2023 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT

ALABAMA POWER COMPANY
PLANT GORGAS
GYPSUM POND

January 31, 2024

Prepared for

Alabama Power Company
Birmingham, Alabama

By

Southern Company Services
Earth Science and Environmental Engineering

CERTIFICATION STATEMENT

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

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Annelyse W. Helms, P.G. — Date

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EXECUTIVE SUMMARY

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

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

A Groundwater Remedy Selection Report was prepared to meet the requirements of 40 CFR § 257.97, ADEM Admin. Code r. 335-13-15-.06(8), and Part C of AO No.18-096-GW and submitted to ADEM on December 17, 2021. Subsequently, within 90 days of remedy selection, a Corrective Action Groundwater Monitoring Program describing implementation and monitoring of selected remedies at the Site was submitted on March 15, 2022.

The Gorgas Gypsum Pond concluded the 2023 monitoring period in corrective action. No SSL of Appendix IV parameters were identified from statistical analysis during the semi-annual monitoring events of 2023. The following summarizes results and activities conducted during the first and second 2023 semi-annual monitoring periods:

- Submitted the 2022 Annual Groundwater Monitoring and Corrective Action Report on January 31, 2023.

- An Alternate Source Demonstration (ASD) was performed to address monitoring wells exhibiting elevated lithium concentrations and included with the 2022 Annual Groundwater Monitoring and Corrective Action Report on January 31, 2023.
- Completed the first semi-annual assessment groundwater sampling event between February 27, 2023 and March 1, 2023.
- Submitted the 2023 Semi-Annual Groundwater Monitoring and Corrective Action Report on July 31, 2023.
- Completed the second semi-annual assessment groundwater sampling event between August 21, 2023 and August 25, 2023.
- Completed the closure of the Gypsum Pond by removing all of the gypsum, liner system, and fill material; installing new stormwater and conveyance structures; conducting final grading; and beginning the re-establishment of the vegetative cover system.

The selected corrective measures and remedial efforts at the Gorgas Gypsum Pond consist of source control and Sitewide MNA. A preliminary design investigation is scheduled for the Gorgas Ash Pond to investigate and plan for groundwater remedy implementation in March and April 2024. The results and findings of those investigations will be applicable to the Gypsum Pond and could be integrated as additional groundwater corrective action strategies if warranted.

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

- Continue evaluation of recently collected MNA parameter data and ongoing compliance monitoring to determine the effectiveness of the selected remedies in meeting long-term groundwater protection standards at the Site.
- Continue discussions with ADEM regarding the status of the lithium ASD and the natural occurrence and mobilization of lithium at the Site.
- Conduct the first 2024 semi-annual assessment monitoring event and submit the Semi-annual Groundwater Monitoring and Corrective Action Report summarizing the findings to ADEM by July 31, 2024.

Pursuant to 40 CFR § 257.90(e)(6), an **Executive Summary Table** highlighting program status and significant findings from the most recent semi-annual monitoring period has been included on the next page.

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

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

Statistical Analysis Results *

Appendix III SSIs

Parameter	Wells
Boron	GS-GSA-MW-3, GS-GSA-MW-4, GS-GSA-MW-8.
Calcium	GS-GSA-MW-3 and GS-GSA-MW-8.
Chloride	GS-GSA-MW-3, GS-GSA-MW-4, and GS-GSA-MW-8.
Fluoride	None.
pH	MW-1 (upgradient), MW-4 (upgradient)
Sulfate	GS-GSA-MW-3 and GS-GSA-MW-4.
TDS	GS-GSA-MW-3 and GS-GSA-MW-4.

Appendix IV SSLs

No Significant Results.

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

Assessment of Corrective Measures & Groundwater Remedy

Assessment of Corrective Measures

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

Groundwater Remedy

Remedy Selection Date: December 17, 2021
Initiated During Period: No
Ongoing During Period: No

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ABBREVIATIONS

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

SSI	statistically significant increases
SSL	statistically significant levels
TAL	Test America, Inc.
TOC	top of casing
TDS	total dissolved solids
USGS	Unites States Geological Survey
UTL	Upper Tolerance Limits

1.0 INTRODUCTION

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

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

2.0 MONITORING PROGRAM STATUS

The Site is currently in corrective action. In accordance with 40 CFR § 257.94(e) and ADEM Admin. Code r. 335-13-15-.06(5)(e), APC implemented assessment monitoring in January 2018. SSI of Appendix III parameters and SSL of Appendix IV parameters were identified at the Gorgas Gypsum Pond during sampling events conducted in 2018. Pursuant to 40 CFR § 257.95(g)(3)(i) and ADEM Admin. Code r. 335-13-15-.06(6)(g)4(i), APC completed an Assessment of Corrective Measures (ACM) in accordance with 40 CFR § 257.96, ADEM Admin. Code r. 335-13-15-.06(7), and AO No. 18-096-GW. The ACM was completed June 12, 2019, and a public meeting was held to solicit public input regarding the proposed groundwater remedies on July 1, 2020.

A Groundwater Remedy Selection Report was prepared and submitted on December 17, 2021, to meet the requirements of 40 CFR § 257.97, ADEM Admin. Code r. 335-13-15-.06(8), and Part C of AO No. 18-096-GW. Subsequently, within 90 days of remedy selection, a Corrective Action Groundwater Monitoring Program was developed and submitted to ADEM on March 15, 2022.

An ASD for lithium was prepared to address monitoring wells exhibiting elevated lithium concentrations and submitted as an appendix to the 2022 Annual Groundwater Monitoring and Corrective Action Report on January 31, 2023, for ADEM review.

In accordance with 40 CFR § 257.98 and ADEM Admin. Code r. 335-13-15-.06(9), APC will continue semi-annual corrective action monitoring, including all monitoring wells in the certified groundwater monitoring system and any well installed to characterize the horizontal and vertical extent of SSL.

3.0 SITE LOCATION AND DESCRIPTION

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

The Gypsum Pond is located west-northwest of the main plant and to the north of the Black Warrior River. **Figure 1**, **Site Location Map**, depicts the location of the Plant and Gypsum Pond with respect to the surrounding area.

3.1 PHYSICAL SETTING

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

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

3.2 SITE GEOLOGY AND HYDROGEOLOGY

Plant Gorgas lies in the Warrior Basin physiographic region (Sapp and Emplaincourt, 1975), a late Paleozoic basin formed as a result of flexure and sediment loading associated with Appalachian and Ouachita orogenies. The bedrock geology is dominated by clastic sedimentary rocks of the Upper Pottsville Formation. Deeper stratigraphy is marked by carbonates, shales, chert, and sandstones of Mississippian to Cambrian in age (Raymond et al., 1988). Plant Gorgas is directly underlain by rocks belonging to the Pratt Coal Group (Ward II et al., 1989) of the Upper Pottsville Formation. In general, the Pratt Group consists of mudstone, shale, fine-grained sandstone, and interbedded coal in fining-upward sequences. The Pratt Coal

Group generally contains three named coal seams, each separated by 25 to 50 feet of intra-burden. In descending order, they are the Pratt, Nickel Plate, and American coal seams. Locally, Pratt Coal Group strata gently dip (0.5-1.0 degrees) to the south and south-southwest. **Figure 3**, **Site Geologic Map**, illustrates the surface geology at the Site and neighboring areas.

Strip mining was conducted over a large portion of the area down to the American seam. As a result, the overburden around the Gypsum Pond is dominated by backfilled mine overburden (mine spoils) and is characterized by weathered shale and sandstone boulders with lenses of fine sediments and small amounts of coal fragments and coarse sediments. Geologic logs generated during various on-Site investigations indicate that the depth to rock varies significantly, ranging from as little as 20 feet (un-mined areas) to as much as 155 feet below ground surface (BGS). Beneath the Gypsum Pond, subsurface geology is likely characterized by thin remnants of mine backfill and un-mined portions of the Pratt Coal Group consisting predominantly of mudstone and sandstone. **Figures 4A-4E**, **Geologic Cross-Sections**, illustrate the geologic layering beneath the Site.

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

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

The Pottsville aquifer system is composed primarily of Pennsylvanian-aged sandstones, shales, conglomerates, and coal. Groundwater flow primarily occurs through coal seams or rock fabric discontinuities such as bedding planes and fractures. Groundwater in the Pottsville aquifer system is commonly regarded as confined due to large permeability contrasts within the aquifer (Stricklin, 1989). Recharge to the Pottsville aquifer system is largely through infiltration of precipitation and to a lesser extent, downward seepage of river water at hydraulically favored locations. Recharge is accommodated largely by fracture-enhanced permeability. Major recharge zones to the Pottsville aquifer system are related to major geologic structures such as large fault zones or along systematic fold axes (Pashin, 2007). Although the

Pottsville aquifer system is the primary aquifer in Walker County, groundwater use is relatively limited. According to O'Rear et al., 1972, groundwater use accounted for approximately 15% of total water use in Walker County in 1966. By 2005, groundwater use had declined to less than 1% of total water use in Walker County, or 1.14 million gallons per day (mgd) of groundwater out of a total water use of 969.5 mgd (USGS, 2005).

3.2.1 Pottsville Formation – Rock Chemistry

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

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

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

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

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

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

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

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

3.2.2 Uppermost Aquifer

The principal aquifer system from a local and regional perspective is the Pottsville aquifer system. The Pottsville aquifer system is the uppermost aquifer beneath the Site. In the Pottsville aquifer system, two types of secondary porosity were observed to yield groundwater: (1) fractured intervals and (2) bedding plane weaknesses associated with fissile, siderite-banded, iron-claystone sequences. Fractured intervals are sporadic across the Site and tend to occur with greater density in the upper 100 feet of rock. The upper portions of the Pottsville aquifer system beneath the disposal facilities indicate unconfined to confined, fractured, and extremely anisotropic conditions. The Pottsville aquifer system functions as a series of confined to semi-confined water producing zones (aquifers) because of the large permeability contrasts within the strata (Stricklin, 1989). Depth to groundwater varies significantly across the Site and is wholly dependent on encountering a fractured interval or zone of fissile iron-claystone.

The Upper Water-Table Flow System exists only across the central and southern portions of the Site and generally is composed of shallow, saturated overburden, overburden-rock transition zone, or upper weathered rock (~ 20 to 40 feet below ground surface). Where present, this flow system appears to be vertically located lateral to or above the base of the Gypsum Pond. To the north and east of the Gypsum Pond, this flow system may not be present due to historical mining activities (lack of recharge, lack of overburden materials).

Intermediate and deep flow systems at the Site generally are composed of discrete fracture intervals, bedding planes, and minor coal seams in the lower Pratt Coal Group and Gillespy Coal Group. Characteristics of these flow systems are: (1) variable, sporadic groundwater saturation and yield, (2) appearance of semi-confining to confining conditions between flow systems, (3) vertical downward gradients across northern and central areas of the Site, and (4) the converge of groundwater elevations south of the Gypsum Pond near "Blue Pond."

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

3.2.3 Flow Interpretation

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

With the addition of piezometers and delineation wells to the Site monitoring program, groundwater flow is now grouped into five flow systems: (1) Upper Water-Table Flow System, (2) Intermediate Flow System 1, (3) Intermediate Flow System 2, (4) Intermediate Flow System 3, and (5) Deep Flow System.

For the Upper Water-Table Flow System, groundwater flow at the Site is a subdued replica of the natural topography where gravity is the dominant force driving flow. The general direction of groundwater flow in this system is towards the south. However, local flow can also occur towards the southeast and southwest, mimicking the natural topography of the Site. West of the gypsum pond, flow is (1) towards northern and central portions of the gypsum pond or (2) lateral to southern portions of the gypsum pond. Flow converges towards "Blue Pond" south of the gypsum pond and to the Black Warrior River further south.

Intermediate flow systems and the deep flow system beneath the Site display similar flow patterns. Each system is interpreted to generally flow south to south-southeast across the Site. Hydraulically, these systems appear semi-confined to confined based on groundwater elevations displaying vertical separation and downward vertical gradients. Flow through these systems likely converges to similar hydraulic potential near "Blue Pond" south of the Plant Gorgas Gypsum Pond.

3.3 GROUNDWATER MONITORING SYSTEM

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

3.3.1 Monitoring Wells

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

The location and designation of Site wells are presented on **Figure 5, Monitoring Well Location Map**.

3.3.1.1 Upgradient Wells

To evaluate upgradient well locations at the Site, groundwater elevations and CCR indicator parameters were reviewed. The upper water bearing unit was not encountered in the upgradient areas located west, north, and east of the Gypsum Pond. Therefore, four locations upgradient of the nearby Plant Gorgas landfills were selected to provide background groundwater quality data. These locations were selected based on the facts that the wells are near the Site, have not been affected by a CCR unit release, and are installed in similar geology. Each site is located within the same coal group sequence of the Pottsville and contains backfilled mine material overburden. Monitoring well locations MW-1, MW-2, MW-3, and MW-4 serve as upgradient locations for the Gypsum Pond. **Table 1a, Compliance Monitoring Well Network Details**, summarizes the monitoring well construction details and the lithology (flow system) adjacent to the screened interval for upgradient compliance wells at the Plant Gorgas Gypsum Pond.

3.3.1.2 Downgradient Wells

The absence of water-bearing zones at the Site during Site investigation influenced the number and location of downgradient monitoring wells. Monitoring well locations GS-GSA-MW-3, GS-GSA-MW-4, and GS-GSA-MW-8 are used as downgradient locations for the Gypsum Pond. The three downgradient monitoring well locations were installed in the valley south of the Gypsum Pond and at lower elevations. These locations capture groundwater draining through the valley occupied by the Gypsum Pond. Because the valley is narrow from west to east (approximately 800 to 1,200 feet across), these wells intercept preferential draining for the Site and are sufficient to monitor groundwater downgradient of the Gypsum Pond. **Table 1a** summarizes the monitoring well construction details and the lithology (flow system) adjacent to the screened interval for downgradient compliance wells at the Plant Gorgas Gypsum Pond.

3.3.1.3 Delineation Wells

Pursuant to 40 CFR § 257.95(g)(1), ADEM Admin. Code r. 335-13-15-.06(6)(g)2., and AO 18-096-GW, additional wells were installed to characterize the horizontal and vertical extent of groundwater protection standard (GWPS) exceedances identified during assessment monitoring. Three phases of field investigation have occurred since late 2018 to explore potential impacts to groundwater. Field work for Phase III efforts concluded in early July 2020. The locations of the onsite delineation wells are shown on **Figure 5**. All delineation wells are sampled semi-annually as part of the semi-annual groundwater monitoring program. **Table 1b, Delineation Well Network Details**, summarizes construction details and the lithology (flow system) adjacent to the screened interval.

3.3.1.4 Piezometers

Vertical delineation well GS-GSA-MW-23VA, horizontal delineation wells GS-GSA-MW-10H and GS-GSA-MW-15H, and monitoring wells GS-GSA-PZ-2A, GS-GSA-MW-1, and GS-GSA-MW-2 did not produce sufficient groundwater yield for well development or low-flow sampling methods and were subsequently redesignated as water-level only piezometers.

In addition, monitoring wells GS-GSA-PZ-16 through GS-GSA-PZ-22 were installed in May 2020 as water-level only piezometers. However, due to their upgradient location relative to the regulated unit, GS-GSA-PZ-17 through GS-GSA-PZ-22 have been sampled semi-annually since August 2020 for potential inclusion in the facility's groundwater compliance network. Research regarding the Site's historical land use indicates that monitoring wells GS-GSA-PZ-16 through GS-GSA-PZ-22 were installed in the vicinity of a previously unknown strip-mined coal storage area. Additional evaluation of the groundwater quality in these monitoring wells is required to ensure that they are representative of background concentrations prior to being redesignated as upgradient compliance monitoring wells. Piezometers are presented on **Figure 5**. Well construction and flow system details are summarized in **Table 1c, Piezometer Well Network Details**.

3.3.1.5 Monitoring Well Replacement and Abandonment

Due to insufficient historical groundwater yield, five water-level only piezometers including GS-GSA-PZ-4, GS-GSA-MW-05, GS-GSA-MW-06, GS-GSA-MW-07, and GS-GSA-MW-09 were abandoned in accordance with ADEM guidelines in October of 2023. Abandonment forms documenting the associated abandonment activities are presented in **Appendix A, Monitoring Well Abandonment Forms**, for reference. **Table 1d, Abandoned Well Network Details,** provides the monitoring well details for abandoned wells.

3.4 GROUNDWATER MONITORING HISTORY

In accordance with 40 CFR § 257.94(b) and ADEM Admin. Code r. 335-13-15-.06(5)(b), eight independent samples were collected from each background and downgradient well and analyzed for the constituents listed in Appendix III and IV prior to October 17, 2017. Background sampling was performed over the period of August 2016 to June 2017. Groundwater sampling for the first detection monitoring event after the background period was performed in August 2017.

Based on results of the 2017 Annual Groundwater and Corrective Action Monitoring Report, APC initiated an assessment monitoring program on January 15, 2018. Pursuant to 40 CFR § 257.95(a) and ADEM Admin. Code r. 335-13-15-.06(6)(a), monitoring wells were sampled for all Appendix IV parameters in

February 2018, within 90 days of initiating the assessment monitoring program. Semi-annual sampling continues to the present.

The Gypsum Pond entered an assessment monitoring program pursuant to 40 CFR § 257.95(a) and ADEM Admin. Code r. 335-13-15.06(6)(a) in January 2018. Statistical evaluations of 2018 assessment monitoring data identified SSL of Appendix IV constituents above the GWPS, and the Site performed an Assessment of Corrective Measures. Pursuant to 40 CFR § 257.95(g)(1), ADEM Admin. Code r. 335-13-15-.06(6)(g)2., and AO No. 18-096-GW, delineation wells were installed to characterize the horizontal and vertical extent of GWPS exceedances identified during assessment monitoring in three phases of groundwater investigations between January 2019 and July 2020. These wells, along with the compliance monitoring well network, are sampled semi-annually.

3.4.1 Available Monitoring Data

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

3.4.2 Historical Groundwater Flow

Groundwater flow systems and flow pattern interpretations in the complex hydrogeologic system have changed over the years as additional hydrogeologic data have become available in the form of piezometers and delineation wells. The following factors result in a fairly complex hydrogeologic that must be interpreted and presented: (1) historic strip mining of uppermost aquifer (Pratt and American Coals); (2) potential dewatering of historic mine sites; (3) limited area of local recharge and disturbance of recharge zone; (4) variability of overburden material type (mine spoil vs natural), layering, and thickness; (5) variability in groundwater yield and production; (6) overall relatively low groundwater recharge rates to wells; (7) overall lack of groundwater yield north and east of the Gypsum Pond; and (8) ongoing closure-by-removal of the Gypsum Pond. Groundwater data and the discrete intermediate flow systems will continue to be evaluated over the coming sampling events. Tables summarizing groundwater elevations from all groundwater monitoring events are included in **Appendix C, Historical Groundwater Elevations Summary**.

3.4.3 Monitoring Variance

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

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

3.5 GROUNDWATER SAMPLING AND ANALYSIS

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

During routine semi-annual monitoring events, all compliance and delineation wells are sampled and analyzed for Appendix III and Appendix IV constituents. Additional general chemistry constituents (major ions and anions) are now being collected routinely. These non-compliance parameters will be periodically analyzed to explore seasonal changes in geochemical facies in Site groundwater. The following subsections summarize the sequential steps and process for the sampling, handling, transport, and analysis of compliance-related groundwater samples at the Site.

3.5.1 Groundwater Sample Collection

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

Groundwater samples were collected from monitoring wells using low-flow sampling procedures in accordance with 40 CFR § 257.93(a) and ADEM Admin. Code r. 335-13-15-.06(4)(a). All monitoring wells at Plant Gorgas are equipped with a dedicated pump. Monitoring wells were purged and sampled using low-flow sampling procedures. In this procedure, field water quality parameters (pH, turbidity,

conductivity, and dissolved oxygen) are measured to determine stabilization and groundwater samples are collected when the following stabilization criteria are met:

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

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

3.5.2 Sample Preservation and Handling

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

3.5.3 Chain of Custody

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

3.5.4 Laboratory Analysis

Laboratory analyses were performed by the APC Environmental Laboratory (APCEL) in Calera, Alabama or Pace Analytical Services, LLC (Pace) in Greensburg, Pennsylvania. Both APCEL and Pace are accredited by National Environmental Laboratory Accreditation Program (NELAP) and maintain a NELAP certification for all parameters analyzed. **Table 2, Parameters and Reporting Limits**, lists monitoring

constituents analyzed from Site groundwater. Groundwater data and COC records for the monitoring events are presented in **Appendix D**.

3.5.5 Monitoring Period Sampling Events

As required by 40 CFR § 257.90(e) and ADEM Admin. Code r. 335-13-15-.06(1)(e), the following describes monitoring-related activities performed during the monitoring period. The first semi-annual monitoring event took place between February 27, 2023 and March 1, 2023 and the second semi-annual monitoring event took place between August 21 and August 25, 2023.

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

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

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

groundwater monitoring events are included as **Appendix D**, in accordance with the requirements of 40 CFR § 257.90(e)(3) and ADEM Admin. Code r. 335-13-15-.06(1)(e)3.

4.0 GROUNDWATER ELEVATIONS AND FLOW

During the first 2023 semi-annual sampling event, groundwater elevations ranged from 256.45 to 430.40 feet NAVD88 (feet above reference 1988 North American Vertical Datum). **Figure 6A, Potentiometric Surface Contour Map – Water Table (February 27, 2023)**, **Figure 6B, Potentiometric Surface Contour Map – Intermediate Flow System 1 (February 27, 2023)**, **Figure 6C, Potentiometric Surface Contour Map – Intermediate Flow System 2 (February 27, 2023)**, **Figure 6D, Potentiometric Surface Contour Map – Intermediate Flow System 3 (February 27, 2023)**, and **Figure 6E, Potentiometric Surface Contour Map – Deep Interval (February 27, 2023)** depict groundwater elevations and inferred groundwater flow direction from higher elevation to lower.

During the second 2023 semi-annual sampling event, groundwater elevations ranged from 302.09 to 417.86 feet NAVD88 (feet above reference 1988 North American Vertical Datum). **Figure 7A, Potentiometric Surface Contour Map – Water Table (August 21, 2023), Figure 7B, Potentiometric Surface Contour Map – Intermediate Flow System 1 (August 21, 2023), Figure 7C, Potentiometric Surface Contour Map – Intermediate Flow System 2 (August 21, 2023), Figure 7D, Potentiometric Surface Contour Map – Intermediate Flow System 3 (August 21, 2023), and Figure 7E, Potentiometric Surface Contour Map – Deep Interval (August 21, 2023)** depict groundwater elevations and inferred groundwater flow direction from higher elevation to lower.

As shown on **Figure 6A** and **Figure 7A,** groundwater appears to flow towards the narrow valley occupied by the Gypsum Pond from the north, west, and east of the Site as well as in a general south to south-southeast pattern. Groundwater in the valley flows southward. Groundwater in this upper flow system likely seeps slowly downward (recharges) into underlying Pottsville Strata.

As shown on **Figures 6B** through **6E** and **7B through 7E**, the groundwater flow patterns in lower Pratt Coal Group and Gillespy Coal Group strata are interpreted to be less influenced by local topographic relief displaying a south-southeast flow pattern converging on "Blue Pond" and likely, the Black Warrior River further south. Groundwater flow patterns in Intermediate Flow Systems 1 and 2 likely display some degree of localized westerly and easterly flow towards the southern Gypsum Pond.

Groundwater elevations and vertical gradients between flow systems at the Site suggest semi-confining to confining conditions with downward vertical gradients further north and some notable upward vertical gradients south of the sedimentation pond and near "Blue Pond." These data indicate that areas south of the sedimentation pond and around "Blue Pond" are mixing zones where shallow flow systems mix with older, more mineralized groundwater discharging from deeper flow systems. Sources of deeper upwelling

groundwater may include underground Mary Lee and American coal mines upgradient and adjacent to the Site.

Piezometer GS-GSA-PZ-21 appears to be screened within a sixth discrete groundwater zone between the Water Table Flow System and Intermediate Flow System 1 and was therefore not utilized to generate any of the potentiometric surfaces shown on **Figures 6A** through **7E**. In addition, groundwater elevation data associated with delineation well GS-GSA-MW-15H were not utilized to generate any of the potentiometric surfaces (**Figures 6A** through **7E)** because (1) less than half of the well screen was covered by groundwater at the time of gauging and (2) the measured elevation did not fit the overall spatial pattern of groundwater flow. Recent available groundwater elevation data have been tabulated and included in **Table 3, Groundwater Elevations Summary**. All available groundwater elevation data recorded since 2016 have been tabulated and included in **Appendix B.**

4.1 GROUNDWATER FLOW VELOCITY CALCULATION

Because the geology at the Gypsum Pond is not homogeneous or isotropic with respect to groundwater flow, groundwater velocity calculations using derivations of Darcy's Law or other methods are not applicable to groundwater at the Site. The hydrogeologic characteristics of fractured rock and mine spoils typically produce preferential groundwater flow paths, so groundwater velocity is much more variable than in uniform porous media such as sand.

These flow paths correspond to more permeable lenses in mine spoil and fractures, zones of fracture concentration, bedding planes, and other discontinuities in the rock. Lateral or vertical transitions from mine spoils to natural overburden materials also add complexity to groundwater velocity and flow paths. For mine spoil materials, slug testing provided horizontal hydraulic conductivities for the uppermost aquifer between 5.11×10^{-3} centimeters per second (cm/sec) and 2.47×10^{-4} cm/sec.

At the Gorgas Ash Pond, slug testing provided horizontal hydraulic conductivities in flow zones of the Pratt Coal Group between 1.19×10^{-3} cm/sec and 1.22×10^{-5} cm/sec with an average of 4.52×10^{-4} cm/sec. A total of 43 packer tests resulted in a range of hydraulic conductivity (k) values from an estimated low of 7×10^{-7} cm/sec to a high of 4×10^{-3} cm/sec, with most tests (31) in the moderate range (10^{-5} cm/sec to 10^{-4} cm/sec), 2 test results in the more permeable range (10^{-3} to 10^{-2} cm/sec), and 10 test results in the less permeable range (10^{-6} cm/sec).

Slug and packer testing results included in this discussion present a general bias towards higher permeability. This is because the intervals tested were primarily selected based on observations of well

yield from borehole geophysics, hydrophysics, or field observations (i.e., no yield or poor yielding zones are not often tested or quantified). The data reviewed suggest that typical Pottsville flow zones will have hydraulic conductivities between 10^{-4} or 10^{-5} cm/sec and will be separated vertically (and sometimes laterally) by lower permeability mudstones, shales, and channel sandstones, which typically exhibit hydraulic conductivities in the range of 10^{-6} and 10^{-7} cm/sec. Therefore, groundwater flow velocities across the Site are likely highly variable and cannot be attributed to a single generic value.

5.0 EVALUATION OF GROUNDWATER QUALITY DATA

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

5.1 DATA VALIDATION – QUALITY ASSURANCE/QUALITY CONTROL

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

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

Where:

RPD = Relative Percent Difference (%)

Conc1 = Higher concentration of the sample or field duplicate

Conc2 = Lower concentration of the sample or field duplicate

Where the RPD is below 20%, the difference is considered acceptable, and no further action is needed. Where an RPD is greater than 20%, further evaluation is required to attempt to determine the cause of the difference and potentially result in qualified data. **Table 4a, Relative Percent Difference (RPD) Calculations**, provides the RPDs for sample and sample duplicates during the first semi-annual sampling event of 2023. All RPD values were below 20% for the first 2023 semi-annual sampling event. All RPD values were below 20% for the second 2023 semi-annual sampling event with the exception of concentrations of arsenic and lead detected in in parent-duplicate pair GS-GSA-MW12H/GS-GSA-MW-

12 DUP. A qualifier was not needed for arsenic because the results were less than five times the RL and the difference between the parent and duplicate results was less than the RL value. However, a qualifier (+) J, (ND) UJ was needed for lead because the results were greater than five times the RL and the difference between the parent and duplicate results was greater than the RL value.

The laboratory-provided analytical report revealed low-level or trace detections of chromium in field or equipment blanks (FB-1 and FB-2) during the first 2023 sampling event and no detections during the second 2023 sampling event. **Table 4b, Field QC: Blank Detections** provides a summary of low-level detections observed during the first and second semi-annual monitoring events of 2023. Each of these detections was estimated concentrations, above the MDL but below the RL, and qualified in the laboratory analytical reports with "J flags." However, if concentrations are detected above the MDL in field QC samples, original results on the (1) date of a blank detection and (2) with a value less than 5 times the field QC detection are flagged with a (+) U* and MDL/RL values modified based upon the blank concentration. The three low-level chromium detections in equipment or field blanks resulted in a total of 17 validation flag updates at select sample or well locations.

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

5.2 STATISTICAL METHODOLOGY AND TESTS

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

5.2.1 Appendix III Evaluation

Intrawell prediction limits, combined with a 1-of-2 verification strategy, were constructed for pH, sulfate, and TDS to determine whether there has been an SSI over background groundwater quality. Interwell prediction limits, combined with a 1-of-2 verification strategy, were constructed for boron, calcium, chloride, and fluoride. Intrawell prediction limits use screened historical data within a given well to establish limits for parameters at that well. The most recent sample from the same well is compared to its respective background to identify SSI over background. Interwell prediction limits pool upgradient well

data to establish a background limit for an individual constituent. The most recent sample from each downgradient well is compared to the background limit to identify SSI.

Groundwater Stats Consulting demonstrated that these test methods were appropriate in the October 2017 Statistical Analysis Plan, which was updated in the September 2019 data screening evaluation. Time series plots were used to screen proposed background data for suspected outliers, or extreme values that would result in limits that are not conservative from a regulatory perspective. Suspected outliers are formally tested using Tukey's box plot method when applicable, and when identified, are flagged in the computer database, and deselected prior to construction of statistical limits.

The following adjustments are also applicable to the statistical analysis at the Site:

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

5.2.2 Appendix IV Evaluation

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

Parametric tolerance limits (UTL) were calculated using pooled upgradient well data for Appendix IV parameters with a target of 95% confidence and 95% coverage. The confidence and coverage levels for

nonparametric tolerance limits are dependent on the number of background samples. The UTLs were then used as the GWPS.

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

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

In corrective action, when the lower confidence limit (LCL), or the entire interval, exceeds the GWPS as discussed in the USEPA Unified Guidance (2009), the result is recorded as an SSL. GWPS for Appendix IV constituents are updated on a biennial schedule. This schedule was initiated in 2019 with updates generally occurring after the second semi-annual sampling event of each biennial year. The most recent GWPS update was conducted after the second semi-annual sampling event in the fall of 2023. The next GWPS update will commence following the second semi-annual sampling event of 2025. Data from upgradient wells collected between updates may still be used to support Alternate Source Demonstration (ASD), if merited.

5.3 STATISTICAL EXCEEDANCES

Analytical data from the first and second 2023 semi-annual monitoring events were statistically analyzed in accordance with the Professional Engineer (PE)-certified Statistical Analysis Plan (October 2017) and updated in the August 2020 data screening evaluation performed by Groundwater Stats Consulting. Appendix III statistical analysis was performed to determine if constituents had returned to background levels. Appendix IV monitoring parameters were evaluated to determine if concentrations statistically exceeded the established GWPS.

5.3.1 Appendix III Constituents

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

5.3.2 Appendix IV Constituents

Table 5, **Summary of Background Levels and Groundwater Protection Standards**, summarizes the background limit established at each monitoring well and the GWPS. A summary table of the statistical limits accompanies the prediction limits in **Appendix E**. As discussed in **Section 5.2.2**, Site GWPS were updated after the second semi-annual sampling event of 2023.

5.3.2.1 First Semi-Annual Monitoring Event

Statistical analysis of Appendix IV data did not identify any Appendix IV SSL during the first semi-annual monitoring event of 2023 in Site compliance wells. **Table 6, First Semi-Annual Monitoring Event Analytical Results Summary**, provides a summary of analytical results for all constituents from the first semi-annual sampling event of 2023.

Limited groundwater analytical data are available for delineation wells installed at the Site. Therefore, groundwater quality is simply compared to the GWPS. A review of analytical data derived from delineation wells identified the following concentrations that exceed Site GWPS concentrations during the first 2023 semi-annual sampling event:

- GS-GSA-MW-13H: Arsenic
- GS-GSA-MW-14H: Lithium

A review of analytical data derived from the downgradient monitoring wells and piezometer locations identified the following concentrations that exceed Site GWPS concentrations during the first 2023 semi-annual sampling event:

- GS-GSA-MW-4: Lithium, Beryllium, Cadmium.
- GS-GSA-PZ-22: Arsenic.

5.3.2.2 Second Semi-Annual Monitoring Event

Statistical analysis of Appendix IV data did not identify any Appendix IV SSL during the second semi-annual monitoring event of 2023 in Site compliance wells. **Table 7, Second Semi-Annual Monitoring Event Analytical Results Summary**, provides a summary of analytical results for all constituents from the second semi-annual sampling event of 2023.

Limited groundwater analytical data are available for delineation wells installed at the Site. Therefore, groundwater quality is simply compared to the GWPS. A review of analytical data derived from delineation

wells identified the following concentrations that exceed Site GWPS concentrations during the second 2023 semi-annual sampling event:

- GS-GSA-MW-11H: Combined Radium
- GS-GSA-MW-13H: Arsenic

Analytical data derived from delineation wells identified detectable concentrations of arsenic (GS-GSA-MW-13H) and combined radium (GS-GSA-MW-11H) at concentrations that exceed their respective GWPS during the second 2023 semi-annual sampling event. Elevated concentrations of arsenic have been historically detected in delineation well GS-GSA-MW-13H. However, these elevated concentrations and GWPS exceedances are not the result of an impact to groundwater from the Gypsum Pond. Wells immediately downgradient of the Gypsum Pond, as well as delineation wells between the Gypsum Pond and GS-GSA-MW-13H, have historically been non-detect or detected at only trace concentrations. This absence of arsenic in other wells is notable, because if an arsenic impact were related to the Gypsum Pond, the highest concentrations would be expected closer to the Gypsum Pond and to diminish to the south in the direction of groundwater flow away from the facility. The observation described in this report is the opposite of that scenario. Combined radium was detected for the first time at a concentration that exceeded its respective GWPS in the groundwater samples collected from delineation well GS-GSA-MW-11H during the second 2023 semi-annual sampling event. Delineation well GS-GSA-MW-11H was resampled by APC on October 19, 2023 in order to confirm the presence of radium above the GWPS. Analytical results of the resample event did not reveal detectable concentrations of combined radium in excess of its respective GWPS.

A review of analytical data derived from the downgradient monitoring wells and piezometer locations identified the following concentrations that exceed Site GWPS concentrations during the second 2023 semi-annual sampling event:

- GS-GSA-MW-4: Lithium.
- GS-GSA-PZ-17: Lithium.
- GS-GSA-PZ-22: Arsenic.

Beryllium and cadmium were not detected at concentrations that exceed their respective GWPS in the groundwater samples collected from compliance well GS-GSA-MW-4 during the second 2023 sampling event. The first-time exceedances for both constituents were reported in the fall of 2022, with all preceding concentrations significantly below the GWPS since its installation in 2016. The concentrations of beryllium

and cadmium detected in compliance well GS-GA-MW-4 during the second 2023 semi-annual event are consistent with historic concentrations prior to the fall of 2022 (**Appendix B**).

Lithium did not exceed its respective GWPS in the groundwater samples collected from delineation well GS-GSA-MW-14H during the second 2023 semi-annual sampling event. Historic time series graphs indicate a decreasing trend in the lithium concentrations detected in delineation well GS-GSA-MW-14H.

5.3.2.3 Additional Upgradient Piezometers

Piezometers GS-GSA-PZ-16 through GS-GSA-PZ-22 were installed as water-level only piezometers in May of 2020. However, due to their upgradient location relative to the regulated unit, GS-GSA-PZ-17 through GS-GSA-PZ-22 have been sampled semi-annually since August 2020 for potential inclusion in the facility's groundwater compliance network. Research regarding the Site's historical land use indicates that monitoring wells GS-GSA-PZ-16 through GS-GSA-PZ-22 were installed in the vicinity of a previously unknown strip-mined coal storage area. Additional evaluation of the groundwater quality in these monitoring wells is required to ensure they are representative of background concentrations prior to being redesignated as upgradient compliance monitoring wells.

During the first and second 2023 semi-annual monitoring events, exceedances for arsenic were observed in GS-GSA-PZ-22. Historic time series graphs of arsenic indicate an increasing trend in detected concentrations in upgradient piezometer GS-GSA-PZ-22, indicating there is likely an existing arsenic source located upgradient of the Gypsum Pond that is leaching into the underlying groundwater. Arsenic concentrations in upgradient piezometers are otherwise stable or decreasing in concentration.

Lithium was detected at concentrations that exceed GWPS in the groundwater samples collected from piezometer GS-GSA-PZ-17 during the second 2023 semi-annual sampling event. Lithium concentrations exceeding GWPS in upgradient piezometers indicate that lithium is naturally occurring and have been impacted by historic mining activities. Average lithium concentrations observed in upgradient piezometers are:

- GS-GSA-PZ-17: 0.726 mg/L
- GS-GSA-PZ-18: 0.343 mg/L
- GS-GSA-PZ-19: 0.080 mg/L
- GS-GSA-PZ-20: 0.110 mg/L
- GS-GSA-PZ-21: 0.018 mg/L
- GS-GSA-PZ-22: 0.066 mg/L

Limited data from these wells generally indicate a seasonal trend where higher concentrations are reported during late summer sampling events and lower concentrations reported for sampling events conducted in late winter and early spring. This seasonal trend is most evident in historic concentrations for lithium detected in piezometers GS-GSA-PZ-17 and GS-GSA-PZ-18 and could reflect a delayed response to elevated rainfall during the wetter spring months. Lithium concentrations in GS-GSA-PZ-17 range from 0.78 to 1.39 mg/L in the late summer and 0.20 to 0.35 mg/L in the late winter. Similarly, though less pronounced, lithium concentrations in GS-GSA-PZ-18 range from 0.29 to 0.44 mg/L in the late summer and 0.25 to 0.35 mg/L in the late winter. Aside from GS-GSA-PZ-17, lithium concentrations in upgradient piezometers appear to be stable. **Figures 8A** and **8B, Arsenic and Lithium GWPS Exceedances Map (February and March 2023)** and **Arsenic and Lithium GWPS Exceedances Map (August 2023)**, depict GWPS exceedances in Site delineation wells from the first and second semi-annual sampling events of 2023.

6.0 ALTERNATE SOURCE DEMONSTRATION

As part of a comprehensive study into the occurrence of lithium in Site groundwater, an ASD was conducted that demonstrated the SSL for lithium in Site monitoring wells are the result of natural variation in groundwater quality driven by naturally occurring lithium from clay minerals in aquifer solids. Mobilization of lithium to groundwater primarily occurs with the weathering of mudstone and clay-rich mine spoils that constitute significant portions of the subsurface overburden profile at the Site. The ASD report was prepared to address historical SSL for lithium in the following downgradient compliance monitoring wells:

- GS-GSA-MW-3
- GS-GSA-MW-4

The ASD report also addressed the GWPS exceedances for lithium in the following vertical and horizontal delineation wells:

- GS-GSA-MW-3V
- GS-GSA-MW-9V
- GS-GSA-MW-12H
- GS-GSA-MW-14H

During the 2023 monitoring period, no SSL for lithium were observed in downgradient monitoring wells. Lithium GWPS exceedances were observed in horizontal delineation well GS-GSA-MW-14H during the February-March 2023 sampling event (0.471 mg/L) and in downgradient compliance well GS-GSA-MW-4 during the February-March 2023 and August 2023 sampling events (1.35 mg/L and 0.469 mg/L, respectively). Thus, lithium concentrations reflect temporal variability in groundwater flow conditions in the overburden mine spoils.

The results of the ASD study indicated that lithium occurs in the overburden and bedrock aquifers at concentrations significantly greater than the range of average reported concentration in the Earth's crust, and groundwater conditions support the mobility of lithium from the aquifer solids into groundwater at the Site. The ASD demonstrated that the SSL for lithium in the wells listed above are not the result of a release from the Plant Gorgas Gypsum Pond. In addition to serving as an ASD for historical SSL in compliance wells and exceedances in delineation wells, the report comprehensively documents geogenic sources of lithium at the Site and Pottsville Formation and mechanisms for mobilization of lithium to groundwater. Thus, the ASD report may be referenced as explanation or guidance for potential future SSL or GWPS exceedances.

A report documenting the findings of the ASD for the Gorgas Gypsum Pond was submitted to ADEM in conjunction with the 2022 Annual Groundwater Monitoring and Corrective Action Report. As of the publication date of this 2023 report, APC has not received comment from ADEM regarding their review. Therefore, in accordance with 40 CFR § 257.95(d) and Alabama Admin. Code r. 335-13-15-.06(6)(d), APC will continue semi-annual corrective action monitoring, including all monitoring wells in the certified groundwater monitoring system and any well installed to characterize the horizontal and vertical extent of SSL.

7.0 GROUNDWATER ASSESSMENT AND CORRECTIVE ACTION

As required by Part E of the Order (AO No. 18-096-GW) and correspondence from ADEM (March 2021), this report provides an update on groundwater delineation activities completed since the submittal of the Facility Plan for Groundwater Investigation (November 13, 2018). The primary purpose of this plan and subsequent phases of work was to identify the horizontal and vertical extent of groundwater impacts defined by EPA Appendix IV groundwater protection standards.

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

7.1 CHRONOLOGY OF DELINEATION ACTIVITIES

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

7.1.1 Delineation Wells

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

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

Phase I was conducted between February 2019 and August 2019. **Table 1c** and **Figure 5** present details and locations of delineation wells installed during this phase. The following summarizes all activities that were completed during Phase I of groundwater delineation at the Site:

- Installed three horizontal delineation wells (GS-GSA-MW-9H, GS-GSA-MW-10H, and GS-GSA-MW-11H) and two vertical delineation wells (GS-GSA-MW-3V and GS-GSA-MW-4V) between February 3, 2019, and February 25, 2019.

- Developed new delineation wells between February and March 2019. Horizontal delineation well MW-10H did not yield sufficient water and did not meet successful criteria for well development or sampling.
- Sampled groundwater from four successfully developed delineation wells between March 4, 2019 and March 5, 2019.
- Submitted a Groundwater Investigation Report to ADEM on May 13, 2019. This report recommended a second phase of groundwater investigation to complete delineation of groundwater impacts as required by Part B of the Order.
- Submitted an Assessment of Corrective Measures to ADEM on July 11, 2019, as required by Part C of the Order.
- Submitted a Phase II – Groundwater Delineation Plan to ADEM on August 15, 2019. This plan documented planned activities associated with proposed Phase II delineation efforts.
- On December 30, 2019, provided ADEM with a response to comments received from ADEM on November 14, 2019.

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

Following a review of data gathered from the Phase I Investigation, additional groundwater investigation was proposed to ADEM in a Phase II Delineation Plan submitted August 15, 2019, to further delineate extent of groundwater impacts. Phase II was conducted between October 2019 and March 2020. The following summarizes all activities completed during Phase II of groundwater delineation at the Site:

- Completed semi-annual assessment sampling events in October 2019 and February 2020.
- Installation of two horizontal delineation wells south-southwest of the Gypsum Pond (GS-GSA-MW-12H and GS-GSA-MW-13H).
- Installation of one vertical delineation well (GS-GSA-MW-8V) offset from existing compliance well GS-GSA-MW-8.
- Sampling of compliance wells, Phase I delineation wells, and Phase II delineation wells in October and November 2019.
- Survey of 11 piezometers previously installed at the Site in 2015 or earlier to help constrain Site groundwater flow conditions. Eight of these locations were dry or had less than 1 foot of groundwater and were not included on maps to improve readability.
- A preliminary review of potentiometric data and analytical data revealed the need for a Phase III investigation to expand delineation efforts and provide additional Site characterization data.

- Submitted a Semi-Annual Progress Report documenting groundwater investigation activities on March 30, 2020.

Phase III – Groundwater Investigation (February 2020 – August 2020)

Following a review of data gathered from the Phase I and Phase II Investigations, additional groundwater investigation was necessary to delineate Appendix IV constituents at the Gypsum Pond. Phase III was conducted between May 2, 2020, and June 11, 2020. The following summarizes all activities completed during Phase II of groundwater delineation at the Site:

- Installed three vertical delineation wells (GS-GSA-MW-9V, GS-GSA-MW-12V, and GS-GSA-MW-23VA) between May 12 and June 11, 2020.
- Installed two horizontal delineation wells (GS-GSA-MW-14H and GS-GSA-MW-15H) between May 4 and May 5, 2020. Horizontal delineation well GS-GSA-MW-15H did not yield sufficient water for development and sampling and will be used as a water-level only piezometer.
- Installed seven additional piezometers (GS-GSA-PZ-16, GS-GSA-PZ-17, GS-GSA-PZ-178, GS-GSA-PZ-19, GS-GSA-PZ-20, GS-GSA-PZ-21, and GS-GSA-PZ-22) between May 2 and May 31, 2020.
- Completed semi-annual assessment groundwater sampling event between August 3 and August 5, 2020.
- Submitted a Semi-Annual Progress Report documenting groundwater investigation activities on September 30, 2020.

APC responded to the February 3, 2021 ADEM Semi-Annual Progress and Groundwater Delineation Reports comments on March 5, 2021. APC responded to the January 20, 2021 ADEM Groundwater Monitoring plan comments letter and included a Supplemental Site Hydrogeologic Characterization Report on March 8, 2021. The second revised Groundwater Monitoring plan was submitted to ADEM on March 15, 2021.

7.1.2 Nature and Quantity of Release

Part B of the Order also required collecting data on the nature and estimated quantity of material released. To collect data regarding the nature of the source, sampling of gypsum material was conducted from near the surface of the Gypsum Pond. Samples were collected based on physical characteristics and subject to leaching using the Toxicity Characteristic Leaching Procedure (TCLP) and the Synthetic Precipitation Leaching Procedure (SPLP). The extract from each leach test was analyzed for arsenic, barium, cadmium,

chromium, mercury, lead, and selenium. Results from the sample collected did not exceed GWPS for analyzed constituents.

Results from leachability testing were included in the *Semi-Annual Progress and Delineation Report* for the Plant Gorgas Gypsum Pond, submitted September 30, 2020.

In October 2021, samples were collected from the sedimentation pond, the clear pool, and the emergency storage pond downgradient of the Gypsum Pond**.** Leachate from the dewatering of the Gypsum Pond is transported downgradient to the sedimentation pond for settlement and treatment. While it is not a direct comparison to porewater or the gypsum material itself, leachate from the Gypsum Pond can be used as a proxy to evaluate the nature of the source and what constituents may be leachable from the gypsum. These samples were collected in support of the ASD for lithium at the Site.

Samples from the three ponds were analyzed for Appendix III and Appendix IV constituents besides combined radium. Because of the treatment process, the sample collected from the sedimentation pond (GS-GSA-SP-3) is most representative of leachate from the Gypsum Pond. Results from these samples did not exceed GWPS for analyzed constituents except for arsenic in the samples collected from the sedimentation pond (GS-GSA-SP-3 at a concentration of 0.0344 mg/L) and the clear pool (GS-GSA-SP-2 at a concentration of 0.0566 mg/L).

7.1.3 Discussion of Delineation Results

Previous Groundwater Monitoring and Corrective Action Reports for the Plant Gorgas Gypsum Pond have identified SSL in groundwater for lithium. The most recent SSL for lithium was during the second semi-annual monitoring event of 2020 when an SSL for lithium was observed in downgradient well GS-GSA-MW-3. Lithium concentrations have increased to above GWPS in downgradient monitoring well GS-GSA-MW-4 since July 2021, but have not resulted in an SSL. However, recent concentrations decreased from a high of 1.89 mg/L in July 2022 to 1.35mg/L in March 2023 and to 0.469 mg/L in August 2023. The general increase in concentration appears to have initiated with increasing well turbidity, which occurred between October 2019 and March 2021 as described in the ASD study. The highest turbidity value of 8.94 nephelometric turbidity units (NTU) occurred in October 2020, which is notable because it was the first sampling event after the February 2020 well solids and precipitate sampling event, a sampling event that retrieved and disturbed well solids and precipitates in the wells (MNA Evaluation). Minerals identified during the ASD study in GS-GSA-MW-4 were dominated by muscovite and illite (61% by weight) and lesser percentages of quartz (36.8 %), zeolite (2.0%), and vermiculite (0.2%). In fine-grained sediments, lithium and boron are known to be hosted by smectite, illite, or chlorite clay minerals, and this was

experimentally demonstrated showing lithium and boron are adsorbed in the interlayers of smectite and incorporated into illite during diagenetic alteration of smectite (Williams and Hervig, 2005). Other studies have shown that illitic clays and claystone/mudstones are enriched in lithium (Castor and Henry, 2020). Elevated aluminum, a common constituent associated with clay minerals and micas, was observed in groundwater samples collected from GS-GSA-MW-4 during January and May 2022 (29.70 and 27.00 mg/L, respectively). In addition, as summarized in **Section 7.3.1**, closure activities are ongoing at the Site. The gypsum material, liner system, and fill material have been removed, which increases the availability of recharge upgradient of GS-GSA-MW-4 and the further weathering of native clays and mine spoils underlying the Gypsum Pond. Therefore, it is reasonable to attribute increases in lithium and boron to disruption of physical and geochemical equilibria caused by stirring and suctioning of muscovite-illite dominated well sediments, as well as closure activities and increased potential for recharge upgradient of GS-GSA-MW-4. **Figures 9A** and **9B, Lithium Concentrations Along Geologic Cross-Section D-D'**, depict lithium concentrations at the Gypsum Pond during the first and second semi-annual monitoring events of 2023.

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

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

As shown on **Table 1b**, 10 delineation wells have been installed at the Site to assess potential impacts. Additionally, two delineation wells were installed (GS-GSA-MW-10H and GS-GSA-MW-15H) but did not produce sufficient groundwater yield to sample (**Table 1c**).

Lithium exceedances are common at the site and have been suspected to be related to natural sources of lithium in mine spoils and native geologic material rather than a release from the CCR unit. To address these lithium exceedances, a year-long study was conducted at the site to characterize geochemical

signatures in groundwater and to assess the occurrence and nature of lithium in site materials. This study included boron isotopic analysis of groundwater, source characterization as described in **Section 7.1.2**, and rock core sampling and analysis. As part of this analysis, an ASD was performed that concluded lithium concentrations observed at the following monitoring wells are not the result of a release from the Gypsum Pond but rather natural variation in site groundwater due to naturally occurring lithium:

- GS-GSA-MW-3
- GS-GSA-MW-4
- GS-GSA-MW-3V
- GS-GSA-MW-9V
- GS-GSA-MW-12H
- GS-GSA-MW-14H

The ASD concluded that lithium in groundwater is associated with the mobilization of lithium from mine spoils, clay minerals commonly found in shales and mudstones, and mineralized fractures and is not the result of a release from the CCR unit.

7.2 STATUS OF DELINEATION

Elevated concentrations of lithium previously attributed to the CCR unit have been horizontally delineated in the direction of groundwater flow away from the facility in multiple flow systems. These elevated concentrations do not extend off-site and primarily occur in discrete zones that correspond to shale and mudstone or mine spoil lithologies.

As discussed in **Section 7.1.3**, lithium occurs in these discrete zones due to the infiltration of meteoric water and the weathering of shale, mudstone, and mine spoils, which mobilizes abundant lithium associated with clay minerals and native coal seams. Lithium has been attributed to natural sources and not a release from the CCR unit. Therefore, delineation activities related to lithium in groundwater at the Site are considered to be complete.

7.3 GROUNDWATER REMEDY AND CORRECTIVE ACTION

Although concentrations resulting in SSL that triggered corrective action have declined below the GWPS, and an ASD has been prepared documenting a natural source, groundwater corrective action monitoring is proceeding as planned pending ADEM approval of the ASD. An ACM for groundwater impacts was conducted and submitted to ADEM in June 2019. Additional data analyses and investigations conducted

since the ACM were included in the detailed Groundwater Remedy Selection Report, submitted in December 2021, and the Corrective Action Groundwater Monitoring Program document submitted in March 2022.

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

7.3.1 Groundwater Remedy Selection

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

- Source control, which includes the clean closure and removal of the Gypsum Pond.
  - Gypsum material removal completed from 2021-2023.
  - Remaining gypsum, liner system, and underlying fill material removal completed 2023.
  - Stormwater control and conveyance structure construction completed 2023.
  - Civil site work, final grading, and re-establishment of vegetative cover to be completed 2024.
- Monitored natural attenuation (MNA) over the entire Site.

Source control at the Gypsum Pond has been accomplished by complete removal of the CCR material from the unit and regrading of the area as needed to facilitate stormwater management. The Gypsum Pond 60-mil high-density polyethylene (HDPE) geomembrane liner and all fill material have been removed as part of the closure project. During closure activities, the liner reduced the potential for source contributions to groundwater. MNA was selected based on the evidence gathered during initial investigations, which highlighted that these processes are already occurring.

7.3.2 Corrective Action – Groundwater Monitoring Program

The Corrective Action Groundwater Monitoring Program describes early plans for implementation and monitoring of groundwater remedies described above. Construction activities associated with closure reached substantial completion in late 2022, with the majority of CCR material removed from the Site. Site closure included removal of free water, dewatering the CCR material, grading the Site to promote drainage, and removing gypsum material. As described in Section 7.3.1., final grading and civil site work is scheduled to be completed in 2024.

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

Selected Remedy	Implementation Task(s)
Monitored Natural Attenuation	1. Implementation of expanded MNA sampling parameters. 2. Further assessment of MNA monitoring network.

Implementation of Monitored Natural Attenuation

General chemistry and MNA sampling parameters were added to the sampling plans and analyzed in the laboratory during the first and second 2023 semi-annual sampling events (**Tables 6** and **7**). These parameters, in addition to field parameters, Appendix III parameters, and Appendix IV parameters, are used to study the processes that govern or facilitate MNA as well as changes in geochemical conditions. Parameters will be included into the site geochemical model.

Wells are sampled for the following additional MNA parameters:

1) Alkalinity (total as $CaCO_3$)
2) Aluminum (total and dissolved)
3) Bicarbonate alkalinity (calculated)

4) Carbonate alkalinity (calculated)
5) Iron (total and dissolved)
6) Magnesium (dissolved)
7) Manganese (total and dissolved)
8) Nitrogen as nitrate/nitrite
9) Potassium (dissolved)
10) Silica (dissolved)
11) Sodium (dissolved)
12) Sulfide
13) Total organic carbon

8.0 SUMMARY AND CONCLUSIONS

Although SSL are no longer observed at the site and an ASD has been prepared to demonstrate a natural source for elevated lithium constituent concentrations, the Gorgas Gypsum Pond remains in corrective action pending ADEM's approval of the ASD. The selected remedial efforts at the Site consist of source control and Sitewide MNA.

The certified compliance monitoring well network is sampled on a semi-annual basis. During the first and second semi-annual monitoring period of 2023, the groundwater samples were analyzed for all Appendix III and IV parameters in addition to general chemistry and MNA parameters to evaluate remedy performance. Statistical evaluations of the first and second 2023 semi-annual monitoring event did not identify SSL of Appendix IV constituents in any of the Site monitoring wells. GWPS exceedances were initially detected in two of the Site delineation wells during the second 2023 semi-annual sampling event: GS-GSA-MW-13H (arsenic) and GS-GSA-MW-11H (combined radium). Delineation well GS-GSA-MW-11H was resampled by APC on October 19, 2023 in order to confirm the presence of radium. Analytical results of the resample event did not reveal detectable concentrations of combined radium in excess of its respective GWPS.

An ASD was performed to address the occurrence of lithium at the Site and submitted with the 2022 Semi-Annual and Annual reports in July 2022 and January 2023 respectively. The ASD concluded that lithium concentrations exceeding the GWPS in site monitoring wells are likely associated with mobilization of lithium from mine spoils, clay minerals commonly found in shales and mudstones, and mineralized fractures, and are not the result of a release from the CCR unit. Therefore, delineation is considered complete at the site.

In accordance with 40 CFR § 257.95(d) and Alabama Admin. Code r. 335-13-15-.06(6)(d), APC will continue semi-annual assessment and corrective action monitoring. The following future actions are planned for the Site:

- Continue evaluation of recently collected MNA parameter data and ongoing compliance monitoring to determine the effectiveness of the selected remedies in meeting long-term groundwater protection standards at the Site.
- Continue discussions with ADEM regarding the status of the lithium ASD and the natural occurrence and mobilization of lithium at the Site.

- Conduct the first 2024 semi-annual assessment monitoring event and submit the Annual Groundwater Monitoring and Corrective Action Reports summarizing the findings to ADEM by July 31, 2024.

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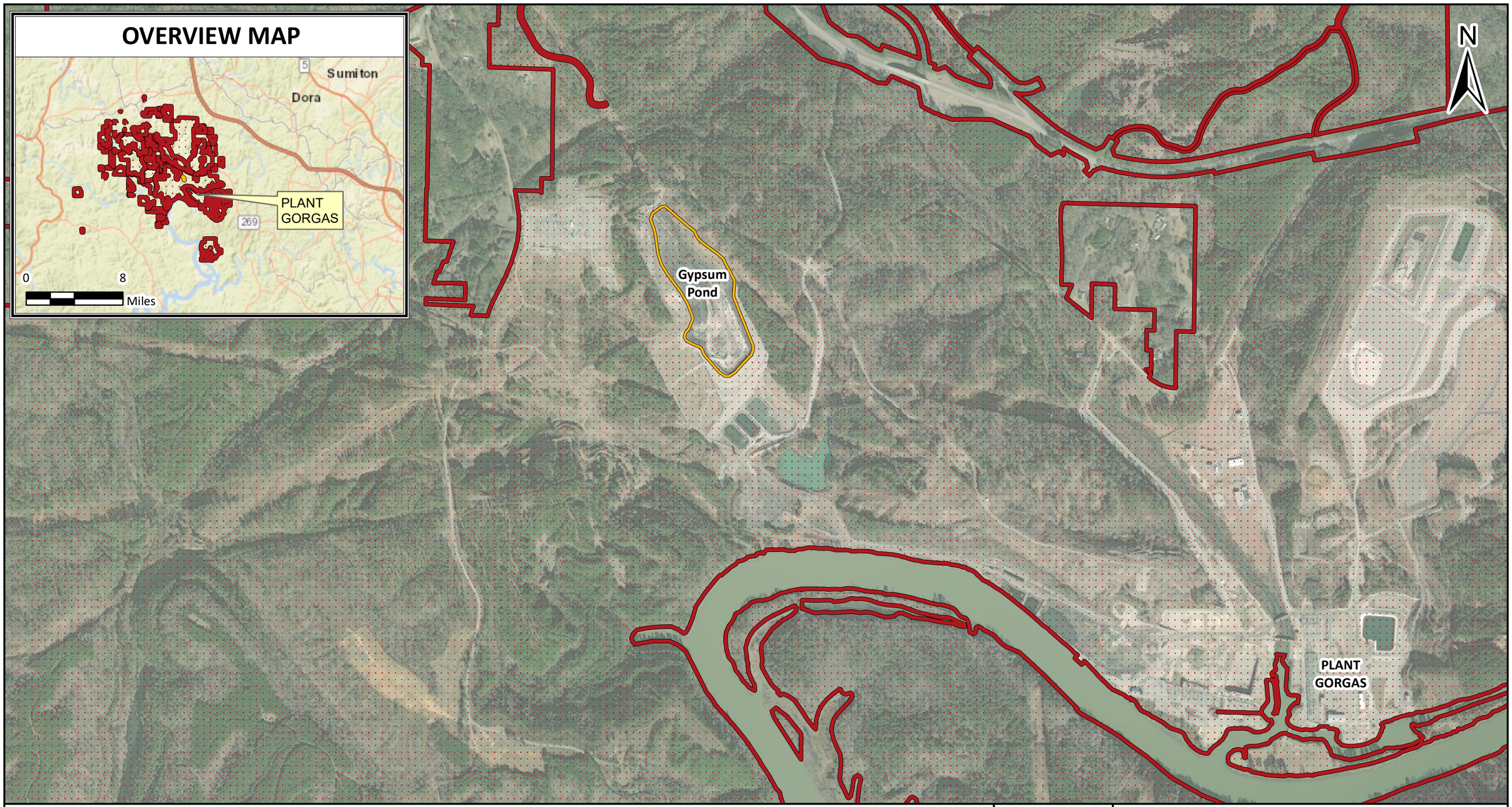
Figures



LEGEND

- Gypsum Pond Boundary
- Property Boundary (Approximate)

0 1,000 Feet

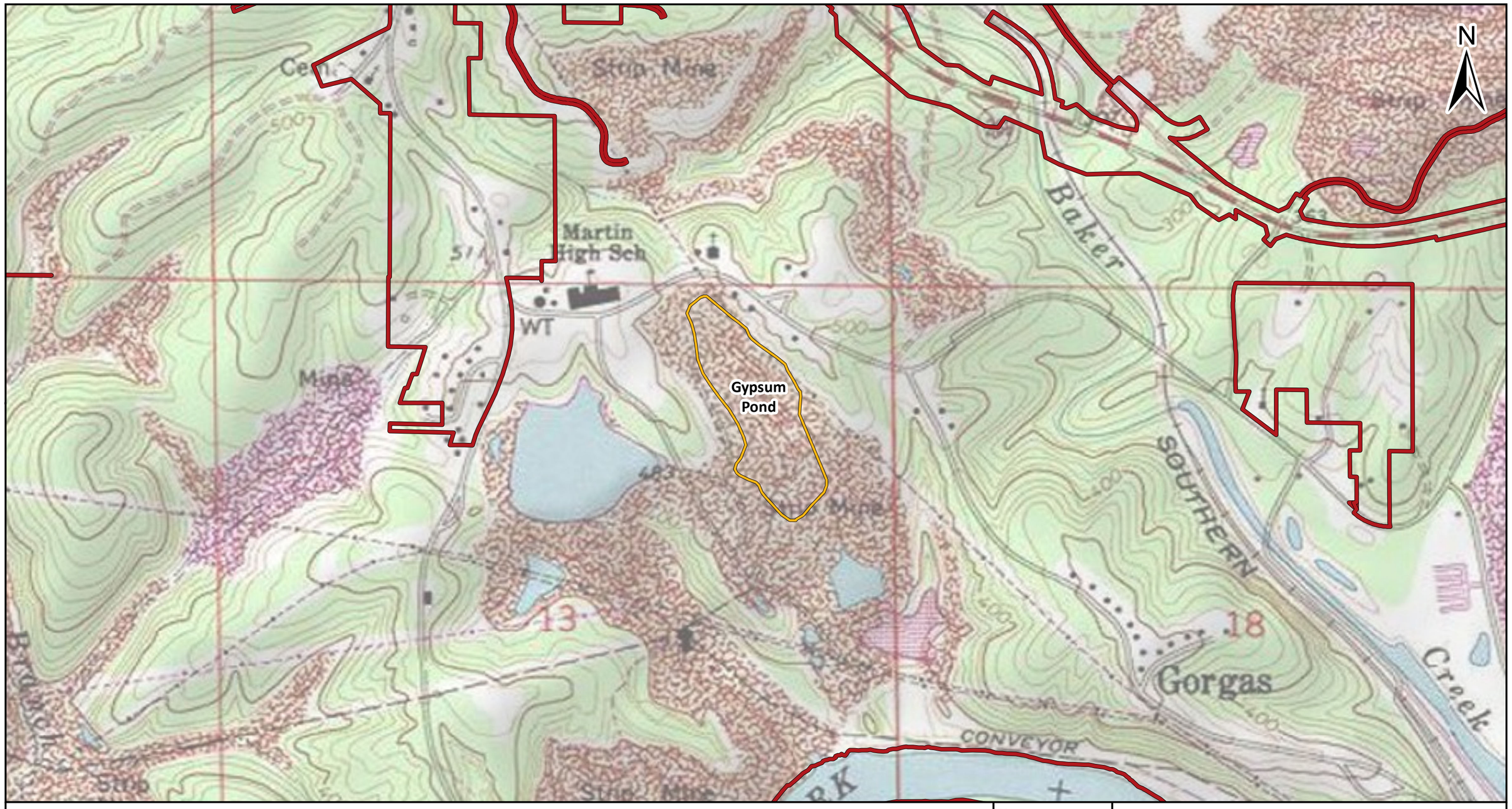
Projection: NAD 1983 State Plane Alabama West FIPS 0102 Feet
Base Map:Maxar Vivid Standard, 1/07/2023

SCALE	1:12,000
DATE	12/04/2023
DRAWN BY	KAR
CHECKED BY	AWH

DRAWING TITLE:
SITE LOCATION MAP
PLANT GORGAS GYPSUM POND

FIGURE NO.
FIGURE 1

Southern Company



LEGEND

- Gypsum Pond Boundary
- Property Boundary (Approximate)

0 750

Feet

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

SCALE	1:9,000
DATE	12/04/2023
DRAWN BY	KAR
CHECKED BY	AWH

DRAWING TITLE:

SITE TOPOGRAPHIC MAP
PLANT GORGAS GYPSUM POND

FIGURE NO.

FIGURE 2

Southern Company

N

Gypsum Pond

Ppv1u

LEGEND

Gypsum Pond Boundary

Property Boundary (Approximate)

Geologic Units

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

0 750

Feet

Projection: NAD 1983 State Plane Alabama West FIPS 0102 Feet

Base Map:Maxar Vivid Standard, 1/07/2023.

SCALE	1:9,000
DATE	12/04/2023
DRAWN BY	KAR
CHECKED BY	AWH

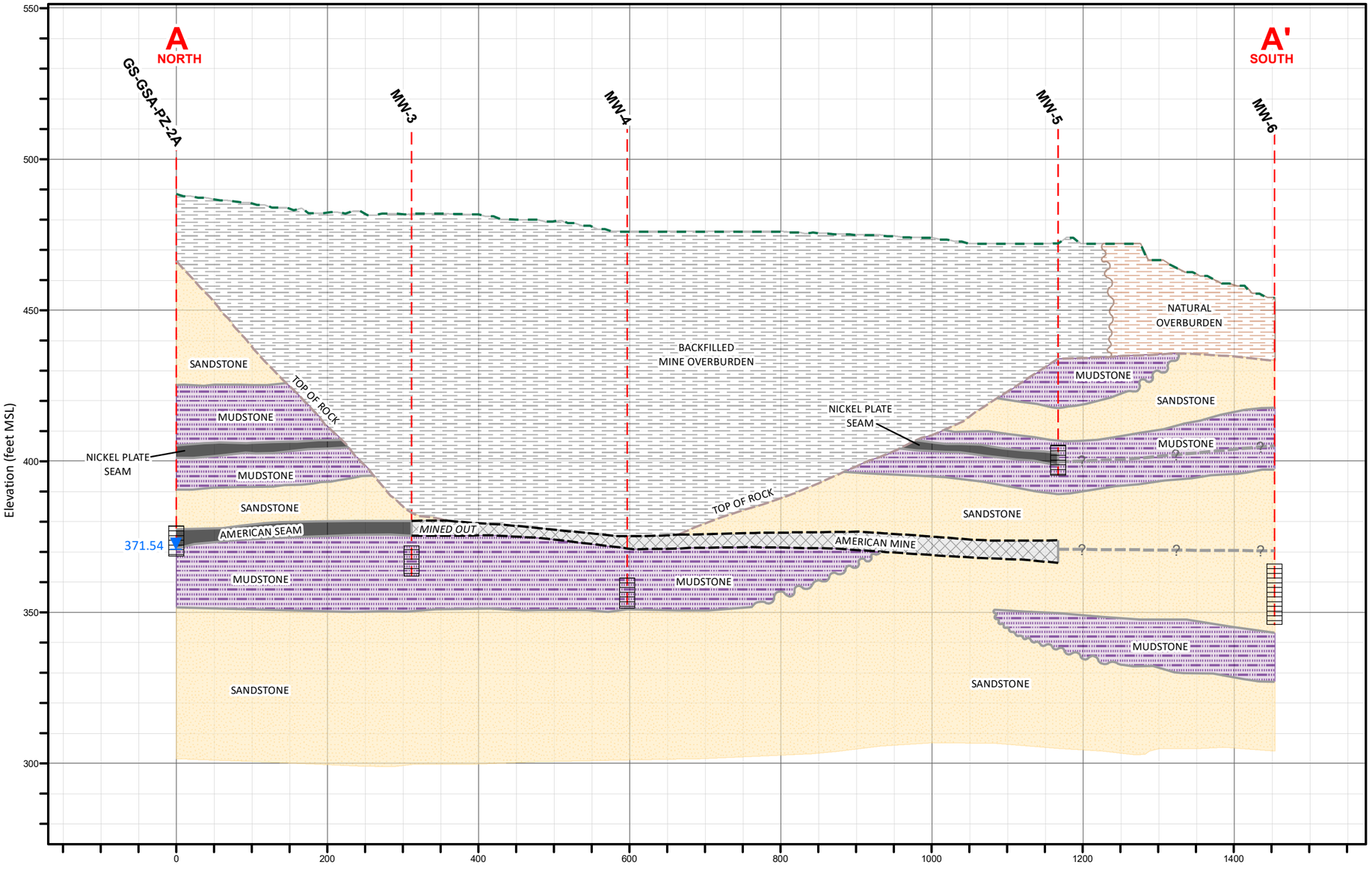
DRAWING TITLE:

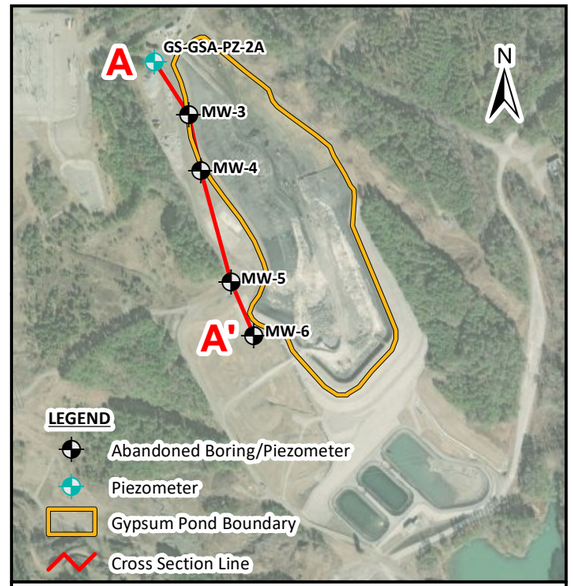
SITE GEOLOGIC MAP
PLANT GORGAS GYPSUM POND

FIGURE NO.

FIGURE 3

Southern Company





0 750 Feet

Projection: NAD 1983 State Plane Alabama West FIPS 0102 Feet
Base Map: Maxar Vivid Standard, 1/07/2023

NOTES:
1. Stratagraphic layers were correlated using a combination of boring data and gamma logs.
2. Vertical exaggeration = 4.
3. Wells MW-3 through MW-6 were installed in 2015 and did not produce enough groundwater to develop and sample.
4. Water level in GS-GSA-PZ-2A measured on August 21, 2023.

LEGEND

- Approximate Groundwater Elevation
- Screen Interval
- Ground Surface Elevation
- Borehole Location
- Top of Rock
- Strata Boundary
- Inferred Strata
- Mine

Geologic Units

- Backfilled Mine Overburden
- Natural Overburden
- Mudstone
- Sandstone
- Mine
- Coal

SCALE	AS SHOWN
DATE	12/05/2023
DRAWN BY	KAR
CHECKED BY	AWH

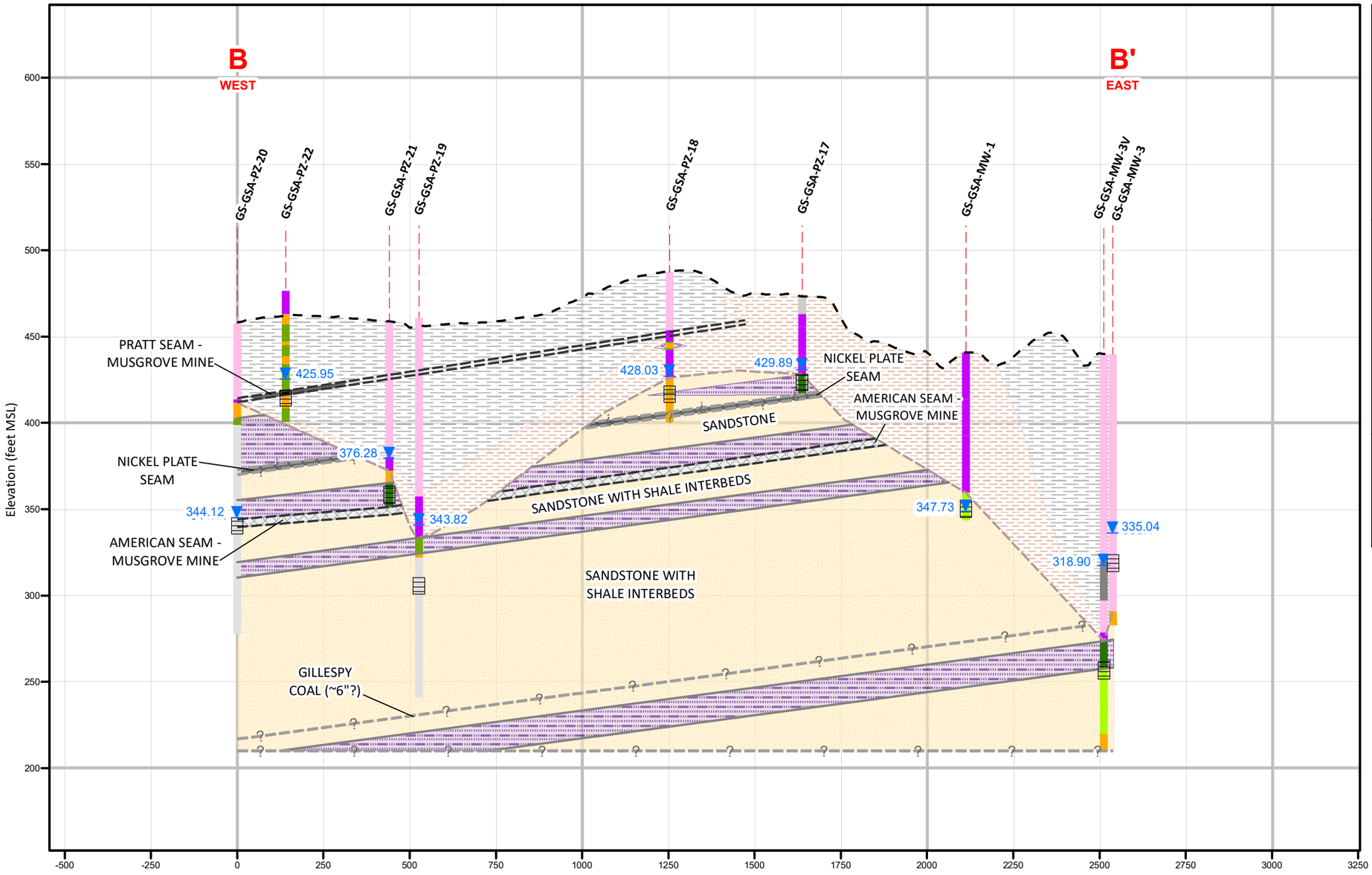
DRAWING TITLE

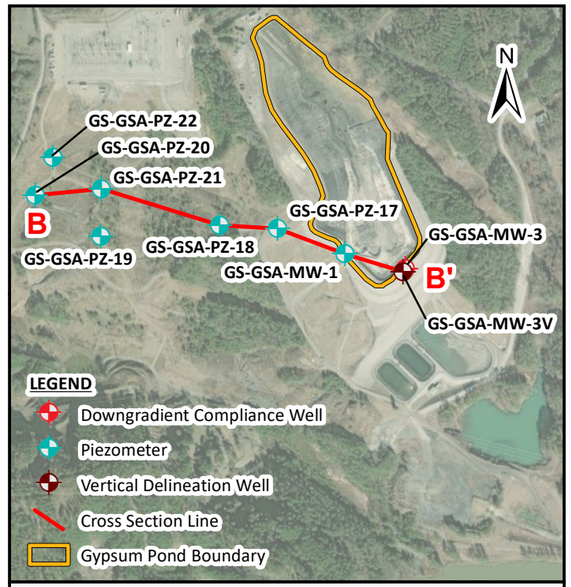
GEOLOGIC CROSS SECTION A - A'
PLANT GORGAS GYPSUM POND

FIGURE NO

FIGURE 4A

Southern Company





NOTES:
1. GS-GSA-PZ-22 and PZ-19 are projected onto the cross section line, so the ground surface deviates from the well surface elevation at these locations.
2. NM indicates water level not measured.
3. Water levels measured on August 21, 2023.
4. Water levels exist from three separate flow systems, so correlations of potentiometric surfaces are not presented on this figure.
5. Vertical exaggeration = 5.

LEGEND

Ground Surface Elevation	Top of Rock	CCR Fill	No Recovery	Backfilled Mine Overburden	Sandstone
Water Level Elevation	Strata Boundary	Fill Materials	Sandstone	Natural Overburden	Mine
Screened Interval	Inferred Strata	Overburden	Sandstone and Siltstone	Mudstone/Shale	Coal
Borehole Location	Mine	COAL	Siltstone		
		Hydroexcavated	Shale		

Borehole Description

Geologic Units

SCALE	AS SHOWN
DATE	12/06/2023
DRAWN BY	KAR
CHECKED BY	AWH

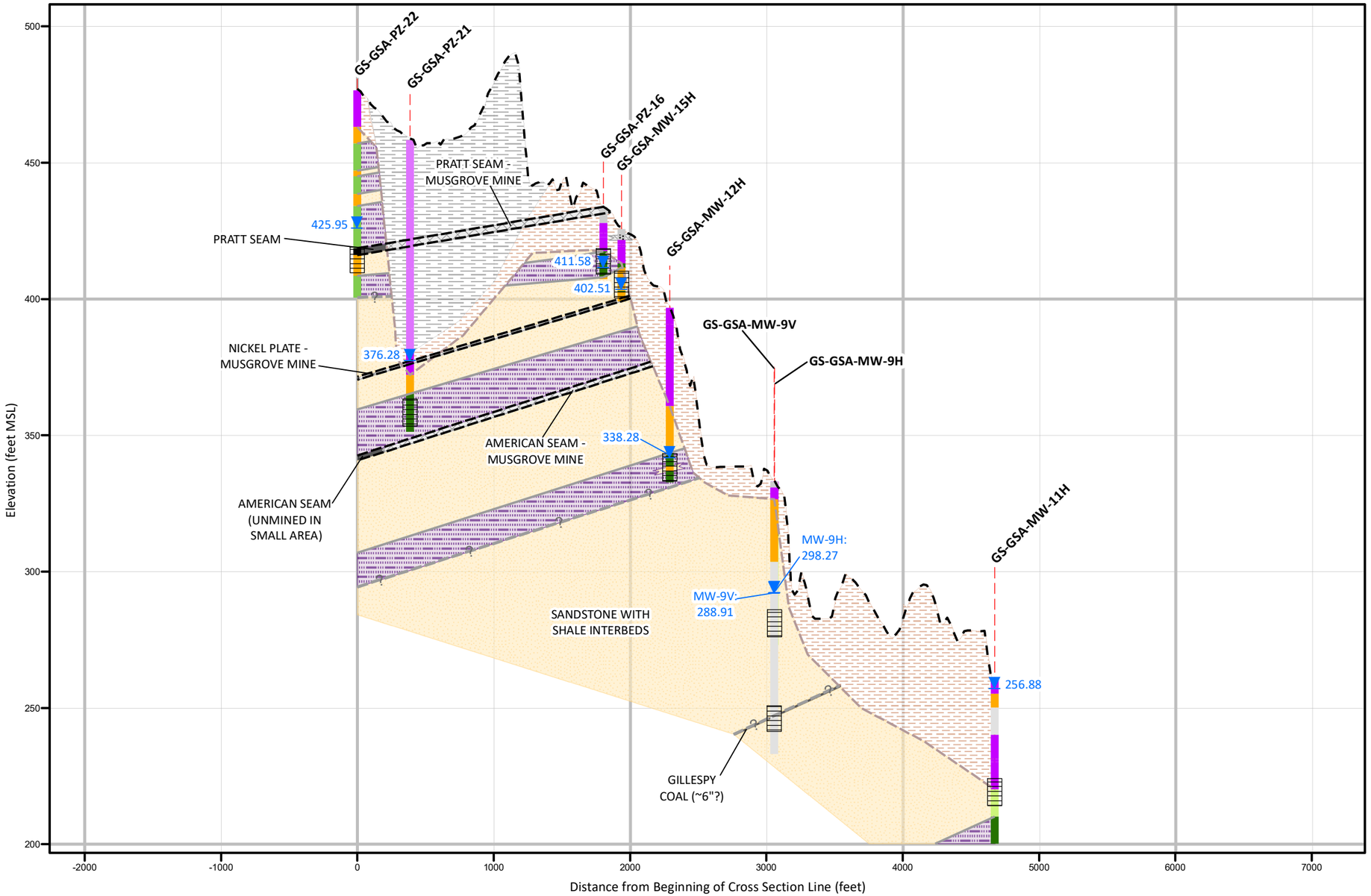
DRAWING TITLE

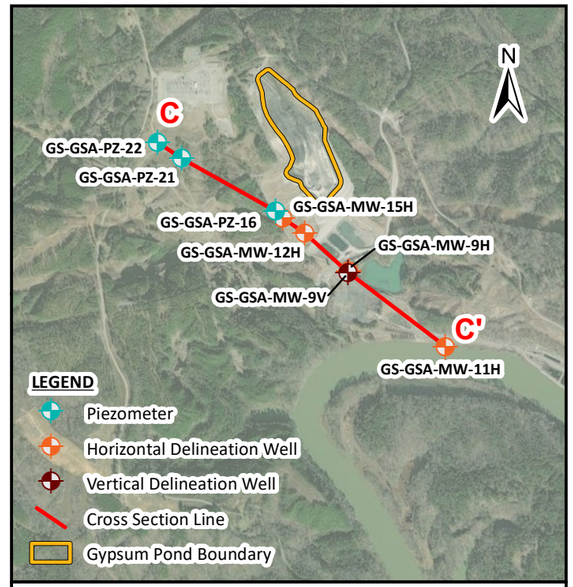
GEOLOGIC CROSS SECTION B - B'
PLANT GORGAS GYPSUM POND

FIGURE NO

FIGURE 4B

Southern Company





Projection: NAD 1983 State Plane Alabama West FIPS 0102 Feet
Base Map: Maxar Vivid Standard, 1/07/2023

NOTES:
1. GS-GSA-MW-9H is projected onto the cross section line, so the ground surface deviates from the well surface elevation at this location.
2. Groundwater levels measured on August 21, 2023.
3. Water levels exist from three separate flow systems, so correlations of potentiometric surfaces are not presented on this figure.
4. Deeper strata projected from structural elevations of coal seams from Musgrove Mine records or from neighboring borings that extend deeper.
5. Vertical exaggeration = 5.

LEGEND

- Ground Surface Elevation
- Water Level Elevation
- Borehole Location
- Screened Interval
- Top of Rock
- Strata Boundary
- Inferred Strata
- Mine

Borehole Description

- CCR Fill
- Fill Materials
- Overburden
- MINESPOILS
- COAL
- Hydroexcavated
- No Recovery
- Sandstone
- Sandstone and Siltstone
- Siltstone
- Shale

Geologic Units

- Backfilled Mine Overburden
- Natural Overburden
- Mudstone/Shale
- Sandstone with Shale Interbeds
- Mine
- Coal

SCALE	AS SHOWN
DATE	12/06/2023
DRAWN BY	KAR
CHECKED BY	AWH

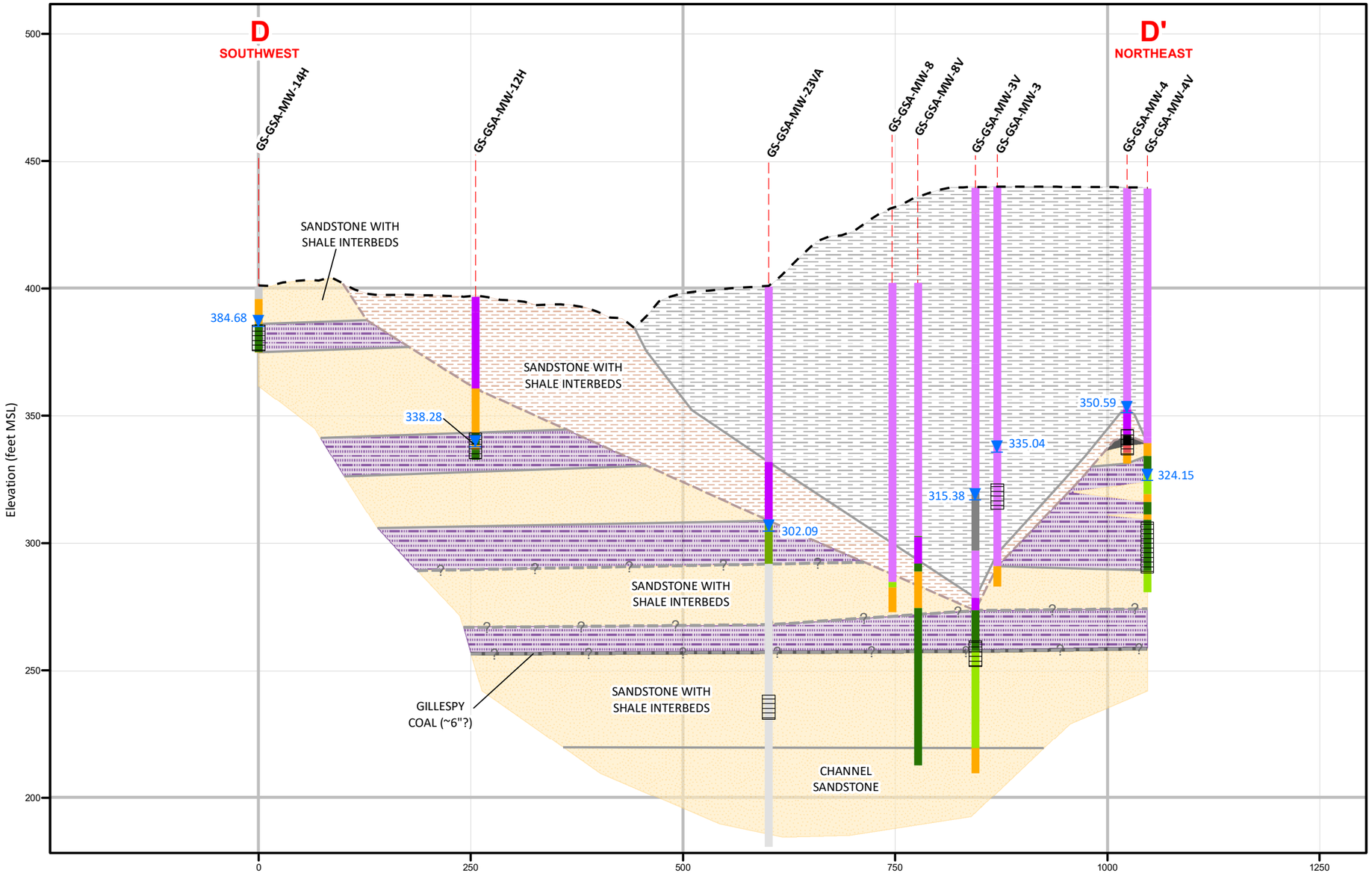
DRAWING TITLE

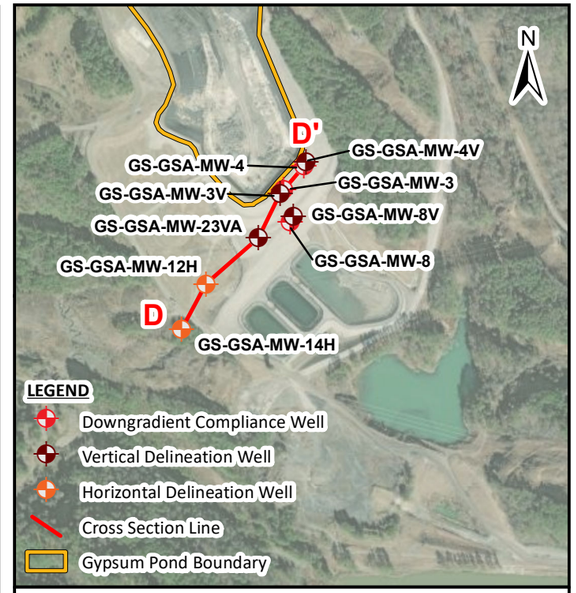
GEOLOGIC CROSS SECTION C - C'
PLANT GORGAS GYPSUM POND

FIGURE NO

FIGURE 4C

Southern Company





0 750 Feet

Projection: NAD 1983 State Plane Alabama West FIPS 0102 Feet
Base Map: Maxar Vivid Standard, 1/07/2023

NOTES:
1. Groundwater levels measured on August 21, 2023.
2. Water levels exist from three separate flow systems, so correlations of potentiometric surfaces are not presented on this figure.
3. Deeper strata projected from structural elevations of coal seams from Musgrove Mine records or from neighboring borings that extend deeper.
4. Vertical exaggeration = 5.

LEGEND

- Ground Surface Elevation
- Water Level Elevation
- Borehole Location
- Screened Interval
- Top of Rock
- Strata Boundary
- Inferred Strata
- Mine

Borehole Description

- CCR Fill
- Fill Materials
- Overburden
- MINESPOILS
- COAL
- Hydroexcavated
- No Recovery
- Partially Weathered Rock

Geologic Units

- Sandstone
- Sandstone and Siltstone
- Siltstone
- Shale
- Backfilled Mine Overburden
- Natural Overburden
- Mudstone/Shale
- Sandstone
- Mine
- Coal

SCALE	AS SHOWN
DATE	12/06/2023
DRAWN BY	KAR
CHECKED BY	AWH

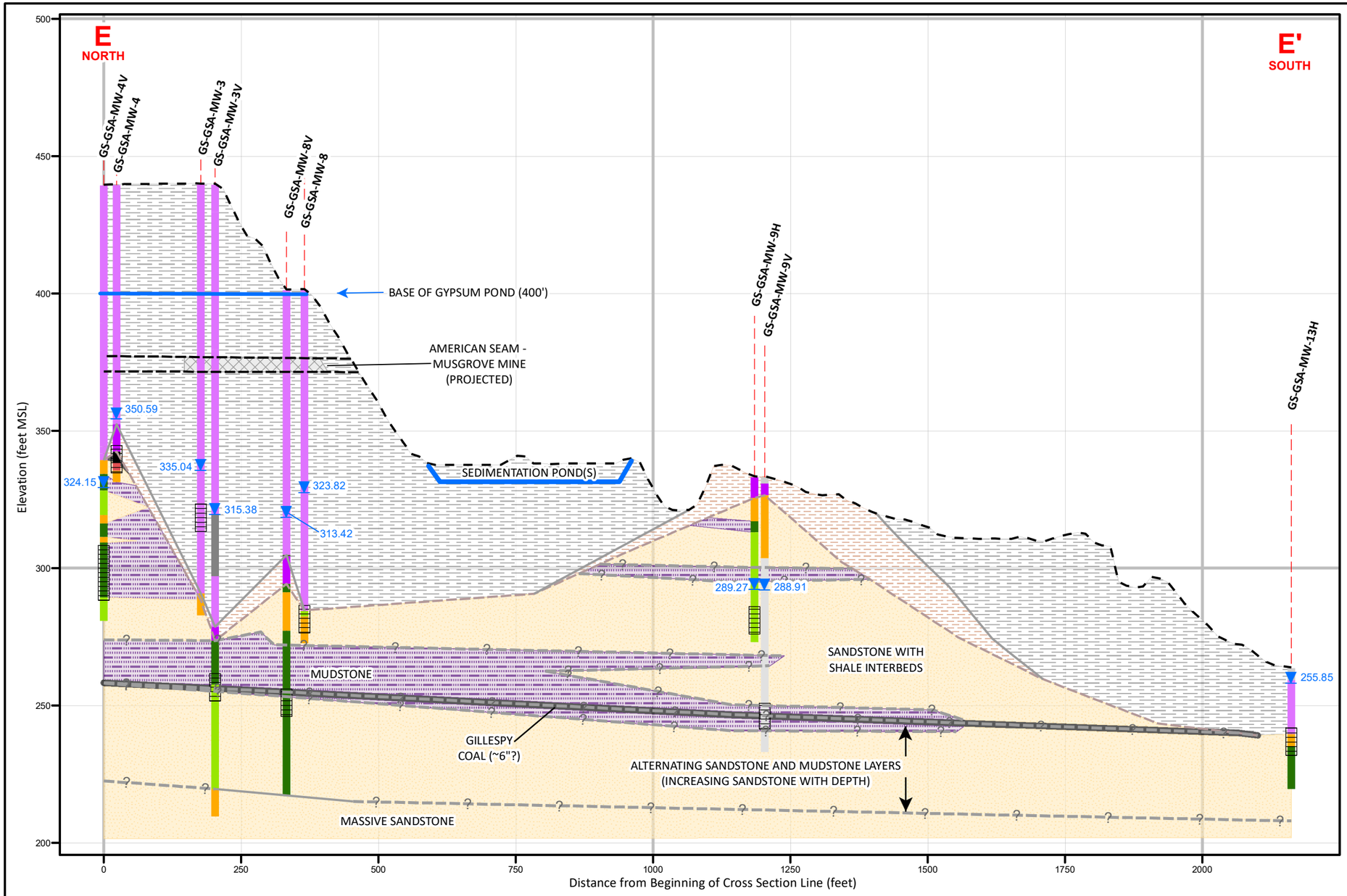
DRAWING TITLE

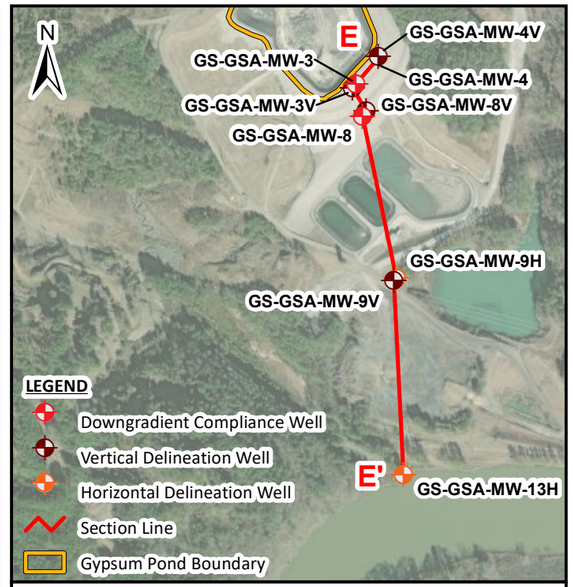
GEOLOGIC CROSS SECTION D - D'
PLANT GORGAS GYPSUM POND

FIGURE NO

FIGURE 4D

Southern Company





Projection: NAD 1983 State Plane Alabama West FIPS 0102 Feet
Base Map: Maxar Vivid Standard, 1/07/2023

NOTES:
1. Groundwater levels measured on August 21, 2023.
3. Water levels exist from three separate flow systems, so correlations of potentiometric surfaces are not presented on this figure.
4. Vertical exaggeration = 5.

LEGEND

- Ground Surface Elevation
- Groundwater Elevation
- Borehole Location
- SCREEN_63
- Top of Rock
- Strata Boundary
- Inferred Strata
- Mine

Borehole Description

- CCR Fill
- Fill Materials
- Overburden
- COAL
- Hydroexcavated
- No Recovery
- Partially Weathered Rock
- Sandstone
- Sandstone and Siltstone
- Shale

Geologic Units

- Backfilled Mine Overburden
- Natural Overburden
- Mudstone/Shale
- Sandstone
- Mine
- Coal

SCALE	AS SHOWN
DATE	12/06/2023
DRAWN BY	KAR
CHECKED BY	AWH

DRAWING TITLE

GEOLOGIC CROSS SECTION E - E'
PLANT GORGAS GYPSUM POND

FIGURE NO

FIGURE 4E

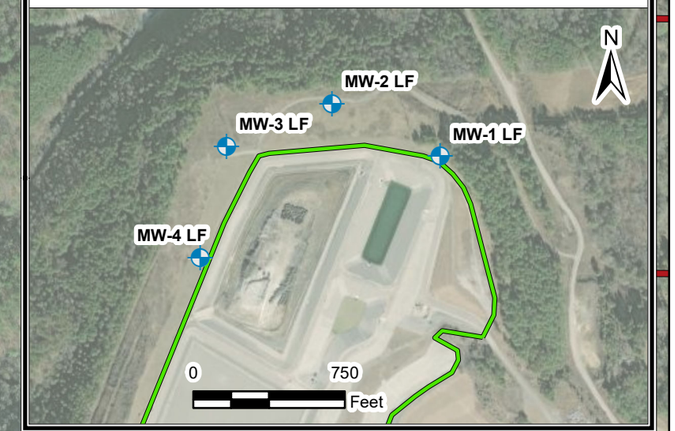
Southern Company

N

GS-GSA-PZ-2A
GS-GSA-PZ-4
GS-GSA-PZ-22
GS-GSA-PZ-21
GS-GSA-PZ-20
GS-GSA-PZ-19
GS-GSA-PZ-18
GS-GSA-PZ-17
GS-GSA-PZ-16
GS-GSA-MW-15H
GS-GSA-MW-14H
GS-GSA-MW-13H
GS-GSA-MW-12H
GS-GSA-MW-11H
GS-GSA-MW-10H
GS-GSA-MW-9H
GS-GSA-MW-9V
GS-GSA-MW-8V
GS-GSA-MW-8
GS-GSA-MW-7
GS-GSA-MW-6
GS-GSA-MW-5
GS-GSA-MW-4V
GS-GSA-MW-4
GS-GSA-MW-3V
GS-GSA-MW-3
GS-GSA-MW-2
GS-GSA-MW-1
GS-GSA-MW-23VA
GS-GSA-MW-12V
GS-GSA-MW-9

APPROXIMATELY 4500'
TO UPGRADIENT WELLS

UPGRADIENT COMPLIANCE WELL NETWORK OVERVIEW MAP



Downgradient Compliance Well
Upgradient Compliance Well
Horizontal Delineation Well
Vertical Delineation Well
Piezometer
Abandoned Well
Property Boundary (Approximiate)
Gypsum Pond Boundary
CCR Landfill Boundary
Sedimentation Pond
Clear Pool
Emergency Storage
Blue Pond

0 500 Feet

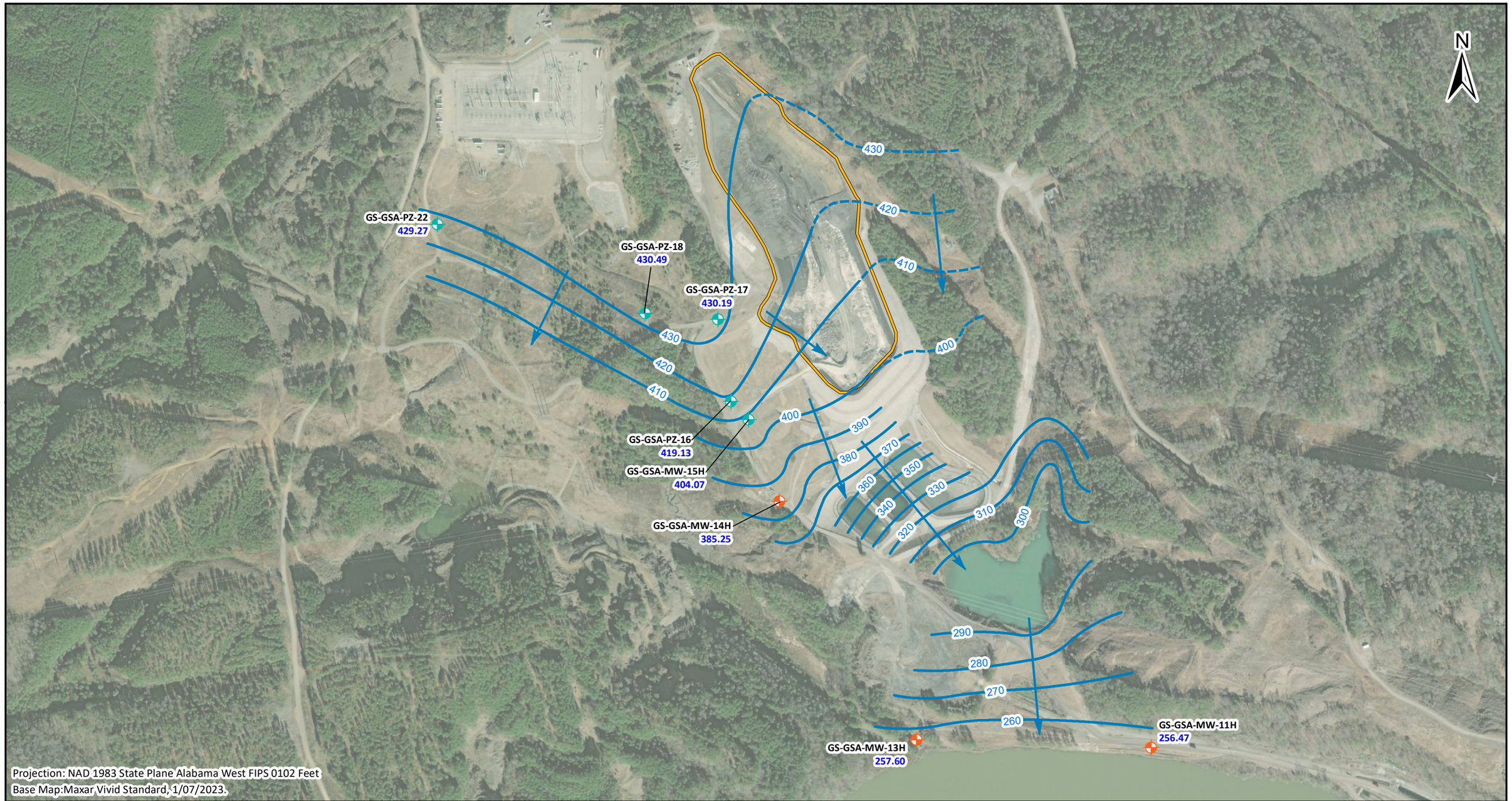
Base Map:Maxar Vivid Standard, 1/07/2023.
Projection: NAD 1983 State Plane Alabama West FIPS 0102 Feet

SCALE	1:6,000
DATE	12/28/2023
DRAWN BY	KAR
CHECKED BY	AWH

DRAWING TITLE:
MONITORING WELL LOCATION MAP
PLANT GORGAS GYPSUM POND

FIGURE NO.
FIGURE 5

Southern Company



LEGEND

- Horizontal Delineation Well
- Piezometer
- **GS-GSA-PZ-17** Well ID
- 430.19 Groundwater Elevation
- Potentiometric Surface Contour (ft NAVD88)
- Inferred Potentiometric Surface Contour (ft NAVD 88)
- Approximate Groundwater Flow Direction
- Gypsum Pond Boundary

0 500 Feet

NOTES:
1. GW Elevation from MW-15H was not utilized for contouring because (1) less than half the screen was covered by groundwater and (2) its groundwater elevation did not fit overall spatial pattern.

SCALE	1:6,000
DATE	12/04/2023
DRAWN BY	KAR
CHECKED BY	AWH

DRAWING TITLE:
POTENTIOMETRIC SURFACE CONTOUR MAP
WATER TABLE, FEBRUARY 27, 2023
PLANT GORGAS GYPSUM POND

FIGURE NO.
FIGURE 6A

Southern Company

LEGEND

- Downgradient Compliance Well
- Horizontal Delineation Well
- Piezometer

GS-GSA-MW-4 Well ID
353.42 Groundwater Elevation

- Potentiometric Surface Contour (ft NAVD88)
- Approximate Groundwater Flow Direction
- Gypsum Pond Boundary

0 500
Feet

NOTES:
1. GS-GSA-MW-1 is shown as a piezometer, since it is not included in the monitoring well network for this site.
2. Piezometer MW-1 had less than 3' of gw in screen and is therefore only used as a guide for drawing 350' elevation contour.

SCALE	1:6,000
DATE	12/04/2023
DRAWN BY	KAR
CHECKED BY	AWH

DRAWING TITLE:
POTENTIOMETRIC SURFACE CONTOUR MAP
INTERMEDIATE FLOW SYSTEM 1, FEBRUARY 27, 2023
PLANT GORGAS GYPSUM POND

FIGURE NO.
FIGURE 6B

Southern Company

LEGEND

- Downgradient Compliance Well
- Piezometer
- **GS-GSA-MW-2** Well ID
  343.02 Groundwater Elevation
- Potentiometric Surface Contour (ft NAVD88)
- Approximate Groundwater Flow Direction
- Gypsum Pond Boundary

0 500 Feet

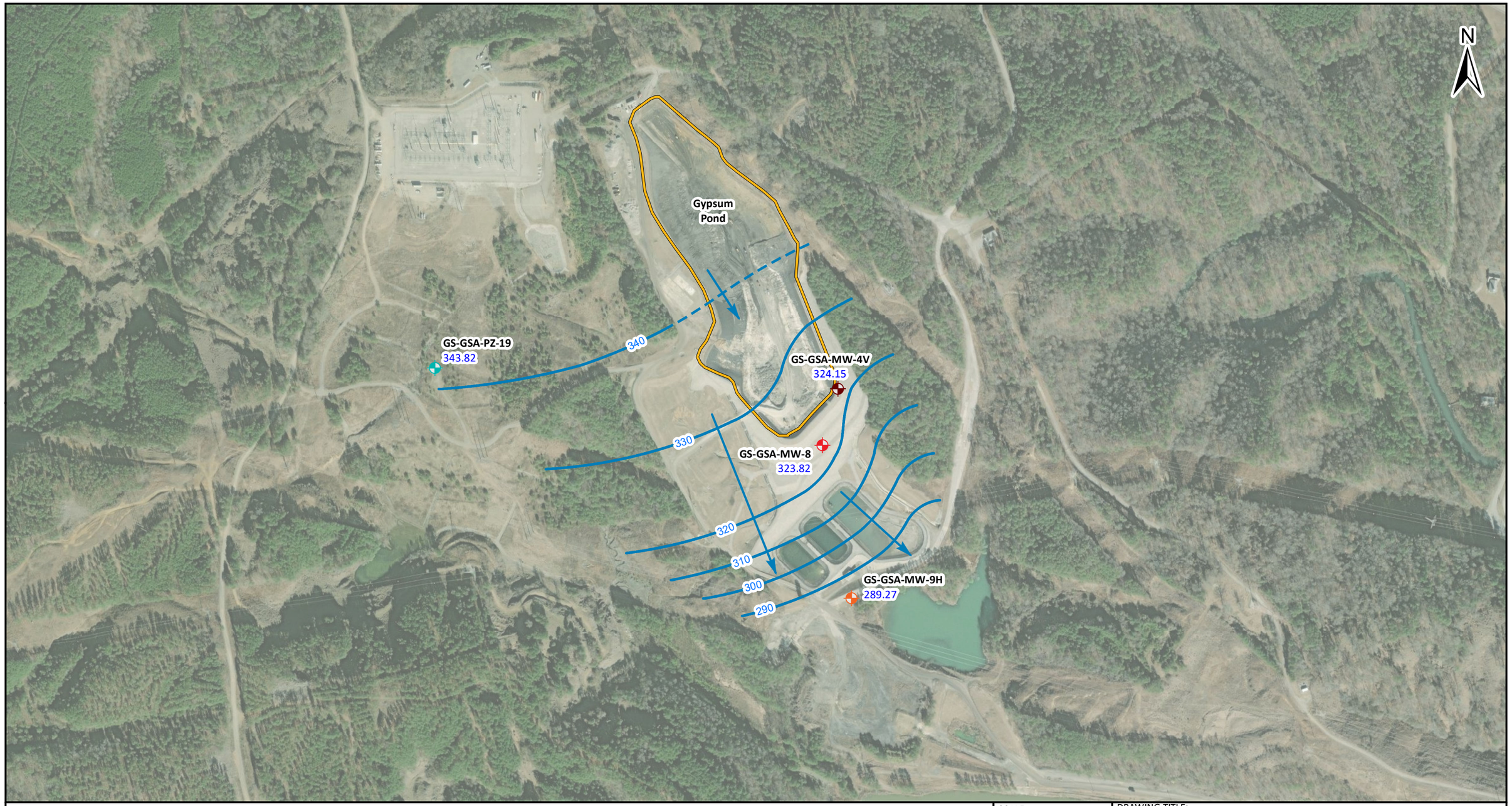
Base Map:Maxar Vivid Standard, 1/07/2023.
Projection: NAD 1983 State Plane Alabama West FIPS 0102 Feet

SCALE	1:6,000
DATE	12/04/2023
DRAWN BY	KAR
CHECKED BY	AWH

DRAWING TITLE:
POTENTIOMETRIC SURFACE CONTOUR MAP
INTERMEDIATE FLOW SYSTEM 2, FEBRUARY 27, 2023
PLANT GORGAS GYPSUM POND

FIGURE NO.
FIGURE 6C

Southern Company



LEGEND

- Downgradient Compliance Well
- Horizontal Delineation Well
- Vertical Delineation Well
- Piezometer
- Potentiometric Surface Contour (ft NAVD88)
- Inferred Potentiometric Surface Contour (ft NAVD 88)
- Approximate Groundwater Flow Direction
- Gypsum Pond Boundary
- **GS-GSA-MW-9H** Well ID
- 289.27 Groundwater Elevation

0 500 Feet

Base Map:Maxar Vivid Standard, 1/07/2023.
Projection: NAD 1983 State Plane Alabama West FIPS 0102 Feet

SCALE	1:6,000
DATE	12/04/2023
DRAWN BY	KAR
CHECKED BY	AWH

DRAWING TITLE:
POTENTIOMETRIC SURFACE CONTOUR MAP
INTERMEDIATE FLOW SYSTEM 3, FEBRUARY 27, 2023
PLANT GORGAS GYPSUM POND

FIGURE NO.
FIGURE 6D

Southern Company

LEGEND

- Vertical Delineation Well
- Potentiometric Surface Contour (ft NAVD88)
- Approximate Groundwater Flow Direction
- Gypsum Pond Boundary

GS-GSA-MW-3V Well ID
324.12 Groundwater Elevation

0 500
Feet

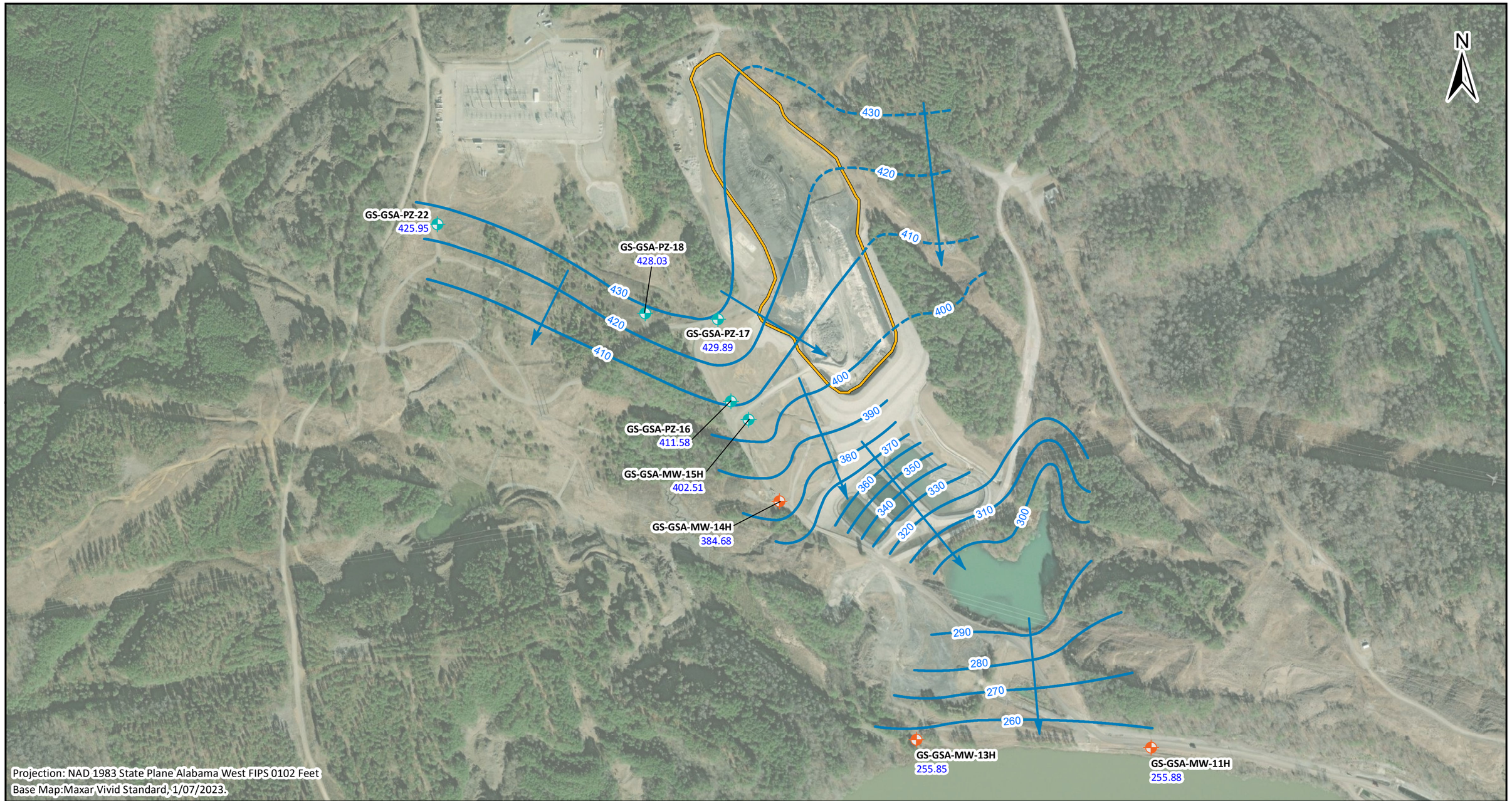
Base Map:Maxar Vivid Standard, 1/07/2023.
Projection: NAD 1983 State Plane Alabama West FIPS 0102 Feet

SCALE	1:6,000
DATE	12/04/2023
DRAWN BY	KAR
CHECKED BY	AWH

DRAWING TITLE:
POTENTIOMETRIC SURFACE CONTOUR MAP
DEEP INTERVAL, FEBRUARY 27, 2023
PLANT GORGAS GYPSUM POND

FIGURE NO.
FIGURE 6E

Southern Company



LEGEND

- Horizontal Delineation Well
- Piezometer
- **GS-GSA-PZ-17** Well ID
- 429.89 Groundwater Elevation
- Potentiometric Surface Contour (ft NAVD88)
- Inferred Potentiometric Surface Contour (ft NAVD 88)
- Approximate Groundwater Flow Direction
- Gypsum Pond Boundary

0 500 Feet

NOTES:
1. GW Elevation from MW-15H was not utilized for contouring because (1) less than half the screen was covered by groundwater and (2) its groundwater elevation did not fit overall spatial pattern.

SCALE	1:6,000
DATE	12/04/2023
DRAWN BY	KAR
CHECKED BY	AWH

DRAWING TITLE:
POTENTIOMETRIC SURFACE CONTOUR MAP
WATER TABLE, AUGUST 21, 2023
PLANT GORGAS GYPSUM POND

FIGURE NO.
FIGURE 7A

Southern Company

LEGEND

- Downgradient Compliance Well
- Horizontal Delineation Well
- Piezometer

GS-GSA-MW-4 Well ID
350.59 Groundwater Elevation

- Potentiometric Surface Contour (ft NAVD88)
- Approximate Groundwater Flow Direction
- Gypsum Pond Boundary

0 500 Feet

NOTES:
1. GS-GSA-MW-1 is shown as a piezometer, since it is not included in the monitoring well network for this site.
2. GS-GSA-MW-1 had less than 3' of gw in screen and is therefore only used as a guide for drawing 350' elevation contour.

SCALE	1:6,000
DATE	12/04/2023
DRAWN BY	KAR
CHECKED BY	AWH

DRAWING TITLE:
POTENTIOMETRIC SURFACE CONTOUR MAP
INTERMEDIATE FLOW SYSTEM 1, AUGUST 21, 2023
PLANT GORGAS GYPSUM POND

FIGURE NO.
FIGURE 7B

Southern Company

LEGEND

- Downgradient Compliance Well
- Piezometer
- **GS-GSA-MW-2** Well ID
  335.50 Groundwater Elevation
- Potentiometric Surface Contour (ft NAVD88)
- Approximate Groundwater Flow Direction
- Gypsum Pond Boundary

0 500
Feet

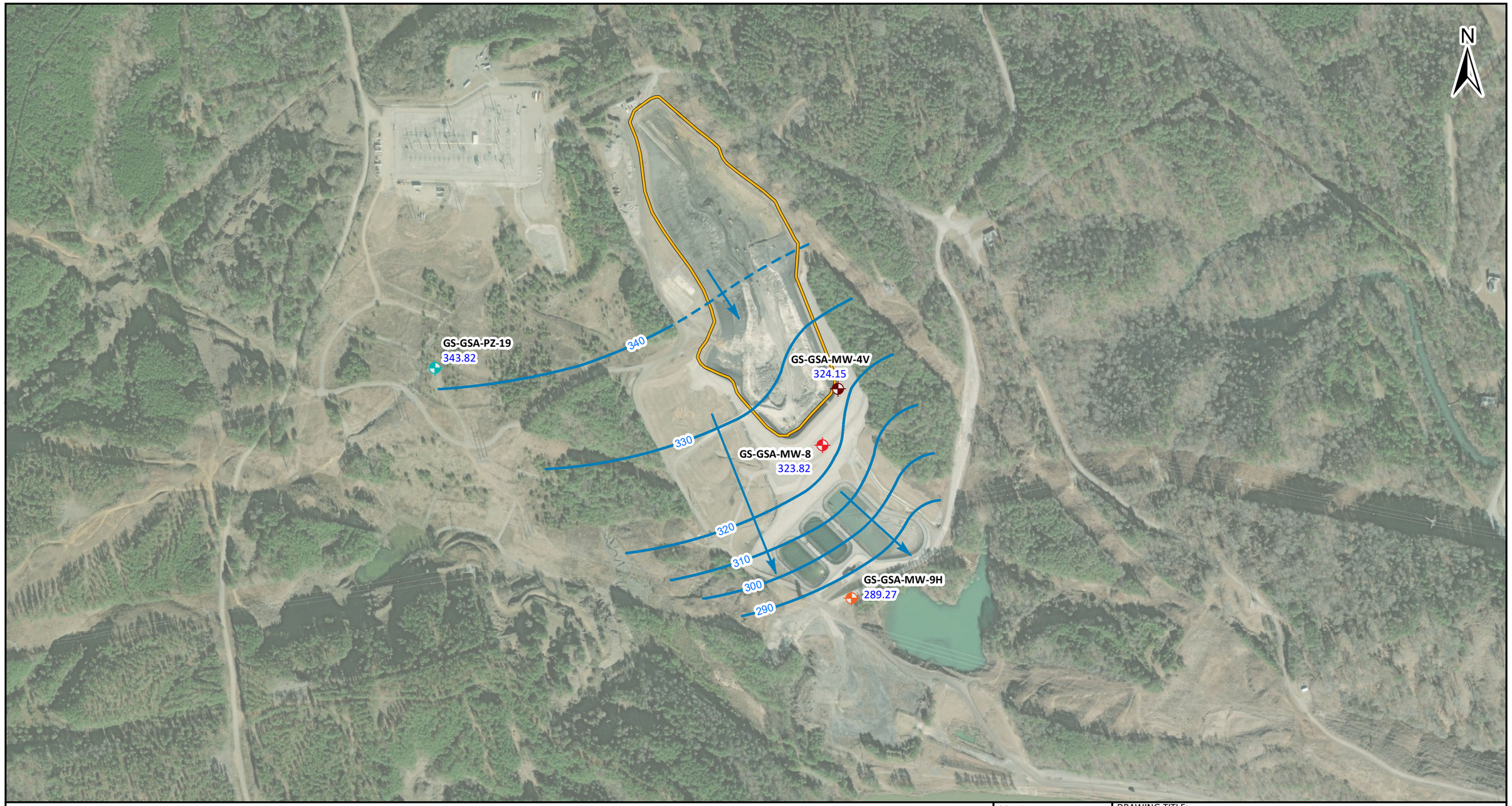
Base Map:Maxar Vivid Standard, 1/07/2023.
Projection: NAD 1983 State Plane Alabama West FIPS 0102 Feet

SCALE	1:6,000
DATE	12/04/2023
DRAWN BY	KAR
CHECKED BY	AWH

DRAWING TITLE:
POTENTIOMETRIC SURFACE CONTOUR MAP
INTERMEDIATE FLOW SYSTEM 2, AUGUST 21, 2023
PLANT GORGAS GYPSUM POND

FIGURE NO.
FIGURE 7C

Southern Company



LEGEND

- Downgradient Compliance Well
- Horizontal Delineation Well
- Vertical Delineation Well
- Piezometer
- Potentiometric Surface Contour (ft NAVD88)
- Inferred Potentiometric Surface Contour (ft NAVD 88)
- Approximate Groundwater Flow Direction
- Gypsum Pond Boundary
- **GS-GSA-MW-9H** Well ID
- 289.27 Groundwater Elevation

0 500 Feet

Base Map:Maxar Vivid Standard, 1/07/2023.
Projection: NAD 1983 State Plane Alabama West FIPS 0102 Feet

SCALE	1:6,000
DATE	12/04/2023
DRAWN BY	KAR
CHECKED BY	AWH

DRAWING TITLE:
POTENTIOMETRIC SURFACE CONTOUR MAP
INTERMEDIATE FLOW SYSTEM 3, AUGUST 21, 2023
PLANT GORGAS GYPSUM POND

FIGURE NO.
FIGURE 7D

Southern Company

LEGEND

- Vertical Delineation Well
- Potentiometric Surface Contour (ft NAVD88)
- Approximate Groundwater Flow Direction
- Gypsum Pond Boundary

GS-GSA-MW-3V Well ID
315.38 Groundwater Elevation

0 500
Feet

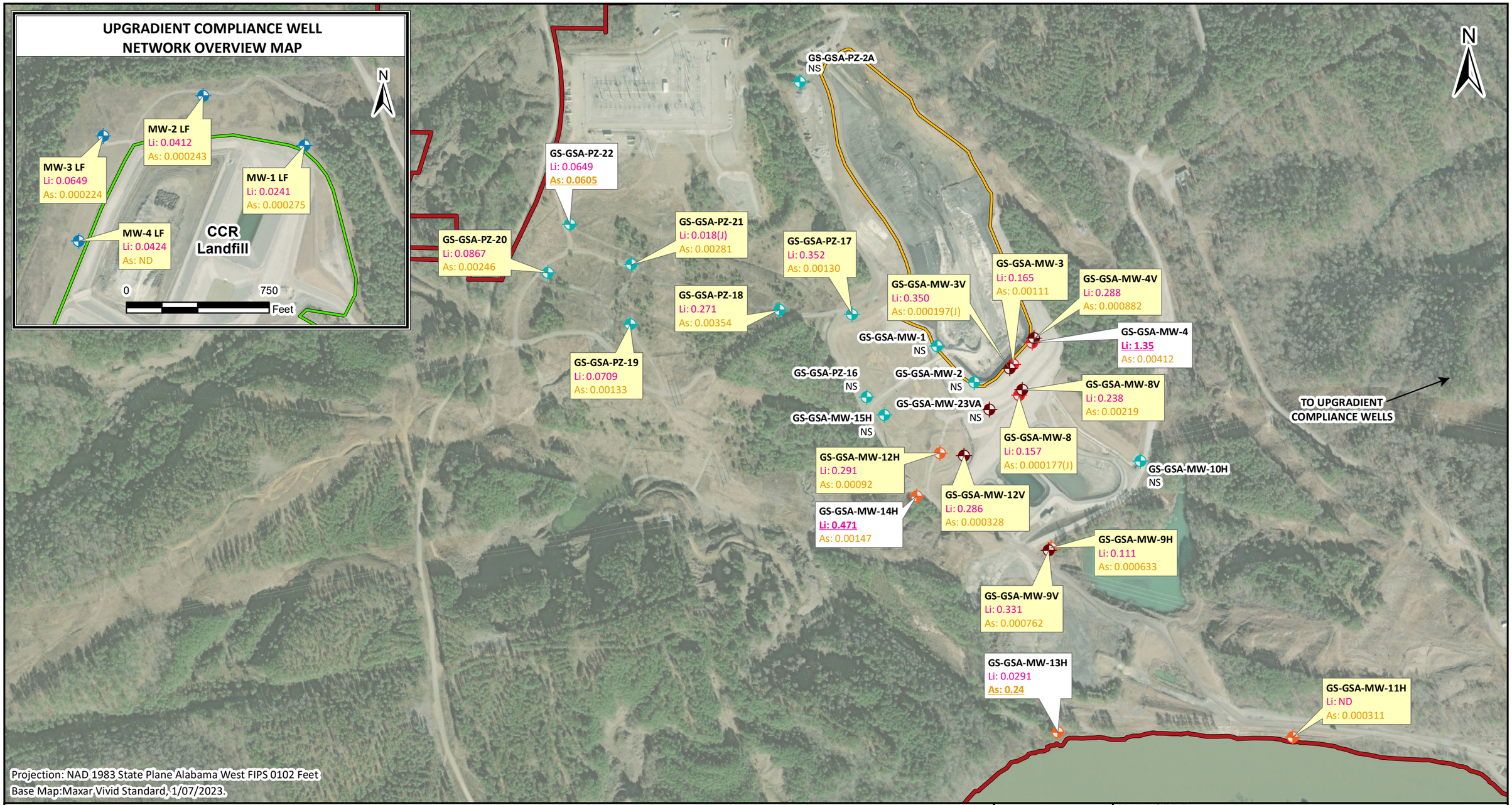
Base Map:Maxar Vivid Standard, 1/07/2023.
Projection: NAD 1983 State Plane Alabama West FIPS 0102 Feet

SCALE	1:6,000
DATE	12/04/2023
DRAWN BY	KAR
CHECKED BY	AWH

DRAWING TITLE:
POTENTIOMETRIC SURFACE CONTOUR MAP
DEEP INTERVAL, AUGUST 21, 2023
PLANT GORGAS GYPSUM POND

FIGURE NO.
FIGURE 7E

Southern Company



LEGEND

- Upgradient Compliance Well
- Downgradient Compliance Well
- Horizontal Delineation Well
- Vertical Delineation Well
- Piezometer
- Property Boundary (Approximiate)
- Gypsum Pond Boundary
- Gypsum CCR Landfill Boundary

GS-GSA-MW-9H Well ID
Li: 0.111 Lithium Concentration (mg/L)
As: 0.000633 Arsenic Concentration (mg/L)

0 500 Feet

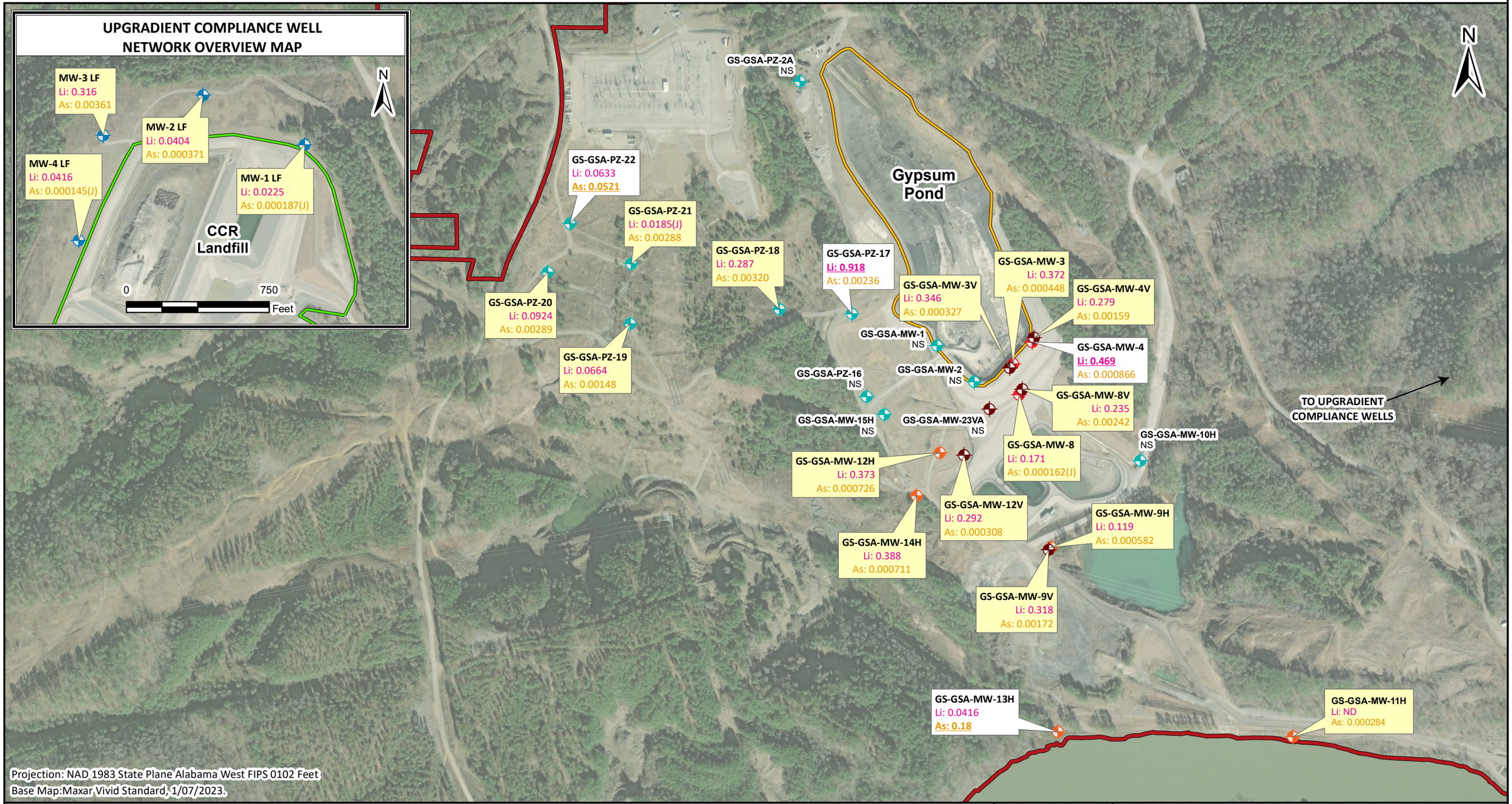
NOTES:
1. Concentrations are in mg/L.
2. NS indicates not sampled.
3. ND indicates concentration below the laboratory method detection limit (MDL).
4. Groundwater samples collected on February 20 and 21, 2023 (upgradient wells) and from February 27 to March 1, 2023.
5. White callout boxes indicate concentrations exceeding the Groundwater Protection Standard (GWPS) of either lithium (0.419 mg/L) or arsenic (0.01 mg/L). Underlined concentrations indicate GWPS exceedances.
6. J indicates estimated concentration above the laboratory MDL and below the laboratory reporting limit.

SCALE	1:6,000
DATE	12/28/2023
DRAWN BY	KAR
CHECKED BY	AWH

DRAWING TITLE:
GWPS EXCEEDANCES MAP
ARSENIC, LITHIUM - FEBRUARY AND MARCH 2023
PLANT GORGAS GYPSUM POND

FIGURE NO.
FIGURE 8A

Southern Company



LEGEND

- Upgradient Compliance Well
- Downgradient Compliance Well
- Horizontal Delineation Well
- Vertical Delineation Well
- Piezometer
- Property Boundary (Approximiate)
- Gypsum Pond Boundary
- Gypsum CCR Landfill Boundary

GS-GSA-MW-9H Well ID
Li: 0.119 Lithium Concentration (mg/L)
As: 0.000582 Arsenic Concentration (mg/L)

0 500 Feet

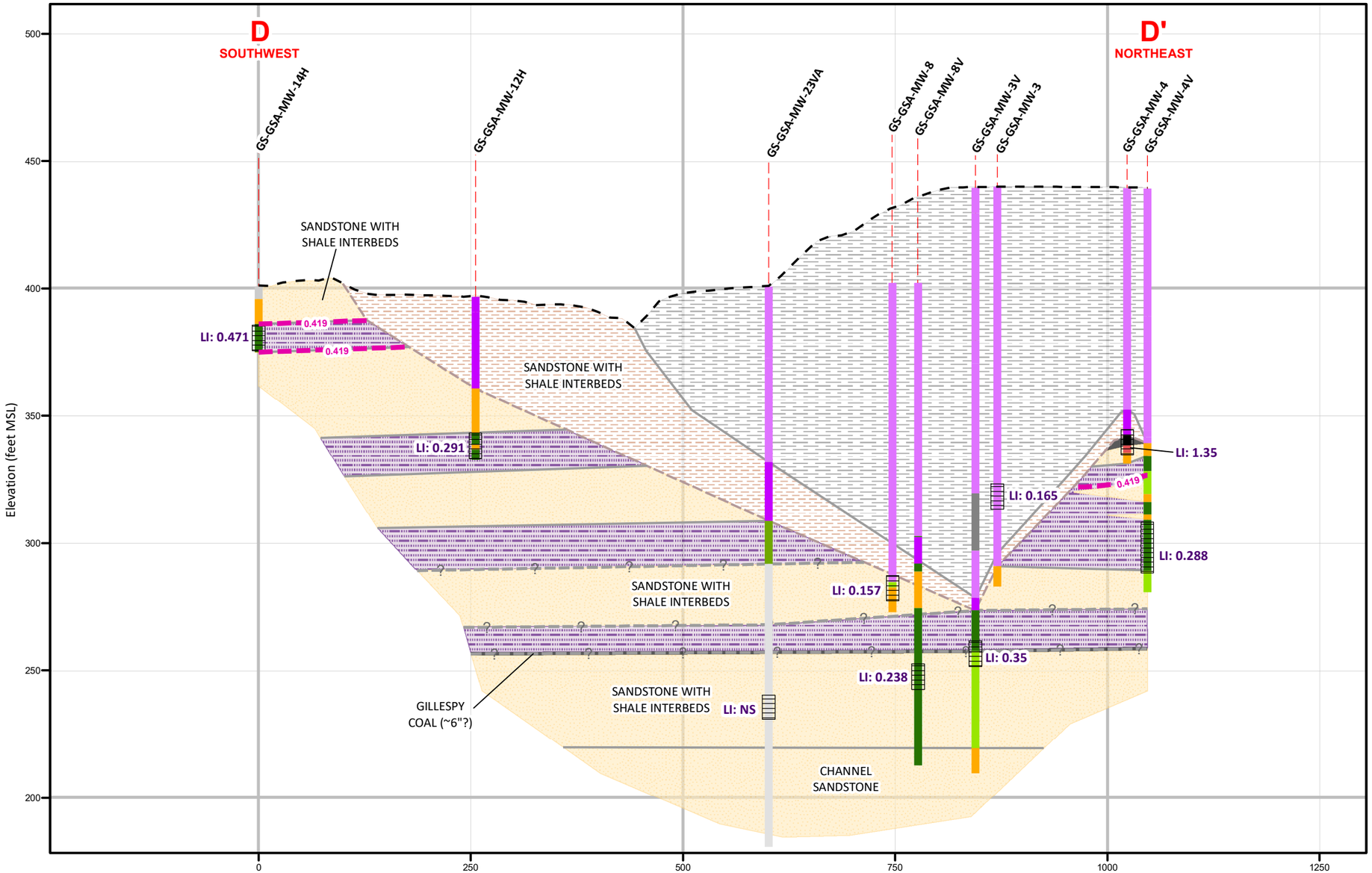
NOTES:
1. Concentrations are in mg/L.
2. NS indicates not sampled.
3. ND indicates concentration below the laboratory method detection limit (MDL).
4. Groundwater samples collected on August 22, 2023 (upgradient wells) and from August 21 to 23, 2023.
5. White callout boxes indicate concentrations exceeding the Groundwater Protection Standard (GWPS) of either lithium (0.419 mg/L) or arsenic (0.01 mg/L). Underlined concentrations indicate GWPS exceedances.
6. J indicates estimated concentration above the laboratory MDL and below the laboratory reporting limit.

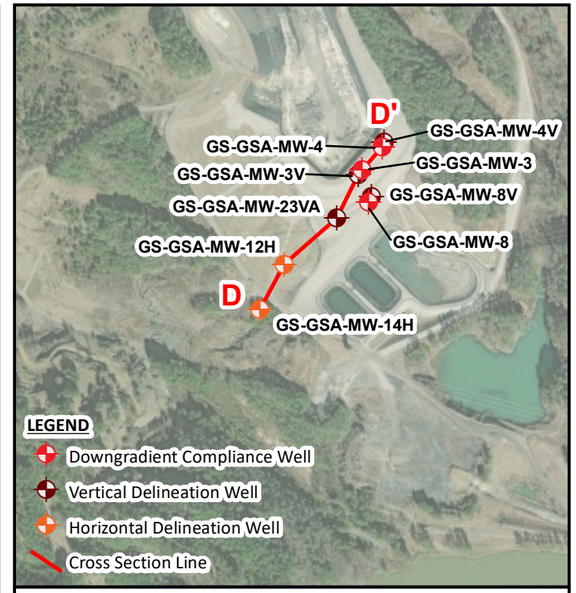
SCALE	1:6,000
DATE	12/28/2023
DRAWN BY	KAR
CHECKED BY	AWH

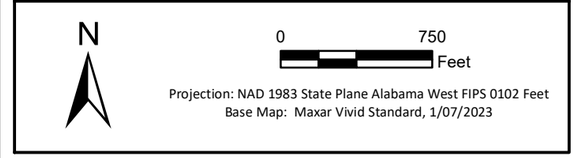
DRAWING TITLE:
GWPS EXCEEDANCES MAP
ARSENIC, LITHIUM - AUGUST 2023
PLANT GORGAS GYPSUM POND

FIGURE NO.
FIGURE 8B

Southern Company







Projection: NAD 1983 State Plane Alabama West FIPS 0102 Feet
Base Map: Maxar Vivid Standard, 1/07/2023

NOTES:
1. Groundwater samples collected from Februrary 27 to March 1, 2023.
3. Deeper strata are projected from structural elevations of coal seams from Musgrove Mine records or from neighboring borings that extend deeper.
4. NS indicates not sampled due to lack of water sufficient for well development (GS-GSA-MW-23VA was not sampled).
5. Vertical exaggeration = 5.
6. Li indicates lithium concentration in mg/L.
7. GWPS indicates Groundwater Protection Standard.
8. An alternate-source demonstration (ASD) was performed at GS-GSA-MW-4 and was submitted in March 2022.

LEGEND

- Ground Surface Elevation
- GWPS Isoconcentration for Lithium (0.419 mg/L)
- Borehole Location
- Screened Interval
- 0.471 Lithium Concentration (mg/L)
- Top of Rock
- Strata Boundary
- Inferred Strata
- Mine

Borehole Description

- CCR Fill
- Fill Materials
- Overburden
- MINESPOILS
- COAL
- Hydroexcavated
- No Recovery
- Partially Weathered Rock

Geologic Units

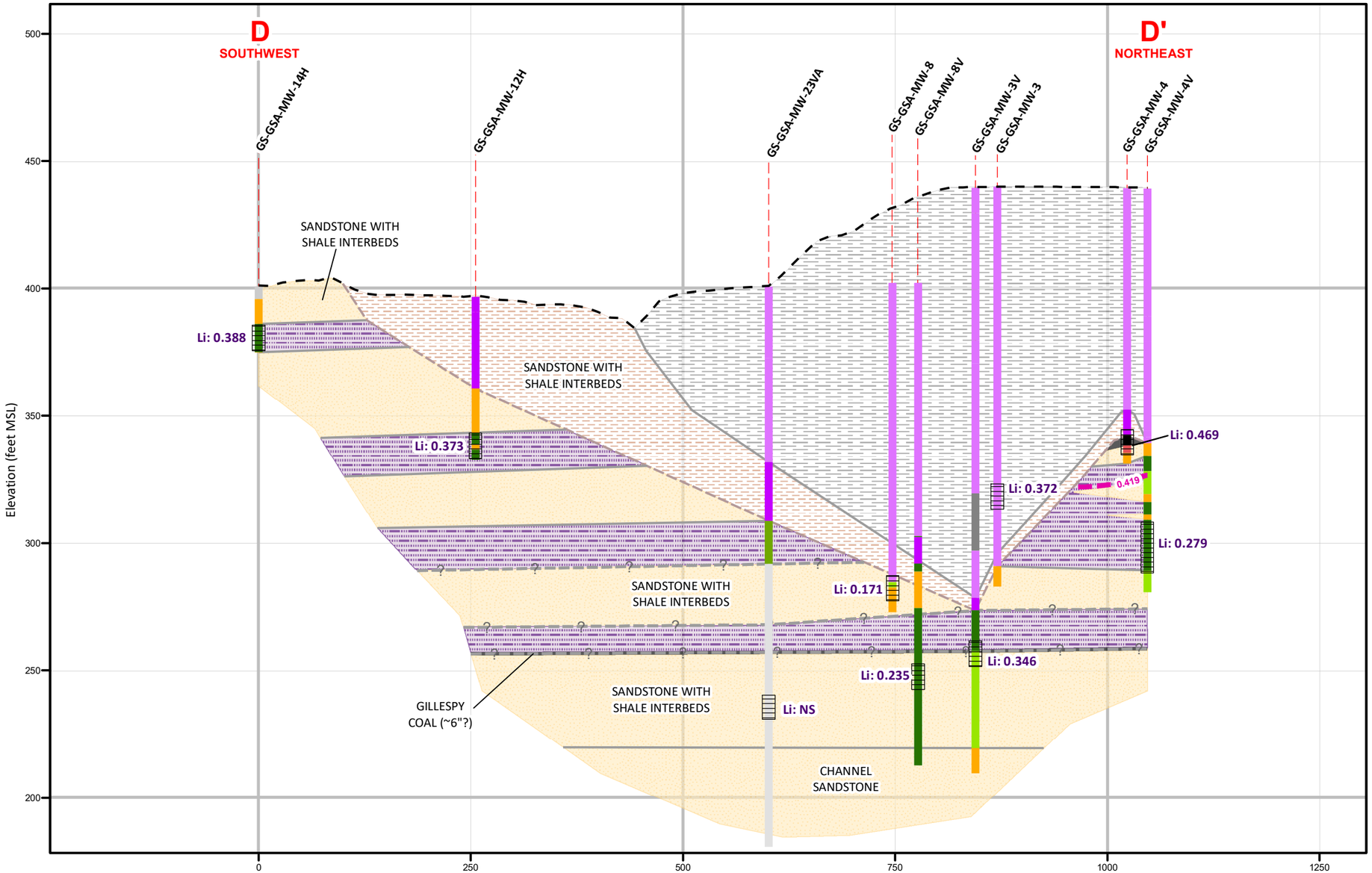
- Sandstone
- Sandstone and Siltstone
- Siltstone
- Shale
- Backfilled Mine Overburden
- Natural Overburden
- Mudstone/Shale
- Sandstone
- Mine
- Coal

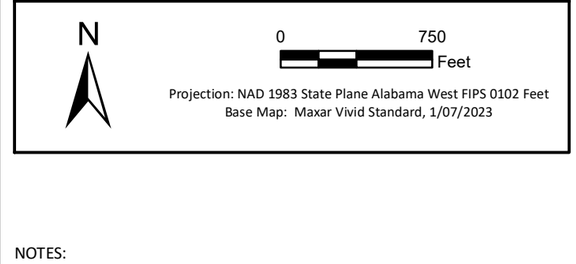
SCALE	AS SHOWN
DATE	12/06/2023
DRAWN BY	KAR
CHECKED BY	AWH

DRAWING TITLE
LITHIUM CONCENTRATIONS ALONG GEOLOGIC CROSS SECTION D - D'
PLANT GORGAS GYPSUM POND

FIGURE NO
FIGURE 9A

Southern Company





Projection: NAD 1983 State Plane Alabama West FIPS 0102 Feet
Base Map: Maxar Vivid Standard, 1/07/2023

NOTES:
1. Groundwater samples collected from August 21 to 23, 2023.
3. Deeper strata are projected from structural elevations of coal seams from Musgrove Mine records or from neighboring borings that extend deeper.
4. NS indicates not sampled due to lack of water sufficient for well development (GS-GSA-MW-23VA was not sampled).
5. Vertical exaggeration = 5.
6. Li indicates lithium concentration in mg/L.
7. GWPS indicates Groundwater Protection Standard.
8. An alternate-source demonstration (ASD) was performed at GS-GSA-MW-4 and was submitted in March 2022.

LEGEND

- Ground Surface Elevation
- GWPS Isoconcentration for Lithium (0.419 mg/L)
- Screened Interval
- 0.469 Lithium Concentration (mg/L)

Borehole Description

- CCR Fill
- Fill Materials
- Overburden
- MINESPOILS
- COAL
- Hydroexcavated
- No Recovery
- Partially Weathered Rock
- Sandstone
- Sandstone and Siltstone
- Siltstone
- Shale
- Borehole Location

Geologic Units

- Top of Rock
- Strata Boundary
- Inferred Strata
- Mine
- Backfilled Mine Overburden
- Natural Overburden
- Mudstone/Shale
- Sandstone
- Mine
- Coal

SCALE	AS SHOWN
DATE	12/29/2023
DRAWN BY	KAR
CHECKED BY	AWH

DRAWING TITLE
LITHIUM CONCENTRATIONS ALONG GEOLOGIC CROSS SECTION D - D'
PLANT GORGAS GYPSUM POND

FIGURE NO
FIGURE 9B

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Tables

Southern Company

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

Well ID	Hydraulic Location	Geologic Unit	Latitude	Longitude	Ground Surface Elevation (ft NAVD)	Top Of Casing Elevation (ft NAVD)	Well Depth (ft BTOC)	Top Of Screen Elevation (ft NAVD)	Bottom Of Screen Elevation (ft NAVD)	Screen Length (ft)	Date Of Installation
WELL NETWORK											
MW-1	Upgradient	Mine Spoil - Pottsville Fm Interface	33.65827	-87.19083	499.29	502.71	108.3	405.19	395.19	10	1/15/2014
MW-2	Upgradient	Mine Spoil - Pottsville Fm Interface	33.65899	-87.19258	499.32	502.47	94.5	418.72	408.72	10	10/23/2014
MW-3	Upgradient	Mine Spoil - Pottsville Fm Interface	33.65841	-87.1943	522.80	526.15	119.1	417.70	407.70	10	10/23/2014
MW-4	Upgradient	Mine Spoil - Pottsville Fm Interface	33.65689	-87.19473	516.82	518.30	128.8	400.52	390.52	10	2/19/2012
GS-GSA-MW-3	Downgradient	Pottsville Fm	33.65344	-87.2165	439.75	442.63	129.7	323.35	313.35	10	12/8/2015
GS-GSA-MW-4	Downgradient	Pottsville Fm	33.65376	-87.21617	439.44	442.10	107.9	344.64	334.64	10	12/9/2015
GS-GSA-MW-8	Downgradient	Pottsville Fm	33.653	-87.21639	401.33	404.38	128.5	286.33	276.33	10	12/20/2015

Notes:

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

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

Southern Company

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

Well ID	Hydraulic Location	Geologic Unit	Latitude	Longitude	Ground Surface Elevation (ft NAVD)	Top Of Casing Elevation (ft NAVD)	Well Depth (ft BTOC)	Top Of Screen Elevation (ft NAVD)	Bottom Of Screen Elevation (ft NAVD)	Screen Length (ft)	Date Of Installation
WELL NETWORK											
GS-GSA-MW-12H	Vertical Delineation	Pottsville Fm	33.65216	-87.21777	396.73	399.73	67.5	342.23	332.23	10	10/28/2019
GS-GSA-MW-12V	Vertical Delineation	Pottsville Fm	33.65213	-87.21735	376.76	379.50	132.7	257.16	247.16	10	5/31/2020
GS-GSA-MW-3V	Vertical Delineation	Pottsville Fm	33.65339	-87.21655	439.60	442.68	191.1	261.60	251.60	10	2/25/2019
GS-GSA-MW-4V	Vertical Delineation	Pottsville Fm	33.65381	-87.21613	439.29	442.18	155.5	307.08	287.08	20	2/25/2019
GS-GSA-MW-8V	Vertical Delineation	Pottsville Fm	33.65308	-87.21634	401.24	404.43	158.5	256.33	246.33	10	10/25/2019
GS-GSA-MW-9V	Vertical Delineation	Pottsville Fm	33.65075	-87.21589	333.32	336.22	95.1	250.82	240.82	10	5/12/2020
GS-GSA-MW-11H	Horizontal Delineation	Overburden-Pottsville Fm	33.64804	-87.21168	260.13	263.02	49.4	224.03	214.03	10	2/6/2019
GS-GSA-MW-13H	Horizontal Delineation	Overburden-Pottsville Fm	33.64812	-87.21574	263.63	266.46	34.9	241.96	231.96	10	10/29/2019
GS-GSA-MW-14H	Horizontal Delineation	Overburden-Pottsville Fm	33.65154	-87.21816	400.86	403.66	28.5	385.56	375.56	10	5/4/2020
GS-GSA-MW-9H	Horizontal Delineation	Pottsville Fm	33.65079	-87.21584	333.04	335.83	60.3	285.94	275.94	10	2/3/2019

Notes:

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

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

Southern Company

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

Well ID	Hydraulic Location	Geologic Unit	Latitude	Longitude	Ground Surface Elevation (ft NAVD)	Top Of Casing Elevation (ft NAVD)	Well Depth (ft BTOC)	Top Of Screen Elevation (ft NAVD)	Bottom Of Screen Elevation (ft NAVD)	Screen Length (ft)	Date Of Installation
WELL NETWORK											
GS-GSA-MW-01	Piezometer	Pottsville Fm	33.65371	-87.2178	440.48	442.96	97.7	355.66	345.66	10	12/17/2015
GS-GSA-MW-02	Piezometer	Pottsville Fm	33.65318	-87.21716	440.04	442.84	119.3	333.84	323.84	10	12/16/2015
GS-GSA-MW-10H	Piezometer	Overburden-Pottsville Fm	33.65204	-87.2143	336.56	339.52	29.0	320.56	310.56	10	2/4/2019
GS-GSA-MW-15H	Piezometer	Overburden-Pottsville Fm	33.65271	-87.21872	425.62	428.16	28.3	409.82	399.82	10	5/5/2020
GS-GSA-MW-23VA	Piezometer	Pottsville Fm	33.65278	-87.2169	400.84	403.60	173.3	240.34	230.34	10	6/11/2020
GS-GSA-PZ-05	Piezometer	Pottsville Fm - Pratt Coal	33.65461	-87.21869	472.40	472.45	79.1	403.80	393.80	10	10/27/2015
GS-GSA-PZ-16	Piezometer	Overburden-Pottsville Fm	33.65297	-87.21902	433.79	436.40	27.9	418.49	408.49	10	5/3/2020
GS-GSA-PZ-17	Piezometer	Overburden-Pottsville Fm	33.65416	-87.21927	473.03	475.94	57.7	428.23	418.23	10	5/2/2020
GS-GSA-PZ-18	Piezometer	Overburden-Pottsville Fm	33.65424	-87.22053	487.20	489.93	78.1	421.30	411.30	10	5/19/2020
GS-GSA-PZ-19	Piezometer	Pottsville Fm	33.65403	-87.22311	460.82	463.50	162.5	310.32	300.32	10	5/29/2020
GS-GSA-PZ-20	Piezometer	Pottsville Fm	33.65478	-87.22453	457.65	460.34	124.5	345.15	335.15	10	5/18/2020

Notes:

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

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

GS-GSA-PZ-21	Piezometer	Pottsville Fm	33.6549	-87.22308	458.21	460.94	107.6	363.31	353.31	10	5/14/2020
GS-GSA-PZ-22	Piezometer	Overburden-Pottsville Fm	33.65548	-87.22414	476.56	479.46	70.4	419.06	409.06	10	5/16/2020
GS-GSA-PZ-2A	Piezometer	Pottsville Fm	33.65753	-87.22016	488.67	491.52	122.4	379.52	369.52	10	11/14/2015

Notes:

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

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

Southern Company

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

Well ID	Hydraulic Location	Geologic Unit	Latitude	Longitude	Ground Surface Elevation (ft NAVD)	Top Of Casing Elevation (ft NAVD)	Well Depth (ft BTOC)	Top Of Screen Elevation (ft NAVD)	Bottom Of Screen Elevation (ft NAVD)	Screen Length (ft)	Date Of Installation
WELL NETWORK											
GS-GSA-MW-05	Abandoned	Pottsville Fm - Mine Spoil	33.65471	-87.21648	439.92	440.32	40.8	409.92	399.92	10	12/18/2015
GS-GSA-MW-06	Abandoned	Pottsville Fm - Open Hole Piezometer	33.65535	-87.2168	440.52	440.88	207.0	---	---	---	11/4/2015
GS-GSA-MW-07	Abandoned	Pottsville Fm - Mine Spoil Interface	33.65276	-87.21705	399.57	399.85	66.7	343.57	333.57	10	1/12/2016
GS-GSA-MW-09	Abandoned	Pottsville Fm	33.65363	-87.21574	400.16	403.23	69.6	344.06	334.06	10	1/11/2016
GS-GSA-PZ-04	Abandoned	Pottsville Fm	33.65604	-87.21907	474.96	477.79	127.8	360.36	350.36	10	10/22/2015

Notes:

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

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

Southern Company

Table 2. Parameters And Reporting Limits

Plant Gorgas Gypsum Storage Pond (Old)
02/20/2023 - 10/19/2023

Appendix III Parameters			
Parameters	**Analytical Methods**	**Reporting Limits**	**Units of Measure**
Boron	EPA 200.7	0.1015	mg/L
Calcium	EPA 200.7	0.406-40.599998	mg/L
Chloride	SM4500Cl E	1-25	mg/L
Fluoride	SM4500F G 2017	0.125	mg/L
pH_Field	Field Sampling	NA	SU
Sulfate	SM4500SO4 E 2011	2-200	mg/L
TDS	NA	NA	mg/L
Appendix IV Parameters			
Parameters	**Analytical Methods**	**Reporting Limits**	**Units of Measure**
Antimony	EPA 200.8	0.001015	mg/L
Arsenic	EPA 200.8	0.000203	mg/L
Barium	EPA 200.8	0.001015	mg/L
Beryllium	EPA 200.8	0.001015	mg/L
Cadmium	EPA 200.8	0.000203	mg/L
Chromium	EPA 200.8	0.001015	mg/L
Cobalt	EPA 200.8	0.000203	mg/L
Lead	EPA 200.8	0.000203	mg/L
Lithium	EPA 200.7	0.02	mg/L
Mercury	EPA 245.1	0.0005	mg/L
Molybdenum	EPA 200.7	0.01015	mg/L
	EPA 200.8	0.000203	mg/L
Selenium	EPA 200.8	0.001015	mg/L
Thallium	EPA 200.8	0.000203	mg/L
Combined Radium 226 + 228	Total Radium Calculation	0.742-1.54	pCi/L

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

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Table 3. Groundwater Elevations Summary

Plant Gorgas Gypsum Storage Pond (Old)
02/20/2023 - 08/21/2023

Measurement Date		02/20/2023		02/27/2023		08/15/2023		08/21/2023	
Well	TOC Elevation (ft. NAVD)	Depth To Water (ft. BTOC)	Groundwater Elevation (ft. NAVD)	Depth To Water (ft. BTOC)	Groundwater Elevation (ft. NAVD)	Depth To Water (ft. BTOC)	Groundwater Elevation (ft. NAVD)	Depth To Water (ft. BTOC)	Groundwater Elevation (ft. NAVD)
MW-1 (LF)	502.71	90.53	412.18	NM	NM	91.20	411.51	91.24	411.47
MW-2 (LF)	502.47	83.43	419.04	NM	NM	84.84	417.63	84.61	417.86
MW-3 (LF)	526.15	106.99	419.16	NM	NM	110.12	416.03	110.03	416.12
MW-4 (LF)	518.30	115.96	402.34	NM	NM	117.03	401.27	117.38	400.92
GS-GSA-MW-01	442.96	NM	NM	94.73	348.23	NM	NM	95.23	347.73
GS-GSA-MW-02	442.84	NM	NM	99.82	343.02	NM	NM	107.34	335.50
GS-GSA-PZ-2A	491.52	NM	NM	119.98	371.54	NM	NM	120.00	371.52
GS-GSA-MW-03	442.63	NM	NM	100.52	342.11	NM	NM	107.59	335.04
GS-GSA-MW-3V	442.68	NM	NM	118.56	324.12	NM	NM	127.30	315.38
GS-GSA-MW-04	442.10	NM	NM	88.68	353.42	NM	NM	91.51	350.59
GS-GSA-MW-4V	442.18	NM	NM	109.54	332.64	NM	NM	118.03	324.15
GS-GSA-PZ-04	477.79	NM	NM	145.15	332.64	NM	NM	153.64	324.15
GS-GSA-MW-05	440.32	NM	NM	DRY	DRY	NM	NM	DRY	DRY
GS-GSA-PZ-05	472.45	NM	NM	DRY	DRY	NM	NM	DRY	DRY
GS-GSA-MW-06	440.88	NM	NM	DRY	DRY	NM	NM	DRY	DRY
GS-GSA-MW-07	399.85	NM	NM	58.70	341.15	NM	NM	68.76	331.09
GS-GSA-MW-08	404.38	NM	NM	70.11	334.27	NM	NM	80.56	323.82
GS-GSA-MW-8V	404.43	NM	NM	81.44	322.99	NM	NM	91.01	313.42
GS-GSA-MW-09	403.23	NM	NM	DRY	DRY	NM	NM	DRY	DRY
GS-GSA-MW-9H	335.83	NM	NM	42.63	293.20	NM	NM	46.56	289.27
GS-GSA-MW-9V	336.22	NM	NM	42.28	293.94	NM	NM	47.31	288.91
GS-GSA-MW-10H	339.52	NM	NM	15.63	323.89	NM	NM	26.98	312.54
GS-GSA-MW-11H	263.02	NM	NM	6.55	256.47	NM	NM	7.14	255.88
GS-GSA-MW-12H	399.73	NM	NM	57.09	342.64	NM	NM	61.45	338.28
GS-GSA-MW-12V	379.50	NM	NM	56.63	322.87	NM	NM	66.09	313.41
GS-GSA-MW-13H	266.46	NM	NM	8.86	257.60	NM	NM	10.61	255.85
GS-GSA-MW-14H	403.66	NM	NM	18.41	385.25	NM	NM	18.98	384.68
GS-GSA-MW-15H	428.16	NM	NM	24.09	404.07	NM	NM	25.65	402.51
GS-GSA-PZ-16	436.40	NM	NM	17.27	419.13	NM	NM	24.82	411.58
GS-GSA-PZ-17	436.4	NM	NM	6.21	430.19	NM	NM	6.51	429.89
GS-GSA-PZ-18	489.93	NM	NM	59.44	430.49	NM	NM	61.90	428.03
GS-GSA-PZ-19	463.50	NM	NM	118.17	345.33	NM	NM	119.68	343.82
GS-GSA-PZ-20	460.34	NM	NM	116.03	344.31	NM	NM	116.22	344.12
GS-GSA-PZ-21	460.94	NM	NM	84.22	376.72	NM	NM	84.66	376.28
GS-GSA-PZ-22	479.46	NM	NM	50.19	429.27	NM	NM	53.51	425.95
GS-GSA-MW-23VA	403.60	NM	NM	109.40	294.20	NM	NM	101.51	302.09

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

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Table 4a. Relative Percent Difference (RPD) Calculations

Plant Gorgas Gypsum Storage Pond (Old)
02/20/2023 - 08/22/2023

GS-GSA-MW-13H				
Sample Date = 8/22/2023				
Analyte	**Units**	**Original Result**	**Duplicate Result**	**RPD (%)**
Boron	mg/L	0.189	0.178	6.00%
Calcium	mg/L	166	175	5.28%
Chloride	mg/L	10	10.7	6.76%
Sulfate	mg/L	786	799	1.64%
Arsenic	mg/L	0.18	0.178	1.12%
Barium	mg/L	0.0257	0.0251	2.36%
Cobalt	mg/L	0.107	0.1	6.76%
Lithium	mg/L	0.0416	0.0412	0.97%
GS-GSA-MW-12H				
Sample Date = 3/1/2023				
Analyte	**Units**	**Original Result**	**Duplicate Result**	**RPD (%)**
Calcium	mg/L	115	116	0.87%
Chloride	mg/L	2.17	2.17	0.00%
Sulfate	mg/L	837	823	1.69%
Arsenic	mg/L	0.00092	0.00098	6.01%
Barium	mg/L	0.0127	0.0121	4.84%
Beryllium	mg/L	0.0067	0.00675	0.74%
Cadmium	mg/L	0.0023	0.00232	0.87%
Cobalt	mg/L	0.271	0.27	0.37%
Lead	mg/L	0.00362	0.00363	0.28%
Lithium	mg/L	0.291	0.287	1.38%
Selenium	mg/L	0.00288	0.00288	0.00%
Thallium	mg/L	0.0004	0.00041	2.23%
Sample Date = 8/22/2023				
Analyte	**Units**	**Original Result**	**Duplicate Result**	**RPD (%)**
Calcium	mg/L	128	134	4.58%
Chloride	mg/L	1.63	1.8	9.91%
Sulfate	mg/L	801	811	1.24%
Arsenic	mg/L	0.00073	0.00099	30.97%
Barium	mg/L	0.0135	0.0137	1.47%
Beryllium	mg/L	0.00745	0.00788	5.61%
Cadmium	mg/L	0.00307	0.0032	4.15%
Cobalt	mg/L	0.323	0.32	0.93%
Lead	mg/L	0.00395	0.00612	43.10%

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Table 4a. Relative Percent Difference (RPD) Calculations

Plant Gorgas Gypsum Storage Pond (Old)
02/20/2023 - 08/22/2023

GS-GSA-MW-12H				
Sample Date = 8/22/2023				
Analyte	**Units**	**Original Result**	**Duplicate Result**	**RPD (%)**
Lithium	mg/L	0.373	0.37	0.81%
Selenium	mg/L	0.00175	0.00186	6.09%
GS-GSA-MW-14H				
Sample Date = 2/28/2023				
Analyte	**Units**	**Original Result**	**Duplicate Result**	**RPD (%)**
Boron	mg/L	0.157	0.157	0.00%
Calcium	mg/L	132	136	2.99%
Chloride	mg/L	2.88	2.92	1.38%
Sulfate	mg/L	748	839	11.47%
Arsenic	mg/L	0.00147	0.00142	3.46%
Barium	mg/L	0.0202	0.021	3.88%
Beryllium	mg/L	0.0109	0.0103	5.66%
Cadmium	mg/L	0.00162	0.00154	5.06%
Cobalt	mg/L	0.227	0.229	0.88%
Lead	mg/L	0.00088	0.00089	1.92%
Lithium	mg/L	0.471	0.475	0.85%
Selenium	mg/L	0.00589	0.00586	0.51%
MW-1				
Sample Date = 2/20/2023				
Analyte	**Units**	**Original Result**	**Duplicate Result**	**RPD (%)**
Calcium	mg/L	151	159	5.16%
Chloride	mg/L	2.05	2	2.47%
Fluoride	mg/L	0.221	0.186	17.20%
Sulfate	mg/L	1520	1430	6.10%
Arsenic	mg/L	0.00027	0.00027	1.84%
Barium	mg/L	0.0102	0.0105	2.90%
Cadmium	mg/L	0.00185	0.00181	2.19%
Cobalt	mg/L	0.0665	0.0678	1.94%
Lithium	mg/L	0.0241	0.0243	0.83%
Selenium	mg/L	0.00258	0.00262	1.54%
Sample Date = 8/22/2023				
Analyte	**Units**	**Original Result**	**Duplicate Result**	**RPD (%)**
Calcium	mg/L	183	159	14.04%
Chloride	mg/L	2.38	2.38	0.00%

Table 4a. Relative Percent Difference (RPD) Calculations

Plant Gorgas Gypsum Storage Pond (Old)
02/20/2023 - 08/22/2023

MW-1				
Sample Date = 8/22/2023				
Analyte	**Units**	**Original Result**	**Duplicate Result**	**RPD (%)**
Fluoride	mg/L	0.159	0.168	5.51%
Sulfate	mg/L	1560	1520	2.60%
Barium	mg/L	0.00976	0.00939	3.86%
Cadmium	mg/L	0.00205	0.00204	0.49%
Cobalt	mg/L	0.086	0.0852	0.94%
Lithium	mg/L	0.0225	0.0231	2.63%
Selenium	mg/L	0.00151	0.00151	0.00%

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

Table 4b. - Field QC: Blank Detections

Plant Gorgas Gypsum Storage Pond (Old)
02/21/2023 - 08/23/2023

Parameters Detected Above MDL					
Sample Date	**QC Location**	**Parameter**	**Blank Concentration**	**Units**	**MDL**
03/01/2023	EB-1	Chromium	0.00025 J	mg/L	0.0002
03/01/2023	FB-1	Chromium	0.00021 J	mg/L	0.0002
02/28/2023	FB-2	Chromium	0.00024 J	mg/L	0.0002

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

Table 5. Summary of Background Levels and Groundwater Protection Standards

Plant Gorgas Gypsum Storage Pond (Old)

Appendix IV Analytes			
Analyte	**Units**	**Background**	**GWPS**
Antimony	mg/L	0.00143	0.006
Arsenic	mg/L	0.0048	0.01
Barium	mg/L	0.0166	2
Beryllium	mg/L	0.0121	0.0121
Cadmium	mg/L	0.00867	0.00867
Chromium	mg/L	0.0105	0.1
Cobalt	mg/L	0.64	0.64
Fluoride	mg/L	0.63	4
Lead	mg/L	0.002	0.015
Lithium	mg/L	0.419	0.419
Mercury	mg/L	0.0005	0.002
Molybdenum	mg/L	0.01015	0.1
Selenium	mg/L	0.0209	0.05
Thallium	mg/L	0.000226	0.002
Combined Radium 226 + 228	pCi/L	1.49	5

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

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Table 6. First Semi-Annual Monitoring Event

Analytical Results Summary
Plant Gorgas Gypsum Storage Pond (Old)
02/20/2023 - 03/01/2023

Field Parameters								
Hydraulic Location	**Well**	**Sample Date**	**Conductivity uS/cm**	**DO mg/L**	**ORP mv**	**pH_Field SU**	**Field Temperature C**	**Turbidity NTU**
Upgradient	MW-1	02/20/2023	2297.01	0.95	361.14	5.07	19.59	0.73
Upgradient	MW-2	02/20/2023	1773	0.82	72.91	6.24	18.95	0.41
Upgradient	MW-3	02/20/2023	3276.9	6.19	231.95	6.01	20.34	1.21
Upgradient	MW-4	02/21/2023	3184.95	3.15	219	6.35	19.61	0.72
Downgradient	GS-GSA-MW-3	02/27/2023	4869.04	0.22	15.53	5.83	21.11	5.67
Downgradient	GS-GSA-MW-4	03/01/2023	3267.69	0.14	320.93	3.5	20.62	3.09
Downgradient	GS-GSA-MW-8	02/28/2023	3234.63	0.15	-190.5	6.93	21.41	3.91
Vert. Delineation	GS-GSA-MW-12H	03/01/2023	1541.69	0.25	330.14	4.55	19.64	7.2
Vert. Delineation	GS-GSA-MW-12V	03/01/2023	4114.67	0.21	-55.81	6.29	19.58	0.4
Vert. Delineation	GS-GSA-MW-3V	02/27/2023	3924.29	1.47	-17.42	5.97	21.17	1.5
Vert. Delineation	GS-GSA-MW-4V	03/01/2023	1574.46	1.13	56.67	5.77	22.42	8.23
Vert. Delineation	GS-GSA-MW-8V	02/28/2023	1611.65	0.3	-285.19	7.5	21.78	1.5
Vert. Delineation	GS-GSA-MW-9V	02/28/2023	3315.99	0.78	-85.98	6.89	21.73	0.75
Horiz. Delineation	GS-GSA-MW-11H	02/28/2023	1506.62	0.34	85	5.99	19.48	4.78
Horiz. Delineation	GS-GSA-MW-13H	02/28/2023	1693.25	0.18	-7.74	5.82	19.32	4.47
Horiz. Delineation	GS-GSA-MW-14H	02/28/2023	1404.5	0.23	298.99	4.39	19.8	6.96
Horiz. Delineation	GS-GSA-MW-9H	02/28/2023	2793.53	0.35	130.08	5.35	22.34	3.42
Piezometer	GS-GSA-PZ-17	02/27/2023	794.5	1.73	174.06	4.34	19.65	2.92
Piezometer	GS-GSA-PZ-18	02/27/2023	1066.18	0.37	208.78	3.94	19.96	0.44
Piezometer	GS-GSA-PZ-19	02/28/2023	1218.89	0.12	-41.07	6.55	18.01	3.18

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Table 6. First Semi-Annual Monitoring Event

Analytical Results Summary
Plant Gorgas Gypsum Storage Pond (Old)
02/20/2023 - 03/01/2023

Field Parameters								
Hydraulic Location	**Well**	**Sample Date**	**Conductivity uS/cm**	**DO mg/L**	**ORP mv**	**pH_Field SU**	**Field Temperature C**	**Turbidity NTU**
Piezometer	GS-GSA-PZ-20	02/28/2023	1240.71	0.22	5.4	6.31	19.24	3.95
Piezometer	GS-GSA-PZ-21	02/28/2023	815.43	0.17	-58.83	6.84	19.41	6.94
Piezometer	GS-GSA-PZ-22	02/28/2023	907.73	0.08	-50.29	6.14	18.33	1.12

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Table 6. First Semi-Annual Monitoring Event

Analytical Results Summary
Plant Gorgas Gypsum Storage Pond (Old)
02/20/2023 - 03/01/2023

EPA Appendix III Set								
Hydraulic Location	**Well**	**Sample Date**	**Boron mg/L**	**Calcium mg/L**	**Chloride mg/L**	**Fluoride mg/L**	**pH_Field SU**	**Sulfate mg/L**
Upgradient	MW-1	02/20/2023	<0.03	151	2.05	0.221	5.07	1520
Upgradient	MW-2	02/20/2023	<0.03	160	1.7	0.267	6.24	767
Upgradient	MW-3	02/20/2023	<0.03	210	1.94	0.379	6.01	2110
Upgradient	MW-4	02/21/2023	0.0408 J	232	1.58	0.415	6.35	1930
Downgradient	GS-GSA-MW-3	02/27/2023	2.78	516	254	0.292	5.83	2770
Downgradient	GS-GSA-MW-4	03/01/2023	8.02	327	113	<0.06	3.5	2130
Downgradient	GS-GSA-MW-8	02/28/2023	1.91	353	86.9	0.161	6.93	1390
Vert. Delineation	GS-GSA-MW-12H	03/01/2023	0.0549 J	115	2.17	<0.06	4.55	837
Vert. Delineation	GS-GSA-MW-12V	03/01/2023	1.6	332	145	0.335	6.29	1810
Vert. Delineation	GS-GSA-MW-3V	02/27/2023	2.91	397	233	0.376	5.97	2090
Vert. Delineation	GS-GSA-MW-4V	03/01/2023	2.85	161	32.8	0.39	5.77	759
Vert. Delineation	GS-GSA-MW-8V	02/28/2023	0.142	29.6	18.6	0.35	7.5	182
Vert. Delineation	GS-GSA-MW-9V	02/28/2023	0.104	347	52.4	0.156	6.89	1770
Horiz. Delineation	GS-GSA-MW-11H	02/28/2023	<0.03	135	5.49	0.0747 J	5.99	787
Horiz. Delineation	GS-GSA-MW-13H	02/28/2023	0.203	146	8.99	0.2	5.82	847
Horiz. Delineation	GS-GSA-MW-14H	02/28/2023	0.157	132	2.88	<0.06	4.39	748
Horiz. Delineation	GS-GSA-MW-9H	02/28/2023	4.79	291	47.1	0.157	5.35	1670
Piezometer	GS-GSA-PZ-17	02/27/2023	0.0623 J	79.9	1.36	<0.06	4.34	400
Piezometer	GS-GSA-PZ-18	02/27/2023	0.0495 J	88.1	1.65	<0.06	3.94	523
Piezometer	GS-GSA-PZ-19	02/28/2023	0.0494 J	115	13.5	0.196	6.55	263
Piezometer	GS-GSA-PZ-20	02/28/2023	0.0862 J	101	10.5	0.156	6.31	444

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Table 6. First Semi-Annual Monitoring Event

Analytical Results Summary
Plant Gorgas Gypsum Storage Pond (Old)
02/20/2023 - 03/01/2023

EPA Appendix III Set								
Hydraulic Location	Well	Sample Date	Boron mg/L	Calcium mg/L	Chloride mg/L	Fluoride mg/L	pH_Field SU	Sulfate mg/L
Piezometer	GS-GSA-PZ-21	02/28/2023	<0.03	44.4	12.3	0.289	6.84	36.3
Piezometer	GS-GSA-PZ-22	02/28/2023	0.0602 J	69.2	5.07	0.116 J	6.14	364

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Table 6. First Semi-Annual Monitoring Event

Analytical Results Summary
Plant Gorgas Gypsum Storage Pond (Old)
02/20/2023 - 03/01/2023

EPA Appendix IV Set										
Hydraulic Location	**Well**	**Sample Date**	**Antimony mg/L**	**Arsenic mg/L**	**Barium mg/L**	**Beryllium mg/L**	**Cadmium mg/L**	**Chromium mg/L**	**Cobalt mg/L**	**Fluoride mg/L**
Upgradient	MW-1	02/20/2023	<0.000508	0.000275	0.0102	<0.000406	0.00185	0.000409 J	0.0665	0.221
Upgradient	MW-2	02/20/2023	<0.000508	0.000243	0.0122	<0.000406	<6.8e-005	0.00033 J	0.0187	0.267
Upgradient	MW-3	02/20/2023	<0.000508	0.000224	0.00822	<0.000406	0.00144	0.000384 J	0.00435	0.379
Upgradient	MW-4	02/21/2023	<0.000508	<8.1e-005	0.0116	<0.000406	<6.8e-005	0.000244 J	<6.8e-005	0.415
Downgradient	GS-GSA-MW-3	02/27/2023	<0.000508	0.00111	0.0138	0.00191	<6.8e-005	0.00037 J	0.285	0.292
Downgradient	GS-GSA-MW-4	03/01/2023	<0.000508	0.00412	0.00845	0.0224	0.00552	0.00243	0.705	<0.06
Downgradient	GS-GSA-MW-8	02/28/2023	<0.000508	0.000177 J	0.0238	<0.000406	<6.8e-005	0.000325 J	0.000248	0.161
Vert. Delineation	GS-GSA-MW-12H	03/01/2023	<0.000508	0.00092	0.0127	0.0067	0.0023	0.000271 J	0.271	<0.06
Vert. Delineation	GS-GSA-MW-12V	03/01/2023	<0.000508	0.000328	0.011	<0.000406	<6.8e-005	0.000234 J	0.000201 J	0.335
Vert. Delineation	GS-GSA-MW-3V	02/27/2023	<0.000508	0.000197 J	0.0139	<0.000406	<6.8e-005	0.000298 J	0.0113	0.376
Vert. Delineation	GS-GSA-MW-4V	03/01/2023	<0.000508	0.000882	0.01	0.00412	<6.8e-005	0.000293 J	0.134	0.39
Vert. Delineation	GS-GSA-MW-8V	02/28/2023	<0.000508	0.00219	0.0973	<0.000406	<6.8e-005	0.000293 J	<6.8e-005	0.35
Vert. Delineation	GS-GSA-MW-9V	02/28/2023	<0.000508	0.000762	0.0122	<0.000406	<6.8e-005	0.000269 J	0.000403	0.156
Horiz. Delineation	GS-GSA-MW-11H	02/28/2023	<0.000508	0.000311	0.0111	<0.000406	0.000242	0.000413 J	0.0049	0.0747 J
Horiz. Delineation	GS-GSA-MW-13H	02/28/2023	<0.000508	0.24	0.0292	0.000451 J	<6.8e-005	0.000325 J	0.285	0.2
Horiz. Delineation	GS-GSA-MW-14H	02/28/2023	<0.000508	0.00147	0.0202	0.0109	0.00162	0.000504 J	0.227	<0.06
Horiz. Delineation	GS-GSA-MW-9H	02/28/2023	<0.000508	0.000633	0.0131	0.000563 J	0.000298	0.000273 J	0.147	0.157
Piezometer	GS-GSA-PZ-17	02/27/2023	<0.000508	0.0013	0.0174	0.00573	0.000812	0.00103	0.15	<0.06
Piezometer	GS-GSA-PZ-18	02/27/2023	<0.000508	0.00354	0.0104	0.00632	<6.8e-005	0.00166	0.0946	<0.06

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Southern Company

Table 6. First Semi-Annual Monitoring Event

Analytical Results Summary
Plant Gorgas Gypsum Storage Pond (Old)
02/20/2023 - 03/01/2023

EPA Appendix IV Set									
Hydraulic Location	**Well**	**Sample Date**	**Lead mg/L**	**Lithium mg/L**	**Mercury mg/L**	**Molybdenum mg/L**	**Selenium mg/L**	**Thallium mg/L**	**Combined Radium 226 + 228 pCi/L**
Upgradient	MW-1	02/20/2023	<6.8e-005	0.0241	<0.0003	<0.000102	0.00258	<6.8e-005	0.36 U
Upgradient	MW-2	02/20/2023	<6.8e-005	0.0412	<0.0003	<0.000102	<0.000508	<6.8e-005	0.837 U
Upgradient	MW-3	02/20/2023	<6.8e-005	0.0649	<0.0003	<0.000102	0.0123	<6.8e-005	0.234 U
Upgradient	MW-4	02/21/2023	<6.8e-005	0.0424	<0.0003	0.00015 J	0.00266	<6.8e-005	0.3 U
Downgradient	GS-GSA-MW-3	02/27/2023	0.000132 J	0.165	<0.0003	0.000191 J	0.00152	<6.8e-005	0.213 U
Downgradient	GS-GSA-MW-4	03/01/2023	0.00144	1.35	<0.0003	<0.000102	0.017	0.000407	0.593 U
Downgradient	GS-GSA-MW-8	02/28/2023	7.8e-005 J	0.157	<0.0003	0.000135 J	<0.000508	<6.8e-005	0.422 U
Vert. Delineation	GS-GSA-MW-12H	03/01/2023	0.00362	0.291	<0.0003	<0.000102	0.00288	0.0004	0.786 U
Vert. Delineation	GS-GSA-MW-12V	03/01/2023	<6.8e-005	0.286	<0.0003	0.00235	<0.000508	<6.8e-005	0.386 U
Vert. Delineation	GS-GSA-MW-3V	02/27/2023	<6.8e-005	0.35	<0.0003	<0.000102	<0.000508	<6.8e-005	0.637 U
Vert. Delineation	GS-GSA-MW-4V	03/01/2023	<6.8e-005	0.288	<0.0003	<0.000102	0.000882 J	<6.8e-005	0.293 U
Vert. Delineation	GS-GSA-MW-8V	02/28/2023	<6.8e-005	0.238	<0.0003	0.000158 J	<0.000508	<6.8e-005	1.09
Vert. Delineation	GS-GSA-MW-9V	02/28/2023	<6.8e-005	0.331	<0.0003	0.000467	<0.000508	<6.8e-005	0.596 U
Horiz. Delineation	GS-GSA-MW-11H	02/28/2023	0.000142 J	<0.007105	<0.0003	<0.000102	<0.000508	<6.8e-005	0.491 U
Horiz. Delineation	GS-GSA-MW-13H	02/28/2023	<6.8e-005	0.0291	<0.0003	0.00121	0.000954 J	<6.8e-005	0.518 U
Horiz. Delineation	GS-GSA-MW-14H	02/28/2023	0.000876	0.471	<0.0003	0.000133 J	0.00589	7.16e-005 J	0.274 U
Horiz. Delineation	GS-GSA-MW-9H	02/28/2023	7.72e-005 J	0.111	<0.0003	<0.000102	0.000886 J	0.000234	0.357 U
Piezometer	GS-GSA-PZ-17	02/27/2023	0.00226	0.352	<0.0003	<0.000102	0.00319	0.000135 J	0.192 U
Piezometer	GS-GSA-PZ-18	02/27/2023	0.000121 J	0.271	<0.0003	<0.000102	0.00329	9.4e-005 J	0.571 U

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Table 6. First Semi-Annual Monitoring Event

Analytical Results Summary
Plant Gorgas Gypsum Storage Pond (Old)
02/20/2023 - 03/01/2023

EPA Appendix IV Set										
Hydraulic Location	Well	Sample Date	Antimony mg/L	Arsenic mg/L	Barium mg/L	Beryllium mg/L	Cadmium mg/L	Chromium mg/L	Cobalt mg/L	Fluoride mg/L
Piezometer	GS-GSA-PZ-19	02/28/2023	<0.000508	0.00133	0.0344	<0.000406	<6.8e-005	0.000239 J	0.000708	0.196
Piezometer	GS-GSA-PZ-20	02/28/2023	<0.000508	0.00246	0.0192	<0.000406	<6.8e-005	0.000295 J	0.00324	0.156
Piezometer	GS-GSA-PZ-21	02/28/2023	<0.000508	0.00281	0.14	<0.000406	<6.8e-005	0.000243 J	0.00311	0.289
Piezometer	GS-GSA-PZ-22	02/28/2023	<0.000508	0.0605	0.0161	<0.000406	<6.8e-005	0.000377 J	0.00317	0.116 J

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Table 6. First Semi-Annual Monitoring Event

Analytical Results Summary
Plant Gorgas Gypsum Storage Pond (Old)
02/20/2023 - 03/01/2023

EPA Appendix IV Set									
Hydraulic Location	Well	Sample Date	Lead mg/L	Lithium mg/L	Mercury mg/L	Molybdenum mg/L	Selenium mg/L	Thallium mg/L	Combined Radium 226 + 228 pCi/L
Piezometer	GS-GSA-PZ-19	02/28/2023	<6.8e-005	0.0709	<0.0003	0.000783	<0.000508	<6.8e-005	0.203 U
Piezometer	GS-GSA-PZ-20	02/28/2023	<6.8e-005	0.0867	<0.0003	0.00143	0.00246	0.000212	0.733 U
Piezometer	GS-GSA-PZ-21	02/28/2023	<6.8e-005	0.018 J	<0.0003	0.00217	<0.000508	<6.8e-005	0.632 U
Piezometer	GS-GSA-PZ-22	02/28/2023	<6.8e-005	0.0649	<0.0003	0.00108	<0.000508	<6.8e-005	0.529 U

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Southern Company

Table 6. First Semi-Annual Monitoring Event

Analytical Results Summary
Plant Gorgas Gypsum Storage Pond (Old)
02/20/2023 - 03/01/2023

General Chemistry and MNA Parameters										
Hydraulic Location	Well	Sample Date	Chloride mg/L	Nitrate Nitrite mg/L as N	Sulfate mg/L	Aluminum mg/L	Calcium mg/L	Iron Total mg/L	Potassium mg/L	Magnesium Total mg/L
Upgradient	MW-1	02/20/2023	2.05	0.891	1520	0.123	151	<0.00812	7.28	277
Upgradient	MW-2	02/20/2023	1.7	<0.2	767	<0.00609	160	0.755	5.8	174
Upgradient	MW-3	02/20/2023	1.94	2.46	2110	0.0365 J	210	0.0467	6.65	392
Upgradient	MW-4	02/21/2023	1.58	0.244 J	1930	<0.00609	232	<0.00812	7.81	362
Downgradient	GS-GSA-MW-3	02/27/2023	254	0.305	2770	0.158	516	148	8.18	325
Downgradient	GS-GSA-MW-4	03/01/2023	113	0.248 J	2130	67.6	327	62.7	4.56	232
Downgradient	GS-GSA-MW-8	02/28/2023	86.9	<0.2	1390	0.0593	353	28.3	7.05	242
Vert. Delineation	GS-GSA-MW-12H	03/01/2023	2.17	0.481	837	8.61	115	1.57	4.87	124
Vert. Delineation	GS-GSA-MW-12V	03/01/2023	145	0.208 J	1810	0.00895 J	332	37.5	6.77	200
Vert. Delineation	GS-GSA-MW-3V	02/27/2023	233	<0.2	2090	0.015 J	397	31.9	7.08	232
Vert. Delineation	GS-GSA-MW-4V	03/01/2023	32.8	0.25 J	759	2.47	161	38.6	4.26	99.8
Vert. Delineation	GS-GSA-MW-8V	02/28/2023	18.6	<0.2	182	0.0156 J	29.6	0.0632	3.29	13.7
Vert. Delineation	GS-GSA-MW-9V	02/28/2023	52.4	<0.2	1770	<0.00609	347	0.922	7.37	156
Horiz. Delineation	GS-GSA-MW-11H	02/28/2023	5.49	<0.2	787	0.0784	135	1.62	0.869	112
Horiz. Delineation	GS-GSA-MW-13H	02/28/2023	8.99	0.275 J	847	0.2	146	53.9	8.66	103
Horiz. Delineation	GS-GSA-MW-14H	02/28/2023	2.88	<0.2	748	15.4	132	10.3	4.24	92.7
Horiz. Delineation	GS-GSA-MW-9H	02/28/2023	47.1	<0.2	1670	0.155	291	15.1	7.71	192
Piezometer	GS-GSA-PZ-17	02/27/2023	1.36	<0.2	400	13.9	79.9	8.89	4.16	50.9
Piezometer	GS-GSA-PZ-18	02/27/2023	1.65	<0.2	523	16.7	88.1	10.5	2.97	55.6
Piezometer	GS-GSA-PZ-19	02/28/2023	13.5	<0.2	263	0.0214 J	115	2.39	3.69	48.6

Notes:
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4. DO - Dissolved Oxygen, ORP - Oxidation Reduction Potential, TDS - Total Dissolved Solids.
5. mg/L - milligrams per liter, mv - millivolts, NTU - nephelometric turbidity unit, C - celsius, SU - standard unit, uS/cm - microseimens per centimeter, pCi/L - picocurries per liter.
6. NC = value not detected with alkalinity calculation

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Table 6. First Semi-Annual Monitoring Event

Analytical Results Summary
Plant Gorgas Gypsum Storage Pond (Old)
02/20/2023 - 03/01/2023

General Chemistry and MNA Parameters										
Hydraulic Location	Well	Sample Date	Manganese Total mg/L	Sodium mg/L	Silica mg/L	Silicon mg/L	Carbon, Total Organic mg/L	Alkalinity Total as CaCO3 mg CaCO3/L	Carbonate Alkalinity as CaCO3 mg CaCO3/L	Bicarbonate Alkalinity as CaCO3 mg CaCO3/L
Upgradient	MW-1	02/20/2023	9.83	32.1	24.6	11.5	4.53	21.4	NC	21.4
Upgradient	MW-2	02/20/2023	4.4	15.6	11.1	5.2	8.44	283	NC	283
Upgradient	MW-3	02/20/2023	0.477	40.2 J	22	10.3	3.56	81.7	NC	81.7
Upgradient	MW-4	02/21/2023	0.000436 J	31	12.2	5.69	4.29	182	NC	182
Downgradient	GS-GSA-MW-3	02/27/2023	56.6	209	21.4	10	8.02	143	NC	143
Downgradient	GS-GSA-MW-4	03/01/2023	28.8	40.7	67.6	31.6	3.82	--	--	--
Downgradient	GS-GSA-MW-8	02/28/2023	12.1	181	13.7	6.38	14.3	620	0.822	619
Vert. Delineation	GS-GSA-MW-12H	03/01/2023	11.2	28	34.2	16	4.04	1	NC	1
Vert. Delineation	GS-GSA-MW-12V	03/01/2023	22.6	323	27	12.6	8.05	251	NC	251
Vert. Delineation	GS-GSA-MW-3V	02/27/2023	12.5	235	24	11.2	7.62	175	NC	175
Vert. Delineation	GS-GSA-MW-4V	03/01/2023	5.02	24.4	29.5	13.8	2.63	42.7	NC	42.7
Vert. Delineation	GS-GSA-MW-8V	02/28/2023	0.124	355	18.7	8.74	14.4	721	5.34	716
Vert. Delineation	GS-GSA-MW-9V	02/28/2023	1.31	285	29.1	13.6	5.77	320	1.61	318
Horiz. Delineation	GS-GSA-MW-11H	02/28/2023	1.8	44.7	19	8.89	3.38	78.5	NC	78.5
Horiz. Delineation	GS-GSA-MW-13H	02/28/2023	21.9	53.4	24.2	11.3	9.42	151	NC	151
Horiz. Delineation	GS-GSA-MW-14H	02/28/2023	8.27	18.1	59.3	27.7	2.42	--	NC	NC
Horiz. Delineation	GS-GSA-MW-9H	02/28/2023	19.8	118	19.9	9.31	6.08	49.9	NC	49.9
Piezometer	GS-GSA-PZ-17	02/27/2023	4.68	7.72	28.2	13.2	3.3	--	--	--
Piezometer	GS-GSA-PZ-18	02/27/2023	3.07	17.7	37.7	17.6	4.15	--	--	--
Piezometer	GS-GSA-PZ-19	02/28/2023	0.783	110	21.8	10.2	10.4	384	NC	384

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Table 6. First Semi-Annual Monitoring Event

Analytical Results Summary
Plant Gorgas Gypsum Storage Pond (Old)
02/20/2023 - 03/01/2023

General Chemistry and MNA Parameters			
Hydraulic Location	**Well**	**Sample Date**	**Sulfide mg/L**
Upgradient	MW-1	02/20/2023	0
Upgradient	MW-2	02/20/2023	0
Upgradient	MW-3	02/20/2023	0
Upgradient	MW-4	02/21/2023	0
Downgradient	GS-GSA-MW-3	02/27/2023	0
Downgradient	GS-GSA-MW-4	03/01/2023	0
Downgradient	GS-GSA-MW-8	02/28/2023	0
Vert. Delineation	GS-GSA-MW-12H	03/01/2023	0
Vert. Delineation	GS-GSA-MW-12V	03/01/2023	0
Vert. Delineation	GS-GSA-MW-3V	02/27/2023	0
Vert. Delineation	GS-GSA-MW-4V	03/01/2023	0
Vert. Delineation	GS-GSA-MW-8V	02/28/2023	10
Vert. Delineation	GS-GSA-MW-9V	02/28/2023	0
Horiz. Delineation	GS-GSA-MW-11H	02/28/2023	0
Horiz. Delineation	GS-GSA-MW-13H	02/28/2023	0
Horiz. Delineation	GS-GSA-MW-14H	02/28/2023	0
Horiz. Delineation	GS-GSA-MW-9H	02/28/2023	0
Piezometer	GS-GSA-PZ-17	02/27/2023	0
Piezometer	GS-GSA-PZ-18	02/27/2023	0
Piezometer	GS-GSA-PZ-19	02/28/2023	0

Notes:
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4. DO - Dissolved Oxygen, ORP - Oxidation Reduction Potential, TDS - Total Dissolved Solids.
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Table 6. First Semi-Annual Monitoring Event

Analytical Results Summary
Plant Gorgas Gypsum Storage Pond (Old)
02/20/2023 - 03/01/2023

General Chemistry and MNA Parameters										
Hydraulic Location	Well	Sample Date	Chloride mg/L	Nitrate Nitrite mg/L as N	Sulfate mg/L	Aluminum mg/L	Calcium mg/L	Iron Total mg/L	Potassium mg/L	Magnesium Total mg/L
Piezometer	GS-GSA-PZ-20	02/28/2023	10.5	<0.2	444	0.00706 J	101	7.7	4.55	54.7
Piezometer	GS-GSA-PZ-21	02/28/2023	12.3	<0.2	36.3	0.00724 J	44.4	3.07	2.31	37.8
Piezometer	GS-GSA-PZ-22	02/28/2023	5.07	0.217 J	364	<0.00609	69.2	43.3	6.5	37

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4. DO - Dissolved Oxygen, ORP - Oxidation Reduction Potential, TDS - Total Dissolved Solids.
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Table 6. First Semi-Annual Monitoring Event

Analytical Results Summary
Plant Gorgas Gypsum Storage Pond (Old)
02/20/2023 - 03/01/2023

General Chemistry and MNA Parameters										
Hydraulic Location	Well	Sample Date	Manganese Total mg/L	Sodium mg/L	Silica mg/L	Silicon mg/L	Carbon, Total Organic mg/L	Alkalinity Total as CaCO3 mg CaCO3/L	Carbonate Alkalinity as CaCO3 mg CaCO3/L	Bicarbonate Alkalinity as CaCO3 mg CaCO3/L
Piezometer	GS-GSA-PZ-20	02/28/2023	0.433	110	19.7	9.21	6.67	206	NC	206
Piezometer	GS-GSA-PZ-21	02/28/2023	1.26	88.7	17.6	8.22	10.1	393	1.06	392
Piezometer	GS-GSA-PZ-22	02/28/2023	2.15	36.3	17.3	8.07	4.44	67.7	NC	67.6

Notes:
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Table 6. First Semi-Annual Monitoring Event

Analytical Results Summary
Plant Gorgas Gypsum Storage Pond (Old)
02/20/2023 - 03/01/2023

General Chemistry and MNA Parameters			
Hydraulic Location	**Well**	**Sample Date**	**Sulfide mg/L**
Piezometer	GS-GSA-PZ-20	02/28/2023	0
Piezometer	GS-GSA-PZ-21	02/28/2023	0
Piezometer	GS-GSA-PZ-22	02/28/2023	0

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4. DO - Dissolved Oxygen, ORP - Oxidation Reduction Potential, TDS - Total Dissolved Solids.
5. mg/L - milligrams per liter, mv - millivolts, NTU - nephelometric turbidity unit, C - celsius, SU - standard unit, uS/cm - microseimens per centimeter, pCi/L - picocurries per liter.
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Table 7. Second Semi-Annual Monitoring Event

Analytical Results Summary
Plant Gorgas Gypsum Storage Pond (Old)
08/21/2023 - 10/19/2023

Field Parameters

Hydraulic Location	Well	Sample Date	Conductivity uS/cm	DO mg/L	ORP mv	pH_Field SU	Field Temperature C	Turbidity NTU
Upgradient	MW-1	08/22/2023	2206.04	0.34	338.64	4.92	22.09	1.06
Upgradient	MW-2	08/22/2023	1720.05	0.09	69.56	5.81	21.04	2.91
Upgradient	MW-3	08/22/2023	4080.83	1.44	216.99	5.04	30.15	5.66
Upgradient	MW-4	08/22/2023	2962.35	1.95	168.43	6.28	23.06	7.22
Downgradient	GS-GSA-MW-3	08/23/2023	3083	0.16	63.9	6.03	22.23	6.86
Downgradient	GS-GSA-MW-4	08/23/2023	1220.16	0.18	236.83	3.74	21.69	4.42
Downgradient	GS-GSA-MW-8	08/23/2023	3047.06	0.47	-85.81	6.83	23.87	3.85
Vert. Delineation	GS-GSA-MW-12H	08/22/2023	1179.41	0.27	177.46	4.25	20.76	7.98
Vert. Delineation	GS-GSA-MW-12V	08/23/2023	3604.51	0.2	-21.76	6.26	20.47	1.68
Vert. Delineation	GS-GSA-MW-3V	08/23/2023	2638.18	1.04	62.2	6.27	26.14	5.99
Vert. Delineation	GS-GSA-MW-4V	08/23/2023	1137.65	0.63	110.1	5.71	23.97	9.08
Vert. Delineation	GS-GSA-MW-8V	08/23/2023	1661.54	0.69	-169.83	7.37	23.97	0.89
Vert. Delineation	GS-GSA-MW-9V	08/22/2023	3178.78	0.72	-54.52	6.81	24.99	0.8
Horiz. Delineation	GS-GSA-MW-11H	08/22/2023	1377.58	0.44	103.36	5.89	20.56	4.87
Horiz. Delineation	GS-GSA-MW-13H	08/22/2023	1363.99	0.21	17.52	5.71	20.37	9.51
Horiz. Delineation	GS-GSA-MW-14H	08/21/2023	1067.58	0.22	285.05	4.3	20.57	4.55
Horiz. Delineation	GS-GSA-MW-9H	08/22/2023	2522.78	0.37	140.35	5.31	22.27	1.9
Piezometer	GS-GSA-PZ-17	08/22/2023	1376.92	0.79	139.16	4.28	26.63	4.74
Piezometer	GS-GSA-PZ-18	08/22/2023	878.47	0.5	153.56	3.98	24.51	4.4
Piezometer	GS-GSA-PZ-19	08/22/2023	969.72	0.24	-7.01	6.56	20.18	5.68

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Table 7. Second Semi-Annual Monitoring Event

Analytical Results Summary
Plant Gorgas Gypsum Storage Pond (Old)
08/21/2023 - 10/19/2023

Field Parameters								
Hydraulic Location	**Well**	**Sample Date**	**Conductivity uS/cm**	**DO mg/L**	**ORP mv**	**pH_Field SU**	**Field Temperature C**	**Turbidity NTU**
Piezometer	GS-GSA-PZ-20	08/22/2023	1083.02	0.34	-4.96	6.32	20.16	4.94
Piezometer	GS-GSA-PZ-21	08/21/2023	802.3	0.39	-28.9	6.85	23.36	6.27
Piezometer	GS-GSA-PZ-22	08/22/2023	792.98	0.19	10.75	6.16	19.22	3.96

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Southern Company

Table 7. Second Semi-Annual Monitoring Event

Analytical Results Summary
Plant Gorgas Gypsum Storage Pond (Old)
08/21/2023 - 10/19/2023

EPA Appendix III Set								
Hydraulic Location	Well	Sample Date	Boron mg/L	Calcium mg/L	Chloride mg/L	Fluoride mg/L	pH_Field SU	Sulfate mg/L
Upgradient	MW-1	08/22/2023	<0.03	183	2.38	0.159	4.92	1560
Upgradient	MW-2	08/22/2023	<0.03	168	3.13	0.184	5.81	912
Upgradient	MW-3	08/22/2023	0.0373 J	359	1.31	0.283	5.04	3140
Upgradient	MW-4	08/22/2023	0.0448 J	287	1.86	0.358	6.28	2390
Downgradient	GS-GSA-MW-3	08/23/2023	1.57	585	212	0.542	6.03	3290
Downgradient	GS-GSA-MW-4	08/23/2023	2.24	156	22.5	<0.06	3.74	828
Downgradient	GS-GSA-MW-8	08/23/2023	2.22	451	90	0.139	6.83	1830
Vert. Delineation	GS-GSA-MW-12H	08/22/2023	0.0633 J	128	1.63	<0.06	4.25	801
Vert. Delineation	GS-GSA-MW-12V	08/23/2023	1.67	390	152	0.281	6.26	2020
Vert. Delineation	GS-GSA-MW-3V	08/23/2023	2.78	462	212	0.477	6.27	2170
Vert. Delineation	GS-GSA-MW-4V	08/23/2023	2.5	179	29.2	0.257	5.71	795
Vert. Delineation	GS-GSA-MW-8V	08/23/2023	0.157	31.5	22.8	0.238	7.37	194
Vert. Delineation	GS-GSA-MW-9V	08/22/2023	0.114	370	52.9	0.113 J	6.81	1830
Horiz. Delineation	GS-GSA-MW-11H	08/22/2023	<0.03	144	5.4	<0.06	5.89	796
Horiz. Delineation	GS-GSA-MW-13H	08/22/2023	0.189	166	10	0.12 J	5.71	786
Horiz. Delineation	GS-GSA-MW-14H	08/21/2023	0.1 J	125	2.19	<0.06	4.3	677
Horiz. Delineation	GS-GSA-MW-9H	08/22/2023	3.86	332	36.2	0.152	5.31	1620
Piezometer	GS-GSA-PZ-17	08/22/2023	0.0947 J	160	1.55	<0.06	4.28	983
Piezometer	GS-GSA-PZ-18	08/22/2023	0.0491 J	90.4	1.79	<0.06	3.98	522
Piezometer	GS-GSA-PZ-19	08/22/2023	0.0504 J	114	15.1	0.209	6.56	221
Piezometer	GS-GSA-PZ-20	08/22/2023	0.106	114	11.7	0.165	6.32	481

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Table 7. Second Semi-Annual Monitoring Event

Analytical Results Summary
Plant Gorgas Gypsum Storage Pond (Old)
08/21/2023 - 10/19/2023

EPA Appendix III Set								
Hydraulic Location	**Well**	**Sample Date**	**Boron mg/L**	**Calcium mg/L**	**Chloride mg/L**	**Fluoride mg/L**	**pH_Field SU**	**Sulfate mg/L**
Piezometer	GS-GSA-PZ-21	08/21/2023	<0.03	48.8	12.4	0.424	6.85	38.8
Piezometer	GS-GSA-PZ-22	08/22/2023	0.071 J	70.3	5.54	0.179	6.16	401

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4. DO - Dissolved Oxygen, ORP - Oxidation Reduction Potential, TDS - Total Dissolved Solids.
5. mg/L - milligrams per liter, mv - millivolts, NTU - nephelometric turbidity unit, C - celsius, SU - standard unit, uS/cm - microseimens per centimeter, pCi/L - picocurries per liter.
6. NC = value not detected with alkalinity calculation

Southern Company

Table 7. Second Semi-Annual Monitoring Event

Analytical Results Summary
Plant Gorgas Gypsum Storage Pond (Old)
08/21/2023 - 10/19/2023

EPA Appendix IV Set										
Hydraulic Location	Well	Sample Date	Antimony mg/L	Arsenic mg/L	Barium mg/L	Beryllium mg/L	Cadmium mg/L	Chromium mg/L	Cobalt mg/L	Fluoride mg/L
Upgradient	MW-1	08/22/2023	<0.00071	0.000187 J	0.00976	<0.000406	0.00205	<0.000203	0.086	0.159
Upgradient	MW-2	08/22/2023	<0.00071	0.000371	0.0134	<0.000406	8.54e-005 J	<0.000203	0.0434	0.184
Upgradient	MW-3	08/22/2023	<0.00071	0.00361	0.0158	0.00277	0.00867	<0.000203	0.529	0.283
Upgradient	MW-4	08/22/2023	<0.00071	0.000145 J	0.013	<0.000406	8.51e-005 J	0.000571 J	0.000142 J	0.358
Downgradient	GS-GSA-MW-3	08/23/2023	<0.00071	0.000448	0.0111	0.00224	<6.8e-005	0.000248 J	0.0509	0.542
Downgradient	GS-GSA-MW-4	08/23/2023	<0.00071	0.000866	0.01	0.00684	0.00224	0.000836 J	0.354	<0.06
Downgradient	GS-GSA-MW-8	08/23/2023	<0.00071	0.000162 J	0.0225	<0.000406	<6.8e-005	<0.000203	8.39e-005 J	0.139
Vert. Delineation	GS-GSA-MW-12H	08/22/2023	<0.00071	0.000726	0.0135	0.00745	0.00307	0.00026 J	0.323	<0.06
Vert. Delineation	GS-GSA-MW-12V	08/23/2023	<0.00071	0.000308	0.0106	<0.000406	<6.8e-005	<0.000203	0.000128 J	0.281
Vert. Delineation	GS-GSA-MW-3V	08/23/2023	<0.00071	0.000327	0.0169	<0.000406	<6.8e-005	<0.000203	0.00949	0.477
Vert. Delineation	GS-GSA-MW-4V	08/23/2023	<0.00071	0.00159	0.0102	0.0104	<6.8e-005	0.000548 J	0.129	0.257
Vert. Delineation	GS-GSA-MW-8V	08/23/2023	<0.00071	0.00242	0.102	<0.000406	<6.8e-005	<0.000203	<6.8e-005	0.238
Vert. Delineation	GS-GSA-MW-9V	08/22/2023	<0.00071	0.00172	0.0137	<0.000406	<6.8e-005	<0.000203	0.000525	0.113 J
Horiz. Delineation	GS-GSA-MW-11H	08/22/2023	<0.00071	0.000284	0.0111	<0.000406	0.000168 J	0.000218 J	0.00459	<0.06
Horiz. Delineation	GS-GSA-MW-13H	08/22/2023	<0.00071	0.18	0.0257	<0.000406	<6.8e-005	<0.000203	0.107	0.12 J
Horiz. Delineation	GS-GSA-MW-14H	08/21/2023	<0.00071	0.000711	0.0154	0.00851	0.00117	0.000236 J	0.179	<0.06
Horiz. Delineation	GS-GSA-MW-9H	08/22/2023	<0.00071	0.000582	0.0132	0.000501 J	0.000248	<0.000203	0.141	0.152
Piezometer	GS-GSA-PZ-17	08/22/2023	<0.00071	0.00236	0.0127	0.0121	0.00181	0.00182	0.307	<0.06
Piezometer	GS-GSA-PZ-18	08/22/2023	<0.00071	0.0032	0.00963	0.00553	7.5e-005 J	0.00152	0.0981	<0.06

Notes:
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4. DO - Dissolved Oxygen, ORP - Oxidation Reduction Potential, TDS - Total Dissolved Solids.
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6. NC = value not detected with alkalinity calculation

Southern Company

Table 7. Second Semi-Annual Monitoring Event

Analytical Results Summary
Plant Gorgas Gypsum Storage Pond (Old)
08/21/2023 - 10/19/2023

EPA Appendix IV Set									
Hydraulic Location	**Well**	**Sample Date**	**Lead mg/L**	**Lithium mg/L**	**Mercury mg/L**	**Molybdenum mg/L**	**Selenium mg/L**	**Thallium mg/L**	**Combined Radium 226 + 228 pCi/L**
Upgradient	MW-1	08/22/2023	<6.8e-005	0.0225	<0.0003	<0.005075	0.00151	<6.8e-005	1.1 U
Upgradient	MW-2	08/22/2023	<6.8e-005	0.0404	<0.0003	<0.005075	<0.000508	<6.8e-005	0.763 U
Upgradient	MW-3	08/22/2023	0.000105 J	0.316	<0.0003	<0.005075	0.0147	<6.8e-005	1.19 U
Upgradient	MW-4	08/22/2023	0.000136 J	0.0416	<0.0003	<0.005075	0.00148	<6.8e-005	0.887 U
Downgradient	GS-GSA-MW-3	08/23/2023	<6.8e-005	0.372	<0.0003	<0.005075	0.00103	<6.8e-005	0.368 U
Downgradient	GS-GSA-MW-4	08/23/2023	0.00067	0.469	<0.0003	<0.005075	0.00287	0.000138 J	1.28
Downgradient	GS-GSA-MW-8	08/23/2023	<6.8e-005	0.171	<0.0003	<0.005075	<0.000508	<6.8e-005	0.735 U
Vert. Delineation	GS-GSA-MW-12H	08/22/2023	0.00395	0.373	<0.0003	<0.005075	0.00175	0.000144 J	1.23
Vert. Delineation	GS-GSA-MW-12V	08/23/2023	<6.8e-005	0.292	<0.0003	<0.005075	<0.000508	<6.8e-005	0.176 U
Vert. Delineation	GS-GSA-MW-3V	08/23/2023	0.00017 J	0.346	<0.0003	<0.005075	<0.000508	<6.8e-005	0.421 U
Vert. Delineation	GS-GSA-MW-4V	08/23/2023	0.000227	0.279	<0.0003	<0.005075	0.000831 J	<6.8e-005	0.559 U
Vert. Delineation	GS-GSA-MW-8V	08/23/2023	<6.8e-005	0.235	<0.0003	<0.005075	<0.000508	<6.8e-005	0.837 U
Vert. Delineation	GS-GSA-MW-9V	08/22/2023	<6.8e-005	0.318	<0.0003	<0.005075	<0.000508	<6.8e-005	0.625 U
Horiz. Delineation	GS-GSA-MW-11H	08/22/2023	0.000105 J	<0.007105	<0.0003	<0.005075	<0.000508	<6.8e-005	9.81
Horiz. Delineation	GS-GSA-MW-13H	08/22/2023	<6.8e-005	0.0416	<0.0003	<0.005075	<0.000508	<6.8e-005	0.999 U
Horiz. Delineation	GS-GSA-MW-14H	08/21/2023	0.000808	0.388	<0.0003	<0.005075	0.00232	<6.8e-005	1.16 U
Horiz. Delineation	GS-GSA-MW-9H	08/22/2023	<6.8e-005	0.119	<0.0003	<0.005075	<0.000508	0.000109 J	0.872 U
Piezometer	GS-GSA-PZ-17	08/22/2023	0.0036	0.918	<0.0003	<0.005075	0.00549	8.21e-005 J	1.04 U
Piezometer	GS-GSA-PZ-18	08/22/2023	0.000123 J	0.287	<0.0003	<0.005075	0.00176	<6.8e-005	1.09 U

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4. DO - Dissolved Oxygen, ORP - Oxidation Reduction Potential, TDS - Total Dissolved Solids.
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Table 7. Second Semi-Annual Monitoring Event

Analytical Results Summary
Plant Gorgas Gypsum Storage Pond (Old)
08/21/2023 - 10/19/2023

EPA Appendix IV Set										
Hydraulic Location	Well	Sample Date	Antimony mg/L	Arsenic mg/L	Barium mg/L	Beryllium mg/L	Cadmium mg/L	Chromium mg/L	Cobalt mg/L	Fluoride mg/L
Piezometer	GS-GSA-PZ-19	08/22/2023	<0.00071	0.00148	0.0382	<0.000406	<6.8e-005	0.000205 J	0.000694	0.209
Piezometer	GS-GSA-PZ-20	08/22/2023	<0.00071	0.00289	0.0174	<0.000406	<6.8e-005	<0.000203	0.00365	0.165
Piezometer	GS-GSA-PZ-21	08/21/2023	<0.00071	0.00288	0.138	<0.000406	<6.8e-005	<0.000203	0.00302	0.424
Piezometer	GS-GSA-PZ-22	08/22/2023	<0.00071	0.0521	0.0167	<0.000406	<6.8e-005	<0.000203	0.00209	0.179

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Southern Company

Table 7. Second Semi-Annual Monitoring Event

Analytical Results Summary
Plant Gorgas Gypsum Storage Pond (Old)
08/21/2023 - 10/19/2023

EPA Appendix IV Set									
Hydraulic Location	Well	Sample Date	Lead mg/L	Lithium mg/L	Mercury mg/L	Molybdenum mg/L	Selenium mg/L	Thallium mg/L	Combined Radium 226 + 228 pCi/L
Piezometer	GS-GSA-PZ-19	08/22/2023	<6.8e-005	0.0664	<0.0003	<0.005075	<0.000508	<6.8e-005	0.916 U
Piezometer	GS-GSA-PZ-20	08/22/2023	<6.8e-005	0.0924	<0.0003	<0.005075	0.002	9.9e-005 J	1.52
Piezometer	GS-GSA-PZ-21	08/21/2023	<6.8e-005	0.0185 J	<0.0003	<0.005075	<0.000508	<6.8e-005	0.403 U
Piezometer	GS-GSA-PZ-22	08/22/2023	<6.8e-005	0.0633	<0.0003	<0.005075	<0.000508	<6.8e-005	0.645 U

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Southern Company

Table 7. Second Semi-Annual Monitoring Event

Analytical Results Summary
Plant Gorgas Gypsum Storage Pond (Old)
08/21/2023 - 10/19/2023

General Chemistry and MNA Parameters

Hydraulic Location	Well	Sample Date	Calcium mg/L	Iron Total mg/L	Potassium mg/L	Magnesium Total mg/L	Manganese Total mg/L	Sodium mg/L	Silica mg/L	Silicon mg/L
Upgradient	MW-1	08/22/2023	183	<0.00812	7.63	346	11.7	33.2	24	11.2
Upgradient	MW-2	08/22/2023	168	3.22	6.25	191	8.13	18.2	12.2	5.7
Upgradient	MW-3	08/22/2023	359	6.78	9.74	551	11.7	61.8	54.8	25.6
Upgradient	MW-4	08/22/2023	287	0.233	9.02	465	0.00648	36	12.6	5.9
Downgradient	GS-GSA-MW-3	08/23/2023	585	265	12	341	25.4	271	19.5	9.13
Downgradient	GS-GSA-MW-4	08/23/2023	156	29.5	3.92	115	13.6	19.1	54.8	25.6
Downgradient	GS-GSA-MW-8	08/23/2023	451	38.4	8.12	269	14.4	169	14.1	6.57
Vert. Delineation	GS-GSA-MW-12H	08/22/2023	128	1.4	4.99	122	12.8	21.7	40.7	19
Vert. Delineation	GS-GSA-MW-12V	08/23/2023	390	39.9	7.9	233	23.9	359	26.5	12.4
Vert. Delineation	GS-GSA-MW-3V	08/23/2023	462	32.4	7.66	234	12.5	231	23.1	10.8
Vert. Delineation	GS-GSA-MW-4V	08/23/2023	179	38.8	4.47	115	4.7	25.6	37.2	17.4
Vert. Delineation	GS-GSA-MW-8V	08/23/2023	31.5	0.0793	3.49	13.9	0.141	395	18.9	8.84
Vert. Delineation	GS-GSA-MW-9V	08/22/2023	370	1.41	7.78	184	1.24	331	27.6	12.9
Horiz. Delineation	GS-GSA-MW-11H	08/22/2023	144	1.54	0.885	121	1.78	46.2	18.7	8.73
Horiz. Delineation	GS-GSA-MW-13H	08/22/2023	166	42.3	7.54	102	11.8	50.5	24	11.2
Horiz. Delineation	GS-GSA-MW-14H	08/21/2023	125	12.6	3.64	85.1	7.41	15.4	56.1	26.2
Horiz. Delineation	GS-GSA-MW-9H	08/22/2023	332	16.9	7.59	217	17.6	133	19.9	9.28
Piezometer	GS-GSA-PZ-17	08/22/2023	160	27.8	5.11	110	8.56	15.4	35.5	16.6
Piezometer	GS-GSA-PZ-18	08/22/2023	90.4	10.5	2.98	58	3.21	14.3	37.2	17.4
Piezometer	GS-GSA-PZ-19	08/22/2023	114	2.03	3.87	49.9	0.68	103	21	9.81

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Southern Company

Table 7. Second Semi-Annual Monitoring Event

Analytical Results Summary
Plant Gorgas Gypsum Storage Pond (Old)
08/21/2023 - 10/19/2023

General Chemistry and MNA Parameters										
Hydraulic Location	Well	Sample Date	Carbon, Total Organic mg/L	Alkalinity Total as CaCO3 mg CaCO3/L	Carbonate Alkalinity as CaCO3 mg CaCO3/L	Bicarbonate Alkalinity as CaCO3 mg CaCO3/L	Chloride mg/L	Nitrate Nitrite mg/L as N	Sulfate mg/L	Aluminum mg/L
Upgradient	MW-1	08/22/2023	1.7 J	20.8	NC	20.8	2.38	1.25	1560	0.137
Upgradient	MW-2	08/22/2023	3.72	247	NC	247	3.13	<0.2	912	0.0309 J
Upgradient	MW-3	08/22/2023	1.49 J	9.75	NC	9.75	1.31	<0.2	3140	2.48
Upgradient	MW-4	08/22/2023	2.26	172	NC	172	1.86	<0.2	2390	0.125
Downgradient	GS-GSA-MW-3	08/23/2023	<1	121	NC	121	212	<0.2	3290	0.179
Downgradient	GS-GSA-MW-4	08/23/2023	<1	--	--	--	22.5	<0.2	828	18.1
Downgradient	GS-GSA-MW-8	08/23/2023	2.96	537	0.553	536	90	<0.2	1830	0.0321 J
Vert. Delineation	GS-GSA-MW-12H	08/22/2023	<1	--	--	--	1.63	<0.2	801	10.7
Vert. Delineation	GS-GSA-MW-12V	08/23/2023	<1	257	NC	257	152	<0.2	2020	<0.009135
Vert. Delineation	GS-GSA-MW-3V	08/23/2023	1.18 J	211	NC	211	212	<0.2	2170	0.0164 J
Vert. Delineation	GS-GSA-MW-4V	08/23/2023	<1	31.4	NC	31.4	29.2	<0.2	795	15.2
Vert. Delineation	GS-GSA-MW-8V	08/23/2023	3.71	755	3.71	751	22.8	<0.2	194	0.011 J
Vert. Delineation	GS-GSA-MW-9V	08/22/2023	<1	328	0.523	327	52.9	<0.2	1830	<0.009135
Horiz. Delineation	GS-GSA-MW-11H	08/22/2023	<1	82.1	NC	82.1	5.4	<0.2	796	0.108
Horiz. Delineation	GS-GSA-MW-13H	08/22/2023	2.48	166	NC	166	10	<0.2	786	0.0136 J
Horiz. Delineation	GS-GSA-MW-14H	08/21/2023	<1	--	--	--	2.19	<0.2	677	12.4
Horiz. Delineation	GS-GSA-MW-9H	08/22/2023	<1	54.8	NC	54.8	36.2	<0.2	1620	0.15
Piezometer	GS-GSA-PZ-17	08/22/2023	1.11 J	--	--	--	1.55	<0.2	983	36.9
Piezometer	GS-GSA-PZ-18	08/22/2023	<1	--	--	--	1.79	<0.2	522	15.7
Piezometer	GS-GSA-PZ-19	08/22/2023	1.33 J	410	0.596	409	15.1	<0.2	221	0.0327 J

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Southern Company

Table 7. Second Semi-Annual Monitoring Event

Analytical Results Summary
Plant Gorgas Gypsum Storage Pond (Old)
08/21/2023 - 10/19/2023

General Chemistry and MNA Parameters			
Hydraulic Location	**Well**	**Sample Date**	**Sulfide mg/L**
Upgradient	MW-1	08/22/2023	0
Upgradient	MW-2	08/22/2023	0
Upgradient	MW-3	08/22/2023	0
Upgradient	MW-4	08/22/2023	0
Downgradient	GS-GSA-MW-3	08/23/2023	0
Downgradient	GS-GSA-MW-4	08/23/2023	0
Downgradient	GS-GSA-MW-8	08/23/2023	0
Vert. Delineation	GS-GSA-MW-12H	08/22/2023	0
Vert. Delineation	GS-GSA-MW-12V	08/23/2023	0
Vert. Delineation	GS-GSA-MW-3V	08/23/2023	0
Vert. Delineation	GS-GSA-MW-4V	08/23/2023	0
Vert. Delineation	GS-GSA-MW-8V	08/23/2023	10
Vert. Delineation	GS-GSA-MW-9V	08/22/2023	0
Horiz. Delineation	GS-GSA-MW-11H	08/22/2023	0
Horiz. Delineation	GS-GSA-MW-13H	08/22/2023	0
Horiz. Delineation	GS-GSA-MW-14H	08/21/2023	0
Horiz. Delineation	GS-GSA-MW-9H	08/22/2023	0
Piezometer	GS-GSA-PZ-17	08/22/2023	0
Piezometer	GS-GSA-PZ-18	08/22/2023	0
Piezometer	GS-GSA-PZ-19	08/22/2023	0

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Table 7. Second Semi-Annual Monitoring Event

Analytical Results Summary
Plant Gorgas Gypsum Storage Pond (Old)
08/21/2023 - 10/19/2023

General Chemistry and MNA Parameters										
Hydraulic Location	Well	Sample Date	Calcium mg/L	Iron Total mg/L	Potassium mg/L	Magnesium Total mg/L	Manganese Total mg/L	Sodium mg/L	Silica mg/L	Silicon mg/L
Piezometer	GS-GSA-PZ-20	08/22/2023	114	9.91	4.87	61.1	0.584	109	19.4	9.06
Piezometer	GS-GSA-PZ-21	08/21/2023	48.8	3.22	2.42	38.4	1.2	100	17.3	8.08
Piezometer	GS-GSA-PZ-22	08/22/2023	70.3	45.9	6.66	36.7	2.1	37.1	18.7	8.74

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

Southern Company

Table 7. Second Semi-Annual Monitoring Event

Analytical Results Summary
Plant Gorgas Gypsum Storage Pond (Old)
08/21/2023 - 10/19/2023

General Chemistry and MNA Parameters										
Hydraulic Location	Well	Sample Date	Carbon, Total Organic mg/L	Alkalinity Total as CaCO3 mg CaCO3/L	Carbonate Alkalinity as CaCO3 mg CaCO3/L	Bicarbonate Alkalinity as CaCO3 mg CaCO3/L	Chloride mg/L	Nitrate Nitrite mg/L as N	Sulfate mg/L	Aluminum mg/L
Piezometer	GS-GSA-PZ-20	08/22/2023	1.32 J	187	NC	187	11.7	<0.2	481	<0.009135
Piezometer	GS-GSA-PZ-21	08/21/2023	4.03	428	0.731	427	12.4	<0.2	38.8	0.0155 J
Piezometer	GS-GSA-PZ-22	08/22/2023	1.67 J	81.1	NC	81.1	5.54	<0.2	401	<0.009135

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

Table 7. Second Semi-Annual Monitoring Event

Analytical Results Summary
Plant Gorgas Gypsum Storage Pond (Old)
08/21/2023 - 10/19/2023

General Chemistry and MNA Parameters			
Hydraulic Location	**Well**	**Sample Date**	**Sulfide mg/L**
Piezometer	GS-GSA-PZ-20	08/22/2023	0
Piezometer	GS-GSA-PZ-21	08/21/2023	0
Piezometer	GS-GSA-PZ-22	08/22/2023	0

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

Appendix A

Southern Company

Monitoring Well Abandonment Form

General Information

Project Name: Gorgas GSA Well Abandonment
Monitoring Well Number: GS-GSA-PZ-4
Plant Name: Plant Gorgas
Plant Address: 460 Gorgas Road Parrish, Alabama
Project & Task Number: 10140098; 11.041.37
Goal/Task: Hydrogeologic Investigation

Abandoned by: Brandon Coates, P.G.
Date: 10/3/2023

Well Details (Check one per section):

Casing Diameter		Borehole Diameter		Well Type	
X	2"	X	6"	X	Permanent
n/a	4"	n/a	8"	n/a	Temporary
n/a	6"	n/a	12"	n/a	Geoprobe® Screen Point (GSP) or Equiv.
n/a	Other/NA	n/a	Other/NA	126.4	Measured Total Depth
				Dry	Measured Static Water Level

Casing Material

X	PVC
n/a	Steel
n/a	Other/NA

Abandonment Details (Check one per section):

Abandonment Method (as detailed in SOW)

n/a	Overdrill and Grout
n/a	Well Extraction
X	Grout in Place
n/a	Bentonite Sealing-Pellets and Neat Cement (low-risk GSP only)
n/a	Bentonite Sealing-Pellets only (low-risk GSP only)
n/a	Probe Hole Grouting (higher risk GSP only)
n/a	Re-proved for through-the-rod grouting (GSP only alternative)

Materials and Quantity Used

X	Type 1 Portland Cement mixed with 3-5% bentonite
n/a	Bentonite Pellets
n/a	Neat Cement
n/a	Other

Overdrilled Well Cuttings and Debris

n/a	Staged Onsite for Disposal (covered top and bottom with poly-sheeting)
n/a	Drummed for Disposal

Note: GS-GSA-PZ-04 was abandoned in-place through the use of a tremie pipe and grout pump. A tremie pipe was placed at the base of the PVC casing and approximately 20 gallons of portland/bentonite grout was pumped at pressure until approximately 1 foot BLS. The remaining well casing was plugged with concrete. In addition, the associated well pad and protective bollards were removed.

Prepared By: Annelyse W. Helms, P.G. Date: 12/6/2023 Signature: Annelyse W. Helms

Reviewed By: Greg Budd, P.G. Date: 12/6/2023 Signature: Greg Budd

Approved By: Date: Signature:

Southern Company

Monitoring Well Abandonment Form

General Information

Project Name: Gorgas GSA Well Abandonment
Monitoring Well Number: GS-GSA-MW-05
Plant Name: Plant Gorgas
Plant Address: 460 Gorgas Road Parrish, Alabama
Project & Task Number: 10140098; 11.041.37
Goal/Task: Hydrogeologic Investigation

Abandoned by: Brandon Coates, P.G.
Date: 10/3/2023

Well Details (Check one per section):

Casing Diameter		Borehole Diameter		Well Type	
X	2"	X	6"	X	Permanent
n/a	4"	n/a	8"	n/a	Temporary
n/a	6"	n/a	12"	n/a	Geoprobe® Screen Point (GSP) or Equiv.
n/a	Other/NA	n/a	Other/NA	42.9	Measured Total Depth
				Dry	Measured Static Water Level

Casing Material

X	PVC
n/a	Steel
n/a	Other/NA

Abandonment Details (Check one per section):

Abandonment Method (as detailed in SOW)

n/a	Overdrill and Grout
n/a	Well Extraction
X	Grout in Place
n/a	Bentonite Sealing-Pellets and Neat Cement (low-risk GSP only)
n/a	Bentonite Sealing-Pellets only (low-risk GSP only)
n/a	Probe Hole Grouting (higher risk GSP only)
n/a	Re-proved for through-the-rod grouting (GSP only alternative)

Materials and Quantity Used

X	Type 1 Portland Cement mixed with 3-5% bentonite
n/a	Bentonite Pellets
n/a	Neat Cement
n/a	Other

Overdrilled Well Cuttings and Debris

n/a	Staged Onsite for Disposal (covered top and bottom with poly-sheeting)
n/a	Drummed for Disposal

Note: GS-GSA-MW-05 was abandoned in-place through the use of a tremie pipe and grout pump. A tremie pipe was placed at the base of the PVC casing and approximately 7 gallons of portland/bentonite grout was pumped at pressure until approximately 1 foot BLS. The remaining well casing was plugged with concrete. In addition, the associated well pad and protective bollards were removed.

Prepared By: Annelyse W. Helms, P.G. Date: 12/6/2023 Signature: Annelyse W. Helms

Reviewed By: Greg Budd, P.G. Date: 12/6/2023 Signature: Greg Budd

Approved By: Date: Signature:

Southern Company

Monitoring Well Abandonment Form

General Information

Project Name: Gorgas GSA Well Abandonment
Monitoring Well Number: GS-GSA-MW-06
Plant Name: Plant Gorgas
Plant Address: 460 Gorgas Road Parrish, Alabama
Project & Task Number: 10140098; 11.041.37
Goal/Task: Hydrogeologic Investigation

Abandoned by: Brandon Coates, P.G.
Date: 10/26/2023

Well Details (Check one per section):

Casing Diameter		Borehole Diameter		Well Type	
X	2"	X	6"	X	Permanent
n/a	4"	n/a	8"	n/a	Temporary
n/a	6"	n/a	12"	n/a	Geoprobe® Screen Point (GSP) or Equiv.
n/a	Other/NA	n/a	Other/NA	35.3	Measured Total Depth
				Dry	Measured Static Water Level

Casing Material

X	PVC
n/a	Steel
n/a	Other/NA

Abandonment Details (Check one per section):

Abandonment Method (as detailed in SOW)

n/a	Overdrill and Grout
n/a	Well Extraction
X	Grout in Place
n/a	Bentonite Sealing-Pellets and Neat Cement (low-risk GSP only)
n/a	Bentonite Sealing-Pellets only (low-risk GSP only)
n/a	Probe Hole Grouting (higher risk GSP only)
n/a	Re-proved for through-the-rod grouting (GSP only alternative)

Materials and Quantity Used

X	Type 1 Portland Cement mixed with 3-5% bentonite
n/a	Bentonite Pellets
n/a	Neat Cement
n/a	Other

Overdrilled Well Cuttings and Debris

n/a	Staged Onsite for Disposal (covered top and bottom with poly-sheeting)
n/a	Drummed for Disposal

Note: GS-GSA-MW-06 was abandoned in-place through the use of a tremie pipe and grout pump. A tremie pipe was placed at the base of the open hole piezometer and approximately 6 gallons of portland/bentonite grout was pumped at pressure until approximately 1 ft. BLS. The remaining well casing was plugged with concrete. It should be noted that GS-GSA-MW-6 was advanced to approximately 207 ft. BLS and completed with surface casing, a concrete well pad, and a steel protective cover. At the time of abandonemnet the depth of the open hole piezometer was measured to be 35.3 feet BLS. Based on on-site observations, the open hole piezometer collasped prior to the date of abandonment. The associate well pad, steel casing, and protective bollards were removed prior to the completion of abandonment activites.

Prepared By: Annelyse W. Helms, P.G. Date: 12/6/2023 Signature: Annelyse W. Helms

Reviewed By: Greg Budd, P.G. Date: 12/6/2023 Signature: Gregory Budd

Approved By: Date: Signature:

Southern Company

Monitoring Well Abandonment Form

General Information

Project Name: Gorgas GSA Well Abandonment
Monitoring Well Number: GS-GSA-MW-07
Plant Name: Plant Gorgas
Plant Address: 460 Gorgas Road Parrish, Alabama
Project & Task Number: 10140098; 11.041.37
Goal/Task: Hydrogeologic Investigation

Abandoned by: Brandon Coates, P.G.
Date: 10/3/2023

Well Details (Check one per section):

Casing Diameter		Borehole Diameter		Well Type	
X	2"	X	6"	X	Permanent
n/a	4"	n/a	8"	n/a	Temporary
n/a	6"	n/a	12"	n/a	Geoprobe® Screen Point (GSP) or Equiv.
n/a	Other/NA	n/a	Other/NA	69.5	Measured Total Depth
				Dry	Measured Static Water Level

Casing Material

X	PVC
n/a	Steel
n/a	Other/NA

Abandonment Details (Check one per section):

Abandonment Method (as detailed in SOW)

n/a	Overdrill and Grout
n/a	Well Extraction
X	Grout in Place
n/a	Bentonite Sealing-Pellets and Neat Cement (low-risk GSP only)
n/a	Bentonite Sealing-Pellets only (low-risk GSP only)
n/a	Probe Hole Grouting (higher risk GSP only)
n/a	Re-proved for through-the-rod grouting (GSP only alternative)

Materials and Quantity Used

X	Type 1 Portland Cement mixed with 3-5% bentonite
n/a	Bentonite Pellets
n/a	Neat Cement
n/a	Other

Overdrilled Well Cuttings and Debris

n/a	Staged Onsite for Disposal (covered top and bottom with poly-sheeting)
n/a	Drummed for Disposal

Note: GS-GSA-MW-07 was abandoned in-place through the use of a tremie pipe and grout pump. A tremie pipe was placed at the base of the PVC casing and approximately 11 gallons of portland/bentonite grout was pumped at pressure until approximately 1 foot BLS. The remaining well casing was plugged with concrete. In addition, the associated well pad and protective bollards were removed.

Prepared By: Annelyse W. Helms, P.G. Date: 12/6/2023 Signature: Annelyse W. Helms

Reviewed By: Greg Budd, P.G. Date: 12/6/2023 Signature: Gregory Budd

Approved By: _____ Date: _____ Signature: _____

Southern Company

Monitoring Well Abandonment Form

General Information

Project Name: Gorgas GSA Well Abandonment
Monitoring Well Number: GS-GSA-MW-09
Plant Name: Plant Gorgas
Plant Address: 460 Gorgas Road Parrish, Alabama
Project & Task Number: 10140098; 11.041.37
Goal/Task: Hydrogeologic Investigation

Abandoned by: Brandon Coates, P.G.
Date: 10/3/2023

Well Details (Check one per section):

Casing Diameter		Borehole Diameter		Well Type	
X	2"	X	6"	X	Permanent
n/a	4"	n/a	8"	n/a	Temporary
n/a	6"	n/a	12"	n/a	Geoprobe® Screen Point (GSP) or Equiv.
n/a	Other/NA	n/a	Other/NA	49.9	Measured Total Depth
				Dry	Measured Static Water Level

Casing Material

X	PVC
n/a	Steel
n/a	Other/NA

Abandonment Details (Check one per section):

Abandonment Method (as detailed in SOW)

n/a	Overdrill and Grout
n/a	Well Extraction
X	Grout in Place
n/a	Bentonite Sealing-Pellets and Neat Cement (low-risk GSP only)
n/a	Bentonite Sealing-Pellets only (low-risk GSP only)
n/a	Probe Hole Grouting (higher risk GSP only)
n/a	Re-proved for through-the-rod grouting (GSP only alternative)

Materials and Quantity Used

X	Type 1 Portland Cement mixed with 3-5% bentonite
n/a	Bentonite Pellets
n/a	Neat Cement
n/a	Other

Overdrilled Well Cuttings and Debris

n/a	Staged Onsite for Disposal (covered top and bottom with poly-sheeting)
n/a	Drummed for Disposal

Note: GS-GSA-MW-09 was abandoned in-place through the use of a tremie pipe and grout pump. A tremie pipe was placed at the base of the PVC casing and approximately 8 gallons of portland/bentonite grout was pumped at pressure until approximately 1 foot BLS. The remaining well casing was plugged with concrete. In addition, the associated well pad and protective bollards were removed.

Prepared By: Annelyse W. Helms, P.G. Date: 12/6/2023 Signature: Annelyse W. Helms

Reviewed By: Greg Budd, P.G. Date: 12/6/2023 Signature: Gregory Budd

Approved By: _____ Date: _____ Signature: _____

Appendix B

Southern Company

ANALYTICAL DATA SUMMARY
Gypsum Storage Pond (Old) (04/25/2016 - 10/19/2023)
APC Plant Gorgas
Walker County Alabama

Analyte	Units	GS-GSA-MW-11H									
		03/04/2019	10/16/2019	02/04/2020	08/04/2020	03/02/2021	07/14/2021	01/26/2022	07/12/2022	02/28/2023	08/22/2023
Appendix III											
Boron	mg/L	<0.02	0.0352 J	<0.03	<0.03	0.0305 J	<0.03	<0.03	0.0301 J	<0.03	<0.03
Calcium	mg/L	160	143	163	139	139	133	144	137	139	147
Chloride	mg/L	3.84	4.45	4.27	4.51	4.63	4.7	5.4	5.18	5.49	5.4
Fluoride	mg/L	0.0973 J	0.0875 J	0.0743 J	0.109	0.0758 J	0.0848 J	0.0809 J	0.156	0.0747 J	<0.06
pH_Field	pH	6.04	6.07	6.02	5.74	5.89	5.72	5.95	5.97	5.99	5.89
Sulfate	mg/L	779	750	725	694	835	747	745	807	787	796
TDS	mg/L	1120	1150	1200	1230	1190	1190	1140	1180	1240	1310
Appendix IV											
Antimony	mg/L	0.00109 J	<0.0008	<0.0008	<0.0008	<0.000507	<0.000508	<0.000508	<0.000508	<0.000508	<0.00071
Arsenic	mg/L	<0.001	<0.001	<0.001	<0.001	0.00039	0.000406	0.000427	0.00023	0.000227	0.000284
Barium	mg/L	0.0247	0.0192	0.0148	0.0138	0.0118	0.0127	0.0139	0.0115	0.0105	0.0111
Beryllium	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406
Cadmium	mg/L	<0.0003	<0.0003	<0.0003	<0.0003	0.000366	0.000285	0.000132 J	0.000152 J	0.00012 J	0.000168 J
Chromium	mg/L	<0.002	<0.002	<0.002	<0.002	0.000295 J	0.00034 J	0.000208 J	0.000425 J	<0.000203	<0.000203
Cobalt	mg/L	0.00664	0.00598	0.00582	0.0061	0.00512	0.00475	0.00479	0.00494	0.0049	0.00459
Combined Radium 226 + 228	pCi/L	0.135 U	0.189 U	0.319 U	0.0315 U	0.308 U	0.398 U	0.506 U	0.997 U	0.491 U	9.81
Fluoride	mg/L	0.0973 J	0.0875 J	0.0743 J	0.109	0.0758 J	0.0848 J	0.0809 J	0.156	0.0747 J	<0.06
Lead	mg/L	<0.001	<0.001	<0.001	<0.001	0.000145 J	0.00014 J	0.000231	0.000175 J	<6.8e-005	<6.8e-005
Lithium	mg/L	<0.01	<0.01	<0.01	<0.01	<0.007105	<0.007105	<0.007105	<0.007105	<0.007105	<0.007105
Mercury	mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Molybdenum	mg/L	<0.002	<0.002	<0.002	<0.002	<6.8e-005	<6.8e-005	0.000112 J	<0.000102	<0.000102	<0.005075
Selenium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.000507	<0.000508	<0.000508	<0.000508	<0.000508	<0.000508
Thallium	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005

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

Southern Company

ANALYTICAL DATA SUMMARY
Gypsum Storage Pond (Old) (04/25/2016 - 10/19/2023)
APC Plant Gorgas
Walker County Alabama

Analyte	Units	GS-GSA-MW-11H	GS-GSA-MW-12H								
		10/19/2023	11/26/2019	01/23/2020	02/04/2020	08/05/2020	03/02/2021	07/14/2021	01/25/2022	07/13/2022	03/01/2023
Appendix III											
Boron	mg/L	--	0.0798 J	--	0.0748 J	0.0748 J	0.0875 J	0.0742 J	0.0645 J	0.0724 J	0.0555 J
Calcium	mg/L	--	144	--	158	126	124	124	124	130	115
Chloride	mg/L	--	2.43	--	2.34	2	2.28	1.69	1.86	1.77	2.17
Fluoride	mg/L	--	<0.05	--	<0.05	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06
pH_Field	pH	--	4.37	--	4.57	4.13	4.11	4.04	4.11	4.15	4.55
Sulfate	mg/L	--	997	--	978	811	890	878	895	839	837
TDS	mg/L	--	1580	--	1580	1380	1390	1330	1320	1270	1300
Appendix IV											
Antimony	mg/L	--	<0.0008	--	<0.0008	<0.0008	<0.000507	<0.000508	<0.000508	<0.000508	<0.000508
Arsenic	mg/L	--	0.00194 J	--	0.00157 J	0.00158 J	0.00138	0.00161	0.0011	0.00121	0.000977
Barium	mg/L	--	0.0184	--	0.0141	0.016	0.0134	0.013	0.013	0.0129	0.0121
Beryllium	mg/L	--	0.0084	--	0.00709	0.00747	0.00703	0.00755	0.00753	0.00817	0.0067
Cadmium	mg/L	--	0.00351	--	0.00301	0.00393	0.00319	0.00301	0.00333	0.00321	0.00232
Chromium	mg/L	--	<0.002	--	<0.002	<0.002	0.000242 J	0.000592 J	0.000226 J	0.000345 J	0.000203 J
Cobalt	mg/L	--	0.435	--	0.351	0.436	0.307	0.299	0.315	0.34	0.271
Combined Radium 226 + 228	pCi/L	0.588 U	0.996	1.02	0.939	-0.306 U	2.18	1.42	1.22 U	1.55	0.786 U
Fluoride	mg/L	--	<0.05	--	<0.05	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06
Lead	mg/L	--	0.00271 J	--	0.00334 J	0.00329 J	0.00478	0.00557	0.00485	0.00404	0.00347
Lithium	mg/L	--	0.449	--	0.394	0.441	0.456	0.454	0.395	0.411	0.297
Mercury	mg/L	--	<0.0003	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Molybdenum	mg/L	--	<0.002	--	<0.002	<0.002	<6.8e-005	<6.8e-005	<6.8e-005	<0.000102	<0.000102
Selenium	mg/L	--	0.00614 J	--	<0.002	0.00417 J	0.00463	0.00441	0.00315	0.0039	0.00288
Thallium	mg/L	--	0.000375 J	--	0.000491 J	0.000297 J	0.000371	0.000343	0.000317	0.000308	0.000356

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

Southern Company

ANALYTICAL DATA SUMMARY
Gypsum Storage Pond (Old) (04/25/2016 - 10/19/2023)
APC Plant Gorgas
Walker County Alabama

Analyte	Units	GS-GSA-MW-12H	GS-GSA-MW-12V							GS-GSA-MW-13H	
		08/22/2023	08/05/2020	03/03/2021	07/14/2021	01/27/2022	07/13/2022	03/01/2023	08/23/2023	11/26/2019	01/23/2020
Appendix III											
Boron	mg/L	0.066 J	1.55	1.54	1.55	1.52	1.61	1.6	1.67	0.201	--
Calcium	mg/L	136	350	353	338	347	381	340	34.4	166	--
Chloride	mg/L	1.8	159	152	189	171	199	145	152	13.1	--
Fluoride	mg/L	<0.06	0.217	0.243	0.335	0.329	0.301	0.335	0.281	0.18	--
pH_Field	pH	4.25	6.15	6.11	6.21	6.19	6.26	6.29	6.26	6.03	--
Sulfate	mg/L	801	1830	1930	2000	1990	1980	1810	2020	731	--
TDS	mg/L	1310	3330	3450	3360	3170	3380	3270	3700	1220	--
Appendix IV											
Antimony	mg/L	<0.00071	<0.0008	<0.000507	<0.000508	<0.000508	<0.000508	<0.000508	<0.00071	<0.0008	--
Arsenic	mg/L	0.000873	<0.001	0.000339	0.000475	0.000476	0.000522	0.000312	0.000308	0.075	--
Barium	mg/L	0.0122	0.0157	0.0126	0.0116	0.0106	0.0114	0.0107	0.0106	0.0431	--
Beryllium	mg/L	0.00795	<0.0006	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406	<0.0006	--
Cadmium	mg/L	0.00283	<0.0003	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<0.0003	--
Chromium	mg/L	<0.000203	<0.002	<0.000203	0.000252 J	<0.000203	0.000212 J	0.000234 J	<0.000203	<0.002	--
Cobalt	mg/L	0.32	<0.002	0.00028	0.000178 J	0.000216	0.00019 J	0.000222	0.000128 J	0.0488	--
Combined Radium 226 + 228	pCi/L	1.23	-0.284 U	0.388 U	0.657 U	0.361 U	0.373 U	0.386 U	0.176 U	0.559	0.55
Fluoride	mg/L	<0.06	0.217	0.243	0.335	0.329	0.301	0.335	0.281	0.18	--
Lead	mg/L	0.00612	<0.001	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<0.001	--
Lithium	mg/L	0.372	0.334	0.411	0.374	0.303	0.313	0.292	0.295	0.0509	--
Mercury	mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	--
Molybdenum	mg/L	<0.005075	0.00247 J	0.00123	0.00203	0.00268	0.00202	0.00235	<0.005075	<0.002	--
Selenium	mg/L	0.00186	<0.002	<0.000507	<0.000508	<0.000508	<0.000508	<0.000508	<0.000508	<0.002	--
Thallium	mg/L	0.000148 J	<0.0002	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<0.0002	--

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

Southern Company

ANALYTICAL DATA SUMMARY
Gypsum Storage Pond (Old) (04/25/2016 - 10/19/2023)
APC Plant Gorgas
Walker County Alabama

Analyte	Units	GS-GSA-MW-13H								GS-GSA-MW-14H	
		02/04/2020	08/04/2020	03/02/2021	07/14/2021	01/26/2022	07/12/2022	02/28/2023	08/22/2023	08/05/2020	03/03/2021
Appendix III											
Boron	mg/L	0.202	0.263	0.206	0.229	0.205	0.21	0.203	0.175	0.158	0.203
Calcium	mg/L	171	192	164	172	168	192	158	170	141	137
Chloride	mg/L	12.9	12.7	10.9	11.5	10.2	10.9	8.99	10.7	3.28	4.8
Fluoride	mg/L	0.115	0.113	0.167	0.187	0.208	0.21	0.2	0.136	0.082 J	<0.06
pH_Field	pH	6	5.89	5.85	5.55	6.08	5.82	5.82	5.71	3.83	4.02
Sulfate	mg/L	720	773	861	857	883	879	847	786	796	803
TDS	mg/L	1200	1350	1450	1400	1410	1360	1480	1400	1280	1260
Appendix IV											
Antimony	mg/L	<0.0008	<0.0008	<0.000507	<0.000508	<0.000508	<0.000508	<0.000508	<0.00071	<0.0008	<0.000507
Arsenic	mg/L	0.16	0.103	0.293	0.103	0.283	0.0901	0.231	0.159	0.00181 J	0.00155
Barium	mg/L	0.0296	0.0275	0.0315	0.0224	0.0332	0.0219	0.0283	0.0237	0.0113	0.0109
Beryllium	mg/L	<0.0006	<0.0006	<0.000406	<0.000406	<0.000406	<0.000406	0.000451 J	<0.000406	0.00879	0.00818
Cadmium	mg/L	<0.0003	<0.0003	<6.8e-005	<6.8e-005	7e-005 J	<6.8e-005	<6.8e-005	<6.8e-005	0.0018	0.0016
Chromium	mg/L	<0.002	<0.002	0.000285 J	0.000322 J	0.000292 J	0.00023 J	0.000215 J	<0.000203	<0.002	<0.000203
Cobalt	mg/L	0.0442	0.111	0.143	0.116	0.288	0.153	0.285	0.106	0.237	0.202
Combined Radium 226 + 228	pCi/L	0.624	-0.402 U	0.686 U	0.826 U	0.354 U	0.669 U	0.518 U	0.999 U	0.758 U	0.185 U
Fluoride	mg/L	0.115	0.113	0.167	0.187	0.208	0.21	0.2	0.136	0.082 J	<0.06
Lead	mg/L	<0.001	<0.001	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	0.00122 J	0.000876
Lithium	mg/L	0.0506	0.0534	0.0439	0.0524	0.0309	0.047	0.0303	0.0406	0.512	0.54
Mercury	mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Molybdenum	mg/L	<0.002	<0.002	0.00138	0.000389	0.00145	0.000352	0.00121	<0.005075	<0.002	7.06e-005 J
Selenium	mg/L	<0.002	<0.002	<0.000507	<0.000508	0.000834 J	<0.000508	0.000954 J	<0.000508	0.00571 J	0.00554
Thallium	mg/L	<0.0002	<0.0002	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<0.0002	7.98e-005 J

Notes:
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Southern Company

ANALYTICAL DATA SUMMARY
Gypsum Storage Pond (Old) (04/25/2016 - 10/19/2023)
APC Plant Gorgas
Walker County Alabama

Analyte	Units	GS-GSA-MW-14H					GS-GSA-MW-3V				
		07/13/2021	01/27/2022	07/13/2022	02/28/2023	08/21/2023	03/05/2019	10/14/2019	02/03/2020	08/04/2020	03/03/2021
Appendix III											
Boron	mg/L	0.139	0.147	0.106	0.157	0.1 J	0.895	2.38	3.06	2.8	2.99
Calcium	mg/L	135	125	130	136	127	329	368	504	443	466
Chloride	mg/L	2.42	3.75	2.15	2.92	2.19	194	298	338	305	307
Fluoride	mg/L	<0.06	<0.06	<0.06	<0.06	<0.06	0.249	0.37	0.438	0.349	0.458
pH_Field	pH	3.8	4.1	3.94	4.39	4.3	6.7	6.39	5.88	5.9	5.76
Sulfate	mg/L	787	784	707	839	677	1170	1710	1970	1860	1930
TDS	mg/L	1210	1130	1120	1300	1160	2170	3200	3660	3530	3640
Appendix IV											
Antimony	mg/L	<0.000508	<0.000508	<0.000508	<0.000508	<0.00071	0.00179 J	<0.0008	<0.0008	<0.0008	<0.000507
Arsenic	mg/L	0.00191	0.00128	0.00124	0.00147	0.000711	<0.001	<0.001	<0.001	<0.001	0.000296
Barium	mg/L	0.0102	0.0112	0.0107	0.02	0.0145	0.0956	0.0451	0.0215	0.017	0.0181
Beryllium	mg/L	0.00883	0.0076	0.00806	0.0109	0.00832	<0.0006	<0.0006	<0.0006	<0.0006	<0.000406
Cadmium	mg/L	0.00142	0.00137	0.00128	0.00162	0.00117	<0.0003	<0.0003	<0.0003	<0.0003	<6.8e-005
Chromium	mg/L	0.0005 J	0.000368 J	0.000526 J	0.000486 J	0.000217 J	<0.002	<0.002	<0.002	<0.002	<0.000203
Cobalt	mg/L	0.207	0.198	0.191	0.229	0.179	0.0059	0.00845	0.0135	0.0133	0.0134
Combined Radium 226 + 228	pCi/L	1.06 U	0.247 U	1 U	0.274 U	1.16 U	0.932	0.184 U	0.408 U	-0.00668 U	1.11 U
Fluoride	mg/L	<0.06	<0.06	<0.06	<0.06	<0.06	0.249	0.37	0.438	0.349	0.458
Lead	mg/L	0.00095	0.000805	0.000876	0.000893	0.000808	<0.001	<0.001	<0.001	<0.001	<6.8e-005
Lithium	mg/L	0.518	0.43	0.428	0.475	0.38	0.309	0.38	0.46	0.395	0.455
Mercury	mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Molybdenum	mg/L	<6.8e-005	9.4e-005 J	<0.000102	0.000576	<0.005075	0.00347 J	<0.002	<0.002	<0.002	7.93e-005 J
Selenium	mg/L	0.00607	0.00463	0.00419	0.00498	0.00311	<0.002	<0.002	<0.002	<0.002	<0.000507
Thallium	mg/L	<6.8e-005	6.81e-005 J	6.89e-005 J	<6.8e-005	<6.8e-005	<0.0002	<0.0002	<0.0002	<0.0002	<6.8e-005

Notes:
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Southern Company

ANALYTICAL DATA SUMMARY
Gypsum Storage Pond (Old) (04/25/2016 - 10/19/2023)
APC Plant Gorgas
Walker County Alabama

Analyte	Units	GS-GSA-MW-3V					GS-GSA-MW-4V				
		07/15/2021	01/26/2022	07/13/2022	02/27/2023	08/23/2023	03/05/2019	10/14/2019	02/03/2020	08/05/2020	03/03/2021
Appendix III											
Boron	mg/L	3.04	2.81	2.85	2.96	2.77	7.15	5.64	5.25	4.41	4.09
Calcium	mg/L	453	481	442	468	462	249	173	184	167	161
Chloride	mg/L	294	238	285	233	212	191	122	101	80.9	70.8
Fluoride	mg/L	0.493	0.516	0.374	0.376	0.477	0.477	0.449	0.555	0.363	0.262
pH_Field	pH	5.92	6.61	5.98	5.97	6.27	6.19	5.89	5.84	5.81	5.75
Sulfate	mg/L	1960	2010	2040	2090	2170	871	818	808	761	746
TDS	mg/L	3430	3150	3340	3600	3630	1410	1340	1290	1330	1320
Appendix IV											
Antimony	mg/L	<0.000508	0.00052 J	<0.000508	<0.000508	<0.00071	<0.0008	<0.0008	<0.0008	<0.0008	<0.000507
Arsenic	mg/L	0.000285	0.00036	0.000178 J	0.000197 J	0.000189 J	<0.001	<0.001	0.00101 J	0.00116 J	0.00107
Barium	mg/L	0.0157	0.0149	0.015	0.0139	0.0174	0.0136	0.0123	0.0103	0.0112	0.0103
Beryllium	mg/L	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406	0.00155 J	0.00382	0.00362	0.00416	0.0032
Cadmium	mg/L	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<0.0003	<0.0003	<0.0003	<0.0003	<6.8e-005
Chromium	mg/L	0.00027 J	0.000248 J	0.000272 J	0.000237 J	<0.000203	<0.002	<0.002	<0.002	<0.002	<0.000203
Cobalt	mg/L	0.0121	0.0132	0.0109	0.0113	0.00525	0.0836	0.12	0.108	0.141	0.118
Combined Radium 226 + 228	pCi/L	0.362 U	0.546 U	1.12	0.637 U	0.421 U	0.364 U	0.369 U	0.758	0.533 U	0.325 U
Fluoride	mg/L	0.493	0.516	0.374	0.376	0.477	0.477	0.449	0.555	0.363	0.262
Lead	mg/L	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	0.00017 J	<0.001	<0.001	<0.001	<0.001	<6.8e-005
Lithium	mg/L	0.441	0.347	0.379	0.35	0.347	0.369	0.317	0.332	0.322	0.345
Mercury	mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Molybdenum	mg/L	8.72e-005 J	0.00012 J	<0.000102	<0.000102	<0.005075	<0.002	<0.002	<0.002	<0.002	<6.8e-005
Selenium	mg/L	<0.000508	<0.000508	<0.000508	<0.000508	<0.000508	<0.002	<0.002	<0.002	<0.002	0.000749 J
Thallium	mg/L	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<0.0002	<0.0002	<0.0002	<0.0002	<6.8e-005

Notes:
1. mg/L - Milligrams per Liter
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Southern Company

ANALYTICAL DATA SUMMARY
Gypsum Storage Pond (Old) (04/25/2016 - 10/19/2023)
APC Plant Gorgas
Walker County Alabama

Analyte	Units	GS-GSA-MW-4V					GS-GSA-MW-8V				
		07/14/2021	01/27/2022	07/13/2022	03/01/2023	08/23/2023	11/26/2019	01/22/2020	02/05/2020	08/05/2020	03/01/2021
Appendix III											
Boron	mg/L	3.68	3.44	3.15	2.9	2.45	0.134	--	0.136	0.131	0.145
Calcium	mg/L	162	176	165	161	179	37	--	37.3	31.9	26.2
Chloride	mg/L	68.4	51.9	47.2	32.8	29.2	6.88	--	9.05	13.9	19.4
Fluoride	mg/L	0.276	0.373	0.536	0.39	0.257	0.195	--	0.162	0.256	0.346
pH_Field	pH	5.75	6.17	5.66	5.77	5.71	7.54	--	7.48	7.58	7.67
Sulfate	mg/L	797	825	858	759	795	277	--	223	243	183
TDS	mg/L	1340	1330	1380	1330	1350	1100	--	1100	1100	1060
Appendix IV											
Antimony	mg/L	<0.000508	<0.000508	<0.000508	<0.000508	<0.00071	<0.0008	--	<0.0008	<0.0008	<0.000507
Arsenic	mg/L	0.00118	0.00108	0.00105	0.000882	0.000873	0.00737	--	0.00232 J	0.00476 J	0.0105
Barium	mg/L	0.01	0.0108	0.00968	0.00953	0.00907	0.0904	--	0.096	0.125	0.15
Beryllium	mg/L	0.00381	0.00335	0.00359	0.00412	0.00327	<0.0006	--	<0.0006	<0.0006	<0.000406
Cadmium	mg/L	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<0.0003	--	<0.0003	<0.0003	<6.8e-005
Chromium	mg/L	0.000266 J	0.000267 J	0.00039 J	<0.000203	0.000548 J	<0.002	--	<0.002	<0.002	<0.000203
Cobalt	mg/L	0.12	0.124	0.141	0.134	0.118	<0.002	--	<0.002	<0.002	<6.8e-005
Combined Radium 226 + 228	pCi/L	0.917 U	0.624 U	0.62 U	0.293 U	0.559 U	0.569	0.524	0.576	1.85	1.49
Fluoride	mg/L	0.276	0.373	0.536	0.39	0.257	0.195	--	0.162	0.256	0.346
Lead	mg/L	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	0.000227	<0.001	--	<0.001	<0.001	<6.8e-005
Lithium	mg/L	0.337	0.294	0.329	0.298	0.28	0.28	--	0.327	0.275	0.292
Mercury	mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	--	<0.0003	<0.0003	<0.0003
Molybdenum	mg/L	<6.8e-005	9.08e-005 J	<0.000102	0.000743	<0.005075	<0.002	--	<0.002	<0.002	0.000654
Selenium	mg/L	0.000952 J	0.00142	0.00111	0.000882 J	0.000664 J	<0.002	--	<0.002	<0.002	<0.000507
Thallium	mg/L	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<0.0002	--	<0.0002	<0.0002	<6.8e-005

Notes:
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Southern Company

ANALYTICAL DATA SUMMARY
Gypsum Storage Pond (Old) (04/25/2016 - 10/19/2023)
APC Plant Gorgas
Walker County Alabama

Analyte	Units	GS-GSA-MW-8V					GS-GSA-MW-9H				
		07/14/2021	01/26/2022	07/12/2022	02/28/2023	08/23/2023	03/05/2019	10/16/2019	02/04/2020	08/04/2020	03/02/2021
Appendix III											
Boron	mg/L	0.147	0.149	0.145	0.142	0.145	12.8	10.7	9.63	8.53	6.68
Calcium	mg/L	29	32	30.4	30.7	30.6	578	363	413	346	333
Chloride	mg/L	16.7	18.9	15.5	18.6	22.8	313	145	139	109	84.7
Fluoride	mg/L	0.339	0.306	0.19	0.35	0.238	0.239	0.101	0.205	0.127	0.094 J
pH_Field	pH	7.97	8.18	7.44	7.5	7.37	5.88	5.43	5.34	5.33	5.29
Sulfate	mg/L	196	199	177	182	194	2010	2020	1710	1790	1750
TDS	mg/L	1060	1050	1010	1020	1150	3240	3080	3110	2920	2860
Appendix IV											
Antimony	mg/L	<0.000508	<0.000508	<0.000508	<0.000508	<0.00071	0.000852 J	<0.0008	<0.0008	<0.0008	<0.000507
Arsenic	mg/L	0.00692	0.00542	0.00159	0.00219	0.00242	<0.001	0.0019 J	0.00123 J	0.00137 J	0.00105
Barium	mg/L	0.148	0.123	0.0904	0.0915	0.0901	0.0312	0.0163	0.0148	0.0153	0.0149
Beryllium	mg/L	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406	<0.0006	0.000985 J	0.000929 J	0.000882 J	0.000724 J
Cadmium	mg/L	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	0.000336 J	0.000362 J	0.000349 J	0.000308 J	0.000338
Chromium	mg/L	<0.000203	<0.000203	0.000233 J	0.000293 J	0.000204 J	<0.002	<0.002	<0.002	<0.002	0.000218 J
Cobalt	mg/L	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	0.14	0.168	0.159	0.178	0.163
Combined Radium 226 + 228	pCi/L	1.85	0.155 U	1.04 U	1.09	0.837 U	0.852	1.29	0.441 U	-0.385 U	0.87 U
Fluoride	mg/L	0.339	0.306	0.19	0.35	0.238	0.239	0.101	0.205	0.127	0.094 J
Lead	mg/L	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<0.001	<0.001	<0.001	<0.001	0.000206
Lithium	mg/L	0.286	0.226	0.269	0.24	0.235	0.169	0.184	0.203	0.166	0.178
Mercury	mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Molybdenum	mg/L	0.000258	0.000177 J	<0.000102	<0.005075	<0.005075	<0.002	<0.002	<0.002	<0.002	<6.8e-005
Selenium	mg/L	<0.000508	<0.000508	0.00855	<0.000508	<0.000508	<0.002	<0.002	<0.002	<0.002	0.00138
Thallium	mg/L	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	0.00021 J	0.000262 J	0.000233 J	0.000265 J	0.000221

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Southern Company

ANALYTICAL DATA SUMMARY
Gypsum Storage Pond (Old) (04/25/2016 - 10/19/2023)
APC Plant Gorgas
Walker County Alabama

Analyte	Units	GS-GSA-MW-9H					GS-GSA-MW-9V				
		07/13/2021	01/26/2022	07/12/2022	02/28/2023	08/22/2023	08/04/2020	03/01/2021	07/13/2021	01/26/2022	07/12/2022
Appendix III											
Boron	mg/L	5.84	5.84	4.8	4.91	3.81	0.149	0.147	0.125	0.104	0.133
Calcium	mg/L	312	318	311	291	332	434	428	408	438	460
Chloride	mg/L	78.6	59.3	51.9	47.1	36.2	58.6	58.7	62	57.2	62.5
Fluoride	mg/L	0.182	0.117	0.191	0.157	0.152	0.135	0.12	0.211	0.155	0.165
pH_Field	pH	5.13	5.35	5.3	5.35	5.31	6.88	6.84	6.92	6.89	6.79
Sulfate	mg/L	1750	1660	1720	1670	1620	1700	1680	1820	1820	1780
TDS	mg/L	2640	2490	2610	2650	2640	3080	3140	2870	2890	2940
Appendix IV											
Antimony	mg/L	<0.000508	<0.000508	<0.000508	<0.000508	<0.00071	<0.0008	<0.000507	<0.000508	<0.000508	<0.000508
Arsenic	mg/L	0.00113	0.00113	0.000996	0.000633	0.00064	<0.001	0.00136	0.00168	0.000816	0.00137
Barium	mg/L	0.0141	0.0134	0.0128	0.0127	0.0132	0.0155	0.012	0.013	0.012	0.012
Beryllium	mg/L	0.000731 J	0.000683 J	0.000678 J	0.000576 J	0.000671 J	<0.0006	<0.000406	<0.000406	<0.000406	<0.000406
Cadmium	mg/L	0.000281	0.000304	0.000267	0.000298	0.000269	<0.0003	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005
Chromium	mg/L	0.000264 J	<0.000203	<0.000203	<0.000203	<0.000203	<0.002	<0.000203	0.000304 J	<0.000203	0.000302 J
Cobalt	mg/L	0.141	0.141	0.148	0.147	0.141	0.00412 J	0.000992	0.000774	0.000541	0.000425
Combined Radium 226 + 228	pCi/L	0.877 U	1.06	0.818 U	0.357 U	0.872 U	0.837 U	0.686 U	0.194 U	0.53 U	0.718 U
Fluoride	mg/L	0.182	0.117	0.191	0.157	0.152	0.135	0.12	0.211	0.155	0.165
Lead	mg/L	0.000155 J	0.000105 J	0.000123 J	7.72e-005 J	7.45e-005 J	<0.001	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005
Lithium	mg/L	0.166	0.115	0.126	0.113	0.119	0.364	0.424	0.408	0.312	0.314
Mercury	mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Molybdenum	mg/L	<6.8e-005	<6.8e-005	<0.000102	<0.000102	<0.005075	0.00423 J	0.000532	0.000562	0.000299	0.000492
Selenium	mg/L	0.00141	0.00129	0.000944 J	0.000886 J	<0.000508	<0.002	<0.000507	<0.000508	<0.000508	<0.000508
Thallium	mg/L	0.000131 J	0.000222	0.00024	0.000205	0.000173 J	<0.0002	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005

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

Southern Company

ANALYTICAL DATA SUMMARY
Gypsum Storage Pond (Old) (04/25/2016 - 10/19/2023)
APC Plant Gorgas
Walker County Alabama

Analyte	Units	GS-GSA-MW-9V		GS-GSA-PZ-17							GS-GSA-PZ-18
		02/28/2023	08/22/2023	08/04/2020	03/03/2021	07/13/2021	01/27/2022	07/13/2022	02/27/2023	08/22/2023	08/03/2020
Appendix III											
Boron	mg/L	0.105	0.125	0.168	0.0643 J	0.111	0.0626 J	0.102	0.0639 J	0.0947 J	0.0671 J
Calcium	mg/L	347	370	218	54.3	165	73.5	152	89.1	176	106
Chloride	mg/L	52.4	52.9	1.7	1.58	1.39	1.64	1.73	1.36	1.55	4.55
Fluoride	mg/L	0.156	0.113 J	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06
pH_Field	pH	6.89	6.81	4.08	4.21	4.36	4.63	4.48	4.34	4.28	4.09
Sulfate	mg/L	1770	1830	1310	320	1010	379	923	400	983	729
TDS	mg/L	3030	3010	2160	571	1550	648	1410	727	1530	1210
Appendix IV											
Antimony	mg/L	<0.000508	<0.00071	<0.0008	<0.000507	<0.000508	0.000508 J	<0.000508	<0.000508	<0.00071	0.00113 J
Arsenic	mg/L	0.000762	0.00183	0.00495 J	0.000966	0.00435	0.00136	0.00318	0.0013	0.00236	0.0114
Barium	mg/L	0.0119	0.0154	0.0181	0.0154	0.0144	0.0151	0.0172	0.0174	0.0135	0.0111
Beryllium	mg/L	<0.000406	<0.000406	0.0145	0.00334	0.012	0.00489	0.00876	0.00598	0.0121	0.00829
Cadmium	mg/L	<6.8e-005	<6.8e-005	0.00197	0.000927	0.00231	0.00151	0.000992	0.000939	0.00181	0.0012
Chromium	mg/L	<0.000203	<0.000203	0.00254 J	0.000525 J	0.002	0.000816 J	0.00159	0.000918 J	0.00182	0.00315 J
Cobalt	mg/L	0.000403	0.000525	0.471	0.0898	0.31	0.129	0.258	0.15	0.307	0.156
Combined Radium 226 + 228	pCi/L	0.596 U	0.625 U	0.407 U	0.517 U	1.27 U	0.359 U	0.792 U	0.192 U	1.04 U	0.511 U
Fluoride	mg/L	0.156	0.113 J	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06
Lead	mg/L	<6.8e-005	<6.8e-005	0.00582	0.00178	0.00473	0.00362	0.0026	0.00268	0.00387	0.00366 J
Lithium	mg/L	0.332	0.304	1.39	0.196	1.15	0.294	0.717	0.383	0.918	0.422
Mercury	mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Molybdenum	mg/L	0.000467	<0.005075	<0.002	<6.8e-005	<6.8e-005	<6.8e-005	<0.000102	<0.000102	<0.005075	<0.002
Selenium	mg/L	<0.000508	<0.000508	0.0135	0.00137	0.0121	0.00269	0.00593	0.00329	0.00834	0.00616 J
Thallium	mg/L	<6.8e-005	<6.8e-005	0.000242 J	0.000118 J	7.93e-005 J	0.000175 J	0.000102 J	0.000135 J	0.000186 J	<0.0002

Notes:
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Southern Company

ANALYTICAL DATA SUMMARY
Gypsum Storage Pond (Old) (04/25/2016 - 10/19/2023)
APC Plant Gorgas
Walker County Alabama

Analyte	Units	GS-GSA-PZ-18						GS-GSA-PZ-19			
		03/03/2021	07/13/2021	01/27/2022	07/12/2022	02/27/2023	08/22/2023	08/03/2020	03/02/2021	07/14/2021	01/25/2022
Appendix III											
Boron	mg/L	0.108	0.0557 J	0.0539 J	0.0535 J	0.0507 J	0.0491 J	0.0553 J	0.066 J	0.0597 J	0.057 J
Calcium	mg/L	98.9	109	88	111	108	100	88	112	122	124
Chloride	mg/L	4.48	2.01	1.92	1.77	1.65	1.79	21.7	15.8	14.3	13.2
Fluoride	mg/L	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	0.18	0.21	0.208	0.194
pH_Field	pH	3.83	3.94	3.89	4.03	3.94	3.98	6.32	6.46	6.57	6.68
Sulfate	mg/L	597	675	532	578	523	522	210	243	369	344
TDS	mg/L	974	1060	778	968	888	874	740	737	945	885
Appendix IV											
Antimony	mg/L	<0.000507	<0.000508	<0.000508	<0.000508	<0.000508	<0.00071	<0.0008	<0.000507	<0.000508	<0.000508
Arsenic	mg/L	0.00515	0.00611	0.0045	0.00603	0.00335	0.00325	0.00279 J	0.00218	0.00175	0.00162
Barium	mg/L	0.0114	0.0101	0.0107	0.00948	0.0098	0.0097	0.047	0.0409	0.0401	0.0373
Beryllium	mg/L	0.006	0.00776	0.00531	0.00673	0.00632	0.00553	<0.0006	<0.000406	<0.000406	<0.000406
Cadmium	mg/L	0.000128 J	0.000354	0.000169 J	0.000374	8.53e-005 J	7.5e-005 J	<0.0003	<6.8e-005	<6.8e-005	<6.8e-005
Chromium	mg/L	0.00196	0.00215	0.00157	0.00191	0.00143	0.00141	<0.002	<0.000203	0.000219 J	<0.000203
Cobalt	mg/L	0.097	0.121	0.092	0.128	0.0946	0.0981	<0.002	0.000808	0.001	0.000689
Combined Radium 226 + 228	pCi/L	0.662 U	1.24 U	0.532 U	0.234 U	0.571 U	1.09 U	0.652 U	0.186 U	0.744 U	0.376 U
Fluoride	mg/L	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	0.18	0.21	0.208	0.194
Lead	mg/L	0.00053	0.000624	0.000229	0.000418	0.000114 J	0.000123 J	<0.001	<6.8e-005	<6.8e-005	<6.8e-005
Lithium	mg/L	0.346	0.444	0.244	0.365	0.272	0.287	0.0753	0.0822	0.0994	0.0791
Mercury	mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Molybdenum	mg/L	0.000107 J	<6.8e-005	<6.8e-005	<0.000102	<0.000102	<0.005075	<0.002	0.000804	0.000842	0.000717
Selenium	mg/L	0.00404	0.00621	0.00298	0.00357	0.00329	0.00233	<0.002	<0.000507	<0.000508	<0.000508
Thallium	mg/L	0.000109 J	<6.8e-005	7.96e-005 J	8.72e-005 J	8.9e-005 J	7.58e-005 J	<0.0002	<6.8e-005	<6.8e-005	<6.8e-005

Notes:
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Southern Company

ANALYTICAL DATA SUMMARY
Gypsum Storage Pond (Old) (04/25/2016 - 10/19/2023)
APC Plant Gorgas
Walker County Alabama

Analyte	Units	GS-GSA-PZ-19			GS-GSA-PZ-20						
		07/12/2022	02/28/2023	08/22/2023	08/03/2020	03/02/2021	07/14/2021	01/25/2022	07/12/2022	02/28/2023	08/22/2023
Appendix III											
Boron	mg/L	0.0555 J	0.0508 J	0.0486 J	0.0833 J	0.0806 J	0.118	0.0765 J	0.0946 J	0.0866 J	0.106
Calcium	mg/L	117	115	119	76.9	89.1	132	96.7	98.3	101	124
Chloride	mg/L	13	13.5	15.1	15	11.6	19.7	13	11.5	10.5	11.7
Fluoride	mg/L	0.31	0.196	0.209	0.188	0.191	0.141	0.191	0.177	0.156	0.165
pH_Field	pH	6.58	6.55	6.56	6.03	6.23	5.9	6.33	6.41	6.31	6.32
Sulfate	mg/L	331	263	221	379	344	711	437	404	444	481
TDS	mg/L	839	839	810	798	774	1170	840	794	879	950
Appendix IV											
Antimony	mg/L	<0.000508	<0.000508	<0.00071	<0.0008	<0.000507	<0.000508	<0.000508	<0.000508	<0.000508	<0.00071
Arsenic	mg/L	0.00156	0.00138	0.00148	0.00214 J	0.00234	0.00136	0.002	0.00222	0.00246	0.0027
Barium	mg/L	0.0335	0.0344	0.0382	0.0211	0.0205	0.018	0.0163	0.0187	0.0181	0.0174
Beryllium	mg/L	<0.000406	<0.000406	<0.000406	<0.0006	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406
Cadmium	mg/L	<6.8e-005	<6.8e-005	<6.8e-005	<0.0003	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005
Chromium	mg/L	0.000268 J	0.000239 J	<0.000203	<0.002	0.000216 J	0.000297 J	<0.000203	0.000228 J	0.000295 J	<0.000203
Cobalt	mg/L	0.00221	0.000708	0.000694	0.00734	0.00254	0.0218	0.00273	0.00278	0.00324	0.00354
Combined Radium 226 + 228	pCi/L	0.533 U	0.203 U	0.916 U	0.0893 U	0.52 U	0.347 U	0.135 U	0.665 U	0.733 U	1.52
Fluoride	mg/L	0.31	0.196	0.209	0.188	0.191	0.141	0.191	0.177	0.156	0.165
Lead	mg/L	<6.8e-005	<6.8e-005	<6.8e-005	<0.001	<6.8e-005	0.000255	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005
Lithium	mg/L	0.0873	0.0727	0.0664	0.102	0.0992	0.212	0.0884	0.0915	0.0869	0.0924
Mercury	mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Molybdenum	mg/L	0.000511	0.000783	<0.005075	<0.002	0.00125	0.000102 J	0.000973	0.00177	0.00166	<0.005075
Selenium	mg/L	<0.000508	<0.000508	<0.000508	<0.002	0.00222	0.00283	0.00308	0.00254	0.00246	0.002
Thallium	mg/L	<6.8e-005	<6.8e-005	<6.8e-005	<0.0002	0.000206	0.000386	0.000198 J	0.000215	0.000195 J	0.000185 J

Notes:
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Southern Company

ANALYTICAL DATA SUMMARY
Gypsum Storage Pond (Old) (04/25/2016 - 10/19/2023)
APC Plant Gorgas
Walker County Alabama

Analyte	Units	GS-GSA-PZ-21							GS-GSA-PZ-22		
		08/04/2020	03/02/2021	07/14/2021	01/25/2022	07/12/2022	02/28/2023	08/21/2023	08/04/2020	03/02/2021	07/14/2021
Appendix III											
Boron	mg/L	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	0.108	0.0823 J	0.0841 J
Calcium	mg/L	36.4	36.1	37.6	40.3	46.2	44.4	48.8	70.4	73	74.4
Chloride	mg/L	13.6	12.6	13.1	12.8	13.2	12.3	12.4	7.77	5.76	5.68
Fluoride	mg/L	0.323	0.319	0.331	0.354	0.306	0.289	0.424	0.167	0.117	0.145
pH_Field	pH	6.94	6.87	6.67	6.94	6.96	6.84	6.85	6.42	6.24	6.1
Sulfate	mg/L	23.8	22.7	24.4	32.8	36.6	36.3	38.8	340	366	385
TDS	mg/L	447	445	455	466	458	424	490	638	662	664
Appendix IV											
Antimony	mg/L	<0.0008	<0.000507	<0.000508	<0.000508	<0.000508	<0.000508	<0.00071	<0.0008	<0.000507	<0.000508
Arsenic	mg/L	0.00204 J	0.00237	0.00265	0.00262	0.00256	0.00254	0.00266	0.0297	0.0331	0.0429
Barium	mg/L	0.12	0.134	0.145	0.151	0.144	0.139	0.138	0.0243	0.0216	0.019
Beryllium	mg/L	<0.0006	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406	<0.0006	<0.000406	<0.000406
Cadmium	mg/L	<0.0003	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<0.0003	<6.8e-005	<6.8e-005
Chromium	mg/L	<0.002	0.000244 J	0.000283 J	<0.000203	0.000308 J	0.000243 J	<0.000203	<0.002	<0.000203	0.000219 J
Cobalt	mg/L	<0.002	0.00193	0.0019	0.00247	0.00312	0.00311	0.00288	0.0021 J	0.00213	0.00141
Combined Radium 226 + 228	pCi/L	0.839	0.776 U	1.29	0.409 U	0.936 U	0.632 U	0.403 U	0.114 U	0.607 U	0.806 U
Fluoride	mg/L	0.323	0.319	0.331	0.354	0.306	0.289	0.424	0.167	0.117	0.145
Lead	mg/L	<0.001	<6.8e-005	<6.8e-005	0.000251	<6.8e-005	<6.8e-005	<6.8e-005	<0.001	<6.8e-005	<6.8e-005
Lithium	mg/L	0.0182 J	0.0168 J	0.0174 J	0.0175 J	0.0185 J	0.019 J	0.0185 J	0.0558	0.0722	0.0683
Mercury	mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Molybdenum	mg/L	0.00347 J	0.00353	0.00353	0.00297	0.00279	0.00212	<0.005075	0.00267 J	0.00146	0.00155
Selenium	mg/L	<0.002	<0.000507	<0.000508	<0.000508	<0.000508	<0.000508	<0.000508	<0.002	<0.000507	<0.000508
Thallium	mg/L	<0.0002	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<0.0002	<6.8e-005	<6.8e-005

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

Southern Company

ANALYTICAL DATA SUMMARY
Gypsum Storage Pond (Old) (04/25/2016 - 10/19/2023)
APC Plant Gorgas
Walker County Alabama

Analyte	Units	GS-GSA-PZ-22				MW-1					
		01/25/2022	07/13/2022	02/28/2023	08/22/2023	04/26/2016	06/20/2016	08/08/2016	08/24/2016	10/03/2016	10/26/2016
Appendix III											
Boron	mg/L	0.0754 J	0.0743 J	0.0703 J	0.0619 J	0.0231 J	0.0227 J	0.0278 J	0.0247 J	0.0307 J	0.0241 J
Calcium	mg/L	71.9	72.8	66.9	70.3	147	152	150	142	139	133
Chloride	mg/L	5.76	5.52	5.07	5.54	1.94	2.09	2.18	2.22	2.34	2.34
Fluoride	mg/L	0.169	0.0953 J	0.116 J	0.179	0.146 J	0.148 J	0.137 J	0.133 J	0.103 J	0.05 J
pH_Field	pH	5.99	5.8	6.14	6.16	5.2	5.18	5.12	--	5.21	5.2
Sulfate	mg/L	440	410	364	401	1490	1420	1460	1450	1460	1330
TDS	mg/L	688	666	676	643	2080	2060	2070	2040	2110	2000
Appendix IV											
Antimony	mg/L	<0.000508	<0.000508	<0.000508	<0.00071	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006
Arsenic	mg/L	0.0446	0.0504	0.0609	0.0521	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Barium	mg/L	0.0176	0.0181	0.0161	0.0155	0.00941 J	0.00951 J	0.00991 J	0.00949 J	0.0105	0.00931 J
Beryllium	mg/L	<0.000406	<0.000406	<0.000406	<0.000406	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006
Cadmium	mg/L	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	0.00196	0.0021	0.00206	0.00182	0.00188	0.00175
Chromium	mg/L	0.000204 J	0.000244 J	<0.000203	<0.000203	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Cobalt	mg/L	0.00294	0.00178	0.00317	0.00209	0.0343	0.0413	0.0513	0.0471	0.0525	0.0527
Combined Radium 226 + 228	pCi/L	0.778 U	0.739 U	0.529 U	0.645 U	0.622	0.159 U	0.511 U	0.566 U	0.537 U	0.636
Fluoride	mg/L	0.169	0.0953 J	0.116 J	0.179	0.146 J	0.148 J	0.137 J	0.133 J	0.103 J	0.05 J
Lead	mg/L	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Lithium	mg/L	0.0718	0.0636	0.0649	0.0633	0.0264 J	0.0246 J	0.0229 J	0.0236 J	0.0229 J	0.0227 J
Mercury	mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025
Molybdenum	mg/L	0.000931	0.0014	0.00108	<0.005075	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Selenium	mg/L	<0.000508	<0.000508	<0.000508	<0.000508	0.00261 J	0.00242 J	0.00253 J	<0.002	0.00211 J	<0.002
Thallium	mg/L	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002

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

Southern Company

ANALYTICAL DATA SUMMARY
Gypsum Storage Pond (Old) (04/25/2016 - 10/19/2023)
APC Plant Gorgas
Walker County Alabama

Analyte	Units	MW-1									
		11/21/2016	01/17/2017	03/22/2017	04/18/2017	05/30/2017	08/23/2017	02/13/2018	05/22/2018	06/12/2018	10/17/2018
Appendix III											
Boron	mg/L	0.0202 J	0.0201 J	0.0224 J	<0.02	<0.02	0.0253 J	--	0.0224 J	0.0214 J	0.0216 J
Calcium	mg/L	144	131	141	149	140	152	--	166	203	171
Chloride	mg/L	2.5	2.68	2.4	2.4	2.6	2.7	--	2.3	2.3	--
Fluoride	mg/L	0.047 J	0.09 J	0.12	0.12	0.13	0.16	0.14	0.16	0.16	--
pH_Field	pH	5.19	5.17	5.2	5.2	5.14	5.12	5.18	5.2	5.15	5.12
Sulfate	mg/L	1420	1350	1500	1300	1400	1500	--	2100	1500	--
TDS	mg/L	2070	1930	2060	2140	2240	2160	--	2380	2400	2220
Appendix IV											
Antimony	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	--	<0.0006	<0.0006	<0.0006	<0.0008
Arsenic	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001
Barium	mg/L	0.00879 J	0.00929 J	0.00938 J	0.00964 J	0.00982 J	--	0.00937 J	0.0102	0.0104	0.00952 J
Beryllium	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	--	<0.0006	<0.0006	<0.0006	<0.0006
Cadmium	mg/L	0.00197	0.002	0.0019	0.00159	0.00214	--	0.0018	0.00201	0.00217	0.00228
Chromium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.002
Cobalt	mg/L	0.0569	0.0768	0.0535	0.0442	0.0465	--	0.062	0.0443	0.0512	0.0751
Combined Radium 226 + 228	pCi/L	0.807	0.308 U	0.344 U	0.934	0.149 U	--	0.774	-0.091 U	1.18	--
Fluoride	mg/L	0.047 J	0.09 J	0.12	0.12	0.13	0.16	0.14	0.16	0.16	--
Lead	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001
Lithium	mg/L	0.0236 J	0.0228 J	0.0238 J	0.0242 J	0.0229 J	--	0.0233 J	0.0263 J	0.0251 J	0.025 J
Mercury	mg/L	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	--	<0.00025	<0.00025	<0.00025	<0.00025
Molybdenum	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.002
Selenium	mg/L	<0.002	<0.002	0.0022 J	0.0027 J	0.00316 J	--	0.00211 J	0.00372 J	0.00409 J	<0.002
Thallium	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	--	<0.0002	<0.0002	<0.0002	<0.0002

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

Southern Company

ANALYTICAL DATA SUMMARY
Gypsum Storage Pond (Old) (04/25/2016 - 10/19/2023)
APC Plant Gorgas
Walker County Alabama

Analyte	Units	MW-1									
		11/19/2018	05/14/2019	10/08/2019	10/16/2019	02/03/2020	04/06/2020	07/13/2020	08/03/2020	02/22/2021	07/12/2021
Appendix III											
Boron	mg/L	0.0237 J	<0.0609	<0.03	0.0385 J	<0.03	<0.03	<0.03	<0.03	0.0307 J	<0.03
Calcium	mg/L	154	167	157	157	172	149	147	148	151	149
Chloride	mg/L	1.7 J	2.28	2.31	2.42	2.07	2.01	2.1	2.05	2.16	2.25
Fluoride	mg/L	0.15	0.119	0.0924 J	0.0756 J	0.0982 J	0.101	0.0678 J	<0.06	0.082 J	0.125
pH_Field	pH	5.09	5.19	5.12	5.16	5	5.21	5.14	5.08	5.06	5.13
Sulfate	mg/L	1300	1560	1540	1680	1510	1530	1450	1370	1400	1500
TDS	mg/L	2360	2340	2330	3650	2380	2240	2240	2200	2230	2210
Appendix IV											
Antimony	mg/L	<0.0008	0.00137 J	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.000507	<0.000508
Arsenic	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.000403	0.000363
Barium	mg/L	0.00915 J	0.00913 J	0.0109	0.0106	0.00995 J	0.00971 J	0.0101	0.0107	0.0107	0.00991
Beryllium	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.000406	<0.000406
Cadmium	mg/L	0.00156	0.00238	0.00218	0.00225	0.00182	0.00184	0.0019	0.00237	0.00184	0.00185
Chromium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.000382 J	0.000487 J
Cobalt	mg/L	0.0825	0.0485	0.0778	0.08	0.0495	0.0417	0.0532	0.0722	0.0657	0.0556
Combined Radium 226 + 228	pCi/L	0.862	0.509	1.47	0.204 U	0.521 U	0.309 U	0.219 U	-0.127 U	0.677 U	0.476 U
Fluoride	mg/L	0.15	0.119	0.0924 J	0.0756 J	0.0982 J	0.101	0.0678 J	<0.06	0.082 J	0.125
Lead	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<6.8e-005	<6.8e-005
Lithium	mg/L	0.0241	0.026 J	0.0268	0.0263	0.0292	0.0278	0.028	0.0259	0.0301	0.0266
Mercury	mg/L	<0.00025	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Molybdenum	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<6.8e-005	<6.8e-005
Selenium	mg/L	<0.002	0.00316 J	<0.002	<0.002	0.00272 J	0.00275 J	0.0025 J	0.00278 J	0.00241	0.00245
Thallium	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<6.8e-005	<6.8e-005

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

Southern Company

ANALYTICAL DATA SUMMARY
Gypsum Storage Pond (Old) (04/25/2016 - 10/19/2023)
APC Plant Gorgas
Walker County Alabama

Analyte	Units	MW-1				MW-2					
		01/25/2022	07/05/2022	02/20/2023	08/22/2023	04/25/2016	05/05/2016	06/20/2016	08/08/2016	08/24/2016	10/03/2016
Appendix III											
Boron	mg/L	<0.03	<0.03	<0.03	<0.03	0.0241 J	--	0.0284 J	0.034 J	0.0316 J	0.0367 J
Calcium	mg/L	159	168	170	159	123	--	168	180	180	184
Chloride	mg/L	2.09	2.07	2	2.38	1.9	--	3.43	3.31	3.23	3.21
Fluoride	mg/L	0.101	0.11 J	0.186	0.159	0.149 J	--	0.148 J	0.134 J	0.129 J	0.086 J
pH_Field	pH	5.11	5.01	5.07	4.92	5.94	--	5.96	5.88	--	5.91
Sulfate	mg/L	1430	1600	1520	1520	745	--	964	1100	1130	1140
TDS	mg/L	2150	2100	2280	2160	1260	--	1620	1740	1720	1800
Appendix IV											
Antimony	mg/L	<0.000508	<0.000508	<0.000508	<0.00071	<0.0006	--	<0.0006	<0.0006	<0.0006	<0.0006
Arsenic	mg/L	0.000274	0.000282	0.000275	0.000187 J	<0.001	--	<0.001	<0.001	<0.001	<0.001
Barium	mg/L	0.0098	0.0093	0.0102	0.00939	0.0134	--	0.0165	0.0162	0.0139	0.0164
Beryllium	mg/L	<0.000406	<0.000406	<0.000406	<0.000406	<0.0006	--	<0.0006	<0.0006	<0.0006	<0.0006
Cadmium	mg/L	0.00196	0.00211	0.00187	0.00195	<0.0002	--	<0.0002	<0.0002	<0.0002	<0.0002
Chromium	mg/L	0.000354 J	0.000364 J	<0.000203	<0.000203	<0.002	--	<0.002	<0.002	<0.002	<0.002
Cobalt	mg/L	0.0671	0.0627	0.0587	0.0852	0.0487	--	0.0767	0.103	0.093	0.0964
Combined Radium 226 + 228	pCi/L	1.01 U	1.49	0.809 U	1.1 U	--	-0.0718 U	0.295 U	0.231 U	0.65	0.845
Fluoride	mg/L	0.101	0.11 J	0.186	0.159	0.149 J	--	0.148 J	0.134 J	0.129 J	0.086 J
Lead	mg/L	<6.8e-005	<6.8e-005	<6.8e-005	6.82e-005 J	<0.001	--	<0.001	<0.001	<0.001	<0.001
Lithium	mg/L	0.0239	0.0274	0.0233	0.0231	0.0353 J	--	0.0583	0.0627	0.0651	0.0622
Mercury	mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.00025	--	<0.00025	<0.00025	<0.00025	<0.00025
Molybdenum	mg/L	<6.8e-005	<0.000102	0.000159 J	<0.005075	<0.002	--	<0.002	<0.002	<0.002	<0.002
Selenium	mg/L	0.00216	0.00269	0.00228	0.00165	<0.002	--	<0.002	<0.002	<0.002	<0.002
Thallium	mg/L	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<0.0002	--	<0.0002	<0.0002	<0.0002	<0.0002

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

Southern Company

ANALYTICAL DATA SUMMARY
Gypsum Storage Pond (Old) (04/25/2016 - 10/19/2023)
APC Plant Gorgas
Walker County Alabama

Analyte	Units	MW-2									
		10/26/2016	11/21/2016	01/17/2017	03/22/2017	04/18/2017	05/31/2017	08/23/2017	02/13/2018	05/22/2018	06/12/2018
Appendix III											
Boron	mg/L	0.0331 J	0.035 J	0.0259 J	0.0243 J	0.0206 J	0.0234 J	0.0267 J	--	0.0251 J	0.0275 J
Calcium	mg/L	171	179	188	155	156	151	155	--	172	179
Chloride	mg/L	3.35	3.34	3.58	3	2.6	4.4 J	4.4	--	3.2	3.7
Fluoride	mg/L	0.027 J	0.027 J	0.066 J	0.13	0.16	0.13	0.16	0.22	0.17	0.16
pH_Field	pH	5.84	5.82	5.87	6.01	6.02	5.85	5.89	6.21	6.04	5.95
Sulfate	mg/L	1060	1100	1160	900	870	1100	920	--	1200	860
TDS	mg/L	1800	1740	1960	1510	1580	1730	1550	--	1500	1550
Appendix IV											
Antimony	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	--	<0.0006	<0.0006	<0.0006
Arsenic	mg/L	<0.001	0.00111 J	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	<0.001
Barium	mg/L	0.0138	0.0144	0.0135	0.0132	0.012	0.0126	--	0.0127	0.0131	0.0138
Beryllium	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	--	<0.0006	<0.0006	<0.0006
Cadmium	mg/L	<0.0002	<0.0002	0.000311 J	<0.0002	<0.0002	0.000212 J	--	<0.0003	<0.0003	<0.0003
Chromium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	<0.002
Cobalt	mg/L	0.0904	0.0857	0.0745	0.0328	0.0242	0.0441	--	0.0179	0.028	0.0366
Combined Radium 226 + 228	pCi/L	0.994	0.537 U	-0.0159 U	0.279 U	0.32 U	0.178 U	--	0.804	0.0077 U	-0.315 U
Fluoride	mg/L	0.027 J	0.027 J	0.066 J	0.13	0.16	0.13	0.16	0.22	0.17	0.16
Lead	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	<0.001
Lithium	mg/L	0.0293 J	0.0667	0.0636	0.0464 J	0.0446 J	0.0496 J	--	0.0615	0.0465 J	0.0472 J
Mercury	mg/L	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	--	<0.00025	<0.00025	<0.00025
Molybdenum	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	<0.002
Selenium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	<0.002
Thallium	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	--	<0.0002	<0.0002	<0.0002

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

Southern Company

ANALYTICAL DATA SUMMARY
Gypsum Storage Pond (Old) (04/25/2016 - 10/19/2023)
APC Plant Gorgas
Walker County Alabama

Analyte	Units	MW-2									
		10/17/2018	11/19/2018	05/14/2019	10/08/2019	10/16/2019	02/03/2020	04/06/2020	07/13/2020	08/03/2020	02/22/2021
Appendix III											
Boron	mg/L	0.0321 J	0.0324 J	<0.0609	0.0371 J	0.0419 J	<0.03	<0.03	<0.03	0.0317 J	<0.03
Calcium	mg/L	200	221	168	190	194	172	152	163	172	178
Chloride	mg/L	--	3	2.98	4.26	4.04	2.48	2.43	4.05	4.03	1.72
Fluoride	mg/L	--	0.18	0.17	0.164	0.114	0.182	0.207	0.132	0.122	0.209
pH_Field	pH	5.9	6.03	6.07	5.96	5.98	5.95	6.21	5.84	5.95	6.1
Sulfate	mg/L	--	1000	948	1230	1170	803	786	843	907	864
TDS	mg/L	1740	1990	1480	1840	1830	1440	1440	1540	1650	1620
Appendix IV											
Antimony	mg/L	<0.0008	<0.0008	0.000989 J	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.000507
Arsenic	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.000295
Barium	mg/L	0.0137	0.0115	0.0109	0.0151	0.0146	0.0122	0.0125	0.0145	0.0147	0.0132
Beryllium	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.000406
Cadmium	mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	8.96e-005 J
Chromium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.000203
Cobalt	mg/L	0.0745	0.0225	0.0222	0.0674	0.073	0.0193	0.0116	0.0405	0.0589	0.0161
Combined Radium 226 + 228	pCi/L	--	0.654	0.579	0.493 U	0.046 U	-0.0245 U	0.212 U	0.0814 U	0.888 U	0.434 U
Fluoride	mg/L	--	0.18	0.17	0.164	0.114	0.182	0.207	0.132	0.122	0.209
Lead	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<6.8e-005
Lithium	mg/L	0.0633	0.0584	0.0445	0.0677	0.0661	0.0534	0.0496	0.0615	0.0611	0.0625
Mercury	mg/L	<0.00025	<0.00025	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Molybdenum	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<6.8e-005
Selenium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.000507
Thallium	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<6.8e-005

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

Southern Company

ANALYTICAL DATA SUMMARY
Gypsum Storage Pond (Old) (04/25/2016 - 10/19/2023)
APC Plant Gorgas
Walker County Alabama

Analyte	Units	MW-2					GS-GSA-MW-3				
		07/12/2021	01/25/2022	07/05/2022	02/20/2023	08/22/2023	08/24/2016	10/03/2016	10/26/2016	11/21/2016	01/17/2017
Appendix III											
Boron	mg/L	<0.03	<0.03	<0.03	<0.03	<0.03	0.799	0.889	1.23	1.72	2.63
Calcium	mg/L	159	179	172	165	168	539	519.7	916	552	572
Chloride	mg/L	2.36	2.14	2.53	1.7	3.13	204	220	249	256	301
Fluoride	mg/L	0.196	0.204	0.2	0.267	0.184	0.264 J	0.276 J	0.182 J	0.238 J	0.34
pH_Field	pH	6.16	6.22	6.15	6.24	5.81	6.28	6.28	6.19	6.2	6.13
Sulfate	mg/L	763	847	844	767	912	2910	2980	2790	2880	2950
TDS	mg/L	1390	1550	1260	1420	1520	5020	4880	5020	5090	4330
Appendix IV											
Antimony	mg/L	<0.000508	<0.000508	<0.000508	<0.000508	<0.00071	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006
Arsenic	mg/L	0.000364	0.000254	0.00035	0.000231	0.000371	<0.001	<0.001	<0.001	<0.001	<0.001
Barium	mg/L	0.013	0.0127	0.0116	0.0122	0.0133	0.0155	0.0156	0.0122	0.0128	0.0125
Beryllium	mg/L	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406	<0.0006	<0.0006	0.000922 J	0.00133 J	0.0017 J
Cadmium	mg/L	8.27e-005 J	9.31e-005 J	0.000117 J	<6.8e-005	8.17e-005 J	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Chromium	mg/L	0.000251 J	0.000216 J	<0.000203	<0.000203	<0.000203	<0.002	<0.002	<0.002	<0.002	<0.002
Cobalt	mg/L	0.0155	0.0166	0.0186	0.0187	0.0439	0.0303	0.041	0.0505	0.0617	0.0793
Combined Radium 226 + 228	pCi/L	0.155 U	0.663 U	1.31	0.837 U	0.763 U	0.389 U	0.683	0.242 U	0.764	0.191 U
Fluoride	mg/L	0.196	0.204	0.2	0.267	0.184	0.264 J	0.276 J	0.182 J	0.238 J	0.34
Lead	mg/L	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<0.001	<0.001	<0.001	<0.001	<0.001
Lithium	mg/L	0.0495	0.051	0.0475	0.0418	0.0394	0.362	0.371	0.416	0.401	0.497
Mercury	mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025
Molybdenum	mg/L	<6.8e-005	<6.8e-005	<0.000102	<0.005075	<0.005075	<0.002	<0.002	<0.002	<0.002	<0.002
Selenium	mg/L	<0.000508	<0.000508	<0.000508	<0.000508	<0.000508	<0.002	<0.002	<0.002	<0.002	<0.002
Thallium	mg/L	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002

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

Southern Company

ANALYTICAL DATA SUMMARY
Gypsum Storage Pond (Old) (04/25/2016 - 10/19/2023)
APC Plant Gorgas
Walker County Alabama

Analyte	Units	GS-GSA-MW-3									
		03/20/2017	04/17/2017	05/30/2017	08/24/2017	02/13/2018	06/11/2018	10/17/2018	04/10/2019	10/14/2019	02/03/2020
Appendix III											
Boron	mg/L	3.11	4.51	2.9	2.83	--	3.09	2.59	3.35	2.48	2.13
Calcium	mg/L	817	476	515	598	--	558	392	659	552	589
Chloride	mg/L	320	340	310	290	--	260	--	249	228	267
Fluoride	mg/L	0.39	0.57	0.38	0.54	0.57	0.63	--	0.738	0.619	0.427
pH_Field	pH	6.17	5.6	6.07	5.99	5.88	5.91	4.75	5.83	6.04	5.98
Sulfate	mg/L	<14	2400	2900	2900	--	2900	--	2980	3110	2840
TDS	mg/L	2690	4780	5170	5140	--	4960	4910	5090	5110	4920
Appendix IV											
Antimony	mg/L	<0.0006	<0.0006	<0.0006	--	<0.0006	<0.0006	<0.0008	0.00111 J	<0.0008	<0.0008
Arsenic	mg/L	<0.001	0.00405 J	<0.001	--	<0.001	<0.001	0.00133 J	0.00121 J	<0.001	<0.001
Barium	mg/L	0.0124	0.0149	0.0121	--	0.0118	0.0127	0.013	0.0153	0.0122	0.0141
Beryllium	mg/L	0.00191 J	0.00655	0.00204 J	--	0.00387	0.00244 J	0.0121	0.00257 J	0.00162 J	0.00141 J
Cadmium	mg/L	<0.0002	<0.0002	<0.0002	--	<0.0003	<0.0003	0.00393	<0.0003	<0.0003	<0.0003
Chromium	mg/L	<0.002	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Cobalt	mg/L	0.0726	0.294	0.0832	--	0.124	0.138	0.49	0.151	0.102	0.0843
Combined Radium 226 + 228	pCi/L	-0.0158 U	0.307 U	0.724	--	0.633	0.773	--	--	0.297 U	--
Fluoride	mg/L	0.39	0.57	0.38	0.54	0.57	0.63	--	0.738	0.619	0.427
Lead	mg/L	<0.001	<0.001	<0.001	--	<0.001	<0.001	0.00102 J	<0.001	<0.001	<0.001
Lithium	mg/L	0.533	0.47	0.479	--	0.508	0.425	0.494	0.425	0.459	0.474
Mercury	mg/L	<0.00025	<0.00025	<0.00025	--	<0.00025	<0.00025	<0.00025	<0.0003	<0.0003	<0.0003
Molybdenum	mg/L	<0.002	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Selenium	mg/L	<0.002	0.00521 J	<0.002	--	0.00267 J	0.00236 J	<0.002	0.00234 J	<0.002	<0.002
Thallium	mg/L	<0.0002	<0.0002	<0.0002	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002

Notes:
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Southern Company

ANALYTICAL DATA SUMMARY
Gypsum Storage Pond (Old) (04/25/2016 - 10/19/2023)
APC Plant Gorgas
Walker County Alabama

Analyte	Units	GS-GSA-MW-3							MW-3		
		08/04/2020	03/01/2021	07/14/2021	01/26/2022	07/13/2022	02/27/2023	08/23/2023	04/25/2016	06/22/2016	08/09/2016
Appendix III											
Boron	mg/L	1.82	2.55	1.47	2.5	1.29	2.81	1.57	0.028 J	0.0433 J	0.0429 J
Calcium	mg/L	545	514	533	518	566	516	585	224	266	260
Chloride	mg/L	222	250	207	255	228	254	212	1.32	1.46	1.35
Fluoride	mg/L	0.389	0.449	0.556	0.447	0.324	0.292	0.542	0.243 J	0.269 J	0.363
pH_Field	pH	6.09	5.82	5.93	6.52	5.92	5.83	6.03	5.56	5.57	5.67
Sulfate	mg/L	2820	2320	2880	2620	3180	2770	3290	1890	2100	2050
TDS	mg/L	5110	4390	4920	4260	4960	5000	5360	2720	3250	3050
Appendix IV											
Antimony	mg/L	<0.0008	<0.000507	<0.000508	<0.000508	<0.000508	<0.000508	<0.00071	<0.0006	<0.0006	<0.0006
Arsenic	mg/L	<0.001	0.0014	0.000572	0.00136	0.000491	0.00111	0.000448	<0.001	<0.001	<0.001
Barium	mg/L	0.0139	0.0154	0.0136	0.0148	0.0118	0.013	0.0105	0.00803 J	0.0101	0.00889 J
Beryllium	mg/L	0.00174 J	0.00157	0.00175	0.00196	0.00196	0.00191	0.00211	0.00122 J	0.00144 J	0.00331
Cadmium	mg/L	<0.0003	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	0.0121	0.00163	0.00122
Chromium	mg/L	<0.002	0.000386 J	0.000392 J	<0.000203	0.000243 J	<0.000203	<0.000203	0.00373 J	0.00606 J	<0.002
Cobalt	mg/L	0.0862	0.119	0.0555	0.0794	0.0482	0.285	0.0509	0.232	0.332	0.311
Combined Radium 226 + 228	pCi/L	0.45 U	0.57 U	0.668 U	0.335 U	0.239 U	0.213 U	0.368 U	0.484 U	0.2 U	0.378 U
Fluoride	mg/L	0.389	0.449	0.556	0.447	0.324	0.292	0.542	0.243 J	0.269 J	0.363
Lead	mg/L	<0.001	0.000157 J	0.00018 J	<6.8e-005	<6.8e-005	0.000132 J	<6.8e-005	<0.001	<0.001	<0.001
Lithium	mg/L	0.468	0.353	0.485	0.31	0.403	0.17	0.372	0.0964	0.156	0.122
Mercury	mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.00025	<0.00025	<0.00025
Molybdenum	mg/L	<0.002	0.00022	0.000264	0.000225	0.000257	0.00036	<0.005075	<0.002	<0.002	<0.002
Selenium	mg/L	<0.002	0.00141	0.00151	0.00117	0.00151	0.0014	0.00144	<0.002	<0.002	<0.002
Thallium	mg/L	<0.0002	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	0.000205 J	<0.0002	<0.0002

Notes:
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Southern Company

ANALYTICAL DATA SUMMARY
Gypsum Storage Pond (Old) (04/25/2016 - 10/19/2023)
APC Plant Gorgas
Walker County Alabama

Analyte	Units	MW-3									
		08/24/2016	10/04/2016	10/26/2016	11/21/2016	01/18/2017	03/22/2017	04/18/2017	05/31/2017	08/23/2017	02/13/2018
Appendix III											
Boron	mg/L	0.0431 J	0.04 J	0.0375 J	0.0406 J	0.0548 J	0.0344 J	<0.02	0.0454 J	0.0425 J	--
Calcium	mg/L	274	243	254	263	431	318	296	306	298	--
Chloride	mg/L	1.47	1.59	1.27	1.38	1.34	2	2.2	1.5 J	1.8 J	--
Fluoride	mg/L	0.346	0.266 J	0.266 J	0.244 J	0.385	0.41	0.29	0.37	0.55	0.27
pH_Field	pH	5.63	5.69	5.56	5.42	5.11	4.52	5.84	4.56	4.77	5.67
Sulfate	mg/L	2190	1950	1980	2060	2620	3200	2500	2800	2600	--
TDS	mg/L	3080	2900	2940	3090	4020	4180	4440	3970	4050	--
Appendix IV											
Antimony	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	--	<0.0006
Arsenic	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	0.00122 J	<0.001	<0.001	--	<0.001
Barium	mg/L	0.00962 J	0.00984 J	0.00878 J	0.00833 J	0.00966 J	0.00991 J	0.00976 J	0.00866 J	--	0.00821 J
Beryllium	mg/L	0.00308	0.00129 J	0.0071	0.00689	0.0169	0.00686	<0.0006	0.00547	--	<0.0006
Cadmium	mg/L	<0.0002	0.000689 J	0.00136	0.00171	0.003	0.00473	0.00117	0.00296	--	0.00232
Chromium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	0.00945 J	0.0105	<0.002	--	<0.002
Cobalt	mg/L	0.271	0.148	0.236	0.241	0.347	0.271	0.00324 J	0.225	--	0.00661 J
Combined Radium 226 + 228	pCi/L	0.131 U	0.514 U	0.755	0.7	0.606	0.927	0.334 U	0.8	--	0.649
Fluoride	mg/L	0.346	0.266 J	0.266 J	0.244 J	0.385	0.41	0.29	0.37	0.55	0.27
Lead	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	--	<0.001
Lithium	mg/L	0.138	0.0966	0.134	0.167	0.237	0.203	0.0764	0.218	--	0.0964
Mercury	mg/L	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	--	<0.00025
Molybdenum	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002
Selenium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	0.0141	0.0158	0.00632 J	--	0.0209
Thallium	mg/L	<0.0002	<0.0002	0.000209 J	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	--	<0.0002

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Southern Company

ANALYTICAL DATA SUMMARY
Gypsum Storage Pond (Old) (04/25/2016 - 10/19/2023)
APC Plant Gorgas
Walker County Alabama

Analyte	Units	MW-3									
		05/24/2018	06/12/2018	11/19/2018	04/10/2019	05/14/2019	10/08/2019	10/16/2019	02/03/2020	04/06/2020	07/13/2020
Appendix III											
Boron	mg/L	0.0339 J	0.0371 J	0.0514 J	<0.03	<0.0609	0.0537 J	0.05 J	--	<0.03	0.0366 J
Calcium	mg/L	297	318	387	348	254	371	346	--	177	264
Chloride	mg/L	1.6 J	1.4 J	<1.4	2.25	2.28	1.36	1.4	--	1.72	1.34
Fluoride	mg/L	0.6	0.53	0.31	0.273	0.281	0.225	0.106	--	0.314	0.13
pH_Field	pH	5.19	4.79	3.77	5.54	5.71	4.98	4.51	--	5.91	5.16
Sulfate	mg/L	2700	2500	3000	2460	2460	2950	2820	--	1670	2130
TDS	mg/L	3680	3820	4710	3680	3580	4720	4210	--	2630	3650
Appendix IV											
Antimony	mg/L	<0.0006	<0.0006	<0.0008	0.000978 J	<0.0008	<0.0008	<0.0008	--	<0.0008	<0.0008
Arsenic	mg/L	<0.001	0.00103 J	0.0012 J	<0.001	<0.001	0.0048 J	0.00389 J	--	<0.001	0.0032 J
Barium	mg/L	0.00977 J	0.00997 J	0.0109	0.0101	0.00922 J	0.0154	0.0128	--	0.00931 J	0.0142
Beryllium	mg/L	0.00164 J	0.00306	0.0185	<0.0006	<0.0006	0.0084	0.0103	--	<0.0006	0.0021 J
Cadmium	mg/L	0.00459	0.00351	0.00309	0.00337	0.0013	0.00598	0.00448	--	0.000645 J	0.0089
Chromium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002
Cobalt	mg/L	0.158	0.291	0.386	0.0144	0.00536	1.07	0.848	--	<0.002	0.47
Combined Radium 226 + 228	pCi/L	0.448 U	0.234 U	0.521	--	0.176 U	0.833 U	0.0279 U	0.0246 U	0.569 U	0.53
Fluoride	mg/L	0.6	0.53	0.31	0.273	0.281	0.225	0.106	--	0.314	0.13
Lead	mg/L	<0.001	<0.001	0.00692	<0.001	<0.001	<0.001	0.00108 J	--	<0.001	<0.001
Lithium	mg/L	0.145	0.194	0.323	0.0905	0.0828	0.419	0.337	--	0.0689	0.256
Mercury	mg/L	<0.00025	<0.00025	<0.00025	<0.0003	<0.0003	<0.0003	<0.0003	--	<0.0003	<0.0003
Molybdenum	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002
Selenium	mg/L	0.00918 J	0.00836 J	0.00439 J	0.0113	0.0119	0.00256 J	0.00286 J	--	0.01	0.0134
Thallium	mg/L	<0.0002	<0.0002	0.000226 J	<0.0002	<0.0002	<0.0002	<0.0002	--	<0.0002	<0.0002

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Southern Company

ANALYTICAL DATA SUMMARY
Gypsum Storage Pond (Old) (04/25/2016 - 10/19/2023)
APC Plant Gorgas
Walker County Alabama

Analyte	Units	MW-3							GS-GSA-MW-4		
		08/03/2020	02/22/2021	07/12/2021	01/25/2022	07/05/2022	02/20/2023	08/22/2023	08/24/2016	10/03/2016	10/26/2016
Appendix III											
Boron	mg/L	0.0424 J	<0.03	<0.03	<0.03	0.0374 J	<0.03	0.0373 J	4.88	4.75	4.96
Calcium	mg/L	285	312	252	305	376	234	359	102	98.4	88.7
Chloride	mg/L	1.17	2.22	2.13	2.12	1.59	1.94	1.31	112	115	115
Fluoride	mg/L	0.0766 J	0.246	0.287	0.325	0.386	0.379	0.283	0.793	0.769	0.578
pH_Field	pH	5.06	5.59	5.86	5.9	5.34	6.01	5.04	3.83	3.82	3.81
Sulfate	mg/L	2330	3040	2380	2550	3110	2110	3140	567	596	585
TDS	mg/L	3760	4670	3510	3950	4220	3230	4820	992	988	1030
Appendix IV											
Antimony	mg/L	<0.0008	<0.000507	<0.000508	<0.000508	<0.000508	<0.000508	<0.00071	<0.0006	<0.0006	<0.0006
Arsenic	mg/L	0.00426 J	0.000789	0.000376	0.00024	0.00374	0.000227	0.00361	<0.001	<0.001	<0.001
Barium	mg/L	0.0166	0.00981	0.00857	0.00821	0.0151	0.00822	0.0151	0.0135	0.0127	0.0118
Beryllium	mg/L	0.00405	<0.000406	<0.000406	<0.000406	0.00139	<0.000406	0.00494	0.00576	0.00469	0.00459
Cadmium	mg/L	0.00652	0.00536	0.000937	0.00178	0.00835	0.00136	0.00883	0.00148	0.00147	0.00157
Chromium	mg/L	<0.002	0.00035 J	0.000307 J	0.00034 J	0.00025 J	0.000297 J	<0.000203	<0.002	<0.002	<0.002
Cobalt	mg/L	0.64	0.0515	0.00567	0.00535	0.263	0.00435	0.529	0.151	0.143	0.154
Combined Radium 226 + 228	pCi/L	0.765 U	0.472 U	0.114 U	0.418 U	1.33	0.234 U	1.19 U	0.741	0.648	0.632
Fluoride	mg/L	0.0766 J	0.246	0.287	0.325	0.386	0.379	0.283	0.793	0.769	0.578
Lead	mg/L	0.002 J	8.8e-005 J	8.42e-005 J	<6.8e-005	7.33e-005 J	<6.8e-005	0.000105 J	<0.001	<0.001	<0.001
Lithium	mg/L	0.27	0.126	0.0808	0.077	0.217	0.065	0.316	0.291	0.287	0.298
Mercury	mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.00025	<0.00025	<0.00025
Molybdenum	mg/L	<0.002	<6.8e-005	<6.8e-005	8.01e-005 J	<0.000102	0.000135 J	<0.005075	<0.002	<0.002	<0.002
Selenium	mg/L	0.0146	0.0181	0.0133	0.0163	0.0238	0.0125	0.0147	0.00234 J	0.00739 J	0.00266 J
Thallium	mg/L	<0.0002	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<0.0002	<0.0002	<0.0002

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

Southern Company

ANALYTICAL DATA SUMMARY
Gypsum Storage Pond (Old) (04/25/2016 - 10/19/2023)
APC Plant Gorgas
Walker County Alabama

Analyte	Units	GS-GSA-MW-4									
		11/21/2016	01/17/2017	03/21/2017	04/17/2017	05/30/2017	08/24/2017	02/13/2018	06/11/2018	10/17/2018	10/14/2019
Appendix III											
Boron	mg/L	4.82	3.97	3.39	3.46	3.79	4.19	--	3.96	3.98	3.37
Calcium	mg/L	104	102	94.7	97.9	93.9	105	--	105	342	93.5
Chloride	mg/L	117	99.3	79	85	99	110	--	81	--	59.1
Fluoride	mg/L	0.562	0.571	0.54	0.54	0.49	0.7	0.63	0.39	--	<0.05
pH_Field	pH	3.81	3.78	3.76	3.76	3.76	3.7	3.73	3.8	3.81	3.91
Sulfate	mg/L	593	637	530	530	530	530	--	540	--	641
TDS	mg/L	1020	988	990	884	1060	1060	--	944	4250	967
Appendix IV											
Antimony	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	--	<0.0006	<0.0006	<0.0008	<0.0008
Arsenic	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	<0.001	0.0012 J
Barium	mg/L	0.012	0.0119	0.0116	0.0112	0.0117	--	0.0121	0.0139	0.0119	0.0147
Beryllium	mg/L	0.00502	0.00488	0.00521	0.0058	0.00517	--	0.00544	0.00463	<0.0006	0.00403
Cadmium	mg/L	0.00154	0.00131	0.00134	0.00122	0.00167	--	0.00145	0.00171	0.00188	0.0015
Chromium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.002
Cobalt	mg/L	0.155	0.16	0.158	0.159	0.159	--	0.19	0.166	0.154	0.213
Combined Radium 226 + 228	pCi/L	1.57	0.493	0.604 U	0.252 U	0.925	--	0.382	0.796	--	0.317 U
Fluoride	mg/L	0.562	0.571	0.54	0.54	0.49	0.7	0.63	0.39	--	<0.05
Lead	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001
Lithium	mg/L	0.294	0.27	0.258	0.274	0.285	--	0.274	0.266	0.266	0.262
Mercury	mg/L	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	--	<0.00025	<0.00025	<0.00025	<0.0003
Molybdenum	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.002
Selenium	mg/L	0.00212 J	0.00263 J	0.00588 J	0.00579 J	0.00471 J	--	0.00498 J	0.00388 J	<0.002	<0.002
Thallium	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	--	<0.0002	<0.0002	<0.0002	<0.0002

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

Southern Company

ANALYTICAL DATA SUMMARY
Gypsum Storage Pond (Old) (04/25/2016 - 10/19/2023)
APC Plant Gorgas
Walker County Alabama

Analyte	Units	GS-GSA-MW-4									
		02/03/2020	02/04/2020	08/05/2020	03/03/2021	07/14/2021	01/27/2022	05/19/2022	07/13/2022	03/01/2023	08/23/2023
Appendix III											
Boron	mg/L	0.0433 J	2.74	2.51	2.42	4.78	5.99	4.51	7.11	8.14	2.24
Calcium	mg/L	265	116	94.7	100	130	181	166	385	361	145
Chloride	mg/L	1.72	43.2	41	40.3	102	103	88.8	199	113	22.5
Fluoride	mg/L	0.37	<0.05	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06
pH_Field	pH	6.14	3.83	3.86	3.76	3.74	3.73	3.6	3.43	3.5	3.74
Sulfate	mg/L	1920	571	519	609	752	1130	1030	3040	2130	828
TDS	mg/L	3240	978	938	1040	1300	1840	1680	4700	3310	1460
Appendix IV											
Antimony	mg/L	<0.0008	<0.0008	<0.0008	<0.000507	<0.000508	<0.000508	<0.000508	<0.000508	<0.000508	<0.00071
Arsenic	mg/L	<0.001	0.00128 J	0.00115 J	0.00116	0.00174	0.00274	0.00185	0.00694	0.00412	0.000866
Barium	mg/L	0.0103	0.0124	0.0142	0.0117	0.0115	0.0131	0.0106	0.00947	0.00845	0.01
Beryllium	mg/L	<0.0006	0.00415	0.00385	0.00406	0.00577	0.00821	0.00898	0.021	0.0186	0.00684
Cadmium	mg/L	<0.0003	0.00143	0.00157	0.00162	0.00246	0.00336	0.00282	0.00662	0.00552	0.00217
Chromium	mg/L	<0.002	<0.002	<0.002	0.000567 J	0.000701 J	0.00107	0.000828 J	0.00355	0.00231	0.000836 J
Cobalt	mg/L	<0.002	0.217	0.235	0.24	0.296	0.447	0.395	0.878	0.705	0.312
Combined Radium 226 + 228	pCi/L	--	0.324 U	0.389 U	0.836 U	1.58	0.791 U	--	1.37	0.593 U	1.28
Fluoride	mg/L	0.37	<0.05	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06
Lead	mg/L	<0.001	<0.001	<0.001	0.000609	0.000792	0.00103	0.000989	0.00231	0.00144	0.000623
Lithium	mg/L	0.0556	0.29	0.273	0.313	0.487	0.671	0.57	1.8	1.34	0.469
Mercury	mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Molybdenum	mg/L	<0.002	<0.002	<0.002	<6.8e-005	<6.8e-005	<6.8e-005	<0.000102	<0.000102	<0.000102	<0.005075
Selenium	mg/L	0.00212 J	<0.002	0.00298 J	0.00294	0.00563	0.00817	0.00573	0.0226	0.016	0.00287
Thallium	mg/L	<0.0002	<0.0002	0.000205 J	0.000178 J	8.68e-005 J	0.000223	0.000229	0.000433	0.00036	0.000219

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

Southern Company

ANALYTICAL DATA SUMMARY
Gypsum Storage Pond (Old) (04/25/2016 - 10/19/2023)
APC Plant Gorgas
Walker County Alabama

Analyte	Units	MW-4									
		04/25/2016	06/20/2016	08/09/2016	08/24/2016	10/03/2016	10/26/2016	11/21/2016	01/18/2017	03/22/2017	04/18/2017
Appendix III											
Boron	mg/L	0.0414 J	0.0434 J	0.0453 J	0.0451 J	0.0511 J	0.0507 J	0.0458 J	0.0445 J	0.0432 J	0.0409 J
Calcium	mg/L	261	295	318	319	293	311	320	417	292	302
Chloride	mg/L	1.53	1.85	1.95	2.07	2.02	2.07	2.39	1.9	1.5 J	1.6 J
Fluoride	mg/L	0.372	0.361	0.326	0.329	0.287 J	0.194 J	0.192 J	0.223 J	0.32	0.32
pH_Field	pH	6.22	6.21	6.11	6.11	6.13	6.12	6.09	6.09	6.15	6.19
Sulfate	mg/L	2260	2500	2750	2770	3060	2650	2720	2650	2700	2400
TDS	mg/L	3300	3870	4140	4190	4190	4400	4230	4120	3980	3880
Appendix IV											
Antimony	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006
Arsenic	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Barium	mg/L	0.0114	0.0103	0.0119	0.0118	0.0119	0.0104	0.0106	0.0101	0.0103	0.0107
Beryllium	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006
Cadmium	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Chromium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Cobalt	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Combined Radium 226 + 228	pCi/L	0.434 U	0.287 U	0.516 U	0.266 U	0.59 U	0.164 U	0.296 U	0.0267 U	0.132 U	-0.0439 U
Fluoride	mg/L	0.372	0.361	0.326	0.329	0.287 J	0.194 J	0.192 J	0.223 J	0.32	0.32
Lead	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Lithium	mg/L	0.0528	0.0554	0.0452 J	0.0488 J	0.0476 J	0.049 J	0.0477 J	0.045 J	0.0493 J	0.0494 J
Mercury	mg/L	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025
Molybdenum	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Selenium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Thallium	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002

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

Southern Company

ANALYTICAL DATA SUMMARY
Gypsum Storage Pond (Old) (04/25/2016 - 10/19/2023)
APC Plant Gorgas
Walker County Alabama

Analyte	Units	MW-4									
		05/31/2017	08/23/2017	02/13/2018	05/23/2018	06/12/2018	11/19/2018	04/10/2019	05/14/2019	10/10/2019	10/16/2019
Appendix III											
Boron	mg/L	0.0392 J	0.042 J	--	0.0433 J	0.0478 J	0.0526 J	0.0438 J	<0.0609	0.0487 J	0.0505 J
Calcium	mg/L	284	297	--	296	355	289	356	254	302	356
Chloride	mg/L	2.1	2.3	--	2	1.7 J	<1.4	1.88	1.82	1.93	1.92
Fluoride	mg/L	0.31	0.38	0.38	0.38	0.39	0.36	0.384	0.335	0.304	0.302
pH_Field	pH	6.13	6.12	6.22	6.21	6.16	6.16	6.14	6.23	6.15	6.19
Sulfate	mg/L	2700	2700	--	2400	2600	2400	2090	2240	2690	3050
TDS	mg/L	4210	3990	--	3740	4080	3920	3280	3130	4000	4060
Appendix IV											
Antimony	mg/L	<0.0006	--	<0.0006	<0.0006	<0.0006	<0.0008	0.00097 J	<0.0008	<0.0008	<0.0008
Arsenic	mg/L	<0.001	--	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Barium	mg/L	0.0104	--	0.0111	0.0107	0.0108	0.0107	0.0107	0.00949 J	0.0116	0.0125
Beryllium	mg/L	<0.0006	--	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006
Cadmium	mg/L	<0.0002	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Chromium	mg/L	<0.002	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Cobalt	mg/L	<0.002	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Combined Radium 226 + 228	pCi/L	0.3 U	--	0.69	0.186 U	0.153 U	0.794	--	0.352 U	1.02 U	0.356 U
Fluoride	mg/L	0.31	0.38	0.38	0.38	0.39	0.36	0.384	0.335	0.304	0.302
Lead	mg/L	<0.001	--	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Lithium	mg/L	0.0501	--	0.0446 J	0.0513	0.0511	0.0467	0.0504	0.0485	0.054	0.052
Mercury	mg/L	<0.00025	--	<0.00025	<0.00025	<0.00025	<0.00025	<0.0003	<0.0003	<0.0003	<0.0003
Molybdenum	mg/L	<0.002	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Selenium	mg/L	<0.002	--	0.00403 J	<0.002	<0.002	0.00436 J	<0.002	0.00201 J	<0.002	<0.002
Thallium	mg/L	<0.0002	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002

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

Southern Company

ANALYTICAL DATA SUMMARY
Gypsum Storage Pond (Old) (04/25/2016 - 10/19/2023)
APC Plant Gorgas
Walker County Alabama

Analyte	Units	MW-4									GS-GSA-MW-8
		02/03/2020	04/06/2020	07/14/2020	02/22/2021	07/12/2021	01/25/2022	07/05/2022	02/21/2023	08/22/2023	08/24/2016
Appendix III											
Boron	mg/L	--	0.0428 J	0.0441 J	0.0397 J	0.0411 J	0.0408 J	0.0433 J	0.0408 J	0.0448 J	0.0898 J
Calcium	mg/L	--	222	259	271	242	264	294	232	287	263
Chloride	mg/L	--	1.5	1.61	1.52	1.56	1.54	1.63	1.58	1.86	4.03
Fluoride	mg/L	--	0.368	0.33	0.357	0.35	0.364	0.362	0.415	0.358	0.165 J
pH_Field	pH	--	6.35	6.2	6.19	6.06	6.3	6.12	6.35	6.28	6.78
Sulfate	mg/L	--	1810	1970	2040	1930	1930	2380	1930	2390	1250
TDS	mg/L	--	2820	3310	3190	3000	3180	3240	3160	3780	2280
Appendix IV											
Antimony	mg/L	--	<0.0008	<0.0008	<0.000507	<0.000508	<0.000508	<0.000508	<0.000508	<0.00071	<0.0006
Arsenic	mg/L	--	<0.001	<0.001	0.000125 J	0.000116 J	8.75e-005 J	9.56e-005 J	<8.1e-005	0.000145 J	0.00119 J
Barium	mg/L	--	0.0115	0.0122	0.0111	0.0108	0.00908	0.0115	0.0116	0.013	0.0536
Beryllium	mg/L	--	<0.0006	<0.0006	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406	<0.0006
Cadmium	mg/L	--	<0.0003	<0.0003	8.96e-005 J	8.19e-005 J	8.59e-005 J	7.46e-005 J	<6.8e-005	<6.8e-005	<0.0002
Chromium	mg/L	--	<0.002	<0.002	<0.000203	0.000302 J	0.000216 J	<0.000203	0.000244 J	0.000571 J	<0.002
Cobalt	mg/L	--	<0.002	<0.002	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	0.0201
Combined Radium 226 + 228	pCi/L	0.254 U	0.459 U	0.169 U	0 U	0.301 U	0.884 U	1.1	0.3 U	0.887 U	0.558 U
Fluoride	mg/L	--	0.368	0.33	0.357	0.35	0.364	0.362	0.415	0.358	0.165 J
Lead	mg/L	--	<0.001	<0.001	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<0.001
Lithium	mg/L	--	0.0519	0.0543	0.0558	0.0533	0.0433	0.0566	0.0431	0.0418	0.0683
Mercury	mg/L	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.00025
Molybdenum	mg/L	--	<0.002	<0.002	0.000131 J	0.000138 J	0.000114 J	<0.000102	0.000274	<0.005075	0.0031 J
Selenium	mg/L	--	0.00284 J	<0.002	0.00222	0.00155	0.00227	0.000961 J	0.00248	0.00192	<0.002
Thallium	mg/L	--	<0.0002	<0.0002	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<0.0002

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

Southern Company

ANALYTICAL DATA SUMMARY
Gypsum Storage Pond (Old) (04/25/2016 - 10/19/2023)
APC Plant Gorgas
Walker County Alabama

Analyte	Units	GS-GSA-MW-8									
		10/03/2016	10/26/2016	11/21/2016	01/17/2017	03/20/2017	04/18/2017	05/30/2017	08/24/2017	02/13/2018	06/12/2018
Appendix III											
Boron	mg/L	0.0821 J	0.0889 J	0.0788 J	0.0607 J	0.114	0.108	0.105	0.12	--	0.181
Calcium	mg/L	253	235	246	231	298	317	316	391	--	442
Chloride	mg/L	3.87	4.08	4.39	7.22	5.7	4.7	15	93	--	140
Fluoride	mg/L	0.114 J	0.056 J	0.059 J	0.07 J	0.18	0.17	0.16	0.18	0.15	0.15
pH_Field	pH	6.71	6.65	6.7	6.25	7.04	6.99	6.98	6.89	6.85	6.83
Sulfate	mg/L	1270	1240	1210	1150	1400	1300	1500	1800	--	1800
TDS	mg/L	2370	2350	2530	2380	2630	2700	2980	3390	--	3510
Appendix IV											
Antimony	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	--	<0.0006	<0.0006
Arsenic	mg/L	0.00114 J	0.0011 J	<0.001	0.00103 J	<0.001	<0.001	<0.001	--	<0.001	<0.001
Barium	mg/L	0.0681	0.0562	0.0604	0.0402	0.0305	0.0276	0.0272	--	0.0249	0.0234
Beryllium	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	--	<0.0006	<0.0006
Cadmium	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	--	<0.0003	<0.0003
Chromium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002
Cobalt	mg/L	0.0167	0.0253	0.0233	0.0708	0.00277 J	<0.002	<0.002	--	0.00492 J	<0.002
Combined Radium 226 + 228	pCi/L	0.565	0.555 U	0.987	0.476 U	0.633 U	0.248 U	0.412 U	--	1.08	0.446 U
Fluoride	mg/L	0.114 J	0.056 J	0.059 J	0.07 J	0.18	0.17	0.16	0.18	0.15	0.15
Lead	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001
Lithium	mg/L	0.0661	0.0681	0.0682	0.0516	0.135	0.139	0.141	--	0.163	0.166
Mercury	mg/L	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	--	<0.00025	<0.00025
Molybdenum	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002
Selenium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002
Thallium	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	--	<0.0002	<0.0002

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

Southern Company

ANALYTICAL DATA SUMMARY
Gypsum Storage Pond (Old) (04/25/2016 - 10/19/2023)
APC Plant Gorgas
Walker County Alabama

Analyte	Units	GS-GSA-MW-8										
		10/17/2018	04/10/2019	10/14/2019	02/04/2020	08/05/2020	03/01/2021	07/14/2021	01/27/2022	07/12/2022	02/28/2023	08/23/2023
Appendix III												
Boron	mg/L	0.616	0.944	2.11	1.47	2.16	1.85	2.07	2.81	2.29	1.91	2.22
Calcium	mg/L	514	533	524	461	497	386	444	494	452	353	451
Chloride	mg/L	--	174	207	94.1	146	92.5	129	122	120	86.9	90
Fluoride	mg/L	--	0.156	0.118	0.132	0.119	0.106	0.221	0.179	0.112 J	0.161	0.139
pH_Field	pH	6.81	6.71	6.88	6.85	6.76	6.48	6.88	6.85	6.49	6.93	6.83
Sulfate	mg/L	--	2150	2090	1570	1880	1450	1700	2000	1740	1390	1830
TDS	mg/L	3550	3580	3730	3190	3610	2870	3150	3290	3090	2620	3280
Appendix IV												
Antimony	mg/L	<0.0008	0.00102 J	<0.0008	<0.0008	<0.0008	<0.000507	<0.000508	<0.000508	<0.000508	<0.000508	<0.00071
Arsenic	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	0.000633	0.000238	0.000187 J	0.000159 J	0.000177 J	0.000144 J
Barium	mg/L	0.0236	0.02	0.0215	0.0209	0.0216	0.0194	0.0232	0.0192	0.0218	0.0224	0.0225
Beryllium	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406
Cadmium	mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005
Chromium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	0.000423 J	0.000302 J	<0.000203	0.000266 J	0.000325 J	<0.000203
Cobalt	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	0.00546	0.000262	0.000674	8.36e-005 J	0.000248	<6.8e-005
Combined Radium 226 + 228	pCi/L	--	--	0.225 U	0.336 U	-0.115 U	0.902 U	1.23 U	0.28 U	0.745 U	0.422 U	0.735 U
Fluoride	mg/L	--	0.156	0.118	0.132	0.119	0.106	0.221	0.179	0.112 J	0.161	0.139
Lead	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	0.000145 J	<6.8e-005	0.00015 J	<6.8e-005	7.8e-005 J	<6.8e-005
Lithium	mg/L	0.188	0.195	0.209	0.188	0.206	0.149	0.213	0.185	0.181	0.157	0.176
Mercury	mg/L	<0.00025	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Molybdenum	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	0.00277	0.000151 J	0.000122 J	0.00011 J	<0.005075	<0.005075
Selenium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.000507	<0.000508	<0.000508	<0.000508	<0.000508	<0.000508
Thallium	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005

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

Appendix C

Southern Company

Appendix C. Historical Groundwater Elevations Summary

Plant Gorgas Gypsum Storage Pond (Old)

10/12/2015 - 08/21/2023

Well	Hydraulic Location	Geologic Unit	Measure Date																				
			10/12/15	04/25/16	06/20/16	08/08/16	08/24/16	10/03/16	10/26/16	11/21/16	01/17/17	03/20/17	04/10/17	04/17/17	05/30/17	08/23/17	10/12/17	10/13/17	10/14/17	10/15/17	10/16/17	10/17/17	10/23/17	11/15/17
MW-1	Upgradient	Mine Spoil - Pottsville Fm Interface	410.95	411.22	410.7	410.49	410.43	410.31	410.19	410.1	410.07	410.67	410.89	410.94	410.8	411.06	410.7	410.72	410.68	410.73	410.68	410.65	410.69	410.66
MW-2	Upgradient	Mine Spoil - Pottsville Fm Interface	417.16	417.36	416.76	416.6	416.42	416.21	416.08	415.98	416.62	417.24	417.66	417.34	416.94	417.02	416.5	416.54	416.49	416.53	416.5	416.51	416.62	416.74
MW-3	Upgradient	Mine Spoil - Pottsville Fm Interface	415.81	416.41	415.45	415	415.08	414.82	414.64	414.43	415.27	416.07	418.23	417.21	415.63	415.73	415.1	415.14	415.15	415.17	415.13	415.12	415.17	415.41
MW-4	Upgradient	Mine Spoil - Pottsville Fm Interface	401.88	402.31	401.79	400.61	400.57	400.09	399.83	399.53	400.51	402.02	402.5	402.33	401.68	401.77	400.79	400.76	400.67	400.67	400.59	400.62	400.54	400.6
GS-GSA-MW-01	Piezometer	Pottsville Fm																						
GS-GSA-MW-02	Piezometer	Pottsville Fm																						
GS-GSA-PZ-2A	Piezometer	Pottsville Fm																						
GS-GSA-MW-3	Downgradient	Pottsville Fm		NM	NM	NM	332.11	331.71	331.53	331.33	331.02	333.43	NM	334.12	334.72	336.19	NM	NM	NM	NM	NM	NM	NM	NM
GS-GSA-MW-3V	Vertical Delineation	Pottsville Fm																						
GS-GSA-MW-4	Downgradient	Pottsville Fm		NM	NM	NM	350.00	349.10	348.71	348.26	349.61	351.50	NM	352.75	351.17	351.02	NM	NM	NM	NM	NM	NM	NM	NM
GS-GSA-MW-4V	Vertical Delineation	Pottsville Fm																						
GS-GSA-PZ-04	Piezometer	Pottsville Fm																						
GS-GSA-MW-05	Piezometer	Mine Spoil - Pottsville Fm Interface																						
GS-GSA-PZ-05	Piezometer	Pottsville Fm - Pratt Coal																						
GS-GSA-MW-06	Piezometer	Mine Spoil - Pottsville Fm Interface																						
GS-GSA-MW-07	Piezometer	Mine Spoil - Pottsville Fm Interface																						
GS-GSA-MW-8	Downgradient	Pottsville Fm		NM	NM	NM	318.89	317.35	316.33	315.43	315.89	320.12	NM	322.22	321.64	323.71	NM	NM	NM	NM	NM	NM	NM	NM
GS-GSA-MW-8V	Vertical Delineation	Pottsville Fm																						
GS-GSA-MW-09	Piezometer	Pottsville Fm																						
GS-GSA-MW-9H	Horizontal Delineation	Pottsville Fm																						
GS-GSA-MW-9V	Vertical Delineation	Pottsville Fm																						
GS-GSA-MW-10H	Piezometer	Overburden-Pottsville Fm																						
GS-GSA-MW-11H	Horizontal Delineation	Overburden-Pottsville Fm																						
GS-GSA-MW-12H	Vertical Delineation	Pottsville Fm																						
GS-GSA-MW-12V	Vertical Delineation	Pottsville Fm																						
GS-GSA-MW-13H	Horizontal Delineation	Overburden-Pottsville Fm																						
GS-GSA-MW-14H	Horizontal Delineation	Overburden-Pottsville Fm																						
GS-GSA-MW-15H	Piezometer	Overburden-Pottsville Fm																						
GS-GSA-PZ-16	Piezometer	Overburden-Pottsville Fm																						
GS-GSA-PZ-17	Piezometer	Overburden-Pottsville Fm																						
GS-GSA-PZ-18	Piezometer	Overburden-Pottsville Fm																						
GS-GSA-PZ-19	Piezometer	Pottsville Fm																						
GS-GSA-PZ-20	Piezometer	Pottsville Fm																						
GS-GSA-PZ-21	Piezometer	Pottsville Fm																						
GS-GSA-PZ-22	Piezometer	Overburden-Pottsville Fm																						
GS-GSA-MW-23VA	Piezometer	Pottsville Fm																						

Southern Company

Appendix C. Historical Groundwater Elevations Summary

Plant Gorgas Gypsum Storage Pond (Old)

10/12/2015 - 08/21/2023

Well	Hydraulic Location	Geologic Unit	Measure Date																				
			02/12/18	02/13/18	04/09/18	05/21/18	06/11/18	10/17/18	10/29/18	11/19/18	03/13/19	04/10/19	05/13/19	10/07/19	10/14/19	11/26/19	02/03/20	04/06/20	07/13/20	08/03/20	02/22/21	07/12/21	01/24/22	07/05/22
MW-1	Upgradient	Mine Spoil - Pottsville Fm Interface	410.89	410.89	411.35	411.47	411.28	410.65	410.62	410.8	412.11	411.95	411.77	410.79	410.72	NM	411.81	412.16	411.22	412.19	411.59	411.54	411.49	411.39
MW-2	Upgradient	Mine Spoil - Pottsville Fm Interface	419.29	419.29	417.32	417.33	417.03	416.39	416.3	417.67	417.7	421.15	417.64	416.63	416.62	NM	417.52	417.81	416.93	417.1	418.5	417.75	418.4	417.74
MW-3	Upgradient	Mine Spoil - Pottsville Fm Interface	418.49	418.49	416.25	416.28	415.77	414.92	414.85	416.31	418.31	417.41	416.4	415.17	415.14	NM	416.62	417.64	415.34	415.49	419.94	421.54	418.99	416.02
MW-4	Upgradient	Mine Spoil - Pottsville Fm Interface	402.67	402.67	402.22	402.24	402.01	400.3	400.18	402.08	402.68	402.86	402.43	400.33	400.33	NM	402.42	402.59	401.42	401.37	402.82	402.3	402.52	401.99
GS-GSA-MW-01	Piezometer	Pottsville Fm															347.96	NM	NM	347.74	347.81	347.88	347.84	NM
GS-GSA-MW-02	Piezometer	Pottsville Fm															340.10	NM	NM	335.87	334.94	339.92	335.15	NM
GS-GSA-PZ-2A	Piezometer	Pottsville Fm															372.06	NM	NM	371.55	371.55	371.82	371.56	NM
GS-GSA-MW-3	Downgradient	Pottsville Fm	NM	332.79	NM	NM	336.36	332.37	NM	NM	341.46	341.33	NM	NM	332.37	NM	339.32	NM	NM	335.10	334.59	339.17	334.91	NM
GS-GSA-MW-3V	Vertical Delineation	Pottsville Fm									326.34	NM	NM	NM	313.29	NM	321.66	NM	NM	316.37	318.85	319.46	318.90	NM
GS-GSA-MW-4	Downgradient	Pottsville Fm	NM	353.06	NM	NM	351.52	349.56	NM	NM	353.06	353.00	NM	NM	349.08	NM	352.42	NM	NM	350.66	354.32	352.12	353.72	NM
GS-GSA-MW-4V	Vertical Delineation	Pottsville Fm									332.35	NM	NM	NM	322.28	NM	328.85	NM	NM	323.88	328.55	327.27	328.76	NM
GS-GSA-PZ-04	Piezometer	Pottsville Fm													NM	NM	328.85	NM	NM	43400.68	43401.08	43400.92	328.76	NM
GS-GSA-MW-05	Piezometer	Mine Spoil - Pottsville Fm Interface															DRY	NM	NM	DRY	DRY	DRY	DRY	NM
GS-GSA-PZ-05	Piezometer	Pottsville Fm - Pratt Coal																		DRY	DRY	DRY	DRY	NM
GS-GSA-MW-06	Piezometer	Mine Spoil - Pottsville Fm Interface															DRY	NM	NM	DRY	DRY	DRY	DRY	NM
GS-GSA-MW-07	Piezometer	Mine Spoil - Pottsville Fm Interface															337.19	NM	NM	330.78	331.57	335.19	332.58	NM
GS-GSA-MW-8	Downgradient	Pottsville Fm	NM	320.01	NM	NM	324.40	319.03	NM	NM	NM	330.27	NM	NM	319.20	NM	329.85	NM	NM	323.91	325.87	328.28	326.90	NM
GS-GSA-MW-8V	Vertical Delineation	Pottsville Fm														310.82	319.53	NM	NM	313.99	318.10	318.06	317.98	NM
GS-GSA-MW-09	Piezometer	Pottsville Fm																		DRY	DRY	DRY	DRY	NM
GS-GSA-MW-9H	Horizontal Delineation	Pottsville Fm									293.64	NM	NM	NM	286.47	NM	291.69	NM	NM	288.01	291.61	290.68	291.76	NM
GS-GSA-MW-9V	Vertical Delineation	Pottsville Fm																		289.16	291.53	291.30	291.44	NM
GS-GSA-MW-10H	Piezometer	Overburden-Pottsville Fm									321.8	NM	NM	NM	NM	NM	319.09	NM	NM	312.41	319.60	318.68	320.11	NM
GS-GSA-MW-11H	Horizontal Delineation	Overburden-Pottsville Fm									256.3	NM	NM	NM	255.09	NM	256.29	NM	NM	256.21	256.33	256.39	256.45	NM
GS-GSA-MW-12H	Vertical Delineation	Pottsville Fm														339.57	341.15	NM	NM	337.17	341.27	340.16	341.25	NM
GS-GSA-MW-12V	Vertical Delineation	Pottsville Fm																		294.01	318.04	317.98	317.91	NM
GS-GSA-MW-13H	Horizontal Delineation	Overburden-Pottsville Fm														257.06	257.03	NM	NM	256.50	257.65	256.48	257.53	NM
GS-GSA-MW-14H	Horizontal Delineation	Overburden-Pottsville Fm																		384.51	385.34	384.82	385.35	NM
GS-GSA-MW-15H	Piezometer	Overburden-Pottsville Fm																		401.88	404.14	402.77	404.00	NM
GS-GSA-PZ-16	Piezometer	Overburden-Pottsville Fm																		409.21	421.76	412.02	421.20	NM
GS-GSA-PZ-17	Piezometer	Overburden-Pottsville Fm																		429.97	430.61	429.91	430.40	NM
GS-GSA-PZ-18	Piezometer	Overburden-Pottsville Fm																		426.03	430.00	428.24	429.44	NM
GS-GSA-PZ-19	Piezometer	Pottsville Fm																		339.96	341.27	341.82	343.53	NM
GS-GSA-PZ-20	Piezometer	Pottsville Fm																		344.11	344.22	344.26	344.20	NM
GS-GSA-PZ-21	Piezometer	Pottsville Fm																		378.58	377.13	377.35	376.89	NM
GS-GSA-PZ-22	Piezometer	Overburden-Pottsville Fm																		424.21	428.41	427.17	428.39	NM
GS-GSA-MW-23VA	Piezometer	Pottsville Fm																		NM	240.62	253.93	269.83	NM

Southern Company

Appendix C. Historical Groundwater Elevations
Summary
Plant Gorgas Gypsum Storage Pond (Old)
10/12/2015 - 08/21/2023

Well	Hydraulic Location	Geologic Unit	Measure Date				
			07/11/22	02/20/23	02/27/23	08/15/23	08/21/23
MW-1	Upgradient	Mine Spoil - Pottsville Fm Interface	NM	412.18	NM	411.51	411.47
MW-2	Upgradient	Mine Spoil - Pottsville Fm Interface	NM	419.04	NM	417.63	417.86
MW-3	Upgradient	Mine Spoil - Pottsville Fm Interface	NM	419.16	NM	416.03	416.12
MW-4	Upgradient	Mine Spoil - Pottsville Fm Interface	NM	402.34	NM	401.27	400.92
GS-GSA-MW-01	Piezometer	Pottsville Fm	347.76	NM	348.23	NM	347.73
GS-GSA-MW-02	Piezometer	Pottsville Fm	338.97	NM	343.02	NM	335.50
GS-GSA-PZ-2A	Piezometer	Pottsville Fm	371.65	NM	371.54	NM	371.52
GS-GSA-MW-3	Downgradient	Pottsville Fm	338.43	NM	342.11	NM	335.04
GS-GSA-MW-3V	Vertical Delineation	Pottsville Fm	317.86	NM	324.12	NM	315.38
GS-GSA-MW-4	Downgradient	Pottsville Fm	351.22	NM	353.42	NM	350.59
GS-GSA-MW-4V	Vertical Delineation	Pottsville Fm	325.94	NM	332.64	NM	324.15
GS-GSA-PZ-04	Piezometer	Pottsville Fm	325.94	NM	332.64	NM	324.15
GS-GSA-MW-05	Piezometer	Mine Spoil - Pottsville Fm Interface	DRY	NM	DRY	NM	DRY
GS-GSA-PZ-05	Piezometer	Pottsville Fm - Pratt Coal	DRY	NM	DRY	NM	DRY
GS-GSA-MW-06	Piezometer	Mine Spoil - Pottsville Fm Interface	DRY	NM	DRY	NM	DRY
GS-GSA-MW-07	Piezometer	Mine Spoil - Pottsville Fm Interface	332.34	NM	341.15	NM	331.09
GS-GSA-MW-8	Downgradient	Pottsville Fm	327.16	NM	334.27	NM	323.82
GS-GSA-MW-8V	Vertical Delineation	Pottsville Fm	316.16	NM	322.99	NM	313.42
GS-GSA-MW-09	Piezometer	Pottsville Fm	DRY	NM	DRY	NM	DRY
GS-GSA-MW-9H	Horizontal Delineation	Pottsville Fm	289.55	NM	293.20	NM	289.27
GS-GSA-MW-9V	Vertical Delineation	Pottsville Fm	290.08	NM	293.94	NM	288.91
GS-GSA-MW-10H	Piezometer	Overburden-Pottsville Fm	314.30	NM	323.89	NM	312.54
GS-GSA-MW-11H	Horizontal Delineation	Overburden-Pottsville Fm	256.13	NM	256.47	NM	255.88
GS-GSA-MW-12H	Vertical Delineation	Pottsville Fm	337.53	NM	342.64	NM	338.28
GS-GSA-MW-12V	Vertical Delineation	Pottsville Fm	316.08	NM	322.87	NM	313.41
GS-GSA-MW-13H	Horizontal Delineation	Overburden-Pottsville Fm	256.10	NM	257.60	NM	255.85
GS-GSA-MW-14H	Horizontal Delineation	Overburden-Pottsville Fm	384.31	NM	385.25	NM	384.68
GS-GSA-MW-15H	Piezometer	Overburden-Pottsville Fm	399.85	NM	404.07	NM	402.51
GS-GSA-PZ-16	Piezometer	Overburden-Pottsville Fm	408.71	NM	419.13	NM	411.58
GS-GSA-PZ-17	Piezometer	Overburden-Pottsville Fm	429.60	NM	430.19	NM	429.89
GS-GSA-PZ-18	Piezometer	Overburden-Pottsville Fm	426.01	NM	430.49	NM	428.03
GS-GSA-PZ-19	Piezometer	Pottsville Fm	343.52	NM	345.33	NM	343.82
GS-GSA-PZ-20	Piezometer	Pottsville Fm	344.16	NM	344.31	NM	344.12
GS-GSA-PZ-21	Piezometer	Pottsville Fm	377.30	NM	376.72	NM	376.28
GS-GSA-PZ-22	Piezometer	Overburden-Pottsville Fm	425.29	NM	429.27	NM	425.95
GS-GSA-MW-23VA	Piezometer	Pottsville Fm	282.38	NM	294.2	NM	302.09

Appendix D

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

Field Case Narrative

Plant Gorgas Pooled Upgradient Wells

2023 Compliance Event 1

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

Field quality control procedures were performed as follows:

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

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

Field Case Narrative

Gorgas Gypsum Pond

2023 Compliance Event 1

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

Dusty conditions due to truck activity were present when pumping and sampling well PZ-17.

Field quality control procedures were performed as follows:

- Blanks and Sample Duplicates were collected as described in the SAP.
    - The reporting limit (RL) for Manganese was exceeded for Equipment Blank 1 (EB-1).

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

Water Level Record/Well Inspection

Groundwater

APC General Testing Laboratory
General Service Complex Building 8

Y

User Name: awgoggin
PIN: 032284
Reason:

Submit

Date: 02/20/2023
Location: Gorgas Pooled Upgradient
Collector: TJ Daugherty

Weather: Cloudy 65

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

Groundwater

APC General Testing Laboratory
General Service Complex Building 8

Y

User Name: awgoggin
PIN: 032284
Reason:

Submit

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

			In Good Condition					
Well	Time	Water Level (ft)	Locks	Bollards	Pad	Protective Casing	Name Plate	Comment
MW-1	1122	90.53	✔	✔	✔	✔	✔	
MW-2	1313	83.43	✔	✔	✔	✔	✔	
MW-3	1413	106.99	✔	✔	✔	✔	✔	
MW-4	1600	115.96	✔	✔	✔	✔	✔	
			✔	✔	✔	✔	✔	
			✔	✔	✔	✔	✔	
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Field Parameters Summary
Plant Gorgas Upgradient Wells

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
MW-1	COND	Conductivity	2/20/2023 11:27	2307.56	uS/cm
MW-1	DO	DO	2/20/2023 11:27	1.16	mg/L
MW-1	DTW	Depth to Water Detail	2/20/2023 11:27	92.88	ft
MW-1	ORP	Oxidation Reduction Potention	2/20/2023 11:27	317.83	mv
MW-1	PH	pH	2/20/2023 11:27	5.04	SU
MW-1	TEMP	Temperature	2/20/2023 11:27	19.45	C
MW-1	TURB	Turbidity	2/20/2023 11:27	0.66	NTU
MW-1	COND	Conductivity	2/20/2023 11:32	2301.7	uS/cm
MW-1	DO	DO	2/20/2023 11:32	1.19	mg/L
MW-1	DTW	Depth to Water Detail	2/20/2023 11:32	92.9	ft
MW-1	ORP	Oxidation Reduction Potention	2/20/2023 11:32	338.68	mv
MW-1	PH	pH	2/20/2023 11:32	5.05	SU
MW-1	TEMP	Temperature	2/20/2023 11:32	19.57	C
MW-1	TURB	Turbidity	2/20/2023 11:32	0.59	NTU
MW-1	COND	Conductivity	2/20/2023 11:37	2295.88	uS/cm
MW-1	DO	DO	2/20/2023 11:37	1.02	mg/L
MW-1	DTW	Depth to Water Detail	2/20/2023 11:37	92.92	ft
MW-1	ORP	Oxidation Reduction Potention	2/20/2023 11:37	348.93	mv
MW-1	PH	pH	2/20/2023 11:37	5.07	SU
MW-1	TEMP	Temperature	2/20/2023 11:37	19.63	C
MW-1	TURB	Turbidity	2/20/2023 11:37	0.69	NTU
MW-1	COND	Conductivity	2/20/2023 11:42	2343.61	uS/cm
MW-1	DO	DO	2/20/2023 11:42	0.97	mg/L
MW-1	DTW	Depth to Water Detail	2/20/2023 11:42	92.94	ft
MW-1	ORP	Oxidation Reduction Potention	2/20/2023 11:42	355.62	mv
MW-1	PH	pH	2/20/2023 11:42	5.08	SU
MW-1	TEMP	Temperature	2/20/2023 11:42	19.63	C
MW-1	TURB	Turbidity	2/20/2023 11:42	0.5	NTU
MW-1	COND	Conductivity	2/20/2023 11:47	2297.01	uS/cm
MW-1	DO	DO	2/20/2023 11:47	0.95	mg/L
MW-1	DTW	Depth to Water Detail	2/20/2023 11:47	92.94	ft
MW-1	ORP	Oxidation Reduction Potention	2/20/2023 11:47	361.14	mv
MW-1	PH	pH	2/20/2023 11:47	5.07	SU
MW-1	SULFIDE	Sulfide	2/20/2023 11:47	0	mg/L
MW-1	TEMP	Temperature	2/20/2023 11:47	19.59	C
MW-1	TURB	Turbidity	2/20/2023 11:47	0.73	NTU

Field Parameters Summary
Plant Gorgas Upgradient Wells

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
MW-2	COND	Conductivity	2/20/2023 13:18	1774.73	uS/cm
MW-2	DO	DO	2/20/2023 13:18	0.85	mg/L
MW-2	DTW	Depth to Water Detail	2/20/2023 13:18	83.43	ft
MW-2	ORP	Oxidation Reduction Potention	2/20/2023 13:18	71.78	mv
MW-2	PH	pH	2/20/2023 13:18	6.22	SU
MW-2	TEMP	Temperature	2/20/2023 13:18	19	C
MW-2	TURB	Turbidity	2/20/2023 13:18	0.72	NTU
MW-2	COND	Conductivity	2/20/2023 13:23	1773.88	uS/cm
MW-2	DO	DO	2/20/2023 13:23	0.85	mg/L
MW-2	DTW	Depth to Water Detail	2/20/2023 13:23	83.43	ft
MW-2	ORP	Oxidation Reduction Potention	2/20/2023 13:23	71.83	mv
MW-2	PH	pH	2/20/2023 13:23	6.23	SU
MW-2	TEMP	Temperature	2/20/2023 13:23	19	C
MW-2	TURB	Turbidity	2/20/2023 13:23	0.94	NTU
MW-2	COND	Conductivity	2/20/2023 13:28	1772.4	uS/cm
MW-2	DO	DO	2/20/2023 13:28	0.83	mg/L
MW-2	DTW	Depth to Water Detail	2/20/2023 13:28	83.43	ft
MW-2	ORP	Oxidation Reduction Potention	2/20/2023 13:28	72.2	mv
MW-2	PH	pH	2/20/2023 13:28	6.24	SU
MW-2	TEMP	Temperature	2/20/2023 13:28	18.98	C
MW-2	TURB	Turbidity	2/20/2023 13:28	0.47	NTU
MW-2	COND	Conductivity	2/20/2023 13:33	1773	uS/cm
MW-2	DO	DO	2/20/2023 13:33	0.82	mg/L
MW-2	DTW	Depth to Water Detail	2/20/2023 13:33	83.43	ft
MW-2	ORP	Oxidation Reduction Potention	2/20/2023 13:33	72.91	mv
MW-2	PH	pH	2/20/2023 13:33	6.24	SU
MW-2	SULFIDE	Sulfide	2/20/2023 13:33	0	mg/L
MW-2	TEMP	Temperature	2/20/2023 13:33	18.95	C
MW-2	TURB	Turbidity	2/20/2023 13:33	0.41	NTU

Field Parameters Summary
Plant Gorgas Upgradient Wells

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
MW-3	COND	Conductivity	2/20/2023 14:18	3845.31	uS/cm
MW-3	DO	DO	2/20/2023 14:18	7.15	mg/L
MW-3	DTW	Depth to Water Detail	2/20/2023 14:18	107.22	ft
MW-3	ORP	Oxidation Reduction Potention	2/20/2023 14:18	307.8	mv
MW-3	PH	pH	2/20/2023 14:18	4.94	SU
MW-3	TEMP	Temperature	2/20/2023 14:18	20.98	C
MW-3	TURB	Turbidity	2/20/2023 14:18	3.67	NTU
MW-3	COND	Conductivity	2/20/2023 14:23	3460.97	uS/cm
MW-3	DO	DO	2/20/2023 14:23	6.52	mg/L
MW-3	DTW	Depth to Water Detail	2/20/2023 14:23	107.24	ft
MW-3	ORP	Oxidation Reduction Potention	2/20/2023 14:23	273.35	mv
MW-3	PH	pH	2/20/2023 14:23	5.74	SU
MW-3	TEMP	Temperature	2/20/2023 14:23	20.86	C
MW-3	TURB	Turbidity	2/20/2023 14:23	12.9	NTU
MW-3	COND	Conductivity	2/20/2023 14:28	3297.44	uS/cm
MW-3	DO	DO	2/20/2023 14:28	6.36	mg/L
MW-3	DTW	Depth to Water Detail	2/20/2023 14:28	107.26	ft
MW-3	ORP	Oxidation Reduction Potention	2/20/2023 14:28	243.1	mv
MW-3	PH	pH	2/20/2023 14:28	5.97	SU
MW-3	TEMP	Temperature	2/20/2023 14:28	20.74	C
MW-3	TURB	Turbidity	2/20/2023 14:28	11.5	NTU
MW-3	COND	Conductivity	2/20/2023 14:33	3289.62	uS/cm
MW-3	DO	DO	2/20/2023 14:33	6.25	mg/L
MW-3	DTW	Depth to Water Detail	2/20/2023 14:33	107.28	ft
MW-3	ORP	Oxidation Reduction Potention	2/20/2023 14:33	235.2	mv
MW-3	PH	pH	2/20/2023 14:33	5.99	SU
MW-3	TEMP	Temperature	2/20/2023 14:33	20.53	C
MW-3	TURB	Turbidity	2/20/2023 14:33	7.21	NTU
MW-3	COND	Conductivity	2/20/2023 14:38	3282.07	uS/cm
MW-3	DO	DO	2/20/2023 14:38	6.17	mg/L
MW-3	DTW	Depth to Water Detail	2/20/2023 14:38	107.3	ft
MW-3	ORP	Oxidation Reduction Potention	2/20/2023 14:38	233.18	mv
MW-3	PH	pH	2/20/2023 14:38	6	SU
MW-3	TEMP	Temperature	2/20/2023 14:38	20.41	C
MW-3	TURB	Turbidity	2/20/2023 14:38	3.72	NTU
MW-3	COND	Conductivity	2/20/2023 14:43	3280.04	uS/cm
MW-3	DO	DO	2/20/2023 14:43	6.2	mg/L
MW-3	DTW	Depth to Water Detail	2/20/2023 14:43	107.32	ft
MW-3	ORP	Oxidation Reduction Potention	2/20/2023 14:43	232.49	mv
MW-3	PH	pH	2/20/2023 14:43	6.01	SU
MW-3	TEMP	Temperature	2/20/2023 14:43	20.36	C
MW-3	TURB	Turbidity	2/20/2023 14:43	2.34	NTU
MW-3	COND	Conductivity	2/20/2023 14:48	3276.9	uS/cm

Field Parameters Summary
Plant Gorgas Upgradient Wells

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
MW-3	DO	DO	2/20/2023 14:48	6.19	mg/L
MW-3	DTW	Depth to Water Detail	2/20/2023 14:48	107.33	ft
MW-3	ORP	Oxidation Reduction Potention	2/20/2023 14:48	231.95	mv
MW-3	PH	pH	2/20/2023 14:48	6.01	SU
MW-3	SULFIDE	Sulfide	2/20/2023 14:48	0	mg/L
MW-3	TEMP	Temperature	2/20/2023 14:48	20.34	C
MW-3	TURB	Turbidity	2/20/2023 14:48	1.21	NTU

Field Parameters Summary
Plant Gorgas Upgradient Wells

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
MW-4	COND	Conductivity	2/21/2023 9:30	3246.86	uS/cm
MW-4	DO	DO	2/21/2023 9:30	2.8	mg/L
MW-4	DTW	Depth to Water Detail	2/21/2023 9:30	116.03	ft
MW-4	ORP	Oxidation Reduction Potention	2/21/2023 9:30	213.78	mv
MW-4	PH	pH	2/21/2023 9:30	6.33	SU
MW-4	TEMP	Temperature	2/21/2023 9:30	19.7	C
MW-4	TURB	Turbidity	2/21/2023 9:30	2.34	NTU
MW-4	COND	Conductivity	2/21/2023 9:35	3228.3	uS/cm
MW-4	DO	DO	2/21/2023 9:35	2.79	mg/L
MW-4	DTW	Depth to Water Detail	2/21/2023 9:35	116.03	ft
MW-4	ORP	Oxidation Reduction Potention	2/21/2023 9:35	214.38	mv
MW-4	PH	pH	2/21/2023 9:35	6.33	SU
MW-4	TEMP	Temperature	2/21/2023 9:35	19.65	C
MW-4	TURB	Turbidity	2/21/2023 9:35	1.59	NTU
MW-4	COND	Conductivity	2/21/2023 9:40	3207.87	uS/cm
MW-4	DO	DO	2/21/2023 9:40	2.9	mg/L
MW-4	DTW	Depth to Water Detail	2/21/2023 9:40	116.03	ft
MW-4	ORP	Oxidation Reduction Potention	2/21/2023 9:40	215.67	mv
MW-4	PH	pH	2/21/2023 9:40	6.34	SU
MW-4	TEMP	Temperature	2/21/2023 9:40	19.6	C
MW-4	TURB	Turbidity	2/21/2023 9:40	1.25	NTU
MW-4	COND	Conductivity	2/21/2023 9:45	3197.25	uS/cm
MW-4	DO	DO	2/21/2023 9:45	3.04	mg/L
MW-4	DTW	Depth to Water Detail	2/21/2023 9:45	116.03	ft
MW-4	ORP	Oxidation Reduction Potention	2/21/2023 9:45	216.9	mv
MW-4	PH	pH	2/21/2023 9:45	6.34	SU
MW-4	TEMP	Temperature	2/21/2023 9:45	19.59	C
MW-4	TURB	Turbidity	2/21/2023 9:45	1.22	NTU
MW-4	COND	Conductivity	2/21/2023 9:50	3189.48	uS/cm
MW-4	DO	DO	2/21/2023 9:50	3.13	mg/L
MW-4	DTW	Depth to Water Detail	2/21/2023 9:50	116.03	ft
MW-4	ORP	Oxidation Reduction Potention	2/21/2023 9:50	217.91	mv
MW-4	PH	pH	2/21/2023 9:50	6.35	SU
MW-4	TEMP	Temperature	2/21/2023 9:50	19.6	C
MW-4	TURB	Turbidity	2/21/2023 9:50	1.2	NTU
MW-4	COND	Conductivity	2/21/2023 9:55	3184.95	uS/cm
MW-4	DO	DO	2/21/2023 9:55	3.15	mg/L
MW-4	DTW	Depth to Water Detail	2/21/2023 9:55	116.03	ft
MW-4	ORP	Oxidation Reduction Potention	2/21/2023 9:55	219	mv
MW-4	PH	pH	2/21/2023 9:55	6.35	SU
MW-4	SULFIDE	Sulfide	2/21/2023 9:55	0	mg/L
MW-4	TEMP	Temperature	2/21/2023 9:55	19.61	C
MW-4	TURB	Turbidity	2/21/2023 9:55	0.72	NTU

Field Parameters Summary
Plant Gorgas Gypsum Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GS-GSA-MW-8	COND	Conductivity	2/28/2023 13:22	3117.84	uS/cm
GS-GSA-MW-8	DO	DO	2/28/2023 13:22	0.17	mg/L
GS-GSA-MW-8	DTW	Depth to Water Detail	2/28/2023 13:22	72.05	ft
GS-GSA-MW-8	ORP	Oxidation Reduction Potential	2/28/2023 13:22	-195.86	mv
GS-GSA-MW-8	PH	pH	2/28/2023 13:22	6.96	SU
GS-GSA-MW-8	TEMP	Temperature	2/28/2023 13:22	21.16	C
GS-GSA-MW-8	TURB	Turbidity	2/28/2023 13:22	3.03	NTU
GS-GSA-MW-8	COND	Conductivity	2/28/2023 13:27	3192.14	uS/cm
GS-GSA-MW-8	DO	DO	2/28/2023 13:27	0.15	mg/L
GS-GSA-MW-8	DTW	Depth to Water Detail	2/28/2023 13:27	72.4	ft
GS-GSA-MW-8	ORP	Oxidation Reduction Potential	2/28/2023 13:27	-193.8	mv
GS-GSA-MW-8	PH	pH	2/28/2023 13:27	6.93	SU
GS-GSA-MW-8	TEMP	Temperature	2/28/2023 13:27	21.31	C
GS-GSA-MW-8	TURB	Turbidity	2/28/2023 13:27	3.9	NTU
GS-GSA-MW-8	COND	Conductivity	2/28/2023 13:32	3215.32	uS/cm
GS-GSA-MW-8	DO	DO	2/28/2023 13:32	0.15	mg/L
GS-GSA-MW-8	DTW	Depth to Water Detail	2/28/2023 13:32	72.5	ft
GS-GSA-MW-8	ORP	Oxidation Reduction Potential	2/28/2023 13:32	-192.63	mv
GS-GSA-MW-8	PH	pH	2/28/2023 13:32	6.93	SU
GS-GSA-MW-8	TEMP	Temperature	2/28/2023 13:32	21.29	C
GS-GSA-MW-8	TURB	Turbidity	2/28/2023 13:32	4.4	NTU
GS-GSA-MW-8	COND	Conductivity	2/28/2023 13:37	3230.58	uS/cm
GS-GSA-MW-8	DO	DO	2/28/2023 13:37	0.14	mg/L
GS-GSA-MW-8	DTW	Depth to Water Detail	2/28/2023 13:37	72.5	ft
GS-GSA-MW-8	ORP	Oxidation Reduction Potential	2/28/2023 13:37	-191.84	mv
GS-GSA-MW-8	PH	pH	2/28/2023 13:37	6.93	SU
GS-GSA-MW-8	TEMP	Temperature	2/28/2023 13:37	21.46	C
GS-GSA-MW-8	TURB	Turbidity	2/28/2023 13:37	3.78	NTU
GS-GSA-MW-8	COND	Conductivity	2/28/2023 13:42	3234.63	uS/cm
GS-GSA-MW-8	DO	DO	2/28/2023 13:42	0.15	mg/L
GS-GSA-MW-8	DTW	Depth to Water Detail	2/28/2023 13:42	72.5	ft
GS-GSA-MW-8	ORP	Oxidation Reduction Potential	2/28/2023 13:42	-190.5	mv
GS-GSA-MW-8	PH	pH	2/28/2023 13:42	6.93	SU
GS-GSA-MW-8	SULFIDE	Sulfide	2/28/2023 13:42	0	mg/L
GS-GSA-MW-8	TEMP	Temperature	2/28/2023 13:42	21.41	C
GS-GSA-MW-8	TURB	Turbidity	2/28/2023 13:42	3.91	NTU
GS-GSA-MW-8V	COND	Conductivity	2/28/2023 11:26	1766.44	uS/cm
GS-GSA-MW-8V	DO	DO	2/28/2023 11:26	0.14	mg/L
GS-GSA-MW-8V	DTW	Depth to Water Detail	2/28/2023 11:26	86.83	ft
GS-GSA-MW-8V	ORP	Oxidation Reduction Potential	2/28/2023 11:26	-226.54	mv
GS-GSA-MW-8V	PH	pH	2/28/2023 11:26	7.68	SU
GS-GSA-MW-8V	TEMP	Temperature	2/28/2023 11:26	20.84	C
GS-GSA-MW-8V	TURB	Turbidity	2/28/2023 11:26	2.04	NTU
GS-GSA-MW-8V	COND	Conductivity	2/28/2023 11:31	1760.81	uS/cm
GS-GSA-MW-8V	DO	DO	2/28/2023 11:31	0.14	mg/L
GS-GSA-MW-8V	DTW	Depth to Water Detail	2/28/2023 11:31	89.7	ft
GS-GSA-MW-8V	ORP	Oxidation Reduction Potential	2/28/2023 11:31	-235.08	mv
GS-GSA-MW-8V	PH	pH	2/28/2023 11:31	7.68	SU

Field Parameters Summary
Plant Gorgas Gypsum Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GS-GSA-MW-8V	TEMP	Temperature	2/28/2023 11:31	20.82	C
GS-GSA-MW-8V	TURB	Turbidity	2/28/2023 11:31	2.57	NTU
GS-GSA-MW-8V	COND	Conductivity	2/28/2023 11:36	1762.35	uS/cm
GS-GSA-MW-8V	DO	DO	2/28/2023 11:36	0.17	mg/L
GS-GSA-MW-8V	DTW	Depth to Water Detail	2/28/2023 11:36	92.5	ft
GS-GSA-MW-8V	ORP	Oxidation Reduction Potential	2/28/2023 11:36	-238.51	mv
GS-GSA-MW-8V	PH	pH	2/28/2023 11:36	7.69	SU
GS-GSA-MW-8V	TEMP	Temperature	2/28/2023 11:36	20.77	C
GS-GSA-MW-8V	TURB	Turbidity	2/28/2023 11:36	1.84	NTU
GS-GSA-MW-8V	COND	Conductivity	2/28/2023 11:41	1757.92	uS/cm
GS-GSA-MW-8V	DO	DO	2/28/2023 11:41	0.2	mg/L
GS-GSA-MW-8V	DTW	Depth to Water Detail	2/28/2023 11:41	94	ft
GS-GSA-MW-8V	ORP	Oxidation Reduction Potential	2/28/2023 11:41	-239.75	mv
GS-GSA-MW-8V	PH	pH	2/28/2023 11:41	7.67	SU
GS-GSA-MW-8V	TEMP	Temperature	2/28/2023 11:41	20.73	C
GS-GSA-MW-8V	TURB	Turbidity	2/28/2023 11:41	1.66	NTU
GS-GSA-MW-8V	COND	Conductivity	2/28/2023 11:46	1743.99	uS/cm
GS-GSA-MW-8V	DO	DO	2/28/2023 11:46	0.21	mg/L
GS-GSA-MW-8V	DTW	Depth to Water Detail	2/28/2023 11:46	95.69	ft
GS-GSA-MW-8V	ORP	Oxidation Reduction Potential	2/28/2023 11:46	-243.76	mv
GS-GSA-MW-8V	PH	pH	2/28/2023 11:46	7.65	SU
GS-GSA-MW-8V	TEMP	Temperature	2/28/2023 11:46	20.61	C
GS-GSA-MW-8V	TURB	Turbidity	2/28/2023 11:46	2.23	NTU
GS-GSA-MW-8V	COND	Conductivity	2/28/2023 11:51	1689.29	uS/cm
GS-GSA-MW-8V	DO	DO	2/28/2023 11:51	0.22	mg/L
GS-GSA-MW-8V	DTW	Depth to Water Detail	2/28/2023 11:51	97.6	ft
GS-GSA-MW-8V	ORP	Oxidation Reduction Potential	2/28/2023 11:51	-250.04	mv
GS-GSA-MW-8V	PH	pH	2/28/2023 11:51	7.57	SU
GS-GSA-MW-8V	TEMP	Temperature	2/28/2023 11:51	20.66	C
GS-GSA-MW-8V	TURB	Turbidity	2/28/2023 11:51	1.87	NTU
GS-GSA-MW-8V	COND	Conductivity	2/28/2023 11:56	1641.78	uS/cm
GS-GSA-MW-8V	DO	DO	2/28/2023 11:56	0.24	mg/L
GS-GSA-MW-8V	DTW	Depth to Water Detail	2/28/2023 11:56	99.58	ft
GS-GSA-MW-8V	ORP	Oxidation Reduction Potential	2/28/2023 11:56	-257	mv
GS-GSA-MW-8V	PH	pH	2/28/2023 11:56	7.54	SU
GS-GSA-MW-8V	TEMP	Temperature	2/28/2023 11:56	20.53	C
GS-GSA-MW-8V	TURB	Turbidity	2/28/2023 11:56	1.92	NTU
GS-GSA-MW-8V	COND	Conductivity	2/28/2023 12:01	1623.29	uS/cm
GS-GSA-MW-8V	DO	DO	2/28/2023 12:01	0.25	mg/L
GS-GSA-MW-8V	DTW	Depth to Water Detail	2/28/2023 12:01	101.5	ft
GS-GSA-MW-8V	ORP	Oxidation Reduction Potential	2/28/2023 12:01	-262.5	mv
GS-GSA-MW-8V	PH	pH	2/28/2023 12:01	7.53	SU
GS-GSA-MW-8V	TEMP	Temperature	2/28/2023 12:01	20.59	C
GS-GSA-MW-8V	TURB	Turbidity	2/28/2023 12:01	1.51	NTU
GS-GSA-MW-8V	COND	Conductivity	2/28/2023 12:06	1609.24	uS/cm
GS-GSA-MW-8V	DO	DO	2/28/2023 12:06	0.24	mg/L
GS-GSA-MW-8V	DTW	Depth to Water Detail	2/28/2023 12:06	102.9	ft
GS-GSA-MW-8V	ORP	Oxidation Reduction Potential	2/28/2023 12:06	-265.96	mv

Field Parameters Summary
Plant Gorgas Gypsum Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GS-GSA-MW-8V	PH	pH	2/28/2023 12:06	7.5	SU
GS-GSA-MW-8V	TEMP	Temperature	2/28/2023 12:06	20.61	C
GS-GSA-MW-8V	TURB	Turbidity	2/28/2023 12:06	1.57	NTU
GS-GSA-MW-8V	COND	Conductivity	2/28/2023 12:11	1594.67	uS/cm
GS-GSA-MW-8V	DO	DO	2/28/2023 12:11	0.24	mg/L
GS-GSA-MW-8V	DTW	Depth to Water Detail	2/28/2023 12:11	104.5	ft
GS-GSA-MW-8V	ORP	Oxidation Reduction Potential	2/28/2023 12:11	-274.53	mv
GS-GSA-MW-8V	PH	pH	2/28/2023 12:11	7.51	SU
GS-GSA-MW-8V	TEMP	Temperature	2/28/2023 12:11	20.48	C
GS-GSA-MW-8V	TURB	Turbidity	2/28/2023 12:11	1.58	NTU
GS-GSA-MW-8V	COND	Conductivity	2/28/2023 12:16	1597.64	uS/cm
GS-GSA-MW-8V	DO	DO	2/28/2023 12:16	0.29	mg/L
GS-GSA-MW-8V	DTW	Depth to Water Detail	2/28/2023 12:16	104.35	ft
GS-GSA-MW-8V	ORP	Oxidation Reduction Potential	2/28/2023 12:16	-280.91	mv
GS-GSA-MW-8V	PH	pH	2/28/2023 12:16	7.5	SU
GS-GSA-MW-8V	TEMP	Temperature	2/28/2023 12:16	21.54	C
GS-GSA-MW-8V	TURB	Turbidity	2/28/2023 12:16	1.78	NTU
GS-GSA-MW-8V	COND	Conductivity	2/28/2023 12:21	1597.07	uS/cm
GS-GSA-MW-8V	DO	DO	2/28/2023 12:21	0.27	mg/L
GS-GSA-MW-8V	DTW	Depth to Water Detail	2/28/2023 12:21	104.23	ft
GS-GSA-MW-8V	ORP	Oxidation Reduction Potential	2/28/2023 12:21	-284.45	mv
GS-GSA-MW-8V	PH	pH	2/28/2023 12:21	7.49	SU
GS-GSA-MW-8V	TEMP	Temperature	2/28/2023 12:21	21.71	C
GS-GSA-MW-8V	TURB	Turbidity	2/28/2023 12:21	1.68	NTU
GS-GSA-MW-8V	COND	Conductivity	2/28/2023 12:26	1611.65	uS/cm
GS-GSA-MW-8V	DO	DO	2/28/2023 12:26	0.3	mg/L
GS-GSA-MW-8V	DTW	Depth to Water Detail	2/28/2023 12:26	104	ft
GS-GSA-MW-8V	ORP	Oxidation Reduction Potential	2/28/2023 12:26	-285.19	mv
GS-GSA-MW-8V	PH	pH	2/28/2023 12:26	7.5	SU
GS-GSA-MW-8V	SULFIDE	Sulfide	2/28/2023 12:26	10	mg/L
GS-GSA-MW-8V	TEMP	Temperature	2/28/2023 12:26	21.78	C
GS-GSA-MW-8V	TURB	Turbidity	2/28/2023 12:26	1.5	NTU
GS-GSA-MW-4	COND	Conductivity	3/1/2023 9:42	3252.62	uS/cm
GS-GSA-MW-4	DO	DO	3/1/2023 9:42	0.22	mg/L
GS-GSA-MW-4	DTW	Depth to Water Detail	3/1/2023 9:42	89.02	ft
GS-GSA-MW-4	ORP	Oxidation Reduction Potential	3/1/2023 9:42	332.35	mv
GS-GSA-MW-4	PH	pH	3/1/2023 9:42	3.49	SU
GS-GSA-MW-4	TEMP	Temperature	3/1/2023 9:42	20.7	C
GS-GSA-MW-4	TURB	Turbidity	3/1/2023 9:42	10.68	NTU
GS-GSA-MW-4	COND	Conductivity	3/1/2023 9:47	3260.12	uS/cm
GS-GSA-MW-4	DO	DO	3/1/2023 9:47	0.18	mg/L
GS-GSA-MW-4	DTW	Depth to Water Detail	3/1/2023 9:47	89.02	ft
GS-GSA-MW-4	ORP	Oxidation Reduction Potential	3/1/2023 9:47	326.68	mv
GS-GSA-MW-4	PH	pH	3/1/2023 9:47	3.49	SU
GS-GSA-MW-4	TEMP	Temperature	3/1/2023 9:47	20.65	C
GS-GSA-MW-4	TURB	Turbidity	3/1/2023 9:47	4.43	NTU
GS-GSA-MW-4	COND	Conductivity	3/1/2023 9:52	3266.13	uS/cm
GS-GSA-MW-4	DO	DO	3/1/2023 9:52	0.15	mg/L

Field Parameters Summary
Plant Gorgas Gypsum Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GS-GSA-MW-4	DTW	Depth to Water Detail	3/1/2023 9:52	89.02	ft
GS-GSA-MW-4	ORP	Oxidation Reduction Potential	3/1/2023 9:52	322.97	mv
GS-GSA-MW-4	PH	pH	3/1/2023 9:52	3.5	SU
GS-GSA-MW-4	TEMP	Temperature	3/1/2023 9:52	20.65	C
GS-GSA-MW-4	TURB	Turbidity	3/1/2023 9:52	3.4	NTU
GS-GSA-MW-4	COND	Conductivity	3/1/2023 9:57	3267.69	uS/cm
GS-GSA-MW-4	DO	DO	3/1/2023 9:57	0.14	mg/L
GS-GSA-MW-4	DTW	Depth to Water Detail	3/1/2023 9:57	89.02	ft
GS-GSA-MW-4	ORP	Oxidation Reduction Potential	3/1/2023 9:57	320.93	mv
GS-GSA-MW-4	PH	pH	3/1/2023 9:57	3.5	SU
GS-GSA-MW-4	SULFIDE	Sulfide	3/1/2023 9:57	0	mg/L
GS-GSA-MW-4	TEMP	Temperature	3/1/2023 9:57	20.62	C
GS-GSA-MW-4	TURB	Turbidity	3/1/2023 9:57	3.09	NTU
GS-GSA-MW-14H	COND	Conductivity	2/28/2023 13:37	1275.49	uS/cm
GS-GSA-MW-14H	DO	DO	2/28/2023 13:37	0.87	mg/L
GS-GSA-MW-14H	DTW	Depth to Water Detail	2/28/2023 13:37	18.72	ft
GS-GSA-MW-14H	ORP	Oxidation Reduction Potential	2/28/2023 13:37	207.86	mv
GS-GSA-MW-14H	PH	pH	2/28/2023 13:37	5.17	SU
GS-GSA-MW-14H	TEMP	Temperature	2/28/2023 13:37	21.25	C
GS-GSA-MW-14H	TURB	Turbidity	2/28/2023 13:37	999	NTU
GS-GSA-MW-14H	COND	Conductivity	2/28/2023 13:42	1281.72	uS/cm
GS-GSA-MW-14H	DO	DO	2/28/2023 13:42	0.82	mg/L
GS-GSA-MW-14H	DTW	Depth to Water Detail	2/28/2023 13:42	18.76	ft
GS-GSA-MW-14H	ORP	Oxidation Reduction Potential	2/28/2023 13:42	160.76	mv
GS-GSA-MW-14H	PH	pH	2/28/2023 13:42	5.15	SU
GS-GSA-MW-14H	TEMP	Temperature	2/28/2023 13:42	19.84	C
GS-GSA-MW-14H	TURB	Turbidity	2/28/2023 13:42	999	NTU
GS-GSA-MW-14H	COND	Conductivity	2/28/2023 13:47	1330.5	uS/cm
GS-GSA-MW-14H	DO	DO	2/28/2023 13:47	0.5	mg/L
GS-GSA-MW-14H	DTW	Depth to Water Detail	2/28/2023 13:47	18.76	ft
GS-GSA-MW-14H	ORP	Oxidation Reduction Potential	2/28/2023 13:47	206.65	mv
GS-GSA-MW-14H	PH	pH	2/28/2023 13:47	4.74	SU
GS-GSA-MW-14H	TEMP	Temperature	2/28/2023 13:47	19.8	C
GS-GSA-MW-14H	TURB	Turbidity	2/28/2023 13:47	52.3	NTU
GS-GSA-MW-14H	COND	Conductivity	2/28/2023 13:52	1355.03	uS/cm
GS-GSA-MW-14H	DO	DO	2/28/2023 13:52	0.39	mg/L
GS-GSA-MW-14H	DTW	Depth to Water Detail	2/28/2023 13:52	18.76	ft
GS-GSA-MW-14H	ORP	Oxidation Reduction Potential	2/28/2023 13:52	239.44	mv
GS-GSA-MW-14H	PH	pH	2/28/2023 13:52	4.6	SU
GS-GSA-MW-14H	TEMP	Temperature	2/28/2023 13:52	19.85	C
GS-GSA-MW-14H	TURB	Turbidity	2/28/2023 13:52	20.6	NTU
GS-GSA-MW-14H	COND	Conductivity	2/28/2023 13:57	1372.75	uS/cm
GS-GSA-MW-14H	DO	DO	2/28/2023 13:57	0.33	mg/L
GS-GSA-MW-14H	DTW	Depth to Water Detail	2/28/2023 13:57	18.76	ft
GS-GSA-MW-14H	ORP	Oxidation Reduction Potential	2/28/2023 13:57	264.5	mv
GS-GSA-MW-14H	PH	pH	2/28/2023 13:57	4.52	SU
GS-GSA-MW-14H	TEMP	Temperature	2/28/2023 13:57	19.85	C
GS-GSA-MW-14H	TURB	Turbidity	2/28/2023 13:57	16.1	NTU

Field Parameters Summary
Plant Gorgas Gypsum Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GS-GSA-MW-14H	COND	Conductivity	2/28/2023 14:02	1382.34	uS/cm
GS-GSA-MW-14H	DO	DO	2/28/2023 14:02	0.29	mg/L
GS-GSA-MW-14H	DTW	Depth to Water Detail	2/28/2023 14:02	18.76	ft
GS-GSA-MW-14H	ORP	Oxidation Reduction Potential	2/28/2023 14:02	278.87	mv
GS-GSA-MW-14H	PH	pH	2/28/2023 14:02	4.48	SU
GS-GSA-MW-14H	TEMP	Temperature	2/28/2023 14:02	19.85	C
GS-GSA-MW-14H	TURB	Turbidity	2/28/2023 14:02	15.7	NTU
GS-GSA-MW-14H	COND	Conductivity	2/28/2023 14:07	1392.2	uS/cm
GS-GSA-MW-14H	DO	DO	2/28/2023 14:07	0.27	mg/L
GS-GSA-MW-14H	DTW	Depth to Water Detail	2/28/2023 14:07	18.76	ft
GS-GSA-MW-14H	ORP	Oxidation Reduction Potential	2/28/2023 14:07	287.18	mv
GS-GSA-MW-14H	PH	pH	2/28/2023 14:07	4.45	SU
GS-GSA-MW-14H	TEMP	Temperature	2/28/2023 14:07	19.78	C
GS-GSA-MW-14H	TURB	Turbidity	2/28/2023 14:07	12.3	NTU
GS-GSA-MW-14H	COND	Conductivity	2/28/2023 14:12	1398.08	uS/cm
GS-GSA-MW-14H	DO	DO	2/28/2023 14:12	0.25	mg/L
GS-GSA-MW-14H	DTW	Depth to Water Detail	2/28/2023 14:12	18.76	ft
GS-GSA-MW-14H	ORP	Oxidation Reduction Potential	2/28/2023 14:12	294.29	mv
GS-GSA-MW-14H	PH	pH	2/28/2023 14:12	4.42	SU
GS-GSA-MW-14H	TEMP	Temperature	2/28/2023 14:12	19.71	C
GS-GSA-MW-14H	TURB	Turbidity	2/28/2023 14:12	8.29	NTU
GS-GSA-MW-14H	COND	Conductivity	2/28/2023 14:17	1404.5	uS/cm
GS-GSA-MW-14H	DO	DO	2/28/2023 14:17	0.23	mg/L
GS-GSA-MW-14H	DTW	Depth to Water Detail	2/28/2023 14:17	18.76	ft
GS-GSA-MW-14H	ORP	Oxidation Reduction Potential	2/28/2023 14:17	298.99	mv
GS-GSA-MW-14H	PH	pH	2/28/2023 14:17	4.39	SU
GS-GSA-MW-14H	SULFIDE	Sulfide	2/28/2023 14:17	0	mg/L
GS-GSA-MW-14H	TEMP	Temperature	2/28/2023 14:17	19.8	C
GS-GSA-MW-14H	TURB	Turbidity	2/28/2023 14:17	6.96	NTU
GS-GSA-PZ-17	COND	Conductivity	2/27/2023 10:49	1213.48	uS/cm
GS-GSA-PZ-17	DO	DO	2/27/2023 10:49	2.82	mg/L
GS-GSA-PZ-17	DTW	Depth to Water Detail	2/27/2023 10:49	46.2	ft
GS-GSA-PZ-17	ORP	Oxidation Reduction Potential	2/27/2023 10:49	71.01	mv
GS-GSA-PZ-17	PH	pH	2/27/2023 10:49	4.63	SU
GS-GSA-PZ-17	TEMP	Temperature	2/27/2023 10:49	20	C
GS-GSA-PZ-17	TURB	Turbidity	2/27/2023 10:49	7.88	NTU
GS-GSA-PZ-17	COND	Conductivity	2/27/2023 10:54	1012.91	uS/cm
GS-GSA-PZ-17	DO	DO	2/27/2023 10:54	2.43	mg/L
GS-GSA-PZ-17	DTW	Depth to Water Detail	2/27/2023 10:54	46.28	ft
GS-GSA-PZ-17	ORP	Oxidation Reduction Potential	2/27/2023 10:54	94.2	mv
GS-GSA-PZ-17	PH	pH	2/27/2023 10:54	4.53	SU
GS-GSA-PZ-17	TEMP	Temperature	2/27/2023 10:54	19.9	C
GS-GSA-PZ-17	TURB	Turbidity	2/27/2023 10:54	6.09	NTU
GS-GSA-PZ-17	COND	Conductivity	2/27/2023 10:59	917.54	uS/cm
GS-GSA-PZ-17	DO	DO	2/27/2023 10:59	1.6	mg/L
GS-GSA-PZ-17	DTW	Depth to Water Detail	2/27/2023 10:59	46.34	ft
GS-GSA-PZ-17	ORP	Oxidation Reduction Potential	2/27/2023 10:59	123.58	mv
GS-GSA-PZ-17	PH	pH	2/27/2023 10:59	4.45	SU

Field Parameters Summary
Plant Gorgas Gypsum Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GS-GSA-PZ-17	TEMP	Temperature	2/27/2023 10:59	19.63	C
GS-GSA-PZ-17	TURB	Turbidity	2/27/2023 10:59	3.48	NTU
GS-GSA-PZ-17	COND	Conductivity	2/27/2023 11:04	881.54	uS/cm
GS-GSA-PZ-17	DO	DO	2/27/2023 11:04	1.85	mg/L
GS-GSA-PZ-17	DTW	Depth to Water Detail	2/27/2023 11:04	46.41	ft
GS-GSA-PZ-17	ORP	Oxidation Reduction Potential	2/27/2023 11:04	151.34	mv
GS-GSA-PZ-17	PH	pH	2/27/2023 11:04	4.42	SU
GS-GSA-PZ-17	TEMP	Temperature	2/27/2023 11:04	19.78	C
GS-GSA-PZ-17	TURB	Turbidity	2/27/2023 11:04	3.24	NTU
GS-GSA-PZ-17	COND	Conductivity	2/27/2023 11:09	826.64	uS/cm
GS-GSA-PZ-17	DO	DO	2/27/2023 11:09	1.9	mg/L
GS-GSA-PZ-17	DTW	Depth to Water Detail	2/27/2023 11:09	46.41	ft
GS-GSA-PZ-17	ORP	Oxidation Reduction Potential	2/27/2023 11:09	165.38	mv
GS-GSA-PZ-17	PH	pH	2/27/2023 11:09	4.42	SU
GS-GSA-PZ-17	TEMP	Temperature	2/27/2023 11:09	19.77	C
GS-GSA-PZ-17	TURB	Turbidity	2/27/2023 11:09	3.02	NTU
GS-GSA-PZ-17	COND	Conductivity	2/27/2023 11:14	792.6	uS/cm
GS-GSA-PZ-17	DO	DO	2/27/2023 11:14	1.87	mg/L
GS-GSA-PZ-17	DTW	Depth to Water Detail	2/27/2023 11:14	46.41	ft
GS-GSA-PZ-17	ORP	Oxidation Reduction Potential	2/27/2023 11:14	171.21	mv
GS-GSA-PZ-17	PH	pH	2/27/2023 11:14	4.38	SU
GS-GSA-PZ-17	TEMP	Temperature	2/27/2023 11:14	19.66	C
GS-GSA-PZ-17	TURB	Turbidity	2/27/2023 11:14	2.91	NTU
GS-GSA-PZ-17	COND	Conductivity	2/27/2023 11:19	794.5	uS/cm
GS-GSA-PZ-17	DO	DO	2/27/2023 11:19	1.73	mg/L
GS-GSA-PZ-17	DTW	Depth to Water Detail	2/27/2023 11:19	46.41	ft
GS-GSA-PZ-17	ORP	Oxidation Reduction Potential	2/27/2023 11:19	174.06	mv
GS-GSA-PZ-17	PH	pH	2/27/2023 11:19	4.34	SU
GS-GSA-PZ-17	SULFIDE	Sulfide	2/27/2023 11:19	0	mg/L
GS-GSA-PZ-17	TEMP	Temperature	2/27/2023 11:19	19.65	C
GS-GSA-PZ-17	TURB	Turbidity	2/27/2023 11:19	2.92	NTU
GS-GSA-PZ-18	COND	Conductivity	2/27/2023 12:13	1067.41	uS/cm
GS-GSA-PZ-18	DO	DO	2/27/2023 12:13	0.76	mg/L
GS-GSA-PZ-18	DTW	Depth to Water Detail	2/27/2023 12:13	60.19	ft
GS-GSA-PZ-18	ORP	Oxidation Reduction Potential	2/27/2023 12:13	228.81	mv
GS-GSA-PZ-18	PH	pH	2/27/2023 12:13	3.91	SU
GS-GSA-PZ-18	TEMP	Temperature	2/27/2023 12:13	20.2	C
GS-GSA-PZ-18	TURB	Turbidity	2/27/2023 12:13	0.78	NTU
GS-GSA-PZ-18	COND	Conductivity	2/27/2023 12:18	1067.25	uS/cm
GS-GSA-PZ-18	DO	DO	2/27/2023 12:18	0.51	mg/L
GS-GSA-PZ-18	DTW	Depth to Water Detail	2/27/2023 12:18	60.31	ft
GS-GSA-PZ-18	ORP	Oxidation Reduction Potential	2/27/2023 12:18	218.62	mv
GS-GSA-PZ-18	PH	pH	2/27/2023 12:18	3.93	SU
GS-GSA-PZ-18	TEMP	Temperature	2/27/2023 12:18	20.27	C
GS-GSA-PZ-18	TURB	Turbidity	2/27/2023 12:18	0.58	NTU
GS-GSA-PZ-18	COND	Conductivity	2/27/2023 12:23	1066.2	uS/cm
GS-GSA-PZ-18	DO	DO	2/27/2023 12:23	0.41	mg/L
GS-GSA-PZ-18	DTW	Depth to Water Detail	2/27/2023 12:23	60.31	ft

Field Parameters Summary
Plant Gorgas Gypsum Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GS-GSA-PZ-18	ORP	Oxidation Reduction Potential	2/27/2023 12:23	211.81	mv
GS-GSA-PZ-18	PH	pH	2/27/2023 12:23	3.94	SU
GS-GSA-PZ-18	TEMP	Temperature	2/27/2023 12:23	20.19	C
GS-GSA-PZ-18	TURB	Turbidity	2/27/2023 12:23	0.46	NTU
GS-GSA-PZ-18	COND	Conductivity	2/27/2023 12:28	1066.18	uS/cm
GS-GSA-PZ-18	DO	DO	2/27/2023 12:28	0.37	mg/L
GS-GSA-PZ-18	DTW	Depth to Water Detail	2/27/2023 12:28	60.31	ft
GS-GSA-PZ-18	ORP	Oxidation Reduction Potential	2/27/2023 12:28	208.78	mv
GS-GSA-PZ-18	PH	pH	2/27/2023 12:28	3.94	SU
GS-GSA-PZ-18	SULFIDE	Sulfide	2/27/2023 12:28	0	mg/L
GS-GSA-PZ-18	TEMP	Temperature	2/27/2023 12:28	19.96	C
GS-GSA-PZ-18	TURB	Turbidity	2/27/2023 12:28	0.44	NTU
GS-GSA-PZ-19	COND	Conductivity	2/28/2023 8:31	1757.63	uS/cm
GS-GSA-PZ-19	DO	DO	2/28/2023 8:31	0.09	mg/L
GS-GSA-PZ-19	DTW	Depth to Water Detail	2/28/2023 8:31	122.16	ft
GS-GSA-PZ-19	ORP	Oxidation Reduction Potential	2/28/2023 8:31	14.28	mv
GS-GSA-PZ-19	PH	pH	2/28/2023 8:31	6.66	SU
GS-GSA-PZ-19	TEMP	Temperature	2/28/2023 8:31	17.75	C
GS-GSA-PZ-19	TURB	Turbidity	2/28/2023 8:31	6.78	NTU
GS-GSA-PZ-19	COND	Conductivity	2/28/2023 8:36	1596.62	uS/cm
GS-GSA-PZ-19	DO	DO	2/28/2023 8:36	0.1	mg/L
GS-GSA-PZ-19	DTW	Depth to Water Detail	2/28/2023 8:36	122.96	ft
GS-GSA-PZ-19	ORP	Oxidation Reduction Potential	2/28/2023 8:36	-7.57	mv
GS-GSA-PZ-19	PH	pH	2/28/2023 8:36	6.63	SU
GS-GSA-PZ-19	TEMP	Temperature	2/28/2023 8:36	17.75	C
GS-GSA-PZ-19	TURB	Turbidity	2/28/2023 8:36	5.24	NTU
GS-GSA-PZ-19	COND	Conductivity	2/28/2023 8:41	1465.34	uS/cm
GS-GSA-PZ-19	DO	DO	2/28/2023 8:41	0.1	mg/L
GS-GSA-PZ-19	DTW	Depth to Water Detail	2/28/2023 8:41	123.89	ft
GS-GSA-PZ-19	ORP	Oxidation Reduction Potential	2/28/2023 8:41	-23.03	mv
GS-GSA-PZ-19	PH	pH	2/28/2023 8:41	6.6	SU
GS-GSA-PZ-19	TEMP	Temperature	2/28/2023 8:41	17.81	C
GS-GSA-PZ-19	TURB	Turbidity	2/28/2023 8:41	3.6	NTU
GS-GSA-PZ-19	COND	Conductivity	2/28/2023 8:46	1401.24	uS/cm
GS-GSA-PZ-19	DO	DO	2/28/2023 8:46	0.11	mg/L
GS-GSA-PZ-19	DTW	Depth to Water Detail	2/28/2023 8:46	124.59	ft
GS-GSA-PZ-19	ORP	Oxidation Reduction Potential	2/28/2023 8:46	-30.74	mv
GS-GSA-PZ-19	PH	pH	2/28/2023 8:46	6.59	SU
GS-GSA-PZ-19	TEMP	Temperature	2/28/2023 8:46	17.83	C
GS-GSA-PZ-19	TURB	Turbidity	2/28/2023 8:46	4.48	NTU
GS-GSA-PZ-19	COND	Conductivity	2/28/2023 8:51	1326.38	uS/cm
GS-GSA-PZ-19	DO	DO	2/28/2023 8:51	0.11	mg/L
GS-GSA-PZ-19	DTW	Depth to Water Detail	2/28/2023 8:51	125.11	ft
GS-GSA-PZ-19	ORP	Oxidation Reduction Potential	2/28/2023 8:51	-36.18	mv
GS-GSA-PZ-19	PH	pH	2/28/2023 8:51	6.58	SU
GS-GSA-PZ-19	TEMP	Temperature	2/28/2023 8:51	17.85	C
GS-GSA-PZ-19	TURB	Turbidity	2/28/2023 8:51	3.83	NTU
GS-GSA-PZ-19	COND	Conductivity	2/28/2023 8:56	1289.48	uS/cm

Field Parameters Summary
Plant Gorgas Gypsum Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GS-GSA-PZ-19	DO	DO	2/28/2023 8:56	0.12	mg/L
GS-GSA-PZ-19	DTW	Depth to Water Detail	2/28/2023 8:56	125.38	ft
GS-GSA-PZ-19	ORP	Oxidation Reduction Potential	2/28/2023 8:56	-37.97	mv
GS-GSA-PZ-19	PH	pH	2/28/2023 8:56	6.57	SU
GS-GSA-PZ-19	TEMP	Temperature	2/28/2023 8:56	17.87	C
GS-GSA-PZ-19	TURB	Turbidity	2/28/2023 8:56	3.28	NTU
GS-GSA-PZ-19	COND	Conductivity	2/28/2023 9:01	1245.25	uS/cm
GS-GSA-PZ-19	DO	DO	2/28/2023 9:01	0.12	mg/L
GS-GSA-PZ-19	DTW	Depth to Water Detail	2/28/2023 9:01	125.6	ft
GS-GSA-PZ-19	ORP	Oxidation Reduction Potential	2/28/2023 9:01	-40.22	mv
GS-GSA-PZ-19	PH	pH	2/28/2023 9:01	6.57	SU
GS-GSA-PZ-19	TEMP	Temperature	2/28/2023 9:01	17.9	C
GS-GSA-PZ-19	TURB	Turbidity	2/28/2023 9:01	3.32	NTU
GS-GSA-PZ-19	COND	Conductivity	2/28/2023 9:06	1230.65	uS/cm
GS-GSA-PZ-19	DO	DO	2/28/2023 9:06	0.12	mg/L
GS-GSA-PZ-19	DTW	Depth to Water Detail	2/28/2023 9:06	125.9	ft
GS-GSA-PZ-19	ORP	Oxidation Reduction Potential	2/28/2023 9:06	-41.49	mv
GS-GSA-PZ-19	PH	pH	2/28/2023 9:06	6.57	SU
GS-GSA-PZ-19	TEMP	Temperature	2/28/2023 9:06	17.95	C
GS-GSA-PZ-19	TURB	Turbidity	2/28/2023 9:06	2.96	NTU
GS-GSA-PZ-19	COND	Conductivity	2/28/2023 9:11	1243.96	uS/cm
GS-GSA-PZ-19	DO	DO	2/28/2023 9:11	0.11	mg/L
GS-GSA-PZ-19	DTW	Depth to Water Detail	2/28/2023 9:11	126.11	ft
GS-GSA-PZ-19	ORP	Oxidation Reduction Potential	2/28/2023 9:11	-41.46	mv
GS-GSA-PZ-19	PH	pH	2/28/2023 9:11	6.57	SU
GS-GSA-PZ-19	TEMP	Temperature	2/28/2023 9:11	17.95	C
GS-GSA-PZ-19	TURB	Turbidity	2/28/2023 9:11	3.03	NTU
GS-GSA-PZ-19	COND	Conductivity	2/28/2023 9:16	1225.26	uS/cm
GS-GSA-PZ-19	DO	DO	2/28/2023 9:16	0.11	mg/L
GS-GSA-PZ-19	DTW	Depth to Water Detail	2/28/2023 9:16	126.24	ft
GS-GSA-PZ-19	ORP	Oxidation Reduction Potential	2/28/2023 9:16	-41.32	mv
GS-GSA-PZ-19	PH	pH	2/28/2023 9:16	6.55	SU
GS-GSA-PZ-19	TEMP	Temperature	2/28/2023 9:16	18	C
GS-GSA-PZ-19	TURB	Turbidity	2/28/2023 9:16	3.12	NTU
GS-GSA-PZ-19	COND	Conductivity	2/28/2023 9:21	1218.89	uS/cm
GS-GSA-PZ-19	DO	DO	2/28/2023 9:21	0.12	mg/L
GS-GSA-PZ-19	DTW	Depth to Water Detail	2/28/2023 9:21	126.39	ft
GS-GSA-PZ-19	ORP	Oxidation Reduction Potential	2/28/2023 9:21	-41.07	mv
GS-GSA-PZ-19	PH	pH	2/28/2023 9:21	6.55	SU
GS-GSA-PZ-19	SULFIDE	Sulfide	2/28/2023 9:21	0	mg/L
GS-GSA-PZ-19	TEMP	Temperature	2/28/2023 9:21	18.01	C
GS-GSA-PZ-19	TURB	Turbidity	2/28/2023 9:21	3.18	NTU
GS-GSA-PZ-20	COND	Conductivity	2/28/2023 12:36	1266.15	uS/cm
GS-GSA-PZ-20	DO	DO	2/28/2023 12:36	0.31	mg/L
GS-GSA-PZ-20	DTW	Depth to Water Detail	2/28/2023 12:36	116.58	ft
GS-GSA-PZ-20	ORP	Oxidation Reduction Potential	2/28/2023 12:36	18.99	mv
GS-GSA-PZ-20	PH	pH	2/28/2023 12:36	6.23	SU
GS-GSA-PZ-20	TEMP	Temperature	2/28/2023 12:36	19.09	C

Field Parameters Summary
Plant Gorgas Gypsum Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GS-GSA-PZ-20	TURB	Turbidity	2/28/2023 12:36	35.4	NTU
GS-GSA-PZ-20	COND	Conductivity	2/28/2023 12:41	1263.94	uS/cm
GS-GSA-PZ-20	DO	DO	2/28/2023 12:41	0.27	mg/L
GS-GSA-PZ-20	DTW	Depth to Water Detail	2/28/2023 12:41	116.64	ft
GS-GSA-PZ-20	ORP	Oxidation Reduction Potential	2/28/2023 12:41	12.23	mv
GS-GSA-PZ-20	PH	pH	2/28/2023 12:41	6.26	SU
GS-GSA-PZ-20	TEMP	Temperature	2/28/2023 12:41	19.29	C
GS-GSA-PZ-20	TURB	Turbidity	2/28/2023 12:41	11.2	NTU
GS-GSA-PZ-20	COND	Conductivity	2/28/2023 12:46	1250.69	uS/cm
GS-GSA-PZ-20	DO	DO	2/28/2023 12:46	0.24	mg/L
GS-GSA-PZ-20	DTW	Depth to Water Detail	2/28/2023 12:46	116.64	ft
GS-GSA-PZ-20	ORP	Oxidation Reduction Potential	2/28/2023 12:46	7.83	mv
GS-GSA-PZ-20	PH	pH	2/28/2023 12:46	6.3	SU
GS-GSA-PZ-20	TEMP	Temperature	2/28/2023 12:46	19.39	C
GS-GSA-PZ-20	TURB	Turbidity	2/28/2023 12:46	4.41	NTU
GS-GSA-PZ-20	COND	Conductivity	2/28/2023 12:51	1240.71	uS/cm
GS-GSA-PZ-20	DO	DO	2/28/2023 12:51	0.22	mg/L
GS-GSA-PZ-20	DTW	Depth to Water Detail	2/28/2023 12:51	116.64	ft
GS-GSA-PZ-20	ORP	Oxidation Reduction Potential	2/28/2023 12:51	5.4	mv
GS-GSA-PZ-20	PH	pH	2/28/2023 12:51	6.31	SU
GS-GSA-PZ-20	SULFIDE	Sulfide	2/28/2023 12:51	0	mg/L
GS-GSA-PZ-20	TEMP	Temperature	2/28/2023 12:51	19.24	C
GS-GSA-PZ-20	TURB	Turbidity	2/28/2023 12:51	3.95	NTU
GS-GSA-PZ-21	COND	Conductivity	2/28/2023 11:13	826.39	uS/cm
GS-GSA-PZ-21	DO	DO	2/28/2023 11:13	0.12	mg/L
GS-GSA-PZ-21	DTW	Depth to Water Detail	2/28/2023 11:13	87.96	ft
GS-GSA-PZ-21	ORP	Oxidation Reduction Potential	2/28/2023 11:13	-36.65	mv
GS-GSA-PZ-21	PH	pH	2/28/2023 11:13	6.74	SU
GS-GSA-PZ-21	TEMP	Temperature	2/28/2023 11:13	18.48	C
GS-GSA-PZ-21	TURB	Turbidity	2/28/2023 11:13	51.1	NTU
GS-GSA-PZ-21	COND	Conductivity	2/28/2023 11:18	827.88	uS/cm
GS-GSA-PZ-21	DO	DO	2/28/2023 11:18	0.17	mg/L
GS-GSA-PZ-21	DTW	Depth to Water Detail	2/28/2023 11:18	87.79	ft
GS-GSA-PZ-21	ORP	Oxidation Reduction Potential	2/28/2023 11:18	-46.5	mv
GS-GSA-PZ-21	PH	pH	2/28/2023 11:18	6.79	SU
GS-GSA-PZ-21	TEMP	Temperature	2/28/2023 11:18	19.21	C
GS-GSA-PZ-21	TURB	Turbidity	2/28/2023 11:18	28.7	NTU
GS-GSA-PZ-21	COND	Conductivity	2/28/2023 11:23	825.41	uS/cm
GS-GSA-PZ-21	DO	DO	2/28/2023 11:23	0.16	mg/L
GS-GSA-PZ-21	DTW	Depth to Water Detail	2/28/2023 11:23	88	ft
GS-GSA-PZ-21	ORP	Oxidation Reduction Potential	2/28/2023 11:23	-54.88	mv
GS-GSA-PZ-21	PH	pH	2/28/2023 11:23	6.83	SU
GS-GSA-PZ-21	TEMP	Temperature	2/28/2023 11:23	19.37	C
GS-GSA-PZ-21	TURB	Turbidity	2/28/2023 11:23	23.8	NTU
GS-GSA-PZ-21	COND	Conductivity	2/28/2023 11:28	824.78	uS/cm
GS-GSA-PZ-21	DO	DO	2/28/2023 11:28	0.16	mg/L
GS-GSA-PZ-21	DTW	Depth to Water Detail	2/28/2023 11:28	88.21	ft
GS-GSA-PZ-21	ORP	Oxidation Reduction Potential	2/28/2023 11:28	-57.28	mv

Field Parameters Summary
Plant Gorgas Gypsum Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GS-GSA-PZ-21	PH	pH	2/28/2023 11:28	6.85	SU
GS-GSA-PZ-21	TEMP	Temperature	2/28/2023 11:28	19.09	C
GS-GSA-PZ-21	TURB	Turbidity	2/28/2023 11:28	14.1	NTU
GS-GSA-PZ-21	COND	Conductivity	2/28/2023 11:33	822.46	uS/cm
GS-GSA-PZ-21	DO	DO	2/28/2023 11:33	0.19	mg/L
GS-GSA-PZ-21	DTW	Depth to Water Detail	2/28/2023 11:33	88.12	ft
GS-GSA-PZ-21	ORP	Oxidation Reduction Potential	2/28/2023 11:33	-58.6	mv
GS-GSA-PZ-21	PH	pH	2/28/2023 11:33	6.85	SU
GS-GSA-PZ-21	TEMP	Temperature	2/28/2023 11:33	19.5	C
GS-GSA-PZ-21	TURB	Turbidity	2/28/2023 11:33	9.82	NTU
GS-GSA-PZ-21	COND	Conductivity	2/28/2023 11:38	815.21	uS/cm
GS-GSA-PZ-21	DO	DO	2/28/2023 11:38	0.18	mg/L
GS-GSA-PZ-21	DTW	Depth to Water Detail	2/28/2023 11:38	88.21	ft
GS-GSA-PZ-21	ORP	Oxidation Reduction Potential	2/28/2023 11:38	-59.73	mv
GS-GSA-PZ-21	PH	pH	2/28/2023 11:38	6.84	SU
GS-GSA-PZ-21	TEMP	Temperature	2/28/2023 11:38	19.43	C
GS-GSA-PZ-21	TURB	Turbidity	2/28/2023 11:38	8.44	NTU
GS-GSA-PZ-21	COND	Conductivity	2/28/2023 11:43	815.43	uS/cm
GS-GSA-PZ-21	DO	DO	2/28/2023 11:43	0.17	mg/L
GS-GSA-PZ-21	DTW	Depth to Water Detail	2/28/2023 11:43	88.3	ft
GS-GSA-PZ-21	ORP	Oxidation Reduction Potential	2/28/2023 11:43	-58.83	mv
GS-GSA-PZ-21	PH	pH	2/28/2023 11:43	6.84	SU
GS-GSA-PZ-21	SULFIDE	Sulfide	2/28/2023 11:43	0	mg/L
GS-GSA-PZ-21	TEMP	Temperature	2/28/2023 11:43	19.41	C
GS-GSA-PZ-21	TURB	Turbidity	2/28/2023 11:43	6.94	NTU
GS-GSA-PZ-22	COND	Conductivity	2/28/2023 10:06	917.32	uS/cm
GS-GSA-PZ-22	DO	DO	2/28/2023 10:06	0.12	mg/L
GS-GSA-PZ-22	DTW	Depth to Water Detail	2/28/2023 10:06	51.62	ft
GS-GSA-PZ-22	ORP	Oxidation Reduction Potential	2/28/2023 10:06	-62.5	mv
GS-GSA-PZ-22	PH	pH	2/28/2023 10:06	6.23	SU
GS-GSA-PZ-22	TEMP	Temperature	2/28/2023 10:06	18.49	C
GS-GSA-PZ-22	TURB	Turbidity	2/28/2023 10:06	1.1	NTU
GS-GSA-PZ-22	COND	Conductivity	2/28/2023 10:11	905.57	uS/cm
GS-GSA-PZ-22	DO	DO	2/28/2023 10:11	0.09	mg/L
GS-GSA-PZ-22	DTW	Depth to Water Detail	2/28/2023 10:11	51.8	ft
GS-GSA-PZ-22	ORP	Oxidation Reduction Potential	2/28/2023 10:11	-47.97	mv
GS-GSA-PZ-22	PH	pH	2/28/2023 10:11	6.12	SU
GS-GSA-PZ-22	TEMP	Temperature	2/28/2023 10:11	18.34	C
GS-GSA-PZ-22	TURB	Turbidity	2/28/2023 10:11	0.96	NTU
GS-GSA-PZ-22	COND	Conductivity	2/28/2023 10:16	908.23	uS/cm
GS-GSA-PZ-22	DO	DO	2/28/2023 10:16	0.08	mg/L
GS-GSA-PZ-22	DTW	Depth to Water Detail	2/28/2023 10:16	51.88	ft
GS-GSA-PZ-22	ORP	Oxidation Reduction Potential	2/28/2023 10:16	-48.4	mv
GS-GSA-PZ-22	PH	pH	2/28/2023 10:16	6.13	SU
GS-GSA-PZ-22	TEMP	Temperature	2/28/2023 10:16	18.33	C
GS-GSA-PZ-22	TURB	Turbidity	2/28/2023 10:16	1.14	NTU
GS-GSA-PZ-22	COND	Conductivity	2/28/2023 10:21	907.73	uS/cm
GS-GSA-PZ-22	DO	DO	2/28/2023 10:21	0.08	mg/L

Field Parameters Summary
Plant Gorgas Gypsum Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GS-GSA-PZ-22	DTW	Depth to Water Detail	2/28/2023 10:21	51.88	ft
GS-GSA-PZ-22	ORP	Oxidation Reduction Potential	2/28/2023 10:21	-50.29	mv
GS-GSA-PZ-22	PH	pH	2/28/2023 10:21	6.14	SU
GS-GSA-PZ-22	SULFIDE	Sulfide	2/28/2023 10:21	0	mg/L
GS-GSA-PZ-22	TEMP	Temperature	2/28/2023 10:21	18.33	C
GS-GSA-PZ-22	TURB	Turbidity	2/28/2023 10:21	1.12	NTU
GS-GSA-MW-3	COND	Conductivity	2/27/2023 13:33	4889.3	uS/cm
GS-GSA-MW-3	DO	DO	2/27/2023 13:33	0.26	mg/L
GS-GSA-MW-3	DTW	Depth to Water Detail	2/27/2023 13:33	100.68	ft
GS-GSA-MW-3	ORP	Oxidation Reduction Potential	2/27/2023 13:33	30.37	mv
GS-GSA-MW-3	PH	pH	2/27/2023 13:33	5.75	SU
GS-GSA-MW-3	TEMP	Temperature	2/27/2023 13:33	21.34	C
GS-GSA-MW-3	TURB	Turbidity	2/27/2023 13:33	8.52	NTU
GS-GSA-MW-3	COND	Conductivity	2/27/2023 13:38	4884.78	uS/cm
GS-GSA-MW-3	DO	DO	2/27/2023 13:38	0.23	mg/L
GS-GSA-MW-3	DTW	Depth to Water Detail	2/27/2023 13:38	100.79	ft
GS-GSA-MW-3	ORP	Oxidation Reduction Potential	2/27/2023 13:38	25.83	mv
GS-GSA-MW-3	PH	pH	2/27/2023 13:38	5.77	SU
GS-GSA-MW-3	TEMP	Temperature	2/27/2023 13:38	21.07	C
GS-GSA-MW-3	TURB	Turbidity	2/27/2023 13:38	6.23	NTU
GS-GSA-MW-3	COND	Conductivity	2/27/2023 13:43	4871.23	uS/cm
GS-GSA-MW-3	DO	DO	2/27/2023 13:43	0.23	mg/L
GS-GSA-MW-3	DTW	Depth to Water Detail	2/27/2023 13:43	100.79	ft
GS-GSA-MW-3	ORP	Oxidation Reduction Potential	2/27/2023 13:43	22.59	mv
GS-GSA-MW-3	PH	pH	2/27/2023 13:43	5.79	SU
GS-GSA-MW-3	TEMP	Temperature	2/27/2023 13:43	21	C
GS-GSA-MW-3	TURB	Turbidity	2/27/2023 13:43	6	NTU
GS-GSA-MW-3	COND	Conductivity	2/27/2023 13:48	4862.26	uS/cm
GS-GSA-MW-3	DO	DO	2/27/2023 13:48	0.23	mg/L
GS-GSA-MW-3	DTW	Depth to Water Detail	2/27/2023 13:48	100.79	ft
GS-GSA-MW-3	ORP	Oxidation Reduction Potential	2/27/2023 13:48	20.14	mv
GS-GSA-MW-3	PH	pH	2/27/2023 13:48	5.8	SU
GS-GSA-MW-3	TEMP	Temperature	2/27/2023 13:48	21.06	C
GS-GSA-MW-3	TURB	Turbidity	2/27/2023 13:48	6.08	NTU
GS-GSA-MW-3	COND	Conductivity	2/27/2023 13:53	4884.77	uS/cm
GS-GSA-MW-3	DO	DO	2/27/2023 13:53	0.22	mg/L
GS-GSA-MW-3	DTW	Depth to Water Detail	2/27/2023 13:53	100.79	ft
GS-GSA-MW-3	ORP	Oxidation Reduction Potential	2/27/2023 13:53	17.97	mv
GS-GSA-MW-3	PH	pH	2/27/2023 13:53	5.81	SU
GS-GSA-MW-3	TEMP	Temperature	2/27/2023 13:53	21.06	C
GS-GSA-MW-3	TURB	Turbidity	2/27/2023 13:53	5.53	NTU
GS-GSA-MW-3	COND	Conductivity	2/27/2023 13:58	4869.04	uS/cm
GS-GSA-MW-3	DO	DO	2/27/2023 13:58	0.22	mg/L
GS-GSA-MW-3	DTW	Depth to Water Detail	2/27/2023 13:58	100.79	ft
GS-GSA-MW-3	ORP	Oxidation Reduction Potential	2/27/2023 13:58	15.53	mv
GS-GSA-MW-3	PH	pH	2/27/2023 13:58	5.83	SU
GS-GSA-MW-3	SULFIDE	Sulfide	2/27/2023 13:58	0	mg/L
GS-GSA-MW-3	TEMP	Temperature	2/27/2023 13:58	21.11	C

Field Parameters Summary
Plant Gorgas Gypsum Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GS-GSA-MW-3	TURB	Turbidity	2/27/2023 13:58	5.67	NTU
GS-GSA-MW-3V	COND	Conductivity	2/27/2023 11:36	3932.14	uS/cm
GS-GSA-MW-3V	DO	DO	2/27/2023 11:36	2.53	mg/L
GS-GSA-MW-3V	DTW	Depth to Water Detail	2/27/2023 11:36	119.63	ft
GS-GSA-MW-3V	ORP	Oxidation Reduction Potential	2/27/2023 11:36	-114	mv
GS-GSA-MW-3V	PH	pH	2/27/2023 11:36	6.26	SU
GS-GSA-MW-3V	TEMP	Temperature	2/27/2023 11:36	21.19	C
GS-GSA-MW-3V	TURB	Turbidity	2/27/2023 11:36	4.98	NTU
GS-GSA-MW-3V	COND	Conductivity	2/27/2023 11:41	3980.81	uS/cm
GS-GSA-MW-3V	DO	DO	2/27/2023 11:41	1.62	mg/L
GS-GSA-MW-3V	DTW	Depth to Water Detail	2/27/2023 11:41	119.89	ft
GS-GSA-MW-3V	ORP	Oxidation Reduction Potential	2/27/2023 11:41	-61.07	mv
GS-GSA-MW-3V	PH	pH	2/27/2023 11:41	6.05	SU
GS-GSA-MW-3V	TEMP	Temperature	2/27/2023 11:41	21.09	C
GS-GSA-MW-3V	TURB	Turbidity	2/27/2023 11:41	3.75	NTU
GS-GSA-MW-3V	COND	Conductivity	2/27/2023 11:46	3951.7	uS/cm
GS-GSA-MW-3V	DO	DO	2/27/2023 11:46	1.47	mg/L
GS-GSA-MW-3V	DTW	Depth to Water Detail	2/27/2023 11:46	119.97	ft
GS-GSA-MW-3V	ORP	Oxidation Reduction Potential	2/27/2023 11:46	-32.9	mv
GS-GSA-MW-3V	PH	pH	2/27/2023 11:46	5.99	SU
GS-GSA-MW-3V	TEMP	Temperature	2/27/2023 11:46	21.13	C
GS-GSA-MW-3V	TURB	Turbidity	2/27/2023 11:46	3.74	NTU
GS-GSA-MW-3V	COND	Conductivity	2/27/2023 11:51	3924.29	uS/cm
GS-GSA-MW-3V	DO	DO	2/27/2023 11:51	1.47	mg/L
GS-GSA-MW-3V	DTW	Depth to Water Detail	2/27/2023 11:51	120.12	ft
GS-GSA-MW-3V	ORP	Oxidation Reduction Potential	2/27/2023 11:51	-17.42	mv
GS-GSA-MW-3V	PH	pH	2/27/2023 11:51	5.97	SU
GS-GSA-MW-3V	SULFIDE	Sulfide	2/27/2023 11:51	0	mg/L
GS-GSA-MW-3V	TEMP	Temperature	2/27/2023 11:51	21.17	C
GS-GSA-MW-3V	TURB	Turbidity	2/27/2023 11:51	1.5	NTU
GS-GSA-MW-9V	COND	Conductivity	2/28/2023 10:12	2675.83	uS/cm
GS-GSA-MW-9V	DO	DO	2/28/2023 10:12	0.87	mg/L
GS-GSA-MW-9V	DTW	Depth to Water Detail	2/28/2023 10:12	66.62	ft
GS-GSA-MW-9V	ORP	Oxidation Reduction Potential	2/28/2023 10:12	-89.15	mv
GS-GSA-MW-9V	PH	pH	2/28/2023 10:12	6.88	SU
GS-GSA-MW-9V	TEMP	Temperature	2/28/2023 10:12	22	C
GS-GSA-MW-9V	TURB	Turbidity	2/28/2023 10:12	1	NTU
GS-GSA-MW-9V	COND	Conductivity	2/28/2023 10:17	3386.56	uS/cm
GS-GSA-MW-9V	DO	DO	2/28/2023 10:17	0.86	mg/L
GS-GSA-MW-9V	DTW	Depth to Water Detail	2/28/2023 10:17	66.81	ft
GS-GSA-MW-9V	ORP	Oxidation Reduction Potential	2/28/2023 10:17	-87.14	mv
GS-GSA-MW-9V	PH	pH	2/28/2023 10:17	6.88	SU
GS-GSA-MW-9V	TEMP	Temperature	2/28/2023 10:17	21.75	C
GS-GSA-MW-9V	TURB	Turbidity	2/28/2023 10:17	0.91	NTU
GS-GSA-MW-9V	COND	Conductivity	2/28/2023 10:22	3374.97	uS/cm
GS-GSA-MW-9V	DO	DO	2/28/2023 10:22	0.82	mg/L
GS-GSA-MW-9V	DTW	Depth to Water Detail	2/28/2023 10:22	67.11	ft
GS-GSA-MW-9V	ORP	Oxidation Reduction Potential	2/28/2023 10:22	-87.23	mv

Field Parameters Summary
Plant Gorgas Gypsum Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GS-GSA-MW-9V	PH	pH	2/28/2023 10:22	6.89	SU
GS-GSA-MW-9V	TEMP	Temperature	2/28/2023 10:22	21.69	C
GS-GSA-MW-9V	TURB	Turbidity	2/28/2023 10:22	0.85	NTU
GS-GSA-MW-9V	COND	Conductivity	2/28/2023 10:27	3362.15	uS/cm
GS-GSA-MW-9V	DO	DO	2/28/2023 10:27	0.8	mg/L
GS-GSA-MW-9V	DTW	Depth to Water Detail	2/28/2023 10:27	67.29	ft
GS-GSA-MW-9V	ORP	Oxidation Reduction Potential	2/28/2023 10:27	-86.94	mv
GS-GSA-MW-9V	PH	pH	2/28/2023 10:27	6.89	SU
GS-GSA-MW-9V	TEMP	Temperature	2/28/2023 10:27	21.63	C
GS-GSA-MW-9V	TURB	Turbidity	2/28/2023 10:27	0.81	NTU
GS-GSA-MW-9V	COND	Conductivity	2/28/2023 10:32	3343.84	uS/cm
GS-GSA-MW-9V	DO	DO	2/28/2023 10:32	0.79	mg/L
GS-GSA-MW-9V	DTW	Depth to Water Detail	2/28/2023 10:32	67.71	ft
GS-GSA-MW-9V	ORP	Oxidation Reduction Potential	2/28/2023 10:32	-86.66	mv
GS-GSA-MW-9V	PH	pH	2/28/2023 10:32	6.89	SU
GS-GSA-MW-9V	TEMP	Temperature	2/28/2023 10:32	21.74	C
GS-GSA-MW-9V	TURB	Turbidity	2/28/2023 10:32	0.84	NTU
GS-GSA-MW-9V	COND	Conductivity	2/28/2023 10:37	3315.57	uS/cm
GS-GSA-MW-9V	DO	DO	2/28/2023 10:37	0.78	mg/L
GS-GSA-MW-9V	DTW	Depth to Water Detail	2/28/2023 10:37	67.86	ft
GS-GSA-MW-9V	ORP	Oxidation Reduction Potential	2/28/2023 10:37	-86.32	mv
GS-GSA-MW-9V	PH	pH	2/28/2023 10:37	6.89	SU
GS-GSA-MW-9V	TEMP	Temperature	2/28/2023 10:37	21.59	C
GS-GSA-MW-9V	TURB	Turbidity	2/28/2023 10:37	0.65	NTU
GS-GSA-MW-9V	COND	Conductivity	2/28/2023 10:42	3315.99	uS/cm
GS-GSA-MW-9V	DO	DO	2/28/2023 10:42	0.78	mg/L
GS-GSA-MW-9V	DTW	Depth to Water Detail	2/28/2023 10:42	67.98	ft
GS-GSA-MW-9V	ORP	Oxidation Reduction Potential	2/28/2023 10:42	-85.98	mv
GS-GSA-MW-9V	PH	pH	2/28/2023 10:42	6.89	SU
GS-GSA-MW-9V	SULFIDE	Sulfide	2/28/2023 10:42	0	mg/L
GS-GSA-MW-9V	TEMP	Temperature	2/28/2023 10:42	21.73	C
GS-GSA-MW-9V	TURB	Turbidity	2/28/2023 10:42	0.75	NTU
GS-GSA-MW-9H	COND	Conductivity	2/28/2023 11:46	2822.34	uS/cm
GS-GSA-MW-9H	DO	DO	2/28/2023 11:46	0.59	mg/L
GS-GSA-MW-9H	DTW	Depth to Water Detail	2/28/2023 11:46	44.49	ft
GS-GSA-MW-9H	ORP	Oxidation Reduction Potential	2/28/2023 11:46	149.19	mv
GS-GSA-MW-9H	PH	pH	2/28/2023 11:46	5.26	SU
GS-GSA-MW-9H	TEMP	Temperature	2/28/2023 11:46	22.11	C
GS-GSA-MW-9H	TURB	Turbidity	2/28/2023 11:46	19.8	NTU
GS-GSA-MW-9H	COND	Conductivity	2/28/2023 11:51	2810.75	uS/cm
GS-GSA-MW-9H	DO	DO	2/28/2023 11:51	0.47	mg/L
GS-GSA-MW-9H	DTW	Depth to Water Detail	2/28/2023 11:51	44.74	ft
GS-GSA-MW-9H	ORP	Oxidation Reduction Potential	2/28/2023 11:51	143.99	mv
GS-GSA-MW-9H	PH	pH	2/28/2023 11:51	5.28	SU
GS-GSA-MW-9H	TEMP	Temperature	2/28/2023 11:51	21.94	C
GS-GSA-MW-9H	TURB	Turbidity	2/28/2023 11:51	10.92	NTU
GS-GSA-MW-9H	COND	Conductivity	2/28/2023 11:56	2808.68	uS/cm
GS-GSA-MW-9H	DO	DO	2/28/2023 11:56	0.41	mg/L

Field Parameters Summary
Plant Gorgas Gypsum Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GS-GSA-MW-9H	DTW	Depth to Water Detail	2/28/2023 11:56	45.03	ft
GS-GSA-MW-9H	ORP	Oxidation Reduction Potential	2/28/2023 11:56	137.3	mv
GS-GSA-MW-9H	PH	pH	2/28/2023 11:56	5.31	SU
GS-GSA-MW-9H	TEMP	Temperature	2/28/2023 11:56	21.92	C
GS-GSA-MW-9H	TURB	Turbidity	2/28/2023 11:56	7.17	NTU
GS-GSA-MW-9H	COND	Conductivity	2/28/2023 12:01	2805.23	uS/cm
GS-GSA-MW-9H	DO	DO	2/28/2023 12:01	0.38	mg/L
GS-GSA-MW-9H	DTW	Depth to Water Detail	2/28/2023 12:01	45.23	ft
GS-GSA-MW-9H	ORP	Oxidation Reduction Potential	2/28/2023 12:01	131.89	mv
GS-GSA-MW-9H	PH	pH	2/28/2023 12:01	5.33	SU
GS-GSA-MW-9H	TEMP	Temperature	2/28/2023 12:01	21.78	C
GS-GSA-MW-9H	TURB	Turbidity	2/28/2023 12:01	5.28	NTU
GS-GSA-MW-9H	COND	Conductivity	2/28/2023 12:06	2803.21	uS/cm
GS-GSA-MW-9H	DO	DO	2/28/2023 12:06	0.37	mg/L
GS-GSA-MW-9H	DTW	Depth to Water Detail	2/28/2023 12:06	45.38	ft
GS-GSA-MW-9H	ORP	Oxidation Reduction Potential	2/28/2023 12:06	131.26	mv
GS-GSA-MW-9H	PH	pH	2/28/2023 12:06	5.34	SU
GS-GSA-MW-9H	TEMP	Temperature	2/28/2023 12:06	22.15	C
GS-GSA-MW-9H	TURB	Turbidity	2/28/2023 12:06	3.93	NTU
GS-GSA-MW-9H	COND	Conductivity	2/28/2023 12:11	2793.53	uS/cm
GS-GSA-MW-9H	DO	DO	2/28/2023 12:11	0.35	mg/L
GS-GSA-MW-9H	DTW	Depth to Water Detail	2/28/2023 12:11	45.5	ft
GS-GSA-MW-9H	ORP	Oxidation Reduction Potential	2/28/2023 12:11	130.08	mv
GS-GSA-MW-9H	PH	pH	2/28/2023 12:11	5.35	SU
GS-GSA-MW-9H	SULFIDE	Sulfide	2/28/2023 12:11	0	mg/L
GS-GSA-MW-9H	TEMP	Temperature	2/28/2023 12:11	22.34	C
GS-GSA-MW-9H	TURB	Turbidity	2/28/2023 12:11	3.42	NTU
GS-GSA-MW-13H	SULFIDE	Sulfide	2/28/2023 13:15	0	mg/L
GS-GSA-MW-13H	COND	Conductivity	2/28/2023 13:30	1557.49	uS/cm
GS-GSA-MW-13H	DO	DO	2/28/2023 13:30	0.19	mg/L
GS-GSA-MW-13H	DTW	Depth to Water Detail	2/28/2023 13:30	9.12	ft
GS-GSA-MW-13H	ORP	Oxidation Reduction Potential	2/28/2023 13:30	-13.01	mv
GS-GSA-MW-13H	PH	pH	2/28/2023 13:30	5.89	SU
GS-GSA-MW-13H	TEMP	Temperature	2/28/2023 13:30	19.38	C
GS-GSA-MW-13H	TURB	Turbidity	2/28/2023 13:30	9.06	NTU
GS-GSA-MW-13H	COND	Conductivity	2/28/2023 13:35	1590.76	uS/cm
GS-GSA-MW-13H	DO	DO	2/28/2023 13:35	0.18	mg/L
GS-GSA-MW-13H	DTW	Depth to Water Detail	2/28/2023 13:35	9.12	ft
GS-GSA-MW-13H	ORP	Oxidation Reduction Potential	2/28/2023 13:35	-10	mv
GS-GSA-MW-13H	PH	pH	2/28/2023 13:35	5.85	SU
GS-GSA-MW-13H	TEMP	Temperature	2/28/2023 13:35	19.34	C
GS-GSA-MW-13H	TURB	Turbidity	2/28/2023 13:35	7.32	NTU
GS-GSA-MW-13H	COND	Conductivity	2/28/2023 13:40	1624.71	uS/cm
GS-GSA-MW-13H	DO	DO	2/28/2023 13:40	0.18	mg/L
GS-GSA-MW-13H	DTW	Depth to Water Detail	2/28/2023 13:40	9.12	ft
GS-GSA-MW-13H	ORP	Oxidation Reduction Potential	2/28/2023 13:40	-8.94	mv
GS-GSA-MW-13H	PH	pH	2/28/2023 13:40	5.83	SU
GS-GSA-MW-13H	TEMP	Temperature	2/28/2023 13:40	19.26	C

Field Parameters Summary
Plant Gorgas Gypsum Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GS-GSA-MW-13H	TURB	Turbidity	2/28/2023 13:40	7.79	NTU
GS-GSA-MW-13H	COND	Conductivity	2/28/2023 13:45	1652.23	uS/cm
GS-GSA-MW-13H	DO	DO	2/28/2023 13:45	0.18	mg/L
GS-GSA-MW-13H	DTW	Depth to Water Detail	2/28/2023 13:45	9.12	ft
GS-GSA-MW-13H	ORP	Oxidation Reduction Potential	2/28/2023 13:45	-8.09	mv
GS-GSA-MW-13H	PH	pH	2/28/2023 13:45	5.82	SU
GS-GSA-MW-13H	TEMP	Temperature	2/28/2023 13:45	19.26	C
GS-GSA-MW-13H	TURB	Turbidity	2/28/2023 13:45	5.78	NTU
GS-GSA-MW-13H	COND	Conductivity	2/28/2023 13:50	1673.52	uS/cm
GS-GSA-MW-13H	DO	DO	2/28/2023 13:50	0.18	mg/L
GS-GSA-MW-13H	DTW	Depth to Water Detail	2/28/2023 13:50	9.12	ft
GS-GSA-MW-13H	ORP	Oxidation Reduction Potential	2/28/2023 13:50	-7.81	mv
GS-GSA-MW-13H	PH	pH	2/28/2023 13:50	5.82	SU
GS-GSA-MW-13H	TEMP	Temperature	2/28/2023 13:50	19.33	C
GS-GSA-MW-13H	TURB	Turbidity	2/28/2023 13:50	5.72	NTU
GS-GSA-MW-13H	COND	Conductivity	2/28/2023 13:55	1693.25	uS/cm
GS-GSA-MW-13H	DO	DO	2/28/2023 13:55	0.18	mg/L
GS-GSA-MW-13H	DTW	Depth to Water Detail	2/28/2023 13:55	9.12	ft
GS-GSA-MW-13H	ORP	Oxidation Reduction Potential	2/28/2023 13:55	-7.74	mv
GS-GSA-MW-13H	PH	pH	2/28/2023 13:55	5.82	SU
GS-GSA-MW-13H	SULFIDE	Sulfide	2/28/2023 13:55	0	mg/L
GS-GSA-MW-13H	TEMP	Temperature	2/28/2023 13:55	19.32	C
GS-GSA-MW-13H	TURB	Turbidity	2/28/2023 13:55	4.47	NTU
GS-GSA-MW-11H	COND	Conductivity	2/28/2023 15:08	1522.12	uS/cm
GS-GSA-MW-11H	DO	DO	2/28/2023 15:08	0.28	mg/L
GS-GSA-MW-11H	DTW	Depth to Water Detail	2/28/2023 15:08	7.96	ft
GS-GSA-MW-11H	ORP	Oxidation Reduction Potential	2/28/2023 15:08	79.2	mv
GS-GSA-MW-11H	PH	pH	2/28/2023 15:08	5.98	SU
GS-GSA-MW-11H	TEMP	Temperature	2/28/2023 15:08	19.4	C
GS-GSA-MW-11H	TURB	Turbidity	2/28/2023 15:08	8.76	NTU
GS-GSA-MW-11H	COND	Conductivity	2/28/2023 15:13	1515.67	uS/cm
GS-GSA-MW-11H	DO	DO	2/28/2023 15:13	0.3	mg/L
GS-GSA-MW-11H	DTW	Depth to Water Detail	2/28/2023 15:13	8.19	ft
GS-GSA-MW-11H	ORP	Oxidation Reduction Potential	2/28/2023 15:13	86.74	mv
GS-GSA-MW-11H	PH	pH	2/28/2023 15:13	5.99	SU
GS-GSA-MW-11H	TEMP	Temperature	2/28/2023 15:13	19.37	C
GS-GSA-MW-11H	TURB	Turbidity	2/28/2023 15:13	8.02	NTU
GS-GSA-MW-11H	COND	Conductivity	2/28/2023 15:18	1515.53	uS/cm
GS-GSA-MW-11H	DO	DO	2/28/2023 15:18	0.34	mg/L
GS-GSA-MW-11H	DTW	Depth to Water Detail	2/28/2023 15:18	8.19	ft
GS-GSA-MW-11H	ORP	Oxidation Reduction Potential	2/28/2023 15:18	90.13	mv
GS-GSA-MW-11H	PH	pH	2/28/2023 15:18	5.99	SU
GS-GSA-MW-11H	TEMP	Temperature	2/28/2023 15:18	19.42	C
GS-GSA-MW-11H	TURB	Turbidity	2/28/2023 15:18	6.75	NTU
GS-GSA-MW-11H	COND	Conductivity	2/28/2023 15:23	1516.12	uS/cm
GS-GSA-MW-11H	DO	DO	2/28/2023 15:23	0.35	mg/L
GS-GSA-MW-11H	DTW	Depth to Water Detail	2/28/2023 15:23	8.19	ft
GS-GSA-MW-11H	ORP	Oxidation Reduction Potential	2/28/2023 15:23	89.18	mv

Field Parameters Summary
Plant Gorgas Gypsum Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GS-GSA-MW-11H	PH	pH	2/28/2023 15:23	5.99	SU
GS-GSA-MW-11H	TEMP	Temperature	2/28/2023 15:23	19.51	C
GS-GSA-MW-11H	TURB	Turbidity	2/28/2023 15:23	4.6	NTU
GS-GSA-MW-11H	COND	Conductivity	2/28/2023 15:28	1506.62	uS/cm
GS-GSA-MW-11H	DO	DO	2/28/2023 15:28	0.34	mg/L
GS-GSA-MW-11H	DTW	Depth to Water Detail	2/28/2023 15:28	8.19	ft
GS-GSA-MW-11H	ORP	Oxidation Reduction Potential	2/28/2023 15:28	85	mv
GS-GSA-MW-11H	PH	pH	2/28/2023 15:28	5.99	SU
GS-GSA-MW-11H	SULFIDE	Sulfide	2/28/2023 15:28	0	mg/L
GS-GSA-MW-11H	TEMP	Temperature	2/28/2023 15:28	19.48	C
GS-GSA-MW-11H	TURB	Turbidity	2/28/2023 15:28	4.78	NTU
GS-GSA-MW-12V	COND	Conductivity	3/1/2023 11:46	5234.17	uS/cm
GS-GSA-MW-12V	DO	DO	3/1/2023 11:46	0.25	mg/L
GS-GSA-MW-12V	DTW	Depth to Water Detail	3/1/2023 11:46	58.02	ft
GS-GSA-MW-12V	ORP	Oxidation Reduction Potential	3/1/2023 11:46	-88.66	mv
GS-GSA-MW-12V	PH	pH	3/1/2023 11:46	6.69	SU
GS-GSA-MW-12V	TEMP	Temperature	3/1/2023 11:46	19.78	C
GS-GSA-MW-12V	TURB	Turbidity	3/1/2023 11:46	1.23	NTU
GS-GSA-MW-12V	COND	Conductivity	3/1/2023 11:51	4646.43	uS/cm
GS-GSA-MW-12V	DO	DO	3/1/2023 11:51	0.22	mg/L
GS-GSA-MW-12V	DTW	Depth to Water Detail	3/1/2023 11:51	58.14	ft
GS-GSA-MW-12V	ORP	Oxidation Reduction Potential	3/1/2023 11:51	-76.12	mv
GS-GSA-MW-12V	PH	pH	3/1/2023 11:51	6.48	SU
GS-GSA-MW-12V	TEMP	Temperature	3/1/2023 11:51	19.65	C
GS-GSA-MW-12V	TURB	Turbidity	3/1/2023 11:51	1.72	NTU
GS-GSA-MW-12V	COND	Conductivity	3/1/2023 11:56	4294.56	uS/cm
GS-GSA-MW-12V	DO	DO	3/1/2023 11:56	0.22	mg/L
GS-GSA-MW-12V	DTW	Depth to Water Detail	3/1/2023 11:56	58.19	ft
GS-GSA-MW-12V	ORP	Oxidation Reduction Potential	3/1/2023 11:56	-65.42	mv
GS-GSA-MW-12V	PH	pH	3/1/2023 11:56	6.36	SU
GS-GSA-MW-12V	TEMP	Temperature	3/1/2023 11:56	19.62	C
GS-GSA-MW-12V	TURB	Turbidity	3/1/2023 11:56	1.28	NTU
GS-GSA-MW-12V	COND	Conductivity	3/1/2023 12:01	4218.18	uS/cm
GS-GSA-MW-12V	DO	DO	3/1/2023 12:01	0.21	mg/L
GS-GSA-MW-12V	DTW	Depth to Water Detail	3/1/2023 12:01	58.19	ft
GS-GSA-MW-12V	ORP	Oxidation Reduction Potential	3/1/2023 12:01	-60.45	mv
GS-GSA-MW-12V	PH	pH	3/1/2023 12:01	6.33	SU
GS-GSA-MW-12V	TEMP	Temperature	3/1/2023 12:01	19.62	C
GS-GSA-MW-12V	TURB	Turbidity	3/1/2023 12:01	1.24	NTU
GS-GSA-MW-12V	COND	Conductivity	3/1/2023 12:06	4114.67	uS/cm
GS-GSA-MW-12V	DO	DO	3/1/2023 12:06	0.21	mg/L
GS-GSA-MW-12V	DTW	Depth to Water Detail	3/1/2023 12:06	58.19	ft
GS-GSA-MW-12V	ORP	Oxidation Reduction Potential	3/1/2023 12:06	-55.81	mv
GS-GSA-MW-12V	PH	pH	3/1/2023 12:06	6.29	SU
GS-GSA-MW-12V	SULFIDE	Sulfide	3/1/2023 12:06	0	mg/L
GS-GSA-MW-12V	TEMP	Temperature	3/1/2023 12:06	19.58	C
GS-GSA-MW-12V	TURB	Turbidity	3/1/2023 12:06	0.4	NTU
GS-GSA-MW-4V	COND	Conductivity	3/1/2023 15:09	1559.35	uS/cm

Field Parameters Summary
Plant Gorgas Gypsum Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GS-GSA-MW-4V	DO	DO	3/1/2023 15:09	1.36	mg/L
GS-GSA-MW-4V	DTW	Depth to Water Detail	3/1/2023 15:09	109.62	ft
GS-GSA-MW-4V	ORP	Oxidation Reduction Potential	3/1/2023 15:09	53.11	mv
GS-GSA-MW-4V	PH	pH	3/1/2023 15:09	5.77	SU
GS-GSA-MW-4V	TEMP	Temperature	3/1/2023 15:09	22.98	C
GS-GSA-MW-4V	TURB	Turbidity	3/1/2023 15:09	10.66	NTU
GS-GSA-MW-4V	COND	Conductivity	3/1/2023 15:14	1565.79	uS/cm
GS-GSA-MW-4V	DO	DO	3/1/2023 15:14	1.23	mg/L
GS-GSA-MW-4V	DTW	Depth to Water Detail	3/1/2023 15:14	110.31	ft
GS-GSA-MW-4V	ORP	Oxidation Reduction Potential	3/1/2023 15:14	55.29	mv
GS-GSA-MW-4V	PH	pH	3/1/2023 15:14	5.77	SU
GS-GSA-MW-4V	TEMP	Temperature	3/1/2023 15:14	22.54	C
GS-GSA-MW-4V	TURB	Turbidity	3/1/2023 15:14	8.94	NTU
GS-GSA-MW-4V	COND	Conductivity	3/1/2023 15:19	1570.35	uS/cm
GS-GSA-MW-4V	DO	DO	3/1/2023 15:19	1.17	mg/L
GS-GSA-MW-4V	DTW	Depth to Water Detail	3/1/2023 15:19	110.31	ft
GS-GSA-MW-4V	ORP	Oxidation Reduction Potential	3/1/2023 15:19	54.98	mv
GS-GSA-MW-4V	PH	pH	3/1/2023 15:19	5.77	SU
GS-GSA-MW-4V	TEMP	Temperature	3/1/2023 15:19	22.52	C
GS-GSA-MW-4V	TURB	Turbidity	3/1/2023 15:19	8.32	NTU
GS-GSA-MW-4V	COND	Conductivity	3/1/2023 15:24	1574.46	uS/cm
GS-GSA-MW-4V	DO	DO	3/1/2023 15:24	1.13	mg/L
GS-GSA-MW-4V	DTW	Depth to Water Detail	3/1/2023 15:24	110.31	ft
GS-GSA-MW-4V	ORP	Oxidation Reduction Potential	3/1/2023 15:24	56.67	mv
GS-GSA-MW-4V	PH	pH	3/1/2023 15:24	5.77	SU
GS-GSA-MW-4V	SULFIDE	Sulfide	3/1/2023 15:24	0	mg/L
GS-GSA-MW-4V	TEMP	Temperature	3/1/2023 15:24	22.42	C
GS-GSA-MW-4V	TURB	Turbidity	3/1/2023 15:24	8.23	NTU
GS-GSA-MW-12H	COND	Conductivity	3/1/2023 10:00	1617.78	uS/cm
GS-GSA-MW-12H	DO	DO	3/1/2023 10:00	0.26	mg/L
GS-GSA-MW-12H	DTW	Depth to Water Detail	3/1/2023 10:00	58.09	ft
GS-GSA-MW-12H	ORP	Oxidation Reduction Potential	3/1/2023 10:00	266.02	mv
GS-GSA-MW-12H	PH	pH	3/1/2023 10:00	4.81	SU
GS-GSA-MW-12H	TEMP	Temperature	3/1/2023 10:00	19.73	C
GS-GSA-MW-12H	TURB	Turbidity	3/1/2023 10:00	38.5	NTU
GS-GSA-MW-12H	COND	Conductivity	3/1/2023 10:05	1594.98	uS/cm
GS-GSA-MW-12H	DO	DO	3/1/2023 10:05	0.25	mg/L
GS-GSA-MW-12H	DTW	Depth to Water Detail	3/1/2023 10:05	58.18	ft
GS-GSA-MW-12H	ORP	Oxidation Reduction Potential	3/1/2023 10:05	288.39	mv
GS-GSA-MW-12H	PH	pH	3/1/2023 10:05	4.75	SU
GS-GSA-MW-12H	TEMP	Temperature	3/1/2023 10:05	19.7	C
GS-GSA-MW-12H	TURB	Turbidity	3/1/2023 10:05	26.4	NTU
GS-GSA-MW-12H	COND	Conductivity	3/1/2023 10:10	1580.04	uS/cm
GS-GSA-MW-12H	DO	DO	3/1/2023 10:10	0.25	mg/L
GS-GSA-MW-12H	DTW	Depth to Water Detail	3/1/2023 10:10	58.21	ft
GS-GSA-MW-12H	ORP	Oxidation Reduction Potential	3/1/2023 10:10	300.5	mv
GS-GSA-MW-12H	PH	pH	3/1/2023 10:10	4.69	SU
GS-GSA-MW-12H	TEMP	Temperature	3/1/2023 10:10	19.65	C

Field Parameters Summary
Plant Gorgas Gypsum Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GS-GSA-MW-12H	TURB	Turbidity	3/1/2023 10:10	14.5	NTU
GS-GSA-MW-12H	COND	Conductivity	3/1/2023 10:15	1576.54	uS/cm
GS-GSA-MW-12H	DO	DO	3/1/2023 10:15	0.25	mg/L
GS-GSA-MW-12H	DTW	Depth to Water Detail	3/1/2023 10:15	58.21	ft
GS-GSA-MW-12H	ORP	Oxidation Reduction Potential	3/1/2023 10:15	307.33	mv
GS-GSA-MW-12H	PH	pH	3/1/2023 10:15	4.67	SU
GS-GSA-MW-12H	TEMP	Temperature	3/1/2023 10:15	19.63	C
GS-GSA-MW-12H	TURB	Turbidity	3/1/2023 10:15	11.2	NTU
GS-GSA-MW-12H	COND	Conductivity	3/1/2023 10:20	1565.72	uS/cm
GS-GSA-MW-12H	DO	DO	3/1/2023 10:20	0.25	mg/L
GS-GSA-MW-12H	DTW	Depth to Water Detail	3/1/2023 10:20	58.21	ft
GS-GSA-MW-12H	ORP	Oxidation Reduction Potential	3/1/2023 10:20	315.42	mv
GS-GSA-MW-12H	PH	pH	3/1/2023 10:20	4.63	SU
GS-GSA-MW-12H	TEMP	Temperature	3/1/2023 10:20	19.61	C
GS-GSA-MW-12H	TURB	Turbidity	3/1/2023 10:20	9.24	NTU
GS-GSA-MW-12H	COND	Conductivity	3/1/2023 10:25	1553.44	uS/cm
GS-GSA-MW-12H	DO	DO	3/1/2023 10:25	0.25	mg/L
GS-GSA-MW-12H	DTW	Depth to Water Detail	3/1/2023 10:25	58.21	ft
GS-GSA-MW-12H	ORP	Oxidation Reduction Potential	3/1/2023 10:25	320.19	mv
GS-GSA-MW-12H	PH	pH	3/1/2023 10:25	4.61	SU
GS-GSA-MW-12H	TEMP	Temperature	3/1/2023 10:25	19.58	C
GS-GSA-MW-12H	TURB	Turbidity	3/1/2023 10:25	11.47	NTU
GS-GSA-MW-12H	COND	Conductivity	3/1/2023 10:30	1546.98	uS/cm
GS-GSA-MW-12H	DO	DO	3/1/2023 10:30	0.25	mg/L
GS-GSA-MW-12H	DTW	Depth to Water Detail	3/1/2023 10:30	58.21	ft
GS-GSA-MW-12H	ORP	Oxidation Reduction Potential	3/1/2023 10:30	326.89	mv
GS-GSA-MW-12H	PH	pH	3/1/2023 10:30	4.56	SU
GS-GSA-MW-12H	TEMP	Temperature	3/1/2023 10:30	19.6	C
GS-GSA-MW-12H	TURB	Turbidity	3/1/2023 10:30	10.94	NTU
GS-GSA-MW-12H	COND	Conductivity	3/1/2023 10:35	1541.69	uS/cm
GS-GSA-MW-12H	DO	DO	3/1/2023 10:35	0.25	mg/L
GS-GSA-MW-12H	DTW	Depth to Water Detail	3/1/2023 10:35	58.21	ft
GS-GSA-MW-12H	ORP	Oxidation Reduction Potential	3/1/2023 10:35	330.14	mv
GS-GSA-MW-12H	PH	pH	3/1/2023 10:35	4.55	SU
GS-GSA-MW-12H	SULFIDE	Sulfide	3/1/2023 10:35	0	mg/L
GS-GSA-MW-12H	TEMP	Temperature	3/1/2023 10:35	19.64	C
GS-GSA-MW-12H	TURB	Turbidity	3/1/2023 10:35	7.2	NTU

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

Analytical Report

Alabama Power

Sample Group : WMWGORPU_1398

Project/Site : Gorgas Pooled Upgradient
Parrish, AL 35580

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

Attention : Dustin Brooks & Greg Dyer

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

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

March 23, 2023

Dear Dustin Brooks,

Enclosed are the analytical results for sample(s) received by the laboratory on February 23, 2023.
All results reported herein conform to the laboratory's most current Quality Assurance Manual. Results marked with an asterisk conform to the most current applicable TNI/NELAC requirements. Exceptions will be noted in the body of the report.

Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2023

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

Sincerely,

Quality Control: Brooke Caton

Digitally signed by Brooke Caton
Date: 2023.03.23 15:34:41 -05'00'

Supervision: T Durant Maske

Digitally signed by T Durant Maske
DN: cn=T Durant Maske gn=T Durant Maske c=US United States l=US United States e=tdmaske@southernco.com
Reason: I am the author of this document
Location:
Date: 2023-03-24 08:05-05:00

REPORT OF LABORATORY ANALYSIS

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

Case Narrative

Alabama Power

Total Metals ICP

Gorgas Pooled Upgradient

WMWGORPU_1398

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

Sample ID	Batch ID	Project ID
BD04051	748217	WMWGORPU_1398
BD04052	748217	WMWGORPU_1398
BD04053	748217	WMWGORPU_1398
BD04054	748217	WMWGORPU_1398
BD04055	748217	WMWGORPU_1398
BD04056	748217	WMWGORPU_1398
BD04057	748217	WMWGORPU_1398

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

General Quality Control Procedures:

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

Matrix Specific Quality Control Procedures:

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

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

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

Sample ID	Analyte	Dilution Factor
BD04051	Calcium, Magnesium	10.15
BD04052	Calcium, Magnesium	10.15
BD04053	Calcium, Magnesium	10.15
BD04054	Calcium, Magnesium, Sodium	101.5
BD04055	Calcium, Magnesium	101.5

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

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

Case Narrative

Alabama Power

Dissolved Metals ICP

Gorgas Pooled Upgradient

WMWGORPU_1398

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

Sample ID	Batch ID	Project ID
BD04051	748164	WMWGORPU_1398
BD04052	748164	WMWGORPU_1398
BD04053	748164	WMWGORPU_1398
BD04054	748164	WMWGORPU_1398
BD04055	748164	WMWGORPU_1398

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

General Quality Control Procedures:

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

Matrix Specific Quality Control Procedures:

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

- A matrix spike and matrix spike duplicate were analyzed with each ICP batch. All acceptance criteria for accuracy were met except for the following:
    - BD04055 Calcium & Magnesium MS/MSD spike levels were less than 30% of the sample concentrations.
- A matrix spike and matrix spike duplicate were analyzed with each ICP batch. All acceptance criteria for precision were met.

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

Sample ID	Analyte	Dilution Factor
BD04051	Calcium, Magnesium	10.15
BD04052	Calcium, Magnesium	10.15
BD04053	Calcium, Magnesium	10.15
BD04054	Calcium, Magnesium, Sodium	101.5
BD04055	Calcium, Magnesium	101.5

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

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

Case Narrative

Alabama Power

Total Metals ICPMS

Gorgas Pooled Upgradient

WMWGORPU_1398

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

Sample ID	Batch ID	Project ID
BD04051	748866	WMWGORPU_1398
BD04052	748866	WMWGORPU_1398
BD04053	748866	WMWGORPU_1398
BD04054	748866	WMWGORPU_1398
BD04055	748866	WMWGORPU_1398
BD04056	748866	WMWGORPU_1398
BD04057	748866	WMWGORPU_1398

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

General Quality Control Procedures:

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

qualifications applied to original analyses or dilution re-analyses are based upon QC data available at the time of review.

Matrix Specific Quality Control Procedures:

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

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

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

Sample ID	Analyte	Dilution Factor
BD04051	Manganese	10.15
BD04052	Manganese	10.15
BD04053	Manganese	5.075

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

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

Case Narrative

Alabama Power

Dissolved Metals ICPMS

Gorgas Pooled Upgradient

WMWGORPU_1398

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

Sample ID	Batch ID	Project ID
BD04051	748914	WMWGORPU_1398
BD04052	748914	WMWGORPU_1398
BD04053	748914	WMWGORPU_1398
BD04054	748914	WMWGORPU_1398
BD04055	748914	WMWGORPU_1398

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

General Quality Control Procedures:

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

Matrix Specific Quality Control Procedures:

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

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

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

Sample ID	Analyte	Dilution Factor
BD04051	Manganese	10.15
BD04052	Manganese	10.15
BD04053	Manganese	5.075

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

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

Case Narrative

Alabama Power

Mercury

Gorgas Pooled Upgradient

WMWGORPU_1398

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

Sample ID	Batch ID	Project ID
BD04051	748527	WMWGORPU_1398
BD04052	748527	WMWGORPU_1398
BD04053	748527	WMWGORPU_1398
BD04054	748527	WMWGORPU_1398
BD04055	748527	WMWGORPU_1398
BD04056	748527	WMWGORPU_1398
BD04057	748527	WMWGORPU_1398

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

General Quality Control Procedures:

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

Matrix Specific Quality Control Procedures:

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

Revision 5

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

7. All samples were analyzed without a dilution factor.

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

Case Narrative

Alabama Power

Total Dissolved Solids

Gorgas Pooled Upgradient

WMWGORPU_1398

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

Sample ID	Batch ID	Project ID
BD04051	748341	WMWGORPU_1398
BD04052	748341	WMWGORPU_1398
BD04053	748341	WMWGORPU_1398
BD04054	748341	WMWGORPU_1398
BD04055	748341	WMWGORPU_1398
BD04056	748341	WMWGORPU_1398
BD04057	748341	WMWGORPU_1398

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

General Quality Control Procedures:

- A Method Blank was analyzed with each batch. All criteria were met.
- All final weights of samples, standards, and blanks agreed within 0.5mg of the previous weight.
- A sample duplicate was analyzed with each batch, and RPD was ≤ 10%.
- A laboratory control sample was analyzed with each batch. All criteria were met.
- Samples were between 2.5mg and 200mg residue.
- All samples with residue <2.5mg had the maximum volume of 150mL filtered. Affected samples are as follows:
  - BD04056
  - BD04057

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

Case Narrative

Alkalinity

Gorgas Pooled Upgradient

WMWGORPU_1398

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

Sample ID	Batch ID	Project ID
BD04051	749113, 749114, 749115	WMWGORPU_1398
BD04052	749113, 749114, 749115	WMWGORPU_1398
BD04053	749113, 749114, 749115	WMWGORPU_1398
BD04054	749113, 749114, 749115	WMWGORPU_1398
BD04055	749113, 749114, 749115	WMWGORPU_1398

4. All of the above samples were prepared and analyzed by Standard Method 2320B.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

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

7. The following samples had pH>10 and/or TDS>500mg/L. Therefore, the calculations for carbonate and bicarbonate are estimates:
    - BD04051
    - BD04052
    - BD04053
    - BD04054
    - BD04055

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

Case Narrative

Alabama Power

Anions

Gorgas Pooled Upgradient

WMWGORPU_1398

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

Sample ID	Batch ID	Project ID
BD04051	748521, 748556, 748696	WMWGORPU_1398
BD04052	748521, 748556, 748696	WMWGORPU_1398
BD04053	748521, 748556, 748696	WMWGORPU_1398
BD04054	748521, 748556, 748696	WMWGORPU_1398
BD04055	748521, 748556, 748696	WMWGORPU_1398
BD04056	748521, 748556, 748696	WMWGORPU_1398
BD04057	748521, 748556, 748696	WMWGORPU_1398

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

General Quality Control Procedures:

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

Matrix Specific Quality Control Procedures:

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

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

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

Sample ID	Analyte	Dilution Factor
BD04051	Sulfate	50
BD04052	Sulfate	50
BD04053	Sulfate	40
BD04054	Sulfate	80
BD04055	Sulfate	80

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

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

Case Narrative

Alabama Power

Nitrate-Nitrite

Gorgas Pooled Upgradient

WMWGORPU_1398

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

Sample ID	Batch ID	Project ID
BD04051	748512	WMWGORPU_1398
BD04052	748512	WMWGORPU_1398
BD04053	748512	WMWGORPU_1398
BD04054	748512	WMWGORPU_1398
BD04055	748512	WMWGORPU_1398
BD04056	748512	WMWGORPU_1398
BD04057	748512	WMWGORPU_1398

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

General Quality Control Procedures:

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

EPA 353.2 Specific QC:

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

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

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

Case Narrative

Alabama Power

Total Organic Carbon

Gorgas Pooled Upgradient

WMWGORPU_1398

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

Sample ID	Batch ID	Project ID
BD04051	748201	WMWGORPU_1398
BD04052	748201	WMWGORPU_1398
BD04053	748201	WMWGORPU_1398
BD04054	748201	WMWGORPU_1398
BD04055	748201	WMWGORPU_1398
BD04056	748201	WMWGORPU_1398
BD04057	748201	WMWGORPU_1398

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

General Quality Control Procedures:

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

Matrix Specific Quality Control Procedures:

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

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

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Pooled Upgradient - MW-1

Location Code: WMWGORPU
Collected: 2/20/23 11:50
Customer ID:
Submittal Date: 2/23/23 10:58

Laboratory ID Number: BD04051

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	2/24/23 13:19	3/2/23 13:36		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	2/24/23 13:19	3/2/23 14:24		10.15	151	mg/L	0.70035	4.06	
* Iron, Total	2/24/23 13:19	3/2/23 13:36		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Total	2/24/23 13:19	3/2/23 13:36		1.015	0.0241	mg/L	0.007105	0.01999956	
* Magnesium, Total	2/24/23 13:19	3/2/23 14:24		10.15	277	mg/L	0.21315	4.06	
* Silica, Total (calc.)	2/24/23 13:19	3/2/23 13:36		1	24.6	mg/L			
* Silicon, Total	2/24/23 13:19	3/2/23 13:36		1.015	11.5	mg/L	0.02030	0.25375	
* Sodium, Total	2/24/23 13:19	3/2/23 13:36		1.015	32.1	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	2/23/23 13:00	2/24/23 13:32		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Dissolved	2/23/23 13:00	2/24/23 13:57		10.15	170	mg/L	0.70035	4.06	
* Iron, Dissolved	2/23/23 13:00	2/24/23 13:32		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Dissolved	2/23/23 13:00	2/24/23 13:32		1.015	0.0233	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	2/23/23 13:00	2/24/23 13:57		10.15	321	mg/L	0.21315	4.06	
* Silica, Dissolved (calc.)	2/23/23 13:00	2/24/23 13:32		1	24.8	mg/L			
* Silicon, Dissolved	2/23/23 13:00	2/24/23 13:32		1.015	11.6	mg/L	0.02030	0.25375	
* Sodium, Dissolved	2/23/23 13:00	2/24/23 13:32		1.015	32.0	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	2/24/23 13:19	2/27/23 15:43		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	2/24/23 13:19	2/27/23 15:43		1.015	0.123	mg/L	0.006090	0.05075	
* Arsenic, Total	2/24/23 13:19	2/27/23 15:43		1.015	0.000275	mg/L	0.000081	0.000203	
* Barium, Total	2/24/23 13:19	2/27/23 15:43		1.015	0.0102	mg/L	0.000508	0.001015	
* Beryllium, Total	2/24/23 13:19	2/27/23 15:43		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	2/24/23 13:19	2/27/23 15:43		1.015	0.00185	mg/L	0.000068	0.000203	
* Chromium, Total	2/24/23 13:19	2/27/23 15:43		1.015	0.000409	mg/L	0.000203	0.001015	J
* Cobalt, Total	2/24/23 13:19	2/27/23 15:43		1.015	0.0665	mg/L	0.000068	0.000203	
* Lead, Total	2/24/23 13:19	2/27/23 15:43		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	2/24/23 13:19	2/27/23 16:16		10.15	9.83	mg/L	0.001522	0.01015	
* Molybdenum, Total	2/24/23 13:19	2/27/23 15:43		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Total	2/24/23 13:19	2/27/23 15:43		1.015	7.28	mg/L	0.169505	0.5075	

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

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

Reported: 3/23/2023
Version: 3.5
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Pooled Upgradient - MW-1

Location Code: WMWGORPU
Collected: 2/20/23 11:50
Customer ID:
Submittal Date: 2/23/23 10:58

Laboratory ID Number: BD04051

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	2/24/23 13:19	2/27/23 15:43		1.015	0.00258	mg/L	0.000508	0.001015	
* Thallium, Total	2/24/23 13:19	2/27/23 15:43		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	2/23/23 13:00	2/23/23 13:27		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	2/23/23 13:00	2/23/23 13:27		1.015	0.112	mg/L	0.006090	0.05075	
* Arsenic, Dissolved	2/23/23 13:00	2/23/23 13:27		1.015	0.000298	mg/L	0.000081	0.000203	
* Barium, Dissolved	2/23/23 13:00	2/23/23 13:27		1.015	0.00873	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	2/23/23 13:00	2/28/23 14:22		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	2/23/23 13:00	2/23/23 13:27		1.015	0.00154	mg/L	0.000068	0.000203	
* Chromium, Dissolved	2/23/23 13:00	2/23/23 13:27		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	2/23/23 13:00	2/23/23 13:27		1.015	0.0587	mg/L	0.000068	0.000203	
* Lead, Dissolved	2/23/23 13:00	2/23/23 13:27		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	2/23/23 13:00	2/23/23 13:53		10.15	9.00	mg/L	0.001522	0.01015	
* Molybdenum, Dissolved	2/23/23 13:00	2/23/23 13:27		1.015	0.000159	mg/L	0.000102	0.000203	J
* Potassium, Dissolved	2/23/23 13:00	2/23/23 13:27		1.015	6.64	mg/L	0.169505	0.5075	
* Selenium, Dissolved	2/23/23 13:00	2/23/23 13:27		1.015	0.00228	mg/L	0.000508	0.001015	
* Thallium, Dissolved	2/23/23 13:00	2/23/23 13:27		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ELH***								
* Mercury, Total by CVAA	2/27/23 19:37	2/28/23 00:53		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	2/24/23 10:17	2/24/23 10:17		1	0.891	mg/L as N	0.20	0.3	
Analytical Method: SM 2320 B	***Analyst: ALH***								
* Alkalinity to pH 4.5	2/28/23 13:57	2/28/23 14:43		1	21.4	mg CaCO3/L			
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	2/24/23 10:25	2/27/23 13:48		1	2280	mg/L		125	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
* Bicarbonate Alkalinity, (calc.)	2/28/23 13:57	2/28/23 14:43		1	21.4	mg CaCO3/L		1	A
* Carbonate Alkalinity, (calc.)	2/28/23 13:57	2/28/23 14:43		1	Not Detected	mg CaCO3/L		0.5	A
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	2/24/23 03:02	2/24/23 03:02		1	4.53	mg/L	1.00	2	

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

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

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Pooled Upgradient - MW-1

Location Code: WMWGORPU
Collected: 2/20/23 11:50
Customer ID:
Submittal Date: 2/23/23 10:58

Laboratory ID Number: BD04051

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	2/24/23 13:43	2/24/23 13:43		1	2.05	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	2/27/23 12:10	2/27/23 12:10		1	0.221	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	3/1/23 12:05	3/1/23 12:05		50	1520	mg/L	30.0	100	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	2/20/23 11:47	2/20/23 11:47			2297.01	uS/cm			FA
pH	2/20/23 11:47	2/20/23 11:47			5.07	SU			FA
Temperature	2/20/23 11:47	2/20/23 11:47			19.59	C			FA
Turbidity	2/20/23 11:47	2/20/23 11:47			0.73	NTU			FA
Sulfide	2/20/23 11:47	2/20/23 11:47			0	mg/L			FA

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

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

Reported: 3/23/2023
Version: 3.5
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORPU
Sample Date: 2/20/23 11:50
Customer ID:
Delivery Date: 2/23/23 10:58

Description: Gorgas Pooled Upgradient - MW-1

Laboratory ID Number: BD04051

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04055	Aluminum, Dissolved	mg/L	-0.0000723	0.0198	0.100	0.0943	0.0950	0.0970	0.0850 to 0.115	94.3	70.0 to 130	0.740	20.0
BD04057	Aluminum, Total	mg/L	0.000456	0.0198	0.100	0.103	0.101	0.0998	0.0850 to 0.115	103	70.0 to 130	1.96	20.0
BD04055	Antimony, Dissolved	mg/L	0.000298	0.00100	0.100	0.0862	0.0870	0.0910	0.0850 to 0.115	86.2	70.0 to 130	0.924	20.0
BD04057	Antimony, Total	mg/L	0.000368	0.00100	0.100	0.101	0.0965	0.0925	0.0850 to 0.115	101	70.0 to 130	4.56	20.0
BD04055	Arsenic, Dissolved	mg/L	-0.0000209	0.000200	0.100	0.0978	0.0978	0.0959	0.0850 to 0.115	97.8	70.0 to 130	0.00	20.0
BD04057	Arsenic, Total	mg/L	0.0000075	0.000200	0.100	0.101	0.0982	0.101	0.0850 to 0.115	101	70.0 to 130	2.81	20.0
BD04055	Barium, Dissolved	mg/L	-0.0000189	0.00100	0.100	0.102	0.102	0.0928	0.0850 to 0.115	91.5	70.0 to 130	0.00	20.0
BD04057	Barium, Total	mg/L	-0.0000020	0.00100	0.100	0.106	0.106	0.102	0.0850 to 0.115	106	70.0 to 130	0.00	20.0
BD04055	Beryllium, Dissolved	mg/L	0.0000085	0.000880	0.100	0.103	0.101	0.104	0.0850 to 0.115	103	70.0 to 130	1.96	20.0
BD04057	Beryllium, Total	mg/L	0.0000162	0.000880	0.100	0.0918	0.0914	0.104	0.0850 to 0.115	91.8	70.0 to 130	0.437	20.0
BD04055	Boron, Dissolved	mg/L	-0.000712	0.0650	1.00	1.08	1.08	1.01	0.850 to 1.15	104	70.0 to 130	0.00	20.0
BD04057	Boron, Total	mg/L	-0.000338	0.0650	1.00	0.981	0.984	0.982	0.850 to 1.15	98.1	70.0 to 130	0.305	20.0
BD04055	Cadmium, Dissolved	mg/L	0.000	0.000147	0.100	0.0966	0.0980	0.0983	0.0850 to 0.115	96.6	70.0 to 130	1.44	20.0
BD04057	Cadmium, Total	mg/L	0.0000020	0.000147	0.100	0.0970	0.0992	0.0968	0.0850 to 0.115	97.0	70.0 to 130	2.24	20.0
BD04055	Calcium, Dissolved	mg/L	-0.0140	0.152	5.00	257	242	4.87	4.25 to 5.75	360	70.0 to 130	6.01	20.0
BD04057	Calcium, Total	mg/L	-0.00704	0.152	5.00	4.89	4.83	4.88	4.25 to 5.75	97.8	70.0 to 130	1.23	20.0
BD04057	Chloride	mg/L	0.0452	1.00	10.0	9.96	10.2	10.1	9.00 to 11.0	99.6	80.0 to 120	2.38	20.0
BD04055	Chromium, Dissolved	mg/L	-0.0000286	0.000440	0.100	0.0967	0.0978	0.0995	0.0850 to 0.115	96.7	70.0 to 130	1.13	20.0
BD04057	Chromium, Total	mg/L	0.0000793	0.000440	0.100	0.105	0.104	0.103	0.0850 to 0.115	105	70.0 to 130	0.957	20.0
BD04055	Cobalt, Dissolved	mg/L	0.0000026	0.000147	0.100	0.0971	0.0996	0.102	0.0850 to 0.115	97.1	70.0 to 130	2.54	20.0
BD04057	Cobalt, Total	mg/L	0.0000019	0.000147	0.100	0.109	0.108	0.107	0.0850 to 0.115	109	70.0 to 130	0.922	20.0
BD04057	Fluoride	mg/L	0.0455	0.125	2.50	2.61	2.61	2.63	2.25 to 2.75	104	80.0 to 120	0.00	20.0
BD04055	Iron, Dissolved	mg/L	0.00132	0.0176	0.2	0.196	0.194	0.203	0.170 to 0.230	98.0	70.0 to 130	1.03	20.0
BD04057	Iron, Total	mg/L	0.000770	0.0176	0.2	0.200	0.198	0.198	0.170 to 0.230	100	70.0 to 130	1.01	20.0

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

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORPU
Sample Date: 2/20/23 11:50
Customer ID:
Delivery Date: 2/23/23 10:58

Description: Gorgas Pooled Upgradient - MW-1

Laboratory ID Number: BD04051

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04055	Lead, Dissolved	mg/L	-0.0000002	0.000147	0.100	0.0983	0.0994	0.0997	0.0850 to 0.115	98.3	70.0 to 130	1.11	20.0
BD04057	Lead, Total	mg/L	0.0000057	0.000147	0.100	0.110	0.113	0.108	0.0850 to 0.115	110	70.0 to 130	2.69	20.0
BD04055	Lithium, Dissolved	mg/L	0.000829	0.0154	0.200	0.255	0.254	0.198	0.170 to 0.230	106	70.0 to 130	0.393	20.0
BD04057	Lithium, Total	mg/L	0.000801	0.0154	0.200	0.197	0.197	0.197	0.170 to 0.230	98.5	70.0 to 130	0.00	20.0
BD04055	Magnesium, Dissolved	mg/L	-0.00578	0.0462	5.00	421	393	4.98	4.25 to 5.75	480	70.0 to 130	6.88	20.0
BD04057	Magnesium, Total	mg/L	-0.0130	0.0462	5.00	4.91	4.87	4.92	4.25 to 5.75	98.2	70.0 to 130	0.818	20.0
BD04055	Manganese, Dissolved	mg/L	0.0000144	0.00033	0.100	0.0962	0.0973	0.0999	0.0850 to 0.115	95.8	70.0 to 130	1.14	20.0
BD04057	Manganese, Total	mg/L	-0.0000724	0.00033	0.100	0.104	0.102	0.103	0.0850 to 0.115	104	70.0 to 130	1.94	20.0
BD04057	Mercury, Total by CVAA	mg/L	1.000E-05	0.000500	0.004	0.00406	0.00402	0.00393	0.00340 to 0.00460	102	70.0 to 130	0.990	20.0
BD04055	Molybdenum, Dissolved	mg/L	0.0000339	0.0002	0.100	0.0983	0.101	0.102	0.0850 to 0.115	98.0	70.0 to 130	2.71	20.0
BD04057	Molybdenum, Total	mg/L	0.0000262	0.0002	0.100	0.106	0.105	0.103	0.0850 to 0.115	106	70.0 to 130	0.948	20.0
BD04055	Potassium, Dissolved	mg/L	-0.00416	0.367	10.0	16.5	16.5	9.76	8.50 to 11.5	92.2	70.0 to 130	0.00	20.0
BD04057	Potassium, Total	mg/L	0.0397	0.367	10.0	10.2	10.1	10.0	8.50 to 11.5	102	70.0 to 130	0.985	20.0
BD04055	Selenium, Dissolved	mg/L	0.0000013	0.00100	0.100	0.107	0.105	0.102	0.0850 to 0.115	105	70.0 to 130	1.89	20.0
BD04057	Selenium, Total	mg/L	0.0000964	0.00100	0.100	0.103	0.102	0.102	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BD04055	Silicon, Dissolved	mg/L	-0.000136	0.0440	1.00	6.66	6.63	1.01	0.850 to 1.15	99.0	70.0 to 130	0.451	20.0
BD04057	Silicon, Total	mg/L	0.000738	0.0440	1.00	0.995	0.993	0.978	0.850 to 1.15	99.5	70.0 to 130	0.201	20.0
BD04055	Sodium, Dissolved	mg/L	-0.00154	0.0880	5.00	37.4	37.2	5.01	4.25 to 5.75	102	70.0 to 130	0.536	20.0
BD04057	Sodium, Total	mg/L	-0.000153	0.0880	5.00	4.87	4.89	4.94	4.25 to 5.75	97.4	70.0 to 130	0.410	20.0
BD04057	Sulfate	mg/L	-0.286	2.0	20.0	18.5	19.0	18.6	18.0 to 22.0	92.5	80.0 to 120	2.67	20.0
BD04055	Thallium, Dissolved	mg/L	-0.0000073	0.000147	0.100	0.0976	0.0986	0.100	0.0850 to 0.115	97.6	70.0 to 130	1.02	20.0
BD04057	Thallium, Total	mg/L	0.0000032	0.000147	0.100	0.115	0.117	0.111	0.0850 to 0.115	115	70.0 to 130	1.72	20.0
BD04057	Total Organic Carbon	mg/L	-0.00336	1.00	10.0	10.4	10.4	26.7		104	80.0 to 120	0.00	20.0

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

Reported: 3/23/2023
Version: 3.5
COA_CCR

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

Alabama Power

Batch QC Summary

Customer Account: WMWGORPU
Sample Date: 2/20/23 11:50
Customer ID:
Delivery Date: 2/23/23 10:58

Description: Gorgas Pooled Upgradient - MW-1

Laboratory ID Number: BD04051

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04055	Alkalinity to pH 4.5	mg CaCO3/L					181	50.1	45.0 to 55.0			0.551	10.0
BD04057	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.04	0.200	2.00	1.98	0.049	1.95	1.80 to 2.20	99.0	90.0 to 110	0.00	15.0
BD04055	Solids, Dissolved	mg/L	2.00	25.0			3180	54.0	40.0 to 60.0			0.631	10.0

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

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Pooled Upgradient - MW-1 Dup

Location Code: WMWGORPU
Collected: 2/20/23 11:50
Customer ID:
Submittal Date: 2/23/23 10:58

Laboratory ID Number: BD04052

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	2/24/23 13:19	3/2/23 13:39		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	2/24/23 13:19	3/2/23 14:27		10.15	159	mg/L	0.70035	4.06	
* Iron, Total	2/24/23 13:19	3/2/23 13:39		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Total	2/24/23 13:19	3/2/23 13:39		1.015	0.0243	mg/L	0.007105	0.01999956	
* Magnesium, Total	2/24/23 13:19	3/2/23 14:27		10.15	293	mg/L	0.21315	4.06	
* Silica, Total (calc.)	2/24/23 13:19	3/2/23 13:39		1	24.6	mg/L			
* Silicon, Total	2/24/23 13:19	3/2/23 13:39		1.015	11.5	mg/L	0.02030	0.25375	
* Sodium, Total	2/24/23 13:19	3/2/23 13:39		1.015	32.0	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	2/23/23 13:00	2/24/23 13:35		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Dissolved	2/23/23 13:00	2/24/23 14:01		10.15	172	mg/L	0.70035	4.06	
* Iron, Dissolved	2/23/23 13:00	2/24/23 13:35		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Dissolved	2/23/23 13:00	2/24/23 13:35		1.015	0.0242	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	2/23/23 13:00	2/24/23 14:01		10.15	328	mg/L	0.21315	4.06	
* Silica, Dissolved (calc.)	2/23/23 13:00	2/24/23 13:35		1	24.6	mg/L			
* Silicon, Dissolved	2/23/23 13:00	2/24/23 13:35		1.015	11.5	mg/L	0.02030	0.25375	
* Sodium, Dissolved	2/23/23 13:00	2/24/23 13:35		1.015	32.9	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	2/24/23 13:19	2/27/23 15:47		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	2/24/23 13:19	2/27/23 15:47		1.015	0.125	mg/L	0.006090	0.05075	
* Arsenic, Total	2/24/23 13:19	2/27/23 15:47		1.015	0.000270	mg/L	0.000081	0.000203	
* Barium, Total	2/24/23 13:19	2/27/23 15:47		1.015	0.0105	mg/L	0.000508	0.001015	
* Beryllium, Total	2/24/23 13:19	2/27/23 15:47		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	2/24/23 13:19	2/27/23 15:47		1.015	0.00181	mg/L	0.000068	0.000203	
* Chromium, Total	2/24/23 13:19	2/27/23 15:47		1.015	0.000415	mg/L	0.000203	0.001015	J
* Cobalt, Total	2/24/23 13:19	2/27/23 15:47		1.015	0.0678	mg/L	0.000068	0.000203	
* Lead, Total	2/24/23 13:19	2/27/23 15:47		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	2/24/23 13:19	2/27/23 16:20		10.15	9.65	mg/L	0.001522	0.01015	
* Molybdenum, Total	2/24/23 13:19	2/27/23 15:47		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Total	2/24/23 13:19	2/27/23 15:47		1.015	7.47	mg/L	0.169505	0.5075	

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

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

Reported: 3/23/2023
Version: 3.5
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Pooled Upgradient - MW-1 Dup

Location Code: WMWGORPU
Collected: 2/20/23 11:50
Customer ID:
Submittal Date: 2/23/23 10:58

Laboratory ID Number: BD04052

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	2/24/23 13:19	2/27/23 15:47		1.015	0.00262	mg/L	0.000508	0.001015	
* Thallium, Total	2/24/23 13:19	2/27/23 15:47		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	2/23/23 13:00	2/23/23 13:31		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	2/23/23 13:00	2/23/23 13:31		1.015	0.111	mg/L	0.006090	0.05075	
* Arsenic, Dissolved	2/23/23 13:00	2/23/23 13:31		1.015	0.000260	mg/L	0.000081	0.000203	
* Barium, Dissolved	2/23/23 13:00	2/23/23 13:31		1.015	0.00821	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	2/23/23 13:00	2/28/23 14:26		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	2/23/23 13:00	2/23/23 13:31		1.015	0.00187	mg/L	0.000068	0.000203	
* Chromium, Dissolved	2/23/23 13:00	2/23/23 13:31		1.015	0.000220	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	2/23/23 13:00	2/23/23 13:31		1.015	0.0581	mg/L	0.000068	0.000203	
* Lead, Dissolved	2/23/23 13:00	2/23/23 13:31		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	2/23/23 13:00	2/23/23 13:57		10.15	9.04	mg/L	0.001522	0.01015	
* Molybdenum, Dissolved	2/23/23 13:00	2/23/23 13:31		1.015	0.000862	mg/L	0.000102	0.000203	
* Potassium, Dissolved	2/23/23 13:00	2/23/23 13:31		1.015	6.60	mg/L	0.169505	0.5075	
* Selenium, Dissolved	2/23/23 13:00	2/23/23 13:31		1.015	0.00251	mg/L	0.000508	0.001015	
* Thallium, Dissolved	2/23/23 13:00	2/23/23 13:31		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ELH***								
* Mercury, Total by CVAA	2/27/23 19:37	2/28/23 00:57		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	2/24/23 10:19	2/24/23 10:19		1	0.904	mg/L as N	0.20	0.3	
Analytical Method: SM 2320 B	***Analyst: ALH***								
* Alkalinity to pH 4.5	2/28/23 13:57	2/28/23 14:43		1	20.8	mg CaCO3/L			
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	2/24/23 10:25	2/27/23 13:48		1	2280	mg/L		125	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
* Bicarbonate Alkalinity, (calc.)	2/28/23 13:57	2/28/23 14:43		1	20.8	mg CaCO3/L		1	A
* Carbonate Alkalinity, (calc.)	2/28/23 13:57	2/28/23 14:43		1	Not Detected	mg CaCO3/L		0.5	A
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	2/24/23 03:20	2/24/23 03:20		1	4.00	mg/L	1.00	2	

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

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

Reported: 3/23/2023
Version: 3.5
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Pooled Upgradient - MW-1 Dup

Location Code: WMWGORPU
Collected: 2/20/23 11:50
Customer ID:
Submittal Date: 2/23/23 10:58

Laboratory ID Number: BD04052

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	2/24/23 13:45	2/24/23 13:45		1	2.00	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	2/27/23 12:11	2/27/23 12:11		1	0.186	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	3/1/23 12:06	3/1/23 12:06		50	1430	mg/L	30.0	100	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	2/20/23 11:47	2/20/23 11:47			2297.01	uS/cm			FA
pH	2/20/23 11:47	2/20/23 11:47			5.07	SU			FA
Temperature	2/20/23 11:47	2/20/23 11:47			19.59	C			FA
Turbidity	2/20/23 11:47	2/20/23 11:47			0.73	NTU			FA
Sulfide	2/20/23 11:47	2/20/23 11:47			0	mg/L			FA

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

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

Reported: 3/23/2023
Version: 3.5
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORPU
Sample Date: 2/20/23 11:50
Customer ID:
Delivery Date: 2/23/23 10:58

Description: Gorgas Pooled Upgradient - MW-1 Dup

Laboratory ID Number: BD04052

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04055	Aluminum, Dissolved	mg/L	-0.0000723	0.0198	0.100	0.0943	0.0950	0.0970	0.0850 to 0.115	94.3	70.0 to 130	0.740	20.0
BD04057	Aluminum, Total	mg/L	0.000456	0.0198	0.100	0.103	0.101	0.0998	0.0850 to 0.115	103	70.0 to 130	1.96	20.0
BD04055	Antimony, Dissolved	mg/L	0.000298	0.00100	0.100	0.0862	0.0870	0.0910	0.0850 to 0.115	86.2	70.0 to 130	0.924	20.0
BD04057	Antimony, Total	mg/L	0.000368	0.00100	0.100	0.101	0.0965	0.0925	0.0850 to 0.115	101	70.0 to 130	4.56	20.0
BD04055	Arsenic, Dissolved	mg/L	-0.0000209	0.000200	0.100	0.0978	0.0978	0.0959	0.0850 to 0.115	97.8	70.0 to 130	0.00	20.0
BD04057	Arsenic, Total	mg/L	0.0000075	0.000200	0.100	0.101	0.0982	0.101	0.0850 to 0.115	101	70.0 to 130	2.81	20.0
BD04055	Barium, Dissolved	mg/L	-0.0000189	0.00100	0.100	0.102	0.102	0.0928	0.0850 to 0.115	91.5	70.0 to 130	0.00	20.0
BD04057	Barium, Total	mg/L	-0.0000020	0.00100	0.100	0.106	0.106	0.102	0.0850 to 0.115	106	70.0 to 130	0.00	20.0
BD04055	Beryllium, Dissolved	mg/L	0.0000085	0.000880	0.100	0.103	0.101	0.104	0.0850 to 0.115	103	70.0 to 130	1.96	20.0
BD04057	Beryllium, Total	mg/L	0.0000162	0.000880	0.100	0.0918	0.0914	0.104	0.0850 to 0.115	91.8	70.0 to 130	0.437	20.0
BD04055	Boron, Dissolved	mg/L	-0.000712	0.0650	1.00	1.08	1.08	1.01	0.850 to 1.15	104	70.0 to 130	0.00	20.0
BD04057	Boron, Total	mg/L	-0.000338	0.0650	1.00	0.981	0.984	0.982	0.850 to 1.15	98.1	70.0 to 130	0.305	20.0
BD04055	Cadmium, Dissolved	mg/L	0.000	0.000147	0.100	0.0966	0.0980	0.0983	0.0850 to 0.115	96.6	70.0 to 130	1.44	20.0
BD04057	Cadmium, Total	mg/L	0.0000020	0.000147	0.100	0.0970	0.0992	0.0968	0.0850 to 0.115	97.0	70.0 to 130	2.24	20.0
BD04055	Calcium, Dissolved	mg/L	-0.0140	0.152	5.00	257	242	4.87	4.25 to 5.75	360	70.0 to 130	6.01	20.0
BD04057	Calcium, Total	mg/L	-0.00704	0.152	5.00	4.89	4.83	4.88	4.25 to 5.75	97.8	70.0 to 130	1.23	20.0
BD04057	Chloride	mg/L	0.0452	1.00	10.0	9.96	10.2	10.1	9.00 to 11.0	99.6	80.0 to 120	2.38	20.0
BD04055	Chromium, Dissolved	mg/L	-0.0000286	0.000440	0.100	0.0967	0.0978	0.0995	0.0850 to 0.115	96.7	70.0 to 130	1.13	20.0
BD04057	Chromium, Total	mg/L	0.0000793	0.000440	0.100	0.105	0.104	0.103	0.0850 to 0.115	105	70.0 to 130	0.957	20.0
BD04055	Cobalt, Dissolved	mg/L	0.0000026	0.000147	0.100	0.0971	0.0996	0.102	0.0850 to 0.115	97.1	70.0 to 130	2.54	20.0
BD04057	Cobalt, Total	mg/L	0.0000019	0.000147	0.100	0.109	0.108	0.107	0.0850 to 0.115	109	70.0 to 130	0.922	20.0
BD04057	Fluoride	mg/L	0.0455	0.125	2.50	2.61	2.61	2.63	2.25 to 2.75	104	80.0 to 120	0.00	20.0
BD04055	Iron, Dissolved	mg/L	0.00132	0.0176	0.2	0.196	0.194	0.203	0.170 to 0.230	98.0	70.0 to 130	1.03	20.0
BD04057	Iron, Total	mg/L	0.000770	0.0176	0.2	0.200	0.198	0.198	0.170 to 0.230	100	70.0 to 130	1.01	20.0

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

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORPU
Sample Date: 2/20/23 11:50
Customer ID:
Delivery Date: 2/23/23 10:58

Description: Gorgas Pooled Upgradient - MW-1 Dup

Laboratory ID Number: BD04052

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04055	Lead, Dissolved	mg/L	-0.0000002	0.000147	0.100	0.0983	0.0994	0.0997	0.0850 to 0.115	98.3	70.0 to 130	1.11	20.0
BD04057	Lead, Total	mg/L	0.0000057	0.000147	0.100	0.110	0.113	0.108	0.0850 to 0.115	110	70.0 to 130	2.69	20.0
BD04055	Lithium, Dissolved	mg/L	0.000829	0.0154	0.200	0.255	0.254	0.198	0.170 to 0.230	106	70.0 to 130	0.393	20.0
BD04057	Lithium, Total	mg/L	0.000801	0.0154	0.200	0.197	0.197	0.197	0.170 to 0.230	98.5	70.0 to 130	0.00	20.0
BD04055	Magnesium, Dissolved	mg/L	-0.00578	0.0462	5.00	421	393	4.98	4.25 to 5.75	480	70.0 to 130	6.88	20.0
BD04057	Magnesium, Total	mg/L	-0.0130	0.0462	5.00	4.91	4.87	4.92	4.25 to 5.75	98.2	70.0 to 130	0.818	20.0
BD04055	Manganese, Dissolved	mg/L	0.0000144	0.00033	0.100	0.0962	0.0973	0.0999	0.0850 to 0.115	95.8	70.0 to 130	1.14	20.0
BD04057	Manganese, Total	mg/L	-0.0000724	0.00033	0.100	0.104	0.102	0.103	0.0850 to 0.115	104	70.0 to 130	1.94	20.0
BD04057	Mercury, Total by CVAA	mg/L	1.000E-05	0.000500	0.004	0.00406	0.00402	0.00393	0.00340 to 0.00460	102	70.0 to 130	0.990	20.0
BD04055	Molybdenum, Dissolved	mg/L	0.0000339	0.0002	0.100	0.0983	0.101	0.102	0.0850 to 0.115	98.0	70.0 to 130	2.71	20.0
BD04057	Molybdenum, Total	mg/L	0.0000262	0.0002	0.100	0.106	0.105	0.103	0.0850 to 0.115	106	70.0 to 130	0.948	20.0
BD04055	Potassium, Dissolved	mg/L	-0.00416	0.367	10.0	16.5	16.5	9.76	8.50 to 11.5	92.2	70.0 to 130	0.00	20.0
BD04057	Potassium, Total	mg/L	0.0397	0.367	10.0	10.2	10.1	10.0	8.50 to 11.5	102	70.0 to 130	0.985	20.0
BD04055	Selenium, Dissolved	mg/L	0.0000013	0.00100	0.100	0.107	0.105	0.102	0.0850 to 0.115	105	70.0 to 130	1.89	20.0
BD04057	Selenium, Total	mg/L	0.0000964	0.00100	0.100	0.103	0.102	0.102	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BD04055	Silicon, Dissolved	mg/L	-0.000136	0.0440	1.00	6.66	6.63	1.01	0.850 to 1.15	99.0	70.0 to 130	0.451	20.0
BD04057	Silicon, Total	mg/L	0.000738	0.0440	1.00	0.995	0.993	0.978	0.850 to 1.15	99.5	70.0 to 130	0.201	20.0
BD04055	Sodium, Dissolved	mg/L	-0.00154	0.0880	5.00	37.4	37.2	5.01	4.25 to 5.75	102	70.0 to 130	0.536	20.0
BD04057	Sodium, Total	mg/L	-0.000153	0.0880	5.00	4.87	4.89	4.94	4.25 to 5.75	97.4	70.0 to 130	0.410	20.0
BD04057	Sulfate	mg/L	-0.286	2.0	20.0	18.5	19.0	18.6	18.0 to 22.0	92.5	80.0 to 120	2.67	20.0
BD04055	Thallium, Dissolved	mg/L	-0.0000073	0.000147	0.100	0.0976	0.0986	0.100	0.0850 to 0.115	97.6	70.0 to 130	1.02	20.0
BD04057	Thallium, Total	mg/L	0.0000032	0.000147	0.100	0.115	0.117	0.111	0.0850 to 0.115	115	70.0 to 130	1.72	20.0
BD04057	Total Organic Carbon	mg/L	-0.00336	1.00	10.0	10.4	10.4	26.7		104	80.0 to 120	0.00	20.0

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

Reported: 3/23/2023
Version: 3.5
COA_CCR

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

Alabama Power

Batch QC Summary

Customer Account: WMWGORPU
Sample Date: 2/20/23 11:50
Customer ID:
Delivery Date: 2/23/23 10:58

Description: Gorgas Pooled Upgradient - MW-1 Dup

Laboratory ID Number: BD04052

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04055	Alkalinity to pH 4.5	mg CaCO3/L					181	50.1	45.0 to 55.0			0.551	10.0
BD04057	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.04	0.200	2.00	1.98	0.049	1.95	1.80 to 2.20	99.0	90.0 to 110	0.00	15.0
BD04055	Solids, Dissolved	mg/L	2.00	25.0			3180	54.0	40.0 to 60.0			0.631	10.0

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

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Pooled Upgradient - MW-2

Location Code: WMWGORPU
Collected: 2/20/23 13:35
Customer ID:
Submittal Date: 2/23/23 10:58

Laboratory ID Number: BD04053

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	2/24/23 13:19	3/2/23 13:42		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	2/24/23 13:19	3/2/23 14:30		10.15	160	mg/L	0.70035	4.06	
* Iron, Total	2/24/23 13:19	3/2/23 13:42		1.015	0.755	mg/L	0.008120	0.0406	
* Lithium, Total	2/24/23 13:19	3/2/23 13:42		1.015	0.0412	mg/L	0.007105	0.01999956	
* Magnesium, Total	2/24/23 13:19	3/2/23 14:30		10.15	174	mg/L	0.21315	4.06	
* Silica, Total (calc.)	2/24/23 13:19	3/2/23 13:42		1	11.1	mg/L			
* Silicon, Total	2/24/23 13:19	3/2/23 13:42		1.015	5.20	mg/L	0.02030	0.25375	
* Sodium, Total	2/24/23 13:19	3/2/23 13:42		1.015	15.6	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	2/23/23 13:00	2/24/23 13:38		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Dissolved	2/23/23 13:00	2/24/23 14:04		10.15	165	mg/L	0.70035	4.06	
* Iron, Dissolved	2/23/23 13:00	2/24/23 13:38		1.015	0.727	mg/L	0.008120	0.0406	
* Lithium, Dissolved	2/23/23 13:00	2/24/23 13:38		1.015	0.0418	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	2/23/23 13:00	2/24/23 14:04		10.15	187	mg/L	0.21315	4.06	
* Molybdenum, Dissolved	2/23/23 01:00	2/24/23 13:38		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Dissolved (calc.)	2/23/23 13:00	2/24/23 13:38		1	11.1	mg/L			
* Silicon, Dissolved	2/23/23 13:00	2/24/23 13:38		1.015	5.18	mg/L	0.02030	0.25375	
* Sodium, Dissolved	2/23/23 13:00	2/24/23 13:38		1.015	16.3	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	2/24/23 13:19	2/27/23 15:51		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	2/24/23 13:19	2/27/23 15:51		1.015	Not Detected	mg/L	0.006090	0.05075	U
* Arsenic, Total	2/24/23 13:19	2/27/23 15:51		1.015	0.000243	mg/L	0.000081	0.000203	
* Barium, Total	2/24/23 13:19	2/27/23 15:51		1.015	0.0122	mg/L	0.000508	0.001015	
* Beryllium, Total	2/24/23 13:19	2/27/23 15:51		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	2/24/23 13:19	2/27/23 15:51		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	2/24/23 13:19	2/27/23 15:51		1.015	0.000330	mg/L	0.000203	0.001015	J
* Cobalt, Total	2/24/23 13:19	2/27/23 15:51		1.015	0.0187	mg/L	0.000068	0.000203	
* Lead, Total	2/24/23 13:19	2/27/23 15:51		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	2/24/23 13:19	2/27/23 16:23		5.075	4.40	mg/L	0.000761	0.005075	
* Molybdenum, Total	2/24/23 13:19	2/27/23 15:51		1.015	Not Detected	mg/L	0.000102	0.000203	U

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

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

Reported: 3/23/2023
Version: 3.5
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Pooled Upgradient - MW-2

Location Code: WMWGORPU
Collected: 2/20/23 13:35
Customer ID:
Submittal Date: 2/23/23 10:58

Laboratory ID Number: BD04053

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	2/24/23 13:19	2/27/23 15:51		1.015	5.80	mg/L	0.169505	0.5075	
* Selenium, Total	2/24/23 13:19	2/27/23 15:51		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	2/24/23 13:19	2/27/23 15:51		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	2/23/23 13:00	2/23/23 13:35		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	2/23/23 13:00	2/23/23 13:35		1.015	Not Detected	mg/L	0.006090	0.05075	U
* Arsenic, Dissolved	2/23/23 13:00	2/23/23 13:35		1.015	0.000231	mg/L	0.000081	0.000203	
* Barium, Dissolved	2/23/23 13:00	2/23/23 13:35		1.015	0.0104	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	2/23/23 13:00	2/28/23 14:29		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	2/23/23 13:00	2/23/23 13:35		1.015	0.000081	mg/L	0.000068	0.000203	J
* Chromium, Dissolved	2/23/23 13:00	2/23/23 13:35		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	2/23/23 13:00	2/23/23 13:35		1.015	0.0163	mg/L	0.000068	0.000203	
* Lead, Dissolved	2/23/23 13:00	2/23/23 13:35		1.015	0.000135	mg/L	0.000068	0.000203	J
* Manganese, Dissolved	2/23/23 13:00	2/23/23 14:01		5.075	4.15	mg/L	0.000761	0.005075	
* Potassium, Dissolved	2/23/23 13:00	2/23/23 13:35		1.015	5.27	mg/L	0.169505	0.5075	
* Selenium, Dissolved	2/23/23 13:00	2/23/23 13:35		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	2/23/23 13:00	2/23/23 13:35		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ELH***								
* Mercury, Total by CVAA	2/27/23 19:37	2/28/23 01:01		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	2/24/23 10:20	2/24/23 10:20		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
* Alkalinity to pH 4.5	2/28/23 13:57	2/28/23 14:43		1	283	mg CaCO3/L			
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	2/24/23 10:25	2/27/23 13:48		1	1420	mg/L		100	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
* Bicarbonate Alkalinity, (calc.)	2/28/23 13:57	2/28/23 14:43		1	283	mg CaCO3/L		1	A
* Carbonate Alkalinity, (calc.)	2/28/23 13:57	2/28/23 14:43		1	Not Detected	mg CaCO3/L		0.5	A
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	2/24/23 03:36	2/24/23 03:36		1	8.44	mg/L	1.00	2	

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

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

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Pooled Upgradient - MW-2

Location Code: WMWGORPU
Collected: 2/20/23 13:35
Customer ID:
Submittal Date: 2/23/23 10:58

Laboratory ID Number: BD04053

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	2/24/23 13:46	2/24/23 13:46		1	1.70	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	2/27/23 12:13	2/27/23 12:13		1	0.267	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	3/1/23 12:08	3/1/23 12:08		40	767	mg/L	24.0	80	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	2/20/23 13:33	2/20/23 13:33			1773.00	uS/cm			FA
pH	2/20/23 13:33	2/20/23 13:33			6.24	SU			FA
Temperature	2/20/23 13:33	2/20/23 13:33			18.95	C			FA
Turbidity	2/20/23 13:33	2/20/23 13:33			0.41	NTU			FA
Sulfide	2/20/23 13:33	2/20/23 13:33			0	mg/L			FA

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

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

Reported: 3/23/2023
Version: 3.5
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORPU
Sample Date: 2/20/23 13:35
Customer ID:
Delivery Date: 2/23/23 10:58

Description: Gorgas Pooled Upgradient - MW-2

Laboratory ID Number: BD04053

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04055	Aluminum, Dissolved	mg/L	-0.0000723	0.0198	0.100	0.0943	0.0950	0.0970	0.0850 to 0.115	94.3	70.0 to 130	0.740	20.0
BD04057	Aluminum, Total	mg/L	0.000456	0.0198	0.100	0.103	0.101	0.0998	0.0850 to 0.115	103	70.0 to 130	1.96	20.0
BD04055	Antimony, Dissolved	mg/L	0.000298	0.00100	0.100	0.0862	0.0870	0.0910	0.0850 to 0.115	86.2	70.0 to 130	0.924	20.0
BD04057	Antimony, Total	mg/L	0.000368	0.00100	0.100	0.101	0.0965	0.0925	0.0850 to 0.115	101	70.0 to 130	4.56	20.0
BD04055	Arsenic, Dissolved	mg/L	-0.0000209	0.000200	0.100	0.0978	0.0978	0.0959	0.0850 to 0.115	97.8	70.0 to 130	0.00	20.0
BD04057	Arsenic, Total	mg/L	0.0000075	0.000200	0.100	0.101	0.0982	0.101	0.0850 to 0.115	101	70.0 to 130	2.81	20.0
BD04055	Barium, Dissolved	mg/L	-0.0000189	0.00100	0.100	0.102	0.102	0.0928	0.0850 to 0.115	91.5	70.0 to 130	0.00	20.0
BD04057	Barium, Total	mg/L	-0.0000020	0.00100	0.100	0.106	0.106	0.102	0.0850 to 0.115	106	70.0 to 130	0.00	20.0
BD04055	Beryllium, Dissolved	mg/L	0.0000085	0.000880	0.100	0.103	0.101	0.104	0.0850 to 0.115	103	70.0 to 130	1.96	20.0
BD04057	Beryllium, Total	mg/L	0.0000162	0.000880	0.100	0.0918	0.0914	0.104	0.0850 to 0.115	91.8	70.0 to 130	0.437	20.0
BD04055	Boron, Dissolved	mg/L	-0.000712	0.0650	1.00	1.08	1.08	1.01	0.850 to 1.15	104	70.0 to 130	0.00	20.0
BD04057	Boron, Total	mg/L	-0.000338	0.0650	1.00	0.981	0.984	0.982	0.850 to 1.15	98.1	70.0 to 130	0.305	20.0
BD04055	Cadmium, Dissolved	mg/L	0.000	0.000147	0.100	0.0966	0.0980	0.0983	0.0850 to 0.115	96.6	70.0 to 130	1.44	20.0
BD04057	Cadmium, Total	mg/L	0.0000020	0.000147	0.100	0.0970	0.0992	0.0968	0.0850 to 0.115	97.0	70.0 to 130	2.24	20.0
BD04055	Calcium, Dissolved	mg/L	-0.0140	0.152	5.00	257	242	4.87	4.25 to 5.75	360	70.0 to 130	6.01	20.0
BD04057	Calcium, Total	mg/L	-0.00704	0.152	5.00	4.89	4.83	4.88	4.25 to 5.75	97.8	70.0 to 130	1.23	20.0
BD04057	Chloride	mg/L	0.0452	1.00	10.0	9.96	10.2	10.1	9.00 to 11.0	99.6	80.0 to 120	2.38	20.0
BD04055	Chromium, Dissolved	mg/L	-0.0000286	0.000440	0.100	0.0967	0.0978	0.0995	0.0850 to 0.115	96.7	70.0 to 130	1.13	20.0
BD04057	Chromium, Total	mg/L	0.0000793	0.000440	0.100	0.105	0.104	0.103	0.0850 to 0.115	105	70.0 to 130	0.957	20.0
BD04055	Cobalt, Dissolved	mg/L	0.0000026	0.000147	0.100	0.0971	0.0996	0.102	0.0850 to 0.115	97.1	70.0 to 130	2.54	20.0
BD04057	Cobalt, Total	mg/L	0.0000019	0.000147	0.100	0.109	0.108	0.107	0.0850 to 0.115	109	70.0 to 130	0.922	20.0
BD04057	Fluoride	mg/L	0.0455	0.125	2.50	2.61	2.61	2.63	2.25 to 2.75	104	80.0 to 120	0.00	20.0
BD04055	Iron, Dissolved	mg/L	0.00132	0.0176	0.2	0.196	0.194	0.203	0.170 to 0.230	98.0	70.0 to 130	1.03	20.0
BD04057	Iron, Total	mg/L	0.000770	0.0176	0.2	0.200	0.198	0.198	0.170 to 0.230	100	70.0 to 130	1.01	20.0

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

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORPU
Sample Date: 2/20/23 13:35
Customer ID:
Delivery Date: 2/23/23 10:58

Description: Gorgas Pooled Upgradient - MW-2

Laboratory ID Number: BD04053

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04055	Lead, Dissolved	mg/L	-0.0000002	0.000147	0.100	0.0983	0.0994	0.0997	0.0850 to 0.115	98.3	70.0 to 130	1.11	20.0
BD04057	Lead, Total	mg/L	0.0000057	0.000147	0.100	0.110	0.113	0.108	0.0850 to 0.115	110	70.0 to 130	2.69	20.0
BD04055	Lithium, Dissolved	mg/L	0.000829	0.0154	0.200	0.255	0.254	0.198	0.170 to 0.230	106	70.0 to 130	0.393	20.0
BD04057	Lithium, Total	mg/L	0.000801	0.0154	0.200	0.197	0.197	0.197	0.170 to 0.230	98.5	70.0 to 130	0.00	20.0
BD04055	Magnesium, Dissolved	mg/L	-0.00578	0.0462	5.00	421	393	4.98	4.25 to 5.75	480	70.0 to 130	6.88	20.0
BD04057	Magnesium, Total	mg/L	-0.0130	0.0462	5.00	4.91	4.87	4.92	4.25 to 5.75	98.2	70.0 to 130	0.818	20.0
BD04055	Manganese, Dissolved	mg/L	0.0000144	0.00033	0.100	0.0962	0.0973	0.0999	0.0850 to 0.115	95.8	70.0 to 130	1.14	20.0
BD04057	Manganese, Total	mg/L	-0.0000724	0.00033	0.100	0.104	0.102	0.103	0.0850 to 0.115	104	70.0 to 130	1.94	20.0
BD04057	Mercury, Total by CVAA	mg/L	1.000E-05	0.000500	0.004	0.00406	0.00402	0.00393	0.00340 to 0.00460	102	70.0 to 130	0.990	20.0
BD04053	Molybdenum, Dissolved	mg/L	0.00048	0.0100				0.201	0.170 to 0.230		70.0 to 130		20.0
BD04057	Molybdenum, Total	mg/L	0.0000262	0.0002	0.100	0.106	0.105	0.103	0.0850 to 0.115	106	70.0 to 130	0.948	20.0
BD04055	Potassium, Dissolved	mg/L	-0.00416	0.367	10.0	16.5	16.5	9.76	8.50 to 11.5	92.2	70.0 to 130	0.00	20.0
BD04057	Potassium, Total	mg/L	0.0397	0.367	10.0	10.2	10.1	10.0	8.50 to 11.5	102	70.0 to 130	0.985	20.0
BD04055	Selenium, Dissolved	mg/L	0.0000013	0.00100	0.100	0.107	0.105	0.102	0.0850 to 0.115	105	70.0 to 130	1.89	20.0
BD04057	Selenium, Total	mg/L	0.0000964	0.00100	0.100	0.103	0.102	0.102	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BD04055	Silicon, Dissolved	mg/L	-0.000136	0.0440	1.00	6.66	6.63	1.01	0.850 to 1.15	99.0	70.0 to 130	0.451	20.0
BD04057	Silicon, Total	mg/L	0.000738	0.0440	1.00	0.995	0.993	0.978	0.850 to 1.15	99.5	70.0 to 130	0.201	20.0
BD04055	Sodium, Dissolved	mg/L	-0.00154	0.0880	5.00	37.4	37.2	5.01	4.25 to 5.75	102	70.0 to 130	0.536	20.0
BD04057	Sodium, Total	mg/L	-0.000153	0.0880	5.00	4.87	4.89	4.94	4.25 to 5.75	97.4	70.0 to 130	0.410	20.0
BD04057	Sulfate	mg/L	-0.286	2.0	20.0	18.5	19.0	18.6	18.0 to 22.0	92.5	80.0 to 120	2.67	20.0
BD04055	Thallium, Dissolved	mg/L	-0.0000073	0.000147	0.100	0.0976	0.0986	0.100	0.0850 to 0.115	97.6	70.0 to 130	1.02	20.0
BD04057	Thallium, Total	mg/L	0.0000032	0.000147	0.100	0.115	0.117	0.111	0.0850 to 0.115	115	70.0 to 130	1.72	20.0
BD04057	Total Organic Carbon	mg/L	-0.00336	1.00	10.0	10.4	10.4	26.7		104	80.0 to 120	0.00	20.0

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

Reported: 3/23/2023
Version: 3.5
COA_CCR

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

Alabama Power

Batch QC Summary

Customer Account: WMWGORPU
Sample Date: 2/20/23 13:35
Customer ID:
Delivery Date: 2/23/23 10:58

Description: Gorgas Pooled Upgradient - MW-2

Laboratory ID Number: BD04053

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04055	Alkalinity to pH 4.5	mg CaCO3/L					181	50.1	45.0 to 55.0			0.551	10.0
BD04057	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.04	0.200	2.00	1.98	0.049	1.95	1.80 to 2.20	99.0	90.0 to 110	0.00	15.0
BD04055	Solids, Dissolved	mg/L	2.00	25.0			3180	54.0	40.0 to 60.0			0.631	10.0

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

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Pooled Upgradient - MW-3

Location Code: WMWGORPU
Collected: 2/20/23 14:53
Customer ID:
Submittal Date: 2/23/23 10:58

Laboratory ID Number: BD04054

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	2/24/23 13:19	3/2/23 13:45		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	2/24/23 13:19	3/2/23 14:33		101.5	210	mg/L	7.0035	40.6	
* Iron, Total	2/24/23 13:19	3/2/23 13:45		1.015	0.0467	mg/L	0.008120	0.0406	
* Lithium, Total	2/24/23 13:19	3/2/23 13:45		1.015	0.0649	mg/L	0.007105	0.01999956	
* Magnesium, Total	2/24/23 13:19	3/2/23 14:33		101.5	392	mg/L	2.1315	40.6	
* Silica, Total (calc.)	2/24/23 13:19	3/2/23 13:45		1	22.0	mg/L			
* Silicon, Total	2/24/23 13:19	3/2/23 13:45		1.015	10.3	mg/L	0.02030	0.25375	
* Sodium, Total	2/24/23 13:19	3/2/23 14:33		101.5	40.2	mg/L	3.045	40.6	J
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	2/23/23 13:00	2/24/23 13:42		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Dissolved	2/23/23 13:00	2/24/23 14:07		101.5	234	mg/L	7.0035	40.6	
* Iron, Dissolved	2/23/23 13:00	2/24/23 13:42		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Dissolved	2/23/23 13:00	2/24/23 13:42		1.015	0.0650	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	2/23/23 13:00	2/24/23 14:07		101.5	446	mg/L	2.1315	40.6	
* Silica, Dissolved (calc.)	2/23/23 13:00	2/24/23 13:42		1	22.0	mg/L			
* Silicon, Dissolved	2/23/23 13:00	2/24/23 13:42		1.015	10.3	mg/L	0.02030	0.25375	
* Sodium, Dissolved	2/23/23 13:00	2/24/23 14:07		101.5	44.9	mg/L	3.045	40.6	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	2/24/23 13:19	2/27/23 15:54		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	2/24/23 13:19	2/27/23 15:54		1.015	0.0365	mg/L	0.006090	0.05075	J
* Arsenic, Total	2/24/23 13:19	2/27/23 15:54		1.015	0.000224	mg/L	0.000081	0.000203	
* Barium, Total	2/24/23 13:19	2/27/23 15:54		1.015	0.00822	mg/L	0.000508	0.001015	
* Beryllium, Total	2/24/23 13:19	2/27/23 15:54		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	2/24/23 13:19	2/27/23 15:54		1.015	0.00144	mg/L	0.000068	0.000203	
* Chromium, Total	2/24/23 13:19	2/27/23 15:54		1.015	0.000384	mg/L	0.000203	0.001015	J
* Cobalt, Total	2/24/23 13:19	2/27/23 15:54		1.015	0.00435	mg/L	0.000068	0.000203	
* Lead, Total	2/24/23 13:19	2/27/23 15:54		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	2/24/23 13:19	2/27/23 15:54		1.015	0.477	mg/L	0.000152	0.001015	
* Molybdenum, Total	2/24/23 13:19	2/27/23 15:54		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Total	2/24/23 13:19	2/27/23 15:54		1.015	6.65	mg/L	0.169505	0.5075	

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

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

Reported: 3/23/2023
Version: 3.5
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Pooled Upgradient - MW-3

Location Code: WMWGORPU
Collected: 2/20/23 14:53
Customer ID:
Submittal Date: 2/23/23 10:58

Laboratory ID Number: BD04054

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	2/24/23 13:19	2/27/23 15:54		1.015	0.0123	mg/L	0.000508	0.001015	
* Thallium, Total	2/24/23 13:19	2/27/23 15:54		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	2/23/23 13:00	2/23/23 13:38		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	2/23/23 13:00	2/23/23 13:38		1.015	0.0298	mg/L	0.006090	0.05075	J
* Arsenic, Dissolved	2/23/23 13:00	2/23/23 13:38		1.015	0.000227	mg/L	0.000081	0.000203	
* Barium, Dissolved	2/23/23 13:00	2/23/23 13:38		1.015	0.00729	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	2/23/23 13:00	2/28/23 14:33		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	2/23/23 13:00	2/23/23 13:38		1.015	0.00136	mg/L	0.000068	0.000203	
* Chromium, Dissolved	2/23/23 13:00	2/23/23 13:38		1.015	0.000297	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	2/23/23 13:00	2/23/23 13:38		1.015	0.00375	mg/L	0.000068	0.000203	
* Lead, Dissolved	2/23/23 13:00	2/23/23 13:38		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	2/23/23 13:00	2/23/23 13:38		1.015	0.447	mg/L	0.000152	0.001015	
* Molybdenum, Dissolved	2/23/23 13:00	2/23/23 13:38		1.015	0.000135	mg/L	0.000102	0.000203	J
* Potassium, Dissolved	2/23/23 13:00	2/23/23 13:38		1.015	6.13	mg/L	0.169505	0.5075	
* Selenium, Dissolved	2/23/23 13:00	2/23/23 13:38		1.015	0.0125	mg/L	0.000508	0.001015	
* Thallium, Dissolved	2/23/23 13:00	2/23/23 13:38		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ELH***								
* Mercury, Total by CVAA	2/27/23 19:37	2/28/23 01:05		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	2/24/23 10:21	2/24/23 10:21		1	2.46	mg/L as N	0.20	0.3	
Analytical Method: SM 2320 B	***Analyst: ALH***								
* Alkalinity to pH 4.5	2/28/23 13:57	2/28/23 14:43		1	81.7	mg CaCO3/L			
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	2/24/23 10:25	2/27/23 13:48		1	3230	mg/L		178.6	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
* Bicarbonate Alkalinity, (calc.)	2/28/23 13:57	2/28/23 14:43		1	81.7	mg CaCO3/L		1	A
* Carbonate Alkalinity, (calc.)	2/28/23 13:57	2/28/23 14:43		1	Not Detected	mg CaCO3/L		0.5	A
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	2/24/23 03:54	2/24/23 03:54		1	3.56	mg/L	1.00	2	

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

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

Reported: 3/23/2023
Version: 3.5
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Pooled Upgradient - MW-3

Location Code: WMWGORPU
Collected: 2/20/23 14:53
Customer ID:
Submittal Date: 2/23/23 10:58

Laboratory ID Number: BD04054

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	2/24/23 13:47	2/24/23 13:47		1	1.94	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	2/27/23 12:14	2/27/23 12:14		1	0.379	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	3/1/23 12:09	3/1/23 12:09		80	2110	mg/L	48.0	160	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	2/20/23 14:48	2/20/23 14:48			3276.9	uS/cm			FA
pH	2/20/23 14:48	2/20/23 14:48			6.01	SU			FA
Temperature	2/20/23 14:48	2/20/23 14:48			20.34	C			FA
Turbidity	2/20/23 14:48	2/20/23 14:48			1.21	NTU			FA
Sulfide	2/20/23 14:48	2/20/23 14:48			0	mg/L			FA

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

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

Reported: 3/23/2023
Version: 3.5
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORPU
Sample Date: 2/20/23 14:53
Customer ID:
Delivery Date: 2/23/23 10:58

Description: Gorgas Pooled Upgradient - MW-3

Laboratory ID Number: BD04054

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04055	Aluminum, Dissolved	mg/L	-0.0000723	0.0198	0.100	0.0943	0.0950	0.0970	0.0850 to 0.115	94.3	70.0 to 130	0.740	20.0
BD04057	Aluminum, Total	mg/L	0.000456	0.0198	0.100	0.103	0.101	0.0998	0.0850 to 0.115	103	70.0 to 130	1.96	20.0
BD04055	Antimony, Dissolved	mg/L	0.000298	0.00100	0.100	0.0862	0.0870	0.0910	0.0850 to 0.115	86.2	70.0 to 130	0.924	20.0
BD04057	Antimony, Total	mg/L	0.000368	0.00100	0.100	0.101	0.0965	0.0925	0.0850 to 0.115	101	70.0 to 130	4.56	20.0
BD04055	Arsenic, Dissolved	mg/L	-0.0000209	0.000200	0.100	0.0978	0.0978	0.0959	0.0850 to 0.115	97.8	70.0 to 130	0.00	20.0
BD04057	Arsenic, Total	mg/L	0.0000075	0.000200	0.100	0.101	0.0982	0.101	0.0850 to 0.115	101	70.0 to 130	2.81	20.0
BD04055	Barium, Dissolved	mg/L	-0.0000189	0.00100	0.100	0.102	0.102	0.0928	0.0850 to 0.115	91.5	70.0 to 130	0.00	20.0
BD04057	Barium, Total	mg/L	-0.0000020	0.00100	0.100	0.106	0.106	0.102	0.0850 to 0.115	106	70.0 to 130	0.00	20.0
BD04055	Beryllium, Dissolved	mg/L	0.0000085	0.000880	0.100	0.103	0.101	0.104	0.0850 to 0.115	103	70.0 to 130	1.96	20.0
BD04057	Beryllium, Total	mg/L	0.0000162	0.000880	0.100	0.0918	0.0914	0.104	0.0850 to 0.115	91.8	70.0 to 130	0.437	20.0
BD04055	Boron, Dissolved	mg/L	-0.000712	0.0650	1.00	1.08	1.08	1.01	0.850 to 1.15	104	70.0 to 130	0.00	20.0
BD04057	Boron, Total	mg/L	-0.000338	0.0650	1.00	0.981	0.984	0.982	0.850 to 1.15	98.1	70.0 to 130	0.305	20.0
BD04055	Cadmium, Dissolved	mg/L	0.000	0.000147	0.100	0.0966	0.0980	0.0983	0.0850 to 0.115	96.6	70.0 to 130	1.44	20.0
BD04057	Cadmium, Total	mg/L	0.0000020	0.000147	0.100	0.0970	0.0992	0.0968	0.0850 to 0.115	97.0	70.0 to 130	2.24	20.0
BD04055	Calcium, Dissolved	mg/L	-0.0140	0.152	5.00	257	242	4.87	4.25 to 5.75	360	70.0 to 130	6.01	20.0
BD04057	Calcium, Total	mg/L	-0.00704	0.152	5.00	4.89	4.83	4.88	4.25 to 5.75	97.8	70.0 to 130	1.23	20.0
BD04057	Chloride	mg/L	0.0452	1.00	10.0	9.96	10.2	10.1	9.00 to 11.0	99.6	80.0 to 120	2.38	20.0
BD04055	Chromium, Dissolved	mg/L	-0.0000286	0.000440	0.100	0.0967	0.0978	0.0995	0.0850 to 0.115	96.7	70.0 to 130	1.13	20.0
BD04057	Chromium, Total	mg/L	0.0000793	0.000440	0.100	0.105	0.104	0.103	0.0850 to 0.115	105	70.0 to 130	0.957	20.0
BD04055	Cobalt, Dissolved	mg/L	0.0000026	0.000147	0.100	0.0971	0.0996	0.102	0.0850 to 0.115	97.1	70.0 to 130	2.54	20.0
BD04057	Cobalt, Total	mg/L	0.0000019	0.000147	0.100	0.109	0.108	0.107	0.0850 to 0.115	109	70.0 to 130	0.922	20.0
BD04057	Fluoride	mg/L	0.0455	0.125	2.50	2.61	2.61	2.63	2.25 to 2.75	104	80.0 to 120	0.00	20.0
BD04055	Iron, Dissolved	mg/L	0.00132	0.0176	0.2	0.196	0.194	0.203	0.170 to 0.230	98.0	70.0 to 130	1.03	20.0
BD04057	Iron, Total	mg/L	0.000770	0.0176	0.2	0.200	0.198	0.198	0.170 to 0.230	100	70.0 to 130	1.01	20.0

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

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORPU
Sample Date: 2/20/23 14:53
Customer ID:
Delivery Date: 2/23/23 10:58

Description: Gorgas Pooled Upgradient - MW-3

Laboratory ID Number: BD04054

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04055	Lead, Dissolved	mg/L	-0.0000002	0.000147	0.100	0.0983	0.0994	0.0997	0.0850 to 0.115	98.3	70.0 to 130	1.11	20.0
BD04057	Lead, Total	mg/L	0.0000057	0.000147	0.100	0.110	0.113	0.108	0.0850 to 0.115	110	70.0 to 130	2.69	20.0
BD04055	Lithium, Dissolved	mg/L	0.000829	0.0154	0.200	0.255	0.254	0.198	0.170 to 0.230	106	70.0 to 130	0.393	20.0
BD04057	Lithium, Total	mg/L	0.000801	0.0154	0.200	0.197	0.197	0.197	0.170 to 0.230	98.5	70.0 to 130	0.00	20.0
BD04055	Magnesium, Dissolved	mg/L	-0.00578	0.0462	5.00	421	393	4.98	4.25 to 5.75	480	70.0 to 130	6.88	20.0
BD04057	Magnesium, Total	mg/L	-0.0130	0.0462	5.00	4.91	4.87	4.92	4.25 to 5.75	98.2	70.0 to 130	0.818	20.0
BD04055	Manganese, Dissolved	mg/L	0.0000144	0.00033	0.100	0.0962	0.0973	0.0999	0.0850 to 0.115	95.8	70.0 to 130	1.14	20.0
BD04057	Manganese, Total	mg/L	-0.0000724	0.00033	0.100	0.104	0.102	0.103	0.0850 to 0.115	104	70.0 to 130	1.94	20.0
BD04057	Mercury, Total by CVAA	mg/L	1.000E-05	0.000500	0.004	0.00406	0.00402	0.00393	0.00340 to 0.00460	102	70.0 to 130	0.990	20.0
BD04055	Molybdenum, Dissolved	mg/L	0.0000339	0.0002	0.100	0.0983	0.101	0.102	0.0850 to 0.115	98.0	70.0 to 130	2.71	20.0
BD04057	Molybdenum, Total	mg/L	0.0000262	0.0002	0.100	0.106	0.105	0.103	0.0850 to 0.115	106	70.0 to 130	0.948	20.0
BD04055	Potassium, Dissolved	mg/L	-0.00416	0.367	10.0	16.5	16.5	9.76	8.50 to 11.5	92.2	70.0 to 130	0.00	20.0
BD04057	Potassium, Total	mg/L	0.0397	0.367	10.0	10.2	10.1	10.0	8.50 to 11.5	102	70.0 to 130	0.985	20.0
BD04055	Selenium, Dissolved	mg/L	0.0000013	0.00100	0.100	0.107	0.105	0.102	0.0850 to 0.115	105	70.0 to 130	1.89	20.0
BD04057	Selenium, Total	mg/L	0.0000964	0.00100	0.100	0.103	0.102	0.102	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BD04055	Silicon, Dissolved	mg/L	-0.000136	0.0440	1.00	6.66	6.63	1.01	0.850 to 1.15	99.0	70.0 to 130	0.451	20.0
BD04057	Silicon, Total	mg/L	0.000738	0.0440	1.00	0.995	0.993	0.978	0.850 to 1.15	99.5	70.0 to 130	0.201	20.0
BD04055	Sodium, Dissolved	mg/L	-0.00154	0.0880	5.00	37.4	37.2	5.01	4.25 to 5.75	102	70.0 to 130	0.536	20.0
BD04057	Sodium, Total	mg/L	-0.000153	0.0880	5.00	4.87	4.89	4.94	4.25 to 5.75	97.4	70.0 to 130	0.410	20.0
BD04057	Sulfate	mg/L	-0.286	2.0	20.0	18.5	19.0	18.6	18.0 to 22.0	92.5	80.0 to 120	2.67	20.0
BD04055	Thallium, Dissolved	mg/L	-0.0000073	0.000147	0.100	0.0976	0.0986	0.100	0.0850 to 0.115	97.6	70.0 to 130	1.02	20.0
BD04057	Thallium, Total	mg/L	0.0000032	0.000147	0.100	0.115	0.117	0.111	0.0850 to 0.115	115	70.0 to 130	1.72	20.0
BD04057	Total Organic Carbon	mg/L	-0.00336	1.00	10.0	10.4	10.4	26.7		104	80.0 to 120	0.00	20.0

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

Reported: 3/23/2023
Version: 3.5
COA_CCR

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

Alabama Power

Batch QC Summary

Customer Account: WMWGORPU
Sample Date: 2/20/23 14:53
Customer ID:
Delivery Date: 2/23/23 10:58

Description: Gorgas Pooled Upgradient - MW-3

Laboratory ID Number: BD04054

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04055	Alkalinity to pH 4.5	mg CaCO3/L					181	50.1	45.0 to 55.0			0.551	10.0
BD04057	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.04	0.200	2.00	1.98	0.049	1.95	1.80 to 2.20	99.0	90.0 to 110	0.00	15.0
BD04055	Solids, Dissolved	mg/L	2.00	25.0			3180	54.0	40.0 to 60.0			0.631	10.0

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

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Pooled Upgradient - MW-4

Location Code: WMWGORPU
Collected: 2/21/23 09:58
Customer ID:
Submittal Date: 2/23/23 10:58

Laboratory ID Number: BD04055

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	2/24/23 13:19	3/2/23 13:48		1.015	0.0408	mg/L	0.030000	0.1015	J
* Calcium, Total	2/24/23 13:19	3/2/23 14:36		101.5	232	mg/L	7.0035	40.6	
* Iron, Total	2/24/23 13:19	3/2/23 13:48		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Total	2/24/23 13:19	3/2/23 13:48		1.015	0.0424	mg/L	0.007105	0.01999956	
* Magnesium, Total	2/24/23 13:19	3/2/23 14:36		101.5	362	mg/L	2.1315	40.6	
* Silica, Total (calc.)	2/24/23 13:19	3/2/23 13:48		1	12.2	mg/L			
* Silicon, Total	2/24/23 13:19	3/2/23 13:48		1.015	5.69	mg/L	0.02030	0.25375	
* Sodium, Total	2/24/23 13:19	3/2/23 13:48		1.015	31.0	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	2/23/23 13:00	2/24/23 13:45		1.015	0.0416	mg/L	0.030000	0.1015	J
* Calcium, Dissolved	2/23/23 13:00	2/24/23 14:10		101.5	239	mg/L	7.0035	40.6	RA
* Iron, Dissolved	2/23/23 13:00	2/24/23 13:45		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Dissolved	2/23/23 13:00	2/24/23 13:45		1.015	0.0431	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	2/23/23 13:00	2/24/23 14:10		101.5	397	mg/L	2.1315	40.6	RA
* Silica, Dissolved (calc.)	2/23/23 13:00	2/24/23 13:45		1	12.1	mg/L			
* Silicon, Dissolved	2/23/23 13:00	2/24/23 13:45		1.015	5.67	mg/L	0.02030	0.25375	
* Sodium, Dissolved	2/23/23 13:00	2/24/23 13:45		1.015	32.3	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	2/24/23 13:19	2/27/23 15:58		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	2/24/23 13:19	2/27/23 15:58		1.015	Not Detected	mg/L	0.006090	0.05075	U
* Arsenic, Total	2/24/23 13:19	2/27/23 15:58		1.015	Not Detected	mg/L	0.000081	0.000203	U
* Barium, Total	2/24/23 13:19	2/27/23 15:58		1.015	0.0116	mg/L	0.000508	0.001015	
* Beryllium, Total	2/24/23 13:19	2/27/23 15:58		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	2/24/23 13:19	2/27/23 15:58		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	2/24/23 13:19	2/27/23 15:58		1.015	0.000244	mg/L	0.000203	0.001015	J
* Cobalt, Total	2/24/23 13:19	2/27/23 15:58		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	2/24/23 13:19	2/27/23 15:58		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	2/24/23 13:19	2/27/23 15:58		1.015	0.000436	mg/L	0.000152	0.001015	J
* Molybdenum, Total	2/24/23 13:19	2/27/23 15:58		1.015	0.000150	mg/L	0.000102	0.000203	J
* Potassium, Total	2/24/23 13:19	2/27/23 15:58		1.015	7.81	mg/L	0.169505	0.5075	

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

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

Reported: 3/23/2023
Version: 3.5
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Pooled Upgradient - MW-4

Location Code: WMWGORPU
Collected: 2/21/23 09:58
Customer ID:
Submittal Date: 2/23/23 10:58

Laboratory ID Number: BD04055

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	2/24/23 13:19	2/27/23 15:58		1.015	0.00266	mg/L	0.000508	0.001015	
* Thallium, Total	2/24/23 13:19	2/27/23 15:58		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	2/23/23 13:00	2/23/23 13:42		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	2/23/23 13:00	2/23/23 13:42		1.015	Not Detected	mg/L	0.006090	0.05075	U
* Arsenic, Dissolved	2/23/23 13:00	2/23/23 13:42		1.015	Not Detected	mg/L	0.000081	0.000203	U
* Barium, Dissolved	2/23/23 13:00	2/23/23 13:42		1.015	0.0105	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	2/23/23 13:00	2/28/23 14:36		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	2/23/23 13:00	2/23/23 13:42		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	2/23/23 13:00	2/23/23 13:42		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	2/23/23 13:00	2/23/23 13:42		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Dissolved	2/23/23 13:00	2/23/23 13:42		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	2/23/23 13:00	2/23/23 13:42		1.015	0.000381	mg/L	0.000152	0.001015	J
* Molybdenum, Dissolved	2/23/23 13:00	2/23/23 13:42		1.015	0.000274	mg/L	0.000102	0.000203	
* Potassium, Dissolved	2/23/23 13:00	2/23/23 13:42		1.015	7.28	mg/L	0.169505	0.5075	
* Selenium, Dissolved	2/23/23 13:00	2/23/23 13:42		1.015	0.00248	mg/L	0.000508	0.001015	
* Thallium, Dissolved	2/23/23 13:00	2/23/23 13:42		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ELH***								
* Mercury, Total by CVAA	2/27/23 19:37	2/28/23 01:09		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	2/24/23 10:22	2/24/23 10:22		1	0.244	mg/L as N	0.20	0.3	J
Analytical Method: SM 2320 B	***Analyst: ALH***								
* Alkalinity to pH 4.5	2/28/23 13:57	2/28/23 14:43		1	182	mg CaCO3/L			
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	2/24/23 10:25	2/27/23 13:48		1	3160	mg/L		147.1	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
* Bicarbonate Alkalinity, (calc.)	2/28/23 13:57	2/28/23 14:43		1	182	mg CaCO3/L		1	A
* Carbonate Alkalinity, (calc.)	2/28/23 13:57	2/28/23 14:43		1	Not Detected	mg CaCO3/L		0.5	A
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	2/24/23 04:09	2/24/23 04:09		1	4.29	mg/L	1.00	2	

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

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

Reported: 3/23/2023
Version: 3.5
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Pooled Upgradient - MW-4

Location Code: WMWGORPU
Collected: 2/21/23 09:58
Customer ID:
Submittal Date: 2/23/23 10:58

Laboratory ID Number: BD04055

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	2/24/23 13:48	2/24/23 13:48		1	1.58	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	2/27/23 12:15	2/27/23 12:15		1	0.415	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	3/1/23 12:10	3/1/23 12:10		80	1930	mg/L	48.0	160	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	2/21/23 09:55	2/21/23 09:55			3184.95	uS/cm			FA
pH	2/21/23 09:55	2/21/23 09:55			6.35	SU			FA
Temperature	2/21/23 09:55	2/21/23 09:55			19.61	C			FA
Turbidity	2/21/23 09:55	2/21/23 09:55			0.72	NTU			FA
Sulfide	2/21/23 09:55	2/21/23 09:55			0	mg/L			FA

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

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

Reported: 3/23/2023
Version: 3.5
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORPU
Sample Date: 2/21/23 09:58
Customer ID:
Delivery Date: 2/23/23 10:58

Description: Gorgas Pooled Upgradient - MW-4

Laboratory ID Number: BD04055

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04055	Aluminum, Dissolved	mg/L	-0.0000723	0.0198	0.100	0.0943	0.0950	0.0970	0.0850 to 0.115	94.3	70.0 to 130	0.740	20.0
BD04057	Aluminum, Total	mg/L	0.000456	0.0198	0.100	0.103	0.101	0.0998	0.0850 to 0.115	103	70.0 to 130	1.96	20.0
BD04055	Antimony, Dissolved	mg/L	0.000298	0.00100	0.100	0.0862	0.0870	0.0910	0.0850 to 0.115	86.2	70.0 to 130	0.924	20.0
BD04057	Antimony, Total	mg/L	0.000368	0.00100	0.100	0.101	0.0965	0.0925	0.0850 to 0.115	101	70.0 to 130	4.56	20.0
BD04055	Arsenic, Dissolved	mg/L	-0.0000209	0.000200	0.100	0.0978	0.0978	0.0959	0.0850 to 0.115	97.8	70.0 to 130	0.00	20.0
BD04057	Arsenic, Total	mg/L	0.0000075	0.000200	0.100	0.101	0.0982	0.101	0.0850 to 0.115	101	70.0 to 130	2.81	20.0
BD04055	Barium, Dissolved	mg/L	-0.0000189	0.00100	0.100	0.102	0.102	0.0928	0.0850 to 0.115	91.5	70.0 to 130	0.00	20.0
BD04057	Barium, Total	mg/L	-0.0000020	0.00100	0.100	0.106	0.106	0.102	0.0850 to 0.115	106	70.0 to 130	0.00	20.0
BD04055	Beryllium, Dissolved	mg/L	0.0000085	0.000880	0.100	0.103	0.101	0.104	0.0850 to 0.115	103	70.0 to 130	1.96	20.0
BD04057	Beryllium, Total	mg/L	0.0000162	0.000880	0.100	0.0918	0.0914	0.104	0.0850 to 0.115	91.8	70.0 to 130	0.437	20.0
BD04055	Boron, Dissolved	mg/L	-0.000712	0.0650	1.00	1.08	1.08	1.01	0.850 to 1.15	104	70.0 to 130	0.00	20.0
BD04057	Boron, Total	mg/L	-0.000338	0.0650	1.00	0.981	0.984	0.982	0.850 to 1.15	98.1	70.0 to 130	0.305	20.0
BD04055	Cadmium, Dissolved	mg/L	0.000	0.000147	0.100	0.0966	0.0980	0.0983	0.0850 to 0.115	96.6	70.0 to 130	1.44	20.0
BD04057	Cadmium, Total	mg/L	0.0000020	0.000147	0.100	0.0970	0.0992	0.0968	0.0850 to 0.115	97.0	70.0 to 130	2.24	20.0
BD04055	Calcium, Dissolved	mg/L	-0.0140	0.152	5.00	257	242	4.87	4.25 to 5.75	360	70.0 to 130	6.01	20.0
BD04057	Calcium, Total	mg/L	-0.00704	0.152	5.00	4.89	4.83	4.88	4.25 to 5.75	97.8	70.0 to 130	1.23	20.0
BD04057	Chloride	mg/L	0.0452	1.00	10.0	9.96	10.2	10.1	9.00 to 11.0	99.6	80.0 to 120	2.38	20.0
BD04055	Chromium, Dissolved	mg/L	-0.0000286	0.000440	0.100	0.0967	0.0978	0.0995	0.0850 to 0.115	96.7	70.0 to 130	1.13	20.0
BD04057	Chromium, Total	mg/L	0.0000793	0.000440	0.100	0.105	0.104	0.103	0.0850 to 0.115	105	70.0 to 130	0.957	20.0
BD04055	Cobalt, Dissolved	mg/L	0.0000026	0.000147	0.100	0.0971	0.0996	0.102	0.0850 to 0.115	97.1	70.0 to 130	2.54	20.0
BD04057	Cobalt, Total	mg/L	0.0000019	0.000147	0.100	0.109	0.108	0.107	0.0850 to 0.115	109	70.0 to 130	0.922	20.0
BD04057	Fluoride	mg/L	0.0455	0.125	2.50	2.61	2.61	2.63	2.25 to 2.75	104	80.0 to 120	0.00	20.0
BD04055	Iron, Dissolved	mg/L	0.00132	0.0176	0.2	0.196	0.194	0.203	0.170 to 0.230	98.0	70.0 to 130	1.03	20.0
BD04057	Iron, Total	mg/L	0.000770	0.0176	0.2	0.200	0.198	0.198	0.170 to 0.230	100	70.0 to 130	1.01	20.0

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

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORPU
Sample Date: 2/21/23 09:58
Customer ID:
Delivery Date: 2/23/23 10:58

Description: Gorgas Pooled Upgradient - MW-4

Laboratory ID Number: BD04055

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04055	Lead, Dissolved	mg/L	-0.0000002	0.000147	0.100	0.0983	0.0994	0.0997	0.0850 to 0.115	98.3	70.0 to 130	1.11	20.0
BD04057	Lead, Total	mg/L	0.0000057	0.000147	0.100	0.110	0.113	0.108	0.0850 to 0.115	110	70.0 to 130	2.69	20.0
BD04055	Lithium, Dissolved	mg/L	0.000829	0.0154	0.200	0.255	0.254	0.198	0.170 to 0.230	106	70.0 to 130	0.393	20.0
BD04057	Lithium, Total	mg/L	0.000801	0.0154	0.200	0.197	0.197	0.197	0.170 to 0.230	98.5	70.0 to 130	0.00	20.0
BD04055	Magnesium, Dissolved	mg/L	-0.00578	0.0462	5.00	421	393	4.98	4.25 to 5.75	480	70.0 to 130	6.88	20.0
BD04057	Magnesium, Total	mg/L	-0.0130	0.0462	5.00	4.91	4.87	4.92	4.25 to 5.75	98.2	70.0 to 130	0.818	20.0
BD04055	Manganese, Dissolved	mg/L	0.0000144	0.00033	0.100	0.0962	0.0973	0.0999	0.0850 to 0.115	95.8	70.0 to 130	1.14	20.0
BD04057	Manganese, Total	mg/L	-0.0000724	0.00033	0.100	0.104	0.102	0.103	0.0850 to 0.115	104	70.0 to 130	1.94	20.0
BD04057	Mercury, Total by CVAA	mg/L	1.000E-05	0.000500	0.004	0.00406	0.00402	0.00393	0.00340 to 0.00460	102	70.0 to 130	0.990	20.0
BD04055	Molybdenum, Dissolved	mg/L	0.0000339	0.0002	0.100	0.0983	0.101	0.102	0.0850 to 0.115	98.0	70.0 to 130	2.71	20.0
BD04057	Molybdenum, Total	mg/L	0.0000262	0.0002	0.100	0.106	0.105	0.103	0.0850 to 0.115	106	70.0 to 130	0.948	20.0
BD04055	Potassium, Dissolved	mg/L	-0.00416	0.367	10.0	16.5	16.5	9.76	8.50 to 11.5	92.2	70.0 to 130	0.00	20.0
BD04057	Potassium, Total	mg/L	0.0397	0.367	10.0	10.2	10.1	10.0	8.50 to 11.5	102	70.0 to 130	0.985	20.0
BD04055	Selenium, Dissolved	mg/L	0.0000013	0.00100	0.100	0.107	0.105	0.102	0.0850 to 0.115	105	70.0 to 130	1.89	20.0
BD04057	Selenium, Total	mg/L	0.0000964	0.00100	0.100	0.103	0.102	0.102	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BD04055	Silicon, Dissolved	mg/L	-0.000136	0.0440	1.00	6.66	6.63	1.01	0.850 to 1.15	99.0	70.0 to 130	0.451	20.0
BD04057	Silicon, Total	mg/L	0.000738	0.0440	1.00	0.995	0.993	0.978	0.850 to 1.15	99.5	70.0 to 130	0.201	20.0
BD04055	Sodium, Dissolved	mg/L	-0.00154	0.0880	5.00	37.4	37.2	5.01	4.25 to 5.75	102	70.0 to 130	0.536	20.0
BD04057	Sodium, Total	mg/L	-0.000153	0.0880	5.00	4.87	4.89	4.94	4.25 to 5.75	97.4	70.0 to 130	0.410	20.0
BD04057	Sulfate	mg/L	-0.286	2.0	20.0	18.5	19.0	18.6	18.0 to 22.0	92.5	80.0 to 120	2.67	20.0
BD04055	Thallium, Dissolved	mg/L	-0.0000073	0.000147	0.100	0.0976	0.0986	0.100	0.0850 to 0.115	97.6	70.0 to 130	1.02	20.0
BD04057	Thallium, Total	mg/L	0.0000032	0.000147	0.100	0.115	0.117	0.111	0.0850 to 0.115	115	70.0 to 130	1.72	20.0
BD04057	Total Organic Carbon	mg/L	-0.00336	1.00	10.0	10.4	10.4	26.7		104	80.0 to 120	0.00	20.0

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

Reported: 3/23/2023
Version: 3.5
COA_CCR

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

Alabama Power

Batch QC Summary

Customer Account: WMWGORPU
Sample Date: 2/21/23 09:58
Customer ID:
Delivery Date: 2/23/23 10:58

Description: Gorgas Pooled Upgradient - MW-4

Laboratory ID Number: BD04055

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04055	Alkalinity to pH 4.5	mg CaCO3/L					181	50.1	45.0 to 55.0			0.551	10.0
BD04057	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.04	0.200	2.00	1.98	0.049	1.95	1.80 to 2.20	99.0	90.0 to 110	0.00	15.0
BD04055	Solids, Dissolved	mg/L	2.00	25.0			3180	54.0	40.0 to 60.0			0.631	10.0

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

Reported: 3/23/2023
Version: 3.5
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Pooled Upgradient Field Blank-1

Location Code: WMWGORPUFB
Collected: 2/21/23 10:35
Customer ID:
Submittal Date: 2/23/23 10:58

Laboratory ID Number: BD04056

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	2/24/23 13:19	3/2/23 13:51		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	2/24/23 13:19	3/2/23 13:51		1.015	Not Detected	mg/L	0.070035	0.406	U
* Iron, Total	2/24/23 13:19	3/2/23 13:51		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Total	2/24/23 13:19	3/2/23 13:51		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	2/24/23 13:19	3/2/23 13:51		1.015	Not Detected	mg/L	0.021315	0.406	U
* Silica, Total (calc.)	2/24/23 13:19	3/2/23 13:51		1	Not Detected	mg/L			
* Silicon, Total	2/24/23 13:19	3/2/23 13:51		1.015	Not Detected	mg/L	0.02030	0.25375	U
* Sodium, Total	2/24/23 13:19	3/2/23 13:51		1.015	Not Detected	mg/L	0.03045	0.406	U
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	2/24/23 13:19	2/27/23 16:02		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	2/24/23 13:19	2/27/23 16:02		1.015	Not Detected	mg/L	0.006090	0.05075	U
* Arsenic, Total	2/24/23 13:19	2/27/23 16:02		1.015	Not Detected	mg/L	0.000081	0.000203	U
* Barium, Total	2/24/23 13:19	2/27/23 16:02		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Beryllium, Total	2/24/23 13:19	2/27/23 16:02		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	2/24/23 13:19	2/27/23 16:02		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	2/24/23 13:19	2/27/23 16:02		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	2/24/23 13:19	2/27/23 16:02		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	2/24/23 13:19	2/27/23 16:02		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	2/24/23 13:19	2/27/23 16:02		1.015	Not Detected	mg/L	0.000152	0.001015	U
* Molybdenum, Total	2/24/23 13:19	2/27/23 16:02		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Total	2/24/23 13:19	2/27/23 16:02		1.015	Not Detected	mg/L	0.169505	0.5075	U
* Selenium, Total	2/24/23 13:19	2/27/23 16:02		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	2/24/23 13:19	2/27/23 16:02		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ELH***								
* Mercury, Total by CVAA	2/27/23 19:37	2/28/23 01:13		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	2/24/23 10:23	2/24/23 10:23		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	2/24/23 10:25	2/27/23 13:48		1	Not Detected	mg/L		25	U

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

Comments:

Reported: 3/23/2023
Version: 3.5
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Pooled Upgradient Field Blank-1

Location Code: WMWGORPUFB
Collected: 2/21/23 10:35
Customer ID:
Submittal Date: 2/23/23 10:58

Laboratory ID Number: BD04056

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 5310 B		***Analyst: SC***							
* Total Organic Carbon	2/24/23 04:24	2/24/23 04:24		1	Not Detected	mg/L	1.00	2	U
Analytical Method: SM4500Cl E		***Analyst: JCC***							
* Chloride	2/24/23 13:49	2/24/23 13:49		1	Not Detected	mg/L	0.50	1	U
Analytical Method: SM4500F G 2017		***Analyst: JCC***							
* Fluoride	2/27/23 12:16	2/27/23 12:16		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011		***Analyst: JCC***							
* Sulfate	3/1/23 12:11	3/1/23 12:11		1	Not Detected	mg/L	0.6	2	U

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

Comments:

Reported: 3/23/2023
Version: 3.5
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORPUFB
Sample Date: 2/21/23 10:35
Customer ID:
Delivery Date: 2/23/23 10:58

Description: Gorgas Pooled Upgradient Field Blank-1

Laboratory ID Number: BD04056

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04057	Aluminum, Total	mg/L	0.000456	0.0198	0.100	0.103	0.101	0.0998	0.0850 to 0.115	103	70.0 to 130	1.96	20.0
BD04057	Antimony, Total	mg/L	0.000368	0.00100	0.100	0.101	0.0965	0.0925	0.0850 to 0.115	101	70.0 to 130	4.56	20.0
BD04057	Arsenic, Total	mg/L	0.0000075	0.000200	0.100	0.101	0.0982	0.101	0.0850 to 0.115	101	70.0 to 130	2.81	20.0
BD04057	Barium, Total	mg/L	-0.0000020	0.00100	0.100	0.106	0.106	0.102	0.0850 to 0.115	106	70.0 to 130	0.00	20.0
BD04057	Beryllium, Total	mg/L	0.0000162	0.000880	0.100	0.0918	0.0914	0.104	0.0850 to 0.115	91.8	70.0 to 130	0.437	20.0
BD04057	Boron, Total	mg/L	-0.000338	0.0650	1.00	0.981	0.984	0.982	0.850 to 1.15	98.1	70.0 to 130	0.305	20.0
BD04057	Cadmium, Total	mg/L	0.0000020	0.000147	0.100	0.0970	0.0992	0.0968	0.0850 to 0.115	97.0	70.0 to 130	2.24	20.0
BD04057	Calcium, Total	mg/L	-0.00704	0.152	5.00	4.89	4.83	4.88	4.25 to 5.75	97.8	70.0 to 130	1.23	20.0
BD04057	Chloride	mg/L	0.0452	1.00	10.0	9.96	10.2	10.1	9.00 to 11.0	99.6	80.0 to 120	2.38	20.0
BD04057	Chromium, Total	mg/L	0.0000793	0.000440	0.100	0.105	0.104	0.103	0.0850 to 0.115	105	70.0 to 130	0.957	20.0
BD04057	Cobalt, Total	mg/L	0.0000019	0.000147	0.100	0.109	0.108	0.107	0.0850 to 0.115	109	70.0 to 130	0.922	20.0
BD04057	Fluoride	mg/L	0.0455	0.125	2.50	2.61	2.61	2.63	2.25 to 2.75	104	80.0 to 120	0.00	20.0
BD04057	Iron, Total	mg/L	0.000770	0.0176	0.2	0.200	0.198	0.198	0.170 to 0.230	100	70.0 to 130	1.01	20.0
BD04057	Lead, Total	mg/L	0.0000057	0.000147	0.100	0.110	0.113	0.108	0.0850 to 0.115	110	70.0 to 130	2.69	20.0
BD04057	Lithium, Total	mg/L	0.000801	0.0154	0.200	0.197	0.197	0.197	0.170 to 0.230	98.5	70.0 to 130	0.00	20.0
BD04057	Magnesium, Total	mg/L	-0.0130	0.0462	5.00	4.91	4.87	4.92	4.25 to 5.75	98.2	70.0 to 130	0.818	20.0
BD04057	Manganese, Total	mg/L	-0.0000724	0.00033	0.100	0.104	0.102	0.103	0.0850 to 0.115	104	70.0 to 130	1.94	20.0
BD04057	Mercury, Total by CVAA	mg/L	1.000E-05	0.000500	0.004	0.00406	0.00402	0.00393	0.00340 to 0.00460	102	70.0 to 130	0.990	20.0
BD04057	Molybdenum, Total	mg/L	0.0000262	0.0002	0.100	0.106	0.105	0.103	0.0850 to 0.115	106	70.0 to 130	0.948	20.0
BD04057	Potassium, Total	mg/L	0.0397	0.367	10.0	10.2	10.1	10.0	8.50 to 11.5	102	70.0 to 130	0.985	20.0
BD04057	Selenium, Total	mg/L	0.0000964	0.00100	0.100	0.103	0.102	0.102	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BD04057	Silicon, Total	mg/L	0.000738	0.0440	1.00	0.995	0.993	0.978	0.850 to 1.15	99.5	70.0 to 130	0.201	20.0
BD04057	Sodium, Total	mg/L	-0.000153	0.0880	5.00	4.87	4.89	4.94	4.25 to 5.75	97.4	70.0 to 130	0.410	20.0
BD04057	Sulfate	mg/L	-0.286	2.0	20.0	18.5	19.0	18.6	18.0 to 22.0	92.5	80.0 to 120	2.67	20.0

Comments:

Reported: 3/23/2023
Version: 3.5
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORPUFB
Sample Date: 2/21/23 10:35
Customer ID:
Delivery Date: 2/23/23 10:58

Description:Gorgas Pooled Upgradient Field Blank-1

Laboratory ID Number: BD04056

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04057	Thallium, Total	mg/L	0.0000032	0.000147	0.100	0.115	0.117	0.111	0.0850 to 0.115	115	70.0 to 130	1.72	20.0
BD04057	Total Organic Carbon	mg/L	-0.00336	1.00	10.0	10.4	10.4	26.7		104	80.0 to 120	0.00	20.0

Comments:

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

Alabama Power

Batch QC Summary

Customer Account: WMWGORPUFB
Sample Date: 2/21/23 10:35
Customer ID:
Delivery Date: 2/23/23 10:58

Description: Gorgas Pooled Upgradient Field Blank-1

Laboratory ID Number: BD04056

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04057	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.04	0.200	2.00	1.98	0.049	1.95	1.80 to 2.20	99.0	90.0 to 110	0.00	15.0
BD04055	Solids, Dissolved	mg/L	2.00	25.0			3180	54.0	40.0 to 60.0			0.631	10.0

Comments:

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Pooled Upgradient Equipment Blank-1

Location Code: WMWGORPUEB
Collected: 2/21/23 10:45
Customer ID:
Submittal Date: 2/23/23 10:58

Laboratory ID Number: BD04057

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	2/24/23 13:19	3/2/23 13:55		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	2/24/23 13:19	3/2/23 13:55		1.015	Not Detected	mg/L	0.070035	0.406	U
* Iron, Total	2/24/23 13:19	3/2/23 13:55		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Total	2/24/23 13:19	3/2/23 13:55		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	2/24/23 13:19	3/2/23 13:55		1.015	Not Detected	mg/L	0.021315	0.406	U
* Silica, Total (calc.)	2/24/23 13:19	3/2/23 13:55		1	Not Detected	mg/L			
* Silicon, Total	2/24/23 13:19	3/2/23 13:55		1.015	Not Detected	mg/L	0.02030	0.25375	U
* Sodium, Total	2/24/23 13:19	3/2/23 13:55		1.015	Not Detected	mg/L	0.03045	0.406	U
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	2/24/23 13:19	2/27/23 16:06		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	2/24/23 13:19	2/27/23 16:06		1.015	Not Detected	mg/L	0.006090	0.05075	U
* Arsenic, Total	2/24/23 13:19	2/27/23 16:06		1.015	Not Detected	mg/L	0.000081	0.000203	U
* Barium, Total	2/24/23 13:19	2/27/23 16:06		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Beryllium, Total	2/24/23 13:19	2/27/23 16:06		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	2/24/23 13:19	2/27/23 16:06		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	2/24/23 13:19	2/27/23 16:06		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	2/24/23 13:19	2/27/23 16:06		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	2/24/23 13:19	2/27/23 16:06		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	2/24/23 13:19	2/27/23 16:06		1.015	Not Detected	mg/L	0.000152	0.001015	U
* Molybdenum, Total	2/24/23 13:19	2/27/23 16:06		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Total	2/24/23 13:19	2/27/23 16:06		1.015	Not Detected	mg/L	0.169505	0.5075	U
* Selenium, Total	2/24/23 13:19	2/27/23 16:06		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	2/24/23 13:19	2/27/23 16:06		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	3/7/23 15:53	3/7/23 20:20		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	2/24/23 10:24	2/24/23 10:24		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	2/24/23 10:25	2/27/23 13:48		1	Not Detected	mg/L		25	U

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

Comments:

Reported: 3/23/2023
Version: 3.5
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Pooled Upgradient Equipment Blank-1

Location Code: WMWGORPUEB
Collected: 2/21/23 10:45
Customer ID:
Submittal Date: 2/23/23 10:58

Laboratory ID Number: BD04057

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	2/24/23 04:38	2/24/23 04:38		1	Not Detected	mg/L	1.00	2	U
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	2/24/23 13:51	2/24/23 13:51		1	Not Detected	mg/L	0.50	1	U
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	2/27/23 12:17	2/27/23 12:17		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	3/1/23 12:12	3/1/23 12:12		1	Not Detected	mg/L	0.6	2	U

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

Comments:

Reported: 3/23/2023
Version: 3.5
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORPUEB
Sample Date: 2/21/23 10:45
Customer ID:
Delivery Date: 2/23/23 10:58

Description: Gorgas Pooled Upgradient Equipment Blank-1

Laboratory ID Number: BD04057

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04057	Aluminum, Total	mg/L	0.000456	0.0198	0.100	0.103	0.101	0.0998	0.0850 to 0.115	103	70.0 to 130	1.96	20.0
BD04057	Antimony, Total	mg/L	0.000368	0.00100	0.100	0.101	0.0965	0.0925	0.0850 to 0.115	101	70.0 to 130	4.56	20.0
BD04057	Arsenic, Total	mg/L	0.0000075	0.000200	0.100	0.101	0.0982	0.101	0.0850 to 0.115	101	70.0 to 130	2.81	20.0
BD04057	Barium, Total	mg/L	-0.0000020	0.00100	0.100	0.106	0.106	0.102	0.0850 to 0.115	106	70.0 to 130	0.00	20.0
BD04057	Beryllium, Total	mg/L	0.0000162	0.000880	0.100	0.0918	0.0914	0.104	0.0850 to 0.115	91.8	70.0 to 130	0.437	20.0
BD04057	Boron, Total	mg/L	-0.000338	0.0650	1.00	0.981	0.984	0.982	0.850 to 1.15	98.1	70.0 to 130	0.305	20.0
BD04057	Cadmium, Total	mg/L	0.0000020	0.000147	0.100	0.0970	0.0992	0.0968	0.0850 to 0.115	97.0	70.0 to 130	2.24	20.0
BD04057	Calcium, Total	mg/L	-0.00704	0.152	5.00	4.89	4.83	4.88	4.25 to 5.75	97.8	70.0 to 130	1.23	20.0
BD04057	Chloride	mg/L	0.0452	1.00	10.0	9.96	10.2	10.1	9.00 to 11.0	99.6	80.0 to 120	2.38	20.0
BD04057	Chromium, Total	mg/L	0.0000793	0.000440	0.100	0.105	0.104	0.103	0.0850 to 0.115	105	70.0 to 130	0.957	20.0
BD04057	Cobalt, Total	mg/L	0.0000019	0.000147	0.100	0.109	0.108	0.107	0.0850 to 0.115	109	70.0 to 130	0.922	20.0
BD04057	Fluoride	mg/L	0.0455	0.125	2.50	2.61	2.61	2.63	2.25 to 2.75	104	80.0 to 120	0.00	20.0
BD04057	Iron, Total	mg/L	0.000770	0.0176	0.2	0.200	0.198	0.198	0.170 to 0.230	100	70.0 to 130	1.01	20.0
BD04057	Lead, Total	mg/L	0.0000057	0.000147	0.100	0.110	0.113	0.108	0.0850 to 0.115	110	70.0 to 130	2.69	20.0
BD04057	Lithium, Total	mg/L	0.000801	0.0154	0.200	0.197	0.197	0.197	0.170 to 0.230	98.5	70.0 to 130	0.00	20.0
BD04057	Magnesium, Total	mg/L	-0.0130	0.0462	5.00	4.91	4.87	4.92	4.25 to 5.75	98.2	70.0 to 130	0.818	20.0
BD04057	Manganese, Total	mg/L	-0.0000724	0.00033	0.100	0.104	0.102	0.103	0.0850 to 0.115	104	70.0 to 130	1.94	20.0
BD04057	Mercury, Total by CVAA	mg/L	1.000E-05	0.000500	0.004	0.00406	0.00402	0.00393	0.00340 to 0.00460	102	70.0 to 130	0.990	20.0
BD04057	Molybdenum, Total	mg/L	0.0000262	0.0002	0.100	0.106	0.105	0.103	0.0850 to 0.115	106	70.0 to 130	0.948	20.0
BD04057	Potassium, Total	mg/L	0.0397	0.367	10.0	10.2	10.1	10.0	8.50 to 11.5	102	70.0 to 130	0.985	20.0
BD04057	Selenium, Total	mg/L	0.0000964	0.00100	0.100	0.103	0.102	0.102	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BD04057	Silicon, Total	mg/L	0.000738	0.0440	1.00	0.995	0.993	0.978	0.850 to 1.15	99.5	70.0 to 130	0.201	20.0
BD04057	Sodium, Total	mg/L	-0.000153	0.0880	5.00	4.87	4.89	4.94	4.25 to 5.75	97.4	70.0 to 130	0.410	20.0
BD04057	Sulfate	mg/L	-0.286	2.0	20.0	18.5	19.0	18.6	18.0 to 22.0	92.5	80.0 to 120	2.67	20.0

Comments:

Reported: 3/23/2023
Version: 3.5
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORPUEB
Sample Date: 2/21/23 10:45
Customer ID:
Delivery Date: 2/23/23 10:58

Description:Gorgas Pooled Upgradient Equipment Blank-1

Laboratory ID Number: BD04057

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04057	Thallium, Total	mg/L	0.0000032	0.000147	0.100	0.115	0.117	0.111	0.0850 to 0.115	115	70.0 to 130	1.72	20.0
BD04057	Total Organic Carbon	mg/L	-0.00336	1.00	10.0	10.4	10.4	26.7		104	80.0 to 120	0.00	20.0

Comments:

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

Alabama Power

Batch QC Summary

Customer Account: WMWGORPUEB
Sample Date: 2/21/23 10:45
Customer ID:
Delivery Date: 2/23/23 10:58

Description: Gorgas Pooled Upgradient Equipment Blank-1

Laboratory ID Number: BD04057

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04057	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.04	0.200	2.00	1.98	0.049	1.95	1.80 to 2.20	99.0	90.0 to 110	0.00	15.0
BD04055	Solids, Dissolved	mg/L	2.00	25.0			3180	54.0	40.0 to 60.0			0.631	10.0

Comments:

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

Definitions

Alabama Power

Project Number: WMWGORPU_1398

Abbreviation	Description
DF	Dilution Factor
LCS	Lab Control Sample
LFM	Lab Fortified Matrix
MB	Method Blank
MDL	Method Detection Limit; minimum concentration of an analyte that can be determined with 99% confidence that the concentration is greater than zero.
MS	Matrix Spike
MSD	Matrix Spike Duplicate
Prec	Precision (% RPD)
Q	Qualifier; comment used to note deviations or additional information associated with analytical results.
QC	Quality Control
Rec	Recovery of Matrix Spike
RL	Reporting Limit; lowest concentration at which an analyte can be quantitatively measured.
Vio Spec	Violation Specification; regulatory limit which has been exceeded by the sample analyzed.

Qualifier	Description
A	Bicarbonate alkalinity, carbonate alkalinity, hydroxide alkalinity, free carbon dioxide, and/or total carbon dioxide calculations are estimates due to pH>10SU and/or TDS>500mg/L.
FA	Field results were reviewed by the Water Field Group. Refer to APC Field Case Narrative.
J	Reported value is an estimate because concentration is less than reporting limit.
RA	Matrix spike is invalid due to sample concentration.
U	Compound was analyzed, but not detected.

Chain of Custody
Groundwater
APC General Testing Laboratory

☑ Field Complete ☐ Outside Lab
☑ Lab Complete

Lab ETA

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Collector	TJ Daugherty	Requested By	Greg Dyer
		Location	Gorgas Pooled Upgradient

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

Comments

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id	pH Check
MW-1	02/20/2023	11:50	6	Groundwater		BD04051	☑
MW-1 Dup	02/20/2023	11:50	6	Sample Duplicate		BD04052	☑
MW-2	02/20/2023	13:35	6	Groundwater		BD04053	☑
MW-3	02/20/2023	14:53	6	Groundwater		BD04054	☑
MW-4	02/21/2023	09:58	6	Groundwater		BD04055	☑
FB-1	02/21/2023	10:35	5	Field Blank		BD04056	☑
EB-1	02/21/2023	10:45	5	Equipment Blank		BD04057	☑
							☐
							☐
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Relinquished By	Received By	Date/Time
		02/22/2023 16:30
		02/23/2023 08:37

SmarTroll ID	7586-41445-5-4	Cooler Temp	1.1 °C
Turbidity ID	4677-23343-4-2	Thermometer ID	10614-61208-2-1
Sample Event	1398	pH Strip ID	10429-60252-10-8

Bottles/Pre-Preserved Bottles are provided by the GTL

Total Metals and Alkalinity are not performed on Dissolved Sets

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

Chain of Custody Groundwater

APC General Testing Laboratory

☑ Field Complete ☑ Lab Complete ☑ Outside Lab

Lab ETA

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Collector	TJ Daugherty	Requested By	Greg Dyer
		Location	Gorgas Pooled Upgradient

Bottles													
	1	Radium	1 L	3	N/A	N/A	5	N/A	N/A	7	N/A	N/A
	2	N/A	N/A	4	N/A	N/A	6	N/A	N/A	8	N/A	N/A

Comments: Rad MS/MSD @ MW-4

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id	pH Check
MW-1	02/20/2023	11:50	1	Groundwater		BD04058	☑
MW-1 Dup	02/20/2023	11:50	1	Sample Duplicate		BD04059	☑
MW-2	02/20/2023	13:35	1	Groundwater		BD04060	☑
MW-3	02/20/2023	14:53	1	Groundwater		BD04061	☑
MW-4	02/21/2023	09:58	3	Groundwater		BD04062	☑
FB-1	02/21/2023	10:35	1	Field Blank		BD04063	☑
EB-1	02/21/2023	10:45	1	Equipment Blank		BD04064	☑
							☐
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Relinquished By	Received By	Date/Time
		02/22/2023 16:30
		02/23/2023 08:38

SmarTroll ID	7586-41445-5-4	Cooler Temp	N/A
Turbidity ID	4677-23343-4-2	Thermometer ID	N/A
Sample Event	1398	pH Strip ID	10429-60252-10-8

Bottles/Pre-Preserved Bottles are provided by the GTL

Total Metals and Alkalinity are not performed on Dissolved Sets

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

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

Analytical Report

Alabama Power

Sample Group : WMWGORG_1401

Project/Site : Gorgas Gypsum
Parrish, AL 35580

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

Attention : Dustin Brooks & Greg Dyer

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

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

April 07, 2023

Dear Dustin Brooks,

Enclosed are the analytical results for sample(s) received by the laboratory on March 02, 2023.
All results reported herein conform to the laboratory's most current Quality Assurance Manual. Results marked with an asterisk conform to the most current applicable TNI/NELAC requirements. Exceptions will be noted in the body of the report.

Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2023

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

Sincerely,

Quality Control: Brooke Caton

Digitally signed by Brooke Caton
Date: 2023.04.07 15:31:12 -05'00'

Supervision: T Durant Maske

Digitally signed by T Durant Maske
DN: cn=T Durant Maske gn=T Durant Maske c=US United States l=US United States e=tdmaske@southernco.com
Reason: I am the author of this document
Location:
Date: 2023-04-10 10:48-05:00

REPORT OF LABORATORY ANALYSIS

This Certificate states the physical and/or chemical characteristics of the sample as submitted.
This document shall not be reproduced, except in full, without written consent from Alabama Power's General Test Laboratory.

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

Case Narrative

Alabama Power

Total Metals ICP

Gorgas Gypsum

WMWGORG_1401

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

Sample ID	Batch ID	Project ID
BD04566	748792	WMWGORG_1401
BD04567	748792	WMWGORG_1401
BD04568	748792	WMWGORG_1401
BD04569	748792	WMWGORG_1401
BD04570	748792	WMWGORG_1401
BD04571	748792, 751138	WMWGORG_1401
BD04572	748792	WMWGORG_1401
BD04573	748792	WMWGORG_1401
BD04574	748792	WMWGORG_1401
BD04575	748792	WMWGORG_1401
BD04576	748793	WMWGORG_1401
BD04577	748793	WMWGORG_1401
BD04578	748793	WMWGORG_1401
BD04579	748793, 751138	WMWGORG_1401
BD04580	748793	WMWGORG_1401
BD04581	748793	WMWGORG_1401
BD04582	748793	WMWGORG_1401
BD04583	748793	WMWGORG_1401
BD04584	748793	WMWGORG_1401
BD04585	748793	WMWGORG_1401
BD04586	748794	WMWGORG_1401
BD04587	748794	WMWGORG_1401
BD04588	748794	WMWGORG_1401
BD04589	748794	WMWGORG_1401

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

General Quality Control Procedures:

Revision 5

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

Matrix Specific Quality Control Procedures:

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

- A matrix spike and matrix spike duplicate were digested and analyzed with each ICP batch. All acceptance criteria for accuracy were met except for the following:
    - BD04575 Calcium, Iron and Silicon MS/MSD spike levels were less than 30% of the sample concentrations.
    - BD04579 Calcium, Iron, Magnesium, and Sodium MS/MSD spike levels were less than 30% of the sample concentrations.
    - BD04585 Calcium and Magnesium MS/MSD spike levels were less than 30% of the sample concentrations.
    - Bd04589 Iron MS/MSD spike levels were less than 30% of the sample concentrations.
- A matrix spike and matrix spike duplicate were digested and analyzed with each ICP batch. All acceptance criteria for precision were met.

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

Sample ID	Analyte	Dilution Factor
BD04566	Sodium	101.5
BD04567	Iron, Magnesium, Sodium	10.15
BD04567	Calcium	101.5
BD04568	Calcium, Iron, Magnesium	10.15

BD04569	Calcium, Iron, Magnesium	10.15
BD04570	Calcium, Magnesium, Sodium	10.15
BD04571	Calcium, Iron	101.5
BD04572	Calcium, Sodium	10.15
BD04573	Calcium, Iron, Magnesium, Sodium	10.15
BD04575	Calcium, Iron, Magnesium, Silicon	10.15
BD04576	Calcium, Iron, Magnesium, Silicon	10.15
BD04577	Iron	101.5
BD04577	Calcium, Magnesium, Silicon, Sodium	10.15
BD04578	Iron, Magnesium, Sodium	10.15
BD04578	Calcium	101.5
BD04579	Calcium, Iron, Magnesium, Sodium	101.5
BD04580	Magnesium, Sodium	10.15
BD04580	Calcium	101.5
BD04581	Calcium, Iron, Magnesium, Sodium	10.15
BD04582	Iron	101.5
BD04582	Calcium, Magnesium, Sodium	10.15
BD04583	Calcium, Magnesium, Sodium	10.15
BD04584	Calcium, Magnesium	10.15
BD04585	Calcium, Magnesium	10.15
BD04587	Calcium, Iron, Magnesium, Sodium	10.15
BD04589	Calcium, Iron, Magnesium	10.15

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

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

Case Narrative

Alabama Power

Dissolved Metals ICP

Gorgas Gypsum

WMWGORG_1401

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

Sample ID	Batch ID	Project ID
BD04566	748738, 751194	WMWGORG_1401
BD04567	748738, 751194	WMWGORG_1401
BD04568	748738	WMWGORG_1401
BD04569	748738	WMWGORG_1401
BD04570	748738	WMWGORG_1401
BD04571	748738, 751128	WMWGORG_1401
BD04572	748738	WMWGORG_1401
BD04573	748738	WMWGORG_1401
BD04575	748738	WMWGORG_1401
BD04576	748739	WMWGORG_1401
BD04577	748739	WMWGORG_1401
BD04578	748739	WMWGORG_1401
BD04579	748739, 751128	WMWGORG_1401
BD04580	748739	WMWGORG_1401
BD04581	748739	WMWGORG_1401
BD04582	748739	WMWGORG_1401
BD04583	748739	WMWGORG_1401
BD04584	748739	WMWGORG_1401
BD04585	748739	WMWGORG_1401
BD04587	748740	WMWGORG_1401
BD04589	748740	WMWGORG_1401

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

General Quality Control Procedures:

- Prior to sample analysis, an initial calibration verification (ICV) was analyzed, and all criteria were met.
- Following the ICV, an initial calibration blank (ICB) was analyzed, and all criteria were met.
- All continued calibration verification (CCV) were within the acceptance criteria for the requested analytes.

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

Matrix Specific Quality Control Procedures:

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

- A matrix spike and matrix spike duplicate were analyzed with each ICP batch. All acceptance criteria for accuracy were met except for the following:
    - BD04575 Calcium, Iron, Magnesium and Silicon MS/MSD spike levels were less than 30% of the sample concentrations.
    - BD04585 Calcium and Magnesium MS/MSD spike levels were less than 30% of the sample concentrations.
    - BD04589 Calcium, Iron and Magnesium MS/MSD spike levels were less than 30% of the sample concentrations.
- A matrix spike and matrix spike duplicate were analyzed with each ICP batch. All acceptance criteria for precision were met.

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

Sample ID	Analyte	Dilution Factor
BD04566	Sodium	101.5
BD04567	Calcium, Iron, Magnesium, Sodium	101.5
BD04568	Calcium, Iron, Magnesium	10.15
BD04569	Calcium, Iron, Magnesium	10.15
BD04570	Calcium, Magnesium, Sodium	10.15
BD04571	Calcium, Iron	101.5
BD04572	Calcium, Sodium	10.15
BD04573	Calcium, Iron, Magnesium, Sodium	10.15

BD04575	Calcium, Iron, Magnesium, Silicon	10.15
BD04576	Calcium, Iron, Magnesium, Silicon	10.15
BD04577	Iron	101.5
BD04577	Calcium, Magnesium, Silicon, Sodium	10.15
BD04578	Calcium, Iron, Magnesium, Sodium	101.5
BD04579	Calcium, Iron, Magnesium, Sodium	101.5
BD04580	Calcium, Magnesium, Sodium	101.5
BD04581	Calcium, Iron, Magnesium, Sodium	10.15
BD04582	Iron	101.5
BD04582	Calcium, Magnesium, Sodium	10.15
BD04583	Calcium, Magnesium, Sodium	10.15
BD04584	Calcium, Magnesium	10.15
BD04585	Calcium, Magnesium	10.15
BD04587	Calcium, Iron, Magnesium, Sodium	10.15
BD04589	Calcium, Iron, Magnesium	10.15
BC12872	Iron	101.5
BC12873	Calcium, Iron, Magnesium, Sodium, Silicon	101.5
BC12875	Calcium, Iron, Magnesium, Sodium	101.5

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

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

Case Narrative

Alabama Power

Total Metals ICPMS

Gorgas Gypsum

WMWGORG_1401

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

Sample ID	Batch ID	Project ID
BD04566	749667	WMWGORG_1401
BD04567	749667	WMWGORG_1401
BD04568	749667	WMWGORG_1401
BD04569	749667	WMWGORG_1401
BD04570	749667	WMWGORG_1401
BD04571	749667	WMWGORG_1401
BD04572	749667	WMWGORG_1401
BD04573	749667	WMWGORG_1401
BD04574	749667	WMWGORG_1401
BD04575	749667	WMWGORG_1401
BD04576	749668	WMWGORG_1401
BD04577	749668	WMWGORG_1401
BD04578	749668	WMWGORG_1401
BD04579	749668	WMWGORG_1401
BD04580	749668	WMWGORG_1401
BD04581	749668	WMWGORG_1401
BD04582	749668	WMWGORG_1401
BD04583	749668	WMWGORG_1401
BD04584	749668	WMWGORG_1401
BD04585	749668	WMWGORG_1401
BD04586	749669	WMWGORG_1401
BD04587	749669	WMWGORG_1401
BD04588	749669	WMWGORG_1401
BD04589	749669	WMWGORG_1401

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

General Quality Control Procedures:

Revision 5

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

Matrix Specific Quality Control Procedures:

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

- A matrix spike and matrix spike duplicate were digested and analyzed with each ICPMS batch. All acceptance criteria for accuracy were met, except for the following:
    - BD04575, BD04585, & BD04589 Aluminum and Manganese MS/MSD spike levels were less than 30% of the sample concentrations.
- A matrix spike and matrix spike duplicate were digested and analyzed with each ICPMS batch. All acceptance criteria for precision were met.

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

Sample ID	Analyte	Dilution Factor
BD04567	Manganese	10.15
BD04568	Manganese	5.075
BD04568	Aluminum	92.365
BD04569	Manganese	5.075
BD04569	Aluminum	92.365
BD04571	Manganese	5.075
BD04575	Manganese	10.15
BD04575*	Aluminum	92.365

BD04576	Manganese	10.15
BD04576	Aluminum	92.365
BD04577	Aluminum, Manganese	92.365
BD04578	Manganese	10.15
BD04579	Manganese	92.365
BD04580	Manganese	5.075
BD04581	Manganese	92.365
BD04582	Manganese	92.365
BD04583	Manganese	5.075
BD04584	Aluminum, Manganese	10.15
BD04585*	Aluminum, Manganese	10.15
BD04587	Manganese	92.365
BD04589*	Aluminum, Manganese	5.075

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

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

Case Narrative

Alabama Power

Dissolved Metals ICPMS

Gorgas Gypsum

WMWGORG_1401

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

Sample ID	Batch ID	Project ID
BD04566	749463	WMWGORG_1401
BD04567	749463	WMWGORG_1401
BD04568	749463	WMWGORG_1401
BD04569	749463	WMWGORG_1401
BD04570	749463	WMWGORG_1401
BD04571	749463	WMWGORG_1401
BD04572	749463	WMWGORG_1401
BD04573	749463	WMWGORG_1401
BD04575	749463	WMWGORG_1401
BD04576	749478	WMWGORG_1401
BD04577	749478	WMWGORG_1401
BD04578	749478	WMWGORG_1401
BD04579	749478	WMWGORG_1401
BD04580	749478	WMWGORG_1401
BD04581	749478	WMWGORG_1401
BD04582	749478	WMWGORG_1401
BD04583	749478	WMWGORG_1401
BD04584	749478	WMWGORG_1401
BD04585	749478	WMWGORG_1401
BD04587	749479	WMWGORG_1401
BD04589	749479	WMWGORG_1401

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

General Quality Control Procedures:

- All tune and calibration met criteria for all requested analytes.
- Prior to sample analysis, an initial calibration verification (ICV) was analyzed, and all criteria were met.

Revision 5

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

Matrix Specific Quality Control Procedures:

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

- A matrix spike and matrix spike duplicate were analyzed with each ICPMS batch. All acceptance criteria for accuracy were met except for the following:
    - BD04575 & BD04585 Aluminum and Manganese MS/MSD spike levels were less than 30% of the sample concentrations.
    - BD04589 Manganese MS/MSD spike levels were less than 30% of the sample concentrations.
- A matrix spike and matrix spike duplicate were analyzed with each ICPMS batch. All acceptance criteria for precision were met.

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

Sample ID	Analyte	Dilution Factor
BD04567	Manganese	10.15
BD04568	Manganese	5.075
BD04568	Aluminum	92.365
BD04569	Manganese	5.075
BD04569	Aluminum	92.365
BD04571	Manganese	5.075
BD04575	Aluminum, Manganese	10.15

BD04576	Aluminum, Manganese	10.15
BD04577	Aluminum, Manganese	92.365
BD04578	Manganese	10.15
BD04579	Manganese	92.365
BD04581	Manganese	92.365
BD04582	Manganese	92.365
BD04583	Manganese	5.075
BD04584	Aluminum, Manganese	10.15
BD04585	Aluminum, Manganese	10.15
BD04587	Manganese	92.365
BD04589	Manganese	5.075

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

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

Case Narrative

Alabama Power

Mercury

Gorgas Gypsum

WMWGORG_1401

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

Sample ID	Batch ID	Project ID
BD04566	749103	WMWGORG_1401
BD04567	749103	WMWGORG_1401
BD04568	749103	WMWGORG_1401
BD04569	749103	WMWGORG_1401
BD04570	749103	WMWGORG_1401
BD04571	749103	WMWGORG_1401
BD04572	749103	WMWGORG_1401
BD04573	749103	WMWGORG_1401
BD04574	749103	WMWGORG_1401
BD04575	749103	WMWGORG_1401
BD04576	749104	WMWGORG_1401
BD04577	749104	WMWGORG_1401
BD04578	749104	WMWGORG_1401
BD04579	749104	WMWGORG_1401
BD04580	749104	WMWGORG_1401
BD04581	749104	WMWGORG_1401
BD04582	749104	WMWGORG_1401
BD04583	749104	WMWGORG_1401
BD04584	749104	WMWGORG_1401
BD04585	749104	WMWGORG_1401
BD04586	749105	WMWGORG_1401
BD04587	749105	WMWGORG_1401
BD04588	749105	WMWGORG_1401
BD04589	749105	WMWGORG_1401

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

General Quality Control Procedures:

Revision 5

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

Matrix Specific Quality Control Procedures:

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

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

7. All samples were analyzed without a dilution factor.

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

Case Narrative

Alabama Power

Total Dissolved Solids

Gorgas Gypsum

WMWGORG_1401

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

Sample ID	Batch ID	Project ID
BD04566	748842	WMWGORG_1401
BD04567	748842	WMWGORG_1401
BD04568	748842	WMWGORG_1401
BD04569	748842	WMWGORG_1401
BD04570	748842	WMWGORG_1401
BD04571	748842	WMWGORG_1401
BD04572	748842	WMWGORG_1401
BD04573	748843	WMWGORG_1401
BD04574	748843	WMWGORG_1401
BD04575	748843	WMWGORG_1401
BD04576	748843	WMWGORG_1401
BD04577	749096	WMWGORG_1401
BD04578	748843	WMWGORG_1401
BD04579	748843	WMWGORG_1401
BD04580	748843	WMWGORG_1401
BD04581	748843	WMWGORG_1401
BD04582	748843	WMWGORG_1401
BD04583	748843	WMWGORG_1401
BD04584	749096	WMWGORG_1401
BD04585	749096	WMWGORG_1401
BD04586	749096	WMWGORG_1401
BD04587	749096	WMWGORG_1401
BD04588	749096	WMWGORG_1401
BD04589	749096	WMWGORG_1401

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

General Quality Control Procedures:

Revision 5

- A Method Blank was analyzed with each batch. All criteria were met.
- All final weights of samples, standards, and blanks agreed within 0.5mg of the previous weight.
- A sample duplicate was analyzed with each batch, and RPD was ≤ 10%.
- A laboratory control sample was analyzed with each batch. All criteria were met.
- Samples were between 2.5mg and 200mg residue.
- All samples with residue <2.5mg had the maximum volume of 150mL filtered. Affected samples are as follows:
    - BD04574
    - BD04586
    - BD04588

Alkalinity

Gorgas Gypsum

WMWGORG_1401

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

Sample ID	Batch ID	Project ID
BD04566	749862, 749863, 749864	WMWGORG_1401
BD04567	749862, 749863, 749864	WMWGORG_1401
BD04568	749718, 749719	WMWGORG_1401
BD04569	749718, 749719	WMWGORG_1401
BD04570	749862, 749863, 749864	WMWGORG_1401
BD04571	749862, 749863, 749864	WMWGORG_1401
BD04572	749862, 749863, 749864	WMWGORG_1401
BD04573	749862, 749863, 749864	WMWGORG_1401
BD04575	749862, 749863, 749864	WMWGORG_1401
BD04576	749863, 749864	WMWGORG_1401
BD04577	749862, 749863, 749864	WMWGORG_1401
BD04578	749717, 749718, 749719	WMWGORG_1401
BD04579	749717, 749718, 749719	WMWGORG_1401
BD04580	749862, 749863, 749864	WMWGORG_1401
BD04581	749862, 749863, 749864	WMWGORG_1401
BD04582	749862, 749863, 749864	WMWGORG_1401
BD04583	749862, 749863, 749864	WMWGORG_1401
BD04584	749862, 749863, 749864	WMWGORG_1401
BD04585	749862, 749863, 749864	WMWGORG_1401
BD04587	749862, 749863, 749864	WMWGORG_1401
BD04589	749862, 749863, 749864	WMWGORG_1401

4. All of the above samples were prepared and analyzed by Standard Method 2320B, except for the following:
    - BD04577, BD04568, & BD04569 Alkalinity could not be performed, pH below titration end point of 4.5 SU.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

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

7. The following samples had pH>10 and/or TDS>500mg/L. Therefore, the calculations for carbonate and bicarbonate are estimates:
    - BD04566
    - BD04567
    - BD04570
    - BD04571
    - BD04573
    - BD04575
    - BD04576
    - BD04577
    - BD04578
    - BD04579
    - BD04580
    - BD04581
    - BD04582
    - BD04583
    - BD04584
    - BD04585
    - BD04587
    - BD04589

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

Case Narrative

Alabama Power

Anions

Gorgas Gypsum

WMWGORG_1401

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

Sample ID	Batch ID	Project ID
BD04566	749123, 749126, 748847	WMWGORG_1401
BD04567	749123, 749126, 748847	WMWGORG_1401
BD04568	749123, 749894, 748847	WMWGORG_1401
BD04569	749123, 749894, 748847	WMWGORG_1401
BD04570	749123, 749126, 748847	WMWGORG_1401
BD04571	749123, 749126, 748847	WMWGORG_1401
BD04572	749123, 749126, 748847	WMWGORG_1401
BD04573	749123, 749126, 748847	WMWGORG_1401
BD04574	749123, 749126, 748847	WMWGORG_1401
BD04575	749123, 749894, 748847	WMWGORG_1401
BD04576	749124, 751140, 748848	WMWGORG_1401
BD04577	749124, 749127, 748848	WMWGORG_1401
BD04578	749124, 749127, 748848	WMWGORG_1401
BD04579	749124, 749127, 748848	WMWGORG_1401
BD04580	749124, 749127, 748848	WMWGORG_1401
BD04581	749124, 749127, 748848	WMWGORG_1401
BD04582	749124, 749127, 748848	WMWGORG_1401
BD04583	749124, 749127, 748848	WMWGORG_1401
BD04584	749124, 751140, 748848	WMWGORG_1401
BD04585	749124, 749127, 748848	WMWGORG_1401
BD04586	749125, 749128, 748849	WMWGORG_1401
BD04587	749125, 749128, 748849	WMWGORG_1401
BD04588	749125, 749128, 748849	WMWGORG_1401
BD04589	749125, 749128, 748849	WMWGORG_1401

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

General Quality Control Procedures:

Revision 5

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

Matrix Specific Quality Control Procedures:

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

- A matrix spike and matrix spike duplicate were analyzed with each batch. All acceptance criteria for accuracy were met, except for the following:
    - BC12875 matrix spike duplicate recovery is outside of the specification limit.
- A matrix spike and matrix spike duplicate were analyzed with each batch. All acceptance criteria for precision were met.

7. Sample BD04568, BD04569, BD04575, BD04577, BD04585, & BD04585 results for Fluoride are qualified due to potential matrix interferences.
8. The following samples were diluted due to the analyzed sample concentration being greater than the high standard of the calibration curve:

Sample ID	Analyte	Dilution Factor
BD04566	Sulfate	8
BD04567	Chloride, Sulfate	5, 50
BD04568	Sulfate	25
BD04569	Sulfate	32
BD04570	Sulfate	16
BD04571	Sulfate	20
BD04573	Sulfate	25
BD04575	Sulfate	50
BD04576	Sulfate	40
BD04577	Chloride, Sulfate	25, 80
BD04578	Chloride, Sulfate	25, 80
BD04579	Chloride, Sulfate	25, 100
BD04580	Chloride, Sulfate	4, 80
BD04581	Chloride, Sulfate	4, 50

BD04582	Sulfate	40
BD04583	Sulfate	40
BD04584	Sulfate	40
BD04585	Sulfate	50
BD04587	Chloride & Sulfate	25, 80
BD04589	Chloride & Sulfate	5, 50

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

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

Case Narrative

Alabama Power

Nitrate-Nitrite

Gorgas Gypsum

WMWGORG_1401

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

Sample ID	Batch ID	Project ID
BD04566	749119	WMWGORG_1401
BD04567	749119	WMWGORG_1401
BD04568	749119	WMWGORG_1401
BD04569	749119	WMWGORG_1401
BD04570	749119	WMWGORG_1401
BD04571	749119	WMWGORG_1401
BD04572	749119	WMWGORG_1401
BD04573	749119	WMWGORG_1401
BD04574	749119	WMWGORG_1401
BD04575	749119	WMWGORG_1401
BD04576	749120	WMWGORG_1401
BD04577	749120	WMWGORG_1401
BD04578	749120	WMWGORG_1401
BD04579	749120	WMWGORG_1401
BD04580	749120	WMWGORG_1401
BD04581	749120	WMWGORG_1401
BD04582	749120	WMWGORG_1401
BD04583	749120	WMWGORG_1401
BD04584	749120	WMWGORG_1401
BD04585	749120	WMWGORG_1401
BD04586	749121	WMWGORG_1401
BD04587	749121	WMWGORG_1401
BD04588	749121	WMWGORG_1401
BD04589	749121	WMWGORG_1401

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

General Quality Control Procedures:

Revision 5

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

EPA 353.2 Specific QC:

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

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

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

Case Narrative

Alabama Power

Total Organic Carbon

Gorgas Gypsum

WMWGORG_1401

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

Sample ID	Batch ID	Project ID
BD04566	748798	WMWGORG_1401
BD04567	748798	WMWGORG_1401
BD04568	748798	WMWGORG_1401
BD04569	748798	WMWGORG_1401
BD04570	748798	WMWGORG_1401
BD04571	748798	WMWGORG_1401
BD04572	748798	WMWGORG_1401
BD04573	748798	WMWGORG_1401
BD04574	748798	WMWGORG_1401
BD04575	748798	WMWGORG_1401
BD04576	748799	WMWGORG_1401
BD04577	748799	WMWGORG_1401
BD04578	748799	WMWGORG_1401
BD04579	748799	WMWGORG_1401
BD04580	748799	WMWGORG_1401
BD04581	748799	WMWGORG_1401
BD04582	748799	WMWGORG_1401
BD04583	748799	WMWGORG_1401
BD04584	748799	WMWGORG_1401
BD04585	748799	WMWGORG_1401
BD04586	748800	WMWGORG_1401
BD04587	748800	WMWGORG_1401
BD04588	748800	WMWGORG_1401
BD04589	748800	WMWGORG_1401

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

General Quality Control Procedures:

- All calibration criteria were met.

Revision 5

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

Matrix Specific Quality Control Procedures:

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

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

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Gypsum - MW-8V

Location Code: WMWGORG
Collected: 2/28/23 12:29
Customer ID:
Submittal Date: 3/2/23 10:38

Laboratory ID Number: BD04566

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***					***Preparation Method: EPA 1638***			
* Boron, Total	3/3/23 11:16	3/6/23 11:52		1.015	0.142	mg/L	0.030000	0.1015	
* Calcium, Total	3/3/23 11:16	3/6/23 11:52		1.015	29.6	mg/L	0.070035	0.406	
* Iron, Total	3/3/23 11:16	3/6/23 11:52		1.015	0.0632	mg/L	0.008120	0.0406	
* Lithium, Total	3/3/23 11:16	3/6/23 11:52		1.015	0.238	mg/L	0.007105	0.01999956	
* Magnesium, Total	3/3/23 11:16	3/6/23 11:52		1.015	13.7	mg/L	0.021315	0.406	
* Silica, Total (calc.)	3/3/23 11:16	3/6/23 11:52		1	18.7	mg/L			
* Silicon, Total	3/3/23 11:16	3/6/23 11:52		1.015	8.74	mg/L	0.02030	0.25375	
* Sodium, Total	3/3/23 11:16	3/7/23 14:01		101.5	355	mg/L	3.045	40.6	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	3/2/23 12:15	3/6/23 09:55		1.015	0.141	mg/L	0.030000	0.1015	
* Calcium, Dissolved	3/2/23 12:15	3/6/23 09:55		1.015	30.7	mg/L	0.070035	0.406	
* Iron, Dissolved	3/2/23 12:15	3/6/23 09:55		1.015	0.0357	mg/L	0.008120	0.0406	J
* Lithium, Dissolved	3/2/23 12:15	3/6/23 09:55		1.015	0.240	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	3/2/23 12:15	3/6/23 09:55		1.015	14.3	mg/L	0.021315	0.406	
* Molybdenum, Dissolved	3/30/23 09:48	3/30/23 10:20		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Dissolved (calc.)	3/2/23 12:15	3/6/23 09:55		1	19.1	mg/L			
* Silicon, Dissolved	3/2/23 12:15	3/6/23 09:55		1.015	8.92	mg/L	0.02030	0.25375	
* Sodium, Dissolved	3/2/23 12:15	3/6/23 13:52		101.5	420	mg/L	3.045	40.6	
Analytical Method: EPA 200.8	***Analyst: DLJ***					***Preparation Method: EPA 1638***			
* Antimony, Total	3/3/23 11:16	3/6/23 16:01		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	3/3/23 11:16	3/6/23 16:01		1.015	0.0156	mg/L	0.006090	0.05075	J
* Arsenic, Total	3/3/23 11:16	3/6/23 16:01		1.015	0.00219	mg/L	0.000081	0.000203	
* Barium, Total	3/3/23 11:16	3/6/23 16:01		1.015	0.0973	mg/L	0.000508	0.001015	
* Beryllium, Total	3/3/23 11:16	3/6/23 16:01		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	3/3/23 11:16	3/6/23 16:01		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	3/3/23 11:16	3/6/23 16:01		1.015	0.000293	mg/L	0.000203	0.001015	J
* Cobalt, Total	3/3/23 11:16	3/6/23 16:01		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	3/3/23 11:16	3/6/23 16:01		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	3/3/23 11:16	3/6/23 16:01		1.015	0.124	mg/L	0.000152	0.001015	
* Molybdenum, Total	3/3/23 11:16	3/6/23 16:01		1.015	0.000158	mg/L	0.000102	0.000203	J

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

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

Reported: 4/7/2023
Version: 3.5
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Gypsum - MW-8V

Location Code: WMWGORG
Collected: 2/28/23 12:29
Customer ID:
Submittal Date: 3/2/23 10:38

Laboratory ID Number: BD04566

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	3/3/23 11:16	3/6/23 16:01		1.015	3.29	mg/L	0.169505	0.5075	
* Selenium, Total	3/3/23 11:16	3/6/23 16:01		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	3/3/23 11:16	3/6/23 16:01		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	3/2/23 12:15	3/2/23 15:44		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	3/2/23 12:15	3/2/23 15:44		1.015	Not Detected	mg/L	0.006090	0.05075	U
* Arsenic, Dissolved	3/2/23 12:15	3/2/23 15:44		1.015	0.00158	mg/L	0.000081	0.000203	
* Barium, Dissolved	3/2/23 12:15	3/2/23 15:44		1.015	0.0915	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	3/2/23 12:15	3/2/23 15:44		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	3/2/23 12:15	3/2/23 15:44		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	3/2/23 12:15	3/2/23 15:44		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	3/2/23 12:15	3/2/23 15:44		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Dissolved	3/2/23 12:15	3/2/23 15:44		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	3/2/23 12:15	3/2/23 15:44		1.015	0.0937	mg/L	0.000152	0.001015	
* Potassium, Dissolved	3/2/23 12:15	3/2/23 15:44		1.015	3.14	mg/L	0.169505	0.5075	
* Selenium, Dissolved	3/2/23 12:15	3/2/23 15:44		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	3/2/23 12:15	3/2/23 15:44		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ELH***								
* Mercury, Total by CVAA	3/8/23 17:33	3/8/23 21:35		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	3/3/23 11:00	3/3/23 11:00		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
* Alkalinity to pH 4.5	3/13/23 13:37	3/13/23 15:58		1	721	mg CaCO3/L			
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	3/2/23 12:50	3/3/23 13:40		1	1020	mg/L		100	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
* Bicarbonate Alkalinity, (calc.)	3/13/23 13:37	3/13/23 15:58		1	716	mg CaCO3/L		1	A
* Carbonate Alkalinity, (calc.)	3/13/23 13:37	3/13/23 15:58		1	5.34	mg CaCO3/L		0.5	A
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	3/2/23 13:27	3/2/23 13:27		1	14.4	mg/L	1.00	2	

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

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

Reported: 4/7/2023
Version: 3.5
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Gypsum - MW-8V

Location Code: WMWGORG
Collected: 2/28/23 12:29
Customer ID:
Submittal Date: 3/2/23 10:38

Laboratory ID Number: BD04566

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	3/3/23 07:55	3/3/23 07:55		1	18.6	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	3/3/23 11:39	3/3/23 11:39		1	0.350	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	3/2/23 14:01	3/2/23 14:01		8	182	mg/L	4.8	16	
Analytical Method: Field Measurements	***Analyst: AWG***								
Conductivity	2/28/23 12:26	2/28/23 12:26			1611.65	uS/cm			FA
pH	2/28/23 12:26	2/28/23 12:26			7.50	SU			FA
Temperature	2/28/23 12:26	2/28/23 12:26			21.78	C			FA
Turbidity	2/28/23 12:26	2/28/23 12:26			1.5	NTU			FA
Sulfide	2/28/23 12:26	2/28/23 12:26			10	mg/L			FA

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

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

Reported: 4/7/2023
Version: 3.5
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORG
Sample Date: 2/28/23 12:29
Customer ID:
Delivery Date: 3/2/23 10:38

Description: Gorgas Gypsum - MW-8V

Laboratory ID Number: BD04566

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04575	Aluminum, Dissolved	mg/L	-0.0000351	0.0198	0.100	12.1	12.0	0.103	0.0850 to 0.115	-100	70.0 to 130	0.830	20.0
BD04575	Aluminum, Total	mg/L	0.000677	0.0198	0.100	15.4	15.2	0.105	0.0850 to 0.115	0.00	70.0 to 130	1.31	20.0
BD04575	Antimony, Dissolved	mg/L	0.000375	0.00100	0.100	0.0900	0.0894	0.0851	0.0850 to 0.115	90.0	70.0 to 130	0.669	20.0
BD04575	Antimony, Total	mg/L	0.000351	0.00100	0.100	0.0992	0.101	0.0911	0.0850 to 0.115	99.2	70.0 to 130	1.80	20.0
BD04575	Arsenic, Dissolved	mg/L	-0.0000031	0.000200	0.100	0.0998	0.0990	0.0994	0.0850 to 0.115	98.6	70.0 to 130	0.805	20.0
BD04575	Arsenic, Total	mg/L	0.0000206	0.000200	0.100	0.101	0.0987	0.100	0.0850 to 0.115	99.5	70.0 to 130	2.30	20.0
BD04575	Barium, Dissolved	mg/L	0.0000093	0.00100	0.100	0.119	0.121	0.105	0.0850 to 0.115	98.5	70.0 to 130	1.67	20.0
BD04575	Barium, Total	mg/L	0.0000082	0.00100	0.100	0.121	0.123	0.100	0.0850 to 0.115	101	70.0 to 130	1.64	20.0
BD04575	Beryllium, Dissolved	mg/L	0.0000272	0.000880	0.100	0.115	0.113	0.106	0.0850 to 0.115	106	70.0 to 130	1.75	20.0
BD04575	Beryllium, Total	mg/L	0.0000174	0.000880	0.100	0.117	0.121	0.0967	0.0850 to 0.115	106	70.0 to 130	3.36	20.0
BD04575	Boron, Dissolved	mg/L	-0.00419	0.0650	1.00	1.20	1.24	1.04	0.850 to 1.15	104	70.0 to 130	3.28	20.0
BD04575	Boron, Total	mg/L	-0.00441	0.0650	1.00	1.22	1.21	1.03	0.850 to 1.15	106	70.0 to 130	0.823	20.0
BD04575	Cadmium, Dissolved	mg/L	0.0000019	0.000147	0.100	0.0943	0.0942	0.0961	0.0850 to 0.115	92.8	70.0 to 130	0.106	20.0
BD04575	Cadmium, Total	mg/L	0.0000066	0.000147	0.100	0.0984	0.101	0.101	0.0850 to 0.115	96.8	70.0 to 130	2.61	20.0
BD04575	Calcium, Dissolved	mg/L	0.00993	0.152	5.00	179	158	5.12	4.25 to 5.75	660	70.0 to 130	12.5	20.0
BD04575	Calcium, Total	mg/L	0.00311	0.152	5.00	140	135	4.80	4.25 to 5.75	160	70.0 to 130	3.64	20.0
BD04575	Chloride	mg/L	0.0461	1.00	10.0	13.0	13.3	10.2	9.00 to 11.0	101	80.0 to 120	2.28	20.0
BD04575	Chromium, Dissolved	mg/L	0.0000039	0.000440	0.100	0.0981	0.0951	0.0978	0.0850 to 0.115	97.8	70.0 to 130	3.11	20.0
BD04575	Chromium, Total	mg/L	0.0000603	0.000440	0.100	0.100	0.101	0.103	0.0850 to 0.115	99.5	70.0 to 130	0.995	20.0
BD04575	Cobalt, Dissolved	mg/L	0.0000034	0.000147	0.100	0.320	0.312	0.104	0.0850 to 0.115	107	70.0 to 130	2.53	20.0
BD04575	Cobalt, Total	mg/L	0.0000044	0.000147	0.100	0.339	0.344	0.111	0.0850 to 0.115	112	70.0 to 130	1.46	20.0
BD04574	Fluoride	mg/L	0.0456	0.125	2.50	2.45	2.57	2.53	2.25 to 2.75	98.0	80.0 to 120	4.78	20.0
BD04575	Iron, Dissolved	mg/L	0.000348	0.0176	0.2	11.9	10.3	0.204	0.170 to 0.230	900	70.0 to 130	14.4	20.0
BD04575	Iron, Total	mg/L	0.000151	0.0176	0.2	10.7	10.3	0.202	0.170 to 0.230	200	70.0 to 130	3.81	20.0

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

Reported: 4/7/2023
Version: 3.5
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORG
Sample Date: 2/28/23 12:29
Customer ID:
Delivery Date: 3/2/23 10:38

Description: Gorgas Gypsum - MW-8V

Laboratory ID Number: BD04566

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04575	Lead, Dissolved	mg/L	0.0000062	0.000147	0.100	0.107	0.107	0.107	0.0850 to 0.115	106	70.0 to 130	0.00	20.0
BD04575	Lead, Total	mg/L	0.0000098	0.000147	0.100	0.106	0.105	0.106	0.0850 to 0.115	105	70.0 to 130	0.948	20.0
BD04575	Lithium, Dissolved	mg/L	0.000578	0.0154	0.200	0.674	0.674	0.202	0.170 to 0.230	100	70.0 to 130	0.00	20.0
BD04575	Lithium, Total	mg/L	-0.00102	0.0154	0.200	0.684	0.687	0.200	0.170 to 0.230	106	70.0 to 130	0.438	20.0
BD04575	Magnesium, Dissolved	mg/L	0.00812	0.0462	5.00	129	115	4.98	4.25 to 5.75	480	70.0 to 130	11.5	20.0
BD04575	Magnesium, Total	mg/L	-0.00751	0.0462	5.00	99.0	96.4	4.86	4.25 to 5.75	126	70.0 to 130	2.66	20.0
BD04575	Manganese, Dissolved	mg/L	0.0000177	0.00033	0.100	8.18	8.28	0.101	0.0850 to 0.115	-10.0	70.0 to 130	1.22	20.0
BD04575	Manganese, Total	mg/L	-0.000076	0.00033	0.100	8.38	7.96	0.105	0.0850 to 0.115	110	70.0 to 130	5.14	20.0
BD04575	Mercury, Total by CVAA	mg/L	4.000E-05	0.000500	0.004	0.0038	0.00382	0.00383	0.00340 to 0.00460	95.0	70.0 to 130	0.525	20.0
BD04567	Molybdenum, Dissolved	mg/L	-0.000133	0.0100	0.2	0.193	0.193	0.197	0.170 to 0.230	96.5	70.0 to 130	0.00	20.0
BD04575	Molybdenum, Total	mg/L	0.0000078	0.0002	0.100	0.0978	0.0970	0.100	0.0850 to 0.115	97.7	70.0 to 130	0.821	20.0
BD04575	Potassium, Dissolved	mg/L	0.0155	0.367	10.0	13.7	13.3	9.82	8.50 to 11.5	96.0	70.0 to 130	2.96	20.0
BD04575	Potassium, Total	mg/L	0.00535	0.367	10.0	13.8	13.9	10.0	8.50 to 11.5	95.6	70.0 to 130	0.722	20.0
BD04575	Selenium, Dissolved	mg/L	0.000130	0.00100	0.100	0.107	0.104	0.101	0.0850 to 0.115	102	70.0 to 130	2.84	20.0
BD04575	Selenium, Total	mg/L	0.000113	0.00100	0.100	0.105	0.104	0.102	0.0850 to 0.115	99.1	70.0 to 130	0.957	20.0
BD04575	Silicon, Dissolved	mg/L	0.000284	0.0440	1.00	35.0	30.4	1.02	0.850 to 1.15	560	70.0 to 130	14.1	20.0
BD04575	Silicon, Total	mg/L	0.00157	0.0440	1.00	29.1	28.1	1.01	0.850 to 1.15	140	70.0 to 130	3.50	20.0
BD04575	Sodium, Dissolved	mg/L	-0.00314	0.0880	5.00	23.2	23.2	4.90	4.25 to 5.75	98.0	70.0 to 130	0.00	20.0
BD04575	Sodium, Total	mg/L	0.00121	0.0880	5.00	23.2	23.1	4.79	4.25 to 5.75	102	70.0 to 130	0.432	20.0
BD04575	Sulfate	mg/L	0.301	2.0	1000	1770	1830	19.8	18.0 to 22.0	102	80.0 to 120	3.33	20.0
BD04575	Thallium, Dissolved	mg/L	0.0000054	0.000147	0.100	0.0987	0.100	0.105	0.0850 to 0.115	98.6	70.0 to 130	1.31	20.0
BD04575	Thallium, Total	mg/L	0.0000118	0.000147	0.100	0.102	0.105	0.103	0.0850 to 0.115	102	70.0 to 130	2.90	20.0
BD04575	Total Organic Carbon	mg/L	-0.00852	1.00	10.0	12.3	12.9	10.0		98.8	80.0 to 120	4.76	20.0

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

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

Alabama Power

Batch QC Summary

Customer Account: WMWGORG
Sample Date: 2/28/23 12:29
Customer ID:
Delivery Date: 3/2/23 10:38

Description: Gorgas Gypsum - MW-8V

Laboratory ID Number: BD04566

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04589	Alkalinity to pH 4.5	mg CaCO3/L					42.2	50.3	45.0 to 55.0			1.18	10.0
BD04575	Nitrogen, Nitrate/Nitrite	mg/L as N	0.04	0.200	2.00	2.21	0.137	1.98	1.80 to 2.20	110	90.0 to 110	0.00	15.0
BD04572	Solids, Dissolved	mg/L	1.00	25.0			444	53.0	40.0 to 60.0			4.61	10.0

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

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Gypsum - MW-8

Location Code: WMWGORG
Collected: 2/28/23 13:47
Customer ID:
Submittal Date: 3/2/23 10:38

Laboratory ID Number: BD04567

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	3/3/23 11:16	3/6/23 11:55		1.015	1.91	mg/L	0.030000	0.1015	
* Calcium, Total	3/3/23 11:16	3/7/23 14:05		101.5	353	mg/L	7.0035	40.6	
* Iron, Total	3/3/23 11:16	3/7/23 09:53		10.15	28.3	mg/L	0.08120	0.406	
* Lithium, Total	3/3/23 11:16	3/6/23 11:55		1.015	0.157	mg/L	0.007105	0.01999956	
* Magnesium, Total	3/3/23 11:16	3/7/23 09:53		10.15	242	mg/L	0.21315	4.06	
* Silica, Total (calc.)	3/3/23 11:16	3/6/23 11:55		1	13.7	mg/L			
* Silicon, Total	3/3/23 11:16	3/6/23 11:55		1.015	6.38	mg/L	0.02030	0.25375	
* Sodium, Total	3/3/23 11:16	3/7/23 09:53		10.15	181	mg/L	0.3045	4.06	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	3/2/23 12:15	3/6/23 09:58		1.015	1.92	mg/L	0.030000	0.1015	
* Calcium, Dissolved	3/2/23 12:15	3/6/23 13:55		101.5	397	mg/L	7.0035	40.6	
* Iron, Dissolved	3/2/23 12:15	3/6/23 13:55		101.5	29.6	mg/L	0.8120	4.06	
* Lithium, Dissolved	3/2/23 12:15	3/6/23 09:58		1.015	0.154	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	3/2/23 12:15	3/6/23 13:55		101.5	249	mg/L	2.1315	40.6	
* Molybdenum, Dissolved	3/30/23 09:48	3/30/23 10:23		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Dissolved (calc.)	3/2/23 12:15	3/6/23 09:58		1	13.6	mg/L			
* Silicon, Dissolved	3/2/23 12:15	3/6/23 09:58		1.015	6.36	mg/L	0.02030	0.25375	
* Sodium, Dissolved	3/2/23 12:15	3/6/23 13:55		101.5	182	mg/L	3.045	40.6	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/3/23 11:16	3/6/23 16:04		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	3/3/23 11:16	3/6/23 16:04		1.015	0.0593	mg/L	0.006090	0.05075	
* Arsenic, Total	3/3/23 11:16	3/6/23 16:04		1.015	0.000177	mg/L	0.000081	0.000203	J
* Barium, Total	3/3/23 11:16	3/6/23 16:04		1.015	0.0238	mg/L	0.000508	0.001015	
* Beryllium, Total	3/3/23 11:16	3/6/23 16:04		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	3/3/23 11:16	3/6/23 16:04		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	3/3/23 11:16	3/6/23 16:04		1.015	0.000325	mg/L	0.000203	0.001015	J
* Cobalt, Total	3/3/23 11:16	3/6/23 16:04		1.015	0.000248	mg/L	0.000068	0.000203	
* Lead, Total	3/3/23 11:16	3/6/23 16:04		1.015	0.000078	mg/L	0.000068	0.000203	J
* Manganese, Total	3/3/23 11:16	3/6/23 18:26		10.15	12.1	mg/L	0.001522	0.01015	
* Molybdenum, Total	3/3/23 11:16	3/6/23 16:04		1.015	0.000135	mg/L	0.000102	0.000203	J

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

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

Reported: 4/7/2023
Version: 3.5
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Gypsum - MW-8

Location Code: WMWGORG
Collected: 2/28/23 13:47
Customer ID:
Submittal Date: 3/2/23 10:38

Laboratory ID Number: BD04567

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	3/3/23 11:16	3/6/23 16:04		1.015	7.05	mg/L	0.169505	0.5075	
* Selenium, Total	3/3/23 11:16	3/6/23 16:04		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	3/3/23 11:16	3/6/23 16:04		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	3/2/23 12:15	3/2/23 15:47		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	3/2/23 12:15	3/2/23 15:47		1.015	Not Detected	mg/L	0.006090	0.05075	U
* Arsenic, Dissolved	3/2/23 12:15	3/2/23 15:47		1.015	0.000144	mg/L	0.000081	0.000203	J
* Barium, Dissolved	3/2/23 12:15	3/2/23 15:47		1.015	0.0224	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	3/2/23 12:15	3/2/23 15:47		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	3/2/23 12:15	3/2/23 15:47		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	3/2/23 12:15	3/2/23 15:47		1.015	0.000361	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	3/2/23 12:15	3/2/23 15:47		1.015	0.000118	mg/L	0.000068	0.000203	J
* Lead, Dissolved	3/2/23 12:15	3/2/23 15:47		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	3/2/23 12:15	3/6/23 11:02		10.15	11.8	mg/L	0.001522	0.01015	
* Potassium, Dissolved	3/2/23 12:15	3/2/23 15:47		1.015	7.20	mg/L	0.169505	0.5075	
* Selenium, Dissolved	3/2/23 12:15	3/2/23 15:47		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	3/2/23 12:15	3/2/23 15:47		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ELH***								
* Mercury, Total by CVAA	3/8/23 17:33	3/8/23 21:39		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	3/3/23 11:02	3/3/23 11:02		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
* Alkalinity to pH 4.5	3/13/23 13:37	3/13/23 15:58		1	620	mg CaCO3/L			
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	3/2/23 12:50	3/3/23 13:40		1	2620	mg/L		208.3	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
* Bicarbonate Alkalinity, (calc.)	3/13/23 13:37	3/13/23 15:58		1	619	mg CaCO3/L		1	A
* Carbonate Alkalinity, (calc.)	3/13/23 13:37	3/13/23 15:58		1	0.822	mg CaCO3/L		0.5	A
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	3/2/23 13:44	3/2/23 13:44		1	14.3	mg/L	1.00	2	

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

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

Reported: 4/7/2023
Version: 3.5
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Gypsum - MW-8

Location Code: WMWGORG
Collected: 2/28/23 13:47
Customer ID:
Submittal Date: 3/2/23 10:38

Laboratory ID Number: BD04567

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E		***Analyst: JCC***							
* Chloride	3/3/23 08:10	3/3/23 08:10		5	86.9	mg/L	2.50	5	
Analytical Method: SM4500F G 2017		***Analyst: JCC***							
* Fluoride	3/3/23 11:40	3/3/23 11:40		1	0.161	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011		***Analyst: JCC***							
* Sulfate	3/2/23 14:03	3/2/23 14:03		50	1390	mg/L	30.0	100	
Analytical Method: Field Measurements		***Analyst: AWG***							
Conductivity	2/28/23 13:42	2/28/23 13:42			3234.63	uS/cm			FA
pH	2/28/23 13:42	2/28/23 13:42			6.93	SU			FA
Temperature	2/28/23 13:42	2/28/23 13:42			21.41	C			FA
Turbidity	2/28/23 13:42	2/28/23 13:42			3.91	NTU			FA
Sulfide	2/28/23 13:42	2/28/23 13:42			0	mg/L			FA

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

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

Reported: 4/7/2023
Version: 3.5
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORG
Sample Date: 2/28/23 13:47
Customer ID:
Delivery Date: 3/2/23 10:38

Description: Gorgas Gypsum - MW-8

Laboratory ID Number: BD04567

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04575	Aluminum, Dissolved	mg/L	-0.0000351	0.0198	0.100	12.1	12.0	0.103	0.0850 to 0.115	-100	70.0 to 130	0.830	20.0
BD04575	Aluminum, Total	mg/L	0.000677	0.0198	0.100	15.4	15.2	0.105	0.0850 to 0.115	0.00	70.0 to 130	1.31	20.0
BD04575	Antimony, Dissolved	mg/L	0.000375	0.00100	0.100	0.0900	0.0894	0.0851	0.0850 to 0.115	90.0	70.0 to 130	0.669	20.0
BD04575	Antimony, Total	mg/L	0.000351	0.00100	0.100	0.0992	0.101	0.0911	0.0850 to 0.115	99.2	70.0 to 130	1.80	20.0
BD04575	Arsenic, Dissolved	mg/L	-0.0000031	0.000200	0.100	0.0998	0.0990	0.0994	0.0850 to 0.115	98.6	70.0 to 130	0.805	20.0
BD04575	Arsenic, Total	mg/L	0.0000206	0.000200	0.100	0.101	0.0987	0.100	0.0850 to 0.115	99.5	70.0 to 130	2.30	20.0
BD04575	Barium, Dissolved	mg/L	0.0000093	0.00100	0.100	0.119	0.121	0.105	0.0850 to 0.115	98.5	70.0 to 130	1.67	20.0
BD04575	Barium, Total	mg/L	0.0000082	0.00100	0.100	0.121	0.123	0.100	0.0850 to 0.115	101	70.0 to 130	1.64	20.0
BD04575	Beryllium, Dissolved	mg/L	0.0000272	0.000880	0.100	0.115	0.113	0.106	0.0850 to 0.115	106	70.0 to 130	1.75	20.0
BD04575	Beryllium, Total	mg/L	0.0000174	0.000880	0.100	0.117	0.121	0.0967	0.0850 to 0.115	106	70.0 to 130	3.36	20.0
BD04575	Boron, Dissolved	mg/L	-0.00419	0.0650	1.00	1.20	1.24	1.04	0.850 to 1.15	104	70.0 to 130	3.28	20.0
BD04575	Boron, Total	mg/L	-0.00441	0.0650	1.00	1.22	1.21	1.03	0.850 to 1.15	106	70.0 to 130	0.823	20.0
BD04575	Cadmium, Dissolved	mg/L	0.0000019	0.000147	0.100	0.0943	0.0942	0.0961	0.0850 to 0.115	92.8	70.0 to 130	0.106	20.0
BD04575	Cadmium, Total	mg/L	0.0000066	0.000147	0.100	0.0984	0.101	0.101	0.0850 to 0.115	96.8	70.0 to 130	2.61	20.0
BD04575	Calcium, Dissolved	mg/L	0.00993	0.152	5.00	179	158	5.12	4.25 to 5.75	660	70.0 to 130	12.5	20.0
BD04575	Calcium, Total	mg/L	0.00311	0.152	5.00	140	135	4.80	4.25 to 5.75	160	70.0 to 130	3.64	20.0
BD04575	Chloride	mg/L	0.0461	1.00	10.0	13.0	13.3	10.2	9.00 to 11.0	101	80.0 to 120	2.28	20.0
BD04575	Chromium, Dissolved	mg/L	0.0000039	0.000440	0.100	0.0981	0.0951	0.0978	0.0850 to 0.115	97.8	70.0 to 130	3.11	20.0
BD04575	Chromium, Total	mg/L	0.0000603	0.000440	0.100	0.100	0.101	0.103	0.0850 to 0.115	99.5	70.0 to 130	0.995	20.0
BD04575	Cobalt, Dissolved	mg/L	0.0000034	0.000147	0.100	0.320	0.312	0.104	0.0850 to 0.115	107	70.0 to 130	2.53	20.0
BD04575	Cobalt, Total	mg/L	0.0000044	0.000147	0.100	0.339	0.344	0.111	0.0850 to 0.115	112	70.0 to 130	1.46	20.0
BD04574	Fluoride	mg/L	0.0456	0.125	2.50	2.45	2.57	2.53	2.25 to 2.75	98.0	80.0 to 120	4.78	20.0
BD04575	Iron, Dissolved	mg/L	0.000348	0.0176	0.2	11.9	10.3	0.204	0.170 to 0.230	900	70.0 to 130	14.4	20.0
BD04575	Iron, Total	mg/L	0.000151	0.0176	0.2	10.7	10.3	0.202	0.170 to 0.230	200	70.0 to 130	3.81	20.0

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

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORG
Sample Date: 2/28/23 13:47
Customer ID:
Delivery Date: 3/2/23 10:38

Description: Gorgas Gypsum - MW-8

Laboratory ID Number: BD04567

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04575	Lead, Dissolved	mg/L	0.0000062	0.000147	0.100	0.107	0.107	0.107	0.0850 to 0.115	106	70.0 to 130	0.00	20.0
BD04575	Lead, Total	mg/L	0.0000098	0.000147	0.100	0.106	0.105	0.106	0.0850 to 0.115	105	70.0 to 130	0.948	20.0
BD04575	Lithium, Dissolved	mg/L	0.000578	0.0154	0.200	0.674	0.674	0.202	0.170 to 0.230	100	70.0 to 130	0.00	20.0
BD04575	Lithium, Total	mg/L	-0.00102	0.0154	0.200	0.684	0.687	0.200	0.170 to 0.230	106	70.0 to 130	0.438	20.0
BD04575	Magnesium, Dissolved	mg/L	0.00812	0.0462	5.00	129	115	4.98	4.25 to 5.75	480	70.0 to 130	11.5	20.0
BD04575	Magnesium, Total	mg/L	-0.00751	0.0462	5.00	99.0	96.4	4.86	4.25 to 5.75	126	70.0 to 130	2.66	20.0
BD04575	Manganese, Dissolved	mg/L	0.0000177	0.00033	0.100	8.18	8.28	0.101	0.0850 to 0.115	-10.0	70.0 to 130	1.22	20.0
BD04575	Manganese, Total	mg/L	-0.000076	0.00033	0.100	8.38	7.96	0.105	0.0850 to 0.115	110	70.0 to 130	5.14	20.0
BD04575	Mercury, Total by CVAA	mg/L	4.000E-05	0.000500	0.004	0.0038	0.00382	0.00383	0.00340 to 0.00460	95.0	70.0 to 130	0.525	20.0
BD04567	Molybdenum, Dissolved	mg/L	-0.000133	0.0100	0.2	0.193	0.193	0.197	0.170 to 0.230	96.5	70.0 to 130	0.00	20.0
BD04575	Molybdenum, Total	mg/L	0.0000078	0.0002	0.100	0.0978	0.0970	0.100	0.0850 to 0.115	97.7	70.0 to 130	0.821	20.0
BD04575	Potassium, Dissolved	mg/L	0.0155	0.367	10.0	13.7	13.3	9.82	8.50 to 11.5	96.0	70.0 to 130	2.96	20.0
BD04575	Potassium, Total	mg/L	0.00535	0.367	10.0	13.8	13.9	10.0	8.50 to 11.5	95.6	70.0 to 130	0.722	20.0
BD04575	Selenium, Dissolved	mg/L	0.000130	0.00100	0.100	0.107	0.104	0.101	0.0850 to 0.115	102	70.0 to 130	2.84	20.0
BD04575	Selenium, Total	mg/L	0.000113	0.00100	0.100	0.105	0.104	0.102	0.0850 to 0.115	99.1	70.0 to 130	0.957	20.0
BD04575	Silicon, Dissolved	mg/L	0.000284	0.0440	1.00	35.0	30.4	1.02	0.850 to 1.15	560	70.0 to 130	14.1	20.0
BD04575	Silicon, Total	mg/L	0.00157	0.0440	1.00	29.1	28.1	1.01	0.850 to 1.15	140	70.0 to 130	3.50	20.0
BD04575	Sodium, Dissolved	mg/L	-0.00314	0.0880	5.00	23.2	23.2	4.90	4.25 to 5.75	98.0	70.0 to 130	0.00	20.0
BD04575	Sodium, Total	mg/L	0.00121	0.0880	5.00	23.2	23.1	4.79	4.25 to 5.75	102	70.0 to 130	0.432	20.0
BD04575	Sulfate	mg/L	0.301	2.0	1000	1770	1830	19.8	18.0 to 22.0	102	80.0 to 120	3.33	20.0
BD04575	Thallium, Dissolved	mg/L	0.0000054	0.000147	0.100	0.0987	0.100	0.105	0.0850 to 0.115	98.6	70.0 to 130	1.31	20.0
BD04575	Thallium, Total	mg/L	0.0000118	0.000147	0.100	0.102	0.105	0.103	0.0850 to 0.115	102	70.0 to 130	2.90	20.0
BD04575	Total Organic Carbon	mg/L	-0.00852	1.00	10.0	12.3	12.9	10.0		98.8	80.0 to 120	4.76	20.0

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

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

Alabama Power

Batch QC Summary

Customer Account: WMWGORG
Sample Date: 2/28/23 13:47
Customer ID:
Delivery Date: 3/2/23 10:38

Description: Gorgas Gypsum - MW-8

Laboratory ID Number: BD04567

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04589	Alkalinity to pH 4.5	mg CaCO3/L					42.2	50.3	45.0 to 55.0			1.18	10.0
BD04575	Nitrogen, Nitrate/Nitrite	mg/L as N	0.04	0.200	2.00	2.21	0.137	1.98	1.80 to 2.20	110	90.0 to 110	0.00	15.0
BD04572	Solids, Dissolved	mg/L	1.00	25.0			444	53.0	40.0 to 60.0			4.61	10.0

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

Reported: 4/7/2023
Version: 3.5
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Gypsum - PZ-17

Location Code: WMWGORG
Collected: 2/27/23 11:22
Customer ID:
Submittal Date: 3/2/23 10:38

Laboratory ID Number: BD04568

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	3/3/23 11:16	3/6/23 11:58		1.015	0.0623	mg/L	0.030000	0.1015	J
* Calcium, Total	3/3/23 11:16	3/7/23 09:56		10.15	79.9	mg/L	0.70035	4.06	
* Iron, Total	3/3/23 11:16	3/7/23 09:56		10.15	8.89	mg/L	0.08120	0.406	
* Lithium, Total	3/3/23 11:16	3/6/23 11:58		1.015	0.352	mg/L	0.007105	0.01999956	
* Magnesium, Total	3/3/23 11:16	3/7/23 09:56		10.15	50.9	mg/L	0.21315	4.06	
* Silica, Total (calc.)	3/3/23 11:16	3/6/23 11:58		1	28.2	mg/L			
* Silicon, Total	3/3/23 11:16	3/6/23 11:58		1.015	13.2	mg/L	0.02030	0.25375	
* Sodium, Total	3/3/23 11:16	3/6/23 11:58		1.015	7.72	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	3/2/23 12:15	3/6/23 10:01		1.015	0.0639	mg/L	0.030000	0.1015	J
* Calcium, Dissolved	3/2/23 12:15	3/6/23 13:58		10.15	89.1	mg/L	0.70035	4.06	
* Iron, Dissolved	3/2/23 12:15	3/6/23 13:58		10.15	8.19	mg/L	0.08120	0.406	
* Lithium, Dissolved	3/2/23 12:15	3/6/23 10:01		1.015	0.383	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	3/2/23 12:15	3/6/23 13:58		10.15	59.7	mg/L	0.21315	4.06	
* Silica, Dissolved (calc.)	3/2/23 12:15	3/6/23 10:01		1	29.7	mg/L			
* Silicon, Dissolved	3/2/23 12:15	3/6/23 10:01		1.015	13.9	mg/L	0.02030	0.25375	
* Sodium, Dissolved	3/2/23 12:15	3/6/23 10:01		1.015	8.28	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/3/23 11:16	3/6/23 16:08		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	3/3/23 11:16	3/6/23 18:33		92.365	13.9	mg/L	0.554190	4.61825	
* Arsenic, Total	3/3/23 11:16	3/6/23 16:08		1.015	0.00130	mg/L	0.000081	0.000203	
* Barium, Total	3/3/23 11:16	3/6/23 16:08		1.015	0.0174	mg/L	0.000508	0.001015	
* Beryllium, Total	3/3/23 11:16	3/6/23 16:08		1.015	0.00573	mg/L	0.000406	0.001015	
* Cadmium, Total	3/3/23 11:16	3/6/23 16:08		1.015	0.000812	mg/L	0.000068	0.000203	
* Chromium, Total	3/3/23 11:16	3/6/23 16:08		1.015	0.00103	mg/L	0.000203	0.001015	
* Cobalt, Total	3/3/23 11:16	3/6/23 16:08		1.015	0.150	mg/L	0.000068	0.000203	
* Lead, Total	3/3/23 11:16	3/6/23 16:08		1.015	0.00226	mg/L	0.000068	0.000203	
* Manganese, Total	3/3/23 11:16	3/6/23 18:29		5.075	4.68	mg/L	0.000761	0.005075	
* Molybdenum, Total	3/3/23 11:16	3/6/23 16:08		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Total	3/3/23 11:16	3/6/23 16:08		1.015	4.16	mg/L	0.169505	0.5075	

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

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
Alkalinity could not be performed, pH below titration end point of 4.5 SU.
Fluoride may have potential matrix interference.

Reported: 4/7/2023
Version: 3.5
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Gypsum - PZ-17

Location Code: WMWGORG
Collected: 2/27/23 11:22
Customer ID:
Submittal Date: 3/2/23 10:38

Laboratory ID Number: BD04568

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	3/3/23 11:16	3/6/23 16:08		1.015	0.00319	mg/L	0.000508	0.001015	
* Thallium, Total	3/3/23 11:16	3/6/23 16:08		1.015	0.000135	mg/L	0.000068	0.000203	J
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	3/2/23 12:15	3/2/23 15:51		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	3/2/23 12:15	3/6/23 11:09		92.365	14.7	mg/L	0.554190	4.61825	
* Arsenic, Dissolved	3/2/23 12:15	3/2/23 15:51		1.015	0.00117	mg/L	0.000081	0.000203	
* Barium, Dissolved	3/2/23 12:15	3/2/23 15:51		1.015	0.0175	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	3/2/23 12:15	3/2/23 15:51		1.015	0.00598	mg/L	0.000406	0.001015	
* Cadmium, Dissolved	3/2/23 12:15	3/2/23 15:51		1.015	0.000939	mg/L	0.000068	0.000203	
* Chromium, Dissolved	3/2/23 12:15	3/2/23 15:51		1.015	0.000918	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	3/2/23 12:15	3/2/23 15:51		1.015	0.156	mg/L	0.000068	0.000203	
* Lead, Dissolved	3/2/23 12:15	3/2/23 15:51		1.015	0.00268	mg/L	0.000068	0.000203	
* Manganese, Dissolved	3/2/23 12:15	3/6/23 11:06		5.075	4.72	mg/L	0.000761	0.005075	
* Molybdenum, Dissolved	3/2/23 12:15	3/2/23 15:51		1.015	0.000186	mg/L	0.000102	0.000203	J
* Potassium, Dissolved	3/2/23 12:15	3/2/23 15:51		1.015	4.16	mg/L	0.169505	0.5075	
* Selenium, Dissolved	3/2/23 12:15	3/2/23 15:51		1.015	0.00329	mg/L	0.000508	0.001015	
* Thallium, Dissolved	3/2/23 12:15	3/2/23 15:51		1.015	0.000144	mg/L	0.000068	0.000203	J
Analytical Method: EPA 245.1	***Analyst: ELH***								
* Mercury, Total by CVAA	3/8/23 17:33	3/8/23 21:43		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	3/3/23 11:04	3/3/23 11:04		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	3/2/23 12:50	3/3/23 13:40		1	727	mg/L		25	
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	3/2/23 14:03	3/2/23 14:03		1	3.30	mg/L	1.00	2	
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	3/3/23 07:58	3/3/23 07:58		1	1.36	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	3/14/23 14:14	3/14/23 14:14		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	3/2/23 14:04	3/2/23 14:04		25	400	mg/L	15.0	50	

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

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
Alkalinity could not be performed, pH below titration end point of 4.5 SU.
Fluoride may have potential matrix interference.

Reported: 4/7/2023
Version: 3.5
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Gypsum - PZ-17

Location Code: WMWGORG
Collected: 2/27/23 11:22
Customer ID:
Submittal Date: 3/2/23 10:38

Laboratory ID Number: BD04568

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	2/27/23 11:19	2/27/23 11:19			794.50	uS/cm			FA
pH	2/27/23 11:19	2/27/23 11:19			4.34	SU			FA
Temperature	2/27/23 11:19	2/27/23 11:19			19.65	C			FA
Turbidity	2/27/23 11:19	2/27/23 11:19			2.92	NTU			FA
Sulfide	2/27/23 11:19	2/27/23 11:19			0	mg/L			FA

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

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
Alkalinity could not be performed, pH below titration end point of 4.5 SU.
Fluoride may have potential matrix interference.

Reported: 4/7/2023
Version: 3.5
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORG
Sample Date: 2/27/23 11:22
Customer ID:
Delivery Date: 3/2/23 10:38

Description: Gorgas Gypsum - PZ-17

Laboratory ID Number: BD04568

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04575	Aluminum, Dissolved	mg/L	-0.0000351	0.0198	0.100	12.1	12.0	0.103	0.0850 to 0.115	-100	70.0 to 130	0.830	20.0
BD04575	Aluminum, Total	mg/L	0.000677	0.0198	0.100	15.4	15.2	0.105	0.0850 to 0.115	0.00	70.0 to 130	1.31	20.0
BD04575	Antimony, Dissolved	mg/L	0.000375	0.00100	0.100	0.0900	0.0894	0.0851	0.0850 to 0.115	90.0	70.0 to 130	0.669	20.0
BD04575	Antimony, Total	mg/L	0.000351	0.00100	0.100	0.0992	0.101	0.0911	0.0850 to 0.115	99.2	70.0 to 130	1.80	20.0
BD04575	Arsenic, Dissolved	mg/L	-0.0000031	0.000200	0.100	0.0998	0.0990	0.0994	0.0850 to 0.115	98.6	70.0 to 130	0.805	20.0
BD04575	Arsenic, Total	mg/L	0.0000206	0.000200	0.100	0.101	0.0987	0.100	0.0850 to 0.115	99.5	70.0 to 130	2.30	20.0
BD04575	Barium, Dissolved	mg/L	0.0000093	0.00100	0.100	0.119	0.121	0.105	0.0850 to 0.115	98.5	70.0 to 130	1.67	20.0
BD04575	Barium, Total	mg/L	0.0000082	0.00100	0.100	0.121	0.123	0.100	0.0850 to 0.115	101	70.0 to 130	1.64	20.0
BD04575	Beryllium, Dissolved	mg/L	0.0000272	0.000880	0.100	0.115	0.113	0.106	0.0850 to 0.115	106	70.0 to 130	1.75	20.0
BD04575	Beryllium, Total	mg/L	0.0000174	0.000880	0.100	0.117	0.121	0.0967	0.0850 to 0.115	106	70.0 to 130	3.36	20.0
BD04575	Boron, Dissolved	mg/L	-0.00419	0.0650	1.00	1.20	1.24	1.04	0.850 to 1.15	104	70.0 to 130	3.28	20.0
BD04575	Boron, Total	mg/L	-0.00441	0.0650	1.00	1.22	1.21	1.03	0.850 to 1.15	106	70.0 to 130	0.823	20.0
BD04575	Cadmium, Dissolved	mg/L	0.0000019	0.000147	0.100	0.0943	0.0942	0.0961	0.0850 to 0.115	92.8	70.0 to 130	0.106	20.0
BD04575	Cadmium, Total	mg/L	0.0000066	0.000147	0.100	0.0984	0.101	0.101	0.0850 to 0.115	96.8	70.0 to 130	2.61	20.0
BD04575	Calcium, Dissolved	mg/L	0.00993	0.152	5.00	179	158	5.12	4.25 to 5.75	660	70.0 to 130	12.5	20.0
BD04575	Calcium, Total	mg/L	0.00311	0.152	5.00	140	135	4.80	4.25 to 5.75	160	70.0 to 130	3.64	20.0
BD04575	Chloride	mg/L	0.0461	1.00	10.0	13.0	13.3	10.2	9.00 to 11.0	101	80.0 to 120	2.28	20.0
BD04575	Chromium, Dissolved	mg/L	0.0000039	0.000440	0.100	0.0981	0.0951	0.0978	0.0850 to 0.115	97.8	70.0 to 130	3.11	20.0
BD04575	Chromium, Total	mg/L	0.0000603	0.000440	0.100	0.100	0.101	0.103	0.0850 to 0.115	99.5	70.0 to 130	0.995	20.0
BD04575	Cobalt, Dissolved	mg/L	0.0000034	0.000147	0.100	0.320	0.312	0.104	0.0850 to 0.115	107	70.0 to 130	2.53	20.0
BD04575	Cobalt, Total	mg/L	0.0000044	0.000147	0.100	0.339	0.344	0.111	0.0850 to 0.115	112	70.0 to 130	1.46	20.0
BD05000	Fluoride	mg/L	0.0103	0.125	2.50	6.92	6.89	2.64	2.25 to 2.75	98.0	80.0 to 120	0.434	20.0
BD04575	Iron, Dissolved	mg/L	0.000348	0.0176	0.2	11.9	10.3	0.204	0.170 to 0.230	900	70.0 to 130	14.4	20.0
BD04575	Iron, Total	mg/L	0.000151	0.0176	0.2	10.7	10.3	0.202	0.170 to 0.230	200	70.0 to 130	3.81	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
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Fluoride may have potential matrix interference.

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORG
Sample Date: 2/27/23 11:22
Customer ID:
Delivery Date: 3/2/23 10:38

Description: Gorgas Gypsum - PZ-17

Laboratory ID Number: BD04568

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04575	Lead, Dissolved	mg/L	0.0000062	0.000147	0.100	0.107	0.107	0.107	0.0850 to 0.115	106	70.0 to 130	0.00	20.0
BD04575	Lead, Total	mg/L	0.0000098	0.000147	0.100	0.106	0.105	0.106	0.0850 to 0.115	105	70.0 to 130	0.948	20.0
BD04575	Lithium, Dissolved	mg/L	0.000578	0.0154	0.200	0.674	0.674	0.202	0.170 to 0.230	100	70.0 to 130	0.00	20.0
BD04575	Lithium, Total	mg/L	-0.00102	0.0154	0.200	0.684	0.687	0.200	0.170 to 0.230	106	70.0 to 130	0.438	20.0
BD04575	Magnesium, Dissolved	mg/L	0.00812	0.0462	5.00	129	115	4.98	4.25 to 5.75	480	70.0 to 130	11.5	20.0
BD04575	Magnesium, Total	mg/L	-0.00751	0.0462	5.00	99.0	96.4	4.86	4.25 to 5.75	126	70.0 to 130	2.66	20.0
BD04575	Manganese, Dissolved	mg/L	0.0000177	0.00033	0.100	8.18	8.28	0.101	0.0850 to 0.115	-10.0	70.0 to 130	1.22	20.0
BD04575	Manganese, Total	mg/L	-0.000076	0.00033	0.100	8.38	7.96	0.105	0.0850 to 0.115	110	70.0 to 130	5.14	20.0
BD04575	Mercury, Total by CVAA	mg/L	4.000E-05	0.000500	0.004	0.0038	0.00382	0.00383	0.00340 to 0.00460	95.0	70.0 to 130	0.525	20.0
BD04575	Molybdenum, Dissolved	mg/L	0.0000157	0.0002	0.100	0.101	0.0990	0.101	0.0850 to 0.115	100	70.0 to 130	2.00	20.0
BD04575	Molybdenum, Total	mg/L	0.0000078	0.0002	0.100	0.0978	0.0970	0.100	0.0850 to 0.115	97.7	70.0 to 130	0.821	20.0
BD04575	Potassium, Dissolved	mg/L	0.0155	0.367	10.0	13.7	13.3	9.82	8.50 to 11.5	96.0	70.0 to 130	2.96	20.0
BD04575	Potassium, Total	mg/L	0.00535	0.367	10.0	13.8	13.9	10.0	8.50 to 11.5	95.6	70.0 to 130	0.722	20.0
BD04575	Selenium, Dissolved	mg/L	0.000130	0.00100	0.100	0.107	0.104	0.101	0.0850 to 0.115	102	70.0 to 130	2.84	20.0
BD04575	Selenium, Total	mg/L	0.000113	0.00100	0.100	0.105	0.104	0.102	0.0850 to 0.115	99.1	70.0 to 130	0.957	20.0
BD04575	Silicon, Dissolved	mg/L	0.000284	0.0440	1.00	35.0	30.4	1.02	0.850 to 1.15	560	70.0 to 130	14.1	20.0
BD04575	Silicon, Total	mg/L	0.00157	0.0440	1.00	29.1	28.1	1.01	0.850 to 1.15	140	70.0 to 130	3.50	20.0
BD04575	Sodium, Dissolved	mg/L	-0.00314	0.0880	5.00	23.2	23.2	4.90	4.25 to 5.75	98.0	70.0 to 130	0.00	20.0
BD04575	Sodium, Total	mg/L	0.00121	0.0880	5.00	23.2	23.1	4.79	4.25 to 5.75	102	70.0 to 130	0.432	20.0
BD04575	Sulfate	mg/L	0.301	2.0	1000	1770	1830	19.8	18.0 to 22.0	102	80.0 to 120	3.33	20.0
BD04575	Thallium, Dissolved	mg/L	0.0000054	0.000147	0.100	0.0987	0.100	0.105	0.0850 to 0.115	98.6	70.0 to 130	1.31	20.0
BD04575	Thallium, Total	mg/L	0.0000118	0.000147	0.100	0.102	0.105	0.103	0.0850 to 0.115	102	70.0 to 130	2.90	20.0
BD04575	Total Organic Carbon	mg/L	-0.00852	1.00	10.0	12.3	12.9	10.0		98.8	80.0 to 120	4.76	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
Alkalinity could not be performed, pH below titration end point of 4.5 SU.
Fluoride may have potential matrix interference.

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

Alabama Power

Batch QC Summary

Customer Account: WMWGORG
Sample Date: 2/27/23 11:22
Customer ID:
Delivery Date: 3/2/23 10:38

Description: Gorgas Gypsum - PZ-17

Laboratory ID Number: BD04568

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04575	Nitrogen, Nitrate/Nitrite	mg/L as N	0.04	0.200	2.00	2.21	0.137	1.98	1.80 to 2.20	110	90.0 to 110	0.00	15.0
BD04572	Solids, Dissolved	mg/L	1.00	25.0			444	53.0	40.0 to 60.0			4.61	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
Alkalinity could not be performed, pH below titration end point of 4.5 SU.
Fluoride may have potential matrix interference.

Reported: 4/7/2023
Version: 3.5
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Gypsum - PZ-18

Location Code: WMWGORG
Collected: 2/27/23 12:31
Customer ID:
Submittal Date: 3/2/23 10:38

Laboratory ID Number: BD04569

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	3/3/23 11:16	3/6/23 12:02		1.015	0.0495	mg/L	0.030000	0.1015	J
* Calcium, Total	3/3/23 11:16	3/7/23 10:00		10.15	88.1	mg/L	0.70035	4.06	
* Iron, Total	3/3/23 11:16	3/7/23 10:00		10.15	10.5	mg/L	0.08120	0.406	
* Lithium, Total	3/3/23 11:16	3/6/23 12:02		1.015	0.271	mg/L	0.007105	0.01999956	
* Magnesium, Total	3/3/23 11:16	3/7/23 10:00		10.15	55.6	mg/L	0.21315	4.06	
* Silica, Total (calc.)	3/3/23 11:16	3/6/23 12:02		1	37.7	mg/L			
* Silicon, Total	3/3/23 11:16	3/6/23 12:02		1.015	17.6	mg/L	0.02030	0.25375	
* Sodium, Total	3/3/23 11:16	3/6/23 12:02		1.015	17.7	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	3/2/23 12:15	3/6/23 10:05		1.015	0.0507	mg/L	0.030000	0.1015	J
* Calcium, Dissolved	3/2/23 12:15	3/6/23 14:02		10.15	108	mg/L	0.70035	4.06	
* Iron, Dissolved	3/2/23 12:15	3/6/23 14:02		10.15	12.6	mg/L	0.08120	0.406	
* Lithium, Dissolved	3/2/23 12:15	3/6/23 10:05		1.015	0.272	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	3/2/23 12:15	3/6/23 14:02		10.15	69.3	mg/L	0.21315	4.06	
* Silica, Dissolved (calc.)	3/2/23 12:15	3/6/23 10:05		1	38.1	mg/L			
* Silicon, Dissolved	3/2/23 12:15	3/6/23 10:05		1.015	17.8	mg/L	0.02030	0.25375	
* Sodium, Dissolved	3/2/23 12:15	3/6/23 10:05		1.015	17.9	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/3/23 11:16	3/6/23 16:11		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	3/3/23 11:16	3/6/23 18:40		92.365	16.7	mg/L	0.554190	4.61825	
* Arsenic, Total	3/3/23 11:16	3/6/23 16:11		1.015	0.00354	mg/L	0.000081	0.000203	
* Barium, Total	3/3/23 11:16	3/6/23 16:11		1.015	0.0104	mg/L	0.000508	0.001015	
* Beryllium, Total	3/3/23 11:16	3/6/23 16:11		1.015	0.00632	mg/L	0.000406	0.001015	
* Cadmium, Total	3/3/23 11:16	3/6/23 16:11		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	3/3/23 11:16	3/6/23 16:11		1.015	0.00166	mg/L	0.000203	0.001015	
* Cobalt, Total	3/3/23 11:16	3/6/23 16:11		1.015	0.0946	mg/L	0.000068	0.000203	
* Lead, Total	3/3/23 11:16	3/6/23 16:11		1.015	0.000121	mg/L	0.000068	0.000203	J
* Manganese, Total	3/3/23 11:16	3/6/23 18:36		5.075	3.07	mg/L	0.000761	0.005075	
* Molybdenum, Total	3/3/23 11:16	3/6/23 16:11		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Total	3/3/23 11:16	3/6/23 16:11		1.015	2.97	mg/L	0.169505	0.5075	

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

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
Alkalinity could not be performed, pH below titration end point of 4.5 SU.
Fluoride may have potential matrix interference.

Reported: 4/7/2023
Version: 3.5
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Gypsum - PZ-18

Location Code: WMWGORG
Collected: 2/27/23 12:31
Customer ID:
Submittal Date: 3/2/23 10:38

Laboratory ID Number: BD04569

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	3/3/23 11:16	3/6/23 16:11		1.015	0.00329	mg/L	0.000508	0.001015	
* Thallium, Total	3/3/23 11:16	3/6/23 16:11		1.015	0.000094	mg/L	0.000068	0.000203	J
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	3/2/23 12:15	3/2/23 15:54		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	3/2/23 12:15	3/6/23 11:16		92.365	15.7	mg/L	0.554190	4.61825	
* Arsenic, Dissolved	3/2/23 12:15	3/2/23 15:54		1.015	0.00335	mg/L	0.000081	0.000203	
* Barium, Dissolved	3/2/23 12:15	3/2/23 15:54		1.015	0.00980	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	3/2/23 12:15	3/2/23 15:54		1.015	0.00629	mg/L	0.000406	0.001015	
* Cadmium, Dissolved	3/2/23 12:15	3/2/23 15:54		1.015	0.0000853	mg/L	0.000068	0.000203	J
* Chromium, Dissolved	3/2/23 12:15	3/2/23 15:54		1.015	0.00143	mg/L	0.000203	0.001015	
* Cobalt, Dissolved	3/2/23 12:15	3/2/23 15:54		1.015	0.0897	mg/L	0.000068	0.000203	
* Lead, Dissolved	3/2/23 12:15	3/2/23 15:54		1.015	0.000114	mg/L	0.000068	0.000203	J
* Manganese, Dissolved	3/2/23 12:15	3/6/23 11:13		5.075	2.90	mg/L	0.000761	0.005075	
* Molybdenum, Dissolved	3/2/23 12:15	3/2/23 15:54		1.015	0.000314	mg/L	0.000102	0.000203	
* Potassium, Dissolved	3/2/23 12:15	3/2/23 15:54		1.015	2.89	mg/L	0.169505	0.5075	
* Selenium, Dissolved	3/2/23 12:15	3/2/23 15:54		1.015	0.00296	mg/L	0.000508	0.001015	
* Thallium, Dissolved	3/2/23 12:15	3/2/23 15:54		1.015	0.000089	mg/L	0.000068	0.000203	J
Analytical Method: EPA 245.1	***Analyst: ELH***								
* Mercury, Total by CVAA	3/8/23 17:33	3/8/23 21:47		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	3/3/23 11:06	3/3/23 11:06		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	3/2/23 12:50	3/3/23 13:40		1	888	mg/L		50	
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	3/2/23 14:16	3/2/23 14:16		1	4.15	mg/L	1.00	2	
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	3/3/23 07:59	3/3/23 07:59		1	1.65	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	3/14/23 14:16	3/14/23 14:16		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	3/2/23 14:05	3/2/23 14:05		32	523	mg/L	19.2	64	

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

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
Alkalinity could not be performed, pH below titration end point of 4.5 SU.
Fluoride may have potential matrix interference.

Reported: 4/7/2023
Version: 3.5
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Gypsum - PZ-18

Location Code: WMWGORG
Collected: 2/27/23 12:31
Customer ID:
Submittal Date: 3/2/23 10:38

Laboratory ID Number: BD04569

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	2/27/23 12:28	2/27/23 12:28			1066.18	uS/cm			FA
pH	2/27/23 12:28	2/27/23 12:28			3.94	SU			FA
Temperature	2/27/23 12:28	2/27/23 12:28			19.96	C			FA
Turbidity	2/27/23 12:28	2/27/23 12:28			0.44	NTU			FA
Sulfide	2/27/23 12:28	2/27/23 12:28			0	mg/L			FA

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

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
Alkalinity could not be performed, pH below titration end point of 4.5 SU.
Fluoride may have potential matrix interference.

Reported: 4/7/2023
Version: 3.5
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORG
Sample Date: 2/27/23 12:31
Customer ID:
Delivery Date: 3/2/23 10:38

Description: Gorgas Gypsum - PZ-18

Laboratory ID Number: BD04569

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04575	Aluminum, Dissolved	mg/L	-0.0000351	0.0198	0.100	12.1	12.0	0.103	0.0850 to 0.115	-100	70.0 to 130	0.830	20.0
BD04575	Aluminum, Total	mg/L	0.000677	0.0198	0.100	15.4	15.2	0.105	0.0850 to 0.115	0.00	70.0 to 130	1.31	20.0
BD04575	Antimony, Dissolved	mg/L	0.000375	0.00100	0.100	0.0900	0.0894	0.0851	0.0850 to 0.115	90.0	70.0 to 130	0.669	20.0
BD04575	Antimony, Total	mg/L	0.000351	0.00100	0.100	0.0992	0.101	0.0911	0.0850 to 0.115	99.2	70.0 to 130	1.80	20.0
BD04575	Arsenic, Dissolved	mg/L	-0.0000031	0.000200	0.100	0.0998	0.0990	0.0994	0.0850 to 0.115	98.6	70.0 to 130	0.805	20.0
BD04575	Arsenic, Total	mg/L	0.0000206	0.000200	0.100	0.101	0.0987	0.100	0.0850 to 0.115	99.5	70.0 to 130	2.30	20.0
BD04575	Barium, Dissolved	mg/L	0.0000093	0.00100	0.100	0.119	0.121	0.105	0.0850 to 0.115	98.5	70.0 to 130	1.67	20.0
BD04575	Barium, Total	mg/L	0.0000082	0.00100	0.100	0.121	0.123	0.100	0.0850 to 0.115	101	70.0 to 130	1.64	20.0
BD04575	Beryllium, Dissolved	mg/L	0.0000272	0.000880	0.100	0.115	0.113	0.106	0.0850 to 0.115	106	70.0 to 130	1.75	20.0
BD04575	Beryllium, Total	mg/L	0.0000174	0.000880	0.100	0.117	0.121	0.0967	0.0850 to 0.115	106	70.0 to 130	3.36	20.0
BD04575	Boron, Dissolved	mg/L	-0.00419	0.0650	1.00	1.20	1.24	1.04	0.850 to 1.15	104	70.0 to 130	3.28	20.0
BD04575	Boron, Total	mg/L	-0.00441	0.0650	1.00	1.22	1.21	1.03	0.850 to 1.15	106	70.0 to 130	0.823	20.0
BD04575	Cadmium, Dissolved	mg/L	0.0000019	0.000147	0.100	0.0943	0.0942	0.0961	0.0850 to 0.115	92.8	70.0 to 130	0.106	20.0
BD04575	Cadmium, Total	mg/L	0.0000066	0.000147	0.100	0.0984	0.101	0.101	0.0850 to 0.115	96.8	70.0 to 130	2.61	20.0
BD04575	Calcium, Dissolved	mg/L	0.00993	0.152	5.00	179	158	5.12	4.25 to 5.75	660	70.0 to 130	12.5	20.0
BD04575	Calcium, Total	mg/L	0.00311	0.152	5.00	140	135	4.80	4.25 to 5.75	160	70.0 to 130	3.64	20.0
BD04575	Chloride	mg/L	0.0461	1.00	10.0	13.0	13.3	10.2	9.00 to 11.0	101	80.0 to 120	2.28	20.0
BD04575	Chromium, Dissolved	mg/L	0.0000039	0.000440	0.100	0.0981	0.0951	0.0978	0.0850 to 0.115	97.8	70.0 to 130	3.11	20.0
BD04575	Chromium, Total	mg/L	0.0000603	0.000440	0.100	0.100	0.101	0.103	0.0850 to 0.115	99.5	70.0 to 130	0.995	20.0
BD04575	Cobalt, Dissolved	mg/L	0.0000034	0.000147	0.100	0.320	0.312	0.104	0.0850 to 0.115	107	70.0 to 130	2.53	20.0
BD04575	Cobalt, Total	mg/L	0.0000044	0.000147	0.100	0.339	0.344	0.111	0.0850 to 0.115	112	70.0 to 130	1.46	20.0
BD05000	Fluoride	mg/L	0.0103	0.125	2.50	6.92	6.89	2.64	2.25 to 2.75	98.0	80.0 to 120	0.434	20.0
BD04575	Iron, Dissolved	mg/L	0.000348	0.0176	0.2	11.9	10.3	0.204	0.170 to 0.230	900	70.0 to 130	14.4	20.0
BD04575	Iron, Total	mg/L	0.000151	0.0176	0.2	10.7	10.3	0.202	0.170 to 0.230	200	70.0 to 130	3.81	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
Alkalinity could not be performed, pH below titration end point of 4.5 SU.
Fluoride may have potential matrix interference.

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORG
Sample Date: 2/27/23 12:31
Customer ID:
Delivery Date: 3/2/23 10:38

Description: Gorgas Gypsum - PZ-18

Laboratory ID Number: BD04569

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04575	Lead, Dissolved	mg/L	0.0000062	0.000147	0.100	0.107	0.107	0.107	0.0850 to 0.115	106	70.0 to 130	0.00	20.0
BD04575	Lead, Total	mg/L	0.0000098	0.000147	0.100	0.106	0.105	0.106	0.0850 to 0.115	105	70.0 to 130	0.948	20.0
BD04575	Lithium, Dissolved	mg/L	0.000578	0.0154	0.200	0.674	0.674	0.202	0.170 to 0.230	100	70.0 to 130	0.00	20.0
BD04575	Lithium, Total	mg/L	-0.00102	0.0154	0.200	0.684	0.687	0.200	0.170 to 0.230	106	70.0 to 130	0.438	20.0
BD04575	Magnesium, Dissolved	mg/L	0.00812	0.0462	5.00	129	115	4.98	4.25 to 5.75	480	70.0 to 130	11.5	20.0
BD04575	Magnesium, Total	mg/L	-0.00751	0.0462	5.00	99.0	96.4	4.86	4.25 to 5.75	126	70.0 to 130	2.66	20.0
BD04575	Manganese, Dissolved	mg/L	0.0000177	0.00033	0.100	8.18	8.28	0.101	0.0850 to 0.115	-10.0	70.0 to 130	1.22	20.0
BD04575	Manganese, Total	mg/L	-0.000076	0.00033	0.100	8.38	7.96	0.105	0.0850 to 0.115	110	70.0 to 130	5.14	20.0
BD04575	Mercury, Total by CVAA	mg/L	4.000E-05	0.000500	0.004	0.0038	0.00382	0.00383	0.00340 to 0.00460	95.0	70.0 to 130	0.525	20.0
BD04575	Molybdenum, Dissolved	mg/L	0.0000157	0.0002	0.100	0.101	0.0990	0.101	0.0850 to 0.115	100	70.0 to 130	2.00	20.0
BD04575	Molybdenum, Total	mg/L	0.0000078	0.0002	0.100	0.0978	0.0970	0.100	0.0850 to 0.115	97.7	70.0 to 130	0.821	20.0
BD04575	Potassium, Dissolved	mg/L	0.0155	0.367	10.0	13.7	13.3	9.82	8.50 to 11.5	96.0	70.0 to 130	2.96	20.0
BD04575	Potassium, Total	mg/L	0.00535	0.367	10.0	13.8	13.9	10.0	8.50 to 11.5	95.6	70.0 to 130	0.722	20.0
BD04575	Selenium, Dissolved	mg/L	0.000130	0.00100	0.100	0.107	0.104	0.101	0.0850 to 0.115	102	70.0 to 130	2.84	20.0
BD04575	Selenium, Total	mg/L	0.000113	0.00100	0.100	0.105	0.104	0.102	0.0850 to 0.115	99.1	70.0 to 130	0.957	20.0
BD04575	Silicon, Dissolved	mg/L	0.000284	0.0440	1.00	35.0	30.4	1.02	0.850 to 1.15	560	70.0 to 130	14.1	20.0
BD04575	Silicon, Total	mg/L	0.00157	0.0440	1.00	29.1	28.1	1.01	0.850 to 1.15	140	70.0 to 130	3.50	20.0
BD04575	Sodium, Dissolved	mg/L	-0.00314	0.0880	5.00	23.2	23.2	4.90	4.25 to 5.75	98.0	70.0 to 130	0.00	20.0
BD04575	Sodium, Total	mg/L	0.00121	0.0880	5.00	23.2	23.1	4.79	4.25 to 5.75	102	70.0 to 130	0.432	20.0
BD04575	Sulfate	mg/L	0.301	2.0	1000	1770	1830	19.8	18.0 to 22.0	102	80.0 to 120	3.33	20.0
BD04575	Thallium, Dissolved	mg/L	0.0000054	0.000147	0.100	0.0987	0.100	0.105	0.0850 to 0.115	98.6	70.0 to 130	1.31	20.0
BD04575	Thallium, Total	mg/L	0.0000118	0.000147	0.100	0.102	0.105	0.103	0.0850 to 0.115	102	70.0 to 130	2.90	20.0
BD04575	Total Organic Carbon	mg/L	-0.00852	1.00	10.0	12.3	12.9	10.0		98.8	80.0 to 120	4.76	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
Alkalinity could not be performed, pH below titration end point of 4.5 SU.
Fluoride may have potential matrix interference.

Reported: 4/7/2023
Version: 3.5
COA_CCR

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

Alabama Power

Batch QC Summary

Customer Account: WMWGORG
Sample Date: 2/27/23 12:31
Customer ID:
Delivery Date: 3/2/23 10:38

Description: Gorgas Gypsum - PZ-18

Laboratory ID Number: BD04569

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04575	Nitrogen, Nitrate/Nitrite	mg/L as N	0.04	0.200	2.00	2.21	0.137	1.98	1.80 to 2.20	110	90.0 to 110	0.00	15.0
BD04572	Solids, Dissolved	mg/L	1.00	25.0			444	53.0	40.0 to 60.0			4.61	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
Alkalinity could not be performed, pH below titration end point of 4.5 SU.
Fluoride may have potential matrix interference.

Reported: 4/7/2023
Version: 3.5
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Gypsum - PZ-19

Location Code: WMWGORG
Collected: 2/28/23 09:24
Customer ID:
Submittal Date: 3/2/23 10:38

Laboratory ID Number: BD04570

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	3/3/23 11:16	3/6/23 12:05		1.015	0.0494	mg/L	0.030000	0.1015	J
* Calcium, Total	3/3/23 11:16	3/7/23 10:03		10.15	115	mg/L	0.70035	4.06	
* Iron, Total	3/3/23 11:16	3/6/23 12:05		1.015	2.39	mg/L	0.008120	0.0406	
* Lithium, Total	3/3/23 11:16	3/6/23 12:05		1.015	0.0709	mg/L	0.007105	0.01999956	
* Magnesium, Total	3/3/23 11:16	3/7/23 10:03		10.15	48.6	mg/L	0.21315	4.06	
* Silica, Total (calc.)	3/3/23 11:16	3/6/23 12:05		1	21.8	mg/L			
* Silicon, Total	3/3/23 11:16	3/6/23 12:05		1.015	10.2	mg/L	0.02030	0.25375	
* Sodium, Total	3/3/23 11:16	3/7/23 10:03		10.15	110	mg/L	0.3045	4.06	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	3/2/23 12:15	3/6/23 10:08		1.015	0.0508	mg/L	0.030000	0.1015	J
* Calcium, Dissolved	3/2/23 12:15	3/6/23 14:05		10.15	135	mg/L	0.70035	4.06	
* Iron, Dissolved	3/2/23 12:15	3/6/23 10:08		1.015	2.45	mg/L	0.008120	0.0406	
* Lithium, Dissolved	3/2/23 12:15	3/6/23 10:08		1.015	0.0727	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	3/2/23 12:15	3/6/23 14:05		10.15	60.4	mg/L	0.21315	4.06	
* Silica, Dissolved (calc.)	3/2/23 12:15	3/6/23 10:08		1	22.3	mg/L			
* Silicon, Dissolved	3/2/23 12:15	3/6/23 10:08		1.015	10.4	mg/L	0.02030	0.25375	
* Sodium, Dissolved	3/2/23 12:15	3/6/23 14:05		10.15	133	mg/L	0.3045	4.06	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/3/23 11:16	3/6/23 16:15		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	3/3/23 11:16	3/6/23 16:15		1.015	0.0214	mg/L	0.006090	0.05075	J
* Arsenic, Total	3/3/23 11:16	3/6/23 16:15		1.015	0.00133	mg/L	0.000081	0.000203	
* Barium, Total	3/3/23 11:16	3/6/23 16:15		1.015	0.0344	mg/L	0.000508	0.001015	
* Beryllium, Total	3/3/23 11:16	3/6/23 16:15		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	3/3/23 11:16	3/6/23 16:15		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	3/3/23 11:16	3/6/23 16:15		1.015	0.000239	mg/L	0.000203	0.001015	J
* Cobalt, Total	3/3/23 11:16	3/6/23 16:15		1.015	0.000708	mg/L	0.000068	0.000203	
* Lead, Total	3/3/23 11:16	3/6/23 16:15		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	3/3/23 11:16	3/6/23 16:15		1.015	0.783	mg/L	0.000152	0.001015	
* Molybdenum, Total	3/3/23 11:16	3/6/23 16:15		1.015	0.000783	mg/L	0.000102	0.000203	
* Potassium, Total	3/3/23 11:16	3/6/23 16:15		1.015	3.69	mg/L	0.169505	0.5075	

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

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

Reported: 4/7/2023
Version: 3.5
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Gypsum - PZ-19

Location Code: WMWGORG
Collected: 2/28/23 09:24
Customer ID:
Submittal Date: 3/2/23 10:38

Laboratory ID Number: BD04570

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	3/3/23 11:16	3/6/23 16:15		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	3/3/23 11:16	3/6/23 16:15		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	3/2/23 12:15	3/2/23 15:58		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	3/2/23 12:15	3/2/23 15:58		1.015	Not Detected	mg/L	0.006090	0.05075	U
* Arsenic, Dissolved	3/2/23 12:15	3/2/23 15:58		1.015	0.00138	mg/L	0.000081	0.000203	
* Barium, Dissolved	3/2/23 12:15	3/2/23 15:58		1.015	0.0350	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	3/2/23 12:15	3/2/23 15:58		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	3/2/23 12:15	3/2/23 15:58		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	3/2/23 12:15	3/2/23 15:58		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	3/2/23 12:15	3/2/23 15:58		1.015	0.000606	mg/L	0.000068	0.000203	
* Lead, Dissolved	3/2/23 12:15	3/2/23 15:58		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	3/2/23 12:15	3/2/23 15:58		1.015	0.782	mg/L	0.000152	0.001015	
* Molybdenum, Dissolved	3/2/23 12:15	3/2/23 15:58		1.015	0.000780	mg/L	0.000102	0.000203	
* Potassium, Dissolved	3/2/23 12:15	3/2/23 15:58		1.015	3.61	mg/L	0.169505	0.5075	
* Selenium, Dissolved	3/2/23 12:15	3/2/23 15:58		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	3/2/23 12:15	3/2/23 15:58		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ELH***								
* Mercury, Total by CVAA	3/8/23 17:33	3/8/23 21:51		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	3/3/23 11:08	3/3/23 11:08		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
* Alkalinity to pH 4.5	3/13/23 13:37	3/13/23 15:58		1	384	mg CaCO3/L			
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	3/2/23 12:50	3/3/23 13:40		1	839	mg/L		75.8	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
* Bicarbonate Alkalinity, (calc.)	3/13/23 13:37	3/13/23 15:58		1	384	mg CaCO3/L		1	A
* Carbonate Alkalinity, (calc.)	3/13/23 13:37	3/13/23 15:58		1	Not Detected	mg CaCO3/L		0.5	A
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	3/2/23 14:32	3/2/23 14:32		1	10.4	mg/L	1.00	2	

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

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

Reported: 4/7/2023
Version: 3.5
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Gypsum - PZ-19

Location Code: WMWGORG
Collected: 2/28/23 09:24
Customer ID:
Submittal Date: 3/2/23 10:38

Laboratory ID Number: BD04570

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	3/3/23 08:00	3/3/23 08:00		1	13.5	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	3/3/23 11:41	3/3/23 11:41		1	0.196	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	3/2/23 14:06	3/2/23 14:06		16	263	mg/L	9.6	32	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	2/28/23 09:21	2/28/23 09:21			1218.89	uS/cm			FA
pH	2/28/23 09:21	2/28/23 09:21			6.55	SU			FA
Temperature	2/28/23 09:21	2/28/23 09:21			18.01	C			FA
Turbidity	2/28/23 09:21	2/28/23 09:21			3.18	NTU			FA
Sulfide	2/28/23 09:21	2/28/23 09:21			0	mg/L			FA

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

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

Reported: 4/7/2023
Version: 3.5
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORG
Sample Date: 2/28/23 09:24
Customer ID:
Delivery Date: 3/2/23 10:38

Description: Gorgas Gypsum - PZ-19

Laboratory ID Number: BD04570

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04575	Aluminum, Dissolved	mg/L	-0.0000351	0.0198	0.100	12.1	12.0	0.103	0.0850 to 0.115	-100	70.0 to 130	0.830	20.0
BD04575	Aluminum, Total	mg/L	0.000677	0.0198	0.100	15.4	15.2	0.105	0.0850 to 0.115	0.00	70.0 to 130	1.31	20.0
BD04575	Antimony, Dissolved	mg/L	0.000375	0.00100	0.100	0.0900	0.0894	0.0851	0.0850 to 0.115	90.0	70.0 to 130	0.669	20.0
BD04575	Antimony, Total	mg/L	0.000351	0.00100	0.100	0.0992	0.101	0.0911	0.0850 to 0.115	99.2	70.0 to 130	1.80	20.0
BD04575	Arsenic, Dissolved	mg/L	-0.0000031	0.000200	0.100	0.0998	0.0990	0.0994	0.0850 to 0.115	98.6	70.0 to 130	0.805	20.0
BD04575	Arsenic, Total	mg/L	0.0000206	0.000200	0.100	0.101	0.0987	0.100	0.0850 to 0.115	99.5	70.0 to 130	2.30	20.0
BD04575	Barium, Dissolved	mg/L	0.0000093	0.00100	0.100	0.119	0.121	0.105	0.0850 to 0.115	98.5	70.0 to 130	1.67	20.0
BD04575	Barium, Total	mg/L	0.0000082	0.00100	0.100	0.121	0.123	0.100	0.0850 to 0.115	101	70.0 to 130	1.64	20.0
BD04575	Beryllium, Dissolved	mg/L	0.0000272	0.000880	0.100	0.115	0.113	0.106	0.0850 to 0.115	106	70.0 to 130	1.75	20.0
BD04575	Beryllium, Total	mg/L	0.0000174	0.000880	0.100	0.117	0.121	0.0967	0.0850 to 0.115	106	70.0 to 130	3.36	20.0
BD04575	Boron, Dissolved	mg/L	-0.00419	0.0650	1.00	1.20	1.24	1.04	0.850 to 1.15	104	70.0 to 130	3.28	20.0
BD04575	Boron, Total	mg/L	-0.00441	0.0650	1.00	1.22	1.21	1.03	0.850 to 1.15	106	70.0 to 130	0.823	20.0
BD04575	Cadmium, Dissolved	mg/L	0.0000019	0.000147	0.100	0.0943	0.0942	0.0961	0.0850 to 0.115	92.8	70.0 to 130	0.106	20.0
BD04575	Cadmium, Total	mg/L	0.0000066	0.000147	0.100	0.0984	0.101	0.101	0.0850 to 0.115	96.8	70.0 to 130	2.61	20.0
BD04575	Calcium, Dissolved	mg/L	0.00993	0.152	5.00	179	158	5.12	4.25 to 5.75	660	70.0 to 130	12.5	20.0
BD04575	Calcium, Total	mg/L	0.00311	0.152	5.00	140	135	4.80	4.25 to 5.75	160	70.0 to 130	3.64	20.0
BD04575	Chloride	mg/L	0.0461	1.00	10.0	13.0	13.3	10.2	9.00 to 11.0	101	80.0 to 120	2.28	20.0
BD04575	Chromium, Dissolved	mg/L	0.0000039	0.000440	0.100	0.0981	0.0951	0.0978	0.0850 to 0.115	97.8	70.0 to 130	3.11	20.0
BD04575	Chromium, Total	mg/L	0.0000603	0.000440	0.100	0.100	0.101	0.103	0.0850 to 0.115	99.5	70.0 to 130	0.995	20.0
BD04575	Cobalt, Dissolved	mg/L	0.0000034	0.000147	0.100	0.320	0.312	0.104	0.0850 to 0.115	107	70.0 to 130	2.53	20.0
BD04575	Cobalt, Total	mg/L	0.0000044	0.000147	0.100	0.339	0.344	0.111	0.0850 to 0.115	112	70.0 to 130	1.46	20.0
BD04574	Fluoride	mg/L	0.0456	0.125	2.50	2.45	2.57	2.53	2.25 to 2.75	98.0	80.0 to 120	4.78	20.0
BD04575	Iron, Dissolved	mg/L	0.000348	0.0176	0.2	11.9	10.3	0.204	0.170 to 0.230	900	70.0 to 130	14.4	20.0
BD04575	Iron, Total	mg/L	0.000151	0.0176	0.2	10.7	10.3	0.202	0.170 to 0.230	200	70.0 to 130	3.81	20.0

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

Reported: 4/7/2023
Version: 3.5
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORG
Sample Date: 2/28/23 09:24
Customer ID:
Delivery Date: 3/2/23 10:38

Description: Gorgas Gypsum - PZ-19

Laboratory ID Number: BD04570

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04575	Lead, Dissolved	mg/L	0.0000062	0.000147	0.100	0.107	0.107	0.107	0.0850 to 0.115	106	70.0 to 130	0.00	20.0
BD04575	Lead, Total	mg/L	0.0000098	0.000147	0.100	0.106	0.105	0.106	0.0850 to 0.115	105	70.0 to 130	0.948	20.0
BD04575	Lithium, Dissolved	mg/L	0.000578	0.0154	0.200	0.674	0.674	0.202	0.170 to 0.230	100	70.0 to 130	0.00	20.0
BD04575	Lithium, Total	mg/L	-0.00102	0.0154	0.200	0.684	0.687	0.200	0.170 to 0.230	106	70.0 to 130	0.438	20.0
BD04575	Magnesium, Dissolved	mg/L	0.00812	0.0462	5.00	129	115	4.98	4.25 to 5.75	480	70.0 to 130	11.5	20.0
BD04575	Magnesium, Total	mg/L	-0.00751	0.0462	5.00	99.0	96.4	4.86	4.25 to 5.75	126	70.0 to 130	2.66	20.0
BD04575	Manganese, Dissolved	mg/L	0.0000177	0.00033	0.100	8.18	8.28	0.101	0.0850 to 0.115	-10.0	70.0 to 130	1.22	20.0
BD04575	Manganese, Total	mg/L	-0.000076	0.00033	0.100	8.38	7.96	0.105	0.0850 to 0.115	110	70.0 to 130	5.14	20.0
BD04575	Mercury, Total by CVAA	mg/L	4.000E-05	0.000500	0.004	0.0038	0.00382	0.00383	0.00340 to 0.00460	95.0	70.0 to 130	0.525	20.0
BD04575	Molybdenum, Dissolved	mg/L	0.0000157	0.0002	0.100	0.101	0.0990	0.101	0.0850 to 0.115	100	70.0 to 130	2.00	20.0
BD04575	Molybdenum, Total	mg/L	0.0000078	0.0002	0.100	0.0978	0.0970	0.100	0.0850 to 0.115	97.7	70.0 to 130	0.821	20.0
BD04575	Potassium, Dissolved	mg/L	0.0155	0.367	10.0	13.7	13.3	9.82	8.50 to 11.5	96.0	70.0 to 130	2.96	20.0
BD04575	Potassium, Total	mg/L	0.00535	0.367	10.0	13.8	13.9	10.0	8.50 to 11.5	95.6	70.0 to 130	0.722	20.0
BD04575	Selenium, Dissolved	mg/L	0.000130	0.00100	0.100	0.107	0.104	0.101	0.0850 to 0.115	102	70.0 to 130	2.84	20.0
BD04575	Selenium, Total	mg/L	0.000113	0.00100	0.100	0.105	0.104	0.102	0.0850 to 0.115	99.1	70.0 to 130	0.957	20.0
BD04575	Silicon, Dissolved	mg/L	0.000284	0.0440	1.00	35.0	30.4	1.02	0.850 to 1.15	560	70.0 to 130	14.1	20.0
BD04575	Silicon, Total	mg/L	0.00157	0.0440	1.00	29.1	28.1	1.01	0.850 to 1.15	140	70.0 to 130	3.50	20.0
BD04575	Sodium, Dissolved	mg/L	-0.00314	0.0880	5.00	23.2	23.2	4.90	4.25 to 5.75	98.0	70.0 to 130	0.00	20.0
BD04575	Sodium, Total	mg/L	0.00121	0.0880	5.00	23.2	23.1	4.79	4.25 to 5.75	102	70.0 to 130	0.432	20.0
BD04575	Sulfate	mg/L	0.301	2.0	1000	1770	1830	19.8	18.0 to 22.0	102	80.0 to 120	3.33	20.0
BD04575	Thallium, Dissolved	mg/L	0.0000054	0.000147	0.100	0.0987	0.100	0.105	0.0850 to 0.115	98.6	70.0 to 130	1.31	20.0
BD04575	Thallium, Total	mg/L	0.0000118	0.000147	0.100	0.102	0.105	0.103	0.0850 to 0.115	102	70.0 to 130	2.90	20.0
BD04575	Total Organic Carbon	mg/L	-0.00852	1.00	10.0	12.3	12.9	10.0		98.8	80.0 to 120	4.76	20.0

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

Reported: 4/7/2023
Version: 3.5
COA_CCR

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

Alabama Power

Batch QC Summary

Customer Account: WMWGORG
Sample Date: 2/28/23 09:24
Customer ID:
Delivery Date: 3/2/23 10:38

Description: Gorgas Gypsum - PZ-19

Laboratory ID Number: BD04570

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04589	Alkalinity to pH 4.5	mg CaCO3/L					42.2	50.3	45.0 to 55.0			1.18	10.0
BD04575	Nitrogen, Nitrate/Nitrite	mg/L as N	0.04	0.200	2.00	2.21	0.137	1.98	1.80 to 2.20	110	90.0 to 110	0.00	15.0
BD04572	Solids, Dissolved	mg/L	1.00	25.0			444	53.0	40.0 to 60.0			4.61	10.0

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

Reported: 4/7/2023
Version: 3.5
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Gypsum - PZ-22

Location Code: WMWGORG
Collected: 2/28/23 10:24
Customer ID:
Submittal Date: 3/2/23 10:38

Laboratory ID Number: BD04571

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	3/3/23 11:16	3/6/23 12:08		1.015	0.0602	mg/L	0.030000	0.1015	J
* Calcium, Total	3/29/23 13:16	3/30/23 09:55		101.5	69.2	mg/L	7.0035	40.6	
* Iron, Total	3/29/23 13:16	3/30/23 09:55		101.5	43.3	mg/L	0.8120	4.06	
* Lithium, Total	3/3/23 11:16	3/6/23 12:08		1.015	0.0649	mg/L	0.007105	0.01999956	
* Magnesium, Total	3/3/23 11:16	3/6/23 12:08		1.015	37.0	mg/L	0.021315	0.406	
* Silica, Total (calc.)	3/3/23 11:16	3/6/23 12:08		1	17.3	mg/L			
* Silicon, Total	3/3/23 11:16	3/6/23 12:08		1.015	8.07	mg/L	0.02030	0.25375	
* Sodium, Total	3/3/23 11:16	3/6/23 12:08		1.015	36.3	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	3/2/23 12:15	3/6/23 10:11		1.015	0.0703	mg/L	0.030000	0.1015	J
* Calcium, Dissolved	3/29/23 09:49	3/30/23 09:36		101.5	66.9	mg/L	7.0035	40.6	
* Iron, Dissolved	3/29/23 09:49	3/30/23 09:36		101.5	43.5	mg/L	0.8120	4.06	
* Lithium, Dissolved	3/2/23 12:15	3/6/23 10:11		1.015	0.0649	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	3/2/23 12:15	3/6/23 10:11		1.015	37.8	mg/L	0.021315	0.406	
* Silica, Dissolved (calc.)	3/2/23 12:15	3/6/23 10:11		1	17.6	mg/L			
* Silicon, Dissolved	3/2/23 12:15	3/6/23 10:11		1.015	8.24	mg/L	0.02030	0.25375	
* Sodium, Dissolved	3/2/23 12:15	3/6/23 10:11		1.015	37.0	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/3/23 11:16	3/6/23 16:18		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	3/3/23 11:16	3/6/23 16:18		1.015	Not Detected	mg/L	0.006090	0.05075	U
* Arsenic, Total	3/3/23 11:16	3/6/23 16:18		1.015	0.0605	mg/L	0.000081	0.000203	
* Barium, Total	3/3/23 11:16	3/6/23 16:18		1.015	0.0161	mg/L	0.000508	0.001015	
* Beryllium, Total	3/3/23 11:16	3/6/23 16:18		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	3/3/23 11:16	3/6/23 16:18		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	3/3/23 11:16	3/6/23 16:18		1.015	0.000377	mg/L	0.000203	0.001015	J
* Cobalt, Total	3/3/23 11:16	3/6/23 16:18		1.015	0.00317	mg/L	0.000068	0.000203	
* Lead, Total	3/3/23 11:16	3/6/23 16:18		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	3/3/23 11:16	3/6/23 18:43		5.075	2.15	mg/L	0.000761	0.005075	
* Molybdenum, Total	3/3/23 11:16	3/6/23 16:18		1.015	0.00108	mg/L	0.000102	0.000203	
* Potassium, Total	3/3/23 11:16	3/6/23 16:18		1.015	6.50	mg/L	0.169505	0.5075	

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

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

Reported: 4/7/2023
Version: 3.5
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Gypsum - PZ-22

Location Code: WMWGORG
Collected: 2/28/23 10:24
Customer ID:
Submittal Date: 3/2/23 10:38

Laboratory ID Number: BD04571

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	3/3/23 11:16	3/6/23 16:18		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	3/3/23 11:16	3/6/23 16:18		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	3/2/23 12:15	3/2/23 16:01		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	3/2/23 12:15	3/2/23 16:01		1.015	Not Detected	mg/L	0.006090	0.05075	U
* Arsenic, Dissolved	3/2/23 12:15	3/2/23 16:01		1.015	0.0609	mg/L	0.000081	0.000203	
* Barium, Dissolved	3/2/23 12:15	3/2/23 16:01		1.015	0.0162	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	3/2/23 12:15	3/2/23 16:01		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	3/2/23 12:15	3/2/23 16:01		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	3/2/23 12:15	3/2/23 16:01		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	3/2/23 12:15	3/2/23 16:01		1.015	0.00301	mg/L	0.000068	0.000203	
* Lead, Dissolved	3/2/23 12:15	3/2/23 16:01		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	3/2/23 12:15	3/6/23 11:20		5.075	2.14	mg/L	0.000761	0.005075	
* Molybdenum, Dissolved	3/2/23 12:15	3/2/23 16:01		1.015	0.00130	mg/L	0.000102	0.000203	
* Potassium, Dissolved	3/2/23 12:15	3/2/23 16:01		1.015	6.31	mg/L	0.169505	0.5075	
* Selenium, Dissolved	3/2/23 12:15	3/2/23 16:01		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	3/2/23 12:15	3/2/23 16:01		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ELH***								
* Mercury, Total by CVAA	3/8/23 17:33	3/8/23 21:55		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	3/3/23 11:10	3/3/23 11:10		1	0.217	mg/L as N	0.20	0.3	J
Analytical Method: SM 2320 B	***Analyst: ALH***								
* Alkalinity to pH 4.5	3/13/23 13:37	3/13/23 15:58		1	67.7	mg CaCO3/L			
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	3/2/23 12:50	3/3/23 13:40		1	676	mg/L		50	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
* Bicarbonate Alkalinity, (calc.)	3/13/23 13:37	3/13/23 15:58		1	67.6	mg CaCO3/L		1	A
* Carbonate Alkalinity, (calc.)	3/13/23 13:37	3/13/23 15:58		1	Not Detected	mg CaCO3/L		0.5	A
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	3/2/23 14:48	3/2/23 14:48		1	4.44	mg/L	1.00	2	

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

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

Reported: 4/7/2023
Version: 3.5
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Gypsum - PZ-22

Location Code: WMWGORG
Collected: 2/28/23 10:24
Customer ID:
Submittal Date: 3/2/23 10:38

Laboratory ID Number: BD04571

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E		***Analyst: JCC***							
* Chloride	3/3/23 08:01	3/3/23 08:01		1	5.07	mg/L	0.50	1	
Analytical Method: SM4500F G 2017		***Analyst: JCC***							
* Fluoride	3/3/23 11:42	3/3/23 11:42		1	0.116	mg/L	0.06	0.125	J
Analytical Method: SM4500SO4 E 2011		***Analyst: JCC***							
* Sulfate	3/2/23 14:07	3/2/23 14:07		20	364	mg/L	12.0	40	
Analytical Method: Field Measurements		***Analyst: DKG***							
Conductivity	2/28/23 10:21	2/28/23 10:21			907.73	uS/cm			FA
pH	2/28/23 10:21	2/28/23 10:21			6.14	SU			FA
Temperature	2/28/23 10:21	2/28/23 10:21			18.33	C			FA
Turbidity	2/28/23 10:21	2/28/23 10:21			1.12	NTU			FA
Sulfide	2/28/23 10:21	2/28/23 10:21			0	mg/L			FA

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

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

Reported: 4/7/2023
Version: 3.5
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORG
Sample Date: 2/28/23 10:24
Customer ID:
Delivery Date: 3/2/23 10:38

Description: Gorgas Gypsum - PZ-22

Laboratory ID Number: BD04571

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04575	Aluminum, Dissolved	mg/L	-0.0000351	0.0198	0.100	12.1	12.0	0.103	0.0850 to 0.115	-100	70.0 to 130	0.830	20.0
BD04575	Aluminum, Total	mg/L	0.000677	0.0198	0.100	15.4	15.2	0.105	0.0850 to 0.115	0.00	70.0 to 130	1.31	20.0
BD04575	Antimony, Dissolved	mg/L	0.000375	0.00100	0.100	0.0900	0.0894	0.0851	0.0850 to 0.115	90.0	70.0 to 130	0.669	20.0
BD04575	Antimony, Total	mg/L	0.000351	0.00100	0.100	0.0992	0.101	0.0911	0.0850 to 0.115	99.2	70.0 to 130	1.80	20.0
BD04575	Arsenic, Dissolved	mg/L	-0.0000031	0.000200	0.100	0.0998	0.0990	0.0994	0.0850 to 0.115	98.6	70.0 to 130	0.805	20.0
BD04575	Arsenic, Total	mg/L	0.0000206	0.000200	0.100	0.101	0.0987	0.100	0.0850 to 0.115	99.5	70.0 to 130	2.30	20.0
BD04575	Barium, Dissolved	mg/L	0.0000093	0.00100	0.100	0.119	0.121	0.105	0.0850 to 0.115	98.5	70.0 to 130	1.67	20.0
BD04575	Barium, Total	mg/L	0.0000082	0.00100	0.100	0.121	0.123	0.100	0.0850 to 0.115	101	70.0 to 130	1.64	20.0
BD04575	Beryllium, Dissolved	mg/L	0.0000272	0.000880	0.100	0.115	0.113	0.106	0.0850 to 0.115	106	70.0 to 130	1.75	20.0
BD04575	Beryllium, Total	mg/L	0.0000174	0.000880	0.100	0.117	0.121	0.0967	0.0850 to 0.115	106	70.0 to 130	3.36	20.0
BD04575	Boron, Dissolved	mg/L	-0.00419	0.0650	1.00	1.20	1.24	1.04	0.850 to 1.15	104	70.0 to 130	3.28	20.0
BD04575	Boron, Total	mg/L	-0.00441	0.0650	1.00	1.22	1.21	1.03	0.850 to 1.15	106	70.0 to 130	0.823	20.0
BD04575	Cadmium, Dissolved	mg/L	0.0000019	0.000147	0.100	0.0943	0.0942	0.0961	0.0850 to 0.115	92.8	70.0 to 130	0.106	20.0
BD04575	Cadmium, Total	mg/L	0.0000066	0.000147	0.100	0.0984	0.101	0.101	0.0850 to 0.115	96.8	70.0 to 130	2.61	20.0
BD04579	Calcium, Dissolved	mg/L	-0.00418	0.152	5.00	528	553	4.98	4.25 to 5.75	120	70.0 to 130	4.63	20.0
BD04579	Calcium, Total	mg/L	-0.000555	0.152	5.00	508	521	4.81	4.25 to 5.75	-160	70.0 to 130	2.53	20.0
BD04575	Chloride	mg/L	0.0461	1.00	10.0	13.0	13.3	10.2	9.00 to 11.0	101	80.0 to 120	2.28	20.0
BD04575	Chromium, Dissolved	mg/L	0.0000039	0.000440	0.100	0.0981	0.0951	0.0978	0.0850 to 0.115	97.8	70.0 to 130	3.11	20.0
BD04575	Chromium, Total	mg/L	0.0000603	0.000440	0.100	0.100	0.101	0.103	0.0850 to 0.115	99.5	70.0 to 130	0.995	20.0
BD04575	Cobalt, Dissolved	mg/L	0.0000034	0.000147	0.100	0.320	0.312	0.104	0.0850 to 0.115	107	70.0 to 130	2.53	20.0
BD04575	Cobalt, Total	mg/L	0.0000044	0.000147	0.100	0.339	0.344	0.111	0.0850 to 0.115	112	70.0 to 130	1.46	20.0
BD04574	Fluoride	mg/L	0.0456	0.125	2.50	2.45	2.57	2.53	2.25 to 2.75	98.0	80.0 to 120	4.78	20.0
BD04579	Iron, Dissolved	mg/L	-0.00281	0.0176	0.2	155	158	0.193	0.170 to 0.230	2000	70.0 to 130	1.92	20.0
BD04579	Iron, Total	mg/L	-0.00213	0.0176	0.2	148	146	0.192	0.170 to 0.230	0.00	70.0 to 130	1.36	20.0

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

Reported: 4/7/2023
Version: 3.5
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORG
Sample Date: 2/28/23 10:24
Customer ID:
Delivery Date: 3/2/23 10:38

Description: Gorgas Gypsum - PZ-22

Laboratory ID Number: BD04571

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04575	Lead, Dissolved	mg/L	0.0000062	0.000147	0.100	0.107	0.107	0.107	0.0850 to 0.115	106	70.0 to 130	0.00	20.0
BD04575	Lead, Total	mg/L	0.0000098	0.000147	0.100	0.106	0.105	0.106	0.0850 to 0.115	105	70.0 to 130	0.948	20.0
BD04575	Lithium, Dissolved	mg/L	0.000578	0.0154	0.200	0.674	0.674	0.202	0.170 to 0.230	100	70.0 to 130	0.00	20.0
BD04575	Lithium, Total	mg/L	-0.00102	0.0154	0.200	0.684	0.687	0.200	0.170 to 0.230	106	70.0 to 130	0.438	20.0
BD04575	Magnesium, Dissolved	mg/L	0.00812	0.0462	5.00	129	115	4.98	4.25 to 5.75	480	70.0 to 130	11.5	20.0
BD04575	Magnesium, Total	mg/L	-0.00751	0.0462	5.00	99.0	96.4	4.86	4.25 to 5.75	126	70.0 to 130	2.66	20.0
BD04575	Manganese, Dissolved	mg/L	0.0000177	0.00033	0.100	8.18	8.28	0.101	0.0850 to 0.115	-10.0	70.0 to 130	1.22	20.0
BD04575	Manganese, Total	mg/L	-0.000076	0.00033	0.100	8.38	7.96	0.105	0.0850 to 0.115	110	70.0 to 130	5.14	20.0
BD04575	Mercury, Total by CVAA	mg/L	4.000E-05	0.000500	0.004	0.0038	0.00382	0.00383	0.00340 to 0.00460	95.0	70.0 to 130	0.525	20.0
BD04575	Molybdenum, Dissolved	mg/L	0.0000157	0.0002	0.100	0.101	0.0990	0.101	0.0850 to 0.115	100	70.0 to 130	2.00	20.0
BD04575	Molybdenum, Total	mg/L	0.0000078	0.0002	0.100	0.0978	0.0970	0.100	0.0850 to 0.115	97.7	70.0 to 130	0.821	20.0
BD04575	Potassium, Dissolved	mg/L	0.0155	0.367	10.0	13.7	13.3	9.82	8.50 to 11.5	96.0	70.0 to 130	2.96	20.0
BD04575	Potassium, Total	mg/L	0.00535	0.367	10.0	13.8	13.9	10.0	8.50 to 11.5	95.6	70.0 to 130	0.722	20.0
BD04575	Selenium, Dissolved	mg/L	0.000130	0.00100	0.100	0.107	0.104	0.101	0.0850 to 0.115	102	70.0 to 130	2.84	20.0
BD04575	Selenium, Total	mg/L	0.000113	0.00100	0.100	0.105	0.104	0.102	0.0850 to 0.115	99.1	70.0 to 130	0.957	20.0
BD04575	Silicon, Dissolved	mg/L	0.000284	0.0440	1.00	35.0	30.4	1.02	0.850 to 1.15	560	70.0 to 130	14.1	20.0
BD04575	Silicon, Total	mg/L	0.00157	0.0440	1.00	29.1	28.1	1.01	0.850 to 1.15	140	70.0 to 130	3.50	20.0
BD04575	Sodium, Dissolved	mg/L	-0.00314	0.0880	5.00	23.2	23.2	4.90	4.25 to 5.75	98.0	70.0 to 130	0.00	20.0
BD04575	Sodium, Total	mg/L	0.00121	0.0880	5.00	23.2	23.1	4.79	4.25 to 5.75	102	70.0 to 130	0.432	20.0
BD04575	Sulfate	mg/L	0.301	2.0	1000	1770	1830	19.8	18.0 to 22.0	102	80.0 to 120	3.33	20.0
BD04575	Thallium, Dissolved	mg/L	0.0000054	0.000147	0.100	0.0987	0.100	0.105	0.0850 to 0.115	98.6	70.0 to 130	1.31	20.0
BD04575	Thallium, Total	mg/L	0.0000118	0.000147	0.100	0.102	0.105	0.103	0.0850 to 0.115	102	70.0 to 130	2.90	20.0
BD04575	Total Organic Carbon	mg/L	-0.00852	1.00	10.0	12.3	12.9	10.0		98.8	80.0 to 120	4.76	20.0

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

Reported: 4/7/2023
Version: 3.5
COA_CCR

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

Alabama Power

Batch QC Summary

Customer Account: WMWGORG
Sample Date: 2/28/23 10:24
Customer ID:
Delivery Date: 3/2/23 10:38

Description: Gorgas Gypsum - PZ-22

Laboratory ID Number: BD04571

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04589	Alkalinity to pH 4.5	mg CaCO3/L					42.2	50.3	45.0 to 55.0			1.18	10.0
BD04575	Nitrogen, Nitrate/Nitrite	mg/L as N	0.04	0.200	2.00	2.21	0.137	1.98	1.80 to 2.20	110	90.0 to 110	0.00	15.0
BD04572	Solids, Dissolved	mg/L	1.00	25.0			444	53.0	40.0 to 60.0			4.61	10.0

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

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Gypsum - PZ-21

Location Code: WMWGORG
Collected: 2/28/23 11:46
Customer ID:
Submittal Date: 3/2/23 10:38

Laboratory ID Number: BD04572

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	3/3/23 11:16	3/6/23 12:11		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	3/3/23 11:16	3/7/23 10:12		10.15	44.4	mg/L	0.70035	4.06	
* Iron, Total	3/3/23 11:16	3/6/23 12:11		1.015	3.07	mg/L	0.008120	0.0406	
* Lithium, Total	3/3/23 11:16	3/6/23 12:11		1.015	0.0180	mg/L	0.007105	0.01999956	J
* Magnesium, Total	3/3/23 11:16	3/6/23 12:11		1.015	37.8	mg/L	0.021315	0.406	
* Silica, Total (calc.)	3/3/23 11:16	3/6/23 12:11		1	17.6	mg/L			
* Silicon, Total	3/3/23 11:16	3/6/23 12:11		1.015	8.22	mg/L	0.02030	0.25375	
* Sodium, Total	3/3/23 11:16	3/7/23 10:12		10.15	88.7	mg/L	0.3045	4.06	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	3/2/23 12:15	3/6/23 10:14		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Dissolved	3/2/23 12:15	3/6/23 14:11		10.15	49.0	mg/L	0.70035	4.06	
* Iron, Dissolved	3/2/23 12:15	3/6/23 10:14		1.015	2.48	mg/L	0.008120	0.0406	
* Lithium, Dissolved	3/2/23 12:15	3/6/23 10:14		1.015	0.0190	mg/L	0.007105	0.01999956	J
* Magnesium, Dissolved	3/2/23 12:15	3/6/23 10:14		1.015	39.4	mg/L	0.021315	0.406	
* Silica, Dissolved (calc.)	3/2/23 12:15	3/6/23 10:14		1	17.6	mg/L			
* Silicon, Dissolved	3/2/23 12:15	3/6/23 10:14		1.015	8.24	mg/L	0.02030	0.25375	
* Sodium, Dissolved	3/2/23 12:15	3/6/23 14:11		10.15	95.7	mg/L	0.3045	4.06	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/3/23 11:16	3/6/23 16:22		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	3/3/23 11:16	3/6/23 16:22		1.015	0.00724	mg/L	0.006090	0.05075	J
* Arsenic, Total	3/3/23 11:16	3/6/23 16:22		1.015	0.00281	mg/L	0.000081	0.000203	
* Barium, Total	3/3/23 11:16	3/6/23 16:22		1.015	0.140	mg/L	0.000508	0.001015	
* Beryllium, Total	3/3/23 11:16	3/6/23 16:22		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	3/3/23 11:16	3/6/23 16:22		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	3/3/23 11:16	3/6/23 16:22		1.015	0.000243	mg/L	0.000203	0.001015	J
* Cobalt, Total	3/3/23 11:16	3/6/23 16:22		1.015	0.00311	mg/L	0.000068	0.000203	
* Lead, Total	3/3/23 11:16	3/6/23 16:22		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	3/3/23 11:16	3/6/23 16:22		1.015	1.26	mg/L	0.000152	0.001015	
* Molybdenum, Total	3/3/23 11:16	3/6/23 16:22		1.015	0.00217	mg/L	0.000102	0.000203	
* Potassium, Total	3/3/23 11:16	3/6/23 16:22		1.015	2.31	mg/L	0.169505	0.5075	

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

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

Reported: 4/7/2023
Version: 3.5
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Gypsum - PZ-21

Location Code: WMWGORG
Collected: 2/28/23 11:46
Customer ID:
Submittal Date: 3/2/23 10:38

Laboratory ID Number: BD04572

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	3/3/23 11:16	3/6/23 16:22		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	3/3/23 11:16	3/6/23 16:22		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	3/2/23 12:15	3/2/23 16:05		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	3/2/23 12:15	3/2/23 16:05		1.015	Not Detected	mg/L	0.006090	0.05075	U
* Arsenic, Dissolved	3/2/23 12:15	3/2/23 16:05		1.015	0.00254	mg/L	0.000081	0.000203	
* Barium, Dissolved	3/2/23 12:15	3/2/23 16:05		1.015	0.139	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	3/2/23 12:15	3/2/23 16:05		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	3/2/23 12:15	3/2/23 16:05		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	3/2/23 12:15	3/2/23 16:05		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	3/2/23 12:15	3/2/23 16:05		1.015	0.00298	mg/L	0.000068	0.000203	
* Lead, Dissolved	3/2/23 12:15	3/2/23 16:05		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	3/2/23 12:15	3/2/23 16:05		1.015	1.23	mg/L	0.000152	0.001015	
* Molybdenum, Dissolved	3/2/23 12:15	3/2/23 16:05		1.015	0.00212	mg/L	0.000102	0.000203	
* Potassium, Dissolved	3/2/23 12:15	3/2/23 16:05		1.015	2.29	mg/L	0.169505	0.5075	
* Selenium, Dissolved	3/2/23 12:15	3/2/23 16:05		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	3/2/23 12:15	3/2/23 16:05		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ELH***								
* Mercury, Total by CVAA	3/8/23 17:33	3/8/23 21:59		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	3/3/23 11:12	3/3/23 11:12		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
* Alkalinity to pH 4.5	3/13/23 13:37	3/13/23 15:58		1	393	mg CaCO3/L			
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	3/2/23 12:50	3/3/23 13:40		1	424	mg/L		50	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
* Bicarbonate Alkalinity, (calc.)	3/13/23 13:37	3/13/23 15:58		1	392	mg CaCO3/L			
* Carbonate Alkalinity, (calc.)	3/13/23 13:37	3/13/23 15:58		1	1.06	mg CaCO3/L			
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	3/2/23 15:05	3/2/23 15:05		1	10.1	mg/L	1.00	2	

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

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

Reported: 4/7/2023
Version: 3.5
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Gypsum - PZ-21

Location Code: WMWGORG
Collected: 2/28/23 11:46
Customer ID:
Submittal Date: 3/2/23 10:38

Laboratory ID Number: BD04572

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E		***Analyst: JCC***							
* Chloride	3/3/23 08:02	3/3/23 08:02		1	12.3	mg/L	0.50	1	
Analytical Method: SM4500F G 2017		***Analyst: JCC***							
* Fluoride	3/3/23 11:43	3/3/23 11:43		1	0.289	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011		***Analyst: JCC***							
* Sulfate	3/2/23 13:55	3/2/23 13:55		1	36.3	mg/L	0.6	2	
Analytical Method: Field Measurements		***Analyst: DKG***							
Conductivity	2/28/23 11:43	2/28/23 11:43			815.43	uS/cm			FA
pH	2/28/23 11:43	2/28/23 11:43			6.84	SU			FA
Temperature	2/28/23 11:43	2/28/23 11:43			19.41	C			FA
Turbidity	2/28/23 11:43	2/28/23 11:43			6.94	NTU			FA
Sulfide	2/28/23 11:43	2/28/23 11:43			0	mg/L			FA

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

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

Reported: 4/7/2023
Version: 3.5
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORG
Sample Date: 2/28/23 11:46
Customer ID:
Delivery Date: 3/2/23 10:38

Description: Gorgas Gypsum - PZ-21

Laboratory ID Number: BD04572

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04575	Aluminum, Dissolved	mg/L	-0.0000351	0.0198	0.100	12.1	12.0	0.103	0.0850 to 0.115	-100	70.0 to 130	0.830	20.0
BD04575	Aluminum, Total	mg/L	0.000677	0.0198	0.100	15.4	15.2	0.105	0.0850 to 0.115	0.00	70.0 to 130	1.31	20.0
BD04575	Antimony, Dissolved	mg/L	0.000375	0.00100	0.100	0.0900	0.0894	0.0851	0.0850 to 0.115	90.0	70.0 to 130	0.669	20.0
BD04575	Antimony, Total	mg/L	0.000351	0.00100	0.100	0.0992	0.101	0.0911	0.0850 to 0.115	99.2	70.0 to 130	1.80	20.0
BD04575	Arsenic, Dissolved	mg/L	-0.0000031	0.000200	0.100	0.0998	0.0990	0.0994	0.0850 to 0.115	98.6	70.0 to 130	0.805	20.0
BD04575	Arsenic, Total	mg/L	0.0000206	0.000200	0.100	0.101	0.0987	0.100	0.0850 to 0.115	99.5	70.0 to 130	2.30	20.0
BD04575	Barium, Dissolved	mg/L	0.0000093	0.00100	0.100	0.119	0.121	0.105	0.0850 to 0.115	98.5	70.0 to 130	1.67	20.0
BD04575	Barium, Total	mg/L	0.0000082	0.00100	0.100	0.121	0.123	0.100	0.0850 to 0.115	101	70.0 to 130	1.64	20.0
BD04575	Beryllium, Dissolved	mg/L	0.0000272	0.000880	0.100	0.115	0.113	0.106	0.0850 to 0.115	106	70.0 to 130	1.75	20.0
BD04575	Beryllium, Total	mg/L	0.0000174	0.000880	0.100	0.117	0.121	0.0967	0.0850 to 0.115	106	70.0 to 130	3.36	20.0
BD04575	Boron, Dissolved	mg/L	-0.00419	0.0650	1.00	1.20	1.24	1.04	0.850 to 1.15	104	70.0 to 130	3.28	20.0
BD04575	Boron, Total	mg/L	-0.00441	0.0650	1.00	1.22	1.21	1.03	0.850 to 1.15	106	70.0 to 130	0.823	20.0
BD04575	Cadmium, Dissolved	mg/L	0.0000019	0.000147	0.100	0.0943	0.0942	0.0961	0.0850 to 0.115	92.8	70.0 to 130	0.106	20.0
BD04575	Cadmium, Total	mg/L	0.0000066	0.000147	0.100	0.0984	0.101	0.101	0.0850 to 0.115	96.8	70.0 to 130	2.61	20.0
BD04575	Calcium, Dissolved	mg/L	0.00993	0.152	5.00	179	158	5.12	4.25 to 5.75	660	70.0 to 130	12.5	20.0
BD04575	Calcium, Total	mg/L	0.00311	0.152	5.00	140	135	4.80	4.25 to 5.75	160	70.0 to 130	3.64	20.0
BD04575	Chloride	mg/L	0.0461	1.00	10.0	13.0	13.3	10.2	9.00 to 11.0	101	80.0 to 120	2.28	20.0
BD04575	Chromium, Dissolved	mg/L	0.0000039	0.000440	0.100	0.0981	0.0951	0.0978	0.0850 to 0.115	97.8	70.0 to 130	3.11	20.0
BD04575	Chromium, Total	mg/L	0.0000603	0.000440	0.100	0.100	0.101	0.103	0.0850 to 0.115	99.5	70.0 to 130	0.995	20.0
BD04575	Cobalt, Dissolved	mg/L	0.0000034	0.000147	0.100	0.320	0.312	0.104	0.0850 to 0.115	107	70.0 to 130	2.53	20.0
BD04575	Cobalt, Total	mg/L	0.0000044	0.000147	0.100	0.339	0.344	0.111	0.0850 to 0.115	112	70.0 to 130	1.46	20.0
BD04574	Fluoride	mg/L	0.0456	0.125	2.50	2.45	2.57	2.53	2.25 to 2.75	98.0	80.0 to 120	4.78	20.0
BD04575	Iron, Dissolved	mg/L	0.000348	0.0176	0.2	11.9	10.3	0.204	0.170 to 0.230	900	70.0 to 130	14.4	20.0
BD04575	Iron, Total	mg/L	0.000151	0.0176	0.2	10.7	10.3	0.202	0.170 to 0.230	200	70.0 to 130	3.81	20.0

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

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORG
Sample Date: 2/28/23 11:46
Customer ID:
Delivery Date: 3/2/23 10:38

Description: Gorgas Gypsum - PZ-21

Laboratory ID Number: BD04572

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04575	Lead, Dissolved	mg/L	0.0000062	0.000147	0.100	0.107	0.107	0.107	0.0850 to 0.115	106	70.0 to 130	0.00	20.0
BD04575	Lead, Total	mg/L	0.0000098	0.000147	0.100	0.106	0.105	0.106	0.0850 to 0.115	105	70.0 to 130	0.948	20.0
BD04575	Lithium, Dissolved	mg/L	0.000578	0.0154	0.200	0.674	0.674	0.202	0.170 to 0.230	100	70.0 to 130	0.00	20.0
BD04575	Lithium, Total	mg/L	-0.00102	0.0154	0.200	0.684	0.687	0.200	0.170 to 0.230	106	70.0 to 130	0.438	20.0
BD04575	Magnesium, Dissolved	mg/L	0.00812	0.0462	5.00	129	115	4.98	4.25 to 5.75	480	70.0 to 130	11.5	20.0
BD04575	Magnesium, Total	mg/L	-0.00751	0.0462	5.00	99.0	96.4	4.86	4.25 to 5.75	126	70.0 to 130	2.66	20.0
BD04575	Manganese, Dissolved	mg/L	0.0000177	0.00033	0.100	8.18	8.28	0.101	0.0850 to 0.115	-10.0	70.0 to 130	1.22	20.0
BD04575	Manganese, Total	mg/L	-0.000076	0.00033	0.100	8.38	7.96	0.105	0.0850 to 0.115	110	70.0 to 130	5.14	20.0
BD04575	Mercury, Total by CVAA	mg/L	4.000E-05	0.000500	0.004	0.0038	0.00382	0.00383	0.00340 to 0.00460	95.0	70.0 to 130	0.525	20.0
BD04575	Molybdenum, Dissolved	mg/L	0.0000157	0.0002	0.100	0.101	0.0990	0.101	0.0850 to 0.115	100	70.0 to 130	2.00	20.0
BD04575	Molybdenum, Total	mg/L	0.0000078	0.0002	0.100	0.0978	0.0970	0.100	0.0850 to 0.115	97.7	70.0 to 130	0.821	20.0
BD04575	Potassium, Dissolved	mg/L	0.0155	0.367	10.0	13.7	13.3	9.82	8.50 to 11.5	96.0	70.0 to 130	2.96	20.0
BD04575	Potassium, Total	mg/L	0.00535	0.367	10.0	13.8	13.9	10.0	8.50 to 11.5	95.6	70.0 to 130	0.722	20.0
BD04575	Selenium, Dissolved	mg/L	0.000130	0.00100	0.100	0.107	0.104	0.101	0.0850 to 0.115	102	70.0 to 130	2.84	20.0
BD04575	Selenium, Total	mg/L	0.000113	0.00100	0.100	0.105	0.104	0.102	0.0850 to 0.115	99.1	70.0 to 130	0.957	20.0
BD04575	Silicon, Dissolved	mg/L	0.000284	0.0440	1.00	35.0	30.4	1.02	0.850 to 1.15	560	70.0 to 130	14.1	20.0
BD04575	Silicon, Total	mg/L	0.00157	0.0440	1.00	29.1	28.1	1.01	0.850 to 1.15	140	70.0 to 130	3.50	20.0
BD04575	Sodium, Dissolved	mg/L	-0.00314	0.0880	5.00	23.2	23.2	4.90	4.25 to 5.75	98.0	70.0 to 130	0.00	20.0
BD04575	Sodium, Total	mg/L	0.00121	0.0880	5.00	23.2	23.1	4.79	4.25 to 5.75	102	70.0 to 130	0.432	20.0
BD04575	Sulfate	mg/L	0.301	2.0	1000	1770	1830	19.8	18.0 to 22.0	102	80.0 to 120	3.33	20.0
BD04575	Thallium, Dissolved	mg/L	0.0000054	0.000147	0.100	0.0987	0.100	0.105	0.0850 to 0.115	98.6	70.0 to 130	1.31	20.0
BD04575	Thallium, Total	mg/L	0.0000118	0.000147	0.100	0.102	0.105	0.103	0.0850 to 0.115	102	70.0 to 130	2.90	20.0
BD04575	Total Organic Carbon	mg/L	-0.00852	1.00	10.0	12.3	12.9	10.0		98.8	80.0 to 120	4.76	20.0

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

Reported: 4/7/2023
Version: 3.5
COA_CCR

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

Alabama Power

Batch QC Summary

Customer Account: WMWGORG
Sample Date: 2/28/23 11:46
Customer ID:
Delivery Date: 3/2/23 10:38

Description: Gorgas Gypsum - PZ-21

Laboratory ID Number: BD04572

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04589	Alkalinity to pH 4.5	mg CaCO3/L					42.2	50.3	45.0 to 55.0			1.18	10.0
BD04575	Nitrogen, Nitrate/Nitrite	mg/L as N	0.04	0.200	2.00	2.21	0.137	1.98	1.80 to 2.20	110	90.0 to 110	0.00	15.0
BD04572	Solids, Dissolved	mg/L	1.00	25.0			444	53.0	40.0 to 60.0			4.61	10.0

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

Reported: 4/7/2023
Version: 3.5
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Gypsum - PZ-20

Location Code: WMWGORG
Collected: 2/28/23 12:55
Customer ID:
Submittal Date: 3/2/23 10:38

Laboratory ID Number: BD04573

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***					***Preparation Method: EPA 1638***			
* Boron, Total	3/3/23 11:16	3/6/23 12:14		1.015	0.0862	mg/L	0.030000	0.1015	J
* Calcium, Total	3/3/23 11:16	3/7/23 10:15		10.15	101	mg/L	0.70035	4.06	
* Iron, Total	3/3/23 11:16	3/7/23 10:15		10.15	7.70	mg/L	0.08120	0.406	
* Lithium, Total	3/3/23 11:16	3/6/23 12:14		1.015	0.0867	mg/L	0.007105	0.01999956	
* Magnesium, Total	3/3/23 11:16	3/7/23 10:15		10.15	54.7	mg/L	0.21315	4.06	
* Silica, Total (calc.)	3/3/23 11:16	3/6/23 12:14		1	19.7	mg/L			
* Silicon, Total	3/3/23 11:16	3/6/23 12:14		1.015	9.21	mg/L	0.02030	0.25375	
* Sodium, Total	3/3/23 11:16	3/7/23 10:15		10.15	110	mg/L	0.3045	4.06	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	3/2/23 12:15	3/6/23 10:17		1.015	0.0866	mg/L	0.030000	0.1015	J
* Calcium, Dissolved	3/2/23 12:15	3/6/23 14:14		10.15	99.4	mg/L	0.70035	4.06	
* Iron, Dissolved	3/2/23 12:15	3/6/23 14:14		10.15	6.96	mg/L	0.08120	0.406	
* Lithium, Dissolved	3/2/23 12:15	3/6/23 10:17		1.015	0.0869	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	3/2/23 12:15	3/6/23 14:14		10.15	54.5	mg/L	0.21315	4.06	
* Silica, Dissolved (calc.)	3/2/23 12:15	3/6/23 10:17		1	20.1	mg/L			
* Silicon, Dissolved	3/2/23 12:15	3/6/23 10:17		1.015	9.38	mg/L	0.02030	0.25375	
* Sodium, Dissolved	3/2/23 12:15	3/6/23 14:14		10.15	104	mg/L	0.3045	4.06	
Analytical Method: EPA 200.8	***Analyst: DLJ***					***Preparation Method: EPA 1638***			
* Antimony, Total	3/3/23 11:16	3/6/23 16:25		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	3/3/23 11:16	3/6/23 16:25		1.015	0.00706	mg/L	0.006090	0.05075	J
* Arsenic, Total	3/3/23 11:16	3/6/23 16:25		1.015	0.00246	mg/L	0.000081	0.000203	
* Barium, Total	3/3/23 11:16	3/6/23 16:25		1.015	0.0192	mg/L	0.000508	0.001015	
* Beryllium, Total	3/3/23 11:16	3/6/23 16:25		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	3/3/23 11:16	3/6/23 16:25		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	3/3/23 11:16	3/6/23 16:25		1.015	0.000295	mg/L	0.000203	0.001015	J
* Cobalt, Total	3/3/23 11:16	3/6/23 16:25		1.015	0.00324	mg/L	0.000068	0.000203	
* Lead, Total	3/3/23 11:16	3/6/23 16:25		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	3/3/23 11:16	3/6/23 16:25		1.015	0.433	mg/L	0.000152	0.001015	
* Molybdenum, Total	3/3/23 11:16	3/6/23 16:25		1.015	0.00143	mg/L	0.000102	0.000203	
* Potassium, Total	3/3/23 11:16	3/6/23 16:25		1.015	4.55	mg/L	0.169505	0.5075	

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

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

Reported: 4/7/2023
Version: 3.5
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Gypsum - PZ-20

Location Code: WMWGORG
Collected: 2/28/23 12:55
Customer ID:
Submittal Date: 3/2/23 10:38

Laboratory ID Number: BD04573

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	3/3/23 11:16	3/6/23 16:25		1.015	0.00246	mg/L	0.000508	0.001015	
* Thallium, Total	3/3/23 11:16	3/6/23 16:25		1.015	0.000212	mg/L	0.000068	0.000203	
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	3/2/23 12:15	3/2/23 16:08		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	3/2/23 12:15	3/2/23 16:08		1.015	Not Detected	mg/L	0.006090	0.05075	U
* Arsenic, Dissolved	3/2/23 12:15	3/2/23 16:08		1.015	0.00234	mg/L	0.000081	0.000203	
* Barium, Dissolved	3/2/23 12:15	3/2/23 16:08		1.015	0.0181	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	3/2/23 12:15	3/2/23 16:08		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	3/2/23 12:15	3/2/23 16:08		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	3/2/23 12:15	3/2/23 16:08		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	3/2/23 12:15	3/2/23 16:08		1.015	0.00295	mg/L	0.000068	0.000203	
* Lead, Dissolved	3/2/23 12:15	3/2/23 16:08		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	3/2/23 12:15	3/2/23 16:08		1.015	0.405	mg/L	0.000152	0.001015	
* Molybdenum, Dissolved	3/2/23 12:15	3/2/23 16:08		1.015	0.00166	mg/L	0.000102	0.000203	
* Potassium, Dissolved	3/2/23 12:15	3/2/23 16:08		1.015	4.45	mg/L	0.169505	0.5075	
* Selenium, Dissolved	3/2/23 12:15	3/2/23 16:08		1.015	0.00234	mg/L	0.000508	0.001015	
* Thallium, Dissolved	3/2/23 12:15	3/2/23 16:08		1.015	0.000195	mg/L	0.000068	0.000203	J
Analytical Method: EPA 245.1	***Analyst: ELH***								
* Mercury, Total by CVAA	3/8/23 17:33	3/8/23 22:03		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	3/3/23 11:13	3/3/23 11:13		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
* Alkalinity to pH 4.5	3/13/23 13:37	3/13/23 15:58		1	206	mg CaCO3/L			
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	3/2/23 12:50	3/3/23 13:40		1	879	mg/L		75.8	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
* Bicarbonate Alkalinity, (calc.)	3/13/23 13:37	3/13/23 15:58		1	206	mg CaCO3/L		1	A
* Carbonate Alkalinity, (calc.)	3/13/23 13:37	3/13/23 15:58		1	Not Detected	mg CaCO3/L		0.5	A
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	3/2/23 15:18	3/2/23 15:18		1	6.67	mg/L	1.00	2	

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

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

Reported: 4/7/2023
Version: 3.5
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Gypsum - PZ-20

Location Code: WMWGORG
Collected: 2/28/23 12:55
Customer ID:
Submittal Date: 3/2/23 10:38

Laboratory ID Number: BD04573

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	3/3/23 08:04	3/3/23 08:04		1	10.5	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	3/3/23 11:45	3/3/23 11:45		1	0.156	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	3/2/23 14:09	3/2/23 14:09		25	444	mg/L	15.0	50	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	2/28/23 12:51	2/28/23 12:51			1240.71	uS/cm			FA
pH	2/28/23 12:51	2/28/23 12:51			6.31	SU			FA
Temperature	2/28/23 12:51	2/28/23 12:51			19.24	C			FA
Turbidity	2/28/23 12:51	2/28/23 12:51			3.95	NTU			FA
Sulfide	2/28/23 12:51	2/28/23 12:51			0	mg/L			FA

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

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

Reported: 4/7/2023
Version: 3.5
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORG
Sample Date: 2/28/23 12:55
Customer ID:
Delivery Date: 3/2/23 10:38

Description: Gorgas Gypsum - PZ-20

Laboratory ID Number: BD04573

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04575	Aluminum, Dissolved	mg/L	-0.0000351	0.0198	0.100	12.1	12.0	0.103	0.0850 to 0.115	-100	70.0 to 130	0.830	20.0
BD04575	Aluminum, Total	mg/L	0.000677	0.0198	0.100	15.4	15.2	0.105	0.0850 to 0.115	0.00	70.0 to 130	1.31	20.0
BD04575	Antimony, Dissolved	mg/L	0.000375	0.00100	0.100	0.0900	0.0894	0.0851	0.0850 to 0.115	90.0	70.0 to 130	0.669	20.0
BD04575	Antimony, Total	mg/L	0.000351	0.00100	0.100	0.0992	0.101	0.0911	0.0850 to 0.115	99.2	70.0 to 130	1.80	20.0
BD04575	Arsenic, Dissolved	mg/L	-0.0000031	0.000200	0.100	0.0998	0.0990	0.0994	0.0850 to 0.115	98.6	70.0 to 130	0.805	20.0
BD04575	Arsenic, Total	mg/L	0.0000206	0.000200	0.100	0.101	0.0987	0.100	0.0850 to 0.115	99.5	70.0 to 130	2.30	20.0
BD04575	Barium, Dissolved	mg/L	0.0000093	0.00100	0.100	0.119	0.121	0.105	0.0850 to 0.115	98.5	70.0 to 130	1.67	20.0
BD04575	Barium, Total	mg/L	0.0000082	0.00100	0.100	0.121	0.123	0.100	0.0850 to 0.115	101	70.0 to 130	1.64	20.0
BD04575	Beryllium, Dissolved	mg/L	0.0000272	0.000880	0.100	0.115	0.113	0.106	0.0850 to 0.115	106	70.0 to 130	1.75	20.0
BD04575	Beryllium, Total	mg/L	0.0000174	0.000880	0.100	0.117	0.121	0.0967	0.0850 to 0.115	106	70.0 to 130	3.36	20.0
BD04575	Boron, Dissolved	mg/L	-0.00419	0.0650	1.00	1.20	1.24	1.04	0.850 to 1.15	104	70.0 to 130	3.28	20.0
BD04575	Boron, Total	mg/L	-0.00441	0.0650	1.00	1.22	1.21	1.03	0.850 to 1.15	106	70.0 to 130	0.823	20.0
BD04575	Cadmium, Dissolved	mg/L	0.0000019	0.000147	0.100	0.0943	0.0942	0.0961	0.0850 to 0.115	92.8	70.0 to 130	0.106	20.0
BD04575	Cadmium, Total	mg/L	0.0000066	0.000147	0.100	0.0984	0.101	0.101	0.0850 to 0.115	96.8	70.0 to 130	2.61	20.0
BD04575	Calcium, Dissolved	mg/L	0.00993	0.152	5.00	179	158	5.12	4.25 to 5.75	660	70.0 to 130	12.5	20.0
BD04575	Calcium, Total	mg/L	0.00311	0.152	5.00	140	135	4.80	4.25 to 5.75	160	70.0 to 130	3.64	20.0
BD04575	Chloride	mg/L	0.0461	1.00	10.0	13.0	13.3	10.2	9.00 to 11.0	101	80.0 to 120	2.28	20.0
BD04575	Chromium, Dissolved	mg/L	0.0000039	0.000440	0.100	0.0981	0.0951	0.0978	0.0850 to 0.115	97.8	70.0 to 130	3.11	20.0
BD04575	Chromium, Total	mg/L	0.0000603	0.000440	0.100	0.100	0.101	0.103	0.0850 to 0.115	99.5	70.0 to 130	0.995	20.0
BD04575	Cobalt, Dissolved	mg/L	0.0000034	0.000147	0.100	0.320	0.312	0.104	0.0850 to 0.115	107	70.0 to 130	2.53	20.0
BD04575	Cobalt, Total	mg/L	0.0000044	0.000147	0.100	0.339	0.344	0.111	0.0850 to 0.115	112	70.0 to 130	1.46	20.0
BD04574	Fluoride	mg/L	0.0456	0.125	2.50	2.45	2.57	2.53	2.25 to 2.75	98.0	80.0 to 120	4.78	20.0
BD04575	Iron, Dissolved	mg/L	0.000348	0.0176	0.2	11.9	10.3	0.204	0.170 to 0.230	900	70.0 to 130	14.4	20.0
BD04575	Iron, Total	mg/L	0.000151	0.0176	0.2	10.7	10.3	0.202	0.170 to 0.230	200	70.0 to 130	3.81	20.0

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

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORG
Sample Date: 2/28/23 12:55
Customer ID:
Delivery Date: 3/2/23 10:38

Description: Gorgas Gypsum - PZ-20

Laboratory ID Number: BD04573

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04575	Lead, Dissolved	mg/L	0.0000062	0.000147	0.100	0.107	0.107	0.107	0.0850 to 0.115	106	70.0 to 130	0.00	20.0
BD04575	Lead, Total	mg/L	0.0000098	0.000147	0.100	0.106	0.105	0.106	0.0850 to 0.115	105	70.0 to 130	0.948	20.0
BD04575	Lithium, Dissolved	mg/L	0.000578	0.0154	0.200	0.674	0.674	0.202	0.170 to 0.230	100	70.0 to 130	0.00	20.0
BD04575	Lithium, Total	mg/L	-0.00102	0.0154	0.200	0.684	0.687	0.200	0.170 to 0.230	106	70.0 to 130	0.438	20.0
BD04575	Magnesium, Dissolved	mg/L	0.00812	0.0462	5.00	129	115	4.98	4.25 to 5.75	480	70.0 to 130	11.5	20.0
BD04575	Magnesium, Total	mg/L	-0.00751	0.0462	5.00	99.0	96.4	4.86	4.25 to 5.75	126	70.0 to 130	2.66	20.0
BD04575	Manganese, Dissolved	mg/L	0.0000177	0.00033	0.100	8.18	8.28	0.101	0.0850 to 0.115	-10.0	70.0 to 130	1.22	20.0
BD04575	Manganese, Total	mg/L	-0.000076	0.00033	0.100	8.38	7.96	0.105	0.0850 to 0.115	110	70.0 to 130	5.14	20.0
BD04575	Mercury, Total by CVAA	mg/L	4.000E-05	0.000500	0.004	0.0038	0.00382	0.00383	0.00340 to 0.00460	95.0	70.0 to 130	0.525	20.0
BD04575	Molybdenum, Dissolved	mg/L	0.0000157	0.0002	0.100	0.101	0.0990	0.101	0.0850 to 0.115	100	70.0 to 130	2.00	20.0
BD04575	Molybdenum, Total	mg/L	0.0000078	0.0002	0.100	0.0978	0.0970	0.100	0.0850 to 0.115	97.7	70.0 to 130	0.821	20.0
BD04575	Potassium, Dissolved	mg/L	0.0155	0.367	10.0	13.7	13.3	9.82	8.50 to 11.5	96.0	70.0 to 130	2.96	20.0
BD04575	Potassium, Total	mg/L	0.00535	0.367	10.0	13.8	13.9	10.0	8.50 to 11.5	95.6	70.0 to 130	0.722	20.0
BD04575	Selenium, Dissolved	mg/L	0.000130	0.00100	0.100	0.107	0.104	0.101	0.0850 to 0.115	102	70.0 to 130	2.84	20.0
BD04575	Selenium, Total	mg/L	0.000113	0.00100	0.100	0.105	0.104	0.102	0.0850 to 0.115	99.1	70.0 to 130	0.957	20.0
BD04575	Silicon, Dissolved	mg/L	0.000284	0.0440	1.00	35.0	30.4	1.02	0.850 to 1.15	560	70.0 to 130	14.1	20.0
BD04575	Silicon, Total	mg/L	0.00157	0.0440	1.00	29.1	28.1	1.01	0.850 to 1.15	140	70.0 to 130	3.50	20.0
BD04575	Sodium, Dissolved	mg/L	-0.00314	0.0880	5.00	23.2	23.2	4.90	4.25 to 5.75	98.0	70.0 to 130	0.00	20.0
BD04575	Sodium, Total	mg/L	0.00121	0.0880	5.00	23.2	23.1	4.79	4.25 to 5.75	102	70.0 to 130	0.432	20.0
BD04575	Sulfate	mg/L	0.301	2.0	1000	1770	1830	19.8	18.0 to 22.0	102	80.0 to 120	3.33	20.0
BD04575	Thallium, Dissolved	mg/L	0.0000054	0.000147	0.100	0.0987	0.100	0.105	0.0850 to 0.115	98.6	70.0 to 130	1.31	20.0
BD04575	Thallium, Total	mg/L	0.0000118	0.000147	0.100	0.102	0.105	0.103	0.0850 to 0.115	102	70.0 to 130	2.90	20.0
BD04575	Total Organic Carbon	mg/L	-0.00852	1.00	10.0	12.3	12.9	10.0		98.8	80.0 to 120	4.76	20.0

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

Reported: 4/7/2023
Version: 3.5
COA_CCR

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

Alabama Power

Batch QC Summary

Customer Account: WMWGORG
Sample Date: 2/28/23 12:55
Customer ID:
Delivery Date: 3/2/23 10:38

Description: Gorgas Gypsum - PZ-20

Laboratory ID Number: BD04573

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04589	Alkalinity to pH 4.5	mg CaCO3/L					42.2	50.3	45.0 to 55.0			1.18	10.0
BD04575	Nitrogen, Nitrate/Nitrite	mg/L as N	0.04	0.200	2.00	2.21	0.137	1.98	1.80 to 2.20	110	90.0 to 110	0.00	15.0
BD04583	Solids, Dissolved	mg/L	1.00	25.0			1240	53.0	40.0 to 60.0			0.00	10.0

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

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Gypsum Field Blank-2

Location Code: WMWGORGFB
Collected: 2/28/23 13:15
Customer ID:
Submittal Date: 3/2/23 10:43

Laboratory ID Number: BD04574

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	3/3/23 11:16	3/6/23 12:17		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	3/3/23 11:16	3/6/23 12:17		1.015	Not Detected	mg/L	0.070035	0.406	U
* Iron, Total	3/3/23 11:16	3/6/23 12:17		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Total	3/3/23 11:16	3/6/23 12:17		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	3/3/23 11:16	3/6/23 12:17		1.015	Not Detected	mg/L	0.021315	0.406	U
* Silica, Total (calc.)	3/3/23 11:16	3/6/23 12:17		1	Not Detected	mg/L			
* Silicon, Total	3/3/23 11:16	3/6/23 12:17		1.015	Not Detected	mg/L	0.02030	0.25375	U
* Sodium, Total	3/3/23 11:16	3/6/23 12:17		1.015	Not Detected	mg/L	0.03045	0.406	U
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/3/23 11:16	3/6/23 16:29		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	3/3/23 11:16	3/6/23 16:29		1.015	Not Detected	mg/L	0.006090	0.05075	U
* Arsenic, Total	3/3/23 11:16	3/6/23 16:29		1.015	Not Detected	mg/L	0.000081	0.000203	U
* Barium, Total	3/3/23 11:16	3/6/23 16:29		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Beryllium, Total	3/3/23 11:16	3/6/23 16:29		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	3/3/23 11:16	3/6/23 16:29		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	3/3/23 11:16	3/6/23 16:29		1.015	0.000240	mg/L	0.000203	0.001015	J
* Cobalt, Total	3/3/23 11:16	3/6/23 16:29		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	3/3/23 11:16	3/6/23 16:29		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	3/3/23 11:16	3/6/23 16:29		1.015	Not Detected	mg/L	0.000152	0.001015	U
* Molybdenum, Total	3/3/23 11:16	3/6/23 16:29		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Total	3/3/23 11:16	3/6/23 16:29		1.015	Not Detected	mg/L	0.169505	0.5075	U
* Selenium, Total	3/3/23 11:16	3/6/23 16:29		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	3/3/23 11:16	3/6/23 16:29		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ELH***								
* Mercury, Total by CVAA	3/8/23 17:33	3/8/23 22:07		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	3/3/23 11:15	3/3/23 11:15		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	3/2/23 12:50	3/3/23 13:40		1	Not Detected	mg/L		25	U

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

Comments:

Reported: 4/7/2023
Version: 3.5
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Gypsum Field Blank-2

Location Code: WMWGORGFB
Collected: 2/28/23 13:15
Customer ID:
Submittal Date: 3/2/23 10:43

Laboratory ID Number: BD04574

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 5310 B		***Analyst: SC***							
* Total Organic Carbon	3/2/23 15:33	3/2/23 15:33		1	Not Detected	mg/L	1.00	2	U
Analytical Method: SM4500Cl E		***Analyst: JCC***							
* Chloride	3/3/23 08:05	3/3/23 08:05		1	Not Detected	mg/L	0.50	1	U
Analytical Method: SM4500F G 2017		***Analyst: JCC***							
* Fluoride	3/3/23 11:47	3/3/23 11:47		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011		***Analyst: JCC***							
* Sulfate	3/2/23 13:51	3/2/23 13:51		1	1.05	mg/L	0.6	2	J

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

Comments:

Reported: 4/7/2023
Version: 3.5
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORGFB
Sample Date: 2/28/23 13:15
Customer ID:
Delivery Date: 3/2/23 10:43

Description: Gorgas Gypsum Field Blank-2

Laboratory ID Number: BD04574

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04575	Aluminum, Total	mg/L	0.000677	0.0198	0.100	15.4	15.2	0.105	0.0850 to 0.115	0.00	70.0 to 130	1.31	20.0
BD04575	Antimony, Total	mg/L	0.000351	0.00100	0.100	0.0992	0.101	0.0911	0.0850 to 0.115	99.2	70.0 to 130	1.80	20.0
BD04575	Arsenic, Total	mg/L	0.0000206	0.000200	0.100	0.101	0.0987	0.100	0.0850 to 0.115	99.5	70.0 to 130	2.30	20.0
BD04575	Barium, Total	mg/L	0.0000082	0.00100	0.100	0.121	0.123	0.100	0.0850 to 0.115	101	70.0 to 130	1.64	20.0
BD04575	Beryllium, Total	mg/L	0.0000174	0.000880	0.100	0.117	0.121	0.0967	0.0850 to 0.115	106	70.0 to 130	3.36	20.0
BD04575	Boron, Total	mg/L	-0.00441	0.0650	1.00	1.22	1.21	1.03	0.850 to 1.15	106	70.0 to 130	0.823	20.0
BD04575	Cadmium, Total	mg/L	0.0000066	0.000147	0.100	0.0984	0.101	0.101	0.0850 to 0.115	96.8	70.0 to 130	2.61	20.0
BD04575	Calcium, Total	mg/L	0.00311	0.152	5.00	140	135	4.80	4.25 to 5.75	160	70.0 to 130	3.64	20.0
BD04575	Chloride	mg/L	0.0461	1.00	10.0	13.0	13.3	10.2	9.00 to 11.0	101	80.0 to 120	2.28	20.0
BD04575	Chromium, Total	mg/L	0.0000603	0.000440	0.100	0.100	0.101	0.103	0.0850 to 0.115	99.5	70.0 to 130	0.995	20.0
BD04575	Cobalt, Total	mg/L	0.0000044	0.000147	0.100	0.339	0.344	0.111	0.0850 to 0.115	112	70.0 to 130	1.46	20.0
BD04574	Fluoride	mg/L	0.0456	0.125	2.50	2.45	2.57	2.53	2.25 to 2.75	98.0	80.0 to 120	4.78	20.0
BD04575	Iron, Total	mg/L	0.000151	0.0176	0.2	10.7	10.3	0.202	0.170 to 0.230	200	70.0 to 130	3.81	20.0
BD04575	Lead, Total	mg/L	0.0000098	0.000147	0.100	0.106	0.105	0.106	0.0850 to 0.115	105	70.0 to 130	0.948	20.0
BD04575	Lithium, Total	mg/L	-0.00102	0.0154	0.200	0.684	0.687	0.200	0.170 to 0.230	106	70.0 to 130	0.438	20.0
BD04575	Magnesium, Total	mg/L	-0.00751	0.0462	5.00	99.0	96.4	4.86	4.25 to 5.75	126	70.0 to 130	2.66	20.0
BD04575	Manganese, Total	mg/L	-0.000076	0.00033	0.100	8.38	7.96	0.105	0.0850 to 0.115	110	70.0 to 130	5.14	20.0
BD04575	Mercury, Total by CVAA	mg/L	4.000E-05	0.000500	0.004	0.0038	0.00382	0.00383	0.00340 to 0.00460	95.0	70.0 to 130	0.525	20.0
BD04575	Molybdenum, Total	mg/L	0.0000078	0.0002	0.100	0.0978	0.0970	0.100	0.0850 to 0.115	97.7	70.0 to 130	0.821	20.0
BD04575	Potassium, Total	mg/L	0.00535	0.367	10.0	13.8	13.9	10.0	8.50 to 11.5	95.6	70.0 to 130	0.722	20.0
BD04575	Selenium, Total	mg/L	0.000113	0.00100	0.100	0.105	0.104	0.102	0.0850 to 0.115	99.1	70.0 to 130	0.957	20.0
BD04575	Silicon, Total	mg/L	0.00157	0.0440	1.00	29.1	28.1	1.01	0.850 to 1.15	140	70.0 to 130	3.50	20.0
BD04575	Sodium, Total	mg/L	0.00121	0.0880	5.00	23.2	23.1	4.79	4.25 to 5.75	102	70.0 to 130	0.432	20.0
BD04575	Sulfate	mg/L	0.301	2.0	1000	1770	1830	19.8	18.0 to 22.0	102	80.0 to 120	3.33	20.0

Comments:

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORGFB
Sample Date: 2/28/23 13:15
Customer ID:
Delivery Date: 3/2/23 10:43

Description:Gorgas Gypsum Field Blank-2

Laboratory ID Number: BD04574

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04575	Thallium, Total	mg/L	0.0000118	0.000147	0.100	0.102	0.105	0.103	0.0850 to 0.115	102	70.0 to 130	2.90	20.0
BD04575	Total Organic Carbon	mg/L	-0.00852	1.00	10.0	12.3	12.9	10.0		98.8	80.0 to 120	4.76	20.0

Comments:

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

Alabama Power

Batch QC Summary

Customer Account: WMWGORGFB
Sample Date: 2/28/23 13:15
Customer ID:
Delivery Date: 3/2/23 10:43

Description: Gorgas Gypsum Field Blank-2

Laboratory ID Number: BD04574

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04575	Nitrogen, Nitrate/Nitrite	mg/L as N	0.04	0.200	2.00	2.21	0.137	1.98	1.80 to 2.20	110	90.0 to 110	0.00	15.0
BD04583	Solids, Dissolved	mg/L	1.00	25.0			1240	53.0	40.0 to 60.0			0.00	10.0

Comments:

Reported: 4/7/2023
Version: 3.5
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Gypsum - MW-14H

Location Code: WMWGORG
Collected: 2/28/23 14:20
Customer ID:
Submittal Date: 3/2/23 10:38

Laboratory ID Number: BD04575

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	3/3/23 11:16	3/6/23 12:20		1.015	0.157	mg/L	0.030000	0.1015	
* Calcium, Total	3/3/23 11:16	3/7/23 10:19		10.15	132	mg/L	0.70035	4.06	RA
* Iron, Total	3/3/23 11:16	3/7/23 10:19		10.15	10.3	mg/L	0.08120	0.406	RA
* Lithium, Total	3/3/23 11:16	3/6/23 12:20		1.015	0.471	mg/L	0.007105	0.01999956	
* Magnesium, Total	3/3/23 11:16	3/7/23 10:19		10.15	92.7	mg/L	0.21315	4.06	
* Silica, Total (calc.)	3/3/23 11:16	3/7/23 10:19		1	59.3	mg/L			
* Silicon, Total	3/3/23 11:16	3/7/23 10:19		10.15	27.7	mg/L	0.2030	2.5375	RA
* Sodium, Total	3/3/23 11:16	3/6/23 12:20		1.015	18.1	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	3/2/23 12:15	3/6/23 10:20		1.015	0.159	mg/L	0.030000	0.1015	
* Calcium, Dissolved	3/2/23 12:15	3/6/23 14:17		10.15	146	mg/L	0.70035	4.06	RA
* Iron, Dissolved	3/2/23 12:15	3/6/23 14:17		10.15	10.1	mg/L	0.08120	0.406	RA
* Lithium, Dissolved	3/2/23 12:15	3/6/23 10:20		1.015	0.473	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	3/2/23 12:15	3/6/23 14:17		10.15	105	mg/L	0.21315	4.06	RA
* Silica, Dissolved (calc.)	3/2/23 12:15	3/6/23 14:17		1	62.9	mg/L			
* Silicon, Dissolved	3/2/23 12:15	3/6/23 14:17		10.15	29.4	mg/L	0.2030	2.5375	RA
* Sodium, Dissolved	3/2/23 12:15	3/6/23 10:20		1.015	18.3	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/3/23 11:16	3/6/23 16:33		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	3/3/23 11:16	3/6/23 18:57		92.365	15.4	mg/L	0.554190	4.61825	RA
* Arsenic, Total	3/3/23 11:16	3/6/23 16:33		1.015	0.00147	mg/L	0.000081	0.000203	
* Barium, Total	3/3/23 11:16	3/6/23 16:33		1.015	0.0202	mg/L	0.000508	0.001015	
* Beryllium, Total	3/3/23 11:16	3/6/23 16:33		1.015	0.0109	mg/L	0.000406	0.001015	
* Cadmium, Total	3/3/23 11:16	3/6/23 16:33		1.015	0.00162	mg/L	0.000068	0.000203	
* Chromium, Total	3/3/23 11:16	3/6/23 16:33		1.015	0.000504	mg/L	0.000203	0.001015	J
* Cobalt, Total	3/3/23 11:16	3/6/23 16:33		1.015	0.227	mg/L	0.000068	0.000203	
* Lead, Total	3/3/23 11:16	3/6/23 16:33		1.015	0.000876	mg/L	0.000068	0.000203	
* Manganese, Total	3/3/23 11:16	3/6/23 18:47		10.15	8.27	mg/L	0.001522	0.01015	RA
* Molybdenum, Total	3/3/23 11:16	3/6/23 16:33		1.015	0.000133	mg/L	0.000102	0.000203	J
* Potassium, Total	3/3/23 11:16	3/6/23 16:33		1.015	4.24	mg/L	0.169505	0.5075	

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

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
Fluoride may have potential matrix interference.

Reported: 4/7/2023
Version: 3.5
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Gypsum - MW-14H

Location Code: WMWGORG
Collected: 2/28/23 14:20
Customer ID:
Submittal Date: 3/2/23 10:38

Laboratory ID Number: BD04575

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	3/3/23 11:16	3/6/23 16:33		1.015	0.00589	mg/L	0.000508	0.001015	
* Thallium, Total	3/3/23 11:16	3/6/23 16:33		1.015	0.0000716	mg/L	0.000068	0.000203	J
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	3/2/23 12:15	3/2/23 16:12		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	3/2/23 12:15	3/6/23 11:24		10.15	12.2	mg/L	0.06090	0.5075	RA
* Arsenic, Dissolved	3/2/23 12:15	3/2/23 16:12		1.015	0.00122	mg/L	0.000081	0.000203	
* Barium, Dissolved	3/2/23 12:15	3/2/23 16:12		1.015	0.0205	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	3/2/23 12:15	3/2/23 16:12		1.015	0.00944	mg/L	0.000406	0.001015	
* Cadmium, Dissolved	3/2/23 12:15	3/2/23 16:12		1.015	0.00153	mg/L	0.000068	0.000203	
* Chromium, Dissolved	3/2/23 12:15	3/2/23 16:12		1.015	0.000347	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	3/2/23 12:15	3/2/23 16:12		1.015	0.213	mg/L	0.000068	0.000203	
* Lead, Dissolved	3/2/23 12:15	3/2/23 16:12		1.015	0.000813	mg/L	0.000068	0.000203	
* Manganese, Dissolved	3/2/23 12:15	3/6/23 11:24		10.15	8.19	mg/L	0.001522	0.01015	RA
* Molybdenum, Dissolved	3/2/23 12:15	3/2/23 16:12		1.015	0.000576	mg/L	0.000102	0.000203	
* Potassium, Dissolved	3/2/23 12:15	3/2/23 16:12		1.015	4.10	mg/L	0.169505	0.5075	
* Selenium, Dissolved	3/2/23 12:15	3/2/23 16:12		1.015	0.00498	mg/L	0.000508	0.001015	
* Thallium, Dissolved	3/2/23 12:15	3/2/23 16:12		1.015	0.0000715	mg/L	0.000068	0.000203	J
Analytical Method: EPA 245.1	***Analyst: ELH***								
* Mercury, Total by CVAA	3/8/23 17:33	3/8/23 22:11		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	3/3/23 11:17	3/3/23 11:17		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
* Alkalinity to pH 4.5	3/13/23 13:37	3/13/23 15:58		1	Not Detected	mg CaCO3/L			
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	3/2/23 12:50	3/3/23 13:40		1	1300	mg/L		75.8	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
* Bicarbonate Alkalinity, (calc.)	3/13/23 13:37	3/13/23 15:58		1	Not Detected	mg CaCO3/L		1	A
* Carbonate Alkalinity, (calc.)	3/13/23 13:37	3/13/23 15:58		1	Not Detected	mg CaCO3/L		0.5	A
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	3/2/23 15:51	3/2/23 15:51		1	2.42	mg/L	1.00	2	

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

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
Fluoride may have potential matrix interference.

Reported: 4/7/2023
Version: 3.5
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Gypsum - MW-14H

Location Code: WMWGORG
Collected: 2/28/23 14:20
Customer ID:
Submittal Date: 3/2/23 10:38

Laboratory ID Number: BD04575

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E		***Analyst: JCC***							
* Chloride	3/3/23 08:06	3/3/23 08:06		1	2.88	mg/L	0.50	1	
Analytical Method: SM4500F G 2017		***Analyst: JCC***							
* Fluoride	3/14/23 14:19	3/14/23 14:19		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011		***Analyst: JCC***							
* Sulfate	3/2/23 14:10	3/2/23 14:10		50	748	mg/L	30.0	100	
Analytical Method: Field Measurements		***Analyst: DKG***							
Conductivity	2/28/23 14:17	2/28/23 14:17			1404.50	uS/cm			FA
pH	2/28/23 14:17	2/28/23 14:17			4.39	SU			FA
Temperature	2/28/23 14:17	2/28/23 14:17			19.80	C			FA
Turbidity	2/28/23 14:17	2/28/23 14:17			6.96	NTU			FA
Sulfide	2/28/23 14:17	2/28/23 14:17			0	mg/L			FA

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

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
Fluoride may have potential matrix interference.

Reported: 4/7/2023
Version: 3.5
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORG
Sample Date: 2/28/23 14:20
Customer ID:
Delivery Date: 3/2/23 10:38

Description: Gorgas Gypsum - MW-14H

Laboratory ID Number: BD04575

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04575	Aluminum, Dissolved	mg/L	-0.0000351	0.0198	0.100	12.1	12.0	0.103	0.0850 to 0.115	-100	70.0 to 130	0.830	20.0
BD04575	Aluminum, Total	mg/L	0.000677	0.0198	0.100	15.4	15.2	0.105	0.0850 to 0.115	0.00	70.0 to 130	1.31	20.0
BD04575	Antimony, Dissolved	mg/L	0.000375	0.00100	0.100	0.0900	0.0894	0.0851	0.0850 to 0.115	90.0	70.0 to 130	0.669	20.0
BD04575	Antimony, Total	mg/L	0.000351	0.00100	0.100	0.0992	0.101	0.0911	0.0850 to 0.115	99.2	70.0 to 130	1.80	20.0
BD04575	Arsenic, Dissolved	mg/L	-0.0000031	0.000200	0.100	0.0998	0.0990	0.0994	0.0850 to 0.115	98.6	70.0 to 130	0.805	20.0
BD04575	Arsenic, Total	mg/L	0.0000206	0.000200	0.100	0.101	0.0987	0.100	0.0850 to 0.115	99.5	70.0 to 130	2.30	20.0
BD04575	Barium, Dissolved	mg/L	0.0000093	0.00100	0.100	0.119	0.121	0.105	0.0850 to 0.115	98.5	70.0 to 130	1.67	20.0
BD04575	Barium, Total	mg/L	0.0000082	0.00100	0.100	0.121	0.123	0.100	0.0850 to 0.115	101	70.0 to 130	1.64	20.0
BD04575	Beryllium, Dissolved	mg/L	0.0000272	0.000880	0.100	0.115	0.113	0.106	0.0850 to 0.115	106	70.0 to 130	1.75	20.0
BD04575	Beryllium, Total	mg/L	0.0000174	0.000880	0.100	0.117	0.121	0.0967	0.0850 to 0.115	106	70.0 to 130	3.36	20.0
BD04575	Boron, Dissolved	mg/L	-0.00419	0.0650	1.00	1.20	1.24	1.04	0.850 to 1.15	104	70.0 to 130	3.28	20.0
BD04575	Boron, Total	mg/L	-0.00441	0.0650	1.00	1.22	1.21	1.03	0.850 to 1.15	106	70.0 to 130	0.823	20.0
BD04575	Cadmium, Dissolved	mg/L	0.0000019	0.000147	0.100	0.0943	0.0942	0.0961	0.0850 to 0.115	92.8	70.0 to 130	0.106	20.0
BD04575	Cadmium, Total	mg/L	0.0000066	0.000147	0.100	0.0984	0.101	0.101	0.0850 to 0.115	96.8	70.0 to 130	2.61	20.0
BD04575	Calcium, Dissolved	mg/L	0.00993	0.152	5.00	179	158	5.12	4.25 to 5.75	660	70.0 to 130	12.5	20.0
BD04575	Calcium, Total	mg/L	0.00311	0.152	5.00	140	135	4.80	4.25 to 5.75	160	70.0 to 130	3.64	20.0
BD04575	Chloride	mg/L	0.0461	1.00	10.0	13.0	13.3	10.2	9.00 to 11.0	101	80.0 to 120	2.28	20.0
BD04575	Chromium, Dissolved	mg/L	0.0000039	0.000440	0.100	0.0981	0.0951	0.0978	0.0850 to 0.115	97.8	70.0 to 130	3.11	20.0
BD04575	Chromium, Total	mg/L	0.0000603	0.000440	0.100	0.100	0.101	0.103	0.0850 to 0.115	99.5	70.0 to 130	0.995	20.0
BD04575	Cobalt, Dissolved	mg/L	0.0000034	0.000147	0.100	0.320	0.312	0.104	0.0850 to 0.115	107	70.0 to 130	2.53	20.0
BD04575	Cobalt, Total	mg/L	0.0000044	0.000147	0.100	0.339	0.344	0.111	0.0850 to 0.115	112	70.0 to 130	1.46	20.0
BD05000	Fluoride	mg/L	0.0103	0.125	2.50	6.92	6.89	2.64	2.25 to 2.75	98.0	80.0 to 120	0.434	20.0
BD04575	Iron, Dissolved	mg/L	0.000348	0.0176	0.2	11.9	10.3	0.204	0.170 to 0.230	900	70.0 to 130	14.4	20.0
BD04575	Iron, Total	mg/L	0.000151	0.0176	0.2	10.7	10.3	0.202	0.170 to 0.230	200	70.0 to 130	3.81	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
Fluoride may have potential matrix interference.

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORG
Sample Date: 2/28/23 14:20
Customer ID:
Delivery Date: 3/2/23 10:38

Description: Gorgas Gypsum - MW-14H

Laboratory ID Number: BD04575

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04575	Lead, Dissolved	mg/L	0.0000062	0.000147	0.100	0.107	0.107	0.107	0.0850 to 0.115	106	70.0 to 130	0.00	20.0
BD04575	Lead, Total	mg/L	0.0000098	0.000147	0.100	0.106	0.105	0.106	0.0850 to 0.115	105	70.0 to 130	0.948	20.0
BD04575	Lithium, Dissolved	mg/L	0.000578	0.0154	0.200	0.674	0.674	0.202	0.170 to 0.230	100	70.0 to 130	0.00	20.0
BD04575	Lithium, Total	mg/L	-0.00102	0.0154	0.200	0.684	0.687	0.200	0.170 to 0.230	106	70.0 to 130	0.438	20.0
BD04575	Magnesium, Dissolved	mg/L	0.00812	0.0462	5.00	129	115	4.98	4.25 to 5.75	480	70.0 to 130	11.5	20.0
BD04575	Magnesium, Total	mg/L	-0.00751	0.0462	5.00	99.0	96.4	4.86	4.25 to 5.75	126	70.0 to 130	2.66	20.0
BD04575	Manganese, Dissolved	mg/L	0.0000177	0.00033	0.100	8.18	8.28	0.101	0.0850 to 0.115	-10.0	70.0 to 130	1.22	20.0
BD04575	Manganese, Total	mg/L	-0.000076	0.00033	0.100	8.38	7.96	0.105	0.0850 to 0.115	110	70.0 to 130	5.14	20.0
BD04575	Mercury, Total by CVAA	mg/L	4.000E-05	0.000500	0.004	0.0038	0.00382	0.00383	0.00340 to 0.00460	95.0	70.0 to 130	0.525	20.0
BD04575	Molybdenum, Dissolved	mg/L	0.0000157	0.0002	0.100	0.101	0.0990	0.101	0.0850 to 0.115	100	70.0 to 130	2.00	20.0
BD04575	Molybdenum, Total	mg/L	0.0000078	0.0002	0.100	0.0978	0.0970	0.100	0.0850 to 0.115	97.7	70.0 to 130	0.821	20.0
BD04575	Potassium, Dissolved	mg/L	0.0155	0.367	10.0	13.7	13.3	9.82	8.50 to 11.5	96.0	70.0 to 130	2.96	20.0
BD04575	Potassium, Total	mg/L	0.00535	0.367	10.0	13.8	13.9	10.0	8.50 to 11.5	95.6	70.0 to 130	0.722	20.0
BD04575	Selenium, Dissolved	mg/L	0.000130	0.00100	0.100	0.107	0.104	0.101	0.0850 to 0.115	102	70.0 to 130	2.84	20.0
BD04575	Selenium, Total	mg/L	0.000113	0.00100	0.100	0.105	0.104	0.102	0.0850 to 0.115	99.1	70.0 to 130	0.957	20.0
BD04575	Silicon, Dissolved	mg/L	0.000284	0.0440	1.00	35.0	30.4	1.02	0.850 to 1.15	560	70.0 to 130	14.1	20.0
BD04575	Silicon, Total	mg/L	0.00157	0.0440	1.00	29.1	28.1	1.01	0.850 to 1.15	140	70.0 to 130	3.50	20.0
BD04575	Sodium, Dissolved	mg/L	-0.00314	0.0880	5.00	23.2	23.2	4.90	4.25 to 5.75	98.0	70.0 to 130	0.00	20.0
BD04575	Sodium, Total	mg/L	0.00121	0.0880	5.00	23.2	23.1	4.79	4.25 to 5.75	102	70.0 to 130	0.432	20.0
BD04575	Sulfate	mg/L	0.301	2.0	1000	1770	1830	19.8	18.0 to 22.0	102	80.0 to 120	3.33	20.0
BD04575	Thallium, Dissolved	mg/L	0.0000054	0.000147	0.100	0.0987	0.100	0.105	0.0850 to 0.115	98.6	70.0 to 130	1.31	20.0
BD04575	Thallium, Total	mg/L	0.0000118	0.000147	0.100	0.102	0.105	0.103	0.0850 to 0.115	102	70.0 to 130	2.90	20.0
BD04575	Total Organic Carbon	mg/L	-0.00852	1.00	10.0	12.3	12.9	10.0		98.8	80.0 to 120	4.76	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
Fluoride may have potential matrix interference.

Reported: 4/7/2023
Version: 3.5
COA_CCR

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

Alabama Power

Batch QC Summary

Customer Account: WMWGORG
Sample Date: 2/28/23 14:20
Customer ID:
Delivery Date: 3/2/23 10:38

Description: Gorgas Gypsum - MW-14H

Laboratory ID Number: BD04575

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04589	Alkalinity to pH 4.5	mg CaCO3/L					42.2	50.3	45.0 to 55.0			1.18	10.0
BD04575	Nitrogen, Nitrate/Nitrite	mg/L as N	0.04	0.200	2.00	2.21	0.137	1.98	1.80 to 2.20	110	90.0 to 110	0.00	15.0
BD04583	Solids, Dissolved	mg/L	1.00	25.0			1240	53.0	40.0 to 60.0			0.00	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
Fluoride may have potential matrix interference.

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Gypsum - MW-14H Dup

Location Code: WMWGORG
Collected: 2/28/23 14:20
Customer ID:
Submittal Date: 3/2/23 10:38

Laboratory ID Number: BD04576

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***					***Preparation Method: EPA 1638***			
* Boron, Total	3/3/23 11:16	3/6/23 12:36		1.015	0.157	mg/L	0.030000	0.1015	
* Calcium, Total	3/3/23 11:16	3/7/23 10:34		10.15	136	mg/L	0.70035	4.06	
* Iron, Total	3/3/23 11:16	3/7/23 10:34		10.15	9.93	mg/L	0.08120	0.406	
* Lithium, Total	3/3/23 11:16	3/6/23 12:36		1.015	0.475	mg/L	0.007105	0.01999956	
* Magnesium, Total	3/3/23 11:16	3/7/23 10:34		10.15	93.3	mg/L	0.21315	4.06	
* Silica, Total (calc.)	3/3/23 11:16	3/7/23 10:34		1	58.8	mg/L			
* Silicon, Total	3/3/23 11:16	3/7/23 10:34		10.15	27.5	mg/L	0.2030	2.5375	
* Sodium, Total	3/3/23 11:16	3/6/23 12:36		1.015	18.1	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	3/2/23 12:15	3/6/23 10:36		1.015	0.162	mg/L	0.030000	0.1015	
* Calcium, Dissolved	3/2/23 12:15	3/6/23 14:27		10.15	136	mg/L	0.70035	4.06	
* Iron, Dissolved	3/2/23 12:15	3/6/23 14:27		10.15	9.25	mg/L	0.08120	0.406	
* Lithium, Dissolved	3/2/23 12:15	3/6/23 10:36		1.015	0.471	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	3/2/23 12:15	3/6/23 14:27		10.15	98.2	mg/L	0.21315	4.06	
* Silica, Dissolved (calc.)	3/2/23 12:15	3/6/23 14:27		1	57.8	mg/L			
* Silicon, Dissolved	3/2/23 12:15	3/6/23 14:27		10.15	27.0	mg/L	0.2030	2.5375	
* Sodium, Dissolved	3/2/23 12:15	3/6/23 10:36		1.015	18.1	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***					***Preparation Method: EPA 1638***			
* Antimony, Total	3/3/23 11:16	3/6/23 16:54		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	3/3/23 11:16	3/6/23 19:22		92.365	15.0	mg/L	0.554190	4.61825	
* Arsenic, Total	3/3/23 11:16	3/6/23 16:54		1.015	0.00142	mg/L	0.000081	0.000203	
* Barium, Total	3/3/23 11:16	3/6/23 16:54		1.015	0.0210	mg/L	0.000508	0.001015	
* Beryllium, Total	3/3/23 11:16	3/6/23 16:54		1.015	0.0103	mg/L	0.000406	0.001015	
* Cadmium, Total	3/3/23 11:16	3/6/23 16:54		1.015	0.00154	mg/L	0.000068	0.000203	
* Chromium, Total	3/3/23 11:16	3/6/23 16:54		1.015	0.000486	mg/L	0.000203	0.001015	J
* Cobalt, Total	3/3/23 11:16	3/6/23 16:54		1.015	0.229	mg/L	0.000068	0.000203	
* Lead, Total	3/3/23 11:16	3/6/23 16:54		1.015	0.000893	mg/L	0.000068	0.000203	
* Manganese, Total	3/3/23 11:16	3/6/23 19:19		10.15	8.29	mg/L	0.001522	0.01015	
* Molybdenum, Total	3/3/23 11:16	3/6/23 16:54		1.015	0.000121	mg/L	0.000102	0.000203	J
* Potassium, Total	3/3/23 11:16	3/6/23 16:54		1.015	4.29	mg/L	0.169505	0.5075	

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

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

Reported: 4/7/2023
Version: 3.5
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Gypsum - MW-14H Dup

Location Code: WMWGORG
Collected: 2/28/23 14:20
Customer ID:
Submittal Date: 3/2/23 10:38

Laboratory ID Number: BD04576

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	3/3/23 11:16	3/6/23 16:54		1.015	0.00586	mg/L	0.000508	0.001015	
* Thallium, Total	3/3/23 11:16	3/6/23 16:54		1.015	0.000079	mg/L	0.000068	0.000203	J
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	3/2/23 12:15	3/2/23 16:33		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	3/2/23 12:15	3/6/23 11:55		10.15	12.5	mg/L	0.06090	0.5075	
* Arsenic, Dissolved	3/2/23 12:15	3/2/23 16:33		1.015	0.00125	mg/L	0.000081	0.000203	
* Barium, Dissolved	3/2/23 12:15	3/2/23 16:33		1.015	0.0200	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	3/2/23 12:15	3/2/23 16:33		1.015	0.00990	mg/L	0.000406	0.001015	
* Cadmium, Dissolved	3/2/23 12:15	3/2/23 16:33		1.015	0.00156	mg/L	0.000068	0.000203	
* Chromium, Dissolved	3/2/23 12:15	3/2/23 16:33		1.015	0.000347	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	3/2/23 12:15	3/2/23 16:33		1.015	0.211	mg/L	0.000068	0.000203	
* Lead, Dissolved	3/2/23 12:15	3/2/23 16:33		1.015	0.000811	mg/L	0.000068	0.000203	
* Manganese, Dissolved	3/2/23 12:15	3/6/23 11:55		10.15	8.37	mg/L	0.001522	0.01015	
* Molybdenum, Dissolved	3/2/23 12:15	3/2/23 16:33		1.015	0.000222	mg/L	0.000102	0.000203	
* Potassium, Dissolved	3/2/23 12:15	3/2/23 16:33		1.015	4.07	mg/L	0.169505	0.5075	
* Selenium, Dissolved	3/2/23 12:15	3/2/23 16:33		1.015	0.00528	mg/L	0.000508	0.001015	
* Thallium, Dissolved	3/2/23 12:15	3/2/23 16:33		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ELH***								
* Mercury, Total by CVAA	3/8/23 17:33	3/8/23 22:30		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	3/3/23 11:26	3/3/23 11:26		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
* Alkalinity to pH 4.5	3/13/23 13:37	3/13/23 15:58		1	Not Detected	mg CaCO3/L			
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	3/2/23 12:50	3/3/23 13:40		1	1280	mg/L		75.8	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
* Bicarbonate Alkalinity, (calc.)	3/13/23 13:37	3/13/23 15:58		1	Not Detected	mg CaCO3/L		1	A
* Carbonate Alkalinity, (calc.)	3/13/23 13:37	3/13/23 15:58		1	Not Detected	mg CaCO3/L		0.5	A
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	3/2/23 17:07	3/2/23 17:07		1	2.36	mg/L	1.00	2	

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

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

Reported: 4/7/2023
Version: 3.5
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Gypsum - MW-14H Dup

Location Code: WMWGORG
Collected: 2/28/23 14:20
Customer ID:
Submittal Date: 3/2/23 10:38

Laboratory ID Number: BD04576

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E		***Analyst: JCC***							
* Chloride	3/3/23 08:19	3/3/23 08:19		1	2.92	mg/L	0.50	1	
Analytical Method: SM4500F G 2017		***Analyst: CES***							
* Fluoride	3/28/23 11:29	3/29/23 11:29		1	Not Detected	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011		***Analyst: JCC***							
* Sulfate	3/2/23 14:37	3/2/23 14:37		40	839	mg/L	24.0	80	
Analytical Method: Field Measurements		***Analyst: DKG***							
Conductivity	2/28/23 14:17	2/28/23 14:17			1404.50	uS/cm			FA
pH	2/28/23 14:17	2/28/23 14:17			4.39	SU			FA
Temperature	2/28/23 14:17	2/28/23 14:17			19.80	C			FA
Turbidity	2/28/23 14:17	2/28/23 14:17			6.96	NTU			FA
Sulfide	2/28/23 14:17	2/28/23 14:17			0	mg/L			FA

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

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

Reported: 4/7/2023
Version: 3.5
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORG
Sample Date: 2/28/23 14:20
Customer ID:
Delivery Date: 3/2/23 10:38

Description: Gorgas Gypsum - MW-14H Dup

Laboratory ID Number: BD04576

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04585	Aluminum, Dissolved	mg/L	-0.0000351	0.0198	0.100	7.99	7.94	0.103	0.0850 to 0.115	140	70.0 to 130	0.628	20.0
BD04585	Aluminum, Total	mg/L	0.000677	0.0198	0.100	8.69	8.69	0.105	0.0850 to 0.115	220	70.0 to 130	0.00	20.0
BD04585	Antimony, Dissolved	mg/L	0.000375	0.00100	0.100	0.0906	0.0893	0.0851	0.0850 to 0.115	90.6	70.0 to 130	1.45	20.0
BD04585	Antimony, Total	mg/L	0.000351	0.00100	0.100	0.0967	0.0962	0.0911	0.0850 to 0.115	96.7	70.0 to 130	0.518	20.0
BD04585	Arsenic, Dissolved	mg/L	-0.0000031	0.000200	0.100	0.0986	0.0980	0.0994	0.0850 to 0.115	97.8	70.0 to 130	0.610	20.0
BD04585	Arsenic, Total	mg/L	0.0000206	0.000200	0.100	0.0983	0.0992	0.100	0.0850 to 0.115	97.3	70.0 to 130	0.911	20.0
BD04585	Barium, Dissolved	mg/L	0.0000093	0.00100	0.100	0.113	0.110	0.105	0.0850 to 0.115	101	70.0 to 130	2.69	20.0
BD04585	Barium, Total	mg/L	0.0000082	0.00100	0.100	0.117	0.114	0.100	0.0850 to 0.115	105	70.0 to 130	2.60	20.0
BD04585	Beryllium, Dissolved	mg/L	0.0000272	0.000880	0.100	0.106	0.105	0.106	0.0850 to 0.115	99.5	70.0 to 130	0.948	20.0
BD04585	Beryllium, Total	mg/L	0.0000174	0.000880	0.100	0.105	0.106	0.0967	0.0850 to 0.115	98.2	70.0 to 130	0.948	20.0
BD04585	Boron, Dissolved	mg/L	-0.00419	0.0650	1.00	1.12	1.12	1.04	0.850 to 1.15	106	70.0 to 130	0.00	20.0
BD04585	Boron, Total	mg/L	-0.00441	0.0650	1.00	1.10	1.10	1.03	0.850 to 1.15	105	70.0 to 130	0.00	20.0
BD04585	Cadmium, Dissolved	mg/L	0.0000019	0.000147	0.100	0.0971	0.0956	0.0961	0.0850 to 0.115	94.9	70.0 to 130	1.56	20.0
BD04585	Cadmium, Total	mg/L	0.0000066	0.000147	0.100	0.102	0.0974	0.101	0.0850 to 0.115	99.7	70.0 to 130	4.61	20.0
BD04585	Calcium, Dissolved	mg/L	0.00993	0.152	5.00	120	137	5.12	4.25 to 5.75	60.0	70.0 to 130	13.2	20.0
BD04585	Calcium, Total	mg/L	0.00311	0.152	5.00	122	118	4.80	4.25 to 5.75	120	70.0 to 130	3.33	20.0
BD04585	Chloride	mg/L	0.0715	1.00	10.0	12.5	12.1	10.2	9.00 to 11.0	103	80.0 to 120	3.25	20.0
BD04585	Chromium, Dissolved	mg/L	0.0000039	0.000440	0.100	0.0969	0.0947	0.0978	0.0850 to 0.115	96.7	70.0 to 130	2.30	20.0
BD04585	Chromium, Total	mg/L	0.0000603	0.000440	0.100	0.101	0.101	0.103	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BD04585	Cobalt, Dissolved	mg/L	0.0000034	0.000147	0.100	0.366	0.349	0.104	0.0850 to 0.115	110	70.0 to 130	4.76	20.0
BD04585	Cobalt, Total	mg/L	0.0000044	0.000147	0.100	0.382	0.377	0.111	0.0850 to 0.115	112	70.0 to 130	1.32	20.0
BD05868	Fluoride	mg/L	0.0287	0.125	2.50	2.22	2.45	2.40	2.25 to 2.75	88.8	80.0 to 120	9.85	20.0
BD04585	Iron, Dissolved	mg/L	0.000348	0.0176	0.2	1.09	1.09	0.204	0.170 to 0.230	93.0	70.0 to 130	0.00	20.0
BD04585	Iron, Total	mg/L	0.000151	0.0176	0.2	1.75	1.76	0.202	0.170 to 0.230	100	70.0 to 130	0.570	20.0

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

Reported: 4/7/2023
Version: 3.5
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORG
Sample Date: 2/28/23 14:20
Customer ID:
Delivery Date: 3/2/23 10:38

Description: Gorgas Gypsum - MW-14H Dup

Laboratory ID Number: BD04576

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04585	Lead, Dissolved	mg/L	0.0000062	0.000147	0.100	0.108	0.105	0.107	0.0850 to 0.115	105	70.0 to 130	2.82	20.0
BD04585	Lead, Total	mg/L	0.0000098	0.000147	0.100	0.109	0.105	0.106	0.0850 to 0.115	105	70.0 to 130	3.74	20.0
BD04585	Lithium, Dissolved	mg/L	0.000578	0.0154	0.200	0.505	0.504	0.202	0.170 to 0.230	104	70.0 to 130	0.198	20.0
BD04585	Lithium, Total	mg/L	-0.00102	0.0154	0.200	0.498	0.502	0.200	0.170 to 0.230	106	70.0 to 130	0.800	20.0
BD04585	Magnesium, Dissolved	mg/L	0.00812	0.0462	5.00	132	151	4.98	4.25 to 5.75	40.0	70.0 to 130	13.4	20.0
BD04585	Magnesium, Total	mg/L	-0.00751	0.0462	5.00	128	126	4.86	4.25 to 5.75	80.0	70.0 to 130	1.57	20.0
BD04585	Manganese, Dissolved	mg/L	0.0000177	0.00033	0.100	11.3	11.0	0.101	0.0850 to 0.115	-200	70.0 to 130	2.69	20.0
BD04585	Manganese, Total	mg/L	-0.000076	0.00033	0.100	11.6	11.8	0.105	0.0850 to 0.115	600	70.0 to 130	1.71	20.0
BD04585	Mercury, Total by CVAA	mg/L	4.000E-05	0.000500	0.004	0.00381	0.00384	0.00383	0.00340 to 0.00460	95.2	70.0 to 130	0.784	20.0
BD04585	Molybdenum, Dissolved	mg/L	0.0000157	0.0002	0.100	0.0991	0.0987	0.101	0.0850 to 0.115	99.1	70.0 to 130	0.404	20.0
BD04585	Molybdenum, Total	mg/L	0.0000078	0.0002	0.100	0.0977	0.0994	0.100	0.0850 to 0.115	97.7	70.0 to 130	1.73	20.0
BD04585	Potassium, Dissolved	mg/L	0.0155	0.367	10.0	14.8	14.5	9.82	8.50 to 11.5	100	70.0 to 130	2.05	20.0
BD04585	Potassium, Total	mg/L	0.00535	0.367	10.0	14.6	14.7	10.0	8.50 to 11.5	97.3	70.0 to 130	0.683	20.0
BD04585	Selenium, Dissolved	mg/L	0.000130	0.00100	0.100	0.101	0.102	0.101	0.0850 to 0.115	98.3	70.0 to 130	0.985	20.0
BD04585	Selenium, Total	mg/L	0.000113	0.00100	0.100	0.101	0.101	0.102	0.0850 to 0.115	98.1	70.0 to 130	0.00	20.0
BD04585	Silicon, Dissolved	mg/L	0.000284	0.0440	1.00	17.3	17.3	1.02	0.850 to 1.15	80.0	70.0 to 130	0.00	20.0
BD04585	Silicon, Total	mg/L	0.00157	0.0440	1.00	16.9	16.9	1.01	0.850 to 1.15	100	70.0 to 130	0.00	20.0
BD04585	Sodium, Dissolved	mg/L	-0.00314	0.0880	5.00	33.5	33.4	4.90	4.25 to 5.75	96.0	70.0 to 130	0.299	20.0
BD04585	Sodium, Total	mg/L	0.00121	0.0880	5.00	32.9	33.1	4.79	4.25 to 5.75	98.0	70.0 to 130	0.606	20.0
BD04585	Sulfate	mg/L	0.861	2.0	1000	1890	1800	19.9	18.0 to 22.0	107	80.0 to 120	4.88	20.0
BD04585	Thallium, Dissolved	mg/L	0.0000054	0.000147	0.100	0.100	0.101	0.105	0.0850 to 0.115	99.6	70.0 to 130	0.995	20.0
BD04585	Thallium, Total	mg/L	0.0000118	0.000147	0.100	0.102	0.0991	0.103	0.0850 to 0.115	102	70.0 to 130	2.88	20.0
BD04585	Total Organic Carbon	mg/L	0.0331	1.00	10.0	14.1	13.8	9.96		101	80.0 to 120	2.15	20.0

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

Reported: 4/7/2023
Version: 3.5
COA_CCR

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

Alabama Power

Batch QC Summary

Customer Account: WMWGORG
Sample Date: 2/28/23 14:20
Customer ID:
Delivery Date: 3/2/23 10:38

Description: Gorgas Gypsum - MW-14H Dup

Laboratory ID Number: BD04576

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04589	Alkalinity to pH 4.5	mg CaCO3/L					42.2	50.3	45.0 to 55.0			1.18	10.0
BD04585	Nitrogen, Nitrate/Nitrite	mg/L as N	0.03	0.200	2.00	2.50	0.474	1.94	1.80 to 2.20	101	90.0 to 110	0.211	15.0
BD04583	Solids, Dissolved	mg/L	1.00	25.0			1240	53.0	40.0 to 60.0			0.00	10.0

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

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Gypsum - MW-4

Location Code: WMWGORG
Collected: 3/1/23 10:00
Customer ID:
Submittal Date: 3/2/23 10:38

Laboratory ID Number: BD04577

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	3/3/23 11:16	3/6/23 12:39		1.015	8.02	mg/L	0.030000	0.1015	
* Calcium, Total	3/3/23 11:16	3/7/23 10:38		10.15	327	mg/L	0.70035	4.06	
* Iron, Total	3/3/23 11:16	3/7/23 11:19		101.5	62.7	mg/L	0.8120	4.06	
* Lithium, Total	3/3/23 11:16	3/6/23 12:39		1.015	1.35	mg/L	0.007105	0.01999956	
* Magnesium, Total	3/3/23 11:16	3/7/23 10:38		10.15	232	mg/L	0.21315	4.06	
* Silica, Total (calc.)	3/3/23 11:16	3/7/23 10:38		1	67.6	mg/L			
* Silicon, Total	3/3/23 11:16	3/7/23 10:38		10.15	31.6	mg/L	0.2030	2.5375	
* Sodium, Total	3/3/23 11:16	3/7/23 10:38		10.15	40.7	mg/L	0.3045	4.06	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	3/2/23 12:15	3/6/23 10:39		1.015	8.14	mg/L	0.030000	0.1015	
* Calcium, Dissolved	3/2/23 12:15	3/6/23 14:37		10.15	361	mg/L	0.70035	4.06	
* Iron, Dissolved	3/2/23 12:15	3/6/23 14:40		101.5	65.9	mg/L	0.8120	4.06	
* Lithium, Dissolved	3/2/23 12:15	3/6/23 10:39		1.015	1.34	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	3/2/23 12:15	3/6/23 14:37		10.15	266	mg/L	0.21315	4.06	
* Silica, Dissolved (calc.)	3/2/23 12:15	3/6/23 14:37		1	74.7	mg/L			
* Silicon, Dissolved	3/2/23 12:15	3/6/23 14:37		10.15	34.9	mg/L	0.2030	2.5375	
* Sodium, Dissolved	3/2/23 12:15	3/6/23 14:37		10.15	44.4	mg/L	0.3045	4.06	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/3/23 11:16	3/6/23 16:57		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	3/3/23 11:16	3/6/23 19:26		92.365	67.6	mg/L	0.554190	4.61825	
* Arsenic, Total	3/3/23 11:16	3/6/23 16:57		1.015	0.00412	mg/L	0.000081	0.000203	
* Barium, Total	3/3/23 11:16	3/6/23 16:57		1.015	0.00845	mg/L	0.000508	0.001015	
* Beryllium, Total	3/3/23 11:16	3/6/23 16:57		1.015	0.0224	mg/L	0.000406	0.001015	
* Cadmium, Total	3/3/23 11:16	3/6/23 16:57		1.015	0.00552	mg/L	0.000068	0.000203	
* Chromium, Total	3/3/23 11:16	3/6/23 16:57		1.015	0.00243	mg/L	0.000203	0.001015	
* Cobalt, Total	3/3/23 11:16	3/6/23 16:57		1.015	0.705	mg/L	0.000068	0.000203	
* Lead, Total	3/3/23 11:16	3/6/23 16:57		1.015	0.00144	mg/L	0.000068	0.000203	
* Manganese, Total	3/3/23 11:16	3/6/23 19:26		92.365	28.8	mg/L	0.013855	0.092365	
* Molybdenum, Total	3/3/23 11:16	3/6/23 16:57		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Total	3/3/23 11:16	3/6/23 16:57		1.015	4.56	mg/L	0.169505	0.5075	

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

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
Fluoride may have potential matrix interference.
Alkalinity could not be performed, pH below titration end point of 4.5 SU.

Reported: 4/7/2023
Version: 3.5
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Gypsum - MW-4

Location Code: WMWGORG
Collected: 3/1/23 10:00
Customer ID:
Submittal Date: 3/2/23 10:38

Laboratory ID Number: BD04577

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	3/3/23 11:16	3/6/23 16:57		1.015	0.0170	mg/L	0.000508	0.001015	
* Thallium, Total	3/3/23 11:16	3/6/23 16:57		1.015	0.000407	mg/L	0.000068	0.000203	
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	3/2/23 12:15	3/2/23 16:36		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	3/2/23 12:15	3/6/23 12:03		92.365	64.3	mg/L	0.554190	4.61825	
* Arsenic, Dissolved	3/2/23 12:15	3/2/23 16:36		1.015	0.00379	mg/L	0.000081	0.000203	
* Barium, Dissolved	3/2/23 12:15	3/2/23 16:36		1.015	0.00870	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	3/2/23 12:15	3/2/23 16:36		1.015	0.0186	mg/L	0.000406	0.001015	
* Cadmium, Dissolved	3/2/23 12:15	3/2/23 16:36		1.015	0.00532	mg/L	0.000068	0.000203	
* Chromium, Dissolved	3/2/23 12:15	3/2/23 16:36		1.015	0.00231	mg/L	0.000203	0.001015	
* Cobalt, Dissolved	3/2/23 12:15	3/2/23 16:36		1.015	0.644	mg/L	0.000068	0.000203	
* Lead, Dissolved	3/2/23 12:15	3/2/23 16:36		1.015	0.00146	mg/L	0.000068	0.000203	
* Manganese, Dissolved	3/2/23 12:15	3/6/23 12:03		92.365	28.9	mg/L	0.013855	0.092365	
* Molybdenum, Dissolved	3/2/23 12:15	3/2/23 16:36		1.015	0.000455	mg/L	0.000102	0.000203	
* Potassium, Dissolved	3/2/23 12:15	3/2/23 16:36		1.015	4.61	mg/L	0.169505	0.5075	
* Selenium, Dissolved	3/2/23 12:15	3/2/23 16:36		1.015	0.0160	mg/L	0.000508	0.001015	
* Thallium, Dissolved	3/2/23 12:15	3/2/23 16:36		1.015	0.000360	mg/L	0.000068	0.000203	
Analytical Method: EPA 245.1	***Analyst: ELH***								
* Mercury, Total by CVAA	3/8/23 17:33	3/8/23 22:34		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	3/3/23 11:28	3/3/23 11:28		1	0.248	mg/L as N	0.20	0.3	J
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	3/3/23 10:50	3/6/23 13:40		1	3310	mg/L		208.3	
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	3/2/23 17:25	3/2/23 17:25		1	3.82	mg/L	1.00	2	
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	3/3/23 08:33	3/3/23 08:33		25	113	mg/L	12.50	25	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	3/3/23 11:59	3/3/23 11:59		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	3/2/23 14:38	3/2/23 14:38		80	2130	mg/L	48.0	160	

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

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
Fluoride may have potential matrix interference.
Alkalinity could not be performed, pH below titration end point of 4.5 SU.

Reported: 4/7/2023
Version: 3.5
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Gypsum - MW-4

Location Code: WMWGORG
Collected: 3/1/23 10:00
Customer ID:
Submittal Date: 3/2/23 10:38

Laboratory ID Number: BD04577

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	3/1/23 09:57	3/1/23 09:57			3267.69	uS/cm			FA
pH	3/1/23 09:57	3/1/23 09:57			3.50	SU			FA
Temperature	3/1/23 09:57	3/1/23 09:57			20.62	C			FA
Turbidity	3/1/23 09:57	3/1/23 09:57			3.09	NTU			FA
Sulfide	3/1/23 09:57	3/1/23 09:57			0	mg/L			FA

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

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
Fluoride may have potential matrix interference.
Alkalinity could not be performed, pH below titration end point of 4.5 SU.

Reported: 4/7/2023
Version: 3.5
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORG
Sample Date: 3/1/23 10:00
Customer ID:
Delivery Date: 3/2/23 10:38

Description: Gorgas Gypsum - MW-4

Laboratory ID Number: BD04577

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04585	Aluminum, Dissolved	mg/L	-0.0000351	0.0198	0.100	7.99	7.94	0.103	0.0850 to 0.115	140	70.0 to 130	0.628	20.0
BD04585	Aluminum, Total	mg/L	0.000677	0.0198	0.100	8.69	8.69	0.105	0.0850 to 0.115	220	70.0 to 130	0.00	20.0
BD04585	Antimony, Dissolved	mg/L	0.000375	0.00100	0.100	0.0906	0.0893	0.0851	0.0850 to 0.115	90.6	70.0 to 130	1.45	20.0
BD04585	Antimony, Total	mg/L	0.000351	0.00100	0.100	0.0967	0.0962	0.0911	0.0850 to 0.115	96.7	70.0 to 130	0.518	20.0
BD04585	Arsenic, Dissolved	mg/L	-0.0000031	0.000200	0.100	0.0986	0.0980	0.0994	0.0850 to 0.115	97.8	70.0 to 130	0.610	20.0
BD04585	Arsenic, Total	mg/L	0.0000206	0.000200	0.100	0.0983	0.0992	0.100	0.0850 to 0.115	97.3	70.0 to 130	0.911	20.0
BD04585	Barium, Dissolved	mg/L	0.0000093	0.00100	0.100	0.113	0.110	0.105	0.0850 to 0.115	101	70.0 to 130	2.69	20.0
BD04585	Barium, Total	mg/L	0.0000082	0.00100	0.100	0.117	0.114	0.100	0.0850 to 0.115	105	70.0 to 130	2.60	20.0
BD04585	Beryllium, Dissolved	mg/L	0.0000272	0.000880	0.100	0.106	0.105	0.106	0.0850 to 0.115	99.5	70.0 to 130	0.948	20.0
BD04585	Beryllium, Total	mg/L	0.0000174	0.000880	0.100	0.105	0.106	0.0967	0.0850 to 0.115	98.2	70.0 to 130	0.948	20.0
BD04585	Boron, Dissolved	mg/L	-0.00419	0.0650	1.00	1.12	1.12	1.04	0.850 to 1.15	106	70.0 to 130	0.00	20.0
BD04585	Boron, Total	mg/L	-0.00441	0.0650	1.00	1.10	1.10	1.03	0.850 to 1.15	105	70.0 to 130	0.00	20.0
BD04585	Cadmium, Dissolved	mg/L	0.0000019	0.000147	0.100	0.0971	0.0956	0.0961	0.0850 to 0.115	94.9	70.0 to 130	1.56	20.0
BD04585	Cadmium, Total	mg/L	0.0000066	0.000147	0.100	0.102	0.0974	0.101	0.0850 to 0.115	99.7	70.0 to 130	4.61	20.0
BD04585	Calcium, Dissolved	mg/L	0.00993	0.152	5.00	120	137	5.12	4.25 to 5.75	60.0	70.0 to 130	13.2	20.0
BD04585	Calcium, Total	mg/L	0.00311	0.152	5.00	122	118	4.80	4.25 to 5.75	120	70.0 to 130	3.33	20.0
BD04585	Chloride	mg/L	0.0715	1.00	10.0	12.5	12.1	10.2	9.00 to 11.0	103	80.0 to 120	3.25	20.0
BD04585	Chromium, Dissolved	mg/L	0.0000039	0.000440	0.100	0.0969	0.0947	0.0978	0.0850 to 0.115	96.7	70.0 to 130	2.30	20.0
BD04585	Chromium, Total	mg/L	0.0000603	0.000440	0.100	0.101	0.101	0.103	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BD04585	Cobalt, Dissolved	mg/L	0.0000034	0.000147	0.100	0.366	0.349	0.104	0.0850 to 0.115	110	70.0 to 130	4.76	20.0
BD04585	Cobalt, Total	mg/L	0.0000044	0.000147	0.100	0.382	0.377	0.111	0.0850 to 0.115	112	70.0 to 130	1.32	20.0
BD04583	Fluoride	mg/L	0.0273	0.125	2.50	2.21	2.43	2.29	2.25 to 2.75	85.4	80.0 to 120	9.48	20.0
BD04585	Iron, Dissolved	mg/L	0.000348	0.0176	0.2	1.09	1.09	0.204	0.170 to 0.230	93.0	70.0 to 130	0.00	20.0
BD04585	Iron, Total	mg/L	0.000151	0.0176	0.2	1.75	1.76	0.202	0.170 to 0.230	100	70.0 to 130	0.570	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
Fluoride may have potential matrix interference.
Alkalinity could not be performed, pH below titration end point of 4.5 SU.

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORG
Sample Date: 3/1/23 10:00
Customer ID:
Delivery Date: 3/2/23 10:38

Description: Gorgas Gypsum - MW-4

Laboratory ID Number: BD04577

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04585	Lead, Dissolved	mg/L	0.0000062	0.000147	0.100	0.108	0.105	0.107	0.0850 to 0.115	105	70.0 to 130	2.82	20.0
BD04585	Lead, Total	mg/L	0.0000098	0.000147	0.100	0.109	0.105	0.106	0.0850 to 0.115	105	70.0 to 130	3.74	20.0
BD04585	Lithium, Dissolved	mg/L	0.000578	0.0154	0.200	0.505	0.504	0.202	0.170 to 0.230	104	70.0 to 130	0.198	20.0
BD04585	Lithium, Total	mg/L	-0.00102	0.0154	0.200	0.498	0.502	0.200	0.170 to 0.230	106	70.0 to 130	0.800	20.0
BD04585	Magnesium, Dissolved	mg/L	0.00812	0.0462	5.00	132	151	4.98	4.25 to 5.75	40.0	70.0 to 130	13.4	20.0
BD04585	Magnesium, Total	mg/L	-0.00751	0.0462	5.00	128	126	4.86	4.25 to 5.75	80.0	70.0 to 130	1.57	20.0
BD04585	Manganese, Dissolved	mg/L	0.0000177	0.00033	0.100	11.3	11.0	0.101	0.0850 to 0.115	-200	70.0 to 130	2.69	20.0
BD04585	Manganese, Total	mg/L	-0.000076	0.00033	0.100	11.6	11.8	0.105	0.0850 to 0.115	600	70.0 to 130	1.71	20.0
BD04585	Mercury, Total by CVAA	mg/L	4.000E-05	0.000500	0.004	0.00381	0.00384	0.00383	0.00340 to 0.00460	95.2	70.0 to 130	0.784	20.0
BD04585	Molybdenum, Dissolved	mg/L	0.0000157	0.0002	0.100	0.0991	0.0987	0.101	0.0850 to 0.115	99.1	70.0 to 130	0.404	20.0
BD04585	Molybdenum, Total	mg/L	0.0000078	0.0002	0.100	0.0977	0.0994	0.100	0.0850 to 0.115	97.7	70.0 to 130	1.73	20.0
BD04585	Potassium, Dissolved	mg/L	0.0155	0.367	10.0	14.8	14.5	9.82	8.50 to 11.5	100	70.0 to 130	2.05	20.0
BD04585	Potassium, Total	mg/L	0.00535	0.367	10.0	14.6	14.7	10.0	8.50 to 11.5	97.3	70.0 to 130	0.683	20.0
BD04585	Selenium, Dissolved	mg/L	0.000130	0.00100	0.100	0.101	0.102	0.101	0.0850 to 0.115	98.3	70.0 to 130	0.985	20.0
BD04585	Selenium, Total	mg/L	0.000113	0.00100	0.100	0.101	0.101	0.102	0.0850 to 0.115	98.1	70.0 to 130	0.00	20.0
BD04585	Silicon, Dissolved	mg/L	0.000284	0.0440	1.00	17.3	17.3	1.02	0.850 to 1.15	80.0	70.0 to 130	0.00	20.0
BD04585	Silicon, Total	mg/L	0.00157	0.0440	1.00	16.9	16.9	1.01	0.850 to 1.15	100	70.0 to 130	0.00	20.0
BD04585	Sodium, Dissolved	mg/L	-0.00314	0.0880	5.00	33.5	33.4	4.90	4.25 to 5.75	96.0	70.0 to 130	0.299	20.0
BD04585	Sodium, Total	mg/L	0.00121	0.0880	5.00	32.9	33.1	4.79	4.25 to 5.75	98.0	70.0 to 130	0.606	20.0
BD04585	Sulfate	mg/L	0.861	2.0	1000	1890	1800	19.9	18.0 to 22.0	107	80.0 to 120	4.88	20.0
BD04585	Thallium, Dissolved	mg/L	0.0000054	0.000147	0.100	0.100	0.101	0.105	0.0850 to 0.115	99.6	70.0 to 130	0.995	20.0
BD04585	Thallium, Total	mg/L	0.0000118	0.000147	0.100	0.102	0.0991	0.103	0.0850 to 0.115	102	70.0 to 130	2.88	20.0
BD04585	Total Organic Carbon	mg/L	0.0331	1.00	10.0	14.1	13.8	9.96		101	80.0 to 120	2.15	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
Fluoride may have potential matrix interference.
Alkalinity could not be performed, pH below titration end point of 4.5 SU.

Reported: 4/7/2023
Version: 3.5
COA_CCR

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

Alabama Power

Batch QC Summary

Customer Account: WMWGORG
Sample Date: 3/1/23 10:00
Customer ID:
Delivery Date: 3/2/23 10:38

Description: Gorgas Gypsum - MW-4

Laboratory ID Number: BD04577

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04585	Nitrogen, Nitrate/Nitrite	mg/L as N	0.03	0.200	2.00	2.50	0.474	1.94	1.80 to 2.20	101	90.0 to 110	0.211	15.0
BD04589	Solids, Dissolved	mg/L	0.0000	25.0			1320	49.0	40.0 to 60.0			0.755	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
Fluoride may have potential matrix interference.
Alkalinity could not be performed, pH below titration end point of 4.5 SU.

Reported: 4/7/2023
Version: 3.5
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Gypsum - MW-3V

Location Code: WMWGORG
Collected: 2/27/23 11:55
Customer ID:
Submittal Date: 3/2/23 10:38

Laboratory ID Number: BD04578

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	3/3/23 11:16	3/6/23 12:43		1.015	2.91	mg/L	0.030000	0.1015	
* Calcium, Total	3/3/23 11:16	3/7/23 14:08		101.5	397	mg/L	7.0035	40.6	
* Iron, Total	3/3/23 11:16	3/7/23 10:41		10.15	31.9	mg/L	0.08120	0.406	
* Lithium, Total	3/3/23 11:16	3/6/23 12:43		1.015	0.350	mg/L	0.007105	0.01999956	
* Magnesium, Total	3/3/23 11:16	3/7/23 10:41		10.15	232	mg/L	0.21315	4.06	
* Silica, Total (calc.)	3/3/23 11:16	3/6/23 12:43		1	24.0	mg/L			
* Silicon, Total	3/3/23 11:16	3/6/23 12:43		1.015	11.2	mg/L	0.02030	0.25375	
* Sodium, Total	3/3/23 11:16	3/7/23 10:41		10.15	235	mg/L	0.3045	4.06	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	3/2/23 12:15	3/6/23 10:43		1.015	2.96	mg/L	0.030000	0.1015	
* Calcium, Dissolved	3/2/23 12:15	3/6/23 14:43		101.5	468	mg/L	7.0035	40.6	
* Iron, Dissolved	3/2/23 12:15	3/6/23 14:43		101.5	36.6	mg/L	0.8120	4.06	
* Lithium, Dissolved	3/2/23 12:15	3/6/23 10:43		1.015	0.350	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	3/2/23 12:15	3/6/23 14:43		101.5	257	mg/L	2.1315	40.6	
* Silica, Dissolved (calc.)	3/2/23 12:15	3/6/23 10:43		1	24.2	mg/L			
* Silicon, Dissolved	3/2/23 12:15	3/6/23 10:43		1.015	11.3	mg/L	0.02030	0.25375	
* Sodium, Dissolved	3/2/23 12:15	3/6/23 14:43		101.5	257	mg/L	3.045	40.6	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/3/23 11:16	3/6/23 17:01		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	3/3/23 11:16	3/6/23 17:01		1.015	0.0150	mg/L	0.006090	0.05075	J
* Arsenic, Total	3/3/23 11:16	3/6/23 17:01		1.015	0.000197	mg/L	0.000081	0.000203	J
* Barium, Total	3/3/23 11:16	3/6/23 17:01		1.015	0.0139	mg/L	0.000508	0.001015	
* Beryllium, Total	3/3/23 11:16	3/6/23 17:01		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	3/3/23 11:16	3/6/23 17:01		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	3/3/23 11:16	3/6/23 17:01		1.015	0.000298	mg/L	0.000203	0.001015	J
* Cobalt, Total	3/3/23 11:16	3/6/23 17:01		1.015	0.0113	mg/L	0.000068	0.000203	
* Lead, Total	3/3/23 11:16	3/6/23 17:01		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	3/3/23 11:16	3/6/23 19:29		10.15	12.5	mg/L	0.001522	0.01015	
* Molybdenum, Total	3/3/23 11:16	3/6/23 17:01		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Total	3/3/23 11:16	3/6/23 17:01		1.015	7.08	mg/L	0.169505	0.5075	

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

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

Reported: 4/7/2023
Version: 3.5
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Gypsum - MW-3V

Location Code: WMWGORG
Collected: 2/27/23 11:55
Customer ID:
Submittal Date: 3/2/23 10:38

Laboratory ID Number: BD04578

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	3/3/23 11:16	3/6/23 17:01		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	3/3/23 11:16	3/6/23 17:01		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	3/2/23 12:15	3/2/23 16:39		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	3/2/23 12:15	3/2/23 16:39		1.015	0.00776	mg/L	0.006090	0.05075	J
* Arsenic, Dissolved	3/2/23 12:15	3/2/23 16:39		1.015	0.000152	mg/L	0.000081	0.000203	J
* Barium, Dissolved	3/2/23 12:15	3/2/23 16:39		1.015	0.0151	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	3/2/23 12:15	3/2/23 16:39		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	3/2/23 12:15	3/2/23 16:39		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	3/2/23 12:15	3/2/23 16:39		1.015	0.000237	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	3/2/23 12:15	3/2/23 16:39		1.015	0.00856	mg/L	0.000068	0.000203	
* Lead, Dissolved	3/2/23 12:15	3/2/23 16:39		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	3/2/23 12:15	3/6/23 12:06		10.15	12.5	mg/L	0.001522	0.01015	
* Molybdenum, Dissolved	3/2/23 12:15	3/2/23 16:39		1.015	0.000380	mg/L	0.000102	0.000203	
* Potassium, Dissolved	3/2/23 12:15	3/2/23 16:39		1.015	7.02	mg/L	0.169505	0.5075	
* Selenium, Dissolved	3/2/23 12:15	3/2/23 16:39		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	3/2/23 12:15	3/2/23 16:39		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ELH***								
* Mercury, Total by CVAA	3/8/23 17:33	3/8/23 22:38		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	3/3/23 11:30	3/3/23 11:30		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
* Alkalinity to pH 4.5	3/10/23 15:04	3/10/23 15:41		1	175	mg CaCO3/L			
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	3/2/23 12:50	3/3/23 13:40		1	3600	mg/L		208.3	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
* Bicarbonate Alkalinity, (calc.)	3/10/23 15:04	3/10/23 15:41		1	175	mg CaCO3/L		1	A
* Carbonate Alkalinity, (calc.)	3/10/23 15:04	3/10/23 15:41		1	Not Detected	mg CaCO3/L		0.5	A
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	3/2/23 17:41	3/2/23 17:41		1	7.62	mg/L	1.00	2	

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

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

Reported: 4/7/2023
Version: 3.5
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Gypsum - MW-3V

Location Code: WMWGORG
Collected: 2/27/23 11:55
Customer ID:
Submittal Date: 3/2/23 10:38

Laboratory ID Number: BD04578

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E		***Analyst: JCC***							
* Chloride	3/3/23 08:35	3/3/23 08:35		25	233	mg/L	12.50	25	
Analytical Method: SM4500F G 2017		***Analyst: JCC***							
* Fluoride	3/3/23 12:00	3/3/23 12:00		1	0.376	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011		***Analyst: JCC***							
* Sulfate	3/2/23 14:39	3/2/23 14:39		80	2090	mg/L	48.0	160	
Analytical Method: Field Measurements		***Analyst: TJD***							
Conductivity	2/27/23 11:51	2/27/23 11:51			3924.29	uS/cm			FA
pH	2/27/23 11:51	2/27/23 11:51			5.97	SU			FA
Temperature	2/27/23 11:51	2/27/23 11:51			21.17	C			FA
Turbidity	2/27/23 11:51	2/27/23 11:51			1.5	NTU			FA
Sulfide	2/27/23 11:51	2/27/23 11:51			0	mg/L			FA

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

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

Reported: 4/7/2023
Version: 3.5
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORG
Sample Date: 2/27/23 11:55
Customer ID:
Delivery Date: 3/2/23 10:38

Description: Gorgas Gypsum - MW-3V

Laboratory ID Number: BD04578

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04585	Aluminum, Dissolved	mg/L	-0.0000351	0.0198	0.100	7.99	7.94	0.103	0.0850 to 0.115	140	70.0 to 130	0.628	20.0
BD04585	Aluminum, Total	mg/L	0.000677	0.0198	0.100	8.69	8.69	0.105	0.0850 to 0.115	220	70.0 to 130	0.00	20.0
BD04585	Antimony, Dissolved	mg/L	0.000375	0.00100	0.100	0.0906	0.0893	0.0851	0.0850 to 0.115	90.6	70.0 to 130	1.45	20.0
BD04585	Antimony, Total	mg/L	0.000351	0.00100	0.100	0.0967	0.0962	0.0911	0.0850 to 0.115	96.7	70.0 to 130	0.518	20.0
BD04585	Arsenic, Dissolved	mg/L	-0.0000031	0.000200	0.100	0.0986	0.0980	0.0994	0.0850 to 0.115	97.8	70.0 to 130	0.610	20.0
BD04585	Arsenic, Total	mg/L	0.0000206	0.000200	0.100	0.0983	0.0992	0.100	0.0850 to 0.115	97.3	70.0 to 130	0.911	20.0
BD04585	Barium, Dissolved	mg/L	0.0000093	0.00100	0.100	0.113	0.110	0.105	0.0850 to 0.115	101	70.0 to 130	2.69	20.0
BD04585	Barium, Total	mg/L	0.0000082	0.00100	0.100	0.117	0.114	0.100	0.0850 to 0.115	105	70.0 to 130	2.60	20.0
BD04585	Beryllium, Dissolved	mg/L	0.0000272	0.000880	0.100	0.106	0.105	0.106	0.0850 to 0.115	99.5	70.0 to 130	0.948	20.0
BD04585	Beryllium, Total	mg/L	0.0000174	0.000880	0.100	0.105	0.106	0.0967	0.0850 to 0.115	98.2	70.0 to 130	0.948	20.0
BD04585	Boron, Dissolved	mg/L	-0.00419	0.0650	1.00	1.12	1.12	1.04	0.850 to 1.15	106	70.0 to 130	0.00	20.0
BD04585	Boron, Total	mg/L	-0.00441	0.0650	1.00	1.10	1.10	1.03	0.850 to 1.15	105	70.0 to 130	0.00	20.0
BD04585	Cadmium, Dissolved	mg/L	0.0000019	0.000147	0.100	0.0971	0.0956	0.0961	0.0850 to 0.115	94.9	70.0 to 130	1.56	20.0
BD04585	Cadmium, Total	mg/L	0.0000066	0.000147	0.100	0.102	0.0974	0.101	0.0850 to 0.115	99.7	70.0 to 130	4.61	20.0
BD04585	Calcium, Dissolved	mg/L	0.00993	0.152	5.00	120	137	5.12	4.25 to 5.75	60.0	70.0 to 130	13.2	20.0
BD04585	Calcium, Total	mg/L	0.00311	0.152	5.00	122	118	4.80	4.25 to 5.75	120	70.0 to 130	3.33	20.0
BD04585	Chloride	mg/L	0.0715	1.00	10.0	12.5	12.1	10.2	9.00 to 11.0	103	80.0 to 120	3.25	20.0
BD04585	Chromium, Dissolved	mg/L	0.0000039	0.000440	0.100	0.0969	0.0947	0.0978	0.0850 to 0.115	96.7	70.0 to 130	2.30	20.0
BD04585	Chromium, Total	mg/L	0.0000603	0.000440	0.100	0.101	0.101	0.103	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BD04585	Cobalt, Dissolved	mg/L	0.0000034	0.000147	0.100	0.366	0.349	0.104	0.0850 to 0.115	110	70.0 to 130	4.76	20.0
BD04585	Cobalt, Total	mg/L	0.0000044	0.000147	0.100	0.382	0.377	0.111	0.0850 to 0.115	112	70.0 to 130	1.32	20.0
BD04583	Fluoride	mg/L	0.0273	0.125	2.50	2.21	2.43	2.29	2.25 to 2.75	85.4	80.0 to 120	9.48	20.0
BD04585	Iron, Dissolved	mg/L	0.000348	0.0176	0.2	1.09	1.09	0.204	0.170 to 0.230	93.0	70.0 to 130	0.00	20.0
BD04585	Iron, Total	mg/L	0.000151	0.0176	0.2	1.75	1.76	0.202	0.170 to 0.230	100	70.0 to 130	0.570	20.0

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

Reported: 4/7/2023
Version: 3.5
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORG
Sample Date: 2/27/23 11:55
Customer ID:
Delivery Date: 3/2/23 10:38

Description: Gorgas Gypsum - MW-3V

Laboratory ID Number: BD04578

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04585	Lead, Dissolved	mg/L	0.0000062	0.000147	0.100	0.108	0.105	0.107	0.0850 to 0.115	105	70.0 to 130	2.82	20.0
BD04585	Lead, Total	mg/L	0.0000098	0.000147	0.100	0.109	0.105	0.106	0.0850 to 0.115	105	70.0 to 130	3.74	20.0
BD04585	Lithium, Dissolved	mg/L	0.000578	0.0154	0.200	0.505	0.504	0.202	0.170 to 0.230	104	70.0 to 130	0.198	20.0
BD04585	Lithium, Total	mg/L	-0.00102	0.0154	0.200	0.498	0.502	0.200	0.170 to 0.230	106	70.0 to 130	0.800	20.0
BD04585	Magnesium, Dissolved	mg/L	0.00812	0.0462	5.00	132	151	4.98	4.25 to 5.75	40.0	70.0 to 130	13.4	20.0
BD04585	Magnesium, Total	mg/L	-0.00751	0.0462	5.00	128	126	4.86	4.25 to 5.75	80.0	70.0 to 130	1.57	20.0
BD04585	Manganese, Dissolved	mg/L	0.0000177	0.00033	0.100	11.3	11.0	0.101	0.0850 to 0.115	-200	70.0 to 130	2.69	20.0
BD04585	Manganese, Total	mg/L	-0.000076	0.00033	0.100	11.6	11.8	0.105	0.0850 to 0.115	600	70.0 to 130	1.71	20.0
BD04585	Mercury, Total by CVAA	mg/L	4.000E-05	0.000500	0.004	0.00381	0.00384	0.00383	0.00340 to 0.00460	95.2	70.0 to 130	0.784	20.0
BD04585	Molybdenum, Dissolved	mg/L	0.0000157	0.0002	0.100	0.0991	0.0987	0.101	0.0850 to 0.115	99.1	70.0 to 130	0.404	20.0
BD04585	Molybdenum, Total	mg/L	0.0000078	0.0002	0.100	0.0977	0.0994	0.100	0.0850 to 0.115	97.7	70.0 to 130	1.73	20.0
BD04585	Potassium, Dissolved	mg/L	0.0155	0.367	10.0	14.8	14.5	9.82	8.50 to 11.5	100	70.0 to 130	2.05	20.0
BD04585	Potassium, Total	mg/L	0.00535	0.367	10.0	14.6	14.7	10.0	8.50 to 11.5	97.3	70.0 to 130	0.683	20.0
BD04585	Selenium, Dissolved	mg/L	0.000130	0.00100	0.100	0.101	0.102	0.101	0.0850 to 0.115	98.3	70.0 to 130	0.985	20.0
BD04585	Selenium, Total	mg/L	0.000113	0.00100	0.100	0.101	0.101	0.102	0.0850 to 0.115	98.1	70.0 to 130	0.00	20.0
BD04585	Silicon, Dissolved	mg/L	0.000284	0.0440	1.00	17.3	17.3	1.02	0.850 to 1.15	80.0	70.0 to 130	0.00	20.0
BD04585	Silicon, Total	mg/L	0.00157	0.0440	1.00	16.9	16.9	1.01	0.850 to 1.15	100	70.0 to 130	0.00	20.0
BD04585	Sodium, Dissolved	mg/L	-0.00314	0.0880	5.00	33.5	33.4	4.90	4.25 to 5.75	96.0	70.0 to 130	0.299	20.0
BD04585	Sodium, Total	mg/L	0.00121	0.0880	5.00	32.9	33.1	4.79	4.25 to 5.75	98.0	70.0 to 130	0.606	20.0
BD04585	Sulfate	mg/L	0.861	2.0	1000	1890	1800	19.9	18.0 to 22.0	107	80.0 to 120	4.88	20.0
BD04585	Thallium, Dissolved	mg/L	0.0000054	0.000147	0.100	0.100	0.101	0.105	0.0850 to 0.115	99.6	70.0 to 130	0.995	20.0
BD04585	Thallium, Total	mg/L	0.0000118	0.000147	0.100	0.102	0.0991	0.103	0.0850 to 0.115	102	70.0 to 130	2.88	20.0
BD04585	Total Organic Carbon	mg/L	0.0331	1.00	10.0	14.1	13.8	9.96		101	80.0 to 120	2.15	20.0

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

Reported: 4/7/2023
Version: 3.5
COA_CCR

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

Alabama Power

Batch QC Summary

Customer Account: WMWGORG
Sample Date: 2/27/23 11:55
Customer ID:
Delivery Date: 3/2/23 10:38

Description: Gorgas Gypsum - MW-3V

Laboratory ID Number: BD04578

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04579	Alkalinity to pH 4.5	mg CaCO3/L					144	49.9	45.0 to 55.0			0.697	10.0
BD04585	Nitrogen, Nitrate/Nitrite	mg/L as N	0.03	0.200	2.00	2.50	0.474	1.94	1.80 to 2.20	101	90.0 to 110	0.211	15.0
BD04583	Solids, Dissolved	mg/L	1.00	25.0			1240	53.0	40.0 to 60.0			0.00	10.0

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

Reported: 4/7/2023
Version: 3.5
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Gypsum - MW-3

Location Code: WMWGORG
Collected: 2/27/23 14:03
Customer ID:
Submittal Date: 3/2/23 10:38

Laboratory ID Number: BD04579

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	3/3/23 11:16	3/6/23 12:46		1.015	2.78	mg/L	0.030000	0.1015	
* Calcium, Total	3/29/23 13:16	3/30/23 09:58		101.5	516	mg/L	7.0035	40.6	RA
* Iron, Total	3/29/23 13:16	3/30/23 09:58		101.5	148	mg/L	0.8120	4.06	RA
* Lithium, Total	3/3/23 11:16	3/6/23 12:46		1.015	0.165	mg/L	0.007105	0.01999956	
* Magnesium, Total	3/29/23 13:16	3/30/23 09:58		101.5	325	mg/L	2.1315	40.6	RA
* Silica, Total (calc.)	3/3/23 11:16	3/6/23 12:46		1	21.4	mg/L			
* Silicon, Total	3/3/23 11:16	3/6/23 12:46		1.015	10.0	mg/L	0.02030	0.25375	
* Sodium, Total	3/29/23 13:16	3/30/23 09:58		101.5	209	mg/L	4.060	40.6	RA
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	3/2/23 12:15	3/6/23 10:46		1.015	2.81	mg/L	0.030000	0.1015	
* Calcium, Dissolved	3/29/23 09:49	3/30/23 09:39		101.5	522	mg/L	7.0035	40.6	RA
* Iron, Dissolved	3/29/23 09:49	3/30/23 09:39		101.5	151	mg/L	0.8120	4.06	RA
* Lithium, Dissolved	3/2/23 12:15	3/6/23 10:46		1.015	0.170	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	3/29/23 09:49	3/30/23 09:39		101.5	330	mg/L	2.1315	40.6	RA
* Silica, Dissolved (calc.)	3/2/23 12:15	3/6/23 10:46		1	21.8	mg/L			
* Silicon, Dissolved	3/2/23 12:15	3/6/23 10:46		1.015	10.2	mg/L	0.02030	0.25375	
* Sodium, Dissolved	3/29/23 09:49	3/30/23 09:39		101.5	215	mg/L	4.060	40.6	RA
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/3/23 11:16	3/6/23 17:04		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	3/3/23 11:16	3/6/23 17:04		1.015	0.158	mg/L	0.006090	0.05075	
* Arsenic, Total	3/3/23 11:16	3/6/23 17:04		1.015	0.00111	mg/L	0.000081	0.000203	
* Barium, Total	3/3/23 11:16	3/6/23 17:04		1.015	0.0138	mg/L	0.000508	0.001015	
* Beryllium, Total	3/3/23 11:16	3/6/23 17:04		1.015	0.00191	mg/L	0.000406	0.001015	
* Cadmium, Total	3/3/23 11:16	3/6/23 17:04		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	3/3/23 11:16	3/6/23 17:04		1.015	0.000370	mg/L	0.000203	0.001015	J
* Cobalt, Total	3/3/23 11:16	3/6/23 17:04		1.015	0.285	mg/L	0.000068	0.000203	
* Lead, Total	3/3/23 11:16	3/6/23 17:04		1.015	0.000132	mg/L	0.000068	0.000203	J
* Manganese, Total	3/3/23 11:16	3/6/23 19:33		92.365	56.6	mg/L	0.013855	0.092365	
* Molybdenum, Total	3/3/23 11:16	3/6/23 17:04		1.015	0.000191	mg/L	0.000102	0.000203	J
* Potassium, Total	3/3/23 11:16	3/6/23 17:04		1.015	8.18	mg/L	0.169505	0.5075	

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

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

Reported: 4/7/2023
Version: 3.5
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Gypsum - MW-3

Location Code: WMWGORG
Collected: 2/27/23 14:03
Customer ID:
Submittal Date: 3/2/23 10:38

Laboratory ID Number: BD04579

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	3/3/23 11:16	3/6/23 17:04		1.015	0.00152	mg/L	0.000508	0.001015	
* Thallium, Total	3/3/23 11:16	3/6/23 17:04		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	3/2/23 12:15	3/2/23 16:43		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	3/2/23 12:15	3/2/23 16:43		1.015	0.0642	mg/L	0.006090	0.05075	
* Arsenic, Dissolved	3/2/23 12:15	3/2/23 16:43		1.015	0.00106	mg/L	0.000081	0.000203	
* Barium, Dissolved	3/2/23 12:15	3/2/23 16:43		1.015	0.0130	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	3/2/23 12:15	3/2/23 16:43		1.015	0.00158	mg/L	0.000406	0.001015	
* Cadmium, Dissolved	3/2/23 12:15	3/2/23 16:43		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	3/2/23 12:15	3/2/23 16:43		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	3/2/23 12:15	3/2/23 16:43		1.015	0.260	mg/L	0.000068	0.000203	
* Lead, Dissolved	3/2/23 12:15	3/2/23 16:43		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	3/2/23 12:15	3/6/23 12:10		92.365	56.4	mg/L	0.013855	0.092365	
* Molybdenum, Dissolved	3/2/23 12:15	3/2/23 16:43		1.015	0.000360	mg/L	0.000102	0.000203	
* Potassium, Dissolved	3/2/23 12:15	3/2/23 16:43		1.015	8.20	mg/L	0.169505	0.5075	
* Selenium, Dissolved	3/2/23 12:15	3/2/23 16:43		1.015	0.00140	mg/L	0.000508	0.001015	
* Thallium, Dissolved	3/2/23 12:15	3/2/23 16:43		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ELH***								
* Mercury, Total by CVAA	3/8/23 17:33	3/8/23 22:42		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	3/3/23 11:32	3/3/23 11:32		1	0.305	mg/L as N	0.20	0.3	
Analytical Method: SM 2320 B	***Analyst: ALH***								
* Alkalinity to pH 4.5	3/10/23 15:04	3/10/23 15:41		1	143	mg CaCO3/L			
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	3/2/23 12:50	3/3/23 13:40		1	5000	mg/L		312.5	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
* Bicarbonate Alkalinity, (calc.)	3/10/23 15:04	3/10/23 15:41		1	143	mg CaCO3/L		1	A
* Carbonate Alkalinity, (calc.)	3/10/23 15:04	3/10/23 15:41		1	Not Detected	mg CaCO3/L		0.5	A
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	3/2/23 17:57	3/2/23 17:57		1	8.02	mg/L	1.00	2	

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

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

Reported: 4/7/2023
Version: 3.5
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Gypsum - MW-3

Location Code: WMWGORG
Collected: 2/27/23 14:03
Customer ID:
Submittal Date: 3/2/23 10:38

Laboratory ID Number: BD04579

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E		***Analyst: JCC***							
* Chloride	3/3/23 08:36	3/3/23 08:36		25	254	mg/L	12.50	25	
Analytical Method: SM4500F G 2017		***Analyst: JCC***							
* Fluoride	3/3/23 12:01	3/3/23 12:01		1	0.292	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011		***Analyst: JCC***							
* Sulfate	3/2/23 14:41	3/2/23 14:41		100	2770	mg/L	60.0	200	
Analytical Method: Field Measurements		***Analyst: TJD***							
Conductivity	2/27/23 13:58	2/27/23 13:58			4869.04	uS/cm			FA
pH	2/27/23 13:58	2/27/23 13:58			5.83	SU			FA
Temperature	2/27/23 13:58	2/27/23 13:58			21.11	C			FA
Turbidity	2/27/23 13:58	2/27/23 13:58			5.67	NTU			FA
Sulfide	2/27/23 13:58	2/27/23 13:58			0	mg/L			FA

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

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

Reported: 4/7/2023
Version: 3.5
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORG
Sample Date: 2/27/23 14:03
Customer ID:
Delivery Date: 3/2/23 10:38

Description: Gorgas Gypsum - MW-3

Laboratory ID Number: BD04579

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04585	Aluminum, Dissolved	mg/L	-0.0000351	0.0198	0.100	7.99	7.94	0.103	0.0850 to 0.115	140	70.0 to 130	0.628	20.0
BD04585	Aluminum, Total	mg/L	0.000677	0.0198	0.100	8.69	8.69	0.105	0.0850 to 0.115	220	70.0 to 130	0.00	20.0
BD04585	Antimony, Dissolved	mg/L	0.000375	0.00100	0.100	0.0906	0.0893	0.0851	0.0850 to 0.115	90.6	70.0 to 130	1.45	20.0
BD04585	Antimony, Total	mg/L	0.000351	0.00100	0.100	0.0967	0.0962	0.0911	0.0850 to 0.115	96.7	70.0 to 130	0.518	20.0
BD04585	Arsenic, Dissolved	mg/L	-0.0000031	0.000200	0.100	0.0986	0.0980	0.0994	0.0850 to 0.115	97.8	70.0 to 130	0.610	20.0
BD04585	Arsenic, Total	mg/L	0.0000206	0.000200	0.100	0.0983	0.0992	0.100	0.0850 to 0.115	97.3	70.0 to 130	0.911	20.0
BD04585	Barium, Dissolved	mg/L	0.0000093	0.00100	0.100	0.113	0.110	0.105	0.0850 to 0.115	101	70.0 to 130	2.69	20.0
BD04585	Barium, Total	mg/L	0.0000082	0.00100	0.100	0.117	0.114	0.100	0.0850 to 0.115	105	70.0 to 130	2.60	20.0
BD04585	Beryllium, Dissolved	mg/L	0.0000272	0.000880	0.100	0.106	0.105	0.106	0.0850 to 0.115	99.5	70.0 to 130	0.948	20.0
BD04585	Beryllium, Total	mg/L	0.0000174	0.000880	0.100	0.105	0.106	0.0967	0.0850 to 0.115	98.2	70.0 to 130	0.948	20.0
BD04585	Boron, Dissolved	mg/L	-0.00419	0.0650	1.00	1.12	1.12	1.04	0.850 to 1.15	106	70.0 to 130	0.00	20.0
BD04585	Boron, Total	mg/L	-0.00441	0.0650	1.00	1.10	1.10	1.03	0.850 to 1.15	105	70.0 to 130	0.00	20.0
BD04585	Cadmium, Dissolved	mg/L	0.0000019	0.000147	0.100	0.0971	0.0956	0.0961	0.0850 to 0.115	94.9	70.0 to 130	1.56	20.0
BD04585	Cadmium, Total	mg/L	0.0000066	0.000147	0.100	0.102	0.0974	0.101	0.0850 to 0.115	99.7	70.0 to 130	4.61	20.0
BD04579	Calcium, Dissolved	mg/L	-0.00418	0.152	5.00	528	553	4.98	4.25 to 5.75	120	70.0 to 130	4.63	20.0
BD04579	Calcium, Total	mg/L	-0.000555	0.152	5.00	508	521	4.81	4.25 to 5.75	-160	70.0 to 130	2.53	20.0
BD04585	Chloride	mg/L	0.0715	1.00	10.0	12.5	12.1	10.2	9.00 to 11.0	103	80.0 to 120	3.25	20.0
BD04585	Chromium, Dissolved	mg/L	0.0000039	0.000440	0.100	0.0969	0.0947	0.0978	0.0850 to 0.115	96.7	70.0 to 130	2.30	20.0
BD04585	Chromium, Total	mg/L	0.0000603	0.000440	0.100	0.101	0.101	0.103	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BD04585	Cobalt, Dissolved	mg/L	0.0000034	0.000147	0.100	0.366	0.349	0.104	0.0850 to 0.115	110	70.0 to 130	4.76	20.0
BD04585	Cobalt, Total	mg/L	0.0000044	0.000147	0.100	0.382	0.377	0.111	0.0850 to 0.115	112	70.0 to 130	1.32	20.0
BD04583	Fluoride	mg/L	0.0273	0.125	2.50	2.21	2.43	2.29	2.25 to 2.75	85.4	80.0 to 120	9.48	20.0
BD04579	Iron, Dissolved	mg/L	-0.00281	0.0176	0.2	155	158	0.193	0.170 to 0.230	2000	70.0 to 130	1.92	20.0
BD04579	Iron, Total	mg/L	-0.00213	0.0176	0.2	148	146	0.192	0.170 to 0.230	0.00	70.0 to 130	1.36	20.0

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

Reported: 4/7/2023
Version: 3.5
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORG
Sample Date: 2/27/23 14:03
Customer ID:
Delivery Date: 3/2/23 10:38

Description: Gorgas Gypsum - MW-3

Laboratory ID Number: BD04579

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04585	Lead, Dissolved	mg/L	0.0000062	0.000147	0.100	0.108	0.105	0.107	0.0850 to 0.115	105	70.0 to 130	2.82	20.0
BD04585	Lead, Total	mg/L	0.0000098	0.000147	0.100	0.109	0.105	0.106	0.0850 to 0.115	105	70.0 to 130	3.74	20.0
BD04585	Lithium, Dissolved	mg/L	0.000578	0.0154	0.200	0.505	0.504	0.202	0.170 to 0.230	104	70.0 to 130	0.198	20.0
BD04585	Lithium, Total	mg/L	-0.00102	0.0154	0.200	0.498	0.502	0.200	0.170 to 0.230	106	70.0 to 130	0.800	20.0
BD04579	Magnesium, Dissolved	mg/L	0.0109	0.0462	5.00	337	354	4.82	4.25 to 5.75	140	70.0 to 130	4.92	20.0
BD04579	Magnesium, Total	mg/L	0.00390	0.0462	5.00	321	332	4.75	4.25 to 5.75	-80.0	70.0 to 130	3.37	20.0
BD04585	Manganese, Dissolved	mg/L	0.0000177	0.00033	0.100	11.3	11.0	0.101	0.0850 to 0.115	-200	70.0 to 130	2.69	20.0
BD04585	Manganese, Total	mg/L	-0.000076	0.00033	0.100	11.6	11.8	0.105	0.0850 to 0.115	600	70.0 to 130	1.71	20.0
BD04585	Mercury, Total by CVAA	mg/L	4.000E-05	0.000500	0.004	0.00381	0.00384	0.00383	0.00340 to 0.00460	95.2	70.0 to 130	0.784	20.0
BD04585	Molybdenum, Dissolved	mg/L	0.0000157	0.0002	0.100	0.0991	0.0987	0.101	0.0850 to 0.115	99.1	70.0 to 130	0.404	20.0
BD04585	Molybdenum, Total	mg/L	0.0000078	0.0002	0.100	0.0977	0.0994	0.100	0.0850 to 0.115	97.7	70.0 to 130	1.73	20.0
BD04585	Potassium, Dissolved	mg/L	0.0155	0.367	10.0	14.8	14.5	9.82	8.50 to 11.5	100	70.0 to 130	2.05	20.0
BD04585	Potassium, Total	mg/L	0.00535	0.367	10.0	14.6	14.7	10.0	8.50 to 11.5	97.3	70.0 to 130	0.683	20.0
BD04585	Selenium, Dissolved	mg/L	0.000130	0.00100	0.100	0.101	0.102	0.101	0.0850 to 0.115	98.3	70.0 to 130	0.985	20.0
BD04585	Selenium, Total	mg/L	0.000113	0.00100	0.100	0.101	0.101	0.102	0.0850 to 0.115	98.1	70.0 to 130	0.00	20.0
BD04585	Silicon, Dissolved	mg/L	0.000284	0.0440	1.00	17.3	17.3	1.02	0.850 to 1.15	80.0	70.0 to 130	0.00	20.0
BD04585	Silicon, Total	mg/L	0.00157	0.0440	1.00	16.9	16.9	1.01	0.850 to 1.15	100	70.0 to 130	0.00	20.0
BD04579	Sodium, Dissolved	mg/L	0.00963	0.0880	5.00	222	232	4.74	4.25 to 5.75	140	70.0 to 130	4.41	20.0
BD04579	Sodium, Total	mg/L	0.000368	0.0880	5.00	209	216	4.74	4.25 to 5.75	0.00	70.0 to 130	3.29	20.0
BD04585	Sulfate	mg/L	0.861	2.0	1000	1890	1800	19.9	18.0 to 22.0	107	80.0 to 120	4.88	20.0
BD04585	Thallium, Dissolved	mg/L	0.0000054	0.000147	0.100	0.100	0.101	0.105	0.0850 to 0.115	99.6	70.0 to 130	0.995	20.0
BD04585	Thallium, Total	mg/L	0.0000118	0.000147	0.100	0.102	0.0991	0.103	0.0850 to 0.115	102	70.0 to 130	2.88	20.0
BD04585	Total Organic Carbon	mg/L	0.0331	1.00	10.0	14.1	13.8	9.96		101	80.0 to 120	2.15	20.0

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

Reported: 4/7/2023
Version: 3.5
COA_CCR

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

Alabama Power

Batch QC Summary

Customer Account: WMWGORG
Sample Date: 2/27/23 14:03
Customer ID:
Delivery Date: 3/2/23 10:38

Description: Gorgas Gypsum - MW-3

Laboratory ID Number: BD04579

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04579	Alkalinity to pH 4.5	mg CaCO3/L					144	49.9	45.0 to 55.0			0.697	10.0
BD04585	Nitrogen, Nitrate/Nitrite	mg/L as N	0.03	0.200	2.00	2.50	0.474	1.94	1.80 to 2.20	101	90.0 to 110	0.211	15.0
BD04583	Solids, Dissolved	mg/L	1.00	25.0			1240	53.0	40.0 to 60.0			0.00	10.0

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

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Gypsum - MW-9V

Location Code: WMWGORG
Collected: 2/28/23 10:45
Customer ID:
Submittal Date: 3/2/23 10:38

Laboratory ID Number: BD04580

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	3/3/23 11:16	3/6/23 12:49		1.015	0.104	mg/L	0.030000	0.1015	
* Calcium, Total	3/3/23 11:16	3/7/23 14:11		101.5	347	mg/L	7.0035	40.6	
* Iron, Total	3/3/23 11:16	3/6/23 12:49		1.015	0.922	mg/L	0.008120	0.0406	
* Lithium, Total	3/3/23 11:16	3/6/23 12:49		1.015	0.331	mg/L	0.007105	0.01999956	
* Magnesium, Total	3/3/23 11:16	3/7/23 10:47		10.15	156	mg/L	0.21315	4.06	
* Silica, Total (calc.)	3/3/23 11:16	3/6/23 12:49		1	29.1	mg/L			
* Silicon, Total	3/3/23 11:16	3/6/23 12:49		1.015	13.6	mg/L	0.02030	0.25375	
* Sodium, Total	3/3/23 11:16	3/7/23 10:47		10.15	285	mg/L	0.3045	4.06	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	3/2/23 12:15	3/6/23 10:49		1.015	0.105	mg/L	0.030000	0.1015	
* Calcium, Dissolved	3/2/23 12:15	3/6/23 14:49		101.5	406	mg/L	7.0035	40.6	
* Iron, Dissolved	3/2/23 12:15	3/6/23 10:49		1.015	0.887	mg/L	0.008120	0.0406	
* Lithium, Dissolved	3/2/23 12:15	3/6/23 10:49		1.015	0.332	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	3/2/23 12:15	3/6/23 14:49		101.5	168	mg/L	2.1315	40.6	
* Silica, Dissolved (calc.)	3/2/23 12:15	3/6/23 10:49		1	29.3	mg/L			
* Silicon, Dissolved	3/2/23 12:15	3/6/23 10:49		1.015	13.7	mg/L	0.02030	0.25375	
* Sodium, Dissolved	3/2/23 12:15	3/6/23 14:49		101.5	291	mg/L	3.045	40.6	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/3/23 11:16	3/6/23 17:08		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	3/3/23 11:16	3/6/23 17:08		1.015	Not Detected	mg/L	0.006090	0.05075	U
* Arsenic, Total	3/3/23 11:16	3/6/23 17:08		1.015	0.000762	mg/L	0.000081	0.000203	
* Barium, Total	3/3/23 11:16	3/6/23 17:08		1.015	0.0122	mg/L	0.000508	0.001015	
* Beryllium, Total	3/3/23 11:16	3/6/23 17:08		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	3/3/23 11:16	3/6/23 17:08		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	3/3/23 11:16	3/6/23 17:08		1.015	0.000269	mg/L	0.000203	0.001015	J
* Cobalt, Total	3/3/23 11:16	3/6/23 17:08		1.015	0.000403	mg/L	0.000068	0.000203	
* Lead, Total	3/3/23 11:16	3/6/23 17:08		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	3/3/23 11:16	3/9/23 10:50		5.075	1.31	mg/L	0.000761	0.005075	
* Molybdenum, Total	3/3/23 11:16	3/6/23 17:08		1.015	0.000467	mg/L	0.000102	0.000203	
* Potassium, Total	3/3/23 11:16	3/6/23 17:08		1.015	7.37	mg/L	0.169505	0.5075	

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

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

Reported: 4/7/2023
Version: 3.5
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Gypsum - MW-9V

Location Code: WMWGORG
Collected: 2/28/23 10:45
Customer ID:
Submittal Date: 3/2/23 10:38

Laboratory ID Number: BD04580

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	3/3/23 11:16	3/6/23 17:08		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	3/3/23 11:16	3/6/23 17:08		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	3/2/23 12:15	3/2/23 16:46		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	3/2/23 12:15	3/2/23 16:46		1.015	Not Detected	mg/L	0.006090	0.05075	U
* Arsenic, Dissolved	3/2/23 12:15	3/2/23 16:46		1.015	0.000693	mg/L	0.000081	0.000203	
* Barium, Dissolved	3/2/23 12:15	3/2/23 16:46		1.015	0.0119	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	3/2/23 12:15	3/2/23 16:46		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	3/2/23 12:15	3/2/23 16:46		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	3/2/23 12:15	3/2/23 16:46		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	3/2/23 12:15	3/2/23 16:46		1.015	0.000331	mg/L	0.000068	0.000203	
* Lead, Dissolved	3/2/23 12:15	3/2/23 16:46		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	3/2/23 12:15	3/2/23 16:46		1.015	1.26	mg/L	0.000152	0.001015	
* Molybdenum, Dissolved	3/2/23 12:15	3/2/23 16:46		1.015	0.000814	mg/L	0.000102	0.000203	
* Potassium, Dissolved	3/2/23 12:15	3/2/23 16:46		1.015	7.29	mg/L	0.169505	0.5075	
* Selenium, Dissolved	3/2/23 12:15	3/2/23 16:46		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	3/2/23 12:15	3/2/23 16:46		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ELH***								
* Mercury, Total by CVAA	3/8/23 17:33	3/8/23 22:46		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	3/3/23 11:34	3/3/23 11:34		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
* Alkalinity to pH 4.5	3/13/23 13:37	3/13/23 15:58		1	320	mg CaCO3/L			
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	3/2/23 12:50	3/3/23 13:40		1	3030	mg/L		178.6	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
* Bicarbonate Alkalinity, (calc.)	3/13/23 13:37	3/13/23 15:58		1	318	mg CaCO3/L		1	A
* Carbonate Alkalinity, (calc.)	3/13/23 13:37	3/13/23 15:58		1	1.61	mg CaCO3/L		0.5	A
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	3/2/23 18:10	3/2/23 18:10		1	5.77	mg/L	1.00	2	

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

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

Reported: 4/7/2023
Version: 3.5
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Gypsum - MW-9V

Location Code: WMWGORG
Collected: 2/28/23 10:45
Customer ID:
Submittal Date: 3/2/23 10:38

Laboratory ID Number: BD04580

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E		***Analyst: JCC***							
* Chloride	3/3/23 08:37	3/3/23 08:37		4	52.4	mg/L	2.00	4	
Analytical Method: SM4500F G 2017		***Analyst: JCC***							
* Fluoride	3/3/23 12:03	3/3/23 12:03		1	0.156	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011		***Analyst: JCC***							
* Sulfate	3/2/23 14:42	3/2/23 14:42		80	1770	mg/L	48.0	160	
Analytical Method: Field Measurements		***Analyst: TJD***							
Conductivity	2/28/23 10:42	2/28/23 10:42			3315.99	uS/cm			FA
pH	2/28/23 10:42	2/28/23 10:42			6.89	SU			FA
Temperature	2/28/23 10:42	2/28/23 10:42			21.73	C			FA
Turbidity	2/28/23 10:42	2/28/23 10:42			0.75	NTU			FA
Sulfide	2/28/23 10:42	2/28/23 10:42			0	mg/L			FA

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

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

Reported: 4/7/2023
Version: 3.5
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORG
Sample Date: 2/28/23 10:45
Customer ID:
Delivery Date: 3/2/23 10:38

Description: Gorgas Gypsum - MW-9V

Laboratory ID Number: BD04580

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04585	Aluminum, Dissolved	mg/L	-0.0000351	0.0198	0.100	7.99	7.94	0.103	0.0850 to 0.115	140	70.0 to 130	0.628	20.0
BD04585	Aluminum, Total	mg/L	0.000677	0.0198	0.100	8.69	8.69	0.105	0.0850 to 0.115	220	70.0 to 130	0.00	20.0
BD04585	Antimony, Dissolved	mg/L	0.000375	0.00100	0.100	0.0906	0.0893	0.0851	0.0850 to 0.115	90.6	70.0 to 130	1.45	20.0
BD04585	Antimony, Total	mg/L	0.000351	0.00100	0.100	0.0967	0.0962	0.0911	0.0850 to 0.115	96.7	70.0 to 130	0.518	20.0
BD04585	Arsenic, Dissolved	mg/L	-0.0000031	0.000200	0.100	0.0986	0.0980	0.0994	0.0850 to 0.115	97.8	70.0 to 130	0.610	20.0
BD04585	Arsenic, Total	mg/L	0.0000206	0.000200	0.100	0.0983	0.0992	0.100	0.0850 to 0.115	97.3	70.0 to 130	0.911	20.0
BD04585	Barium, Dissolved	mg/L	0.0000093	0.00100	0.100	0.113	0.110	0.105	0.0850 to 0.115	101	70.0 to 130	2.69	20.0
BD04585	Barium, Total	mg/L	0.0000082	0.00100	0.100	0.117	0.114	0.100	0.0850 to 0.115	105	70.0 to 130	2.60	20.0
BD04585	Beryllium, Dissolved	mg/L	0.0000272	0.000880	0.100	0.106	0.105	0.106	0.0850 to 0.115	99.5	70.0 to 130	0.948	20.0
BD04585	Beryllium, Total	mg/L	0.0000174	0.000880	0.100	0.105	0.106	0.0967	0.0850 to 0.115	98.2	70.0 to 130	0.948	20.0
BD04585	Boron, Dissolved	mg/L	-0.00419	0.0650	1.00	1.12	1.12	1.04	0.850 to 1.15	106	70.0 to 130	0.00	20.0
BD04585	Boron, Total	mg/L	-0.00441	0.0650	1.00	1.10	1.10	1.03	0.850 to 1.15	105	70.0 to 130	0.00	20.0
BD04585	Cadmium, Dissolved	mg/L	0.0000019	0.000147	0.100	0.0971	0.0956	0.0961	0.0850 to 0.115	94.9	70.0 to 130	1.56	20.0
BD04585	Cadmium, Total	mg/L	0.0000066	0.000147	0.100	0.102	0.0974	0.101	0.0850 to 0.115	99.7	70.0 to 130	4.61	20.0
BD04585	Calcium, Dissolved	mg/L	0.00993	0.152	5.00	120	137	5.12	4.25 to 5.75	60.0	70.0 to 130	13.2	20.0
BD04585	Calcium, Total	mg/L	0.00311	0.152	5.00	122	118	4.80	4.25 to 5.75	120	70.0 to 130	3.33	20.0
BD04585	Chloride	mg/L	0.0715	1.00	10.0	12.5	12.1	10.2	9.00 to 11.0	103	80.0 to 120	3.25	20.0
BD04585	Chromium, Dissolved	mg/L	0.0000039	0.000440	0.100	0.0969	0.0947	0.0978	0.0850 to 0.115	96.7	70.0 to 130	2.30	20.0
BD04585	Chromium, Total	mg/L	0.0000603	0.000440	0.100	0.101	0.101	0.103	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BD04585	Cobalt, Dissolved	mg/L	0.0000034	0.000147	0.100	0.366	0.349	0.104	0.0850 to 0.115	110	70.0 to 130	4.76	20.0
BD04585	Cobalt, Total	mg/L	0.0000044	0.000147	0.100	0.382	0.377	0.111	0.0850 to 0.115	112	70.0 to 130	1.32	20.0
BD04583	Fluoride	mg/L	0.0273	0.125	2.50	2.21	2.43	2.29	2.25 to 2.75	85.4	80.0 to 120	9.48	20.0
BD04585	Iron, Dissolved	mg/L	0.000348	0.0176	0.2	1.09	1.09	0.204	0.170 to 0.230	93.0	70.0 to 130	0.00	20.0
BD04585	Iron, Total	mg/L	0.000151	0.0176	0.2	1.75	1.76	0.202	0.170 to 0.230	100	70.0 to 130	0.570	20.0

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

Reported: 4/7/2023
Version: 3.5
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORG
Sample Date: 2/28/23 10:45
Customer ID:
Delivery Date: 3/2/23 10:38

Description: Gorgas Gypsum - MW-9V

Laboratory ID Number: BD04580

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04585	Lead, Dissolved	mg/L	0.0000062	0.000147	0.100	0.108	0.105	0.107	0.0850 to 0.115	105	70.0 to 130	2.82	20.0
BD04585	Lead, Total	mg/L	0.0000098	0.000147	0.100	0.109	0.105	0.106	0.0850 to 0.115	105	70.0 to 130	3.74	20.0
BD04585	Lithium, Dissolved	mg/L	0.000578	0.0154	0.200	0.505	0.504	0.202	0.170 to 0.230	104	70.0 to 130	0.198	20.0
BD04585	Lithium, Total	mg/L	-0.00102	0.0154	0.200	0.498	0.502	0.200	0.170 to 0.230	106	70.0 to 130	0.800	20.0
BD04585	Magnesium, Dissolved	mg/L	0.00812	0.0462	5.00	132	151	4.98	4.25 to 5.75	40.0	70.0 to 130	13.4	20.0
BD04585	Magnesium, Total	mg/L	-0.00751	0.0462	5.00	128	126	4.86	4.25 to 5.75	80.0	70.0 to 130	1.57	20.0
BD04585	Manganese, Dissolved	mg/L	0.0000177	0.00033	0.100	11.3	11.0	0.101	0.0850 to 0.115	-200	70.0 to 130	2.69	20.0
BD04585	Manganese, Total	mg/L	-0.000076	0.00033	0.100	11.6	11.8	0.105	0.0850 to 0.115	600	70.0 to 130	1.71	20.0
BD04585	Mercury, Total by CVAA	mg/L	4.000E-05	0.000500	0.004	0.00381	0.00384	0.00383	0.00340 to 0.00460	95.2	70.0 to 130	0.784	20.0
BD04585	Molybdenum, Dissolved	mg/L	0.0000157	0.0002	0.100	0.0991	0.0987	0.101	0.0850 to 0.115	99.1	70.0 to 130	0.404	20.0
BD04585	Molybdenum, Total	mg/L	0.0000078	0.0002	0.100	0.0977	0.0994	0.100	0.0850 to 0.115	97.7	70.0 to 130	1.73	20.0
BD04585	Potassium, Dissolved	mg/L	0.0155	0.367	10.0	14.8	14.5	9.82	8.50 to 11.5	100	70.0 to 130	2.05	20.0
BD04585	Potassium, Total	mg/L	0.00535	0.367	10.0	14.6	14.7	10.0	8.50 to 11.5	97.3	70.0 to 130	0.683	20.0
BD04585	Selenium, Dissolved	mg/L	0.000130	0.00100	0.100	0.101	0.102	0.101	0.0850 to 0.115	98.3	70.0 to 130	0.985	20.0
BD04585	Selenium, Total	mg/L	0.000113	0.00100	0.100	0.101	0.101	0.102	0.0850 to 0.115	98.1	70.0 to 130	0.00	20.0
BD04585	Silicon, Dissolved	mg/L	0.000284	0.0440	1.00	17.3	17.3	1.02	0.850 to 1.15	80.0	70.0 to 130	0.00	20.0
BD04585	Silicon, Total	mg/L	0.00157	0.0440	1.00	16.9	16.9	1.01	0.850 to 1.15	100	70.0 to 130	0.00	20.0
BD04585	Sodium, Dissolved	mg/L	-0.00314	0.0880	5.00	33.5	33.4	4.90	4.25 to 5.75	96.0	70.0 to 130	0.299	20.0
BD04585	Sodium, Total	mg/L	0.00121	0.0880	5.00	32.9	33.1	4.79	4.25 to 5.75	98.0	70.0 to 130	0.606	20.0
BD04585	Sulfate	mg/L	0.861	2.0	1000	1890	1800	19.9	18.0 to 22.0	107	80.0 to 120	4.88	20.0
BD04585	Thallium, Dissolved	mg/L	0.0000054	0.000147	0.100	0.100	0.101	0.105	0.0850 to 0.115	99.6	70.0 to 130	0.995	20.0
BD04585	Thallium, Total	mg/L	0.0000118	0.000147	0.100	0.102	0.0991	0.103	0.0850 to 0.115	102	70.0 to 130	2.88	20.0
BD04585	Total Organic Carbon	mg/L	0.0331	1.00	10.0	14.1	13.8	9.96		101	80.0 to 120	2.15	20.0

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

Reported: 4/7/2023
Version: 3.5
COA_CCR

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

Alabama Power

Batch QC Summary

Customer Account: WMWGORG
Sample Date: 2/28/23 10:45
Customer ID:
Delivery Date: 3/2/23 10:38

Description: Gorgas Gypsum - MW-9V

Laboratory ID Number: BD04580

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04589	Alkalinity to pH 4.5	mg CaCO3/L					42.2	50.3	45.0 to 55.0			1.18	10.0
BD04585	Nitrogen, Nitrate/Nitrite	mg/L as N	0.03	0.200	2.00	2.50	0.474	1.94	1.80 to 2.20	101	90.0 to 110	0.211	15.0
BD04583	Solids, Dissolved	mg/L	1.00	25.0			1240	53.0	40.0 to 60.0			0.00	10.0

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

Reported: 4/7/2023
Version: 3.5
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Gypsum - MW-9H

Location Code: WMWGORG
Collected: 2/28/23 12:15
Customer ID:
Submittal Date: 3/2/23 10:38

Laboratory ID Number: BD04581

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	3/3/23 11:16	3/6/23 12:52		1.015	4.79	mg/L	0.030000	0.1015	
* Calcium, Total	3/3/23 11:16	3/7/23 10:50		10.15	291	mg/L	0.70035	4.06	
* Iron, Total	3/3/23 11:16	3/7/23 10:50		10.15	15.1	mg/L	0.08120	0.406	
* Lithium, Total	3/3/23 11:16	3/6/23 12:52		1.015	0.111	mg/L	0.007105	0.01999956	
* Magnesium, Total	3/3/23 11:16	3/7/23 10:50		10.15	192	mg/L	0.21315	4.06	
* Silica, Total (calc.)	3/3/23 11:16	3/6/23 12:52		1	19.9	mg/L			
* Silicon, Total	3/3/23 11:16	3/6/23 12:52		1.015	9.31	mg/L	0.02030	0.25375	
* Sodium, Total	3/3/23 11:16	3/7/23 10:50		10.15	118	mg/L	0.3045	4.06	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	3/2/23 12:15	3/6/23 10:52		1.015	4.91	mg/L	0.030000	0.1015	
* Calcium, Dissolved	3/2/23 12:15	3/6/23 14:53		10.15	319	mg/L	0.70035	4.06	
* Iron, Dissolved	3/2/23 12:15	3/6/23 14:53		10.15	16.0	mg/L	0.08120	0.406	
* Lithium, Dissolved	3/2/23 12:15	3/6/23 10:52		1.015	0.113	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	3/2/23 12:15	3/6/23 14:53		10.15	215	mg/L	0.21315	4.06	
* Silica, Dissolved (calc.)	3/2/23 12:15	3/6/23 10:52		1	20.3	mg/L			
* Silicon, Dissolved	3/2/23 12:15	3/6/23 10:52		1.015	9.49	mg/L	0.02030	0.25375	
* Sodium, Dissolved	3/2/23 12:15	3/6/23 14:53		10.15	125	mg/L	0.3045	4.06	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/3/23 11:16	3/6/23 17:11		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	3/3/23 11:16	3/6/23 17:11		1.015	0.155	mg/L	0.006090	0.05075	
* Arsenic, Total	3/3/23 11:16	3/6/23 17:11		1.015	0.000633	mg/L	0.000081	0.000203	
* Barium, Total	3/3/23 11:16	3/6/23 17:11		1.015	0.0131	mg/L	0.000508	0.001015	
* Beryllium, Total	3/3/23 11:16	3/6/23 17:11		1.015	0.000563	mg/L	0.000406	0.001015	J
* Cadmium, Total	3/3/23 11:16	3/6/23 17:11		1.015	0.000298	mg/L	0.000068	0.000203	
* Chromium, Total	3/3/23 11:16	3/6/23 17:11		1.015	0.000273	mg/L	0.000203	0.001015	J
* Cobalt, Total	3/3/23 11:16	3/6/23 17:11		1.015	0.147	mg/L	0.000068	0.000203	
* Lead, Total	3/3/23 11:16	3/6/23 17:11		1.015	0.0000772	mg/L	0.000068	0.000203	J
* Manganese, Total	3/3/23 11:16	3/6/23 19:37		92.365	19.8	mg/L	0.013855	0.092365	
* Molybdenum, Total	3/3/23 11:16	3/6/23 17:11		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Total	3/3/23 11:16	3/6/23 17:11		1.015	7.71	mg/L	0.169505	0.5075	

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

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

Reported: 4/7/2023
Version: 3.5
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Gypsum - MW-9H

Location Code: WMWGORG
Collected: 2/28/23 12:15
Customer ID:
Submittal Date: 3/2/23 10:38

Laboratory ID Number: BD04581

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	3/3/23 11:16	3/6/23 17:11		1.015	0.000886	mg/L	0.000508	0.001015	J
* Thallium, Total	3/3/23 11:16	3/6/23 17:11		1.015	0.000234	mg/L	0.000068	0.000203	
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	3/2/23 12:15	3/2/23 16:50		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	3/2/23 12:15	3/2/23 16:50		1.015	0.147	mg/L	0.006090	0.05075	
* Arsenic, Dissolved	3/2/23 12:15	3/2/23 16:50		1.015	0.000520	mg/L	0.000081	0.000203	
* Barium, Dissolved	3/2/23 12:15	3/2/23 16:50		1.015	0.0127	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	3/2/23 12:15	3/2/23 16:50		1.015	0.000576	mg/L	0.000406	0.001015	J
* Cadmium, Dissolved	3/2/23 12:15	3/2/23 16:50		1.015	0.000303	mg/L	0.000068	0.000203	
* Chromium, Dissolved	3/2/23 12:15	3/2/23 16:50		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	3/2/23 12:15	3/2/23 16:50		1.015	0.138	mg/L	0.000068	0.000203	
* Lead, Dissolved	3/2/23 12:15	3/2/23 16:50		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	3/2/23 12:15	3/6/23 12:13		92.365	19.4	mg/L	0.013855	0.092365	
* Molybdenum, Dissolved	3/2/23 12:15	3/2/23 16:50		1.015	0.000205	mg/L	0.000102	0.000203	
* Potassium, Dissolved	3/2/23 12:15	3/2/23 16:50		1.015	7.48	mg/L	0.169505	0.5075	
* Selenium, Dissolved	3/2/23 12:15	3/2/23 16:50		1.015	0.000775	mg/L	0.000508	0.001015	J
* Thallium, Dissolved	3/2/23 12:15	3/2/23 16:50		1.015	0.000205	mg/L	0.000068	0.000203	
Analytical Method: EPA 245.1	***Analyst: ELH***								
* Mercury, Total by CVAA	3/8/23 17:33	3/8/23 22:50		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	3/3/23 11:36	3/3/23 11:36		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
* Alkalinity to pH 4.5	3/13/23 13:37	3/13/23 15:58		1	49.9	mg CaCO3/L			
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	3/2/23 12:50	3/3/23 13:40		1	2650	mg/L		147.1	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
* Bicarbonate Alkalinity, (calc.)	3/13/23 13:37	3/13/23 15:58		1	49.9	mg CaCO3/L		1	A
* Carbonate Alkalinity, (calc.)	3/13/23 13:37	3/13/23 15:58		1	Not Detected	mg CaCO3/L		0.5	A
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	3/2/23 18:26	3/2/23 18:26		1	6.08	mg/L	1.00	2	

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

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

Reported: 4/7/2023
Version: 3.5
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Gypsum - MW-9H

Location Code: WMWGORG
Collected: 2/28/23 12:15
Customer ID:
Submittal Date: 3/2/23 10:38

Laboratory ID Number: BD04581

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E		***Analyst: JCC***							
* Chloride	3/3/23 08:38	3/3/23 08:38		4	47.1	mg/L	2.00	4	
Analytical Method: SM4500F G 2017		***Analyst: JCC***							
* Fluoride	3/3/23 12:04	3/3/23 12:04		1	0.157	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011		***Analyst: JCC***							
* Sulfate	3/2/23 14:43	3/2/23 14:43		50	1670	mg/L	30.0	100	
Analytical Method: Field Measurements		***Analyst: TJD***							
Conductivity	2/28/23 12:11	2/28/23 12:11			2793.53	uS/cm			FA
pH	2/28/23 12:11	2/28/23 12:11			5.35	SU			FA
Temperature	2/28/23 12:11	2/28/23 12:11			22.34	C			FA
Turbidity	2/28/23 12:11	2/28/23 12:11			3.42	NTU			FA
Sulfide	2/28/23 12:11	2/28/23 12:11			0	mg/L			FA

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

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

Reported: 4/7/2023
Version: 3.5
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORG
Sample Date: 2/28/23 12:15
Customer ID:
Delivery Date: 3/2/23 10:38

Description: Gorgas Gypsum - MW-9H

Laboratory ID Number: BD04581

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04585	Aluminum, Dissolved	mg/L	-0.0000351	0.0198	0.100	7.99	7.94	0.103	0.0850 to 0.115	140	70.0 to 130	0.628	20.0
BD04585	Aluminum, Total	mg/L	0.000677	0.0198	0.100	8.69	8.69	0.105	0.0850 to 0.115	220	70.0 to 130	0.00	20.0
BD04585	Antimony, Dissolved	mg/L	0.000375	0.00100	0.100	0.0906	0.0893	0.0851	0.0850 to 0.115	90.6	70.0 to 130	1.45	20.0
BD04585	Antimony, Total	mg/L	0.000351	0.00100	0.100	0.0967	0.0962	0.0911	0.0850 to 0.115	96.7	70.0 to 130	0.518	20.0
BD04585	Arsenic, Dissolved	mg/L	-0.0000031	0.000200	0.100	0.0986	0.0980	0.0994	0.0850 to 0.115	97.8	70.0 to 130	0.610	20.0
BD04585	Arsenic, Total	mg/L	0.0000206	0.000200	0.100	0.0983	0.0992	0.100	0.0850 to 0.115	97.3	70.0 to 130	0.911	20.0
BD04585	Barium, Dissolved	mg/L	0.0000093	0.00100	0.100	0.113	0.110	0.105	0.0850 to 0.115	101	70.0 to 130	2.69	20.0
BD04585	Barium, Total	mg/L	0.0000082	0.00100	0.100	0.117	0.114	0.100	0.0850 to 0.115	105	70.0 to 130	2.60	20.0
BD04585	Beryllium, Dissolved	mg/L	0.0000272	0.000880	0.100	0.106	0.105	0.106	0.0850 to 0.115	99.5	70.0 to 130	0.948	20.0
BD04585	Beryllium, Total	mg/L	0.0000174	0.000880	0.100	0.105	0.106	0.0967	0.0850 to 0.115	98.2	70.0 to 130	0.948	20.0
BD04585	Boron, Dissolved	mg/L	-0.00419	0.0650	1.00	1.12	1.12	1.04	0.850 to 1.15	106	70.0 to 130	0.00	20.0
BD04585	Boron, Total	mg/L	-0.00441	0.0650	1.00	1.10	1.10	1.03	0.850 to 1.15	105	70.0 to 130	0.00	20.0
BD04585	Cadmium, Dissolved	mg/L	0.0000019	0.000147	0.100	0.0971	0.0956	0.0961	0.0850 to 0.115	94.9	70.0 to 130	1.56	20.0
BD04585	Cadmium, Total	mg/L	0.0000066	0.000147	0.100	0.102	0.0974	0.101	0.0850 to 0.115	99.7	70.0 to 130	4.61	20.0
BD04585	Calcium, Dissolved	mg/L	0.00993	0.152	5.00	120	137	5.12	4.25 to 5.75	60.0	70.0 to 130	13.2	20.0
BD04585	Calcium, Total	mg/L	0.00311	0.152	5.00	122	118	4.80	4.25 to 5.75	120	70.0 to 130	3.33	20.0
BD04585	Chloride	mg/L	0.0715	1.00	10.0	12.5	12.1	10.2	9.00 to 11.0	103	80.0 to 120	3.25	20.0
BD04585	Chromium, Dissolved	mg/L	0.0000039	0.000440	0.100	0.0969	0.0947	0.0978	0.0850 to 0.115	96.7	70.0 to 130	2.30	20.0
BD04585	Chromium, Total	mg/L	0.0000603	0.000440	0.100	0.101	0.101	0.103	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BD04585	Cobalt, Dissolved	mg/L	0.0000034	0.000147	0.100	0.366	0.349	0.104	0.0850 to 0.115	110	70.0 to 130	4.76	20.0
BD04585	Cobalt, Total	mg/L	0.0000044	0.000147	0.100	0.382	0.377	0.111	0.0850 to 0.115	112	70.0 to 130	1.32	20.0
BD04583	Fluoride	mg/L	0.0273	0.125	2.50	2.21	2.43	2.29	2.25 to 2.75	85.4	80.0 to 120	9.48	20.0
BD04585	Iron, Dissolved	mg/L	0.000348	0.0176	0.2	1.09	1.09	0.204	0.170 to 0.230	93.0	70.0 to 130	0.00	20.0
BD04585	Iron, Total	mg/L	0.000151	0.0176	0.2	1.75	1.76	0.202	0.170 to 0.230	100	70.0 to 130	0.570	20.0

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

Reported: 4/7/2023
Version: 3.5
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORG
Sample Date: 2/28/23 12:15
Customer ID:
Delivery Date: 3/2/23 10:38

Description: Gorgas Gypsum - MW-9H

Laboratory ID Number: BD04581

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04585	Lead, Dissolved	mg/L	0.0000062	0.000147	0.100	0.108	0.105	0.107	0.0850 to 0.115	105	70.0 to 130	2.82	20.0
BD04585	Lead, Total	mg/L	0.0000098	0.000147	0.100	0.109	0.105	0.106	0.0850 to 0.115	105	70.0 to 130	3.74	20.0
BD04585	Lithium, Dissolved	mg/L	0.000578	0.0154	0.200	0.505	0.504	0.202	0.170 to 0.230	104	70.0 to 130	0.198	20.0
BD04585	Lithium, Total	mg/L	-0.00102	0.0154	0.200	0.498	0.502	0.200	0.170 to 0.230	106	70.0 to 130	0.800	20.0
BD04585	Magnesium, Dissolved	mg/L	0.00812	0.0462	5.00	132	151	4.98	4.25 to 5.75	40.0	70.0 to 130	13.4	20.0
BD04585	Magnesium, Total	mg/L	-0.00751	0.0462	5.00	128	126	4.86	4.25 to 5.75	80.0	70.0 to 130	1.57	20.0
BD04585	Manganese, Dissolved	mg/L	0.0000177	0.00033	0.100	11.3	11.0	0.101	0.0850 to 0.115	-200	70.0 to 130	2.69	20.0
BD04585	Manganese, Total	mg/L	-0.000076	0.00033	0.100	11.6	11.8	0.105	0.0850 to 0.115	600	70.0 to 130	1.71	20.0
BD04585	Mercury, Total by CVAA	mg/L	4.000E-05	0.000500	0.004	0.00381	0.00384	0.00383	0.00340 to 0.00460	95.2	70.0 to 130	0.784	20.0
BD04585	Molybdenum, Dissolved	mg/L	0.0000157	0.0002	0.100	0.0991	0.0987	0.101	0.0850 to 0.115	99.1	70.0 to 130	0.404	20.0
BD04585	Molybdenum, Total	mg/L	0.0000078	0.0002	0.100	0.0977	0.0994	0.100	0.0850 to 0.115	97.7	70.0 to 130	1.73	20.0
BD04585	Potassium, Dissolved	mg/L	0.0155	0.367	10.0	14.8	14.5	9.82	8.50 to 11.5	100	70.0 to 130	2.05	20.0
BD04585	Potassium, Total	mg/L	0.00535	0.367	10.0	14.6	14.7	10.0	8.50 to 11.5	97.3	70.0 to 130	0.683	20.0
BD04585	Selenium, Dissolved	mg/L	0.000130	0.00100	0.100	0.101	0.102	0.101	0.0850 to 0.115	98.3	70.0 to 130	0.985	20.0
BD04585	Selenium, Total	mg/L	0.000113	0.00100	0.100	0.101	0.101	0.102	0.0850 to 0.115	98.1	70.0 to 130	0.00	20.0
BD04585	Silicon, Dissolved	mg/L	0.000284	0.0440	1.00	17.3	17.3	1.02	0.850 to 1.15	80.0	70.0 to 130	0.00	20.0
BD04585	Silicon, Total	mg/L	0.00157	0.0440	1.00	16.9	16.9	1.01	0.850 to 1.15	100	70.0 to 130	0.00	20.0
BD04585	Sodium, Dissolved	mg/L	-0.00314	0.0880	5.00	33.5	33.4	4.90	4.25 to 5.75	96.0	70.0 to 130	0.299	20.0
BD04585	Sodium, Total	mg/L	0.00121	0.0880	5.00	32.9	33.1	4.79	4.25 to 5.75	98.0	70.0 to 130	0.606	20.0
BD04585	Sulfate	mg/L	0.861	2.0	1000	1890	1800	19.9	18.0 to 22.0	107	80.0 to 120	4.88	20.0
BD04585	Thallium, Dissolved	mg/L	0.0000054	0.000147	0.100	0.100	0.101	0.105	0.0850 to 0.115	99.6	70.0 to 130	0.995	20.0
BD04585	Thallium, Total	mg/L	0.0000118	0.000147	0.100	0.102	0.0991	0.103	0.0850 to 0.115	102	70.0 to 130	2.88	20.0
BD04585	Total Organic Carbon	mg/L	0.0331	1.00	10.0	14.1	13.8	9.96		101	80.0 to 120	2.15	20.0

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

Reported: 4/7/2023
Version: 3.5
COA_CCR

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

Alabama Power

Batch QC Summary

Customer Account: WMWGORG
Sample Date: 2/28/23 12:15
Customer ID:
Delivery Date: 3/2/23 10:38

Description: Gorgas Gypsum - MW-9H

Laboratory ID Number: BD04581

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04589	Alkalinity to pH 4.5	mg CaCO3/L					42.2	50.3	45.0 to 55.0			1.18	10.0
BD04585	Nitrogen, Nitrate/Nitrite	mg/L as N	0.03	0.200	2.00	2.50	0.474	1.94	1.80 to 2.20	101	90.0 to 110	0.211	15.0
BD04583	Solids, Dissolved	mg/L	1.00	25.0			1240	53.0	40.0 to 60.0			0.00	10.0

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

Reported: 4/7/2023
Version: 3.5
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Gypsum - MW-13H

Location Code: WMWGORG
Collected: 2/28/23 14:00
Customer ID:
Submittal Date: 3/2/23 10:38

Laboratory ID Number: BD04582

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	3/3/23 11:16	3/6/23 12:55		1.015	0.203	mg/L	0.030000	0.1015	
* Calcium, Total	3/3/23 11:16	3/7/23 10:53		10.15	146	mg/L	0.70035	4.06	
* Iron, Total	3/3/23 11:16	3/7/23 11:25		101.5	53.9	mg/L	0.8120	4.06	
* Lithium, Total	3/3/23 11:16	3/6/23 12:55		1.015	0.0291	mg/L	0.007105	0.01999956	
* Magnesium, Total	3/3/23 11:16	3/7/23 10:53		10.15	103	mg/L	0.21315	4.06	
* Silica, Total (calc.)	3/3/23 11:16	3/6/23 12:55		1	24.2	mg/L			
* Silicon, Total	3/3/23 11:16	3/6/23 12:55		1.015	11.3	mg/L	0.02030	0.25375	
* Sodium, Total	3/3/23 11:16	3/7/23 10:53		10.15	53.4	mg/L	0.3045	4.06	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	3/2/23 12:15	3/6/23 10:55		1.015	0.197	mg/L	0.030000	0.1015	
* Calcium, Dissolved	3/2/23 12:15	3/6/23 14:56		10.15	158	mg/L	0.70035	4.06	
* Iron, Dissolved	3/2/23 12:15	3/6/23 14:59		101.5	51.7	mg/L	0.8120	4.06	
* Lithium, Dissolved	3/2/23 12:15	3/6/23 10:55		1.015	0.0303	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	3/2/23 12:15	3/6/23 14:56		10.15	116	mg/L	0.21315	4.06	
* Silica, Dissolved (calc.)	3/2/23 12:15	3/6/23 10:55		1	24.8	mg/L			
* Silicon, Dissolved	3/2/23 12:15	3/6/23 10:55		1.015	11.6	mg/L	0.02030	0.25375	
* Sodium, Dissolved	3/2/23 12:15	3/6/23 14:56		10.15	55.5	mg/L	0.3045	4.06	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/3/23 11:16	3/6/23 17:15		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	3/3/23 11:16	3/6/23 17:15		1.015	0.200	mg/L	0.006090	0.05075	
* Arsenic, Total	3/3/23 11:16	3/6/23 17:15		1.015	0.240	mg/L	0.000081	0.000203	
* Barium, Total	3/3/23 11:16	3/6/23 17:15		1.015	0.0292	mg/L	0.000508	0.001015	
* Beryllium, Total	3/3/23 11:16	3/6/23 17:15		1.015	0.000451	mg/L	0.000406	0.001015	J
* Cadmium, Total	3/3/23 11:16	3/6/23 17:15		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	3/3/23 11:16	3/6/23 17:15		1.015	0.000325	mg/L	0.000203	0.001015	J
* Cobalt, Total	3/3/23 11:16	3/6/23 17:15		1.015	0.285	mg/L	0.000068	0.000203	
* Lead, Total	3/3/23 11:16	3/6/23 17:15		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	3/3/23 11:16	3/6/23 19:40		92.365	21.9	mg/L	0.013855	0.092365	
* Molybdenum, Total	3/3/23 11:16	3/6/23 17:15		1.015	0.00121	mg/L	0.000102	0.000203	
* Potassium, Total	3/3/23 11:16	3/6/23 17:15		1.015	8.66	mg/L	0.169505	0.5075	

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

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

Reported: 4/7/2023
Version: 3.5
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Gypsum - MW-13H

Location Code: WMWGORG
Collected: 2/28/23 14:00
Customer ID:
Submittal Date: 3/2/23 10:38

Laboratory ID Number: BD04582

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	3/3/23 11:16	3/6/23 17:15		1.015	0.000954	mg/L	0.000508	0.001015	J
* Thallium, Total	3/3/23 11:16	3/6/23 17:15		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	3/2/23 12:15	3/2/23 16:53		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	3/2/23 12:15	3/2/23 16:53		1.015	0.208	mg/L	0.006090	0.05075	
* Arsenic, Dissolved	3/2/23 12:15	3/2/23 16:53		1.015	0.231	mg/L	0.000081	0.000203	
* Barium, Dissolved	3/2/23 12:15	3/2/23 16:53		1.015	0.0283	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	3/2/23 12:15	3/2/23 16:53		1.015	0.00044	mg/L	0.000406	0.001015	J
* Cadmium, Dissolved	3/2/23 12:15	3/2/23 16:53		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	3/2/23 12:15	3/2/23 16:53		1.015	0.000215	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	3/2/23 12:15	3/2/23 16:53		1.015	0.286	mg/L	0.000068	0.000203	
* Lead, Dissolved	3/2/23 12:15	3/2/23 16:53		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	3/2/23 12:15	3/6/23 12:17		92.365	22.5	mg/L	0.013855	0.092365	
* Molybdenum, Dissolved	3/2/23 12:15	3/2/23 16:53		1.015	0.00126	mg/L	0.000102	0.000203	
* Potassium, Dissolved	3/2/23 12:15	3/2/23 16:53		1.015	8.47	mg/L	0.169505	0.5075	
* Selenium, Dissolved	3/2/23 12:15	3/2/23 16:53		1.015	0.000986	mg/L	0.000508	0.001015	J
* Thallium, Dissolved	3/2/23 12:15	3/2/23 16:53		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ELH***								
* Mercury, Total by CVAA	3/8/23 17:33	3/8/23 22:54		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	3/3/23 11:37	3/3/23 11:37		1	0.275	mg/L as N	0.20	0.3	J
Analytical Method: SM 2320 B	***Analyst: ALH***								
* Alkalinity to pH 4.5	3/13/23 13:37	3/13/23 15:58		1	151	mg CaCO3/L			
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	3/2/23 12:50	3/3/23 13:40		1	1480	mg/L		100	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
* Bicarbonate Alkalinity, (calc.)	3/13/23 13:37	3/13/23 15:58		1	151	mg CaCO3/L		1	A
* Carbonate Alkalinity, (calc.)	3/13/23 13:37	3/13/23 15:58		1	Not Detected	mg CaCO3/L		0.5	A
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	3/2/23 18:43	3/2/23 18:43		1	9.42	mg/L	1.00	2	

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

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

Reported: 4/7/2023
Version: 3.5
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Gypsum - MW-13H

Location Code: WMWGORG
Collected: 2/28/23 14:00
Customer ID:
Submittal Date: 3/2/23 10:38

Laboratory ID Number: BD04582

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E		***Analyst: JCC***							
* Chloride	3/3/23 08:26	3/3/23 08:26		1	8.99	mg/L	0.50	1	
Analytical Method: SM4500F G 2017		***Analyst: JCC***							
* Fluoride	3/3/23 12:05	3/3/23 12:05		1	0.200	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011		***Analyst: JCC***							
* Sulfate	3/2/23 14:44	3/2/23 14:44		40	847	mg/L	24.0	80	
Analytical Method: Field Measurements		***Analyst: TJD***							
Conductivity	2/28/23 13:55	2/28/23 13:55			1693.25	uS/cm			FA
pH	2/28/23 13:55	2/28/23 13:55			5.82	SU			FA
Temperature	2/28/23 13:55	2/28/23 13:55			19.32	C			FA
Turbidity	2/28/23 13:55	2/28/23 13:55			4.47	NTU			FA
Sulfide	2/28/23 13:55	2/28/23 13:55			0	mg/L			FA

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

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

Reported: 4/7/2023
Version: 3.5
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORG
Sample Date: 2/28/23 14:00
Customer ID:
Delivery Date: 3/2/23 10:38

Description: Gorgas Gypsum - MW-13H

Laboratory ID Number: BD04582

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04585	Aluminum, Dissolved	mg/L	-0.0000351	0.0198	0.100	7.99	7.94	0.103	0.0850 to 0.115	140	70.0 to 130	0.628	20.0
BD04585	Aluminum, Total	mg/L	0.000677	0.0198	0.100	8.69	8.69	0.105	0.0850 to 0.115	220	70.0 to 130	0.00	20.0
BD04585	Antimony, Dissolved	mg/L	0.000375	0.00100	0.100	0.0906	0.0893	0.0851	0.0850 to 0.115	90.6	70.0 to 130	1.45	20.0
BD04585	Antimony, Total	mg/L	0.000351	0.00100	0.100	0.0967	0.0962	0.0911	0.0850 to 0.115	96.7	70.0 to 130	0.518	20.0
BD04585	Arsenic, Dissolved	mg/L	-0.0000031	0.000200	0.100	0.0986	0.0980	0.0994	0.0850 to 0.115	97.8	70.0 to 130	0.610	20.0
BD04585	Arsenic, Total	mg/L	0.0000206	0.000200	0.100	0.0983	0.0992	0.100	0.0850 to 0.115	97.3	70.0 to 130	0.911	20.0
BD04585	Barium, Dissolved	mg/L	0.0000093	0.00100	0.100	0.113	0.110	0.105	0.0850 to 0.115	101	70.0 to 130	2.69	20.0
BD04585	Barium, Total	mg/L	0.0000082	0.00100	0.100	0.117	0.114	0.100	0.0850 to 0.115	105	70.0 to 130	2.60	20.0
BD04585	Beryllium, Dissolved	mg/L	0.0000272	0.000880	0.100	0.106	0.105	0.106	0.0850 to 0.115	99.5	70.0 to 130	0.948	20.0
BD04585	Beryllium, Total	mg/L	0.0000174	0.000880	0.100	0.105	0.106	0.0967	0.0850 to 0.115	98.2	70.0 to 130	0.948	20.0
BD04585	Boron, Dissolved	mg/L	-0.00419	0.0650	1.00	1.12	1.12	1.04	0.850 to 1.15	106	70.0 to 130	0.00	20.0
BD04585	Boron, Total	mg/L	-0.00441	0.0650	1.00	1.10	1.10	1.03	0.850 to 1.15	105	70.0 to 130	0.00	20.0
BD04585	Cadmium, Dissolved	mg/L	0.0000019	0.000147	0.100	0.0971	0.0956	0.0961	0.0850 to 0.115	94.9	70.0 to 130	1.56	20.0
BD04585	Cadmium, Total	mg/L	0.0000066	0.000147	0.100	0.102	0.0974	0.101	0.0850 to 0.115	99.7	70.0 to 130	4.61	20.0
BD04585	Calcium, Dissolved	mg/L	0.00993	0.152	5.00	120	137	5.12	4.25 to 5.75	60.0	70.0 to 130	13.2	20.0
BD04585	Calcium, Total	mg/L	0.00311	0.152	5.00	122	118	4.80	4.25 to 5.75	120	70.0 to 130	3.33	20.0
BD04585	Chloride	mg/L	0.0715	1.00	10.0	12.5	12.1	10.2	9.00 to 11.0	103	80.0 to 120	3.25	20.0
BD04585	Chromium, Dissolved	mg/L	0.0000039	0.000440	0.100	0.0969	0.0947	0.0978	0.0850 to 0.115	96.7	70.0 to 130	2.30	20.0
BD04585	Chromium, Total	mg/L	0.0000603	0.000440	0.100	0.101	0.101	0.103	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BD04585	Cobalt, Dissolved	mg/L	0.0000034	0.000147	0.100	0.366	0.349	0.104	0.0850 to 0.115	110	70.0 to 130	4.76	20.0
BD04585	Cobalt, Total	mg/L	0.0000044	0.000147	0.100	0.382	0.377	0.111	0.0850 to 0.115	112	70.0 to 130	1.32	20.0
BD04583	Fluoride	mg/L	0.0273	0.125	2.50	2.21	2.43	2.29	2.25 to 2.75	85.4	80.0 to 120	9.48	20.0
BD04585	Iron, Dissolved	mg/L	0.000348	0.0176	0.2	1.09	1.09	0.204	0.170 to 0.230	93.0	70.0 to 130	0.00	20.0
BD04585	Iron, Total	mg/L	0.000151	0.0176	0.2	1.75	1.76	0.202	0.170 to 0.230	100	70.0 to 130	0.570	20.0

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

Reported: 4/7/2023
Version: 3.5
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORG
Sample Date: 2/28/23 14:00
Customer ID:
Delivery Date: 3/2/23 10:38

Description: Gorgas Gypsum - MW-13H

Laboratory ID Number: BD04582

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04585	Lead, Dissolved	mg/L	0.0000062	0.000147	0.100	0.108	0.105	0.107	0.0850 to 0.115	105	70.0 to 130	2.82	20.0
BD04585	Lead, Total	mg/L	0.0000098	0.000147	0.100	0.109	0.105	0.106	0.0850 to 0.115	105	70.0 to 130	3.74	20.0
BD04585	Lithium, Dissolved	mg/L	0.000578	0.0154	0.200	0.505	0.504	0.202	0.170 to 0.230	104	70.0 to 130	0.198	20.0
BD04585	Lithium, Total	mg/L	-0.00102	0.0154	0.200	0.498	0.502	0.200	0.170 to 0.230	106	70.0 to 130	0.800	20.0
BD04585	Magnesium, Dissolved	mg/L	0.00812	0.0462	5.00	132	151	4.98	4.25 to 5.75	40.0	70.0 to 130	13.4	20.0
BD04585	Magnesium, Total	mg/L	-0.00751	0.0462	5.00	128	126	4.86	4.25 to 5.75	80.0	70.0 to 130	1.57	20.0
BD04585	Manganese, Dissolved	mg/L	0.0000177	0.00033	0.100	11.3	11.0	0.101	0.0850 to 0.115	-200	70.0 to 130	2.69	20.0
BD04585	Manganese, Total	mg/L	-0.000076	0.00033	0.100	11.6	11.8	0.105	0.0850 to 0.115	600	70.0 to 130	1.71	20.0
BD04585	Mercury, Total by CVAA	mg/L	4.000E-05	0.000500	0.004	0.00381	0.00384	0.00383	0.00340 to 0.00460	95.2	70.0 to 130	0.784	20.0
BD04585	Molybdenum, Dissolved	mg/L	0.0000157	0.0002	0.100	0.0991	0.0987	0.101	0.0850 to 0.115	99.1	70.0 to 130	0.404	20.0
BD04585	Molybdenum, Total	mg/L	0.0000078	0.0002	0.100	0.0977	0.0994	0.100	0.0850 to 0.115	97.7	70.0 to 130	1.73	20.0
BD04585	Potassium, Dissolved	mg/L	0.0155	0.367	10.0	14.8	14.5	9.82	8.50 to 11.5	100	70.0 to 130	2.05	20.0
BD04585	Potassium, Total	mg/L	0.00535	0.367	10.0	14.6	14.7	10.0	8.50 to 11.5	97.3	70.0 to 130	0.683	20.0
BD04585	Selenium, Dissolved	mg/L	0.000130	0.00100	0.100	0.101	0.102	0.101	0.0850 to 0.115	98.3	70.0 to 130	0.985	20.0
BD04585	Selenium, Total	mg/L	0.000113	0.00100	0.100	0.101	0.101	0.102	0.0850 to 0.115	98.1	70.0 to 130	0.00	20.0
BD04585	Silicon, Dissolved	mg/L	0.000284	0.0440	1.00	17.3	17.3	1.02	0.850 to 1.15	80.0	70.0 to 130	0.00	20.0
BD04585	Silicon, Total	mg/L	0.00157	0.0440	1.00	16.9	16.9	1.01	0.850 to 1.15	100	70.0 to 130	0.00	20.0
BD04585	Sodium, Dissolved	mg/L	-0.00314	0.0880	5.00	33.5	33.4	4.90	4.25 to 5.75	96.0	70.0 to 130	0.299	20.0
BD04585	Sodium, Total	mg/L	0.00121	0.0880	5.00	32.9	33.1	4.79	4.25 to 5.75	98.0	70.0 to 130	0.606	20.0
BD04585	Sulfate	mg/L	0.861	2.0	1000	1890	1800	19.9	18.0 to 22.0	107	80.0 to 120	4.88	20.0
BD04585	Thallium, Dissolved	mg/L	0.0000054	0.000147	0.100	0.100	0.101	0.105	0.0850 to 0.115	99.6	70.0 to 130	0.995	20.0
BD04585	Thallium, Total	mg/L	0.0000118	0.000147	0.100	0.102	0.0991	0.103	0.0850 to 0.115	102	70.0 to 130	2.88	20.0
BD04585	Total Organic Carbon	mg/L	0.0331	1.00	10.0	14.1	13.8	9.96		101	80.0 to 120	2.15	20.0

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

Reported: 4/7/2023
Version: 3.5
COA_CCR

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

Alabama Power

Batch QC Summary

Customer Account: WMWGORG
Sample Date: 2/28/23 14:00
Customer ID:
Delivery Date: 3/2/23 10:38

Description: Gorgas Gypsum - MW-13H

Laboratory ID Number: BD04582

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04589	Alkalinity to pH 4.5	mg CaCO3/L					42.2	50.3	45.0 to 55.0			1.18	10.0
BD04585	Nitrogen, Nitrate/Nitrite	mg/L as N	0.03	0.200	2.00	2.50	0.474	1.94	1.80 to 2.20	101	90.0 to 110	0.211	15.0
BD04583	Solids, Dissolved	mg/L	1.00	25.0			1240	53.0	40.0 to 60.0			0.00	10.0

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

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Gypsum - MW-11H

Location Code: WMWGORG
Collected: 2/28/23 15:30
Customer ID:
Submittal Date: 3/2/23 10:38

Laboratory ID Number: BD04583

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	3/3/23 11:16	3/6/23 12:58		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	3/3/23 11:16	3/7/23 10:56		10.15	135	mg/L	0.70035	4.06	
* Iron, Total	3/3/23 11:16	3/6/23 12:58		1.015	1.62	mg/L	0.008120	0.0406	
* Lithium, Total	3/3/23 11:16	3/6/23 12:58		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	3/3/23 11:16	3/7/23 10:56		10.15	112	mg/L	0.21315	4.06	
* Silica, Total (calc.)	3/3/23 11:16	3/6/23 12:58		1	19.0	mg/L			
* Silicon, Total	3/3/23 11:16	3/6/23 12:58		1.015	8.89	mg/L	0.02030	0.25375	
* Sodium, Total	3/3/23 11:16	3/7/23 10:56		10.15	44.7	mg/L	0.3045	4.06	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	3/2/23 12:15	3/6/23 10:58		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Dissolved	3/2/23 12:15	3/6/23 15:02		10.15	139	mg/L	0.70035	4.06	
* Iron, Dissolved	3/2/23 12:15	3/6/23 10:58		1.015	1.40	mg/L	0.008120	0.0406	
* Lithium, Dissolved	3/2/23 12:15	3/6/23 10:58		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	3/2/23 12:15	3/6/23 15:02		10.15	120	mg/L	0.21315	4.06	
* Silica, Dissolved (calc.)	3/2/23 12:15	3/6/23 10:58		1	18.9	mg/L			
* Silicon, Dissolved	3/2/23 12:15	3/6/23 10:58		1.015	8.82	mg/L	0.02030	0.25375	
* Sodium, Dissolved	3/2/23 12:15	3/6/23 15:02		10.15	45.1	mg/L	0.3045	4.06	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/3/23 11:16	3/6/23 17:18		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	3/3/23 11:16	3/6/23 17:18		1.015	0.0784	mg/L	0.006090	0.05075	
* Arsenic, Total	3/3/23 11:16	3/6/23 17:18		1.015	0.000311	mg/L	0.000081	0.000203	
* Barium, Total	3/3/23 11:16	3/6/23 17:18		1.015	0.0111	mg/L	0.000508	0.001015	
* Beryllium, Total	3/3/23 11:16	3/6/23 17:18		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	3/3/23 11:16	3/6/23 17:18		1.015	0.000242	mg/L	0.000068	0.000203	
* Chromium, Total	3/3/23 11:16	3/6/23 17:18		1.015	0.000413	mg/L	0.000203	0.001015	J
* Cobalt, Total	3/3/23 11:16	3/6/23 17:18		1.015	0.00490	mg/L	0.000068	0.000203	
* Lead, Total	3/3/23 11:16	3/6/23 17:18		1.015	0.000142	mg/L	0.000068	0.000203	J
* Manganese, Total	3/3/23 11:16	3/6/23 19:44		5.075	1.80	mg/L	0.000761	0.005075	
* Molybdenum, Total	3/3/23 11:16	3/6/23 17:18		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Total	3/3/23 11:16	3/6/23 17:18		1.015	0.869	mg/L	0.169505	0.5075	

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

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

Reported: 4/7/2023
Version: 3.5
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Gypsum - MW-11H

Location Code: WMWGORG
Collected: 2/28/23 15:30
Customer ID:
Submittal Date: 3/2/23 10:38

Laboratory ID Number: BD04583

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	3/3/23 11:16	3/6/23 17:18		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	3/3/23 11:16	3/6/23 17:18		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	3/2/23 12:15	3/2/23 16:57		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	3/2/23 12:15	3/2/23 16:57		1.015	Not Detected	mg/L	0.006090	0.05075	U
* Arsenic, Dissolved	3/2/23 12:15	3/2/23 16:57		1.015	0.000227	mg/L	0.000081	0.000203	
* Barium, Dissolved	3/2/23 12:15	3/2/23 16:57		1.015	0.0105	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	3/2/23 12:15	3/2/23 16:57		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	3/2/23 12:15	3/2/23 16:57		1.015	0.000120	mg/L	0.000068	0.000203	J
* Chromium, Dissolved	3/2/23 12:15	3/2/23 16:57		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	3/2/23 12:15	3/2/23 16:57		1.015	0.00452	mg/L	0.000068	0.000203	
* Lead, Dissolved	3/2/23 12:15	3/2/23 16:57		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	3/2/23 12:15	3/6/23 12:20		5.075	1.84	mg/L	0.000761	0.005075	
* Molybdenum, Dissolved	3/2/23 12:15	3/2/23 16:57		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Dissolved	3/2/23 12:15	3/2/23 16:57		1.015	0.832	mg/L	0.169505	0.5075	
* Selenium, Dissolved	3/2/23 12:15	3/2/23 16:57		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	3/2/23 12:15	3/2/23 16:57		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ELH***								
* Mercury, Total by CVAA	3/8/23 17:33	3/8/23 22:58		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	3/3/23 11:39	3/3/23 11:39		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
* Alkalinity to pH 4.5	3/13/23 13:37	3/13/23 15:58		1	78.5	mg CaCO3/L			
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	3/2/23 12:50	3/3/23 13:40		1	1240	mg/L		75.8	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
* Bicarbonate Alkalinity, (calc.)	3/13/23 13:37	3/13/23 15:58		1	78.5	mg CaCO3/L		1	A
* Carbonate Alkalinity, (calc.)	3/13/23 13:37	3/13/23 15:58		1	Not Detected	mg CaCO3/L		0.5	A
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	3/2/23 19:00	3/2/23 19:00		1	3.38	mg/L	1.00	2	

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

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

Reported: 4/7/2023
Version: 3.5
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Gypsum - MW-11H

Location Code: WMWGORG
Collected: 2/28/23 15:30
Customer ID:
Submittal Date: 3/2/23 10:38

Laboratory ID Number: BD04583

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E		***Analyst: JCC***							
* Chloride	3/3/23 08:27	3/3/23 08:27		1	5.49	mg/L	0.50	1	
Analytical Method: SM4500F G 2017		***Analyst: JCC***							
* Fluoride	3/3/23 12:07	3/3/23 12:07		1	0.0747	mg/L	0.06	0.125	J
Analytical Method: SM4500SO4 E 2011		***Analyst: JCC***							
* Sulfate	3/2/23 14:45	3/2/23 14:45		40	787	mg/L	24.0	80	
Analytical Method: Field Measurements		***Analyst: TJD***							
Conductivity	2/28/23 15:28	2/28/23 15:28			1506.62	uS/cm			FA
pH	2/28/23 15:28	2/28/23 15:28			5.99	SU			FA
Temperature	2/28/23 15:28	2/28/23 15:28			19.48	C			FA
Turbidity	2/28/23 15:28	2/28/23 15:28			4.78	NTU			FA
Sulfide	2/28/23 15:28	2/28/23 15:28			0	mg/L			FA

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

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

Reported: 4/7/2023
Version: 3.5
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORG
Sample Date: 2/28/23 15:30
Customer ID:
Delivery Date: 3/2/23 10:38

Description: Gorgas Gypsum - MW-11H

Laboratory ID Number: BD04583

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04585	Aluminum, Dissolved	mg/L	-0.0000351	0.0198	0.100	7.99	7.94	0.103	0.0850 to 0.115	140	70.0 to 130	0.628	20.0
BD04585	Aluminum, Total	mg/L	0.000677	0.0198	0.100	8.69	8.69	0.105	0.0850 to 0.115	220	70.0 to 130	0.00	20.0
BD04585	Antimony, Dissolved	mg/L	0.000375	0.00100	0.100	0.0906	0.0893	0.0851	0.0850 to 0.115	90.6	70.0 to 130	1.45	20.0
BD04585	Antimony, Total	mg/L	0.000351	0.00100	0.100	0.0967	0.0962	0.0911	0.0850 to 0.115	96.7	70.0 to 130	0.518	20.0
BD04585	Arsenic, Dissolved	mg/L	-0.0000031	0.000200	0.100	0.0986	0.0980	0.0994	0.0850 to 0.115	97.8	70.0 to 130	0.610	20.0
BD04585	Arsenic, Total	mg/L	0.0000206	0.000200	0.100	0.0983	0.0992	0.100	0.0850 to 0.115	97.3	70.0 to 130	0.911	20.0
BD04585	Barium, Dissolved	mg/L	0.0000093	0.00100	0.100	0.113	0.110	0.105	0.0850 to 0.115	101	70.0 to 130	2.69	20.0
BD04585	Barium, Total	mg/L	0.0000082	0.00100	0.100	0.117	0.114	0.100	0.0850 to 0.115	105	70.0 to 130	2.60	20.0
BD04585	Beryllium, Dissolved	mg/L	0.0000272	0.000880	0.100	0.106	0.105	0.106	0.0850 to 0.115	99.5	70.0 to 130	0.948	20.0
BD04585	Beryllium, Total	mg/L	0.0000174	0.000880	0.100	0.105	0.106	0.0967	0.0850 to 0.115	98.2	70.0 to 130	0.948	20.0
BD04585	Boron, Dissolved	mg/L	-0.00419	0.0650	1.00	1.12	1.12	1.04	0.850 to 1.15	106	70.0 to 130	0.00	20.0
BD04585	Boron, Total	mg/L	-0.00441	0.0650	1.00	1.10	1.10	1.03	0.850 to 1.15	105	70.0 to 130	0.00	20.0
BD04585	Cadmium, Dissolved	mg/L	0.0000019	0.000147	0.100	0.0971	0.0956	0.0961	0.0850 to 0.115	94.9	70.0 to 130	1.56	20.0
BD04585	Cadmium, Total	mg/L	0.0000066	0.000147	0.100	0.102	0.0974	0.101	0.0850 to 0.115	99.7	70.0 to 130	4.61	20.0
BD04585	Calcium, Dissolved	mg/L	0.00993	0.152	5.00	120	137	5.12	4.25 to 5.75	60.0	70.0 to 130	13.2	20.0
BD04585	Calcium, Total	mg/L	0.00311	0.152	5.00	122	118	4.80	4.25 to 5.75	120	70.0 to 130	3.33	20.0
BD04585	Chloride	mg/L	0.0715	1.00	10.0	12.5	12.1	10.2	9.00 to 11.0	103	80.0 to 120	3.25	20.0
BD04585	Chromium, Dissolved	mg/L	0.0000039	0.000440	0.100	0.0969	0.0947	0.0978	0.0850 to 0.115	96.7	70.0 to 130	2.30	20.0
BD04585	Chromium, Total	mg/L	0.0000603	0.000440	0.100	0.101	0.101	0.103	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BD04585	Cobalt, Dissolved	mg/L	0.0000034	0.000147	0.100	0.366	0.349	0.104	0.0850 to 0.115	110	70.0 to 130	4.76	20.0
BD04585	Cobalt, Total	mg/L	0.0000044	0.000147	0.100	0.382	0.377	0.111	0.0850 to 0.115	112	70.0 to 130	1.32	20.0
BD04583	Fluoride	mg/L	0.0273	0.125	2.50	2.21	2.43	2.29	2.25 to 2.75	85.4	80.0 to 120	9.48	20.0
BD04585	Iron, Dissolved	mg/L	0.000348	0.0176	0.2	1.09	1.09	0.204	0.170 to 0.230	93.0	70.0 to 130	0.00	20.0
BD04585	Iron, Total	mg/L	0.000151	0.0176	0.2	1.75	1.76	0.202	0.170 to 0.230	100	70.0 to 130	0.570	20.0

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

Reported: 4/7/2023
Version: 3.5
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORG
Sample Date: 2/28/23 15:30
Customer ID:
Delivery Date: 3/2/23 10:38

Description: Gorgas Gypsum - MW-11H

Laboratory ID Number: BD04583

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04585	Lead, Dissolved	mg/L	0.0000062	0.000147	0.100	0.108	0.105	0.107	0.0850 to 0.115	105	70.0 to 130	2.82	20.0
BD04585	Lead, Total	mg/L	0.0000098	0.000147	0.100	0.109	0.105	0.106	0.0850 to 0.115	105	70.0 to 130	3.74	20.0
BD04585	Lithium, Dissolved	mg/L	0.000578	0.0154	0.200	0.505	0.504	0.202	0.170 to 0.230	104	70.0 to 130	0.198	20.0
BD04585	Lithium, Total	mg/L	-0.00102	0.0154	0.200	0.498	0.502	0.200	0.170 to 0.230	106	70.0 to 130	0.800	20.0
BD04585	Magnesium, Dissolved	mg/L	0.00812	0.0462	5.00	132	151	4.98	4.25 to 5.75	40.0	70.0 to 130	13.4	20.0
BD04585	Magnesium, Total	mg/L	-0.00751	0.0462	5.00	128	126	4.86	4.25 to 5.75	80.0	70.0 to 130	1.57	20.0
BD04585	Manganese, Dissolved	mg/L	0.0000177	0.00033	0.100	11.3	11.0	0.101	0.0850 to 0.115	-200	70.0 to 130	2.69	20.0
BD04585	Manganese, Total	mg/L	-0.000076	0.00033	0.100	11.6	11.8	0.105	0.0850 to 0.115	600	70.0 to 130	1.71	20.0
BD04585	Mercury, Total by CVAA	mg/L	4.000E-05	0.000500	0.004	0.00381	0.00384	0.00383	0.00340 to 0.00460	95.2	70.0 to 130	0.784	20.0
BD04585	Molybdenum, Dissolved	mg/L	0.0000157	0.0002	0.100	0.0991	0.0987	0.101	0.0850 to 0.115	99.1	70.0 to 130	0.404	20.0
BD04585	Molybdenum, Total	mg/L	0.0000078	0.0002	0.100	0.0977	0.0994	0.100	0.0850 to 0.115	97.7	70.0 to 130	1.73	20.0
BD04585	Potassium, Dissolved	mg/L	0.0155	0.367	10.0	14.8	14.5	9.82	8.50 to 11.5	100	70.0 to 130	2.05	20.0
BD04585	Potassium, Total	mg/L	0.00535	0.367	10.0	14.6	14.7	10.0	8.50 to 11.5	97.3	70.0 to 130	0.683	20.0
BD04585	Selenium, Dissolved	mg/L	0.000130	0.00100	0.100	0.101	0.102	0.101	0.0850 to 0.115	98.3	70.0 to 130	0.985	20.0
BD04585	Selenium, Total	mg/L	0.000113	0.00100	0.100	0.101	0.101	0.102	0.0850 to 0.115	98.1	70.0 to 130	0.00	20.0
BD04585	Silicon, Dissolved	mg/L	0.000284	0.0440	1.00	17.3	17.3	1.02	0.850 to 1.15	80.0	70.0 to 130	0.00	20.0
BD04585	Silicon, Total	mg/L	0.00157	0.0440	1.00	16.9	16.9	1.01	0.850 to 1.15	100	70.0 to 130	0.00	20.0
BD04585	Sodium, Dissolved	mg/L	-0.00314	0.0880	5.00	33.5	33.4	4.90	4.25 to 5.75	96.0	70.0 to 130	0.299	20.0
BD04585	Sodium, Total	mg/L	0.00121	0.0880	5.00	32.9	33.1	4.79	4.25 to 5.75	98.0	70.0 to 130	0.606	20.0
BD04585	Sulfate	mg/L	0.861	2.0	1000	1890	1800	19.9	18.0 to 22.0	107	80.0 to 120	4.88	20.0
BD04585	Thallium, Dissolved	mg/L	0.0000054	0.000147	0.100	0.100	0.101	0.105	0.0850 to 0.115	99.6	70.0 to 130	0.995	20.0
BD04585	Thallium, Total	mg/L	0.0000118	0.000147	0.100	0.102	0.0991	0.103	0.0850 to 0.115	102	70.0 to 130	2.88	20.0
BD04585	Total Organic Carbon	mg/L	0.0331	1.00	10.0	14.1	13.8	9.96		101	80.0 to 120	2.15	20.0

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

Reported: 4/7/2023
Version: 3.5
COA_CCR

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

Alabama Power

Batch QC Summary

Customer Account: WMWGORG
Sample Date: 2/28/23 15:30
Customer ID:
Delivery Date: 3/2/23 10:38

Description: Gorgas Gypsum - MW-11H

Laboratory ID Number: BD04583

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04589	Alkalinity to pH 4.5	mg CaCO3/L					42.2	50.3	45.0 to 55.0			1.18	10.0
BD04585	Nitrogen, Nitrate/Nitrite	mg/L as N	0.03	0.200	2.00	2.50	0.474	1.94	1.80 to 2.20	101	90.0 to 110	0.211	15.0
BD04583	Solids, Dissolved	mg/L	1.00	25.0			1240	53.0	40.0 to 60.0			0.00	10.0

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

Reported: 4/7/2023
Version: 3.5
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Gypsum - MW-12H

Location Code: WMWGORG
Collected: 3/1/23 10:40
Customer ID:
Submittal Date: 3/2/23 10:38

Laboratory ID Number: BD04584

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***					***Preparation Method: EPA 1638***			
* Boron, Total	3/3/23 11:16	3/6/23 13:01		1.015	0.0549	mg/L	0.030000	0.1015	J
* Calcium, Total	3/3/23 11:16	3/7/23 11:00		10.15	115	mg/L	0.70035	4.06	
* Iron, Total	3/3/23 11:16	3/6/23 13:01		1.015	1.57	mg/L	0.008120	0.0406	
* Lithium, Total	3/3/23 11:16	3/6/23 13:01		1.015	0.291	mg/L	0.007105	0.01999956	
* Magnesium, Total	3/3/23 11:16	3/7/23 11:00		10.15	124	mg/L	0.21315	4.06	
* Silica, Total (calc.)	3/3/23 11:16	3/6/23 13:01		1	34.2	mg/L			
* Silicon, Total	3/3/23 11:16	3/6/23 13:01		1.015	16.0	mg/L	0.02030	0.25375	
* Sodium, Total	3/3/23 11:16	3/6/23 13:01		1.015	28.0	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	3/2/23 12:15	3/6/23 11:02		1.015	0.0555	mg/L	0.030000	0.1015	J
* Calcium, Dissolved	3/2/23 12:15	3/7/23 14:25		10.15	118	mg/L	0.70035	4.06	
* Iron, Dissolved	3/2/23 12:15	3/6/23 11:02		1.015	0.913	mg/L	0.008120	0.0406	
* Lithium, Dissolved	3/2/23 12:15	3/6/23 11:02		1.015	0.297	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	3/2/23 12:15	3/7/23 14:25		10.15	127	mg/L	0.21315	4.06	
* Silica, Dissolved (calc.)	3/2/23 12:15	3/6/23 11:02		1	34.9	mg/L			
* Silicon, Dissolved	3/2/23 12:15	3/6/23 11:02		1.015	16.3	mg/L	0.02030	0.25375	
* Sodium, Dissolved	3/2/23 12:15	3/6/23 11:02		1.015	28.9	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***					***Preparation Method: EPA 1638***			
* Antimony, Total	3/3/23 11:16	3/6/23 17:22		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	3/3/23 11:16	3/6/23 19:47		10.15	8.61	mg/L	0.06090	0.5075	
* Arsenic, Total	3/3/23 11:16	3/6/23 17:22		1.015	0.000920	mg/L	0.000081	0.000203	
* Barium, Total	3/3/23 11:16	3/6/23 17:22		1.015	0.0127	mg/L	0.000508	0.001015	
* Beryllium, Total	3/3/23 11:16	3/6/23 17:22		1.015	0.00670	mg/L	0.000406	0.001015	
* Cadmium, Total	3/3/23 11:16	3/6/23 17:22		1.015	0.00230	mg/L	0.000068	0.000203	
* Chromium, Total	3/3/23 11:16	3/6/23 17:22		1.015	0.000271	mg/L	0.000203	0.001015	J
* Cobalt, Total	3/3/23 11:16	3/6/23 17:22		1.015	0.271	mg/L	0.000068	0.000203	
* Lead, Total	3/3/23 11:16	3/6/23 17:22		1.015	0.00362	mg/L	0.000068	0.000203	
* Manganese, Total	3/3/23 11:16	3/6/23 19:47		10.15	11.2	mg/L	0.001522	0.01015	
* Molybdenum, Total	3/3/23 11:16	3/6/23 17:22		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Total	3/3/23 11:16	3/6/23 17:22		1.015	4.87	mg/L	0.169505	0.5075	

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

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
Fluoride may have potential matrix interference.

Reported: 4/7/2023
Version: 3.5
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Gypsum - MW-12H

Location Code: WMWGORG
Collected: 3/1/23 10:40
Customer ID:
Submittal Date: 3/2/23 10:38

Laboratory ID Number: BD04584

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	3/3/23 11:16	3/6/23 17:22		1.015	0.00288	mg/L	0.000508	0.001015	
* Thallium, Total	3/3/23 11:16	3/6/23 17:22		1.015	0.000400	mg/L	0.000068	0.000203	
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	3/2/23 12:15	3/2/23 17:00		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	3/2/23 12:15	3/6/23 12:24		10.15	7.94	mg/L	0.06090	0.5075	
* Arsenic, Dissolved	3/2/23 12:15	3/2/23 17:00		1.015	0.000771	mg/L	0.000081	0.000203	
* Barium, Dissolved	3/2/23 12:15	3/2/23 17:00		1.015	0.0121	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	3/2/23 12:15	3/2/23 17:00		1.015	0.00621	mg/L	0.000406	0.001015	
* Cadmium, Dissolved	3/2/23 12:15	3/2/23 17:00		1.015	0.00228	mg/L	0.000068	0.000203	
* Chromium, Dissolved	3/2/23 12:15	3/2/23 17:00		1.015	0.000223	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	3/2/23 12:15	3/2/23 17:00		1.015	0.249	mg/L	0.000068	0.000203	
* Lead, Dissolved	3/2/23 12:15	3/2/23 17:00		1.015	0.00352	mg/L	0.000068	0.000203	
* Manganese, Dissolved	3/2/23 12:15	3/6/23 12:24		10.15	11.6	mg/L	0.001522	0.01015	
* Molybdenum, Dissolved	3/2/23 12:15	3/2/23 17:00		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Dissolved	3/2/23 12:15	3/2/23 17:00		1.015	4.85	mg/L	0.169505	0.5075	
* Selenium, Dissolved	3/2/23 12:15	3/2/23 17:00		1.015	0.00269	mg/L	0.000508	0.001015	
* Thallium, Dissolved	3/2/23 12:15	3/2/23 17:00		1.015	0.000378	mg/L	0.000068	0.000203	
Analytical Method: EPA 245.1	***Analyst: ELH***								
* Mercury, Total by CVAA	3/8/23 17:33	3/8/23 23:02		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	3/3/23 11:41	3/3/23 11:41		1	0.481	mg/L as N	0.20	0.3	
Analytical Method: SM 2320 B	***Analyst: ALH***								
* Alkalinity to pH 4.5	3/13/23 13:37	3/13/23 15:58		1	1.00	mg CaCO3/L			
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	3/3/23 10:50	3/6/23 13:40		1	1300	mg/L		75.8	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
* Bicarbonate Alkalinity, (calc.)	3/13/23 13:37	3/13/23 15:58		1	1.00	mg CaCO3/L		1	A
* Carbonate Alkalinity, (calc.)	3/13/23 13:37	3/13/23 15:58		1	Not Detected	mg CaCO3/L		0.5	A
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	3/2/23 19:18	3/2/23 19:18		1	4.04	mg/L	1.00	2	

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

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
Fluoride may have potential matrix interference.

Reported: 4/7/2023
Version: 3.5
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Gypsum - MW-12H

Location Code: WMWGORG
Collected: 3/1/23 10:40
Customer ID:
Submittal Date: 3/2/23 10:38

Laboratory ID Number: BD04584

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E		***Analyst: JCC***							
* Chloride	3/3/23 08:29	3/3/23 08:29		1	2.17	mg/L	0.50	1	
Analytical Method: SM4500F G 2017		***Analyst: CES***							
* Fluoride	3/28/23 11:31	3/29/23 11:31		1	Not Detected	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011		***Analyst: JCC***							
* Sulfate	3/2/23 14:47	3/2/23 14:47		40	837	mg/L	24.0	80	
Analytical Method: Field Measurements		***Analyst: TJD***							
Conductivity	3/1/23 10:35	3/1/23 10:35			1541.69	uS/cm			FA
pH	3/1/23 10:35	3/1/23 10:35			4.55	SU			FA
Temperature	3/1/23 10:35	3/1/23 10:35			19.64	C			FA
Turbidity	3/1/23 10:35	3/1/23 10:35			7.2	NTU			FA
Sulfide	3/1/23 10:35	3/1/23 10:35			0	mg/L			FA

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

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
Fluoride may have potential matrix interference.

Reported: 4/7/2023
Version: 3.5
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORG
Sample Date: 3/1/23 10:40
Customer ID:
Delivery Date: 3/2/23 10:38

Description: Gorgas Gypsum - MW-12H

Laboratory ID Number: BD04584

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04585	Aluminum, Dissolved	mg/L	-0.0000351	0.0198	0.100	7.99	7.94	0.103	0.0850 to 0.115	140	70.0 to 130	0.628	20.0
BD04585	Aluminum, Total	mg/L	0.000677	0.0198	0.100	8.69	8.69	0.105	0.0850 to 0.115	220	70.0 to 130	0.00	20.0
BD04585	Antimony, Dissolved	mg/L	0.000375	0.00100	0.100	0.0906	0.0893	0.0851	0.0850 to 0.115	90.6	70.0 to 130	1.45	20.0
BD04585	Antimony, Total	mg/L	0.000351	0.00100	0.100	0.0967	0.0962	0.0911	0.0850 to 0.115	96.7	70.0 to 130	0.518	20.0
BD04585	Arsenic, Dissolved	mg/L	-0.0000031	0.000200	0.100	0.0986	0.0980	0.0994	0.0850 to 0.115	97.8	70.0 to 130	0.610	20.0
BD04585	Arsenic, Total	mg/L	0.0000206	0.000200	0.100	0.0983	0.0992	0.100	0.0850 to 0.115	97.3	70.0 to 130	0.911	20.0
BD04585	Barium, Dissolved	mg/L	0.0000093	0.00100	0.100	0.113	0.110	0.105	0.0850 to 0.115	101	70.0 to 130	2.69	20.0
BD04585	Barium, Total	mg/L	0.0000082	0.00100	0.100	0.117	0.114	0.100	0.0850 to 0.115	105	70.0 to 130	2.60	20.0
BD04585	Beryllium, Dissolved	mg/L	0.0000272	0.000880	0.100	0.106	0.105	0.106	0.0850 to 0.115	99.5	70.0 to 130	0.948	20.0
BD04585	Beryllium, Total	mg/L	0.0000174	0.000880	0.100	0.105	0.106	0.0967	0.0850 to 0.115	98.2	70.0 to 130	0.948	20.0
BD04585	Boron, Dissolved	mg/L	-0.00419	0.0650	1.00	1.12	1.12	1.04	0.850 to 1.15	106	70.0 to 130	0.00	20.0
BD04585	Boron, Total	mg/L	-0.00441	0.0650	1.00	1.10	1.10	1.03	0.850 to 1.15	105	70.0 to 130	0.00	20.0
BD04585	Cadmium, Dissolved	mg/L	0.0000019	0.000147	0.100	0.0971	0.0956	0.0961	0.0850 to 0.115	94.9	70.0 to 130	1.56	20.0
BD04585	Cadmium, Total	mg/L	0.0000066	0.000147	0.100	0.102	0.0974	0.101	0.0850 to 0.115	99.7	70.0 to 130	4.61	20.0
BD04585	Calcium, Dissolved	mg/L	0.00993	0.152	5.00	120	137	5.12	4.25 to 5.75	60.0	70.0 to 130	13.2	20.0
BD04585	Calcium, Total	mg/L	0.00311	0.152	5.00	122	118	4.80	4.25 to 5.75	120	70.0 to 130	3.33	20.0
BD04585	Chloride	mg/L	0.0715	1.00	10.0	12.5	12.1	10.2	9.00 to 11.0	103	80.0 to 120	3.25	20.0
BD04585	Chromium, Dissolved	mg/L	0.0000039	0.000440	0.100	0.0969	0.0947	0.0978	0.0850 to 0.115	96.7	70.0 to 130	2.30	20.0
BD04585	Chromium, Total	mg/L	0.0000603	0.000440	0.100	0.101	0.101	0.103	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BD04585	Cobalt, Dissolved	mg/L	0.0000034	0.000147	0.100	0.366	0.349	0.104	0.0850 to 0.115	110	70.0 to 130	4.76	20.0
BD04585	Cobalt, Total	mg/L	0.0000044	0.000147	0.100	0.382	0.377	0.111	0.0850 to 0.115	112	70.0 to 130	1.32	20.0
BD05868	Fluoride	mg/L	0.0287	0.125	2.50	2.22	2.45	2.40	2.25 to 2.75	88.8	80.0 to 120	9.85	20.0
BD04585	Iron, Dissolved	mg/L	0.000348	0.0176	0.2	1.09	1.09	0.204	0.170 to 0.230	93.0	70.0 to 130	0.00	20.0
BD04585	Iron, Total	mg/L	0.000151	0.0176	0.2	1.75	1.76	0.202	0.170 to 0.230	100	70.0 to 130	0.570	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
Fluoride may have potential matrix interference.

Reported: 4/7/2023
Version: 3.5
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORG
Sample Date: 3/1/23 10:40
Customer ID:
Delivery Date: 3/2/23 10:38

Description: Gorgas Gypsum - MW-12H

Laboratory ID Number: BD04584

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04585	Lead, Dissolved	mg/L	0.0000062	0.000147	0.100	0.108	0.105	0.107	0.0850 to 0.115	105	70.0 to 130	2.82	20.0
BD04585	Lead, Total	mg/L	0.0000098	0.000147	0.100	0.109	0.105	0.106	0.0850 to 0.115	105	70.0 to 130	3.74	20.0
BD04585	Lithium, Dissolved	mg/L	0.000578	0.0154	0.200	0.505	0.504	0.202	0.170 to 0.230	104	70.0 to 130	0.198	20.0
BD04585	Lithium, Total	mg/L	-0.00102	0.0154	0.200	0.498	0.502	0.200	0.170 to 0.230	106	70.0 to 130	0.800	20.0
BD04585	Magnesium, Dissolved	mg/L	0.00812	0.0462	5.00	132	151	4.98	4.25 to 5.75	40.0	70.0 to 130	13.4	20.0
BD04585	Magnesium, Total	mg/L	-0.00751	0.0462	5.00	128	126	4.86	4.25 to 5.75	80.0	70.0 to 130	1.57	20.0
BD04585	Manganese, Dissolved	mg/L	0.0000177	0.00033	0.100	11.3	11.0	0.101	0.0850 to 0.115	-200	70.0 to 130	2.69	20.0
BD04585	Manganese, Total	mg/L	-0.000076	0.00033	0.100	11.6	11.8	0.105	0.0850 to 0.115	600	70.0 to 130	1.71	20.0
BD04585	Mercury, Total by CVAA	mg/L	4.000E-05	0.000500	0.004	0.00381	0.00384	0.00383	0.00340 to 0.00460	95.2	70.0 to 130	0.784	20.0
BD04585	Molybdenum, Dissolved	mg/L	0.0000157	0.0002	0.100	0.0991	0.0987	0.101	0.0850 to 0.115	99.1	70.0 to 130	0.404	20.0
BD04585	Molybdenum, Total	mg/L	0.0000078	0.0002	0.100	0.0977	0.0994	0.100	0.0850 to 0.115	97.7	70.0 to 130	1.73	20.0
BD04585	Potassium, Dissolved	mg/L	0.0155	0.367	10.0	14.8	14.5	9.82	8.50 to 11.5	100	70.0 to 130	2.05	20.0
BD04585	Potassium, Total	mg/L	0.00535	0.367	10.0	14.6	14.7	10.0	8.50 to 11.5	97.3	70.0 to 130	0.683	20.0
BD04585	Selenium, Dissolved	mg/L	0.000130	0.00100	0.100	0.101	0.102	0.101	0.0850 to 0.115	98.3	70.0 to 130	0.985	20.0
BD04585	Selenium, Total	mg/L	0.000113	0.00100	0.100	0.101	0.101	0.102	0.0850 to 0.115	98.1	70.0 to 130	0.00	20.0
BD04585	Silicon, Dissolved	mg/L	0.000284	0.0440	1.00	17.3	17.3	1.02	0.850 to 1.15	80.0	70.0 to 130	0.00	20.0
BD04585	Silicon, Total	mg/L	0.00157	0.0440	1.00	16.9	16.9	1.01	0.850 to 1.15	100	70.0 to 130	0.00	20.0
BD04585	Sodium, Dissolved	mg/L	-0.00314	0.0880	5.00	33.5	33.4	4.90	4.25 to 5.75	96.0	70.0 to 130	0.299	20.0
BD04585	Sodium, Total	mg/L	0.00121	0.0880	5.00	32.9	33.1	4.79	4.25 to 5.75	98.0	70.0 to 130	0.606	20.0
BD04585	Sulfate	mg/L	0.861	2.0	1000	1890	1800	19.9	18.0 to 22.0	107	80.0 to 120	4.88	20.0
BD04585	Thallium, Dissolved	mg/L	0.0000054	0.000147	0.100	0.100	0.101	0.105	0.0850 to 0.115	99.6	70.0 to 130	0.995	20.0
BD04585	Thallium, Total	mg/L	0.0000118	0.000147	0.100	0.102	0.0991	0.103	0.0850 to 0.115	102	70.0 to 130	2.88	20.0
BD04585	Total Organic Carbon	mg/L	0.0331	1.00	10.0	14.1	13.8	9.96		101	80.0 to 120	2.15	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
Fluoride may have potential matrix interference.

Reported: 4/7/2023
Version: 3.5
COA_CCR

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

Alabama Power

Batch QC Summary

Customer Account: WMWGORG
Sample Date: 3/1/23 10:40
Customer ID:
Delivery Date: 3/2/23 10:38

Description: Gorgas Gypsum - MW-12H

Laboratory ID Number: BD04584

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04589	Alkalinity to pH 4.5	mg CaCO3/L					42.2	50.3	45.0 to 55.0			1.18	10.0
BD04585	Nitrogen, Nitrate/Nitrite	mg/L as N	0.03	0.200	2.00	2.50	0.474	1.94	1.80 to 2.20	101	90.0 to 110	0.211	15.0
BD04589	Solids, Dissolved	mg/L	0.0000	25.0			1320	49.0	40.0 to 60.0			0.755	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
Fluoride may have potential matrix interference.

Reported: 4/7/2023
Version: 3.5
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Gypsum - MW-12H Dup

Location Code: WMWGORG
Collected: 3/1/23 10:40
Customer ID:
Submittal Date: 3/2/23 10:38

Laboratory ID Number: BD04585

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***					***Preparation Method: EPA 1638***			
* Boron, Total	3/3/23 11:16	3/6/23 13:05		1.015	0.0544	mg/L	0.030000	0.1015	J
* Calcium, Total	3/3/23 11:16	3/7/23 11:03		10.15	116	mg/L	0.70035	4.06	RA
* Iron, Total	3/3/23 11:16	3/6/23 13:05		1.015	1.55	mg/L	0.008120	0.0406	
* Lithium, Total	3/3/23 11:16	3/6/23 13:05		1.015	0.287	mg/L	0.007105	0.01999956	
* Magnesium, Total	3/3/23 11:16	3/7/23 11:03		10.15	124	mg/L	0.21315	4.06	RA
* Silica, Total (calc.)	3/3/23 11:16	3/6/23 13:05		1	34.0	mg/L			
* Silicon, Total	3/3/23 11:16	3/6/23 13:05		1.015	15.9	mg/L	0.02030	0.25375	
* Sodium, Total	3/3/23 11:16	3/6/23 13:05		1.015	28.0	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	3/2/23 12:15	3/6/23 11:05		1.015	0.0559	mg/L	0.030000	0.1015	J
* Calcium, Dissolved	3/2/23 12:15	3/6/23 15:15		10.15	117	mg/L	0.70035	4.06	RA
* Iron, Dissolved	3/2/23 12:15	3/6/23 11:05		1.015	0.904	mg/L	0.008120	0.0406	
* Lithium, Dissolved	3/2/23 12:15	3/6/23 11:05		1.015	0.297	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	3/2/23 12:15	3/6/23 15:15		10.15	130	mg/L	0.21315	4.06	RA
* Silica, Dissolved (calc.)	3/2/23 12:15	3/6/23 11:05		1	35.3	mg/L			
* Silicon, Dissolved	3/2/23 12:15	3/6/23 11:05		1.015	16.5	mg/L	0.02030	0.25375	
* Sodium, Dissolved	3/2/23 12:15	3/6/23 11:05		1.015	28.7	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***					***Preparation Method: EPA 1638***			
* Antimony, Total	3/3/23 11:16	3/6/23 17:25		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	3/3/23 11:16	3/6/23 19:51		10.15	8.47	mg/L	0.06090	0.5075	RA
* Arsenic, Total	3/3/23 11:16	3/6/23 17:25		1.015	0.000977	mg/L	0.000081	0.000203	
* Barium, Total	3/3/23 11:16	3/6/23 17:25		1.015	0.0121	mg/L	0.000508	0.001015	
* Beryllium, Total	3/3/23 11:16	3/6/23 17:25		1.015	0.00675	mg/L	0.000406	0.001015	
* Cadmium, Total	3/3/23 11:16	3/6/23 17:25		1.015	0.00232	mg/L	0.000068	0.000203	
* Chromium, Total	3/3/23 11:16	3/6/23 17:25		1.015	0.000351	mg/L	0.000203	0.001015	J
* Cobalt, Total	3/3/23 11:16	3/6/23 17:25		1.015	0.270	mg/L	0.000068	0.000203	
* Lead, Total	3/3/23 11:16	3/6/23 17:25		1.015	0.00363	mg/L	0.000068	0.000203	
* Manganese, Total	3/3/23 11:16	3/6/23 19:51		10.15	11.0	mg/L	0.001522	0.01015	RA
* Molybdenum, Total	3/3/23 11:16	3/6/23 17:25		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Total	3/3/23 11:16	3/6/23 17:25		1.015	4.87	mg/L	0.169505	0.5075	

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

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
Fluoride may have potential matrix interference.

Reported: 4/7/2023
Version: 3.5
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Gypsum - MW-12H Dup

Location Code: WMWGORG
Collected: 3/1/23 10:40
Customer ID:
Submittal Date: 3/2/23 10:38

Laboratory ID Number: BD04585

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	3/3/23 11:16	3/6/23 17:25		1.015	0.00288	mg/L	0.000508	0.001015	
* Thallium, Total	3/3/23 11:16	3/6/23 17:25		1.015	0.000409	mg/L	0.000068	0.000203	
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	3/2/23 12:15	3/2/23 17:04		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	3/2/23 12:15	3/6/23 12:28		10.15	7.85	mg/L	0.06090	0.5075	RA
* Arsenic, Dissolved	3/2/23 12:15	3/2/23 17:04		1.015	0.000824	mg/L	0.000081	0.000203	
* Barium, Dissolved	3/2/23 12:15	3/2/23 17:04		1.015	0.0124	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	3/2/23 12:15	3/2/23 17:04		1.015	0.00647	mg/L	0.000406	0.001015	
* Cadmium, Dissolved	3/2/23 12:15	3/2/23 17:04		1.015	0.00222	mg/L	0.000068	0.000203	
* Chromium, Dissolved	3/2/23 12:15	3/2/23 17:04		1.015	0.000203	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	3/2/23 12:15	3/2/23 17:04		1.015	0.256	mg/L	0.000068	0.000203	
* Lead, Dissolved	3/2/23 12:15	3/2/23 17:04		1.015	0.00347	mg/L	0.000068	0.000203	
* Manganese, Dissolved	3/2/23 12:15	3/6/23 12:28		10.15	11.5	mg/L	0.001522	0.01015	RA
* Molybdenum, Dissolved	3/2/23 12:15	3/2/23 17:04		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Dissolved	3/2/23 12:15	3/2/23 17:04		1.015	4.75	mg/L	0.169505	0.5075	
* Selenium, Dissolved	3/2/23 12:15	3/2/23 17:04		1.015	0.00273	mg/L	0.000508	0.001015	
* Thallium, Dissolved	3/2/23 12:15	3/2/23 17:04		1.015	0.000356	mg/L	0.000068	0.000203	
Analytical Method: EPA 245.1	***Analyst: ELH***								
* Mercury, Total by CVAA	3/8/23 17:33	3/8/23 23:06		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	3/3/23 11:43	3/3/23 11:43		1	0.475	mg/L as N	0.20	0.3	
Analytical Method: SM 2320 B	***Analyst: ALH***								
* Alkalinity to pH 4.5	3/13/23 13:37	3/13/23 15:58		1	Not Detected	mg CaCO3/L			
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	3/3/23 10:50	3/6/23 13:40		1	1300	mg/L		75.8	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
* Bicarbonate Alkalinity, (calc.)	3/13/23 13:37	3/13/23 15:58		1	Not Detected	mg CaCO3/L		1	A
* Carbonate Alkalinity, (calc.)	3/13/23 13:37	3/13/23 15:58		1	Not Detected	mg CaCO3/L		0.5	A
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	3/2/23 19:32	3/2/23 19:32		1	4.03	mg/L	1.00	2	

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

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
Fluoride may have potential matrix interference.

Reported: 4/7/2023
Version: 3.5
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Gypsum - MW-12H Dup

Location Code: WMWGORG
Collected: 3/1/23 10:40
Customer ID:
Submittal Date: 3/2/23 10:38

Laboratory ID Number: BD04585

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E		***Analyst: JCC***							
* Chloride	3/3/23 08:30	3/3/23 08:30		1	2.17	mg/L	0.50	1	
Analytical Method: SM4500F G 2017		***Analyst: JCC***							
* Fluoride	3/3/23 12:10	3/3/23 12:10		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011		***Analyst: JCC***							
* Sulfate	3/2/23 14:48	3/2/23 14:48		50	823	mg/L	30.0	100	
Analytical Method: Field Measurements		***Analyst: TJD***							
Conductivity	3/1/23 10:35	3/1/23 10:35			1541.69	uS/cm			FA
pH	3/1/23 10:35	3/1/23 10:35			4.55	SU			FA
Temperature	3/1/23 10:35	3/1/23 10:35			19.64	C			FA
Turbidity	3/1/23 10:35	3/1/23 10:35			7.2	NTU			FA
Sulfide	3/1/23 10:35	3/1/23 10:35			0	mg/L			FA

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

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
Fluoride may have potential matrix interference.

Reported: 4/7/2023
Version: 3.5
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORG
Sample Date: 3/1/23 10:40
Customer ID:
Delivery Date: 3/2/23 10:38

Description: Gorgas Gypsum - MW-12H Dup

Laboratory ID Number: BD04585

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04585	Aluminum, Dissolved	mg/L	-0.0000351	0.0198	0.100	7.99	7.94	0.103	0.0850 to 0.115	140	70.0 to 130	0.628	20.0
BD04585	Aluminum, Total	mg/L	0.000677	0.0198	0.100	8.69	8.69	0.105	0.0850 to 0.115	220	70.0 to 130	0.00	20.0
BD04585	Antimony, Dissolved	mg/L	0.000375	0.00100	0.100	0.0906	0.0893	0.0851	0.0850 to 0.115	90.6	70.0 to 130	1.45	20.0
BD04585	Antimony, Total	mg/L	0.000351	0.00100	0.100	0.0967	0.0962	0.0911	0.0850 to 0.115	96.7	70.0 to 130	0.518	20.0
BD04585	Arsenic, Dissolved	mg/L	-0.0000031	0.000200	0.100	0.0986	0.0980	0.0994	0.0850 to 0.115	97.8	70.0 to 130	0.610	20.0
BD04585	Arsenic, Total	mg/L	0.0000206	0.000200	0.100	0.0983	0.0992	0.100	0.0850 to 0.115	97.3	70.0 to 130	0.911	20.0
BD04585	Barium, Dissolved	mg/L	0.0000093	0.00100	0.100	0.113	0.110	0.105	0.0850 to 0.115	101	70.0 to 130	2.69	20.0
BD04585	Barium, Total	mg/L	0.0000082	0.00100	0.100	0.117	0.114	0.100	0.0850 to 0.115	105	70.0 to 130	2.60	20.0
BD04585	Beryllium, Dissolved	mg/L	0.0000272	0.000880	0.100	0.106	0.105	0.106	0.0850 to 0.115	99.5	70.0 to 130	0.948	20.0
BD04585	Beryllium, Total	mg/L	0.0000174	0.000880	0.100	0.105	0.106	0.0967	0.0850 to 0.115	98.2	70.0 to 130	0.948	20.0
BD04585	Boron, Dissolved	mg/L	-0.00419	0.0650	1.00	1.12	1.12	1.04	0.850 to 1.15	106	70.0 to 130	0.00	20.0
BD04585	Boron, Total	mg/L	-0.00441	0.0650	1.00	1.10	1.10	1.03	0.850 to 1.15	105	70.0 to 130	0.00	20.0
BD04585	Cadmium, Dissolved	mg/L	0.0000019	0.000147	0.100	0.0971	0.0956	0.0961	0.0850 to 0.115	94.9	70.0 to 130	1.56	20.0
BD04585	Cadmium, Total	mg/L	0.0000066	0.000147	0.100	0.102	0.0974	0.101	0.0850 to 0.115	99.7	70.0 to 130	4.61	20.0
BD04585	Calcium, Dissolved	mg/L	0.00993	0.152	5.00	120	137	5.12	4.25 to 5.75	60.0	70.0 to 130	13.2	20.0
BD04585	Calcium, Total	mg/L	0.00311	0.152	5.00	122	118	4.80	4.25 to 5.75	120	70.0 to 130	3.33	20.0
BD04585	Chloride	mg/L	0.0715	1.00	10.0	12.5	12.1	10.2	9.00 to 11.0	103	80.0 to 120	3.25	20.0
BD04585	Chromium, Dissolved	mg/L	0.0000039	0.000440	0.100	0.0969	0.0947	0.0978	0.0850 to 0.115	96.7	70.0 to 130	2.30	20.0
BD04585	Chromium, Total	mg/L	0.0000603	0.000440	0.100	0.101	0.101	0.103	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BD04585	Cobalt, Dissolved	mg/L	0.0000034	0.000147	0.100	0.366	0.349	0.104	0.0850 to 0.115	110	70.0 to 130	4.76	20.0
BD04585	Cobalt, Total	mg/L	0.0000044	0.000147	0.100	0.382	0.377	0.111	0.0850 to 0.115	112	70.0 to 130	1.32	20.0
BD04583	Fluoride	mg/L	0.0273	0.125	2.50	2.21	2.43	2.29	2.25 to 2.75	85.4	80.0 to 120	9.48	20.0
BD04585	Iron, Dissolved	mg/L	0.000348	0.0176	0.2	1.09	1.09	0.204	0.170 to 0.230	93.0	70.0 to 130	0.00	20.0
BD04585	Iron, Total	mg/L	0.000151	0.0176	0.2	1.75	1.76	0.202	0.170 to 0.230	100	70.0 to 130	0.570	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
Fluoride may have potential matrix interference.

Reported: 4/7/2023
Version: 3.5
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORG
Sample Date: 3/1/23 10:40
Customer ID:
Delivery Date: 3/2/23 10:38

Description: Gorgas Gypsum - MW-12H Dup

Laboratory ID Number: BD04585

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04585	Lead, Dissolved	mg/L	0.0000062	0.000147	0.100	0.108	0.105	0.107	0.0850 to 0.115	105	70.0 to 130	2.82	20.0
BD04585	Lead, Total	mg/L	0.0000098	0.000147	0.100	0.109	0.105	0.106	0.0850 to 0.115	105	70.0 to 130	3.74	20.0
BD04585	Lithium, Dissolved	mg/L	0.000578	0.0154	0.200	0.505	0.504	0.202	0.170 to 0.230	104	70.0 to 130	0.198	20.0
BD04585	Lithium, Total	mg/L	-0.00102	0.0154	0.200	0.498	0.502	0.200	0.170 to 0.230	106	70.0 to 130	0.800	20.0
BD04585	Magnesium, Dissolved	mg/L	0.00812	0.0462	5.00	132	151	4.98	4.25 to 5.75	40.0	70.0 to 130	13.4	20.0
BD04585	Magnesium, Total	mg/L	-0.00751	0.0462	5.00	128	126	4.86	4.25 to 5.75	80.0	70.0 to 130	1.57	20.0
BD04585	Manganese, Dissolved	mg/L	0.0000177	0.00033	0.100	11.3	11.0	0.101	0.0850 to 0.115	-200	70.0 to 130	2.69	20.0
BD04585	Manganese, Total	mg/L	-0.000076	0.00033	0.100	11.6	11.8	0.105	0.0850 to 0.115	600	70.0 to 130	1.71	20.0
BD04585	Mercury, Total by CVAA	mg/L	4.000E-05	0.000500	0.004	0.00381	0.00384	0.00383	0.00340 to 0.00460	95.2	70.0 to 130	0.784	20.0
BD04585	Molybdenum, Dissolved	mg/L	0.0000157	0.0002	0.100	0.0991	0.0987	0.101	0.0850 to 0.115	99.1	70.0 to 130	0.404	20.0
BD04585	Molybdenum, Total	mg/L	0.0000078	0.0002	0.100	0.0977	0.0994	0.100	0.0850 to 0.115	97.7	70.0 to 130	1.73	20.0
BD04585	Potassium, Dissolved	mg/L	0.0155	0.367	10.0	14.8	14.5	9.82	8.50 to 11.5	100	70.0 to 130	2.05	20.0
BD04585	Potassium, Total	mg/L	0.00535	0.367	10.0	14.6	14.7	10.0	8.50 to 11.5	97.3	70.0 to 130	0.683	20.0
BD04585	Selenium, Dissolved	mg/L	0.000130	0.00100	0.100	0.101	0.102	0.101	0.0850 to 0.115	98.3	70.0 to 130	0.985	20.0
BD04585	Selenium, Total	mg/L	0.000113	0.00100	0.100	0.101	0.101	0.102	0.0850 to 0.115	98.1	70.0 to 130	0.00	20.0
BD04585	Silicon, Dissolved	mg/L	0.000284	0.0440	1.00	17.3	17.3	1.02	0.850 to 1.15	80.0	70.0 to 130	0.00	20.0
BD04585	Silicon, Total	mg/L	0.00157	0.0440	1.00	16.9	16.9	1.01	0.850 to 1.15	100	70.0 to 130	0.00	20.0
BD04585	Sodium, Dissolved	mg/L	-0.00314	0.0880	5.00	33.5	33.4	4.90	4.25 to 5.75	96.0	70.0 to 130	0.299	20.0
BD04585	Sodium, Total	mg/L	0.00121	0.0880	5.00	32.9	33.1	4.79	4.25 to 5.75	98.0	70.0 to 130	0.606	20.0
BD04585	Sulfate	mg/L	0.861	2.0	1000	1890	1800	19.9	18.0 to 22.0	107	80.0 to 120	4.88	20.0
BD04585	Thallium, Dissolved	mg/L	0.0000054	0.000147	0.100	0.100	0.101	0.105	0.0850 to 0.115	99.6	70.0 to 130	0.995	20.0
BD04585	Thallium, Total	mg/L	0.0000118	0.000147	0.100	0.102	0.0991	0.103	0.0850 to 0.115	102	70.0 to 130	2.88	20.0
BD04585	Total Organic Carbon	mg/L	0.0331	1.00	10.0	14.1	13.8	9.96		101	80.0 to 120	2.15	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
Fluoride may have potential matrix interference.

Reported: 4/7/2023
Version: 3.5
COA_CCR

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

Alabama Power

Batch QC Summary

Customer Account: WMWGORG
Sample Date: 3/1/23 10:40
Customer ID:
Delivery Date: 3/2/23 10:38

Description: Gorgas Gypsum - MW-12H Dup

Laboratory ID Number: BD04585

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04589	Alkalinity to pH 4.5	mg CaCO3/L					42.2	50.3	45.0 to 55.0			1.18	10.0
BD04585	Nitrogen, Nitrate/Nitrite	mg/L as N	0.03	0.200	2.00	2.50	0.474	1.94	1.80 to 2.20	101	90.0 to 110	0.211	15.0
BD04589	Solids, Dissolved	mg/L	0.0000	25.0			1320	49.0	40.0 to 60.0			0.755	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
Fluoride may have potential matrix interference.

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Gypsum Field Blank-1

Location Code: WMWGORGFB
Collected: 3/1/23 11:20
Customer ID:
Submittal Date: 3/2/23 10:44

Laboratory ID Number: BD04586

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	3/3/23 11:16	3/6/23 13:27		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	3/3/23 11:16	3/6/23 13:27		1.015	Not Detected	mg/L	0.070035	0.406	U
* Iron, Total	3/3/23 11:16	3/6/23 13:27		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Total	3/3/23 11:16	3/6/23 13:27		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	3/3/23 11:16	3/6/23 13:27		1.015	Not Detected	mg/L	0.021315	0.406	U
* Silica, Total (calc.)	3/3/23 11:16	3/6/23 13:27		1	Not Detected	mg/L			
* Silicon, Total	3/3/23 11:16	3/6/23 13:27		1.015	Not Detected	mg/L	0.02030	0.25375	U
* Sodium, Total	3/3/23 11:16	3/6/23 13:27		1.015	Not Detected	mg/L	0.03045	0.406	U
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/3/23 11:16	3/6/23 17:54		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	3/3/23 11:16	3/6/23 17:54		1.015	Not Detected	mg/L	0.006090	0.05075	U
* Arsenic, Total	3/3/23 11:16	3/6/23 17:54		1.015	Not Detected	mg/L	0.000081	0.000203	U
* Barium, Total	3/3/23 11:16	3/6/23 17:54		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Beryllium, Total	3/3/23 11:16	3/6/23 17:54		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	3/3/23 11:16	3/6/23 17:54		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	3/3/23 11:16	3/6/23 17:54		1.015	0.000213	mg/L	0.000203	0.001015	J
* Cobalt, Total	3/3/23 11:16	3/6/23 17:54		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	3/3/23 11:16	3/6/23 17:54		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	3/3/23 11:16	3/6/23 17:54		1.015	0.000157	mg/L	0.000152	0.001015	J
* Molybdenum, Total	3/3/23 11:16	3/6/23 17:54		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Total	3/3/23 11:16	3/6/23 17:54		1.015	Not Detected	mg/L	0.169505	0.5075	U
* Selenium, Total	3/3/23 11:16	3/6/23 17:54		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	3/3/23 11:16	3/6/23 17:54		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ELH***								
* Mercury, Total by CVAA	3/8/23 17:33	3/8/23 23:33		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	3/3/23 11:51	3/3/23 11:51		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	3/3/23 10:50	3/6/23 13:40		1	Not Detected	mg/L		25	U

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

Comments:

Reported: 4/7/2023
Version: 3.5
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Gypsum Field Blank-1

Location Code: WMWGORGFB
Collected: 3/1/23 11:20
Customer ID:
Submittal Date: 3/2/23 10:44

Laboratory ID Number: BD04586

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 5310 B		***Analyst: SC***							
* Total Organic Carbon	3/2/23 20:46	3/2/23 20:46		1	Not Detected	mg/L	1.00	2	U
Analytical Method: SM4500Cl E		***Analyst: JCC***							
* Chloride	3/3/23 09:48	3/3/23 09:48		1	Not Detected	mg/L	0.50	1	U
Analytical Method: SM4500F G 2017		***Analyst: JCC***							
* Fluoride	3/3/23 12:41	3/3/23 12:41		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011		***Analyst: JCC***							
* Sulfate	3/2/23 15:11	3/2/23 15:11		1	Not Detected	mg/L	0.6	2	U

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

Comments:

Reported: 4/7/2023
Version: 3.5
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORGFB
Sample Date: 3/1/23 11:20
Customer ID:
Delivery Date: 3/2/23 10:44

Description: Gorgas Gypsum Field Blank-1

Laboratory ID Number: BD04586

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04589	Aluminum, Total	mg/L	0.00105	0.0198	0.100	2.53	2.54	0.104	0.0850 to 0.115	60.0	70.0 to 130	0.394	20.0
BD04589	Antimony, Total	mg/L	0.000377	0.00100	0.100	0.0946	0.0980	0.0927	0.0850 to 0.115	94.6	70.0 to 130	3.53	20.0
BD04589	Arsenic, Total	mg/L	0.0000222	0.000200	0.100	0.0997	0.0991	0.0978	0.0850 to 0.115	98.8	70.0 to 130	0.604	20.0
BD04589	Barium, Total	mg/L	0.0000047	0.00100	0.100	0.108	0.110	0.100	0.0850 to 0.115	98.0	70.0 to 130	1.83	20.0
BD04589	Beryllium, Total	mg/L	0.0000105	0.000880	0.100	0.106	0.103	0.0956	0.0850 to 0.115	102	70.0 to 130	2.87	20.0
BD04589	Boron, Total	mg/L	-0.00446	0.0650	1.00	3.91	3.90	1.02	0.850 to 1.15	106	70.0 to 130	0.256	20.0
BD04589	Cadmium, Total	mg/L	0.0000047	0.000147	0.100	0.0982	0.0984	0.0989	0.0850 to 0.115	98.2	70.0 to 130	0.203	20.0
BD04589	Calcium, Total	mg/L	0.00898	0.152	5.00	165	167	4.79	4.25 to 5.75	80.0	70.0 to 130	1.20	20.0
BD04589	Chloride	mg/L	0.0465	1.00	50.0	80.8	84.0	9.64	9.00 to 11.0	96.0	80.0 to 120	3.88	20.0
BD04589	Chromium, Total	mg/L	0.0000245	0.000440	0.100	0.0988	0.0989	0.101	0.0850 to 0.115	98.5	70.0 to 130	0.101	20.0
BD04589	Cobalt, Total	mg/L	0.0000103	0.000147	0.100	0.243	0.244	0.110	0.0850 to 0.115	109	70.0 to 130	0.411	20.0
BD04589	Fluoride	mg/L	0.0249	0.125	2.50	2.49	2.52	2.37	2.25 to 2.75	84.0	80.0 to 120	1.20	20.0
BD04589	Iron, Total	mg/L	0.000243	0.0176	0.2	38.1	38.9	0.198	0.170 to 0.230	-250	70.0 to 130	2.08	20.0
BD04589	Lead, Total	mg/L	0.0000063	0.000147	0.100	0.102	0.101	0.105	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BD04589	Lithium, Total	mg/L	-0.00127	0.0154	0.200	0.499	0.501	0.199	0.170 to 0.230	106	70.0 to 130	0.400	20.0
BD04589	Magnesium, Total	mg/L	0.0109	0.0462	5.00	104	106	4.80	4.25 to 5.75	84.0	70.0 to 130	1.90	20.0
BD04589	Manganese, Total	mg/L	-0.0000062	0.00033	0.100	4.89	4.78	0.104	0.0850 to 0.115	-130	70.0 to 130	2.28	20.0
BD04589	Mercury, Total by CVAA	mg/L	5.000E-05	0.000500	0.004	0.00401	0.00402	0.004	0.00340 to 0.00460	100	70.0 to 130	0.249	20.0
BD04589	Molybdenum, Total	mg/L	0.0000091	0.0002	0.100	0.101	0.100	0.0994	0.0850 to 0.115	101	70.0 to 130	0.995	20.0
BD04589	Potassium, Total	mg/L	-0.00676	0.367	10.0	14.1	14.0	9.93	8.50 to 11.5	98.4	70.0 to 130	0.712	20.0
BD04589	Selenium, Total	mg/L	0.0000967	0.00100	0.100	0.101	0.100	0.0991	0.0850 to 0.115	100	70.0 to 130	0.995	20.0
BD04589	Silicon, Total	mg/L	0.00185	0.0440	1.00	14.8	14.8	0.991	0.850 to 1.15	100	70.0 to 130	0.00	20.0
BD04589	Sodium, Total	mg/L	0.00137	0.0880	5.00	29.4	29.6	4.67	4.25 to 5.75	100	70.0 to 130	0.678	20.0
BD04589	Sulfate	mg/L	0.261	2.0	1000	1760	1760	19.4	18.0 to 22.0	100	80.0 to 120	0.00	20.0

Comments:

Reported: 4/7/2023
Version: 3.5
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORGFB
Sample Date: 3/1/23 11:20
Customer ID:
Delivery Date: 3/2/23 10:44

Description:Gorgas Gypsum Field Blank-1

Laboratory ID Number: BD04586

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04589	Thallium, Total	mg/L	0.0000089	0.000147	0.100	0.102	0.0993	0.103	0.0850 to 0.115	102	70.0 to 130	2.68	20.0
BD04589	Total Organic Carbon	mg/L	0.0113	1.00	10.0	13.0	13.4	9.96		104	80.0 to 120	3.03	20.0

Comments:

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

Alabama Power

Batch QC Summary

Customer Account: WMWGORGFB
Sample Date: 3/1/23 11:20
Customer ID:
Delivery Date: 3/2/23 10:44

Description: Gorgas Gypsum Field Blank-1

Laboratory ID Number: BD04586

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04589	Nitrogen, Nitrate/Nitrite	mg/L as N	0.02	0.200	2.00	2.20	0.234	2.02	1.80 to 2.20	97.5	90.0 to 110	6.61	15.0
BD04589	Solids, Dissolved	mg/L	0.0000	25.0			1320	49.0	40.0 to 60.0			0.755	10.0

Comments:

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Gypsum - MW-12V

Location Code: WMWGORG
Collected: 3/1/23 12:10
Customer ID:
Submittal Date: 3/2/23 10:38

Laboratory ID Number: BD04587

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	3/3/23 11:16	3/6/23 13:30		1.015	1.60	mg/L	0.030000	0.1015	
* Calcium, Total	3/3/23 11:16	3/7/23 11:28		10.15	332	mg/L	0.70035	4.06	
* Iron, Total	3/3/23 11:16	3/7/23 11:28		10.15	37.5	mg/L	0.08120	0.406	
* Lithium, Total	3/3/23 11:16	3/6/23 13:30		1.015	0.286	mg/L	0.007105	0.01999956	
* Magnesium, Total	3/3/23 11:16	3/7/23 11:28		10.15	200	mg/L	0.21315	4.06	
* Silica, Total (calc.)	3/3/23 11:16	3/6/23 13:30		1	27.0	mg/L			
* Silicon, Total	3/3/23 11:16	3/6/23 13:30		1.015	12.6	mg/L	0.02030	0.25375	
* Sodium, Total	3/3/23 11:16	3/7/23 11:28		10.15	323	mg/L	0.3045	4.06	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	3/2/23 12:15	3/6/23 11:27		1.015	1.63	mg/L	0.030000	0.1015	
* Calcium, Dissolved	3/2/23 12:15	3/6/23 15:24		10.15	340	mg/L	0.70035	4.06	
* Iron, Dissolved	3/2/23 12:15	3/6/23 15:24		10.15	38.7	mg/L	0.08120	0.406	
* Lithium, Dissolved	3/2/23 12:15	3/6/23 11:27		1.015	0.292	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	3/2/23 12:15	3/6/23 15:24		10.15	216	mg/L	0.21315	4.06	
* Silica, Dissolved (calc.)	3/2/23 12:15	3/6/23 11:27		1	27.4	mg/L			
* Silicon, Dissolved	3/2/23 12:15	3/6/23 11:27		1.015	12.8	mg/L	0.02030	0.25375	
* Sodium, Dissolved	3/2/23 12:15	3/6/23 15:24		10.15	342	mg/L	0.3045	4.06	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/3/23 11:16	3/6/23 17:57		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	3/3/23 11:16	3/6/23 17:57		1.015	0.00895	mg/L	0.006090	0.05075	J
* Arsenic, Total	3/3/23 11:16	3/6/23 17:57		1.015	0.000328	mg/L	0.000081	0.000203	
* Barium, Total	3/3/23 11:16	3/6/23 17:57		1.015	0.0110	mg/L	0.000508	0.001015	
* Beryllium, Total	3/3/23 11:16	3/6/23 17:57		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	3/3/23 11:16	3/6/23 17:57		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	3/3/23 11:16	3/6/23 17:57		1.015	0.000234	mg/L	0.000203	0.001015	J
* Cobalt, Total	3/3/23 11:16	3/6/23 17:57		1.015	0.000201	mg/L	0.000068	0.000203	J
* Lead, Total	3/3/23 11:16	3/6/23 17:57		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	3/3/23 11:16	3/6/23 20:12		92.365	22.6	mg/L	0.013855	0.092365	
* Molybdenum, Total	3/3/23 11:16	3/6/23 17:57		1.015	0.00235	mg/L	0.000102	0.000203	
* Potassium, Total	3/3/23 11:16	3/6/23 17:57		1.015	6.77	mg/L	0.169505	0.5075	

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

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

Reported: 4/7/2023
Version: 3.5
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Gypsum - MW-12V

Location Code: WMWGORG
Collected: 3/1/23 12:10
Customer ID:
Submittal Date: 3/2/23 10:38

Laboratory ID Number: BD04587

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	3/3/23 11:16	3/6/23 17:57		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	3/3/23 11:16	3/6/23 17:57		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	3/2/23 12:15	3/2/23 17:32		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	3/2/23 12:15	3/2/23 17:32		1.015	Not Detected	mg/L	0.006090	0.05075	U
* Arsenic, Dissolved	3/2/23 12:15	3/2/23 17:32		1.015	0.000312	mg/L	0.000081	0.000203	
* Barium, Dissolved	3/2/23 12:15	3/2/23 17:32		1.015	0.0107	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	3/2/23 12:15	3/2/23 17:32		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	3/2/23 12:15	3/2/23 17:32		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	3/2/23 12:15	3/2/23 17:32		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	3/2/23 12:15	3/2/23 17:32		1.015	0.000222	mg/L	0.000068	0.000203	
* Lead, Dissolved	3/2/23 12:15	3/2/23 17:32		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	3/2/23 12:15	3/6/23 12:49		92.365	22.5	mg/L	0.013855	0.092365	
* Molybdenum, Dissolved	3/2/23 12:15	3/2/23 17:32		1.015	0.00243	mg/L	0.000102	0.000203	
* Potassium, Dissolved	3/2/23 12:15	3/2/23 17:32		1.015	6.66	mg/L	0.169505	0.5075	
* Selenium, Dissolved	3/2/23 12:15	3/2/23 17:32		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	3/2/23 12:15	3/2/23 17:32		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ELH***								
* Mercury, Total by CVAA	3/8/23 17:33	3/8/23 23:37		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	3/3/23 11:52	3/3/23 11:52		1	0.208	mg/L as N	0.20	0.3	J
Analytical Method: SM 2320 B	***Analyst: ALH***								
* Alkalinity to pH 4.5	3/13/23 13:37	3/13/23 15:58		1	251	mg CaCO3/L			
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	3/3/23 10:50	3/6/23 13:40		1	3270	mg/L		208.3	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
* Bicarbonate Alkalinity, (calc.)	3/13/23 13:37	3/13/23 15:58		1	251	mg CaCO3/L		1	A
* Carbonate Alkalinity, (calc.)	3/13/23 13:37	3/13/23 15:58		1	Not Detected	mg CaCO3/L		0.5	A
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	3/2/23 21:05	3/2/23 21:05		1	8.05	mg/L	1.00	2	

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

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

Reported: 4/7/2023
Version: 3.5
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Gypsum - MW-12V

Location Code: WMWGORG
Collected: 3/1/23 12:10
Customer ID:
Submittal Date: 3/2/23 10:38

Laboratory ID Number: BD04587

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E		***Analyst: JCC***							
* Chloride	3/3/23 09:50	3/3/23 09:50		25	145	mg/L	12.50	25	
Analytical Method: SM4500F G 2017		***Analyst: JCC***							
* Fluoride	3/3/23 12:42	3/3/23 12:42		1	0.335	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011		***Analyst: JCC***							
* Sulfate	3/2/23 15:13	3/2/23 15:13		80	1810	mg/L	48.0	160	
Analytical Method: Field Measurements		***Analyst: TJD***							
Conductivity	3/1/23 12:06	3/1/23 12:06			4114.67	uS/cm			FA
pH	3/1/23 12:06	3/1/23 12:06			6.29	SU			FA
Temperature	3/1/23 12:06	3/1/23 12:06			19.58	C			FA
Turbidity	3/1/23 12:06	3/1/23 12:06			0.4	NTU			FA
Sulfide	3/1/23 12:06	3/1/23 12:06			0	mg/L			FA

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

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

Reported: 4/7/2023
Version: 3.5
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORG
Sample Date: 3/1/23 12:10
Customer ID:
Delivery Date: 3/2/23 10:38

Description: Gorgas Gypsum - MW-12V

Laboratory ID Number: BD04587

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04589	Aluminum, Dissolved	mg/L	0.0000743	0.0198	0.100	0.455	0.447	0.102	0.0850 to 0.115	88.0	70.0 to 130	1.77	20.0
BD04589	Aluminum, Total	mg/L	0.00105	0.0198	0.100	2.53	2.54	0.104	0.0850 to 0.115	60.0	70.0 to 130	0.394	20.0
BD04589	Antimony, Dissolved	mg/L	0.000302	0.00100	0.100	0.0870	0.0884	0.0875	0.0850 to 0.115	87.0	70.0 to 130	1.60	20.0
BD04589	Antimony, Total	mg/L	0.000377	0.00100	0.100	0.0946	0.0980	0.0927	0.0850 to 0.115	94.6	70.0 to 130	3.53	20.0
BD04589	Arsenic, Dissolved	mg/L	-0.0000082	0.000200	0.100	0.0965	0.100	0.0999	0.0850 to 0.115	95.7	70.0 to 130	3.56	20.0
BD04589	Arsenic, Total	mg/L	0.0000222	0.000200	0.100	0.0997	0.0991	0.0978	0.0850 to 0.115	98.8	70.0 to 130	0.604	20.0
BD04589	Barium, Dissolved	mg/L	0.0000093	0.00100	0.100	0.107	0.112	0.105	0.0850 to 0.115	97.5	70.0 to 130	4.57	20.0
BD04589	Barium, Total	mg/L	0.0000047	0.00100	0.100	0.108	0.110	0.100	0.0850 to 0.115	98.0	70.0 to 130	1.83	20.0
BD04589	Beryllium, Dissolved	mg/L	0.000023	0.000880	0.100	0.101	0.104	0.102	0.0850 to 0.115	98.1	70.0 to 130	2.93	20.0
BD04589	Beryllium, Total	mg/L	0.0000105	0.000880	0.100	0.106	0.103	0.0956	0.0850 to 0.115	102	70.0 to 130	2.87	20.0
BD04589	Boron, Dissolved	mg/L	-0.00433	0.0650	1.00	3.95	3.94	1.04	0.850 to 1.15	105	70.0 to 130	0.253	20.0
BD04589	Boron, Total	mg/L	-0.00446	0.0650	1.00	3.91	3.90	1.02	0.850 to 1.15	106	70.0 to 130	0.256	20.0
BD04589	Cadmium, Dissolved	mg/L	-0.0000027	0.000147	0.100	0.0895	0.0908	0.0963	0.0850 to 0.115	89.5	70.0 to 130	1.44	20.0
BD04589	Cadmium, Total	mg/L	0.0000047	0.000147	0.100	0.0982	0.0984	0.0989	0.0850 to 0.115	98.2	70.0 to 130	0.203	20.0
BD04589	Calcium, Dissolved	mg/L	0.0129	0.152	5.00	186	189	4.98	4.25 to 5.75	600	70.0 to 130	1.60	20.0
BD04589	Calcium, Total	mg/L	0.00898	0.152	5.00	165	167	4.79	4.25 to 5.75	80.0	70.0 to 130	1.20	20.0
BD04589	Chloride	mg/L	0.0465	1.00	50.0	80.8	84.0	9.64	9.00 to 11.0	96.0	80.0 to 120	3.88	20.0
BD04589	Chromium, Dissolved	mg/L	-0.0000207	0.000440	0.100	0.0943	0.0947	0.0978	0.0850 to 0.115	94.3	70.0 to 130	0.423	20.0
BD04589	Chromium, Total	mg/L	0.0000245	0.000440	0.100	0.0988	0.0989	0.101	0.0850 to 0.115	98.5	70.0 to 130	0.101	20.0
BD04589	Cobalt, Dissolved	mg/L	0.0000069	0.000147	0.100	0.221	0.214	0.103	0.0850 to 0.115	92.0	70.0 to 130	3.22	20.0
BD04589	Cobalt, Total	mg/L	0.0000103	0.000147	0.100	0.243	0.244	0.110	0.0850 to 0.115	109	70.0 to 130	0.411	20.0
BD04589	Fluoride	mg/L	0.0249	0.125	2.50	2.49	2.52	2.37	2.25 to 2.75	84.0	80.0 to 120	1.20	20.0
BD04589	Iron, Dissolved	mg/L	0.000386	0.0176	0.2	43.5	43.3	0.205	0.170 to 0.230	3000	70.0 to 130	0.461	20.0
BD04589	Iron, Total	mg/L	0.000243	0.0176	0.2	38.1	38.9	0.198	0.170 to 0.230	-250	70.0 to 130	2.08	20.0

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

Reported: 4/7/2023
Version: 3.5
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORG
Sample Date: 3/1/23 12:10
Customer ID:
Delivery Date: 3/2/23 10:38

Description: Gorgas Gypsum - MW-12V

Laboratory ID Number: BD04587

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04589	Lead, Dissolved	mg/L	0.0000059	0.000147	0.100	0.103	0.104	0.110	0.0850 to 0.115	103	70.0 to 130	0.966	20.0
BD04589	Lead, Total	mg/L	0.0000063	0.000147	0.100	0.102	0.101	0.105	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BD04589	Lithium, Dissolved	mg/L	-0.000676	0.0154	0.200	0.501	0.499	0.203	0.170 to 0.230	102	70.0 to 130	0.400	20.0
BD04589	Lithium, Total	mg/L	-0.00127	0.0154	0.200	0.499	0.501	0.199	0.170 to 0.230	106	70.0 to 130	0.400	20.0
BD04589	Magnesium, Dissolved	mg/L	0.00436	0.0462	5.00	122	126	4.94	4.25 to 5.75	420	70.0 to 130	3.23	20.0
BD04589	Magnesium, Total	mg/L	0.0109	0.0462	5.00	104	106	4.80	4.25 to 5.75	84.0	70.0 to 130	1.90	20.0
BD04589	Manganese, Dissolved	mg/L	0.000307	0.00033	0.100	5.01	4.66	0.101	0.0850 to 0.115	310	70.0 to 130	7.24	20.0
BD04589	Manganese, Total	mg/L	-0.0000062	0.00033	0.100	4.89	4.78	0.104	0.0850 to 0.115	-130	70.0 to 130	2.28	20.0
BD04589	Mercury, Total by CVAA	mg/L	5.000E-05	0.000500	0.004	0.00401	0.00402	0.004	0.00340 to 0.00460	100	70.0 to 130	0.249	20.0
BD04589	Molybdenum, Dissolved	mg/L	0.0000155	0.0002	0.100	0.0984	0.101	0.102	0.0850 to 0.115	97.7	70.0 to 130	2.61	20.0
BD04589	Molybdenum, Total	mg/L	0.0000091	0.0002	0.100	0.101	0.100	0.0994	0.0850 to 0.115	101	70.0 to 130	0.995	20.0
BD04589	Potassium, Dissolved	mg/L	0.00975	0.367	10.0	13.4	13.8	9.74	8.50 to 11.5	90.5	70.0 to 130	2.94	20.0
BD04589	Potassium, Total	mg/L	-0.00676	0.367	10.0	14.1	14.0	9.93	8.50 to 11.5	98.4	70.0 to 130	0.712	20.0
BD04589	Selenium, Dissolved	mg/L	0.000108	0.00100	0.100	0.0965	0.101	0.103	0.0850 to 0.115	95.9	70.0 to 130	4.56	20.0
BD04589	Selenium, Total	mg/L	0.0000967	0.00100	0.100	0.101	0.100	0.0991	0.0850 to 0.115	100	70.0 to 130	0.995	20.0
BD04589	Silicon, Dissolved	mg/L	0.000267	0.0440	1.00	14.4	14.4	1.02	0.850 to 1.15	90.0	70.0 to 130	0.00	20.0
BD04589	Silicon, Total	mg/L	0.00185	0.0440	1.00	14.8	14.8	0.991	0.850 to 1.15	100	70.0 to 130	0.00	20.0
BD04589	Sodium, Dissolved	mg/L	0.00216	0.0880	5.00	30.1	29.7	4.90	4.25 to 5.75	92.0	70.0 to 130	1.34	20.0
BD04589	Sodium, Total	mg/L	0.00137	0.0880	5.00	29.4	29.6	4.67	4.25 to 5.75	100	70.0 to 130	0.678	20.0
BD04589	Sulfate	mg/L	0.261	2.0	1000	1760	1760	19.4	18.0 to 22.0	100	80.0 to 120	0.00	20.0
BD04589	Thallium, Dissolved	mg/L	0.0000045	0.000147	0.100	0.0956	0.0991	0.108	0.0850 to 0.115	95.6	70.0 to 130	3.60	20.0
BD04589	Thallium, Total	mg/L	0.0000089	0.000147	0.100	0.102	0.0993	0.103	0.0850 to 0.115	102	70.0 to 130	2.68	20.0
BD04589	Total Organic Carbon	mg/L	0.0113	1.00	10.0	13.0	13.4	9.96		104	80.0 to 120	3.03	20.0

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

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

Alabama Power

Batch QC Summary

Customer Account: WMWGORG
Sample Date: 3/1/23 12:10
Customer ID:
Delivery Date: 3/2/23 10:38

Description: Gorgas Gypsum - MW-12V

Laboratory ID Number: BD04587

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04589	Alkalinity to pH 4.5	mg CaCO3/L					42.2	50.3	45.0 to 55.0			1.18	10.0
BD04589	Nitrogen, Nitrate/Nitrite	mg/L as N	0.02	0.200	2.00	2.20	0.234	2.02	1.80 to 2.20	97.5	90.0 to 110	6.61	15.0
BD04589	Solids, Dissolved	mg/L	0.0000	25.0			1320	49.0	40.0 to 60.0			0.755	10.0

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

Reported: 4/7/2023
Version: 3.5
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Gypsum Equipment Blank-1

Location Code: WMWGORGEB
Collected: 3/1/23 15:20
Customer ID:
Submittal Date: 3/2/23 10:44

Laboratory ID Number: BD04588

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	3/3/23 11:16	3/6/23 13:33		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	3/3/23 11:16	3/6/23 13:33		1.015	Not Detected	mg/L	0.070035	0.406	U
* Iron, Total	3/3/23 11:16	3/6/23 13:33		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Total	3/3/23 11:16	3/6/23 13:33		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	3/3/23 11:16	3/6/23 13:33		1.015	Not Detected	mg/L	0.021315	0.406	U
* Silica, Total (calc.)	3/3/23 11:16	3/6/23 13:33		1	Not Detected	mg/L			
* Silicon, Total	3/3/23 11:16	3/6/23 13:33		1.015	Not Detected	mg/L	0.02030	0.25375	U
* Sodium, Total	3/3/23 11:16	3/6/23 13:33		1.015	Not Detected	mg/L	0.03045	0.406	U
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/3/23 11:16	3/6/23 18:01		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	3/3/23 11:16	3/6/23 18:01		1.015	Not Detected	mg/L	0.006090	0.05075	U
* Arsenic, Total	3/3/23 11:16	3/6/23 18:01		1.015	Not Detected	mg/L	0.000081	0.000203	U
* Barium, Total	3/3/23 11:16	3/6/23 18:01		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Beryllium, Total	3/3/23 11:16	3/6/23 18:01		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	3/3/23 11:16	3/6/23 18:01		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	3/3/23 11:16	3/6/23 18:01		1.015	0.000255	mg/L	0.000203	0.001015	J
* Cobalt, Total	3/3/23 11:16	3/6/23 18:01		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	3/3/23 11:16	3/6/23 18:01		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	3/3/23 11:16	3/6/23 18:01		1.015	0.00105	mg/L	0.000152	0.001015	
* Molybdenum, Total	3/3/23 11:16	3/6/23 18:01		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Total	3/3/23 11:16	3/6/23 18:01		1.015	Not Detected	mg/L	0.169505	0.5075	U
* Selenium, Total	3/3/23 11:16	3/6/23 18:01		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	3/3/23 11:16	3/6/23 18:01		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ELH***								
* Mercury, Total by CVAA	3/8/23 17:33	3/8/23 23:41		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	3/3/23 11:53	3/3/23 11:53		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	3/3/23 10:50	3/6/23 13:40		1	Not Detected	mg/L		25	U

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

Comments:

Reported: 4/7/2023
Version: 3.5
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Gypsum Equipment Blank-1

Location Code: WMWGORGEB
Collected: 3/1/23 15:20
Customer ID:
Submittal Date: 3/2/23 10:44

Laboratory ID Number: BD04588

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 5310 B		***Analyst: SC***							
* Total Organic Carbon	3/2/23 21:21	3/2/23 21:21		1	Not Detected	mg/L	1.00	2	U
Analytical Method: SM4500Cl E		***Analyst: JCC***							
* Chloride	3/3/23 09:51	3/3/23 09:51		1	Not Detected	mg/L	0.50	1	U
Analytical Method: SM4500F G 2017		***Analyst: JCC***							
* Fluoride	3/3/23 12:43	3/3/23 12:43		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011		***Analyst: JCC***							
* Sulfate	3/2/23 15:14	3/2/23 15:14		1	Not Detected	mg/L	0.6	2	U

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

Comments:

Reported: 4/7/2023
Version: 3.5
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORGEB
Sample Date: 3/1/23 15:20
Customer ID:
Delivery Date: 3/2/23 10:44

Description: Gorgas Gypsum Equipment Blank-1

Laboratory ID Number: BD04588

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04589	Aluminum, Total	mg/L	0.00105	0.0198	0.100	2.53	2.54	0.104	0.0850 to 0.115	60.0	70.0 to 130	0.394	20.0
BD04589	Antimony, Total	mg/L	0.000377	0.00100	0.100	0.0946	0.0980	0.0927	0.0850 to 0.115	94.6	70.0 to 130	3.53	20.0
BD04589	Arsenic, Total	mg/L	0.0000222	0.000200	0.100	0.0997	0.0991	0.0978	0.0850 to 0.115	98.8	70.0 to 130	0.604	20.0
BD04589	Barium, Total	mg/L	0.0000047	0.00100	0.100	0.108	0.110	0.100	0.0850 to 0.115	98.0	70.0 to 130	1.83	20.0
BD04589	Beryllium, Total	mg/L	0.0000105	0.000880	0.100	0.106	0.103	0.0956	0.0850 to 0.115	102	70.0 to 130	2.87	20.0
BD04589	Boron, Total	mg/L	-0.00446	0.0650	1.00	3.91	3.90	1.02	0.850 to 1.15	106	70.0 to 130	0.256	20.0
BD04589	Cadmium, Total	mg/L	0.0000047	0.000147	0.100	0.0982	0.0984	0.0989	0.0850 to 0.115	98.2	70.0 to 130	0.203	20.0
BD04589	Calcium, Total	mg/L	0.00898	0.152	5.00	165	167	4.79	4.25 to 5.75	80.0	70.0 to 130	1.20	20.0
BD04589	Chloride	mg/L	0.0465	1.00	50.0	80.8	84.0	9.64	9.00 to 11.0	96.0	80.0 to 120	3.88	20.0
BD04589	Chromium, Total	mg/L	0.0000245	0.000440	0.100	0.0988	0.0989	0.101	0.0850 to 0.115	98.5	70.0 to 130	0.101	20.0
BD04589	Cobalt, Total	mg/L	0.0000103	0.000147	0.100	0.243	0.244	0.110	0.0850 to 0.115	109	70.0 to 130	0.411	20.0
BD04589	Fluoride	mg/L	0.0249	0.125	2.50	2.49	2.52	2.37	2.25 to 2.75	84.0	80.0 to 120	1.20	20.0
BD04589	Iron, Total	mg/L	0.000243	0.0176	0.2	38.1	38.9	0.198	0.170 to 0.230	-250	70.0 to 130	2.08	20.0
BD04589	Lead, Total	mg/L	0.0000063	0.000147	0.100	0.102	0.101	0.105	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BD04589	Lithium, Total	mg/L	-0.00127	0.0154	0.200	0.499	0.501	0.199	0.170 to 0.230	106	70.0 to 130	0.400	20.0
BD04589	Magnesium, Total	mg/L	0.0109	0.0462	5.00	104	106	4.80	4.25 to 5.75	84.0	70.0 to 130	1.90	20.0
BD04589	Manganese, Total	mg/L	-0.0000062	0.00033	0.100	4.89	4.78	0.104	0.0850 to 0.115	-130	70.0 to 130	2.28	20.0
BD04589	Mercury, Total by CVAA	mg/L	5.000E-05	0.000500	0.004	0.00401	0.00402	0.004	0.00340 to 0.00460	100	70.0 to 130	0.249	20.0
BD04589	Molybdenum, Total	mg/L	0.0000091	0.0002	0.100	0.101	0.100	0.0994	0.0850 to 0.115	101	70.0 to 130	0.995	20.0
BD04589	Potassium, Total	mg/L	-0.00676	0.367	10.0	14.1	14.0	9.93	8.50 to 11.5	98.4	70.0 to 130	0.712	20.0
BD04589	Selenium, Total	mg/L	0.0000967	0.00100	0.100	0.101	0.100	0.0991	0.0850 to 0.115	100	70.0 to 130	0.995	20.0
BD04589	Silicon, Total	mg/L	0.00185	0.0440	1.00	14.8	14.8	0.991	0.850 to 1.15	100	70.0 to 130	0.00	20.0
BD04589	Sodium, Total	mg/L	0.00137	0.0880	5.00	29.4	29.6	4.67	4.25 to 5.75	100	70.0 to 130	0.678	20.0
BD04589	Sulfate	mg/L	0.261	2.0	1000	1760	1760	19.4	18.0 to 22.0	100	80.0 to 120	0.00	20.0

Comments:

Reported: 4/7/2023
Version: 3.5
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORGEB
Sample Date: 3/1/23 15:20
Customer ID:
Delivery Date: 3/2/23 10:44

Description:Gorgas Gypsum Equipment Blank-1

Laboratory ID Number: BD04588

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04589	Thallium, Total	mg/L	0.0000089	0.000147	0.100	0.102	0.0993	0.103	0.0850 to 0.115	102	70.0 to 130	2.68	20.0
BD04589	Total Organic Carbon	mg/L	0.0113	1.00	10.0	13.0	13.4	9.96		104	80.0 to 120	3.03	20.0

Comments:

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

Alabama Power

Batch QC Summary

Customer Account: WMWGORGEB
Sample Date: 3/1/23 15:20
Customer ID:
Delivery Date: 3/2/23 10:44

Description: Gorgas Gypsum Equipment Blank-1

Laboratory ID Number: BD04588

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04589	Nitrogen, Nitrate/Nitrite	mg/L as N	0.02	0.200	2.00	2.20	0.234	2.02	1.80 to 2.20	97.5	90.0 to 110	6.61	15.0
BD04589	Solids, Dissolved	mg/L	0.0000	25.0			1320	49.0	40.0 to 60.0			0.755	10.0

Comments:

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Gypsum - MW-4V

Location Code: WMWGORG
Collected: 3/1/23 15:30
Customer ID:
Submittal Date: 3/2/23 10:38

Laboratory ID Number: BD04589

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	3/3/23 11:16	3/6/23 13:36		1.015	2.85	mg/L	0.030000	0.1015	
* Calcium, Total	3/3/23 11:16	3/7/23 11:31		10.15	161	mg/L	0.70035	4.06	
* Iron, Total	3/3/23 11:16	3/7/23 11:31		10.15	38.6	mg/L	0.08120	0.406	RA
* Lithium, Total	3/3/23 11:16	3/6/23 13:36		1.015	0.288	mg/L	0.007105	0.01999956	
* Magnesium, Total	3/3/23 11:16	3/7/23 11:31		10.15	99.8	mg/L	0.21315	4.06	
* Silica, Total (calc.)	3/3/23 11:16	3/6/23 13:36		1	29.5	mg/L			
* Silicon, Total	3/3/23 11:16	3/6/23 13:36		1.015	13.8	mg/L	0.02030	0.25375	
* Sodium, Total	3/3/23 11:16	3/6/23 13:36		1.015	24.4	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	3/2/23 12:15	3/6/23 11:30		1.015	2.90	mg/L	0.030000	0.1015	
* Calcium, Dissolved	3/2/23 12:15	3/6/23 15:28		10.15	156	mg/L	0.70035	4.06	RA
* Iron, Dissolved	3/2/23 12:15	3/6/23 15:28		10.15	37.5	mg/L	0.08120	0.406	RA
* Lithium, Dissolved	3/2/23 12:15	3/6/23 11:30		1.015	0.298	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	3/2/23 12:15	3/6/23 15:28		10.15	101	mg/L	0.21315	4.06	RA
* Silica, Dissolved (calc.)	3/2/23 12:15	3/6/23 11:30		1	28.9	mg/L			
* Silicon, Dissolved	3/2/23 12:15	3/6/23 11:30		1.015	13.5	mg/L	0.02030	0.25375	
* Sodium, Dissolved	3/2/23 12:15	3/6/23 11:30		1.015	25.5	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/3/23 11:16	3/6/23 18:04		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	3/3/23 11:16	3/6/23 20:16		5.075	2.47	mg/L	0.030450	0.25375	RA
* Arsenic, Total	3/3/23 11:16	3/6/23 18:04		1.015	0.000882	mg/L	0.000081	0.000203	
* Barium, Total	3/3/23 11:16	3/6/23 18:04		1.015	0.0100	mg/L	0.000508	0.001015	
* Beryllium, Total	3/3/23 11:16	3/6/23 18:04		1.015	0.00412	mg/L	0.000406	0.001015	
* Cadmium, Total	3/3/23 11:16	3/6/23 18:04		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	3/3/23 11:16	3/6/23 18:04		1.015	0.000293	mg/L	0.000203	0.001015	J
* Cobalt, Total	3/3/23 11:16	3/6/23 18:04		1.015	0.134	mg/L	0.000068	0.000203	
* Lead, Total	3/3/23 11:16	3/6/23 18:04		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	3/3/23 11:16	3/6/23 20:16		5.075	5.02	mg/L	0.000761	0.005075	RA
* Molybdenum, Total	3/3/23 11:16	3/6/23 18:04		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Total	3/3/23 11:16	3/6/23 18:04		1.015	4.26	mg/L	0.169505	0.5075	

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

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

Reported: 4/7/2023
Version: 3.5
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Gypsum - MW-4V

Location Code: WMWGORG
Collected: 3/1/23 15:30
Customer ID:
Submittal Date: 3/2/23 10:38

Laboratory ID Number: BD04589

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	3/3/23 11:16	3/6/23 18:04		1.015	0.000882	mg/L	0.000508	0.001015	J
* Thallium, Total	3/3/23 11:16	3/6/23 18:04		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	3/2/23 12:15	3/2/23 17:36		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	3/2/23 12:15	3/2/23 17:36		1.015	0.367	mg/L	0.006090	0.05075	
* Arsenic, Dissolved	3/2/23 12:15	3/2/23 17:36		1.015	0.000805	mg/L	0.000081	0.000203	
* Barium, Dissolved	3/2/23 12:15	3/2/23 17:36		1.015	0.00953	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	3/2/23 12:15	3/2/23 17:36		1.015	0.00289	mg/L	0.000406	0.001015	
* Cadmium, Dissolved	3/2/23 12:15	3/2/23 17:36		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	3/2/23 12:15	3/2/23 17:36		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	3/2/23 12:15	3/2/23 17:36		1.015	0.129	mg/L	0.000068	0.000203	
* Lead, Dissolved	3/2/23 12:15	3/2/23 17:36		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	3/2/23 12:15	3/6/23 12:52		5.075	4.70	mg/L	0.000761	0.005075	RA
* Molybdenum, Dissolved	3/2/23 12:15	3/2/23 17:36		1.015	0.000743	mg/L	0.000102	0.000203	
* Potassium, Dissolved	3/2/23 12:15	3/2/23 17:36		1.015	4.35	mg/L	0.169505	0.5075	
* Selenium, Dissolved	3/2/23 12:15	3/2/23 17:36		1.015	0.000649	mg/L	0.000508	0.001015	J
* Thallium, Dissolved	3/2/23 12:15	3/2/23 17:36		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ELH***								
* Mercury, Total by CVAA	3/8/23 17:33	3/8/23 23:45		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	3/3/23 11:54	3/3/23 11:54		1	0.250	mg/L as N	0.20	0.3	J
Analytical Method: SM 2320 B	***Analyst: ALH***								
* Alkalinity to pH 4.5	3/13/23 13:37	3/13/23 15:58		1	42.7	mg CaCO3/L			
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	3/3/23 10:50	3/6/23 13:40		1	1330	mg/L		75.8	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
* Bicarbonate Alkalinity, (calc.)	3/13/23 13:37	3/13/23 15:58		1	42.7	mg CaCO3/L		1	A
* Carbonate Alkalinity, (calc.)	3/13/23 13:37	3/13/23 15:58		1	Not Detected	mg CaCO3/L		0.5	A
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	3/2/23 21:39	3/2/23 21:39		1	2.63	mg/L	1.00	2	

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

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

Reported: 4/7/2023
Version: 3.5
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Gypsum - MW-4V

Location Code: WMWGORG
Collected: 3/1/23 15:30
Customer ID:
Submittal Date: 3/2/23 10:38

Laboratory ID Number: BD04589

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E		***Analyst: JCC***							
* Chloride	3/3/23 09:52	3/3/23 09:52		5	32.8	mg/L	2.50	5	
Analytical Method: SM4500F G 2017		***Analyst: JCC***							
* Fluoride	3/3/23 12:44	3/3/23 12:44		1	0.390	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011		***Analyst: JCC***							
* Sulfate	3/2/23 15:15	3/2/23 15:15		50	759	mg/L	30.0	100	
Analytical Method: Field Measurements		***Analyst: TJD***							
Conductivity	3/1/23 15:24	3/1/23 15:24			1574.46	uS/cm			FA
pH	3/1/23 15:24	3/1/23 15:24			5.77	SU			FA
Temperature	3/1/23 15:24	3/1/23 15:24			22.42	C			FA
Turbidity	3/1/23 15:24	3/1/23 15:24			8.23	NTU			FA
Sulfide	3/1/23 15:24	3/1/23 15:24			0	mg/L			FA

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

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

Reported: 4/7/2023
Version: 3.5
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORG
Sample Date: 3/1/23 15:30
Customer ID:
Delivery Date: 3/2/23 10:38

Description: Gorgas Gypsum - MW-4V

Laboratory ID Number: BD04589

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04589	Aluminum, Dissolved	mg/L	0.0000743	0.0198	0.100	0.455	0.447	0.102	0.0850 to 0.115	88.0	70.0 to 130	1.77	20.0
BD04589	Aluminum, Total	mg/L	0.00105	0.0198	0.100	2.53	2.54	0.104	0.0850 to 0.115	60.0	70.0 to 130	0.394	20.0
BD04589	Antimony, Dissolved	mg/L	0.000302	0.00100	0.100	0.0870	0.0884	0.0875	0.0850 to 0.115	87.0	70.0 to 130	1.60	20.0
BD04589	Antimony, Total	mg/L	0.000377	0.00100	0.100	0.0946	0.0980	0.0927	0.0850 to 0.115	94.6	70.0 to 130	3.53	20.0
BD04589	Arsenic, Dissolved	mg/L	-0.0000082	0.000200	0.100	0.0965	0.100	0.0999	0.0850 to 0.115	95.7	70.0 to 130	3.56	20.0
BD04589	Arsenic, Total	mg/L	0.0000222	0.000200	0.100	0.0997	0.0991	0.0978	0.0850 to 0.115	98.8	70.0 to 130	0.604	20.0
BD04589	Barium, Dissolved	mg/L	0.0000093	0.00100	0.100	0.107	0.112	0.105	0.0850 to 0.115	97.5	70.0 to 130	4.57	20.0
BD04589	Barium, Total	mg/L	0.0000047	0.00100	0.100	0.108	0.110	0.100	0.0850 to 0.115	98.0	70.0 to 130	1.83	20.0
BD04589	Beryllium, Dissolved	mg/L	0.000023	0.000880	0.100	0.101	0.104	0.102	0.0850 to 0.115	98.1	70.0 to 130	2.93	20.0
BD04589	Beryllium, Total	mg/L	0.0000105	0.000880	0.100	0.106	0.103	0.0956	0.0850 to 0.115	102	70.0 to 130	2.87	20.0
BD04589	Boron, Dissolved	mg/L	-0.00433	0.0650	1.00	3.95	3.94	1.04	0.850 to 1.15	105	70.0 to 130	0.253	20.0
BD04589	Boron, Total	mg/L	-0.00446	0.0650	1.00	3.91	3.90	1.02	0.850 to 1.15	106	70.0 to 130	0.256	20.0
BD04589	Cadmium, Dissolved	mg/L	-0.0000027	0.000147	0.100	0.0895	0.0908	0.0963	0.0850 to 0.115	89.5	70.0 to 130	1.44	20.0
BD04589	Cadmium, Total	mg/L	0.0000047	0.000147	0.100	0.0982	0.0984	0.0989	0.0850 to 0.115	98.2	70.0 to 130	0.203	20.0
BD04589	Calcium, Dissolved	mg/L	0.0129	0.152	5.00	186	189	4.98	4.25 to 5.75	600	70.0 to 130	1.60	20.0
BD04589	Calcium, Total	mg/L	0.00898	0.152	5.00	165	167	4.79	4.25 to 5.75	80.0	70.0 to 130	1.20	20.0
BD04589	Chloride	mg/L	0.0465	1.00	50.0	80.8	84.0	9.64	9.00 to 11.0	96.0	80.0 to 120	3.88	20.0
BD04589	Chromium, Dissolved	mg/L	-0.0000207	0.000440	0.100	0.0943	0.0947	0.0978	0.0850 to 0.115	94.3	70.0 to 130	0.423	20.0
BD04589	Chromium, Total	mg/L	0.0000245	0.000440	0.100	0.0988	0.0989	0.101	0.0850 to 0.115	98.5	70.0 to 130	0.101	20.0
BD04589	Cobalt, Dissolved	mg/L	0.0000069	0.000147	0.100	0.221	0.214	0.103	0.0850 to 0.115	92.0	70.0 to 130	3.22	20.0
BD04589	Cobalt, Total	mg/L	0.0000103	0.000147	0.100	0.243	0.244	0.110	0.0850 to 0.115	109	70.0 to 130	0.411	20.0
BD04589	Fluoride	mg/L	0.0249	0.125	2.50	2.49	2.52	2.37	2.25 to 2.75	84.0	80.0 to 120	1.20	20.0
BD04589	Iron, Dissolved	mg/L	0.000386	0.0176	0.2	43.5	43.3	0.205	0.170 to 0.230	3000	70.0 to 130	0.461	20.0
BD04589	Iron, Total	mg/L	0.000243	0.0176	0.2	38.1	38.9	0.198	0.170 to 0.230	-250	70.0 to 130	2.08	20.0

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

Reported: 4/7/2023
Version: 3.5
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORG
Sample Date: 3/1/23 15:30
Customer ID:
Delivery Date: 3/2/23 10:38

Description: Gorgas Gypsum - MW-4V

Laboratory ID Number: BD04589

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04589	Lead, Dissolved	mg/L	0.0000059	0.000147	0.100	0.103	0.104	0.110	0.0850 to 0.115	103	70.0 to 130	0.966	20.0
BD04589	Lead, Total	mg/L	0.0000063	0.000147	0.100	0.102	0.101	0.105	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BD04589	Lithium, Dissolved	mg/L	-0.000676	0.0154	0.200	0.501	0.499	0.203	0.170 to 0.230	102	70.0 to 130	0.400	20.0
BD04589	Lithium, Total	mg/L	-0.00127	0.0154	0.200	0.499	0.501	0.199	0.170 to 0.230	106	70.0 to 130	0.400	20.0
BD04589	Magnesium, Dissolved	mg/L	0.00436	0.0462	5.00	122	126	4.94	4.25 to 5.75	420	70.0 to 130	3.23	20.0
BD04589	Magnesium, Total	mg/L	0.0109	0.0462	5.00	104	106	4.80	4.25 to 5.75	84.0	70.0 to 130	1.90	20.0
BD04589	Manganese, Dissolved	mg/L	0.000307	0.00033	0.100	5.01	4.66	0.101	0.0850 to 0.115	310	70.0 to 130	7.24	20.0
BD04589	Manganese, Total	mg/L	-0.0000062	0.00033	0.100	4.89	4.78	0.104	0.0850 to 0.115	-130	70.0 to 130	2.28	20.0
BD04589	Mercury, Total by CVAA	mg/L	5.000E-05	0.000500	0.004	0.00401	0.00402	0.004	0.00340 to 0.00460	100	70.0 to 130	0.249	20.0
BD04589	Molybdenum, Dissolved	mg/L	0.0000155	0.0002	0.100	0.0984	0.101	0.102	0.0850 to 0.115	97.7	70.0 to 130	2.61	20.0
BD04589	Molybdenum, Total	mg/L	0.0000091	0.0002	0.100	0.101	0.100	0.0994	0.0850 to 0.115	101	70.0 to 130	0.995	20.0
BD04589	Potassium, Dissolved	mg/L	0.00975	0.367	10.0	13.4	13.8	9.74	8.50 to 11.5	90.5	70.0 to 130	2.94	20.0
BD04589	Potassium, Total	mg/L	-0.00676	0.367	10.0	14.1	14.0	9.93	8.50 to 11.5	98.4	70.0 to 130	0.712	20.0
BD04589	Selenium, Dissolved	mg/L	0.000108	0.00100	0.100	0.0965	0.101	0.103	0.0850 to 0.115	95.9	70.0 to 130	4.56	20.0
BD04589	Selenium, Total	mg/L	0.0000967	0.00100	0.100	0.101	0.100	0.0991	0.0850 to 0.115	100	70.0 to 130	0.995	20.0
BD04589	Silicon, Dissolved	mg/L	0.000267	0.0440	1.00	14.4	14.4	1.02	0.850 to 1.15	90.0	70.0 to 130	0.00	20.0
BD04589	Silicon, Total	mg/L	0.00185	0.0440	1.00	14.8	14.8	0.991	0.850 to 1.15	100	70.0 to 130	0.00	20.0
BD04589	Sodium, Dissolved	mg/L	0.00216	0.0880	5.00	30.1	29.7	4.90	4.25 to 5.75	92.0	70.0 to 130	1.34	20.0
BD04589	Sodium, Total	mg/L	0.00137	0.0880	5.00	29.4	29.6	4.67	4.25 to 5.75	100	70.0 to 130	0.678	20.0
BD04589	Sulfate	mg/L	0.261	2.0	1000	1760	1760	19.4	18.0 to 22.0	100	80.0 to 120	0.00	20.0
BD04589	Thallium, Dissolved	mg/L	0.0000045	0.000147	0.100	0.0956	0.0991	0.108	0.0850 to 0.115	95.6	70.0 to 130	3.60	20.0
BD04589	Thallium, Total	mg/L	0.0000089	0.000147	0.100	0.102	0.0993	0.103	0.0850 to 0.115	102	70.0 to 130	2.68	20.0
BD04589	Total Organic Carbon	mg/L	0.0113	1.00	10.0	13.0	13.4	9.96		104	80.0 to 120	3.03	20.0

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

Reported: 4/7/2023
Version: 3.5
COA_CCR

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

Alabama Power

Batch QC Summary

Customer Account: WMWGORG
Sample Date: 3/1/23 15:30
Customer ID:
Delivery Date: 3/2/23 10:38

Description: Gorgas Gypsum - MW-4V

Laboratory ID Number: BD04589

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04589	Alkalinity to pH 4.5	mg CaCO3/L					42.2	50.3	45.0 to 55.0			1.18	10.0
BD04589	Nitrogen, Nitrate/Nitrite	mg/L as N	0.02	0.200	2.00	2.20	0.234	2.02	1.80 to 2.20	97.5	90.0 to 110	6.61	15.0
BD04589	Solids, Dissolved	mg/L	0.0000	25.0			1320	49.0	40.0 to 60.0			0.755	10.0

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

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

Definitions

Project Number: WMWGORG_1401

Abbreviation	Description
DF	Dilution Factor
LCS	Lab Control Sample
LFM	Lab Fortified Matrix
MB	Method Blank
MDL	Method Detection Limit; minimum concentration of an analyte that can be determined with 99% confidence that the concentration is greater than zero.
MS	Matrix Spike
MSD	Matrix Spike Duplicate
Prec	Precision (% RPD)
Q	Qualifier; comment used to note deviations or additional information associated with analytical results.
QC	Quality Control
Rec	Recovery of Matrix Spike
RL	Reporting Limit; lowest concentration at which an analyte can be quantitatively measured.
Vio Spec	Violation Specification; regulatory limit which has been exceeded by the sample analyzed.

Qualifier	Description
A	Bicarbonate alkalinity, carbonate alkalinity, hydroxide alkalinity, free carbon dioxide, and/or total carbon dioxide calculations are estimates due to pH>10SU and/or TDS>500mg/L.
FA	Field results were reviewed by the Water Field Group. Refer to APC Field Case Narrative.
J	Reported value is an estimate because concentration is less than reporting limit.
RA	Matrix spike is invalid due to sample concentration.
U	Compound was analyzed, but not detected.

Chain of Custody
Groundwater
APC General Testing Laboratory

☑ Field Complete ☐ Outside Lab
☑ Lab Complete

Lab ETA

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Collector	Dallas Gentry	Requested By	Greg Dyer
		Location	Gorgas Gypsum

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

Comments

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id	pH Check
PZ-17	02/27/2023	11:22	6	Groundwater		BD04568	☑
PZ-18	02/27/2023	12:31	6	Groundwater		BD04569	☑
PZ-19	02/28/2023	09:24	6	Groundwater		BD04570	☑
PZ-22	02/28/2023	10:24	6	Groundwater		BD04571	☑
PZ-21	02/28/2023	11:46	6	Groundwater		BD04572	☑
PZ-20	02/28/2023	12:55	6	Groundwater		BD04573	☑
FB-2	02/28/2023	13:15	5	Field Blank		BD04574	☑
MW-14H	02/28/2023	14:20	6	Groundwater		BD04575	☑
MW-14H dup	02/28/2023	14:20	6	Sample Duplicate		BD04576	☑
MW-4	03/01/2023	10:00	6	Groundwater		BD04577	☑
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Relinquished By	Received By	Date/Time
		03/02/2023 09:30

SmarTroll ID	7586-41443-5-2	Cooler Temp	1.0 °C
Turbidity ID	9901-57263-1-1	Thermometer ID	10614-61208-2-1
Sample Event	1401	pH Strip ID	10429-60252-10-8

Bottles/Pre-Preserved Bottles are provided by the GTL

Total Metals and Alkalinity are not performed on Dissolved Sets

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

Chain of Custody
Groundwater
APC General Testing Laboratory

☑ Field Complete ☐ Outside Lab
☑ Lab Complete

Lab ETA

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Collector	Anthony Goggins	Requested By	Greg Dyer
		Location	Gorgas Gypsum

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

Comments

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id	pH Check
MW-8V	02/28/2023	12:29	6	Groundwater		BD04566	☑
MW-8	02/28/2023	13:47	6	Groundwater		BD04567	☑
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Relinquished By	Received By	Date/Time
		03/02/2023 09:29

SmarTroll ID	7586-41446-5-5	Cooler Temp	1.9 °C
Turbidity ID	9830-57039-1-1	Thermometer ID	10614-61208-2-1
Sample Event	1401	pH Strip ID	10429-60252-10-8

Bottles/Pre-Preserved Bottles are provided by the GTL

Total Metals and Alkalinity are not performed on Dissolved Sets

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

Chain of Custody Groundwater

APC General Testing Laboratory

☑ Field Complete ☐ Outside Lab

☑ Lab Complete

Lab ETA

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Collector	TJ Daugherty	Requested By	Greg Dyer
		Location	Gorgas Gypsum

Bottles

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

Comments

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id	pH Check
MW-3V	02/27/2023	11:55	6	Groundwater		BD04578	☑
MW-3	02/27/2023	14:03	6	Groundwater		BD04579	☑
MW-9V	02/28/2023	10:45	6	Groundwater		BD04580	☑
MW-9H	02/28/2023	12:15	6	Groundwater		BD04581	☑
MW-13H	02/28/2023	14:00	6	Groundwater		BD04582	☑
MW-11H	02/28/2023	15:30	6	Groundwater		BD04583	☑
MW-12H	03/01/2023	10:40	6	Groundwater		BD04584	☑
MW-12H Dup	03/01/2023	10:40	6	Sample Duplicate		BD04585	☑
FB-1	03/01/2023	11:20	5	Field Blank		BD04586	☑
MW-12V	03/01/2023	12:10	6	Groundwater		BD04587	☑
EB-1	03/01/2023	15:20	5	Equipment Blank		BD04588	☑
MW-4V	03/01/2023	15:30	6	Groundwater		BD04589	☑
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Relinquished By	Received By	Date/Time
		03/02/2023 09:28

SmarTroll ID	7586-41445-5-4	Cooler Temp	1.8 °C
Turbidity ID	4677-23343-4-2	Thermometer ID	10614-61208-2-1
Sample Event	1401	pH Strip ID	10275-59508-10-4

Bottles/Pre-Preserved Bottles are provided by the GTL

Total Metals and Alkalinity are not performed on Dissolved Sets

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

Chain of Custody
Groundwater
APC General Testing Laboratory

☑ Field Complete ☑ Outside Lab
☑ Lab Complete

Lab ETA

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Collector	Anthony Goggins	Requested By	Greg Dyer
		Location	Gorgas Gypsum

Bottles												
1	Radium	1 L	3	N/A	N/A	5	N/A	N/A	7	N/A	N/A
2	N/A	N/A	4	N/A	N/A	6	N/A	N/A	8	N/A	N/A

Comments

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id	pH Check
MW-8V	02/28/2023	12:29	1	Groundwater		BD04590	☑
MW-8	02/28/2023	13:47	1	Groundwater		BD04591	☑
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Relinquished By	Received By	Date/Time
		03/02/2023 09:30

SmarTroll ID	7586-41446-5-5	Cooler Temp	N/A
Turbidity ID	9830-57039-1-1	Thermometer ID	N/A
Sample Event	1401	pH Strip ID	10429-60252-10-8

Bottles/Pre-Preserved Bottles are provided by the GTL

Total Metals and Alkalinity are not performed on Dissolved Sets

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

Chain of Custody
Groundwater
APC General Testing Laboratory

☑ Field Complete ☑ Outside Lab
☑ Lab Complete

Lab ETA

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Collector	Dallas Gentry	Requested By	Greg Dyer
		Location	Gorgas Gypsum

Bottles												
1	Radium	1 L	3	N/A	N/A	5	N/A	N/A	7	N/A	N/A
2	N/A	N/A	4	N/A	N/A	6	N/A	N/A	8	N/A	N/A

Comments: Radium MS/MSD collected at PZ-19

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id	pH Check
PZ-17	02/27/2023	11:22	1	Groundwater		BD04592	☑
PZ-18	02/27/2023	12:31	1	Groundwater		BD04593	☑
PZ-19	02/28/2023	09:24	3	Groundwater		BD04594	☑
PZ-22	02/28/2023	10:24	1	Groundwater		BD04595	☑
PZ-21	02/28/2023	11:46	1	Groundwater		BD04596	☑
PZ-20	02/28/2023	12:55	1	Groundwater		BD04597	☑
FB-2	02/28/2023	13:15	1	Field Blank		BD04598	☑
MW-14H	02/28/2023	14:20	1	Groundwater		BD04599	☑
MW-14H dup	02/28/2023	14:20	1	Sample Duplicate		BD04600	☑
MW-4	03/01/2023	10:00	1	Groundwater		BD04601	☑
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Relinquished By	Received By	Date/Time
		03/02/2023 09:31

SmarTroll ID	7586-41443-5-2	Cooler Temp	N/A
Turbidity ID	9901-57263-1-1	Thermometer ID	N/A
Sample Event	1401	pH Strip ID	10429-60252-10-8

Bottles/Pre-Preserved Bottles are provided by the GTL

Total Metals and Alkalinity are not performed on Dissolved Sets

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

Chain of Custody
Groundwater
APC General Testing Laboratory

☑ Field Complete ☑ Outside Lab
☑ Lab Complete

Lab ETA

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Collector	TJ Daugherty	Requested By	Greg Dyer
		Location	Gorgas Gypsum

Bottles												
1	Radium	1 L	3	N/A	N/A	5	N/A	N/A	7	N/A	N/A
2	N/A	N/A	4	N/A	N/A	6	N/A	N/A	8	N/A	N/A

Comments: Rad MS/MSD @ MW-12V

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id	pH Check
MW-3V	02/27/2023	11:55	1	Groundwater		BD04602	☑
MW-3	02/27/2023	14:03	1	Groundwater		BD04603	☑
MW-9V	02/28/2023	10:45	1	Groundwater		BD04604	☑
MW-9H	02/28/2023	12:15	1	Groundwater		BD04605	☑
MW-13H	02/28/2023	14:00	1	Groundwater		BD04606	☑
MW-11H	02/28/2023	15:30	1	Groundwater		BD04607	☑
MW-12H	03/01/2023	10:40	1	Groundwater		BD04608	☑
MW-12H Dup	03/01/2023	10:40	1	Sample Duplicate		BD04609	☑
FB-1	03/01/2023	11:20	1	Field Blank		BD04610	☑
MW-12V	03/01/2023	12:10	3	Groundwater		BD04611	☑
EB-1	03/01/2023	15:20	1	Equipment Blank		BD04612	☑
MW-4V	03/01/2023	15:30	1	Groundwater		BD04613	☑
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Relinquished By	Received By	Date/Time
		03/02/2023 09:28

SmarTroll ID	7586-41445-5-4	Cooler Temp	N/A
Turbidity ID	4677-23343-4-2	Thermometer ID	N/A
Sample Event	1401	pH Strip ID	10275-59508-10-4

Bottles/Pre-Preserved Bottles are provided by the GTL

Total Metals and Alkalinity are not performed on Dissolved Sets

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

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

April 18, 2023

Brooke Caton
Alabama Power
744 Highway 87
Calera, AL 35040

RE: Project: WMWGORPU_1398
Pace Project No.: 30566812

Dear Brooke Caton:

Enclosed are the analytical results for sample(s) received by the laboratory on March 02, 2023. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Greensburg

Greensburg, PA - Revision 1 - This report replaces the April 17, 2023 report. This project was revised on April 18, 2023 to add Rad QC sheets to the final report.

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

Sincerely,

Skyler C. Richmond
skyler.richmond@pacelabs.com
(724)850-5600
Project Manager

Enclosures

cc: Blaine Denton, Alabama Power
Renee Jernigan, Alabama Power

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

CERTIFICATIONS

Project: WMWGORPU_1398
Pace Project No.: 30566812

Pace Analytical Services Pennsylvania
1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
Delaware Certification
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Florida: Cert E871149 SEKS WET
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA180012
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: 2017020
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification #: 9991
Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572018-1
New Hampshire/TNI Certification #: 297617
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Ohio EPA Rad Approval: #41249
Oregon/TNI Certification #: PA200002-010
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: 02867
Texas/TNI Certification #: T104704188-17-3
Utah/TNI Certification #: PA014572017-9
USDA Soil Permit #: P330-17-00091
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Approve List for Rad
Wyoming Certification #: 8TMS-L

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

SAMPLE SUMMARY

Project: WMWGORPU_1398
Pace Project No.: 30566812

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30566812001	**B004058 MW-1**	Water	02/20/23 11:50	03/02/23 11:00
30566812002	**B004059 MW-1 Dup**	Water	02/20/23 11:50	03/02/23 11:00
30566812003	**B004060 MW-2**	Water	02/20/23 13:35	03/02/23 11:00
30566812004	**B004061 MW-3**	Water	02/20/23 14:53	03/02/23 11:00
30566812005	**B004062 MW-4**	Water	02/21/23 09:58	03/02/23 11:00
30566812006	**B004062 MW-4 MS**	Water	02/21/23 09:58	03/02/23 11:00
30566812007	**B004062 MW-4 MSD**	Water	02/21/23 09:58	03/02/23 11:00
30566812008	**B004063 FB-1**	Water	02/21/23 10:35	03/02/23 11:00
30566812009	**B004064 EB-1**	Water	02/21/23 10:45	03/02/23 11:00

Pace Analytical Services, LLC
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Greensburg, PA 15601
(724)850-5600

SAMPLE ANALYTE COUNT

Project: WMWGORPU_1398
Pace Project No.: 30566812

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30566812001	**B004058 MW-1**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30566812002	**B004059 MW-1 Dup**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30566812003	**B004060 MW-2**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30566812004	**B004061 MW-3**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30566812005	**B004062 MW-4**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30566812006	**B004062 MW-4 MS**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
30566812007	**B004062 MW-4 MSD**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
30566812008	**B004063 FB-1**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30566812009	**B004064 EB-1**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA

PASI-PA = Pace Analytical Services - Greensburg

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

PROJECT NARRATIVE

Project: WMWGORPU_1398
Pace Project No.: 30566812

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

General Information:
9 samples were analyzed for EPA 9315 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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

PROJECT NARRATIVE

Project: WMWGORPU_1398
Pace Project No.: 30566812

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

General Information:
9 samples were analyzed for EPA 9320 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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

PROJECT NARRATIVE

Project: WMWGORPU_1398
Pace Project No.: 30566812

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

General Information:
7 samples were analyzed for Total Radium Calculation by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORPU_1398
Pace Project No.: 30566812

Sample: B004058 MW-1 **Lab ID: 30566812001** Collected: 02/20/23 11:50 Received: 03/02/23 11:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.0505U ± 0.121 (0.288) C:99% T:NA**	pCi/L	03/30/23 08:31	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.309U ± 0.363 (0.761) C:73% T:86%**	pCi/L	03/13/23 17:08	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.360U ± 0.484 (1.05)**	pCi/L	03/30/23 15:00	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORPU_1398
Pace Project No.: 30566812

Sample: B004059 MW-1 Dup **Lab ID: 30566812002** Collected: 02/20/23 11:50 Received: 03/02/23 11:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.299 ± 0.162 (0.201) C:95% T:NA**	pCi/L	03/30/23 08:31	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.510U ± 0.397 (0.783) C:73% T:90%**	pCi/L	03/13/23 17:08	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.809U ± 0.559 (0.984)**	pCi/L	03/30/23 15:00	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORPU_1398
Pace Project No.: 30566812

Sample: B004060 MW-2 **Lab ID: 30566812003** Collected: 02/20/23 13:35 Received: 03/02/23 11:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.0169U ± 0.0969 (0.257) C:97% T:NA**	pCi/L	03/30/23 08:38	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.820 ± 0.439 (0.778) C:76% T:86%**	pCi/L	03/13/23 17:08	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.837U ± 0.536 (1.04)**	pCi/L	03/30/23 15:00	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORPU_1398
Pace Project No.: 30566812

Sample: B004061 MW-3 **Lab ID: 30566812004** Collected: 02/20/23 14:53 Received: 03/02/23 11:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.0294U ± 0.118 (0.300) C:98% T:NA**	pCi/L	03/30/23 08:38	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.205U ± 0.371 (0.813) C:74% T:82%**	pCi/L	03/13/23 17:08	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.234U ± 0.489 (1.11)**	pCi/L	03/30/23 15:00	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORPU_1398
Pace Project No.: 30566812

Sample: B004062 MW-4 **Lab ID: 30566812005** Collected: 02/21/23 09:58 Received: 03/02/23 11:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.0284U ± 0.131 (0.337) C:96% T:NA**	pCi/L	03/30/23 08:38	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.272U ± 0.335 (0.706) C:76% T:86%**	pCi/L	03/13/23 17:08	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.300U ± 0.466 (1.04)**	pCi/L	03/30/23 15:00	7440-14-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORPU_1398
Pace Project No.: 30566812

Sample: B004062 MW-4 MS **Lab ID: 30566812006** Collected: 02/21/23 09:58 Received: 03/02/23 11:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**84.63 %REC ± NA (NA) C:NA T:NA**	pCi/L	03/30/23 08:38	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**83.5 %REC ± NA (NA) C:NA T:NA**	pCi/L	03/13/23 17:08	15262-20-1	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORPU_1398
Pace Project No.: 30566812

Sample: B004062 MW-4 MSD **Lab ID: 30566812007** Collected: 02/21/23 09:58 Received: 03/02/23 11:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**83.26 %REC 1.63RPD ± NA (NA) C:NA T:NA**	pCi/L	03/30/23 08:41	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**94.24 %REC 12.09RPD ± NA (NA) C:NA T:NA**	pCi/L	03/13/23 17:08	15262-20-1	

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

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORPU_1398
Pace Project No.: 30566812

Sample: B004063 FB-1 **Lab ID: 30566812008** Collected: 02/21/23 10:35 Received: 03/02/23 11:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.0491U ± 0.105 (0.247) C:101% T:NA**	pCi/L	03/30/23 10:14	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.166U ± 0.301 (0.660) C:68% T:92%**	pCi/L	03/13/23 17:08	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.215U ± 0.406 (0.907)**	pCi/L	03/30/23 15:00	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORPU_1398
Pace Project No.: 30566812

Sample: B004064 EB-1 **Lab ID: 30566812009** Collected: 02/21/23 10:45 Received: 03/02/23 11:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.0287U ± 0.132 (0.340) C:102% T:NA**	pCi/L	03/30/23 10:13	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.448U ± 0.370 (0.734) C:74% T:89%**	pCi/L	03/13/23 17:09	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.477U ± 0.502 (1.07)**	pCi/L	03/30/23 15:00	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL - RADIOCHEMISTRY

Project: WMWGORPU_1398
Pace Project No.: 30566812

QC Batch: 571662
QC Batch Method: EPA 9315
Analysis Method: EPA 9315
Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30566812001, 30566812002, 30566812003, 30566812004, 30566812005, 30566812006, 30566812007, 30566812008, 30566812009

METHOD BLANK: 2775793 Matrix: Water
Associated Lab Samples: 30566812001, 30566812002, 30566812003, 30566812004, 30566812005, 30566812006, 30566812007, 30566812008, 30566812009

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

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL - RADIOCHEMISTRY

Project: WMWGORPU_1398
Pace Project No.: 30566812

QC Batch: 571663
QC Batch Method: EPA 9320
Analysis Method: EPA 9320
Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30566812001, 30566812002, 30566812003, 30566812004, 30566812005, 30566812006, 30566812007, 30566812008, 30566812009

METHOD BLANK: 2775794 Matrix: Water
Associated Lab Samples: 30566812001, 30566812002, 30566812003, 30566812004, 30566812005, 30566812006, 30566812007, 30566812008, 30566812009

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

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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

QUALIFIERS

Project: WMWGORPU_1398
Pace Project No.: 30566812

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Act - Activity

Unc - Uncertainty: For Safe Drinking Water Act (SDWA) analyses, the reported Unc. Is the calculated Count Uncertainty (95% confidence interval) using a coverage factor of 1.96. For all other matrices (non-SDWA), the reported Unc. is the calculated Expanded Uncertainty (aka Combined Standard Uncertainty, CSU), reported at the 95% confidence interval using a coverage factor of 1.96.

Gamma Spec: The Unc. reported for all gamma-spectroscopy analyses (EPA 901.1), is the calculated Expanded Uncertainty (CSU) at the 95.4% confidence interval, using a coverage factor of 2.0.

(MDC) - Minimum Detectable Concentration

Trac - Tracer Recovery (%)

Carr - Carrier Recovery (%)

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

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

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: WMWGORPU_1398
Pace Project No.: 30566812

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30566812001	**B004058 MW-1**	EPA 9315	571662		
30566812002	**B004059 MW-1 Dup**	EPA 9315	571662		
30566812003	**B004060 MW-2**	EPA 9315	571662		
30566812004	**B004061 MW-3**	EPA 9315	571662		
30566812005	**B004062 MW-4**	EPA 9315	571662		
30566812006	**B004062 MW-4 MS**	EPA 9315	571662		
30566812007	**B004062 MW-4 MSD**	EPA 9315	571662		
30566812008	**B004063 FB-1**	EPA 9315	571662		
30566812009	**B004064 EB-1**	EPA 9315	571662		
30566812001	**B004058 MW-1**	EPA 9320	571663		
30566812002	**B004059 MW-1 Dup**	EPA 9320	571663		
30566812003	**B004060 MW-2**	EPA 9320	571663		
30566812004	**B004061 MW-3**	EPA 9320	571663		
30566812005	**B004062 MW-4**	EPA 9320	571663		
30566812006	**B004062 MW-4 MS**	EPA 9320	571663		
30566812007	**B004062 MW-4 MSD**	EPA 9320	571663		
30566812008	**B004063 FB-1**	EPA 9320	571663		
30566812009	**B004064 EB-1**	EPA 9320	571663		
30566812001	**B004058 MW-1**	Total Radium Calculation	577500		
30566812002	**B004059 MW-1 Dup**	Total Radium Calculation	577500		
30566812003	**B004060 MW-2**	Total Radium Calculation	577500		
30566812004	**B004061 MW-3**	Total Radium Calculation	577500		
30566812005	**B004062 MW-4**	Total Radium Calculation	577500		
30566812008	**B004063 FB-1**	Total Radium Calculation	577500		
30566812009	**B004064 EB-1**	Total Radium Calculation	577500		

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	Alabama Power Company	Report To:	Brooke Caton	Attention:	Brooke Caton
Address:	744 Highway 87 GSC Bldg #8 Calera, AL 35040	Copy To:	Renee Jernigan & Blaine Denton	Company Name:	Alabama Power Co.
				Address:	744 Highway 87 GSC Bldg #8
Email To:	tbwill@southernco.com	Purchase Order #:	APC10755638	Pace Quote:	CCR
Phone:	205-664-6101 Fax	Project Name:	Plant Gorgas Pooled Upgradient	Pace Project Manager:	Skyler Richmond
Requested Due Date:	Normal	Project Number:	WMWGORPU_1398	Pace Profile #:	16788

Regulatory Agency

State / Location: AL

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)	Description	Station Name Location_Code	Site Name Facility_ID	Sample Duplicate	Matrix Spike/Matrix Spike Duplicate	Field Filtered	MATRIX CODE	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	# OF CONTAINERS	Preservatives: Unpreserved	NaOH+ZnAcetate	HNO3	Y/N	Analyses Test: EPA 9315	EPA 9320	Total Radium Sum	Total Sulfide	Residual Chlorine (Y/N)	
1	BD04058	MW-1	APCO-GS-UP-MW-1	APCO_Gorgas_Pooled_Upgradient				GW	G	2/20/2023	11:50	1			X		X	X	X			001
2	BD04059	MW-1 Dup	APCO-GS-UP-MW-1	APCO_Gorgas_Pooled_Upgradient	x			GW	G	2/20/2023	11:50	1			X		X	X	X			002
3	BD04060	MW-2	APCO-GS-UP-MW-2	APCO_Gorgas_Pooled_Upgradient				GW	G	2/20/2023	13:35	1			X		X	X	X			003
4	BD04061	MW-3	APCO-GS-UP-MW-3	APCO_Gorgas_Pooled_Upgradient				GW	G	2/20/2023	14:53	1			X		X	X	X			004
5	BD04062	MW-4	APCO-GS-UP-MW-4	APCO_Gorgas_Pooled_Upgradient		x		GW	G	2/21/2023	9:58	3			X		X	X	X			005,006,007
6	BD04063	FB-1	APCO-GS-UP-FB-01	APCO_Gorgas_Pooled_Upgradient				GW	G	2/21/2023	10:35	1			X		X	X	X			008
7	BD04064	EB-1	APCO-GS-UP-EB-01	APCO_Gorgas_Pooled_Upgradient				GW	G	2/21/2023	10:45	1			X		X	X	X			009
8																						
9																						
10																						
11																						
12																						

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	Brooke Caton/ APC GTL	2/24/2023	9:37		3-2-23	11:00	

WO# : 30566812

30566812

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER:

SIGNATURE of SAMPLER: DATE Signed:

SAMPLE CONDITIONS			
TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

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

Effective Date: 02/03/2023

WO#: 30566812

PM: SCR Due Date: 03/30/23

CLIENT: ALABAMA PWR

Client Name: Alabama Power Company

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

Tracking Number: 615407597805

Examined By	TH
Labeled By	TH
Temped By	—

Custody Seal on Cooler/Box Present: ☐ Yes ☑ No **Seals Intact:** ☐ Yes ☑ No

Thermometer Used: — **Type of Ice:** Wet Blue (None)

Cooler Temperature: Observed Temp — °C Correction Factor: — °C Final Temp: — °C

Temp should be above freezing to 6°C

Comments:	Yes	No	NA	pH paper Lot# 100777 / D.P.D. Residual Chlorine Lot # —
Chain of Custody Present	J			1.
Chain of Custody Filled Out:	J			2.
-Were client corrections present on COC		J		
Chain of Custody Relinquished	J			3.
Sampler Name & Signature on COC:		J		4.
Sample Labels match COC:	J			5.
-Includes date/time/ID Matrix:	WT			
Samples Arrived within Hold Time:	J			6.
Short Hold Time Analysis (<72hr remaining):		J		7.
Rush Turn Around Time Requested:		J		8.
Sufficient Volume:	J			9.
Correct Containers Used:	J			10.
-Pace Containers Used	J			
Containers Intact:	J			11.
Orthophosphate field filtered:			J	12.
Hex Cr Aqueous samples field filtered:			J	13.
Organic Samples checked for dechlorination			J	14:
Filtered volume received for dissolved tests:			J	15:
All containers checked for preservation:	J			16.
exceptions: VOA, coliform, TOC, O&G, Phenolics, Radon, non-aqueous matrix				PH<2
All containers meet method preservation requirements:	J			Initial when completed TH / Date/Time of Preservation / Lot# of added Preservative
8260C/D: Headspace in VOA Vials (> 6mm)			J	17.
624.1: Headspace in VOA Vials (0mm)			J	18.
Trip Blank Present:			J	Trip blank custody seal present? YES or NO
Rad Samples Screened <0.5 mrem/hr.	J			Initial when completed TH / Date: 3/2/23 / Survey Meter SN: 4563

Comments:

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

Client _____ Profile Number 16788

Site Plant Gorgas Pooled Upgradient Notes _____

Page 1 of 1

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

WO#: 30566812

PM: SCR Due Date: 03/30/23

CLIENT: ALABAMA PWR

Container Codes

Glass

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

Plastic/Misc.

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

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

WT	Water
SL	Solid
OL	Non-Aq Liquid
WP	Wipe

Qualtrax ID: 55678

Pace® Analytical Services, LLC

Page 1 of 1

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

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

Analyst Must Manually Enter All Fields Highlighted in Yellow.

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

Laboratory Control Sample Assessment	LCSD (Y or N)?	N
	LCS71855	LCSD71855
Count Date:	3/13/2023	
Spike I.D.:	22-040	
Decay Corrected Spike Concentration (pCi/mL):	33.255	
Volume Used (mL):	0.10	
Aliquot Volume (L, g, F):	0.801	
Target Conc. (pCi/L, g, F):	4.151	
Uncertainty (Calculated):	0.203	
Result (pCi/L, g, F):	4.630	
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	1.057	
Numerical Performance Indicator:	0.87	
Percent Recovery:	111.54%	
Status vs Numerical Indicator:	N/A	
Status vs Recovery:	Pass	
Upper % Recovery Limits:	135%	
Lower % Recovery Limits:	60%	

Sample Matrix Spike Control Assessment	MS/MSD 1	MS/MSD 2
Sample Collection Date:	2/20/2023	2/21/2023
Sample I.D.	30566801010	30566812005
Sample MS I.D.	30566801011	30566812006
Sample MSD I.D.	30566801012	30566812007
Spike I.D.:	22-040	22-040
MS/MSD Decay Corrected Spike Concentration (pCi/mL):	33.489	33.489
Spike Volume Used in MS (mL):	0.20	0.20
Spike Volume Used in MSD (mL):	0.20	0.20
MS Aliquot (L, g, F):	0.802	0.805
MS Target Conc.(pCi/L, g, F):	8.356	8.318
MSD Aliquot (L, g, F):	0.801	0.801
MSD Target Conc. (pCi/L, g, F):	8.359	8.363
MS Spike Uncertainty (calculated):	0.409	0.408
MSD Spike Uncertainty (calculated):	0.410	0.410
Sample Result:	0.625	0.272
Sample Result 2 Sigma CSU (pCi/L, g, F):	0.332	0.335
Sample Matrix Spike Result:	7.364	7.217
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):	1.499	1.484
Sample Matrix Spike Duplicate Result:	6.067	8.153
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):	1.264	1.657
MS Numerical Performance Indicator:	-1.994	-1.709
MSD Numerical Performance Indicator:	-4.174	-0.543
MS Percent Recovery:	80.65%	83.50%
MSD Percent Recovery:	65.10%	94.24%
MS Status vs Numerical Indicator:	Pass	Pass
MSD Status vs Numerical Indicator:	Fail****	Pass
MS Status vs Recovery:	Pass	Pass
MSD Status vs Recovery:	Pass	Pass
MS/MSD Upper % Recovery Limits:	135%	135%
MS/MSD Lower % Recovery Limits:	60%	60%

Duplicate Sample Assessment		Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Sample I.D.:		
Duplicate Sample I.D.		
Sample Result (pCi/L, g, F):		
Sample Result 2 Sigma CSU (pCi/L, g, F):		
Sample Duplicate Result (pCi/L, g, F):		
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):		
Are sample and/or duplicate results below RL?	See Below ##	
Duplicate Numerical Performance Indicator:		
Duplicate RPD:		
Duplicate Status vs Numerical Indicator:		
Duplicate Status vs RPD:		
% RPD Limit:		

Matrix Spike/Matrix Spike Duplicate Sample Assessment		
Sample I.D.	30566801010	30566812005
Sample MS I.D.	30566801011	30566812006
Sample MSD I.D.	30566801012	30566812007
Sample Matrix Spike Result:	7.364	7.217
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):	1.499	1.484
Sample Matrix Spike Duplicate Result:	6.067	8.153
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):	1.264	1.657
Duplicate Numerical Performance Indicator:	1.296	-0.825
(Based on the Percent Recoveries) MS/ MSD Duplicate RPD:	21.34%	12.09%
MS/ MSD Duplicate Status vs Numerical Indicator:	Pass	Pass
MS/ MSD Duplicate Status vs RPD:	Pass	Pass
% RPD Limit:	36%	36%

Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

Comments:

VAL
3/14/23

Quality Control Sample Performance Assessment

Pace Analytical
www.pacelabs.com

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

Analyst Must Manually Enter All Fields Highlighted in Yellow.

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

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS71852	LCSD71852
Count Date:	3/30/2023	3/30/2023
Spike I.D.:	19-033	19-033
Decay Corrected Spike Concentration (pCi/mL):	24.018	24.018
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.500	0.501
Target Conc. (pCi/L, g, F):	4.800	4.792
Uncertainty (Calculated):	0.058	0.058
Result (pCi/L, g, F):	4.635	4.831
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.453	0.457
Numerical Performance Indicator:	-0.71	0.17
Percent Recovery:	96.56%	100.81%
Status vs Numerical Indicator:	N/A	N/A
Status vs Recovery:	Pass	Pass
Upper % Recovery Limits:	125%	125%
Lower % Recovery Limits:	75%	75%

Sample Matrix Spike Control Assessment	MS/MSD 1	MS/MSD 2
Sample Collection Date:	2/22/2023	
Sample I.D.	30566801006	
Sample MS I.D.	30566801007	
Sample MSD I.D.	30566801008	
Spike I.D.:	19-033	
MS/MSD Decay Corrected Spike Concentration (pCi/mL):	24.019	
Spike Volume Used in MS (mL):	0.20	
Spike Volume Used in MSD (mL):	0.20	
MS Aliquot (L, g, F):	0.309	
MS Target Conc.(pCi/L, g, F):	15.572	
MSD Aliquot (L, g, F):	0.275	
MSD Target Conc. (pCi/L, g, F):	17.464	
MS Spike Uncertainty (calculated):	0.187	
MSD Spike Uncertainty (calculated):	0.210	
Sample Result:	0.087	
Sample Result Counting Uncertainty (pCi/L, g, F):	0.126	
Sample Matrix Spike Result:	15.273	
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):	1.022	
Sample Matrix Spike Duplicate Result:	18.292	
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):	1.183	
MS Numerical Performance Indicator:	-0.721	
MSD Numerical Performance Indicator:	1.203	
MS Percent Recovery:	97.53%	
MSD Percent Recovery:	104.24%	
MS Status vs Numerical Indicator:	N/A	
MSD Status vs Numerical Indicator:	N/A	
MS Status vs Recovery:	Pass	
MSD Status vs Recovery:	Pass	
MS/MSD Upper % Recovery Limits:	125%	
MS/MSD Lower % Recovery Limits:	75%	

Duplicate Sample Assessment		
Sample I.D.:	LCS71852	
Duplicate Sample I.D.	LCSD71852	
Sample Result (pCi/L, g, F):	4.635	
Sample Result Counting Uncertainty (pCi/L, g, F):	0.453	
Sample Duplicate Result (pCi/L, g, F):	4.831	
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.457	
Are sample and/or duplicate results below RL?	NO	
Duplicate Numerical Performance Indicator:	-0.597	
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	4.31%	
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	Pass	
% RPD Limit:	25%	

Matrix Spike/Matrix Spike Duplicate Sample Assessment		
Sample I.D.	30566801006	
Sample MS I.D.	30566801007	
Sample MSD I.D.	30566801008	
Sample Matrix Spike Result:	15.273	
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):	1.022	
Sample Matrix Spike Duplicate Result:	18.292	
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):	1.183	
Duplicate Numerical Performance Indicator:	-3.785	
(Based on the Percent Recoveries) MS/ MSD Duplicate RPD:	6.66%	
MS/ MSD Duplicate Status vs Numerical Indicator:	N/A	
MS/ MSD Duplicate Status vs RPD:	Pass	
% RPD Limit:	25%	

Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

Comments:

SLC 3/30/2023

TJL 3/30/23

Quality Control Sample Performance Assessment

Pace Analytical™
www.pacelabs.com

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

Analyst Must Manually Enter All Fields Highlighted in Yellow.

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

Laboratory Control Sample Assessment	LCSD (Y or N)?	N
	LCS71853	LCSD71853
Count Date:	3/10/2023	
Spike I.D.:	22-040	
Decay Corrected Spike Concentration (pCi/mL):	33.289	
Volume Used (mL):	0.10	
Aliquot Volume (L, g, F):	0.803	
Target Conc. (pCi/L, g, F):	4.147	
Uncertainty (Calculated):	0.203	
Result (pCi/L, g, F):	4.599	
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	1.066	
Numerical Performance Indicator:	0.82	
Percent Recovery:	110.89%	
Status vs Numerical Indicator:	N/A	
Status vs Recovery:	Pass	
Upper % Recovery Limits:	135%	
Lower % Recovery Limits:	60%	

Sample Matrix Spike Control Assessment	MS/MSD 1	MS/MSD 2
Sample Collection Date:	2/22/2023	
Sample I.D.	30566801006	
Sample MS I.D.	30566801007	
Sample MSD I.D.	30566801008	
Spike I.D.:	22-040	
MS/MSD Decay Corrected Spike Concentration (pCi/mL):	33.466	
Spike Volume Used in MS (mL):	0.20	
Spike Volume Used in MSD (mL):	0.20	
MS Aliquot (L, g, F):	0.802	
MS Target Conc.(pCi/L, g, F):	8.348	
MSD Aliquot (L, g, F):	0.801	
MSD Target Conc. (pCi/L, g, F):	8.359	
MS Spike Uncertainty (calculated):	0.409	
MSD Spike Uncertainty (calculated):	0.410	
Sample Result:	0.717	
Sample Result 2 Sigma CSU (pCi/L, g, F):	0.378	
Sample Matrix Spike Result:	7.149	
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):	1.505	
Sample Matrix Spike Duplicate Result:	7.908	
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):	1.594	
MS Numerical Performance Indicator:	-2.341	
MSD Numerical Performance Indicator:	-1.355	
MS Percent Recovery:	77.04%	
MSD Percent Recovery:	86.03%	
MS Status vs Numerical Indicator:	Warning	
MSD Status vs Numerical Indicator:	Pass	
MS Status vs Recovery:	Pass	
MSD Status vs Recovery:	Pass	
MS/MSD Upper % Recovery Limits:	135%	
MS/MSD Lower % Recovery Limits:	60%	

Duplicate Sample Assessment		
Sample I.D.:		Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.		
Sample Result (pCi/L, g, F):		
Sample Result 2 Sigma CSU (pCi/L, g, F):		
Sample Duplicate Result (pCi/L, g, F):		
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):		
Are sample and/or duplicate results below RL?	See Below ##	
Duplicate Numerical Performance Indicator:		
Duplicate RPD:		
Duplicate Status vs Numerical Indicator:		
Duplicate Status vs RPD:		
% RPD Limit:		

Matrix Spike/Matrix Spike Duplicate Sample Assessment		
Sample I.D.	30566801006	
Sample MS I.D.	30566801007	
Sample MSD I.D.	30566801008	
Sample Matrix Spike Result:	7.149	
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):	1.505	
Sample Matrix Spike Duplicate Result:	7.908	
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):	1.594	
Duplicate Numerical Performance Indicator:	-0.679	
(Based on the Percent Recoveries) MS/ MSD Duplicate RPD:	11.02%	
MS/ MSD Duplicate Status vs Numerical Indicator:	Pass	
MS/ MSD Duplicate Status vs RPD:	Pass	
% RPD Limit:	36%	

Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

Comments:

VAL
3/13/23

Quality Control Sample Performance Assessment

Pace Analytical
www.pacelabs.com

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

Analyst Must Manually Enter All Fields Highlighted in Yellow.

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

Laboratory Control Sample Assessment	LCSD (Y or N)?	N
	LCS71854	LCSD71854
Count Date:	3/30/2023	
Spike I.D.:	19-033	
Decay Corrected Spike Concentration (pCi/mL):	24.018	
Volume Used (mL):	0.10	
Aliquot Volume (L, g, F):	0.500	
Target Conc. (pCi/L, g, F):	4.799	
Uncertainty (Calculated):	0.058	
Result (pCi/L, g, F):	4.775	
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.460	
Numerical Performance Indicator:	-0.10	
Percent Recovery:	99.50%	
Status vs Numerical Indicator:	N/A	
Status vs Recovery:	Pass	
Upper % Recovery Limits:	125%	
Lower % Recovery Limits:	75%	

Sample Matrix Spike Control Assessment	MS/MSD 1	MS/MSD 2
Sample Collection Date:	2/20/2023	2/21/2023
Sample I.D.	30566801010	30566812005
Sample MS I.D.	30566801011	30566812006
Sample MSD I.D.	30566801012	30566812007
Spike I.D.:	19-033	19-033
MS/MSD Decay Corrected Spike Concentration (pCi/mL):	24.019	24.019
Spike Volume Used in MS (mL):	0.20	0.20
Spike Volume Used in MSD (mL):	0.20	0.20
MS Aliquot (L, g, F):	0.301	0.311
MS Target Conc.(pCi/L, g, F):	15.943	15.428
MSD Aliquot (L, g, F):	0.271	0.297
MSD Target Conc. (pCi/L, g, F):	17.740	16.192
MS Spike Uncertainty (calculated):	0.191	0.185
MSD Spike Uncertainty (calculated):	0.213	0.194
Sample Result:	-0.089	0.028
Sample Result Counting Uncertainty (pCi/L, g, F):	0.061	0.131
Sample Matrix Spike Result:	13.990	13.086
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):	1.010	0.986
Sample Matrix Spike Duplicate Result:	18.258	13.511
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):	1.204	0.991
MS Numerical Performance Indicator:	-3.546	-4.590
MSD Numerical Performance Indicator:	0.972	-5.216
MS Percent Recovery:	88.31%	84.63%
MSD Percent Recovery:	103.42%	83.26%
MS Status vs Numerical Indicator:	N/A	N/A
MSD Status vs Numerical Indicator:	N/A	N/A
MS Status vs Recovery:	Pass	Pass
MSD Status vs Recovery:	Pass	Pass
MS/MSD Upper % Recovery Limits:	125%	125%
MS/MSD Lower % Recovery Limits:	75%	75%

Duplicate Sample Assessment		
Sample I.D.:		
Duplicate Sample I.D.		
Sample Result (pCi/L, g, F):		
Sample Result Counting Uncertainty (pCi/L, g, F):		
Sample Duplicate Result (pCi/L, g, F):		
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):		
Are sample and/or duplicate results below RL?	See Below ##	
Duplicate Numerical Performance Indicator:		
Duplicate RPD:		
Duplicate Status vs Numerical Indicator:		
Duplicate Status vs RPD:		
% RPD Limit:		

Matrix Spike/Matrix Spike Duplicate Sample Assessment		
Sample I.D.	30566801010	30566812005
Sample MS I.D.	30566801011	30566812006
Sample MSD I.D.	30566801012	30566812007
Sample Matrix Spike Result:	13.990	13.086
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):	1.010	0.986
Sample Matrix Spike Duplicate Result:	18.258	13.511
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):	1.204	0.991
Duplicate Numerical Performance Indicator:	-5.322	-0.595
(Based on the Percent Recoveries) MS/ MSD Duplicate RPD:	15.76%	1.63%
MS/ MSD Duplicate Status vs Numerical Indicator:	N/A	N/A
MS/ MSD Duplicate Status vs RPD:	Pass	Pass
% RPD Limit:	25%	25%

Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

Comments:

SLC 3/30/23

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

April 18, 2023

Brooke Caton
Alabama Power
744 Highway 87
Calera, AL 35040

RE: Project: WMWGORG_1401
Pace Project No.: 30568704

Dear Brooke Caton:

Enclosed are the analytical results for sample(s) received by the laboratory on March 08, 2023. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Greensburg

Greensburg, PA - Revision 1 - This report replaces the April 17, 2023 report. This project was revised on April 18, 2023 to add Rad QC sheets to the final report.

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

Sincerely,

Justin P. Horn for
Skyler C. Richmond
skyler.richmond@pacelabs.com
(724)850-5600
Project Manager

Enclosures

cc: Blaine Denton, Alabama Power
Renee Jernigan, Alabama Power

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

CERTIFICATIONS

Project: WMWGORG_1401
Pace Project No.: 30568704

Pace Analytical Services Pennsylvania
1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
Delaware Certification
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Guam Certification
Florida: Cert E871149 SEKS WET
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA180012
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: 2017020
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification #: 9991
Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572018-1
New Hampshire/TNI Certification #: 297617
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Ohio EPA Rad Approval: #41249
Oregon/TNI Certification #: PA200002-010
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: 02867
Texas/TNI Certification #: T104704188-17-3
Utah/TNI Certification #: PA014572017-9
USDA Soil Permit #: P330-17-00091
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Approve List for Rad
Wyoming Certification #: 8TMS-L

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

SAMPLE SUMMARY

Project: WMWGORG_1401
Pace Project No.: 30568704

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30568704001	BD04590 MW-8V	Water	02/28/23 12:29	03/08/23 11:05
30568704002	BD04591 MW-8	Water	02/28/23 13:47	03/08/23 11:05
30568704003	BD04592 PZ-17	Water	02/27/23 11:22	03/08/23 11:05
30568704004	BD04593 PZ-18	Water	02/27/23 12:31	03/08/23 11:05
30568704005	BD04594 PZ-19	Water	02/28/23 09:24	03/08/23 11:05
30568704006	BD04594 PZ-19 MS	Water	02/28/23 09:24	03/08/23 11:05
30568704007	BD04594 PZ-19 MSD	Water	02/28/23 09:24	03/08/23 11:05
30568704008	BD04595 PZ-22	Water	02/28/23 10:24	03/08/23 11:05
30568704009	BD04596 PZ-21	Water	02/28/23 11:46	03/08/23 11:05
30568704010	BD04597 PZ-20	Water	02/28/23 12:55	03/08/23 11:05
30568704011	BD04598 FB-2	Water	02/28/23 13:15	03/08/23 11:05
30568704012	BD04599 MW-14H	Water	02/28/23 14:20	03/08/23 11:05
30568704013	BD04600 MW-14H Dup	Water	02/28/23 14:20	03/08/23 11:05
30568704014	BD04601 MW-4	Water	03/01/23 10:00	03/08/23 11:05
30568704015	BD04602 MW-3V	Water	02/27/23 11:55	03/08/23 11:05
30568704016	BD04603 MW-3	Water	02/27/23 14:03	03/08/23 11:05
30568704017	BD04604 MW-9V	Water	02/28/23 10:45	03/08/23 11:05
30568704018	BD04605 MW-9H	Water	02/28/23 12:15	03/08/23 11:05
30568704019	BD04606 MW-13H	Water	02/28/23 14:00	03/08/23 11:05
30568704020	BD04607 MW-11H	Water	02/28/23 15:30	03/08/23 11:05
30568704021	BD04608 MW-12H	Water	03/01/23 10:40	03/08/23 11:05
30568704022	BD04609 MW-12H Dup	Water	03/01/23 10:40	03/08/23 11:05
30568704023	BD04610 FB-1	Water	03/01/23 11:20	03/08/23 11:05
30568704024	BD04611 MW-12V	Water	03/01/23 12:10	03/08/23 11:05
30568704025	BD04611 MW-12V MS	Water	03/01/23 12:10	03/08/23 11:05
30568704026	BD04611 MW-12V MSD	Water	03/01/23 12:10	03/08/23 11:05
30568704027	BD04612 EB-1	Water	03/01/23 15:20	03/08/23 11:05
30568704028	BD04613 MW-4V	Water	03/01/23 15:30	03/08/23 11:05

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

SAMPLE ANALYTE COUNT

Project: WMWGORG_1401
Pace Project No.: 30568704

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30568704001	**BD04590 MW-8V**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30568704002	**BD04591 MW-8**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30568704003	**BD04592 PZ-17**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30568704004	**BD04593 PZ-18**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30568704005	**BD04594 PZ-19**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30568704006	**BD04594 PZ-19 MS**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
30568704007	**BD04594 PZ-19 MSD**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
30568704008	**BD04595 PZ-22**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30568704009	**BD04596 PZ-21**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30568704010	**BD04597 PZ-20**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30568704011	**BD04598 FB-2**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30568704012	**BD04599 MW-14H**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30568704013	**BD04600 MW-14H Dup**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: WMWGORG_1401
Pace Project No.: 30568704

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30568704014	**BD04601 MW-4**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30568704015	**BD04602 MW-3V**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30568704016	**BD04603 MW-3**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30568704017	**BD04604 MW-9V**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30568704018	**BD04605 MW-9H**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30568704019	**BD04606 MW-13H**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30568704020	**BD04607 MW-11H**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30568704021	**BD04608 MW-12H**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30568704022	**BD04609 MW-12H Dup**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30568704023	**BD04610 FB-1**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30568704024	**BD04611 MW-12V**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30568704025	**BD04611 MW-12V MS**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
30568704026	**BD04611 MW-12V MSD**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA

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SAMPLE ANALYTE COUNT

Project: WMWGORG_1401
Pace Project No.: 30568704

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30568704027	**BD04612 EB-1**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30568704028	**BD04613 MW-4V**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA

PASI-PA = Pace Analytical Services - Greensburg

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PROJECT NARRATIVE

Project: WMWGORG_1401
Pace Project No.: 30568704

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

General Information:
28 samples were analyzed for EPA 9315 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: WMWGORG_1401
Pace Project No.: 30568704

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

General Information:
28 samples were analyzed for EPA 9320 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: WMWGORG_1401
Pace Project No.: 30568704

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

General Information:
24 samples were analyzed for Total Radium Calculation by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORG_1401
Pace Project No.: 30568704

Sample: BD04590 MW-8V **Lab ID: 30568704001** Collected: 02/28/23 12:29 Received: 03/08/23 11:05 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.209U ± 0.170 (0.301) C:94% T:NA**	pCi/L	04/03/23 19:34	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.876 ± 0.374 (0.581) C:84% T:80%**	pCi/L	03/15/23 12:21	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.09 ± 0.544 (0.882)**	pCi/L	04/04/23 15:54	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORG_1401
Pace Project No.: 30568704

Sample: BD04591 MW-8 **Lab ID: 30568704002** Collected: 02/28/23 13:47 Received: 03/08/23 11:05 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.152U ± 0.137 (0.241) C:100% T:NA**	pCi/L	04/03/23 19:35	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.270U ± 0.271 (0.556) C:86% T:86%**	pCi/L	03/15/23 12:21	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.422U ± 0.408 (0.797)**	pCi/L	04/04/23 15:54	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORG_1401
Pace Project No.: 30568704

Sample: BD04592 PZ-17 **Lab ID: 30568704003** Collected: 02/27/23 11:22 Received: 03/08/23 11:05 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.124U ± 0.133 (0.252) C:90% T:NA**	pCi/L	04/03/23 19:25	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.0682U ± 0.258 (0.586) C:83% T:91%**	pCi/L	03/15/23 12:21	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.192U ± 0.391 (0.838)**	pCi/L	04/04/23 15:54	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORG_1401
Pace Project No.: 30568704

Sample: BD04593 PZ-18 **Lab ID: 30568704004** Collected: 02/27/23 12:31 Received: 03/08/23 11:05 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.177U ± 0.145 (0.246) C:94% T:NA**	pCi/L	04/04/23 09:20	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.394U ± 0.313 (0.620) C:80% T:89%**	pCi/L	03/15/23 12:21	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.571U ± 0.458 (0.866)**	pCi/L	04/04/23 15:54	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORG_1401
Pace Project No.: 30568704

Sample: BD04594 PZ-19 **Lab ID: 30568704005** Collected: 02/28/23 09:24 Received: 03/08/23 11:05 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.0826U ± 0.123 (0.267) C:94% T:NA**	pCi/L	04/04/23 09:20	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.120U ± 0.269 (0.596) C:82% T:87%**	pCi/L	03/15/23 12:21	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.203U ± 0.392 (0.863)**	pCi/L	04/04/23 15:54	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORG_1401
Pace Project No.: 30568704

Sample: BD04594 PZ-19 MS **Lab ID: 30568704006** Collected: 02/28/23 09:24 Received: 03/08/23 11:05 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**99.84 %REC ± NA (NA) C:NA T:NA**	pCi/L	04/04/23 09:20	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**102.14 %REC ± NA (NA) C:NA T:NA**	pCi/L	03/15/23 12:22	15262-20-1	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORG_1401
Pace Project No.: 30568704

Sample: BD04594 PZ-19 MSD **Lab ID: 30568704007** Collected: 02/28/23 09:24 Received: 03/08/23 11:05 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**109.60 %REC 9.32RPD ± NA (NA) C:NA T:NA**	pCi/L	04/04/23 09:20	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**93.71 %REC 8.61RPD ± NA (NA) C:NA T:NA**	pCi/L	03/15/23 12:22	15262-20-1	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORG_1401
Pace Project No.: 30568704

Sample: BD04595 PZ-22 **Lab ID: 30568704008** Collected: 02/28/23 10:24 Received: 03/08/23 11:05 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.107U ± 0.126 (0.253) C:97% T:NA**	pCi/L	04/04/23 09:20	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.422U ± 0.304 (0.581) C:77% T:88%**	pCi/L	03/15/23 12:22	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.529U ± 0.430 (0.834)**	pCi/L	04/04/23 15:54	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORG_1401
Pace Project No.: 30568704

Sample: BD04596 PZ-21 **Lab ID: 30568704009** Collected: 02/28/23 11:46 Received: 03/08/23 11:05 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.321 ± 0.173 (0.213) C:95% T:NA**	pCi/L	04/04/23 09:20	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.311U ± 0.267 (0.529) C:81% T:85%**	pCi/L	03/15/23 12:22	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.632U ± 0.440 (0.742)**	pCi/L	04/04/23 15:54	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORG_1401
Pace Project No.: 30568704

Sample: BD04597 PZ-20 **Lab ID: 30568704010** Collected: 02/28/23 12:55 Received: 03/08/23 11:05 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.285U ± 0.196 (0.336) C:90% T:NA**	pCi/L	04/04/23 09:20	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.448U ± 0.278 (0.501) C:82% T:86%**	pCi/L	03/15/23 12:22	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.733U ± 0.474 (0.837)**	pCi/L	04/04/23 15:54	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORG_1401
Pace Project No.: 30568704

Sample: BD04598 FB-2 **Lab ID: 30568704011** Collected: 02/28/23 13:15 Received: 03/08/23 11:05 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.00346U ± 0.0965 (0.268) C:94% T:NA**	pCi/L	04/04/23 09:20	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.450U ± 0.336 (0.654) C:76% T:84%**	pCi/L	03/15/23 12:22	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.453U ± 0.433 (0.922)**	pCi/L	04/04/23 15:54	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORG_1401
Pace Project No.: 30568704

Sample: BD04599 MW-14H **Lab ID: 30568704012** Collected: 02/28/23 14:20 Received: 03/08/23 11:05 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.261 ± 0.162 (0.244) C:99% T:NA**	pCi/L	04/04/23 09:20	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.0126U ± 0.258 (0.600) C:82% T:90%**	pCi/L	03/15/23 12:22	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.274U ± 0.420 (0.844)**	pCi/L	04/04/23 15:54	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORG_1401
Pace Project No.: 30568704

Sample: BD04600 MW-14H Dup **Lab ID: 30568704013** Collected: 02/28/23 14:20 Received: 03/08/23 11:05 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.439 ± 0.198 (0.215) C:98% T:NA**	pCi/L	04/04/23 09:20	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.252U ± 0.272 (0.565) C:83% T:91%**	pCi/L	03/15/23 12:22	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.691U ± 0.470 (0.780)**	pCi/L	04/04/23 15:54	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORG_1401
Pace Project No.: 30568704

Sample: BD04601 MW-4 **Lab ID: 30568704014** Collected: 03/01/23 10:00 Received: 03/08/23 11:05 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.121U ± 0.165 (0.357) C:99% T:NA**	pCi/L	04/04/23 08:40	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.472U ± 0.317 (0.594) C:81% T:88%**	pCi/L	03/15/23 12:22	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.593U ± 0.482 (0.951)**	pCi/L	04/04/23 15:54	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORG_1401
Pace Project No.: 30568704

Sample: BD04602 MW-3V **Lab ID: 30568704015** Collected: 02/27/23 11:55 Received: 03/08/23 11:05 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.0487U ± 0.0940 (0.216) C:94% T:NA**	pCi/L	04/04/23 08:43	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.588 ± 0.328 (0.586) C:81% T:91%**	pCi/L	03/15/23 12:22	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.637U ± 0.422 (0.802)**	pCi/L	04/04/23 15:54	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORG_1401
Pace Project No.: 30568704

Sample: BD04603 MW-3 **Lab ID: 30568704016** Collected: 02/27/23 14:03 Received: 03/08/23 11:05 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.0554U ± 0.0849 (0.181) C:96% T:NA**	pCi/L	04/04/23 08:45	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.158U ± 0.258 (0.561) C:80% T:96%**	pCi/L	03/15/23 12:23	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.213U ± 0.343 (0.742)**	pCi/L	04/04/23 15:54	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORG_1401
Pace Project No.: 30568704

Sample: BD04604 MW-9V **Lab ID: 30568704017** Collected: 02/28/23 10:45 Received: 03/08/23 11:05 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.0467U ± 0.113 (0.269) C:102% T:NA**	pCi/L	04/04/23 08:45	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.549U ± 0.311 (0.566) C:81% T:101%**	pCi/L	03/15/23 12:23	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.596U ± 0.424 (0.835)**	pCi/L	04/04/23 15:54	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORG_1401
Pace Project No.: 30568704

Sample: BD04605 MW-9H **Lab ID: 30568704018** Collected: 02/28/23 12:15 Received: 03/08/23 11:05 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.0565U ± 0.115 (0.269) C:104% T:NA**	pCi/L	04/04/23 08:45	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.300U ± 0.279 (0.566) C:85% T:87%**	pCi/L	03/15/23 12:23	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.357U ± 0.394 (0.835)**	pCi/L	04/04/23 15:54	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORG_1401
Pace Project No.: 30568704

Sample: BD04606 MW-13H **Lab ID: 30568704019** Collected: 02/28/23 14:00 Received: 03/08/23 11:05 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.218U ± 0.175 (0.306) C:94% T:NA**	pCi/L	04/04/23 08:45	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.300U ± 0.280 (0.567) C:86% T:84%**	pCi/L	03/15/23 12:23	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.518U ± 0.455 (0.873)**	pCi/L	04/04/23 15:54	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORG_1401
Pace Project No.: 30568704

Sample: BD04607 MW-11H **Lab ID: 30568704020** Collected: 02/28/23 15:30 Received: 03/08/23 11:05 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.0371U ± 0.0942 (0.230) C:91% T:NA**	pCi/L	04/04/23 08:46	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.454U ± 0.326 (0.629) C:79% T:89%**	pCi/L	03/15/23 12:23	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.491U ± 0.420 (0.859)**	pCi/L	04/04/23 15:54	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORG_1401
Pace Project No.: 30568704

Sample: BD04608 MW-12H **Lab ID: 30568704021** Collected: 03/01/23 10:40 Received: 03/08/23 11:05 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.241U ± 0.163 (0.260) C:97% T:NA**	pCi/L	04/04/23 11:17	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.545U ± 0.318 (0.572) C:75% T:92%**	pCi/L	03/15/23 12:23	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.786U ± 0.481 (0.832)**	pCi/L	04/04/23 15:53	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORG_1401
Pace Project No.: 30568704

Sample: BD04609 MW-12H Dup **Lab ID: 30568704022** Collected: 03/01/23 10:40 Received: 03/08/23 11:05 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.351 ± 0.191 (0.270) C:97% T:NA**	pCi/L	04/04/23 11:17	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**1.05 ± 0.414 (0.629) C:80% T:86%**	pCi/L	03/15/23 12:24	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.40 ± 0.605 (0.899)**	pCi/L	04/04/23 15:53	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORG_1401
Pace Project No.: 30568704

Sample: BD04610 FB-1 **Lab ID: 30568704023** Collected: 03/01/23 11:20 Received: 03/08/23 11:05 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.0729U ± 0.126 (0.284) C:100% T:NA**	pCi/L	04/04/23 11:17	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.274U ± 0.298 (0.619) C:81% T:83%**	pCi/L	03/15/23 12:24	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.347U ± 0.424 (0.903)**	pCi/L	04/04/23 15:53	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORG_1401
Pace Project No.: 30568704

Sample: BD04611 MW-12V **Lab ID: 30568704024** Collected: 03/01/23 12:10 Received: 03/08/23 11:05 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.0976U ± 0.115 (0.231) C:101% T:NA**	pCi/L	04/04/23 11:17	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.288U ± 0.257 (0.516) C:84% T:92%**	pCi/L	03/15/23 12:24	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.386U ± 0.372 (0.747)**	pCi/L	04/04/23 15:53	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORG_1401
Pace Project No.: 30568704

Sample: BD04611 MW-12V MS **Lab ID: 30568704025** Collected: 03/01/23 12:10 Received: 03/08/23 11:05 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**96.63 %REC ± NA (NA) C:NA T:NA**	pCi/L	04/04/23 11:17	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**73.35 %REC ± NA (NA) C:NA T:NA**	pCi/L	03/15/23 12:24	15262-20-1	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORG_1401
Pace Project No.: 30568704

Sample: BD04611 MW-12V MSD **Lab ID: 30568704026** Collected: 03/01/23 12:10 Received: 03/08/23 11:05 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**108.33 %REC 11.42RPD ± NA (NA) C:NA T:NA**	pCi/L	04/04/23 11:17	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**69.77 %REC 5.00RPD ± NA (NA) C:NA T:NA**	pCi/L	03/15/23 12:24	15262-20-1	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORG_1401
Pace Project No.: 30568704

Sample: BD04612 EB-1 **Lab ID: 30568704027** Collected: 03/01/23 15:20 Received: 03/08/23 11:05 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**-0.105U ± 0.0337 (0.251) C:98% T:NA**	pCi/L	04/04/23 11:17	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**-0.0225U ± 0.305 (0.717) C:81% T:79%**	pCi/L	03/15/23 12:24	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.000U ± 0.339 (0.968)**	pCi/L	04/04/23 15:53	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORG_1401
Pace Project No.: 30568704

Sample: BD04613 MW-4V **Lab ID: 30568704028** Collected: 03/01/23 15:30 Received: 03/08/23 11:05 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.0343U ± 0.0951 (0.233) C:98% T:NA**	pCi/L	04/04/23 11:17	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.259U ± 0.299 (0.627) C:79% T:91%**	pCi/L	03/15/23 12:24	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.293U ± 0.394 (0.860)**	pCi/L	04/04/23 15:53	7440-14-4	

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QUALITY CONTROL - RADIOCHEMISTRY

Project: WMWGORG_1401
Pace Project No.: 30568704

QC Batch: 572946
QC Batch Method: EPA 9320
Analysis Method: EPA 9320
Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30568704001, 30568704002, 30568704003, 30568704004, 30568704005, 30568704006, 30568704007, 30568704008, 30568704009, 30568704010, 30568704011, 30568704012, 30568704013, 30568704014, 30568704015, 30568704016, 30568704017, 30568704018, 30568704019, 30568704020

METHOD BLANK: 2782798
Matrix: Water
Associated Lab Samples: 30568704001, 30568704002, 30568704003, 30568704004, 30568704005, 30568704006, 30568704007, 30568704008, 30568704009, 30568704010, 30568704011, 30568704012, 30568704013, 30568704014, 30568704015, 30568704016, 30568704017, 30568704018, 30568704019, 30568704020

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.0415 ± 0.261 (0.602) C:83% T:85%	pCi/L	03/15/23 12:21	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL - RADIOCHEMISTRY

Project: WMWGORG_1401
Pace Project No.: 30568704

QC Batch: 572947 Analysis Method: EPA 9315
QC Batch Method: EPA 9315 Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30568704021, 30568704022, 30568704023, 30568704024, 30568704025, 30568704026, 30568704027, 30568704028

METHOD BLANK: 2782802 Matrix: Water
Associated Lab Samples: 30568704021, 30568704022, 30568704023, 30568704024, 30568704025, 30568704026, 30568704027, 30568704028

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.0357 ± 0.0630 (0.142) C:98% T:NA	pCi/L	04/04/23 11:17	

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QUALITY CONTROL - RADIOCHEMISTRY

Project: WMWGORG_1401
Pace Project No.: 30568704

QC Batch: 572945
QC Batch Method: EPA 9315
Analysis Method: EPA 9315
Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30568704001, 30568704002, 30568704003, 30568704004, 30568704005, 30568704006, 30568704007, 30568704008, 30568704009, 30568704010, 30568704011, 30568704012, 30568704013, 30568704014, 30568704015, 30568704016, 30568704017, 30568704018, 30568704019, 30568704020

METHOD BLANK: 2782797
Matrix: Water
Associated Lab Samples: 30568704001, 30568704002, 30568704003, 30568704004, 30568704005, 30568704006, 30568704007, 30568704008, 30568704009, 30568704010, 30568704011, 30568704012, 30568704013, 30568704014, 30568704015, 30568704016, 30568704017, 30568704018, 30568704019, 30568704020

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	-0.0203 ± 0.0779 (0.223) C:92% T:NA	pCi/L	04/03/23 19:31	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

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QUALITY CONTROL - RADIOCHEMISTRY

Project: WMWGORG_1401
Pace Project No.: 30568704

QC Batch: 572948 Analysis Method: EPA 9320
QC Batch Method: EPA 9320 Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30568704021, 30568704022, 30568704023, 30568704024, 30568704025, 30568704026, 30568704027, 30568704028

METHOD BLANK: 2782805 Matrix: Water
Associated Lab Samples: 30568704021, 30568704022, 30568704023, 30568704024, 30568704025, 30568704026, 30568704027, 30568704028

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.137 ± 0.284 (0.627) C:77% T:89%	pCi/L	03/15/23 12:23	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: WMWGORG_1401
Pace Project No.: 30568704

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Act - Activity

Unc - Uncertainty: For Safe Drinking Water Act (SDWA) analyses, the reported Unc. Is the calculated Count Uncertainty (95% confidence interval) using a coverage factor of 1.96. For all other matrices (non-SDWA), the reported Unc. is the calculated Expanded Uncertainty (aka Combined Standard Uncertainty, CSU), reported at the 95% confidence interval using a coverage factor of 1.96.

Gamma Spec: The Unc. reported for all gamma-spectroscopy analyses (EPA 901.1), is the calculated Expanded Uncertainty (CSU) at the 95.4% confidence interval, using a coverage factor of 2.0.

(MDC) - Minimum Detectable Concentration

Trac - Tracer Recovery (%)

Carr - Carrier Recovery (%)

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: WMWGORG_1401
Pace Project No.: 30568704

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30568704001	BD04590 MW-8V	EPA 9315	572945		
30568704002	BD04591 MW-8	EPA 9315	572945		
30568704003	BD04592 PZ-17	EPA 9315	572945		
30568704004	BD04593 PZ-18	EPA 9315	572945		
30568704005	BD04594 PZ-19	EPA 9315	572945		
30568704006	BD04594 PZ-19 MS	EPA 9315	572945		
30568704007	BD04594 PZ-19 MSD	EPA 9315	572945		
30568704008	BD04595 PZ-22	EPA 9315	572945		
30568704009	BD04596 PZ-21	EPA 9315	572945		
30568704010	BD04597 PZ-20	EPA 9315	572945		
30568704011	BD04598 FB-2	EPA 9315	572945		
30568704012	BD04599 MW-14H	EPA 9315	572945		
30568704013	BD04600 MW-14H Dup	EPA 9315	572945		
30568704014	BD04601 MW-4	EPA 9315	572945		
30568704015	BD04602 MW-3V	EPA 9315	572945		
30568704016	BD04603 MW-3	EPA 9315	572945		
30568704017	BD04604 MW-9V	EPA 9315	572945		
30568704018	BD04605 MW-9H	EPA 9315	572945		
30568704019	BD04606 MW-13H	EPA 9315	572945		
30568704020	BD04607 MW-11H	EPA 9315	572945		
30568704021	BD04608 MW-12H	EPA 9315	572947		
30568704022	BD04609 MW-12H Dup	EPA 9315	572947		
30568704023	BD04610 FB-1	EPA 9315	572947		
30568704024	BD04611 MW-12V	EPA 9315	572947		
30568704025	BD04611 MW-12V MS	EPA 9315	572947		
30568704026	BD04611 MW-12V MSD	EPA 9315	572947		
30568704027	BD04612 EB-1	EPA 9315	572947		
30568704028	BD04613 MW-4V	EPA 9315	572947		
30568704001	BD04590 MW-8V	EPA 9320	572946		
30568704002	BD04591 MW-8	EPA 9320	572946		
30568704003	BD04592 PZ-17	EPA 9320	572946		
30568704004	BD04593 PZ-18	EPA 9320	572946		
30568704005	BD04594 PZ-19	EPA 9320	572946		
30568704006	BD04594 PZ-19 MS	EPA 9320	572946		
30568704007	BD04594 PZ-19 MSD	EPA 9320	572946		
30568704008	BD04595 PZ-22	EPA 9320	572946		
30568704009	BD04596 PZ-21	EPA 9320	572946		
30568704010	BD04597 PZ-20	EPA 9320	572946		
30568704011	BD04598 FB-2	EPA 9320	572946		
30568704012	BD04599 MW-14H	EPA 9320	572946		
30568704013	BD04600 MW-14H Dup	EPA 9320	572946		
30568704014	BD04601 MW-4	EPA 9320	572946		
30568704015	BD04602 MW-3V	EPA 9320	572946		
30568704016	BD04603 MW-3	EPA 9320	572946		
30568704017	BD04604 MW-9V	EPA 9320	572946		
30568704018	BD04605 MW-9H	EPA 9320	572946		
30568704019	BD04606 MW-13H	EPA 9320	572946		
30568704020	BD04607 MW-11H	EPA 9320	572946		

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: WMWGORG_1401
Pace Project No.: 30568704

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30568704021	**BD04608 MW-12H**	EPA 9320	572948		
30568704022	**BD04609 MW-12H Dup**	EPA 9320	572948		
30568704023	**BD04610 FB-1**	EPA 9320	572948		
30568704024	**BD04611 MW-12V**	EPA 9320	572948		
30568704025	**BD04611 MW-12V MS**	EPA 9320	572948		
30568704026	**BD04611 MW-12V MSD**	EPA 9320	572948		
30568704027	**BD04612 EB-1**	EPA 9320	572948		
30568704028	**BD04613 MW-4V**	EPA 9320	572948		
30568704001	**BD04590 MW-8V**	Total Radium Calculation	578436		
30568704002	**BD04591 MW-8**	Total Radium Calculation	578436		
30568704003	**BD04592 PZ-17**	Total Radium Calculation	578436		
30568704004	**BD04593 PZ-18**	Total Radium Calculation	578436		
30568704005	**BD04594 PZ-19**	Total Radium Calculation	578436		
30568704008	**BD04595 PZ-22**	Total Radium Calculation	578436		
30568704009	**BD04596 PZ-21**	Total Radium Calculation	578436		
30568704010	**BD04597 PZ-20**	Total Radium Calculation	578436		
30568704011	**BD04598 FB-2**	Total Radium Calculation	578436		
30568704012	**BD04599 MW-14H**	Total Radium Calculation	578436		
30568704013	**BD04600 MW-14H Dup**	Total Radium Calculation	578436		
30568704014	**BD04601 MW-4**	Total Radium Calculation	578436		
30568704015	**BD04602 MW-3V**	Total Radium Calculation	578436		
30568704016	**BD04603 MW-3**	Total Radium Calculation	578436		
30568704017	**BD04604 MW-9V**	Total Radium Calculation	578436		
30568704018	**BD04605 MW-9H**	Total Radium Calculation	578436		
30568704019	**BD04606 MW-13H**	Total Radium Calculation	578436		
30568704020	**BD04607 MW-11H**	Total Radium Calculation	578436		
30568704021	**BD04608 MW-12H**	Total Radium Calculation	578435		
30568704022	**BD04609 MW-12H Dup**	Total Radium Calculation	578435		
30568704023	**BD04610 FB-1**	Total Radium Calculation	578435		
30568704024	**BD04611 MW-12V**	Total Radium Calculation	578435		
30568704027	**BD04612 EB-1**	Total Radium Calculation	578435		
30568704028	**BD04613 MW-4V**	Total Radium Calculation	578435		

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	Alabama Power Company	Report To:	Brooke Caton	Attention:	Brooke Caton
Address:	744 Highway 87 GSC Bldg #8	Copy To:	Renee Jernigan & Blaine Denton	Company Name:	Alabama Power Co.
	Calera, AL 35040			Address:	744 Highway 87 GSC Bldg #8
Email To:	tbwill@southernco.com	Purchase Order #:	APC10755638	Pace Quote:	CCR
Phone:	205-664-6101 Fax:	Project Name:	Plant Gorgas Gypsum	Pace Project Manager:	Skyler Richmond
Requested Due Date:	Normal	Project Number:	WMWGORG_1401	Pace Profile #:	16788

Regulatory Agency

State / Location: AL

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)	Description	Station Name Location_Code	Site Name Facility_ID	Sample Duplicate	Matrix Spike/Matrix Spike Duplicate	Field Filtered	MATRIX CODE	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	# OF CONTAINERS	Preservatives: Unpreserved	NaOH+ZnAcetate	HNO3	Y/N	Analyses Test: EPA 9315	EPA 9320	Total Radium Sum	Total Sulfide	Residual Chlorine (Y/N)	
1	BD04590	MW-8V	APCO-GS-GSA-MW-8V	APCO_Gorgas_GypsumStore				GW	G	2/28/2023	12:29	1			X		X	X	X			001
2	BD04591	MW-8	APCO-GS-GSA-MW-8	APCO_Gorgas_GypsumStore				GW	G	2/28/2023	13:47	1			X		X	X	X			002
3	BD04592	PZ-17	APCO-GS-GSA-PZ-17	APCO_Gorgas_GypsumStore				GW	G	2/27/2023	11:22	1			X		X	X	X			003
4	BD04593	PZ-18	APCO-GS-GSA-PZ-18	APCO_Gorgas_GypsumStore				GW	G	2/27/2023	12:31	1			X		X	X	X			004
5	BD04594	PZ-19	APCO-GS-GSA-PZ-19	APCO_Gorgas_GypsumStore		x		GW	G	2/28/2023	9:24	3			X		X	X	X			005
6	BD04595	PZ-22	APCO-GS-GSA-PZ-22	APCO_Gorgas_GypsumStore				GW	G	2/28/2023	10:24	1			X		X	X	X			007
7	BD04596	PZ-21	APCO-GS-GSA-PZ-21	APCO_Gorgas_GypsumStore				GW	G	2/28/2023	11:46	1			X		X	X	X			008
8	BD04597	PZ-20	APCO-GS-GSA-PZ-20	APCO_Gorgas_GypsumStore				GW	G	2/28/2023	12:55	1			X		X	X	X			009
9	BD04598	FB-2	APCO-GS-GSA-FB-02	APCO_Gorgas_GypsumStore				GW	G	2/28/2023	13:15	1			X		X	X	X			010
10	BD04599	MW-14H	APCO-GS-GSA-MW-14H	APCO_Gorgas_GypsumStore				GW	G	2/28/2023	14:20	1			X		X	X	X			011
11	BD04600	MW-14H Dup	APCO-GS-GSA-MW-14H	APCO_Gorgas_GypsumStore	x			GW	G	2/28/2023	14:20	1			X		X	X	X			012
12	BD04601	MW-4	APCO-GS-GSA-MW-4	APCO_Gorgas_GypsumStore				GW	G	3/1/2023	10:00	1			X		X	X	X			013

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	Brooke Caton/ APC GTL	3/3/2023	11:00		3/8/23	1105	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER:

SIGNATURE of SAMPLER: DATE Signed:

TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

WO# : 30568704

30568704

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	Alabama Power Company	Report To:	Brooke Caton	Attention:	Brooke Caton
Address:	744 Highway 87 GSC Bldg #8	Copy To:	Renee Jernigan & Blaine Denton	Company Name:	Alabama Power Co.
	Calera, AL 35040			Address:	744 Highway 87 GSC Bldg #8
Email To:	tbwill@southernco.com	Purchase Order #:	APC10755638	Pace Quote:	CCR
Phone:	205-664-6101 Fax:	Project Name:	Plant Gorgas Gypsum	Pace Project Manager:	Skyler Richmond
Requested Due Date:	Normal	Project Number:	WMWGORG_1401	Pace Profile #:	16788

Regulatory Agency

State / Location: AL

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)	Description	Station Name Location_Code	Site Name Facility_ID	Sample Duplicate	Matrix Spike/Matrix Spike Duplicate	Field Filtered	MATRIX CODE	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	# OF CONTAINERS	Preservatives: Unpreserved	Preservatives: NaOH+ZnAcetate	Preservatives: HNO3	Y/N	Analyses Test: EPA 9315	Analyses Test: EPA 9320	Analyses Test: Total Radium Sum	Analyses Test: Total Sulfide	Residual Chlorine (Y/N)	
1	BD04602	MW-3V	APCO-GS-GSA-MW-3V	APCO_Gorgas_GypsumStore				GW	G	2/27/2023	11:55	1			X		X	X	X			015
2	BD04603	MW-3	APCO-GS-GSA-MW-3	APCO_Gorgas_GypsumStore				GW	G	2/27/2023	14:03	1			X		X	X	X			016
3	BD04604	MW-9V	APCO-GS-GSA-MW-9V	APCO_Gorgas_GypsumStore				GW	G	2/28/2023	10:45	1			X		X	X	X			017
4	BD04605	MW-9H	APCO-GS-GSA-MW-9H	APCO_Gorgas_GypsumStore				GW	G	2/28/2023	12:15	1			X		X	X	X			018
5	BD04606	MW-13H	APCO-GS-GSA-MW-13H	APCO_Gorgas_GypsumStore				GW	G	2/28/2023	14:00	1			X		X	X	X			019
6	BD04607	MW-11H	APCO-GS-GSA-MW-11H	APCO_Gorgas_GypsumStore				GW	G	2/28/2023	15:30	1			X		X	X	X			020
7	BD04608	MW-12H	APCO-GS-GSA-MW-12H	APCO_Gorgas_GypsumStore				GW	G	3/1/2023	10:40	1			X		X	X	X			021
8	BD04609	MW-12H Dup	APCO-GS-GSA-MW-12H	APCO_Gorgas_GypsumStore	x			GW	G	3/1/2023	10:40	1			X		X	X	X			022
9	BD04610	FB-1	APCO-GS-GSA-FB-01	APCO_Gorgas_GypsumStore				GW	G	3/1/2023	11:20	1			X		X	X	X			023
10	BD04611	MW-12V	APCO-GS-GSA-MW-12V	APCO_Gorgas_GypsumStore		x		GW	G	3/1/2023	12:10	3			X		X	X	X			025
11	BD04612	EB-1	APCO-GS-GSA-EB-01	APCO_Gorgas_GypsumStore				GW	G	3/1/2023	15:20	1			X		X	X	X			027
12	BD04613	MW-4V	APCO-GS-GSA-MW-4V	APCO_Gorgas_GypsumStore				GW	G	3/1/2023	15:30	1			X		X	X	X			028

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	Brooke Caton/ APC GTL	3/3/2023	11:00		3/8/23	1105	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER:

SIGNATURE of SAMPLER: DATE Signed:

TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

WO#: 30568704

PM: SCR Due Date: 04/05/23

CLIENT: ALABAMA PWR

Page 66 of 154

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

Effective Date: 02/03/2023

WO# : 30568704

PM: SCR Due Date: 04/05/23

CLIENT: ALABAMA PWR

Client Name: Alabama Power

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

Tracking Number: 6154 0259 8050

Examined By	PS
Labeled By	PS
Temped By	

Custody Seal on Cooler/Box Present: ☑ Yes ☐ No **Seals Intact:** ☐ Yes ☑ No

Thermometer Used: _____ **Type of Ice:** Wet Blue (None)

Cooler Temperature: Observed Temp _____ °C Correction Factor: _____ °C Final Temp: _____ °C

Temp should be above freezing to 6°C

Comments:	Yes	No	NA	pH paper Lot# 10022221 / D.P.D. Residual Chlorine Lot #
Chain of Custody Present	✓			1.
Chain of Custody Filled Out:	✓			2.
-Were client corrections present on COC		✓		
Chain of Custody Relinquished		✓		3.
Sampler Name & Signature on COC:		✓		4.
Sample Labels match COC:	✓			5.
-Includes date/time/ID Matrix:	WT			
Samples Arrived within Hold Time:	✓			6.
Short Hold Time Analysis (<72hr remaining):		✓		7.
Rush Turn Around Time Requested:		✓		8.
Sufficient Volume:	✓			9.
Correct Containers Used:	✓			10.
-Pace Containers Used	✓			
Containers Intact:	✓			11.
Orthophosphate field filtered:			✓	12.
Hex Cr Aqueous samples field filtered:			✓	13.
Organic Samples checked for dechlorination			✓	14:
Filtered volume received for dissolved tests:			✓	15:
All containers checked for preservation: exceptions: VOA, coliform, TOC, O&G, Phenolics, Radon, non-aqueous matrix	✓			16. pH<2
All containers meet method preservation requirements:	✓			Initial when completed PS / Date/Time of Preservation / Lot# of added Preservative
8260C/D: Headspace in VOA Vials (> 6mm)			✓	17.
624.1: Headspace in VOA Vials (0mm)			✓	18.
Trip Blank Present:			✓	Trip blank custody seal present? YES or NO
Rad Samples Screened <0.5 mrem/hr.	✓			Initial when completed PS / Date: 3/9/23 / Survey Meter SN: 1563

Comments:

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

DC#_Title: ENV-FRM-GBUR-0072 v02_Sample Container Count Offshore Projects
Effective Date: 1/11/2023

Client _____ Profile Number 16788

Site Plant Gorgas Gypsum Page 1 of 3 Notes _____

		Amber Glass					Plastic								Vials					Other										
Sample Line Item	Matrix	AG1H	AG3S	AG3U	AG5U	AG5T	BP1N	BP1U	BP2S	BP2U	BP3C	BP3N	BP3S	BP3U	DG9S	VG9H	VG9T	VG9U	VOAK	WGFU	WGKU	ZPLC	GCUB	GJN	12GN	GN	BG1U		
001	WT						1																						
002							1																						
003							1																						
004							1																						
005							1																						
006							1																						
007							1																						
008							1																						
009							1																						
010							1																						
011							1																						
012							1																						

WO#: 30568704
PM: SCR Due Date: 04/05/23
CLIENT: ALABAMA PWR

Container Codes

Glass

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

Plastic/Misc.

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

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

WT	Water
SL	Solid
OL	Non-Aq Liquid
WP	Wipe

Qualtrax ID: 55678

Pace® Analytical Services, LLC

Client _____ Profile Number _____

Site _____ Page 2 of 3 Notes _____

		Amber Glass					Plastic								Vials					Other									
Sample Line Item	Matrix	AG1H	AG3S	AG3U	AG5U	AG5T	BP1N	BP1U	BP2S	BP2U	BP3C	BP3N	BP3S	BP3U	DG9S	VG9H	VG9T	VG9U	VOAK	WGFU	WGKU	ZPLC	GCUB	GJN	12GN	GN	BG1U		
013	WT						1																						
014							1																						
015							1																						
016							1																						
017							1																						
018							1																						
019							1																						
020							1																						
021							1																						
022							1																						
023							1																						
024	↓						1																						

WO#: 30568704
PM: SCR Due Date: 04/05/23
CLIENT: ALABAMA PWR

Container Codes

Glass

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

Plastic/Misc.

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

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

WT	Water
SL	Solid
OL	Non-Aq Liquid
WP	Wipe

Qualtrax ID: 55678

Pace® Analytical Services, LLC

Client _____ Profile Number _____

Site _____ Page 3 of 3 Notes _____

		Amber Glass					Plastic								Vials					Other									
Sample Line Item	Matrix	AG1H	AG3S	AG3U	AG5U	AG5T	BP1N	BP1U	BP2S	BP2U	BP3C	BP3N	BP3S	BP3U	DG9S	VG9H	VG9T	VG9U	VOAK	WGFU	WGKU	ZPLC	GCUB	GJN	12GN	GN	BG1U		
025	WT						1																						
026	↓						1																						
027	↓						1																						
028	↓						1																						

WO#: 30568704
Due Date: 04/05/23
PM: SCR
CLIENT: ALABAMA PWR

Container Codes

Glass

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

Plastic/Misc.

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

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

WT	Water
SL	Solid
OL	Non-Aq Liquid
WP	Wipe

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

Test:	Ra-228
Analyst:	JJS1
Date:	3/13/2023
Worklist:	71946
Matrix:	WT

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2782805
MB concentration:	0.137
M/B 2 Sigma CSU:	0.284
MB MDC:	0.627
MB Numerical Performance Indicator:	0.95
MB Status vs Numerical Indicator:	Pass
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	N
	LCS71946	LCSD71946
Count Date:	3/15/2023	
Spike I.D.:	22-040	
Decay Corrected Spike Concentration (pCi/mL):	33.235	
Volume Used (mL):	0.10	
Aliquot Volume (L, g, F):	0.810	
Target Conc. (pCi/L, g, F):	4.103	
Uncertainty (Calculated):	0.201	
Result (pCi/L, g, F):	3.226	
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	0.797	
Numerical Performance Indicator:	-2.09	
Percent Recovery:	78.64%	
Status vs Numerical Indicator:	N/A	
Status vs Recovery:	Pass	
Upper % Recovery Limits:	135%	
Lower % Recovery Limits:	60%	

Sample Matrix Spike Control Assessment	MS/MSD 1	MS/MSD 2
Sample Collection Date:	3/1/2023	
Sample I.D.	30568704024	
Sample MS I.D.	30568704025	
Sample MSD I.D.	30568704026	
Spike I.D.:	22-040	
MS/MSD Decay Corrected Spike Concentration (pCi/mL):	33.389	
Spike Volume Used in MS (mL):	0.20	
Spike Volume Used in MSD (mL):	0.20	
MS Aliquot (L, g, F):	0.806	
MS Target Conc.(pCi/L, g, F):	8.282	
MSD Aliquot (L, g, F):	0.808	
MSD Target Conc. (pCi/L, g, F):	8.264	
MS Spike Uncertainty (calculated):	0.406	
MSD Spike Uncertainty (calculated):	0.405	
Sample Result:	0.288	
Sample Result 2 Sigma CSU (pCi/L, g, F):	0.257	
Sample Matrix Spike Result:	6.363	
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):	1.314	
Sample Matrix Spike Duplicate Result:	6.054	
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):	1.256	
MS Numerical Performance Indicator:	-3.092	
MSD Numerical Performance Indicator:	-3.641	
MS Percent Recovery:	73.35%	
MSD Percent Recovery:	69.77%	
MS Status vs Numerical Indicator:	Fail****	
MSD Status vs Numerical Indicator:	Fail****	
MS Status vs Recovery:	Pass	
MSD Status vs Recovery:	Pass	
MS/MSD Upper % Recovery Limits:	135%	
MS/MSD Lower % Recovery Limits:	60%	

Duplicate Sample Assessment		
Sample I.D.:		Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.		
Sample Result (pCi/L, g, F):		
Sample Result 2 Sigma CSU (pCi/L, g, F):		
Sample Duplicate Result (pCi/L, g, F):		
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):		
Are sample and/or duplicate results below RL?	See Below ##	
Duplicate Numerical Performance Indicator:		
Duplicate RPD:		
Duplicate Status vs Numerical Indicator:		
Duplicate Status vs RPD:		
% RPD Limit:		

Matrix Spike/Matrix Spike Duplicate Sample Assessment		
Sample I.D.	30568704024	
Sample MS I.D.	30568704025	
Sample MSD I.D.	30568704026	
Sample Matrix Spike Result:	6.363	
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):	1.314	
Sample Matrix Spike Duplicate Result:	6.054	
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):	1.256	
Duplicate Numerical Performance Indicator:	0.333	
(Based on the Percent Recoveries) MS/ MSD Duplicate RPD:	5.00%	
MS/ MSD Duplicate Status vs Numerical Indicator:	Pass	
MS/ MSD Duplicate Status vs RPD:	Pass	
% RPD Limit:	36%	

Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

Comments:

MS/MSD pass % recovery criteria JJS 3/16/23

~~****If all other QC criteria pass, this batch is acceptable. The matrix spike duplicate result indicates a possible bias for this sample only and may not be applicable to any other samples in this analytical batch.~~

3/16/23

VAL 3/16/23

Quality Control Sample Performance Assessment

Pace Analytical™
www.pacelabs.com

Test:	Ra-226
Analyst:	SLC
Date:	3/10/2023
Worklist:	71943
Matrix:	DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2782797
MB concentration:	-0.020
M/B Counting Uncertainty:	0.078
MB MDC:	0.223
MB Numerical Performance Indicator:	-0.51
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS71943	LCSD71943
Count Date:	4/4/2023	4/4/2023
Spike I.D.:	19-033	19-033
Decay Corrected Spike Concentration (pCi/mL):	24.018	24.018
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.515	0.504
Target Conc. (pCi/L, g, F):	4.665	4.765
Uncertainty (Calculated):	0.056	0.057
Result (pCi/L, g, F):	4.583	5.293
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.435	0.492
Numerical Performance Indicator:	-0.37	2.09
Percent Recovery:	98.24%	111.07%
Status vs Numerical Indicator:	N/A	N/A
Status vs Recovery:	Pass	Pass
Upper % Recovery Limits:	125%	125%
Lower % Recovery Limits:	75%	75%

Sample Matrix Spike Control Assessment	MS/MSD 1	MS/MSD 2
Sample Collection Date:	2/28/2023	
Sample I.D.	30568704005	
Sample MS I.D.	30568704006	
Sample MSD I.D.	30568704007	
Spike I.D.:	19-033	
MS/MSD Decay Corrected Spike Concentration (pCi/mL):	24.019	
Spike Volume Used in MS (mL):	0.20	
Spike Volume Used in MSD (mL):	0.20	
MS Aliquot (L, g, F):	0.245	
MS Target Conc.(pCi/L, g, F):	19.571	
MSD Aliquot (L, g, F):	0.293	
MSD Target Conc. (pCi/L, g, F):	16.414	
MS Spike Uncertainty (calculated):	0.235	
MSD Spike Uncertainty (calculated):	0.197	
Sample Result:	0.083	
Sample Result Counting Uncertainty (pCi/L, g, F):	0.122	
Sample Matrix Spike Result:	19.623	
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):	1.308	
Sample Matrix Spike Duplicate Result:	18.073	
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):	1.154	
MS Numerical Performance Indicator:	-0.046	
MSD Numerical Performance Indicator:	2.625	
MS Percent Recovery:	99.84%	
MSD Percent Recovery:	109.60%	
MS Status vs Numerical Indicator:	N/A	
MSD Status vs Numerical Indicator:	N/A	
MS Status vs Recovery:	Pass	
MSD Status vs Recovery:	Pass	
MS/MSD Upper % Recovery Limits:	125%	
MS/MSD Lower % Recovery Limits:	75%	

Duplicate Sample Assessment		
Sample I.D.:	LCS71943	
Duplicate Sample I.D.	LCSD71943	
Sample Result (pCi/L, g, F):	4.583	
Sample Result Counting Uncertainty (pCi/L, g, F):	0.435	
Sample Duplicate Result (pCi/L, g, F):	5.293	
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.492	
Are sample and/or duplicate results below RL?	NO	
Duplicate Numerical Performance Indicator:	-2.117	
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	12.26%	
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	Pass	
% RPD Limit:	25%	

Matrix Spike/Matrix Spike Duplicate Sample Assessment		
Sample I.D.	30568704005	
Sample MS I.D.	30568704006	
Sample MSD I.D.	30568704007	
Sample Matrix Spike Result:	19.623	
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):	1.308	
Sample Matrix Spike Duplicate Result:	18.073	
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):	1.154	
Duplicate Numerical Performance Indicator:	1.741	
(Based on the Percent Recoveries) MS/ MSD Duplicate RPD:	9.32%	
MS/ MSD Duplicate Status vs Numerical Indicator:	N/A	
MS/ MSD Duplicate Status vs RPD:	Pass	
% RPD Limit:	25%	

Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

Comments:

VAm 4/4/23
SLC 4/4/23

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

Test:	Ra-228
Analyst:	JJS1
Date:	3/13/2023
Worklist:	71944
Matrix:	WT

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2782798
MB concentration:	0.042
M/B 2 Sigma CSU:	0.261
MB MDC:	0.602
MB Numerical Performance Indicator:	0.31
MB Status vs Numerical Indicator:	Pass
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	N
	LCS71944	LCSD71944
Count Date:	3/15/2023	
Spike I.D.:	22-040	
Decay Corrected Spike Concentration (pCi/mL):	33.235	
Volume Used (mL):	0.10	
Aliquot Volume (L, g, F):	0.807	
Target Conc. (pCi/L, g, F):	4.118	
Uncertainty (Calculated):	0.202	
Result (pCi/L, g, F):	3.023	
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	0.766	
Numerical Performance Indicator:	-2.71	
Percent Recovery:	73.40%	
Status vs Numerical Indicator:	N/A	
Status vs Recovery:	Pass	
Upper % Recovery Limits:	135%	
Lower % Recovery Limits:	60%	

Sample Matrix Spike Control Assessment	MS/MSD 1	MS/MSD 2
Sample Collection Date:	2/28/2023	
Sample I.D.	30568704005	
Sample MS I.D.	30568704006	
Sample MSD I.D.	30568704007	
Spike I.D.:	22-040	
MS/MSD Decay Corrected Spike Concentration (pCi/mL):	33.402	
Spike Volume Used in MS (mL):	0.20	
Spike Volume Used in MSD (mL):	0.20	
MS Aliquot (L, g, F):	0.805	
MS Target Conc.(pCi/L, g, F):	8.300	
MSD Aliquot (L, g, F):	0.805	
MSD Target Conc. (pCi/L, g, F):	8.297	
MS Spike Uncertainty (calculated):	0.407	
MSD Spike Uncertainty (calculated):	0.407	
Sample Result:	0.120	
Sample Result 2 Sigma CSU (pCi/L, g, F):	0.269	
Sample Matrix Spike Result:	8.598	
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):	1.712	
Sample Matrix Spike Duplicate Result:	7.895	
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):	1.606	
MS Numerical Performance Indicator:	0.195	
MSD Numerical Performance Indicator:	-0.610	
MS Percent Recovery:	102.14%	
MSD Percent Recovery:	93.71%	
MS Status vs Numerical Indicator:	Pass	
MSD Status vs Numerical Indicator:	Pass	
MS Status vs Recovery:	Pass	
MSD Status vs Recovery:	Pass	
MS/MSD Upper % Recovery Limits:	135%	
MS/MSD Lower % Recovery Limits:	60%	

Duplicate Sample Assessment		
Sample I.D.:		Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.		
Sample Result (pCi/L, g, F):		
Sample Result 2 Sigma CSU (pCi/L, g, F):		
Sample Duplicate Result (pCi/L, g, F):		
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):		
Are sample and/or duplicate results below RL?	See Below ##	
Duplicate Numerical Performance Indicator:		
Duplicate RPD:		
Duplicate Status vs Numerical Indicator:		
Duplicate Status vs RPD:		
% RPD Limit:		

Matrix Spike/Matrix Spike Duplicate Sample Assessment		
Sample I.D.	30568704005	
Sample MS I.D.	30568704006	
Sample MSD I.D.	30568704007	
Sample Matrix Spike Result:	8.598	
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):	1.712	
Sample Matrix Spike Duplicate Result:	7.895	
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):	1.606	
Duplicate Numerical Performance Indicator:	0.587	
(Based on the Percent Recoveries) MS/ MSD Duplicate RPD:	8.61%	
MS/ MSD Duplicate Status vs Numerical Indicator:	Pass	
MS/ MSD Duplicate Status vs RPD:	Pass	
% RPD Limit:	36%	

Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

Comments:

VAL
3/16/23

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

Test:	Ra-226
Analyst:	SLC
Date:	3/10/2023
Worklist:	71945
Matrix:	WT

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2782802
MB concentration:	0.036
M/B 2 Sigma CSU:	0.063
MB MDC:	0.142
MB Numerical Performance Indicator:	1.11
MB Status vs Numerical Indicator:	Pass
MB Status vs. MDC:	N/A

Laboratory Control Sample Assessment	LCSD (Y or N)?	N
	LCS71945	LCSD71945
Count Date:	4/4/2023	
Spike I.D.:	19-033	
Decay Corrected Spike Concentration (pCi/mL):	24.018	
Volume Used (mL):	0.10	
Aliquot Volume (L, g, F):	0.502	
Target Conc. (pCi/L, g, F):	4.786	
Uncertainty (Calculated):	0.057	
Result (pCi/L, g, F):	4.611	
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	0.811	
Numerical Performance Indicator:	-0.42	
Percent Recovery:	96.35%	
Status vs Numerical Indicator:	Pass	
Status vs Recovery:	N/A	
Upper % Recovery Limits:	125%	
Lower % Recovery Limits:	75%	

Sample Matrix Spike Control Assessment	MS/MSD 1	MS/MSD 2
Sample Collection Date:	3/1/2023	
Sample I.D.	30568704024	
Sample MS I.D.	30568704025	
Sample MSD I.D.	30568704026	
Spike I.D.:	19-033	
MS/MSD Decay Corrected Spike Concentration (pCi/mL):	24.019	
Spike Volume Used in MS (mL):	0.20	
Spike Volume Used in MSD (mL):	0.20	
MS Aliquot (L, g, F):	0.316	
MS Target Conc.(pCi/L, g, F):	15.197	
MSD Aliquot (L, g, F):	0.332	
MSD Target Conc. (pCi/L, g, F):	14.487	
MS Spike Uncertainty (calculated):	0.182	
MSD Spike Uncertainty (calculated):	0.174	
Sample Result:	0.098	
Sample Result 2 Sigma CSU (pCi/L, g, F):	0.115	
Sample Matrix Spike Result:	14.782	
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):	2.369	
Sample Matrix Spike Duplicate Result:	15.792	
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):	2.491	
MS Numerical Performance Indicator:	-0.422	
MSD Numerical Performance Indicator:	0.947	
MS Percent Recovery:	96.63%	
MSD Percent Recovery:	108.33%	
MS Status vs Numerical Indicator:	Pass	
MSD Status vs Numerical Indicator:	Pass	
MS Status vs Recovery:	N/A	
MSD Status vs Recovery:	N/A	
MS/MSD Upper % Recovery Limits:	125%	
MS/MSD Lower % Recovery Limits:	75%	

Duplicate Sample Assessment		
Sample I.D.:		
Duplicate Sample I.D.		
Sample Result (pCi/L, g, F):		
Sample Result 2 Sigma CSU (pCi/L, g, F):		
Sample Duplicate Result (pCi/L, g, F):		
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):		
Are sample and/or duplicate results below RL?	See Below ##	
Duplicate Numerical Performance Indicator:		
Duplicate RPD:		
Duplicate Status vs Numerical Indicator:		
Duplicate Status vs RPD:		
% RPD Limit:		

Matrix Spike/Matrix Spike Duplicate Sample Assessment		
Sample I.D.	30568704024	
Sample MS I.D.	30568704025	
Sample MSD I.D.	30568704026	
Sample Matrix Spike Result:	14.782	
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):	2.369	
Sample Matrix Spike Duplicate Result:	15.792	
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):	2.491	
Duplicate Numerical Performance Indicator:	-0.576	
(Based on the Percent Recoveries) MS/ MSD Duplicate RPD:	11.42%	
MS/ MSD Duplicate Status vs Numerical Indicator:	Pass	
MS/ MSD Duplicate Status vs RPD:	N/A	
% RPD Limit:	25%	

Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

Comments:

LAM 4/4/23
SLC 4/4/23

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

Field Case Narrative

Gorgas Gypsum Pond

2023 Compliance Event 2

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

Dusty conditions due to truck activity were present when pumping and sampling wells PZ-17, MW-4, MW-4V, MW-3 and MW-3V.

Field quality control procedures were performed as follows:

- Blanks and Sample Duplicates were collected as described in the SAP.
    - The reporting limit (RL) for TDS was exceeded for Equipment Blank 1 (EB-1), Field Blank-1 (FB-1) and Field Blank 2 (FB-2).

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

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

Field Case Narrative

Gorgas Gypsum Pond

MW-11H Radium Resample

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

Field quality control procedures were performed as follows:

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

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

Y

User Name: awgoggin
PIN: 032284
Reason: Corrected name space

Submit

Date: 08/21/2023
Location: Gorgas Pooled Upgradient
Collector: TJ Daugherty

Weather: Sunny 90

			In Good Condition					
Well	Time	Water Level (ft)	Locks	Bollards	Pad	Protective Casing	Name Plate	Comment
MW-1	1210	91.24	✔	✔	✔	✔	✔	
MW-2	1202	84.61	✔	✔	✔	✔	✔	
MW-3	1157	110.03	✔	✔	✔	✔	✔	
MW-4	1150	117.38	✔	✔	✔	✔	✔	
			☐	☐	☐	☐	☐	
			☐	☐	☐	☐	☐	
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Water Level Record/Well Inspection

Groundwater

APC General Testing Laboratory
General Service Complex Building 8

Y

User Name: Dfgentry
PIN: 123654
Reason: Corrected 15H from 125.65 to 25.65. T

Submit

Date: 08/21/2023
Location: Gorgas Gypsum
Collector: Dallas Gentry

Weather: Partly Cloudy 90

			In Good Condition					
Well	Time	Water Level (ft)	Locks	Bollards	Pad	Protective Casing	Name Plate	Comment
MW-1	1211	95.23	✔	✔	✔	✔	✔	
MW-2	1214	107.34	✔	✔	✔	✔	✔	
PZ-2A	1206	120.0	✔	✔	✔	✔	✔	
MW-3	1220	107.59	✔	✔	✔	✔	✔	
MW-3V	1217	127.30	✔	✔	✔	✔	✔	
MW-4	1223	91.51	✔	✔	✔	✔	✔	
MW-4V	1225	118.03	✔	✔	✔	✔	✔	
PZ-4	1238	126.69	✔	✔	✔	✔	✔	
MW-5	1228	DRY	✔	✔	✔	✔	✔	
PZ-5	1202	DRY	✔	✔	✔	✔	✔	
MW-6	1231	DRY	✔	✔	✔	✔	✔	
MW-7	1252	68.76	✔	✔	✔	✔	✔	Collected by TJD
MW-8	1257	80.56	✔	✔	✔	✔	✔	Collected by TJD
MW-8V	1259	91.01	✔	✔	✔	✔	✔	Collected by TJD
MW-9	1305	Dry	✔	✔	✔	✔	✔	Collected by TJD
MW-9H	1234	46.56	✔	✔	✔	✔	✔	Collected by TJD
MW-9V	1236	47.31	✔	✔	✔	✔	✔	Collected by TJD
MW-10H	1240	26.98	✔	✔	✔	✔	✔	Collected by TJD
MW-11H	1226	7.14	✔	✔	✔	✔	✔	Collected by TJD
MW-12H	1249	61.45	✔	✔	✔	✔	✔	Collected by TJD
MW-12V	1244	66.09	✔	✔	✔	✔	✔	Collected by TJD
MW-13H	1230	10.61	✔	✔	✔	✔	✔	Collected by TJD
MW-14H	1350	18.98	✔	✔	✔	✔	✔	Collected by TJD
MW-15H	1155	25.65	✔	✔	✔	✔	✔	
PZ-16	1152	24.82	✔	✔	✔	✔	✔	
PZ-17	1159	46.05	✔	✔	✔	✔	✔	
PZ-18	1245	61.90	✔	✔	✔	✔	✔	
PZ-19	1251	119.68	✔	✔	✔	✔	✔	
PZ-20	1258	116.22	✔	✔	✔	✔	✔	
PZ-21	1305	84.66	✔	✔	✔	✔	✔	
PZ-22	1311	53.51	✔	✔	✔	✔	✔	
MW-23VA	1254	101.51	✔	✔	✔	✔	✔	Collected by TJD

FIELD PARAMETER SUMMARY
PLANT GORGAS GYPSUM POND

Well ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
MW-1	COND	Conductivity	8/22/2023 12:38	2196.92	uS/cm
MW-1	DO	DO	8/22/2023 12:38	0.52	mg/L
MW-1	DTW	Depth to Water Detail	8/22/2023 12:38	92.8	ft
MW-1	ORP	Oxidation Reduction Potential	8/22/2023 12:38	297.82	mv
MW-1	PH	pH	8/22/2023 12:38	4.88	SU
MW-1	TEMP	Temperature	8/22/2023 12:38	22.3	C
MW-1	TURB	Turbidity	8/22/2023 12:38	2.74	NTU
MW-1	COND	Conductivity	8/22/2023 12:43	2180.39	uS/cm
MW-1	DO	DO	8/22/2023 12:43	0.77	mg/L
MW-1	DTW	Depth to Water Detail	8/22/2023 12:43	92.8	ft
MW-1	ORP	Oxidation Reduction Potential	8/22/2023 12:43	321.71	mv
MW-1	PH	pH	8/22/2023 12:43	4.85	SU
MW-1	TEMP	Temperature	8/22/2023 12:43	22.07	C
MW-1	TURB	Turbidity	8/22/2023 12:43	1.4	NTU
MW-1	COND	Conductivity	8/22/2023 12:48	2204.07	uS/cm
MW-1	DO	DO	8/22/2023 12:48	0.5	mg/L
MW-1	DTW	Depth to Water Detail	8/22/2023 12:48	92.8	ft
MW-1	ORP	Oxidation Reduction Potential	8/22/2023 12:48	333.02	mv
MW-1	PH	pH	8/22/2023 12:48	4.88	SU
MW-1	TEMP	Temperature	8/22/2023 12:48	22.19	C
MW-1	TURB	Turbidity	8/22/2023 12:48	1.58	NTU
MW-1	COND	Conductivity	8/22/2023 12:53	2206.04	uS/cm
MW-1	DO	DO	8/22/2023 12:53	0.34	mg/L
MW-1	DTW	Depth to Water Detail	8/22/2023 12:53	92.8	ft
MW-1	ORP	Oxidation Reduction Potential	8/22/2023 12:53	338.64	mv
MW-1	PH	pH	8/22/2023 12:53	4.92	SU
MW-1	SULFIDE	Sulfide	8/22/2023 12:53	0	mg/L
MW-1	TEMP	Temperature	8/22/2023 12:53	22.09	C
MW-1	TURB	Turbidity	8/22/2023 12:53	1.06	NTU
MW-2	COND	Conductivity	8/22/2023 13:33	1734.93	uS/cm
MW-2	DO	DO	8/22/2023 13:33	0.18	mg/L
MW-2	DTW	Depth to Water Detail	8/22/2023 13:33	84.6	ft
MW-2	ORP	Oxidation Reduction Potential	8/22/2023 13:33	67.36	mv
MW-2	PH	pH	8/22/2023 13:33	5.82	SU
MW-2	TEMP	Temperature	8/22/2023 13:33	21.99	C
MW-2	TURB	Turbidity	8/22/2023 13:33	21.9	NTU
MW-2	COND	Conductivity	8/22/2023 13:38	1720.39	uS/cm
MW-2	DO	DO	8/22/2023 13:38	0.12	mg/L
MW-2	DTW	Depth to Water Detail	8/22/2023 13:38	84.6	ft
MW-2	ORP	Oxidation Reduction Potential	8/22/2023 13:38	71.28	mv
MW-2	PH	pH	8/22/2023 13:38	5.79	SU
MW-2	TEMP	Temperature	8/22/2023 13:38	21.44	C
MW-2	TURB	Turbidity	8/22/2023 13:38	9.91	NTU
MW-2	COND	Conductivity	8/22/2023 13:43	1719.27	uS/cm
MW-2	DO	DO	8/22/2023 13:43	0.1	mg/L
MW-2	DTW	Depth to Water Detail	8/22/2023 13:43	84.6	ft
MW-2	ORP	Oxidation Reduction Potential	8/22/2023 13:43	69.58	mv
MW-2	PH	pH	8/22/2023 13:43	5.8	SU
MW-2	TEMP	Temperature	8/22/2023 13:43	21.21	C
MW-2	TURB	Turbidity	8/22/2023 13:43	6.95	NTU
MW-2	COND	Conductivity	8/22/2023 13:48	1720.05	uS/cm
MW-2	DO	DO	8/22/2023 13:48	0.09	mg/L
MW-2	DTW	Depth to Water Detail	8/22/2023 13:48	84.6	ft
MW-2	ORP	Oxidation Reduction Potential	8/22/2023 13:48	69.56	mv
MW-2	PH	pH	8/22/2023 13:48	5.81	SU
MW-2	SULFIDE	Sulfide	8/22/2023 13:48	0	mg/L
MW-2	TEMP	Temperature	8/22/2023 13:48	21.04	C
MW-2	TURB	Turbidity	8/22/2023 13:48	2.91	NTU
MW-3	COND	Conductivity	8/22/2023 14:25	2710.92	uS/cm
MW-3	DO	DO	8/22/2023 14:25	7.93	mg/L
MW-3	DTW	Depth to Water Detail	8/22/2023 14:25	110.6	ft

FIELD PARAMETER SUMMARY
PLANT GORGAS GYPSUM POND

Well ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
MW-3	ORP	Oxidation Reduction Potential	8/22/2023 14:25	107.59	mv
MW-3	PH	pH	8/22/2023 14:25	6.77	SU
MW-3	TEMP	Temperature	8/22/2023 14:25	30.96	C
MW-3	TURB	Turbidity	8/22/2023 14:25	8.64	NTU
MW-3	COND	Conductivity	8/22/2023 14:30	2927.96	uS/cm
MW-3	DO	DO	8/22/2023 14:30	6.45	mg/L
MW-3	DTW	Depth to Water Detail	8/22/2023 14:30	110.7	ft
MW-3	ORP	Oxidation Reduction Potential	8/22/2023 14:30	106.33	mv
MW-3	PH	pH	8/22/2023 14:30	5.74	SU
MW-3	TEMP	Temperature	8/22/2023 14:30	30.09	C
MW-3	TURB	Turbidity	8/22/2023 14:30	12.8	NTU
MW-3	COND	Conductivity	8/22/2023 14:35	3186.4	uS/cm
MW-3	DO	DO	8/22/2023 14:35	2.32	mg/L
MW-3	DTW	Depth to Water Detail	8/22/2023 14:35	110.82	ft
MW-3	ORP	Oxidation Reduction Potential	8/22/2023 14:35	149.98	mv
MW-3	PH	pH	8/22/2023 14:35	5.3	SU
MW-3	TEMP	Temperature	8/22/2023 14:35	30.29	C
MW-3	TURB	Turbidity	8/22/2023 14:35	36	NTU
MW-3	COND	Conductivity	8/22/2023 14:40	3737.45	uS/cm
MW-3	DO	DO	8/22/2023 14:40	1.59	mg/L
MW-3	DTW	Depth to Water Detail	8/22/2023 14:40	110.92	ft
MW-3	ORP	Oxidation Reduction Potential	8/22/2023 14:40	173.45	mv
MW-3	PH	pH	8/22/2023 14:40	5.18	SU
MW-3	TEMP	Temperature	8/22/2023 14:40	30.37	C
MW-3	TURB	Turbidity	8/22/2023 14:40	24	NTU
MW-3	COND	Conductivity	8/22/2023 14:45	3703.94	uS/cm
MW-3	DO	DO	8/22/2023 14:45	1.31	mg/L
MW-3	DTW	Depth to Water Detail	8/22/2023 14:45	111	ft
MW-3	ORP	Oxidation Reduction Potential	8/22/2023 14:45	195.14	mv
MW-3	PH	pH	8/22/2023 14:45	5.13	SU
MW-3	TEMP	Temperature	8/22/2023 14:45	29.84	C
MW-3	TURB	Turbidity	8/22/2023 14:45	16.4	NTU
MW-3	COND	Conductivity	8/22/2023 14:50	4111.39	uS/cm
MW-3	DO	DO	8/22/2023 14:50	1.3	mg/L
MW-3	DTW	Depth to Water Detail	8/22/2023 14:50	111.1	ft
MW-3	ORP	Oxidation Reduction Potential	8/22/2023 14:50	210.96	mv
MW-3	PH	pH	8/22/2023 14:50	5.09	SU
MW-3	TEMP	Temperature	8/22/2023 14:50	30.06	C
MW-3	TURB	Turbidity	8/22/2023 14:50	11	NTU
MW-3	COND	Conductivity	8/22/2023 14:55	4098.69	uS/cm
MW-3	DO	DO	8/22/2023 14:55	1.42	mg/L
MW-3	DTW	Depth to Water Detail	8/22/2023 14:55	111.15	ft
MW-3	ORP	Oxidation Reduction Potential	8/22/2023 14:55	217.32	mv
MW-3	PH	pH	8/22/2023 14:55	5.06	SU
MW-3	TEMP	Temperature	8/22/2023 14:55	30.19	C
MW-3	TURB	Turbidity	8/22/2023 14:55	8.03	NTU
MW-3	COND	Conductivity	8/22/2023 15:00	4080.83	uS/cm
MW-3	DO	DO	8/22/2023 15:00	1.44	mg/L
MW-3	DTW	Depth to Water Detail	8/22/2023 15:00	111.25	ft
MW-3	ORP	Oxidation Reduction Potential	8/22/2023 15:00	216.99	mv
MW-3	PH	pH	8/22/2023 15:00	5.04	SU
MW-3	SULFIDE	Sulfide	8/22/2023 15:00	0	mg/L
MW-3	TEMP	Temperature	8/22/2023 15:00	30.15	C
MW-3	TURB	Turbidity	8/22/2023 15:00	5.66	NTU
MW-4	COND	Conductivity	8/22/2023 16:10	3000.74	uS/cm
MW-4	DO	DO	8/22/2023 16:10	1.59	mg/L
MW-4	DTW	Depth to Water Detail	8/22/2023 16:10	117.38	ft
MW-4	ORP	Oxidation Reduction Potential	8/22/2023 16:10	144.57	mv
MW-4	PH	pH	8/22/2023 16:10	6.12	SU
MW-4	TEMP	Temperature	8/22/2023 16:10	24.36	C
MW-4	TURB	Turbidity	8/22/2023 16:10	40.6	NTU

FIELD PARAMETER SUMMARY
PLANT GORGAS GYPSUM POND

Well ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
MW-4	COND	Conductivity	8/22/2023 16:15	3122.72	uS/cm
MW-4	DO	DO	8/22/2023 16:15	1.21	mg/L
MW-4	DTW	Depth to Water Detail	8/22/2023 16:15	117.38	ft
MW-4	ORP	Oxidation Reduction Potential	8/22/2023 16:15	154.59	mv
MW-4	PH	pH	8/22/2023 16:15	6.16	SU
MW-4	TEMP	Temperature	8/22/2023 16:15	23.63	C
MW-4	TURB	Turbidity	8/22/2023 16:15	18.6	NTU
MW-4	COND	Conductivity	8/22/2023 16:20	2957.37	uS/cm
MW-4	DO	DO	8/22/2023 16:20	1.55	mg/L
MW-4	DTW	Depth to Water Detail	8/22/2023 16:20	117.38	ft
MW-4	ORP	Oxidation Reduction Potential	8/22/2023 16:20	158.62	mv
MW-4	PH	pH	8/22/2023 16:20	6.24	SU
MW-4	TEMP	Temperature	8/22/2023 16:20	23.22	C
MW-4	TURB	Turbidity	8/22/2023 16:20	12.1	NTU
MW-4	COND	Conductivity	8/22/2023 16:25	2923.19	uS/cm
MW-4	DO	DO	8/22/2023 16:25	1.84	mg/L
MW-4	DTW	Depth to Water Detail	8/22/2023 16:25	117.38	ft
MW-4	ORP	Oxidation Reduction Potential	8/22/2023 16:25	163.28	mv
MW-4	PH	pH	8/22/2023 16:25	6.27	SU
MW-4	TEMP	Temperature	8/22/2023 16:25	23.14	C
MW-4	TURB	Turbidity	8/22/2023 16:25	8.66	NTU
MW-4	COND	Conductivity	8/22/2023 16:30	2962.35	uS/cm
MW-4	DO	DO	8/22/2023 16:30	1.95	mg/L
MW-4	DTW	Depth to Water Detail	8/22/2023 16:30	117.38	ft
MW-4	ORP	Oxidation Reduction Potential	8/22/2023 16:30	168.43	mv
MW-4	PH	pH	8/22/2023 16:30	6.28	SU
MW-4	SULFIDE	Sulfide	8/22/2023 16:30	0	mg/L
MW-4	TEMP	Temperature	8/22/2023 16:30	23.06	C
MW-4	TURB	Turbidity	8/22/2023 16:30	7.22	NTU
GS-GSA-MW-3	COND	Conductivity	8/23/2023 10:19	3254.2	uS/cm
GS-GSA-MW-3	DO	DO	8/23/2023 10:19	0.2	mg/L
GS-GSA-MW-3	DTW	Depth to Water Detail	8/23/2023 10:19	107.94	ft
GS-GSA-MW-3	ORP	Oxidation Reduction Potential	8/23/2023 10:19	90.96	mv
GS-GSA-MW-3	PH	pH	8/23/2023 10:19	6	SU
GS-GSA-MW-3	TEMP	Temperature	8/23/2023 10:19	22.26	C
GS-GSA-MW-3	TURB	Turbidity	8/23/2023 10:19	11	NTU
GS-GSA-MW-3	COND	Conductivity	8/23/2023 10:24	3166.37	uS/cm
GS-GSA-MW-3	DO	DO	8/23/2023 10:24	0.17	mg/L
GS-GSA-MW-3	DTW	Depth to Water Detail	8/23/2023 10:24	107.94	ft
GS-GSA-MW-3	ORP	Oxidation Reduction Potential	8/23/2023 10:24	79.68	mv
GS-GSA-MW-3	PH	pH	8/23/2023 10:24	6.03	SU
GS-GSA-MW-3	TEMP	Temperature	8/23/2023 10:24	22.14	C
GS-GSA-MW-3	TURB	Turbidity	8/23/2023 10:24	8.53	NTU
GS-GSA-MW-3	COND	Conductivity	8/23/2023 10:29	3112.95	uS/cm
GS-GSA-MW-3	DO	DO	8/23/2023 10:29	0.16	mg/L
GS-GSA-MW-3	DTW	Depth to Water Detail	8/23/2023 10:29	107.94	ft
GS-GSA-MW-3	ORP	Oxidation Reduction Potential	8/23/2023 10:29	71.01	mv
GS-GSA-MW-3	PH	pH	8/23/2023 10:29	6.04	SU
GS-GSA-MW-3	TEMP	Temperature	8/23/2023 10:29	22.07	C
GS-GSA-MW-3	TURB	Turbidity	8/23/2023 10:29	7.34	NTU
GS-GSA-MW-3	COND	Conductivity	8/23/2023 10:34	3083	uS/cm
GS-GSA-MW-3	DO	DO	8/23/2023 10:34	0.16	mg/L
GS-GSA-MW-3	DTW	Depth to Water Detail	8/23/2023 10:34	107.94	ft
GS-GSA-MW-3	ORP	Oxidation Reduction Potential	8/23/2023 10:34	63.9	mv
GS-GSA-MW-3	PH	pH	8/23/2023 10:34	6.03	SU
GS-GSA-MW-3	SULFIDE	Sulfide	8/23/2023 10:34	0	mg/L
GS-GSA-MW-3	TEMP	Temperature	8/23/2023 10:34	22.23	C
GS-GSA-MW-3	TURB	Turbidity	8/23/2023 10:34	6.86	NTU
GS-GSA-MW-3V	COND	Conductivity	8/23/2023 14:49	2864.18	uS/cm
GS-GSA-MW-3V	DO	DO	8/23/2023 14:49	2.14	mg/L
GS-GSA-MW-3V	DTW	Depth to Water Detail	8/23/2023 14:49	128.95	ft

FIELD PARAMETER SUMMARY
PLANT GORGAS GYPSUM POND

Well ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GS-GSA-MW-3V	ORP	Oxidation Reduction Potential	8/23/2023 14:49	76.42	mv
GS-GSA-MW-3V	PH	pH	8/23/2023 14:49	6.19	SU
GS-GSA-MW-3V	TEMP	Temperature	8/23/2023 14:49	27.42	C
GS-GSA-MW-3V	TURB	Turbidity	8/23/2023 14:49	6.68	NTU
GS-GSA-MW-3V	COND	Conductivity	8/23/2023 14:54	2747.18	uS/cm
GS-GSA-MW-3V	DO	DO	8/23/2023 14:54	1.87	mg/L
GS-GSA-MW-3V	DTW	Depth to Water Detail	8/23/2023 14:54	129.11	ft
GS-GSA-MW-3V	ORP	Oxidation Reduction Potential	8/23/2023 14:54	80.55	mv
GS-GSA-MW-3V	PH	pH	8/23/2023 14:54	6.17	SU
GS-GSA-MW-3V	TEMP	Temperature	8/23/2023 14:54	26.45	C
GS-GSA-MW-3V	TURB	Turbidity	8/23/2023 14:54	6.18	NTU
GS-GSA-MW-3V	COND	Conductivity	8/23/2023 14:59	2705.92	uS/cm
GS-GSA-MW-3V	DO	DO	8/23/2023 14:59	1.61	mg/L
GS-GSA-MW-3V	DTW	Depth to Water Detail	8/23/2023 14:59	129.24	ft
GS-GSA-MW-3V	ORP	Oxidation Reduction Potential	8/23/2023 14:59	77.02	mv
GS-GSA-MW-3V	PH	pH	8/23/2023 14:59	6.23	SU
GS-GSA-MW-3V	TEMP	Temperature	8/23/2023 14:59	26.29	C
GS-GSA-MW-3V	TURB	Turbidity	8/23/2023 14:59	5.97	NTU
GS-GSA-MW-3V	COND	Conductivity	8/23/2023 15:04	2742.72	uS/cm
GS-GSA-MW-3V	DO	DO	8/23/2023 15:04	1.59	mg/L
GS-GSA-MW-3V	DTW	Depth to Water Detail	8/23/2023 15:04	129.36	ft
GS-GSA-MW-3V	ORP	Oxidation Reduction Potential	8/23/2023 15:04	74.47	mv
GS-GSA-MW-3V	PH	pH	8/23/2023 15:04	6.23	SU
GS-GSA-MW-3V	TEMP	Temperature	8/23/2023 15:04	26.45	C
GS-GSA-MW-3V	TURB	Turbidity	8/23/2023 15:04	5.88	NTU
GS-GSA-MW-3V	COND	Conductivity	8/23/2023 15:09	2619	uS/cm
GS-GSA-MW-3V	DO	DO	8/23/2023 15:09	1.27	mg/L
GS-GSA-MW-3V	DTW	Depth to Water Detail	8/23/2023 15:09	129.47	ft
GS-GSA-MW-3V	ORP	Oxidation Reduction Potential	8/23/2023 15:09	72.97	mv
GS-GSA-MW-3V	PH	pH	8/23/2023 15:09	6.25	SU
GS-GSA-MW-3V	TEMP	Temperature	8/23/2023 15:09	25.88	C
GS-GSA-MW-3V	TURB	Turbidity	8/23/2023 15:09	5.9	NTU
GS-GSA-MW-3V	COND	Conductivity	8/23/2023 15:14	2599.57	uS/cm
GS-GSA-MW-3V	DO	DO	8/23/2023 15:14	1.12	mg/L
GS-GSA-MW-3V	DTW	Depth to Water Detail	8/23/2023 15:14	129.47	ft
GS-GSA-MW-3V	ORP	Oxidation Reduction Potential	8/23/2023 15:14	69.87	mv
GS-GSA-MW-3V	PH	pH	8/23/2023 15:14	6.26	SU
GS-GSA-MW-3V	TEMP	Temperature	8/23/2023 15:14	25.27	C
GS-GSA-MW-3V	TURB	Turbidity	8/23/2023 15:14	5.95	NTU
GS-GSA-MW-3V	COND	Conductivity	8/23/2023 15:19	2595.97	uS/cm
GS-GSA-MW-3V	DO	DO	8/23/2023 15:19	1.05	mg/L
GS-GSA-MW-3V	DTW	Depth to Water Detail	8/23/2023 15:19	129.63	ft
GS-GSA-MW-3V	ORP	Oxidation Reduction Potential	8/23/2023 15:19	66.05	mv
GS-GSA-MW-3V	PH	pH	8/23/2023 15:19	6.27	SU
GS-GSA-MW-3V	TEMP	Temperature	8/23/2023 15:19	25.42	C
GS-GSA-MW-3V	TURB	Turbidity	8/23/2023 15:19	5.81	NTU
GS-GSA-MW-3V	COND	Conductivity	8/23/2023 15:24	2638.18	uS/cm
GS-GSA-MW-3V	DO	DO	8/23/2023 15:24	1.04	mg/L
GS-GSA-MW-3V	DTW	Depth to Water Detail	8/23/2023 15:24	129.63	ft
GS-GSA-MW-3V	ORP	Oxidation Reduction Potential	8/23/2023 15:24	62.2	mv
GS-GSA-MW-3V	PH	pH	8/23/2023 15:24	6.27	SU
GS-GSA-MW-3V	SULFIDE	Sulfide	8/23/2023 15:24	0	mg/L
GS-GSA-MW-3V	TEMP	Temperature	8/23/2023 15:24	26.14	C
GS-GSA-MW-3V	TURB	Turbidity	8/23/2023 15:24	5.99	NTU
GS-GSA-MW-4	COND	Conductivity	8/23/2023 9:22	1199.67	uS/cm
GS-GSA-MW-4	DO	DO	8/23/2023 9:22	0.21	mg/L
GS-GSA-MW-4	DTW	Depth to Water Detail	8/23/2023 9:22	91.72	ft
GS-GSA-MW-4	ORP	Oxidation Reduction Potential	8/23/2023 9:22	290.31	mv
GS-GSA-MW-4	PH	pH	8/23/2023 9:22	3.6	SU
GS-GSA-MW-4	TEMP	Temperature	8/23/2023 9:22	21.97	C
GS-GSA-MW-4	TURB	Turbidity	8/23/2023 9:22	4.85	NTU

FIELD PARAMETER SUMMARY
PLANT GORGAS GYPSUM POND

Well ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GS-GSA-MW-4	COND	Conductivity	8/23/2023 9:27	1209.11	uS/cm
GS-GSA-MW-4	DO	DO	8/23/2023 9:27	0.19	mg/L
GS-GSA-MW-4	DTW	Depth to Water Detail	8/23/2023 9:27	91.72	ft
GS-GSA-MW-4	ORP	Oxidation Reduction Potential	8/23/2023 9:27	251.63	mv
GS-GSA-MW-4	PH	pH	8/23/2023 9:27	3.7	SU
GS-GSA-MW-4	TEMP	Temperature	8/23/2023 9:27	21.84	C
GS-GSA-MW-4	TURB	Turbidity	8/23/2023 9:27	4.52	NTU
GS-GSA-MW-4	COND	Conductivity	8/23/2023 9:32	1214.73	uS/cm
GS-GSA-MW-4	DO	DO	8/23/2023 9:32	0.18	mg/L
GS-GSA-MW-4	DTW	Depth to Water Detail	8/23/2023 9:32	91.72	ft
GS-GSA-MW-4	ORP	Oxidation Reduction Potential	8/23/2023 9:32	241.73	mv
GS-GSA-MW-4	PH	pH	8/23/2023 9:32	3.73	SU
GS-GSA-MW-4	TEMP	Temperature	8/23/2023 9:32	21.71	C
GS-GSA-MW-4	TURB	Turbidity	8/23/2023 9:32	4.47	NTU
GS-GSA-MW-4	COND	Conductivity	8/23/2023 9:37	1220.16	uS/cm
GS-GSA-MW-4	DO	DO	8/23/2023 9:37	0.18	mg/L
GS-GSA-MW-4	DTW	Depth to Water Detail	8/23/2023 9:37	91.72	ft
GS-GSA-MW-4	ORP	Oxidation Reduction Potential	8/23/2023 9:37	236.83	mv
GS-GSA-MW-4	PH	pH	8/23/2023 9:37	3.74	SU
GS-GSA-MW-4	SULFIDE	Sulfide	8/23/2023 9:37	0	mg/L
GS-GSA-MW-4	TEMP	Temperature	8/23/2023 9:37	21.69	C
GS-GSA-MW-4	TURB	Turbidity	8/23/2023 9:37	4.42	NTU
GS-GSA-MW-4V	COND	Conductivity	8/23/2023 7:53	1242.39	uS/cm
GS-GSA-MW-4V	DO	DO	8/23/2023 7:53	4.11	mg/L
GS-GSA-MW-4V	DTW	Depth to Water Detail	8/23/2023 7:53	118.68	ft
GS-GSA-MW-4V	ORP	Oxidation Reduction Potential	8/23/2023 7:53	123.9	mv
GS-GSA-MW-4V	PH	pH	8/23/2023 7:53	5.23	SU
GS-GSA-MW-4V	TEMP	Temperature	8/23/2023 7:53	24.71	C
GS-GSA-MW-4V	TURB	Turbidity	8/23/2023 7:53	10.48	NTU
GS-GSA-MW-4V	COND	Conductivity	8/23/2023 7:58	1205.24	uS/cm
GS-GSA-MW-4V	DO	DO	8/23/2023 7:58	1.72	mg/L
GS-GSA-MW-4V	DTW	Depth to Water Detail	8/23/2023 7:58	118.75	ft
GS-GSA-MW-4V	ORP	Oxidation Reduction Potential	8/23/2023 7:58	115.14	mv
GS-GSA-MW-4V	PH	pH	8/23/2023 7:58	5.48	SU
GS-GSA-MW-4V	TEMP	Temperature	8/23/2023 7:58	24.6	C
GS-GSA-MW-4V	TURB	Turbidity	8/23/2023 7:58	100	NTU
GS-GSA-MW-4V	COND	Conductivity	8/23/2023 8:03	1189.81	uS/cm
GS-GSA-MW-4V	DO	DO	8/23/2023 8:03	1.2	mg/L
GS-GSA-MW-4V	DTW	Depth to Water Detail	8/23/2023 8:03	118.78	ft
GS-GSA-MW-4V	ORP	Oxidation Reduction Potential	8/23/2023 8:03	116.7	mv
GS-GSA-MW-4V	PH	pH	8/23/2023 8:03	5.59	SU
GS-GSA-MW-4V	TEMP	Temperature	8/23/2023 8:03	24.63	C
GS-GSA-MW-4V	TURB	Turbidity	8/23/2023 8:03	77.9	NTU
GS-GSA-MW-4V	COND	Conductivity	8/23/2023 8:08	1158.19	uS/cm
GS-GSA-MW-4V	DO	DO	8/23/2023 8:08	0.72	mg/L
GS-GSA-MW-4V	DTW	Depth to Water Detail	8/23/2023 8:08	118.82	ft
GS-GSA-MW-4V	ORP	Oxidation Reduction Potential	8/23/2023 8:08	114.81	mv
GS-GSA-MW-4V	PH	pH	8/23/2023 8:08	5.67	SU
GS-GSA-MW-4V	TEMP	Temperature	8/23/2023 8:08	23.49	C
GS-GSA-MW-4V	TURB	Turbidity	8/23/2023 8:08	32.4	NTU
GS-GSA-MW-4V	COND	Conductivity	8/23/2023 8:13	1148.74	uS/cm
GS-GSA-MW-4V	DO	DO	8/23/2023 8:13	0.62	mg/L
GS-GSA-MW-4V	DTW	Depth to Water Detail	8/23/2023 8:13	118.84	ft
GS-GSA-MW-4V	ORP	Oxidation Reduction Potential	8/23/2023 8:13	113.29	mv
GS-GSA-MW-4V	PH	pH	8/23/2023 8:13	5.7	SU
GS-GSA-MW-4V	TEMP	Temperature	8/23/2023 8:13	23.44	C
GS-GSA-MW-4V	TURB	Turbidity	8/23/2023 8:13	18.8	NTU
GS-GSA-MW-4V	COND	Conductivity	8/23/2023 8:18	1150.32	uS/cm
GS-GSA-MW-4V	DO	DO	8/23/2023 8:18	0.58	mg/L
GS-GSA-MW-4V	DTW	Depth to Water Detail	8/23/2023 8:18	118.84	ft
GS-GSA-MW-4V	ORP	Oxidation Reduction Potential	8/23/2023 8:18	112.66	mv

FIELD PARAMETER SUMMARY
PLANT GORGAS GYPSUM POND

Well ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GS-GSA-MW-4V	PH	pH	8/23/2023 8:18	5.71	SU
GS-GSA-MW-4V	TEMP	Temperature	8/23/2023 8:18	23.76	C
GS-GSA-MW-4V	TURB	Turbidity	8/23/2023 8:18	15.4	NTU
GS-GSA-MW-4V	COND	Conductivity	8/23/2023 8:23	1148.63	uS/cm
GS-GSA-MW-4V	DO	DO	8/23/2023 8:23	0.6	mg/L
GS-GSA-MW-4V	DTW	Depth to Water Detail	8/23/2023 8:23	118.84	ft
GS-GSA-MW-4V	ORP	Oxidation Reduction Potential	8/23/2023 8:23	112.11	mv
GS-GSA-MW-4V	PH	pH	8/23/2023 8:23	5.7	SU
GS-GSA-MW-4V	TEMP	Temperature	8/23/2023 8:23	23.89	C
GS-GSA-MW-4V	TURB	Turbidity	8/23/2023 8:23	11.6	NTU
GS-GSA-MW-4V	COND	Conductivity	8/23/2023 8:28	1141.88	uS/cm
GS-GSA-MW-4V	DO	DO	8/23/2023 8:28	0.62	mg/L
GS-GSA-MW-4V	DTW	Depth to Water Detail	8/23/2023 8:28	118.84	ft
GS-GSA-MW-4V	ORP	Oxidation Reduction Potential	8/23/2023 8:28	111.25	mv
GS-GSA-MW-4V	PH	pH	8/23/2023 8:28	5.7	SU
GS-GSA-MW-4V	TEMP	Temperature	8/23/2023 8:28	23.9	C
GS-GSA-MW-4V	TURB	Turbidity	8/23/2023 8:28	9.9	NTU
GS-GSA-MW-4V	COND	Conductivity	8/23/2023 8:33	1137.65	uS/cm
GS-GSA-MW-4V	DO	DO	8/23/2023 8:33	0.63	mg/L
GS-GSA-MW-4V	DTW	Depth to Water Detail	8/23/2023 8:33	118.84	ft
GS-GSA-MW-4V	ORP	Oxidation Reduction Potential	8/23/2023 8:33	110.1	mv
GS-GSA-MW-4V	PH	pH	8/23/2023 8:33	5.71	SU
GS-GSA-MW-4V	SULFIDE	Sulfide	8/23/2023 8:33	0	mg/L
GS-GSA-MW-4V	TEMP	Temperature	8/23/2023 8:33	23.97	C
GS-GSA-MW-4V	TURB	Turbidity	8/23/2023 8:33	9.08	NTU
GS-GSA-MW-12H	COND	Conductivity	8/22/2023 13:40	1232.93	uS/cm
GS-GSA-MW-12H	DO	DO	8/22/2023 13:40	0.67	mg/L
GS-GSA-MW-12H	DTW	Depth to Water Detail	8/22/2023 13:40	61.62	ft
GS-GSA-MW-12H	ORP	Oxidation Reduction Potential	8/22/2023 13:40	167.21	mv
GS-GSA-MW-12H	PH	pH	8/22/2023 13:40	4.42	SU
GS-GSA-MW-12H	TEMP	Temperature	8/22/2023 13:40	22.12	C
GS-GSA-MW-12H	TURB	Turbidity	8/22/2023 13:40	93	NTU
GS-GSA-MW-12H	COND	Conductivity	8/22/2023 13:45	1186.51	uS/cm
GS-GSA-MW-12H	DO	DO	8/22/2023 13:45	0.36	mg/L
GS-GSA-MW-12H	DTW	Depth to Water Detail	8/22/2023 13:45	61.88	ft
GS-GSA-MW-12H	ORP	Oxidation Reduction Potential	8/22/2023 13:45	175.39	mv
GS-GSA-MW-12H	PH	pH	8/22/2023 13:45	4.29	SU
GS-GSA-MW-12H	TEMP	Temperature	8/22/2023 13:45	20.93	C
GS-GSA-MW-12H	TURB	Turbidity	8/22/2023 13:45	20.1	NTU
GS-GSA-MW-12H	COND	Conductivity	8/22/2023 13:50	1178.47	uS/cm
GS-GSA-MW-12H	DO	DO	8/22/2023 13:50	0.32	mg/L
GS-GSA-MW-12H	DTW	Depth to Water Detail	8/22/2023 13:50	61.96	ft
GS-GSA-MW-12H	ORP	Oxidation Reduction Potential	8/22/2023 13:50	178.13	mv
GS-GSA-MW-12H	PH	pH	8/22/2023 13:50	4.25	SU
GS-GSA-MW-12H	TEMP	Temperature	8/22/2023 13:50	20.7	C
GS-GSA-MW-12H	TURB	Turbidity	8/22/2023 13:50	15.1	NTU
GS-GSA-MW-12H	COND	Conductivity	8/22/2023 13:55	1176.33	uS/cm
GS-GSA-MW-12H	DO	DO	8/22/2023 13:55	0.28	mg/L
GS-GSA-MW-12H	DTW	Depth to Water Detail	8/22/2023 13:55	61.98	ft
GS-GSA-MW-12H	ORP	Oxidation Reduction Potential	8/22/2023 13:55	179.04	mv
GS-GSA-MW-12H	PH	pH	8/22/2023 13:55	4.24	SU
GS-GSA-MW-12H	TEMP	Temperature	8/22/2023 13:55	20.67	C
GS-GSA-MW-12H	TURB	Turbidity	8/22/2023 13:55	11.5	NTU
GS-GSA-MW-12H	COND	Conductivity	8/22/2023 14:00	1180.86	uS/cm
GS-GSA-MW-12H	DO	DO	8/22/2023 14:00	0.27	mg/L
GS-GSA-MW-12H	DTW	Depth to Water Detail	8/22/2023 14:00	61.98	ft
GS-GSA-MW-12H	ORP	Oxidation Reduction Potential	8/22/2023 14:00	178.43	mv
GS-GSA-MW-12H	PH	pH	8/22/2023 14:00	4.24	SU
GS-GSA-MW-12H	TEMP	Temperature	8/22/2023 14:00	20.92	C
GS-GSA-MW-12H	TURB	Turbidity	8/22/2023 14:00	9.86	NTU
GS-GSA-MW-12H	COND	Conductivity	8/22/2023 14:05	1179.41	uS/cm

FIELD PARAMETER SUMMARY
PLANT GORGAS GYPSUM POND

Well ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GS-GSA-MW-12H	DO	DO	8/22/2023 14:05	0.27	mg/L
GS-GSA-MW-12H	DTW	Depth to Water Detail	8/22/2023 14:05	61.98	ft
GS-GSA-MW-12H	ORP	Oxidation Reduction Potential	8/22/2023 14:05	177.46	mv
GS-GSA-MW-12H	PH	pH	8/22/2023 14:05	4.25	SU
GS-GSA-MW-12H	SULFIDE	Sulfide	8/22/2023 14:05	0	mg/L
GS-GSA-MW-12H	TEMP	Temperature	8/22/2023 14:05	20.76	C
GS-GSA-MW-12H	TURB	Turbidity	8/22/2023 14:05	7.98	NTU
GS-GSA-PZ-17	COND	Conductivity	8/22/2023 12:10	1444.19	uS/cm
GS-GSA-PZ-17	DO	DO	8/22/2023 12:10	0.97	mg/L
GS-GSA-PZ-17	DTW	Depth to Water Detail	8/22/2023 12:10	46.76	ft
GS-GSA-PZ-17	ORP	Oxidation Reduction Potential	8/22/2023 12:10	108.51	mv
GS-GSA-PZ-17	PH	pH	8/22/2023 12:10	4.61	SU
GS-GSA-PZ-17	TEMP	Temperature	8/22/2023 12:10	27.08	C
GS-GSA-PZ-17	TURB	Turbidity	8/22/2023 12:10	7.28	NTU
GS-GSA-PZ-17	COND	Conductivity	8/22/2023 12:15	1419.07	uS/cm
GS-GSA-PZ-17	DO	DO	8/22/2023 12:15	0.76	mg/L
GS-GSA-PZ-17	DTW	Depth to Water Detail	8/22/2023 12:15	46.86	ft
GS-GSA-PZ-17	ORP	Oxidation Reduction Potential	8/22/2023 12:15	108.86	mv
GS-GSA-PZ-17	PH	pH	8/22/2023 12:15	4.62	SU
GS-GSA-PZ-17	TEMP	Temperature	8/22/2023 12:15	26.18	C
GS-GSA-PZ-17	TURB	Turbidity	8/22/2023 12:15	5.94	NTU
GS-GSA-PZ-17	COND	Conductivity	8/22/2023 12:20	1425.79	uS/cm
GS-GSA-PZ-17	DO	DO	8/22/2023 12:20	0.76	mg/L
GS-GSA-PZ-17	DTW	Depth to Water Detail	8/22/2023 12:20	46.98	ft
GS-GSA-PZ-17	ORP	Oxidation Reduction Potential	8/22/2023 12:20	115.42	mv
GS-GSA-PZ-17	PH	pH	8/22/2023 12:20	4.54	SU
GS-GSA-PZ-17	TEMP	Temperature	8/22/2023 12:20	27.42	C
GS-GSA-PZ-17	TURB	Turbidity	8/22/2023 12:20	5.4	NTU
GS-GSA-PZ-17	COND	Conductivity	8/22/2023 12:25	1389.06	uS/cm
GS-GSA-PZ-17	DO	DO	8/22/2023 12:25	0.72	mg/L
GS-GSA-PZ-17	DTW	Depth to Water Detail	8/22/2023 12:25	47.06	ft
GS-GSA-PZ-17	ORP	Oxidation Reduction Potential	8/22/2023 12:25	126.52	mv
GS-GSA-PZ-17	PH	pH	8/22/2023 12:25	4.4	SU
GS-GSA-PZ-17	TEMP	Temperature	8/22/2023 12:25	26.86	C
GS-GSA-PZ-17	TURB	Turbidity	8/22/2023 12:25	6.07	NTU
GS-GSA-PZ-17	COND	Conductivity	8/22/2023 12:30	1387.04	uS/cm
GS-GSA-PZ-17	DO	DO	8/22/2023 12:30	0.72	mg/L
GS-GSA-PZ-17	DTW	Depth to Water Detail	8/22/2023 12:30	47.13	ft
GS-GSA-PZ-17	ORP	Oxidation Reduction Potential	8/22/2023 12:30	133.51	mv
GS-GSA-PZ-17	PH	pH	8/22/2023 12:30	4.32	SU
GS-GSA-PZ-17	TEMP	Temperature	8/22/2023 12:30	27.1	C
GS-GSA-PZ-17	TURB	Turbidity	8/22/2023 12:30	4.86	NTU
GS-GSA-PZ-17	COND	Conductivity	8/22/2023 12:35	1376.92	uS/cm
GS-GSA-PZ-17	DO	DO	8/22/2023 12:35	0.79	mg/L
GS-GSA-PZ-17	DTW	Depth to Water Detail	8/22/2023 12:35	47.18	ft
GS-GSA-PZ-17	ORP	Oxidation Reduction Potential	8/22/2023 12:35	139.16	mv
GS-GSA-PZ-17	PH	pH	8/22/2023 12:35	4.28	SU
GS-GSA-PZ-17	SULFIDE	Sulfide	8/22/2023 12:35	0	mg/L
GS-GSA-PZ-17	TEMP	Temperature	8/22/2023 12:35	26.63	C
GS-GSA-PZ-17	TURB	Turbidity	8/22/2023 12:35	4.74	NTU
GS-GSA-PZ-18	COND	Conductivity	8/22/2023 10:45	882.06	uS/cm
GS-GSA-PZ-18	DO	DO	8/22/2023 10:45	0.76	mg/L
GS-GSA-PZ-18	DTW	Depth to Water Detail	8/22/2023 10:45	62.73	ft
GS-GSA-PZ-18	ORP	Oxidation Reduction Potential	8/22/2023 10:45	151.66	mv
GS-GSA-PZ-18	PH	pH	8/22/2023 10:45	3.93	SU
GS-GSA-PZ-18	TEMP	Temperature	8/22/2023 10:45	24.45	C
GS-GSA-PZ-18	TURB	Turbidity	8/22/2023 10:45	4.9	NTU
GS-GSA-PZ-18	COND	Conductivity	8/22/2023 10:50	879.65	uS/cm
GS-GSA-PZ-18	DO	DO	8/22/2023 10:50	0.53	mg/L
GS-GSA-PZ-18	DTW	Depth to Water Detail	8/22/2023 10:50	62.79	ft
GS-GSA-PZ-18	ORP	Oxidation Reduction Potential	8/22/2023 10:50	152.83	mv

FIELD PARAMETER SUMMARY
PLANT GORGAS GYPSUM POND

Well ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GS-GSA-PZ-18	PH	pH	8/22/2023 10:50	3.94	SU
GS-GSA-PZ-18	TEMP	Temperature	8/22/2023 10:50	24.17	C
GS-GSA-PZ-18	TURB	Turbidity	8/22/2023 10:50	4.11	NTU
GS-GSA-PZ-18	COND	Conductivity	8/22/2023 10:55	879.68	uS/cm
GS-GSA-PZ-18	DO	DO	8/22/2023 10:55	0.53	mg/L
GS-GSA-PZ-18	DTW	Depth to Water Detail	8/22/2023 10:55	62.79	ft
GS-GSA-PZ-18	ORP	Oxidation Reduction Potential	8/22/2023 10:55	153.44	mv
GS-GSA-PZ-18	PH	pH	8/22/2023 10:55	3.96	SU
GS-GSA-PZ-18	TEMP	Temperature	8/22/2023 10:55	24.57	C
GS-GSA-PZ-18	TURB	Turbidity	8/22/2023 10:55	4.56	NTU
GS-GSA-PZ-18	COND	Conductivity	8/22/2023 11:00	878.47	uS/cm
GS-GSA-PZ-18	DO	DO	8/22/2023 11:00	0.5	mg/L
GS-GSA-PZ-18	DTW	Depth to Water Detail	8/22/2023 11:00	62.79	ft
GS-GSA-PZ-18	ORP	Oxidation Reduction Potential	8/22/2023 11:00	153.56	mv
GS-GSA-PZ-18	PH	pH	8/22/2023 11:00	3.98	SU
GS-GSA-PZ-18	SULFIDE	Sulfide	8/22/2023 11:00	0	mg/L
GS-GSA-PZ-18	TEMP	Temperature	8/22/2023 11:00	24.51	C
GS-GSA-PZ-18	TURB	Turbidity	8/22/2023 11:00	4.4	NTU
GS-GSA-PZ-19	COND	Conductivity	8/22/2023 9:15	1462.2	uS/cm
GS-GSA-PZ-19	DO	DO	8/22/2023 9:15	0.26	mg/L
GS-GSA-PZ-19	DTW	Depth to Water Detail	8/22/2023 9:15	119.66	ft
GS-GSA-PZ-19	ORP	Oxidation Reduction Potential	8/22/2023 9:15	-18.26	mv
GS-GSA-PZ-19	PH	pH	8/22/2023 9:15	6.59	SU
GS-GSA-PZ-19	TEMP	Temperature	8/22/2023 9:15	19.99	C
GS-GSA-PZ-19	TURB	Turbidity	8/22/2023 9:15	6.72	NTU
GS-GSA-PZ-19	COND	Conductivity	8/22/2023 9:20	1346.78	uS/cm
GS-GSA-PZ-19	DO	DO	8/22/2023 9:20	0.25	mg/L
GS-GSA-PZ-19	DTW	Depth to Water Detail	8/22/2023 9:20	123.69	ft
GS-GSA-PZ-19	ORP	Oxidation Reduction Potential	8/22/2023 9:20	-13.67	mv
GS-GSA-PZ-19	PH	pH	8/22/2023 9:20	6.57	SU
GS-GSA-PZ-19	TEMP	Temperature	8/22/2023 9:20	20.04	C
GS-GSA-PZ-19	TURB	Turbidity	8/22/2023 9:20	5.49	NTU
GS-GSA-PZ-19	COND	Conductivity	8/22/2023 9:25	1229.7	uS/cm
GS-GSA-PZ-19	DO	DO	8/22/2023 9:25	0.24	mg/L
GS-GSA-PZ-19	DTW	Depth to Water Detail	8/22/2023 9:25	124.58	ft
GS-GSA-PZ-19	ORP	Oxidation Reduction Potential	8/22/2023 9:25	-10.43	mv
GS-GSA-PZ-19	PH	pH	8/22/2023 9:25	6.57	SU
GS-GSA-PZ-19	TEMP	Temperature	8/22/2023 9:25	19.87	C
GS-GSA-PZ-19	TURB	Turbidity	8/22/2023 9:25	5.61	NTU
GS-GSA-PZ-19	COND	Conductivity	8/22/2023 9:30	1157.8	uS/cm
GS-GSA-PZ-19	DO	DO	8/22/2023 9:30	0.24	mg/L
GS-GSA-PZ-19	DTW	Depth to Water Detail	8/22/2023 9:30	125.12	ft
GS-GSA-PZ-19	ORP	Oxidation Reduction Potential	8/22/2023 9:30	-8.52	mv
GS-GSA-PZ-19	PH	pH	8/22/2023 9:30	6.56	SU
GS-GSA-PZ-19	TEMP	Temperature	8/22/2023 9:30	19.85	C
GS-GSA-PZ-19	TURB	Turbidity	8/22/2023 9:30	5.75	NTU
GS-GSA-PZ-19	COND	Conductivity	8/22/2023 9:35	1103.25	uS/cm
GS-GSA-PZ-19	DO	DO	8/22/2023 9:35	0.25	mg/L
GS-GSA-PZ-19	DTW	Depth to Water Detail	8/22/2023 9:35	125.66	ft
GS-GSA-PZ-19	ORP	Oxidation Reduction Potential	8/22/2023 9:35	-7.72	mv
GS-GSA-PZ-19	PH	pH	8/22/2023 9:35	6.56	SU
GS-GSA-PZ-19	TEMP	Temperature	8/22/2023 9:35	20.24	C
GS-GSA-PZ-19	TURB	Turbidity	8/22/2023 9:35	5.68	NTU
GS-GSA-PZ-19	COND	Conductivity	8/22/2023 9:40	1054.38	uS/cm
GS-GSA-PZ-19	DO	DO	8/22/2023 9:40	0.23	mg/L
GS-GSA-PZ-19	DTW	Depth to Water Detail	8/22/2023 9:40	126.05	ft
GS-GSA-PZ-19	ORP	Oxidation Reduction Potential	8/22/2023 9:40	-7.1	mv
GS-GSA-PZ-19	PH	pH	8/22/2023 9:40	6.56	SU
GS-GSA-PZ-19	TEMP	Temperature	8/22/2023 9:40	19.87	C
GS-GSA-PZ-19	TURB	Turbidity	8/22/2023 9:40	5.66	NTU
GS-GSA-PZ-19	COND	Conductivity	8/22/2023 9:45	1024.21	uS/cm

FIELD PARAMETER SUMMARY
PLANT GORGAS GYPSUM POND

Well ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GS-GSA-PZ-19	DO	DO	8/22/2023 9:45	0.23	mg/L
GS-GSA-PZ-19	DTW	Depth to Water Detail	8/22/2023 9:45	126.39	ft
GS-GSA-PZ-19	ORP	Oxidation Reduction Potential	8/22/2023 9:45	-6.6	mv
GS-GSA-PZ-19	PH	pH	8/22/2023 9:45	6.56	SU
GS-GSA-PZ-19	TEMP	Temperature	8/22/2023 9:45	19.73	C
GS-GSA-PZ-19	TURB	Turbidity	8/22/2023 9:45	5.57	NTU
GS-GSA-PZ-19	COND	Conductivity	8/22/2023 9:50	999.09	uS/cm
GS-GSA-PZ-19	DO	DO	8/22/2023 9:50	0.24	mg/L
GS-GSA-PZ-19	DTW	Depth to Water Detail	8/22/2023 9:50	126.62	ft
GS-GSA-PZ-19	ORP	Oxidation Reduction Potential	8/22/2023 9:50	-6.78	mv
GS-GSA-PZ-19	PH	pH	8/22/2023 9:50	6.56	SU
GS-GSA-PZ-19	TEMP	Temperature	8/22/2023 9:50	20.31	C
GS-GSA-PZ-19	TURB	Turbidity	8/22/2023 9:50	5.6	NTU
GS-GSA-PZ-19	COND	Conductivity	8/22/2023 9:55	997.55	uS/cm
GS-GSA-PZ-19	DO	DO	8/22/2023 9:55	0.22	mg/L
GS-GSA-PZ-19	DTW	Depth to Water Detail	8/22/2023 9:55	126.9	ft
GS-GSA-PZ-19	ORP	Oxidation Reduction Potential	8/22/2023 9:55	-6.6	mv
GS-GSA-PZ-19	PH	pH	8/22/2023 9:55	6.56	SU
GS-GSA-PZ-19	TEMP	Temperature	8/22/2023 9:55	19.9	C
GS-GSA-PZ-19	TURB	Turbidity	8/22/2023 9:55	5.52	NTU
GS-GSA-PZ-19	COND	Conductivity	8/22/2023 10:00	976.54	uS/cm
GS-GSA-PZ-19	DO	DO	8/22/2023 10:00	0.23	mg/L
GS-GSA-PZ-19	DTW	Depth to Water Detail	8/22/2023 10:00	127.01	ft
GS-GSA-PZ-19	ORP	Oxidation Reduction Potential	8/22/2023 10:00	-6.54	mv
GS-GSA-PZ-19	PH	pH	8/22/2023 10:00	6.57	SU
GS-GSA-PZ-19	TEMP	Temperature	8/22/2023 10:00	19.78	C
GS-GSA-PZ-19	TURB	Turbidity	8/22/2023 10:00	5.5	NTU
GS-GSA-PZ-19	COND	Conductivity	8/22/2023 10:05	969.72	uS/cm
GS-GSA-PZ-19	DO	DO	8/22/2023 10:05	0.24	mg/L
GS-GSA-PZ-19	DTW	Depth to Water Detail	8/22/2023 10:05	127.18	ft
GS-GSA-PZ-19	ORP	Oxidation Reduction Potential	8/22/2023 10:05	-7.01	mv
GS-GSA-PZ-19	PH	pH	8/22/2023 10:05	6.56	SU
GS-GSA-PZ-19	SULFIDE	Sulfide	8/22/2023 10:05	0	mg/L
GS-GSA-PZ-19	TEMP	Temperature	8/22/2023 10:05	20.18	C
GS-GSA-PZ-19	TURB	Turbidity	8/22/2023 10:05	5.68	NTU
GS-GSA-PZ-20	COND	Conductivity	8/22/2023 8:05	1089.5	uS/cm
GS-GSA-PZ-20	DO	DO	8/22/2023 8:05	0.51	mg/L
GS-GSA-PZ-20	DTW	Depth to Water Detail	8/22/2023 8:05	116.71	ft
GS-GSA-PZ-20	ORP	Oxidation Reduction Potential	8/22/2023 8:05	-8.04	mv
GS-GSA-PZ-20	PH	pH	8/22/2023 8:05	6.3	SU
GS-GSA-PZ-20	TEMP	Temperature	8/22/2023 8:05	20.26	C
GS-GSA-PZ-20	TURB	Turbidity	8/22/2023 8:05	11.1	NTU
GS-GSA-PZ-20	COND	Conductivity	8/22/2023 8:10	1092.63	uS/cm
GS-GSA-PZ-20	DO	DO	8/22/2023 8:10	0.41	mg/L
GS-GSA-PZ-20	DTW	Depth to Water Detail	8/22/2023 8:10	116.74	ft
GS-GSA-PZ-20	ORP	Oxidation Reduction Potential	8/22/2023 8:10	-6.3	mv
GS-GSA-PZ-20	PH	pH	8/22/2023 8:10	6.32	SU
GS-GSA-PZ-20	TEMP	Temperature	8/22/2023 8:10	20.14	C
GS-GSA-PZ-20	TURB	Turbidity	8/22/2023 8:10	8.63	NTU
GS-GSA-PZ-20	COND	Conductivity	8/22/2023 8:15	1086.34	uS/cm
GS-GSA-PZ-20	DO	DO	8/22/2023 8:15	0.37	mg/L
GS-GSA-PZ-20	DTW	Depth to Water Detail	8/22/2023 8:15	116.77	ft
GS-GSA-PZ-20	ORP	Oxidation Reduction Potential	8/22/2023 8:15	-5.57	mv
GS-GSA-PZ-20	PH	pH	8/22/2023 8:15	6.32	SU
GS-GSA-PZ-20	TEMP	Temperature	8/22/2023 8:15	20.09	C
GS-GSA-PZ-20	TURB	Turbidity	8/22/2023 8:15	5.97	NTU
GS-GSA-PZ-20	COND	Conductivity	8/22/2023 8:20	1083.02	uS/cm
GS-GSA-PZ-20	DO	DO	8/22/2023 8:20	0.34	mg/L
GS-GSA-PZ-20	DTW	Depth to Water Detail	8/22/2023 8:20	116.79	ft
GS-GSA-PZ-20	ORP	Oxidation Reduction Potential	8/22/2023 8:20	-4.96	mv
GS-GSA-PZ-20	PH	pH	8/22/2023 8:20	6.32	SU

FIELD PARAMETER SUMMARY
PLANT GORGAS GYPSUM POND

Well ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GS-GSA-PZ-20	SULFIDE	Sulfide	8/22/2023 8:20	0	mg/L
GS-GSA-PZ-20	TEMP	Temperature	8/22/2023 8:20	20.16	C
GS-GSA-PZ-20	TURB	Turbidity	8/22/2023 8:20	4.94	NTU
GS-GSA-PZ-21	COND	Conductivity	8/21/2023 14:07	819.44	uS/cm
GS-GSA-PZ-21	DO	DO	8/21/2023 14:07	0.27	mg/L
GS-GSA-PZ-21	DTW	Depth to Water Detail	8/21/2023 14:07	87.9	ft
GS-GSA-PZ-21	ORP	Oxidation Reduction Potential	8/21/2023 14:07	-2.86	mv
GS-GSA-PZ-21	PH	pH	8/21/2023 14:07	6.86	SU
GS-GSA-PZ-21	TEMP	Temperature	8/21/2023 14:07	21.3	C
GS-GSA-PZ-21	TURB	Turbidity	8/21/2023 14:07	10.1	NTU
GS-GSA-PZ-21	COND	Conductivity	8/21/2023 14:12	818.43	uS/cm
GS-GSA-PZ-21	DO	DO	8/21/2023 14:12	0.24	mg/L
GS-GSA-PZ-21	DTW	Depth to Water Detail	8/21/2023 14:12	88.52	ft
GS-GSA-PZ-21	ORP	Oxidation Reduction Potential	8/21/2023 14:12	-11.15	mv
GS-GSA-PZ-21	PH	pH	8/21/2023 14:12	6.86	SU
GS-GSA-PZ-21	TEMP	Temperature	8/21/2023 14:12	21.39	C
GS-GSA-PZ-21	TURB	Turbidity	8/21/2023 14:12	10.05	NTU
GS-GSA-PZ-21	COND	Conductivity	8/21/2023 14:17	820.64	uS/cm
GS-GSA-PZ-21	DO	DO	8/21/2023 14:17	0.35	mg/L
GS-GSA-PZ-21	DTW	Depth to Water Detail	8/21/2023 14:17	88.22	ft
GS-GSA-PZ-21	ORP	Oxidation Reduction Potential	8/21/2023 14:17	-19.65	mv
GS-GSA-PZ-21	PH	pH	8/21/2023 14:17	6.86	SU
GS-GSA-PZ-21	TEMP	Temperature	8/21/2023 14:17	24.21	C
GS-GSA-PZ-21	TURB	Turbidity	8/21/2023 14:17	8.71	NTU
GS-GSA-PZ-21	COND	Conductivity	8/21/2023 14:22	816.12	uS/cm
GS-GSA-PZ-21	DO	DO	8/21/2023 14:22	0.39	mg/L
GS-GSA-PZ-21	DTW	Depth to Water Detail	8/21/2023 14:22	88.06	ft
GS-GSA-PZ-21	ORP	Oxidation Reduction Potential	8/21/2023 14:22	-25.52	mv
GS-GSA-PZ-21	PH	pH	8/21/2023 14:22	6.86	SU
GS-GSA-PZ-21	TEMP	Temperature	8/21/2023 14:22	24.46	C
GS-GSA-PZ-21	TURB	Turbidity	8/21/2023 14:22	6.48	NTU
GS-GSA-PZ-21	COND	Conductivity	8/21/2023 14:27	802.3	uS/cm
GS-GSA-PZ-21	DO	DO	8/21/2023 14:27	0.39	mg/L
GS-GSA-PZ-21	DTW	Depth to Water Detail	8/21/2023 14:27	88.01	ft
GS-GSA-PZ-21	ORP	Oxidation Reduction Potential	8/21/2023 14:27	-28.9	mv
GS-GSA-PZ-21	PH	pH	8/21/2023 14:27	6.85	SU
GS-GSA-PZ-21	SULFIDE	Sulfide	8/21/2023 14:27	0	mg/L
GS-GSA-PZ-21	TEMP	Temperature	8/21/2023 14:27	23.36	C
GS-GSA-PZ-21	TURB	Turbidity	8/21/2023 14:27	6.27	NTU
GS-GSA-PZ-22	COND	Conductivity	8/22/2023 7:09	822.4	uS/cm
GS-GSA-PZ-22	DO	DO	8/22/2023 7:09	0.24	mg/L
GS-GSA-PZ-22	DTW	Depth to Water Detail	8/22/2023 7:09	54.94	ft
GS-GSA-PZ-22	ORP	Oxidation Reduction Potential	8/22/2023 7:09	24.33	mv
GS-GSA-PZ-22	PH	pH	8/22/2023 7:09	6.22	SU
GS-GSA-PZ-22	TEMP	Temperature	8/22/2023 7:09	19.06	C
GS-GSA-PZ-22	TURB	Turbidity	8/22/2023 7:09	5.58	NTU
GS-GSA-PZ-22	COND	Conductivity	8/22/2023 7:14	809.53	uS/cm
GS-GSA-PZ-22	DO	DO	8/22/2023 7:14	0.19	mg/L
GS-GSA-PZ-22	DTW	Depth to Water Detail	8/22/2023 7:14	55.05	ft
GS-GSA-PZ-22	ORP	Oxidation Reduction Potential	8/22/2023 7:14	20.98	mv
GS-GSA-PZ-22	PH	pH	8/22/2023 7:14	6.16	SU
GS-GSA-PZ-22	TEMP	Temperature	8/22/2023 7:14	19.05	C
GS-GSA-PZ-22	TURB	Turbidity	8/22/2023 7:14	4.49	NTU
GS-GSA-PZ-22	COND	Conductivity	8/22/2023 7:19	798.65	uS/cm
GS-GSA-PZ-22	DO	DO	8/22/2023 7:19	0.19	mg/L
GS-GSA-PZ-22	DTW	Depth to Water Detail	8/22/2023 7:19	55.13	ft
GS-GSA-PZ-22	ORP	Oxidation Reduction Potential	8/22/2023 7:19	15.36	mv
GS-GSA-PZ-22	PH	pH	8/22/2023 7:19	6.16	SU
GS-GSA-PZ-22	TEMP	Temperature	8/22/2023 7:19	19.18	C
GS-GSA-PZ-22	TURB	Turbidity	8/22/2023 7:19	3.89	NTU
GS-GSA-PZ-22	COND	Conductivity	8/22/2023 7:24	792.98	uS/cm

FIELD PARAMETER SUMMARY
PLANT GORGAS GYPSUM POND

Well ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GS-GSA-PZ-22	DO	DO	8/22/2023 7:24	0.19	mg/L
GS-GSA-PZ-22	DTW	Depth to Water Detail	8/22/2023 7:24	55.2	ft
GS-GSA-PZ-22	ORP	Oxidation Reduction Potential	8/22/2023 7:24	10.75	mv
GS-GSA-PZ-22	PH	pH	8/22/2023 7:24	6.16	SU
GS-GSA-PZ-22	SULFIDE	Sulfide	8/22/2023 7:24	0	mg/L
GS-GSA-PZ-22	TEMP	Temperature	8/22/2023 7:24	19.22	C
GS-GSA-PZ-22	TURB	Turbidity	8/22/2023 7:24	3.96	NTU
GS-GSA-MW-8	COND	Conductivity	8/23/2023 11:08	3034.9	uS/cm
GS-GSA-MW-8	DO	DO	8/23/2023 11:08	0.71	mg/L
GS-GSA-MW-8	DTW	Depth to Water Detail	8/23/2023 11:08	81.72	ft
GS-GSA-MW-8	ORP	Oxidation Reduction Potential	8/23/2023 11:08	-84.22	mv
GS-GSA-MW-8	PH	pH	8/23/2023 11:08	6.8	SU
GS-GSA-MW-8	TEMP	Temperature	8/23/2023 11:08	24.15	C
GS-GSA-MW-8	TURB	Turbidity	8/23/2023 11:08	3.19	NTU
GS-GSA-MW-8	COND	Conductivity	8/23/2023 11:13	3019.55	uS/cm
GS-GSA-MW-8	DO	DO	8/23/2023 11:13	0.55	mg/L
GS-GSA-MW-8	DTW	Depth to Water Detail	8/23/2023 11:13	81.86	ft
GS-GSA-MW-8	ORP	Oxidation Reduction Potential	8/23/2023 11:13	-85.19	mv
GS-GSA-MW-8	PH	pH	8/23/2023 11:13	6.83	SU
GS-GSA-MW-8	TEMP	Temperature	8/23/2023 11:13	23.74	C
GS-GSA-MW-8	TURB	Turbidity	8/23/2023 11:13	2.53	NTU
GS-GSA-MW-8	COND	Conductivity	8/23/2023 11:18	3058.32	uS/cm
GS-GSA-MW-8	DO	DO	8/23/2023 11:18	0.49	mg/L
GS-GSA-MW-8	DTW	Depth to Water Detail	8/23/2023 11:18	81.91	ft
GS-GSA-MW-8	ORP	Oxidation Reduction Potential	8/23/2023 11:18	-85.63	mv
GS-GSA-MW-8	PH	pH	8/23/2023 11:18	6.83	SU
GS-GSA-MW-8	TEMP	Temperature	8/23/2023 11:18	23.98	C
GS-GSA-MW-8	TURB	Turbidity	8/23/2023 11:18	2.69	NTU
GS-GSA-MW-8	COND	Conductivity	8/23/2023 11:23	3047.06	uS/cm
GS-GSA-MW-8	DO	DO	8/23/2023 11:23	0.47	mg/L
GS-GSA-MW-8	DTW	Depth to Water Detail	8/23/2023 11:23	81.97	ft
GS-GSA-MW-8	ORP	Oxidation Reduction Potential	8/23/2023 11:23	-85.81	mv
GS-GSA-MW-8	PH	pH	8/23/2023 11:23	6.83	SU
GS-GSA-MW-8	SULFIDE	Sulfide	8/23/2023 11:23	0	mg/L
GS-GSA-MW-8	TEMP	Temperature	8/23/2023 11:23	23.87	C
GS-GSA-MW-8	TURB	Turbidity	8/23/2023 11:23	3.85	NTU
GS-GSA-MW-8V	COND	Conductivity	8/23/2023 10:04	1604.86	uS/cm
GS-GSA-MW-8V	DO	DO	8/23/2023 10:04	0.67	mg/L
GS-GSA-MW-8V	DTW	Depth to Water Detail	8/23/2023 10:04	104.11	ft
GS-GSA-MW-8V	ORP	Oxidation Reduction Potential	8/23/2023 10:04	-164.46	mv
GS-GSA-MW-8V	PH	pH	8/23/2023 10:04	7.37	SU
GS-GSA-MW-8V	TEMP	Temperature	8/23/2023 10:04	22.46	C
GS-GSA-MW-8V	TURB	Turbidity	8/23/2023 10:04	1.89	NTU
GS-GSA-MW-8V	COND	Conductivity	8/23/2023 10:09	1621.43	uS/cm
GS-GSA-MW-8V	DO	DO	8/23/2023 10:09	0.61	mg/L
GS-GSA-MW-8V	DTW	Depth to Water Detail	8/23/2023 10:09	104.91	ft
GS-GSA-MW-8V	ORP	Oxidation Reduction Potential	8/23/2023 10:09	-167.14	mv
GS-GSA-MW-8V	PH	pH	8/23/2023 10:09	7.36	SU
GS-GSA-MW-8V	TEMP	Temperature	8/23/2023 10:09	22.17	C
GS-GSA-MW-8V	TURB	Turbidity	8/23/2023 10:09	0.85	NTU
GS-GSA-MW-8V	COND	Conductivity	8/23/2023 10:14	1644.91	uS/cm
GS-GSA-MW-8V	DO	DO	8/23/2023 10:14	0.61	mg/L
GS-GSA-MW-8V	DTW	Depth to Water Detail	8/23/2023 10:14	104.96	ft
GS-GSA-MW-8V	ORP	Oxidation Reduction Potential	8/23/2023 10:14	-168.37	mv
GS-GSA-MW-8V	PH	pH	8/23/2023 10:14	7.37	SU
GS-GSA-MW-8V	TEMP	Temperature	8/23/2023 10:14	22.72	C
GS-GSA-MW-8V	TURB	Turbidity	8/23/2023 10:14	1.08	NTU
GS-GSA-MW-8V	COND	Conductivity	8/23/2023 10:19	1661.54	uS/cm
GS-GSA-MW-8V	DO	DO	8/23/2023 10:19	0.69	mg/L
GS-GSA-MW-8V	DTW	Depth to Water Detail	8/23/2023 10:19	104.96	ft
GS-GSA-MW-8V	ORP	Oxidation Reduction Potential	8/23/2023 10:19	-169.83	mv

FIELD PARAMETER SUMMARY
PLANT GORGAS GYPSUM POND

Well ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GS-GSA-MW-8V	PH	pH	8/23/2023 10:19	7.37	SU
GS-GSA-MW-8V	SULFIDE	Sulfide	8/23/2023 10:19	10	mg/L
GS-GSA-MW-8V	TEMP	Temperature	8/23/2023 10:19	23.97	C
GS-GSA-MW-8V	TURB	Turbidity	8/23/2023 10:19	0.89	NTU
GS-GSA-MW-9H	COND	Conductivity	8/22/2023 11:50	2520.98	uS/cm
GS-GSA-MW-9H	DO	DO	8/22/2023 11:50	0.81	mg/L
GS-GSA-MW-9H	DTW	Depth to Water Detail	8/22/2023 11:50	49.34	ft
GS-GSA-MW-9H	ORP	Oxidation Reduction Potential	8/22/2023 11:50	153.14	mv
GS-GSA-MW-9H	PH	pH	8/22/2023 11:50	5.2	SU
GS-GSA-MW-9H	TEMP	Temperature	8/22/2023 11:50	21.92	C
GS-GSA-MW-9H	TURB	Turbidity	8/22/2023 11:50	6.77	NTU
GS-GSA-MW-9H	COND	Conductivity	8/22/2023 11:55	2535.49	uS/cm
GS-GSA-MW-9H	DO	DO	8/22/2023 11:55	0.62	mg/L
GS-GSA-MW-9H	DTW	Depth to Water Detail	8/22/2023 11:55	49.79	ft
GS-GSA-MW-9H	ORP	Oxidation Reduction Potential	8/22/2023 11:55	147.69	mv
GS-GSA-MW-9H	PH	pH	8/22/2023 11:55	5.24	SU
GS-GSA-MW-9H	TEMP	Temperature	8/22/2023 11:55	22.01	C
GS-GSA-MW-9H	TURB	Turbidity	8/22/2023 11:55	3.63	NTU
GS-GSA-MW-9H	COND	Conductivity	8/22/2023 12:00	2531.33	uS/cm
GS-GSA-MW-9H	DO	DO	8/22/2023 12:00	0.49	mg/L
GS-GSA-MW-9H	DTW	Depth to Water Detail	8/22/2023 12:00	49.86	ft
GS-GSA-MW-9H	ORP	Oxidation Reduction Potential	8/22/2023 12:00	143.81	mv
GS-GSA-MW-9H	PH	pH	8/22/2023 12:00	5.27	SU
GS-GSA-MW-9H	TEMP	Temperature	8/22/2023 12:00	22.16	C
GS-GSA-MW-9H	TURB	Turbidity	8/22/2023 12:00	3.24	NTU
GS-GSA-MW-9H	COND	Conductivity	8/22/2023 12:05	2525.63	uS/cm
GS-GSA-MW-9H	DO	DO	8/22/2023 12:05	0.41	mg/L
GS-GSA-MW-9H	DTW	Depth to Water Detail	8/22/2023 12:05	49.98	ft
GS-GSA-MW-9H	ORP	Oxidation Reduction Potential	8/22/2023 12:05	141.65	mv
GS-GSA-MW-9H	PH	pH	8/22/2023 12:05	5.29	SU
GS-GSA-MW-9H	TEMP	Temperature	8/22/2023 12:05	22.06	C
GS-GSA-MW-9H	TURB	Turbidity	8/22/2023 12:05	3.05	NTU
GS-GSA-MW-9H	COND	Conductivity	8/22/2023 12:10	2522.78	uS/cm
GS-GSA-MW-9H	DO	DO	8/22/2023 12:10	0.37	mg/L
GS-GSA-MW-9H	DTW	Depth to Water Detail	8/22/2023 12:10	49.98	ft
GS-GSA-MW-9H	ORP	Oxidation Reduction Potential	8/22/2023 12:10	140.35	mv
GS-GSA-MW-9H	PH	pH	8/22/2023 12:10	5.31	SU
GS-GSA-MW-9H	SULFIDE	Sulfide	8/22/2023 12:10	0	mg/L
GS-GSA-MW-9H	TEMP	Temperature	8/22/2023 12:10	22.27	C
GS-GSA-MW-9H	TURB	Turbidity	8/22/2023 12:10	1.9	NTU
GS-GSA-MW-9V	COND	Conductivity	8/22/2023 13:41	3179.21	uS/cm
GS-GSA-MW-9V	DO	DO	8/22/2023 13:41	0.97	mg/L
GS-GSA-MW-9V	DTW	Depth to Water Detail	8/22/2023 13:41	58.92	ft
GS-GSA-MW-9V	ORP	Oxidation Reduction Potential	8/22/2023 13:41	-44.42	mv
GS-GSA-MW-9V	PH	pH	8/22/2023 13:41	6.81	SU
GS-GSA-MW-9V	TEMP	Temperature	8/22/2023 13:41	25.1	C
GS-GSA-MW-9V	TURB	Turbidity	8/22/2023 13:41	0.86	NTU
GS-GSA-MW-9V	COND	Conductivity	8/22/2023 13:46	3189.4	uS/cm
GS-GSA-MW-9V	DO	DO	8/22/2023 13:46	0.85	mg/L
GS-GSA-MW-9V	DTW	Depth to Water Detail	8/22/2023 13:46	59.21	ft
GS-GSA-MW-9V	ORP	Oxidation Reduction Potential	8/22/2023 13:46	-47.11	mv
GS-GSA-MW-9V	PH	pH	8/22/2023 13:46	6.77	SU
GS-GSA-MW-9V	TEMP	Temperature	8/22/2023 13:46	25.24	C
GS-GSA-MW-9V	TURB	Turbidity	8/22/2023 13:46	1.24	NTU
GS-GSA-MW-9V	COND	Conductivity	8/22/2023 13:51	3176.83	uS/cm
GS-GSA-MW-9V	DO	DO	8/22/2023 13:51	0.77	mg/L
GS-GSA-MW-9V	DTW	Depth to Water Detail	8/22/2023 13:51	59.36	ft
GS-GSA-MW-9V	ORP	Oxidation Reduction Potential	8/22/2023 13:51	-50.8	mv
GS-GSA-MW-9V	PH	pH	8/22/2023 13:51	6.78	SU
GS-GSA-MW-9V	TEMP	Temperature	8/22/2023 13:51	24.81	C
GS-GSA-MW-9V	TURB	Turbidity	8/22/2023 13:51	0.88	NTU

FIELD PARAMETER SUMMARY
PLANT GORGAS GYPSUM POND

Well ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GS-GSA-MW-9V	COND	Conductivity	8/22/2023 13:56	3178.78	uS/cm
GS-GSA-MW-9V	DO	DO	8/22/2023 13:56	0.72	mg/L
GS-GSA-MW-9V	DTW	Depth to Water Detail	8/22/2023 13:56	59.49	ft
GS-GSA-MW-9V	ORP	Oxidation Reduction Potential	8/22/2023 13:56	-54.52	mv
GS-GSA-MW-9V	PH	pH	8/22/2023 13:56	6.81	SU
GS-GSA-MW-9V	SULFIDE	Sulfide	8/22/2023 13:56	0	mg/L
GS-GSA-MW-9V	TEMP	Temperature	8/22/2023 13:56	24.99	C
GS-GSA-MW-9V	TURB	Turbidity	8/22/2023 13:56	0.8	NTU
GS-GSA-MW-11H	COND	Conductivity	8/22/2023 9:17	1402.4	uS/cm
GS-GSA-MW-11H	DO	DO	8/22/2023 9:17	0.28	mg/L
GS-GSA-MW-11H	DTW	Depth to Water Detail	8/22/2023 9:17	8.2	ft
GS-GSA-MW-11H	ORP	Oxidation Reduction Potential	8/22/2023 9:17	117.71	mv
GS-GSA-MW-11H	PH	pH	8/22/2023 9:17	5.77	SU
GS-GSA-MW-11H	TEMP	Temperature	8/22/2023 9:17	20.76	C
GS-GSA-MW-11H	TURB	Turbidity	8/22/2023 9:17	29.1	NTU
GS-GSA-MW-11H	COND	Conductivity	8/22/2023 9:22	1395.93	uS/cm
GS-GSA-MW-11H	DO	DO	8/22/2023 9:22	0.27	mg/L
GS-GSA-MW-11H	DTW	Depth to Water Detail	8/22/2023 9:22	8.64	ft
GS-GSA-MW-11H	ORP	Oxidation Reduction Potential	8/22/2023 9:22	113.15	mv
GS-GSA-MW-11H	PH	pH	8/22/2023 9:22	5.83	SU
GS-GSA-MW-11H	TEMP	Temperature	8/22/2023 9:22	20.71	C
GS-GSA-MW-11H	TURB	Turbidity	8/22/2023 9:22	12.4	NTU
GS-GSA-MW-11H	COND	Conductivity	8/22/2023 9:27	1386.32	uS/cm
GS-GSA-MW-11H	DO	DO	8/22/2023 9:27	0.4	mg/L
GS-GSA-MW-11H	DTW	Depth to Water Detail	8/22/2023 9:27	8.64	ft
GS-GSA-MW-11H	ORP	Oxidation Reduction Potential	8/22/2023 9:27	111.65	mv
GS-GSA-MW-11H	PH	pH	8/22/2023 9:27	5.87	SU
GS-GSA-MW-11H	TEMP	Temperature	8/22/2023 9:27	20.61	C
GS-GSA-MW-11H	TURB	Turbidity	8/22/2023 9:27	6.99	NTU
GS-GSA-MW-11H	COND	Conductivity	8/22/2023 9:32	1380.09	uS/cm
GS-GSA-MW-11H	DO	DO	8/22/2023 9:32	0.46	mg/L
GS-GSA-MW-11H	DTW	Depth to Water Detail	8/22/2023 9:32	8.64	ft
GS-GSA-MW-11H	ORP	Oxidation Reduction Potential	8/22/2023 9:32	109.14	mv
GS-GSA-MW-11H	PH	pH	8/22/2023 9:32	5.88	SU
GS-GSA-MW-11H	TEMP	Temperature	8/22/2023 9:32	20.55	C
GS-GSA-MW-11H	TURB	Turbidity	8/22/2023 9:32	5.82	NTU
GS-GSA-MW-11H	COND	Conductivity	8/22/2023 9:37	1377.58	uS/cm
GS-GSA-MW-11H	DO	DO	8/22/2023 9:37	0.44	mg/L
GS-GSA-MW-11H	DTW	Depth to Water Detail	8/22/2023 9:37	8.64	ft
GS-GSA-MW-11H	ORP	Oxidation Reduction Potential	8/22/2023 9:37	103.36	mv
GS-GSA-MW-11H	PH	pH	8/22/2023 9:37	5.89	SU
GS-GSA-MW-11H	SULFIDE	Sulfide	8/22/2023 9:37	0	mg/L
GS-GSA-MW-11H	TEMP	Temperature	8/22/2023 9:37	20.56	C
GS-GSA-MW-11H	TURB	Turbidity	8/22/2023 9:37	4.87	NTU
GS-GSA-MW-12V	COND	Conductivity	8/23/2023 12:34	4592.95	uS/cm
GS-GSA-MW-12V	DO	DO	8/23/2023 12:34	0.2	mg/L
GS-GSA-MW-12V	DTW	Depth to Water Detail	8/23/2023 12:34	67.81	ft
GS-GSA-MW-12V	ORP	Oxidation Reduction Potential	8/23/2023 12:34	-55.8	mv
GS-GSA-MW-12V	PH	pH	8/23/2023 12:34	6.74	SU
GS-GSA-MW-12V	TEMP	Temperature	8/23/2023 12:34	20.31	C
GS-GSA-MW-12V	TURB	Turbidity	8/23/2023 12:34	3.66	NTU
GS-GSA-MW-12V	COND	Conductivity	8/23/2023 12:39	4048.16	uS/cm
GS-GSA-MW-12V	DO	DO	8/23/2023 12:39	0.22	mg/L
GS-GSA-MW-12V	DTW	Depth to Water Detail	8/23/2023 12:39	67.81	ft
GS-GSA-MW-12V	ORP	Oxidation Reduction Potential	8/23/2023 12:39	-40.66	mv
GS-GSA-MW-12V	PH	pH	8/23/2023 12:39	6.49	SU
GS-GSA-MW-12V	TEMP	Temperature	8/23/2023 12:39	20.49	C
GS-GSA-MW-12V	TURB	Turbidity	8/23/2023 12:39	2.17	NTU
GS-GSA-MW-12V	COND	Conductivity	8/23/2023 12:44	3828.39	uS/cm
GS-GSA-MW-12V	DO	DO	8/23/2023 12:44	0.19	mg/L
GS-GSA-MW-12V	DTW	Depth to Water Detail	8/23/2023 12:44	67.81	ft

FIELD PARAMETER SUMMARY
PLANT GORGAS GYPSUM POND

Well ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GS-GSA-MW-12V	ORP	Oxidation Reduction Potential	8/23/2023 12:44	-32.59	mv
GS-GSA-MW-12V	PH	pH	8/23/2023 12:44	6.39	SU
GS-GSA-MW-12V	TEMP	Temperature	8/23/2023 12:44	20.22	C
GS-GSA-MW-12V	TURB	Turbidity	8/23/2023 12:44	2.13	NTU
GS-GSA-MW-12V	COND	Conductivity	8/23/2023 12:49	3736.03	uS/cm
GS-GSA-MW-12V	DO	DO	8/23/2023 12:49	0.22	mg/L
GS-GSA-MW-12V	DTW	Depth to Water Detail	8/23/2023 12:49	67.81	ft
GS-GSA-MW-12V	ORP	Oxidation Reduction Potential	8/23/2023 12:49	-27.93	mv
GS-GSA-MW-12V	PH	pH	8/23/2023 12:49	6.33	SU
GS-GSA-MW-12V	TEMP	Temperature	8/23/2023 12:49	20.62	C
GS-GSA-MW-12V	TURB	Turbidity	8/23/2023 12:49	1.8	NTU
GS-GSA-MW-12V	COND	Conductivity	8/23/2023 12:54	3642.04	uS/cm
GS-GSA-MW-12V	DO	DO	8/23/2023 12:54	0.19	mg/L
GS-GSA-MW-12V	DTW	Depth to Water Detail	8/23/2023 12:54	67.81	ft
GS-GSA-MW-12V	ORP	Oxidation Reduction Potential	8/23/2023 12:54	-23.72	mv
GS-GSA-MW-12V	PH	pH	8/23/2023 12:54	6.28	SU
GS-GSA-MW-12V	TEMP	Temperature	8/23/2023 12:54	20.27	C
GS-GSA-MW-12V	TURB	Turbidity	8/23/2023 12:54	2.05	NTU
GS-GSA-MW-12V	COND	Conductivity	8/23/2023 12:59	3604.51	uS/cm
GS-GSA-MW-12V	DO	DO	8/23/2023 12:59	0.2	mg/L
GS-GSA-MW-12V	DTW	Depth to Water Detail	8/23/2023 12:59	67.81	ft
GS-GSA-MW-12V	ORP	Oxidation Reduction Potential	8/23/2023 12:59	-21.76	mv
GS-GSA-MW-12V	PH	pH	8/23/2023 12:59	6.26	SU
GS-GSA-MW-12V	SULFIDE	Sulfide	8/23/2023 12:59	0	mg/L
GS-GSA-MW-12V	TEMP	Temperature	8/23/2023 12:59	20.47	C
GS-GSA-MW-12V	TURB	Turbidity	8/23/2023 12:59	1.68	NTU
GS-GSA-MW-13H	COND	Conductivity	8/22/2023 10:24	1366.06	uS/cm
GS-GSA-MW-13H	DO	DO	8/22/2023 10:24	0.21	mg/L
GS-GSA-MW-13H	DTW	Depth to Water Detail	8/22/2023 10:24	10.76	ft
GS-GSA-MW-13H	ORP	Oxidation Reduction Potential	8/22/2023 10:24	18.12	mv
GS-GSA-MW-13H	PH	pH	8/22/2023 10:24	5.73	SU
GS-GSA-MW-13H	TEMP	Temperature	8/22/2023 10:24	20.55	C
GS-GSA-MW-13H	TURB	Turbidity	8/22/2023 10:24	18.4	NTU
GS-GSA-MW-13H	COND	Conductivity	8/22/2023 10:29	1364.24	uS/cm
GS-GSA-MW-13H	DO	DO	8/22/2023 10:29	0.21	mg/L
GS-GSA-MW-13H	DTW	Depth to Water Detail	8/22/2023 10:29	10.76	ft
GS-GSA-MW-13H	ORP	Oxidation Reduction Potential	8/22/2023 10:29	19.73	mv
GS-GSA-MW-13H	PH	pH	8/22/2023 10:29	5.7	SU
GS-GSA-MW-13H	TEMP	Temperature	8/22/2023 10:29	20.43	C
GS-GSA-MW-13H	TURB	Turbidity	8/22/2023 10:29	12.89	NTU
GS-GSA-MW-13H	COND	Conductivity	8/22/2023 10:34	1365.36	uS/cm
GS-GSA-MW-13H	DO	DO	8/22/2023 10:34	0.21	mg/L
GS-GSA-MW-13H	DTW	Depth to Water Detail	8/22/2023 10:34	10.76	ft
GS-GSA-MW-13H	ORP	Oxidation Reduction Potential	8/22/2023 10:34	18.79	mv
GS-GSA-MW-13H	PH	pH	8/22/2023 10:34	5.69	SU
GS-GSA-MW-13H	TEMP	Temperature	8/22/2023 10:34	20.36	C
GS-GSA-MW-13H	TURB	Turbidity	8/22/2023 10:34	10.44	NTU
GS-GSA-MW-13H	COND	Conductivity	8/22/2023 10:39	1363.99	uS/cm
GS-GSA-MW-13H	DO	DO	8/22/2023 10:39	0.21	mg/L
GS-GSA-MW-13H	DTW	Depth to Water Detail	8/22/2023 10:39	10.76	ft
GS-GSA-MW-13H	ORP	Oxidation Reduction Potential	8/22/2023 10:39	17.52	mv
GS-GSA-MW-13H	PH	pH	8/22/2023 10:39	5.71	SU
GS-GSA-MW-13H	SULFIDE	Sulfide	8/22/2023 10:39	0	mg/L
GS-GSA-MW-13H	TEMP	Temperature	8/22/2023 10:39	20.37	C
GS-GSA-MW-13H	TURB	Turbidity	8/22/2023 10:39	9.51	NTU
GS-GSA-MW-14H	COND	Conductivity	8/21/2023 14:14	1055.14	uS/cm
GS-GSA-MW-14H	DO	DO	8/21/2023 14:14	0.3	mg/L
GS-GSA-MW-14H	DTW	Depth to Water Detail	8/21/2023 14:14	19.31	ft
GS-GSA-MW-14H	ORP	Oxidation Reduction Potential	8/21/2023 14:14	260.29	mv
GS-GSA-MW-14H	PH	pH	8/21/2023 14:14	4.4	SU
GS-GSA-MW-14H	TEMP	Temperature	8/21/2023 14:14	20.67	C

FIELD PARAMETER SUMMARY
PLANT GORGAS GYPSUM POND

Well ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GS-GSA-MW-14H	TURB	Turbidity	8/21/2023 14:14	12.21	NTU
GS-GSA-MW-14H	COND	Conductivity	8/21/2023 14:19	1059.09	uS/cm
GS-GSA-MW-14H	DO	DO	8/21/2023 14:19	0.27	mg/L
GS-GSA-MW-14H	DTW	Depth to Water Detail	8/21/2023 14:19	19.31	ft
GS-GSA-MW-14H	ORP	Oxidation Reduction Potential	8/21/2023 14:19	269.54	mv
GS-GSA-MW-14H	PH	pH	8/21/2023 14:19	4.38	SU
GS-GSA-MW-14H	TEMP	Temperature	8/21/2023 14:19	20.62	C
GS-GSA-MW-14H	TURB	Turbidity	8/21/2023 14:19	7.17	NTU
GS-GSA-MW-14H	COND	Conductivity	8/21/2023 14:24	1062.03	uS/cm
GS-GSA-MW-14H	DO	DO	8/21/2023 14:24	0.25	mg/L
GS-GSA-MW-14H	DTW	Depth to Water Detail	8/21/2023 14:24	19.31	ft
GS-GSA-MW-14H	ORP	Oxidation Reduction Potential	8/21/2023 14:24	276.08	mv
GS-GSA-MW-14H	PH	pH	8/21/2023 14:24	4.34	SU
GS-GSA-MW-14H	TEMP	Temperature	8/21/2023 14:24	20.62	C
GS-GSA-MW-14H	TURB	Turbidity	8/21/2023 14:24	6.42	NTU
GS-GSA-MW-14H	COND	Conductivity	8/21/2023 14:29	1065.01	uS/cm
GS-GSA-MW-14H	DO	DO	8/21/2023 14:29	0.24	mg/L
GS-GSA-MW-14H	DTW	Depth to Water Detail	8/21/2023 14:29	19.31	ft
GS-GSA-MW-14H	ORP	Oxidation Reduction Potential	8/21/2023 14:29	281.22	mv
GS-GSA-MW-14H	PH	pH	8/21/2023 14:29	4.31	SU
GS-GSA-MW-14H	TEMP	Temperature	8/21/2023 14:29	20.6	C
GS-GSA-MW-14H	TURB	Turbidity	8/21/2023 14:29	4.75	NTU
GS-GSA-MW-14H	COND	Conductivity	8/21/2023 14:34	1067.58	uS/cm
GS-GSA-MW-14H	DO	DO	8/21/2023 14:34	0.22	mg/L
GS-GSA-MW-14H	DTW	Depth to Water Detail	8/21/2023 14:34	19.31	ft
GS-GSA-MW-14H	ORP	Oxidation Reduction Potential	8/21/2023 14:34	285.05	mv
GS-GSA-MW-14H	PH	pH	8/21/2023 14:34	4.3	SU
GS-GSA-MW-14H	SULFIDE	Sulfide	8/21/2023 14:34	0	mg/L
GS-GSA-MW-14H	TEMP	Temperature	8/21/2023 14:34	20.57	C
GS-GSA-MW-14H	TURB	Turbidity	8/21/2023 14:34	4.55	NTU
GS-GSA-MW-11H	COND	Conductivity	10/19/2023 9:06	1778.72	uS/cm
GS-GSA-MW-11H	DO	DO	10/19/2023 9:06	0.11	mg/L
GS-GSA-MW-11H	DTW	Depth to Water Detail	10/19/2023 9:06	8.78	ft
GS-GSA-MW-11H	ORP	Oxidation Reduction Potention	10/19/2023 9:06	54.64	mv
GS-GSA-MW-11H	PH	pH	10/19/2023 9:06	5.95	SU
GS-GSA-MW-11H	TEMP	Temperature	10/19/2023 9:06	19.85	C
GS-GSA-MW-11H	TURB	Turbidity	10/19/2023 9:06	9.81	NTU
GS-GSA-MW-11H	COND	Conductivity	10/19/2023 9:11	1768.14	uS/cm
GS-GSA-MW-11H	DO	DO	10/19/2023 9:11	0.13	mg/L
GS-GSA-MW-11H	DTW	Depth to Water Detail	10/19/2023 9:11	8.84	ft
GS-GSA-MW-11H	ORP	Oxidation Reduction Potention	10/19/2023 9:11	56.05	mv
GS-GSA-MW-11H	PH	pH	10/19/2023 9:11	5.96	SU
GS-GSA-MW-11H	TEMP	Temperature	10/19/2023 9:11	19.82	C
GS-GSA-MW-11H	TURB	Turbidity	10/19/2023 9:11	9.15	NTU
GS-GSA-MW-11H	COND	Conductivity	10/19/2023 9:16	1751.34	uS/cm
GS-GSA-MW-11H	DO	DO	10/19/2023 9:16	0.2	mg/L
GS-GSA-MW-11H	DTW	Depth to Water Detail	10/19/2023 9:16	8.92	ft
GS-GSA-MW-11H	ORP	Oxidation Reduction Potention	10/19/2023 9:16	56.92	mv
GS-GSA-MW-11H	PH	pH	10/19/2023 9:16	5.96	SU
GS-GSA-MW-11H	TEMP	Temperature	10/19/2023 9:16	19.85	C
GS-GSA-MW-11H	TURB	Turbidity	10/19/2023 9:16	8.24	NTU
GS-GSA-MW-11H	COND	Conductivity	10/19/2023 9:21	1737.87	uS/cm
GS-GSA-MW-11H	DO	DO	10/19/2023 9:21	0.25	mg/L
GS-GSA-MW-11H	DTW	Depth to Water Detail	10/19/2023 9:21	8.97	ft
GS-GSA-MW-11H	ORP	Oxidation Reduction Potention	10/19/2023 9:21	57.33	mv
GS-GSA-MW-11H	PH	pH	10/19/2023 9:21	5.96	SU
GS-GSA-MW-11H	SULFIDE	Sulfide	10/19/2023 9:21	0	mg/L
GS-GSA-MW-11H	TEMP	Temperature	10/19/2023 9:21	19.83	C
GS-GSA-MW-11H	TURB	Turbidity	10/19/2023 9:21	8.41	NTU

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

Analytical Report

Alabama Power

Sample Group : WMWGORPU_1421

Project/Site : Gorgas Pooled Upgradient
Parrish, AL 35580

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

Attention : Dustin Brooks & Greg Budd

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

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

Alabama Power

September 12, 2023

Dear Dustin Brooks,

Enclosed are the analytical results for sample(s) received by the laboratory on August 23, 2023.
All results reported herein conform to the laboratory's most current Quality Assurance Manual. Results marked with an asterisk conform to the most current applicable TNI/NELAC requirements. Exceptions will be noted in the body of the report.

Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2024

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

Sincerely,

Quality Control: Brooke Caton

Digitally signed by Brooke Caton
Date: 2023.09.12 13:53:59 -05'00'

Supervision: T Durant Maske

Digitally signed by T Durant Maske
DN: cn=T Durant Maske gn=T Durant Maske c=US United States l=US United States e=tdmaske@southernco.com
Reason: I am the author of this document
Location:
Date: 2023-09-13 07:09-05:00

NELAP ACCREDITED TNI LABORATORY

REPORT OF LABORATORY ANALYSIS

Alabama Power Lab & Field SERVICES

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

Case Narrative

Alabama Power

Total Metals ICP

Gorgas Pooled Upgradient

WMWGORPU_1421

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

Sample ID	Batch ID	Project ID
BD16119	764180	WMWGORPU_1421
BD16120	764180	WMWGORPU_1421
BD16121	764180	WMWGORPU_1421
BD16122	764180	WMWGORPU_1421
BD16123	764180	WMWGORPU_1421
BD16124	764180	WMWGORPU_1421
BD16125	764180	WMWGORPU_1421

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

General Quality Control Procedures:

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

Matrix Specific Quality Control Procedures:

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

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

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

Sample ID	Analyte	Dilution Factor
BD16119	Calcium, Magnesium	10.15
BD16120	Calcium, Magnesium	10.15
BD16121	Calcium, Magnesium	10.15
BD16122	Iron, Sodium, Silicon	10.15
BD16122	Calcium, Magnesium	101.5
BD16124	Calcium, Magnesium	101.5

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

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

Case Narrative

Alabama Power

Dissolved Metals ICP

Gorgas Pooled Upgradient

WMWGORPU_1421

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

Sample ID	Batch ID	Project ID
BD16119	764162	WMWGORPU_1421
BD16120	764162	WMWGORPU_1421
BD16121	764162	WMWGORPU_1421
BD16122	764162	WMWGORPU_1421
BD16124	764162	WMWGORPU_1421

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

General Quality Control Procedures:

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

Matrix Specific Quality Control Procedures:

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

- A matrix spike and matrix spike duplicate were analyzed with each ICP batch. All acceptance criteria for accuracy were met, except for the following:
    - BD16124 Calcium and Magnesium MS/MSD spike levels were less than 30% of the sample concentrations.
- A matrix spike and matrix spike duplicate were analyzed with each ICP batch. All acceptance criteria for precision were met.

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

Sample ID	Analyte	Dilution Factor
BD16119	Calcium, Magnesium	10.15
BD16120	Calcium, Magnesium	10.15
BD16121	Calcium, Magnesium	10.15
BD16122	Iron, Sodium, Silicon	10.15
BD16122	Calcium, Magnesium	101.5
BD16124	Calcium, Magnesium	101.5

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

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

Case Narrative

Alabama Power

Total Metals ICPMS

Gorgas Pooled Upgradient

WMWGORPU_1421

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

Sample ID	Batch ID	Project ID
BD16119	764827	WMWGORPU_1421
BD16120	764827	WMWGORPU_1421
BD16121	764827	WMWGORPU_1421
BD16122	764827	WMWGORPU_1421
BD16123	764827	WMWGORPU_1421
BD16124	764827	WMWGORPU_1421
BD16125	764827	WMWGORPU_1421

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

General Quality Control Procedures:

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

Matrix Specific Quality Control Procedures:

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

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

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

Sample ID	Analyte	Dilution Factor
BD16119	Manganese	10.15
BD16120	Manganese	10.15
BD16121	Manganese	10.15
BD16122	Manganese	10.15

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

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

Case Narrative

Alabama Power

Dissolved Metals ICPMS

Gorgas Pooled Upgradient

WMWGORPU_1421

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

Sample ID	Batch ID	Project ID
BD16119	764800	WMWGORPU_1421
BD16120	764800	WMWGORPU_1421
BD16121	764800	WMWGORPU_1421
BD16122	764800	WMWGORPU_1421
BD16124	764800	WMWGORPU_1421

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

General Quality Control Procedures:

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

Matrix Specific Quality Control Procedures:

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

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

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

Sample ID	Analyte	Dilution Factor
BD16119	Manganese	10.15
BD16120	Manganese	10.15
BD16121	Manganese	10.15
BD16122	Manganese	10.15

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

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

Case Narrative

Alabama Power

Mercury

Gorgas Pooled Upgradient

WMWGORPU_1421

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

Sample ID	Batch ID	Project ID
BD16119	764385	WMWGORPU_1421
BD16120	764385	WMWGORPU_1421
BD16121	764385	WMWGORPU_1421
BD16122	764385	WMWGORPU_1421
BD16123	764385	WMWGORPU_1421
BD16124	764385	WMWGORPU_1421
BD16125	764385	WMWGORPU_1421

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

General Quality Control Procedures:

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

Matrix Specific Quality Control Procedures:

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

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

7. All samples were analyzed without a dilution.

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

Case Narrative

Alabama Power

Total Dissolved Solids

Gorgas Pooled Upgradient

WMWGORPU_1421

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

Sample ID	Batch ID	Project ID
BD16119	764185	WMWGORPU_1421
BD16120	764185	WMWGORPU_1421
BD16121	764185	WMWGORPU_1421
BD16122	764185	WMWGORPU_1421
BD16123	764185	WMWGORPU_1421
BD16124	764186	WMWGORPU_1421
BD16125	764186	WMWGORPU_1421

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

General Quality Control Procedures:

- A Method Blank was analyzed with each batch. All criteria were met.
- All final weights of samples, standards, and blanks agreed within 0.5mg of the previous weight.
- A sample duplicate was analyzed with each batch, and RPD was ≤10%.
- A laboratory control sample was analyzed with each batch. All criteria were met.
- Samples were between 2.5mg and 200mg residue.
- All samples with residue <2.5mg had the maximum volume of 150mL filtered. Affected samples are as follows:
  - BD16123
  - BD16125

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

Case Narrative

Alkalinity

Gorgas Pooled Upgradient

WMWGORPU_1421

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

Sample ID	Batch ID	Project ID
BD16119	765028, 765029, 765030, 765031	WMWGORPU_1421
BD16120	765028, 765029, 765030, 765031	WMWGORPU_1421
BD16121	765028, 765029, 765030, 765031	WMWGORPU_1421
BD16122	765028, 765029, 765030, 765031	WMWGORPU_1421
BD16124	765028, 765029, 765030, 765031	WMWGORPU_1421

4. All of the above samples were prepared and analyzed by Standard Method 2320B.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

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

7. The following samples had pH>10 and/or TDS>500mg/L. Therefore, the calculations for carbonate and bicarbonate are estimates:
    - BD16119
    - BD16120
    - BD16121
    - BD16122
    - BD16124

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

Case Narrative

Alabama Power

Anions

Gorgas Pooled Upgradient

WMWGORPU_1421

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

Sample ID	Batch ID	Project ID
BD16119	764915, 764971, 764204	WMWGORPU_1421
BD16120	764915, 764971, 764204	WMWGORPU_1421
BD16121	764915, 764971, 764204	WMWGORPU_1421
BD16122	764915, 764971, 764204	WMWGORPU_1421
BD16123	764915, 764971, 764204	WMWGORPU_1421
BD16124	764915, 764971, 764204	WMWGORPU_1421
BD16125	764915, 764971, 764204	WMWGORPU_1421

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

General Quality Control Procedures:

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

Matrix Specific Quality Control Procedures:

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

Revision 5

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

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

Sample ID	Analyte	Dilution Factor
BD16119	Sulfate	50
BD16120	Sulfate	50
BD16121	Sulfate	40
BD16122	Sulfate	100
BD16124	Sulfate	100

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

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

Case Narrative

Alabama Power

Nitrate-Nitrite

Gorgas Pooled Upgradient

WMWGORPU_1421

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

Sample ID	Batch ID	Project ID
BD16119	764325	WMWGORPU_1421
BD16120	764325	WMWGORPU_1421
BD16121	764325	WMWGORPU_1421
BD16122	764325	WMWGORPU_1421
BD16123	764325	WMWGORPU_1421
BD16124	764325	WMWGORPU_1421
BD16125	764325	WMWGORPU_1421

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

General Quality Control Procedures:

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

EPA 353.2 Specific QC:

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

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

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

Case Narrative

Alabama Power

Total Organic Carbon

Gorgas Pooled Upgradient

WMWGORPU_1421

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

Sample ID	Batch ID	Project ID
BD16119	764400	WMWGORPU_1421
BD16120	764400	WMWGORPU_1421
BD16121	764400	WMWGORPU_1421
BD16122	764400	WMWGORPU_1421
BD16123	764400	WMWGORPU_1421
BD16124	764400	WMWGORPU_1421
BD16125	764400	WMWGORPU_1421

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

General Quality Control Procedures:

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

Matrix Specific Quality Control Procedures:

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

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

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Pooled Upgradient - MW-1

Location Code: WMWGORPU
Collected: 8/22/23 12:55
Customer ID:
Submittal Date: 8/23/23 08:53

Laboratory ID Number: BD16119

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	8/23/23 14:50	8/24/23 13:56		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	8/23/23 14:50	8/25/23 11:27		10.15	183	mg/L	0.70035	4.06	
* Iron, Total	8/23/23 14:50	8/24/23 13:56		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Total	8/23/23 14:50	8/24/23 13:56		1.015	0.0225	mg/L	0.007105	0.01999956	
* Magnesium, Total	8/23/23 14:50	8/25/23 11:27		10.15	346	mg/L	0.21315	4.06	
* Molybdenum, Total	8/23/23 14:50	8/24/23 13:56		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Total (calc.)	8/23/23 14:50	8/24/23 13:56		1	24.0	mg/L			
* Silicon, Total	8/23/23 14:50	8/24/23 13:56		1.015	11.2	mg/L	0.02030	0.25375	
* Sodium, Total	8/23/23 14:50	8/24/23 13:56		1.015	33.2	mg/L	0.04060	0.406	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	8/23/23 11:45	8/24/23 14:37		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Dissolved	8/23/23 11:45	8/25/23 11:52		10.15	144	mg/L	0.70035	4.06	
* Iron, Dissolved	8/23/23 11:45	8/24/23 14:37		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Dissolved	8/23/23 11:45	8/24/23 14:37		1.015	0.0223	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	8/23/23 11:45	8/25/23 11:52		10.15	273	mg/L	0.21315	4.06	
* Molybdenum, Dissolved	8/23/23 11:45	8/24/23 14:37		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Dissolved (calc.)	8/23/23 11:45	8/24/23 14:37		1	23.8	mg/L			
* Silicon, Dissolved	8/23/23 11:45	8/24/23 14:37		1.015	11.1	mg/L	0.02030	0.25375	
* Sodium, Dissolved	8/23/23 11:45	8/24/23 14:37		1.015	32.9	mg/L	0.04060	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	8/23/23 14:50	8/23/23 16:05		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Total	8/23/23 14:50	8/24/23 16:58		1.015	0.137	mg/L	0.009135	0.05075	
* Arsenic, Total	8/23/23 14:50	8/23/23 16:05		1.015	0.000187	mg/L	0.000112	0.000203	J
* Barium, Total	8/23/23 14:50	8/23/23 16:05		1.015	0.00976	mg/L	0.000508	0.001015	
* Beryllium, Total	8/23/23 14:50	8/23/23 16:05		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	8/23/23 14:50	8/23/23 16:05		1.015	0.00205	mg/L	0.000068	0.000203	
* Chromium, Total	8/23/23 14:50	8/23/23 16:05		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	8/23/23 14:50	8/23/23 16:05		1.015	0.0860	mg/L	0.000068	0.000203	
* Lead, Total	8/23/23 14:50	8/23/23 16:05		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	8/23/23 14:50	8/23/23 16:48		10.15	11.7	mg/L	0.001522	0.01015	

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

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

Reported: 9/12/2023
Version: 3.5
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Pooled Upgradient - MW-1

Location Code: WMWGORPU
Collected: 8/22/23 12:55
Customer ID:
Submittal Date: 8/23/23 08:53

Laboratory ID Number: BD16119

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	8/23/23 14:50	8/23/23 16:05		1.015	7.63	mg/L	0.169505	0.5075	
* Selenium, Total	8/23/23 14:50	8/23/23 16:05		1.015	0.00151	mg/L	0.000508	0.001015	
* Thallium, Total	8/23/23 14:50	8/23/23 16:05		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	8/23/23 11:45	8/23/23 12:00		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	8/23/23 11:45	8/23/23 12:00		1.015	0.128	mg/L	0.009135	0.05075	
* Arsenic, Dissolved	8/23/23 11:45	8/23/23 12:00		1.015	0.000207	mg/L	0.000112	0.000203	
* Barium, Dissolved	8/23/23 11:45	8/23/23 12:00		1.015	0.00952	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	8/23/23 11:45	8/23/23 12:00		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	8/23/23 11:45	8/23/23 12:00		1.015	0.00195	mg/L	0.000068	0.000203	
* Chromium, Dissolved	8/23/23 11:45	8/23/23 12:00		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	8/23/23 11:45	8/23/23 12:00		1.015	0.0844	mg/L	0.000068	0.000203	
* Lead, Dissolved	8/23/23 11:45	8/23/23 12:00		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	8/23/23 11:45	8/23/23 13:25		10.15	12.0	mg/L	0.001522	0.01015	
* Potassium, Dissolved	8/23/23 11:45	8/23/23 12:00		1.015	7.54	mg/L	0.169505	0.5075	
* Selenium, Dissolved	8/23/23 11:45	8/23/23 12:00		1.015	0.00158	mg/L	0.000508	0.001015	
* Thallium, Dissolved	8/23/23 11:45	8/23/23 12:00		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	8/24/23 18:45	8/25/23 00:47		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: CES***								
* Nitrogen, Nitrate/Nitrite	8/24/23 13:23	8/24/23 13:23		1	1.25	mg/L as N	0.20	0.3	
Analytical Method: SM 2320 B	***Analyst: DHC***								
* Alkalinity	8/30/23 13:30	8/30/23 15:33		1	20.8	mg CaCO3/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	8/23/23 11:20	8/24/23 13:00		1	2160	mg/L		125	
Analytical Method: SM 4500CO2 D	***Analyst: DHC***								
* Bicarbonate Alkalinity, (calc.)	8/30/23 13:30	8/30/23 15:33		1	20.8	mg CaCO3/L		1	A
* Carbonate Alkalinity, (calc.)	8/30/23 13:30	8/30/23 15:33		1	Not Detected	mg CaCO3/L		0.5	A
Analytical Method: SM 4500H+ B	***Analyst: DHC***								
Alkalinity pH Endpoint	8/30/23 13:30	8/30/23 15:33		1	4.44	SU		2	

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

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

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Pooled Upgradient - MW-1

Location Code: WMWGORPU
Collected: 8/22/23 12:55
Customer ID:
Submittal Date: 8/23/23 08:53

Laboratory ID Number: BD16119

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	8/25/23 11:17	8/25/23 11:17		1	1.70	mg/L	1.00	2	J
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	8/29/23 10:13	8/29/23 10:13		1	2.38	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	8/29/23 14:10	8/29/23 14:10		1	0.159	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	8/23/23 13:49	8/23/23 13:49		50	1560	mg/L	30.0	100	
Analytical Method: Field Measurements	***Analyst: AWG***								
Conductivity	8/22/23 12:53	8/22/23 12:53			2206.04	uS/cm			FA
pH	8/22/23 12:53	8/22/23 12:53			4.92	SU			FA
Temperature	8/22/23 12:53	8/22/23 12:53			22.09	C			FA
Turbidity	8/22/23 12:53	8/22/23 12:53			1.06	NTU			FA
Sulfide	8/22/23 12:53	8/22/23 12:53			0	mg/L			FA

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

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

Reported: 9/12/2023
Version: 3.5
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORPU
Sample Date: 8/22/23 12:55
Customer ID:
Delivery Date: 8/23/23 08:53

Description: Gorgas Pooled Upgradient - MW-1

Laboratory ID Number: BD16119

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD16124	Aluminum, Dissolved	mg/L	-0.000285	0.0198	0.100	0.105	0.100	0.105	0.0850 to 0.115	105	70.0 to 130	4.88	20.0
BD16125	Aluminum, Total	mg/L	0.000392	0.0198	0.100	0.106	0.103	0.107	0.0850 to 0.115	106	70.0 to 130	2.87	20.0
BD16124	Antimony, Dissolved	mg/L	0.000282	0.00100	0.100	0.0837	0.0870	0.0896	0.0850 to 0.115	83.7	70.0 to 130	3.87	20.0
BD16125	Antimony, Total	mg/L	0.000262	0.00100	0.100	0.0905	0.0891	0.0922	0.0850 to 0.115	90.5	70.0 to 130	1.56	20.0
BD16124	Arsenic, Dissolved	mg/L	0.0000059	0.000200	0.100	0.0995	0.0987	0.0980	0.0850 to 0.115	99.5	70.0 to 130	0.807	20.0
BD16125	Arsenic, Total	mg/L	-0.0000063	0.000200	0.100	0.0973	0.0966	0.0976	0.0850 to 0.115	97.3	70.0 to 130	0.722	20.0
BD16124	Barium, Dissolved	mg/L	0.0000062	0.00100	0.100	0.104	0.109	0.0998	0.0850 to 0.115	92.9	70.0 to 130	4.69	20.0
BD16125	Barium, Total	mg/L	-0.0000057	0.00100	0.100	0.0992	0.0965	0.0962	0.0850 to 0.115	99.2	70.0 to 130	2.76	20.0
BD16124	Beryllium, Dissolved	mg/L	0.0000210	0.000880	0.100	0.0871	0.0929	0.0963	0.0850 to 0.115	87.1	70.0 to 130	6.44	20.0
BD16125	Beryllium, Total	mg/L	0.0000186	0.000880	0.100	0.0863	0.0863	0.0895	0.0850 to 0.115	86.3	70.0 to 130	0.00	20.0
BD16124	Boron, Dissolved	mg/L	0.000039	0.0650	1.00	1.04	1.03	0.968	0.850 to 1.15	99.5	70.0 to 130	0.966	20.0
BD16125	Boron, Total	mg/L	0.000278	0.0650	1.00	0.959	0.961	0.965	0.850 to 1.15	95.9	70.0 to 130	0.208	20.0
BD16124	Cadmium, Dissolved	mg/L	0.0000046	0.000147	0.100	0.0915	0.0928	0.100	0.0850 to 0.115	91.5	70.0 to 130	1.41	20.0
BD16125	Cadmium, Total	mg/L	0.0000000	0.000147	0.100	0.0965	0.0992	0.0972	0.0850 to 0.115	96.5	70.0 to 130	2.76	20.0
BD16124	Calcium, Dissolved	mg/L	-0.0339	0.152	5.00	306	289	4.77	4.25 to 5.75	400	70.0 to 130	5.71	20.0
BD16125	Calcium, Total	mg/L	-0.0350	0.152	5.00	4.64	4.65	4.67	4.25 to 5.75	92.8	70.0 to 130	0.215	20.0
BD16125	Chloride	mg/L	-0.0231	1.00	10.0	9.99	10.1	10.6	9.00 to 11.0	99.9	80.0 to 120	1.10	20.0
BD16124	Chromium, Dissolved	mg/L	-0.0000820	0.000440	0.100	0.101	0.0985	0.102	0.0850 to 0.115	101	70.0 to 130	2.51	20.0
BD16125	Chromium, Total	mg/L	-0.0000845	0.000440	0.100	0.101	0.0987	0.100	0.0850 to 0.115	101	70.0 to 130	2.30	20.0
BD16124	Cobalt, Dissolved	mg/L	-0.0000349	0.000147	0.100	0.105	0.104	0.108	0.0850 to 0.115	105	70.0 to 130	0.957	20.0
BD16125	Cobalt, Total	mg/L	-0.0000385	0.000147	0.100	0.106	0.103	0.106	0.0850 to 0.115	106	70.0 to 130	2.87	20.0
BD16125	Fluoride	mg/L	0.0326	0.125	2.50	2.45	2.52	2.56	2.25 to 2.75	98.0	80.0 to 120	2.82	20.0
BD16124	Iron, Dissolved	mg/L	-0.000760	0.0176	0.2	0.188	0.186	0.193	0.170 to 0.230	94.0	70.0 to 130	1.07	20.0
BD16125	Iron, Total	mg/L	-0.000626	0.0176	0.2	0.192	0.192	0.192	0.170 to 0.230	96.0	70.0 to 130	0.00	20.0

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

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORPU
Sample Date: 8/22/23 12:55
Customer ID:
Delivery Date: 8/23/23 08:53

Description: Gorgas Pooled Upgradient - MW-1

Laboratory ID Number: BD16119

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD16124	Lead, Dissolved	mg/L	0.0000066	0.000147	0.100	0.100	0.101	0.102	0.0850 to 0.115	100	70.0 to 130	0.995	20.0
BD16125	Lead, Total	mg/L	0.0000062	0.000147	0.100	0.104	0.109	0.106	0.0850 to 0.115	104	70.0 to 130	4.69	20.0
BD16124	Lithium, Dissolved	mg/L	0.000735	0.0154	0.200	0.256	0.253	0.199	0.170 to 0.230	107	70.0 to 130	1.18	20.0
BD16125	Lithium, Total	mg/L	0.000715	0.0154	0.200	0.196	0.200	0.199	0.170 to 0.230	98.0	70.0 to 130	2.02	20.0
BD16124	Magnesium, Dissolved	mg/L	-0.0148	0.0462	5.00	500	469	4.91	4.25 to 5.75	740	70.0 to 130	6.40	20.0
BD16125	Magnesium, Total	mg/L	-0.0222	0.0462	5.00	4.83	4.91	4.94	4.25 to 5.75	95.9	70.0 to 130	1.64	20.0
BD16124	Manganese, Dissolved	mg/L	-0.0000101	0.00033	0.100	0.102	0.101	0.104	0.0850 to 0.115	100	70.0 to 130	0.985	20.0
BD16125	Manganese, Total	mg/L	-0.0000022	0.00033	0.100	0.103	0.100	0.102	0.0850 to 0.115	103	70.0 to 130	2.96	20.0
BD16125	Mercury, Total by CVAA	mg/L	5.000E-05	0.000500	0.004	0.00401	0.00403	0.00399	0.00340 to 0.00460	100	70.0 to 130	0.498	20.0
BD16124	Molybdenum, Dissolved	mg/L	0.000379	0.0100	0.2	0.193	0.191	0.196	0.170 to 0.230	96.5	70.0 to 130	1.04	20.0
BD16125	Molybdenum, Total	mg/L	0.000	0.0100	0.2	0.194	0.195	0.194	0.170 to 0.230	97.0	70.0 to 130	0.514	20.0
BD16124	Potassium, Dissolved	mg/L	0.00753	0.367	10.0	19.6	19.2	11.1	8.50 to 11.5	109	70.0 to 130	2.06	20.0
BD16125	Potassium, Total	mg/L	0.0111	0.367	10.0	10.8	10.8	11.2	8.50 to 11.5	108	70.0 to 130	0.00	20.0
BD16124	Selenium, Dissolved	mg/L	0.0000265	0.00100	0.100	0.103	0.105	0.100	0.0850 to 0.115	101	70.0 to 130	1.92	20.0
BD16125	Selenium, Total	mg/L	-0.0000875	0.00100	0.100	0.101	0.102	0.102	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BD16124	Silicon, Dissolved	mg/L	0.000253	0.0440	1.00	6.64	6.63	0.981	0.850 to 1.15	95.0	70.0 to 130	0.151	20.0
BD16125	Silicon, Total	mg/L	0.000318	0.0440	1.00	0.974	0.975	0.971	0.850 to 1.15	97.4	70.0 to 130	0.103	20.0
BD16124	Sodium, Dissolved	mg/L	0.000918	0.0880	5.00	40.6	40.1	5.02	4.25 to 5.75	110	70.0 to 130	1.24	20.0
BD16125	Sodium, Total	mg/L	0.00245	0.0880	5.00	4.95	5.04	5.04	4.25 to 5.75	99.0	70.0 to 130	1.80	20.0
BD16125	Sulfate	mg/L	0.567	2.0	20.0	20.8	20.4	20.6	18.0 to 22.0	104	80.0 to 120	1.94	20.0
BD16124	Thallium, Dissolved	mg/L	-0.0000690	0.000147	0.100	0.103	0.0990	0.104	0.0850 to 0.115	103	70.0 to 130	3.96	20.0
BD16125	Thallium, Total	mg/L	-0.0000665	0.000147	0.100	0.105	0.110	0.108	0.0850 to 0.115	105	70.0 to 130	4.65	20.0
BD16125	Total Organic Carbon	mg/L	0.143	1.00	10.0	9.33	9.52	24.6		93.3	80.0 to 120	2.02	20.0

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

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

Alabama Power

Batch QC Summary

Customer Account: WMWGORPU
Sample Date: 8/22/23 12:55
Customer ID:
Delivery Date: 8/23/23 08:53

Description: Gorgas Pooled Upgradient - MW-1

Laboratory ID Number: BD16119

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD16124	Alkalinity	mg CaCO3/L					172	51.6	45.0 to 55.0			0.00	10.0
BD16125	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.03	0.200	2.00	1.95	-0.053	2.06	1.80 to 2.20	97.5	90.0 to 110	0.00	15.0
BD16122	Solids, Dissolved	mg/L	2.00	25.0			4850	53.0	40.0 to 60.0			0.620	10.0

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

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Pooled Upgradient - MW-1 DUP

Location Code: WMWGORPU
Collected: 8/22/23 12:55
Customer ID:
Submittal Date: 8/23/23 08:53

Laboratory ID Number: BD16120

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	8/23/23 14:50	8/24/23 13:59		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	8/23/23 14:50	8/25/23 11:30		10.15	159	mg/L	0.70035	4.06	
* Iron, Total	8/23/23 14:50	8/24/23 13:59		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Total	8/23/23 14:50	8/24/23 13:59		1.015	0.0231	mg/L	0.007105	0.01999956	
* Magnesium, Total	8/23/23 14:50	8/25/23 11:30		10.15	297	mg/L	0.21315	4.06	
* Molybdenum, Total	8/23/23 14:50	8/24/23 13:59		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Total (calc.)	8/23/23 14:50	8/24/23 13:59		1	24.0	mg/L			
* Silicon, Total	8/23/23 14:50	8/24/23 13:59		1.015	11.2	mg/L	0.02030	0.25375	
* Sodium, Total	8/23/23 14:50	8/24/23 13:59		1.015	33.5	mg/L	0.04060	0.406	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	8/23/23 11:45	8/24/23 14:40		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Dissolved	8/23/23 11:45	8/25/23 11:55		10.15	142	mg/L	0.70035	4.06	
* Iron, Dissolved	8/23/23 11:45	8/24/23 14:40		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Dissolved	8/23/23 11:45	8/24/23 14:40		1.015	0.0225	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	8/23/23 11:45	8/25/23 11:55		10.15	267	mg/L	0.21315	4.06	
* Molybdenum, Dissolved	8/23/23 11:45	8/24/23 14:40		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Dissolved (calc.)	8/23/23 11:45	8/24/23 14:40		1	23.8	mg/L			
* Silicon, Dissolved	8/23/23 11:45	8/24/23 14:40		1.015	11.1	mg/L	0.02030	0.25375	
* Sodium, Dissolved	8/23/23 11:45	8/24/23 14:40		1.015	33.1	mg/L	0.04060	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	8/23/23 14:50	8/23/23 16:09		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Total	8/23/23 14:50	8/24/23 17:02		1.015	0.134	mg/L	0.009135	0.05075	
* Arsenic, Total	8/23/23 14:50	8/23/23 16:09		1.015	0.000186	mg/L	0.000112	0.000203	J
* Barium, Total	8/23/23 14:50	8/23/23 16:09		1.015	0.00939	mg/L	0.000508	0.001015	
* Beryllium, Total	8/23/23 14:50	8/23/23 16:09		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	8/23/23 14:50	8/23/23 16:09		1.015	0.00204	mg/L	0.000068	0.000203	
* Chromium, Total	8/23/23 14:50	8/23/23 16:09		1.015	0.000279	mg/L	0.000203	0.001015	J
* Cobalt, Total	8/23/23 14:50	8/23/23 16:09		1.015	0.0852	mg/L	0.000068	0.000203	
* Lead, Total	8/23/23 14:50	8/23/23 16:09		1.015	0.0000682	mg/L	0.000068	0.000203	J
* Manganese, Total	8/23/23 14:50	8/23/23 16:51		10.15	11.6	mg/L	0.001522	0.01015	

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

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

Reported: 9/12/2023
Version: 3.5
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Pooled Upgradient - MW-1 DUP

Location Code: WMWGORPU
Collected: 8/22/23 12:55
Customer ID:
Submittal Date: 8/23/23 08:53

Laboratory ID Number: BD16120

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	8/23/23 14:50	8/23/23 16:09		1.015	7.58	mg/L	0.169505	0.5075	
* Selenium, Total	8/23/23 14:50	8/23/23 16:09		1.015	0.00151	mg/L	0.000508	0.001015	
* Thallium, Total	8/23/23 14:50	8/23/23 16:09		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	8/23/23 11:45	8/23/23 12:03		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	8/23/23 11:45	8/23/23 12:03		1.015	0.126	mg/L	0.009135	0.05075	
* Arsenic, Dissolved	8/23/23 11:45	8/23/23 12:03		1.015	0.000184	mg/L	0.000112	0.000203	J
* Barium, Dissolved	8/23/23 11:45	8/23/23 12:03		1.015	0.00917	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	8/23/23 11:45	8/23/23 12:03		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	8/23/23 11:45	8/23/23 12:03		1.015	0.00182	mg/L	0.000068	0.000203	
* Chromium, Dissolved	8/23/23 11:45	8/23/23 12:03		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	8/23/23 11:45	8/23/23 12:03		1.015	0.0827	mg/L	0.000068	0.000203	
* Lead, Dissolved	8/23/23 11:45	8/23/23 12:03		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	8/23/23 11:45	8/23/23 13:28		10.15	11.1	mg/L	0.001522	0.01015	
* Potassium, Dissolved	8/23/23 11:45	8/23/23 12:03		1.015	7.46	mg/L	0.169505	0.5075	
* Selenium, Dissolved	8/23/23 11:45	8/23/23 12:03		1.015	0.00165	mg/L	0.000508	0.001015	
* Thallium, Dissolved	8/23/23 11:45	8/23/23 12:03		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	8/24/23 18:45	8/25/23 00:51		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: CES***								
* Nitrogen, Nitrate/Nitrite	8/24/23 13:25	8/24/23 13:25		1	1.26	mg/L as N	0.20	0.3	
Analytical Method: SM 2320 B	***Analyst: DHC***								
* Alkalinity	8/30/23 13:30	8/30/23 15:33		1	20.7	mg CaCO3/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	8/23/23 11:20	8/24/23 13:00		1	2160	mg/L		125	
Analytical Method: SM 4500CO2 D	***Analyst: DHC***								
* Bicarbonate Alkalinity, (calc.)	8/30/23 13:30	8/30/23 15:33		1	20.7	mg CaCO3/L		1	A
* Carbonate Alkalinity, (calc.)	8/30/23 13:30	8/30/23 15:33		1	Not Detected	mg CaCO3/L		0.5	A
Analytical Method: SM 4500H+ B	***Analyst: DHC***								
Alkalinity pH Endpoint	8/30/23 13:30	8/30/23 15:33		1	4.46	SU		2	

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

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

Reported: 9/12/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gorgas Pooled Upgradient - MW-1 DUP

Location Code: WMWGORPU
Collected: 8/22/23 12:55
Customer ID:
Submittal Date: 8/23/23 08:53

Laboratory ID Number: BD16120

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	8/25/23 11:33	8/25/23 11:33		1	1.98	mg/L	1.00	2	J
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	8/29/23 10:14	8/29/23 10:14		1	2.38	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	8/29/23 14:11	8/29/23 14:11		1	0.168	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	8/23/23 13:50	8/23/23 13:50		50	1520	mg/L	30.0	100	
Analytical Method: Field Measurements	***Analyst: AWG***								
Conductivity	8/22/23 12:53	8/22/23 12:53			2206.04	uS/cm			FA
pH	8/22/23 12:53	8/22/23 12:53			4.92	SU			FA
Temperature	8/22/23 12:53	8/22/23 12:53			22.09	C			FA
Turbidity	8/22/23 12:53	8/22/23 12:53			1.06	NTU			FA
Sulfide	8/22/23 12:53	8/22/23 12:53			0	mg/L			FA

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 9/12/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGORPU
Sample Date: 8/22/23 12:55
Customer ID:
Delivery Date: 8/23/23 08:53

Description: Gorgas Pooled Upgradient - MW-1 DUP

Laboratory ID Number: BD16120

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD16124	Aluminum, Dissolved	mg/L	-0.000285	0.0198	0.100	0.105	0.100	0.105	0.0850 to 0.115	105	70.0 to 130	4.88	20.0
BD16125	Aluminum, Total	mg/L	0.000392	0.0198	0.100	0.106	0.103	0.107	0.0850 to 0.115	106	70.0 to 130	2.87	20.0
BD16124	Antimony, Dissolved	mg/L	0.000282	0.00100	0.100	0.0837	0.0870	0.0896	0.0850 to 0.115	83.7	70.0 to 130	3.87	20.0
BD16125	Antimony, Total	mg/L	0.000262	0.00100	0.100	0.0905	0.0891	0.0922	0.0850 to 0.115	90.5	70.0 to 130	1.56	20.0
BD16124	Arsenic, Dissolved	mg/L	0.0000059	0.000200	0.100	0.0995	0.0987	0.0980	0.0850 to 0.115	99.5	70.0 to 130	0.807	20.0
BD16125	Arsenic, Total	mg/L	-0.0000063	0.000200	0.100	0.0973	0.0966	0.0976	0.0850 to 0.115	97.3	70.0 to 130	0.722	20.0
BD16124	Barium, Dissolved	mg/L	0.0000062	0.00100	0.100	0.104	0.109	0.0998	0.0850 to 0.115	92.9	70.0 to 130	4.69	20.0
BD16125	Barium, Total	mg/L	-0.0000057	0.00100	0.100	0.0992	0.0965	0.0962	0.0850 to 0.115	99.2	70.0 to 130	2.76	20.0
BD16124	Beryllium, Dissolved	mg/L	0.0000210	0.000880	0.100	0.0871	0.0929	0.0963	0.0850 to 0.115	87.1	70.0 to 130	6.44	20.0
BD16125	Beryllium, Total	mg/L	0.0000186	0.000880	0.100	0.0863	0.0863	0.0895	0.0850 to 0.115	86.3	70.0 to 130	0.00	20.0
BD16124	Boron, Dissolved	mg/L	0.000039	0.0650	1.00	1.04	1.03	0.968	0.850 to 1.15	99.5	70.0 to 130	0.966	20.0
BD16125	Boron, Total	mg/L	0.000278	0.0650	1.00	0.959	0.961	0.965	0.850 to 1.15	95.9	70.0 to 130	0.208	20.0
BD16124	Cadmium, Dissolved	mg/L	0.0000046	0.000147	0.100	0.0915	0.0928	0.100	0.0850 to 0.115	91.5	70.0 to 130	1.41	20.0
BD16125	Cadmium, Total	mg/L	0.0000000	0.000147	0.100	0.0965	0.0992	0.0972	0.0850 to 0.115	96.5	70.0 to 130	2.76	20.0
BD16124	Calcium, Dissolved	mg/L	-0.0339	0.152	5.00	306	289	4.77	4.25 to 5.75	400	70.0 to 130	5.71	20.0
BD16125	Calcium, Total	mg/L	-0.0350	0.152	5.00	4.64	4.65	4.67	4.25 to 5.75	92.8	70.0 to 130	0.215	20.0
BD16125	Chloride	mg/L	-0.0231	1.00	10.0	9.99	10.1	10.6	9.00 to 11.0	99.9	80.0 to 120	1.10	20.0
BD16124	Chromium, Dissolved	mg/L	-0.0000820	0.000440	0.100	0.101	0.0985	0.102	0.0850 to 0.115	101	70.0 to 130	2.51	20.0
BD16125	Chromium, Total	mg/L	-0.0000845	0.000440	0.100	0.101	0.0987	0.100	0.0850 to 0.115	101	70.0 to 130	2.30	20.0
BD16124	Cobalt, Dissolved	mg/L	-0.0000349	0.000147	0.100	0.105	0.104	0.108	0.0850 to 0.115	105	70.0 to 130	0.957	20.0
BD16125	Cobalt, Total	mg/L	-0.0000385	0.000147	0.100	0.106	0.103	0.106	0.0850 to 0.115	106	70.0 to 130	2.87	20.0
BD16125	Fluoride	mg/L	0.0326	0.125	2.50	2.45	2.52	2.56	2.25 to 2.75	98.0	80.0 to 120	2.82	20.0
BD16124	Iron, Dissolved	mg/L	-0.000760	0.0176	0.2	0.188	0.186	0.193	0.170 to 0.230	94.0	70.0 to 130	1.07	20.0
BD16125	Iron, Total	mg/L	-0.000626	0.0176	0.2	0.192	0.192	0.192	0.170 to 0.230	96.0	70.0 to 130	0.00	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGORPU
Sample Date: 8/22/23 12:55
Customer ID:
Delivery Date: 8/23/23 08:53

Description: Gorgas Pooled Upgradient - MW-1 DUP

Laboratory ID Number: BD16120

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD16124	Lead, Dissolved	mg/L	0.0000066	0.000147	0.100	0.100	0.101	0.102	0.0850 to 0.115	100	70.0 to 130	0.995	20.0
BD16125	Lead, Total	mg/L	0.0000062	0.000147	0.100	0.104	0.109	0.106	0.0850 to 0.115	104	70.0 to 130	4.69	20.0
BD16124	Lithium, Dissolved	mg/L	0.000735	0.0154	0.200	0.256	0.253	0.199	0.170 to 0.230	107	70.0 to 130	1.18	20.0
BD16125	Lithium, Total	mg/L	0.000715	0.0154	0.200	0.196	0.200	0.199	0.170 to 0.230	98.0	70.0 to 130	2.02	20.0
BD16124	Magnesium, Dissolved	mg/L	-0.0148	0.0462	5.00	500	469	4.91	4.25 to 5.75	740	70.0 to 130	6.40	20.0
BD16125	Magnesium, Total	mg/L	-0.0222	0.0462	5.00	4.83	4.91	4.94	4.25 to 5.75	95.9	70.0 to 130	1.64	20.0
BD16124	Manganese, Dissolved	mg/L	-0.0000101	0.00033	0.100	0.102	0.101	0.104	0.0850 to 0.115	100	70.0 to 130	0.985	20.0
BD16125	Manganese, Total	mg/L	-0.0000022	0.00033	0.100	0.103	0.100	0.102	0.0850 to 0.115	103	70.0 to 130	2.96	20.0
BD16125	Mercury, Total by CVAA	mg/L	5.000E-05	0.000500	0.004	0.00401	0.00403	0.00399	0.00340 to 0.00460	100	70.0 to 130	0.498	20.0
BD16124	Molybdenum, Dissolved	mg/L	0.000379	0.0100	0.2	0.193	0.191	0.196	0.170 to 0.230	96.5	70.0 to 130	1.04	20.0
BD16125	Molybdenum, Total	mg/L	0.000	0.0100	0.2	0.194	0.195	0.194	0.170 to 0.230	97.0	70.0 to 130	0.514	20.0
BD16124	Potassium, Dissolved	mg/L	0.00753	0.367	10.0	19.6	19.2	11.1	8.50 to 11.5	109	70.0 to 130	2.06	20.0
BD16125	Potassium, Total	mg/L	0.0111	0.367	10.0	10.8	10.8	11.2	8.50 to 11.5	108	70.0 to 130	0.00	20.0
BD16124	Selenium, Dissolved	mg/L	0.0000265	0.00100	0.100	0.103	0.105	0.100	0.0850 to 0.115	101	70.0 to 130	1.92	20.0
BD16125	Selenium, Total	mg/L	-0.0000875	0.00100	0.100	0.101	0.102	0.102	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BD16124	Silicon, Dissolved	mg/L	0.000253	0.0440	1.00	6.64	6.63	0.981	0.850 to 1.15	95.0	70.0 to 130	0.151	20.0
BD16125	Silicon, Total	mg/L	0.000318	0.0440	1.00	0.974	0.975	0.971	0.850 to 1.15	97.4	70.0 to 130	0.103	20.0
BD16124	Sodium, Dissolved	mg/L	0.000918	0.0880	5.00	40.6	40.1	5.02	4.25 to 5.75	110	70.0 to 130	1.24	20.0
BD16125	Sodium, Total	mg/L	0.00245	0.0880	5.00	4.95	5.04	5.04	4.25 to 5.75	99.0	70.0 to 130	1.80	20.0
BD16125	Sulfate	mg/L	0.567	2.0	20.0	20.8	20.4	20.6	18.0 to 22.0	104	80.0 to 120	1.94	20.0
BD16124	Thallium, Dissolved	mg/L	-0.0000690	0.000147	0.100	0.103	0.0990	0.104	0.0850 to 0.115	103	70.0 to 130	3.96	20.0
BD16125	Thallium, Total	mg/L	-0.0000665	0.000147	0.100	0.105	0.110	0.108	0.0850 to 0.115	105	70.0 to 130	4.65	20.0
BD16125	Total Organic Carbon	mg/L	0.143	1.00	10.0	9.33	9.52	24.6		93.3	80.0 to 120	2.02	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Alabama Power

Batch QC Summary

Customer Account: WMWGORPU
Sample Date: 8/22/23 12:55
Customer ID:
Delivery Date: 8/23/23 08:53

Description: Gorgas Pooled Upgradient - MW-1 DUP

Laboratory ID Number: BD16120

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD16124	Alkalinity	mg CaCO3/L					172	51.6	45.0 to 55.0			0.00	10.0
BD16125	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.03	0.200	2.00	1.95	-0.053	2.06	1.80 to 2.20	97.5	90.0 to 110	0.00	15.0
BD16122	Solids, Dissolved	mg/L	2.00	25.0			4850	53.0	40.0 to 60.0			0.620	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gorgas Pooled Upgradient - MW-2

Location Code: WMWGORPU
Collected: 8/22/23 13:52
Customer ID:
Submittal Date: 8/23/23 08:53

Laboratory ID Number: BD16121

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	8/23/23 14:50	8/24/23 14:02		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	8/23/23 14:50	8/25/23 11:33		10.15	168	mg/L	0.70035	4.06	
* Iron, Total	8/23/23 14:50	8/24/23 14:02		1.015	3.22	mg/L	0.008120	0.0406	
* Lithium, Total	8/23/23 14:50	8/24/23 14:02		1.015	0.0404	mg/L	0.007105	0.01999956	
* Magnesium, Total	8/23/23 14:50	8/25/23 11:33		10.15	191	mg/L	0.21315	4.06	
* Molybdenum, Total	8/23/23 14:50	8/24/23 14:02		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Total (calc.)	8/23/23 14:50	8/24/23 14:02		1	12.2	mg/L			
* Silicon, Total	8/23/23 14:50	8/24/23 14:02		1.015	5.70	mg/L	0.02030	0.25375	
* Sodium, Total	8/23/23 14:50	8/24/23 14:02		1.015	18.2	mg/L	0.04060	0.406	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	8/23/23 11:45	8/24/23 14:43		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Dissolved	8/23/23 11:45	8/25/23 11:58		10.15	173	mg/L	0.70035	4.06	
* Iron, Dissolved	8/23/23 11:45	8/24/23 14:43		1.015	2.92	mg/L	0.008120	0.0406	
* Lithium, Dissolved	8/23/23 11:45	8/24/23 14:43		1.015	0.0394	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	8/23/23 11:45	8/25/23 11:58		10.15	197	mg/L	0.21315	4.06	
* Molybdenum, Dissolved	8/23/23 11:45	8/24/23 14:43		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Dissolved (calc.)	8/23/23 11:45	8/24/23 14:43		1	12.0	mg/L			
* Silicon, Dissolved	8/23/23 11:45	8/24/23 14:43		1.015	5.61	mg/L	0.02030	0.25375	
* Sodium, Dissolved	8/23/23 11:45	8/24/23 14:43		1.015	17.8	mg/L	0.04060	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	8/23/23 14:50	8/23/23 16:12		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Arsenic, Total	8/23/23 14:50	8/23/23 16:12		1.015	0.000371	mg/L	0.000112	0.000203	
* Aluminum, Total	8/23/23 14:50	8/24/23 17:06		1.015	0.0309	mg/L	0.009135	0.05075	J
* Barium, Total	8/23/23 14:50	8/23/23 16:12		1.015	0.0134	mg/L	0.000508	0.001015	
* Beryllium, Total	8/23/23 14:50	8/23/23 16:12		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	8/23/23 14:50	8/23/23 16:12		1.015	0.0000854	mg/L	0.000068	0.000203	J
* Chromium, Total	8/23/23 14:50	8/23/23 16:12		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	8/23/23 14:50	8/23/23 16:12		1.015	0.0434	mg/L	0.000068	0.000203	
* Lead, Total	8/23/23 14:50	8/23/23 16:12		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	8/23/23 14:50	8/23/23 16:55		10.15	8.13	mg/L	0.001522	0.01015	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gorgas Pooled Upgradient - MW-2

Location Code: WMWGORPU
Collected: 8/22/23 13:52
Customer ID:
Submittal Date: 8/23/23 08:53

Laboratory ID Number: BD16121

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	8/23/23 14:50	8/23/23 16:12		1.015	6.25	mg/L	0.169505	0.5075	
* Selenium, Total	8/23/23 14:50	8/23/23 16:12		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	8/23/23 14:50	8/23/23 16:12		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	8/23/23 11:45	8/23/23 12:07		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	8/23/23 11:45	8/23/23 12:07		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Dissolved	8/23/23 11:45	8/23/23 12:07		1.015	0.000257	mg/L	0.000112	0.000203	
* Barium, Dissolved	8/23/23 11:45	8/23/23 12:07		1.015	0.0133	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	8/23/23 11:45	8/23/23 12:07		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	8/23/23 11:45	8/23/23 12:07		1.015	0.0000817	mg/L	0.000068	0.000203	J
* Chromium, Dissolved	8/23/23 11:45	8/23/23 12:07		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	8/23/23 11:45	8/23/23 12:07		1.015	0.0439	mg/L	0.000068	0.000203	
* Lead, Dissolved	8/23/23 11:45	8/23/23 12:07		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	8/23/23 11:45	8/23/23 13:32		10.15	8.05	mg/L	0.001522	0.01015	
* Potassium, Dissolved	8/23/23 11:45	8/23/23 12:07		1.015	6.22	mg/L	0.169505	0.5075	
* Selenium, Dissolved	8/23/23 11:45	8/23/23 12:07		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	8/23/23 11:45	8/23/23 12:07		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	8/24/23 18:45	8/25/23 00:55		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: CES***								
* Nitrogen, Nitrate/Nitrite	8/24/23 13:31	8/24/23 13:31		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: DHC***								
* Alkalinity	8/30/23 13:30	8/30/23 15:33		1	247	mg CaCO3/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	8/23/23 11:20	8/24/23 13:00		1	1520	mg/L		100	
Analytical Method: SM 4500CO2 D	***Analyst: DHC***								
* Bicarbonate Alkalinity, (calc.)	8/30/23 13:30	8/30/23 15:33		1	247	mg CaCO3/L		1	A
* Carbonate Alkalinity, (calc.)	8/30/23 13:30	8/30/23 15:33		1	Not Detected	mg CaCO3/L		0.5	A
Analytical Method: SM 4500H+ B	***Analyst: DHC***								
Alkalinity pH Endpoint	8/30/23 13:30	8/30/23 15:33		1	4.48	SU		2	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 9/12/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gorgas Pooled Upgradient - MW-2

Location Code: WMWGORPU
Collected: 8/22/23 13:52
Customer ID:
Submittal Date: 8/23/23 08:53

Laboratory ID Number: BD16121

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	8/25/23 11:47	8/25/23 11:47		1	3.72	mg/L	1.00	2	
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	8/29/23 10:15	8/29/23 10:15		1	3.13	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	8/29/23 14:12	8/29/23 14:12		1	0.184	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	8/23/23 13:51	8/23/23 13:51		40	912	mg/L	24.0	80	
Analytical Method: Field Measurements	***Analyst: AWG***								
Conductivity	8/22/23 13:48	8/22/23 13:48			1720.05	uS/cm			FA
pH	8/22/23 13:48	8/22/23 13:48			5.81	SU			FA
Temperature	8/22/23 13:48	8/22/23 13:48			21.04	C			FA
Turbidity	8/22/23 13:48	8/22/23 13:48			2.91	NTU			FA
Sulfide	8/22/23 13:48	8/22/23 13:48			0	mg/L			FA

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 9/12/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGORPU
Sample Date: 8/22/23 13:52
Customer ID:
Delivery Date: 8/23/23 08:53

Description: Gorgas Pooled Upgradient - MW-2

Laboratory ID Number: BD16121

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD16124	Aluminum, Dissolved	mg/L	-0.000285	0.0198	0.100	0.105	0.100	0.105	0.0850 to 0.115	105	70.0 to 130	4.88	20.0
BD16125	Aluminum, Total	mg/L	0.000392	0.0198	0.100	0.106	0.103	0.107	0.0850 to 0.115	106	70.0 to 130	2.87	20.0
BD16124	Antimony, Dissolved	mg/L	0.000282	0.00100	0.100	0.0837	0.0870	0.0896	0.0850 to 0.115	83.7	70.0 to 130	3.87	20.0
BD16125	Antimony, Total	mg/L	0.000262	0.00100	0.100	0.0905	0.0891	0.0922	0.0850 to 0.115	90.5	70.0 to 130	1.56	20.0
BD16124	Arsenic, Dissolved	mg/L	0.0000059	0.000200	0.100	0.0995	0.0987	0.0980	0.0850 to 0.115	99.5	70.0 to 130	0.807	20.0
BD16125	Arsenic, Total	mg/L	-0.0000063	0.000200	0.100	0.0973	0.0966	0.0976	0.0850 to 0.115	97.3	70.0 to 130	0.722	20.0
BD16124	Barium, Dissolved	mg/L	0.0000062	0.00100	0.100	0.104	0.109	0.0998	0.0850 to 0.115	92.9	70.0 to 130	4.69	20.0
BD16125	Barium, Total	mg/L	-0.0000057	0.00100	0.100	0.0992	0.0965	0.0962	0.0850 to 0.115	99.2	70.0 to 130	2.76	20.0
BD16124	Beryllium, Dissolved	mg/L	0.0000210	0.000880	0.100	0.0871	0.0929	0.0963	0.0850 to 0.115	87.1	70.0 to 130	6.44	20.0
BD16125	Beryllium, Total	mg/L	0.0000186	0.000880	0.100	0.0863	0.0863	0.0895	0.0850 to 0.115	86.3	70.0 to 130	0.00	20.0
BD16124	Boron, Dissolved	mg/L	0.000039	0.0650	1.00	1.04	1.03	0.968	0.850 to 1.15	99.5	70.0 to 130	0.966	20.0
BD16125	Boron, Total	mg/L	0.000278	0.0650	1.00	0.959	0.961	0.965	0.850 to 1.15	95.9	70.0 to 130	0.208	20.0
BD16124	Cadmium, Dissolved	mg/L	0.0000046	0.000147	0.100	0.0915	0.0928	0.100	0.0850 to 0.115	91.5	70.0 to 130	1.41	20.0
BD16125	Cadmium, Total	mg/L	0.0000000	0.000147	0.100	0.0965	0.0992	0.0972	0.0850 to 0.115	96.5	70.0 to 130	2.76	20.0
BD16124	Calcium, Dissolved	mg/L	-0.0339	0.152	5.00	306	289	4.77	4.25 to 5.75	400	70.0 to 130	5.71	20.0
BD16125	Calcium, Total	mg/L	-0.0350	0.152	5.00	4.64	4.65	4.67	4.25 to 5.75	92.8	70.0 to 130	0.215	20.0
BD16125	Chloride	mg/L	-0.0231	1.00	10.0	9.99	10.1	10.6	9.00 to 11.0	99.9	80.0 to 120	1.10	20.0
BD16124	Chromium, Dissolved	mg/L	-0.0000820	0.000440	0.100	0.101	0.0985	0.102	0.0850 to 0.115	101	70.0 to 130	2.51	20.0
BD16125	Chromium, Total	mg/L	-0.0000845	0.000440	0.100	0.101	0.0987	0.100	0.0850 to 0.115	101	70.0 to 130	2.30	20.0
BD16124	Cobalt, Dissolved	mg/L	-0.0000349	0.000147	0.100	0.105	0.104	0.108	0.0850 to 0.115	105	70.0 to 130	0.957	20.0
BD16125	Cobalt, Total	mg/L	-0.0000385	0.000147	0.100	0.106	0.103	0.106	0.0850 to 0.115	106	70.0 to 130	2.87	20.0
BD16125	Fluoride	mg/L	0.0326	0.125	2.50	2.45	2.52	2.56	2.25 to 2.75	98.0	80.0 to 120	2.82	20.0
BD16124	Iron, Dissolved	mg/L	-0.000760	0.0176	0.2	0.188	0.186	0.193	0.170 to 0.230	94.0	70.0 to 130	1.07	20.0
BD16125	Iron, Total	mg/L	-0.000626	0.0176	0.2	0.192	0.192	0.192	0.170 to 0.230	96.0	70.0 to 130	0.00	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGORPU
Sample Date: 8/22/23 13:52
Customer ID:
Delivery Date: 8/23/23 08:53

Description: Gorgas Pooled Upgradient - MW-2

Laboratory ID Number: BD16121

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD16124	Lead, Dissolved	mg/L	0.0000066	0.000147	0.100	0.100	0.101	0.102	0.0850 to 0.115	100	70.0 to 130	0.995	20.0
BD16125	Lead, Total	mg/L	0.0000062	0.000147	0.100	0.104	0.109	0.106	0.0850 to 0.115	104	70.0 to 130	4.69	20.0
BD16124	Lithium, Dissolved	mg/L	0.000735	0.0154	0.200	0.256	0.253	0.199	0.170 to 0.230	107	70.0 to 130	1.18	20.0
BD16125	Lithium, Total	mg/L	0.000715	0.0154	0.200	0.196	0.200	0.199	0.170 to 0.230	98.0	70.0 to 130	2.02	20.0
BD16124	Magnesium, Dissolved	mg/L	-0.0148	0.0462	5.00	500	469	4.91	4.25 to 5.75	740	70.0 to 130	6.40	20.0
BD16125	Magnesium, Total	mg/L	-0.0222	0.0462	5.00	4.83	4.91	4.94	4.25 to 5.75	95.9	70.0 to 130	1.64	20.0
BD16124	Manganese, Dissolved	mg/L	-0.0000101	0.00033	0.100	0.102	0.101	0.104	0.0850 to 0.115	100	70.0 to 130	0.985	20.0
BD16125	Manganese, Total	mg/L	-0.0000022	0.00033	0.100	0.103	0.100	0.102	0.0850 to 0.115	103	70.0 to 130	2.96	20.0
BD16125	Mercury, Total by CVAA	mg/L	5.000E-05	0.000500	0.004	0.00401	0.00403	0.00399	0.00340 to 0.00460	100	70.0 to 130	0.498	20.0
BD16124	Molybdenum, Dissolved	mg/L	0.000379	0.0100	0.2	0.193	0.191	0.196	0.170 to 0.230	96.5	70.0 to 130	1.04	20.0
BD16125	Molybdenum, Total	mg/L	0.000	0.0100	0.2	0.194	0.195	0.194	0.170 to 0.230	97.0	70.0 to 130	0.514	20.0
BD16124	Potassium, Dissolved	mg/L	0.00753	0.367	10.0	19.6	19.2	11.1	8.50 to 11.5	109	70.0 to 130	2.06	20.0
BD16125	Potassium, Total	mg/L	0.0111	0.367	10.0	10.8	10.8	11.2	8.50 to 11.5	108	70.0 to 130	0.00	20.0
BD16124	Selenium, Dissolved	mg/L	0.0000265	0.00100	0.100	0.103	0.105	0.100	0.0850 to 0.115	101	70.0 to 130	1.92	20.0
BD16125	Selenium, Total	mg/L	-0.0000875	0.00100	0.100	0.101	0.102	0.102	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BD16124	Silicon, Dissolved	mg/L	0.000253	0.0440	1.00	6.64	6.63	0.981	0.850 to 1.15	95.0	70.0 to 130	0.151	20.0
BD16125	Silicon, Total	mg/L	0.000318	0.0440	1.00	0.974	0.975	0.971	0.850 to 1.15	97.4	70.0 to 130	0.103	20.0
BD16124	Sodium, Dissolved	mg/L	0.000918	0.0880	5.00	40.6	40.1	5.02	4.25 to 5.75	110	70.0 to 130	1.24	20.0
BD16125	Sodium, Total	mg/L	0.00245	0.0880	5.00	4.95	5.04	5.04	4.25 to 5.75	99.0	70.0 to 130	1.80	20.0
BD16125	Sulfate	mg/L	0.567	2.0	20.0	20.8	20.4	20.6	18.0 to 22.0	104	80.0 to 120	1.94	20.0
BD16124	Thallium, Dissolved	mg/L	-0.0000690	0.000147	0.100	0.103	0.0990	0.104	0.0850 to 0.115	103	70.0 to 130	3.96	20.0
BD16125	Thallium, Total	mg/L	-0.0000665	0.000147	0.100	0.105	0.110	0.108	0.0850 to 0.115	105	70.0 to 130	4.65	20.0
BD16125	Total Organic Carbon	mg/L	0.143	1.00	10.0	9.33	9.52	24.6		93.3	80.0 to 120	2.02	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Alabama Power

Batch QC Summary

Customer Account: WMWGORPU
Sample Date: 8/22/23 13:52
Customer ID:
Delivery Date: 8/23/23 08:53

Description: Gorgas Pooled Upgradient - MW-2

Laboratory ID Number: BD16121

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD16124	Alkalinity	mg CaCO3/L					172	51.6	45.0 to 55.0			0.00	10.0
BD16125	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.03	0.200	2.00	1.95	-0.053	2.06	1.80 to 2.20	97.5	90.0 to 110	0.00	15.0
BD16122	Solids, Dissolved	mg/L	2.00	25.0			4850	53.0	40.0 to 60.0			0.620	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gorgas Pooled Upgradient - MW-3

Location Code: WMWGORPU
Collected: 8/22/23 15:04
Customer ID:
Submittal Date: 8/23/23 08:53

Laboratory ID Number: BD16122

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	8/23/23 14:50	8/24/23 14:05		1.015	0.0373	mg/L	0.030000	0.1015	J
* Calcium, Total	8/23/23 14:50	8/25/23 11:39		101.5	359	mg/L	7.0035	40.6	
* Iron, Total	8/23/23 14:50	8/25/23 11:36		10.15	6.78	mg/L	0.08120	0.406	
* Lithium, Total	8/23/23 14:50	8/24/23 14:05		1.015	0.316	mg/L	0.007105	0.01999956	
* Magnesium, Total	8/23/23 14:50	8/25/23 11:39		101.5	551	mg/L	2.1315	40.6	
* Molybdenum, Total	8/23/23 14:50	8/24/23 14:05		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Total (calc.)	8/23/23 14:50	8/25/23 11:36		1	54.8	mg/L			
* Silicon, Total	8/23/23 14:50	8/25/23 11:36		10.15	25.6	mg/L	0.2030	2.5375	
* Sodium, Total	8/23/23 14:50	8/25/23 11:36		10.15	61.8	mg/L	0.4060	4.06	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	8/23/23 11:45	8/24/23 14:46		1.015	0.0360	mg/L	0.030000	0.1015	J
* Calcium, Dissolved	8/23/23 11:45	8/25/23 12:05		101.5	397	mg/L	7.0035	40.6	
* Iron, Dissolved	8/23/23 11:45	8/25/23 12:01		10.15	11.7	mg/L	0.08120	0.406	
* Lithium, Dissolved	8/23/23 11:45	8/24/23 14:46		1.015	0.318	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	8/23/23 11:45	8/25/23 12:05		101.5	616	mg/L	2.1315	40.6	
* Molybdenum, Dissolved	8/23/23 11:45	8/24/23 14:46		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Dissolved (calc.)	8/23/23 11:45	8/25/23 12:01		1	55.6	mg/L			
* Silicon, Dissolved	8/23/23 11:45	8/25/23 12:01		10.15	26.0	mg/L	0.2030	2.5375	
* Sodium, Dissolved	8/23/23 11:45	8/25/23 12:01		10.15	61.7	mg/L	0.4060	4.06	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	8/23/23 14:50	8/23/23 16:16		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Total	8/23/23 14:50	8/24/23 17:09		1.015	2.48	mg/L	0.009135	0.05075	
* Arsenic, Total	8/23/23 14:50	8/23/23 16:16		1.015	0.00361	mg/L	0.000112	0.000203	
* Barium, Total	8/23/23 14:50	8/23/23 16:16		1.015	0.0158	mg/L	0.000508	0.001015	
* Beryllium, Total	8/23/23 14:50	8/23/23 16:16		1.015	0.00277	mg/L	0.000406	0.001015	
* Cadmium, Total	8/23/23 14:50	8/23/23 16:16		1.015	0.00867	mg/L	0.000068	0.000203	
* Chromium, Total	8/23/23 14:50	8/23/23 16:16		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	8/23/23 14:50	8/23/23 16:16		1.015	0.529	mg/L	0.000068	0.000203	
* Lead, Total	8/23/23 14:50	8/23/23 16:16		1.015	0.000105	mg/L	0.000068	0.000203	J
* Manganese, Total	8/23/23 14:50	8/23/23 16:58		10.15	11.7	mg/L	0.001522	0.01015	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 9/12/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gorgas Pooled Upgradient - MW-3

Location Code: WMWGORPU
Collected: 8/22/23 15:04
Customer ID:
Submittal Date: 8/23/23 08:53

Laboratory ID Number: BD16122

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	8/23/23 14:50	8/23/23 16:16		1.015	9.74	mg/L	0.169505	0.5075	
* Selenium, Total	8/23/23 14:50	8/23/23 16:16		1.015	0.0147	mg/L	0.000508	0.001015	
* Thallium, Total	8/23/23 14:50	8/23/23 16:16		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	8/23/23 11:45	8/23/23 12:10		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	8/23/23 11:45	8/23/23 12:10		1.015	3.06	mg/L	0.009135	0.05075	
* Arsenic, Dissolved	8/23/23 11:45	8/23/23 12:10		1.015	0.00393	mg/L	0.000112	0.000203	
* Barium, Dissolved	8/23/23 11:45	8/23/23 12:10		1.015	0.0151	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	8/23/23 11:45	8/23/23 12:10		1.015	0.00494	mg/L	0.000406	0.001015	
* Cadmium, Dissolved	8/23/23 11:45	8/23/23 12:10		1.015	0.00883	mg/L	0.000068	0.000203	
* Chromium, Dissolved	8/23/23 11:45	8/23/23 12:10		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	8/23/23 11:45	8/23/23 12:10		1.015	0.516	mg/L	0.000068	0.000203	
* Lead, Dissolved	8/23/23 11:45	8/23/23 12:10		1.015	0.0000974	mg/L	0.000068	0.000203	J
* Manganese, Dissolved	8/23/23 11:45	8/23/23 13:35		10.15	11.0	mg/L	0.001522	0.01015	
* Potassium, Dissolved	8/23/23 11:45	8/23/23 12:10		1.015	9.46	mg/L	0.169505	0.5075	
* Selenium, Dissolved	8/23/23 11:45	8/23/23 12:10		1.015	0.0150	mg/L	0.000508	0.001015	
* Thallium, Dissolved	8/23/23 11:45	8/23/23 12:10		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	8/24/23 18:45	8/25/23 00:59		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: CES***								
* Nitrogen, Nitrate/Nitrite	8/24/23 13:31	8/24/23 13:31		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: DHC***								
* Alkalinity	8/30/23 13:30	8/30/23 15:33		1	9.75	mg CaCO3/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	8/23/23 11:20	8/24/23 13:00		1	4820	mg/L		250	
Analytical Method: SM 4500CO2 D	***Analyst: DHC***								
* Bicarbonate Alkalinity, (calc.)	8/30/23 13:30	8/30/23 15:33		1	9.75	mg CaCO3/L		1	A
* Carbonate Alkalinity, (calc.)	8/30/23 13:30	8/30/23 15:33		1	Not Detected	mg CaCO3/L		0.5	A
Analytical Method: SM 4500H+ B	***Analyst: DHC***								
Alkalinity pH Endpoint	8/30/23 13:30	8/30/23 15:33		1	4.23	SU		2	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gorgas Pooled Upgradient - MW-3

Location Code: WMWGORPU
Collected: 8/22/23 15:04
Customer ID:
Submittal Date: 8/23/23 08:53

Laboratory ID Number: BD16122

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	8/25/23 12:01	8/25/23 12:01		1	1.49	mg/L	1.00	2	J
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	8/29/23 10:16	8/29/23 10:16		1	1.31	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	8/29/23 14:14	8/29/23 14:14		1	0.283	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	8/23/23 13:52	8/23/23 13:52		100	3140	mg/L	60.0	200	
Analytical Method: Field Measurements	***Analyst: AWG***								
Conductivity	8/22/23 15:00	8/22/23 15:00			4080.83	uS/cm			FA
pH	8/22/23 15:00	8/22/23 15:00			5.04	SU			FA
Temperature	8/22/23 15:00	8/22/23 15:00			30.15	C			FA
Turbidity	8/22/23 15:00	8/22/23 15:00			5.66	NTU			FA
Sulfide	8/22/23 15:00	8/22/23 15:00			0	mg/L			FA

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGORPU
Sample Date: 8/22/23 15:04
Customer ID:
Delivery Date: 8/23/23 08:53

Description: Gorgas Pooled Upgradient - MW-3

Laboratory ID Number: BD16122

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD16124	Aluminum, Dissolved	mg/L	-0.000285	0.0198	0.100	0.105	0.100	0.105	0.0850 to 0.115	105	70.0 to 130	4.88	20.0
BD16125	Aluminum, Total	mg/L	0.000392	0.0198	0.100	0.106	0.103	0.107	0.0850 to 0.115	106	70.0 to 130	2.87	20.0
BD16124	Antimony, Dissolved	mg/L	0.000282	0.00100	0.100	0.0837	0.0870	0.0896	0.0850 to 0.115	83.7	70.0 to 130	3.87	20.0
BD16125	Antimony, Total	mg/L	0.000262	0.00100	0.100	0.0905	0.0891	0.0922	0.0850 to 0.115	90.5	70.0 to 130	1.56	20.0
BD16124	Arsenic, Dissolved	mg/L	0.0000059	0.000200	0.100	0.0995	0.0987	0.0980	0.0850 to 0.115	99.5	70.0 to 130	0.807	20.0
BD16125	Arsenic, Total	mg/L	-0.0000063	0.000200	0.100	0.0973	0.0966	0.0976	0.0850 to 0.115	97.3	70.0 to 130	0.722	20.0
BD16124	Barium, Dissolved	mg/L	0.0000062	0.00100	0.100	0.104	0.109	0.0998	0.0850 to 0.115	92.9	70.0 to 130	4.69	20.0
BD16125	Barium, Total	mg/L	-0.0000057	0.00100	0.100	0.0992	0.0965	0.0962	0.0850 to 0.115	99.2	70.0 to 130	2.76	20.0
BD16124	Beryllium, Dissolved	mg/L	0.0000210	0.000880	0.100	0.0871	0.0929	0.0963	0.0850 to 0.115	87.1	70.0 to 130	6.44	20.0
BD16125	Beryllium, Total	mg/L	0.0000186	0.000880	0.100	0.0863	0.0863	0.0895	0.0850 to 0.115	86.3	70.0 to 130	0.00	20.0
BD16124	Boron, Dissolved	mg/L	0.000039	0.0650	1.00	1.04	1.03	0.968	0.850 to 1.15	99.5	70.0 to 130	0.966	20.0
BD16125	Boron, Total	mg/L	0.000278	0.0650	1.00	0.959	0.961	0.965	0.850 to 1.15	95.9	70.0 to 130	0.208	20.0
BD16124	Cadmium, Dissolved	mg/L	0.0000046	0.000147	0.100	0.0915	0.0928	0.100	0.0850 to 0.115	91.5	70.0 to 130	1.41	20.0
BD16125	Cadmium, Total	mg/L	0.0000000	0.000147	0.100	0.0965	0.0992	0.0972	0.0850 to 0.115	96.5	70.0 to 130	2.76	20.0
BD16124	Calcium, Dissolved	mg/L	-0.0339	0.152	5.00	306	289	4.77	4.25 to 5.75	400	70.0 to 130	5.71	20.0
BD16125	Calcium, Total	mg/L	-0.0350	0.152	5.00	4.64	4.65	4.67	4.25 to 5.75	92.8	70.0 to 130	0.215	20.0
BD16125	Chloride	mg/L	-0.0231	1.00	10.0	9.99	10.1	10.6	9.00 to 11.0	99.9	80.0 to 120	1.10	20.0
BD16124	Chromium, Dissolved	mg/L	-0.0000820	0.000440	0.100	0.101	0.0985	0.102	0.0850 to 0.115	101	70.0 to 130	2.51	20.0
BD16125	Chromium, Total	mg/L	-0.0000845	0.000440	0.100	0.101	0.0987	0.100	0.0850 to 0.115	101	70.0 to 130	2.30	20.0
BD16124	Cobalt, Dissolved	mg/L	-0.0000349	0.000147	0.100	0.105	0.104	0.108	0.0850 to 0.115	105	70.0 to 130	0.957	20.0
BD16125	Cobalt, Total	mg/L	-0.0000385	0.000147	0.100	0.106	0.103	0.106	0.0850 to 0.115	106	70.0 to 130	2.87	20.0
BD16125	Fluoride	mg/L	0.0326	0.125	2.50	2.45	2.52	2.56	2.25 to 2.75	98.0	80.0 to 120	2.82	20.0
BD16124	Iron, Dissolved	mg/L	-0.000760	0.0176	0.2	0.188	0.186	0.193	0.170 to 0.230	94.0	70.0 to 130	1.07	20.0
BD16125	Iron, Total	mg/L	-0.000626	0.0176	0.2	0.192	0.192	0.192	0.170 to 0.230	96.0	70.0 to 130	0.00	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGORPU
Sample Date: 8/22/23 15:04
Customer ID:
Delivery Date: 8/23/23 08:53

Description: Gorgas Pooled Upgradient - MW-3

Laboratory ID Number: BD16122

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD16124	Lead, Dissolved	mg/L	0.0000066	0.000147	0.100	0.100	0.101	0.102	0.0850 to 0.115	100	70.0 to 130	0.995	20.0
BD16125	Lead, Total	mg/L	0.0000062	0.000147	0.100	0.104	0.109	0.106	0.0850 to 0.115	104	70.0 to 130	4.69	20.0
BD16124	Lithium, Dissolved	mg/L	0.000735	0.0154	0.200	0.256	0.253	0.199	0.170 to 0.230	107	70.0 to 130	1.18	20.0
BD16125	Lithium, Total	mg/L	0.000715	0.0154	0.200	0.196	0.200	0.199	0.170 to 0.230	98.0	70.0 to 130	2.02	20.0
BD16124	Magnesium, Dissolved	mg/L	-0.0148	0.0462	5.00	500	469	4.91	4.25 to 5.75	740	70.0 to 130	6.40	20.0
BD16125	Magnesium, Total	mg/L	-0.0222	0.0462	5.00	4.83	4.91	4.94	4.25 to 5.75	95.9	70.0 to 130	1.64	20.0
BD16124	Manganese, Dissolved	mg/L	-0.0000101	0.00033	0.100	0.102	0.101	0.104	0.0850 to 0.115	100	70.0 to 130	0.985	20.0
BD16125	Manganese, Total	mg/L	-0.0000022	0.00033	0.100	0.103	0.100	0.102	0.0850 to 0.115	103	70.0 to 130	2.96	20.0
BD16125	Mercury, Total by CVAA	mg/L	5.000E-05	0.000500	0.004	0.00401	0.00403	0.00399	0.00340 to 0.00460	100	70.0 to 130	0.498	20.0
BD16124	Molybdenum, Dissolved	mg/L	0.000379	0.0100	0.2	0.193	0.191	0.196	0.170 to 0.230	96.5	70.0 to 130	1.04	20.0
BD16125	Molybdenum, Total	mg/L	0.000	0.0100	0.2	0.194	0.195	0.194	0.170 to 0.230	97.0	70.0 to 130	0.514	20.0
BD16124	Potassium, Dissolved	mg/L	0.00753	0.367	10.0	19.6	19.2	11.1	8.50 to 11.5	109	70.0 to 130	2.06	20.0
BD16125	Potassium, Total	mg/L	0.0111	0.367	10.0	10.8	10.8	11.2	8.50 to 11.5	108	70.0 to 130	0.00	20.0
BD16124	Selenium, Dissolved	mg/L	0.0000265	0.00100	0.100	0.103	0.105	0.100	0.0850 to 0.115	101	70.0 to 130	1.92	20.0
BD16125	Selenium, Total	mg/L	-0.0000875	0.00100	0.100	0.101	0.102	0.102	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BD16124	Silicon, Dissolved	mg/L	0.000253	0.0440	1.00	6.64	6.63	0.981	0.850 to 1.15	95.0	70.0 to 130	0.151	20.0
BD16125	Silicon, Total	mg/L	0.000318	0.0440	1.00	0.974	0.975	0.971	0.850 to 1.15	97.4	70.0 to 130	0.103	20.0
BD16124	Sodium, Dissolved	mg/L	0.000918	0.0880	5.00	40.6	40.1	5.02	4.25 to 5.75	110	70.0 to 130	1.24	20.0
BD16125	Sodium, Total	mg/L	0.00245	0.0880	5.00	4.95	5.04	5.04	4.25 to 5.75	99.0	70.0 to 130	1.80	20.0
BD16125	Sulfate	mg/L	0.567	2.0	20.0	20.8	20.4	20.6	18.0 to 22.0	104	80.0 to 120	1.94	20.0
BD16124	Thallium, Dissolved	mg/L	-0.0000690	0.000147	0.100	0.103	0.0990	0.104	0.0850 to 0.115	103	70.0 to 130	3.96	20.0
BD16125	Thallium, Total	mg/L	-0.0000665	0.000147	0.100	0.105	0.110	0.108	0.0850 to 0.115	105	70.0 to 130	4.65	20.0
BD16125	Total Organic Carbon	mg/L	0.143	1.00	10.0	9.33	9.52	24.6		93.3	80.0 to 120	2.02	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Alabama Power

Batch QC Summary

Customer Account: WMWGORPU
Sample Date: 8/22/23 15:04
Customer ID:
Delivery Date: 8/23/23 08:53

Description: Gorgas Pooled Upgradient - MW-3

Laboratory ID Number: BD16122

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD16124	Alkalinity	mg CaCO3/L					172	51.6	45.0 to 55.0			0.00	10.0
BD16125	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.03	0.200	2.00	1.95	-0.053	2.06	1.80 to 2.20	97.5	90.0 to 110	0.00	15.0
BD16122	Solids, Dissolved	mg/L	2.00	25.0			4850	53.0	40.0 to 60.0			0.620	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gorgas Pooled Upgradient Field Blank-1

Location Code: WMWGORPUFB
Collected: 8/22/23 16:08
Customer ID:
Submittal Date: 8/23/23 08:54

Laboratory ID Number: BD16123

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	8/23/23 14:50	8/24/23 14:08		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	8/23/23 14:50	8/24/23 14:08		1.015	Not Detected	mg/L	0.070035	0.406	U
* Iron, Total	8/23/23 14:50	8/24/23 14:08		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Total	8/23/23 14:50	8/24/23 14:08		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	8/23/23 14:50	8/24/23 14:08		1.015	0.0297	mg/L	0.021315	0.406	J
* Molybdenum, Total	8/23/23 14:50	8/24/23 14:08		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Total (calc.)	8/23/23 14:50	8/24/23 14:08		1	Not Detected	mg/L			
* Silicon, Total	8/23/23 14:50	8/24/23 14:08		1.015	Not Detected	mg/L	0.02030	0.25375	U
* Sodium, Total	8/23/23 14:50	8/24/23 14:08		1.015	Not Detected	mg/L	0.04060	0.406	U
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	8/23/23 14:50	8/23/23 16:19		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Arsenic, Total	8/23/23 14:50	8/23/23 16:19		1.015	Not Detected	mg/L	0.000112	0.000203	U
* Aluminum, Total	8/23/23 14:50	8/24/23 17:13		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Barium, Total	8/23/23 14:50	8/23/23 16:19		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Beryllium, Total	8/23/23 14:50	8/23/23 16:19		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	8/23/23 14:50	8/23/23 16:19		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	8/23/23 14:50	8/23/23 16:19		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	8/23/23 14:50	8/23/23 16:19		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	8/23/23 14:50	8/23/23 16:19		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	8/23/23 14:50	8/23/23 16:19		1.015	0.000400	mg/L	0.000152	0.001015	J
* Potassium, Total	8/23/23 14:50	8/23/23 16:19		1.015	Not Detected	mg/L	0.169505	0.5075	U
* Selenium, Total	8/23/23 14:50	8/23/23 16:19		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	8/23/23 14:50	8/23/23 16:19		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	8/24/23 18:45	8/25/23 01:03		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: CES***								
* Nitrogen, Nitrate/Nitrite	8/24/23 13:32	8/24/23 13:32		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	8/23/23 11:20	8/24/23 13:00		1	Not Detected	mg/L		25	U

MDL's and RL's are adjusted for sample dilution, as applicable

Comments:

Reported: 9/12/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gorgas Pooled Upgradient Field Blank-1

Location Code: WMWGORPUFB
Collected: 8/22/23 16:08
Customer ID:
Submittal Date: 8/23/23 08:54

Laboratory ID Number: BD16123

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	8/25/23 12:16	8/25/23 12:16		1	Not Detected	mg/L	1.00	2	U
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	8/29/23 10:17	8/29/23 10:17		1	Not Detected	mg/L	0.50	1	U
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	8/29/23 14:15	8/29/23 14:15		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	8/23/23 13:56	8/23/23 13:56		1	0.664	mg/L	0.6	2	J

MDL's and RL's are adjusted for sample dilution, as applicable

Comments:

Reported: 9/12/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGORPUFB
Sample Date: 8/22/23 16:08
Customer ID:
Delivery Date: 8/23/23 08:54

Description: Gorgas Pooled Upgradient Field Blank-1

Laboratory ID Number: BD16123

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD16125	Aluminum, Total	mg/L	0.000392	0.0198	0.100	0.106	0.103	0.107	0.0850 to 0.115	106	70.0 to 130	2.87	20.0
BD16125	Antimony, Total	mg/L	0.000262	0.00100	0.100	0.0905	0.0891	0.0922	0.0850 to 0.115	90.5	70.0 to 130	1.56	20.0
BD16125	Arsenic, Total	mg/L	-0.0000063	0.000200	0.100	0.0973	0.0966	0.0976	0.0850 to 0.115	97.3	70.0 to 130	0.722	20.0
BD16125	Barium, Total	mg/L	-0.0000057	0.00100	0.100	0.0992	0.0965	0.0962	0.0850 to 0.115	99.2	70.0 to 130	2.76	20.0
BD16125	Beryllium, Total	mg/L	0.0000186	0.000880	0.100	0.0863	0.0863	0.0895	0.0850 to 0.115	86.3	70.0 to 130	0.00	20.0
BD16125	Boron, Total	mg/L	0.000278	0.0650	1.00	0.959	0.961	0.965	0.850 to 1.15	95.9	70.0 to 130	0.208	20.0
BD16125	Cadmium, Total	mg/L	0.0000000	0.000147	0.100	0.0965	0.0992	0.0972	0.0850 to 0.115	96.5	70.0 to 130	2.76	20.0
BD16125	Calcium, Total	mg/L	-0.0350	0.152	5.00	4.64	4.65	4.67	4.25 to 5.75	92.8	70.0 to 130	0.215	20.0
BD16125	Chloride	mg/L	-0.0231	1.00	10.0	9.99	10.1	10.6	9.00 to 11.0	99.9	80.0 to 120	1.10	20.0
BD16125	Chromium, Total	mg/L	-0.0000845	0.000440	0.100	0.101	0.0987	0.100	0.0850 to 0.115	101	70.0 to 130	2.30	20.0
BD16125	Cobalt, Total	mg/L	-0.0000385	0.000147	0.100	0.106	0.103	0.106	0.0850 to 0.115	106	70.0 to 130	2.87	20.0
BD16125	Fluoride	mg/L	0.0326	0.125	2.50	2.45	2.52	2.56	2.25 to 2.75	98.0	80.0 to 120	2.82	20.0
BD16125	Iron, Total	mg/L	-0.000626	0.0176	0.2	0.192	0.192	0.192	0.170 to 0.230	96.0	70.0 to 130	0.00	20.0
BD16125	Lead, Total	mg/L	0.0000062	0.000147	0.100	0.104	0.109	0.106	0.0850 to 0.115	104	70.0 to 130	4.69	20.0
BD16125	Lithium, Total	mg/L	0.000715	0.0154	0.200	0.196	0.200	0.199	0.170 to 0.230	98.0	70.0 to 130	2.02	20.0
BD16125	Magnesium, Total	mg/L	-0.0222	0.0462	5.00	4.83	4.91	4.94	4.25 to 5.75	95.9	70.0 to 130	1.64	20.0
BD16125	Manganese, Total	mg/L	-0.0000022	0.00033	0.100	0.103	0.100	0.102	0.0850 to 0.115	103	70.0 to 130	2.96	20.0
BD16125	Mercury, Total by CVAA	mg/L	5.000E-05	0.000500	0.004	0.00401	0.00403	0.00399	0.00340 to 0.00460	100	70.0 to 130	0.498	20.0
BD16125	Molybdenum, Total	mg/L	0.000	0.0100	0.2	0.194	0.195	0.194	0.170 to 0.230	97.0	70.0 to 130	0.514	20.0
BD16125	Potassium, Total	mg/L	0.0111	0.367	10.0	10.8	10.8	11.2	8.50 to 11.5	108	70.0 to 130	0.00	20.0
BD16125	Selenium, Total	mg/L	-0.0000875	0.00100	0.100	0.101	0.102	0.102	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BD16125	Silicon, Total	mg/L	0.000318	0.0440	1.00	0.974	0.975	0.971	0.850 to 1.15	97.4	70.0 to 130	0.103	20.0
BD16125	Sodium, Total	mg/L	0.00245	0.0880	5.00	4.95	5.04	5.04	4.25 to 5.75	99.0	70.0 to 130	1.80	20.0
BD16125	Sulfate	mg/L	0.567	2.0	20.0	20.8	20.4	20.6	18.0 to 22.0	104	80.0 to 120	1.94	20.0

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGORPUFB
Sample Date: 8/22/23 16:08
Customer ID:
Delivery Date: 8/23/23 08:54

Description: Gorgas Pooled Upgradient Field Blank-1

Laboratory ID Number: BD16123

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD16125	Thallium, Total	mg/L	-0.0000665	0.000147	0.100	0.105	0.110	0.108	0.0850 to 0.115	105	70.0 to 130	4.65	20.0
BD16125	Total Organic Carbon	mg/L	0.143	1.00	10.0	9.33	9.52	24.6		93.3	80.0 to 120	2.02	20.0

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Alabama Power

Batch QC Summary

Customer Account: WMWGORPUFB
Sample Date: 8/22/23 16:08
Customer ID:
Delivery Date: 8/23/23 08:54

Description: Gorgas Pooled Upgradient Field Blank-1

Laboratory ID Number: BD16123

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD16125	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.03	0.200	2.00	1.95	-0.053	2.06	1.80 to 2.20	97.5	90.0 to 110	0.00	15.0
BD16122	Solids, Dissolved	mg/L	2.00	25.0			4850	53.0	40.0 to 60.0			0.620	10.0

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gorgas Pooled Upgradient - MW-4

Location Code: WMWGORPU
Collected: 8/22/23 16:33
Customer ID:
Submittal Date: 8/23/23 08:54

Laboratory ID Number: BD16124

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***					***Preparation Method: EPA 1638***			
* Boron, Total	8/23/23 14:50	8/24/23 14:12		1.015	0.0448	mg/L	0.030000	0.1015	J
* Calcium, Total	8/23/23 14:50	8/25/23 11:42		101.5	287	mg/L	7.0035	40.6	
* Iron, Total	8/23/23 14:50	8/24/23 14:12		1.015	0.233	mg/L	0.008120	0.0406	
* Lithium, Total	8/23/23 14:50	8/24/23 14:12		1.015	0.0416	mg/L	0.007105	0.01999956	
* Magnesium, Total	8/23/23 14:50	8/25/23 11:42		101.5	465	mg/L	2.1315	40.6	
* Molybdenum, Total	8/23/23 14:50	8/24/23 14:12		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Total (calc.)	8/23/23 14:50	8/24/23 14:12		1	12.6	mg/L			
* Silicon, Total	8/23/23 14:50	8/24/23 14:12		1.015	5.90	mg/L	0.02030	0.25375	
* Sodium, Total	8/23/23 14:50	8/24/23 14:12		1.015	36.0	mg/L	0.04060	0.406	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	8/23/23 11:45	8/24/23 14:50		1.015	0.0447	mg/L	0.030000	0.1015	J
* Calcium, Dissolved	8/23/23 11:45	8/25/23 12:08		101.5	286	mg/L	7.0035	40.6	RA
* Iron, Dissolved	8/23/23 11:45	8/24/23 14:50		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Dissolved	8/23/23 11:45	8/24/23 14:50		1.015	0.0418	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	8/23/23 11:45	8/25/23 12:08		101.5	463	mg/L	2.1315	40.6	RA
* Molybdenum, Dissolved	8/23/23 11:45	8/24/23 14:50		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Dissolved (calc.)	8/23/23 11:45	8/24/23 14:50		1	12.2	mg/L			
* Silicon, Dissolved	8/23/23 11:45	8/24/23 14:50		1.015	5.69	mg/L	0.02030	0.25375	
* Sodium, Dissolved	8/23/23 11:45	8/24/23 14:50		1.015	35.1	mg/L	0.04060	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***					***Preparation Method: EPA 1638***			
* Antimony, Total	8/23/23 14:50	8/23/23 16:23		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Total	8/23/23 14:50	8/24/23 17:17		1.015	0.125	mg/L	0.009135	0.05075	
* Arsenic, Total	8/23/23 14:50	8/23/23 16:23		1.015	0.000145	mg/L	0.000112	0.000203	J
* Barium, Total	8/23/23 14:50	8/23/23 16:23		1.015	0.0130	mg/L	0.000508	0.001015	
* Beryllium, Total	8/23/23 14:50	8/23/23 16:23		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	8/23/23 14:50	8/23/23 16:23		1.015	0.0000851	mg/L	0.000068	0.000203	J
* Chromium, Total	8/23/23 14:50	8/23/23 16:23		1.015	0.000571	mg/L	0.000203	0.001015	J
* Cobalt, Total	8/23/23 14:50	8/23/23 16:23		1.015	0.000142	mg/L	0.000068	0.000203	J
* Lead, Total	8/23/23 14:50	8/23/23 16:23		1.015	0.000136	mg/L	0.000068	0.000203	J
* Manganese, Total	8/23/23 14:50	8/23/23 16:23		1.015	0.00648	mg/L	0.000152	0.001015	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 9/12/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gorgas Pooled Upgradient - MW-4

Location Code: WMWGORPU
Collected: 8/22/23 16:33
Customer ID:
Submittal Date: 8/23/23 08:54

Laboratory ID Number: BD16124

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	8/23/23 14:50	8/23/23 16:23		1.015	9.02	mg/L	0.169505	0.5075	
* Selenium, Total	8/23/23 14:50	8/23/23 16:23		1.015	0.00148	mg/L	0.000508	0.001015	
* Thallium, Total	8/23/23 14:50	8/23/23 16:23		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	8/23/23 11:45	8/23/23 12:14		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	8/23/23 11:45	8/23/23 12:14		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Dissolved	8/23/23 11:45	8/23/23 12:14		1.015	Not Detected	mg/L	0.000112	0.000203	U
* Barium, Dissolved	8/23/23 11:45	8/23/23 12:14		1.015	0.0111	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	8/23/23 11:45	8/23/23 12:14		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	8/23/23 11:45	8/23/23 12:14		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	8/23/23 11:45	8/23/23 12:14		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	8/23/23 11:45	8/23/23 12:14		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Dissolved	8/23/23 11:45	8/23/23 12:14		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	8/23/23 11:45	8/23/23 12:14		1.015	0.00161	mg/L	0.000152	0.001015	
* Potassium, Dissolved	8/23/23 11:45	8/23/23 12:14		1.015	8.70	mg/L	0.169505	0.5075	
* Selenium, Dissolved	8/23/23 11:45	8/23/23 12:14		1.015	0.00192	mg/L	0.000508	0.001015	
* Thallium, Dissolved	8/23/23 11:45	8/23/23 12:14		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	8/24/23 18:45	8/25/23 01:07		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: CES***								
* Nitrogen, Nitrate/Nitrite	8/24/23 13:33	8/24/23 13:33		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: DHC***								
* Alkalinity	8/30/23 13:30	8/30/23 15:33		1	172	mg CaCO3/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	8/23/23 11:20	8/24/23 13:00		1	3780	mg/L		178.6	
Analytical Method: SM 4500CO2 D	***Analyst: DHC***								
* Bicarbonate Alkalinity, (calc.)	8/30/23 13:30	8/30/23 15:33		1	172	mg CaCO3/L		1	A
* Carbonate Alkalinity, (calc.)	8/30/23 13:30	8/30/23 15:33		1	Not Detected	mg CaCO3/L		0.5	A
Analytical Method: SM 4500H+ B	***Analyst: DHC***								
Alkalinity pH Endpoint	8/30/23 13:30	8/30/23 15:33		1	4.51	SU		2	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 9/12/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gorgas Pooled Upgradient - MW-4

Location Code: WMWGORPU
Collected: 8/22/23 16:33
Customer ID:
Submittal Date: 8/23/23 08:54

Laboratory ID Number: BD16124

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 5310 B		***Analyst: SC***							
* Total Organic Carbon	8/25/23 12:28	8/25/23 12:28		1	2.26	mg/L	1.00	2	
Analytical Method: SM4500Cl E		***Analyst: JCC***							
* Chloride	8/29/23 10:19	8/29/23 10:19		1	1.86	mg/L	0.50	1	
Analytical Method: SM4500F G 2017		***Analyst: JCC***							
* Fluoride	8/29/23 14:16	8/29/23 14:16		1	0.358	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011		***Analyst: JCC***							
* Sulfate	8/23/23 13:54	8/23/23 13:54		100	2390	mg/L	60.0	200	
Analytical Method: Field Measurements		***Analyst: AWG***							
Conductivity	8/22/23 16:30	8/22/23 16:30			2962.35	uS/cm			FA
pH	8/22/23 16:30	8/22/23 16:30			6.28	SU			FA
Temperature	8/22/23 16:30	8/22/23 16:30			23.06	C			FA
Turbidity	8/22/23 16:30	8/22/23 16:30			7.22	NTU			FA
Sulfide	8/22/23 16:30	8/22/23 16:30			0	mg/L			FA

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGORPU
Sample Date: 8/22/23 16:33
Customer ID:
Delivery Date: 8/23/23 08:54

Description: Gorgas Pooled Upgradient - MW-4

Laboratory ID Number: BD16124

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD16124	Aluminum, Dissolved	mg/L	-0.000285	0.0198	0.100	0.105	0.100	0.105	0.0850 to 0.115	105	70.0 to 130	4.88	20.0
BD16125	Aluminum, Total	mg/L	0.000392	0.0198	0.100	0.106	0.103	0.107	0.0850 to 0.115	106	70.0 to 130	2.87	20.0
BD16124	Antimony, Dissolved	mg/L	0.000282	0.00100	0.100	0.0837	0.0870	0.0896	0.0850 to 0.115	83.7	70.0 to 130	3.87	20.0
BD16125	Antimony, Total	mg/L	0.000262	0.00100	0.100	0.0905	0.0891	0.0922	0.0850 to 0.115	90.5	70.0 to 130	1.56	20.0
BD16124	Arsenic, Dissolved	mg/L	0.0000059	0.000200	0.100	0.0995	0.0987	0.0980	0.0850 to 0.115	99.5	70.0 to 130	0.807	20.0
BD16125	Arsenic, Total	mg/L	-0.0000063	0.000200	0.100	0.0973	0.0966	0.0976	0.0850 to 0.115	97.3	70.0 to 130	0.722	20.0
BD16124	Barium, Dissolved	mg/L	0.0000062	0.00100	0.100	0.104	0.109	0.0998	0.0850 to 0.115	92.9	70.0 to 130	4.69	20.0
BD16125	Barium, Total	mg/L	-0.0000057	0.00100	0.100	0.0992	0.0965	0.0962	0.0850 to 0.115	99.2	70.0 to 130	2.76	20.0
BD16124	Beryllium, Dissolved	mg/L	0.0000210	0.000880	0.100	0.0871	0.0929	0.0963	0.0850 to 0.115	87.1	70.0 to 130	6.44	20.0
BD16125	Beryllium, Total	mg/L	0.0000186	0.000880	0.100	0.0863	0.0863	0.0895	0.0850 to 0.115	86.3	70.0 to 130	0.00	20.0
BD16124	Boron, Dissolved	mg/L	0.000039	0.0650	1.00	1.04	1.03	0.968	0.850 to 1.15	99.5	70.0 to 130	0.966	20.0
BD16125	Boron, Total	mg/L	0.000278	0.0650	1.00	0.959	0.961	0.965	0.850 to 1.15	95.9	70.0 to 130	0.208	20.0
BD16124	Cadmium, Dissolved	mg/L	0.0000046	0.000147	0.100	0.0915	0.0928	0.100	0.0850 to 0.115	91.5	70.0 to 130	1.41	20.0
BD16125	Cadmium, Total	mg/L	0.0000000	0.000147	0.100	0.0965	0.0992	0.0972	0.0850 to 0.115	96.5	70.0 to 130	2.76	20.0
BD16124	Calcium, Dissolved	mg/L	-0.0339	0.152	5.00	306	289	4.77	4.25 to 5.75	400	70.0 to 130	5.71	20.0
BD16125	Calcium, Total	mg/L	-0.0350	0.152	5.00	4.64	4.65	4.67	4.25 to 5.75	92.8	70.0 to 130	0.215	20.0
BD16125	Chloride	mg/L	-0.0231	1.00	10.0	9.99	10.1	10.6	9.00 to 11.0	99.9	80.0 to 120	1.10	20.0
BD16124	Chromium, Dissolved	mg/L	-0.0000820	0.000440	0.100	0.101	0.0985	0.102	0.0850 to 0.115	101	70.0 to 130	2.51	20.0
BD16125	Chromium, Total	mg/L	-0.0000845	0.000440	0.100	0.101	0.0987	0.100	0.0850 to 0.115	101	70.0 to 130	2.30	20.0
BD16124	Cobalt, Dissolved	mg/L	-0.0000349	0.000147	0.100	0.105	0.104	0.108	0.0850 to 0.115	105	70.0 to 130	0.957	20.0
BD16125	Cobalt, Total	mg/L	-0.0000385	0.000147	0.100	0.106	0.103	0.106	0.0850 to 0.115	106	70.0 to 130	2.87	20.0
BD16125	Fluoride	mg/L	0.0326	0.125	2.50	2.45	2.52	2.56	2.25 to 2.75	98.0	80.0 to 120	2.82	20.0
BD16124	Iron, Dissolved	mg/L	-0.000760	0.0176	0.2	0.188	0.186	0.193	0.170 to 0.230	94.0	70.0 to 130	1.07	20.0
BD16125	Iron, Total	mg/L	-0.000626	0.0176	0.2	0.192	0.192	0.192	0.170 to 0.230	96.0	70.0 to 130	0.00	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGORPU
Sample Date: 8/22/23 16:33
Customer ID:
Delivery Date: 8/23/23 08:54

Description: Gorgas Pooled Upgradient - MW-4

Laboratory ID Number: BD16124

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD16124	Lead, Dissolved	mg/L	0.0000066	0.000147	0.100	0.100	0.101	0.102	0.0850 to 0.115	100	70.0 to 130	0.995	20.0
BD16125	Lead, Total	mg/L	0.0000062	0.000147	0.100	0.104	0.109	0.106	0.0850 to 0.115	104	70.0 to 130	4.69	20.0
BD16124	Lithium, Dissolved	mg/L	0.000735	0.0154	0.200	0.256	0.253	0.199	0.170 to 0.230	107	70.0 to 130	1.18	20.0
BD16125	Lithium, Total	mg/L	0.000715	0.0154	0.200	0.196	0.200	0.199	0.170 to 0.230	98.0	70.0 to 130	2.02	20.0
BD16124	Magnesium, Dissolved	mg/L	-0.0148	0.0462	5.00	500	469	4.91	4.25 to 5.75	740	70.0 to 130	6.40	20.0
BD16125	Magnesium, Total	mg/L	-0.0222	0.0462	5.00	4.83	4.91	4.94	4.25 to 5.75	95.9	70.0 to 130	1.64	20.0
BD16124	Manganese, Dissolved	mg/L	-0.0000101	0.00033	0.100	0.102	0.101	0.104	0.0850 to 0.115	100	70.0 to 130	0.985	20.0
BD16125	Manganese, Total	mg/L	-0.0000022	0.00033	0.100	0.103	0.100	0.102	0.0850 to 0.115	103	70.0 to 130	2.96	20.0
BD16125	Mercury, Total by CVAA	mg/L	5.000E-05	0.000500	0.004	0.00401	0.00403	0.00399	0.00340 to 0.00460	100	70.0 to 130	0.498	20.0
BD16124	Molybdenum, Dissolved	mg/L	0.000379	0.0100	0.2	0.193	0.191	0.196	0.170 to 0.230	96.5	70.0 to 130	1.04	20.0
BD16125	Molybdenum, Total	mg/L	0.000	0.0100	0.2	0.194	0.195	0.194	0.170 to 0.230	97.0	70.0 to 130	0.514	20.0
BD16124	Potassium, Dissolved	mg/L	0.00753	0.367	10.0	19.6	19.2	11.1	8.50 to 11.5	109	70.0 to 130	2.06	20.0
BD16125	Potassium, Total	mg/L	0.0111	0.367	10.0	10.8	10.8	11.2	8.50 to 11.5	108	70.0 to 130	0.00	20.0
BD16124	Selenium, Dissolved	mg/L	0.0000265	0.00100	0.100	0.103	0.105	0.100	0.0850 to 0.115	101	70.0 to 130	1.92	20.0
BD16125	Selenium, Total	mg/L	-0.0000875	0.00100	0.100	0.101	0.102	0.102	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BD16124	Silicon, Dissolved	mg/L	0.000253	0.0440	1.00	6.64	6.63	0.981	0.850 to 1.15	95.0	70.0 to 130	0.151	20.0
BD16125	Silicon, Total	mg/L	0.000318	0.0440	1.00	0.974	0.975	0.971	0.850 to 1.15	97.4	70.0 to 130	0.103	20.0
BD16124	Sodium, Dissolved	mg/L	0.000918	0.0880	5.00	40.6	40.1	5.02	4.25 to 5.75	110	70.0 to 130	1.24	20.0
BD16125	Sodium, Total	mg/L	0.00245	0.0880	5.00	4.95	5.04	5.04	4.25 to 5.75	99.0	70.0 to 130	1.80	20.0
BD16125	Sulfate	mg/L	0.567	2.0	20.0	20.8	20.4	20.6	18.0 to 22.0	104	80.0 to 120	1.94	20.0
BD16124	Thallium, Dissolved	mg/L	-0.0000690	0.000147	0.100	0.103	0.0990	0.104	0.0850 to 0.115	103	70.0 to 130	3.96	20.0
BD16125	Thallium, Total	mg/L	-0.0000665	0.000147	0.100	0.105	0.110	0.108	0.0850 to 0.115	105	70.0 to 130	4.65	20.0
BD16125	Total Organic Carbon	mg/L	0.143	1.00	10.0	9.33	9.52	24.6		93.3	80.0 to 120	2.02	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Alabama Power

Batch QC Summary

Customer Account: WMWGORPU
Sample Date: 8/22/23 16:33
Customer ID:
Delivery Date: 8/23/23 08:54

Description: Gorgas Pooled Upgradient - MW-4

Laboratory ID Number: BD16124

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD16124	Alkalinity	mg CaCO3/L					172	51.6	45.0 to 55.0			0.00	10.0
BD16125	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.03	0.200	2.00	1.95	-0.053	2.06	1.80 to 2.20	97.5	90.0 to 110	0.00	15.0
BD16124	Solids, Dissolved	mg/L	2.00	25.0			3820	53.0	40.0 to 60.0			1.05	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 9/12/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gorgas Pooled Upgradient Equipment Blank-1

Location Code: WMWGORPUEB
Collected: 8/22/23 16:45
Customer ID:
Submittal Date: 8/23/23 08:54

Laboratory ID Number: BD16125

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	8/23/23 14:50	8/24/23 14:15		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	8/23/23 14:50	8/24/23 14:15		1.015	Not Detected	mg/L	0.070035	0.406	U
* Iron, Total	8/23/23 14:50	8/24/23 14:15		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Total	8/23/23 14:50	8/24/23 14:15		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	8/23/23 14:50	8/24/23 14:15		1.015	0.0349	mg/L	0.021315	0.406	J
* Molybdenum, Total	8/23/23 14:50	8/24/23 14:15		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Total (calc.)	8/23/23 14:50	8/24/23 14:15		1	Not Detected	mg/L			
* Silicon, Total	8/23/23 14:50	8/24/23 14:15		1.015	Not Detected	mg/L	0.02030	0.25375	U
* Sodium, Total	8/23/23 14:50	8/24/23 14:15		1.015	Not Detected	mg/L	0.04060	0.406	U
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	8/23/23 14:50	8/23/23 16:26		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Arsenic, Total	8/23/23 14:50	8/23/23 16:26		1.015	Not Detected	mg/L	0.000112	0.000203	U
* Aluminum, Total	8/23/23 14:50	8/24/23 17:20		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Barium, Total	8/23/23 14:50	8/23/23 16:26		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Beryllium, Total	8/23/23 14:50	8/23/23 16:26		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	8/23/23 14:50	8/23/23 16:26		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	8/23/23 14:50	8/23/23 16:26		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	8/23/23 14:50	8/23/23 16:26		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	8/23/23 14:50	8/23/23 16:26		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	8/23/23 14:50	8/23/23 16:26		1.015	Not Detected	mg/L	0.000152	0.001015	U
* Potassium, Total	8/23/23 14:50	8/23/23 16:26		1.015	Not Detected	mg/L	0.169505	0.5075	U
* Selenium, Total	8/23/23 14:50	8/23/23 16:26		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	8/23/23 14:50	8/23/23 16:26		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	8/24/23 18:45	8/25/23 01:11		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: CES***								
* Nitrogen, Nitrate/Nitrite	8/24/23 13:34	8/24/23 13:34		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	8/23/23 11:20	8/24/23 13:00		1	Not Detected	mg/L		25	U

MDL's and RL's are adjusted for sample dilution, as applicable

Comments:

Reported: 9/12/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gorgas Pooled Upgradient Equipment Blank-1

Location Code: WMWGORPUEB
Collected: 8/22/23 16:45
Customer ID:
Submittal Date: 8/23/23 08:54

Laboratory ID Number: BD16125

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	8/25/23 12:43	8/25/23 12:43		1	Not Detected	mg/L	1.00	2	U
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	8/29/23 10:20	8/29/23 10:20		1	Not Detected	mg/L	0.50	1	U
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	8/29/23 14:17	8/29/23 14:17		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	8/23/23 13:57	8/23/23 13:57		1	Not Detected	mg/L	0.6	2	U

MDL's and RL's are adjusted for sample dilution, as applicable

Comments:

Reported: 9/12/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGORPUEB
Sample Date: 8/22/23 16:45
Customer ID:
Delivery Date: 8/23/23 08:54

Description:Gorgas Pooled Upgradient Equipment Blank-1

Laboratory ID Number: BD16125

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD16125	Aluminum, Total	mg/L	0.000392	0.0198	0.100	0.106	0.103	0.107	0.0850 to 0.115	106	70.0 to 130	2.87	20.0
BD16125	Antimony, Total	mg/L	0.000262	0.00100	0.100	0.0905	0.0891	0.0922	0.0850 to 0.115	90.5	70.0 to 130	1.56	20.0
BD16125	Arsenic, Total	mg/L	-0.0000063	0.000200	0.100	0.0973	0.0966	0.0976	0.0850 to 0.115	97.3	70.0 to 130	0.722	20.0
BD16125	Barium, Total	mg/L	-0.0000057	0.00100	0.100	0.0992	0.0965	0.0962	0.0850 to 0.115	99.2	70.0 to 130	2.76	20.0
BD16125	Beryllium, Total	mg/L	0.0000186	0.000880	0.100	0.0863	0.0863	0.0895	0.0850 to 0.115	86.3	70.0 to 130	0.00	20.0
BD16125	Boron, Total	mg/L	0.000278	0.0650	1.00	0.959	0.961	0.965	0.850 to 1.15	95.9	70.0 to 130	0.208	20.0
BD16125	Cadmium, Total	mg/L	0.0000000	0.000147	0.100	0.0965	0.0992	0.0972	0.0850 to 0.115	96.5	70.0 to 130	2.76	20.0
BD16125	Calcium, Total	mg/L	-0.0350	0.152	5.00	4.64	4.65	4.67	4.25 to 5.75	92.8	70.0 to 130	0.215	20.0
BD16125	Chloride	mg/L	-0.0231	1.00	10.0	9.99	10.1	10.6	9.00 to 11.0	99.9	80.0 to 120	1.10	20.0
BD16125	Chromium, Total	mg/L	-0.0000845	0.000440	0.100	0.101	0.0987	0.100	0.0850 to 0.115	101	70.0 to 130	2.30	20.0
BD16125	Cobalt, Total	mg/L	-0.0000385	0.000147	0.100	0.106	0.103	0.106	0.0850 to 0.115	106	70.0 to 130	2.87	20.0
BD16125	Fluoride	mg/L	0.0326	0.125	2.50	2.45	2.52	2.56	2.25 to 2.75	98.0	80.0 to 120	2.82	20.0
BD16125	Iron, Total	mg/L	-0.000626	0.0176	0.2	0.192	0.192	0.192	0.170 to 0.230	96.0	70.0 to 130	0.00	20.0
BD16125	Lead, Total	mg/L	0.0000062	0.000147	0.100	0.104	0.109	0.106	0.0850 to 0.115	104	70.0 to 130	4.69	20.0
BD16125	Lithium, Total	mg/L	0.000715	0.0154	0.200	0.196	0.200	0.199	0.170 to 0.230	98.0	70.0 to 130	2.02	20.0
BD16125	Magnesium, Total	mg/L	-0.0222	0.0462	5.00	4.83	4.91	4.94	4.25 to 5.75	95.9	70.0 to 130	1.64	20.0
BD16125	Manganese, Total	mg/L	-0.0000022	0.00033	0.100	0.103	0.100	0.102	0.0850 to 0.115	103	70.0 to 130	2.96	20.0
BD16125	Mercury, Total by CVAA	mg/L	5.000E-05	0.000500	0.004	0.00401	0.00403	0.00399	0.00340 to 0.00460	100	70.0 to 130	0.498	20.0
BD16125	Molybdenum, Total	mg/L	0.000	0.0100	0.2	0.194	0.195	0.194	0.170 to 0.230	97.0	70.0 to 130	0.514	20.0
BD16125	Potassium, Total	mg/L	0.0111	0.367	10.0	10.8	10.8	11.2	8.50 to 11.5	108	70.0 to 130	0.00	20.0
BD16125	Selenium, Total	mg/L	-0.0000875	0.00100	0.100	0.101	0.102	0.102	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BD16125	Silicon, Total	mg/L	0.000318	0.0440	1.00	0.974	0.975	0.971	0.850 to 1.15	97.4	70.0 to 130	0.103	20.0
BD16125	Sodium, Total	mg/L	0.00245	0.0880	5.00	4.95	5.04	5.04	4.25 to 5.75	99.0	70.0 to 130	1.80	20.0
BD16125	Sulfate	mg/L	0.567	2.0	20.0	20.8	20.4	20.6	18.0 to 22.0	104	80.0 to 120	1.94	20.0

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGORPUEB
Sample Date: 8/22/23 16:45
Customer ID:
Delivery Date: 8/23/23 08:54

Description:Gorgas Pooled Upgradient Equipment Blank-1

Laboratory ID Number: BD16125

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD16125	Thallium, Total	mg/L	-0.0000665	0.000147	0.100	0.105	0.110	0.108	0.0850 to 0.115	105	70.0 to 130	4.65	20.0
BD16125	Total Organic Carbon	mg/L	0.143	1.00	10.0	9.33	9.52	24.6		93.3	80.0 to 120	2.02	20.0

Comments:

Reported: 9/12/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Alabama Power

Batch QC Summary

Customer Account: WMWGORPUEB
Sample Date: 8/22/23 16:45
Customer ID:
Delivery Date: 8/23/23 08:54

Description: Gorgas Pooled Upgradient Equipment Blank-1

Laboratory ID Number: BD16125

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD16125	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.03	0.200	2.00	1.95	-0.053	2.06	1.80 to 2.20	97.5	90.0 to 110	0.00	15.0
BD16124	Solids, Dissolved	mg/L	2.00	25.0			3820	53.0	40.0 to 60.0			1.05	10.0

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040
(205) 664-6001

Definitions

Alabama Power

Project Number: WMWGORPU_1421

Abbreviation	Description
DF	Dilution Factor
LCS	Lab Control Sample
LFM	Lab Fortified Matrix
MB	Method Blank
MDL	Method Detection Limit; minimum concentration of an analyte that can be determined with 99% confidence that the concentration is greater than zero.
MS	Matrix Spike
MSD	Matrix Spike Duplicate
Prec	Precision (% RPD)
Q	Qualifier; comment used to note deviations or additional information associated with analytical results.
QC	Quality Control
Rec	Recovery of Matrix Spike
RL	Reporting Limit; lowest concentration at which an analyte can be quantitatively measured.
Vio Spec	Violation Specification; regulatory limit which has been exceeded by the sample analyzed.

Qualifier	Description
A	Bicarbonate alkalinity, carbonate alkalinity, hydroxide alkalinity, free carbon dioxide, and/or total carbon dioxide calculations are estimates due to pH>10SU and/or TDS>500mg/L.
FA	Field results were reviewed by the Water Field Group. Refer to APC Field Case Narrative.
J	Reported value is an estimate because concentration is less than reporting limit.
RA	Matrix spike is invalid due to sample concentration.
U	Compound was analyzed, but not detected.

Chain of Custody
Groundwater
APC General Testing Laboratory

☑ Field Complete ☐ Outside Lab
☑ Lab Complete

Lab ETA

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Collector	Anthony Goggins	Requested By	Greg Budd
		Location	Gorgas Pooled Upgradient

Bottles

1	Metals	500 mL	3	Hg	250 mL	5	TDS/Alkalinity	500 mL	7	N/A	N/A
2	Dissolved Metals	500 mL	4	Nitrite, Nitrate; TOC	250 mL	6	Anions	500 mL	8	N/A	N/A

Comments: Relinquished to GSC 8 Shipping Lab 082323 0700

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id	pH Check
MW-1	08/22/2023	12:55	6	Groundwater		BD16119	☑
MW-1 Dup	08/22/2023	12:55	6	Sample Duplicate		BD16120	☑
MW-2	08/22/2023	13:52	6	Groundwater		BD16121	☑
MW-3	08/22/2023	15:04	6	Groundwater		BD16122	☑
FB-1	08/22/2023	16:08	5	Field Blank		BD16123	☑
MW-4	08/22/2023	16:33	6	Groundwater		BD16124	☑
EB-1	08/22/2023	16:45	5	Equipment Blank		BD16125	☑
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Relinquished By	Received By	Date/Time
Digitally signed by Anthony Goggins Date: 2023.08.23 07:08:39 -05'00'	Brooke Caton Digitally signed by Brooke Caton Date: 2023.08.23 07:45:14 -05'00'	08/23/2023 07:45

SmarTroll ID	7586-41446-5-5	Cooler Temp	1.1°C
Turbidity ID	9830-57039-1-1	Thermometer ID	10614-61208-2-1
Sample Event	1421	pH Strip ID	10853-62410-10-9

Bottles/Pre-Preserved Bottles are provided by the GTL

Total Metals and Alkalinity are not performed on Dissolved Sets

Dissolved Metals and Alkalinity are not performed on blanks i.e. Field Blanks or Equipment Blanks

Chain of Custody
Groundwater
APC General Testing Laboratory

☑ Field Complete ☑ Outside Lab
☑ Lab Complete

Lab ETA

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Collector	Anthony Goggins	Requested By	Greg Budd
		Location	Gorgas Pooled Upgradient

Bottles

1	Radium	1 L	3	N/A	N/A	5	N/A	N/A	7	N/A	N/A
2	N/A	N/A	4	N/A	N/A	6	N/A	N/A	8	N/A	N/A

Comments: MS/MSD Collected @ MW-2; Relinquished to GSC8 Shipping lab 082323 0700

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id	pH Check
MW-1	08/22/2023	12:55	1	Groundwater		BD16126	☑
MW-1 Dup	08/22/2023	12:55	1	Sample Duplicate		BD16127	☑
MW-2	08/22/2023	13:52	3	Groundwater		BD16128	☑
MW-3	08/22/2023	15:04	1	Groundwater		BD16129	☑
FB-1	08/22/2023	16:08	1	Field Blank		BD16130	☑
MW-4	08/22/2023	16:33	1	Groundwater		BD16131	☑
EB-1	08/22/2023	16:45	1	Equipment Blank		BD16132	☑
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Relinquished By	Received By	Date/Time
Digitally signed by Anthony Goggins Date: 2023.08.23 07:03:09 -05'00'	Brooke Caton Digitally signed by Brooke Caton Date: 2023.08.23 07:44:44 -05'00'	08/23/2023 07:44

SmarTroll ID	7586-41446-5-5	Cooler Temp	N/A
Turbidity ID	9830-57039-1-1	Thermometer ID	N/A
Sample Event	1421	pH Strip ID	10853-62410-10-9

Bottles/Pre-Preserved Bottles are provided by the GTL

Total Metals and Alkalinity are not performed on Dissolved Sets

Dissolved Metals and Alkalinity are not performed on blanks i.e. Field Blanks or Equipment Blanks

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

September 27, 2023

Brooke Caton
Alabama Power
744 Highway 87
Calera, AL 35040

RE: Project: WMWGORPU_1421
Pace Project No.: 30617128

Dear Brooke Caton:

Enclosed are the analytical results for sample(s) received by the laboratory on August 28, 2023. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Greensburg

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Skyler C. Richmond
skyler.richmond@pacelabs.com
(724)850-5600
Project Manager

Enclosures

cc: Blaine Denton, Alabama Power
Renee Jernigan, Alabama Power

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

CERTIFICATIONS

Project: WMWGORPU_1421
Pace Project No.: 30617128

Pace Analytical Services Pennsylvania
1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
ANABISO/IEC 17025:2017 Rad Cert#: L24170
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 2950
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA010
Louisiana DEQ/TNI Certification #: 04086
Maine Certification #: 2023021
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification #: 9991
Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572023-03
New Hampshire/TNI Certification #: 297622
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Ohio EPA Rad Approval: #41249
Oregon/TNI Certification #: PA200002-015
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: TN02867
Texas/TNI Certification #: T104704188-22-18
Utah/TNI Certification #: PA014572223-14
USDA Soil Permit #: 525-23-67-77263
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Approve List for Rad

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE SUMMARY

Project: WMWGORPU_1421
Pace Project No.: 30617128

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30617128001	**BD16126 MW-1**	Water	08/22/23 12:55	08/28/23 10:25
30617128002	**BD16127 MW-1 Dup**	Water	08/22/23 12:55	08/28/23 10:25
30617128003	**BD16128 MW-2**	Water	08/22/23 13:52	08/28/23 10:25
30617128004	**BD16128 MW-2 MS**	Water	08/22/23 13:52	08/28/23 10:25
30617128005	**BD16128 MW-2 MSD**	Water	08/22/23 13:52	08/28/23 10:25
30617128006	**BD16129 MW-3**	Water	08/22/23 15:04	08/28/23 10:25
30617128007	**BD16130 FB-1**	Water	08/22/23 16:08	08/28/23 10:25
30617128008	**BD16131 MW-4**	Water	08/22/23 16:33	08/28/23 10:25
30617128009	**BD16132 EB-1**	Water	08/22/23 16:45	08/28/23 10:25

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE ANALYTE COUNT

Project: WMWGORPU_1421
Pace Project No.: 30617128

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30617128001	**BD16126 MW-1**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA
30617128002	**BD16127 MW-1 Dup**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA
30617128003	**BD16128 MW-2**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA
30617128004	**BD16128 MW-2 MS**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
30617128005	**BD16128 MW-2 MSD**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
30617128006	**BD16129 MW-3**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA
30617128007	**BD16130 FB-1**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA
30617128008	**BD16131 MW-4**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA
30617128009	**BD16132 EB-1**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA

PASI-PA = Pace Analytical Services - Greensburg

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

PROJECT NARRATIVE

Project: WMWGORPU_1421
Pace Project No.: 30617128

Method: **EPA 9315**
Description: 9315 Total Radium
Client: Alabama Power
Date: September 27, 2023

General Information:
9 samples were analyzed for EPA 9315 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

PROJECT NARRATIVE

Project: WMWGORPU_1421
Pace Project No.: 30617128

Method: **EPA 9320**
Description: 9320 Radium 228
Client: Alabama Power
Date: September 27, 2023

General Information:
9 samples were analyzed for EPA 9320 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

PROJECT NARRATIVE

Project: WMWGORPU_1421
Pace Project No.: 30617128

Method: **Total Radium Calculation**
Description: Total Radium 228+226
Client: Alabama Power
Date: September 27, 2023

General Information:
7 samples were analyzed for Total Radium Calculation by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORPU_1421
Pace Project No.: 30617128

Sample: BD16126 MW-1 **Lab ID: 30617128001** Collected: 08/22/23 12:55 Received: 08/28/23 10:25 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.310U ± 0.277 (0.516) C:80% T:NA**	pCi/L	09/25/23 08:26	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.788 ± 0.398 (0.686) C:80% T:83%**	pCi/L	09/19/23 11:19	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.10U ± 0.675 (1.20)**	pCi/L	09/26/23 15:10	7440-14-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORPU_1421
Pace Project No.: 30617128

Sample: BD16127 MW-1 Dup **Lab ID: 30617128002** Collected: 08/22/23 12:55 Received: 08/28/23 10:25 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.203U ± 0.227 (0.453) C:89% T:NA**	pCi/L	09/25/23 08:27	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.398U ± 0.351 (0.712) C:79% T:95%**	pCi/L	09/19/23 11:20	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.601U ± 0.578 (1.17)**	pCi/L	09/26/23 15:10	7440-14-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORPU_1421
Pace Project No.: 30617128

Sample: BD16128 MW-2 **Lab ID: 30617128003** Collected: 08/22/23 13:52 Received: 08/28/23 10:25 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.227U ± 0.255 (0.515) C:78% T:NA**	pCi/L	09/25/23 08:27	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.536U ± 0.358 (0.677) C:77% T:92%**	pCi/L	09/19/23 14:37	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.763U ± 0.613 (1.19)**	pCi/L	09/26/23 15:10	7440-14-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORPU_1421
Pace Project No.: 30617128

Sample: BD16128 MW-2 MS **Lab ID: 30617128004** Collected: 08/22/23 13:52 Received: 08/28/23 10:25 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**99.40 %REC ± NA (NA) C:NA T:NA**	pCi/L	09/25/23 08:28	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**78.67 %REC ± NA (NA) C:NA T:NA**	pCi/L	09/19/23 14:37	15262-20-1	

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORPU_1421
Pace Project No.: 30617128

Sample: BD16128 MW-2 MSD **Lab ID: 30617128005** Collected: 08/22/23 13:52 Received: 08/28/23 10:25 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**86.70 %REC 13.65RPD ± NA (NA) C:NA T:NA**	pCi/L	09/25/23 08:28	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**93.22 %REC 16.93RPD ± NA (NA) C:NA T:NA**	pCi/L	09/19/23 14:37	15262-20-1	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORPU_1421
Pace Project No.: 30617128

Sample: BD16129 MW-3 **Lab ID: 30617128006** Collected: 08/22/23 15:04 Received: 08/28/23 10:25 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.740 ± 0.364 (0.489) C:86% T:NA**	pCi/L	09/25/23 08:28	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.445U ± 0.362 (0.720) C:78% T:89%**	pCi/L	09/19/23 14:37	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.19U ± 0.726 (1.21)**	pCi/L	09/26/23 15:10	7440-14-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORPU_1421
Pace Project No.: 30617128

Sample: BD16130 FB-1 **Lab ID: 30617128007** Collected: 08/22/23 16:08 Received: 08/28/23 10:25 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.0545U ± 0.276 (0.684) C:85% T:NA**	pCi/L	09/25/23 15:21	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.366U ± 0.346 (0.705) C:82% T:85%**	pCi/L	09/19/23 14:37	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.421U ± 0.622 (1.39)**	pCi/L	09/26/23 15:10	7440-14-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORPU_1421
Pace Project No.: 30617128

Sample: BD16131 MW-4 **Lab ID: 30617128008** Collected: 08/22/23 16:33 Received: 08/28/23 10:25 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.232U ± 0.281 (0.590) C:83% T:NA**	pCi/L	09/25/23 15:22	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.655U ± 0.370 (0.670) C:85% T:87%**	pCi/L	09/19/23 14:38	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.887U ± 0.651 (1.26)**	pCi/L	09/26/23 15:10	7440-14-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORPU_1421
Pace Project No.: 30617128

Sample: BD16132 EB-1 **Lab ID: 30617128009** Collected: 08/22/23 16:45 Received: 08/28/23 10:25 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.0983U ± 0.183 (0.419) C:90% T:NA**	pCi/L	09/25/23 15:22	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.0306U ± 0.288 (0.666) C:85% T:88%**	pCi/L	09/19/23 14:38	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.129U ± 0.471 (1.09)**	pCi/L	09/26/23 15:10	7440-14-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL - RADIOCHEMISTRY

Project: WMWGORPU_1421
Pace Project No.: 30617128

QC Batch: 614498
QC Batch Method: EPA 9320
Analysis Method: EPA 9320
Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30617128001, 30617128002, 30617128003, 30617128004, 30617128005, 30617128006, 30617128007, 30617128008, 30617128009

METHOD BLANK: 2991831 Matrix: Water
Associated Lab Samples: 30617128001, 30617128002, 30617128003, 30617128004, 30617128005, 30617128006, 30617128007, 30617128008, 30617128009

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	-0.0233 ± 0.262 (0.618) C:83% T:92%	pCi/L	09/19/23 11:18	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL - RADIOCHEMISTRY

Project: WMWGORPU_1421
Pace Project No.: 30617128

QC Batch: 612803
QC Batch Method: EPA 9315
Analysis Method: EPA 9315
Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30617128001, 30617128002, 30617128003, 30617128004, 30617128005, 30617128006, 30617128007, 30617128008, 30617128009

METHOD BLANK: 2982901 Matrix: Water
Associated Lab Samples: 30617128001, 30617128002, 30617128003, 30617128004, 30617128005, 30617128006, 30617128007, 30617128008, 30617128009

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.0621 ± 0.104 (0.234) C:69% T:NA	pCi/L	09/25/23 08:26	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALIFIERS

Project: WMWGORPU_1421
Pace Project No.: 30617128

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Act - Activity

Unc - Uncertainty: For Safe Drinking Water Act (SDWA) analyses, the reported Unc. Is the calculated Count Uncertainty (95% confidence interval) using a coverage factor of 1.96. For all other matrices (non-SDWA), the reported Unc. is the calculated Expanded Uncertainty (aka Combined Standard Uncertainty, CSU), reported at the 95% confidence interval using a coverage factor of 1.96.

Gamma Spec: The Unc. reported for all gamma-spectroscopy analyses (EPA 901.1), is the calculated Expanded Uncertainty (CSU) at the 95.4% confidence interval, using a coverage factor of 2.0.

(MDC) - Minimum Detectable Concentration

Trac - Tracer Recovery (%)

Carr - Carrier Recovery (%)

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: WMWGORPU_1421
Pace Project No.: 30617128

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30617128001	**BD16126 MW-1**	EPA 9315	612803		
30617128002	**BD16127 MW-1 Dup**	EPA 9315	612803		
30617128003	**BD16128 MW-2**	EPA 9315	612803		
30617128004	**BD16128 MW-2 MS**	EPA 9315	612803		
30617128005	**BD16128 MW-2 MSD**	EPA 9315	612803		
30617128006	**BD16129 MW-3**	EPA 9315	612803		
30617128007	**BD16130 FB-1**	EPA 9315	612803		
30617128008	**BD16131 MW-4**	EPA 9315	612803		
30617128009	**BD16132 EB-1**	EPA 9315	612803		
30617128001	**BD16126 MW-1**	EPA 9320	614498		
30617128002	**BD16127 MW-1 Dup**	EPA 9320	614498		
30617128003	**BD16128 MW-2**	EPA 9320	614498		
30617128004	**BD16128 MW-2 MS**	EPA 9320	614498		
30617128005	**BD16128 MW-2 MSD**	EPA 9320	614498		
30617128006	**BD16129 MW-3**	EPA 9320	614498		
30617128007	**BD16130 FB-1**	EPA 9320	614498		
30617128008	**BD16131 MW-4**	EPA 9320	614498		
30617128009	**BD16132 EB-1**	EPA 9320	614498		
30617128001	**BD16126 MW-1**	Total Radium Calculation	618154		
30617128002	**BD16127 MW-1 Dup**	Total Radium Calculation	618154		
30617128003	**BD16128 MW-2**	Total Radium Calculation	618154		
30617128006	**BD16129 MW-3**	Total Radium Calculation	618154		
30617128007	**BD16130 FB-1**	Total Radium Calculation	618154		
30617128008	**BD16131 MW-4**	Total Radium Calculation	618154		
30617128009	**BD16132 EB-1**	Total Radium Calculation	618154		

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Section A — Required Client Information:

Company:	Alabama Power Company
Address:	744 Highway 87 GSC Bldg #8
	Calera, AL 35040
Email To:	tbwill@southernco.com
Phone:	205-664-6101 Fax:
Requested Due Date:	Normal

Section B — Required Project Information:

Report To:	Brooke Caton
Copy To:	Renee Jernigan & Blaine Denton
Purchase Order #:	APC87119-0001
Project Name:	Plant Gorgas Pooled Upgradient
Project Number:	WMWGORPU_1421

Section C — Invoice Information:

Attention:	Brooke Caton
Company Name:	Alabama Power Co.
Address:	744 Highway 87 GSC Bldg #8
Pace Quote:	CCR
Pace Project Manager:	Skyler Richmond
Pace Profile #:	16788

Regulatory Agency

State / Location: AL

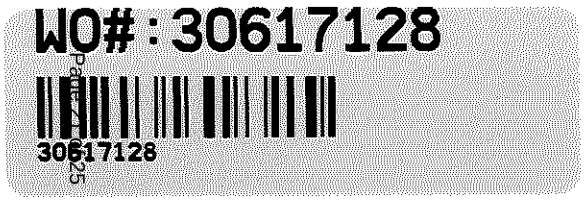
Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)	Description	Station Name Location_Code	Site Name Facility_ID	Sample Duplicate	Matrix Spike/Matrix Spike Duplicate	Field Filtered	MATRIX CODE	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	# OF CONTAINERS	Preservatives: Unpreserved	Preservatives: NaOH+ZnAcetate	Preservatives: HNO3	Preservatives:	Preservatives:	Y/N	Analyses Test: EPA 9315	EPA 9320	Total Radium Sum	Total Sulfide		Residual Chlorine (Y/N)	
1	BD16126	MW-1	APCO-GS-UP-MW-1	APCO_Gorgas_Pooled_Upgradient				GW	G	8/22/2023	12:55	1			X				X	X	X				001
2	BD16127	MW-1 Dup	APCO-GS-UP-MW-1	APCO_Gorgas_Pooled_Upgradient	x			GW	G	8/22/2023	12:55	1			X				X	X	X				002
3	BD16128	MW-2	APCO-GS-UP-MW-2	APCO_Gorgas_Pooled_Upgradient		x		GW	G	8/22/2023	13:52	3			X				X	X	X				003,004,005
4	BD16129	MW-3	APCO-GS-UP-MW-3	APCO_Gorgas_Pooled_Upgradient				GW	G	8/22/2023	15:04	1			X				X	X	X				006
5	BD16130	FB-1	APCO-GS-UP-FB-01	APCO_Gorgas_Pooled_Upgradient				GW	G	8/22/2023	16:08	1			X				X	X	X				007
6	BD16131	MW-4	APCO-GS-UP-MW-4	APCO_Gorgas_Pooled_Upgradient				GW	G	8/22/2023	16:33	1			X				X	X	X				008
7	BD16132	EB-1	APCO-GS-UP-EB-01	APCO_Gorgas_Pooled_Upgradient				GW	G	8/22/2023	16:45	1			X				X	X	X				009
8																									
9																									
10																									
11																									
12																									

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	Brooke Caton/ APC GTL	8/24/2023	12:51		8/24/23	10:25	—	—	Y	Y

SAMPLER NAME AND SIGNATURE			TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
PRINT Name of SAMPLER:						
SIGNATURE of SAMPLER:	DATE Signed:					

WO# : 30617128



	DC#_Title: ENV-FRM-GBUR-0088 v05_Sample Condition Upon Receipt-Pittsburgh	WO#: 30617128
Pace ANALYTICAL SERVICES	Effective Date: 07/06/2023	PM: SCR Due Date: 09/26/23
		CLIENT: ALABAMA PWR

Client Name: APC

Courier: ☑ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace ☐ Other

Tracking Number: 7012 3696 8871

Initial / Date

Examined By: TH 8/28/23

Labeled By: TH 8/28/23

Temped By: —

Custody Seal on Cooler/Box Present: ☑ Yes ☐ No **Seals Intact:** ☑ Yes ☐ No

Thermometer Used: — **Type of Ice:** Wet Blue (None)

Cooler Temperature: Observed Temp — °C Correction Factor: — °C Final Temp: — °C

Temp should be above freezing to 6°C

Comments:	Yes	No	NA	pH paper Lot# 100831	D.P.D. Residual Chlorine Lot # —
Chain of Custody Present	J			1.	
Chain of Custody Filled Out:	J			2.	
-Were client corrections present on COC		J			
Chain of Custody Relinquished	J			3.	
Sampler Name & Signature on COC:		J		4.	
Sample Labels match COC:	J			5.	
-Includes date/time/ID					
Matrix:	WT				
Samples Arrived within Hold Time:	J			6.	
Short Hold Time Analysis (<72hr remaining):		J		7.	
Rush Turn Around Time Requested:		J		8.	
Sufficient Volume:	J			9.	
Correct Containers Used:	J			10.	
-Pace Containers Used	J				
Containers Intact:	J			11.	
Orthophosphate field filtered:			J	12.	
Hex Cr Aqueous samples field filtered:			J	13.	
Organic Samples checked for dechlorination			J	14:	
Filtered volume received for dissolved tests:			J	15:	
All containers checked for preservation:	J			16.	
exceptions: VOA, coliform, TOC, O&G, Phenolics, Radon, non-aqueous matrix				PH<2	
All containers meet method preservation requirements:	J			Initial when completed TH	Date/Time of Preservation
				Lot# of added Preservative	
8260C/D: Headspace in VOA Vials (> 6mm)			J	17.	
624.1: Headspace in VOA Vials (0mm)			J	18.	
Trip Blank Present:			J	Trip blank custody seal present? YES or NO	
Rad Samples Screened <0.5 mrem/hr.	J			Initial when completed TH	Date: 8/28/23 Survey Meter SN: 1563

Comments:

Note: For NC compliance samples with discrepancies, a copy of this form must be sent to the DEHNR Certification office.
PM Review is documented electronically in LIMS through the SRF Review schedule in the Workorder Edit Screen.

Client _____

Site Plant Gorgas Pooled Upgradient

Page 1 of 1

Profile Number 16788

Notes _____

		Amber Glass					Plastic								Vials					Other									
Sample Line Item	Matrix	AG1H	AG3S	AG3U	AG5U	AG5T	BP1N	BP1U	BP2S	BP2U	BP3C	BP3N	BP3S	BP3U	DG9S	VG9H	VG9T	VG9U	VOAK	WGFU	WGKU	ZPLC	GCUB	GJN	12GN	GN	BG1U		
1	WT						1																						
2							1																						
3							1																						
4							1																						
5							1																						
6							1																						
7							1																						
8							1																						
9							1																						

Container Codes

Glass

GJN	1 Gallon Jug with HNO3	DG9S	40mL amber VOA vial H2SO4
AG5U	100mL amber glass unpreserved	VG9U	40mL clear VOA vial
AG5T	100mL amber glass Na Thiosulfate	VG9T	40mL clear VOA vial Na Thiosulfate
GJN	1 Gallon Jug	VG9H	40mL clear VOA vial HCl
AG1S	1L amber glass H2SO4	JGFU	4oz amber wide jar
AG1H	1L amber glass HCl	WGFU	4oz wide jar unpreserved
AG1T	1L amber glass NA Thiosulfate	BG2U	500mL clear glass unpreserved
BG1U	1L clear glass unpreserved	AG2U	500mL amber glass unpreserved
AG3S	250mL amber glass H2SO4	WGKU	8oz wide jar unpreserved
AG3U	250mL amber glass unpreserved	GN	General

Plastic/Misc.

GCUB	1 gallon cubitainer
12GN	1/2 gallon cubitainer
SP5T	120mL coliform Na Thiosulfate
BP1N	1L plastic HNO3
BP1U	1L plastic unpreserved
BP3S	250mL plastic H2SO4
BP3N	250mL plastic HNO3
BP3U	250mL plastic unpreserved
BP3C	250mL plastic NAOH
	500mL plastic H2SO4
	500mL plastic unpreserved

EZI	5g Encore
VOAK	Kit Volatile Solid
I	Wipe/Swab
ZPLC	Siploc Bag

WT	Water
SL	Solid
OL	Non-Aq Liquid
WP	Wipe

WO#: 30617128

PM: SCR Due Date: 09/26/23

CLIENT: ALABAMA PWR

Qualtrax ID: 55678

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

Test:	Ra-228
Analyst:	VAL
Date:	9/13/2023
Worklist:	75265
Matrix:	WT

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2991831
MB concentration:	-0.023
M/B 2 Sigma CSU:	0.262
MB MDC:	0.618
MB Numerical Performance Indicator:	-0.17
MB Status vs Numerical Indicator:	Pass
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	N
	LCS75265	LCSD75265
Count Date:	9/19/2023	
Spike I.D.:	23-043	
Decay Corrected Spike Concentration (pCi/mL):	39.760	
Volume Used (mL):	0.10	
Aliquot Volume (L, g, F):	0.817	
Target Conc. (pCi/L, g, F):	4.869	
Uncertainty (Calculated):	0.239	
Result (pCi/L, g, F):	4.388	
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	0.994	
Numerical Performance Indicator:	-0.92	
Percent Recovery:	90.14%	
Status vs Numerical Indicator:	N/A	
Status vs Recovery:	Pass	
Upper % Recovery Limits:	135%	
Lower % Recovery Limits:	60%	

Sample Matrix Spike Control Assessment	MS/MSD 1	MS/MSD 2
Sample Collection Date:	8/22/2023	8/16/2023
Sample I.D.	30617128003	30616394001
Sample MS I.D.	30617128004	30616394002
Sample MSD I.D.	30617128005	30616394003
Spike I.D.:	23-043	23-043
MS/MSD Decay Corrected Spike Concentration (pCi/mL):	40.130	40.130
Spike Volume Used in MS (mL):	0.20	0.20
Spike Volume Used in MSD (mL):	0.20	0.20
MS Aliquot (L, g, F):	0.802	0.807
MS Target Conc.(pCi/L, g, F):	10.012	9.951
MSD Aliquot (L, g, F):	0.803	0.805
MSD Target Conc. (pCi/L, g, F):	9.995	9.972
MS Spike Uncertainty (calculated):	0.491	0.488
MSD Spike Uncertainty (calculated):	0.490	0.489
Sample Result:	0.536	0.096
Sample Result 2 Sigma CSU (pCi/L, g, F):	0.358	0.291
Sample Matrix Spike Result:	8.412	8.642
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):	1.708	1.730
Sample Matrix Spike Duplicate Result:	9.853	9.127
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):	1.980	1.799
MS Numerical Performance Indicator:	-2.309	-1.512
MSD Numerical Performance Indicator:	-0.641	-0.978
MS Percent Recovery:	78.67%	85.88%
MSD Percent Recovery:	93.22%	90.56%
MS Status vs Numerical Indicator:	Warning	Pass
MSD Status vs Numerical Indicator:	Pass	Pass
MS Status vs Recovery:	Pass	Pass
MSD Status vs Recovery:	Pass	Pass
MS/MSD Upper % Recovery Limits:	135%	135%
MS/MSD Lower % Recovery Limits:	60%	60%

Duplicate Sample Assessment		
Sample I.D.:		Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.		
Sample Result (pCi/L, g, F):		
Sample Result 2 Sigma CSU (pCi/L, g, F):		
Sample Duplicate Result (pCi/L, g, F):		
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):		
Are sample and/or duplicate results below RL?	See Below ##	
Duplicate Numerical Performance Indicator:		
Duplicate RPD:		
Duplicate Status vs Numerical Indicator:		
Duplicate Status vs RPD:		
% RPD Limit:		

Matrix Spike/Matrix Spike Duplicate Sample Assessment		
Sample I.D.	30617128003	30616394001
Sample MS I.D.	30617128004	30616394002
Sample MSD I.D.	30617128005	30616394003
Sample Matrix Spike Result:	8.412	8.642
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):	1.708	1.730
Sample Matrix Spike Duplicate Result:	9.853	9.127
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):	1.980	1.799
Duplicate Numerical Performance Indicator:	-1.080	-0.381
(Based on the Percent Recoveries) MS/ MSD Duplicate RPD:	16.93%	5.31%
MS/ MSD Duplicate Status vs Numerical Indicator:	Pass	Pass
MS/ MSD Duplicate Status vs RPD:	Pass	Pass
% RPD Limit:	36%	36%

Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

Comments:

VAL 9/20/23

9/19/2023

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

Test:	Ra-226
Analyst:	SLC
Date:	9/8/2023
Worklist:	75123
Matrix:	WT

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2982901
MB concentration:	0.062
M/B 2 Sigma CSU:	0.104
MB MDC:	0.234
MB Numerical Performance Indicator:	1.17
MB Status vs Numerical Indicator:	Pass
MB Status vs. MDC:	N/A

Laboratory Control Sample Assessment	LCSD (Y or N)?	N
	LCS75123	LCSD75123
Count Date:	9/25/2023	
Spike I.D.:	23-014	
Decay Corrected Spike Concentration (pCi/mL):	25.030	
Volume Used (mL):	0.10	
Aliquot Volume (L, g, F):	0.513	
Target Conc. (pCi/L, g, F):	4.881	
Uncertainty (Calculated):	0.229	
Result (pCi/L, g, F):	4.826	
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	0.847	
Numerical Performance Indicator:	-0.12	
Percent Recovery:	98.86%	
Status vs Numerical Indicator:	Pass	
Status vs Recovery:	N/A	
Upper % Recovery Limits:	125%	
Lower % Recovery Limits:	75%	

Sample Matrix Spike Control Assessment	MS/MSD 1	MS/MSD 2
Sample Collection Date:	8/22/2023	8/22/2023
Sample I.D.	30617128003	30617138003
Sample MS I.D.	30617128004	30617138004
Sample MSD I.D.	30617128005	30617138005
Spike I.D.:	23-014	23-014
MS/MSD Decay Corrected Spike Concentration (pCi/mL):	25.031	25.031
Spike Volume Used in MS (mL):	0.20	0.20
Spike Volume Used in MSD (mL):	0.20	0.20
MS Aliquot (L, g, F):	0.209	0.209
MS Target Conc.(pCi/L, g, F):	23.942	23.914
MSD Aliquot (L, g, F):	0.209	0.207
MSD Target Conc. (pCi/L, g, F):	24.009	24.219
MS Spike Uncertainty (calculated):	1.125	1.124
MSD Spike Uncertainty (calculated):	1.128	1.138
Sample Result:	0.227	0.412
Sample Result 2 Sigma CSU (pCi/L, g, F):	0.255	0.264
Sample Matrix Spike Result:	24.026	27.513
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):	3.881	4.372
Sample Matrix Spike Duplicate Result:	21.043	26.591
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):	3.460	4.261
MS Numerical Performance Indicator:	-0.069	1.381
MSD Numerical Performance Indicator:	-1.715	0.870
MS Percent Recovery:	99.40%	113.33%
MSD Percent Recovery:	86.70%	108.10%
MS Status vs Numerical Indicator:	Pass	Pass
MSD Status vs Numerical Indicator:	Pass	Pass
MS Status vs Recovery:	N/A	N/A
MSD Status vs Recovery:	N/A	N/A
MS/MSD Upper % Recovery Limits:	125%	125%
MS/MSD Lower % Recovery Limits:	75%	75%

Duplicate Sample Assessment		
Sample I.D.:		
Duplicate Sample I.D.		
Sample Result (pCi/L, g, F):		
Sample Result 2 Sigma CSU (pCi/L, g, F):		
Sample Duplicate Result (pCi/L, g, F):		
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):		
Are sample and/or duplicate results below RL?	See Below ##	
Duplicate Numerical Performance Indicator:		
Duplicate RPD:		
Duplicate Status vs Numerical Indicator:		
Duplicate Status vs RPD:		
% RPD Limit:		

Matrix Spike/Matrix Spike Duplicate Sample Assessment		
Sample I.D.	30617128003	30617138003
Sample MS I.D.	30617128004	30617138004
Sample MSD I.D.	30617128005	30617138005
Sample Matrix Spike Result:	24.026	27.513
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):	3.881	4.372
Sample Matrix Spike Duplicate Result:	21.043	26.591
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):	3.460	4.261
Duplicate Numerical Performance Indicator:	1.125	0.296
(Based on the Percent Recoveries) MS/ MSD Duplicate RPD:	13.65%	4.73%
MS/ MSD Duplicate Status vs Numerical Indicator:	Pass	Pass
MS/ MSD Duplicate Status vs RPD:	N/A	N/A
% RPD Limit:	25%	25%

Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

Comments:

LAM 9/26/23

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040
205-664-6001

Analytical Report

Alabama Power

Sample Group : WMWGORG_1422

Project/Site : Gorgas Gypsum
Parrish, AL 35580

For : Southern Company Services
3535 Colonnade Parkway
Birmingham, AL 35243

Attention : Dustin Brooks & Greg Budd

Released By : Brooke Caton
tbwill@southernco.com
(205) 664-6101

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040
(205) 664-6001

Alabama Power

September 25, 2023

Dear Dustin Brooks,

Enclosed are the analytical results for sample(s) received by the laboratory on August 24, 2023.
All results reported herein conform to the laboratory's most current Quality Assurance Manual. Results marked with an asterisk conform to the most current applicable TNI/NELAC requirements. Exceptions will be noted in the body of the report.

Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2024

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Quality Control: Brooke Caton

Digitally signed by Brooke Caton
Date: 2023.09.25 07:09:52 -05'00'

Supervision: T Durant Maske

Digitally signed by T Durant Maske
DN: cn=T Durant Maske gn=T Durant Maske c=US United States l=US United States e=tdmaske@southernco.com
Reason: I am the author of this document
Location:
Date: 2023-09-25 10:05-05:00

NELAP ACCREDITED TNI LABORATORY

REPORT OF LABORATORY ANALYSIS

Alabama Power Lab & Field SERVICES

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Case Narrative

Alabama Power

Total Metals ICP

Gorgas Gypsum

WMWGORG_1422

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BD16246	764317	WMWGORG_1422
BD16247	764317	WMWGORG_1422
BD16248	764317	WMWGORG_1422
BD16249	764317	WMWGORG_1422
BD16250	764317	WMWGORG_1422
BD16251	764317	WMWGORG_1422
BD16252	764317	WMWGORG_1422
BD16253	764317	WMWGORG_1422
BD16254	764317	WMWGORG_1422
BD16255	764317	WMWGORG_1422
BD16256	764318	WMWGORG_1422
BD16257	764318	WMWGORG_1422
BD16258	764318	WMWGORG_1422
BD16259	764318	WMWGORG_1422
BD16260	764318	WMWGORG_1422
BD16261	764318	WMWGORG_1422
BD16262	764318	WMWGORG_1422
BD16263	764318	WMWGORG_1422
BD16264	764318	WMWGORG_1422
BD16265	764318	WMWGORG_1422
BD16266	764319	WMWGORG_1422
BD16267	764319	WMWGORG_1422
BD16268	764319	WMWGORG_1422
BD16269	764319	WMWGORG_1422

4. All of the above samples were analyzed by EPA 200.7 and prepared by EPA 1638.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- Prior to sample analysis, an initial calibration verification (ICV) was analyzed, and all criteria were met.
- Following the ICV, an initial calibration blank (ICB) was analyzed, and all criteria were met.

- All continued calibration verification (CCV) were within the acceptance criteria for the requested analytes.
- All continued calibration blanks (CCB) were analyzed, and all criteria were met.
- A preparation method blank and laboratory control sample were digested and analyzed with the samples in each digestion batch.
- All laboratory control sample criteria were met.
- The method blank associated with each digestion batch passed all acceptance criteria for all requested analytes.
- All calibration curve requirements were within acceptance criteria.
- All sample internal standard criteria were met.
- The spectral interference check associated with EPA 200.7 was analyzed, and all acceptance criteria were met.
- It is noted that the QC summary page typically provides the QC results from the original batch analytical sequence. If dilutions were subsequently performed to bring sample concentrations within the calibration range, any additional QC data from the dilution analyses may need to be obtained from the laboratory. Any qualifications applied to original analyses or dilution re-analyses are based upon QC data available at the time of review.

Matrix Specific Quality Control Procedures:

Similarity of matrix and therefore relevance of matrix specific QC results should not be automatically inferred for any sample other than the sample selected for QC.

- A matrix spike and matrix spike duplicate were digested and analyzed with each ICP batch. All acceptance criteria for accuracy were met, except for the following:
    - BD16265 Sodium MS/MSD spike levels were less than 30% of the sample concentrations.
- A matrix spike and matrix spike duplicate were digested and analyzed with each ICP batch. All acceptance criteria for precision were met.

7. The following samples were diluted due to the analyzed sample concentration being greater than the high standard of the calibration curve:

Sample ID	Analyte	Dilution Factor
BD16246	Calcium, Sodium	10.15
BD16247	Calcium, Iron	101.5
BD16248	Calcium, Iron, Magnesium, Sodium	10.15
BD16249	Calcium, Magnesium, Sodium	10.15
BD16250	Calcium, Iron, Magnesium	10.15
BD16251	Calcium, Iron, Magnesium	10.15
BD16252	Calcium, Magnesium	10.15
BD16253	Calcium, Iron, Magnesium	10.15
BD16254	Calcium, Magnesium	10.15
BD16254	Iron	101.5
BD16256	Calcium, Iron, Magnesium, Silicon	10.15
BD16257	Calcium, Iron, Magnesium, Sodium	101.5
BD16258	Calcium, Iron, Magnesium, Sodium	101.5

BD16259	Calcium, Iron, Magnesium, Silicon	10.15
BD16260	Calcium, Magnesium, Sodium	10.15
BD16261	Calcium, Magnesium, Sodium	10.15
BD16261	Iron	101.5
BD16262	Calcium, Magnesium, Sodium	10.15
BD16262	Iron	101.5
BD16263	Calcium, Iron, Magnesium, Sodium	10.15
BD16264	Magnesium, Sodium	10.15
BD16264	Calcium	101.5
BD16265	Sodium	10.15
BD16266	Calcium, Iron, Magnesium, Sodium	101.5
BD16268	Calcium, Magnesium, Sodium	10.15
BD16268	Iron	101.5

8. The raw data results are shown with dilution factors included.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Case Narrative

Alabama Power

Dissolved Metals ICP

Gorgas Gypsum

WMWGORG_1422

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BD16246	764263	WMWGORG_1422
BD16247	764263	WMWGORG_1422
BD16248	764263	WMWGORG_1422
BD16249	764263	WMWGORG_1422
BD16250	764263	WMWGORG_1422
BD16251	764263	WMWGORG_1422
BD16252	764263	WMWGORG_1422
BD16253	764263	WMWGORG_1422
BD16254	764263	WMWGORG_1422
BD16256	764263	WMWGORG_1422
BD16257	764264	WMWGORG_1422
BD16258	764264	WMWGORG_1422
BD16259	764264	WMWGORG_1422
BD16260	764264	WMWGORG_1422
BD16261	764264	WMWGORG_1422
BD16262	764264	WMWGORG_1422
BD16263	764264	WMWGORG_1422
BD16264	764264	WMWGORG_1422
BD16265	764264	WMWGORG_1422
BD16266	764264	WMWGORG_1422
BD16268	764265	WMWGORG_1422

4. All of the above samples were analyzed and prepared by EPA 200.7 for dissolved analysis.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- Prior to sample analysis, an initial calibration verification (ICV) was analyzed, and all criteria were met.
- Following the ICV, an initial calibration blank (ICB) was analyzed, and all criteria were met.
- All continued calibration verification (CCV) were within the acceptance criteria for the requested analytes.
- All continued calibration blanks (CCB) were analyzed, and all criteria were met.

- Due to no filtered method blank (MB) or laboratory control sample (LCS) submitted with the sample set, an unfiltered MB and LCS were analyzed with the samples in each batch.
- All laboratory control sample criteria were met.
- The method blank associated with each batch passed all acceptance criteria for all requested analytes.
- All calibration curve requirements were within acceptance criteria.
- All sample internal standard criteria were met.
- The spectral interference check associated with EPA 200.7 was analyzed and all acceptance criteria were met.
- It is noted that the QC summary page typically provides the QC results from the original batch analytical sequence. If dilutions were subsequently performed to bring sample concentrations within the calibration range, any additional QC data from the dilution analyses may need to be obtained from the laboratory. Any qualifications applied to original analyses or dilution re-analyses are based upon QC data available at the time of review.

Matrix Specific Quality Control Procedures:

Similarity of matrix and therefore relevance of matrix specific QC results should not be automatically inferred for any sample other than the sample selected for QC.

- A matrix spike and matrix spike duplicate were analyzed with each ICP batch. All acceptance criteria for accuracy were met, except for the following:
    - BD16256 Calcium, Iron, Magnesium, Silicon MS/MSD spike levels were less than 30% of the sample concentrations.
    - BD16266 Calcium, Iron, Magnesium, Sodium MS/MSD spike levels were less than 30% of the sample concentrations.
    - BD16268 Calcium, Iron, Magnesium, Sodium MS/MSD spike levels were less than 30% of the sample concentrations.
- A matrix spike and matrix spike duplicate were analyzed with each ICP batch. All acceptance criteria for precision were met.

7. The following samples were diluted due to the analyzed sample concentration being greater than the high standard of the calibration curve:

Sample ID	Analyte	Dilution Factor
BD16246	Calcium, Sodium	10.15
BD16247	Calcium, Iron	101.5
BD16248	Calcium, Iron, Magnesium, Sodium	10.15
BD16249	Calcium, Magnesium, Sodium	10.15
BD16250	Calcium, Iron, Magnesium	10.15
BD16251	Calcium, Iron, Magnesium	10.15
BD16252	Calcium, Magnesium	10.15
BD16253	Calcium, Magnesium	10.15
BD16254	Calcium, Magnesium	10.15
BD16254	Iron	101.5
BD16256	Calcium, Iron, Magnesium, Silicon	10.15

BD16257	Calcium, Iron, Magnesium, Sodium	101.5
BD16258	Calcium, Iron, Magnesium, Sodium	101.5
BD16259	Calcium, Iron, Magnesium, Silicon	10.15
BD16260	Calcium, Magnesium, Sodium	10.15
BD16261	Calcium, Magnesium, Sodium	10.15
BD16261	Iron	101.5
BD16262	Calcium, Magnesium, Sodium	10.15
BD16262	Iron	101.5
BD16263	Calcium, Iron, Magnesium, Sodium	10.15
BD16264	Magnesium, Sodium	10.15
BD16264	Calcium	101.5
BD16265	Sodium	10.15
BD16266	Calcium, Iron, Magnesium, Sodium	101.5
BD16268	Calcium, Iron, Magnesium, Sodium	10.15

8. The raw data results are shown with dilution factors included.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Case Narrative

Alabama Power

Total Metals ICPMS

Gorgas Gypsum

WMWGORG_1422

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BD16246	765187	WMWGORG_1422
BD16247	765187	WMWGORG_1422
BD16248	765187	WMWGORG_1422
BD16249	765187	WMWGORG_1422
BD16250	765187	WMWGORG_1422
BD16251	765187	WMWGORG_1422
BD16252	765187	WMWGORG_1422
BD16253	765187	WMWGORG_1422
BD16254	765187	WMWGORG_1422
BD16255	765187	WMWGORG_1422
BD16256	765188	WMWGORG_1422
BD16257	765188	WMWGORG_1422
BD16258	765188	WMWGORG_1422
BD16259	765188	WMWGORG_1422
BD16260	765188	WMWGORG_1422
BD16261	765188	WMWGORG_1422
BD16262	765188	WMWGORG_1422
BD16263	765188	WMWGORG_1422
BD16264	765188	WMWGORG_1422
BD16265	765188	WMWGORG_1422
BD16266	765189, 765703	WMWGORG_1422
BD16267	765189, 765703	WMWGORG_1422
BD16268	765189, 765703	WMWGORG_1422
BD16269	765189, 765703	WMWGORG_1422

4. All of the above samples were analyzed by EPA 200.8 and prepared by EPA 1638.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- All tune and calibration met criteria for all requested analytes.
- Prior to sample analysis, an initial calibration verification (ICV) was analyzed, and all criteria were met.

- Following the ICV, an initial calibration blank (ICB) was analyzed and was below the limit of quantitation for all requested analytes.
- All continued calibration verification (CCV) were within the acceptance criteria for the requested analytes.
- All continued calibration blanks (CCB) were below the limit of quantitation for the requested analytes.
- A preparation method blank and laboratory control sample were digested and analyzed with the samples in each digestion batch.
- All laboratory control sample criteria were met.
- The method blank associated with each digestion batch passed all acceptance criteria for all requested analytes.
- The interference check samples associated with EPA 200.8 were analyzed and passed for all requested analytes.
- All sample internal standard criteria were met.
- It is noted that the QC summary page typically provides the QC results from the original batch analytical sequence. If dilutions were subsequently performed to bring sample concentrations within the calibration range, any additional QC data from the dilution analyses may need to be obtained from the laboratory. Any qualifications applied to original analyses or dilution re-analyses are based upon QC data available at the time of review.

Matrix Specific Quality Control Procedures:

Similarity of matrix and therefore relevance of matrix specific QC results should not be automatically inferred for any sample other than the sample selected for QC.

- A matrix spike and matrix spike duplicate were digested and analyzed with each ICPMS batch. All acceptance criteria for accuracy were met.
- A matrix spike and matrix spike duplicate were digested and analyzed with each ICPMS batch. All acceptance criteria for precision were met.

7. The following samples were diluted due to the analyzed sample concentration being greater than the high standard of the calibration curve:

Sample ID	Analyte	Dilution Factor
BD16247	Manganese	5.075
BD16250	Manganese	5.075
BD16250	Aluminum	5.075
BD16251	Manganese	10.15
BD16251	Aluminum	10.15
BD16252	Manganese	92.365
BD16252	Aluminum	10.15
BD16253	Manganese	92.365
BD16253	Aluminum	10.15
BD16254	Manganese	5.075
BD16254	Aluminum	5.075
BD16256	Manganese	92.365
BD16256	Aluminum	5.075
BD16257	Manganese	92.365

BD16258	Manganese	92.365
BD16259	Manganese	10.15
BD16259	Aluminum	10.15
BD16260	Manganese	5.075
BD16261	Manganese	92.365
BD16262	Manganese	92.365
BD16263	Manganese	92.365
BD16266	Manganese	92.365
BD16268	Manganese	92.365

8. The raw data results are shown with dilution factors included.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Case Narrative

Alabama Power

Dissolved Metals ICPMS

Gorgas Gypsum

WMWGORG_1422

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BD16246	765190	WMWGORG_1422
BD16247	765190	WMWGORG_1422
BD16248	765190	WMWGORG_1422
BD16249	765190	WMWGORG_1422
BD16250	765190	WMWGORG_1422
BD16251	765190	WMWGORG_1422
BD16252	765190	WMWGORG_1422
BD16253	765190	WMWGORG_1422
BD16254	765190	WMWGORG_1422
BD16256	765190	WMWGORG_1422
BD16257	765191	WMWGORG_1422
BD16258	765191	WMWGORG_1422
BD16259	765191	WMWGORG_1422
BD16260	765191	WMWGORG_1422
BD16261	765191	WMWGORG_1422
BD16262	765191	WMWGORG_1422
BD16263	765191	WMWGORG_1422
BD16264	765191	WMWGORG_1422
BD16265	765191	WMWGORG_1422
BD16266	765191	WMWGORG_1422
BD16268	765192	WMWGORG_1422

4. All of the above samples were analyzed and prepared by EPA 200.8 for dissolved analysis.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- All tune and calibration met criteria for all requested analytes.
- Prior to sample analysis, an initial calibration verification (ICV) was analyzed, and all criteria were met.
- Following the ICV, an initial calibration blank (ICB) was analyzed and was below the limit of quantitation for all requested analytes.
- All continued calibration verification (CCV) were within the acceptance criteria for the requested analytes.

- All continued calibration blanks (CCB) were below the limit of quantitation for the requested analytes.
- Due to no filtered method blank (MB) or laboratory control sample (LCS) submitted with the sample set, an unfiltered MB and LCS were analyzed with the samples in each batch.
- All laboratory control sample criteria were met.
- The method blank associated with each preparation batch passed all acceptance criteria for all requested analytes.
- The interference check samples associated with EPA 200.8 were analyzed and passed for all requested analytes.
- All sample internal standard criteria were met.
- It is noted that the QC summary page typically provides the QC results from the original batch analytical sequence. If dilutions were subsequently performed to bring sample concentrations within the calibration range, any additional QC data from the dilution analyses may need to be obtained from the laboratory. Any qualifications applied to original analyses or dilution re-analyses are based upon QC data available at the time of review.

Matrix Specific Quality Control Procedures:

Similarity of matrix and therefore relevance of matrix specific QC results should not be automatically inferred for any sample other than the sample selected for QC.

- A matrix spike and matrix spike duplicate were analyzed with each ICPMS batch. All acceptance criteria for accuracy were met, except for the following:
    - BD16256 Aluminum MS/MSD spike levels were less than 30% of the sample concentrations.
    - BD16256 Cobalt MS recovery and/or MSD recovery is outside of specification limit.
    - BD16266 Manganese MS/MSD spike levels were less than 30% of the sample concentrations.
    - BD16268 Manganese MS/MSD spike levels were less than 30% of the sample concentrations.
- A matrix spike and matrix spike duplicate were analyzed with each ICPMS batch. All acceptance criteria for precision were met.

7. The following samples were diluted due to the analyzed sample concentration being greater than the high standard of the calibration curve:

Sample ID	Analyte	Dilution Factor
BD16247	Manganese	5.075
BD16250	Manganese	5.075
BD16250	Aluminum	5.075
BD16251	Manganese	10.15
BD16251	Aluminum	10.15
BD16252	Manganese	92.365
BD16252	Aluminum	10.15
BD16253	Manganese	92.365
BD16253	Aluminum	10.15
BD16254	Manganese	5.075
BD16256	Manganese	92.365
BD16256	Aluminum	5.075
BD16257	Manganese	92.365
BD16258	Manganese	92.365

BD16259	Manganese	10.15
BD16259	Aluminum	10.15
BD16260	Manganese	5.075
BD16261	Manganese	92.365
BD16262	Manganese	92.365
BD16263	Manganese	92.365
BD16266	Manganese	92.365
BD16268	Manganese	92.365

8. The raw data results are shown with dilution factors included.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Case Narrative

Alabama Power

Mercury

Gorgas Gypsum

WMWGORG_1422

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BD16246	764431	WMWGORG_1422
BD16247	764431	WMWGORG_1422
BD16248	764431	WMWGORG_1422
BD16249	764431	WMWGORG_1422
BD16250	764431	WMWGORG_1422
BD16251	764431	WMWGORG_1422
BD16252	764431	WMWGORG_1422
BD16253	764431	WMWGORG_1422
BD16254	764431	WMWGORG_1422
BD16255	764431	WMWGORG_1422
BD16256	764432	WMWGORG_1422
BD16257	764432	WMWGORG_1422
BD16258	764432	WMWGORG_1422
BD16259	764432	WMWGORG_1422
BD16260	764432	WMWGORG_1422
BD16261	764432	WMWGORG_1422
BD16262	764432	WMWGORG_1422
BD16263	764432	WMWGORG_1422
BD16264	764432	WMWGORG_1422
BD16265	764432	WMWGORG_1422
BD16266	764433	WMWGORG_1422
BD16267	764433	WMWGORG_1422
BD16268	764433	WMWGORG_1422
BD16269	764433	WMWGORG_1422

4. All of the above samples were analyzed and prepared by EPA 245.1.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- Prior to sample analysis, an initial calibration verification (ICV) was analyzed and all criteria were met.

- Following the ICV, an initial calibration blank (ICB) was analyzed and was below the method detection limit for the requested analyte.
- All continued calibration verification (CCV) were within the acceptance criteria for the requested analyte.
- All continued calibration blanks (CCB) were below the limit of quantitation for the requested analyte.
- A preparation method blank and laboratory control sample were digested and analyzed with the samples in each digestion batch.
- All laboratory control sample criteria were met.
- The method blank associated with each digestion batch was below the limit of quantitation for the requested analyte.
- All calibration met criteria for the requested analyte.
- All response signals were satisfactory.

Matrix Specific Quality Control Procedures:

Similarity of matrix and therefore relevance of matrix specific QC results should not be automatically inferred for any sample other than the sample selected for QC.

- A matrix spike and matrix spike duplicate were digested and analyzed with each analytical batch. All acceptance criteria for accuracy were met.
- A matrix spike and matrix spike duplicate were digested and analyzed with each analytical batch. All acceptance criteria for precision were met.

7. All samples were analyzed without a dilution.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Case Narrative

Alabama Power

Total Dissolved Solids

Gorgas Gypsum

WMWGORG_1422

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BD16246	764359	WMWGORG_1422
BD16247	764359	WMWGORG_1422
BD16248	764359	WMWGORG_1422
BD16249	764359	WMWGORG_1422
BD16250	764359	WMWGORG_1422
BD16251	764359	WMWGORG_1422
BD16252	764359	WMWGORG_1422
BD16253	764359	WMWGORG_1422
BD16254	764360	WMWGORG_1422
BD16255	764360	WMWGORG_1422
BD16256	764360	WMWGORG_1422
BD16257	764360	WMWGORG_1422
BD16258	764360	WMWGORG_1422
BD16259	764360	WMWGORG_1422
BD16260	764360	WMWGORG_1422
BD16261	764360	WMWGORG_1422
BD16262	764360	WMWGORG_1422
BD16263	764360	WMWGORG_1422
BD16264	764384	WMWGORG_1422
BD16265	764384	WMWGORG_1422
BD16266	764384	WMWGORG_1422
BD16267	764384	WMWGORG_1422
BD16268	764384	WMWGORG_1422
BD16269	764384	WMWGORG_1422

4. All of the above samples were prepared and analyzed by Standard Method 2540C.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- A Method Blank was analyzed with each batch. All criteria were met.
- All final weights of samples, standards, and blanks agreed within 0.5mg of the previous weight.

- A sample duplicate was analyzed with each batch, and RPD was ≤10%.
- A laboratory control sample was analyzed with each batch. All criteria were met.
- Samples were between 2.5mg and 200mg residue.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Case Narrative

Alkalinity

Gorgas Gypsum

WMWGORG_1422

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BD16246	765019, 765020, 765021, 765022	WMWGORG_1422
BD16247	765019, 765020, 765021, 765022	WMWGORG_1422
BD16248	765019, 765020, 765021, 765022	WMWGORG_1422
BD16249	765019, 765020, 765021, 765022	WMWGORG_1422
BD16250	765020, 765022	WMWGORG_1422
BD16251	765020, 765022	WMWGORG_1422
BD16252	765020, 765022	WMWGORG_1422
BD16253	765020, 765022	WMWGORG_1422
BD16254	765019, 765020, 765021, 765022	WMWGORG_1422
BD16256	765020, 765022	WMWGORG_1422
BD16257	765019, 765020, 765021, 765022	WMWGORG_1422
BD16258	765019, 765020, 765021, 765022	WMWGORG_1422
BD16259	765020, 765022	WMWGORG_1422
BD16260	765019, 765020, 765021, 765022	WMWGORG_1422
BD16261	765019, 765020, 765021, 765022	WMWGORG_1422
BD16262	765019, 765020, 765021, 765022	WMWGORG_1422
BD16263	765019, 765020, 765021, 765022	WMWGORG_1422
BD16264	765019, 765020, 765021, 765022	WMWGORG_1422
BD16265	765019, 765020, 765021, 765022	WMWGORG_1422
BD16266	765019, 765020, 765021, 765022	WMWGORG_1422
BD16268	765459, 765460, 765461, 765462	WMWGORG_1422

4. All of the above samples were prepared and analyzed by Standard Method 2320B, except for the following:
    - BD16250, BD16251, BD16252, BD16253, BD16256, & BD16259 Alkalinity could not be performed, pH at or below titration end point of 4.5 SU.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- An initial pH check was analyzed with each batch. The acceptance criteria were met.
- A final pH check was analyzed with each batch. The acceptance criteria were met.

- An alkalinity laboratory control sample was analyzed with each batch. Range criteria of within 10% of true value was met.
- An alkalinity sample duplicate was analyzed with each batch. Precision criteria less than 10 RPD was met.

7. The following samples had pH>10 and/or TDS>500mg/L. Therefore, the calculations for carbonate and bicarbonate are estimates:
    - BD16247
    - BD16248
    - BD16249
    - BD16250
    - BD16251
    - BD16252
    - BD16253
    - BD16254
    - BD16256
    - BD16157
    - BD16258
    - BD16259
    - BD16260
    - BD16261
    - BD16262
    - BD16263
    - BD16264
    - BD16265
    - BD16266
    - BD16268

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Case Narrative

Alabama Power

Anions

Gorgas Gypsum

WMWGORG_1422

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BD16246	764916, 764973, 764381	WMWGORG_1422
BD16247	764916, 764973, 764381	WMWGORG_1422
BD16248	764916, 764973, 764381	WMWGORG_1422
BD16249	764916, 764973, 764381	WMWGORG_1422
BD16250	764916, 764973, 764381	WMWGORG_1422
BD16251	764916, 764973, 764381	WMWGORG_1422
BD16252	764916, 764973, 764381	WMWGORG_1422
BD16253	764916, 764973, 764381	WMWGORG_1422
BD16254	764916, 764973, 764381	WMWGORG_1422
BD16255	764916, 764973, 764381	WMWGORG_1422
BD16256	764917, 764974, 764382	WMWGORG_1422
BD16257	764917, 764974, 764382	WMWGORG_1422
BD16258	764917, 764974, 764382	WMWGORG_1422
BD16259	764917, 764974, 764382	WMWGORG_1422
BD16260	764917, 764974, 764382	WMWGORG_1422
BD16261	764917, 764974, 764382	WMWGORG_1422
BD16262	764917, 764974, 764382	WMWGORG_1422
BD16263	764917, 764974, 764382	WMWGORG_1422
BD16264	764917, 764974, 764382	WMWGORG_1422
BD16265	764917, 764974, 764382	WMWGORG_1422
BD16266	764918, 764975, 764383	WMWGORG_1422
BD16267	764918, 764975, 764383	WMWGORG_1422
BD16268	764918, 764975, 764383	WMWGORG_1422
BD16269	764918, 764975, 764383	WMWGORG_1422

4. All of the above samples were analyzed and prepared by SM4500 Cl E, SM4500 F G, and SM4500 SO4 E.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

Revision 5

- All calibration met criteria for the requested analyte.
- Prior to sample analysis, an initial calibration verification (ICV), and all criteria were met.
- Prior to sample analysis, an initial calibration blank (ICB) was analyzed and was below half the limit of quantitation for the requested analyte.
- All continued calibration verification (CCV) were within the acceptance criteria for the requested analyte.
- All continued calibration blanks (CCB) were below the limit of quantitation for the requested analyte.
- It is noted that the QC summary page typically provides the QC results from the original batch analytical sequence. If dilutions were subsequently performed to bring sample concentrations within the calibration range, any additional QC data from the dilution analyses may need to be obtained from the laboratory. Any qualifications applied to original analyses or dilution re-analyses are based upon QC data available at the time of review.

Matrix Specific Quality Control Procedures:

Similarity of matrix and therefore relevance of matrix specific QC results should not be automatically inferred for any sample other than the sample selected for QC.

- A matrix spike and matrix spike duplicate were analyzed with each batch. All acceptance criteria for accuracy were met, except for the following:
    - BD16255 Fluoride MS recovery and/or MSD recovery is outside of specification limit.
- A matrix spike and matrix spike duplicate were analyzed with each batch. All acceptance criteria for precision were met.

7. Sample BD16250, BD16251, BD16252, BD16253, & BD16259 results for Fluoride are qualified due to potential matrix interferences.
8. The following samples were diluted due to the analyzed sample concentration being greater than the high standard of the calibration curve:

Sample ID	Analyte	Dilution Factor
BD16247	Sulfate	20
BD16248	Sulfate	25
BD16249	Sulfate	10
BD16250	Sulfate	32
BD16251	Sulfate	50
BD16252	Sulfate	40
BD16253	Sulfate	40
BD16254	Chloride, Sulfate	2, 40
BD16256	Chloride, Sulfate	2, 40
BD16257	Chloride, Sulfate	25, 100
BD16258	Chloride, Sulfate	25, 80
BD16259	Sulfate	32
BD16260	Sulfate	40

BD16261	Sulfate	40
BD16262	Sulfate	40
BD16263	Chloride, Sulfate	2, 80
BD16264	Chloride, Sulfate	3, 80
BD16265	Chloride, Sulfate	3, 8
BD16266	Chloride, Sulfate	25, 80
BD16268	Chloride, Sulfate	25, 80

9. The raw data results are shown with dilution factors included.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Case Narrative

Alabama Power

Nitrate-Nitrite

Gorgas Gypsum

WMWGORG_1422

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BD16246	764329	WMWGORG_1422
BD16247	764329	WMWGORG_1422
BD16248	764329	WMWGORG_1422
BD16249	764329	WMWGORG_1422
BD16250	764329	WMWGORG_1422
BD16251	764329	WMWGORG_1422
BD16252	764329	WMWGORG_1422
BD16253	764329	WMWGORG_1422
BD16254	764329	WMWGORG_1422
BD16255	764329	WMWGORG_1422
BD16256	764330	WMWGORG_1422
BD16257	764330	WMWGORG_1422
BD16258	764330	WMWGORG_1422
BD16259	764330	WMWGORG_1422
BD16260	764330	WMWGORG_1422
BD16261	764330	WMWGORG_1422
BD16262	764330	WMWGORG_1422
BD16263	764330	WMWGORG_1422
BD16264	764330	WMWGORG_1422
BD16265	764330	WMWGORG_1422
BD16266	764331	WMWGORG_1422
BD16267	764331	WMWGORG_1422
BD16268	764331	WMWGORG_1422
BD16269	764331	WMWGORG_1422

4. All of the above samples were prepared and analyzed for NO_x by EPA 353.2.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- Water baseline report was run and met criteria.
- All calibration met criteria for the requested analytes.
- Prior to sample analysis, an initial calibration verification (ICV) was analyzed and met all criteria.
- All continued calibration verification (CCV) were within the acceptance criteria.
- Prior to sample analysis, an initial calibration blank (ICB) was analyzed and were below limit of detection.
- All continued calibration blanks (CCB) were below the limit of detection.

EPA 353.2 Specific QC:

- Prior to sample analysis, Cadmium coil reduction efficiency check met criteria.
- Matrix Specific QC:
    - A sample duplicate was run and criteria for precision was met.
    - A matrix spike was run and criteria for accuracy was met.

7. All samples were analyzed without a dilution factor.
8. The raw data results are shown with dilution factors included.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Case Narrative

Alabama Power

Total Organic Carbon

Gorgas Gypsum

WMWGORG_1422

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BD16246	764401	WMWGORG_1422
BD16247	764401	WMWGORG_1422
BD16248	764401	WMWGORG_1422
BD16249	764401	WMWGORG_1422
BD16250	764401	WMWGORG_1422
BD16251	764401	WMWGORG_1422
BD16252	764401	WMWGORG_1422
BD16253	764401	WMWGORG_1422
BD16254	764401	WMWGORG_1422
BD16255	764401	WMWGORG_1422
BD16256	764402	WMWGORG_1422
BD16257	764402	WMWGORG_1422
BD16258	764402	WMWGORG_1422
BD16259	764402	WMWGORG_1422
BD16260	764402	WMWGORG_1422
BD16261	764402	WMWGORG_1422
BD16262	764402	WMWGORG_1422
BD16263	764402	WMWGORG_1422
BD16264	764402	WMWGORG_1422
BD16265	764402	WMWGORG_1422
BD16266	764403	WMWGORG_1422
BD16267	764403	WMWGORG_1422
BD16268	764403	WMWGORG_1422
BD16269	764403	WMWGORG_1422

4. All of the above samples were prepared and analyzed by Standard Method 5310B.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- All calibration criteria were met.
- Prior to sample analysis, an initial calibration verification (ICV) was analyzed and met all criteria.

- Prior to sample analysis, an initial calibration blank (ICB) was analyzed and was <1/2RL.
- All continued calibration verifications (CCVs) were within the acceptance range.
- All continued calibration blanks (CCBs) were <1/2RL.

Matrix Specific Quality Control Procedures:

- A matrix spike and matrix spike duplicate were analyzed with each batch. All acceptance criteria for accuracy were met.
- A matrix spike and matrix spike duplicate were analyzed with each batch. All acceptance criteria for precision were met.

7. All samples were analyzed without a dilution factor.
8. The raw data results are shown with dilution factors included.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gorgas Gypsum - PZ-21

Location Code: WMWGORG
Collected: 8/21/23 14:31
Customer ID:
Submittal Date: 8/24/23 08:32

Laboratory ID Number: BD16246

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	8/24/23 16:04	8/25/23 14:27		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	8/24/23 16:04	8/28/23 14:01		10.15	48.8	mg/L	0.70035	4.06	
* Iron, Total	8/24/23 16:04	8/25/23 14:27		1.015	3.22	mg/L	0.008120	0.0406	
* Lithium, Total	8/24/23 16:04	8/25/23 14:27		1.015	0.0185	mg/L	0.007105	0.01999956	J
* Magnesium, Total	8/24/23 16:04	8/25/23 14:27		1.015	38.4	mg/L	0.021315	0.406	
* Molybdenum, Total	8/24/23 16:04	8/25/23 14:27		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Total (calc.)	8/24/23 16:04	8/25/23 14:27		1	17.3	mg/L			
* Silicon, Total	8/24/23 16:04	8/25/23 14:27		1.015	8.08	mg/L	0.02030	0.25375	
* Sodium, Total	8/24/23 16:04	8/28/23 14:01		10.15	100	mg/L	0.4060	4.06	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	8/24/23 11:01	8/25/23 12:30		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Dissolved	8/24/23 11:01	8/28/23 12:17		10.15	53.5	mg/L	0.70035	4.06	
* Iron, Dissolved	8/24/23 11:01	8/25/23 12:30		1.015	2.71	mg/L	0.008120	0.0406	
* Lithium, Dissolved	8/24/23 11:01	8/25/23 12:30		1.015	0.0187	mg/L	0.007105	0.01999956	J
* Magnesium, Dissolved	8/24/23 11:01	8/25/23 12:30		1.015	39.2	mg/L	0.021315	0.406	
* Molybdenum, Dissolved	8/24/23 11:01	8/25/23 12:30		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Dissolved (calc.)	8/24/23 11:01	8/25/23 12:30		1	17.2	mg/L			
* Silicon, Dissolved	8/24/23 11:01	8/25/23 12:30		1.015	8.02	mg/L	0.02030	0.25375	
* Sodium, Dissolved	8/24/23 11:01	8/28/23 12:17		10.15	103	mg/L	0.4060	4.06	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	8/24/23 16:04	8/25/23 10:23		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Arsenic, Total	8/24/23 16:04	8/25/23 10:23		1.015	0.00288	mg/L	0.000112	0.000203	
* Aluminum, Total	8/24/23 16:04	8/25/23 10:23		1.015	0.0155	mg/L	0.009135	0.05075	J
* Barium, Total	8/24/23 16:04	8/25/23 10:23		1.015	0.138	mg/L	0.000508	0.001015	
* Beryllium, Total	8/24/23 16:04	8/25/23 10:23		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	8/24/23 16:04	8/25/23 10:23		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	8/24/23 16:04	8/25/23 10:23		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	8/24/23 16:04	8/25/23 10:23		1.015	0.00302	mg/L	0.000068	0.000203	
* Lead, Total	8/24/23 16:04	8/25/23 10:23		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	8/24/23 16:04	8/25/23 10:23		1.015	1.20	mg/L	0.000152	0.001015	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 9/25/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gorgas Gypsum - PZ-21

Location Code: WMWGORG
Collected: 8/21/23 14:31
Customer ID:
Submittal Date: 8/24/23 08:32

Laboratory ID Number: BD16246

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	8/24/23 16:04	8/25/23 10:23		1.015	2.42	mg/L	0.169505	0.5075	
* Selenium, Total	8/24/23 16:04	8/25/23 10:23		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	8/24/23 16:04	8/25/23 10:23		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	8/24/23 11:01	8/24/23 14:40		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	8/24/23 11:01	8/24/23 14:40		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Dissolved	8/24/23 11:01	8/24/23 14:40		1.015	0.00266	mg/L	0.000112	0.000203	
* Barium, Dissolved	8/24/23 11:01	8/24/23 14:40		1.015	0.131	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	8/24/23 11:01	8/24/23 14:40		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	8/24/23 11:01	8/24/23 14:40		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	8/24/23 11:01	8/24/23 14:40		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	8/24/23 11:01	8/24/23 14:40		1.015	0.00288	mg/L	0.000068	0.000203	
* Lead, Dissolved	8/24/23 11:01	8/24/23 14:40		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	8/24/23 11:01	8/24/23 14:40		1.015	1.15	mg/L	0.000152	0.001015	
* Potassium, Dissolved	8/24/23 11:01	8/24/23 14:40		1.015	2.35	mg/L	0.169505	0.5075	
* Selenium, Dissolved	8/24/23 11:01	8/24/23 14:40		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	8/24/23 11:01	8/24/23 14:40		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	8/25/23 11:54	8/25/23 15:50		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: CES***								
* Nitrogen, Nitrate/Nitrite	8/24/23 12:17	8/24/23 12:17		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: DHC***								
* Alkalinity	8/30/23 09:34	8/30/23 13:21		1	428	mg CaCO3/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	8/24/23 11:00	8/30/23 12:15		1	490	mg/L		50	
Analytical Method: SM 4500CO2 D	***Analyst: DHC***								
* Bicarbonate Alkalinity, (calc.)	8/30/23 09:34	8/30/23 13:21		1	427	mg CaCO3/L		1	
* Carbonate Alkalinity, (calc.)	8/30/23 09:34	8/30/23 13:21		1	0.731	mg CaCO3/L		0.5	
Analytical Method: SM 4500H+ B	***Analyst: DHC***								
Alkalinity pH Endpoint	8/30/23 09:34	8/30/23 13:21		1	4.51	SU		2	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 9/25/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gorgas Gypsum - PZ-21

Location Code: WMWGORG
Collected: 8/21/23 14:31
Customer ID:
Submittal Date: 8/24/23 08:32

Laboratory ID Number: BD16246

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	8/25/23 14:01	8/25/23 14:01		1	4.03	mg/L	1.00	2	
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	8/29/23 10:33	8/29/23 10:33		1	12.4	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	8/29/23 14:29	8/29/23 14:29		1	0.424	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	8/24/23 10:58	8/24/23 10:58		1	38.8	mg/L	0.6	2	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	8/21/23 14:27	8/21/23 14:27			802.30	uS/cm			FA
pH	8/21/23 14:27	8/21/23 14:27			6.85	SU			FA
Temperature	8/21/23 14:27	8/21/23 14:27			23.36	C			FA
Turbidity	8/21/23 14:27	8/21/23 14:27			6.27	NTU			FA
Sulfide	8/21/23 14:27	8/21/23 14:27			0	mg/L			FA

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 9/25/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGORG
Sample Date: 8/21/23 14:31
Customer ID:
Delivery Date: 8/24/23 08:32

Description: Gorgas Gypsum - PZ-21

Laboratory ID Number: BD16246

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD16256	Aluminum, Dissolved	mg/L	-0.000172	0.0198	0.100	18.0	16.9	0.107	0.0850 to 0.115	-200	70.0 to 130	6.30	20.0
BD16255	Aluminum, Total	mg/L	0.000416	0.0198	0.100	0.103	0.104	0.104	0.0850 to 0.115	103	70.0 to 130	0.966	20.0
BD16256	Antimony, Dissolved	mg/L	0.000328	0.00100	0.100	0.104	0.0956	0.0926	0.0850 to 0.115	104	70.0 to 130	8.42	20.0
BD16255	Antimony, Total	mg/L	0.000302	0.00100	0.100	0.0945	0.0950	0.0928	0.0850 to 0.115	94.5	70.0 to 130	0.528	20.0
BD16256	Arsenic, Dissolved	mg/L	0.0000027	0.000200	0.100	0.107	0.0984	0.101	0.0850 to 0.115	106	70.0 to 130	8.37	20.0
BD16255	Arsenic, Total	mg/L	0.0000072	0.000200	0.100	0.101	0.101	0.102	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BD16256	Barium, Dissolved	mg/L	0.0000131	0.00100	0.100	0.117	0.107	0.0970	0.0850 to 0.115	109	70.0 to 130	8.93	20.0
BD16255	Barium, Total	mg/L	0.0000115	0.00100	0.100	0.101	0.0994	0.0993	0.0850 to 0.115	101	70.0 to 130	1.60	20.0
BD16256	Beryllium, Dissolved	mg/L	0.0000369	0.000880	0.100	0.110	0.108	0.104	0.0850 to 0.115	103	70.0 to 130	1.83	20.0
BD16255	Beryllium, Total	mg/L	0.000	0.000880	0.100	0.0993	0.101	0.100	0.0850 to 0.115	99.3	70.0 to 130	1.70	20.0
BD16256	Boron, Dissolved	mg/L	-0.000395	0.0650	1.00	3.25	3.25	0.988	0.850 to 1.15	101	70.0 to 130	0.00	20.0
BD16255	Boron, Total	mg/L	-0.000149	0.0650	1.00	0.985	0.977	0.974	0.850 to 1.15	98.5	70.0 to 130	0.815	20.0
BD16256	Cadmium, Dissolved	mg/L	-0.0000002	0.000147	0.100	0.110	0.0998	0.0992	0.0850 to 0.115	108	70.0 to 130	9.72	20.0
BD16255	Cadmium, Total	mg/L	0.0000049	0.000147	0.100	0.104	0.100	0.101	0.0850 to 0.115	104	70.0 to 130	3.92	20.0
BD16256	Calcium, Dissolved	mg/L	-0.00836	0.152	5.00	156	150	4.84	4.25 to 5.75	220	70.0 to 130	3.92	20.0
BD16255	Calcium, Total	mg/L	-0.0149	0.152	5.00	4.63	4.75	4.72	4.25 to 5.75	92.6	70.0 to 130	2.56	20.0
BD16255	Chloride	mg/L	-0.00615	1.00	10.0	10.0	10.1	10.6	9.00 to 11.0	100	80.0 to 120	0.995	20.0
BD16256	Chromium, Dissolved	mg/L	0.0000133	0.000440	0.100	0.103	0.0936	0.101	0.0850 to 0.115	102	70.0 to 130	9.56	20.0
BD16255	Chromium, Total	mg/L	-0.0000482	0.000440	0.100	0.103	0.102	0.103	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BD16256	Cobalt, Dissolved	mg/L	0.0000012	0.000147	0.100	0.444	0.403	0.0999	0.0850 to 0.115	132	70.0 to 130	9.68	20.0
BD16255	Cobalt, Total	mg/L	-0.0000511	0.000147	0.100	0.105	0.104	0.105	0.0850 to 0.115	105	70.0 to 130	0.957	20.0
BD16255	Fluoride	mg/L	0.0323	0.125	2.50	1.93	2.21	2.40	2.25 to 2.75	77.2	80.0 to 120	13.5	20.0
BD16256	Iron, Dissolved	mg/L	0.0118	0.0176	0.2	29.3	28.9	0.199	0.170 to 0.230	500	70.0 to 130	1.37	20.0
BD16255	Iron, Total	mg/L	0.00252	0.0176	0.2	0.199	0.199	0.198	0.170 to 0.230	99.5	70.0 to 130	0.00	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGORG
Sample Date: 8/21/23 14:31
Customer ID:
Delivery Date: 8/24/23 08:32

Description: Gorgas Gypsum - PZ-21

Laboratory ID Number: BD16246

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD16256	Lead, Dissolved	mg/L	0.0000062	0.000147	0.100	0.108	0.0972	0.102	0.0850 to 0.115	107	70.0 to 130	10.5	20.0
BD16255	Lead, Total	mg/L	0.0000013	0.000147	0.100	0.106	0.104	0.108	0.0850 to 0.115	106	70.0 to 130	1.90	20.0
BD16256	Lithium, Dissolved	mg/L	-0.000045	0.0154	0.200	0.663	0.664	0.196	0.170 to 0.230	100	70.0 to 130	0.151	20.0
BD16255	Lithium, Total	mg/L	0.000397	0.0154	0.200	0.197	0.195	0.194	0.170 to 0.230	98.5	70.0 to 130	1.02	20.0
BD16256	Magnesium, Dissolved	mg/L	0.0115	0.0462	5.00	118	114	4.98	4.25 to 5.75	160	70.0 to 130	3.45	20.0
BD16255	Magnesium, Total	mg/L	0.0147	0.0462	5.00	4.90	4.92	4.89	4.25 to 5.75	97.5	70.0 to 130	0.407	20.0
BD16256	Manganese, Dissolved	mg/L	0.0000265	0.00033	0.100	13.4	12.5	0.102	0.0850 to 0.115	100	70.0 to 130	6.95	20.0
BD16255	Manganese, Total	mg/L	0.0000137	0.00033	0.100	0.102	0.101	0.103	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BD16255	Mercury, Total by CVAA	mg/L	4.000E-05	0.000500	0.004	0.00397	0.00391	0.00393	0.00340 to 0.00460	99.2	70.0 to 130	1.52	20.0
BD16256	Molybdenum, Dissolved	mg/L	0.00029	0.0100	0.2	0.197	0.197	0.198	0.170 to 0.230	98.5	70.0 to 130	0.00	20.0
BD16255	Molybdenum, Total	mg/L	0.000	0.0100	0.2	0.200	0.200	0.199	0.170 to 0.230	100	70.0 to 130	0.00	20.0
BD16256	Potassium, Dissolved	mg/L	-0.0105	0.367	10.0	14.8	13.4	10.2	8.50 to 11.5	112	70.0 to 130	9.93	20.0
BD16255	Potassium, Total	mg/L	-0.00850	0.367	10.0	10.2	10.3	10.6	8.50 to 11.5	102	70.0 to 130	0.976	20.0
BD16256	Selenium, Dissolved	mg/L	0.0000176	0.00100	0.100	0.110	0.100	0.104	0.0850 to 0.115	107	70.0 to 130	9.52	20.0
BD16255	Selenium, Total	mg/L	0.0000331	0.00100	0.100	0.104	0.105	0.106	0.0850 to 0.115	104	70.0 to 130	0.957	20.0
BD16256	Silicon, Dissolved	mg/L	-0.00145	0.0440	1.00	26.3	25.8	0.987	0.850 to 1.15	180	70.0 to 130	1.92	20.0
BD16255	Silicon, Total	mg/L	-0.000644	0.0440	1.00	0.978	0.978	0.974	0.850 to 1.15	97.8	70.0 to 130	0.00	20.0
BD16256	Sodium, Dissolved	mg/L	0.00575	0.0880	5.00	24.3	24.3	5.09	4.25 to 5.75	104	70.0 to 130	0.00	20.0
BD16255	Sodium, Total	mg/L	0.0102	0.0880	5.00	5.01	4.96	4.96	4.25 to 5.75	100	70.0 to 130	1.00	20.0
BD16255	Sulfate	mg/L	0.481	2.0	20.0	19.6	19.7	20.5	18.0 to 22.0	94.6	80.0 to 120	0.509	20.0
BD16256	Thallium, Dissolved	mg/L	0.0000002	0.000147	0.100	0.105	0.0942	0.0986	0.0850 to 0.115	105	70.0 to 130	10.8	20.0
BD16255	Thallium, Total	mg/L	-0.0000938	0.000147	0.100	0.112	0.105	0.113	0.0850 to 0.115	112	70.0 to 130	6.45	20.0
BD16255	Total Organic Carbon	mg/L	0.139	1.00	10.0	10.1	9.52	24.0		101	80.0 to 120	5.91	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Alabama Power

Batch QC Summary

Customer Account: WMWGORG
Sample Date: 8/21/23 14:31
Customer ID:
Delivery Date: 8/24/23 08:32

Description: Gorgas Gypsum - PZ-21

Laboratory ID Number: BD16246

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD16263	Alkalinity	mg CaCO3/L					55.1	51.6	45.0 to 55.0			0.546	10.0
BD16255	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.03	0.200	2.00	1.98	-0.050	2.11	1.80 to 2.20	99.0	90.0 to 110	0.00	15.0
BD16253	Solids, Dissolved	mg/L	3.00	25.0			1260	53.0	40.0 to 60.0			3.89	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 9/25/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gorgas Gypsum - PZ-22

Location Code: WMWGORG
Collected: 8/22/23 07:27
Customer ID:
Submittal Date: 8/24/23 08:32

Laboratory ID Number: BD16247

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	8/24/23 16:04	8/25/23 14:30		1.015	0.0710	mg/L	0.030000	0.1015	J
* Calcium, Total	8/24/23 16:04	8/28/23 14:04		101.5	70.3	mg/L	7.0035	40.6	
* Iron, Total	8/24/23 16:04	8/28/23 14:04		101.5	45.9	mg/L	0.8120	4.06	
* Lithium, Total	8/24/23 16:04	8/25/23 14:30		1.015	0.0633	mg/L	0.007105	0.01999956	
* Magnesium, Total	8/24/23 16:04	8/25/23 14:30		1.015	36.7	mg/L	0.021315	0.406	
* Molybdenum, Total	8/24/23 16:04	8/25/23 14:30		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Total (calc.)	8/24/23 16:04	8/25/23 14:30		1	18.7	mg/L			
* Silicon, Total	8/24/23 16:04	8/25/23 14:30		1.015	8.74	mg/L	0.02030	0.25375	
* Sodium, Total	8/24/23 16:04	8/25/23 14:30		1.015	37.1	mg/L	0.04060	0.406	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	8/24/23 11:01	8/25/23 12:33		1.015	0.0619	mg/L	0.030000	0.1015	J
* Calcium, Dissolved	8/24/23 11:01	8/28/23 12:20		101.5	69.5	mg/L	7.0035	40.6	
* Iron, Dissolved	8/24/23 11:01	8/28/23 12:20		101.5	46.3	mg/L	0.8120	4.06	
* Lithium, Dissolved	8/24/23 11:01	8/25/23 12:33		1.015	0.0627	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	8/24/23 11:01	8/25/23 12:33		1.015	36.6	mg/L	0.021315	0.406	
* Molybdenum, Dissolved	8/24/23 11:01	8/25/23 12:33		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Dissolved (calc.)	8/24/23 11:01	8/25/23 12:33		1	18.8	mg/L			
* Silicon, Dissolved	8/24/23 11:01	8/25/23 12:33		1.015	8.78	mg/L	0.02030	0.25375	
* Sodium, Dissolved	8/24/23 11:01	8/25/23 12:33		1.015	37.0	mg/L	0.04060	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	8/24/23 16:04	8/25/23 10:27		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Arsenic, Total	8/24/23 16:04	8/25/23 10:27		1.015	0.0521	mg/L	0.000112	0.000203	
* Aluminum, Total	8/24/23 16:04	8/25/23 10:27		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Barium, Total	8/24/23 16:04	8/25/23 10:27		1.015	0.0167	mg/L	0.000508	0.001015	
* Beryllium, Total	8/24/23 16:04	8/25/23 10:27		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	8/24/23 16:04	8/25/23 10:27		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	8/24/23 16:04	8/25/23 10:27		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	8/24/23 16:04	8/25/23 10:27		1.015	0.00209	mg/L	0.000068	0.000203	
* Lead, Total	8/24/23 16:04	8/25/23 10:27		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	8/24/23 16:04	8/25/23 12:55		5.075	2.10	mg/L	0.000761	0.005075	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 9/25/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gorgas Gypsum - PZ-22

Location Code: WMWGORG
Collected: 8/22/23 07:27
Customer ID:
Submittal Date: 8/24/23 08:32

Laboratory ID Number: BD16247

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	8/24/23 16:04	8/25/23 10:27		1.015	6.66	mg/L	0.169505	0.5075	
* Selenium, Total	8/24/23 16:04	8/25/23 10:27		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	8/24/23 16:04	8/25/23 10:27		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	8/24/23 11:01	8/24/23 14:44		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	8/24/23 11:01	8/24/23 14:44		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Dissolved	8/24/23 11:01	8/24/23 14:44		1.015	0.0521	mg/L	0.000112	0.000203	
* Barium, Dissolved	8/24/23 11:01	8/24/23 14:44		1.015	0.0155	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	8/24/23 11:01	8/24/23 14:44		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	8/24/23 11:01	8/24/23 14:44		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	8/24/23 11:01	8/24/23 14:44		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	8/24/23 11:01	8/24/23 14:44		1.015	0.00240	mg/L	0.000068	0.000203	
* Lead, Dissolved	8/24/23 11:01	8/24/23 14:44		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	8/24/23 11:01	8/24/23 18:51		5.075	2.01	mg/L	0.000761	0.005075	
* Potassium, Dissolved	8/24/23 11:01	8/24/23 14:44		1.015	6.61	mg/L	0.169505	0.5075	
* Selenium, Dissolved	8/24/23 11:01	8/24/23 14:44		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	8/24/23 11:01	8/24/23 14:44		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	8/25/23 11:54	8/25/23 15:53		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: CES***								
* Nitrogen, Nitrate/Nitrite	8/24/23 12:18	8/24/23 12:18		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: DHC***								
* Alkalinity	8/30/23 09:34	8/30/23 13:21		1	81.1	mg CaCO3/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	8/24/23 11:00	8/30/23 12:15		1	643	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: DHC***								
* Bicarbonate Alkalinity, (calc.)	8/30/23 09:34	8/30/23 13:21		1	81.1	mg CaCO3/L		1	A
* Carbonate Alkalinity, (calc.)	8/30/23 09:34	8/30/23 13:21		1	Not Detected	mg CaCO3/L		0.5	A
Analytical Method: SM 4500H+ B	***Analyst: DHC***								
Alkalinity pH Endpoint	8/30/23 09:34	8/30/23 13:21		1	4.52	SU		2	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 9/25/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gorgas Gypsum - PZ-22

Location Code: WMWGORG
Collected: 8/22/23 07:27
Customer ID:
Submittal Date: 8/24/23 08:32

Laboratory ID Number: BD16247

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	8/25/23 14:16	8/25/23 14:16		1	1.67	mg/L	1.00	2	J
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	8/29/23 10:34	8/29/23 10:34		1	5.54	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	8/29/23 14:30	8/29/23 14:30		1	0.179	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	8/24/23 10:59	8/24/23 10:59		20	401	mg/L	12.0	40	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	8/22/23 07:24	8/22/23 07:24			792.98	uS/cm			FA
pH	8/22/23 07:24	8/22/23 07:24			6.16	SU			FA
Temperature	8/22/23 07:24	8/22/23 07:24			19.22	C			FA
Turbidity	8/22/23 07:24	8/22/23 07:24			3.96	NTU			FA
Sulfide	8/22/23 07:24	8/22/23 07:24			0	mg/L			FA

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGORG
Sample Date: 8/22/23 07:27
Customer ID:
Delivery Date: 8/24/23 08:32

Description: Gorgas Gypsum - PZ-22

Laboratory ID Number: BD16247

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD16256	Aluminum, Dissolved	mg/L	-0.000172	0.0198	0.100	18.0	16.9	0.107	0.0850 to 0.115	-200	70.0 to 130	6.30	20.0
BD16255	Aluminum, Total	mg/L	0.000416	0.0198	0.100	0.103	0.104	0.104	0.0850 to 0.115	103	70.0 to 130	0.966	20.0
BD16256	Antimony, Dissolved	mg/L	0.000328	0.00100	0.100	0.104	0.0956	0.0926	0.0850 to 0.115	104	70.0 to 130	8.42	20.0
BD16255	Antimony, Total	mg/L	0.000302	0.00100	0.100	0.0945	0.0950	0.0928	0.0850 to 0.115	94.5	70.0 to 130	0.528	20.0
BD16256	Arsenic, Dissolved	mg/L	0.0000027	0.000200	0.100	0.107	0.0984	0.101	0.0850 to 0.115	106	70.0 to 130	8.37	20.0
BD16255	Arsenic, Total	mg/L	0.0000072	0.000200	0.100	0.101	0.101	0.102	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BD16256	Barium, Dissolved	mg/L	0.0000131	0.00100	0.100	0.117	0.107	0.0970	0.0850 to 0.115	109	70.0 to 130	8.93	20.0
BD16255	Barium, Total	mg/L	0.0000115	0.00100	0.100	0.101	0.0994	0.0993	0.0850 to 0.115	101	70.0 to 130	1.60	20.0
BD16256	Beryllium, Dissolved	mg/L	0.0000369	0.000880	0.100	0.110	0.108	0.104	0.0850 to 0.115	103	70.0 to 130	1.83	20.0
BD16255	Beryllium, Total	mg/L	0.000	0.000880	0.100	0.0993	0.101	0.100	0.0850 to 0.115	99.3	70.0 to 130	1.70	20.0
BD16256	Boron, Dissolved	mg/L	-0.000395	0.0650	1.00	3.25	3.25	0.988	0.850 to 1.15	101	70.0 to 130	0.00	20.0
BD16255	Boron, Total	mg/L	-0.000149	0.0650	1.00	0.985	0.977	0.974	0.850 to 1.15	98.5	70.0 to 130	0.815	20.0
BD16256	Cadmium, Dissolved	mg/L	-0.0000002	0.000147	0.100	0.110	0.0998	0.0992	0.0850 to 0.115	108	70.0 to 130	9.72	20.0
BD16255	Cadmium, Total	mg/L	0.0000049	0.000147	0.100	0.104	0.100	0.101	0.0850 to 0.115	104	70.0 to 130	3.92	20.0
BD16256	Calcium, Dissolved	mg/L	-0.00836	0.152	5.00	156	150	4.84	4.25 to 5.75	220	70.0 to 130	3.92	20.0
BD16255	Calcium, Total	mg/L	-0.0149	0.152	5.00	4.63	4.75	4.72	4.25 to 5.75	92.6	70.0 to 130	2.56	20.0
BD16255	Chloride	mg/L	-0.00615	1.00	10.0	10.0	10.1	10.6	9.00 to 11.0	100	80.0 to 120	0.995	20.0
BD16256	Chromium, Dissolved	mg/L	0.0000133	0.000440	0.100	0.103	0.0936	0.101	0.0850 to 0.115	102	70.0 to 130	9.56	20.0
BD16255	Chromium, Total	mg/L	-0.0000482	0.000440	0.100	0.103	0.102	0.103	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BD16256	Cobalt, Dissolved	mg/L	0.0000012	0.000147	0.100	0.444	0.403	0.0999	0.0850 to 0.115	132	70.0 to 130	9.68	20.0
BD16255	Cobalt, Total	mg/L	-0.0000511	0.000147	0.100	0.105	0.104	0.105	0.0850 to 0.115	105	70.0 to 130	0.957	20.0
BD16255	Fluoride	mg/L	0.0323	0.125	2.50	1.93	2.21	2.40	2.25 to 2.75	77.2	80.0 to 120	13.5	20.0
BD16256	Iron, Dissolved	mg/L	0.0118	0.0176	0.2	29.3	28.9	0.199	0.170 to 0.230	500	70.0 to 130	1.37	20.0
BD16255	Iron, Total	mg/L	0.00252	0.0176	0.2	0.199	0.199	0.198	0.170 to 0.230	99.5	70.0 to 130	0.00	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGORG
Sample Date: 8/22/23 07:27
Customer ID:
Delivery Date: 8/24/23 08:32

Description: Gorgas Gypsum - PZ-22

Laboratory ID Number: BD16247

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD16256	Lead, Dissolved	mg/L	0.0000062	0.000147	0.100	0.108	0.0972	0.102	0.0850 to 0.115	107	70.0 to 130	10.5	20.0
BD16255	Lead, Total	mg/L	0.0000013	0.000147	0.100	0.106	0.104	0.108	0.0850 to 0.115	106	70.0 to 130	1.90	20.0
BD16256	Lithium, Dissolved	mg/L	-0.000045	0.0154	0.200	0.663	0.664	0.196	0.170 to 0.230	100	70.0 to 130	0.151	20.0
BD16255	Lithium, Total	mg/L	0.000397	0.0154	0.200	0.197	0.195	0.194	0.170 to 0.230	98.5	70.0 to 130	1.02	20.0
BD16256	Magnesium, Dissolved	mg/L	0.0115	0.0462	5.00	118	114	4.98	4.25 to 5.75	160	70.0 to 130	3.45	20.0
BD16255	Magnesium, Total	mg/L	0.0147	0.0462	5.00	4.90	4.92	4.89	4.25 to 5.75	97.5	70.0 to 130	0.407	20.0
BD16256	Manganese, Dissolved	mg/L	0.0000265	0.00033	0.100	13.4	12.5	0.102	0.0850 to 0.115	100	70.0 to 130	6.95	20.0
BD16255	Manganese, Total	mg/L	0.0000137	0.00033	0.100	0.102	0.101	0.103	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BD16255	Mercury, Total by CVAA	mg/L	4.000E-05	0.000500	0.004	0.00397	0.00391	0.00393	0.00340 to 0.00460	99.2	70.0 to 130	1.52	20.0
BD16256	Molybdenum, Dissolved	mg/L	0.00029	0.0100	0.2	0.197	0.197	0.198	0.170 to 0.230	98.5	70.0 to 130	0.00	20.0
BD16255	Molybdenum, Total	mg/L	0.000	0.0100	0.2	0.200	0.200	0.199	0.170 to 0.230	100	70.0 to 130	0.00	20.0
BD16256	Potassium, Dissolved	mg/L	-0.0105	0.367	10.0	14.8	13.4	10.2	8.50 to 11.5	112	70.0 to 130	9.93	20.0
BD16255	Potassium, Total	mg/L	-0.00850	0.367	10.0	10.2	10.3	10.6	8.50 to 11.5	102	70.0 to 130	0.976	20.0
BD16256	Selenium, Dissolved	mg/L	0.0000176	0.00100	0.100	0.110	0.100	0.104	0.0850 to 0.115	107	70.0 to 130	9.52	20.0
BD16255	Selenium, Total	mg/L	0.0000331	0.00100	0.100	0.104	0.105	0.106	0.0850 to 0.115	104	70.0 to 130	0.957	20.0
BD16256	Silicon, Dissolved	mg/L	-0.00145	0.0440	1.00	26.3	25.8	0.987	0.850 to 1.15	180	70.0 to 130	1.92	20.0
BD16255	Silicon, Total	mg/L	-0.000644	0.0440	1.00	0.978	0.978	0.974	0.850 to 1.15	97.8	70.0 to 130	0.00	20.0
BD16256	Sodium, Dissolved	mg/L	0.00575	0.0880	5.00	24.3	24.3	5.09	4.25 to 5.75	104	70.0 to 130	0.00	20.0
BD16255	Sodium, Total	mg/L	0.0102	0.0880	5.00	5.01	4.96	4.96	4.25 to 5.75	100	70.0 to 130	1.00	20.0
BD16255	Sulfate	mg/L	0.481	2.0	20.0	19.6	19.7	20.5	18.0 to 22.0	94.6	80.0 to 120	0.509	20.0
BD16256	Thallium, Dissolved	mg/L	0.0000002	0.000147	0.100	0.105	0.0942	0.0986	0.0850 to 0.115	105	70.0 to 130	10.8	20.0
BD16255	Thallium, Total	mg/L	-0.0000938	0.000147	0.100	0.112	0.105	0.113	0.0850 to 0.115	112	70.0 to 130	6.45	20.0
BD16255	Total Organic Carbon	mg/L	0.139	1.00	10.0	10.1	9.52	24.0		101	80.0 to 120	5.91	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Alabama Power

Batch QC Summary

Customer Account: WMWGORG
Sample Date: 8/22/23 07:27
Customer ID:
Delivery Date: 8/24/23 08:32

Description: Gorgas Gypsum - PZ-22

Laboratory ID Number: BD16247

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD16263	Alkalinity	mg CaCO3/L					55.1	51.6	45.0 to 55.0			0.546	10.0
BD16255	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.03	0.200	2.00	1.98	-0.050	2.11	1.80 to 2.20	99.0	90.0 to 110	0.00	15.0
BD16253	Solids, Dissolved	mg/L	3.00	25.0			1260	53.0	40.0 to 60.0			3.89	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 9/25/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gorgas Gypsum - PZ-20

Location Code: WMWGORG
Collected: 8/22/23 08:23
Customer ID:
Submittal Date: 8/24/23 08:32

Laboratory ID Number: BD16248

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	8/24/23 16:04	8/25/23 14:33		1.015	0.106	mg/L	0.030000	0.1015	
* Calcium, Total	8/24/23 16:04	8/28/23 14:07		10.15	114	mg/L	0.70035	4.06	
* Iron, Total	8/24/23 16:04	8/28/23 14:07		10.15	9.91	mg/L	0.08120	0.406	
* Lithium, Total	8/24/23 16:04	8/25/23 14:33		1.015	0.0924	mg/L	0.007105	0.01999956	
* Magnesium, Total	8/24/23 16:04	8/28/23 14:07		10.15	61.1	mg/L	0.21315	4.06	
* Molybdenum, Total	8/24/23 16:04	8/25/23 14:33		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Total (calc.)	8/24/23 16:04	8/25/23 14:33		1	19.4	mg/L			
* Silicon, Total	8/24/23 16:04	8/25/23 14:33		1.015	9.06	mg/L	0.02030	0.25375	
* Sodium, Total	8/24/23 16:04	8/28/23 14:07		10.15	109	mg/L	0.4060	4.06	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	8/24/23 11:01	8/25/23 12:36		1.015	0.108	mg/L	0.030000	0.1015	
* Calcium, Dissolved	8/24/23 11:01	8/28/23 12:23		10.15	124	mg/L	0.70035	4.06	
* Iron, Dissolved	8/24/23 11:01	8/28/23 12:23		10.15	10.5	mg/L	0.08120	0.406	
* Lithium, Dissolved	8/24/23 11:01	8/25/23 12:36		1.015	0.0923	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	8/24/23 11:01	8/28/23 12:23		10.15	67.1	mg/L	0.21315	4.06	
* Molybdenum, Dissolved	8/24/23 11:01	8/25/23 12:36		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Dissolved (calc.)	8/24/23 11:01	8/25/23 12:36		1	19.4	mg/L			
* Silicon, Dissolved	8/24/23 11:01	8/25/23 12:36		1.015	9.08	mg/L	0.02030	0.25375	
* Sodium, Dissolved	8/24/23 11:01	8/28/23 12:23		10.15	119	mg/L	0.4060	4.06	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	8/24/23 16:04	8/25/23 10:30		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Total	8/24/23 16:04	8/25/23 10:30		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Total	8/24/23 16:04	8/25/23 10:30		1.015	0.00289	mg/L	0.000112	0.000203	
* Barium, Total	8/24/23 16:04	8/25/23 10:30		1.015	0.0174	mg/L	0.000508	0.001015	
* Beryllium, Total	8/24/23 16:04	8/25/23 10:30		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	8/24/23 16:04	8/25/23 10:30		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	8/24/23 16:04	8/25/23 10:30		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	8/24/23 16:04	8/25/23 10:30		1.015	0.00365	mg/L	0.000068	0.000203	
* Lead, Total	8/24/23 16:04	8/25/23 10:30		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	8/24/23 16:04	8/25/23 10:30		1.015	0.584	mg/L	0.000152	0.001015	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 9/25/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gorgas Gypsum - PZ-20

Location Code: WMWGORG
Collected: 8/22/23 08:23
Customer ID:
Submittal Date: 8/24/23 08:32

Laboratory ID Number: BD16248

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	8/24/23 16:04	8/25/23 10:30		1.015	4.87	mg/L	0.169505	0.5075	
* Selenium, Total	8/24/23 16:04	8/25/23 10:30		1.015	0.00200	mg/L	0.000508	0.001015	
* Thallium, Total	8/24/23 16:04	8/25/23 10:30		1.015	0.0000990	mg/L	0.000068	0.000203	J
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	8/24/23 11:01	8/24/23 14:47		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	8/24/23 11:01	8/24/23 14:47		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Dissolved	8/24/23 11:01	8/24/23 14:47		1.015	0.00270	mg/L	0.000112	0.000203	
* Barium, Dissolved	8/24/23 11:01	8/24/23 14:47		1.015	0.0163	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	8/24/23 11:01	8/24/23 14:47		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	8/24/23 11:01	8/24/23 14:47		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	8/24/23 11:01	8/24/23 14:47		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	8/24/23 11:01	8/24/23 14:47		1.015	0.00354	mg/L	0.000068	0.000203	
* Lead, Dissolved	8/24/23 11:01	8/24/23 14:47		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	8/24/23 11:01	8/24/23 14:47		1.015	0.587	mg/L	0.000152	0.001015	
* Potassium, Dissolved	8/24/23 11:01	8/24/23 14:47		1.015	4.67	mg/L	0.169505	0.5075	
* Selenium, Dissolved	8/24/23 11:01	8/24/23 14:47		1.015	0.00235	mg/L	0.000508	0.001015	
* Thallium, Dissolved	8/24/23 11:01	8/24/23 14:47		1.015	0.000185	mg/L	0.000068	0.000203	J
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	8/25/23 11:54	8/25/23 15:57		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: CES***								
* Nitrogen, Nitrate/Nitrite	8/24/23 12:20	8/24/23 12:20		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: DHC***								
* Alkalinity	8/30/23 09:34	8/30/23 13:21		1	187	mg CaCO3/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	8/24/23 11:00	8/30/23 12:15		1	950	mg/L		50	
Analytical Method: SM 4500CO2 D	***Analyst: DHC***								
* Bicarbonate Alkalinity, (calc.)	8/30/23 09:34	8/30/23 13:21		1	187	mg CaCO3/L		1	A
* Carbonate Alkalinity, (calc.)	8/30/23 09:34	8/30/23 13:21		1	Not Detected	mg CaCO3/L		0.5	A
Analytical Method: SM 4500H+ B	***Analyst: DHC***								
Alkalinity pH Endpoint	8/30/23 09:34	8/30/23 13:21		1	4.49	SU		2	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 9/25/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gorgas Gypsum - PZ-20

Location Code: WMWGORG
Collected: 8/22/23 08:23
Customer ID:
Submittal Date: 8/24/23 08:32

Laboratory ID Number: BD16248

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	8/25/23 14:34	8/25/23 14:34		1	1.32	mg/L	1.00	2	J
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	8/29/23 10:35	8/29/23 10:35		1	11.7	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	8/29/23 14:31	8/29/23 14:31		1	0.165	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	8/24/23 11:00	8/24/23 11:00		25	481	mg/L	15.0	50	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	8/22/23 08:20	8/22/23 08:20			1083.02	uS/cm			FA
pH	8/22/23 08:20	8/22/23 08:20			6.32	SU			FA
Temperature	8/22/23 08:20	8/22/23 08:20			20.16	C			FA
Turbidity	8/22/23 08:20	8/22/23 08:20			4.94	NTU			FA
Sulfide	8/22/23 08:20	8/22/23 08:20			0	mg/L			FA

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 9/25/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGORG
Sample Date: 8/22/23 08:23
Customer ID:
Delivery Date: 8/24/23 08:32

Description: Gorgas Gypsum - PZ-20

Laboratory ID Number: BD16248

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD16256	Aluminum, Dissolved	mg/L	-0.000172	0.0198	0.100	18.0	16.9	0.107	0.0850 to 0.115	-200	70.0 to 130	6.30	20.0
BD16255	Aluminum, Total	mg/L	0.000416	0.0198	0.100	0.103	0.104	0.104	0.0850 to 0.115	103	70.0 to 130	0.966	20.0
BD16256	Antimony, Dissolved	mg/L	0.000328	0.00100	0.100	0.104	0.0956	0.0926	0.0850 to 0.115	104	70.0 to 130	8.42	20.0
BD16255	Antimony, Total	mg/L	0.000302	0.00100	0.100	0.0945	0.0950	0.0928	0.0850 to 0.115	94.5	70.0 to 130	0.528	20.0
BD16256	Arsenic, Dissolved	mg/L	0.0000027	0.000200	0.100	0.107	0.0984	0.101	0.0850 to 0.115	106	70.0 to 130	8.37	20.0
BD16255	Arsenic, Total	mg/L	0.0000072	0.000200	0.100	0.101	0.101	0.102	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BD16256	Barium, Dissolved	mg/L	0.0000131	0.00100	0.100	0.117	0.107	0.0970	0.0850 to 0.115	109	70.0 to 130	8.93	20.0
BD16255	Barium, Total	mg/L	0.0000115	0.00100	0.100	0.101	0.0994	0.0993	0.0850 to 0.115	101	70.0 to 130	1.60	20.0
BD16256	Beryllium, Dissolved	mg/L	0.0000369	0.000880	0.100	0.110	0.108	0.104	0.0850 to 0.115	103	70.0 to 130	1.83	20.0
BD16255	Beryllium, Total	mg/L	0.000	0.000880	0.100	0.0993	0.101	0.100	0.0850 to 0.115	99.3	70.0 to 130	1.70	20.0
BD16256	Boron, Dissolved	mg/L	-0.000395	0.0650	1.00	3.25	3.25	0.988	0.850 to 1.15	101	70.0 to 130	0.00	20.0
BD16255	Boron, Total	mg/L	-0.000149	0.0650	1.00	0.985	0.977	0.974	0.850 to 1.15	98.5	70.0 to 130	0.815	20.0
BD16256	Cadmium, Dissolved	mg/L	-0.0000002	0.000147	0.100	0.110	0.0998	0.0992	0.0850 to 0.115	108	70.0 to 130	9.72	20.0
BD16255	Cadmium, Total	mg/L	0.0000049	0.000147	0.100	0.104	0.100	0.101	0.0850 to 0.115	104	70.0 to 130	3.92	20.0
BD16256	Calcium, Dissolved	mg/L	-0.00836	0.152	5.00	156	150	4.84	4.25 to 5.75	220	70.0 to 130	3.92	20.0
BD16255	Calcium, Total	mg/L	-0.0149	0.152	5.00	4.63	4.75	4.72	4.25 to 5.75	92.6	70.0 to 130	2.56	20.0
BD16255	Chloride	mg/L	-0.00615	1.00	10.0	10.0	10.1	10.6	9.00 to 11.0	100	80.0 to 120	0.995	20.0
BD16256	Chromium, Dissolved	mg/L	0.0000133	0.000440	0.100	0.103	0.0936	0.101	0.0850 to 0.115	102	70.0 to 130	9.56	20.0
BD16255	Chromium, Total	mg/L	-0.0000482	0.000440	0.100	0.103	0.102	0.103	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BD16256	Cobalt, Dissolved	mg/L	0.0000012	0.000147	0.100	0.444	0.403	0.0999	0.0850 to 0.115	132	70.0 to 130	9.68	20.0
BD16255	Cobalt, Total	mg/L	-0.0000511	0.000147	0.100	0.105	0.104	0.105	0.0850 to 0.115	105	70.0 to 130	0.957	20.0
BD16255	Fluoride	mg/L	0.0323	0.125	2.50	1.93	2.21	2.40	2.25 to 2.75	77.2	80.0 to 120	13.5	20.0
BD16256	Iron, Dissolved	mg/L	0.0118	0.0176	0.2	29.3	28.9	0.199	0.170 to 0.230	500	70.0 to 130	1.37	20.0
BD16255	Iron, Total	mg/L	0.00252	0.0176	0.2	0.199	0.199	0.198	0.170 to 0.230	99.5	70.0 to 130	0.00	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGORG
Sample Date: 8/22/23 08:23
Customer ID:
Delivery Date: 8/24/23 08:32

Description: Gorgas Gypsum - PZ-20

Laboratory ID Number: BD16248

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD16256	Lead, Dissolved	mg/L	0.0000062	0.000147	0.100	0.108	0.0972	0.102	0.0850 to 0.115	107	70.0 to 130	10.5	20.0
BD16255	Lead, Total	mg/L	0.0000013	0.000147	0.100	0.106	0.104	0.108	0.0850 to 0.115	106	70.0 to 130	1.90	20.0
BD16256	Lithium, Dissolved	mg/L	-0.000045	0.0154	0.200	0.663	0.664	0.196	0.170 to 0.230	100	70.0 to 130	0.151	20.0
BD16255	Lithium, Total	mg/L	0.000397	0.0154	0.200	0.197	0.195	0.194	0.170 to 0.230	98.5	70.0 to 130	1.02	20.0
BD16256	Magnesium, Dissolved	mg/L	0.0115	0.0462	5.00	118	114	4.98	4.25 to 5.75	160	70.0 to 130	3.45	20.0
BD16255	Magnesium, Total	mg/L	0.0147	0.0462	5.00	4.90	4.92	4.89	4.25 to 5.75	97.5	70.0 to 130	0.407	20.0
BD16256	Manganese, Dissolved	mg/L	0.0000265	0.00033	0.100	13.4	12.5	0.102	0.0850 to 0.115	100	70.0 to 130	6.95	20.0
BD16255	Manganese, Total	mg/L	0.0000137	0.00033	0.100	0.102	0.101	0.103	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BD16255	Mercury, Total by CVAA	mg/L	4.000E-05	0.000500	0.004	0.00397	0.00391	0.00393	0.00340 to 0.00460	99.2	70.0 to 130	1.52	20.0
BD16256	Molybdenum, Dissolved	mg/L	0.00029	0.0100	0.2	0.197	0.197	0.198	0.170 to 0.230	98.5	70.0 to 130	0.00	20.0
BD16255	Molybdenum, Total	mg/L	0.000	0.0100	0.2	0.200	0.200	0.199	0.170 to 0.230	100	70.0 to 130	0.00	20.0
BD16256	Potassium, Dissolved	mg/L	-0.0105	0.367	10.0	14.8	13.4	10.2	8.50 to 11.5	112	70.0 to 130	9.93	20.0
BD16255	Potassium, Total	mg/L	-0.00850	0.367	10.0	10.2	10.3	10.6	8.50 to 11.5	102	70.0 to 130	0.976	20.0
BD16256	Selenium, Dissolved	mg/L	0.0000176	0.00100	0.100	0.110	0.100	0.104	0.0850 to 0.115	107	70.0 to 130	9.52	20.0
BD16255	Selenium, Total	mg/L	0.0000331	0.00100	0.100	0.104	0.105	0.106	0.0850 to 0.115	104	70.0 to 130	0.957	20.0
BD16256	Silicon, Dissolved	mg/L	-0.00145	0.0440	1.00	26.3	25.8	0.987	0.850 to 1.15	180	70.0 to 130	1.92	20.0
BD16255	Silicon, Total	mg/L	-0.000644	0.0440	1.00	0.978	0.978	0.974	0.850 to 1.15	97.8	70.0 to 130	0.00	20.0
BD16256	Sodium, Dissolved	mg/L	0.00575	0.0880	5.00	24.3	24.3	5.09	4.25 to 5.75	104	70.0 to 130	0.00	20.0
BD16255	Sodium, Total	mg/L	0.0102	0.0880	5.00	5.01	4.96	4.96	4.25 to 5.75	100	70.0 to 130	1.00	20.0
BD16255	Sulfate	mg/L	0.481	2.0	20.0	19.6	19.7	20.5	18.0 to 22.0	94.6	80.0 to 120	0.509	20.0
BD16256	Thallium, Dissolved	mg/L	0.0000002	0.000147	0.100	0.105	0.0942	0.0986	0.0850 to 0.115	105	70.0 to 130	10.8	20.0
BD16255	Thallium, Total	mg/L	-0.0000938	0.000147	0.100	0.112	0.105	0.113	0.0850 to 0.115	112	70.0 to 130	6.45	20.0
BD16255	Total Organic Carbon	mg/L	0.139	1.00	10.0	10.1	9.52	24.0		101	80.0 to 120	5.91	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Alabama Power

Batch QC Summary

Customer Account: WMWGORG
Sample Date: 8/22/23 08:23
Customer ID:
Delivery Date: 8/24/23 08:32

Description: Gorgas Gypsum - PZ-20

Laboratory ID Number: BD16248

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD16263	Alkalinity	mg CaCO3/L					55.1	51.6	45.0 to 55.0			0.546	10.0
BD16255	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.03	0.200	2.00	1.98	-0.050	2.11	1.80 to 2.20	99.0	90.0 to 110	0.00	15.0
BD16253	Solids, Dissolved	mg/L	3.00	25.0			1260	53.0	40.0 to 60.0			3.89	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gorgas Gypsum - PZ-19

Location Code: WMWGORG
Collected: 8/22/23 10:08
Customer ID:
Submittal Date: 8/24/23 08:32

Laboratory ID Number: BD16249

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***					***Preparation Method: EPA 1638***			
* Boron, Total	8/24/23 16:04	8/25/23 14:36		1.015	0.0504	mg/L	0.030000	0.1015	J
* Calcium, Total	8/24/23 16:04	8/28/23 14:11		10.15	114	mg/L	0.70035	4.06	
* Iron, Total	8/24/23 16:04	8/25/23 14:36		1.015	2.03	mg/L	0.008120	0.0406	
* Lithium, Total	8/24/23 16:04	8/25/23 14:36		1.015	0.0664	mg/L	0.007105	0.01999956	
* Magnesium, Total	8/24/23 16:04	8/28/23 14:11		10.15	49.9	mg/L	0.21315	4.06	
* Molybdenum, Total	8/24/23 16:04	8/25/23 14:36		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Total (calc.)	8/24/23 16:04	8/25/23 14:36		1	21.0	mg/L			
* Silicon, Total	8/24/23 16:04	8/25/23 14:36		1.015	9.81	mg/L	0.02030	0.25375	
* Sodium, Total	8/24/23 16:04	8/28/23 14:11		10.15	103	mg/L	0.4060	4.06	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	8/24/23 11:01	8/25/23 12:39		1.015	0.0486	mg/L	0.030000	0.1015	J
* Calcium, Dissolved	8/24/23 11:01	8/28/23 12:26		10.15	119	mg/L	0.70035	4.06	
* Iron, Dissolved	8/24/23 11:01	8/25/23 12:39		1.015	1.98	mg/L	0.008120	0.0406	
* Lithium, Dissolved	8/24/23 11:01	8/25/23 12:39		1.015	0.0660	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	8/24/23 11:01	8/28/23 12:26		10.15	52.1	mg/L	0.21315	4.06	
* Molybdenum, Dissolved	8/24/23 11:01	8/25/23 12:39		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Dissolved (calc.)	8/24/23 11:01	8/25/23 12:39		1	21.0	mg/L			
* Silicon, Dissolved	8/24/23 11:01	8/25/23 12:39		1.015	9.83	mg/L	0.02030	0.25375	
* Sodium, Dissolved	8/24/23 11:01	8/28/23 12:26		10.15	111	mg/L	0.4060	4.06	
Analytical Method: EPA 200.8	***Analyst: DLJ***					***Preparation Method: EPA 1638***			
* Antimony, Total	8/24/23 16:04	8/25/23 10:34		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Total	8/24/23 16:04	8/25/23 10:34		1.015	0.0327	mg/L	0.009135	0.05075	J
* Arsenic, Total	8/24/23 16:04	8/25/23 10:34		1.015	0.00148	mg/L	0.000112	0.000203	
* Barium, Total	8/24/23 16:04	8/25/23 10:34		1.015	0.0382	mg/L	0.000508	0.001015	
* Beryllium, Total	8/24/23 16:04	8/25/23 10:34		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	8/24/23 16:04	8/25/23 10:34		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	8/24/23 16:04	8/25/23 10:34		1.015	0.000205	mg/L	0.000203	0.001015	J
* Cobalt, Total	8/24/23 16:04	8/25/23 10:34		1.015	0.000694	mg/L	0.000068	0.000203	
* Lead, Total	8/24/23 16:04	8/25/23 10:34		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	8/24/23 16:04	8/25/23 10:34		1.015	0.680	mg/L	0.000152	0.001015	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 9/25/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gorgas Gypsum - PZ-19

Location Code: WMWGORG
Collected: 8/22/23 10:08
Customer ID:
Submittal Date: 8/24/23 08:32

Laboratory ID Number: BD16249

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	8/24/23 16:04	8/25/23 10:34		1.015	3.87	mg/L	0.169505	0.5075	
* Selenium, Total	8/24/23 16:04	8/25/23 10:34		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	8/24/23 16:04	8/25/23 10:34		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	8/24/23 11:01	8/24/23 14:51		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	8/24/23 11:01	8/24/23 14:51		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Dissolved	8/24/23 11:01	8/24/23 14:51		1.015	0.00148	mg/L	0.000112	0.000203	
* Barium, Dissolved	8/24/23 11:01	8/24/23 14:51		1.015	0.0382	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	8/24/23 11:01	8/24/23 14:51		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	8/24/23 11:01	8/24/23 14:51		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	8/24/23 11:01	8/24/23 14:51		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	8/24/23 11:01	8/24/23 14:51		1.015	0.000458	mg/L	0.000068	0.000203	
* Lead, Dissolved	8/24/23 11:01	8/24/23 14:51		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	8/24/23 11:01	8/24/23 14:51		1.015	0.665	mg/L	0.000152	0.001015	
* Potassium, Dissolved	8/24/23 11:01	8/24/23 14:51		1.015	3.62	mg/L	0.169505	0.5075	
* Selenium, Dissolved	8/24/23 11:01	8/24/23 14:51		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	8/24/23 11:01	8/24/23 14:51		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	8/25/23 11:54	8/25/23 16:01		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: CES***								
* Nitrogen, Nitrate/Nitrite	8/24/23 12:22	8/24/23 12:22		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: DHC***								
* Alkalinity	8/30/23 09:34	8/30/23 13:21		1	410	mg CaCO3/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	8/24/23 11:00	8/30/23 12:15		1	810	mg/L		50	
Analytical Method: SM 4500CO2 D	***Analyst: DHC***								
* Bicarbonate Alkalinity, (calc.)	8/30/23 09:34	8/30/23 13:21		1	409	mg CaCO3/L		1	A
* Carbonate Alkalinity, (calc.)	8/30/23 09:34	8/30/23 13:21		1	0.596	mg CaCO3/L		0.5	A
Analytical Method: SM 4500H+ B	***Analyst: DHC***								
Alkalinity pH Endpoint	8/30/23 09:34	8/30/23 13:21		1	4.51	SU		2	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 9/25/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gorgas Gypsum - PZ-19

Location Code: WMWGORG
Collected: 8/22/23 10:08
Customer ID:
Submittal Date: 8/24/23 08:32

Laboratory ID Number: BD16249

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	8/25/23 14:51	8/25/23 14:51		1	1.33	mg/L	1.00	2	J
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	8/29/23 10:36	8/29/23 10:36		1	15.1	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	8/29/23 14:33	8/29/23 14:33		1	0.209	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	8/24/23 11:01	8/24/23 11:01		10	221	mg/L	6.0	20	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	8/22/23 10:05	8/22/23 10:05			969.72	uS/cm			FA
pH	8/22/23 10:05	8/22/23 10:05			6.56	SU			FA
Temperature	8/22/23 10:05	8/22/23 10:05			20.18	C			FA
Turbidity	8/22/23 10:05	8/22/23 10:05			5.68	NTU			FA
Sulfide	8/22/23 10:05	8/22/23 10:05			0	mg/L			FA

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 9/25/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGORG
Sample Date: 8/22/23 10:08
Customer ID:
Delivery Date: 8/24/23 08:32

Description: Gorgas Gypsum - PZ-19

Laboratory ID Number: BD16249

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD16256	Aluminum, Dissolved	mg/L	-0.000172	0.0198	0.100	18.0	16.9	0.107	0.0850 to 0.115	-200	70.0 to 130	6.30	20.0
BD16255	Aluminum, Total	mg/L	0.000416	0.0198	0.100	0.103	0.104	0.104	0.0850 to 0.115	103	70.0 to 130	0.966	20.0
BD16256	Antimony, Dissolved	mg/L	0.000328	0.00100	0.100	0.104	0.0956	0.0926	0.0850 to 0.115	104	70.0 to 130	8.42	20.0
BD16255	Antimony, Total	mg/L	0.000302	0.00100	0.100	0.0945	0.0950	0.0928	0.0850 to 0.115	94.5	70.0 to 130	0.528	20.0
BD16256	Arsenic, Dissolved	mg/L	0.0000027	0.000200	0.100	0.107	0.0984	0.101	0.0850 to 0.115	106	70.0 to 130	8.37	20.0
BD16255	Arsenic, Total	mg/L	0.0000072	0.000200	0.100	0.101	0.101	0.102	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BD16256	Barium, Dissolved	mg/L	0.0000131	0.00100	0.100	0.117	0.107	0.0970	0.0850 to 0.115	109	70.0 to 130	8.93	20.0
BD16255	Barium, Total	mg/L	0.0000115	0.00100	0.100	0.101	0.0994	0.0993	0.0850 to 0.115	101	70.0 to 130	1.60	20.0
BD16256	Beryllium, Dissolved	mg/L	0.0000369	0.000880	0.100	0.110	0.108	0.104	0.0850 to 0.115	103	70.0 to 130	1.83	20.0
BD16255	Beryllium, Total	mg/L	0.000	0.000880	0.100	0.0993	0.101	0.100	0.0850 to 0.115	99.3	70.0 to 130	1.70	20.0
BD16256	Boron, Dissolved	mg/L	-0.000395	0.0650	1.00	3.25	3.25	0.988	0.850 to 1.15	101	70.0 to 130	0.00	20.0
BD16255	Boron, Total	mg/L	-0.000149	0.0650	1.00	0.985	0.977	0.974	0.850 to 1.15	98.5	70.0 to 130	0.815	20.0
BD16256	Cadmium, Dissolved	mg/L	-0.0000002	0.000147	0.100	0.110	0.0998	0.0992	0.0850 to 0.115	108	70.0 to 130	9.72	20.0
BD16255	Cadmium, Total	mg/L	0.0000049	0.000147	0.100	0.104	0.100	0.101	0.0850 to 0.115	104	70.0 to 130	3.92	20.0
BD16256	Calcium, Dissolved	mg/L	-0.00836	0.152	5.00	156	150	4.84	4.25 to 5.75	220	70.0 to 130	3.92	20.0
BD16255	Calcium, Total	mg/L	-0.0149	0.152	5.00	4.63	4.75	4.72	4.25 to 5.75	92.6	70.0 to 130	2.56	20.0
BD16255	Chloride	mg/L	-0.00615	1.00	10.0	10.0	10.1	10.6	9.00 to 11.0	100	80.0 to 120	0.995	20.0
BD16256	Chromium, Dissolved	mg/L	0.0000133	0.000440	0.100	0.103	0.0936	0.101	0.0850 to 0.115	102	70.0 to 130	9.56	20.0
BD16255	Chromium, Total	mg/L	-0.0000482	0.000440	0.100	0.103	0.102	0.103	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BD16256	Cobalt, Dissolved	mg/L	0.0000012	0.000147	0.100	0.444	0.403	0.0999	0.0850 to 0.115	132	70.0 to 130	9.68	20.0
BD16255	Cobalt, Total	mg/L	-0.0000511	0.000147	0.100	0.105	0.104	0.105	0.0850 to 0.115	105	70.0 to 130	0.957	20.0
BD16255	Fluoride	mg/L	0.0323	0.125	2.50	1.93	2.21	2.40	2.25 to 2.75	77.2	80.0 to 120	13.5	20.0
BD16256	Iron, Dissolved	mg/L	0.0118	0.0176	0.2	29.3	28.9	0.199	0.170 to 0.230	500	70.0 to 130	1.37	20.0
BD16255	Iron, Total	mg/L	0.00252	0.0176	0.2	0.199	0.199	0.198	0.170 to 0.230	99.5	70.0 to 130	0.00	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGORG
Sample Date: 8/22/23 10:08
Customer ID:
Delivery Date: 8/24/23 08:32

Description: Gorgas Gypsum - PZ-19

Laboratory ID Number: BD16249

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD16256	Lead, Dissolved	mg/L	0.0000062	0.000147	0.100	0.108	0.0972	0.102	0.0850 to 0.115	107	70.0 to 130	10.5	20.0
BD16255	Lead, Total	mg/L	0.0000013	0.000147	0.100	0.106	0.104	0.108	0.0850 to 0.115	106	70.0 to 130	1.90	20.0
BD16256	Lithium, Dissolved	mg/L	-0.000045	0.0154	0.200	0.663	0.664	0.196	0.170 to 0.230	100	70.0 to 130	0.151	20.0
BD16255	Lithium, Total	mg/L	0.000397	0.0154	0.200	0.197	0.195	0.194	0.170 to 0.230	98.5	70.0 to 130	1.02	20.0
BD16256	Magnesium, Dissolved	mg/L	0.0115	0.0462	5.00	118	114	4.98	4.25 to 5.75	160	70.0 to 130	3.45	20.0
BD16255	Magnesium, Total	mg/L	0.0147	0.0462	5.00	4.90	4.92	4.89	4.25 to 5.75	97.5	70.0 to 130	0.407	20.0
BD16256	Manganese, Dissolved	mg/L	0.0000265	0.00033	0.100	13.4	12.5	0.102	0.0850 to 0.115	100	70.0 to 130	6.95	20.0
BD16255	Manganese, Total	mg/L	0.0000137	0.00033	0.100	0.102	0.101	0.103	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BD16255	Mercury, Total by CVAA	mg/L	4.000E-05	0.000500	0.004	0.00397	0.00391	0.00393	0.00340 to 0.00460	99.2	70.0 to 130	1.52	20.0
BD16256	Molybdenum, Dissolved	mg/L	0.00029	0.0100	0.2	0.197	0.197	0.198	0.170 to 0.230	98.5	70.0 to 130	0.00	20.0
BD16255	Molybdenum, Total	mg/L	0.000	0.0100	0.2	0.200	0.200	0.199	0.170 to 0.230	100	70.0 to 130	0.00	20.0
BD16256	Potassium, Dissolved	mg/L	-0.0105	0.367	10.0	14.8	13.4	10.2	8.50 to 11.5	112	70.0 to 130	9.93	20.0
BD16255	Potassium, Total	mg/L	-0.00850	0.367	10.0	10.2	10.3	10.6	8.50 to 11.5	102	70.0 to 130	0.976	20.0
BD16256	Selenium, Dissolved	mg/L	0.0000176	0.00100	0.100	0.110	0.100	0.104	0.0850 to 0.115	107	70.0 to 130	9.52	20.0
BD16255	Selenium, Total	mg/L	0.0000331	0.00100	0.100	0.104	0.105	0.106	0.0850 to 0.115	104	70.0 to 130	0.957	20.0
BD16256	Silicon, Dissolved	mg/L	-0.00145	0.0440	1.00	26.3	25.8	0.987	0.850 to 1.15	180	70.0 to 130	1.92	20.0
BD16255	Silicon, Total	mg/L	-0.000644	0.0440	1.00	0.978	0.978	0.974	0.850 to 1.15	97.8	70.0 to 130	0.00	20.0
BD16256	Sodium, Dissolved	mg/L	0.00575	0.0880	5.00	24.3	24.3	5.09	4.25 to 5.75	104	70.0 to 130	0.00	20.0
BD16255	Sodium, Total	mg/L	0.0102	0.0880	5.00	5.01	4.96	4.96	4.25 to 5.75	100	70.0 to 130	1.00	20.0
BD16255	Sulfate	mg/L	0.481	2.0	20.0	19.6	19.7	20.5	18.0 to 22.0	94.6	80.0 to 120	0.509	20.0
BD16256	Thallium, Dissolved	mg/L	0.0000002	0.000147	0.100	0.105	0.0942	0.0986	0.0850 to 0.115	105	70.0 to 130	10.8	20.0
BD16255	Thallium, Total	mg/L	-0.0000938	0.000147	0.100	0.112	0.105	0.113	0.0850 to 0.115	112	70.0 to 130	6.45	20.0
BD16255	Total Organic Carbon	mg/L	0.139	1.00	10.0	10.1	9.52	24.0		101	80.0 to 120	5.91	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Alabama Power

Batch QC Summary

Customer Account: WMWGORG
Sample Date: 8/22/23 10:08
Customer ID:
Delivery Date: 8/24/23 08:32

Description: Gorgas Gypsum - PZ-19

Laboratory ID Number: BD16249

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD16263	Alkalinity	mg CaCO3/L					55.1	51.6	45.0 to 55.0			0.546	10.0
BD16255	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.03	0.200	2.00	1.98	-0.050	2.11	1.80 to 2.20	99.0	90.0 to 110	0.00	15.0
BD16253	Solids, Dissolved	mg/L	3.00	25.0			1260	53.0	40.0 to 60.0			3.89	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 9/25/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gorgas Gypsum - PZ-18

Location Code: WMWGORG
Collected: 8/22/23 11:03
Customer ID:
Submittal Date: 8/24/23 08:32

Laboratory ID Number: BD16250

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***					***Preparation Method: EPA 1638***			
* Boron, Total	8/24/23 16:04	8/25/23 14:39		1.015	0.0491	mg/L	0.030000	0.1015	J
* Calcium, Total	8/24/23 16:04	8/28/23 14:14		10.15	90.4	mg/L	0.70035	4.06	
* Iron, Total	8/24/23 16:04	8/28/23 14:14		10.15	10.5	mg/L	0.08120	0.406	
* Lithium, Total	8/24/23 16:04	8/25/23 14:39		1.015	0.287	mg/L	0.007105	0.01999956	
* Magnesium, Total	8/24/23 16:04	8/28/23 14:14		10.15	58.0	mg/L	0.21315	4.06	
* Molybdenum, Total	8/24/23 16:04	8/25/23 14:39		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Total (calc.)	8/24/23 16:04	8/25/23 14:39		1	37.2	mg/L			
* Silicon, Total	8/24/23 16:04	8/25/23 14:39		1.015	17.4	mg/L	0.02030	0.25375	
* Sodium, Total	8/24/23 16:04	8/25/23 14:39		1.015	14.3	mg/L	0.04060	0.406	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	8/24/23 11:01	8/25/23 12:42		1.015	0.0486	mg/L	0.030000	0.1015	J
* Calcium, Dissolved	8/24/23 11:01	8/28/23 12:29		10.15	100	mg/L	0.70035	4.06	
* Iron, Dissolved	8/24/23 11:01	8/28/23 12:29		10.15	11.4	mg/L	0.08120	0.406	
* Lithium, Dissolved	8/24/23 11:01	8/25/23 12:42		1.015	0.280	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	8/24/23 11:01	8/28/23 12:29		10.15	64.7	mg/L	0.21315	4.06	
* Molybdenum, Dissolved	8/24/23 11:01	8/25/23 12:42		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Dissolved (calc.)	8/24/23 11:01	8/25/23 12:42		1	37.2	mg/L			
* Silicon, Dissolved	8/24/23 11:01	8/25/23 12:42		1.015	17.4	mg/L	0.02030	0.25375	
* Sodium, Dissolved	8/24/23 11:01	8/25/23 12:42		1.015	14.2	mg/L	0.04060	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***					***Preparation Method: EPA 1638***			
* Antimony, Total	8/24/23 16:04	8/25/23 10:37		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Total	8/24/23 16:04	8/25/23 13:02		5.075	15.7	mg/L	0.045675	0.25375	
* Arsenic, Total	8/24/23 16:04	8/25/23 10:37		1.015	0.00320	mg/L	0.000112	0.000203	
* Barium, Total	8/24/23 16:04	8/25/23 10:37		1.015	0.00963	mg/L	0.000508	0.001015	
* Beryllium, Total	8/24/23 16:04	8/25/23 10:37		1.015	0.00553	mg/L	0.000406	0.001015	
* Cadmium, Total	8/24/23 16:04	8/25/23 10:37		1.015	0.0000750	mg/L	0.000068	0.000203	J
* Chromium, Total	8/24/23 16:04	8/25/23 10:37		1.015	0.00152	mg/L	0.000203	0.001015	
* Cobalt, Total	8/24/23 16:04	8/25/23 10:37		1.015	0.0981	mg/L	0.000068	0.000203	
* Lead, Total	8/24/23 16:04	8/25/23 10:37		1.015	0.000123	mg/L	0.000068	0.000203	J
* Manganese, Total	8/24/23 16:04	8/25/23 13:02		5.075	3.21	mg/L	0.000761	0.005075	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
Alkalinity could not be performed, pH at or below titration end point of 4.5 SU.

Reported: 9/25/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gorgas Gypsum - PZ-18

Location Code: WMWGORG
Collected: 8/22/23 11:03
Customer ID:
Submittal Date: 8/24/23 08:32

Laboratory ID Number: BD16250

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	8/24/23 16:04	8/25/23 10:37		1.015	2.98	mg/L	0.169505	0.5075	
* Selenium, Total	8/24/23 16:04	8/25/23 10:37		1.015	0.00176	mg/L	0.000508	0.001015	
* Thallium, Total	8/24/23 16:04	8/25/23 10:37		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	8/24/23 11:01	8/24/23 14:55		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	8/24/23 11:01	8/24/23 18:58		5.075	14.2	mg/L	0.045675	0.25375	
* Arsenic, Dissolved	8/24/23 11:01	8/24/23 14:55		1.015	0.00325	mg/L	0.000112	0.000203	
* Barium, Dissolved	8/24/23 11:01	8/24/23 14:55		1.015	0.00970	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	8/24/23 11:01	8/24/23 14:55		1.015	0.00590	mg/L	0.000406	0.001015	
* Cadmium, Dissolved	8/24/23 11:01	8/24/23 14:55		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	8/24/23 11:01	8/24/23 14:55		1.015	0.00141	mg/L	0.000203	0.001015	
* Cobalt, Dissolved	8/24/23 11:01	8/24/23 14:55		1.015	0.0917	mg/L	0.000068	0.000203	
* Lead, Dissolved	8/24/23 11:01	8/24/23 14:55		1.015	0.000114	mg/L	0.000068	0.000203	J
* Manganese, Dissolved	8/24/23 11:01	8/24/23 18:58		5.075	3.01	mg/L	0.000761	0.005075	
* Potassium, Dissolved	8/24/23 11:01	8/24/23 14:55		1.015	2.92	mg/L	0.169505	0.5075	
* Selenium, Dissolved	8/24/23 11:01	8/24/23 14:55		1.015	0.00233	mg/L	0.000508	0.001015	
* Thallium, Dissolved	8/24/23 11:01	8/24/23 14:55		1.015	0.0000758	mg/L	0.000068	0.000203	J
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	8/25/23 11:54	8/25/23 16:05		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: CES***								
* Nitrogen, Nitrate/Nitrite	8/24/23 12:24	8/24/23 12:24		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	8/24/23 11:00	8/30/23 12:15		1	874	mg/L		50	
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	8/25/23 15:06	8/25/23 15:06		1	Not Detected	mg/L	1.00	2	U
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	8/29/23 10:37	8/29/23 10:37		1	1.79	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	8/29/23 14:34	8/29/23 14:34		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	8/24/23 11:03	8/24/23 11:03		32	522	mg/L	19.2	64	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
Alkalinity could not be performed, pH at or below titration end point of 4.5 SU.

Reported: 9/25/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gorgas Gypsum - PZ-18

Location Code: WMWGORG
Collected: 8/22/23 11:03
Customer ID:
Submittal Date: 8/24/23 08:32

Laboratory ID Number: BD16250

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	8/22/23 11:00	8/22/23 11:00			878.47	uS/cm			FA
pH	8/22/23 11:00	8/22/23 11:00			3.98	SU			FA
Temperature	8/22/23 11:00	8/22/23 11:00			24.51	C			FA
Turbidity	8/22/23 11:00	8/22/23 11:00			4.4	NTU			FA
Sulfide	8/22/23 11:00	8/22/23 11:00			0	mg/L			FA

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
Alkalinity could not be performed, pH at or below titration end point of 4.5 SU.

Reported: 9/25/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGORG
Sample Date: 8/22/23 11:03
Customer ID:
Delivery Date: 8/24/23 08:32

Description: Gorgas Gypsum - PZ-18

Laboratory ID Number: BD16250

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD16256	Aluminum, Dissolved	mg/L	-0.000172	0.0198	0.100	18.0	16.9	0.107	0.0850 to 0.115	-200	70.0 to 130	6.30	20.0
BD16255	Aluminum, Total	mg/L	0.000416	0.0198	0.100	0.103	0.104	0.104	0.0850 to 0.115	103	70.0 to 130	0.966	20.0
BD16256	Antimony, Dissolved	mg/L	0.000328	0.00100	0.100	0.104	0.0956	0.0926	0.0850 to 0.115	104	70.0 to 130	8.42	20.0
BD16255	Antimony, Total	mg/L	0.000302	0.00100	0.100	0.0945	0.0950	0.0928	0.0850 to 0.115	94.5	70.0 to 130	0.528	20.0
BD16256	Arsenic, Dissolved	mg/L	0.0000027	0.000200	0.100	0.107	0.0984	0.101	0.0850 to 0.115	106	70.0 to 130	8.37	20.0
BD16255	Arsenic, Total	mg/L	0.0000072	0.000200	0.100	0.101	0.101	0.102	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BD16256	Barium, Dissolved	mg/L	0.0000131	0.00100	0.100	0.117	0.107	0.0970	0.0850 to 0.115	109	70.0 to 130	8.93	20.0
BD16255	Barium, Total	mg/L	0.0000115	0.00100	0.100	0.101	0.0994	0.0993	0.0850 to 0.115	101	70.0 to 130	1.60	20.0
BD16256	Beryllium, Dissolved	mg/L	0.0000369	0.000880	0.100	0.110	0.108	0.104	0.0850 to 0.115	103	70.0 to 130	1.83	20.0
BD16255	Beryllium, Total	mg/L	0.000	0.000880	0.100	0.0993	0.101	0.100	0.0850 to 0.115	99.3	70.0 to 130	1.70	20.0
BD16256	Boron, Dissolved	mg/L	-0.000395	0.0650	1.00	3.25	3.25	0.988	0.850 to 1.15	101	70.0 to 130	0.00	20.0
BD16255	Boron, Total	mg/L	-0.000149	0.0650	1.00	0.985	0.977	0.974	0.850 to 1.15	98.5	70.0 to 130	0.815	20.0
BD16256	Cadmium, Dissolved	mg/L	-0.0000002	0.000147	0.100	0.110	0.0998	0.0992	0.0850 to 0.115	108	70.0 to 130	9.72	20.0
BD16255	Cadmium, Total	mg/L	0.0000049	0.000147	0.100	0.104	0.100	0.101	0.0850 to 0.115	104	70.0 to 130	3.92	20.0
BD16256	Calcium, Dissolved	mg/L	-0.00836	0.152	5.00	156	150	4.84	4.25 to 5.75	220	70.0 to 130	3.92	20.0
BD16255	Calcium, Total	mg/L	-0.0149	0.152	5.00	4.63	4.75	4.72	4.25 to 5.75	92.6	70.0 to 130	2.56	20.0
BD16255	Chloride	mg/L	-0.00615	1.00	10.0	10.0	10.1	10.6	9.00 to 11.0	100	80.0 to 120	0.995	20.0
BD16256	Chromium, Dissolved	mg/L	0.0000133	0.000440	0.100	0.103	0.0936	0.101	0.0850 to 0.115	102	70.0 to 130	9.56	20.0
BD16255	Chromium, Total	mg/L	-0.0000482	0.000440	0.100	0.103	0.102	0.103	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BD16256	Cobalt, Dissolved	mg/L	0.0000012	0.000147	0.100	0.444	0.403	0.0999	0.0850 to 0.115	132	70.0 to 130	9.68	20.0
BD16255	Cobalt, Total	mg/L	-0.0000511	0.000147	0.100	0.105	0.104	0.105	0.0850 to 0.115	105	70.0 to 130	0.957	20.0
BD16255	Fluoride	mg/L	0.0323	0.125	2.50	1.93	2.21	2.40	2.25 to 2.75	77.2	80.0 to 120	13.5	20.0
BD16256	Iron, Dissolved	mg/L	0.0118	0.0176	0.2	29.3	28.9	0.199	0.170 to 0.230	500	70.0 to 130	1.37	20.0
BD16255	Iron, Total	mg/L	0.00252	0.0176	0.2	0.199	0.199	0.198	0.170 to 0.230	99.5	70.0 to 130	0.00	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
Alkalinity could not be performed, pH at or below titration end point of 4.5 SU.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGORG
Sample Date: 8/22/23 11:03
Customer ID:
Delivery Date: 8/24/23 08:32

Description: Gorgas Gypsum - PZ-18

Laboratory ID Number: BD16250

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD16256	Lead, Dissolved	mg/L	0.0000062	0.000147	0.100	0.108	0.0972	0.102	0.0850 to 0.115	107	70.0 to 130	10.5	20.0
BD16255	Lead, Total	mg/L	0.0000013	0.000147	0.100	0.106	0.104	0.108	0.0850 to 0.115	106	70.0 to 130	1.90	20.0
BD16256	Lithium, Dissolved	mg/L	-0.000045	0.0154	0.200	0.663	0.664	0.196	0.170 to 0.230	100	70.0 to 130	0.151	20.0
BD16255	Lithium, Total	mg/L	0.000397	0.0154	0.200	0.197	0.195	0.194	0.170 to 0.230	98.5	70.0 to 130	1.02	20.0
BD16256	Magnesium, Dissolved	mg/L	0.0115	0.0462	5.00	118	114	4.98	4.25 to 5.75	160	70.0 to 130	3.45	20.0
BD16255	Magnesium, Total	mg/L	0.0147	0.0462	5.00	4.90	4.92	4.89	4.25 to 5.75	97.5	70.0 to 130	0.407	20.0
BD16256	Manganese, Dissolved	mg/L	0.0000265	0.00033	0.100	13.4	12.5	0.102	0.0850 to 0.115	100	70.0 to 130	6.95	20.0
BD16255	Manganese, Total	mg/L	0.0000137	0.00033	0.100	0.102	0.101	0.103	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BD16255	Mercury, Total by CVAA	mg/L	4.000E-05	0.000500	0.004	0.00397	0.00391	0.00393	0.00340 to 0.00460	99.2	70.0 to 130	1.52	20.0
BD16256	Molybdenum, Dissolved	mg/L	0.00029	0.0100	0.2	0.197	0.197	0.198	0.170 to 0.230	98.5	70.0 to 130	0.00	20.0
BD16255	Molybdenum, Total	mg/L	0.000	0.0100	0.2	0.200	0.200	0.199	0.170 to 0.230	100	70.0 to 130	0.00	20.0
BD16256	Potassium, Dissolved	mg/L	-0.0105	0.367	10.0	14.8	13.4	10.2	8.50 to 11.5	112	70.0 to 130	9.93	20.0
BD16255	Potassium, Total	mg/L	-0.00850	0.367	10.0	10.2	10.3	10.6	8.50 to 11.5	102	70.0 to 130	0.976	20.0
BD16256	Selenium, Dissolved	mg/L	0.0000176	0.00100	0.100	0.110	0.100	0.104	0.0850 to 0.115	107	70.0 to 130	9.52	20.0
BD16255	Selenium, Total	mg/L	0.0000331	0.00100	0.100	0.104	0.105	0.106	0.0850 to 0.115	104	70.0 to 130	0.957	20.0
BD16256	Silicon, Dissolved	mg/L	-0.00145	0.0440	1.00	26.3	25.8	0.987	0.850 to 1.15	180	70.0 to 130	1.92	20.0
BD16255	Silicon, Total	mg/L	-0.000644	0.0440	1.00	0.978	0.978	0.974	0.850 to 1.15	97.8	70.0 to 130	0.00	20.0
BD16256	Sodium, Dissolved	mg/L	0.00575	0.0880	5.00	24.3	24.3	5.09	4.25 to 5.75	104	70.0 to 130	0.00	20.0
BD16255	Sodium, Total	mg/L	0.0102	0.0880	5.00	5.01	4.96	4.96	4.25 to 5.75	100	70.0 to 130	1.00	20.0
BD16255	Sulfate	mg/L	0.481	2.0	20.0	19.6	19.7	20.5	18.0 to 22.0	94.6	80.0 to 120	0.509	20.0
BD16256	Thallium, Dissolved	mg/L	0.0000002	0.000147	0.100	0.105	0.0942	0.0986	0.0850 to 0.115	105	70.0 to 130	10.8	20.0
BD16255	Thallium, Total	mg/L	-0.0000938	0.000147	0.100	0.112	0.105	0.113	0.0850 to 0.115	112	70.0 to 130	6.45	20.0
BD16255	Total Organic Carbon	mg/L	0.139	1.00	10.0	10.1	9.52	24.0		101	80.0 to 120	5.91	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
Alkalinity could not be performed, pH at or below titration end point of 4.5 SU.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Alabama Power

Batch QC Summary

Customer Account: WMWGORG
Sample Date: 8/22/23 11:03
Customer ID:
Delivery Date: 8/24/23 08:32

Description: Gorgas Gypsum - PZ-18

Laboratory ID Number: BD16250

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD16255	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.03	0.200	2.00	1.98	-0.050	2.11	1.80 to 2.20	99.0	90.0 to 110	0.00	15.0
BD16253	Solids, Dissolved	mg/L	3.00	25.0			1260	53.0	40.0 to 60.0			3.89	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
Alkalinity could not be performed, pH at or below titration end point of 4.5 SU.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gorgas Gypsum - PZ-17

Location Code: WMWGORG
Collected: 8/22/23 12:38
Customer ID:
Submittal Date: 8/24/23 08:32

Laboratory ID Number: BD16251

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	8/24/23 16:04	8/25/23 14:43		1.015	0.0947	mg/L	0.030000	0.1015	J
* Calcium, Total	8/24/23 16:04	8/28/23 14:17		10.15	160	mg/L	0.70035	4.06	
* Iron, Total	8/24/23 16:04	8/28/23 14:17		10.15	27.8	mg/L	0.08120	0.406	
* Lithium, Total	8/24/23 16:04	8/25/23 14:43		1.015	0.918	mg/L	0.007105	0.01999956	
* Magnesium, Total	8/24/23 16:04	8/28/23 14:17		10.15	110	mg/L	0.21315	4.06	
* Molybdenum, Total	8/24/23 16:04	8/25/23 14:43		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Total (calc.)	8/24/23 16:04	8/25/23 14:43		1	35.5	mg/L			
* Silicon, Total	8/24/23 16:04	8/25/23 14:43		1.015	16.6	mg/L	0.02030	0.25375	
* Sodium, Total	8/24/23 16:04	8/25/23 14:43		1.015	15.4	mg/L	0.04060	0.406	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	8/24/23 11:01	8/25/23 12:46		1.015	0.0989	mg/L	0.030000	0.1015	J
* Calcium, Dissolved	8/24/23 11:01	8/28/23 12:33		10.15	176	mg/L	0.70035	4.06	
* Iron, Dissolved	8/24/23 11:01	8/28/23 12:33		10.15	28.9	mg/L	0.08120	0.406	
* Lithium, Dissolved	8/24/23 11:01	8/25/23 12:46		1.015	0.920	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	8/24/23 11:01	8/28/23 12:33		10.15	121	mg/L	0.21315	4.06	
* Molybdenum, Dissolved	8/24/23 11:01	8/25/23 12:46		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Dissolved (calc.)	8/24/23 11:01	8/25/23 12:46		1	36.4	mg/L			
* Silicon, Dissolved	8/24/23 11:01	8/25/23 12:46		1.015	17.0	mg/L	0.02030	0.25375	
* Sodium, Dissolved	8/24/23 11:01	8/25/23 12:46		1.015	15.2	mg/L	0.04060	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	8/24/23 16:04	8/25/23 10:41		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Arsenic, Total	8/24/23 16:04	8/25/23 10:41		1.015	0.00236	mg/L	0.000112	0.000203	
* Aluminum, Total	8/24/23 16:04	8/25/23 13:09		10.15	36.9	mg/L	0.09135	0.5075	
* Barium, Total	8/24/23 16:04	8/25/23 10:41		1.015	0.0127	mg/L	0.000508	0.001015	
* Beryllium, Total	8/24/23 16:04	8/25/23 10:41		1.015	0.0121	mg/L	0.000406	0.001015	
* Cadmium, Total	8/24/23 16:04	8/25/23 10:41		1.015	0.00181	mg/L	0.000068	0.000203	
* Chromium, Total	8/24/23 16:04	8/25/23 10:41		1.015	0.00182	mg/L	0.000203	0.001015	
* Cobalt, Total	8/24/23 16:04	8/25/23 10:41		1.015	0.307	mg/L	0.000068	0.000203	
* Lead, Total	8/24/23 16:04	8/25/23 10:41		1.015	0.00360	mg/L	0.000068	0.000203	
* Manganese, Total	8/24/23 16:04	8/25/23 13:09		10.15	8.56	mg/L	0.001522	0.01015	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
Alkalinity could not be performed, pH at or below titration end point of 4.5 SU.

Reported: 9/25/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gorgas Gypsum - PZ-17

Location Code: WMWGORG
Collected: 8/22/23 12:38
Customer ID:
Submittal Date: 8/24/23 08:32

Laboratory ID Number: BD16251

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	8/24/23 16:04	8/25/23 10:41		1.015	5.11	mg/L	0.169505	0.5075	
* Selenium, Total	8/24/23 16:04	8/25/23 10:41		1.015	0.00549	mg/L	0.000508	0.001015	
* Thallium, Total	8/24/23 16:04	8/25/23 10:41		1.015	0.0000821	mg/L	0.000068	0.000203	J
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	8/24/23 11:01	8/24/23 14:58		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	8/24/23 11:01	8/24/23 19:05		10.15	35.4	mg/L	0.09135	0.5075	
* Arsenic, Dissolved	8/24/23 11:01	8/24/23 14:58		1.015	0.00295	mg/L	0.000112	0.000203	
* Barium, Dissolved	8/24/23 11:01	8/24/23 14:58		1.015	0.0135	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	8/24/23 11:01	8/24/23 14:58		1.015	0.0129	mg/L	0.000406	0.001015	
* Cadmium, Dissolved	8/24/23 11:01	8/24/23 14:58		1.015	0.00192	mg/L	0.000068	0.000203	
* Chromium, Dissolved	8/24/23 11:01	8/24/23 14:58		1.015	0.00185	mg/L	0.000203	0.001015	
* Cobalt, Dissolved	8/24/23 11:01	8/24/23 14:58		1.015	0.295	mg/L	0.000068	0.000203	
* Lead, Dissolved	8/24/23 11:01	8/24/23 14:58		1.015	0.00387	mg/L	0.000068	0.000203	
* Manganese, Dissolved	8/24/23 11:01	8/24/23 19:05		10.15	7.80	mg/L	0.001522	0.01015	
* Potassium, Dissolved	8/24/23 11:01	8/24/23 14:58		1.015	5.21	mg/L	0.169505	0.5075	
* Selenium, Dissolved	8/24/23 11:01	8/24/23 14:58		1.015	0.00834	mg/L	0.000508	0.001015	
* Thallium, Dissolved	8/24/23 11:01	8/24/23 14:58		1.015	0.000186	mg/L	0.000068	0.000203	J
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	8/25/23 11:54	8/25/23 16:09		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: CES***								
* Nitrogen, Nitrate/Nitrite	8/24/23 12:26	8/24/23 12:26		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	8/24/23 11:00	8/30/23 12:15		1	1530	mg/L		75.8	
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	8/25/23 15:24	8/25/23 15:24		1	1.11	mg/L	1.00	2	J
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	8/29/23 10:38	8/29/23 10:38		1	1.55	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	8/29/23 14:35	8/29/23 14:35		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	8/24/23 11:04	8/24/23 11:04		50	983	mg/L	30.0	100	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
Alkalinity could not be performed, pH at or below titration end point of 4.5 SU.

Reported: 9/25/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gorgas Gypsum - PZ-17

Location Code: WMWGORG
Collected: 8/22/23 12:38
Customer ID:
Submittal Date: 8/24/23 08:32

Laboratory ID Number: BD16251

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	8/22/23 12:35	8/22/23 12:35			1376.92	uS/cm			FA
pH	8/22/23 12:35	8/22/23 12:35			4.28	SU			FA
Temperature	8/22/23 12:35	8/22/23 12:35			26.63	C			FA
Turbidity	8/22/23 12:35	8/22/23 12:35			4.74	NTU			FA
Sulfide	8/22/23 12:35	8/22/23 12:35			0	mg/L			FA

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
Alkalinity could not be performed, pH at or below titration end point of 4.5 SU.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGORG
Sample Date: 8/22/23 12:38
Customer ID:
Delivery Date: 8/24/23 08:32

Description: Gorgas Gypsum - PZ-17

Laboratory ID Number: BD16251

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD16256	Aluminum, Dissolved	mg/L	-0.000172	0.0198	0.100	18.0	16.9	0.107	0.0850 to 0.115	-200	70.0 to 130	6.30	20.0
BD16255	Aluminum, Total	mg/L	0.000416	0.0198	0.100	0.103	0.104	0.104	0.0850 to 0.115	103	70.0 to 130	0.966	20.0
BD16256	Antimony, Dissolved	mg/L	0.000328	0.00100	0.100	0.104	0.0956	0.0926	0.0850 to 0.115	104	70.0 to 130	8.42	20.0
BD16255	Antimony, Total	mg/L	0.000302	0.00100	0.100	0.0945	0.0950	0.0928	0.0850 to 0.115	94.5	70.0 to 130	0.528	20.0
BD16256	Arsenic, Dissolved	mg/L	0.0000027	0.000200	0.100	0.107	0.0984	0.101	0.0850 to 0.115	106	70.0 to 130	8.37	20.0
BD16255	Arsenic, Total	mg/L	0.0000072	0.000200	0.100	0.101	0.101	0.102	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BD16256	Barium, Dissolved	mg/L	0.0000131	0.00100	0.100	0.117	0.107	0.0970	0.0850 to 0.115	109	70.0 to 130	8.93	20.0
BD16255	Barium, Total	mg/L	0.0000115	0.00100	0.100	0.101	0.0994	0.0993	0.0850 to 0.115	101	70.0 to 130	1.60	20.0
BD16256	Beryllium, Dissolved	mg/L	0.0000369	0.000880	0.100	0.110	0.108	0.104	0.0850 to 0.115	103	70.0 to 130	1.83	20.0
BD16255	Beryllium, Total	mg/L	0.000	0.000880	0.100	0.0993	0.101	0.100	0.0850 to 0.115	99.3	70.0 to 130	1.70	20.0
BD16256	Boron, Dissolved	mg/L	-0.000395	0.0650	1.00	3.25	3.25	0.988	0.850 to 1.15	101	70.0 to 130	0.00	20.0
BD16255	Boron, Total	mg/L	-0.000149	0.0650	1.00	0.985	0.977	0.974	0.850 to 1.15	98.5	70.0 to 130	0.815	20.0
BD16256	Cadmium, Dissolved	mg/L	-0.0000002	0.000147	0.100	0.110	0.0998	0.0992	0.0850 to 0.115	108	70.0 to 130	9.72	20.0
BD16255	Cadmium, Total	mg/L	0.0000049	0.000147	0.100	0.104	0.100	0.101	0.0850 to 0.115	104	70.0 to 130	3.92	20.0
BD16256	Calcium, Dissolved	mg/L	-0.00836	0.152	5.00	156	150	4.84	4.25 to 5.75	220	70.0 to 130	3.92	20.0
BD16255	Calcium, Total	mg/L	-0.0149	0.152	5.00	4.63	4.75	4.72	4.25 to 5.75	92.6	70.0 to 130	2.56	20.0
BD16255	Chloride	mg/L	-0.00615	1.00	10.0	10.0	10.1	10.6	9.00 to 11.0	100	80.0 to 120	0.995	20.0
BD16256	Chromium, Dissolved	mg/L	0.0000133	0.000440	0.100	0.103	0.0936	0.101	0.0850 to 0.115	102	70.0 to 130	9.56	20.0
BD16255	Chromium, Total	mg/L	-0.0000482	0.000440	0.100	0.103	0.102	0.103	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BD16256	Cobalt, Dissolved	mg/L	0.0000012	0.000147	0.100	0.444	0.403	0.0999	0.0850 to 0.115	132	70.0 to 130	9.68	20.0
BD16255	Cobalt, Total	mg/L	-0.0000511	0.000147	0.100	0.105	0.104	0.105	0.0850 to 0.115	105	70.0 to 130	0.957	20.0
BD16255	Fluoride	mg/L	0.0323	0.125	2.50	1.93	2.21	2.40	2.25 to 2.75	77.2	80.0 to 120	13.5	20.0
BD16256	Iron, Dissolved	mg/L	0.0118	0.0176	0.2	29.3	28.9	0.199	0.170 to 0.230	500	70.0 to 130	1.37	20.0
BD16255	Iron, Total	mg/L	0.00252	0.0176	0.2	0.199	0.199	0.198	0.170 to 0.230	99.5	70.0 to 130	0.00	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
Alkalinity could not be performed, pH at or below titration end point of 4.5 SU.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGORG
Sample Date: 8/22/23 12:38
Customer ID:
Delivery Date: 8/24/23 08:32

Description: Gorgas Gypsum - PZ-17

Laboratory ID Number: BD16251

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD16256	Lead, Dissolved	mg/L	0.0000062	0.000147	0.100	0.108	0.0972	0.102	0.0850 to 0.115	107	70.0 to 130	10.5	20.0
BD16255	Lead, Total	mg/L	0.0000013	0.000147	0.100	0.106	0.104	0.108	0.0850 to 0.115	106	70.0 to 130	1.90	20.0
BD16256	Lithium, Dissolved	mg/L	-0.000045	0.0154	0.200	0.663	0.664	0.196	0.170 to 0.230	100	70.0 to 130	0.151	20.0
BD16255	Lithium, Total	mg/L	0.000397	0.0154	0.200	0.197	0.195	0.194	0.170 to 0.230	98.5	70.0 to 130	1.02	20.0
BD16256	Magnesium, Dissolved	mg/L	0.0115	0.0462	5.00	118	114	4.98	4.25 to 5.75	160	70.0 to 130	3.45	20.0
BD16255	Magnesium, Total	mg/L	0.0147	0.0462	5.00	4.90	4.92	4.89	4.25 to 5.75	97.5	70.0 to 130	0.407	20.0
BD16256	Manganese, Dissolved	mg/L	0.0000265	0.00033	0.100	13.4	12.5	0.102	0.0850 to 0.115	100	70.0 to 130	6.95	20.0
BD16255	Manganese, Total	mg/L	0.0000137	0.00033	0.100	0.102	0.101	0.103	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BD16255	Mercury, Total by CVAA	mg/L	4.000E-05	0.000500	0.004	0.00397	0.00391	0.00393	0.00340 to 0.00460	99.2	70.0 to 130	1.52	20.0
BD16256	Molybdenum, Dissolved	mg/L	0.00029	0.0100	0.2	0.197	0.197	0.198	0.170 to 0.230	98.5	70.0 to 130	0.00	20.0
BD16255	Molybdenum, Total	mg/L	0.000	0.0100	0.2	0.200	0.200	0.199	0.170 to 0.230	100	70.0 to 130	0.00	20.0
BD16256	Potassium, Dissolved	mg/L	-0.0105	0.367	10.0	14.8	13.4	10.2	8.50 to 11.5	112	70.0 to 130	9.93	20.0
BD16255	Potassium, Total	mg/L	-0.00850	0.367	10.0	10.2	10.3	10.6	8.50 to 11.5	102	70.0 to 130	0.976	20.0
BD16256	Selenium, Dissolved	mg/L	0.0000176	0.00100	0.100	0.110	0.100	0.104	0.0850 to 0.115	107	70.0 to 130	9.52	20.0
BD16255	Selenium, Total	mg/L	0.0000331	0.00100	0.100	0.104	0.105	0.106	0.0850 to 0.115	104	70.0 to 130	0.957	20.0
BD16256	Silicon, Dissolved	mg/L	-0.00145	0.0440	1.00	26.3	25.8	0.987	0.850 to 1.15	180	70.0 to 130	1.92	20.0
BD16255	Silicon, Total	mg/L	-0.000644	0.0440	1.00	0.978	0.978	0.974	0.850 to 1.15	97.8	70.0 to 130	0.00	20.0
BD16256	Sodium, Dissolved	mg/L	0.00575	0.0880	5.00	24.3	24.3	5.09	4.25 to 5.75	104	70.0 to 130	0.00	20.0
BD16255	Sodium, Total	mg/L	0.0102	0.0880	5.00	5.01	4.96	4.96	4.25 to 5.75	100	70.0 to 130	1.00	20.0
BD16255	Sulfate	mg/L	0.481	2.0	20.0	19.6	19.7	20.5	18.0 to 22.0	94.6	80.0 to 120	0.509	20.0
BD16256	Thallium, Dissolved	mg/L	0.0000002	0.000147	0.100	0.105	0.0942	0.0986	0.0850 to 0.115	105	70.0 to 130	10.8	20.0
BD16255	Thallium, Total	mg/L	-0.0000938	0.000147	0.100	0.112	0.105	0.113	0.0850 to 0.115	112	70.0 to 130	6.45	20.0
BD16255	Total Organic Carbon	mg/L	0.139	1.00	10.0	10.1	9.52	24.0		101	80.0 to 120	5.91	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
Alkalinity could not be performed, pH at or below titration end point of 4.5 SU.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Alabama Power

Batch QC Summary

Customer Account: WMWGORG
Sample Date: 8/22/23 12:38
Customer ID:
Delivery Date: 8/24/23 08:32

Description: Gorgas Gypsum - PZ-17

Laboratory ID Number: BD16251

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD16255	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.03	0.200	2.00	1.98	-0.050	2.11	1.80 to 2.20	99.0	90.0 to 110	0.00	15.0
BD16253	Solids, Dissolved	mg/L	3.00	25.0			1260	53.0	40.0 to 60.0			3.89	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
Alkalinity could not be performed, pH at or below titration end point of 4.5 SU.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gorgas Gypsum - MW-12H

Location Code: WMWGORG
Collected: 8/22/23 14:08
Customer ID:
Submittal Date: 8/24/23 08:32

Laboratory ID Number: BD16252

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	8/24/23 16:04	8/25/23 14:46		1.015	0.0633	mg/L	0.030000	0.1015	J
* Calcium, Total	8/24/23 16:04	8/28/23 14:20		10.15	128	mg/L	0.70035	4.06	
* Iron, Total	8/24/23 16:04	8/25/23 14:46		1.015	1.40	mg/L	0.008120	0.0406	
* Lithium, Total	8/24/23 16:04	8/25/23 14:46		1.015	0.373	mg/L	0.007105	0.01999956	
* Magnesium, Total	8/24/23 16:04	8/28/23 14:20		10.15	122	mg/L	0.21315	4.06	
* Molybdenum, Total	8/24/23 16:04	8/25/23 14:46		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Total (calc.)	8/24/23 16:04	8/25/23 14:46		1	40.7	mg/L			
* Silicon, Total	8/24/23 16:04	8/25/23 14:46		1.015	19.0	mg/L	0.02030	0.25375	
* Sodium, Total	8/24/23 16:04	8/25/23 14:46		1.015	21.7	mg/L	0.04060	0.406	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	8/24/23 11:01	8/25/23 12:49		1.015	0.0628	mg/L	0.030000	0.1015	J
* Calcium, Dissolved	8/24/23 11:01	8/28/23 12:36		10.15	136	mg/L	0.70035	4.06	
* Iron, Dissolved	8/24/23 11:01	8/25/23 12:49		1.015	0.0930	mg/L	0.008120	0.0406	
* Lithium, Dissolved	8/24/23 11:01	8/25/23 12:49		1.015	0.371	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	8/24/23 11:01	8/28/23 12:36		10.15	131	mg/L	0.21315	4.06	
* Molybdenum, Dissolved	8/24/23 11:01	8/25/23 12:49		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Dissolved (calc.)	8/24/23 11:01	8/25/23 12:49		1	40.0	mg/L			
* Silicon, Dissolved	8/24/23 11:01	8/25/23 12:49		1.015	18.7	mg/L	0.02030	0.25375	
* Sodium, Dissolved	8/24/23 11:01	8/25/23 12:49		1.015	21.6	mg/L	0.04060	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	8/24/23 16:04	8/25/23 10:44		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Total	8/24/23 16:04	8/25/23 13:16		10.15	10.7	mg/L	0.09135	0.5075	
* Arsenic, Total	8/24/23 16:04	8/25/23 10:44		1.015	0.000726	mg/L	0.000112	0.000203	
* Barium, Total	8/24/23 16:04	8/25/23 10:44		1.015	0.0135	mg/L	0.000508	0.001015	
* Beryllium, Total	8/24/23 16:04	8/25/23 10:44		1.015	0.00745	mg/L	0.000406	0.001015	
* Cadmium, Total	8/24/23 16:04	8/25/23 10:44		1.015	0.00307	mg/L	0.000068	0.000203	
* Chromium, Total	8/24/23 16:04	8/25/23 10:44		1.015	0.000260	mg/L	0.000203	0.001015	J
* Cobalt, Total	8/24/23 16:04	8/25/23 10:44		1.015	0.323	mg/L	0.000068	0.000203	
* Lead, Total	8/24/23 16:04	8/25/23 10:44		1.015	0.00395	mg/L	0.000068	0.000203	
* Manganese, Total	8/24/23 16:04	8/25/23 13:13		92.365	12.8	mg/L	0.013855	0.092365	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
Alkalinity could not be performed, pH at or below titration end point of 4.5 SU.

Reported: 9/25/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gorgas Gypsum - MW-12H

Location Code: WMWGORG
Collected: 8/22/23 14:08
Customer ID:
Submittal Date: 8/24/23 08:32

Laboratory ID Number: BD16252

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	8/24/23 16:04	8/25/23 10:44		1.015	4.99	mg/L	0.169505	0.5075	
* Selenium, Total	8/24/23 16:04	8/25/23 10:44		1.015	0.00175	mg/L	0.000508	0.001015	
* Thallium, Total	8/24/23 16:04	8/25/23 10:44		1.015	0.000144	mg/L	0.000068	0.000203	J
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	8/24/23 11:01	8/24/23 15:02		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	8/24/23 11:01	8/24/23 19:13		10.15	9.25	mg/L	0.09135	0.5075	
* Arsenic, Dissolved	8/24/23 11:01	8/24/23 15:02		1.015	0.000917	mg/L	0.000112	0.000203	
* Barium, Dissolved	8/24/23 11:01	8/24/23 15:02		1.015	0.0122	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	8/24/23 11:01	8/24/23 15:02		1.015	0.00757	mg/L	0.000406	0.001015	
* Cadmium, Dissolved	8/24/23 11:01	8/24/23 15:02		1.015	0.00283	mg/L	0.000068	0.000203	
* Chromium, Dissolved	8/24/23 11:01	8/24/23 15:02		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	8/24/23 11:01	8/24/23 15:02		1.015	0.291	mg/L	0.000068	0.000203	
* Lead, Dissolved	8/24/23 11:01	8/24/23 15:02		1.015	0.00315	mg/L	0.000068	0.000203	
* Manganese, Dissolved	8/24/23 11:01	8/24/23 19:13		10.15	12.5	mg/L	0.001522	0.01015	
* Potassium, Dissolved	8/24/23 11:01	8/24/23 15:02		1.015	4.62	mg/L	0.169505	0.5075	
* Selenium, Dissolved	8/24/23 11:01	8/24/23 15:02		1.015	0.00274	mg/L	0.000508	0.001015	
* Thallium, Dissolved	8/24/23 11:01	8/24/23 15:02		1.015	0.000222	mg/L	0.000068	0.000203	
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	8/25/23 11:54	8/25/23 16:13		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: CES***								
* Nitrogen, Nitrate/Nitrite	8/24/23 12:28	8/24/23 12:28		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	8/24/23 11:00	8/30/23 12:15		1	1310	mg/L		50	
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	8/25/23 15:41	8/25/23 15:41		1	Not Detected	mg/L	1.00	2	U
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	8/29/23 10:40	8/29/23 10:40		1	1.63	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	8/29/23 14:36	8/29/23 14:36		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	8/24/23 11:05	8/24/23 11:05		40	801	mg/L	24.0	80	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
Alkalinity could not be performed, pH at or below titration end point of 4.5 SU.

Reported: 9/25/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gorgas Gypsum - MW-12H

Location Code: WMWGORG
Collected: 8/22/23 14:08
Customer ID:
Submittal Date: 8/24/23 08:32

Laboratory ID Number: BD16252

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	8/22/23 14:05	8/22/23 14:05			1179.41	uS/cm			FA
pH	8/22/23 14:05	8/22/23 14:05			4.25	SU			FA
Temperature	8/22/23 14:05	8/22/23 14:05			20.76	C			FA
Turbidity	8/22/23 14:05	8/22/23 14:05			7.98	NTU			FA
Sulfide	8/22/23 14:05	8/22/23 14:05			0	mg/L			FA

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
Alkalinity could not be performed, pH at or below titration end point of 4.5 SU.

Reported: 9/25/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGORG
Sample Date: 8/22/23 14:08
Customer ID:
Delivery Date: 8/24/23 08:32

Description: Gorgas Gypsum - MW-12H

Laboratory ID Number: BD16252

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD16256	Aluminum, Dissolved	mg/L	-0.000172	0.0198	0.100	18.0	16.9	0.107	0.0850 to 0.115	-200	70.0 to 130	6.30	20.0
BD16255	Aluminum, Total	mg/L	0.000416	0.0198	0.100	0.103	0.104	0.104	0.0850 to 0.115	103	70.0 to 130	0.966	20.0
BD16256	Antimony, Dissolved	mg/L	0.000328	0.00100	0.100	0.104	0.0956	0.0926	0.0850 to 0.115	104	70.0 to 130	8.42	20.0
BD16255	Antimony, Total	mg/L	0.000302	0.00100	0.100	0.0945	0.0950	0.0928	0.0850 to 0.115	94.5	70.0 to 130	0.528	20.0
BD16256	Arsenic, Dissolved	mg/L	0.0000027	0.000200	0.100	0.107	0.0984	0.101	0.0850 to 0.115	106	70.0 to 130	8.37	20.0
BD16255	Arsenic, Total	mg/L	0.0000072	0.000200	0.100	0.101	0.101	0.102	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BD16256	Barium, Dissolved	mg/L	0.0000131	0.00100	0.100	0.117	0.107	0.0970	0.0850 to 0.115	109	70.0 to 130	8.93	20.0
BD16255	Barium, Total	mg/L	0.0000115	0.00100	0.100	0.101	0.0994	0.0993	0.0850 to 0.115	101	70.0 to 130	1.60	20.0
BD16256	Beryllium, Dissolved	mg/L	0.0000369	0.000880	0.100	0.110	0.108	0.104	0.0850 to 0.115	103	70.0 to 130	1.83	20.0
BD16255	Beryllium, Total	mg/L	0.000	0.000880	0.100	0.0993	0.101	0.100	0.0850 to 0.115	99.3	70.0 to 130	1.70	20.0
BD16256	Boron, Dissolved	mg/L	-0.000395	0.0650	1.00	3.25	3.25	0.988	0.850 to 1.15	101	70.0 to 130	0.00	20.0
BD16255	Boron, Total	mg/L	-0.000149	0.0650	1.00	0.985	0.977	0.974	0.850 to 1.15	98.5	70.0 to 130	0.815	20.0
BD16256	Cadmium, Dissolved	mg/L	-0.0000002	0.000147	0.100	0.110	0.0998	0.0992	0.0850 to 0.115	108	70.0 to 130	9.72	20.0
BD16255	Cadmium, Total	mg/L	0.0000049	0.000147	0.100	0.104	0.100	0.101	0.0850 to 0.115	104	70.0 to 130	3.92	20.0
BD16256	Calcium, Dissolved	mg/L	-0.00836	0.152	5.00	156	150	4.84	4.25 to 5.75	220	70.0 to 130	3.92	20.0
BD16255	Calcium, Total	mg/L	-0.0149	0.152	5.00	4.63	4.75	4.72	4.25 to 5.75	92.6	70.0 to 130	2.56	20.0
BD16255	Chloride	mg/L	-0.00615	1.00	10.0	10.0	10.1	10.6	9.00 to 11.0	100	80.0 to 120	0.995	20.0
BD16256	Chromium, Dissolved	mg/L	0.0000133	0.000440	0.100	0.103	0.0936	0.101	0.0850 to 0.115	102	70.0 to 130	9.56	20.0
BD16255	Chromium, Total	mg/L	-0.0000482	0.000440	0.100	0.103	0.102	0.103	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BD16256	Cobalt, Dissolved	mg/L	0.0000012	0.000147	0.100	0.444	0.403	0.0999	0.0850 to 0.115	132	70.0 to 130	9.68	20.0
BD16255	Cobalt, Total	mg/L	-0.0000511	0.000147	0.100	0.105	0.104	0.105	0.0850 to 0.115	105	70.0 to 130	0.957	20.0
BD16255	Fluoride	mg/L	0.0323	0.125	2.50	1.93	2.21	2.40	2.25 to 2.75	77.2	80.0 to 120	13.5	20.0
BD16256	Iron, Dissolved	mg/L	0.0118	0.0176	0.2	29.3	28.9	0.199	0.170 to 0.230	500	70.0 to 130	1.37	20.0
BD16255	Iron, Total	mg/L	0.00252	0.0176	0.2	0.199	0.199	0.198	0.170 to 0.230	99.5	70.0 to 130	0.00	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
Alkalinity could not be performed, pH at or below titration end point of 4.5 SU.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGORG
Sample Date: 8/22/23 14:08
Customer ID:
Delivery Date: 8/24/23 08:32

Description: Gorgas Gypsum - MW-12H

Laboratory ID Number: BD16252

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD16256	Lead, Dissolved	mg/L	0.0000062	0.000147	0.100	0.108	0.0972	0.102	0.0850 to 0.115	107	70.0 to 130	10.5	20.0
BD16255	Lead, Total	mg/L	0.0000013	0.000147	0.100	0.106	0.104	0.108	0.0850 to 0.115	106	70.0 to 130	1.90	20.0
BD16256	Lithium, Dissolved	mg/L	-0.000045	0.0154	0.200	0.663	0.664	0.196	0.170 to 0.230	100	70.0 to 130	0.151	20.0
BD16255	Lithium, Total	mg/L	0.000397	0.0154	0.200	0.197	0.195	0.194	0.170 to 0.230	98.5	70.0 to 130	1.02	20.0
BD16256	Magnesium, Dissolved	mg/L	0.0115	0.0462	5.00	118	114	4.98	4.25 to 5.75	160	70.0 to 130	3.45	20.0
BD16255	Magnesium, Total	mg/L	0.0147	0.0462	5.00	4.90	4.92	4.89	4.25 to 5.75	97.5	70.0 to 130	0.407	20.0
BD16256	Manganese, Dissolved	mg/L	0.0000265	0.00033	0.100	13.4	12.5	0.102	0.0850 to 0.115	100	70.0 to 130	6.95	20.0
BD16255	Manganese, Total	mg/L	0.0000137	0.00033	0.100	0.102	0.101	0.103	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BD16255	Mercury, Total by CVAA	mg/L	4.000E-05	0.000500	0.004	0.00397	0.00391	0.00393	0.00340 to 0.00460	99.2	70.0 to 130	1.52	20.0
BD16256	Molybdenum, Dissolved	mg/L	0.00029	0.0100	0.2	0.197	0.197	0.198	0.170 to 0.230	98.5	70.0 to 130	0.00	20.0
BD16255	Molybdenum, Total	mg/L	0.000	0.0100	0.2	0.200	0.200	0.199	0.170 to 0.230	100	70.0 to 130	0.00	20.0
BD16256	Potassium, Dissolved	mg/L	-0.0105	0.367	10.0	14.8	13.4	10.2	8.50 to 11.5	112	70.0 to 130	9.93	20.0
BD16255	Potassium, Total	mg/L	-0.00850	0.367	10.0	10.2	10.3	10.6	8.50 to 11.5	102	70.0 to 130	0.976	20.0
BD16256	Selenium, Dissolved	mg/L	0.0000176	0.00100	0.100	0.110	0.100	0.104	0.0850 to 0.115	107	70.0 to 130	9.52	20.0
BD16255	Selenium, Total	mg/L	0.0000331	0.00100	0.100	0.104	0.105	0.106	0.0850 to 0.115	104	70.0 to 130	0.957	20.0
BD16256	Silicon, Dissolved	mg/L	-0.00145	0.0440	1.00	26.3	25.8	0.987	0.850 to 1.15	180	70.0 to 130	1.92	20.0
BD16255	Silicon, Total	mg/L	-0.000644	0.0440	1.00	0.978	0.978	0.974	0.850 to 1.15	97.8	70.0 to 130	0.00	20.0
BD16256	Sodium, Dissolved	mg/L	0.00575	0.0880	5.00	24.3	24.3	5.09	4.25 to 5.75	104	70.0 to 130	0.00	20.0
BD16255	Sodium, Total	mg/L	0.0102	0.0880	5.00	5.01	4.96	4.96	4.25 to 5.75	100	70.0 to 130	1.00	20.0
BD16255	Sulfate	mg/L	0.481	2.0	20.0	19.6	19.7	20.5	18.0 to 22.0	94.6	80.0 to 120	0.509	20.0
BD16256	Thallium, Dissolved	mg/L	0.0000002	0.000147	0.100	0.105	0.0942	0.0986	0.0850 to 0.115	105	70.0 to 130	10.8	20.0
BD16255	Thallium, Total	mg/L	-0.0000938	0.000147	0.100	0.112	0.105	0.113	0.0850 to 0.115	112	70.0 to 130	6.45	20.0
BD16255	Total Organic Carbon	mg/L	0.139	1.00	10.0	10.1	9.52	24.0		101	80.0 to 120	5.91	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
Alkalinity could not be performed, pH at or below titration end point of 4.5 SU.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Alabama Power

Batch QC Summary

Customer Account: WMWGORG
Sample Date: 8/22/23 14:08
Customer ID:
Delivery Date: 8/24/23 08:32

Description: Gorgas Gypsum - MW-12H

Laboratory ID Number: BD16252

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD16255	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.03	0.200	2.00	1.98	-0.050	2.11	1.80 to 2.20	99.0	90.0 to 110	0.00	15.0
BD16253	Solids, Dissolved	mg/L	3.00	25.0			1260	53.0	40.0 to 60.0			3.89	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
Alkalinity could not be performed, pH at or below titration end point of 4.5 SU.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gorgas Gypsum - MW-12H Dup

Location Code: WMWGORG
Collected: 8/22/23 14:08
Customer ID:
Submittal Date: 8/24/23 08:32

Laboratory ID Number: BD16253

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	8/24/23 16:04	8/25/23 14:49		1.015	0.0660	mg/L	0.030000	0.1015	J
* Calcium, Total	8/24/23 16:04	8/28/23 14:23		10.15	134	mg/L	0.70035	4.06	
* Iron, Total	8/24/23 16:04	8/28/23 14:23		10.15	7.30	mg/L	0.08120	0.406	
* Lithium, Total	8/24/23 16:04	8/25/23 14:49		1.015	0.370	mg/L	0.007105	0.01999956	
* Magnesium, Total	8/24/23 16:04	8/28/23 14:23		10.15	127	mg/L	0.21315	4.06	
* Molybdenum, Total	8/24/23 16:04	8/25/23 14:49		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Total (calc.)	8/24/23 16:04	8/25/23 14:49		1	41.7	mg/L			
* Silicon, Total	8/24/23 16:04	8/25/23 14:49		1.015	19.5	mg/L	0.02030	0.25375	
* Sodium, Total	8/24/23 16:04	8/25/23 14:49		1.015	21.5	mg/L	0.04060	0.406	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	8/24/23 11:01	8/25/23 12:52		1.015	0.0624	mg/L	0.030000	0.1015	J
* Calcium, Dissolved	8/24/23 11:01	8/28/23 12:39		10.15	141	mg/L	0.70035	4.06	
* Iron, Dissolved	8/24/23 11:01	8/25/23 12:52		1.015	0.0912	mg/L	0.008120	0.0406	
* Lithium, Dissolved	8/24/23 11:01	8/25/23 12:52		1.015	0.372	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	8/24/23 11:01	8/28/23 12:39		10.15	135	mg/L	0.21315	4.06	
* Molybdenum, Dissolved	8/24/23 11:01	8/25/23 12:52		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Dissolved (calc.)	8/24/23 11:01	8/25/23 12:52		1	40.2	mg/L			
* Silicon, Dissolved	8/24/23 11:01	8/25/23 12:52		1.015	18.8	mg/L	0.02030	0.25375	
* Sodium, Dissolved	8/24/23 11:01	8/25/23 12:52		1.015	21.6	mg/L	0.04060	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	8/24/23 16:04	8/25/23 10:48		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Total	8/24/23 16:04	8/25/23 13:23		10.15	13.5	mg/L	0.09135	0.5075	
* Arsenic, Total	8/24/23 16:04	8/25/23 10:48		1.015	0.000992	mg/L	0.000112	0.000203	
* Barium, Total	8/24/23 16:04	8/25/23 10:48		1.015	0.0137	mg/L	0.000508	0.001015	
* Beryllium, Total	8/24/23 16:04	8/25/23 10:48		1.015	0.00788	mg/L	0.000406	0.001015	
* Cadmium, Total	8/24/23 16:04	8/25/23 10:48		1.015	0.00320	mg/L	0.000068	0.000203	
* Chromium, Total	8/24/23 16:04	8/25/23 10:48		1.015	0.000439	mg/L	0.000203	0.001015	J
* Cobalt, Total	8/24/23 16:04	8/25/23 10:48		1.015	0.320	mg/L	0.000068	0.000203	
* Lead, Total	8/24/23 16:04	8/25/23 10:48		1.015	0.00612	mg/L	0.000068	0.000203	
* Manganese, Total	8/24/23 16:04	8/25/23 13:20		92.365	12.8	mg/L	0.013855	0.092365	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
Alkalinity could not be performed, pH at or below titration end point of 4.5 SU.

Reported: 9/25/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gorgas Gypsum - MW-12H Dup

Location Code: WMWGORG
Collected: 8/22/23 14:08
Customer ID:
Submittal Date: 8/24/23 08:32

Laboratory ID Number: BD16253

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	8/24/23 16:04	8/25/23 10:48		1.015	5.02	mg/L	0.169505	0.5075	
* Selenium, Total	8/24/23 16:04	8/25/23 10:48		1.015	0.00186	mg/L	0.000508	0.001015	
* Thallium, Total	8/24/23 16:04	8/25/23 10:48		1.015	0.000148	mg/L	0.000068	0.000203	J
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	8/24/23 11:01	8/24/23 15:06		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	8/24/23 11:01	8/24/23 19:20		10.15	9.10	mg/L	0.09135	0.5075	
* Arsenic, Dissolved	8/24/23 11:01	8/24/23 15:06		1.015	0.000873	mg/L	0.000112	0.000203	
* Barium, Dissolved	8/24/23 11:01	8/24/23 15:06		1.015	0.0121	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	8/24/23 11:01	8/24/23 15:06		1.015	0.00795	mg/L	0.000406	0.001015	
* Cadmium, Dissolved	8/24/23 11:01	8/24/23 15:06		1.015	0.00302	mg/L	0.000068	0.000203	
* Chromium, Dissolved	8/24/23 11:01	8/24/23 15:06		1.015	0.000204	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	8/24/23 11:01	8/24/23 15:06		1.015	0.301	mg/L	0.000068	0.000203	
* Lead, Dissolved	8/24/23 11:01	8/24/23 15:06		1.015	0.00319	mg/L	0.000068	0.000203	
* Manganese, Dissolved	8/24/23 11:01	8/24/23 19:20		10.15	12.3	mg/L	0.001522	0.01015	
* Potassium, Dissolved	8/24/23 11:01	8/24/23 15:06		1.015	4.83	mg/L	0.169505	0.5075	
* Selenium, Dissolved	8/24/23 11:01	8/24/23 15:06		1.015	0.00237	mg/L	0.000508	0.001015	
* Thallium, Dissolved	8/24/23 11:01	8/24/23 15:06		1.015	0.000213	mg/L	0.000068	0.000203	
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	8/25/23 11:54	8/25/23 16:17		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: CES***								
* Nitrogen, Nitrate/Nitrite	8/24/23 12:29	8/24/23 12:29		1	0.200	mg/L as N	0.20	0.3	J
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	8/24/23 11:00	8/30/23 12:15		1	1310	mg/L		50	
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	8/25/23 15:57	8/25/23 15:57		1	Not Detected	mg/L	1.00	2	U
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	8/29/23 10:41	8/29/23 10:41		1	1.80	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	8/29/23 14:37	8/29/23 14:37		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	8/24/23 11:06	8/24/23 11:06		40	811	mg/L	24.0	80	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
Alkalinity could not be performed, pH at or below titration end point of 4.5 SU.

Reported: 9/25/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gorgas Gypsum - MW-12H Dup

Location Code: WMWGORG
Collected: 8/22/23 14:08
Customer ID:
Submittal Date: 8/24/23 08:32

Laboratory ID Number: BD16253

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	8/22/23 14:05	8/22/23 14:05			1179.41	uS/cm			FA
pH	8/22/23 14:05	8/22/23 14:05			4.25	SU			FA
Temperature	8/22/23 14:05	8/22/23 14:05			20.76	C			FA
Turbidity	8/22/23 14:05	8/22/23 14:05			7.98	NTU			FA
Sulfide	8/22/23 14:05	8/22/23 14:05			0	mg/L			FA

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
Alkalinity could not be performed, pH at or below titration end point of 4.5 SU.

Reported: 9/25/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGORG
Sample Date: 8/22/23 14:08
Customer ID:
Delivery Date: 8/24/23 08:32

Description: Gorgas Gypsum - MW-12H Dup

Laboratory ID Number: BD16253

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD16256	Aluminum, Dissolved	mg/L	-0.000172	0.0198	0.100	18.0	16.9	0.107	0.0850 to 0.115	-200	70.0 to 130	6.30	20.0
BD16255	Aluminum, Total	mg/L	0.000416	0.0198	0.100	0.103	0.104	0.104	0.0850 to 0.115	103	70.0 to 130	0.966	20.0
BD16256	Antimony, Dissolved	mg/L	0.000328	0.00100	0.100	0.104	0.0956	0.0926	0.0850 to 0.115	104	70.0 to 130	8.42	20.0
BD16255	Antimony, Total	mg/L	0.000302	0.00100	0.100	0.0945	0.0950	0.0928	0.0850 to 0.115	94.5	70.0 to 130	0.528	20.0
BD16256	Arsenic, Dissolved	mg/L	0.0000027	0.000200	0.100	0.107	0.0984	0.101	0.0850 to 0.115	106	70.0 to 130	8.37	20.0
BD16255	Arsenic, Total	mg/L	0.0000072	0.000200	0.100	0.101	0.101	0.102	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BD16256	Barium, Dissolved	mg/L	0.0000131	0.00100	0.100	0.117	0.107	0.0970	0.0850 to 0.115	109	70.0 to 130	8.93	20.0
BD16255	Barium, Total	mg/L	0.0000115	0.00100	0.100	0.101	0.0994	0.0993	0.0850 to 0.115	101	70.0 to 130	1.60	20.0
BD16256	Beryllium, Dissolved	mg/L	0.0000369	0.000880	0.100	0.110	0.108	0.104	0.0850 to 0.115	103	70.0 to 130	1.83	20.0
BD16255	Beryllium, Total	mg/L	0.000	0.000880	0.100	0.0993	0.101	0.100	0.0850 to 0.115	99.3	70.0 to 130	1.70	20.0
BD16256	Boron, Dissolved	mg/L	-0.000395	0.0650	1.00	3.25	3.25	0.988	0.850 to 1.15	101	70.0 to 130	0.00	20.0
BD16255	Boron, Total	mg/L	-0.000149	0.0650	1.00	0.985	0.977	0.974	0.850 to 1.15	98.5	70.0 to 130	0.815	20.0
BD16256	Cadmium, Dissolved	mg/L	-0.0000002	0.000147	0.100	0.110	0.0998	0.0992	0.0850 to 0.115	108	70.0 to 130	9.72	20.0
BD16255	Cadmium, Total	mg/L	0.0000049	0.000147	0.100	0.104	0.100	0.101	0.0850 to 0.115	104	70.0 to 130	3.92	20.0
BD16256	Calcium, Dissolved	mg/L	-0.00836	0.152	5.00	156	150	4.84	4.25 to 5.75	220	70.0 to 130	3.92	20.0
BD16255	Calcium, Total	mg/L	-0.0149	0.152	5.00	4.63	4.75	4.72	4.25 to 5.75	92.6	70.0 to 130	2.56	20.0
BD16255	Chloride	mg/L	-0.00615	1.00	10.0	10.0	10.1	10.6	9.00 to 11.0	100	80.0 to 120	0.995	20.0
BD16256	Chromium, Dissolved	mg/L	0.0000133	0.000440	0.100	0.103	0.0936	0.101	0.0850 to 0.115	102	70.0 to 130	9.56	20.0
BD16255	Chromium, Total	mg/L	-0.0000482	0.000440	0.100	0.103	0.102	0.103	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BD16256	Cobalt, Dissolved	mg/L	0.0000012	0.000147	0.100	0.444	0.403	0.0999	0.0850 to 0.115	132	70.0 to 130	9.68	20.0
BD16255	Cobalt, Total	mg/L	-0.0000511	0.000147	0.100	0.105	0.104	0.105	0.0850 to 0.115	105	70.0 to 130	0.957	20.0
BD16255	Fluoride	mg/L	0.0323	0.125	2.50	1.93	2.21	2.40	2.25 to 2.75	77.2	80.0 to 120	13.5	20.0
BD16256	Iron, Dissolved	mg/L	0.0118	0.0176	0.2	29.3	28.9	0.199	0.170 to 0.230	500	70.0 to 130	1.37	20.0
BD16255	Iron, Total	mg/L	0.00252	0.0176	0.2	0.199	0.199	0.198	0.170 to 0.230	99.5	70.0 to 130	0.00	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
Alkalinity could not be performed, pH at or below titration end point of 4.5 SU.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGORG
Sample Date: 8/22/23 14:08
Customer ID:
Delivery Date: 8/24/23 08:32

Description: Gorgas Gypsum - MW-12H Dup

Laboratory ID Number: BD16253

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD16256	Lead, Dissolved	mg/L	0.0000062	0.000147	0.100	0.108	0.0972	0.102	0.0850 to 0.115	107	70.0 to 130	10.5	20.0
BD16255	Lead, Total	mg/L	0.0000013	0.000147	0.100	0.106	0.104	0.108	0.0850 to 0.115	106	70.0 to 130	1.90	20.0
BD16256	Lithium, Dissolved	mg/L	-0.000045	0.0154	0.200	0.663	0.664	0.196	0.170 to 0.230	100	70.0 to 130	0.151	20.0
BD16255	Lithium, Total	mg/L	0.000397	0.0154	0.200	0.197	0.195	0.194	0.170 to 0.230	98.5	70.0 to 130	1.02	20.0
BD16256	Magnesium, Dissolved	mg/L	0.0115	0.0462	5.00	118	114	4.98	4.25 to 5.75	160	70.0 to 130	3.45	20.0
BD16255	Magnesium, Total	mg/L	0.0147	0.0462	5.00	4.90	4.92	4.89	4.25 to 5.75	97.5	70.0 to 130	0.407	20.0
BD16256	Manganese, Dissolved	mg/L	0.0000265	0.00033	0.100	13.4	12.5	0.102	0.0850 to 0.115	100	70.0 to 130	6.95	20.0
BD16255	Manganese, Total	mg/L	0.0000137	0.00033	0.100	0.102	0.101	0.103	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BD16255	Mercury, Total by CVAA	mg/L	4.000E-05	0.000500	0.004	0.00397	0.00391	0.00393	0.00340 to 0.00460	99.2	70.0 to 130	1.52	20.0
BD16256	Molybdenum, Dissolved	mg/L	0.00029	0.0100	0.2	0.197	0.197	0.198	0.170 to 0.230	98.5	70.0 to 130	0.00	20.0
BD16255	Molybdenum, Total	mg/L	0.000	0.0100	0.2	0.200	0.200	0.199	0.170 to 0.230	100	70.0 to 130	0.00	20.0
BD16256	Potassium, Dissolved	mg/L	-0.0105	0.367	10.0	14.8	13.4	10.2	8.50 to 11.5	112	70.0 to 130	9.93	20.0
BD16255	Potassium, Total	mg/L	-0.00850	0.367	10.0	10.2	10.3	10.6	8.50 to 11.5	102	70.0 to 130	0.976	20.0
BD16256	Selenium, Dissolved	mg/L	0.0000176	0.00100	0.100	0.110	0.100	0.104	0.0850 to 0.115	107	70.0 to 130	9.52	20.0
BD16255	Selenium, Total	mg/L	0.0000331	0.00100	0.100	0.104	0.105	0.106	0.0850 to 0.115	104	70.0 to 130	0.957	20.0
BD16256	Silicon, Dissolved	mg/L	-0.00145	0.0440	1.00	26.3	25.8	0.987	0.850 to 1.15	180	70.0 to 130	1.92	20.0
BD16255	Silicon, Total	mg/L	-0.000644	0.0440	1.00	0.978	0.978	0.974	0.850 to 1.15	97.8	70.0 to 130	0.00	20.0
BD16256	Sodium, Dissolved	mg/L	0.00575	0.0880	5.00	24.3	24.3	5.09	4.25 to 5.75	104	70.0 to 130	0.00	20.0
BD16255	Sodium, Total	mg/L	0.0102	0.0880	5.00	5.01	4.96	4.96	4.25 to 5.75	100	70.0 to 130	1.00	20.0
BD16255	Sulfate	mg/L	0.481	2.0	20.0	19.6	19.7	20.5	18.0 to 22.0	94.6	80.0 to 120	0.509	20.0
BD16256	Thallium, Dissolved	mg/L	0.0000002	0.000147	0.100	0.105	0.0942	0.0986	0.0850 to 0.115	105	70.0 to 130	10.8	20.0
BD16255	Thallium, Total	mg/L	-0.0000938	0.000147	0.100	0.112	0.105	0.113	0.0850 to 0.115	112	70.0 to 130	6.45	20.0
BD16255	Total Organic Carbon	mg/L	0.139	1.00	10.0	10.1	9.52	24.0		101	80.0 to 120	5.91	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
Alkalinity could not be performed, pH at or below titration end point of 4.5 SU.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Alabama Power

Batch QC Summary

Customer Account: WMWGORG
Sample Date: 8/22/23 14:08
Customer ID:
Delivery Date: 8/24/23 08:32

Description: Gorgas Gypsum - MW-12H Dup

Laboratory ID Number: BD16253

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD16255	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.03	0.200	2.00	1.98	-0.050	2.11	1.80 to 2.20	99.0	90.0 to 110	0.00	15.0
BD16253	Solids, Dissolved	mg/L	3.00	25.0			1260	53.0	40.0 to 60.0			3.89	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
Alkalinity could not be performed, pH at or below titration end point of 4.5 SU.

Reported: 9/25/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gorgas Gypsum - MW-4V

Location Code: WMWGORG
Collected: 8/23/23 08:36
Customer ID:
Submittal Date: 8/24/23 08:32

Laboratory ID Number: BD16254

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	8/24/23 16:04	8/25/23 14:52		1.015	2.50	mg/L	0.030000	0.1015	
* Calcium, Total	8/24/23 16:04	8/28/23 14:26		10.15	179	mg/L	0.70035	4.06	
* Iron, Total	8/24/23 16:04	9/1/23 13:10		101.5	38.8	mg/L	0.8120	4.06	
* Lithium, Total	8/24/23 16:04	8/25/23 14:52		1.015	0.279	mg/L	0.007105	0.01999956	
* Magnesium, Total	8/24/23 16:04	8/28/23 14:26		10.15	115	mg/L	0.21315	4.06	
* Molybdenum, Total	8/24/23 16:04	8/25/23 14:52		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Total (calc.)	8/24/23 16:04	8/25/23 14:52		1	37.2	mg/L			
* Silicon, Total	8/24/23 16:04	8/25/23 14:52		1.015	17.4	mg/L	0.02030	0.25375	
* Sodium, Total	8/24/23 16:04	8/25/23 14:52		1.015	25.6	mg/L	0.04060	0.406	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	8/24/23 11:01	8/25/23 12:55		1.015	2.45	mg/L	0.030000	0.1015	
* Calcium, Dissolved	8/24/23 11:01	8/28/23 12:42		10.15	171	mg/L	0.70035	4.06	
* Iron, Dissolved	8/24/23 11:01	9/1/23 12:57		101.5	41.2	mg/L	0.8120	4.06	
* Lithium, Dissolved	8/24/23 11:01	8/25/23 12:55		1.015	0.280	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	8/24/23 11:01	8/28/23 12:42		10.15	111	mg/L	0.21315	4.06	
* Molybdenum, Dissolved	8/24/23 11:01	8/25/23 12:55		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Dissolved (calc.)	8/24/23 11:01	8/25/23 12:55		1	28.5	mg/L			
* Silicon, Dissolved	8/24/23 11:01	8/25/23 12:55		1.015	13.3	mg/L	0.02030	0.25375	
* Sodium, Dissolved	8/24/23 11:01	8/25/23 12:55		1.015	25.9	mg/L	0.04060	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	8/24/23 16:04	8/25/23 10:51		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Total	8/24/23 16:04	8/25/23 13:27		5.075	15.2	mg/L	0.045675	0.25375	
* Arsenic, Total	8/24/23 16:04	8/25/23 10:51		1.015	0.00159	mg/L	0.000112	0.000203	
* Barium, Total	8/24/23 16:04	8/25/23 10:51		1.015	0.0102	mg/L	0.000508	0.001015	
* Beryllium, Total	8/24/23 16:04	8/25/23 10:51		1.015	0.0104	mg/L	0.000406	0.001015	
* Cadmium, Total	8/24/23 16:04	8/25/23 10:51		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	8/24/23 16:04	8/25/23 10:51		1.015	0.000548	mg/L	0.000203	0.001015	J
* Cobalt, Total	8/24/23 16:04	8/25/23 10:51		1.015	0.129	mg/L	0.000068	0.000203	
* Lead, Total	8/24/23 16:04	8/25/23 10:51		1.015	0.000227	mg/L	0.000068	0.000203	
* Manganese, Total	8/24/23 16:04	8/25/23 13:27		5.075	4.70	mg/L	0.000761	0.005075	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 9/25/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gorgas Gypsum - MW-4V

Location Code: WMWGORG
Collected: 8/23/23 08:36
Customer ID:
Submittal Date: 8/24/23 08:32

Laboratory ID Number: BD16254

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	8/24/23 16:04	8/25/23 10:51		1.015	4.47	mg/L	0.169505	0.5075	
* Selenium, Total	8/24/23 16:04	8/25/23 10:51		1.015	0.000831	mg/L	0.000508	0.001015	J
* Thallium, Total	8/24/23 16:04	8/25/23 10:51		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	8/24/23 11:01	8/24/23 15:09		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	8/24/23 11:01	8/24/23 15:09		1.015	0.578	mg/L	0.009135	0.05075	
* Arsenic, Dissolved	8/24/23 11:01	8/24/23 15:09		1.015	0.000873	mg/L	0.000112	0.000203	
* Barium, Dissolved	8/24/23 11:01	8/24/23 15:09		1.015	0.00907	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	8/24/23 11:01	8/24/23 15:09		1.015	0.00327	mg/L	0.000406	0.001015	
* Cadmium, Dissolved	8/24/23 11:01	8/24/23 15:09		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	8/24/23 11:01	8/24/23 15:09		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	8/24/23 11:01	8/24/23 15:09		1.015	0.118	mg/L	0.000068	0.000203	
* Lead, Dissolved	8/24/23 11:01	8/24/23 15:09		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	8/24/23 11:01	8/24/23 19:24		5.075	4.63	mg/L	0.000761	0.005075	
* Potassium, Dissolved	8/24/23 11:01	8/24/23 15:09		1.015	4.32	mg/L	0.169505	0.5075	
* Selenium, Dissolved	8/24/23 11:01	8/24/23 15:09		1.015	0.000664	mg/L	0.000508	0.001015	J
* Thallium, Dissolved	8/24/23 11:01	8/24/23 15:09		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	8/25/23 11:54	8/25/23 16:21		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: CES***								
* Nitrogen, Nitrate/Nitrite	8/24/23 12:31	8/24/23 12:31		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: DHC***								
* Alkalinity	8/30/23 09:34	8/30/23 13:21		1	31.4	mg CaCO3/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	8/24/23 11:00	8/30/23 12:15		1	1350	mg/L		50	
Analytical Method: SM 4500CO2 D	***Analyst: DHC***								
* Bicarbonate Alkalinity, (calc.)	8/30/23 09:34	8/30/23 13:21		1	31.4	mg CaCO3/L		1	A
* Carbonate Alkalinity, (calc.)	8/30/23 09:34	8/30/23 13:21		1	Not Detected	mg CaCO3/L		0.5	A
Analytical Method: SM 4500H+ B	***Analyst: DHC***								
Alkalinity pH Endpoint	8/30/23 09:34	8/30/23 13:21		1	4.45	SU		2	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 9/25/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gorgas Gypsum - MW-4V

Location Code: WMWGORG
Collected: 8/23/23 08:36
Customer ID:
Submittal Date: 8/24/23 08:32

Laboratory ID Number: BD16254

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	8/25/23 16:11	8/25/23 16:11		1	Not Detected	mg/L	1.00	2	U
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	8/29/23 10:47	8/29/23 10:47		2	29.2	mg/L	1.00	2	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	8/29/23 14:39	8/29/23 14:39		1	0.257	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	8/24/23 11:07	8/24/23 11:07		40	795	mg/L	24.0	80	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	8/23/23 08:33	8/23/23 08:33			1137.65	uS/cm			FA
pH	8/23/23 08:33	8/23/23 08:33			5.71	SU			FA
Temperature	8/23/23 08:33	8/23/23 08:33			23.97	C			FA
Turbidity	8/23/23 08:33	8/23/23 08:33			9.08	NTU			FA
Sulfide	8/23/23 08:33	8/23/23 08:33			0	mg/L			FA

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGORG
Sample Date: 8/23/23 08:36
Customer ID:
Delivery Date: 8/24/23 08:32

Description: Gorgas Gypsum - MW-4V

Laboratory ID Number: BD16254

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD16256	Aluminum, Dissolved	mg/L	-0.000172	0.0198	0.100	18.0	16.9	0.107	0.0850 to 0.115	-200	70.0 to 130	6.30	20.0
BD16255	Aluminum, Total	mg/L	0.000416	0.0198	0.100	0.103	0.104	0.104	0.0850 to 0.115	103	70.0 to 130	0.966	20.0
BD16256	Antimony, Dissolved	mg/L	0.000328	0.00100	0.100	0.104	0.0956	0.0926	0.0850 to 0.115	104	70.0 to 130	8.42	20.0
BD16255	Antimony, Total	mg/L	0.000302	0.00100	0.100	0.0945	0.0950	0.0928	0.0850 to 0.115	94.5	70.0 to 130	0.528	20.0
BD16256	Arsenic, Dissolved	mg/L	0.0000027	0.000200	0.100	0.107	0.0984	0.101	0.0850 to 0.115	106	70.0 to 130	8.37	20.0
BD16255	Arsenic, Total	mg/L	0.0000072	0.000200	0.100	0.101	0.101	0.102	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BD16256	Barium, Dissolved	mg/L	0.0000131	0.00100	0.100	0.117	0.107	0.0970	0.0850 to 0.115	109	70.0 to 130	8.93	20.0
BD16255	Barium, Total	mg/L	0.0000115	0.00100	0.100	0.101	0.0994	0.0993	0.0850 to 0.115	101	70.0 to 130	1.60	20.0
BD16256	Beryllium, Dissolved	mg/L	0.0000369	0.000880	0.100	0.110	0.108	0.104	0.0850 to 0.115	103	70.0 to 130	1.83	20.0
BD16255	Beryllium, Total	mg/L	0.000	0.000880	0.100	0.0993	0.101	0.100	0.0850 to 0.115	99.3	70.0 to 130	1.70	20.0
BD16256	Boron, Dissolved	mg/L	-0.000395	0.0650	1.00	3.25	3.25	0.988	0.850 to 1.15	101	70.0 to 130	0.00	20.0
BD16255	Boron, Total	mg/L	-0.000149	0.0650	1.00	0.985	0.977	0.974	0.850 to 1.15	98.5	70.0 to 130	0.815	20.0
BD16256	Cadmium, Dissolved	mg/L	-0.0000002	0.000147	0.100	0.110	0.0998	0.0992	0.0850 to 0.115	108	70.0 to 130	9.72	20.0
BD16255	Cadmium, Total	mg/L	0.0000049	0.000147	0.100	0.104	0.100	0.101	0.0850 to 0.115	104	70.0 to 130	3.92	20.0
BD16256	Calcium, Dissolved	mg/L	-0.00836	0.152	5.00	156	150	4.84	4.25 to 5.75	220	70.0 to 130	3.92	20.0
BD16255	Calcium, Total	mg/L	-0.0149	0.152	5.00	4.63	4.75	4.72	4.25 to 5.75	92.6	70.0 to 130	2.56	20.0
BD16255	Chloride	mg/L	-0.00615	1.00	10.0	10.0	10.1	10.6	9.00 to 11.0	100	80.0 to 120	0.995	20.0
BD16256	Chromium, Dissolved	mg/L	0.0000133	0.000440	0.100	0.103	0.0936	0.101	0.0850 to 0.115	102	70.0 to 130	9.56	20.0
BD16255	Chromium, Total	mg/L	-0.0000482	0.000440	0.100	0.103	0.102	0.103	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BD16256	Cobalt, Dissolved	mg/L	0.0000012	0.000147	0.100	0.444	0.403	0.0999	0.0850 to 0.115	132	70.0 to 130	9.68	20.0
BD16255	Cobalt, Total	mg/L	-0.0000511	0.000147	0.100	0.105	0.104	0.105	0.0850 to 0.115	105	70.0 to 130	0.957	20.0
BD16255	Fluoride	mg/L	0.0323	0.125	2.50	1.93	2.21	2.40	2.25 to 2.75	77.2	80.0 to 120	13.5	20.0
BD16256	Iron, Dissolved	mg/L	0.0118	0.0176	0.2	29.3	28.9	0.199	0.170 to 0.230	500	70.0 to 130	1.37	20.0
BD16255	Iron, Total	mg/L	0.00252	0.0176	0.2	0.199	0.199	0.198	0.170 to 0.230	99.5	70.0 to 130	0.00	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGORG
Sample Date: 8/23/23 08:36
Customer ID:
Delivery Date: 8/24/23 08:32

Description: Gorgas Gypsum - MW-4V

Laboratory ID Number: BD16254

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD16256	Lead, Dissolved	mg/L	0.0000062	0.000147	0.100	0.108	0.0972	0.102	0.0850 to 0.115	107	70.0 to 130	10.5	20.0
BD16255	Lead, Total	mg/L	0.0000013	0.000147	0.100	0.106	0.104	0.108	0.0850 to 0.115	106	70.0 to 130	1.90	20.0
BD16256	Lithium, Dissolved	mg/L	-0.000045	0.0154	0.200	0.663	0.664	0.196	0.170 to 0.230	100	70.0 to 130	0.151	20.0
BD16255	Lithium, Total	mg/L	0.000397	0.0154	0.200	0.197	0.195	0.194	0.170 to 0.230	98.5	70.0 to 130	1.02	20.0
BD16256	Magnesium, Dissolved	mg/L	0.0115	0.0462	5.00	118	114	4.98	4.25 to 5.75	160	70.0 to 130	3.45	20.0
BD16255	Magnesium, Total	mg/L	0.0147	0.0462	5.00	4.90	4.92	4.89	4.25 to 5.75	97.5	70.0 to 130	0.407	20.0
BD16256	Manganese, Dissolved	mg/L	0.0000265	0.00033	0.100	13.4	12.5	0.102	0.0850 to 0.115	100	70.0 to 130	6.95	20.0
BD16255	Manganese, Total	mg/L	0.0000137	0.00033	0.100	0.102	0.101	0.103	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BD16255	Mercury, Total by CVAA	mg/L	4.000E-05	0.000500	0.004	0.00397	0.00391	0.00393	0.00340 to 0.00460	99.2	70.0 to 130	1.52	20.0
BD16256	Molybdenum, Dissolved	mg/L	0.00029	0.0100	0.2	0.197	0.197	0.198	0.170 to 0.230	98.5	70.0 to 130	0.00	20.0
BD16255	Molybdenum, Total	mg/L	0.000	0.0100	0.2	0.200	0.200	0.199	0.170 to 0.230	100	70.0 to 130	0.00	20.0
BD16256	Potassium, Dissolved	mg/L	-0.0105	0.367	10.0	14.8	13.4	10.2	8.50 to 11.5	112	70.0 to 130	9.93	20.0
BD16255	Potassium, Total	mg/L	-0.00850	0.367	10.0	10.2	10.3	10.6	8.50 to 11.5	102	70.0 to 130	0.976	20.0
BD16256	Selenium, Dissolved	mg/L	0.0000176	0.00100	0.100	0.110	0.100	0.104	0.0850 to 0.115	107	70.0 to 130	9.52	20.0
BD16255	Selenium, Total	mg/L	0.0000331	0.00100	0.100	0.104	0.105	0.106	0.0850 to 0.115	104	70.0 to 130	0.957	20.0
BD16256	Silicon, Dissolved	mg/L	-0.00145	0.0440	1.00	26.3	25.8	0.987	0.850 to 1.15	180	70.0 to 130	1.92	20.0
BD16255	Silicon, Total	mg/L	-0.000644	0.0440	1.00	0.978	0.978	0.974	0.850 to 1.15	97.8	70.0 to 130	0.00	20.0
BD16256	Sodium, Dissolved	mg/L	0.00575	0.0880	5.00	24.3	24.3	5.09	4.25 to 5.75	104	70.0 to 130	0.00	20.0
BD16255	Sodium, Total	mg/L	0.0102	0.0880	5.00	5.01	4.96	4.96	4.25 to 5.75	100	70.0 to 130	1.00	20.0
BD16255	Sulfate	mg/L	0.481	2.0	20.0	19.6	19.7	20.5	18.0 to 22.0	94.6	80.0 to 120	0.509	20.0
BD16256	Thallium, Dissolved	mg/L	0.0000002	0.000147	0.100	0.105	0.0942	0.0986	0.0850 to 0.115	105	70.0 to 130	10.8	20.0
BD16255	Thallium, Total	mg/L	-0.0000938	0.000147	0.100	0.112	0.105	0.113	0.0850 to 0.115	112	70.0 to 130	6.45	20.0
BD16255	Total Organic Carbon	mg/L	0.139	1.00	10.0	10.1	9.52	24.0		101	80.0 to 120	5.91	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Alabama Power

Batch QC Summary

Customer Account: WMWGORG
Sample Date: 8/23/23 08:36
Customer ID:
Delivery Date: 8/24/23 08:32

Description: Gorgas Gypsum - MW-4V

Laboratory ID Number: BD16254

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD16263	Alkalinity	mg CaCO3/L					55.1	51.6	45.0 to 55.0			0.546	10.0
BD16255	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.03	0.200	2.00	1.98	-0.050	2.11	1.80 to 2.20	99.0	90.0 to 110	0.00	15.0
BD16263	Solids, Dissolved	mg/L	3.00	25.0			2650	53.0	40.0 to 60.0			0.378	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 9/25/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gorgas Gypsum Field Blank-2

Location Code: WMWGORGFB
Collected: 8/23/23 09:30
Customer ID:
Submittal Date: 8/24/23 08:32

Laboratory ID Number: BD16255

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	8/24/23 16:04	8/25/23 14:55		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	8/24/23 16:04	8/25/23 14:55		1.015	Not Detected	mg/L	0.070035	0.406	U
* Iron, Total	8/24/23 16:04	8/25/23 14:55		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Total	8/24/23 16:04	8/25/23 14:55		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	8/24/23 16:04	8/25/23 14:55		1.015	0.0264	mg/L	0.021315	0.406	J
* Molybdenum, Total	8/24/23 16:04	8/25/23 14:55		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Total (calc.)	8/24/23 16:04	8/25/23 14:55		1	Not Detected	mg/L			
* Silicon, Total	8/24/23 16:04	8/25/23 14:55		1.015	Not Detected	mg/L	0.02030	0.25375	U
* Sodium, Total	8/24/23 16:04	8/25/23 14:55		1.015	Not Detected	mg/L	0.04060	0.406	U
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	8/24/23 16:04	8/25/23 10:55		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Total	8/24/23 16:04	8/25/23 10:55		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Total	8/24/23 16:04	8/25/23 10:55		1.015	Not Detected	mg/L	0.000112	0.000203	U
* Barium, Total	8/24/23 16:04	8/25/23 10:55		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Beryllium, Total	8/24/23 16:04	8/25/23 10:55		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	8/24/23 16:04	8/25/23 10:55		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	8/24/23 16:04	8/25/23 10:55		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	8/24/23 16:04	8/25/23 10:55		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	8/24/23 16:04	8/25/23 10:55		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	8/24/23 16:04	8/25/23 10:55		1.015	0.000285	mg/L	0.000152	0.001015	J
* Potassium, Total	8/24/23 16:04	8/25/23 10:55		1.015	Not Detected	mg/L	0.169505	0.5075	U
* Selenium, Total	8/24/23 16:04	8/25/23 10:55		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	8/24/23 16:04	8/25/23 10:55		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	8/25/23 11:54	8/25/23 16:25		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: CES***								
* Nitrogen, Nitrate/Nitrite	8/24/23 12:33	8/24/23 12:33		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	8/24/23 11:00	8/30/23 12:15		1	38.0	mg/L		25	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Fluoride matrix spike recovery and/or matrix spike duplicate recovery is outside of specification limit.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gorgas Gypsum Field Blank-2

Location Code: WMWGORGFB
Collected: 8/23/23 09:30
Customer ID:
Submittal Date: 8/24/23 08:32

Laboratory ID Number: BD16255

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 5310 B		***Analyst: SC***							
* Total Organic Carbon	8/25/23 16:26	8/25/23 16:26		1	Not Detected	mg/L	1.00	2	U
Analytical Method: SM4500Cl E		***Analyst: JCC***							
* Chloride	8/29/23 10:43	8/29/23 10:43		1	Not Detected	mg/L	0.50	1	U
Analytical Method: SM4500F G 2017		***Analyst: JCC***							
* Fluoride	8/29/23 14:40	8/29/23 14:40		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011		***Analyst: JCC***							
* Sulfate	8/24/23 11:09	8/24/23 11:09		1	0.672	mg/L	0.6	2	J

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Fluoride matrix spike recovery and/or matrix spike duplicate recovery is outside of specification limit.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGORGFB
Sample Date: 8/23/23 09:30
Customer ID:
Delivery Date: 8/24/23 08:32

Description: Gorgas Gypsum Field Blank-2

Laboratory ID Number: BD16255

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD16255	Aluminum, Total	mg/L	0.000416	0.0198	0.100	0.103	0.104	0.104	0.0850 to 0.115	103	70.0 to 130	0.966	20.0
BD16255	Antimony, Total	mg/L	0.000302	0.00100	0.100	0.0945	0.0950	0.0928	0.0850 to 0.115	94.5	70.0 to 130	0.528	20.0
BD16255	Arsenic, Total	mg/L	0.0000072	0.000200	0.100	0.101	0.101	0.102	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BD16255	Barium, Total	mg/L	0.0000115	0.00100	0.100	0.101	0.0994	0.0993	0.0850 to 0.115	101	70.0 to 130	1.60	20.0
BD16255	Beryllium, Total	mg/L	0.000	0.000880	0.100	0.0993	0.101	0.100	0.0850 to 0.115	99.3	70.0 to 130	1.70	20.0
BD16255	Boron, Total	mg/L	-0.000149	0.0650	1.00	0.985	0.977	0.974	0.850 to 1.15	98.5	70.0 to 130	0.815	20.0
BD16255	Cadmium, Total	mg/L	0.0000049	0.000147	0.100	0.104	0.100	0.101	0.0850 to 0.115	104	70.0 to 130	3.92	20.0
BD16255	Calcium, Total	mg/L	-0.0149	0.152	5.00	4.63	4.75	4.72	4.25 to 5.75	92.6	70.0 to 130	2.56	20.0
BD16255	Chloride	mg/L	-0.00615	1.00	10.0	10.0	10.1	10.6	9.00 to 11.0	100	80.0 to 120	0.995	20.0
BD16255	Chromium, Total	mg/L	-0.0000482	0.000440	0.100	0.103	0.102	0.103	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BD16255	Cobalt, Total	mg/L	-0.0000511	0.000147	0.100	0.105	0.104	0.105	0.0850 to 0.115	105	70.0 to 130	0.957	20.0
BD16255	Fluoride	mg/L	0.0323	0.125	2.50	1.93	2.21	2.40	2.25 to 2.75	77.2	80.0 to 120	13.5	20.0
BD16255	Iron, Total	mg/L	0.00252	0.0176	0.2	0.199	0.199	0.198	0.170 to 0.230	99.5	70.0 to 130	0.00	20.0
BD16255	Lead, Total	mg/L	0.0000013	0.000147	0.100	0.106	0.104	0.108	0.0850 to 0.115	106	70.0 to 130	1.90	20.0
BD16255	Lithium, Total	mg/L	0.000397	0.0154	0.200	0.197	0.195	0.194	0.170 to 0.230	98.5	70.0 to 130	1.02	20.0
BD16255	Magnesium, Total	mg/L	0.0147	0.0462	5.00	4.90	4.92	4.89	4.25 to 5.75	97.5	70.0 to 130	0.407	20.0
BD16255	Manganese, Total	mg/L	0.0000137	0.00033	0.100	0.102	0.101	0.103	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BD16255	Mercury, Total by CVAA	mg/L	4.000E-05	0.000500	0.004	0.00397	0.00391	0.00393	0.00340 to 0.00460	99.2	70.0 to 130	1.52	20.0
BD16255	Molybdenum, Total	mg/L	0.000	0.0100	0.2	0.200	0.200	0.199	0.170 to 0.230	100	70.0 to 130	0.00	20.0
BD16255	Potassium, Total	mg/L	-0.00850	0.367	10.0	10.2	10.3	10.6	8.50 to 11.5	102	70.0 to 130	0.976	20.0
BD16255	Selenium, Total	mg/L	0.0000331	0.00100	0.100	0.104	0.105	0.106	0.0850 to 0.115	104	70.0 to 130	0.957	20.0
BD16255	Silicon, Total	mg/L	-0.000644	0.0440	1.00	0.978	0.978	0.974	0.850 to 1.15	97.8	70.0 to 130	0.00	20.0
BD16255	Sodium, Total	mg/L	0.0102	0.0880	5.00	5.01	4.96	4.96	4.25 to 5.75	100	70.0 to 130	1.00	20.0
BD16255	Sulfate	mg/L	0.481	2.0	20.0	19.6	19.7	20.5	18.0 to 22.0	94.6	80.0 to 120	0.509	20.0

Comments: Fluoride matrix spike recovery and/or matrix spike duplicate recovery is outside of specification limit.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGORGFB
Sample Date: 8/23/23 09:30
Customer ID:
Delivery Date: 8/24/23 08:32

Description: Gorgas Gypsum Field Blank-2

Laboratory ID Number: BD16255

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD16255	Thallium, Total	mg/L	-0.0000938	0.000147	0.100	0.112	0.105	0.113	0.0850 to 0.115	112	70.0 to 130	6.45	20.0
BD16255	Total Organic Carbon	mg/L	0.139	1.00	10.0	10.1	9.52	24.0		101	80.0 to 120	5.91	20.0

Comments: Fluoride matrix spike recovery and/or matrix spike duplicate recovery is outside of specification limit.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Alabama Power

Batch QC Summary

Customer Account: WMWGORGFB
Sample Date: 8/23/23 09:30
Customer ID:
Delivery Date: 8/24/23 08:32

Description: Gorgas Gypsum Field Blank-2

Laboratory ID Number: BD16255

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD16255	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.03	0.200	2.00	1.98	-0.050	2.11	1.80 to 2.20	99.0	90.0 to 110	0.00	15.0
BD16263	Solids, Dissolved	mg/L	3.00	25.0			2650	53.0	40.0 to 60.0			0.378	10.0

Comments: Fluoride matrix spike recovery and/or matrix spike duplicate recovery is outside of specification limit.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gorgas Gypsum - MW-4

Location Code: WMWGORG
Collected: 8/23/23 09:40
Customer ID:
Submittal Date: 8/24/23 08:32

Laboratory ID Number: BD16256

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	8/24/23 16:04	8/25/23 15:11		1.015	2.24	mg/L	0.030000	0.1015	
* Calcium, Total	8/24/23 16:04	8/28/23 14:29		10.15	156	mg/L	0.70035	4.06	
* Iron, Total	8/24/23 16:04	8/28/23 14:29		10.15	29.5	mg/L	0.08120	0.406	
* Lithium, Total	8/24/23 16:04	8/25/23 15:11		1.015	0.469	mg/L	0.007105	0.01999956	
* Magnesium, Total	8/24/23 16:04	8/28/23 14:29		10.15	115	mg/L	0.21315	4.06	
* Molybdenum, Total	8/24/23 16:04	8/25/23 15:11		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Total (calc.)	8/24/23 16:04	8/28/23 14:29		1	54.8	mg/L			
* Silicon, Total	8/24/23 16:04	8/28/23 14:29		10.15	25.6	mg/L	0.2030	2.5375	
* Sodium, Total	8/24/23 16:04	8/25/23 15:11		1.015	19.1	mg/L	0.04060	0.406	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	8/24/23 11:01	8/25/23 12:58		1.015	2.24	mg/L	0.030000	0.1015	
* Calcium, Dissolved	8/24/23 11:01	8/28/23 12:45		10.15	145	mg/L	0.70035	4.06	RA
* Iron, Dissolved	8/24/23 11:01	8/28/23 12:45		10.15	28.3	mg/L	0.08120	0.406	RA
* Lithium, Dissolved	8/24/23 11:01	8/25/23 12:58		1.015	0.462	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	8/24/23 11:01	8/28/23 12:45		10.15	110	mg/L	0.21315	4.06	RA
* Molybdenum, Dissolved	8/24/23 11:01	8/25/23 12:58		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Dissolved (calc.)	8/24/23 11:01	8/28/23 12:45		1	52.4	mg/L			
* Silicon, Dissolved	8/24/23 11:01	8/28/23 12:45		10.15	24.5	mg/L	0.2030	2.5375	RA
* Sodium, Dissolved	8/24/23 11:01	8/25/23 12:58		1.015	19.1	mg/L	0.04060	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	8/24/23 16:04	8/25/23 11:16		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Total	8/24/23 16:04	8/29/23 15:00		5.075	18.1	mg/L	0.045675	0.25375	
* Arsenic, Total	8/24/23 16:04	8/25/23 11:16		1.015	0.000866	mg/L	0.000112	0.000203	
* Barium, Total	8/24/23 16:04	8/25/23 11:16		1.015	0.0100	mg/L	0.000508	0.001015	
* Beryllium, Total	8/24/23 16:04	8/25/23 11:16		1.015	0.00684	mg/L	0.000406	0.001015	
* Cadmium, Total	8/24/23 16:04	8/25/23 11:16		1.015	0.00224	mg/L	0.000068	0.000203	
* Chromium, Total	8/24/23 16:04	8/25/23 11:16		1.015	0.000836	mg/L	0.000203	0.001015	J
* Cobalt, Total	8/24/23 16:04	8/25/23 11:16		1.015	0.354	mg/L	0.000068	0.000203	
* Lead, Total	8/24/23 16:04	8/25/23 11:16		1.015	0.000670	mg/L	0.000068	0.000203	
* Manganese, Total	8/24/23 16:04	8/25/23 13:41		92.365	13.6	mg/L	0.013855	0.092365	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
Alkalinity could not be performed, pH at or below titration end point of 4.5 SU.

Reported: 9/25/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gorgas Gypsum - MW-4

Location Code: WMWGORG
Collected: 8/23/23 09:40
Customer ID:
Submittal Date: 8/24/23 08:32

Laboratory ID Number: BD16256

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	8/24/23 16:04	8/25/23 11:16		1.015	3.92	mg/L	0.169505	0.5075	
* Selenium, Total	8/24/23 16:04	8/25/23 11:16		1.015	0.00287	mg/L	0.000508	0.001015	
* Thallium, Total	8/24/23 16:04	8/25/23 11:16		1.015	0.000138	mg/L	0.000068	0.000203	J
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	8/24/23 11:01	8/24/23 15:13		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	8/24/23 11:01	8/29/23 14:31		5.075	18.2	mg/L	0.045675	0.25375	RA
* Arsenic, Dissolved	8/24/23 11:01	8/24/23 15:13		1.015	0.00104	mg/L	0.000112	0.000203	
* Barium, Dissolved	8/24/23 11:01	8/24/23 15:13		1.015	0.00848	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	8/24/23 11:01	8/24/23 15:13		1.015	0.00713	mg/L	0.000406	0.001015	
* Cadmium, Dissolved	8/24/23 11:01	8/24/23 15:13		1.015	0.00217	mg/L	0.000068	0.000203	
* Chromium, Dissolved	8/24/23 11:01	8/24/23 15:13		1.015	0.000721	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	8/24/23 11:01	8/24/23 15:13		1.015	0.312	mg/L	0.000068	0.000203	R
* Lead, Dissolved	8/24/23 11:01	8/24/23 15:13		1.015	0.000623	mg/L	0.000068	0.000203	
* Manganese, Dissolved	8/24/23 11:01	8/24/23 19:38		92.365	13.3	mg/L	0.013855	0.092365	
* Potassium, Dissolved	8/24/23 11:01	8/24/23 15:13		1.015	3.63	mg/L	0.169505	0.5075	
* Selenium, Dissolved	8/24/23 11:01	8/24/23 15:13		1.015	0.00326	mg/L	0.000508	0.001015	
* Thallium, Dissolved	8/24/23 11:01	8/24/23 15:13		1.015	0.000219	mg/L	0.000068	0.000203	
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	8/25/23 11:54	8/25/23 16:45		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: CES***								
* Nitrogen, Nitrate/Nitrite	8/24/23 12:42	8/24/23 12:42		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	8/24/23 11:00	8/30/23 12:15		1	1460	mg/L		75.8	
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	8/25/23 17:40	8/25/23 17:40		1	Not Detected	mg/L	1.00	2	U
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	8/29/23 11:12	8/29/23 11:12		2	22.5	mg/L	1.00	2	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	8/29/23 14:51	8/29/23 14:51		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	8/24/23 12:58	8/24/23 12:58		40	828	mg/L	24.0	80	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
Alkalinity could not be performed, pH at or below titration end point of 4.5 SU.

Reported: 9/25/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gorgas Gypsum - MW-4

Location Code: WMWGORG
Collected: 8/23/23 09:40
Customer ID:
Submittal Date: 8/24/23 08:32

Laboratory ID Number: BD16256

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	8/23/23 09:37	8/23/23 09:37			1220.16	uS/cm			FA
pH	8/23/23 09:37	8/23/23 09:37			3.74	SU			FA
Temperature	8/23/23 09:37	8/23/23 09:37			21.69	C			FA
Turbidity	8/23/23 09:37	8/23/23 09:37			4.42	NTU			FA
Sulfide	8/23/23 09:37	8/23/23 09:37			0	mg/L			FA

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
Alkalinity could not be performed, pH at or below titration end point of 4.5 SU.

Reported: 9/25/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGORG
Sample Date: 8/23/23 09:40
Customer ID:
Delivery Date: 8/24/23 08:32

Description: Gorgas Gypsum - MW-4

Laboratory ID Number: BD16256

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD16256	Aluminum, Dissolved	mg/L	-0.000172	0.0198	0.100	18.0	16.9	0.107	0.0850 to 0.115	-200	70.0 to 130	6.30	20.0
BD16265	Aluminum, Total	mg/L	0.000416	0.0198	0.100	0.115	0.111	0.104	0.0850 to 0.115	104	70.0 to 130	3.54	20.0
BD16256	Antimony, Dissolved	mg/L	0.000328	0.00100	0.100	0.104	0.0956	0.0926	0.0850 to 0.115	104	70.0 to 130	8.42	20.0
BD16265	Antimony, Total	mg/L	0.000302	0.00100	0.100	0.101	0.104	0.0928	0.0850 to 0.115	101	70.0 to 130	2.93	20.0
BD16256	Arsenic, Dissolved	mg/L	0.0000027	0.000200	0.100	0.107	0.0984	0.101	0.0850 to 0.115	106	70.0 to 130	8.37	20.0
BD16265	Arsenic, Total	mg/L	0.0000072	0.000200	0.100	0.103	0.107	0.102	0.0850 to 0.115	101	70.0 to 130	3.81	20.0
BD16256	Barium, Dissolved	mg/L	0.0000131	0.00100	0.100	0.117	0.107	0.0970	0.0850 to 0.115	109	70.0 to 130	8.93	20.0
BD16265	Barium, Total	mg/L	0.0000115	0.00100	0.100	0.197	0.201	0.0993	0.0850 to 0.115	95.0	70.0 to 130	2.01	20.0
BD16256	Beryllium, Dissolved	mg/L	0.0000369	0.000880	0.100	0.110	0.108	0.104	0.0850 to 0.115	103	70.0 to 130	1.83	20.0
BD16265	Beryllium, Total	mg/L	0.000	0.000880	0.100	0.104	0.105	0.100	0.0850 to 0.115	104	70.0 to 130	0.957	20.0
BD16256	Boron, Dissolved	mg/L	-0.000395	0.0650	1.00	3.25	3.25	0.988	0.850 to 1.15	101	70.0 to 130	0.00	20.0
BD16265	Boron, Total	mg/L	-0.000149	0.0650	1.00	1.15	1.15	0.974	0.850 to 1.15	99.3	70.0 to 130	0.00	20.0
BD16256	Cadmium, Dissolved	mg/L	-0.0000002	0.000147	0.100	0.110	0.0998	0.0992	0.0850 to 0.115	108	70.0 to 130	9.72	20.0
BD16265	Cadmium, Total	mg/L	0.0000049	0.000147	0.100	0.102	0.0993	0.101	0.0850 to 0.115	102	70.0 to 130	2.68	20.0
BD16256	Calcium, Dissolved	mg/L	-0.00836	0.152	5.00	156	150	4.84	4.25 to 5.75	220	70.0 to 130	3.92	20.0
BD16265	Calcium, Total	mg/L	-0.0149	0.152	5.00	35.6	35.9	4.72	4.25 to 5.75	82.0	70.0 to 130	0.839	20.0
BD16265	Chloride	mg/L	-0.0434	1.00	30.0	52.6	53.0	10.5	9.00 to 11.0	99.3	80.0 to 120	0.758	20.0
BD16256	Chromium, Dissolved	mg/L	0.0000133	0.000440	0.100	0.103	0.0936	0.101	0.0850 to 0.115	102	70.0 to 130	9.56	20.0
BD16265	Chromium, Total	mg/L	-0.0000482	0.000440	0.100	0.100	0.0986	0.103	0.0850 to 0.115	100	70.0 to 130	1.41	20.0
BD16256	Cobalt, Dissolved	mg/L	0.0000012	0.000147	0.100	0.444	0.403	0.0999	0.0850 to 0.115	132	70.0 to 130	9.68	20.0
BD16265	Cobalt, Total	mg/L	-0.0000511	0.000147	0.100	0.102	0.0999	0.105	0.0850 to 0.115	102	70.0 to 130	2.08	20.0
BD16265	Fluoride	mg/L	0.00652	0.125	2.50	2.83	2.88	2.62	2.25 to 2.75	104	80.0 to 120	1.75	20.0
BD16256	Iron, Dissolved	mg/L	0.0118	0.0176	0.2	29.3	28.9	0.199	0.170 to 0.230	500	70.0 to 130	1.37	20.0
BD16265	Iron, Total	mg/L	0.00252	0.0176	0.2	0.275	0.271	0.198	0.170 to 0.230	97.8	70.0 to 130	1.47	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
Alkalinity could not be performed, pH at or below titration end point of 4.5 SU.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGORG
Sample Date: 8/23/23 09:40
Customer ID:
Delivery Date: 8/24/23 08:32

Description: Gorgas Gypsum - MW-4

Laboratory ID Number: BD16256

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD16256	Lead, Dissolved	mg/L	0.0000062	0.000147	0.100	0.108	0.0972	0.102	0.0850 to 0.115	107	70.0 to 130	10.5	20.0
BD16265	Lead, Total	mg/L	0.0000013	0.000147	0.100	0.104	0.104	0.108	0.0850 to 0.115	104	70.0 to 130	0.00	20.0
BD16256	Lithium, Dissolved	mg/L	-0.000045	0.0154	0.200	0.663	0.664	0.196	0.170 to 0.230	100	70.0 to 130	0.151	20.0
BD16265	Lithium, Total	mg/L	0.000397	0.0154	0.200	0.439	0.440	0.194	0.170 to 0.230	102	70.0 to 130	0.228	20.0
BD16256	Magnesium, Dissolved	mg/L	0.0115	0.0462	5.00	118	114	4.98	4.25 to 5.75	160	70.0 to 130	3.45	20.0
BD16265	Magnesium, Total	mg/L	0.0147	0.0462	5.00	18.6	18.6	4.89	4.25 to 5.75	94.0	70.0 to 130	0.00	20.0
BD16256	Manganese, Dissolved	mg/L	0.0000265	0.00033	0.100	13.4	12.5	0.102	0.0850 to 0.115	100	70.0 to 130	6.95	20.0
BD16265	Manganese, Total	mg/L	0.0000137	0.00033	0.100	0.242	0.238	0.103	0.0850 to 0.115	101	70.0 to 130	1.67	20.0
BD16265	Mercury, Total by CVAA	mg/L	4.000E-05	0.000500	0.004	0.00395	0.00399	0.00393	0.00340 to 0.00460	98.8	70.0 to 130	1.01	20.0
BD16256	Molybdenum, Dissolved	mg/L	0.00029	0.0100	0.2	0.197	0.197	0.198	0.170 to 0.230	98.5	70.0 to 130	0.00	20.0
BD16265	Molybdenum, Total	mg/L	0.000	0.0100	0.2	0.199	0.199	0.199	0.170 to 0.230	99.5	70.0 to 130	0.00	20.0
BD16256	Potassium, Dissolved	mg/L	-0.0105	0.367	10.0	14.8	13.4	10.2	8.50 to 11.5	112	70.0 to 130	9.93	20.0
BD16265	Potassium, Total	mg/L	-0.00850	0.367	10.0	13.5	13.2	10.6	8.50 to 11.5	100	70.0 to 130	2.25	20.0
BD16256	Selenium, Dissolved	mg/L	0.0000176	0.00100	0.100	0.110	0.100	0.104	0.0850 to 0.115	107	70.0 to 130	9.52	20.0
BD16265	Selenium, Total	mg/L	0.0000331	0.00100	0.100	0.0866	0.0897	0.106	0.0850 to 0.115	86.6	70.0 to 130	3.52	20.0
BD16256	Silicon, Dissolved	mg/L	-0.00145	0.0440	1.00	26.3	25.8	0.987	0.850 to 1.15	180	70.0 to 130	1.92	20.0
BD16265	Silicon, Total	mg/L	-0.000644	0.0440	1.00	9.83	9.82	0.974	0.850 to 1.15	99.0	70.0 to 130	0.102	20.0
BD16256	Sodium, Dissolved	mg/L	0.00575	0.0880	5.00	24.3	24.3	5.09	4.25 to 5.75	104	70.0 to 130	0.00	20.0
BD16265	Sodium, Total	mg/L	0.0102	0.0880	5.00	400	425	4.96	4.25 to 5.75	100	70.0 to 130	6.06	20.0
BD16265	Sulfate	mg/L	0.389	2.0	160	353	351	20.8	18.0 to 22.0	99.4	80.0 to 120	0.568	20.0
BD16256	Thallium, Dissolved	mg/L	0.0000002	0.000147	0.100	0.105	0.0942	0.0986	0.0850 to 0.115	105	70.0 to 130	10.8	20.0
BD16265	Thallium, Total	mg/L	-0.0000938	0.000147	0.100	0.105	0.104	0.113	0.0850 to 0.115	105	70.0 to 130	0.957	20.0
BD16265	Total Organic Carbon	mg/L	0.173	1.00	10.0	13.4	12.8	23.5		96.9	80.0 to 120	4.58	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
Alkalinity could not be performed, pH at or below titration end point of 4.5 SU.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Alabama Power

Batch QC Summary

Customer Account: WMWGORG
Sample Date: 8/23/23 09:40
Customer ID:
Delivery Date: 8/24/23 08:32

Description: Gorgas Gypsum - MW-4

Laboratory ID Number: BD16256

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD16265	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.03	0.200	2.00	1.96	0.070	2.16	1.80 to 2.20	98.0	90.0 to 110	0.00	15.0
BD16263	Solids, Dissolved	mg/L	3.00	25.0			2650	53.0	40.0 to 60.0			0.378	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
Alkalinity could not be performed, pH at or below titration end point of 4.5 SU.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gorgas Gypsum - MW-3

Location Code: WMWGORG
Collected: 8/23/23 10:37
Customer ID:
Submittal Date: 8/24/23 08:32

Laboratory ID Number: BD16257

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	8/24/23 16:04	8/25/23 15:14		1.015	1.57	mg/L	0.030000	0.1015	
* Calcium, Total	8/24/23 16:04	8/28/23 14:39		101.5	585	mg/L	7.0035	40.6	
* Iron, Total	8/24/23 16:04	8/28/23 14:39		101.5	265	mg/L	0.8120	4.06	
* Lithium, Total	8/24/23 16:04	8/25/23 15:14		1.015	0.372	mg/L	0.007105	0.01999956	
* Magnesium, Total	8/24/23 16:04	8/28/23 14:39		101.5	341	mg/L	2.1315	40.6	
* Molybdenum, Total	8/24/23 16:04	8/25/23 15:14		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Total (calc.)	8/24/23 16:04	8/25/23 15:14		1	19.5	mg/L			
* Silicon, Total	8/24/23 16:04	8/25/23 15:14		1.015	9.13	mg/L	0.02030	0.25375	
* Sodium, Total	8/24/23 16:04	8/28/23 14:39		101.5	271	mg/L	4.060	40.6	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	8/24/23 11:01	8/25/23 13:14		1.015	1.58	mg/L	0.030000	0.1015	
* Calcium, Dissolved	8/24/23 11:01	8/28/23 13:01		101.5	569	mg/L	7.0035	40.6	
* Iron, Dissolved	8/24/23 11:01	8/28/23 13:01		101.5	253	mg/L	0.8120	4.06	
* Lithium, Dissolved	8/24/23 11:01	8/25/23 13:14		1.015	0.368	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	8/24/23 11:01	8/28/23 13:01		101.5	346	mg/L	2.1315	40.6	
* Molybdenum, Dissolved	8/24/23 11:01	8/25/23 13:14		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Dissolved (calc.)	8/24/23 11:01	8/25/23 13:14		1	19.6	mg/L			
* Silicon, Dissolved	8/24/23 11:01	8/25/23 13:14		1.015	9.15	mg/L	0.02030	0.25375	
* Sodium, Dissolved	8/24/23 11:01	8/28/23 13:01		101.5	273	mg/L	4.060	40.6	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	8/24/23 16:04	8/25/23 11:19		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Total	8/24/23 16:04	8/25/23 11:19		1.015	0.179	mg/L	0.009135	0.05075	
* Arsenic, Total	8/24/23 16:04	8/25/23 11:19		1.015	0.000448	mg/L	0.000112	0.000203	
* Barium, Total	8/24/23 16:04	8/25/23 11:19		1.015	0.0111	mg/L	0.000508	0.001015	
* Beryllium, Total	8/24/23 16:04	8/25/23 11:19		1.015	0.00224	mg/L	0.000406	0.001015	
* Cadmium, Total	8/24/23 16:04	8/25/23 11:19		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	8/24/23 16:04	8/25/23 11:19		1.015	0.000248	mg/L	0.000203	0.001015	J
* Cobalt, Total	8/24/23 16:04	8/25/23 11:19		1.015	0.0509	mg/L	0.000068	0.000203	
* Lead, Total	8/24/23 16:04	8/25/23 11:19		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	8/24/23 16:04	8/25/23 13:45		92.365	25.4	mg/L	0.013855	0.092365	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 9/25/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gorgas Gypsum - MW-3

Location Code: WMWGORG
Collected: 8/23/23 10:37
Customer ID:
Submittal Date: 8/24/23 08:32

Laboratory ID Number: BD16257

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	8/24/23 16:04	8/25/23 11:19		1.015	12.0	mg/L	0.169505	0.5075	
* Selenium, Total	8/24/23 16:04	8/25/23 11:19		1.015	0.00103	mg/L	0.000508	0.001015	
* Thallium, Total	8/24/23 16:04	8/25/23 11:19		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	8/24/23 11:01	8/24/23 15:34		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	8/24/23 11:01	8/24/23 15:34		1.015	0.101	mg/L	0.009135	0.05075	
* Arsenic, Dissolved	8/24/23 11:01	8/24/23 15:34		1.015	0.000546	mg/L	0.000112	0.000203	
* Barium, Dissolved	8/24/23 11:01	8/24/23 15:34		1.015	0.0105	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	8/24/23 11:01	8/24/23 15:34		1.015	0.00211	mg/L	0.000406	0.001015	
* Cadmium, Dissolved	8/24/23 11:01	8/24/23 15:34		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	8/24/23 11:01	8/24/23 15:34		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	8/24/23 11:01	8/24/23 15:34		1.015	0.0494	mg/L	0.000068	0.000203	
* Lead, Dissolved	8/24/23 11:01	8/24/23 15:34		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	8/24/23 11:01	8/24/23 19:49		92.365	25.3	mg/L	0.013855	0.092365	
* Potassium, Dissolved	8/24/23 11:01	8/24/23 15:34		1.015	11.8	mg/L	0.169505	0.5075	
* Selenium, Dissolved	8/24/23 11:01	8/24/23 15:34		1.015	0.00144	mg/L	0.000508	0.001015	
* Thallium, Dissolved	8/24/23 11:01	8/24/23 15:34		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	8/25/23 11:54	8/25/23 16:49		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: CES***								
* Nitrogen, Nitrate/Nitrite	8/24/23 12:44	8/24/23 12:44		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: DHC***								
* Alkalinity	8/30/23 09:34	8/30/23 13:21		1	121	mg CaCO3/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	8/24/23 11:00	8/30/23 12:15		1	5360	mg/L		178.6	
Analytical Method: SM 4500CO2 D	***Analyst: DHC***								
* Bicarbonate Alkalinity, (calc.)	8/30/23 09:34	8/30/23 13:21		1	121	mg CaCO3/L		1	A
* Carbonate Alkalinity, (calc.)	8/30/23 09:34	8/30/23 13:21		1	Not Detected	mg CaCO3/L		0.5	A
Analytical Method: SM 4500H+ B	***Analyst: DHC***								
Alkalinity pH Endpoint	8/30/23 09:34	8/30/23 13:21		1	4.52	SU		2	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 9/25/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gorgas Gypsum - MW-3

Location Code: WMWGORG
Collected: 8/23/23 10:37
Customer ID:
Submittal Date: 8/24/23 08:32

Laboratory ID Number: BD16257

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	8/25/23 17:57	8/25/23 17:57		1	Not Detected	mg/L	1.00	2	U
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	8/29/23 11:14	8/29/23 11:14		25	212	mg/L	12.50	25	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	8/29/23 14:52	8/29/23 14:52		1	0.542	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	8/24/23 12:59	8/24/23 12:59		100	3290	mg/L	60.0	200	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	8/23/23 10:34	8/23/23 10:34			3083.00	uS/cm			FA
pH	8/23/23 10:34	8/23/23 10:34			6.03	SU			FA
Temperature	8/23/23 10:34	8/23/23 10:34			22.23	C			FA
Turbidity	8/23/23 10:34	8/23/23 10:34			6.86	NTU			FA
Sulfide	8/23/23 10:34	8/23/23 10:34			0	mg/L			FA

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGORG
Sample Date: 8/23/23 10:37
Customer ID:
Delivery Date: 8/24/23 08:32

Description: Gorgas Gypsum - MW-3

Laboratory ID Number: BD16257

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD16266	Aluminum, Dissolved	mg/L	-0.000172	0.0198	0.100	0.106	0.106	0.107	0.0850 to 0.115	106	70.0 to 130	0.00	20.0
BD16265	Aluminum, Total	mg/L	0.000416	0.0198	0.100	0.115	0.111	0.104	0.0850 to 0.115	104	70.0 to 130	3.54	20.0
BD16266	Antimony, Dissolved	mg/L	0.000328	0.00100	0.100	0.0955	0.0936	0.0926	0.0850 to 0.115	95.5	70.0 to 130	2.01	20.0
BD16265	Antimony, Total	mg/L	0.000302	0.00100	0.100	0.101	0.104	0.0928	0.0850 to 0.115	101	70.0 to 130	2.93	20.0
BD16266	Arsenic, Dissolved	mg/L	0.0000027	0.000200	0.100	0.105	0.107	0.101	0.0850 to 0.115	105	70.0 to 130	1.89	20.0
BD16265	Arsenic, Total	mg/L	0.0000072	0.000200	0.100	0.103	0.107	0.102	0.0850 to 0.115	101	70.0 to 130	3.81	20.0
BD16266	Barium, Dissolved	mg/L	0.0000131	0.00100	0.100	0.123	0.121	0.0970	0.0850 to 0.115	100	70.0 to 130	1.64	20.0
BD16265	Barium, Total	mg/L	0.0000115	0.00100	0.100	0.197	0.201	0.0993	0.0850 to 0.115	95.0	70.0 to 130	2.01	20.0
BD16266	Beryllium, Dissolved	mg/L	0.0000369	0.000880	0.100	0.0916	0.0930	0.104	0.0850 to 0.115	91.6	70.0 to 130	1.52	20.0
BD16265	Beryllium, Total	mg/L	0.000	0.000880	0.100	0.104	0.105	0.100	0.0850 to 0.115	104	70.0 to 130	0.957	20.0
BD16266	Boron, Dissolved	mg/L	-0.000395	0.0650	1.00	3.23	3.23	0.988	0.850 to 1.15	100	70.0 to 130	0.00	20.0
BD16265	Boron, Total	mg/L	-0.000149	0.0650	1.00	1.15	1.15	0.974	0.850 to 1.15	99.3	70.0 to 130	0.00	20.0
BD16266	Cadmium, Dissolved	mg/L	-0.0000002	0.000147	0.100	0.0979	0.0988	0.0992	0.0850 to 0.115	97.9	70.0 to 130	0.915	20.0
BD16265	Cadmium, Total	mg/L	0.0000049	0.000147	0.100	0.102	0.0993	0.101	0.0850 to 0.115	102	70.0 to 130	2.68	20.0
BD16266	Calcium, Dissolved	mg/L	-0.00836	0.152	5.00	464	446	4.84	4.25 to 5.75	320	70.0 to 130	3.96	20.0
BD16265	Calcium, Total	mg/L	-0.0149	0.152	5.00	35.6	35.9	4.72	4.25 to 5.75	82.0	70.0 to 130	0.839	20.0
BD16265	Chloride	mg/L	-0.0434	1.00	30.0	52.6	53.0	10.5	9.00 to 11.0	99.3	80.0 to 120	0.758	20.0
BD16266	Chromium, Dissolved	mg/L	0.0000133	0.000440	0.100	0.0971	0.0990	0.101	0.0850 to 0.115	97.1	70.0 to 130	1.94	20.0
BD16265	Chromium, Total	mg/L	-0.0000482	0.000440	0.100	0.100	0.0986	0.103	0.0850 to 0.115	100	70.0 to 130	1.41	20.0
BD16266	Cobalt, Dissolved	mg/L	0.0000012	0.000147	0.100	0.0956	0.0965	0.0999	0.0850 to 0.115	95.6	70.0 to 130	0.937	20.0
BD16265	Cobalt, Total	mg/L	-0.0000511	0.000147	0.100	0.102	0.0999	0.105	0.0850 to 0.115	102	70.0 to 130	2.08	20.0
BD16265	Fluoride	mg/L	0.00652	0.125	2.50	2.83	2.88	2.62	2.25 to 2.75	104	80.0 to 120	1.75	20.0
BD16266	Iron, Dissolved	mg/L	0.0118	0.0176	0.2	37.0	37.8	0.199	0.170 to 0.230	-200	70.0 to 130	2.14	20.0
BD16265	Iron, Total	mg/L	0.00252	0.0176	0.2	0.275	0.271	0.198	0.170 to 0.230	97.8	70.0 to 130	1.47	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGORG
Sample Date: 8/23/23 10:37
Customer ID:
Delivery Date: 8/24/23 08:32

Description: Gorgas Gypsum - MW-3

Laboratory ID Number: BD16257

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD16266	Lead, Dissolved	mg/L	0.0000062	0.000147	0.100	0.0988	0.0990	0.102	0.0850 to 0.115	98.8	70.0 to 130	0.202	20.0
BD16265	Lead, Total	mg/L	0.0000013	0.000147	0.100	0.104	0.104	0.108	0.0850 to 0.115	104	70.0 to 130	0.00	20.0
BD16266	Lithium, Dissolved	mg/L	-0.000045	0.0154	0.200	0.381	0.377	0.196	0.170 to 0.230	102	70.0 to 130	1.06	20.0
BD16265	Lithium, Total	mg/L	0.000397	0.0154	0.200	0.439	0.440	0.194	0.170 to 0.230	102	70.0 to 130	0.228	20.0
BD16266	Magnesium, Dissolved	mg/L	0.0115	0.0462	5.00	277	268	4.98	4.25 to 5.75	160	70.0 to 130	3.30	20.0
BD16265	Magnesium, Total	mg/L	0.0147	0.0462	5.00	18.6	18.6	4.89	4.25 to 5.75	94.0	70.0 to 130	0.00	20.0
BD16266	Manganese, Dissolved	mg/L	0.0000265	0.00033	0.100	13.9	13.6	0.102	0.0850 to 0.115	100	70.0 to 130	2.18	20.0
BD16265	Manganese, Total	mg/L	0.0000137	0.00033	0.100	0.242	0.238	0.103	0.0850 to 0.115	101	70.0 to 130	1.67	20.0
BD16265	Mercury, Total by CVAA	mg/L	4.000E-05	0.000500	0.004	0.00395	0.00399	0.00393	0.00340 to 0.00460	98.8	70.0 to 130	1.01	20.0
BD16266	Molybdenum, Dissolved	mg/L	0.00029	0.0100	0.2	0.197	0.197	0.198	0.170 to 0.230	98.5	70.0 to 130	0.00	20.0
BD16265	Molybdenum, Total	mg/L	0.000	0.0100	0.2	0.199	0.199	0.199	0.170 to 0.230	99.5	70.0 to 130	0.00	20.0
BD16266	Potassium, Dissolved	mg/L	-0.0105	0.367	10.0	17.6	17.8	10.2	8.50 to 11.5	97.2	70.0 to 130	1.13	20.0
BD16265	Potassium, Total	mg/L	-0.00850	0.367	10.0	13.5	13.2	10.6	8.50 to 11.5	100	70.0 to 130	2.25	20.0
BD16266	Selenium, Dissolved	mg/L	0.0000176	0.00100	0.100	0.106	0.107	0.104	0.0850 to 0.115	106	70.0 to 130	0.939	20.0
BD16265	Selenium, Total	mg/L	0.0000331	0.00100	0.100	0.0866	0.0897	0.106	0.0850 to 0.115	86.6	70.0 to 130	3.52	20.0
BD16266	Silicon, Dissolved	mg/L	-0.00145	0.0440	1.00	7.54	7.54	0.987	0.850 to 1.15	93.0	70.0 to 130	0.00	20.0
BD16265	Silicon, Total	mg/L	-0.000644	0.0440	1.00	9.83	9.82	0.974	0.850 to 1.15	99.0	70.0 to 130	0.102	20.0
BD16266	Sodium, Dissolved	mg/L	0.00575	0.0880	5.00	176	170	5.09	4.25 to 5.75	120	70.0 to 130	3.47	20.0
BD16265	Sodium, Total	mg/L	0.0102	0.0880	5.00	400	425	4.96	4.25 to 5.75	100	70.0 to 130	6.06	20.0
BD16265	Sulfate	mg/L	0.389	2.0	160	353	351	20.8	18.0 to 22.0	99.4	80.0 to 120	0.568	20.0
BD16266	Thallium, Dissolved	mg/L	0.0000002	0.000147	0.100	0.0957	0.0955	0.0986	0.0850 to 0.115	95.7	70.0 to 130	0.209	20.0
BD16265	Thallium, Total	mg/L	-0.0000938	0.000147	0.100	0.105	0.104	0.113	0.0850 to 0.115	105	70.0 to 130	0.957	20.0
BD16265	Total Organic Carbon	mg/L	0.173	1.00	10.0	13.4	12.8	23.5		96.9	80.0 to 120	4.58	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 9/25/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Alabama Power

Batch QC Summary

Customer Account: WMWGORG
Sample Date: 8/23/23 10:37
Customer ID:
Delivery Date: 8/24/23 08:32

Description: Gorgas Gypsum - MW-3

Laboratory ID Number: BD16257

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD16263	Alkalinity	mg CaCO3/L					55.1	51.6	45.0 to 55.0			0.546	10.0
BD16265	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.03	0.200	2.00	1.96	0.070	2.16	1.80 to 2.20	98.0	90.0 to 110	0.00	15.0
BD16263	Solids, Dissolved	mg/L	3.00	25.0			2650	53.0	40.0 to 60.0			0.378	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gorgas Gypsum - MW-3V

Location Code: WMWGORG
Collected: 8/23/23 15:27
Customer ID:
Submittal Date: 8/24/23 08:32

Laboratory ID Number: BD16258

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	8/24/23 16:04	8/25/23 15:18		1.015	2.78	mg/L	0.030000	0.1015	
* Calcium, Total	8/24/23 16:04	8/28/23 14:42		101.5	462	mg/L	7.0035	40.6	
* Iron, Total	8/24/23 16:04	8/28/23 14:42		101.5	32.4	mg/L	0.8120	4.06	
* Lithium, Total	8/24/23 16:04	8/25/23 15:18		1.015	0.346	mg/L	0.007105	0.01999956	
* Magnesium, Total	8/24/23 16:04	8/28/23 14:42		101.5	234	mg/L	2.1315	40.6	
* Molybdenum, Total	8/24/23 16:04	8/25/23 15:18		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Total (calc.)	8/24/23 16:04	8/25/23 15:18		1	23.1	mg/L			
* Silicon, Total	8/24/23 16:04	8/25/23 15:18		1.015	10.8	mg/L	0.02030	0.25375	
* Sodium, Total	8/24/23 16:04	8/28/23 14:42		101.5	231	mg/L	4.060	40.6	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	8/24/23 11:01	8/25/23 13:17		1.015	2.77	mg/L	0.030000	0.1015	
* Calcium, Dissolved	8/24/23 11:01	8/28/23 13:04		101.5	482	mg/L	7.0035	40.6	
* Iron, Dissolved	8/24/23 11:01	8/28/23 13:04		101.5	31.4	mg/L	0.8120	4.06	
* Lithium, Dissolved	8/24/23 11:01	8/25/23 13:17		1.015	0.347	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	8/24/23 11:01	8/28/23 13:04		101.5	242	mg/L	2.1315	40.6	
* Molybdenum, Dissolved	8/24/23 11:01	8/25/23 13:17		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Dissolved (calc.)	8/24/23 11:01	8/25/23 13:17		1	23.1	mg/L			
* Silicon, Dissolved	8/24/23 11:01	8/25/23 13:17		1.015	10.8	mg/L	0.02030	0.25375	
* Sodium, Dissolved	8/24/23 11:01	8/28/23 13:04		101.5	235	mg/L	4.060	40.6	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	8/24/23 16:04	8/25/23 11:23		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Total	8/24/23 16:04	8/25/23 11:23		1.015	0.0164	mg/L	0.009135	0.05075	J
* Arsenic, Total	8/24/23 16:04	8/25/23 11:23		1.015	0.000327	mg/L	0.000112	0.000203	
* Barium, Total	8/24/23 16:04	8/25/23 11:23		1.015	0.0169	mg/L	0.000508	0.001015	
* Beryllium, Total	8/24/23 16:04	8/25/23 11:23		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	8/24/23 16:04	8/25/23 11:23		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	8/24/23 16:04	8/25/23 11:23		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	8/24/23 16:04	8/25/23 11:23		1.015	0.00949	mg/L	0.000068	0.000203	
* Lead, Total	8/24/23 16:04	8/25/23 11:23		1.015	0.000170	mg/L	0.000068	0.000203	J
* Manganese, Total	8/24/23 16:04	8/25/23 13:48		92.365	12.5	mg/L	0.013855	0.092365	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 9/25/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gorgas Gypsum - MW-3V

Location Code: WMWGORG
Collected: 8/23/23 15:27
Customer ID:
Submittal Date: 8/24/23 08:32

Laboratory ID Number: BD16258

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	8/24/23 16:04	8/25/23 11:23		1.015	7.66	mg/L	0.169505	0.5075	
* Selenium, Total	8/24/23 16:04	8/25/23 11:23		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	8/24/23 16:04	8/25/23 11:23		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	8/24/23 11:01	8/24/23 15:38		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	8/24/23 11:01	8/24/23 15:38		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Dissolved	8/24/23 11:01	8/24/23 15:38		1.015	0.000189	mg/L	0.000112	0.000203	J
* Barium, Dissolved	8/24/23 11:01	8/24/23 15:38		1.015	0.0174	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	8/24/23 11:01	8/24/23 15:38		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	8/24/23 11:01	8/24/23 15:38		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	8/24/23 11:01	8/24/23 15:38		1.015	0.000210	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	8/24/23 11:01	8/24/23 15:38		1.015	0.00525	mg/L	0.000068	0.000203	
* Lead, Dissolved	8/24/23 11:01	8/24/23 15:38		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	8/24/23 11:01	8/24/23 19:53		92.365	12.0	mg/L	0.013855	0.092365	
* Potassium, Dissolved	8/24/23 11:01	8/24/23 15:38		1.015	7.38	mg/L	0.169505	0.5075	
* Selenium, Dissolved	8/24/23 11:01	8/24/23 15:38		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	8/24/23 11:01	8/24/23 15:38		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	8/25/23 11:54	8/25/23 16:53		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: CES***								
* Nitrogen, Nitrate/Nitrite	8/24/23 12:46	8/24/23 12:46		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: DHC***								
* Alkalinity	8/30/23 09:34	8/30/23 13:21		1	211	mg CaCO3/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	8/24/23 11:00	8/30/23 12:15		1	3630	mg/L		147.1	
Analytical Method: SM 4500CO2 D	***Analyst: DHC***								
* Bicarbonate Alkalinity, (calc.)	8/30/23 09:34	8/30/23 13:21		1	211	mg CaCO3/L		1	A
* Carbonate Alkalinity, (calc.)	8/30/23 09:34	8/30/23 13:21		1	Not Detected	mg CaCO3/L		0.5	A
Analytical Method: SM 4500H+ B	***Analyst: DHC***								
Alkalinity pH Endpoint	8/30/23 09:34	8/30/23 13:21		1	4.49	SU		2	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 9/25/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gorgas Gypsum - MW-3V

Location Code: WMWGORG
Collected: 8/23/23 15:27
Customer ID:
Submittal Date: 8/24/23 08:32

Laboratory ID Number: BD16258

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	8/25/23 18:13	8/25/23 18:13		1	1.18	mg/L	1.00	2	J
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	8/29/23 11:15	8/29/23 11:15		25	212	mg/L	12.50	25	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	8/29/23 14:54	8/29/23 14:54		1	0.477	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	8/24/23 13:01	8/24/23 13:01		80	2170	mg/L	48.0	160	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	8/23/23 15:24	8/23/23 15:24			2638.18	uS/cm			FA
pH	8/23/23 15:24	8/23/23 15:24			6.27	SU			FA
Temperature	8/23/23 15:24	8/23/23 15:24			26.14	C			FA
Turbidity	8/23/23 15:24	8/23/23 15:24			5.99	NTU			FA
Sulfide	8/23/23 15:24	8/23/23 15:24			0	mg/L			FA

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 9/25/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGORG
Sample Date: 8/23/23 15:27
Customer ID:
Delivery Date: 8/24/23 08:32

Description: Gorgas Gypsum - MW-3V

Laboratory ID Number: BD16258

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD16266	Aluminum, Dissolved	mg/L	-0.000172	0.0198	0.100	0.106	0.106	0.107	0.0850 to 0.115	106	70.0 to 130	0.00	20.0
BD16265	Aluminum, Total	mg/L	0.000416	0.0198	0.100	0.115	0.111	0.104	0.0850 to 0.115	104	70.0 to 130	3.54	20.0
BD16266	Antimony, Dissolved	mg/L	0.000328	0.00100	0.100	0.0955	0.0936	0.0926	0.0850 to 0.115	95.5	70.0 to 130	2.01	20.0
BD16265	Antimony, Total	mg/L	0.000302	0.00100	0.100	0.101	0.104	0.0928	0.0850 to 0.115	101	70.0 to 130	2.93	20.0
BD16266	Arsenic, Dissolved	mg/L	0.0000027	0.000200	0.100	0.105	0.107	0.101	0.0850 to 0.115	105	70.0 to 130	1.89	20.0
BD16265	Arsenic, Total	mg/L	0.0000072	0.000200	0.100	0.103	0.107	0.102	0.0850 to 0.115	101	70.0 to 130	3.81	20.0
BD16266	Barium, Dissolved	mg/L	0.0000131	0.00100	0.100	0.123	0.121	0.0970	0.0850 to 0.115	100	70.0 to 130	1.64	20.0
BD16265	Barium, Total	mg/L	0.0000115	0.00100	0.100	0.197	0.201	0.0993	0.0850 to 0.115	95.0	70.0 to 130	2.01	20.0
BD16266	Beryllium, Dissolved	mg/L	0.0000369	0.000880	0.100	0.0916	0.0930	0.104	0.0850 to 0.115	91.6	70.0 to 130	1.52	20.0
BD16265	Beryllium, Total	mg/L	0.000	0.000880	0.100	0.104	0.105	0.100	0.0850 to 0.115	104	70.0 to 130	0.957	20.0
BD16266	Boron, Dissolved	mg/L	-0.000395	0.0650	1.00	3.23	3.23	0.988	0.850 to 1.15	100	70.0 to 130	0.00	20.0
BD16265	Boron, Total	mg/L	-0.000149	0.0650	1.00	1.15	1.15	0.974	0.850 to 1.15	99.3	70.0 to 130	0.00	20.0
BD16266	Cadmium, Dissolved	mg/L	-0.0000002	0.000147	0.100	0.0979	0.0988	0.0992	0.0850 to 0.115	97.9	70.0 to 130	0.915	20.0
BD16265	Cadmium, Total	mg/L	0.0000049	0.000147	0.100	0.102	0.0993	0.101	0.0850 to 0.115	102	70.0 to 130	2.68	20.0
BD16266	Calcium, Dissolved	mg/L	-0.00836	0.152	5.00	464	446	4.84	4.25 to 5.75	320	70.0 to 130	3.96	20.0
BD16265	Calcium, Total	mg/L	-0.0149	0.152	5.00	35.6	35.9	4.72	4.25 to 5.75	82.0	70.0 to 130	0.839	20.0
BD16265	Chloride	mg/L	-0.0434	1.00	30.0	52.6	53.0	10.5	9.00 to 11.0	99.3	80.0 to 120	0.758	20.0
BD16266	Chromium, Dissolved	mg/L	0.0000133	0.000440	0.100	0.0971	0.0990	0.101	0.0850 to 0.115	97.1	70.0 to 130	1.94	20.0
BD16265	Chromium, Total	mg/L	-0.0000482	0.000440	0.100	0.100	0.0986	0.103	0.0850 to 0.115	100	70.0 to 130	1.41	20.0
BD16266	Cobalt, Dissolved	mg/L	0.0000012	0.000147	0.100	0.0956	0.0965	0.0999	0.0850 to 0.115	95.6	70.0 to 130	0.937	20.0
BD16265	Cobalt, Total	mg/L	-0.0000511	0.000147	0.100	0.102	0.0999	0.105	0.0850 to 0.115	102	70.0 to 130	2.08	20.0
BD16265	Fluoride	mg/L	0.00652	0.125	2.50	2.83	2.88	2.62	2.25 to 2.75	104	80.0 to 120	1.75	20.0
BD16266	Iron, Dissolved	mg/L	0.0118	0.0176	0.2	37.0	37.8	0.199	0.170 to 0.230	-200	70.0 to 130	2.14	20.0
BD16265	Iron, Total	mg/L	0.00252	0.0176	0.2	0.275	0.271	0.198	0.170 to 0.230	97.8	70.0 to 130	1.47	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGORG
Sample Date: 8/23/23 15:27
Customer ID:
Delivery Date: 8/24/23 08:32

Description: Gorgas Gypsum - MW-3V

Laboratory ID Number: BD16258

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD16266	Lead, Dissolved	mg/L	0.0000062	0.000147	0.100	0.0988	0.0990	0.102	0.0850 to 0.115	98.8	70.0 to 130	0.202	20.0
BD16265	Lead, Total	mg/L	0.0000013	0.000147	0.100	0.104	0.104	0.108	0.0850 to 0.115	104	70.0 to 130	0.00	20.0
BD16266	Lithium, Dissolved	mg/L	-0.000045	0.0154	0.200	0.381	0.377	0.196	0.170 to 0.230	102	70.0 to 130	1.06	20.0
BD16265	Lithium, Total	mg/L	0.000397	0.0154	0.200	0.439	0.440	0.194	0.170 to 0.230	102	70.0 to 130	0.228	20.0
BD16266	Magnesium, Dissolved	mg/L	0.0115	0.0462	5.00	277	268	4.98	4.25 to 5.75	160	70.0 to 130	3.30	20.0
BD16265	Magnesium, Total	mg/L	0.0147	0.0462	5.00	18.6	18.6	4.89	4.25 to 5.75	94.0	70.0 to 130	0.00	20.0
BD16266	Manganese, Dissolved	mg/L	0.0000265	0.00033	0.100	13.9	13.6	0.102	0.0850 to 0.115	100	70.0 to 130	2.18	20.0
BD16265	Manganese, Total	mg/L	0.0000137	0.00033	0.100	0.242	0.238	0.103	0.0850 to 0.115	101	70.0 to 130	1.67	20.0
BD16265	Mercury, Total by CVAA	mg/L	4.000E-05	0.000500	0.004	0.00395	0.00399	0.00393	0.00340 to 0.00460	98.8	70.0 to 130	1.01	20.0
BD16266	Molybdenum, Dissolved	mg/L	0.00029	0.0100	0.2	0.197	0.197	0.198	0.170 to 0.230	98.5	70.0 to 130	0.00	20.0
BD16265	Molybdenum, Total	mg/L	0.000	0.0100	0.2	0.199	0.199	0.199	0.170 to 0.230	99.5	70.0 to 130	0.00	20.0
BD16266	Potassium, Dissolved	mg/L	-0.0105	0.367	10.0	17.6	17.8	10.2	8.50 to 11.5	97.2	70.0 to 130	1.13	20.0
BD16265	Potassium, Total	mg/L	-0.00850	0.367	10.0	13.5	13.2	10.6	8.50 to 11.5	100	70.0 to 130	2.25	20.0
BD16266	Selenium, Dissolved	mg/L	0.0000176	0.00100	0.100	0.106	0.107	0.104	0.0850 to 0.115	106	70.0 to 130	0.939	20.0
BD16265	Selenium, Total	mg/L	0.0000331	0.00100	0.100	0.0866	0.0897	0.106	0.0850 to 0.115	86.6	70.0 to 130	3.52	20.0
BD16266	Silicon, Dissolved	mg/L	-0.00145	0.0440	1.00	7.54	7.54	0.987	0.850 to 1.15	93.0	70.0 to 130	0.00	20.0
BD16265	Silicon, Total	mg/L	-0.000644	0.0440	1.00	9.83	9.82	0.974	0.850 to 1.15	99.0	70.0 to 130	0.102	20.0
BD16266	Sodium, Dissolved	mg/L	0.00575	0.0880	5.00	176	170	5.09	4.25 to 5.75	120	70.0 to 130	3.47	20.0
BD16265	Sodium, Total	mg/L	0.0102	0.0880	5.00	400	425	4.96	4.25 to 5.75	100	70.0 to 130	6.06	20.0
BD16265	Sulfate	mg/L	0.389	2.0	160	353	351	20.8	18.0 to 22.0	99.4	80.0 to 120	0.568	20.0
BD16266	Thallium, Dissolved	mg/L	0.0000002	0.000147	0.100	0.0957	0.0955	0.0986	0.0850 to 0.115	95.7	70.0 to 130	0.209	20.0
BD16265	Thallium, Total	mg/L	-0.0000938	0.000147	0.100	0.105	0.104	0.113	0.0850 to 0.115	105	70.0 to 130	0.957	20.0
BD16265	Total Organic Carbon	mg/L	0.173	1.00	10.0	13.4	12.8	23.5		96.9	80.0 to 120	4.58	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 9/25/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Alabama Power

Batch QC Summary

Customer Account: WMWGORG
Sample Date: 8/23/23 15:27
Customer ID:
Delivery Date: 8/24/23 08:32

Description: Gorgas Gypsum - MW-3V

Laboratory ID Number: BD16258

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD16263	Alkalinity	mg CaCO3/L					55.1	51.6	45.0 to 55.0			0.546	10.0
BD16265	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.03	0.200	2.00	1.96	0.070	2.16	1.80 to 2.20	98.0	90.0 to 110	0.00	15.0
BD16263	Solids, Dissolved	mg/L	3.00	25.0			2650	53.0	40.0 to 60.0			0.378	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gorgas Gypsum - MW-14H

Location Code: WMWGORG
Collected: 8/21/23 14:35
Customer ID:
Submittal Date: 8/24/23 08:32

Laboratory ID Number: BD16259

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***					***Preparation Method: EPA 1638***			
* Boron, Total	8/24/23 16:04	8/25/23 15:21		1.015	0.100	mg/L	0.030000	0.1015	J
* Calcium, Total	8/24/23 16:04	8/28/23 14:45		10.15	125	mg/L	0.70035	4.06	
* Iron, Total	8/24/23 16:04	8/28/23 14:45		10.15	12.6	mg/L	0.08120	0.406	
* Lithium, Total	8/24/23 16:04	8/25/23 15:21		1.015	0.388	mg/L	0.007105	0.01999956	
* Magnesium, Total	8/24/23 16:04	8/28/23 14:45		10.15	85.1	mg/L	0.21315	4.06	
* Molybdenum, Total	8/24/23 16:04	8/25/23 15:21		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Total (calc.)	8/24/23 16:04	8/28/23 14:45		1	56.1	mg/L			
* Silicon, Total	8/24/23 16:04	8/28/23 14:45		10.15	26.2	mg/L	0.2030	2.5375	
* Sodium, Total	8/24/23 16:04	8/25/23 15:21		1.015	15.4	mg/L	0.04060	0.406	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	8/24/23 11:01	8/25/23 13:20		1.015	0.0985	mg/L	0.030000	0.1015	J
* Calcium, Dissolved	8/24/23 11:01	8/28/23 13:07		10.15	127	mg/L	0.70035	4.06	
* Iron, Dissolved	8/24/23 11:01	8/28/23 13:07		10.15	12.3	mg/L	0.08120	0.406	
* Lithium, Dissolved	8/24/23 11:01	8/25/23 13:20		1.015	0.380	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	8/24/23 11:01	8/28/23 13:07		10.15	87.7	mg/L	0.21315	4.06	
* Molybdenum, Dissolved	8/24/23 11:01	8/25/23 13:20		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Dissolved (calc.)	8/24/23 11:01	8/28/23 13:07		1	56.7	mg/L			
* Silicon, Dissolved	8/24/23 11:01	8/28/23 13:07		10.15	26.5	mg/L	0.2030	2.5375	
* Sodium, Dissolved	8/24/23 11:01	8/25/23 13:20		1.015	15.3	mg/L	0.04060	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***					***Preparation Method: EPA 1638***			
* Antimony, Total	8/24/23 16:04	8/25/23 11:26		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Arsenic, Total	8/24/23 16:04	8/25/23 11:26		1.015	0.000711	mg/L	0.000112	0.000203	
* Aluminum, Total	8/24/23 16:04	8/25/23 13:52		10.15	12.4	mg/L	0.09135	0.5075	
* Barium, Total	8/24/23 16:04	8/25/23 11:26		1.015	0.0154	mg/L	0.000508	0.001015	
* Beryllium, Total	8/24/23 16:04	8/25/23 11:26		1.015	0.00851	mg/L	0.000406	0.001015	
* Cadmium, Total	8/24/23 16:04	8/25/23 11:26		1.015	0.00117	mg/L	0.000068	0.000203	
* Chromium, Total	8/24/23 16:04	8/25/23 11:26		1.015	0.000236	mg/L	0.000203	0.001015	J
* Cobalt, Total	8/24/23 16:04	8/25/23 11:26		1.015	0.179	mg/L	0.000068	0.000203	
* Lead, Total	8/24/23 16:04	8/25/23 11:26		1.015	0.000808	mg/L	0.000068	0.000203	
* Manganese, Total	8/24/23 16:04	8/25/23 13:52		10.15	7.41	mg/L	0.001522	0.01015	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
Alkalinity could not be performed, pH at or below titration end point of 4.5 SU.

Reported: 9/25/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gorgas Gypsum - MW-14H

Location Code: WMWGORG
Collected: 8/21/23 14:35
Customer ID:
Submittal Date: 8/24/23 08:32

Laboratory ID Number: BD16259

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	8/24/23 16:04	8/25/23 11:26		1.015	3.64	mg/L	0.169505	0.5075	
* Selenium, Total	8/24/23 16:04	8/25/23 11:26		1.015	0.00232	mg/L	0.000508	0.001015	
* Thallium, Total	8/24/23 16:04	8/25/23 11:26		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	8/24/23 11:01	8/24/23 15:42		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	8/24/23 11:01	8/24/23 19:56		10.15	10.4	mg/L	0.09135	0.5075	
* Arsenic, Dissolved	8/24/23 11:01	8/24/23 15:42		1.015	0.000924	mg/L	0.000112	0.000203	
* Barium, Dissolved	8/24/23 11:01	8/24/23 15:42		1.015	0.0145	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	8/24/23 11:01	8/24/23 15:42		1.015	0.00832	mg/L	0.000406	0.001015	
* Cadmium, Dissolved	8/24/23 11:01	8/24/23 15:42		1.015	0.00102	mg/L	0.000068	0.000203	
* Chromium, Dissolved	8/24/23 11:01	8/24/23 15:42		1.015	0.000217	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	8/24/23 11:01	8/24/23 15:42		1.015	0.171	mg/L	0.000068	0.000203	
* Lead, Dissolved	8/24/23 11:01	8/24/23 15:42		1.015	0.000732	mg/L	0.000068	0.000203	
* Manganese, Dissolved	8/24/23 11:01	8/24/23 19:56		10.15	7.13	mg/L	0.001522	0.01015	
* Potassium, Dissolved	8/24/23 11:01	8/24/23 15:42		1.015	3.64	mg/L	0.169505	0.5075	
* Selenium, Dissolved	8/24/23 11:01	8/24/23 15:42		1.015	0.00311	mg/L	0.000508	0.001015	
* Thallium, Dissolved	8/24/23 11:01	8/24/23 15:42		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	8/25/23 11:54	8/25/23 16:56		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: CES***								
* Nitrogen, Nitrate/Nitrite	8/24/23 12:48	8/24/23 12:48		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	8/24/23 11:00	8/30/23 12:15		1	1160	mg/L		50	
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	8/25/23 18:30	8/25/23 18:30		1	Not Detected	mg/L	1.00	2	U
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	8/29/23 11:02	8/29/23 11:02		1	2.19	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	8/29/23 14:55	8/29/23 14:55		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	8/24/23 13:02	8/24/23 13:02		32	677	mg/L	19.2	64	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
Alkalinity could not be performed, pH at or below titration end point of 4.5 SU.

Reported: 9/25/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gorgas Gypsum - MW-14H

Location Code: WMWGORG
Collected: 8/21/23 14:35
Customer ID:
Submittal Date: 8/24/23 08:32

Laboratory ID Number: BD16259

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	8/21/23 14:34	8/21/23 14:34			1067.58	uS/cm			FA
pH	8/21/23 14:34	8/21/23 14:34			4.30	SU			FA
Temperature	8/21/23 14:34	8/21/23 14:34			20.57	C			FA
Turbidity	8/21/23 14:34	8/21/23 14:34			4.55	NTU			FA
Sulfide	8/21/23 14:34	8/21/23 14:34			0	mg/L			FA

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
Alkalinity could not be performed, pH at or below titration end point of 4.5 SU.

Reported: 9/25/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGORG
Sample Date: 8/21/23 14:35
Customer ID:
Delivery Date: 8/24/23 08:32

Description: Gorgas Gypsum - MW-14H

Laboratory ID Number: BD16259

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD16266	Aluminum, Dissolved	mg/L	-0.000172	0.0198	0.100	0.106	0.106	0.107	0.0850 to 0.115	106	70.0 to 130	0.00	20.0
BD16265	Aluminum, Total	mg/L	0.000416	0.0198	0.100	0.115	0.111	0.104	0.0850 to 0.115	104	70.0 to 130	3.54	20.0
BD16266	Antimony, Dissolved	mg/L	0.000328	0.00100	0.100	0.0955	0.0936	0.0926	0.0850 to 0.115	95.5	70.0 to 130	2.01	20.0
BD16265	Antimony, Total	mg/L	0.000302	0.00100	0.100	0.101	0.104	0.0928	0.0850 to 0.115	101	70.0 to 130	2.93	20.0
BD16266	Arsenic, Dissolved	mg/L	0.0000027	0.000200	0.100	0.105	0.107	0.101	0.0850 to 0.115	105	70.0 to 130	1.89	20.0
BD16265	Arsenic, Total	mg/L	0.0000072	0.000200	0.100	0.103	0.107	0.102	0.0850 to 0.115	101	70.0 to 130	3.81	20.0
BD16266	Barium, Dissolved	mg/L	0.0000131	0.00100	0.100	0.123	0.121	0.0970	0.0850 to 0.115	100	70.0 to 130	1.64	20.0
BD16265	Barium, Total	mg/L	0.0000115	0.00100	0.100	0.197	0.201	0.0993	0.0850 to 0.115	95.0	70.0 to 130	2.01	20.0
BD16266	Beryllium, Dissolved	mg/L	0.0000369	0.000880	0.100	0.0916	0.0930	0.104	0.0850 to 0.115	91.6	70.0 to 130	1.52	20.0
BD16265	Beryllium, Total	mg/L	0.000	0.000880	0.100	0.104	0.105	0.100	0.0850 to 0.115	104	70.0 to 130	0.957	20.0
BD16266	Boron, Dissolved	mg/L	-0.000395	0.0650	1.00	3.23	3.23	0.988	0.850 to 1.15	100	70.0 to 130	0.00	20.0
BD16265	Boron, Total	mg/L	-0.000149	0.0650	1.00	1.15	1.15	0.974	0.850 to 1.15	99.3	70.0 to 130	0.00	20.0
BD16266	Cadmium, Dissolved	mg/L	-0.0000002	0.000147	0.100	0.0979	0.0988	0.0992	0.0850 to 0.115	97.9	70.0 to 130	0.915	20.0
BD16265	Cadmium, Total	mg/L	0.0000049	0.000147	0.100	0.102	0.0993	0.101	0.0850 to 0.115	102	70.0 to 130	2.68	20.0
BD16266	Calcium, Dissolved	mg/L	-0.00836	0.152	5.00	464	446	4.84	4.25 to 5.75	320	70.0 to 130	3.96	20.0
BD16265	Calcium, Total	mg/L	-0.0149	0.152	5.00	35.6	35.9	4.72	4.25 to 5.75	82.0	70.0 to 130	0.839	20.0
BD16265	Chloride	mg/L	-0.0434	1.00	30.0	52.6	53.0	10.5	9.00 to 11.0	99.3	80.0 to 120	0.758	20.0
BD16266	Chromium, Dissolved	mg/L	0.0000133	0.000440	0.100	0.0971	0.0990	0.101	0.0850 to 0.115	97.1	70.0 to 130	1.94	20.0
BD16265	Chromium, Total	mg/L	-0.0000482	0.000440	0.100	0.100	0.0986	0.103	0.0850 to 0.115	100	70.0 to 130	1.41	20.0
BD16266	Cobalt, Dissolved	mg/L	0.0000012	0.000147	0.100	0.0956	0.0965	0.0999	0.0850 to 0.115	95.6	70.0 to 130	0.937	20.0
BD16265	Cobalt, Total	mg/L	-0.0000511	0.000147	0.100	0.102	0.0999	0.105	0.0850 to 0.115	102	70.0 to 130	2.08	20.0
BD16265	Fluoride	mg/L	0.00652	0.125	2.50	2.83	2.88	2.62	2.25 to 2.75	104	80.0 to 120	1.75	20.0
BD16266	Iron, Dissolved	mg/L	0.0118	0.0176	0.2	37.0	37.8	0.199	0.170 to 0.230	-200	70.0 to 130	2.14	20.0
BD16265	Iron, Total	mg/L	0.00252	0.0176	0.2	0.275	0.271	0.198	0.170 to 0.230	97.8	70.0 to 130	1.47	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
Alkalinity could not be performed, pH at or below titration end point of 4.5 SU.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGORG
Sample Date: 8/21/23 14:35
Customer ID:
Delivery Date: 8/24/23 08:32

Description: Gorgas Gypsum - MW-14H

Laboratory ID Number: BD16259

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD16266	Lead, Dissolved	mg/L	0.0000062	0.000147	0.100	0.0988	0.0990	0.102	0.0850 to 0.115	98.8	70.0 to 130	0.202	20.0
BD16265	Lead, Total	mg/L	0.0000013	0.000147	0.100	0.104	0.104	0.108	0.0850 to 0.115	104	70.0 to 130	0.00	20.0
BD16266	Lithium, Dissolved	mg/L	-0.000045	0.0154	0.200	0.381	0.377	0.196	0.170 to 0.230	102	70.0 to 130	1.06	20.0
BD16265	Lithium, Total	mg/L	0.000397	0.0154	0.200	0.439	0.440	0.194	0.170 to 0.230	102	70.0 to 130	0.228	20.0
BD16266	Magnesium, Dissolved	mg/L	0.0115	0.0462	5.00	277	268	4.98	4.25 to 5.75	160	70.0 to 130	3.30	20.0
BD16265	Magnesium, Total	mg/L	0.0147	0.0462	5.00	18.6	18.6	4.89	4.25 to 5.75	94.0	70.0 to 130	0.00	20.0
BD16266	Manganese, Dissolved	mg/L	0.0000265	0.00033	0.100	13.9	13.6	0.102	0.0850 to 0.115	100	70.0 to 130	2.18	20.0
BD16265	Manganese, Total	mg/L	0.0000137	0.00033	0.100	0.242	0.238	0.103	0.0850 to 0.115	101	70.0 to 130	1.67	20.0
BD16265	Mercury, Total by CVAA	mg/L	4.000E-05	0.000500	0.004	0.00395	0.00399	0.00393	0.00340 to 0.00460	98.8	70.0 to 130	1.01	20.0
BD16266	Molybdenum, Dissolved	mg/L	0.00029	0.0100	0.2	0.197	0.197	0.198	0.170 to 0.230	98.5	70.0 to 130	0.00	20.0
BD16265	Molybdenum, Total	mg/L	0.000	0.0100	0.2	0.199	0.199	0.199	0.170 to 0.230	99.5	70.0 to 130	0.00	20.0
BD16266	Potassium, Dissolved	mg/L	-0.0105	0.367	10.0	17.6	17.8	10.2	8.50 to 11.5	97.2	70.0 to 130	1.13	20.0
BD16265	Potassium, Total	mg/L	-0.00850	0.367	10.0	13.5	13.2	10.6	8.50 to 11.5	100	70.0 to 130	2.25	20.0
BD16266	Selenium, Dissolved	mg/L	0.0000176	0.00100	0.100	0.106	0.107	0.104	0.0850 to 0.115	106	70.0 to 130	0.939	20.0
BD16265	Selenium, Total	mg/L	0.0000331	0.00100	0.100	0.0866	0.0897	0.106	0.0850 to 0.115	86.6	70.0 to 130	3.52	20.0
BD16266	Silicon, Dissolved	mg/L	-0.00145	0.0440	1.00	7.54	7.54	0.987	0.850 to 1.15	93.0	70.0 to 130	0.00	20.0
BD16265	Silicon, Total	mg/L	-0.000644	0.0440	1.00	9.83	9.82	0.974	0.850 to 1.15	99.0	70.0 to 130	0.102	20.0
BD16266	Sodium, Dissolved	mg/L	0.00575	0.0880	5.00	176	170	5.09	4.25 to 5.75	120	70.0 to 130	3.47	20.0
BD16265	Sodium, Total	mg/L	0.0102	0.0880	5.00	400	425	4.96	4.25 to 5.75	100	70.0 to 130	6.06	20.0
BD16265	Sulfate	mg/L	0.389	2.0	160	353	351	20.8	18.0 to 22.0	99.4	80.0 to 120	0.568	20.0
BD16266	Thallium, Dissolved	mg/L	0.0000002	0.000147	0.100	0.0957	0.0955	0.0986	0.0850 to 0.115	95.7	70.0 to 130	0.209	20.0
BD16265	Thallium, Total	mg/L	-0.0000938	0.000147	0.100	0.105	0.104	0.113	0.0850 to 0.115	105	70.0 to 130	0.957	20.0
BD16265	Total Organic Carbon	mg/L	0.173	1.00	10.0	13.4	12.8	23.5		96.9	80.0 to 120	4.58	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
Alkalinity could not be performed, pH at or below titration end point of 4.5 SU.

Reported: 9/25/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Alabama Power

Batch QC Summary

Customer Account: WMWGORG
Sample Date: 8/21/23 14:35
Customer ID:
Delivery Date: 8/24/23 08:32

Description: Gorgas Gypsum - MW-14H

Laboratory ID Number: BD16259

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD16265	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.03	0.200	2.00	1.96	0.070	2.16	1.80 to 2.20	98.0	90.0 to 110	0.00	15.0
BD16263	Solids, Dissolved	mg/L	3.00	25.0			2650	53.0	40.0 to 60.0			0.378	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
Alkalinity could not be performed, pH at or below titration end point of 4.5 SU.

Reported: 9/25/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gorgas Gypsum - MW-11H

Location Code: WMWGORG
Collected: 8/22/23 09:40
Customer ID:
Submittal Date: 8/24/23 08:32

Laboratory ID Number: BD16260

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	8/24/23 16:04	8/25/23 15:24		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	8/24/23 16:04	8/28/23 14:48		10.15	144	mg/L	0.70035	4.06	
* Iron, Total	8/24/23 16:04	8/25/23 15:24		1.015	1.54	mg/L	0.008120	0.0406	
* Lithium, Total	8/24/23 16:04	8/25/23 15:24		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	8/24/23 16:04	8/28/23 14:48		10.15	121	mg/L	0.21315	4.06	
* Molybdenum, Total	8/24/23 16:04	8/25/23 15:24		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Total (calc.)	8/24/23 16:04	8/25/23 15:24		1	18.7	mg/L			
* Silicon, Total	8/24/23 16:04	8/25/23 15:24		1.015	8.73	mg/L	0.02030	0.25375	
* Sodium, Total	8/24/23 16:04	8/28/23 14:48		10.15	46.2	mg/L	0.4060	4.06	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	8/24/23 11:01	8/25/23 13:23		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Dissolved	8/24/23 11:01	8/28/23 13:11		10.15	147	mg/L	0.70035	4.06	
* Iron, Dissolved	8/24/23 11:01	8/25/23 13:23		1.015	1.36	mg/L	0.008120	0.0406	
* Lithium, Dissolved	8/24/23 11:01	8/25/23 13:23		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	8/24/23 11:01	8/28/23 13:11		10.15	125	mg/L	0.21315	4.06	
* Molybdenum, Dissolved	8/24/23 11:01	8/25/23 13:23		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Dissolved (calc.)	8/24/23 11:01	8/25/23 13:23		1	18.4	mg/L			
* Silicon, Dissolved	8/24/23 11:01	8/25/23 13:23		1.015	8.59	mg/L	0.02030	0.25375	
* Sodium, Dissolved	8/24/23 11:01	8/28/23 13:11		10.15	48.0	mg/L	0.4060	4.06	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	8/24/23 16:04	8/25/23 11:30		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Total	8/24/23 16:04	8/25/23 11:30		1.015	0.108	mg/L	0.009135	0.05075	
* Arsenic, Total	8/24/23 16:04	8/25/23 11:30		1.015	0.000284	mg/L	0.000112	0.000203	
* Barium, Total	8/24/23 16:04	8/25/23 11:30		1.015	0.0111	mg/L	0.000508	0.001015	
* Beryllium, Total	8/24/23 16:04	8/25/23 11:30		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	8/24/23 16:04	8/25/23 11:30		1.015	0.000168	mg/L	0.000068	0.000203	J
* Chromium, Total	8/24/23 16:04	8/25/23 11:30		1.015	0.000218	mg/L	0.000203	0.001015	J
* Cobalt, Total	8/24/23 16:04	8/25/23 11:30		1.015	0.00459	mg/L	0.000068	0.000203	
* Lead, Total	8/24/23 16:04	8/25/23 11:30		1.015	0.000105	mg/L	0.000068	0.000203	J
* Manganese, Total	8/24/23 16:04	8/25/23 13:55		5.075	1.78	mg/L	0.000761	0.005075	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 9/25/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gorgas Gypsum - MW-11H

Location Code: WMWGORG
Collected: 8/22/23 09:40
Customer ID:
Submittal Date: 8/24/23 08:32

Laboratory ID Number: BD16260

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	8/24/23 16:04	8/25/23 11:30		1.015	0.885	mg/L	0.169505	0.5075	
* Selenium, Total	8/24/23 16:04	8/25/23 11:30		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	8/24/23 16:04	8/25/23 11:30		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	8/24/23 11:01	8/24/23 15:45		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	8/24/23 11:01	8/24/23 15:45		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Dissolved	8/24/23 11:01	8/24/23 15:45		1.015	0.000227	mg/L	0.000112	0.000203	
* Barium, Dissolved	8/24/23 11:01	8/24/23 15:45		1.015	0.0102	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	8/24/23 11:01	8/24/23 15:45		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	8/24/23 11:01	8/24/23 15:45		1.015	0.0000978	mg/L	0.000068	0.000203	J
* Chromium, Dissolved	8/24/23 11:01	8/24/23 15:45		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	8/24/23 11:01	8/24/23 15:45		1.015	0.00437	mg/L	0.000068	0.000203	
* Lead, Dissolved	8/24/23 11:01	8/24/23 15:45		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	8/24/23 11:01	8/24/23 20:00		5.075	1.72	mg/L	0.000761	0.005075	
* Potassium, Dissolved	8/24/23 11:01	8/24/23 15:45		1.015	0.863	mg/L	0.169505	0.5075	
* Selenium, Dissolved	8/24/23 11:01	8/24/23 15:45		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	8/24/23 11:01	8/24/23 15:45		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	8/25/23 11:54	8/25/23 17:00		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: CES***								
* Nitrogen, Nitrate/Nitrite	8/24/23 12:50	8/24/23 12:50		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: DHC***								
* Alkalinity	8/30/23 09:34	8/30/23 13:21		1	82.1	mg CaCO3/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	8/24/23 11:00	8/30/23 12:15		1	1310	mg/L		75.8	
Analytical Method: SM 4500CO2 D	***Analyst: DHC***								
* Bicarbonate Alkalinity, (calc.)	8/30/23 09:34	8/30/23 13:21		1	82.1	mg CaCO3/L		1	A
* Carbonate Alkalinity, (calc.)	8/30/23 09:34	8/30/23 13:21		1	Not Detected	mg CaCO3/L		0.5	A
Analytical Method: SM 4500H+ B	***Analyst: DHC***								
Alkalinity pH Endpoint	8/30/23 09:34	8/30/23 13:21		1	4.50	SU		2	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 9/25/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gorgas Gypsum - MW-11H

Location Code: WMWGORG
Collected: 8/22/23 09:40
Customer ID:
Submittal Date: 8/24/23 08:32

Laboratory ID Number: BD16260

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	8/25/23 18:44	8/25/23 18:44		1	Not Detected	mg/L	1.00	2	U
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	8/29/23 11:03	8/29/23 11:03		1	5.40	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	8/29/23 14:56	8/29/23 14:56		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	8/24/23 13:03	8/24/23 13:03		40	796	mg/L	24.0	80	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	8/22/23 09:37	8/22/23 09:37			1377.58	uS/cm			FA
pH	8/22/23 09:37	8/22/23 09:37			5.89	SU			FA
Temperature	8/22/23 09:37	8/22/23 09:37			20.56	C			FA
Turbidity	8/22/23 09:37	8/22/23 09:37			4.87	NTU			FA
Sulfide	8/22/23 09:37	8/22/23 09:37			0	mg/L			FA

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 9/25/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGORG
Sample Date: 8/22/23 09:40
Customer ID:
Delivery Date: 8/24/23 08:32

Description: Gorgas Gypsum - MW-11H

Laboratory ID Number: BD16260

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD16266	Aluminum, Dissolved	mg/L	-0.000172	0.0198	0.100	0.106	0.106	0.107	0.0850 to 0.115	106	70.0 to 130	0.00	20.0
BD16265	Aluminum, Total	mg/L	0.000416	0.0198	0.100	0.115	0.111	0.104	0.0850 to 0.115	104	70.0 to 130	3.54	20.0
BD16266	Antimony, Dissolved	mg/L	0.000328	0.00100	0.100	0.0955	0.0936	0.0926	0.0850 to 0.115	95.5	70.0 to 130	2.01	20.0
BD16265	Antimony, Total	mg/L	0.000302	0.00100	0.100	0.101	0.104	0.0928	0.0850 to 0.115	101	70.0 to 130	2.93	20.0
BD16266	Arsenic, Dissolved	mg/L	0.0000027	0.000200	0.100	0.105	0.107	0.101	0.0850 to 0.115	105	70.0 to 130	1.89	20.0
BD16265	Arsenic, Total	mg/L	0.0000072	0.000200	0.100	0.103	0.107	0.102	0.0850 to 0.115	101	70.0 to 130	3.81	20.0
BD16266	Barium, Dissolved	mg/L	0.0000131	0.00100	0.100	0.123	0.121	0.0970	0.0850 to 0.115	100	70.0 to 130	1.64	20.0
BD16265	Barium, Total	mg/L	0.0000115	0.00100	0.100	0.197	0.201	0.0993	0.0850 to 0.115	95.0	70.0 to 130	2.01	20.0
BD16266	Beryllium, Dissolved	mg/L	0.0000369	0.000880	0.100	0.0916	0.0930	0.104	0.0850 to 0.115	91.6	70.0 to 130	1.52	20.0
BD16265	Beryllium, Total	mg/L	0.000	0.000880	0.100	0.104	0.105	0.100	0.0850 to 0.115	104	70.0 to 130	0.957	20.0
BD16266	Boron, Dissolved	mg/L	-0.000395	0.0650	1.00	3.23	3.23	0.988	0.850 to 1.15	100	70.0 to 130	0.00	20.0
BD16265	Boron, Total	mg/L	-0.000149	0.0650	1.00	1.15	1.15	0.974	0.850 to 1.15	99.3	70.0 to 130	0.00	20.0
BD16266	Cadmium, Dissolved	mg/L	-0.0000002	0.000147	0.100	0.0979	0.0988	0.0992	0.0850 to 0.115	97.9	70.0 to 130	0.915	20.0
BD16265	Cadmium, Total	mg/L	0.0000049	0.000147	0.100	0.102	0.0993	0.101	0.0850 to 0.115	102	70.0 to 130	2.68	20.0
BD16266	Calcium, Dissolved	mg/L	-0.00836	0.152	5.00	464	446	4.84	4.25 to 5.75	320	70.0 to 130	3.96	20.0
BD16265	Calcium, Total	mg/L	-0.0149	0.152	5.00	35.6	35.9	4.72	4.25 to 5.75	82.0	70.0 to 130	0.839	20.0
BD16265	Chloride	mg/L	-0.0434	1.00	30.0	52.6	53.0	10.5	9.00 to 11.0	99.3	80.0 to 120	0.758	20.0
BD16266	Chromium, Dissolved	mg/L	0.0000133	0.000440	0.100	0.0971	0.0990	0.101	0.0850 to 0.115	97.1	70.0 to 130	1.94	20.0
BD16265	Chromium, Total	mg/L	-0.0000482	0.000440	0.100	0.100	0.0986	0.103	0.0850 to 0.115	100	70.0 to 130	1.41	20.0
BD16266	Cobalt, Dissolved	mg/L	0.0000012	0.000147	0.100	0.0956	0.0965	0.0999	0.0850 to 0.115	95.6	70.0 to 130	0.937	20.0
BD16265	Cobalt, Total	mg/L	-0.0000511	0.000147	0.100	0.102	0.0999	0.105	0.0850 to 0.115	102	70.0 to 130	2.08	20.0
BD16265	Fluoride	mg/L	0.00652	0.125	2.50	2.83	2.88	2.62	2.25 to 2.75	104	80.0 to 120	1.75	20.0
BD16266	Iron, Dissolved	mg/L	0.0118	0.0176	0.2	37.0	37.8	0.199	0.170 to 0.230	-200	70.0 to 130	2.14	20.0
BD16265	Iron, Total	mg/L	0.00252	0.0176	0.2	0.275	0.271	0.198	0.170 to 0.230	97.8	70.0 to 130	1.47	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGORG
Sample Date: 8/22/23 09:40
Customer ID:
Delivery Date: 8/24/23 08:32

Description: Gorgas Gypsum - MW-11H

Laboratory ID Number: BD16260

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD16266	Lead, Dissolved	mg/L	0.0000062	0.000147	0.100	0.0988	0.0990	0.102	0.0850 to 0.115	98.8	70.0 to 130	0.202	20.0
BD16265	Lead, Total	mg/L	0.0000013	0.000147	0.100	0.104	0.104	0.108	0.0850 to 0.115	104	70.0 to 130	0.00	20.0
BD16266	Lithium, Dissolved	mg/L	-0.000045	0.0154	0.200	0.381	0.377	0.196	0.170 to 0.230	102	70.0 to 130	1.06	20.0
BD16265	Lithium, Total	mg/L	0.000397	0.0154	0.200	0.439	0.440	0.194	0.170 to 0.230	102	70.0 to 130	0.228	20.0
BD16266	Magnesium, Dissolved	mg/L	0.0115	0.0462	5.00	277	268	4.98	4.25 to 5.75	160	70.0 to 130	3.30	20.0
BD16265	Magnesium, Total	mg/L	0.0147	0.0462	5.00	18.6	18.6	4.89	4.25 to 5.75	94.0	70.0 to 130	0.00	20.0
BD16266	Manganese, Dissolved	mg/L	0.0000265	0.00033	0.100	13.9	13.6	0.102	0.0850 to 0.115	100	70.0 to 130	2.18	20.0
BD16265	Manganese, Total	mg/L	0.0000137	0.00033	0.100	0.242	0.238	0.103	0.0850 to 0.115	101	70.0 to 130	1.67	20.0
BD16265	Mercury, Total by CVAA	mg/L	4.000E-05	0.000500	0.004	0.00395	0.00399	0.00393	0.00340 to 0.00460	98.8	70.0 to 130	1.01	20.0
BD16266	Molybdenum, Dissolved	mg/L	0.00029	0.0100	0.2	0.197	0.197	0.198	0.170 to 0.230	98.5	70.0 to 130	0.00	20.0
BD16265	Molybdenum, Total	mg/L	0.000	0.0100	0.2	0.199	0.199	0.199	0.170 to 0.230	99.5	70.0 to 130	0.00	20.0
BD16266	Potassium, Dissolved	mg/L	-0.0105	0.367	10.0	17.6	17.8	10.2	8.50 to 11.5	97.2	70.0 to 130	1.13	20.0
BD16265	Potassium, Total	mg/L	-0.00850	0.367	10.0	13.5	13.2	10.6	8.50 to 11.5	100	70.0 to 130	2.25	20.0
BD16266	Selenium, Dissolved	mg/L	0.0000176	0.00100	0.100	0.106	0.107	0.104	0.0850 to 0.115	106	70.0 to 130	0.939	20.0
BD16265	Selenium, Total	mg/L	0.0000331	0.00100	0.100	0.0866	0.0897	0.106	0.0850 to 0.115	86.6	70.0 to 130	3.52	20.0
BD16266	Silicon, Dissolved	mg/L	-0.00145	0.0440	1.00	7.54	7.54	0.987	0.850 to 1.15	93.0	70.0 to 130	0.00	20.0
BD16265	Silicon, Total	mg/L	-0.000644	0.0440	1.00	9.83	9.82	0.974	0.850 to 1.15	99.0	70.0 to 130	0.102	20.0
BD16266	Sodium, Dissolved	mg/L	0.00575	0.0880	5.00	176	170	5.09	4.25 to 5.75	120	70.0 to 130	3.47	20.0
BD16265	Sodium, Total	mg/L	0.0102	0.0880	5.00	400	425	4.96	4.25 to 5.75	100	70.0 to 130	6.06	20.0
BD16265	Sulfate	mg/L	0.389	2.0	160	353	351	20.8	18.0 to 22.0	99.4	80.0 to 120	0.568	20.0
BD16266	Thallium, Dissolved	mg/L	0.0000002	0.000147	0.100	0.0957	0.0955	0.0986	0.0850 to 0.115	95.7	70.0 to 130	0.209	20.0
BD16265	Thallium, Total	mg/L	-0.0000938	0.000147	0.100	0.105	0.104	0.113	0.0850 to 0.115	105	70.0 to 130	0.957	20.0
BD16265	Total Organic Carbon	mg/L	0.173	1.00	10.0	13.4	12.8	23.5		96.9	80.0 to 120	4.58	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 9/25/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Alabama Power

Batch QC Summary

Customer Account: WMWGORG
Sample Date: 8/22/23 09:40
Customer ID:
Delivery Date: 8/24/23 08:32

Description: Gorgas Gypsum - MW-11H

Laboratory ID Number: BD16260

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD16263	Alkalinity	mg CaCO3/L					55.1	51.6	45.0 to 55.0			0.546	10.0
BD16265	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.03	0.200	2.00	1.96	0.070	2.16	1.80 to 2.20	98.0	90.0 to 110	0.00	15.0
BD16263	Solids, Dissolved	mg/L	3.00	25.0			2650	53.0	40.0 to 60.0			0.378	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 9/25/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gorgas Gypsum - MW-13H

Location Code: WMWGORG
Collected: 8/22/23 10:43
Customer ID:
Submittal Date: 8/24/23 08:32

Laboratory ID Number: BD16261

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	8/24/23 16:04	8/25/23 15:27		1.015	0.189	mg/L	0.030000	0.1015	
* Calcium, Total	8/24/23 16:04	8/28/23 14:52		10.15	166	mg/L	0.70035	4.06	
* Iron, Total	8/24/23 16:04	9/1/23 13:13		101.5	42.3	mg/L	0.8120	4.06	
* Lithium, Total	8/24/23 16:04	8/25/23 15:27		1.015	0.0416	mg/L	0.007105	0.01999956	
* Magnesium, Total	8/24/23 16:04	8/28/23 14:52		10.15	102	mg/L	0.21315	4.06	
* Molybdenum, Total	8/24/23 16:04	8/25/23 15:27		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Total (calc.)	8/24/23 16:04	8/25/23 15:27		1	24.0	mg/L			
* Silicon, Total	8/24/23 16:04	8/25/23 15:27		1.015	11.2	mg/L	0.02030	0.25375	
* Sodium, Total	8/24/23 16:04	8/28/23 14:52		10.15	50.5	mg/L	0.4060	4.06	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	8/24/23 11:01	8/25/23 13:27		1.015	0.179	mg/L	0.030000	0.1015	
* Calcium, Dissolved	8/24/23 11:01	8/28/23 13:14		10.15	170	mg/L	0.70035	4.06	
* Iron, Dissolved	8/24/23 11:01	9/1/23 13:00		101.5	50.8	mg/L	0.8120	4.06	
* Lithium, Dissolved	8/24/23 11:01	8/25/23 13:27		1.015	0.0406	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	8/24/23 11:01	8/28/23 13:14		10.15	105	mg/L	0.21315	4.06	
* Molybdenum, Dissolved	8/24/23 11:01	8/25/23 13:27		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Dissolved (calc.)	8/24/23 11:01	8/25/23 13:27		1	23.5	mg/L			
* Silicon, Dissolved	8/24/23 11:01	8/25/23 13:27		1.015	11.0	mg/L	0.02030	0.25375	
* Sodium, Dissolved	8/24/23 11:01	8/28/23 13:14		10.15	50.9	mg/L	0.4060	4.06	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	8/24/23 16:04	8/25/23 11:34		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Total	8/24/23 16:04	8/25/23 11:34		1.015	0.0136	mg/L	0.009135	0.05075	J
* Arsenic, Total	8/24/23 16:04	8/25/23 11:34		1.015	0.180	mg/L	0.000112	0.000203	
* Barium, Total	8/24/23 16:04	8/25/23 11:34		1.015	0.0257	mg/L	0.000508	0.001015	
* Beryllium, Total	8/24/23 16:04	8/25/23 11:34		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	8/24/23 16:04	8/25/23 11:34		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	8/24/23 16:04	8/25/23 11:34		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	8/24/23 16:04	8/25/23 11:34		1.015	0.107	mg/L	0.000068	0.000203	
* Lead, Total	8/24/23 16:04	8/25/23 11:34		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	8/24/23 16:04	8/25/23 13:59		92.365	11.8	mg/L	0.013855	0.092365	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 9/25/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gorgas Gypsum - MW-13H

Location Code: WMWGORG
Collected: 8/22/23 10:43
Customer ID:
Submittal Date: 8/24/23 08:32

Laboratory ID Number: BD16261

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	8/24/23 16:04	8/25/23 11:34		1.015	7.54	mg/L	0.169505	0.5075	
* Selenium, Total	8/24/23 16:04	8/25/23 11:34		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	8/24/23 16:04	8/25/23 11:34		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	8/24/23 11:01	8/24/23 15:49		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	8/24/23 11:01	8/24/23 15:49		1.015	0.00963	mg/L	0.009135	0.05075	J
* Arsenic, Dissolved	8/24/23 11:01	8/24/23 15:49		1.015	0.159	mg/L	0.000112	0.000203	
* Barium, Dissolved	8/24/23 11:01	8/24/23 15:49		1.015	0.0234	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	8/24/23 11:01	8/24/23 15:49		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	8/24/23 11:01	8/24/23 15:49		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	8/24/23 11:01	8/24/23 15:49		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	8/24/23 11:01	8/24/23 15:49		1.015	0.108	mg/L	0.000068	0.000203	
* Lead, Dissolved	8/24/23 11:01	8/24/23 15:49		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	8/24/23 11:01	8/24/23 20:04		92.365	11.9	mg/L	0.013855	0.092365	
* Potassium, Dissolved	8/24/23 11:01	8/24/23 15:49		1.015	7.02	mg/L	0.169505	0.5075	
* Selenium, Dissolved	8/24/23 11:01	8/24/23 15:49		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	8/24/23 11:01	8/24/23 15:49		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	8/25/23 11:54	8/25/23 17:04		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: CES***								
* Nitrogen, Nitrate/Nitrite	8/24/23 12:52	8/24/23 12:52		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: DHC***								
* Alkalinity	8/30/23 09:34	8/30/23 13:21		1	166	mg CaCO3/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	8/24/23 11:00	8/30/23 12:15		1	1400	mg/L		75.8	
Analytical Method: SM 4500CO2 D	***Analyst: DHC***								
* Bicarbonate Alkalinity, (calc.)	8/30/23 09:34	8/30/23 13:21		1	166	mg CaCO3/L		1	A
* Carbonate Alkalinity, (calc.)	8/30/23 09:34	8/30/23 13:21		1	Not Detected	mg CaCO3/L		0.5	A
Analytical Method: SM 4500H+ B	***Analyst: DHC***								
Alkalinity pH Endpoint	8/30/23 09:34	8/30/23 13:21		1	4.50	SU		2	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 9/25/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gorgas Gypsum - MW-13H

Location Code: WMWGORG
Collected: 8/22/23 10:43
Customer ID:
Submittal Date: 8/24/23 08:32

Laboratory ID Number: BD16261

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 5310 B		***Analyst: SC***							
* Total Organic Carbon	8/25/23 18:57	8/25/23 18:57		1	2.48	mg/L	1.00	2	
Analytical Method: SM4500Cl E		***Analyst: JCC***							
* Chloride	8/29/23 11:04	8/29/23 11:04		1	10.0	mg/L	0.50	1	
Analytical Method: SM4500F G 2017		***Analyst: JCC***							
* Fluoride	8/29/23 14:57	8/29/23 14:57		1	0.120	mg/L	0.06	0.125	J
Analytical Method: SM4500SO4 E 2011		***Analyst: JCC***							
* Sulfate	8/24/23 13:04	8/24/23 13:04		40	786	mg/L	24.0	80	
Analytical Method: Field Measurements		***Analyst: TJD***							
Conductivity	8/22/23 10:39	8/22/23 10:39			1363.99	uS/cm			FA
pH	8/22/23 10:39	8/22/23 10:39			5.71	SU			FA
Temperature	8/22/23 10:39	8/22/23 10:39			20.37	C			FA
Turbidity	8/22/23 10:39	8/22/23 10:39			9.51	NTU			FA
Sulfide	8/22/23 10:39	8/22/23 10:39			0	mg/L			FA

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 9/25/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGORG
Sample Date: 8/22/23 10:43
Customer ID:
Delivery Date: 8/24/23 08:32

Description: Gorgas Gypsum - MW-13H

Laboratory ID Number: BD16261

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD16266	Aluminum, Dissolved	mg/L	-0.000172	0.0198	0.100	0.106	0.106	0.107	0.0850 to 0.115	106	70.0 to 130	0.00	20.0
BD16265	Aluminum, Total	mg/L	0.000416	0.0198	0.100	0.115	0.111	0.104	0.0850 to 0.115	104	70.0 to 130	3.54	20.0
BD16266	Antimony, Dissolved	mg/L	0.000328	0.00100	0.100	0.0955	0.0936	0.0926	0.0850 to 0.115	95.5	70.0 to 130	2.01	20.0
BD16265	Antimony, Total	mg/L	0.000302	0.00100	0.100	0.101	0.104	0.0928	0.0850 to 0.115	101	70.0 to 130	2.93	20.0
BD16266	Arsenic, Dissolved	mg/L	0.0000027	0.000200	0.100	0.105	0.107	0.101	0.0850 to 0.115	105	70.0 to 130	1.89	20.0
BD16265	Arsenic, Total	mg/L	0.0000072	0.000200	0.100	0.103	0.107	0.102	0.0850 to 0.115	101	70.0 to 130	3.81	20.0
BD16266	Barium, Dissolved	mg/L	0.0000131	0.00100	0.100	0.123	0.121	0.0970	0.0850 to 0.115	100	70.0 to 130	1.64	20.0
BD16265	Barium, Total	mg/L	0.0000115	0.00100	0.100	0.197	0.201	0.0993	0.0850 to 0.115	95.0	70.0 to 130	2.01	20.0
BD16266	Beryllium, Dissolved	mg/L	0.0000369	0.000880	0.100	0.0916	0.0930	0.104	0.0850 to 0.115	91.6	70.0 to 130	1.52	20.0
BD16265	Beryllium, Total	mg/L	0.000	0.000880	0.100	0.104	0.105	0.100	0.0850 to 0.115	104	70.0 to 130	0.957	20.0
BD16266	Boron, Dissolved	mg/L	-0.000395	0.0650	1.00	3.23	3.23	0.988	0.850 to 1.15	100	70.0 to 130	0.00	20.0
BD16265	Boron, Total	mg/L	-0.000149	0.0650	1.00	1.15	1.15	0.974	0.850 to 1.15	99.3	70.0 to 130	0.00	20.0
BD16266	Cadmium, Dissolved	mg/L	-0.0000002	0.000147	0.100	0.0979	0.0988	0.0992	0.0850 to 0.115	97.9	70.0 to 130	0.915	20.0
BD16265	Cadmium, Total	mg/L	0.0000049	0.000147	0.100	0.102	0.0993	0.101	0.0850 to 0.115	102	70.0 to 130	2.68	20.0
BD16266	Calcium, Dissolved	mg/L	-0.00836	0.152	5.00	464	446	4.84	4.25 to 5.75	320	70.0 to 130	3.96	20.0
BD16265	Calcium, Total	mg/L	-0.0149	0.152	5.00	35.6	35.9	4.72	4.25 to 5.75	82.0	70.0 to 130	0.839	20.0
BD16265	Chloride	mg/L	-0.0434	1.00	30.0	52.6	53.0	10.5	9.00 to 11.0	99.3	80.0 to 120	0.758	20.0
BD16266	Chromium, Dissolved	mg/L	0.0000133	0.000440	0.100	0.0971	0.0990	0.101	0.0850 to 0.115	97.1	70.0 to 130	1.94	20.0
BD16265	Chromium, Total	mg/L	-0.0000482	0.000440	0.100	0.100	0.0986	0.103	0.0850 to 0.115	100	70.0 to 130	1.41	20.0
BD16266	Cobalt, Dissolved	mg/L	0.0000012	0.000147	0.100	0.0956	0.0965	0.0999	0.0850 to 0.115	95.6	70.0 to 130	0.937	20.0
BD16265	Cobalt, Total	mg/L	-0.0000511	0.000147	0.100	0.102	0.0999	0.105	0.0850 to 0.115	102	70.0 to 130	2.08	20.0
BD16265	Fluoride	mg/L	0.00652	0.125	2.50	2.83	2.88	2.62	2.25 to 2.75	104	80.0 to 120	1.75	20.0
BD16266	Iron, Dissolved	mg/L	0.0118	0.0176	0.2	37.0	37.8	0.199	0.170 to 0.230	-200	70.0 to 130	2.14	20.0
BD16265	Iron, Total	mg/L	0.00252	0.0176	0.2	0.275	0.271	0.198	0.170 to 0.230	97.8	70.0 to 130	1.47	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 9/25/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGORG
Sample Date: 8/22/23 10:43
Customer ID:
Delivery Date: 8/24/23 08:32

Description: Gorgas Gypsum - MW-13H

Laboratory ID Number: BD16261

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD16266	Lead, Dissolved	mg/L	0.0000062	0.000147	0.100	0.0988	0.0990	0.102	0.0850 to 0.115	98.8	70.0 to 130	0.202	20.0
BD16265	Lead, Total	mg/L	0.0000013	0.000147	0.100	0.104	0.104	0.108	0.0850 to 0.115	104	70.0 to 130	0.00	20.0
BD16266	Lithium, Dissolved	mg/L	-0.000045	0.0154	0.200	0.381	0.377	0.196	0.170 to 0.230	102	70.0 to 130	1.06	20.0
BD16265	Lithium, Total	mg/L	0.000397	0.0154	0.200	0.439	0.440	0.194	0.170 to 0.230	102	70.0 to 130	0.228	20.0
BD16266	Magnesium, Dissolved	mg/L	0.0115	0.0462	5.00	277	268	4.98	4.25 to 5.75	160	70.0 to 130	3.30	20.0
BD16265	Magnesium, Total	mg/L	0.0147	0.0462	5.00	18.6	18.6	4.89	4.25 to 5.75	94.0	70.0 to 130	0.00	20.0
BD16266	Manganese, Dissolved	mg/L	0.0000265	0.00033	0.100	13.9	13.6	0.102	0.0850 to 0.115	100	70.0 to 130	2.18	20.0
BD16265	Manganese, Total	mg/L	0.0000137	0.00033	0.100	0.242	0.238	0.103	0.0850 to 0.115	101	70.0 to 130	1.67	20.0
BD16265	Mercury, Total by CVAA	mg/L	4.000E-05	0.000500	0.004	0.00395	0.00399	0.00393	0.00340 to 0.00460	98.8	70.0 to 130	1.01	20.0
BD16266	Molybdenum, Dissolved	mg/L	0.00029	0.0100	0.2	0.197	0.197	0.198	0.170 to 0.230	98.5	70.0 to 130	0.00	20.0
BD16265	Molybdenum, Total	mg/L	0.000	0.0100	0.2	0.199	0.199	0.199	0.170 to 0.230	99.5	70.0 to 130	0.00	20.0
BD16266	Potassium, Dissolved	mg/L	-0.0105	0.367	10.0	17.6	17.8	10.2	8.50 to 11.5	97.2	70.0 to 130	1.13	20.0
BD16265	Potassium, Total	mg/L	-0.00850	0.367	10.0	13.5	13.2	10.6	8.50 to 11.5	100	70.0 to 130	2.25	20.0
BD16266	Selenium, Dissolved	mg/L	0.0000176	0.00100	0.100	0.106	0.107	0.104	0.0850 to 0.115	106	70.0 to 130	0.939	20.0
BD16265	Selenium, Total	mg/L	0.0000331	0.00100	0.100	0.0866	0.0897	0.106	0.0850 to 0.115	86.6	70.0 to 130	3.52	20.0
BD16266	Silicon, Dissolved	mg/L	-0.00145	0.0440	1.00	7.54	7.54	0.987	0.850 to 1.15	93.0	70.0 to 130	0.00	20.0
BD16265	Silicon, Total	mg/L	-0.000644	0.0440	1.00	9.83	9.82	0.974	0.850 to 1.15	99.0	70.0 to 130	0.102	20.0
BD16266	Sodium, Dissolved	mg/L	0.00575	0.0880	5.00	176	170	5.09	4.25 to 5.75	120	70.0 to 130	3.47	20.0
BD16265	Sodium, Total	mg/L	0.0102	0.0880	5.00	400	425	4.96	4.25 to 5.75	100	70.0 to 130	6.06	20.0
BD16265	Sulfate	mg/L	0.389	2.0	160	353	351	20.8	18.0 to 22.0	99.4	80.0 to 120	0.568	20.0
BD16266	Thallium, Dissolved	mg/L	0.0000002	0.000147	0.100	0.0957	0.0955	0.0986	0.0850 to 0.115	95.7	70.0 to 130	0.209	20.0
BD16265	Thallium, Total	mg/L	-0.0000938	0.000147	0.100	0.105	0.104	0.113	0.0850 to 0.115	105	70.0 to 130	0.957	20.0
BD16265	Total Organic Carbon	mg/L	0.173	1.00	10.0	13.4	12.8	23.5		96.9	80.0 to 120	4.58	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 9/25/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Alabama Power

Batch QC Summary

Customer Account: WMWGORG
Sample Date: 8/22/23 10:43
Customer ID:
Delivery Date: 8/24/23 08:32

Description: Gorgas Gypsum - MW-13H

Laboratory ID Number: BD16261

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD16263	Alkalinity	mg CaCO3/L					55.1	51.6	45.0 to 55.0			0.546	10.0
BD16265	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.03	0.200	2.00	1.96	0.070	2.16	1.80 to 2.20	98.0	90.0 to 110	0.00	15.0
BD16263	Solids, Dissolved	mg/L	3.00	25.0			2650	53.0	40.0 to 60.0			0.378	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gorgas Gypsum - MW-13H Dup

Location Code: WMWGORG
Collected: 8/22/23 10:43
Customer ID:
Submittal Date: 8/24/23 08:32

Laboratory ID Number: BD16262

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	8/24/23 16:04	8/25/23 15:30		1.015	0.178	mg/L	0.030000	0.1015	
* Calcium, Total	8/24/23 16:04	8/28/23 14:55		10.15	175	mg/L	0.70035	4.06	
* Iron, Total	8/24/23 16:04	9/1/23 13:16		101.5	43.1	mg/L	0.8120	4.06	
* Lithium, Total	8/24/23 16:04	8/25/23 15:30		1.015	0.0412	mg/L	0.007105	0.01999956	
* Magnesium, Total	8/24/23 16:04	8/28/23 14:55		10.15	107	mg/L	0.21315	4.06	
* Molybdenum, Total	8/24/23 16:04	8/25/23 15:30		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Total (calc.)	8/24/23 16:04	8/25/23 15:30		1	24.0	mg/L			
* Silicon, Total	8/24/23 16:04	8/25/23 15:30		1.015	11.2	mg/L	0.02030	0.25375	
* Sodium, Total	8/24/23 16:04	8/28/23 14:55		10.15	52.9	mg/L	0.4060	4.06	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	8/24/23 11:01	8/25/23 13:30		1.015	0.175	mg/L	0.030000	0.1015	
* Calcium, Dissolved	8/24/23 11:01	8/28/23 13:17		10.15	180	mg/L	0.70035	4.06	
* Iron, Dissolved	8/24/23 11:01	9/1/23 13:03		101.5	46.7	mg/L	0.8120	4.06	
* Lithium, Dissolved	8/24/23 11:01	8/25/23 13:30		1.015	0.0413	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	8/24/23 11:01	8/28/23 13:17		10.15	111	mg/L	0.21315	4.06	
* Molybdenum, Dissolved	8/24/23 11:01	8/25/23 13:30		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Dissolved (calc.)	8/24/23 11:01	8/25/23 13:30		1	23.8	mg/L			
* Silicon, Dissolved	8/24/23 11:01	8/25/23 13:30		1.015	11.1	mg/L	0.02030	0.25375	
* Sodium, Dissolved	8/24/23 11:01	8/28/23 13:17		10.15	54.3	mg/L	0.4060	4.06	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	8/24/23 16:04	8/25/23 11:37		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Total	8/24/23 16:04	8/25/23 11:37		1.015	0.0139	mg/L	0.009135	0.05075	J
* Arsenic, Total	8/24/23 16:04	8/25/23 11:37		1.015	0.178	mg/L	0.000112	0.000203	
* Barium, Total	8/24/23 16:04	8/25/23 11:37		1.015	0.0251	mg/L	0.000508	0.001015	
* Beryllium, Total	8/24/23 16:04	8/25/23 11:37		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	8/24/23 16:04	8/25/23 11:37		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	8/24/23 16:04	8/25/23 11:37		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	8/24/23 16:04	8/25/23 11:37		1.015	0.100	mg/L	0.000068	0.000203	
* Lead, Total	8/24/23 16:04	8/25/23 11:37		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	8/24/23 16:04	8/25/23 14:02		92.365	11.5	mg/L	0.013855	0.092365	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 9/25/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gorgas Gypsum - MW-13H Dup

Location Code: WMWGORG
Collected: 8/22/23 10:43
Customer ID:
Submittal Date: 8/24/23 08:32

Laboratory ID Number: BD16262

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	8/24/23 16:04	8/25/23 11:37		1.015	7.41	mg/L	0.169505	0.5075	
* Selenium, Total	8/24/23 16:04	8/25/23 11:37		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	8/24/23 16:04	8/25/23 11:37		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	8/24/23 11:01	8/24/23 15:53		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	8/24/23 11:01	8/24/23 15:53		1.015	0.00979	mg/L	0.009135	0.05075	J
* Arsenic, Dissolved	8/24/23 11:01	8/24/23 15:53		1.015	0.159	mg/L	0.000112	0.000203	
* Barium, Dissolved	8/24/23 11:01	8/24/23 15:53		1.015	0.0237	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	8/24/23 11:01	8/24/23 15:53		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	8/24/23 11:01	8/24/23 15:53		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	8/24/23 11:01	8/24/23 15:53		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	8/24/23 11:01	8/24/23 15:53		1.015	0.106	mg/L	0.000068	0.000203	
* Lead, Dissolved	8/24/23 11:01	8/24/23 15:53		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	8/24/23 11:01	8/24/23 20:07		92.365	11.8	mg/L	0.013855	0.092365	
* Potassium, Dissolved	8/24/23 11:01	8/24/23 15:53		1.015	7.21	mg/L	0.169505	0.5075	
* Selenium, Dissolved	8/24/23 11:01	8/24/23 15:53		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	8/24/23 11:01	8/24/23 15:53		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	8/25/23 11:54	8/25/23 17:08		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: CES***								
* Nitrogen, Nitrate/Nitrite	8/24/23 12:54	8/24/23 12:54		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: DHC***								
* Alkalinity	8/30/23 09:34	8/30/23 13:21		1	168	mg CaCO3/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	8/24/23 11:00	8/30/23 12:15		1	1430	mg/L		75.8	
Analytical Method: SM 4500CO2 D	***Analyst: DHC***								
* Bicarbonate Alkalinity, (calc.)	8/30/23 09:34	8/30/23 13:21		1	168	mg CaCO3/L		1	A
* Carbonate Alkalinity, (calc.)	8/30/23 09:34	8/30/23 13:21		1	Not Detected	mg CaCO3/L		0.5	A
Analytical Method: SM 4500H+ B	***Analyst: DHC***								
Alkalinity pH Endpoint	8/30/23 09:34	8/30/23 13:21		1	4.52	SU		2	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 9/25/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gorgas Gypsum - MW-13H Dup

Location Code: WMWGORG
Collected: 8/22/23 10:43
Customer ID:
Submittal Date: 8/24/23 08:32

Laboratory ID Number: BD16262

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 5310 B		***Analyst: SC***							
* Total Organic Carbon	8/25/23 19:11	8/25/23 19:11		1	2.67	mg/L	1.00	2	
Analytical Method: SM4500Cl E		***Analyst: JCC***							
* Chloride	8/29/23 11:05	8/29/23 11:05		1	10.7	mg/L	0.50	1	
Analytical Method: SM4500F G 2017		***Analyst: JCC***							
* Fluoride	8/29/23 14:58	8/29/23 14:58		1	0.136	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011		***Analyst: JCC***							
* Sulfate	8/24/23 13:05	8/24/23 13:05		40	799	mg/L	24.0	80	
Analytical Method: Field Measurements		***Analyst: TJD***							
Conductivity	8/22/23 10:39	8/22/23 10:39			1363.99	uS/cm			FA
pH	8/22/23 10:39	8/22/23 10:39			5.71	SU			FA
Temperature	8/22/23 10:39	8/22/23 10:39			20.37	C			FA
Turbidity	8/22/23 10:39	8/22/23 10:39			9.51	NTU			FA
Sulfide	8/22/23 10:39	8/22/23 10:39			0	mg/L			FA

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 9/25/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGORG
Sample Date: 8/22/23 10:43
Customer ID:
Delivery Date: 8/24/23 08:32

Description: Gorgas Gypsum - MW-13H Dup

Laboratory ID Number: BD16262

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD16266	Aluminum, Dissolved	mg/L	-0.000172	0.0198	0.100	0.106	0.106	0.107	0.0850 to 0.115	106	70.0 to 130	0.00	20.0
BD16265	Aluminum, Total	mg/L	0.000416	0.0198	0.100	0.115	0.111	0.104	0.0850 to 0.115	104	70.0 to 130	3.54	20.0
BD16266	Antimony, Dissolved	mg/L	0.000328	0.00100	0.100	0.0955	0.0936	0.0926	0.0850 to 0.115	95.5	70.0 to 130	2.01	20.0
BD16265	Antimony, Total	mg/L	0.000302	0.00100	0.100	0.101	0.104	0.0928	0.0850 to 0.115	101	70.0 to 130	2.93	20.0
BD16266	Arsenic, Dissolved	mg/L	0.0000027	0.000200	0.100	0.105	0.107	0.101	0.0850 to 0.115	105	70.0 to 130	1.89	20.0
BD16265	Arsenic, Total	mg/L	0.0000072	0.000200	0.100	0.103	0.107	0.102	0.0850 to 0.115	101	70.0 to 130	3.81	20.0
BD16266	Barium, Dissolved	mg/L	0.0000131	0.00100	0.100	0.123	0.121	0.0970	0.0850 to 0.115	100	70.0 to 130	1.64	20.0
BD16265	Barium, Total	mg/L	0.0000115	0.00100	0.100	0.197	0.201	0.0993	0.0850 to 0.115	95.0	70.0 to 130	2.01	20.0
BD16266	Beryllium, Dissolved	mg/L	0.0000369	0.000880	0.100	0.0916	0.0930	0.104	0.0850 to 0.115	91.6	70.0 to 130	1.52	20.0
BD16265	Beryllium, Total	mg/L	0.000	0.000880	0.100	0.104	0.105	0.100	0.0850 to 0.115	104	70.0 to 130	0.957	20.0
BD16266	Boron, Dissolved	mg/L	-0.000395	0.0650	1.00	3.23	3.23	0.988	0.850 to 1.15	100	70.0 to 130	0.00	20.0
BD16265	Boron, Total	mg/L	-0.000149	0.0650	1.00	1.15	1.15	0.974	0.850 to 1.15	99.3	70.0 to 130	0.00	20.0
BD16266	Cadmium, Dissolved	mg/L	-0.0000002	0.000147	0.100	0.0979	0.0988	0.0992	0.0850 to 0.115	97.9	70.0 to 130	0.915	20.0
BD16265	Cadmium, Total	mg/L	0.0000049	0.000147	0.100	0.102	0.0993	0.101	0.0850 to 0.115	102	70.0 to 130	2.68	20.0
BD16266	Calcium, Dissolved	mg/L	-0.00836	0.152	5.00	464	446	4.84	4.25 to 5.75	320	70.0 to 130	3.96	20.0
BD16265	Calcium, Total	mg/L	-0.0149	0.152	5.00	35.6	35.9	4.72	4.25 to 5.75	82.0	70.0 to 130	0.839	20.0
BD16265	Chloride	mg/L	-0.0434	1.00	30.0	52.6	53.0	10.5	9.00 to 11.0	99.3	80.0 to 120	0.758	20.0
BD16266	Chromium, Dissolved	mg/L	0.0000133	0.000440	0.100	0.0971	0.0990	0.101	0.0850 to 0.115	97.1	70.0 to 130	1.94	20.0
BD16265	Chromium, Total	mg/L	-0.0000482	0.000440	0.100	0.100	0.0986	0.103	0.0850 to 0.115	100	70.0 to 130	1.41	20.0
BD16266	Cobalt, Dissolved	mg/L	0.0000012	0.000147	0.100	0.0956	0.0965	0.0999	0.0850 to 0.115	95.6	70.0 to 130	0.937	20.0
BD16265	Cobalt, Total	mg/L	-0.0000511	0.000147	0.100	0.102	0.0999	0.105	0.0850 to 0.115	102	70.0 to 130	2.08	20.0
BD16265	Fluoride	mg/L	0.00652	0.125	2.50	2.83	2.88	2.62	2.25 to 2.75	104	80.0 to 120	1.75	20.0
BD16266	Iron, Dissolved	mg/L	0.0118	0.0176	0.2	37.0	37.8	0.199	0.170 to 0.230	-200	70.0 to 130	2.14	20.0
BD16265	Iron, Total	mg/L	0.00252	0.0176	0.2	0.275	0.271	0.198	0.170 to 0.230	97.8	70.0 to 130	1.47	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGORG
Sample Date: 8/22/23 10:43
Customer ID:
Delivery Date: 8/24/23 08:32

Description: Gorgas Gypsum - MW-13H Dup

Laboratory ID Number: BD16262

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD16266	Lead, Dissolved	mg/L	0.0000062	0.000147	0.100	0.0988	0.0990	0.102	0.0850 to 0.115	98.8	70.0 to 130	0.202	20.0
BD16265	Lead, Total	mg/L	0.0000013	0.000147	0.100	0.104	0.104	0.108	0.0850 to 0.115	104	70.0 to 130	0.00	20.0
BD16266	Lithium, Dissolved	mg/L	-0.000045	0.0154	0.200	0.381	0.377	0.196	0.170 to 0.230	102	70.0 to 130	1.06	20.0
BD16265	Lithium, Total	mg/L	0.000397	0.0154	0.200	0.439	0.440	0.194	0.170 to 0.230	102	70.0 to 130	0.228	20.0
BD16266	Magnesium, Dissolved	mg/L	0.0115	0.0462	5.00	277	268	4.98	4.25 to 5.75	160	70.0 to 130	3.30	20.0
BD16265	Magnesium, Total	mg/L	0.0147	0.0462	5.00	18.6	18.6	4.89	4.25 to 5.75	94.0	70.0 to 130	0.00	20.0
BD16266	Manganese, Dissolved	mg/L	0.0000265	0.00033	0.100	13.9	13.6	0.102	0.0850 to 0.115	100	70.0 to 130	2.18	20.0
BD16265	Manganese, Total	mg/L	0.0000137	0.00033	0.100	0.242	0.238	0.103	0.0850 to 0.115	101	70.0 to 130	1.67	20.0
BD16265	Mercury, Total by CVAA	mg/L	4.000E-05	0.000500	0.004	0.00395	0.00399	0.00393	0.00340 to 0.00460	98.8	70.0 to 130	1.01	20.0
BD16266	Molybdenum, Dissolved	mg/L	0.00029	0.0100	0.2	0.197	0.197	0.198	0.170 to 0.230	98.5	70.0 to 130	0.00	20.0
BD16265	Molybdenum, Total	mg/L	0.000	0.0100	0.2	0.199	0.199	0.199	0.170 to 0.230	99.5	70.0 to 130	0.00	20.0
BD16266	Potassium, Dissolved	mg/L	-0.0105	0.367	10.0	17.6	17.8	10.2	8.50 to 11.5	97.2	70.0 to 130	1.13	20.0
BD16265	Potassium, Total	mg/L	-0.00850	0.367	10.0	13.5	13.2	10.6	8.50 to 11.5	100	70.0 to 130	2.25	20.0
BD16266	Selenium, Dissolved	mg/L	0.0000176	0.00100	0.100	0.106	0.107	0.104	0.0850 to 0.115	106	70.0 to 130	0.939	20.0
BD16265	Selenium, Total	mg/L	0.0000331	0.00100	0.100	0.0866	0.0897	0.106	0.0850 to 0.115	86.6	70.0 to 130	3.52	20.0
BD16266	Silicon, Dissolved	mg/L	-0.00145	0.0440	1.00	7.54	7.54	0.987	0.850 to 1.15	93.0	70.0 to 130	0.00	20.0
BD16265	Silicon, Total	mg/L	-0.000644	0.0440	1.00	9.83	9.82	0.974	0.850 to 1.15	99.0	70.0 to 130	0.102	20.0
BD16266	Sodium, Dissolved	mg/L	0.00575	0.0880	5.00	176	170	5.09	4.25 to 5.75	120	70.0 to 130	3.47	20.0
BD16265	Sodium, Total	mg/L	0.0102	0.0880	5.00	400	425	4.96	4.25 to 5.75	100	70.0 to 130	6.06	20.0
BD16265	Sulfate	mg/L	0.389	2.0	160	353	351	20.8	18.0 to 22.0	99.4	80.0 to 120	0.568	20.0
BD16266	Thallium, Dissolved	mg/L	0.0000002	0.000147	0.100	0.0957	0.0955	0.0986	0.0850 to 0.115	95.7	70.0 to 130	0.209	20.0
BD16265	Thallium, Total	mg/L	-0.0000938	0.000147	0.100	0.105	0.104	0.113	0.0850 to 0.115	105	70.0 to 130	0.957	20.0
BD16265	Total Organic Carbon	mg/L	0.173	1.00	10.0	13.4	12.8	23.5		96.9	80.0 to 120	4.58	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 9/25/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Alabama Power

Batch QC Summary

Customer Account: WMWGORG
Sample Date: 8/22/23 10:43
Customer ID:
Delivery Date: 8/24/23 08:32

Description: Gorgas Gypsum - MW-13H Dup

Laboratory ID Number: BD16262

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD16263	Alkalinity	mg CaCO3/L					55.1	51.6	45.0 to 55.0			0.546	10.0
BD16265	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.03	0.200	2.00	1.96	0.070	2.16	1.80 to 2.20	98.0	90.0 to 110	0.00	15.0
BD16263	Solids, Dissolved	mg/L	3.00	25.0			2650	53.0	40.0 to 60.0			0.378	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gorgas Gypsum - MW-9H

Location Code: WMWGORG
Collected: 8/22/23 12:15
Customer ID:
Submittal Date: 8/24/23 08:32

Laboratory ID Number: BD16263

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	8/24/23 16:04	8/25/23 15:34		1.015	3.86	mg/L	0.030000	0.1015	
* Calcium, Total	8/24/23 16:04	8/28/23 14:58		10.15	332	mg/L	0.70035	4.06	
* Iron, Total	8/24/23 16:04	8/28/23 14:58		10.15	16.9	mg/L	0.08120	0.406	
* Lithium, Total	8/24/23 16:04	8/25/23 15:34		1.015	0.119	mg/L	0.007105	0.01999956	
* Magnesium, Total	8/24/23 16:04	8/28/23 14:58		10.15	217	mg/L	0.21315	4.06	
* Molybdenum, Total	8/24/23 16:04	8/25/23 15:34		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Total (calc.)	8/24/23 16:04	8/25/23 15:34		1	19.9	mg/L			
* Silicon, Total	8/24/23 16:04	8/25/23 15:34		1.015	9.28	mg/L	0.02030	0.25375	
* Sodium, Total	8/24/23 16:04	8/28/23 14:58		10.15	133	mg/L	0.4060	4.06	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	8/24/23 11:01	8/25/23 13:33		1.015	3.81	mg/L	0.030000	0.1015	
* Calcium, Dissolved	8/24/23 11:01	8/28/23 13:20		10.15	318	mg/L	0.70035	4.06	
* Iron, Dissolved	8/24/23 11:01	8/28/23 13:20		10.15	16.3	mg/L	0.08120	0.406	
* Lithium, Dissolved	8/24/23 11:01	8/25/23 13:33		1.015	0.119	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	8/24/23 11:01	8/28/23 13:20		10.15	213	mg/L	0.21315	4.06	
* Molybdenum, Dissolved	8/24/23 11:01	8/25/23 13:33		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Dissolved (calc.)	8/24/23 11:01	8/25/23 13:33		1	20.0	mg/L			
* Silicon, Dissolved	8/24/23 11:01	8/25/23 13:33		1.015	9.35	mg/L	0.02030	0.25375	
* Sodium, Dissolved	8/24/23 11:01	8/28/23 13:20		10.15	132	mg/L	0.4060	4.06	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	8/24/23 16:04	8/25/23 11:41		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Total	8/24/23 16:04	8/25/23 11:41		1.015	0.150	mg/L	0.009135	0.05075	
* Arsenic, Total	8/24/23 16:04	8/25/23 11:41		1.015	0.000582	mg/L	0.000112	0.000203	
* Barium, Total	8/24/23 16:04	8/25/23 11:41		1.015	0.0132	mg/L	0.000508	0.001015	
* Beryllium, Total	8/24/23 16:04	8/25/23 11:41		1.015	0.000501	mg/L	0.000406	0.001015	J
* Cadmium, Total	8/24/23 16:04	8/25/23 11:41		1.015	0.000248	mg/L	0.000068	0.000203	
* Chromium, Total	8/24/23 16:04	8/25/23 11:41		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	8/24/23 16:04	8/25/23 11:41		1.015	0.141	mg/L	0.000068	0.000203	
* Lead, Total	8/24/23 16:04	8/25/23 11:41		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	8/24/23 16:04	8/25/23 14:06		92.365	17.6	mg/L	0.013855	0.092365	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 9/25/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gorgas Gypsum - MW-9H

Location Code: WMWGORG
Collected: 8/22/23 12:15
Customer ID:
Submittal Date: 8/24/23 08:32

Laboratory ID Number: BD16263

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	8/24/23 16:04	8/25/23 11:41		1.015	7.59	mg/L	0.169505	0.5075	
* Selenium, Total	8/24/23 16:04	8/25/23 11:41		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	8/24/23 16:04	8/25/23 11:41		1.015	0.000109	mg/L	0.000068	0.000203	J
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	8/24/23 11:01	8/24/23 15:56		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	8/24/23 11:01	8/24/23 15:56		1.015	0.148	mg/L	0.009135	0.05075	
* Arsenic, Dissolved	8/24/23 11:01	8/24/23 15:56		1.015	0.000640	mg/L	0.000112	0.000203	
* Barium, Dissolved	8/24/23 11:01	8/24/23 15:56		1.015	0.0125	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	8/24/23 11:01	8/24/23 15:56		1.015	0.000671	mg/L	0.000406	0.001015	J
* Cadmium, Dissolved	8/24/23 11:01	8/24/23 15:56		1.015	0.000269	mg/L	0.000068	0.000203	
* Chromium, Dissolved	8/24/23 11:01	8/24/23 15:56		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	8/24/23 11:01	8/24/23 15:56		1.015	0.130	mg/L	0.000068	0.000203	
* Lead, Dissolved	8/24/23 11:01	8/24/23 15:56		1.015	0.0000745	mg/L	0.000068	0.000203	J
* Manganese, Dissolved	8/24/23 11:01	8/24/23 20:11		92.365	18.1	mg/L	0.013855	0.092365	
* Potassium, Dissolved	8/24/23 11:01	8/24/23 15:56		1.015	7.17	mg/L	0.169505	0.5075	
* Selenium, Dissolved	8/24/23 11:01	8/24/23 15:56		1.015	0.000591	mg/L	0.000508	0.001015	J
* Thallium, Dissolved	8/24/23 11:01	8/24/23 15:56		1.015	0.000173	mg/L	0.000068	0.000203	J
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	8/25/23 11:54	8/25/23 17:12		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: CES***								
* Nitrogen, Nitrate/Nitrite	8/24/23 12:55	8/24/23 12:55		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: DHC***								
* Alkalinity	8/30/23 09:34	8/30/23 13:21		1	54.8	mg CaCO3/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	8/24/23 11:00	8/30/23 12:15		1	2640	mg/L		147.1	
Analytical Method: SM 4500CO2 D	***Analyst: DHC***								
* Bicarbonate Alkalinity, (calc.)	8/30/23 09:34	8/30/23 13:21		1	54.8	mg CaCO3/L		1	A
* Carbonate Alkalinity, (calc.)	8/30/23 09:34	8/30/23 13:21		1	Not Detected	mg CaCO3/L		0.5	A
Analytical Method: SM 4500H+ B	***Analyst: DHC***								
Alkalinity pH Endpoint	8/30/23 09:34	8/30/23 13:21		1	4.40	SU		2	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 9/25/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gorgas Gypsum - MW-9H

Location Code: WMWGORG
Collected: 8/22/23 12:15
Customer ID:
Submittal Date: 8/24/23 08:32

Laboratory ID Number: BD16263

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	8/25/23 19:28	8/25/23 19:28		1	Not Detected	mg/L	1.00	2	U
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	8/29/23 11:16	8/29/23 11:16		2	36.2	mg/L	1.00	2	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	8/29/23 15:00	8/29/23 15:00		1	0.152	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	8/24/23 13:07	8/24/23 13:07		80	1620	mg/L	48.0	160	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	8/22/23 12:10	8/22/23 12:10			2522.78	uS/cm			FA
pH	8/22/23 12:10	8/22/23 12:10			5.31	SU			FA
Temperature	8/22/23 12:10	8/22/23 12:10			22.27	C			FA
Turbidity	8/22/23 12:10	8/22/23 12:10			1.9	NTU			FA
Sulfide	8/22/23 12:10	8/22/23 12:10			0	mg/L			FA

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 9/25/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGORG
Sample Date: 8/22/23 12:15
Customer ID:
Delivery Date: 8/24/23 08:32

Description: Gorgas Gypsum - MW-9H

Laboratory ID Number: BD16263

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD16266	Aluminum, Dissolved	mg/L	-0.000172	0.0198	0.100	0.106	0.106	0.107	0.0850 to 0.115	106	70.0 to 130	0.00	20.0
BD16265	Aluminum, Total	mg/L	0.000416	0.0198	0.100	0.115	0.111	0.104	0.0850 to 0.115	104	70.0 to 130	3.54	20.0
BD16266	Antimony, Dissolved	mg/L	0.000328	0.00100	0.100	0.0955	0.0936	0.0926	0.0850 to 0.115	95.5	70.0 to 130	2.01	20.0
BD16265	Antimony, Total	mg/L	0.000302	0.00100	0.100	0.101	0.104	0.0928	0.0850 to 0.115	101	70.0 to 130	2.93	20.0
BD16266	Arsenic, Dissolved	mg/L	0.0000027	0.000200	0.100	0.105	0.107	0.101	0.0850 to 0.115	105	70.0 to 130	1.89	20.0
BD16265	Arsenic, Total	mg/L	0.0000072	0.000200	0.100	0.103	0.107	0.102	0.0850 to 0.115	101	70.0 to 130	3.81	20.0
BD16266	Barium, Dissolved	mg/L	0.0000131	0.00100	0.100	0.123	0.121	0.0970	0.0850 to 0.115	100	70.0 to 130	1.64	20.0
BD16265	Barium, Total	mg/L	0.0000115	0.00100	0.100	0.197	0.201	0.0993	0.0850 to 0.115	95.0	70.0 to 130	2.01	20.0
BD16266	Beryllium, Dissolved	mg/L	0.0000369	0.000880	0.100	0.0916	0.0930	0.104	0.0850 to 0.115	91.6	70.0 to 130	1.52	20.0
BD16265	Beryllium, Total	mg/L	0.000	0.000880	0.100	0.104	0.105	0.100	0.0850 to 0.115	104	70.0 to 130	0.957	20.0
BD16266	Boron, Dissolved	mg/L	-0.000395	0.0650	1.00	3.23	3.23	0.988	0.850 to 1.15	100	70.0 to 130	0.00	20.0
BD16265	Boron, Total	mg/L	-0.000149	0.0650	1.00	1.15	1.15	0.974	0.850 to 1.15	99.3	70.0 to 130	0.00	20.0
BD16266	Cadmium, Dissolved	mg/L	-0.0000002	0.000147	0.100	0.0979	0.0988	0.0992	0.0850 to 0.115	97.9	70.0 to 130	0.915	20.0
BD16265	Cadmium, Total	mg/L	0.0000049	0.000147	0.100	0.102	0.0993	0.101	0.0850 to 0.115	102	70.0 to 130	2.68	20.0
BD16266	Calcium, Dissolved	mg/L	-0.00836	0.152	5.00	464	446	4.84	4.25 to 5.75	320	70.0 to 130	3.96	20.0
BD16265	Calcium, Total	mg/L	-0.0149	0.152	5.00	35.6	35.9	4.72	4.25 to 5.75	82.0	70.0 to 130	0.839	20.0
BD16265	Chloride	mg/L	-0.0434	1.00	30.0	52.6	53.0	10.5	9.00 to 11.0	99.3	80.0 to 120	0.758	20.0
BD16266	Chromium, Dissolved	mg/L	0.0000133	0.000440	0.100	0.0971	0.0990	0.101	0.0850 to 0.115	97.1	70.0 to 130	1.94	20.0
BD16265	Chromium, Total	mg/L	-0.0000482	0.000440	0.100	0.100	0.0986	0.103	0.0850 to 0.115	100	70.0 to 130	1.41	20.0
BD16266	Cobalt, Dissolved	mg/L	0.0000012	0.000147	0.100	0.0956	0.0965	0.0999	0.0850 to 0.115	95.6	70.0 to 130	0.937	20.0
BD16265	Cobalt, Total	mg/L	-0.0000511	0.000147	0.100	0.102	0.0999	0.105	0.0850 to 0.115	102	70.0 to 130	2.08	20.0
BD16265	Fluoride	mg/L	0.00652	0.125	2.50	2.83	2.88	2.62	2.25 to 2.75	104	80.0 to 120	1.75	20.0
BD16266	Iron, Dissolved	mg/L	0.0118	0.0176	0.2	37.0	37.8	0.199	0.170 to 0.230	-200	70.0 to 130	2.14	20.0
BD16265	Iron, Total	mg/L	0.00252	0.0176	0.2	0.275	0.271	0.198	0.170 to 0.230	97.8	70.0 to 130	1.47	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 9/25/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGORG
Sample Date: 8/22/23 12:15
Customer ID:
Delivery Date: 8/24/23 08:32

Description: Gorgas Gypsum - MW-9H

Laboratory ID Number: BD16263

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD16266	Lead, Dissolved	mg/L	0.0000062	0.000147	0.100	0.0988	0.0990	0.102	0.0850 to 0.115	98.8	70.0 to 130	0.202	20.0
BD16265	Lead, Total	mg/L	0.0000013	0.000147	0.100	0.104	0.104	0.108	0.0850 to 0.115	104	70.0 to 130	0.00	20.0
BD16266	Lithium, Dissolved	mg/L	-0.000045	0.0154	0.200	0.381	0.377	0.196	0.170 to 0.230	102	70.0 to 130	1.06	20.0
BD16265	Lithium, Total	mg/L	0.000397	0.0154	0.200	0.439	0.440	0.194	0.170 to 0.230	102	70.0 to 130	0.228	20.0
BD16266	Magnesium, Dissolved	mg/L	0.0115	0.0462	5.00	277	268	4.98	4.25 to 5.75	160	70.0 to 130	3.30	20.0
BD16265	Magnesium, Total	mg/L	0.0147	0.0462	5.00	18.6	18.6	4.89	4.25 to 5.75	94.0	70.0 to 130	0.00	20.0
BD16266	Manganese, Dissolved	mg/L	0.0000265	0.00033	0.100	13.9	13.6	0.102	0.0850 to 0.115	100	70.0 to 130	2.18	20.0
BD16265	Manganese, Total	mg/L	0.0000137	0.00033	0.100	0.242	0.238	0.103	0.0850 to 0.115	101	70.0 to 130	1.67	20.0
BD16265	Mercury, Total by CVAA	mg/L	4.000E-05	0.000500	0.004	0.00395	0.00399	0.00393	0.00340 to 0.00460	98.8	70.0 to 130	1.01	20.0
BD16266	Molybdenum, Dissolved	mg/L	0.00029	0.0100	0.2	0.197	0.197	0.198	0.170 to 0.230	98.5	70.0 to 130	0.00	20.0
BD16265	Molybdenum, Total	mg/L	0.000	0.0100	0.2	0.199	0.199	0.199	0.170 to 0.230	99.5	70.0 to 130	0.00	20.0
BD16266	Potassium, Dissolved	mg/L	-0.0105	0.367	10.0	17.6	17.8	10.2	8.50 to 11.5	97.2	70.0 to 130	1.13	20.0
BD16265	Potassium, Total	mg/L	-0.00850	0.367	10.0	13.5	13.2	10.6	8.50 to 11.5	100	70.0 to 130	2.25	20.0
BD16266	Selenium, Dissolved	mg/L	0.0000176	0.00100	0.100	0.106	0.107	0.104	0.0850 to 0.115	106	70.0 to 130	0.939	20.0
BD16265	Selenium, Total	mg/L	0.0000331	0.00100	0.100	0.0866	0.0897	0.106	0.0850 to 0.115	86.6	70.0 to 130	3.52	20.0
BD16266	Silicon, Dissolved	mg/L	-0.00145	0.0440	1.00	7.54	7.54	0.987	0.850 to 1.15	93.0	70.0 to 130	0.00	20.0
BD16265	Silicon, Total	mg/L	-0.000644	0.0440	1.00	9.83	9.82	0.974	0.850 to 1.15	99.0	70.0 to 130	0.102	20.0
BD16266	Sodium, Dissolved	mg/L	0.00575	0.0880	5.00	176	170	5.09	4.25 to 5.75	120	70.0 to 130	3.47	20.0
BD16265	Sodium, Total	mg/L	0.0102	0.0880	5.00	400	425	4.96	4.25 to 5.75	100	70.0 to 130	6.06	20.0
BD16265	Sulfate	mg/L	0.389	2.0	160	353	351	20.8	18.0 to 22.0	99.4	80.0 to 120	0.568	20.0
BD16266	Thallium, Dissolved	mg/L	0.0000002	0.000147	0.100	0.0957	0.0955	0.0986	0.0850 to 0.115	95.7	70.0 to 130	0.209	20.0
BD16265	Thallium, Total	mg/L	-0.0000938	0.000147	0.100	0.105	0.104	0.113	0.0850 to 0.115	105	70.0 to 130	0.957	20.0
BD16265	Total Organic Carbon	mg/L	0.173	1.00	10.0	13.4	12.8	23.5		96.9	80.0 to 120	4.58	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 9/25/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Alabama Power

Batch QC Summary

Customer Account: WMWGORG
Sample Date: 8/22/23 12:15
Customer ID:
Delivery Date: 8/24/23 08:32

Description: Gorgas Gypsum - MW-9H

Laboratory ID Number: BD16263

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD16263	Alkalinity	mg CaCO3/L					55.1	51.6	45.0 to 55.0			0.546	10.0
BD16265	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.03	0.200	2.00	1.96	0.070	2.16	1.80 to 2.20	98.0	90.0 to 110	0.00	15.0
BD16263	Solids, Dissolved	mg/L	3.00	25.0			2650	53.0	40.0 to 60.0			0.378	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 9/25/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gorgas Gypsum - MW-9V

Location Code: WMWGORG
Collected: 8/22/23 14:00
Customer ID:
Submittal Date: 8/24/23 08:32

Laboratory ID Number: BD16264

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***					***Preparation Method: EPA 1638***			
* Boron, Total	8/24/23 16:04	8/25/23 15:37		1.015	0.114	mg/L	0.030000	0.1015	
* Calcium, Total	8/24/23 16:04	9/1/23 13:19		101.5	370	mg/L	7.0035	40.6	
* Iron, Total	8/24/23 16:04	8/25/23 15:37		1.015	1.41	mg/L	0.008120	0.0406	
* Lithium, Total	8/24/23 16:04	8/25/23 15:37		1.015	0.318	mg/L	0.007105	0.01999956	
* Magnesium, Total	8/24/23 16:04	8/28/23 15:01		10.15	184	mg/L	0.21315	4.06	
* Molybdenum, Total	8/24/23 16:04	8/25/23 15:37		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Total (calc.)	8/24/23 16:04	8/25/23 15:37		1	27.6	mg/L			
* Silicon, Total	8/24/23 16:04	8/25/23 15:37		1.015	12.9	mg/L	0.02030	0.25375	
* Sodium, Total	8/24/23 16:04	8/28/23 15:01		10.15	331	mg/L	0.4060	4.06	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	8/24/23 11:01	8/25/23 13:36		1.015	0.125	mg/L	0.030000	0.1015	
* Calcium, Dissolved	8/24/23 11:01	9/1/23 13:06		101.5	402	mg/L	7.0035	40.6	
* Iron, Dissolved	8/24/23 11:01	8/25/23 13:36		1.015	1.52	mg/L	0.008120	0.0406	
* Lithium, Dissolved	8/24/23 11:01	8/25/23 13:36		1.015	0.304	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	8/24/23 11:01	8/28/23 13:23		10.15	165	mg/L	0.21315	4.06	
* Molybdenum, Dissolved	8/24/23 11:01	8/25/23 13:36		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Dissolved (calc.)	8/24/23 11:01	8/25/23 13:36		1	25.9	mg/L			
* Silicon, Dissolved	8/24/23 11:01	8/25/23 13:36		1.015	12.1	mg/L	0.02030	0.25375	
* Sodium, Dissolved	8/24/23 11:01	8/28/23 13:23		10.15	306	mg/L	0.4060	4.06	
Analytical Method: EPA 200.8	***Analyst: DLJ***					***Preparation Method: EPA 1638***			
* Antimony, Total	8/24/23 16:04	8/25/23 11:44		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Arsenic, Total	8/24/23 16:04	8/25/23 11:44		1.015	0.00172	mg/L	0.000112	0.000203	
* Aluminum, Total	8/24/23 16:04	8/25/23 11:44		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Barium, Total	8/24/23 16:04	8/25/23 11:44		1.015	0.0137	mg/L	0.000508	0.001015	
* Beryllium, Total	8/24/23 16:04	8/25/23 11:44		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	8/24/23 16:04	8/25/23 11:44		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	8/24/23 16:04	8/25/23 11:44		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	8/24/23 16:04	8/25/23 11:44		1.015	0.000525	mg/L	0.000068	0.000203	
* Lead, Total	8/24/23 16:04	8/25/23 11:44		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	8/24/23 16:04	8/25/23 11:44		1.015	1.24	mg/L	0.000152	0.001015	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 9/25/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gorgas Gypsum - MW-9V

Location Code: WMWGORG
Collected: 8/22/23 14:00
Customer ID:
Submittal Date: 8/24/23 08:32

Laboratory ID Number: BD16264

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	8/24/23 16:04	8/25/23 11:44		1.015	7.78	mg/L	0.169505	0.5075	
* Selenium, Total	8/24/23 16:04	8/25/23 11:44		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	8/24/23 16:04	8/25/23 11:44		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	8/24/23 11:01	8/24/23 16:00		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	8/24/23 11:01	8/24/23 16:00		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Dissolved	8/24/23 11:01	8/24/23 16:00		1.015	0.00183	mg/L	0.000112	0.000203	
* Barium, Dissolved	8/24/23 11:01	8/24/23 16:00		1.015	0.0154	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	8/24/23 11:01	8/24/23 16:00		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	8/24/23 11:01	8/24/23 16:00		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	8/24/23 11:01	8/24/23 16:00		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	8/24/23 11:01	8/24/23 16:00		1.015	0.000950	mg/L	0.000068	0.000203	
* Lead, Dissolved	8/24/23 11:01	8/24/23 16:00		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	8/24/23 11:01	8/24/23 16:00		1.015	1.07	mg/L	0.000152	0.001015	
* Potassium, Dissolved	8/24/23 11:01	8/24/23 16:00		1.015	7.59	mg/L	0.169505	0.5075	
* Selenium, Dissolved	8/24/23 11:01	8/24/23 16:00		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	8/24/23 11:01	8/24/23 16:00		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	8/25/23 11:54	8/25/23 17:16		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: CES***								
* Nitrogen, Nitrate/Nitrite	8/24/23 12:57	8/24/23 12:57		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: DHC***								
* Alkalinity	8/30/23 09:34	8/30/23 13:21		1	328	mg CaCO3/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	8/24/23 11:20	8/30/23 12:45		1	3010	mg/L		178.6	
Analytical Method: SM 4500CO2 D	***Analyst: DHC***								
* Bicarbonate Alkalinity, (calc.)	8/30/23 09:34	8/30/23 13:21		1	327	mg CaCO3/L		1	A
* Carbonate Alkalinity, (calc.)	8/30/23 09:34	8/30/23 13:21		1	0.523	mg CaCO3/L		0.5	A
Analytical Method: SM 4500H+ B	***Analyst: DHC***								
Alkalinity pH Endpoint	8/30/23 09:34	8/30/23 13:21		1	4.53	SU		2	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 9/25/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gorgas Gypsum - MW-9V

Location Code: WMWGORG
Collected: 8/22/23 14:00
Customer ID:
Submittal Date: 8/24/23 08:32

Laboratory ID Number: BD16264

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	8/25/23 19:43	8/25/23 19:43		1	Not Detected	mg/L	1.00	2	U
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	8/29/23 11:17	8/29/23 11:17		3	52.9	mg/L	1.50	3	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	8/29/23 15:01	8/29/23 15:01		1	0.113	mg/L	0.06	0.125	J
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	8/24/23 13:08	8/24/23 13:08		80	1830	mg/L	48.0	160	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	8/22/23 13:56	8/22/23 13:56			3178.78	uS/cm			FA
pH	8/22/23 13:56	8/22/23 13:56			6.81	SU			FA
Temperature	8/22/23 13:56	8/22/23 13:56			24.99	C			FA
Turbidity	8/22/23 13:56	8/22/23 13:56			0.8	NTU			FA
Sulfide	8/22/23 13:56	8/22/23 13:56			0	mg/L			FA

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 9/25/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGORG
Sample Date: 8/22/23 14:00
Customer ID:
Delivery Date: 8/24/23 08:32

Description: Gorgas Gypsum - MW-9V

Laboratory ID Number: BD16264

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD16266	Aluminum, Dissolved	mg/L	-0.000172	0.0198	0.100	0.106	0.106	0.107	0.0850 to 0.115	106	70.0 to 130	0.00	20.0
BD16265	Aluminum, Total	mg/L	0.000416	0.0198	0.100	0.115	0.111	0.104	0.0850 to 0.115	104	70.0 to 130	3.54	20.0
BD16266	Antimony, Dissolved	mg/L	0.000328	0.00100	0.100	0.0955	0.0936	0.0926	0.0850 to 0.115	95.5	70.0 to 130	2.01	20.0
BD16265	Antimony, Total	mg/L	0.000302	0.00100	0.100	0.101	0.104	0.0928	0.0850 to 0.115	101	70.0 to 130	2.93	20.0
BD16266	Arsenic, Dissolved	mg/L	0.0000027	0.000200	0.100	0.105	0.107	0.101	0.0850 to 0.115	105	70.0 to 130	1.89	20.0
BD16265	Arsenic, Total	mg/L	0.0000072	0.000200	0.100	0.103	0.107	0.102	0.0850 to 0.115	101	70.0 to 130	3.81	20.0
BD16266	Barium, Dissolved	mg/L	0.0000131	0.00100	0.100	0.123	0.121	0.0970	0.0850 to 0.115	100	70.0 to 130	1.64	20.0
BD16265	Barium, Total	mg/L	0.0000115	0.00100	0.100	0.197	0.201	0.0993	0.0850 to 0.115	95.0	70.0 to 130	2.01	20.0
BD16266	Beryllium, Dissolved	mg/L	0.0000369	0.000880	0.100	0.0916	0.0930	0.104	0.0850 to 0.115	91.6	70.0 to 130	1.52	20.0
BD16265	Beryllium, Total	mg/L	0.000	0.000880	0.100	0.104	0.105	0.100	0.0850 to 0.115	104	70.0 to 130	0.957	20.0
BD16266	Boron, Dissolved	mg/L	-0.000395	0.0650	1.00	3.23	3.23	0.988	0.850 to 1.15	100	70.0 to 130	0.00	20.0
BD16265	Boron, Total	mg/L	-0.000149	0.0650	1.00	1.15	1.15	0.974	0.850 to 1.15	99.3	70.0 to 130	0.00	20.0
BD16266	Cadmium, Dissolved	mg/L	-0.0000002	0.000147	0.100	0.0979	0.0988	0.0992	0.0850 to 0.115	97.9	70.0 to 130	0.915	20.0
BD16265	Cadmium, Total	mg/L	0.0000049	0.000147	0.100	0.102	0.0993	0.101	0.0850 to 0.115	102	70.0 to 130	2.68	20.0
BD16266	Calcium, Dissolved	mg/L	-0.00836	0.152	5.00	464	446	4.84	4.25 to 5.75	320	70.0 to 130	3.96	20.0
BD16265	Calcium, Total	mg/L	-0.0149	0.152	5.00	35.6	35.9	4.72	4.25 to 5.75	82.0	70.0 to 130	0.839	20.0
BD16265	Chloride	mg/L	-0.0434	1.00	30.0	52.6	53.0	10.5	9.00 to 11.0	99.3	80.0 to 120	0.758	20.0
BD16266	Chromium, Dissolved	mg/L	0.0000133	0.000440	0.100	0.0971	0.0990	0.101	0.0850 to 0.115	97.1	70.0 to 130	1.94	20.0
BD16265	Chromium, Total	mg/L	-0.0000482	0.000440	0.100	0.100	0.0986	0.103	0.0850 to 0.115	100	70.0 to 130	1.41	20.0
BD16266	Cobalt, Dissolved	mg/L	0.0000012	0.000147	0.100	0.0956	0.0965	0.0999	0.0850 to 0.115	95.6	70.0 to 130	0.937	20.0
BD16265	Cobalt, Total	mg/L	-0.0000511	0.000147	0.100	0.102	0.0999	0.105	0.0850 to 0.115	102	70.0 to 130	2.08	20.0
BD16265	Fluoride	mg/L	0.00652	0.125	2.50	2.83	2.88	2.62	2.25 to 2.75	104	80.0 to 120	1.75	20.0
BD16266	Iron, Dissolved	mg/L	0.0118	0.0176	0.2	37.0	37.8	0.199	0.170 to 0.230	-200	70.0 to 130	2.14	20.0
BD16265	Iron, Total	mg/L	0.00252	0.0176	0.2	0.275	0.271	0.198	0.170 to 0.230	97.8	70.0 to 130	1.47	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 9/25/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGORG
Sample Date: 8/22/23 14:00
Customer ID:
Delivery Date: 8/24/23 08:32

Description: Gorgas Gypsum - MW-9V

Laboratory ID Number: BD16264

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD16266	Lead, Dissolved	mg/L	0.0000062	0.000147	0.100	0.0988	0.0990	0.102	0.0850 to 0.115	98.8	70.0 to 130	0.202	20.0
BD16265	Lead, Total	mg/L	0.0000013	0.000147	0.100	0.104	0.104	0.108	0.0850 to 0.115	104	70.0 to 130	0.00	20.0
BD16266	Lithium, Dissolved	mg/L	-0.000045	0.0154	0.200	0.381	0.377	0.196	0.170 to 0.230	102	70.0 to 130	1.06	20.0
BD16265	Lithium, Total	mg/L	0.000397	0.0154	0.200	0.439	0.440	0.194	0.170 to 0.230	102	70.0 to 130	0.228	20.0
BD16266	Magnesium, Dissolved	mg/L	0.0115	0.0462	5.00	277	268	4.98	4.25 to 5.75	160	70.0 to 130	3.30	20.0
BD16265	Magnesium, Total	mg/L	0.0147	0.0462	5.00	18.6	18.6	4.89	4.25 to 5.75	94.0	70.0 to 130	0.00	20.0
BD16266	Manganese, Dissolved	mg/L	0.0000265	0.00033	0.100	13.9	13.6	0.102	0.0850 to 0.115	100	70.0 to 130	2.18	20.0
BD16265	Manganese, Total	mg/L	0.0000137	0.00033	0.100	0.242	0.238	0.103	0.0850 to 0.115	101	70.0 to 130	1.67	20.0
BD16265	Mercury, Total by CVAA	mg/L	4.000E-05	0.000500	0.004	0.00395	0.00399	0.00393	0.00340 to 0.00460	98.8	70.0 to 130	1.01	20.0
BD16266	Molybdenum, Dissolved	mg/L	0.00029	0.0100	0.2	0.197	0.197	0.198	0.170 to 0.230	98.5	70.0 to 130	0.00	20.0
BD16265	Molybdenum, Total	mg/L	0.000	0.0100	0.2	0.199	0.199	0.199	0.170 to 0.230	99.5	70.0 to 130	0.00	20.0
BD16266	Potassium, Dissolved	mg/L	-0.0105	0.367	10.0	17.6	17.8	10.2	8.50 to 11.5	97.2	70.0 to 130	1.13	20.0
BD16265	Potassium, Total	mg/L	-0.00850	0.367	10.0	13.5	13.2	10.6	8.50 to 11.5	100	70.0 to 130	2.25	20.0
BD16266	Selenium, Dissolved	mg/L	0.0000176	0.00100	0.100	0.106	0.107	0.104	0.0850 to 0.115	106	70.0 to 130	0.939	20.0
BD16265	Selenium, Total	mg/L	0.0000331	0.00100	0.100	0.0866	0.0897	0.106	0.0850 to 0.115	86.6	70.0 to 130	3.52	20.0
BD16266	Silicon, Dissolved	mg/L	-0.00145	0.0440	1.00	7.54	7.54	0.987	0.850 to 1.15	93.0	70.0 to 130	0.00	20.0
BD16265	Silicon, Total	mg/L	-0.000644	0.0440	1.00	9.83	9.82	0.974	0.850 to 1.15	99.0	70.0 to 130	0.102	20.0
BD16266	Sodium, Dissolved	mg/L	0.00575	0.0880	5.00	176	170	5.09	4.25 to 5.75	120	70.0 to 130	3.47	20.0
BD16265	Sodium, Total	mg/L	0.0102	0.0880	5.00	400	425	4.96	4.25 to 5.75	100	70.0 to 130	6.06	20.0
BD16265	Sulfate	mg/L	0.389	2.0	160	353	351	20.8	18.0 to 22.0	99.4	80.0 to 120	0.568	20.0
BD16266	Thallium, Dissolved	mg/L	0.0000002	0.000147	0.100	0.0957	0.0955	0.0986	0.0850 to 0.115	95.7	70.0 to 130	0.209	20.0
BD16265	Thallium, Total	mg/L	-0.0000938	0.000147	0.100	0.105	0.104	0.113	0.0850 to 0.115	105	70.0 to 130	0.957	20.0
BD16265	Total Organic Carbon	mg/L	0.173	1.00	10.0	13.4	12.8	23.5		96.9	80.0 to 120	4.58	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 9/25/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Alabama Power

Batch QC Summary

Customer Account: WMWGORG
Sample Date: 8/22/23 14:00
Customer ID:
Delivery Date: 8/24/23 08:32

Description: Gorgas Gypsum - MW-9V

Laboratory ID Number: BD16264

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD16263	Alkalinity	mg CaCO3/L					55.1	51.6	45.0 to 55.0			0.546	10.0
BD16265	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.03	0.200	2.00	1.96	0.070	2.16	1.80 to 2.20	98.0	90.0 to 110	0.00	15.0
BD16268	Solids, Dissolved	mg/L	2.00	25.0			3990	59.0	40.0 to 60.0			7.54	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 9/25/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gorgas Gypsum - MW-8V

Location Code: WMWGORG
Collected: 8/23/23 10:22
Customer ID:
Submittal Date: 8/24/23 08:32

Laboratory ID Number: BD16265

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	8/24/23 16:04	8/25/23 15:40		1.015	0.157	mg/L	0.030000	0.1015	
* Calcium, Total	8/24/23 16:04	8/25/23 15:40		1.015	31.5	mg/L	0.070035	0.406	
* Iron, Total	8/24/23 16:04	8/25/23 15:40		1.015	0.0793	mg/L	0.008120	0.0406	
* Lithium, Total	8/24/23 16:04	8/25/23 15:40		1.015	0.235	mg/L	0.007105	0.01999956	
* Magnesium, Total	8/24/23 16:04	8/25/23 15:40		1.015	13.9	mg/L	0.021315	0.406	
* Molybdenum, Total	8/24/23 16:04	8/25/23 15:40		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Total (calc.)	8/24/23 16:04	8/25/23 15:40		1	18.9	mg/L			
* Silicon, Total	8/24/23 16:04	8/25/23 15:40		1.015	8.84	mg/L	0.02030	0.25375	
* Sodium, Total	8/24/23 16:04	8/28/23 15:04		10.15	395	mg/L	0.4060	4.06	RA
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	8/24/23 11:01	8/25/23 13:39		1.015	0.145	mg/L	0.030000	0.1015	
* Calcium, Dissolved	8/24/23 11:01	8/25/23 13:39		1.015	30.6	mg/L	0.070035	0.406	
* Iron, Dissolved	8/24/23 11:01	8/25/23 13:39		1.015	0.0409	mg/L	0.008120	0.0406	
* Lithium, Dissolved	8/24/23 11:01	8/25/23 13:39		1.015	0.235	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	8/24/23 11:01	8/25/23 13:39		1.015	14.2	mg/L	0.021315	0.406	
* Molybdenum, Dissolved	8/24/23 11:01	8/25/23 13:39		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Dissolved (calc.)	8/24/23 11:01	8/25/23 13:39		1	18.2	mg/L			
* Silicon, Dissolved	8/24/23 11:01	8/25/23 13:39		1.015	8.49	mg/L	0.02030	0.25375	
* Sodium, Dissolved	8/24/23 11:01	8/28/23 13:26		10.15	378	mg/L	0.4060	4.06	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	8/24/23 16:04	8/25/23 11:48		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Total	8/24/23 16:04	8/25/23 11:48		1.015	0.0110	mg/L	0.009135	0.05075	J
* Arsenic, Total	8/24/23 16:04	8/25/23 11:48		1.015	0.00242	mg/L	0.000112	0.000203	
* Barium, Total	8/24/23 16:04	8/25/23 11:48		1.015	0.102	mg/L	0.000508	0.001015	
* Beryllium, Total	8/24/23 16:04	8/25/23 11:48		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	8/24/23 16:04	8/25/23 11:48		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	8/24/23 16:04	8/25/23 11:48		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	8/24/23 16:04	8/25/23 11:48		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	8/24/23 16:04	8/25/23 11:48		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	8/24/23 16:04	8/25/23 11:48		1.015	0.141	mg/L	0.000152	0.001015	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 9/25/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gorgas Gypsum - MW-8V

Location Code: WMWGORG
Collected: 8/23/23 10:22
Customer ID:
Submittal Date: 8/24/23 08:32

Laboratory ID Number: BD16265

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	8/24/23 16:04	8/25/23 11:48		1.015	3.49	mg/L	0.169505	0.5075	
* Selenium, Total	8/24/23 16:04	8/25/23 11:48		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	8/24/23 16:04	8/25/23 11:48		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	8/24/23 11:01	8/24/23 16:03		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	8/24/23 11:01	8/24/23 16:03		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Dissolved	8/24/23 11:01	8/24/23 16:03		1.015	0.00142	mg/L	0.000112	0.000203	
* Barium, Dissolved	8/24/23 11:01	8/24/23 16:03		1.015	0.0901	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	8/24/23 11:01	8/24/23 16:03		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	8/24/23 11:01	8/24/23 16:03		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	8/24/23 11:01	8/24/23 16:03		1.015	0.000204	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	8/24/23 11:01	8/24/23 16:03		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Dissolved	8/24/23 11:01	8/24/23 16:03		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	8/24/23 11:01	8/24/23 16:03		1.015	0.143	mg/L	0.000152	0.001015	
* Potassium, Dissolved	8/24/23 11:01	8/24/23 16:03		1.015	3.24	mg/L	0.169505	0.5075	
* Selenium, Dissolved	8/24/23 11:01	8/24/23 16:03		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	8/24/23 11:01	8/24/23 16:03		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	8/25/23 11:54	8/25/23 17:20		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: CES***								
* Nitrogen, Nitrate/Nitrite	8/24/23 12:59	8/24/23 12:59		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: DHC***								
* Alkalinity	8/30/23 09:34	8/30/23 13:21		1	755	mg CaCO3/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	8/24/23 11:20	8/30/23 12:45		1	1150	mg/L		100	
Analytical Method: SM 4500CO2 D	***Analyst: DHC***								
* Bicarbonate Alkalinity, (calc.)	8/30/23 09:34	8/30/23 13:21		1	751	mg CaCO3/L		1	A
* Carbonate Alkalinity, (calc.)	8/30/23 09:34	8/30/23 13:21		1	3.71	mg CaCO3/L		0.5	A
Analytical Method: SM 4500H+ B	***Analyst: DHC***								
Alkalinity pH Endpoint	8/30/23 09:34	8/30/23 13:21		1	4.42	SU		2	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 9/25/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gorgas Gypsum - MW-8V

Location Code: WMWGORG
Collected: 8/23/23 10:22
Customer ID:
Submittal Date: 8/24/23 08:32

Laboratory ID Number: BD16265

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 5310 B		***Analyst: SC***							
* Total Organic Carbon	8/25/23 19:57	8/25/23 19:57		1	3.71	mg/L	1.00	2	
Analytical Method: SM4500Cl E		***Analyst: JCC***							
* Chloride	8/29/23 11:09	8/29/23 11:09		3	22.8	mg/L	1.50	3	
Analytical Method: SM4500F G 2017		***Analyst: JCC***							
* Fluoride	8/29/23 15:02	8/29/23 15:02		1	0.238	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011		***Analyst: JCC***							
* Sulfate	8/24/23 13:09	8/24/23 13:09		8	194	mg/L	4.8	16	
Analytical Method: Field Measurements		***Analyst: TJD***							
Conductivity	8/23/23 10:19	8/23/23 10:19			1661.54	uS/cm			FA
pH	8/23/23 10:19	8/23/23 10:19			7.37	SU			FA
Temperature	8/23/23 10:19	8/23/23 10:19			23.97	C			FA
Turbidity	8/23/23 10:19	8/23/23 10:19			0.89	NTU			FA
Sulfide	8/23/23 10:19	8/23/23 10:19			10	mg/L			FA

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 9/25/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGORG
Sample Date: 8/23/23 10:22
Customer ID:
Delivery Date: 8/24/23 08:32

Description: Gorgas Gypsum - MW-8V

Laboratory ID Number: BD16265

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD16266	Aluminum, Dissolved	mg/L	-0.000172	0.0198	0.100	0.106	0.106	0.107	0.0850 to 0.115	106	70.0 to 130	0.00	20.0
BD16265	Aluminum, Total	mg/L	0.000416	0.0198	0.100	0.115	0.111	0.104	0.0850 to 0.115	104	70.0 to 130	3.54	20.0
BD16266	Antimony, Dissolved	mg/L	0.000328	0.00100	0.100	0.0955	0.0936	0.0926	0.0850 to 0.115	95.5	70.0 to 130	2.01	20.0
BD16265	Antimony, Total	mg/L	0.000302	0.00100	0.100	0.101	0.104	0.0928	0.0850 to 0.115	101	70.0 to 130	2.93	20.0
BD16266	Arsenic, Dissolved	mg/L	0.0000027	0.000200	0.100	0.105	0.107	0.101	0.0850 to 0.115	105	70.0 to 130	1.89	20.0
BD16265	Arsenic, Total	mg/L	0.0000072	0.000200	0.100	0.103	0.107	0.102	0.0850 to 0.115	101	70.0 to 130	3.81	20.0
BD16266	Barium, Dissolved	mg/L	0.0000131	0.00100	0.100	0.123	0.121	0.0970	0.0850 to 0.115	100	70.0 to 130	1.64	20.0
BD16265	Barium, Total	mg/L	0.0000115	0.00100	0.100	0.197	0.201	0.0993	0.0850 to 0.115	95.0	70.0 to 130	2.01	20.0
BD16266	Beryllium, Dissolved	mg/L	0.0000369	0.000880	0.100	0.0916	0.0930	0.104	0.0850 to 0.115	91.6	70.0 to 130	1.52	20.0
BD16265	Beryllium, Total	mg/L	0.000	0.000880	0.100	0.104	0.105	0.100	0.0850 to 0.115	104	70.0 to 130	0.957	20.0
BD16266	Boron, Dissolved	mg/L	-0.000395	0.0650	1.00	3.23	3.23	0.988	0.850 to 1.15	100	70.0 to 130	0.00	20.0
BD16265	Boron, Total	mg/L	-0.000149	0.0650	1.00	1.15	1.15	0.974	0.850 to 1.15	99.3	70.0 to 130	0.00	20.0
BD16266	Cadmium, Dissolved	mg/L	-0.0000002	0.000147	0.100	0.0979	0.0988	0.0992	0.0850 to 0.115	97.9	70.0 to 130	0.915	20.0
BD16265	Cadmium, Total	mg/L	0.0000049	0.000147	0.100	0.102	0.0993	0.101	0.0850 to 0.115	102	70.0 to 130	2.68	20.0
BD16266	Calcium, Dissolved	mg/L	-0.00836	0.152	5.00	464	446	4.84	4.25 to 5.75	320	70.0 to 130	3.96	20.0
BD16265	Calcium, Total	mg/L	-0.0149	0.152	5.00	35.6	35.9	4.72	4.25 to 5.75	82.0	70.0 to 130	0.839	20.0
BD16265	Chloride	mg/L	-0.0434	1.00	30.0	52.6	53.0	10.5	9.00 to 11.0	99.3	80.0 to 120	0.758	20.0
BD16266	Chromium, Dissolved	mg/L	0.0000133	0.000440	0.100	0.0971	0.0990	0.101	0.0850 to 0.115	97.1	70.0 to 130	1.94	20.0
BD16265	Chromium, Total	mg/L	-0.0000482	0.000440	0.100	0.100	0.0986	0.103	0.0850 to 0.115	100	70.0 to 130	1.41	20.0
BD16266	Cobalt, Dissolved	mg/L	0.0000012	0.000147	0.100	0.0956	0.0965	0.0999	0.0850 to 0.115	95.6	70.0 to 130	0.937	20.0
BD16265	Cobalt, Total	mg/L	-0.0000511	0.000147	0.100	0.102	0.0999	0.105	0.0850 to 0.115	102	70.0 to 130	2.08	20.0
BD16265	Fluoride	mg/L	0.00652	0.125	2.50	2.83	2.88	2.62	2.25 to 2.75	104	80.0 to 120	1.75	20.0
BD16266	Iron, Dissolved	mg/L	0.0118	0.0176	0.2	37.0	37.8	0.199	0.170 to 0.230	-200	70.0 to 130	2.14	20.0
BD16265	Iron, Total	mg/L	0.00252	0.0176	0.2	0.275	0.271	0.198	0.170 to 0.230	97.8	70.0 to 130	1.47	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 9/25/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGORG
Sample Date: 8/23/23 10:22
Customer ID:
Delivery Date: 8/24/23 08:32

Description: Gorgas Gypsum - MW-8V

Laboratory ID Number: BD16265

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD16266	Lead, Dissolved	mg/L	0.0000062	0.000147	0.100	0.0988	0.0990	0.102	0.0850 to 0.115	98.8	70.0 to 130	0.202	20.0
BD16265	Lead, Total	mg/L	0.0000013	0.000147	0.100	0.104	0.104	0.108	0.0850 to 0.115	104	70.0 to 130	0.00	20.0
BD16266	Lithium, Dissolved	mg/L	-0.000045	0.0154	0.200	0.381	0.377	0.196	0.170 to 0.230	102	70.0 to 130	1.06	20.0
BD16265	Lithium, Total	mg/L	0.000397	0.0154	0.200	0.439	0.440	0.194	0.170 to 0.230	102	70.0 to 130	0.228	20.0
BD16266	Magnesium, Dissolved	mg/L	0.0115	0.0462	5.00	277	268	4.98	4.25 to 5.75	160	70.0 to 130	3.30	20.0
BD16265	Magnesium, Total	mg/L	0.0147	0.0462	5.00	18.6	18.6	4.89	4.25 to 5.75	94.0	70.0 to 130	0.00	20.0
BD16266	Manganese, Dissolved	mg/L	0.0000265	0.00033	0.100	13.9	13.6	0.102	0.0850 to 0.115	100	70.0 to 130	2.18	20.0
BD16265	Manganese, Total	mg/L	0.0000137	0.00033	0.100	0.242	0.238	0.103	0.0850 to 0.115	101	70.0 to 130	1.67	20.0
BD16265	Mercury, Total by CVAA	mg/L	4.000E-05	0.000500	0.004	0.00395	0.00399	0.00393	0.00340 to 0.00460	98.8	70.0 to 130	1.01	20.0
BD16266	Molybdenum, Dissolved	mg/L	0.00029	0.0100	0.2	0.197	0.197	0.198	0.170 to 0.230	98.5	70.0 to 130	0.00	20.0
BD16265	Molybdenum, Total	mg/L	0.000	0.0100	0.2	0.199	0.199	0.199	0.170 to 0.230	99.5	70.0 to 130	0.00	20.0
BD16266	Potassium, Dissolved	mg/L	-0.0105	0.367	10.0	17.6	17.8	10.2	8.50 to 11.5	97.2	70.0 to 130	1.13	20.0
BD16265	Potassium, Total	mg/L	-0.00850	0.367	10.0	13.5	13.2	10.6	8.50 to 11.5	100	70.0 to 130	2.25	20.0
BD16266	Selenium, Dissolved	mg/L	0.0000176	0.00100	0.100	0.106	0.107	0.104	0.0850 to 0.115	106	70.0 to 130	0.939	20.0
BD16265	Selenium, Total	mg/L	0.0000331	0.00100	0.100	0.0866	0.0897	0.106	0.0850 to 0.115	86.6	70.0 to 130	3.52	20.0
BD16266	Silicon, Dissolved	mg/L	-0.00145	0.0440	1.00	7.54	7.54	0.987	0.850 to 1.15	93.0	70.0 to 130	0.00	20.0
BD16265	Silicon, Total	mg/L	-0.000644	0.0440	1.00	9.83	9.82	0.974	0.850 to 1.15	99.0	70.0 to 130	0.102	20.0
BD16266	Sodium, Dissolved	mg/L	0.00575	0.0880	5.00	176	170	5.09	4.25 to 5.75	120	70.0 to 130	3.47	20.0
BD16265	Sodium, Total	mg/L	0.0102	0.0880	5.00	400	425	4.96	4.25 to 5.75	100	70.0 to 130	6.06	20.0
BD16265	Sulfate	mg/L	0.389	2.0	160	353	351	20.8	18.0 to 22.0	99.4	80.0 to 120	0.568	20.0
BD16266	Thallium, Dissolved	mg/L	0.0000002	0.000147	0.100	0.0957	0.0955	0.0986	0.0850 to 0.115	95.7	70.0 to 130	0.209	20.0
BD16265	Thallium, Total	mg/L	-0.0000938	0.000147	0.100	0.105	0.104	0.113	0.0850 to 0.115	105	70.0 to 130	0.957	20.0
BD16265	Total Organic Carbon	mg/L	0.173	1.00	10.0	13.4	12.8	23.5		96.9	80.0 to 120	4.58	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 9/25/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Alabama Power

Batch QC Summary

Customer Account: WMWGORG
Sample Date: 8/23/23 10:22
Customer ID:
Delivery Date: 8/24/23 08:32

Description: Gorgas Gypsum - MW-8V

Laboratory ID Number: BD16265

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD16263	Alkalinity	mg CaCO3/L					55.1	51.6	45.0 to 55.0			0.546	10.0
BD16265	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.03	0.200	2.00	1.96	0.070	2.16	1.80 to 2.20	98.0	90.0 to 110	0.00	15.0
BD16268	Solids, Dissolved	mg/L	2.00	25.0			3990	59.0	40.0 to 60.0			7.54	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 9/25/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gorgas Gypsum - MW-8

Location Code: WMWGORG
Collected: 8/23/23 11:25
Customer ID:
Submittal Date: 8/24/23 08:32

Laboratory ID Number: BD16266

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	8/24/23 16:04	8/25/23 16:02		1.015	2.22	mg/L	0.030000	0.1015	
* Calcium, Total	8/24/23 16:04	8/28/23 15:14		101.5	451	mg/L	7.0035	40.6	
* Iron, Total	8/24/23 16:04	8/28/23 15:14		101.5	38.4	mg/L	0.8120	4.06	
* Lithium, Total	8/24/23 16:04	8/25/23 16:02		1.015	0.171	mg/L	0.007105	0.01999956	
* Magnesium, Total	8/24/23 16:04	8/28/23 15:14		101.5	269	mg/L	2.1315	40.6	
* Molybdenum, Total	8/24/23 16:04	8/25/23 16:02		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Total (calc.)	8/24/23 16:04	8/25/23 16:02		1	14.1	mg/L			
* Silicon, Total	8/24/23 16:04	8/25/23 16:02		1.015	6.57	mg/L	0.02030	0.25375	
* Sodium, Total	8/24/23 16:04	8/28/23 15:14		101.5	169	mg/L	4.060	40.6	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	8/24/23 11:01	8/25/23 13:42		1.015	2.23	mg/L	0.030000	0.1015	
* Calcium, Dissolved	8/24/23 11:01	8/28/23 13:29		101.5	448	mg/L	7.0035	40.6	RA
* Iron, Dissolved	8/24/23 11:01	8/28/23 13:29		101.5	37.4	mg/L	0.8120	4.06	RA
* Lithium, Dissolved	8/24/23 11:01	8/25/23 13:42		1.015	0.176	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	8/24/23 11:01	8/28/23 13:29		101.5	269	mg/L	2.1315	40.6	RA
* Molybdenum, Dissolved	8/24/23 11:01	8/25/23 13:42		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Dissolved (calc.)	8/24/23 11:01	8/25/23 13:42		1	14.1	mg/L			
* Silicon, Dissolved	8/24/23 11:01	8/25/23 13:42		1.015	6.61	mg/L	0.02030	0.25375	
* Sodium, Dissolved	8/24/23 11:01	8/28/23 13:29		101.5	170	mg/L	4.060	40.6	RA
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	8/24/23 16:04	8/25/23 12:16		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Total	8/30/23 13:19	8/30/23 14:09		1.015	0.0321	mg/L	0.009135	0.05075	J
* Arsenic, Total	8/24/23 16:04	8/25/23 12:16		1.015	0.000162	mg/L	0.000112	0.000203	J
* Barium, Total	8/24/23 16:04	8/25/23 12:16		1.015	0.0225	mg/L	0.000508	0.001015	
* Beryllium, Total	8/24/23 16:04	8/25/23 12:16		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	8/24/23 16:04	8/25/23 12:16		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	8/24/23 16:04	8/25/23 12:16		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	8/24/23 16:04	8/25/23 12:16		1.015	0.0000839	mg/L	0.000068	0.000203	J
* Lead, Total	8/24/23 16:04	8/25/23 12:16		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	8/24/23 16:04	8/25/23 14:09		92.365	14.4	mg/L	0.013855	0.092365	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 9/25/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gorgas Gypsum - MW-8

Location Code: WMWGORG
Collected: 8/23/23 11:25
Customer ID:
Submittal Date: 8/24/23 08:32

Laboratory ID Number: BD16266

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	8/24/23 16:04	8/25/23 12:16		1.015	8.12	mg/L	0.169505	0.5075	
* Selenium, Total	8/24/23 16:04	8/25/23 12:16		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	8/24/23 16:04	8/25/23 12:16		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	8/24/23 11:01	8/24/23 16:07		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	8/24/23 11:01	8/24/23 16:07		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Dissolved	8/24/23 11:01	8/24/23 16:07		1.015	0.000144	mg/L	0.000112	0.000203	J
* Barium, Dissolved	8/24/23 11:01	8/24/23 16:07		1.015	0.0225	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	8/24/23 11:01	8/24/23 16:07		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	8/24/23 11:01	8/24/23 16:07		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	8/24/23 11:01	8/24/23 16:07		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	8/24/23 11:01	8/24/23 16:07		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Dissolved	8/24/23 11:01	8/24/23 16:07		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	8/24/23 11:01	8/24/23 20:14		92.365	13.8	mg/L	0.013855	0.092365	RA
* Potassium, Dissolved	8/24/23 11:01	8/24/23 16:07		1.015	7.88	mg/L	0.169505	0.5075	
* Selenium, Dissolved	8/24/23 11:01	8/24/23 16:07		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	8/24/23 11:01	8/24/23 16:07		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	8/28/23 10:25	8/28/23 16:00		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: CES***								
* Nitrogen, Nitrate/Nitrite	8/24/23 13:08	8/24/23 13:08		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: DHC***								
* Alkalinity	8/30/23 09:34	8/30/23 13:21		1	537	mg CaCO3/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	8/24/23 11:20	8/30/23 12:45		1	3280	mg/L		178.6	
Analytical Method: SM 4500CO2 D	***Analyst: DHC***								
* Bicarbonate Alkalinity, (calc.)	8/30/23 09:34	8/30/23 13:21		1	536	mg CaCO3/L		1	A
* Carbonate Alkalinity, (calc.)	8/30/23 09:34	8/30/23 13:21		1	0.553	mg CaCO3/L		0.5	A
Analytical Method: SM 4500H+ B	***Analyst: DHC***								
Alkalinity pH Endpoint	8/30/23 09:34	8/30/23 13:21		1	4.52	SU		2	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 9/25/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gorgas Gypsum - MW-8

Location Code: WMWGORG
Collected: 8/23/23 11:25
Customer ID:
Submittal Date: 8/24/23 08:32

Laboratory ID Number: BD16266

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	8/25/23 21:10	8/25/23 21:10		1	2.96	mg/L	1.00	2	
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	8/29/23 11:36	8/29/23 11:36		25	90.0	mg/L	12.50	25	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	8/29/23 15:14	8/29/23 15:14		1	0.139	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	8/24/23 13:30	8/24/23 13:30		80	1830	mg/L	48.0	160	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	8/23/23 11:23	8/23/23 11:23			3047.06	uS/cm			FA
pH	8/23/23 11:23	8/23/23 11:23			6.83	SU			FA
Temperature	8/23/23 11:23	8/23/23 11:23			23.87	C			FA
Turbidity	8/23/23 11:23	8/23/23 11:23			3.85	NTU			FA
Sulfide	8/23/23 11:23	8/23/23 11:23			0	mg/L			FA

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 9/25/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGORG
Sample Date: 8/23/23 11:25
Customer ID:
Delivery Date: 8/24/23 08:32

Description: Gorgas Gypsum - MW-8

Laboratory ID Number: BD16266

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD16266	Aluminum, Dissolved	mg/L	-0.000172	0.0198	0.100	0.106	0.106	0.107	0.0850 to 0.115	106	70.0 to 130	0.00	20.0
BD16266	Aluminum, Total	mg/L	0.000992	0.0198	0.100	0.137	0.149	0.107	0.0850 to 0.115	105	70.0 to 130	8.39	20.0
BD16266	Antimony, Dissolved	mg/L	0.000328	0.00100	0.100	0.0955	0.0936	0.0926	0.0850 to 0.115	95.5	70.0 to 130	2.01	20.0
BD16269	Antimony, Total	mg/L	0.000260	0.00100	0.100	0.0919	0.0923	0.0933	0.0850 to 0.115	91.9	70.0 to 130	0.434	20.0
BD16266	Arsenic, Dissolved	mg/L	0.0000027	0.000200	0.100	0.105	0.107	0.101	0.0850 to 0.115	105	70.0 to 130	1.89	20.0
BD16269	Arsenic, Total	mg/L	0.0000133	0.000200	0.100	0.0995	0.100	0.101	0.0850 to 0.115	99.5	70.0 to 130	0.501	20.0
BD16266	Barium, Dissolved	mg/L	0.0000131	0.00100	0.100	0.123	0.121	0.0970	0.0850 to 0.115	100	70.0 to 130	1.64	20.0
BD16269	Barium, Total	mg/L	0.0000439	0.00100	0.100	0.100	0.0989	0.0978	0.0850 to 0.115	100	70.0 to 130	1.11	20.0
BD16266	Beryllium, Dissolved	mg/L	0.0000369	0.000880	0.100	0.0916	0.0930	0.104	0.0850 to 0.115	91.6	70.0 to 130	1.52	20.0
BD16269	Beryllium, Total	mg/L	0.0000032	0.000880	0.100	0.101	0.0978	0.0980	0.0850 to 0.115	101	70.0 to 130	3.22	20.0
BD16266	Boron, Dissolved	mg/L	-0.000395	0.0650	1.00	3.23	3.23	0.988	0.850 to 1.15	100	70.0 to 130	0.00	20.0
BD16269	Boron, Total	mg/L	-0.000066	0.0650	1.00	0.985	0.981	0.982	0.850 to 1.15	98.5	70.0 to 130	0.407	20.0
BD16266	Cadmium, Dissolved	mg/L	-0.0000002	0.000147	0.100	0.0979	0.0988	0.0992	0.0850 to 0.115	97.9	70.0 to 130	0.915	20.0
BD16269	Cadmium, Total	mg/L	-0.0000007	0.000147	0.100	0.0991	0.102	0.0996	0.0850 to 0.115	99.1	70.0 to 130	2.88	20.0
BD16266	Calcium, Dissolved	mg/L	-0.00836	0.152	5.00	464	446	4.84	4.25 to 5.75	320	70.0 to 130	3.96	20.0
BD16269	Calcium, Total	mg/L	-0.0140	0.152	5.00	4.57	4.65	4.69	4.25 to 5.75	91.4	70.0 to 130	1.74	20.0
BD16269	Chloride	mg/L	0.076	1.00	10.0	9.21	9.30	9.84	9.00 to 11.0	92.1	80.0 to 120	0.972	20.0
BD16266	Chromium, Dissolved	mg/L	0.0000133	0.000440	0.100	0.0971	0.0990	0.101	0.0850 to 0.115	97.1	70.0 to 130	1.94	20.0
BD16269	Chromium, Total	mg/L	-0.000116	0.000440	0.100	0.103	0.102	0.102	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BD16266	Cobalt, Dissolved	mg/L	0.0000012	0.000147	0.100	0.0956	0.0965	0.0999	0.0850 to 0.115	95.6	70.0 to 130	0.937	20.0
BD16269	Cobalt, Total	mg/L	-0.0000496	0.000147	0.100	0.104	0.104	0.104	0.0850 to 0.115	104	70.0 to 130	0.00	20.0
BD16269	Fluoride	mg/L	0.018	0.125	2.50	2.54	2.60	2.54	2.25 to 2.75	102	80.0 to 120	2.33	20.0
BD16266	Iron, Dissolved	mg/L	0.0118	0.0176	0.2	37.0	37.8	0.199	0.170 to 0.230	-200	70.0 to 130	2.14	20.0
BD16269	Iron, Total	mg/L	0.00276	0.0176	0.2	0.197	0.199	0.199	0.170 to 0.230	98.5	70.0 to 130	1.01	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 9/25/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGORG
Sample Date: 8/23/23 11:25
Customer ID:
Delivery Date: 8/24/23 08:32

Description: Gorgas Gypsum - MW-8

Laboratory ID Number: BD16266

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD16266	Lead, Dissolved	mg/L	0.0000062	0.000147	0.100	0.0988	0.0990	0.102	0.0850 to 0.115	98.8	70.0 to 130	0.202	20.0
BD16269	Lead, Total	mg/L	0.000003	0.000147	0.100	0.105	0.104	0.104	0.0850 to 0.115	105	70.0 to 130	0.957	20.0
BD16266	Lithium, Dissolved	mg/L	-0.000045	0.0154	0.200	0.381	0.377	0.196	0.170 to 0.230	102	70.0 to 130	1.06	20.0
BD16269	Lithium, Total	mg/L	0.000757	0.0154	0.200	0.193	0.196	0.195	0.170 to 0.230	96.5	70.0 to 130	1.54	20.0
BD16266	Magnesium, Dissolved	mg/L	0.0115	0.0462	5.00	277	268	4.98	4.25 to 5.75	160	70.0 to 130	3.30	20.0
BD16269	Magnesium, Total	mg/L	0.00781	0.0462	5.00	4.80	4.87	4.89	4.25 to 5.75	95.3	70.0 to 130	1.45	20.0
BD16266	Manganese, Dissolved	mg/L	0.0000265	0.00033	0.100	13.9	13.6	0.102	0.0850 to 0.115	100	70.0 to 130	2.18	20.0
BD16269	Manganese, Total	mg/L	0.0000955	0.00033	0.100	0.101	0.102	0.101	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BD16269	Mercury, Total by CVAA	mg/L	4.000E-05	0.000500	0.004	0.00395	0.0039	0.00399	0.00340 to 0.00460	98.8	70.0 to 130	1.27	20.0
BD16266	Molybdenum, Dissolved	mg/L	0.00029	0.0100	0.2	0.197	0.197	0.198	0.170 to 0.230	98.5	70.0 to 130	0.00	20.0
BD16269	Molybdenum, Total	mg/L	0.000	0.0100	0.2	0.199	0.199	0.200	0.170 to 0.230	99.5	70.0 to 130	0.00	20.0
BD16266	Potassium, Dissolved	mg/L	-0.0105	0.367	10.0	17.6	17.8	10.2	8.50 to 11.5	97.2	70.0 to 130	1.13	20.0
BD16269	Potassium, Total	mg/L	-0.0119	0.367	10.0	10.6	10.3	10.4	8.50 to 11.5	106	70.0 to 130	2.87	20.0
BD16266	Selenium, Dissolved	mg/L	0.0000176	0.00100	0.100	0.106	0.107	0.104	0.0850 to 0.115	106	70.0 to 130	0.939	20.0
BD16269	Selenium, Total	mg/L	-0.0000052	0.00100	0.100	0.102	0.104	0.104	0.0850 to 0.115	102	70.0 to 130	1.94	20.0
BD16266	Silicon, Dissolved	mg/L	-0.00145	0.0440	1.00	7.54	7.54	0.987	0.850 to 1.15	93.0	70.0 to 130	0.00	20.0
BD16269	Silicon, Total	mg/L	-0.000455	0.0440	1.00	0.963	0.968	0.977	0.850 to 1.15	96.3	70.0 to 130	0.518	20.0
BD16266	Sodium, Dissolved	mg/L	0.00575	0.0880	5.00	176	170	5.09	4.25 to 5.75	120	70.0 to 130	3.47	20.0
BD16269	Sodium, Total	mg/L	0.0143	0.0880	5.00	4.89	4.95	4.96	4.25 to 5.75	96.7	70.0 to 130	1.22	20.0
BD16269	Sulfate	mg/L	0.318	2.0	20.0	20.6	20.5	21.0	18.0 to 22.0	103	80.0 to 120	0.487	20.0
BD16266	Thallium, Dissolved	mg/L	0.0000002	0.000147	0.100	0.0957	0.0955	0.0986	0.0850 to 0.115	95.7	70.0 to 130	0.209	20.0
BD16269	Thallium, Total	mg/L	-0.0000932	0.000147	0.100	0.106	0.107	0.108	0.0850 to 0.115	106	70.0 to 130	0.939	20.0
BD16269	Total Organic Carbon	mg/L	0.135	1.00	10.0	9.92	9.79	25.3		99.2	80.0 to 120	1.32	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Alabama Power

Batch QC Summary

Customer Account: WMWGORG
Sample Date: 8/23/23 11:25
Customer ID:
Delivery Date: 8/24/23 08:32

Description: Gorgas Gypsum - MW-8

Laboratory ID Number: BD16266

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD16263	Alkalinity	mg CaCO3/L					55.1	51.6	45.0 to 55.0			0.546	10.0
BD16269	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.03	0.200	2.00	2.03	0.026	2.14	1.80 to 2.20	102	90.0 to 110	0.00	15.0
BD16268	Solids, Dissolved	mg/L	2.00	25.0			3990	59.0	40.0 to 60.0			7.54	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 9/25/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gorgas Gypsum Field Blank-1

Location Code: WMWGORGFB
Collected: 8/23/23 12:00
Customer ID:
Submittal Date: 8/24/23 08:32

Laboratory ID Number: BD16267

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	8/24/23 16:04	8/25/23 16:05		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	8/24/23 16:04	8/25/23 16:05		1.015	Not Detected	mg/L	0.070035	0.406	U
* Iron, Total	8/24/23 16:04	8/25/23 16:05		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Total	8/24/23 16:04	8/25/23 16:05		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	8/24/23 16:04	8/25/23 16:05		1.015	0.0471	mg/L	0.021315	0.406	J
* Molybdenum, Total	8/24/23 16:04	8/25/23 16:05		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Total (calc.)	8/24/23 16:04	8/25/23 16:05		1	Not Detected	mg/L			
* Silicon, Total	8/24/23 16:04	8/25/23 16:05		1.015	Not Detected	mg/L	0.02030	0.25375	U
* Sodium, Total	8/24/23 16:04	8/25/23 16:05		1.015	Not Detected	mg/L	0.04060	0.406	U
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	8/24/23 16:04	8/25/23 12:19		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Total	8/30/23 13:19	8/30/23 14:19		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Total	8/24/23 16:04	8/25/23 12:19		1.015	Not Detected	mg/L	0.000112	0.000203	U
* Barium, Total	8/24/23 16:04	8/25/23 12:19		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Beryllium, Total	8/24/23 16:04	8/25/23 12:19		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	8/24/23 16:04	8/25/23 12:19		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	8/24/23 16:04	8/25/23 12:19		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	8/24/23 16:04	8/25/23 12:19		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	8/24/23 16:04	8/25/23 12:19		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	8/24/23 16:04	8/25/23 12:19		1.015	0.000283	mg/L	0.000152	0.001015	J
* Potassium, Total	8/24/23 16:04	8/25/23 12:19		1.015	Not Detected	mg/L	0.169505	0.5075	U
* Selenium, Total	8/24/23 16:04	8/25/23 12:19		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	8/24/23 16:04	8/25/23 12:19		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	8/28/23 10:25	8/28/23 16:04		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: CES***								
* Nitrogen, Nitrate/Nitrite	8/24/23 13:10	8/24/23 13:10		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	8/24/23 11:20	8/30/23 12:45		1	26.0	mg/L		25	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gorgas Gypsum Field Blank-1

Location Code: WMWGORGFB
Collected: 8/23/23 12:00
Customer ID:
Submittal Date: 8/24/23 08:32

Laboratory ID Number: BD16267

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 5310 B		***Analyst: SC***							
* Total Organic Carbon	8/25/23 21:25	8/25/23 21:25		1	Not Detected	mg/L	1.00	2	U
Analytical Method: SM4500Cl E		***Analyst: JCC***							
* Chloride	8/29/23 11:31	8/29/23 11:31		1	Not Detected	mg/L	0.50	1	U
Analytical Method: SM4500F G 2017		***Analyst: JCC***							
* Fluoride	8/29/23 15:15	8/29/23 15:15		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011		***Analyst: JCC***							
* Sulfate	8/24/23 13:31	8/24/23 13:31		1	0.675	mg/L	0.6	2	J

MDL's and RL's are adjusted for sample dilution, as applicable

Comments:

Reported: 9/25/2023
Version: 3.5
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Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGORGFB
Sample Date: 8/23/23 12:00
Customer ID:
Delivery Date: 8/24/23 08:32

Description: Gorgas Gypsum Field Blank-1

Laboratory ID Number: BD16267

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD16266	Aluminum, Total	mg/L	0.000992	0.0198	0.100	0.137	0.149	0.107	0.0850 to 0.115	105	70.0 to 130	8.39	20.0
BD16269	Antimony, Total	mg/L	0.000260	0.00100	0.100	0.0919	0.0923	0.0933	0.0850 to 0.115	91.9	70.0 to 130	0.434	20.0
BD16269	Arsenic, Total	mg/L	0.0000133	0.000200	0.100	0.0995	0.100	0.101	0.0850 to 0.115	99.5	70.0 to 130	0.501	20.0
BD16269	Barium, Total	mg/L	0.0000439	0.00100	0.100	0.100	0.0989	0.0978	0.0850 to 0.115	100	70.0 to 130	1.11	20.0
BD16269	Beryllium, Total	mg/L	0.0000032	0.000880	0.100	0.101	0.0978	0.0980	0.0850 to 0.115	101	70.0 to 130	3.22	20.0
BD16269	Boron, Total	mg/L	-0.000066	0.0650	1.00	0.985	0.981	0.982	0.850 to 1.15	98.5	70.0 to 130	0.407	20.0
BD16269	Cadmium, Total	mg/L	-0.0000007	0.000147	0.100	0.0991	0.102	0.0996	0.0850 to 0.115	99.1	70.0 to 130	2.88	20.0
BD16269	Calcium, Total	mg/L	-0.0140	0.152	5.00	4.57	4.65	4.69	4.25 to 5.75	91.4	70.0 to 130	1.74	20.0
BD16269	Chloride	mg/L	0.076	1.00	10.0	9.21	9.30	9.84	9.00 to 11.0	92.1	80.0 to 120	0.972	20.0
BD16269	Chromium, Total	mg/L	-0.000116	0.000440	0.100	0.103	0.102	0.102	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BD16269	Cobalt, Total	mg/L	-0.0000496	0.000147	0.100	0.104	0.104	0.104	0.0850 to 0.115	104	70.0 to 130	0.00	20.0
BD16269	Fluoride	mg/L	0.018	0.125	2.50	2.54	2.60	2.54	2.25 to 2.75	102	80.0 to 120	2.33	20.0
BD16269	Iron, Total	mg/L	0.00276	0.0176	0.2	0.197	0.199	0.199	0.170 to 0.230	98.5	70.0 to 130	1.01	20.0
BD16269	Lead, Total	mg/L	0.000003	0.000147	0.100	0.105	0.104	0.104	0.0850 to 0.115	105	70.0 to 130	0.957	20.0
BD16269	Lithium, Total	mg/L	0.000757	0.0154	0.200	0.193	0.196	0.195	0.170 to 0.230	96.5	70.0 to 130	1.54	20.0
BD16269	Magnesium, Total	mg/L	0.00781	0.0462	5.00	4.80	4.87	4.89	4.25 to 5.75	95.3	70.0 to 130	1.45	20.0
BD16269	Manganese, Total	mg/L	0.0000955	0.00033	0.100	0.101	0.102	0.101	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BD16269	Mercury, Total by CVAA	mg/L	4.000E-05	0.000500	0.004	0.00395	0.0039	0.00399	0.00340 to 0.00460	98.8	70.0 to 130	1.27	20.0
BD16269	Molybdenum, Total	mg/L	0.000	0.0100	0.2	0.199	0.199	0.200	0.170 to 0.230	99.5	70.0 to 130	0.00	20.0
BD16269	Potassium, Total	mg/L	-0.0119	0.367	10.0	10.6	10.3	10.4	8.50 to 11.5	106	70.0 to 130	2.87	20.0
BD16269	Selenium, Total	mg/L	-0.0000052	0.00100	0.100	0.102	0.104	0.104	0.0850 to 0.115	102	70.0 to 130	1.94	20.0
BD16269	Silicon, Total	mg/L	-0.000455	0.0440	1.00	0.963	0.968	0.977	0.850 to 1.15	96.3	70.0 to 130	0.518	20.0
BD16269	Sodium, Total	mg/L	0.0143	0.0880	5.00	4.89	4.95	4.96	4.25 to 5.75	96.7	70.0 to 130	1.22	20.0
BD16269	Sulfate	mg/L	0.318	2.0	20.0	20.6	20.5	21.0	18.0 to 22.0	103	80.0 to 120	0.487	20.0

Comments:

Alabama Power
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Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGORGFB
Sample Date: 8/23/23 12:00
Customer ID:
Delivery Date: 8/24/23 08:32

Description: Gorgas Gypsum Field Blank-1

Laboratory ID Number: BD16267

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD16269	Thallium, Total	mg/L	-0.0000932	0.000147	0.100	0.106	0.107	0.108	0.0850 to 0.115	106	70.0 to 130	0.939	20.0
BD16269	Total Organic Carbon	mg/L	0.135	1.00	10.0	9.92	9.79	25.3		99.2	80.0 to 120	1.32	20.0

Comments:

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Calera, AL 35040

Alabama Power

Batch QC Summary

Customer Account: WMWGORGFB
Sample Date: 8/23/23 12:00
Customer ID:
Delivery Date: 8/24/23 08:32

Description: Gorgas Gypsum Field Blank-1

Laboratory ID Number: BD16267

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD16269	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.03	0.200	2.00	2.03	0.026	2.14	1.80 to 2.20	102	90.0 to 110	0.00	15.0
BD16268	Solids, Dissolved	mg/L	2.00	25.0			3990	59.0	40.0 to 60.0			7.54	10.0

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gorgas Gypsum - MW-12V

Location Code: WMWGORG
Collected: 8/23/23 13:02
Customer ID:
Submittal Date: 8/24/23 08:32

Laboratory ID Number: BD16268

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	8/24/23 16:04	8/25/23 16:09		1.015	1.67	mg/L	0.030000	0.1015	
* Calcium, Total	8/24/23 16:04	8/28/23 15:23		10.15	390	mg/L	0.70035	4.06	
* Iron, Total	8/24/23 16:04	9/1/23 13:22		101.5	39.9	mg/L	0.8120	4.06	
* Lithium, Total	8/24/23 16:04	8/25/23 16:09		1.015	0.292	mg/L	0.007105	0.01999956	
* Magnesium, Total	8/24/23 16:04	8/28/23 15:23		10.15	233	mg/L	0.21315	4.06	
* Molybdenum, Total	8/24/23 16:04	8/25/23 16:09		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Total (calc.)	8/24/23 16:04	8/25/23 16:09		1	26.5	mg/L			
* Silicon, Total	8/24/23 16:04	8/25/23 16:09		1.015	12.4	mg/L	0.02030	0.25375	
* Sodium, Total	8/24/23 16:04	8/28/23 15:23		10.15	359	mg/L	0.4060	4.06	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	8/24/23 11:01	8/25/23 14:04		1.015	1.64	mg/L	0.030000	0.1015	
* Calcium, Dissolved	8/24/23 11:01	8/28/23 13:45		10.15	34.4	mg/L	0.70035	4.06	RA
* Iron, Dissolved	8/24/23 11:01	8/28/23 13:45		10.15	3.91	mg/L	0.08120	0.406	RA
* Lithium, Dissolved	8/24/23 11:01	8/25/23 14:04		1.015	0.295	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	8/24/23 11:01	8/28/23 13:45		10.15	21.8	mg/L	0.21315	4.06	RA
* Molybdenum, Dissolved	8/24/23 11:01	8/25/23 14:04		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Dissolved (calc.)	8/24/23 11:01	8/25/23 14:04		1	26.3	mg/L			
* Silicon, Dissolved	8/24/23 11:01	8/25/23 14:04		1.015	12.3	mg/L	0.02030	0.25375	
* Sodium, Dissolved	8/24/23 11:01	8/28/23 13:45		10.15	36.2	mg/L	0.4060	4.06	RA
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	8/24/23 16:04	8/25/23 12:23		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Total	8/30/23 13:19	8/30/23 14:23		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Total	8/24/23 16:04	8/25/23 12:23		1.015	0.000308	mg/L	0.000112	0.000203	
* Barium, Total	8/24/23 16:04	8/25/23 12:23		1.015	0.0106	mg/L	0.000508	0.001015	
* Beryllium, Total	8/24/23 16:04	8/25/23 12:23		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	8/24/23 16:04	8/25/23 12:23		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	8/24/23 16:04	8/25/23 12:23		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	8/24/23 16:04	8/25/23 12:23		1.015	0.000128	mg/L	0.000068	0.000203	J
* Lead, Total	8/24/23 16:04	8/25/23 12:23		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	8/24/23 16:04	8/29/23 15:04		92.365	23.9	mg/L	0.013855	0.092365	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 9/25/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gorgas Gypsum - MW-12V

Location Code: WMWGORG
Collected: 8/23/23 13:02
Customer ID:
Submittal Date: 8/24/23 08:32

Laboratory ID Number: BD16268

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	8/24/23 16:04	8/25/23 12:23		1.015	7.90	mg/L	0.169505	0.5075	
* Selenium, Total	8/24/23 16:04	8/25/23 12:23		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	8/24/23 16:04	8/25/23 12:23		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	8/24/23 11:01	8/24/23 16:36		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	8/24/23 11:01	8/24/23 16:36		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Dissolved	8/24/23 11:01	8/24/23 16:36		1.015	0.000342	mg/L	0.000112	0.000203	
* Barium, Dissolved	8/24/23 11:01	8/24/23 16:36		1.015	0.0104	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	8/24/23 11:01	8/24/23 16:36		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	8/24/23 11:01	8/24/23 16:36		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	8/24/23 11:01	8/24/23 16:36		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	8/24/23 11:01	8/24/23 16:36		1.015	0.000150	mg/L	0.000068	0.000203	J
* Lead, Dissolved	8/24/23 11:01	8/24/23 16:36		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	8/24/23 11:01	8/29/23 14:42		92.365	23.2	mg/L	0.013855	0.092365	RA
* Potassium, Dissolved	8/24/23 11:01	8/24/23 16:36		1.015	8.07	mg/L	0.169505	0.5075	
* Selenium, Dissolved	8/24/23 11:01	8/24/23 16:36		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	8/24/23 11:01	8/24/23 16:36		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	8/28/23 10:25	8/28/23 16:08		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: CES***								
* Nitrogen, Nitrate/Nitrite	8/24/23 13:12	8/24/23 13:12		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: DHC***								
* Alkalinity	9/5/23 09:03	9/5/23 09:56		1	257	mg CaCO3/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	8/24/23 11:20	8/30/23 12:45		1	3700	mg/L		227.3	
Analytical Method: SM 4500CO2 D	***Analyst: DHC***								
* Bicarbonate Alkalinity, (calc.)	9/5/23 09:03	9/5/23 09:56		1	257	mg CaCO3/L		1	A
* Carbonate Alkalinity, (calc.)	9/5/23 09:03	9/5/23 09:56		1	Not Detected	mg CaCO3/L		0.5	A
Analytical Method: SM 4500H+ B	***Analyst: DHC***								
Alkalinity pH Endpoint	9/5/23 09:03	9/5/23 09:56		1	4.51	SU		2	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 9/25/2023
Version: 3.5
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Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gorgas Gypsum - MW-12V

Location Code: WMWGORG
Collected: 8/23/23 13:02
Customer ID:
Submittal Date: 8/24/23 08:32

Laboratory ID Number: BD16268

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	8/25/23 21:37	8/25/23 21:37		1	Not Detected	mg/L	1.00	2	U
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	8/29/23 11:37	8/29/23 11:37		25	152	mg/L	12.50	25	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	8/29/23 15:16	8/29/23 15:16		1	0.281	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	8/24/23 13:33	8/24/23 13:33		80	2020	mg/L	48.0	160	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	8/23/23 12:59	8/23/23 12:59			3604.51	uS/cm			FA
pH	8/23/23 12:59	8/23/23 12:59			6.26	SU			FA
Temperature	8/23/23 12:59	8/23/23 12:59			20.47	C			FA
Turbidity	8/23/23 12:59	8/23/23 12:59			1.68	NTU			FA
Sulfide	8/23/23 12:59	8/23/23 12:59			0	mg/L			FA

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

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COA_CCR

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General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGORG
Sample Date: 8/23/23 13:02
Customer ID:
Delivery Date: 8/24/23 08:32

Description: Gorgas Gypsum - MW-12V

Laboratory ID Number: BD16268

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD16268	Aluminum, Dissolved	mg/L	-0.000184	0.0198	0.100	0.108	0.107	0.100	0.0850 to 0.115	108	70.0 to 130	0.930	20.0
BD16266	Aluminum, Total	mg/L	0.000992	0.0198	0.100	0.137	0.149	0.107	0.0850 to 0.115	105	70.0 to 130	8.39	20.0
BD16268	Antimony, Dissolved	mg/L	0.000269	0.00100	0.100	0.102	0.105	0.0882	0.0850 to 0.115	102	70.0 to 130	2.90	20.0
BD16269	Antimony, Total	mg/L	0.000260	0.00100	0.100	0.0919	0.0923	0.0933	0.0850 to 0.115	91.9	70.0 to 130	0.434	20.0
BD16268	Arsenic, Dissolved	mg/L	0.0000151	0.000200	0.100	0.104	0.104	0.0981	0.0850 to 0.115	104	70.0 to 130	0.00	20.0
BD16269	Arsenic, Total	mg/L	0.0000133	0.000200	0.100	0.0995	0.100	0.101	0.0850 to 0.115	99.5	70.0 to 130	0.501	20.0
BD16268	Barium, Dissolved	mg/L	0.0000244	0.00100	0.100	0.109	0.110	0.0940	0.0850 to 0.115	98.6	70.0 to 130	0.913	20.0
BD16269	Barium, Total	mg/L	0.0000439	0.00100	0.100	0.100	0.0989	0.0978	0.0850 to 0.115	100	70.0 to 130	1.11	20.0
BD16268	Beryllium, Dissolved	mg/L	-0.0000013	0.000880	0.100	0.0969	0.0981	0.100	0.0850 to 0.115	96.9	70.0 to 130	1.23	20.0
BD16269	Beryllium, Total	mg/L	0.0000032	0.000880	0.100	0.101	0.0978	0.0980	0.0850 to 0.115	101	70.0 to 130	3.22	20.0
BD16268	Boron, Dissolved	mg/L	-0.00022	0.0650	1.00	2.66	2.66	0.969	0.850 to 1.15	102	70.0 to 130	0.00	20.0
BD16269	Boron, Total	mg/L	-0.000066	0.0650	1.00	0.985	0.981	0.982	0.850 to 1.15	98.5	70.0 to 130	0.407	20.0
BD16268	Cadmium, Dissolved	mg/L	-0.0000001	0.000147	0.100	0.0976	0.0989	0.0973	0.0850 to 0.115	97.6	70.0 to 130	1.32	20.0
BD16269	Cadmium, Total	mg/L	-0.0000007	0.000147	0.100	0.0991	0.102	0.0996	0.0850 to 0.115	99.1	70.0 to 130	2.88	20.0
BD16268	Calcium, Dissolved	mg/L	-0.0283	0.152	5.00	35.2	35.0	4.62	4.25 to 5.75	16.0	70.0 to 130	0.570	20.0
BD16269	Calcium, Total	mg/L	-0.0140	0.152	5.00	4.57	4.65	4.69	4.25 to 5.75	91.4	70.0 to 130	1.74	20.0
BD16269	Chloride	mg/L	0.076	1.00	10.0	9.21	9.30	9.84	9.00 to 11.0	92.1	80.0 to 120	0.972	20.0
BD16268	Chromium, Dissolved	mg/L	-0.0000585	0.000440	0.100	0.0972	0.0972	0.0966	0.0850 to 0.115	97.2	70.0 to 130	0.00	20.0
BD16269	Chromium, Total	mg/L	-0.000116	0.000440	0.100	0.103	0.102	0.102	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BD16268	Cobalt, Dissolved	mg/L	0.0000001	0.000147	0.100	0.0952	0.0959	0.0961	0.0850 to 0.115	95.0	70.0 to 130	0.733	20.0
BD16269	Cobalt, Total	mg/L	-0.0000496	0.000147	0.100	0.104	0.104	0.104	0.0850 to 0.115	104	70.0 to 130	0.00	20.0
BD16269	Fluoride	mg/L	0.018	0.125	2.50	2.54	2.60	2.54	2.25 to 2.75	102	80.0 to 120	2.33	20.0
BD16268	Iron, Dissolved	mg/L	0.00277	0.0176	0.2	3.88	3.90	0.198	0.170 to 0.230	-15.0	70.0 to 130	0.514	20.0
BD16269	Iron, Total	mg/L	0.00276	0.0176	0.2	0.197	0.199	0.199	0.170 to 0.230	98.5	70.0 to 130	1.01	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGORG
Sample Date: 8/23/23 13:02
Customer ID:
Delivery Date: 8/24/23 08:32

Description: Gorgas Gypsum - MW-12V

Laboratory ID Number: BD16268

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD16268	Lead, Dissolved	mg/L	0.0000013	0.000147	0.100	0.0977	0.0994	0.0974	0.0850 to 0.115	97.7	70.0 to 130	1.73	20.0
BD16269	Lead, Total	mg/L	0.000003	0.000147	0.100	0.105	0.104	0.104	0.0850 to 0.115	105	70.0 to 130	0.957	20.0
BD16268	Lithium, Dissolved	mg/L	0.000532	0.0154	0.200	0.504	0.506	0.192	0.170 to 0.230	104	70.0 to 130	0.396	20.0
BD16269	Lithium, Total	mg/L	0.000757	0.0154	0.200	0.193	0.196	0.195	0.170 to 0.230	96.5	70.0 to 130	1.54	20.0
BD16268	Magnesium, Dissolved	mg/L	0.00813	0.0462	5.00	22.3	22.1	4.78	4.25 to 5.75	10.0	70.0 to 130	0.901	20.0
BD16269	Magnesium, Total	mg/L	0.00781	0.0462	5.00	4.80	4.87	4.89	4.25 to 5.75	95.3	70.0 to 130	1.45	20.0
BD16268	Manganese, Dissolved	mg/L	-0.000245	0.00033	0.100	22.4	23.7	0.0979	0.0850 to 0.115	-800	70.0 to 130	5.64	20.0
BD16269	Manganese, Total	mg/L	0.0000955	0.00033	0.100	0.101	0.102	0.101	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BD16269	Mercury, Total by CVAA	mg/L	4.000E-05	0.000500	0.004	0.00395	0.0039	0.00399	0.00340 to 0.00460	98.8	70.0 to 130	1.27	20.0
BD16268	Molybdenum, Dissolved	mg/L	0.000126	0.0100	0.2	0.200	0.199	0.197	0.170 to 0.230	100	70.0 to 130	0.501	20.0
BD16269	Molybdenum, Total	mg/L	0.000	0.0100	0.2	0.199	0.199	0.200	0.170 to 0.230	99.5	70.0 to 130	0.00	20.0
BD16268	Potassium, Dissolved	mg/L	-0.0186	0.367	10.0	17.7	17.7	9.69	8.50 to 11.5	96.3	70.0 to 130	0.00	20.0
BD16269	Potassium, Total	mg/L	-0.0119	0.367	10.0	10.6	10.3	10.4	8.50 to 11.5	106	70.0 to 130	2.87	20.0
BD16268	Selenium, Dissolved	mg/L	0.0000625	0.00100	0.100	0.101	0.102	0.0981	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BD16269	Selenium, Total	mg/L	-0.0000052	0.00100	0.100	0.102	0.104	0.104	0.0850 to 0.115	102	70.0 to 130	1.94	20.0
BD16268	Silicon, Dissolved	mg/L	-0.000913	0.0440	1.00	13.2	13.2	0.976	0.850 to 1.15	90.0	70.0 to 130	0.00	20.0
BD16269	Silicon, Total	mg/L	-0.000455	0.0440	1.00	0.963	0.968	0.977	0.850 to 1.15	96.3	70.0 to 130	0.518	20.0
BD16268	Sodium, Dissolved	mg/L	0.00652	0.0880	5.00	36.5	36.0	4.91	4.25 to 5.75	6.00	70.0 to 130	1.38	20.0
BD16269	Sodium, Total	mg/L	0.0143	0.0880	5.00	4.89	4.95	4.96	4.25 to 5.75	96.7	70.0 to 130	1.22	20.0
BD16269	Sulfate	mg/L	0.318	2.0	20.0	20.6	20.5	21.0	18.0 to 22.0	103	80.0 to 120	0.487	20.0
BD16268	Thallium, Dissolved	mg/L	-0.0000029	0.000147	0.100	0.0940	0.0954	0.0941	0.0850 to 0.115	94.0	70.0 to 130	1.48	20.0
BD16269	Thallium, Total	mg/L	-0.0000932	0.000147	0.100	0.106	0.107	0.108	0.0850 to 0.115	106	70.0 to 130	0.939	20.0
BD16269	Total Organic Carbon	mg/L	0.135	1.00	10.0	9.92	9.79	25.3		99.2	80.0 to 120	1.32	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Alabama Power

Batch QC Summary

Customer Account: WMWGORG
Sample Date: 8/23/23 13:02
Customer ID:
Delivery Date: 8/24/23 08:32

Description: Gorgas Gypsum - MW-12V

Laboratory ID Number: BD16268

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD16268	Alkalinity	mg CaCO3/L					257	51.1	45.0 to 55.0			0.00	10.0
BD16269	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.03	0.200	2.00	2.03	0.026	2.14	1.80 to 2.20	102	90.0 to 110	0.00	15.0
BD16268	Solids, Dissolved	mg/L	2.00	25.0			3990	59.0	40.0 to 60.0			7.54	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gorgas Gypsum Equipment Blank-1

Location Code: WMWGORGEB
Collected: 8/23/23 13:30
Customer ID:
Submittal Date: 8/24/23 08:33

Laboratory ID Number: BD16269

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	8/24/23 16:04	8/25/23 16:12		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	8/24/23 16:04	8/25/23 16:12		1.015	Not Detected	mg/L	0.070035	0.406	U
* Iron, Total	8/24/23 16:04	8/25/23 16:12		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Total	8/24/23 16:04	8/25/23 16:12		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	8/24/23 16:04	8/25/23 16:12		1.015	0.0360	mg/L	0.021315	0.406	J
* Molybdenum, Total	8/24/23 16:04	8/25/23 16:12		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Total (calc.)	8/24/23 16:04	8/25/23 16:12		1	Not Detected	mg/L			
* Silicon, Total	8/24/23 16:04	8/25/23 16:12		1.015	Not Detected	mg/L	0.02030	0.25375	U
* Sodium, Total	8/24/23 16:04	8/25/23 16:12		1.015	0.0564	mg/L	0.04060	0.406	J
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	8/24/23 16:04	8/25/23 12:26		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Total	8/30/23 13:19	8/30/23 14:26		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Total	8/24/23 16:04	8/25/23 12:26		1.015	Not Detected	mg/L	0.000112	0.000203	U
* Barium, Total	8/24/23 16:04	8/25/23 12:26		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Beryllium, Total	8/24/23 16:04	8/25/23 12:26		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	8/24/23 16:04	8/25/23 12:26		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	8/24/23 16:04	8/25/23 12:26		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	8/24/23 16:04	8/25/23 12:26		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	8/24/23 16:04	8/25/23 12:26		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	8/24/23 16:04	8/25/23 12:26		1.015	0.000490	mg/L	0.000152	0.001015	J
* Potassium, Total	8/24/23 16:04	8/25/23 12:26		1.015	Not Detected	mg/L	0.169505	0.5075	U
* Selenium, Total	8/24/23 16:04	8/25/23 12:26		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	8/24/23 16:04	8/25/23 12:26		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	8/28/23 10:25	8/28/23 16:12		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: CES***								
* Nitrogen, Nitrate/Nitrite	8/24/23 13:14	8/24/23 13:14		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	8/24/23 11:20	8/30/23 12:45		1	26.7	mg/L		25	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gorgas Gypsum Equipment Blank-1

Location Code: WMWGORGEB
Collected: 8/23/23 13:30
Customer ID:
Submittal Date: 8/24/23 08:33

Laboratory ID Number: BD16269

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	8/25/23 21:54	8/25/23 21:54		1	Not Detected	mg/L	1.00	2	U
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	8/29/23 11:32	8/29/23 11:32		1	Not Detected	mg/L	0.50	1	U
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	8/29/23 15:18	8/29/23 15:18		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	8/24/23 13:34	8/24/23 13:34		1	Not Detected	mg/L	0.6	2	U

MDL's and RL's are adjusted for sample dilution, as applicable

Comments:

Reported: 9/25/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGORGEB
Sample Date: 8/23/23 13:30
Customer ID:
Delivery Date: 8/24/23 08:33

Description: Gorgas Gypsum Equipment Blank-1

Laboratory ID Number: BD16269

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD16266	Aluminum, Total	mg/L	0.000992	0.0198	0.100	0.137	0.149	0.107	0.0850 to 0.115	105	70.0 to 130	8.39	20.0
BD16269	Antimony, Total	mg/L	0.000260	0.00100	0.100	0.0919	0.0923	0.0933	0.0850 to 0.115	91.9	70.0 to 130	0.434	20.0
BD16269	Arsenic, Total	mg/L	0.0000133	0.000200	0.100	0.0995	0.100	0.101	0.0850 to 0.115	99.5	70.0 to 130	0.501	20.0
BD16269	Barium, Total	mg/L	0.0000439	0.00100	0.100	0.100	0.0989	0.0978	0.0850 to 0.115	100	70.0 to 130	1.11	20.0
BD16269	Beryllium, Total	mg/L	0.0000032	0.000880	0.100	0.101	0.0978	0.0980	0.0850 to 0.115	101	70.0 to 130	3.22	20.0
BD16269	Boron, Total	mg/L	-0.000066	0.0650	1.00	0.985	0.981	0.982	0.850 to 1.15	98.5	70.0 to 130	0.407	20.0
BD16269	Cadmium, Total	mg/L	-0.0000007	0.000147	0.100	0.0991	0.102	0.0996	0.0850 to 0.115	99.1	70.0 to 130	2.88	20.0
BD16269	Calcium, Total	mg/L	-0.0140	0.152	5.00	4.57	4.65	4.69	4.25 to 5.75	91.4	70.0 to 130	1.74	20.0
BD16269	Chloride	mg/L	0.076	1.00	10.0	9.21	9.30	9.84	9.00 to 11.0	92.1	80.0 to 120	0.972	20.0
BD16269	Chromium, Total	mg/L	-0.000116	0.000440	0.100	0.103	0.102	0.102	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BD16269	Cobalt, Total	mg/L	-0.0000496	0.000147	0.100	0.104	0.104	0.104	0.0850 to 0.115	104	70.0 to 130	0.00	20.0
BD16269	Fluoride	mg/L	0.018	0.125	2.50	2.54	2.60	2.54	2.25 to 2.75	102	80.0 to 120	2.33	20.0
BD16269	Iron, Total	mg/L	0.00276	0.0176	0.2	0.197	0.199	0.199	0.170 to 0.230	98.5	70.0 to 130	1.01	20.0
BD16269	Lead, Total	mg/L	0.000003	0.000147	0.100	0.105	0.104	0.104	0.0850 to 0.115	105	70.0 to 130	0.957	20.0
BD16269	Lithium, Total	mg/L	0.000757	0.0154	0.200	0.193	0.196	0.195	0.170 to 0.230	96.5	70.0 to 130	1.54	20.0
BD16269	Magnesium, Total	mg/L	0.00781	0.0462	5.00	4.80	4.87	4.89	4.25 to 5.75	95.3	70.0 to 130	1.45	20.0
BD16269	Manganese, Total	mg/L	0.0000955	0.00033	0.100	0.101	0.102	0.101	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BD16269	Mercury, Total by CVAA	mg/L	4.000E-05	0.000500	0.004	0.00395	0.0039	0.00399	0.00340 to 0.00460	98.8	70.0 to 130	1.27	20.0
BD16269	Molybdenum, Total	mg/L	0.000	0.0100	0.2	0.199	0.199	0.200	0.170 to 0.230	99.5	70.0 to 130	0.00	20.0
BD16269	Potassium, Total	mg/L	-0.0119	0.367	10.0	10.6	10.3	10.4	8.50 to 11.5	106	70.0 to 130	2.87	20.0
BD16269	Selenium, Total	mg/L	-0.0000052	0.00100	0.100	0.102	0.104	0.104	0.0850 to 0.115	102	70.0 to 130	1.94	20.0
BD16269	Silicon, Total	mg/L	-0.000455	0.0440	1.00	0.963	0.968	0.977	0.850 to 1.15	96.3	70.0 to 130	0.518	20.0
BD16269	Sodium, Total	mg/L	0.0143	0.0880	5.00	4.89	4.95	4.96	4.25 to 5.75	96.7	70.0 to 130	1.22	20.0
BD16269	Sulfate	mg/L	0.318	2.0	20.0	20.6	20.5	21.0	18.0 to 22.0	103	80.0 to 120	0.487	20.0

Comments:

Reported: 9/25/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGORGEB
Sample Date: 8/23/23 13:30
Customer ID:
Delivery Date: 8/24/23 08:33

Description:Gorgas Gypsum Equipment Blank-1

Laboratory ID Number: BD16269

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD16269	Thallium, Total	mg/L	-0.0000932	0.000147	0.100	0.106	0.107	0.108	0.0850 to 0.115	106	70.0 to 130	0.939	20.0
BD16269	Total Organic Carbon	mg/L	0.135	1.00	10.0	9.92	9.79	25.3		99.2	80.0 to 120	1.32	20.0

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Alabama Power

Batch QC Summary

Customer Account: WMWGORGEB
Sample Date: 8/23/23 13:30
Customer ID:
Delivery Date: 8/24/23 08:33

Description: Gorgas Gypsum Equipment Blank-1

Laboratory ID Number: BD16269

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD16269	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.03	0.200	2.00	2.03	0.026	2.14	1.80 to 2.20	102	90.0 to 110	0.00	15.0
BD16268	Solids, Dissolved	mg/L	2.00	25.0			3990	59.0	40.0 to 60.0			7.54	10.0

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040
(205) 664-6001

Definitions

Alabama Power

Project Number: WMWGORG_1422

Abbreviation	Description
DF	Dilution Factor
LCS	Lab Control Sample
LFM	Lab Fortified Matrix
MB	Method Blank
MDL	Method Detection Limit; minimum concentration of an analyte that can be determined with 99% confidence that the concentration is greater than zero.
MS	Matrix Spike
MSD	Matrix Spike Duplicate
Prec	Precision (% RPD)
Q	Qualifier; comment used to note deviations or additional information associated with analytical results.
QC	Quality Control
Rec	Recovery of Matrix Spike
RL	Reporting Limit; lowest concentration at which an analyte can be quantitatively measured.
Vio Spec	Violation Specification; regulatory limit which has been exceeded by the sample analyzed.

Qualifier	Description
A	Bicarbonate alkalinity, carbonate alkalinity, hydroxide alkalinity, free carbon dioxide, and/or total carbon dioxide calculations are estimates due to pH>10SU and/or TDS>500mg/L.
FA	Field results were reviewed by the Water Field Group. Refer to APC Field Case Narrative.
J	Reported value is an estimate because concentration is less than reporting limit.
R	Matrix spike recovery and/or matrix spike duplicate recovery is outside of specification limit.
RA	Matrix spike is invalid due to sample concentration.
U	Compound was analyzed, but not detected.

Chain of Custody
Groundwater
APC General Testing Laboratory

☑ Field Complete ☐ Outside Lab
☑ Lab Complete

Lab ETA

Requested Complete Date	Routine	Results To	Dustin Brooks
Collector	Dallas Gentry	Requested By	Greg Budd
		Location	Gorgas Gypsum

Bottles

1	Metals	500 mL	3	Hg	250 mL	5	TDS/Alkalinity	500 mL	7	N/A	N/A
2	Dissolved Metals	500 mL	4	Nitrite, Nitrate; TOC	250 mL	6	Anions	500 mL	8	N/A	N/A

Comments

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id	pH Check
PZ-21	08/21/2023	14:31	6	Groundwater		BD16246	☑
PZ-22	08/22/2023	07:27	6	Groundwater		BD16247	☑
PZ-20	08/22/2023	08:23	6	Groundwater		BD16248	☑
PZ-19	08/22/2023	10:08	6	Groundwater		BD16249	☑
PZ-18	08/22/2023	11:03	6	Groundwater		BD16250	☑
PZ-17	08/22/2023	12:38	6	Groundwater		BD16251	☑
MW-12H	08/22/2023	14:08	6	Groundwater		BD16252	☑
MW-12H dup	08/22/2023	14:08	6	Sample Duplicate		BD16253	☑
MW-4V	08/23/2023	08:36	6	Groundwater		BD16254	☑
FB-2	08/23/2023	09:30	5	Field Blank		BD16255	☑
MW-4	08/23/2023	09:40	6	Groundwater		BD16256	☑
MW-3	08/23/2023	10:37	6	Groundwater		BD16257	☑
MW-3V	08/23/2023	15:27	6	Groundwater		BD16258	☑
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Relinquished By	Received By	Date/Time
		08/24/2023 07:25

SmarTroll ID	7586-41443-5-2	Cooler Temp	1.3 °C
Turbidity ID	9901-57263-1-1	Thermometer ID	10614-61208-2-1
Sample Event	1422	pH Strip ID	10853-62410-10-9

Bottles/Pre-Preserved Bottles are provided by the GTL

Total Metals and Alkalinity are not performed on Dissolved Sets

Dissolved Metals and Alkalinity are not performed on blanks i.e. Field Blanks or Equipment Blanks

Chain of Custody Groundwater

APC General Testing Laboratory

☑ Field Complete ☐ Outside Lab

☑ Lab Complete

Lab ETA

Requested Complete Date	Routine	Results To	Dustin Brooks
Collector	TJ Daugherty	Requested By	Greg Budd
		Location	Gorgas Gypsum

Bottles

1	Metals	500 mL	3	Hg	250 mL	5	TDS/Alkalinity	500 mL	7	N/A	N/A
2	Dissolved Metals	500 mL	4	Nitrite, Nitrate; TOC	250 mL	6	Anions	500 mL	8	N/A	N/A

Comments: Removed Greg Dyer from "Results To". Replaced Greg Dyer with Greg Budd in "Requested By" field. BC 08/24/2023

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id	pH Check
MW-14H	08/21/2023	14:35	6	Groundwater		BD16259	☑
MW-11H	08/22/2023	09:40	6	Groundwater		BD16260	☑
MW-13H	08/22/2023	10:43	6	Groundwater		BD16261	☑
MW-13H Dup	08/22/2023	10:43	6	Sample Duplicate		BD16262	☑
MW-9H	08/22/2023	12:15	6	Groundwater		BD16263	☑
MW-9V	08/22/2023	14:00	6	Groundwater		BD16264	☑
MW-8V	08/23/2023	10:22	6	Groundwater		BD16265	☑
MW-8	08/23/2023	11:25	6	Groundwater		BD16266	☑
FB-1	08/23/2023	12:00	5	Field Blank		BD1626	☑
MW-12V	08/23/2023	13:02	6	Groundwater		BD16268	☑
EB-1	08/23/2023	13:30	5	Equipment Blank		BD16269	☑
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Relinquished By	Received By	Date/Time
		08/24/2023 08:19

SmarTroll ID	7586-41445-5-4	Cooler Temp	2.6 °C
Turbidity ID	4677-23343-4-2	Thermometer ID	10614-61208-2-1
Sample Event	1422	pH Strip ID	10853-62410-10-9

Bottles/Pre-Preserved Bottles are provided by the GTL

Total Metals and Alkalinity are not performed on Dissolved Sets

Dissolved Metals and Alkalinity are not performed on blanks i.e. Field Blanks or Equipment Blanks

Chain of Custody
Groundwater
APC General Testing Laboratory

☑ Field Complete ☑ Outside Lab
☑ Lab Complete

Lab ETA

Requested Complete Date	Routine	Results To	Dustin Brooks
Collector	Dallas Gentry	Requested By	Greg Budd
		Location	Gorgas Gypsum

Bottles								
1	Radium	1 L	3	N/A	N/A	5	N/A	N/A	7	N/A	N/A
2	N/A	N/A	4	N/A	N/A	6	N/A	N/A	8	N/A	N/A

Comments: Radium MS/MSD collected at PZ-20

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id	pH Check
PZ-21	08/21/2023	14:31	1	Groundwater		BD16270	☑
PZ-22	08/22/2023	07:27	1	Groundwater		BD16271	☑
PZ-20	08/22/2023	08:23	3	Groundwater		BD16272	☑
PZ-19	08/22/2023	10:08	1	Groundwater		BD16273	☑
PZ-18	08/22/2023	11:03	1	Groundwater		BD16274	☑
PZ-17	08/22/2023	12:38	1	Groundwater		BD16275	☑
MW-12H	08/22/2023	14:08	1	Groundwater		BD16276	☑
MW-12H dup	08/22/2023	14:08	1	Sample Duplicate		BD16277	☑
MW-4V	08/23/2023	08:36	1	Groundwater		BD16278	☑
FB-2	08/23/2023	09:30	1	Field Blank		BD16279	☑
MW-4	08/23/2023	09:40	1	Groundwater		BD16280	☑
MW-3	08/23/2023	10:37	1	Groundwater		BD16281	☑
MW-3V	08/23/2023	15:27	1	Groundwater		BD16282	☑
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							☐

Relinquished By	Received By	Date/Time
		08/24/2023 07:24

SmarTroll ID	7586-41443-5-2	Cooler Temp	N/A
Turbidity ID	9901-57263-1-1	Thermometer ID	N/A
Sample Event	1422	pH Strip ID	10853-62410-10-9

Bottles/Pre-Preserved Bottles are provided by the GTL

Total Metals and Alkalinity are not performed on Dissolved Sets

Dissolved Metals and Alkalinity are not performed on blanks i.e. Field Blanks or Equipment Blanks

Chain of Custody
Groundwater
APC General Testing Laboratory

☑ Field Complete ☑ Outside Lab
☑ Lab Complete

Lab ETA

Requested Complete Date	Routine	Results To	Dustin Brooks
Collector	TJ Daugherty	Requested By	Greg Budd
		Location	Gorgas Gypsum

Bottles												
1	Radium	1 L	3	N/A	N/A	5	N/A	N/A	7	N/A	N/A
2	N/A	N/A	4	N/A	N/A	6	N/A	N/A	8	N/A	N/A

Comments: Removed Greg Dyer from "Results To". Replaced Greg Dyer with Greg Budd in "Requested By" field. BC 08/24/2023

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id	pH Check
MW-14H	08/21/2023	14:35	3	Groundwater		BD16283	☑
MW-11H	08/22/2023	09:40	1	Groundwater		BD16284	☑
MW-13H	08/22/2023	10:43	1	Groundwater		BD16285	☑
MW-13H Dup	08/22/2023	10:43	1	Sample Duplicate		BD16286	☑
MW-9H	08/22/2023	12:15	1	Groundwater		BD16287	☑
MW-9V	08/22/2023	14:00	1	Groundwater		BD16288	☑
MW-8V	08/23/2023	10:22	1	Groundwater		BD16289	☑
MW-8	08/23/2023	11:25	1	Groundwater		BD16290	☑
FB-1	08/23/2023	12:00	1	Field Blank		BD16291	☑
MW-12V	08/23/2023	13:02	1	Groundwater		BD16292	☑
EB-1	08/23/2023	13:30	1	Equipment Blank		BD16293	☑
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Relinquished By	Received By	Date/Time
		08/24/2023 08:19

SmarTroll ID	7586-41445-5-4	Cooler Temp	N/A
Turbidity ID	4677-23343-4-2	Thermometer ID	N/A
Sample Event	1422	pH Strip ID	10853-62410-10-9

Bottles/Pre-Preserved Bottles are provided by the GTL

Total Metals and Alkalinity are not performed on Dissolved Sets

Dissolved Metals and Alkalinity are not performed on blanks i.e. Field Blanks or Equipment Blanks

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

October 11, 2023

Brooke Caton
Alabama Power
744 Highway 87
Calera, AL 35040

RE: Project: WMWGORG_1422
Pace Project No.: 30617138

Dear Brooke Caton:

Enclosed are the analytical results for sample(s) received by the laboratory on August 28, 2023. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Greensburg

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Skyler C. Richmond
skyler.richmond@pacelabs.com
(724)850-5600
Project Manager

Enclosures

cc: Blaine Denton, Alabama Power
Renee Jernigan, Alabama Power

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

CERTIFICATIONS

Project: WMWGORG_1422
Pace Project No.: 30617138

Pace Analytical Services Pennsylvania
1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
ANABISO/IEC 17025:2017 Rad Cert#: L24170
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 2950
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA010
Louisiana DEQ/TNI Certification #: 04086
Maine Certification #: 2023021
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification #: 9991
Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572023-03
New Hampshire/TNI Certification #: 297622
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Ohio EPA Rad Approval: #41249
Oregon/TNI Certification #: PA200002-015
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: TN02867
Texas/TNI Certification #: T104704188-22-18
Utah/TNI Certification #: PA014572223-14
USDA Soil Permit #: 525-23-67-77263
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Approve List for Rad

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE SUMMARY

Project: WMWGORG_1422
Pace Project No.: 30617138

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30617138001	**BD16270 PZ-21**	Water	08/21/23 14:31	08/28/23 10:25
30617138002	**BD16271 PZ-22**	Water	08/22/23 07:27	08/28/23 10:25
30617138003	**BD16272 PZ-20**	Water	08/22/23 08:23	08/28/23 10:25
30617138004	**BD16272 PZ-20 MS**	Water	08/22/23 08:23	08/28/23 10:25
30617138005	**BD16272 PZ-20 MSD**	Water	08/22/23 08:23	08/28/23 10:25
30617138006	**BD16273 PZ-19**	Water	08/22/23 10:08	08/28/23 10:25
30617138007	**BD16274 PZ-18**	Water	08/22/23 11:03	08/28/23 10:25
30617138008	**BD16275 PZ-17**	Water	08/22/23 12:38	08/28/23 10:25
30617138009	**BD16276 MW-12H**	Water	08/22/23 14:08	08/28/23 10:25
30617138010	**BD16277 MW-12H Dup**	Water	08/22/23 14:08	08/28/23 10:25
30617138011	**BD16278 MW-4V**	Water	08/23/23 08:36	08/28/23 10:25
30617138012	**BD16279 FB-2**	Water	08/23/23 09:30	08/28/23 10:25
30617138013	**BD16280 MW-4**	Water	08/23/23 09:40	08/28/23 10:25
30617138014	**BD16281 MW-3**	Water	08/23/23 10:37	08/28/23 10:25
30617138015	**BD16282 MW-3V**	Water	08/23/23 15:27	08/28/23 10:25
30617138016	**BD16283 MW-14H**	Water	08/21/23 14:35	08/28/23 10:25
30617138017	**BD16283 MW-14H MS**	Water	08/21/23 14:35	08/28/23 10:25
30617138018	**BD16283 MW-14H MSD**	Water	08/21/23 14:35	08/28/23 10:25
30617138019	**BD16284 MW-11H**	Water	08/22/23 09:40	08/28/23 10:25
30617138020	**BD16285 MW-13H**	Water	08/22/23 10:43	08/28/23 10:25
30617138021	**BD16286 MW-13H Dup**	Water	08/22/23 10:43	08/28/23 10:25
30617138022	**BD16287 MW-9H**	Water	08/22/23 12:15	08/28/23 10:25
30617138023	**BD16288 MW-9V**	Water	08/22/23 14:00	08/28/23 10:25
30617138024	**BD16289 MW-8V**	Water	08/23/23 10:22	08/28/23 10:25
30617138025	**BD16290 MW-8**	Water	08/23/23 11:25	08/28/23 10:25
30617138026	**BD16291 FB-1**	Water	08/23/23 12:00	08/28/23 10:25
30617138027	**BD16292 MW-12V**	Water	08/23/23 13:02	08/28/23 10:25
30617138028	**BD16293 EB-1**	Water	08/23/23 13:30	08/28/23 10:25

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE ANALYTE COUNT

Project: WMWGORG_1422
Pace Project No.: 30617138

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30617138001	**BD16270 PZ-21**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA
30617138002	**BD16271 PZ-22**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA
30617138003	**BD16272 PZ-20**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA
30617138004	**BD16272 PZ-20 MS**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
30617138005	**BD16272 PZ-20 MSD**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
30617138006	**BD16273 PZ-19**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA
30617138007	**BD16274 PZ-18**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA
30617138008	**BD16275 PZ-17**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA
30617138009	**BD16276 MW-12H**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA
30617138010	**BD16277 MW-12H Dup**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA
30617138011	**BD16278 MW-4V**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA
30617138012	**BD16279 FB-2**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA
30617138013	**BD16280 MW-4**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE ANALYTE COUNT

Project: WMWGORG_1422
Pace Project No.: 30617138

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30617138014	**BD16281 MW-3**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA
30617138015	**BD16282 MW-3V**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA
30617138016	**BD16283 MW-14H**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA
30617138017	**BD16283 MW-14H MS**	EPA 9315	SLC	1	PASI-PA
30617138018	**BD16283 MW-14H MSD**	EPA 9315	SLC	1	PASI-PA
30617138019	**BD16284 MW-11H**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30617138020	**BD16285 MW-13H**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA
30617138021	**BD16286 MW-13H Dup**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA
30617138022	**BD16287 MW-9H**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA
30617138023	**BD16288 MW-9V**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA
30617138024	**BD16289 MW-8V**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA
30617138025	**BD16290 MW-8**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA
30617138026	**BD16291 FB-1**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA
30617138027	**BD16292 MW-12V**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE ANALYTE COUNT

Project: WMWGORG_1422
Pace Project No.: 30617138

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		Total Radium Calculation	LAL	1	PASI-PA
30617138028	**BD16293 EB-1**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA

PASI-PA = Pace Analytical Services - Greensburg

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

PROJECT NARRATIVE

Project: WMWGORG_1422
Pace Project No.: 30617138

Method: **EPA 9315**
Description: 9315 Total Radium
Client: Alabama Power
Date: October 11, 2023

General Information:
28 samples were analyzed for EPA 9315 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

PROJECT NARRATIVE

Project: WMWGORG_1422
Pace Project No.: 30617138

Method: **EPA 9320**
Description: 9320 Radium 228
Client: Alabama Power
Date: October 11, 2023

General Information:
26 samples were analyzed for EPA 9320 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: WMWGORG_1422
Pace Project No.: 30617138

Method: **Total Radium Calculation**
Description: Total Radium 228+226
Client: Alabama Power
Date: October 11, 2023

General Information:
24 samples were analyzed for Total Radium Calculation by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORG_1422
Pace Project No.: 30617138

Sample: BD16270 PZ-21 **Lab ID: 30617138001** Collected: 08/21/23 14:31 Received: 08/28/23 10:25 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.398U ± 0.300 (0.509) C:71% T:NA**	pCi/L	09/25/23 15:22	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.00528U ± 0.238 (0.561) C:85% T:93%**	pCi/L	09/19/23 14:38	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.403U ± 0.538 (1.07)**	pCi/L	09/26/23 15:10	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORG_1422
Pace Project No.: 30617138

Sample: BD16271 PZ-22 **Lab ID: 30617138002** Collected: 08/22/23 07:27 Received: 08/28/23 10:25 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.434U ± 0.294 (0.473) C:75% T:NA**	pCi/L	09/25/23 15:22	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.211U ± 0.285 (0.606) C:82% T:85%**	pCi/L	09/19/23 14:38	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.645U ± 0.579 (1.08)**	pCi/L	09/26/23 15:10	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORG_1422
Pace Project No.: 30617138

Sample: BD16272 PZ-20 **Lab ID: 30617138003** Collected: 08/22/23 08:23 Received: 08/28/23 10:25 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.412 ± 0.264 (0.378) C:84% T:NA**	pCi/L	09/25/23 15:22	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**1.11 ± 0.488 (0.821) C:87% T:84%**	pCi/L	09/20/23 11:30	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.52 ± 0.752 (1.20)**	pCi/L	09/26/23 15:10	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORG_1422
Pace Project No.: 30617138

Sample: BD16272 PZ-20 MS **Lab ID: 30617138004** Collected: 08/22/23 08:23 Received: 08/28/23 10:25 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**113.33 %REC ± NA (NA) C:NA T:NA**	pCi/L	09/25/23 15:22	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**80.42 %REC ± NA (NA) C:NA T:NA**	pCi/L	09/20/23 11:30	15262-20-1	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORG_1422
Pace Project No.: 30617138

Sample: BD16272 PZ-20 MSD **Lab ID: 30617138005** Collected: 08/22/23 08:23 Received: 08/28/23 10:25 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**108.10 %REC 4.73RPD ± NA (NA) C:NA T:NA**	pCi/L	09/25/23 15:23	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**87.86 %REC 8.85RPD ± NA (NA) C:NA T:NA**	pCi/L	09/20/23 11:30	15262-20-1	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORG_1422
Pace Project No.: 30617138

Sample: BD16273 PZ-19 **Lab ID: 30617138006** Collected: 08/22/23 10:08 Received: 08/28/23 10:25 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.561U ± 0.389 (0.703) C:77% T:NA**	pCi/L	09/25/23 15:26	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.355U ± 0.400 (0.840) C:85% T:80%**	pCi/L	09/20/23 11:30	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.916U ± 0.789 (1.54)**	pCi/L	09/26/23 15:10	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORG_1422
Pace Project No.: 30617138

Sample: BD16274 PZ-18 **Lab ID: 30617138007** Collected: 08/22/23 11:03 Received: 08/28/23 10:25 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.331U ± 0.262 (0.466) C:82% T:NA**	pCi/L	09/25/23 15:26	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.755U ± 0.469 (0.888) C:84% T:75%**	pCi/L	09/20/23 11:30	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.09U ± 0.731 (1.35)**	pCi/L	09/26/23 15:10	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORG_1422
Pace Project No.: 30617138

Sample: BD16275 PZ-17 **Lab ID: 30617138008** Collected: 08/22/23 12:38 Received: 08/28/23 10:25 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.285U ± 0.254 (0.474) C:89% T:NA**	pCi/L	09/25/23 15:26	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.753 ± 0.375 (0.642) C:85% T:91%**	pCi/L	09/20/23 14:53	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.04U ± 0.629 (1.12)**	pCi/L	09/26/23 15:10	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORG_1422
Pace Project No.: 30617138

Sample: BD16276 MW-12H **Lab ID: 30617138009** Collected: 08/22/23 14:08 Received: 08/28/23 10:25 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.526 ± 0.300 (0.452) C:95% T:NA**	pCi/L	09/26/23 11:30	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.706U ± 0.400 (0.711) C:83% T:79%**	pCi/L	09/20/23 14:53	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.23 ± 0.700 (1.16)**	pCi/L	09/26/23 15:10	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORG_1422
Pace Project No.: 30617138

Sample: BD16277 MW-12H Dup **Lab ID: 30617138010** Collected: 08/22/23 14:08 Received: 08/28/23 10:25 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.474U ± 0.306 (0.503) C:92% T:NA**	pCi/L	09/25/23 20:08	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.390U ± 0.395 (0.816) C:82% T:83%**	pCi/L	09/20/23 14:53	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.864U ± 0.701 (1.32)**	pCi/L	09/26/23 15:10	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORG_1422
Pace Project No.: 30617138

Sample: BD16278 MW-4V **Lab ID: 30617138011** Collected: 08/23/23 08:36 Received: 08/28/23 10:25 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.385U ± 0.283 (0.516) C:97% T:NA**	pCi/L	09/25/23 20:10	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.174U ± 0.347 (0.765) C:83% T:81%**	pCi/L	09/20/23 14:53	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.559U ± 0.630 (1.28)**	pCi/L	09/26/23 15:10	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORG_1422
Pace Project No.: 30617138

Sample: BD16279 FB-2 **Lab ID: 30617138012** Collected: 08/23/23 09:30 Received: 08/28/23 10:25 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.398U ± 0.291 (0.503) C:84% T:NA**	pCi/L	09/25/23 20:04	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.254U ± 0.290 (0.607) C:85% T:98%**	pCi/L	09/20/23 14:53	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.652U ± 0.581 (1.11)**	pCi/L	09/26/23 15:07	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORG_1422
Pace Project No.: 30617138

Sample: BD16280 MW-4 **Lab ID: 30617138013** Collected: 08/23/23 09:40 Received: 08/28/23 10:25 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.381U ± 0.300 (0.542) C:85% T:NA**	pCi/L	09/26/23 08:40	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.901 ± 0.377 (0.581) C:88% T:88%**	pCi/L	09/20/23 14:54	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.28 ± 0.677 (1.12)**	pCi/L	09/26/23 15:07	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORG_1422
Pace Project No.: 30617138

Sample: BD16281 MW-3 **Lab ID: 30617138014** Collected: 08/23/23 10:37 Received: 08/28/23 10:25 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.266U ± 0.292 (0.602) C:86% T:NA**	pCi/L	09/26/23 08:42	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.102U ± 0.334 (0.754) C:85% T:80%**	pCi/L	09/20/23 14:54	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.368U ± 0.626 (1.36)**	pCi/L	09/26/23 15:07	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORG_1422
Pace Project No.: 30617138

Sample: BD16282 MW-3V **Lab ID: 30617138015** Collected: 08/23/23 15:27 Received: 08/28/23 10:25 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.0989U ± 0.166 (0.371) C:90% T:NA**	pCi/L	09/26/23 08:42	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.322U ± 0.364 (0.760) C:82% T:82%**	pCi/L	09/20/23 14:54	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.421U ± 0.530 (1.13)**	pCi/L	09/26/23 15:07	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORG_1422
Pace Project No.: 30617138

Sample: BD16283 MW-14H **Lab ID: 30617138016** Collected: 08/21/23 14:35 Received: 08/28/23 10:25 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.279U ± 0.299 (0.615) C:83% T:NA**	pCi/L	09/26/23 08:42	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.885 ± 0.477 (0.841) C:70% T:78%**	pCi/L	09/25/23 12:06	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.16U ± 0.776 (1.46)**	pCi/L	09/26/23 15:07	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORG_1422
Pace Project No.: 30617138

Sample: BD16283 MW-14H MS **Lab ID: 30617138017** Collected: 08/21/23 14:35 Received: 08/28/23 10:25 Matrix: Water
PWS: Site ID: Sample Type:

Comments: • Run sample 017 as MS and assess against previously ran 016 result.

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
		Pace Analytical Services - Greensburg				
Radium-226	EPA 9315	**105.98 %REC ± NA (NA) C:NA T:NA**	pCi/L	09/26/23 08:39	13982-63-3	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORG_1422
Pace Project No.: 30617138

Sample: BD16283 MW-14H MSD **Lab ID: 30617138018** Collected: 08/21/23 14:35 Received: 08/28/23 10:25 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**105.16 %REC 0.78RPD ± NA (NA) C:NA T:NA**	pCi/L	09/26/23 08:39	13982-63-3	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORG_1422
Pace Project No.: 30617138

Sample: BD16284 MW-11H **Lab ID: 30617138019** Collected: 08/22/23 09:40 Received: 08/28/23 10:25 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.226U ± 0.280 (0.590) C:81% T:NA**	pCi/L	09/26/23 08:39	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.629 ± 0.347 (0.584) C:78% T:80%**	pCi/L	10/10/23 14:45	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**9.81 ± 2.25 (1.43)**	pCi/L	09/29/23 11:52	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORG_1422
Pace Project No.: 30617138

Sample: BD16285 MW-13H **Lab ID: 30617138020** Collected: 08/22/23 10:43 Received: 08/28/23 10:25 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.240U ± 0.247 (0.484) C:85% T:NA**	pCi/L	09/26/23 08:39	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.759 ± 0.394 (0.632) C:70% T:70%**	pCi/L	09/25/23 12:06	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.999U ± 0.641 (1.12)**	pCi/L	09/26/23 15:07	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORG_1422
Pace Project No.: 30617138

Sample: BD16286 MW-13H Dup **Lab ID: 30617138021** Collected: 08/22/23 10:43 Received: 08/28/23 10:25 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.211U ± 0.265 (0.562) C:84% T:NA**	pCi/L	09/26/23 08:40	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.753 ± 0.337 (0.464) C:71% T:77%**	pCi/L	09/25/23 12:06	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.964U ± 0.602 (1.03)**	pCi/L	09/26/23 15:07	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORG_1422
Pace Project No.: 30617138

Sample: BD16287 MW-9H **Lab ID: 30617138022** Collected: 08/22/23 12:15 Received: 08/28/23 10:25 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.164U ± 0.239 (0.522) C:83% T:NA**	pCi/L	09/26/23 08:43	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.708 ± 0.358 (0.608) C:86% T:87%**	pCi/L	09/20/23 14:55	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.872U ± 0.597 (1.13)**	pCi/L	09/26/23 15:07	7440-14-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORG_1422
Pace Project No.: 30617138

Sample: BD16288 MW-9V **Lab ID: 30617138023** Collected: 08/22/23 14:00 Received: 08/28/23 10:25 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.523 ± 0.329 (0.500) C:76% T:NA**	pCi/L	09/26/23 08:40	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.102U ± 0.353 (0.798) C:74% T:87%**	pCi/L	09/21/23 15:45	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.625U ± 0.682 (1.30)**	pCi/L	09/26/23 15:07	7440-14-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORG_1422
Pace Project No.: 30617138

Sample: BD16289 MW-8V **Lab ID: 30617138024** Collected: 08/23/23 10:22 Received: 08/28/23 10:25 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.148U ± 0.228 (0.503) C:93% T:NA**	pCi/L	09/26/23 08:40	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.689 ± 0.386 (0.676) C:74% T:86%**	pCi/L	09/21/23 15:45	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.837U ± 0.614 (1.18)**	pCi/L	09/26/23 15:07	7440-14-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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(724)850-5600

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORG_1422
Pace Project No.: 30617138

Sample: BD16290 MW-8 **Lab ID: 30617138025** Collected: 08/23/23 11:25 Received: 08/28/23 10:25 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.0916U ± 0.184 (0.426) C:92% T:NA**	pCi/L	09/26/23 08:40	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.643U ± 0.387 (0.702) C:75% T:84%**	pCi/L	09/21/23 15:45	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.735U ± 0.571 (1.13)**	pCi/L	09/26/23 15:07	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORG_1422
Pace Project No.: 30617138

Sample: BD16291 FB-1 **Lab ID: 30617138026** Collected: 08/23/23 12:00 Received: 08/28/23 10:25 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.186U ± 0.311 (0.700) C:82% T:NA**	pCi/L	09/26/23 08:43	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.110U ± 0.298 (0.671) C:77% T:87%**	pCi/L	09/21/23 15:45	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.296U ± 0.609 (1.37)**	pCi/L	09/26/23 15:07	7440-14-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORG_1422
Pace Project No.: 30617138

Sample: BD16292 MW-12V **Lab ID: 30617138027** Collected: 08/23/23 13:02 Received: 08/28/23 10:25 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**-0.0888U ± 0.181 (0.555) C:91% T:NA**	pCi/L	09/26/23 08:43	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.176U ± 0.408 (0.840) C:73% T:84%**	pCi/L	09/21/23 15:46	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.176U ± 0.589 (1.40)**	pCi/L	09/26/23 15:07	7440-14-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORG_1422
Pace Project No.: 30617138

Sample: BD16293 EB-1 **Lab ID: 30617138028** Collected: 08/23/23 13:30 Received: 08/28/23 10:25 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.141U ± 0.213 (0.466) C:83% T:NA**	pCi/L	09/26/23 08:43	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.0709U ± 0.367 (0.811) C:76% T:91%**	pCi/L	09/21/23 15:46	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.212U ± 0.580 (1.28)**	pCi/L	09/26/23 15:07	7440-14-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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QUALITY CONTROL - RADIOCHEMISTRY

Project: WMWGORG_1422
Pace Project No.: 30617138

QC Batch: 620307
QC Batch Method: EPA 9320
Analysis Method: EPA 9320
Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30617138019

METHOD BLANK: 3022445 Matrix: Water
Associated Lab Samples: 30617138019

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.410 ± 0.294 (0.559) C:79% T:92%	pCi/L	10/10/23 14:45	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL - RADIOCHEMISTRY

Project: WMWGORG_1422
Pace Project No.: 30617138

QC Batch: 615449
QC Batch Method: EPA 9320
Analysis Method: EPA 9320
Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30617138023, 30617138024, 30617138025, 30617138026, 30617138027, 30617138028

METHOD BLANK: 2997155 Matrix: Water
Associated Lab Samples: 30617138023, 30617138024, 30617138025, 30617138026, 30617138027, 30617138028

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.527 ± 0.457 (0.929) C:76% T:86%	pCi/L	09/21/23 15:48	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL - RADIOCHEMISTRY

Project: WMWGORG_1422
Pace Project No.: 30617138

QC Batch: 612804
QC Batch Method: EPA 9315
Analysis Method: EPA 9315
Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30617138012, 30617138013, 30617138014, 30617138015, 30617138016, 30617138017, 30617138018, 30617138019, 30617138020, 30617138021, 30617138022, 30617138023, 30617138024, 30617138025, 30617138026, 30617138027, 30617138028

METHOD BLANK: 2982902
Matrix: Water
Associated Lab Samples: 30617138012, 30617138013, 30617138014, 30617138015, 30617138016, 30617138017, 30617138018, 30617138019, 30617138020, 30617138021, 30617138022, 30617138023, 30617138024, 30617138025, 30617138026, 30617138027, 30617138028

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.161 ± 0.130 (0.245) C:84% T:NA	pCi/L	09/25/23 20:10	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL - RADIOCHEMISTRY

Project: WMWGORG_1422
Pace Project No.: 30617138

QC Batch: 614799
QC Batch Method: EPA 9320
Analysis Method: EPA 9320
Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30617138003, 30617138004, 30617138005, 30617138006, 30617138007, 30617138008, 30617138009, 30617138010, 30617138011, 30617138012, 30617138013, 30617138014, 30617138015, 30617138016, 30617138020, 30617138021, 30617138022

METHOD BLANK: 2993407
Matrix: Water
Associated Lab Samples: 30617138003, 30617138004, 30617138005, 30617138006, 30617138007, 30617138008, 30617138009, 30617138010, 30617138011, 30617138012, 30617138013, 30617138014, 30617138015, 30617138016, 30617138020, 30617138021, 30617138022

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.515 ± 0.342 (0.638) C:86% T:83%	pCi/L	09/20/23 11:29	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL - RADIOCHEMISTRY

Project: WMWGORG_1422
Pace Project No.: 30617138

QC Batch: 614498
QC Batch Method: EPA 9320
Analysis Method: EPA 9320
Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30617138001, 30617138002

METHOD BLANK: 2991831 Matrix: Water
Associated Lab Samples: 30617138001, 30617138002

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	-0.0233 ± 0.262 (0.618) C:83% T:92%	pCi/L	09/19/23 11:18	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL - RADIOCHEMISTRY

Project: WMWGORG_1422
Pace Project No.: 30617138

QC Batch: 612803
QC Batch Method: EPA 9315
Analysis Method: EPA 9315
Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30617138001, 30617138002, 30617138003, 30617138004, 30617138005, 30617138006, 30617138007, 30617138008, 30617138009, 30617138010, 30617138011

METHOD BLANK: 2982901 Matrix: Water
Associated Lab Samples: 30617138001, 30617138002, 30617138003, 30617138004, 30617138005, 30617138006, 30617138007, 30617138008, 30617138009, 30617138010, 30617138011

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.0621 ± 0.104 (0.234) C:69% T:NA	pCi/L	09/25/23 08:26	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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Greensburg, PA 15601
(724)850-5600

QUALIFIERS

Project: WMWGORG_1422
Pace Project No.: 30617138

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Act - Activity

Unc - Uncertainty: For Safe Drinking Water Act (SDWA) analyses, the reported Unc. Is the calculated Count Uncertainty (95% confidence interval) using a coverage factor of 1.96. For all other matrices (non-SDWA), the reported Unc. is the calculated Expanded Uncertainty (aka Combined Standard Uncertainty, CSU), reported at the 95% confidence interval using a coverage factor of 1.96.

Gamma Spec: The Unc. reported for all gamma-spectroscopy analyses (EPA 901.1), is the calculated Expanded Uncertainty (CSU) at the 95.4% confidence interval, using a coverage factor of 2.0.

(MDC) - Minimum Detectable Concentration

Trac - Tracer Recovery (%)

Carr - Carrier Recovery (%)

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

Pace Analytical Services, LLC
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Greensburg, PA 15601
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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: WMWGORG_1422
Pace Project No.: 30617138

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30617138001	**BD16270 PZ-21**	EPA 9315	612803		
30617138002	**BD16271 PZ-22**	EPA 9315	612803		
30617138003	**BD16272 PZ-20**	EPA 9315	612803		
30617138004	**BD16272 PZ-20 MS**	EPA 9315	612803		
30617138005	**BD16272 PZ-20 MSD**	EPA 9315	612803		
30617138006	**BD16273 PZ-19**	EPA 9315	612803		
30617138007	**BD16274 PZ-18**	EPA 9315	612803		
30617138008	**BD16275 PZ-17**	EPA 9315	612803		
30617138009	**BD16276 MW-12H**	EPA 9315	612803		
30617138010	**BD16277 MW-12H Dup**	EPA 9315	612803		
30617138011	**BD16278 MW-4V**	EPA 9315	612803		
30617138012	**BD16279 FB-2**	EPA 9315	612804		
30617138013	**BD16280 MW-4**	EPA 9315	612804		
30617138014	**BD16281 MW-3**	EPA 9315	612804		
30617138015	**BD16282 MW-3V**	EPA 9315	612804		
30617138016	**BD16283 MW-14H**	EPA 9315	612804		
30617138017	**BD16283 MW-14H MS**	EPA 9315	612804		
30617138018	**BD16283 MW-14H MSD**	EPA 9315	612804		
30617138019	**BD16284 MW-11H**	EPA 9315	612804		
30617138020	**BD16285 MW-13H**	EPA 9315	612804		
30617138021	**BD16286 MW-13H Dup**	EPA 9315	612804		
30617138022	**BD16287 MW-9H**	EPA 9315	612804		
30617138023	**BD16288 MW-9V**	EPA 9315	612804		
30617138024	**BD16289 MW-8V**	EPA 9315	612804		
30617138025	**BD16290 MW-8**	EPA 9315	612804		
30617138026	**BD16291 FB-1**	EPA 9315	612804		
30617138027	**BD16292 MW-12V**	EPA 9315	612804		
30617138028	**BD16293 EB-1**	EPA 9315	612804		
30617138001	**BD16270 PZ-21**	EPA 9320	614498		
30617138002	**BD16271 PZ-22**	EPA 9320	614498		
30617138003	**BD16272 PZ-20**	EPA 9320	614799		
30617138004	**BD16272 PZ-20 MS**	EPA 9320	614799		
30617138005	**BD16272 PZ-20 MSD**	EPA 9320	614799		
30617138006	**BD16273 PZ-19**	EPA 9320	614799		
30617138007	**BD16274 PZ-18**	EPA 9320	614799		
30617138008	**BD16275 PZ-17**	EPA 9320	614799		
30617138009	**BD16276 MW-12H**	EPA 9320	614799		
30617138010	**BD16277 MW-12H Dup**	EPA 9320	614799		
30617138011	**BD16278 MW-4V**	EPA 9320	614799		
30617138012	**BD16279 FB-2**	EPA 9320	614799		
30617138013	**BD16280 MW-4**	EPA 9320	614799		
30617138014	**BD16281 MW-3**	EPA 9320	614799		
30617138015	**BD16282 MW-3V**	EPA 9320	614799		
30617138016	**BD16283 MW-14H**	EPA 9320	614799		
30617138019	**BD16284 MW-11H**	EPA 9320	620307		
30617138020	**BD16285 MW-13H**	EPA 9320	614799		

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: WMWGORG_1422
Pace Project No.: 30617138

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30617138021	**BD16286 MW-13H Dup**	EPA 9320	614799		
30617138022	**BD16287 MW-9H**	EPA 9320	614799		
30617138023	**BD16288 MW-9V**	EPA 9320	615449		
30617138024	**BD16289 MW-8V**	EPA 9320	615449		
30617138025	**BD16290 MW-8**	EPA 9320	615449		
30617138026	**BD16291 FB-1**	EPA 9320	615449		
30617138027	**BD16292 MW-12V**	EPA 9320	615449		
30617138028	**BD16293 EB-1**	EPA 9320	615449		
30617138001	**BD16270 PZ-21**	Total Radium Calculation	618154		
30617138002	**BD16271 PZ-22**	Total Radium Calculation	618154		
30617138003	**BD16272 PZ-20**	Total Radium Calculation	618154		
30617138006	**BD16273 PZ-19**	Total Radium Calculation	618154		
30617138007	**BD16274 PZ-18**	Total Radium Calculation	618154		
30617138008	**BD16275 PZ-17**	Total Radium Calculation	618154		
30617138009	**BD16276 MW-12H**	Total Radium Calculation	618154		
30617138010	**BD16277 MW-12H Dup**	Total Radium Calculation	618154		
30617138011	**BD16278 MW-4V**	Total Radium Calculation	618154		
30617138012	**BD16279 FB-2**	Total Radium Calculation	618149		
30617138013	**BD16280 MW-4**	Total Radium Calculation	618149		
30617138014	**BD16281 MW-3**	Total Radium Calculation	618149		
30617138015	**BD16282 MW-3V**	Total Radium Calculation	618149		
30617138016	**BD16283 MW-14H**	Total Radium Calculation	618149		
30617138019	**BD16284 MW-11H**	Total Radium Calculation	619014		
30617138020	**BD16285 MW-13H**	Total Radium Calculation	618149		
30617138021	**BD16286 MW-13H Dup**	Total Radium Calculation	618149		
30617138022	**BD16287 MW-9H**	Total Radium Calculation	618149		
30617138023	**BD16288 MW-9V**	Total Radium Calculation	618149		
30617138024	**BD16289 MW-8V**	Total Radium Calculation	618149		
30617138025	**BD16290 MW-8**	Total Radium Calculation	618149		
30617138026	**BD16291 FB-1**	Total Radium Calculation	618149		
30617138027	**BD16292 MW-12V**	Total Radium Calculation	618149		
30617138028	**BD16293 EB-1**	Total Radium Calculation	618149		

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	Alabama Power Company	Report To:	Brooke Caton	Attention:	Brooke Caton
Address:	744 Highway 87 GSC Bldg #8	Copy To:	Renee Jernigan & Blaine Denton	Company Name:	Alabama Power Co.
	Calera, AL 35040			Address:	744 Highway 87 GSC Bldg #8
Email To:	tbwill@southernco.com	Purchase Order #:	APC87119-0001	Pace Quote:	CCR
Phone:	205-664-6101 Fax:	Project Name:	Plant Gorgas Gypsum	Pace Project Manager:	Skyler Richmond
Requested Due Date:	Normal	Project Number:	WMWGORG_1422	Pace Profile #:	16788

Regulatory Agency

State / Location: AL

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)	Description	Station Name Location_Code	Site Name Facility_ID	Sample Duplicate	Matrix Spike/Matrix Spike Duplicate	Field Filtered	MATRIX CODE	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	# OF CONTAINERS	Preservatives: Unpreserved	Preservatives: NaOH+ZnAcetate	Preservatives: HNO3	Preservatives:	Preservatives:	Analyses Test Y/N	EPA 9315	EPA 9320	Total Radium Sum	Total Sulfide		Residual Chlorine (Y/N)	
1	BD16270	PZ-21	APCO-GS-GSA-PZ-21	APCO_Gorgas_GypsumStore				GW	G	8/21/2023	14:31	1			X				X	X	X				001
2	BD16271	PZ-22	APCO-GS-GSA-PZ-22	APCO_Gorgas_GypsumStore				GW	G	8/22/2023	7:27	1			X				X	X	X				002
3	BD16272	PZ-20	APCO-GS-GSA-PZ-20	APCO_Gorgas_GypsumStore		x		GW	G	8/22/2023	8:23	3			X				X	X	X				003,004,005
4	BD16273	PZ-19	APCO-GS-GSA-PZ-19	APCO_Gorgas_GypsumStore				GW	G	8/22/2023	10:08	1			X				X	X	X				006
5	BD16274	PZ-18	APCO-GS-GSA-PZ-18	APCO_Gorgas_GypsumStore				GW	G	8/22/2023	11:03	1			X				X	X	X				007
6	BD16275	PZ-17	APCO-GS-GSA-PZ-17	APCO_Gorgas_GypsumStore				GW	G	8/22/2023	12:38	1			X				X	X	X				008
7	BD16276	MW-12H	APCO-GS-GSA-MW-12H	APCO_Gorgas_GypsumStore				GW	G	8/22/2023	14:08	1			X				X	X	X				009
8	BD16277	MW-12H Dup	APCO-GS-GSA-MW-12H	APCO_Gorgas_GypsumStore	x			GW	G	8/22/2023	14:08	1			X				X	X	X				010
9	BD16278	MW-4V	APCO-GS-GSA-MW-4V	APCO_Gorgas_GypsumStore				GW	G	8/23/2023	8:36	1			X				X	X	X				011
10	BD16279	FB-2	APCO-GS-GSA-FB-02	APCO_Gorgas_GypsumStore				GW	G	8/23/2023	9:30	1			X				X	X	X				012
11	BD16280	MW-4	APCO-GS-GSA-MW-4	APCO_Gorgas_GypsumStore				GW	G	8/23/2023	9:40	1			X				X	X	X				013
12	BD16281	MW-3	APCO-GS-GSA-MW-3	APCO_Gorgas_GypsumStore				GW	G	8/23/2023	10:37	1			X				X	X	X				014

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	Brooke Caton/ APC GTL	8/24/2023	13:00	[signature]	8/25/23	10:25	—	N	Y	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER:

SIGNATURE of SAMPLER: DATE Signed:

TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

WO# : 30617138

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	Alabama Power Company	Report To:	Brooke Caton	Attention:	Brooke Caton
Address:	744 Highway 87 GSC Bldg #8 Calera, AL 35040	Copy To:	Renee Jernigan & Blaine Denton	Company Name:	Alabama Power Co.
				Address:	744 Highway 87 GSC Bldg #8
Email To:	tbwill@southernco.com	Purchase Order #:	APC87119-0001	Pace Quote:	CCR
Phone:	205-664-6101 Fax:	Project Name:	Plant Gorgas Gypsum	Pace Project Manager:	Skyler Richmond
Requested Due Date:	Normal	Project Number:	WMWGORG_1422	Pace Profile #:	16788

Regulatory Agency

State / Location: AL

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)	Description	Station Name Location_Code	Site Name Facility_ID	Sample Duplicate	Matrix Spike/Matrix Spike Duplicate	Field Filtered	MATRIX CODE	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	# OF CONTAINERS	Preservatives: Unpreserved	NaOH+ZnAcetate	HNO3	Y/N	Analyses Test: EPA 9315	EPA 9320	Total Radium Sum	Total Sulfide	Residual Chlorine (Y/N)	
1	BD16282	MW-3V	APCO-GS-GSA-MW-3V	APCO_Gorgas_GypsumStore				GW	G	8/23/2023	15:27	1			X		X	X	X			015
2	BD16283	MW-14H	APCO-GS-GSA-MW-14H	APCO_Gorgas_GypsumStore		x		GW	G	8/21/2023	14:35	3			X		X	X	X			016,017,018
3	BD16284	MW-11H	APCO-GS-GSA-MW-11H	APCO_Gorgas_GypsumStore				GW	G	8/22/2023	9:40	1			X		X	X	X			019
4	BD16285	MW-13H	APCO-GS-GSA-MW-13H	APCO_Gorgas_GypsumStore				GW	G	8/22/2023	10:43	1			X		X	X	X			020
5	BD16286	MW-13H Dup	APCO-GS-GSA-MW-13H	APCO_Gorgas_GypsumStore	x			GW	G	8/22/2023	10:43	1			X		X	X	X			021
6	BD16287	MW-9H	APCO-GS-GSA-MW-9H	APCO_Gorgas_GypsumStore				GW	G	8/22/2023	12:15	1			X		X	X	X			022
7	BD16288	MW-9V	APCO-GS-GSA-MW-9V	APCO_Gorgas_GypsumStore				GW	G	8/22/2023	14:00	1			X		X	X	X			023
8	BD16289	MW-8V	APCO-GS-GSA-MW-8V	APCO_Gorgas_GypsumStore				GW	G	8/23/2023	10:22	1			X		X	X	X			024
9	BD16290	MW-8	APCO-GS-GSA-MW-8	APCO_Gorgas_GypsumStore				GW	G	8/23/2023	11:25	1			X		X	X	X			025
10	BD16291	FB-1	APCO-GS-GSA-FB-01	APCO_Gorgas_GypsumStore				GW	G	8/23/2023	12:00	1			X		X	X	X			026
11	BD16292	MW-12V	APCO-GS-GSA-MW-12V	APCO_Gorgas_GypsumStore				GW	G	8/23/2023	13:02	1			X		X	X	X			027
12	BD16293	EB-1	APCO-GS-GSA-EB-01	APCO_Gorgas_GypsumStore				GW	G	8/23/2023	13:30	1			X		X	X	X			028

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	Brooke Caton/ APC GTL	8/24/2023	13:00		8/24/23	10:25	-	N	Y	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER:

SIGNATURE of SAMPLER: DATE Signed:

TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

WO#: 30617138

PM: SCR Due Date: 09/26/23

CLIENT: ALABAMA PWR

	DC#_Title: ENV-FRM-GBUR-0088 v05_Sample Condition Upon Receipt-Pittsburgh	WO# : 30617138
Pace ANALYTICAL SERVICES	Effective Date: 07/06/2023	PM: SCR Due Date: 09/26/23
		CLIENT: ALABAMA PWR

Client Name: APC

Courier: ☑ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace ☐ Other

Tracking Number: 7012-3696 8871

Initial / Date

Examined By: TH 8/28/23

Labeled By: TH 8/28/23

Temped By: —

Custody Seal on Cooler/Box Present: ☑ Yes ☐ No **Seals Intact:** ☑ Yes ☐ No

Thermometer Used: — **Type of Ice:** Wet Blue (None)

Cooler Temperature: Observed Temp — °C Correction Factor: — °C Final Temp: — °C

Temp should be above freezing to 6°C

Comments:	Yes	No	NA	pH paper Lot# 1000931	D.P.D. Residual Chlorine Lot # —
Chain of Custody Present	J			1.	
Chain of Custody Filled Out:	J			2.	
-Were client corrections present on COC		J			
Chain of Custody Relinquished	J			3.	
Sampler Name & Signature on COC:		J		4.	
Sample Labels match COC:	J			5.	
-Includes date/time/ID					
Matrix:	WT				
Samples Arrived within Hold Time:	J			6.	
Short Hold Time Analysis (<72hr remaining):		J		7.	
Rush Turn Around Time Requested:		J		8.	
Sufficient Volume:	J			9.	
Correct Containers Used:	J			10.	
-Pace Containers Used	J				
Containers Intact:	J			11.	
Orthophosphate field filtered:			J	12.	
Hex Cr Aqueous samples field filtered:			J	13.	
Organic Samples checked for dechlorination			J	14:	
Filtered volume received for dissolved tests:			J	15:	
All containers checked for preservation:	J			16.	
exceptions: VOA, coliform, TOC, O&G, Phenolics, Radon, non-aqueous matrix				PH<2	
All containers meet method preservation requirements:	J			Initial when completed TH	Date/Time of Preservation
				Lot# of added Preservative	
8260C/D: Headspace in VOA Vials (> 6mm)			J	17.	
624.1: Headspace in VOA Vials (0mm)			J	18.	
Trip Blank Present:			J	Trip blank custody seal present? YES or NO	
Rad Samples Screened <0.5 mrem/hr.	J			Initial when completed TH	Date: 8/28/23 Survey Meter SN: 1563

Comments:

Note: For NC compliance samples with discrepancies, a copy of this form must be sent to the DEHNR Certification office.
PM Review is documented electronically in LIMS through the SRF Review schedule in the Workorder Edit Screen.

Client _____

Site Plant Boragas Gypsum

Page 1 of 1

Profile Number 16788

Notes _____

Sample Line Item	Matrix	Amber Glass					Plastic								Vials					Other									
		AG1H	AG3S	AG3U	AG5U	AG5T	BP1N	BP1U	BP2S	BP2U	BP3C	BP3N	BP3S	BP3U	DG9S	VG9H	VG9T	VG9U	VOAK	WGFU	WGKU	ZPLC	GCUB	GJN	12GN	GN	BG1U		
1	WT						1																						
28																													

Container Codes

Glass

GJN	1 Gallon Jug with HNO3	DG9S	40mL amber VOA vial H2SO4
AG5U	100mL amber glass unpreserved	VG9U	40mL clear VOA vial
AG5T	100mL amber glass Na Thiosulfate	VG9T	40mL clear VOA vial Na Thiosulfate
GJN	1 Gallon Jug	VG9H	40mL clear VOA vial HCl
AG1S	1L amber glass H2SO4	JGFU	4oz amber wide jar
AG1H	1L amber glass HCl	WGFU	4oz wide jar unpreserved
AG1T	1L amber glass NA Thiosulfate	BG2U	500mL clear glass unpreserved
BG1U	1L clear glass unpreserved	AG2U	500mL amber glass unpreserved
AG3S	250mL amber glass H2SO4	WGKU	8oz wide jar unpreserved
AG3U	250mL amber glass unpreserved	GN	Genera

Plastic/Misc.

GCUB	1 gallon cubitainer
12GN	1/2 gallon cubitainer
SP5T	120mL coliform Na Thiosulfate
BP1N	1L plastic HNO3
BP1U	1L plastic unpreserved
BP3S	250mL plastic H2SO4
BP3N	250mL plastic HNO3
BP3U	250mL plastic unpreserved
BP3C	250mL plastic NAOH
	500mL plastic H2SO4
	500mL plastic unpreserved

EZI	5g Encore
VOAK	Kit Volatile Solid
I	Wipe/Swab
ZPLC	Siploc Bag

WT	Water
SL	Solid
OL	Non-Aq Liquid
WP	Wipe

WO#: 30617138

PM: SCR Due Date: 09/26/23

CLIENT: ALABAMA PWR

Qualtrax ID: 55678

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

Test:	Ra-228
Analyst:	VAL
Date:	9/13/2023
Worklist:	75265
Matrix:	WT

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2991831
MB concentration:	-0.023
M/B 2 Sigma CSU:	0.262
MB MDC:	0.618
MB Numerical Performance Indicator:	-0.17
MB Status vs Numerical Indicator:	Pass
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	N
	LCS75265	LCSD75265
Count Date:	9/19/2023	
Spike I.D.:	23-043	
Decay Corrected Spike Concentration (pCi/mL):	39.760	
Volume Used (mL):	0.10	
Aliquot Volume (L, g, F):	0.817	
Target Conc. (pCi/L, g, F):	4.869	
Uncertainty (Calculated):	0.239	
Result (pCi/L, g, F):	4.388	
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	0.994	
Numerical Performance Indicator:	-0.92	
Percent Recovery:	90.14%	
Status vs Numerical Indicator:	N/A	
Status vs Recovery:	Pass	
Upper % Recovery Limits:	135%	
Lower % Recovery Limits:	60%	

Sample Matrix Spike Control Assessment	MS/MSD 1	MS/MSD 2
Sample Collection Date:	8/22/2023	8/16/2023
Sample I.D.	30617128003	30616394001
Sample MS I.D.	30617128004	30616394002
Sample MSD I.D.	30617128005	30616394003
Spike I.D.:	23-043	23-043
MS/MSD Decay Corrected Spike Concentration (pCi/mL):	40.130	40.130
Spike Volume Used in MS (mL):	0.20	0.20
Spike Volume Used in MSD (mL):	0.20	0.20
MS Aliquot (L, g, F):	0.802	0.807
MS Target Conc.(pCi/L, g, F):	10.012	9.951
MSD Aliquot (L, g, F):	0.803	0.805
MSD Target Conc. (pCi/L, g, F):	9.995	9.972
MS Spike Uncertainty (calculated):	0.491	0.488
MSD Spike Uncertainty (calculated):	0.490	0.489
Sample Result:	0.536	0.096
Sample Result 2 Sigma CSU (pCi/L, g, F):	0.358	0.291
Sample Matrix Spike Result:	8.412	8.642
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):	1.708	1.730
Sample Matrix Spike Duplicate Result:	9.853	9.127
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):	1.980	1.799
MS Numerical Performance Indicator:	-2.309	-1.512
MSD Numerical Performance Indicator:	-0.641	-0.978
MS Percent Recovery:	78.67%	85.88%
MSD Percent Recovery:	93.22%	90.56%
MS Status vs Numerical Indicator:	Warning	Pass
MSD Status vs Numerical Indicator:	Pass	Pass
MS Status vs Recovery:	Pass	Pass
MSD Status vs Recovery:	Pass	Pass
MS/MSD Upper % Recovery Limits:	135%	135%
MS/MSD Lower % Recovery Limits:	60%	60%

Duplicate Sample Assessment		
Sample I.D.:		Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.		
Sample Result (pCi/L, g, F):		
Sample Result 2 Sigma CSU (pCi/L, g, F):		
Sample Duplicate Result (pCi/L, g, F):		
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):		
Are sample and/or duplicate results below RL?	See Below ##	
Duplicate Numerical Performance Indicator:		
Duplicate RPD:		
Duplicate Status vs Numerical Indicator:		
Duplicate Status vs RPD:		
% RPD Limit:		

Matrix Spike/Matrix Spike Duplicate Sample Assessment		
Sample I.D.	30617128003	30616394001
Sample MS I.D.	30617128004	30616394002
Sample MSD I.D.	30617128005	30616394003
Sample Matrix Spike Result:	8.412	8.642
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):	1.708	1.730
Sample Matrix Spike Duplicate Result:	9.853	9.127
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):	1.980	1.799
Duplicate Numerical Performance Indicator:	-1.080	-0.381
(Based on the Percent Recoveries) MS/ MSD Duplicate RPD:	16.93%	5.31%
MS/ MSD Duplicate Status vs Numerical Indicator:	Pass	Pass
MS/ MSD Duplicate Status vs RPD:	Pass	Pass
% RPD Limit:	36%	36%

Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

Comments:

VAL 9/20/23

9/19/2023

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

Test:	Ra-226
Analyst:	SLC
Date:	9/8/2023
Worklist:	75123
Matrix:	WT

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2982901
MB concentration:	0.062
M/B 2 Sigma CSU:	0.104
MB MDC:	0.234
MB Numerical Performance Indicator:	1.17
MB Status vs Numerical Indicator:	Pass
MB Status vs. MDC:	N/A

Laboratory Control Sample Assessment	LCSD (Y or N)?	N
	LCS75123	LCSD75123
Count Date:	9/25/2023	
Spike I.D.:	23-014	
Decay Corrected Spike Concentration (pCi/mL):	25.030	
Volume Used (mL):	0.10	
Aliquot Volume (L, g, F):	0.513	
Target Conc. (pCi/L, g, F):	4.881	
Uncertainty (Calculated):	0.229	
Result (pCi/L, g, F):	4.826	
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	0.847	
Numerical Performance Indicator:	-0.12	
Percent Recovery:	98.86%	
Status vs Numerical Indicator:	Pass	
Status vs Recovery:	N/A	
Upper % Recovery Limits:	125%	
Lower % Recovery Limits:	75%	

Sample Matrix Spike Control Assessment	MS/MSD 1	MS/MSD 2
Sample Collection Date:	8/22/2023	8/22/2023
Sample I.D.	30617128003	30617138003
Sample MS I.D.	30617128004	30617138004
Sample MSD I.D.	30617128005	30617138005
Spike I.D.:	23-014	23-014
MS/MSD Decay Corrected Spike Concentration (pCi/mL):	25.031	25.031
Spike Volume Used in MS (mL):	0.20	0.20
Spike Volume Used in MSD (mL):	0.20	0.20
MS Aliquot (L, g, F):	0.209	0.209
MS Target Conc.(pCi/L, g, F):	23.942	23.914
MSD Aliquot (L, g, F):	0.209	0.207
MSD Target Conc. (pCi/L, g, F):	24.009	24.219
MS Spike Uncertainty (calculated):	1.125	1.124
MSD Spike Uncertainty (calculated):	1.128	1.138
Sample Result:	0.227	0.412
Sample Result 2 Sigma CSU (pCi/L, g, F):	0.255	0.264
Sample Matrix Spike Result:	24.026	27.513
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):	3.881	4.372
Sample Matrix Spike Duplicate Result:	21.043	26.591
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):	3.460	4.261
MS Numerical Performance Indicator:	-0.069	1.381
MSD Numerical Performance Indicator:	-1.715	0.870
MS Percent Recovery:	99.40%	113.33%
MSD Percent Recovery:	86.70%	108.10%
MS Status vs Numerical Indicator:	Pass	Pass
MSD Status vs Numerical Indicator:	Pass	Pass
MS Status vs Recovery:	N/A	N/A
MSD Status vs Recovery:	N/A	N/A
MS/MSD Upper % Recovery Limits:	125%	125%
MS/MSD Lower % Recovery Limits:	75%	75%

Duplicate Sample Assessment		
Sample I.D.:		
Duplicate Sample I.D.		
Sample Result (pCi/L, g, F):		
Sample Result 2 Sigma CSU (pCi/L, g, F):		
Sample Duplicate Result (pCi/L, g, F):		
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):		
Are sample and/or duplicate results below RL?	See Below ##	
Duplicate Numerical Performance Indicator:		
Duplicate RPD:		
Duplicate Status vs Numerical Indicator:		
Duplicate Status vs RPD:		
% RPD Limit:		

Matrix Spike/Matrix Spike Duplicate Sample Assessment		
Sample I.D.	30617128003	30617138003
Sample MS I.D.	30617128004	30617138004
Sample MSD I.D.	30617128005	30617138005
Sample Matrix Spike Result:	24.026	27.513
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):	3.881	4.372
Sample Matrix Spike Duplicate Result:	21.043	26.591
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):	3.460	4.261
Duplicate Numerical Performance Indicator:	1.125	0.296
(Based on the Percent Recoveries) MS/ MSD Duplicate RPD:	13.65%	4.73%
MS/ MSD Duplicate Status vs Numerical Indicator:	Pass	Pass
MS/ MSD Duplicate Status vs RPD:	N/A	N/A
% RPD Limit:	25%	25%

Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

Comments:

LAM 9/26/23

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

Test:	Ra-228
Analyst:	VAL
Date:	9/18/2023
Worklist:	75314
Matrix:	WT

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2997155
MB concentration:	0.527
M/B 2 Sigma CSU:	0.457
MB MDC:	0.929
MB Numerical Performance Indicator:	2.26
MB Status vs Numerical Indicator:	Warning
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	N
	LCS75314	LCSD75314
Count Date:	9/21/2023	
Spike I.D.:	23-043	
Decay Corrected Spike Concentration (pCi/mL):	39.733	
Volume Used (mL):	0.10	
Aliquot Volume (L, g, F):	0.816	
Target Conc. (pCi/L, g, F):	4.870	
Uncertainty (Calculated):	0.239	
Result (pCi/L, g, F):	3.643	
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	0.897	
Numerical Performance Indicator:	-2.59	
Percent Recovery:	74.81%	
Status vs Numerical Indicator:	N/A	
Status vs Recovery:	Pass	
Upper % Recovery Limits:	135%	
Lower % Recovery Limits:	60%	

Sample Matrix Spike Control Assessment	MS/MSD 1	MS/MSD 2
Sample Collection Date:	9/5/2023	8/31/2023
Sample I.D.	30620689003	30620692003
Sample MS I.D.	30620689004	30620692004
Sample MSD I.D.	30620689005	30620692005
Spike I.D.:	23-043	23-043
MS/MSD Decay Corrected Spike Concentration (pCi/mL):	39.947	39.947
Spike Volume Used in MS (mL):	0.20	0.20
Spike Volume Used in MSD (mL):	0.20	0.20
MS Aliquot (L, g, F):	0.810	0.805
MS Target Conc.(pCi/L, g, F):	9.864	9.924
MSD Aliquot (L, g, F):	0.807	0.808
MSD Target Conc. (pCi/L, g, F):	9.898	9.885
MS Spike Uncertainty (calculated):	0.483	0.486
MSD Spike Uncertainty (calculated):	0.485	0.484
Sample Result:	0.220	0.223
Sample Result 2 Sigma CSU (pCi/L, g, F):	0.370	0.352
Sample Matrix Spike Result:	8.467	7.452
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):	1.718	1.576
Sample Matrix Spike Duplicate Result:	8.872	9.569
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):	1.784	1.923
MS Numerical Performance Indicator:	-1.739	-3.134
MSD Numerical Performance Indicator:	-1.295	-0.524
MS Percent Recovery:	83.61%	72.83%
MSD Percent Recovery:	87.41%	94.55%
MS Status vs Numerical Indicator:	Pass	Fail****
MSD Status vs Numerical Indicator:	Pass	Pass
MS Status vs Recovery:	Pass	Pass
MSD Status vs Recovery:	Pass	Pass
MS/MSD Upper % Recovery Limits:	135%	135%
MS/MSD Lower % Recovery Limits:	60%	60%

Duplicate Sample Assessment		
Sample I.D.:		Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.		
Sample Result (pCi/L, g, F):		
Sample Result 2 Sigma CSU (pCi/L, g, F):		
Sample Duplicate Result (pCi/L, g, F):		
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):		
Are sample and/or duplicate results below RL?	See Below ##	
Duplicate Numerical Performance Indicator:		
Duplicate RPD:		
Duplicate Status vs Numerical Indicator:		
Duplicate Status vs RPD:		
% RPD Limit:		

Matrix Spike/Matrix Spike Duplicate Sample Assessment		
Sample I.D.	30620689003	30620692003
Sample MS I.D.	30620689004	30620692004
Sample MSD I.D.	30620689005	30620692005
Sample Matrix Spike Result:	8.467	7.452
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):	1.718	1.576
Sample Matrix Spike Duplicate Result:	8.872	9.569
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):	1.784	1.923
Duplicate Numerical Performance Indicator:	-0.320	-1.670
(Based on the Percent Recoveries) MS/ MSD Duplicate RPD:	4.45%	25.95%
MS/ MSD Duplicate Status vs Numerical Indicator:	Pass	Pass
MS/ MSD Duplicate Status vs RPD:	Pass	Pass
% RPD Limit:	36%	36%

Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

Comments:

VAL
9/22/23

Quality Control Sample Performance Assessment

Pace Analytical™
www.pacelabs.com

Test:	Ra-228
Analyst:	ZPC
Date:	9/15/2023
Worklist:	75273
Matrix:	WT

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2993407
MB concentration:	0.515
M/B 2 Sigma CSU:	0.342
MB MDC:	0.638
MB Numerical Performance Indicator:	2.95
MB Status vs Numerical Indicator:	Warning
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	N
	LCS75273	LCSD75273
Count Date:	9/20/2023	
Spike I.D.:	23-043	
Decay Corrected Spike Concentration (pCi/mL):	39.747	
Volume Used (mL):	0.10	
Aliquot Volume (L, g, F):	0.820	
Target Conc. (pCi/L, g, F):	4.849	
Uncertainty (Calculated):	0.238	
Result (pCi/L, g, F):	6.162	
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	1.303	
Numerical Performance Indicator:	1.94	
Percent Recovery:	127.07%	
Status vs Numerical Indicator:	N/A	
Status vs Recovery:	Pass	
Upper % Recovery Limits:	135%	
Lower % Recovery Limits:	60%	

Sample Matrix Spike Control Assessment	MS/MSD 1	MS/MSD 2
Sample Collection Date:	8/22/2023	8/21/2023
Sample I.D.	30617138003	30617138016
Sample MS I.D.	30617138004	30617138017
Sample MSD I.D.	30617138005	30617138018
Spike I.D.:	23-043	23-043
MS/MSD Decay Corrected Spike Concentration (pCi/mL):	40.133	40.133
Spike Volume Used in MS (mL):	0.20	0.20
Spike Volume Used in MSD (mL):	0.20	0.20
MS Aliquot (L, g, F):	0.803	0.804
MS Target Conc.(pCi/L, g, F):	10.002	9.980
MSD Aliquot (L, g, F):	0.803	0.804
MSD Target Conc. (pCi/L, g, F):	9.997	9.982
MS Spike Uncertainty (calculated):	0.490	0.489
MSD Spike Uncertainty (calculated):	0.490	0.489
Sample Result:	1.111	0.209
Sample Result 2 Sigma CSU (pCi/L, g, F):	0.488	0.286
Sample Matrix Spike Result:	9.154	0.320
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):	1.834	0.335
Sample Matrix Spike Duplicate Result:	9.895	7.796
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):	1.969	1.607
MS Numerical Performance Indicator:	-1.959	-29.390
MSD Numerical Performance Indicator:	-1.140	-2.754
MS Percent Recovery:	80.42%	1.11%
MSD Percent Recovery:	87.86%	76.01%
MS Status vs Numerical Indicator:	Pass	Fail****
MSD Status vs Numerical Indicator:	Pass	Warning
MS Status vs Recovery:	Pass	MS Low****
MSD Status vs Recovery:	Pass	Pass
MS/MSD Upper % Recovery Limits:	135%	135%
MS/MSD Lower % Recovery Limits:	60%	60%

Duplicate Sample Assessment		
Sample I.D.:		Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.		
Sample Result (pCi/L, g, F):		
Sample Result 2 Sigma CSU (pCi/L, g, F):		
Sample Duplicate Result (pCi/L, g, F):		
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):		
Are sample and/or duplicate results below RL?	See Below ##	
Duplicate Numerical Performance Indicator:		
Duplicate RPD:		
Duplicate Status vs Numerical Indicator:		
Duplicate Status vs RPD:		
% RPD Limit:		

Matrix Spike/Matrix Spike Duplicate Sample Assessment		
Sample I.D.	30617138003	30617138016
Sample MS I.D.	30617138004	30617138017
Sample MSD I.D.	30617138005	30617138018
Sample Matrix Spike Result:	9.154	0.320
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):	1.834	0.335
Sample Matrix Spike Duplicate Result:	9.895	7.796
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):	1.969	1.607
Duplicate Numerical Performance Indicator:	-0.539	-8.928
(Based on the Percent Recoveries) MS/ MSD Duplicate RPD:	8.85%	194.24%
MS/ MSD Duplicate Status vs Numerical Indicator:	Pass	Fail***
MS/ MSD Duplicate Status vs RPD:	Pass	Fail***
% RPD Limit:	36%	36%

RI

Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

Comments:

***Batch must be re-prepped due to unacceptable precision.

VAL
9/21/23

Quality Control Sample Performance Assessment

Pace Analytical
www.pacelabs.com

Test:	Ra-226
Analyst:	SLC
Date:	9/11/2023
Worklist:	75124
Matrix:	WT

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2982902
MB concentration:	0.161
M/B 2 Sigma CSU:	0.130
MB MDC:	0.245
MB Numerical Performance Indicator:	2.43
MB Status vs Numerical Indicator:	Warning
MB Status vs. MDC:	N/A

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS75124	LCSD75124
Count Date:	9/26/2023	9/26/2023
Spike I.D.:	23-014	23-014
Decay Corrected Spike Concentration (pCi/mL):	25.030	25.030
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.516	0.514
Target Conc. (pCi/L, g, F):	4.847	4.866
Uncertainty (Calculated):	0.228	0.229
Result (pCi/L, g, F):	5.005	4.915
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	0.886	0.878
Numerical Performance Indicator:	0.34	0.11
Percent Recovery:	103.25%	101.02%
Status vs Numerical Indicator:	Pass	Pass
Status vs Recovery:	N/A	N/A
Upper % Recovery Limits:	125%	125%
Lower % Recovery Limits:	75%	75%

Sample Matrix Spike Control Assessment	MS/MSD 1	MS/MSD 2
Sample Collection Date:	8/21/2023	
Sample I.D.	30617138016	
Sample MS I.D.	30617138017	
Sample MSD I.D.	30617138018	
Spike I.D.:	23-014	
MS/MSD Decay Corrected Spike Concentration (pCi/mL):	25.031	
Spike Volume Used in MS (mL):	0.20	
Spike Volume Used in MSD (mL):	0.20	
MS Aliquot (L, g, F):	0.213	
MS Target Conc.(pCi/L, g, F):	23.493	
MSD Aliquot (L, g, F):	0.204	
MSD Target Conc. (pCi/L, g, F):	24.518	
MS Spike Uncertainty (calculated):	1.104	
MSD Spike Uncertainty (calculated):	1.152	
Sample Result:	0.279	
Sample Result 2 Sigma CSU (pCi/L, g, F):	0.299	
Sample Matrix Spike Result:	25.176	
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):	4.051	
Sample Matrix Spike Duplicate Result:	26.060	
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):	4.235	
MS Numerical Performance Indicator:	0.654	
MSD Numerical Performance Indicator:	0.563	
MS Percent Recovery:	105.98%	
MSD Percent Recovery:	105.16%	
MS Status vs Numerical Indicator:	Pass	
MSD Status vs Numerical Indicator:	Pass	
MS Status vs Recovery:	N/A	
MSD Status vs Recovery:	N/A	
MS/MSD Upper % Recovery Limits:	125%	
MS/MSD Lower % Recovery Limits:	75%	

Duplicate Sample Assessment		
Sample I.D.:	LCS75124	
Duplicate Sample I.D.	LCSD75124	
Sample Result (pCi/L, g, F):	5.005	
Sample Result 2 Sigma CSU (pCi/L, g, F):	0.886	
Sample Duplicate Result (pCi/L, g, F):	4.915	
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	0.878	
Are sample and/or duplicate results below RL?	NO	
Duplicate Numerical Performance Indicator:	0.140	
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	2.19%	
Duplicate Status vs Numerical Indicator:	Pass	
Duplicate Status vs RPD:	N/A	
% RPD Limit:	25%	

Matrix Spike/Matrix Spike Duplicate Sample Assessment		
Sample I.D.	30617138016	
Sample MS I.D.	30617138017	
Sample MSD I.D.	30617138018	
Sample Matrix Spike Result:	25.176	
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):	4.051	
Sample Matrix Spike Duplicate Result:	26.060	
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):	4.235	
Duplicate Numerical Performance Indicator:	-0.296	
(Based on the Percent Recoveries) MS/ MSD Duplicate RPD:	0.78%	
MS/ MSD Duplicate Status vs Numerical Indicator:	Pass	
MS/ MSD Duplicate Status vs RPD:	N/A	
% RPD Limit:	25%	

Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

Comments:

LAM 9/20/23

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

November 28, 2023

Brooke Caton
Alabama Power
744 Highway 87
Calera, AL 35040

RE: Project: WMWGORG_1431
Pace Project No.: 30634058

Dear Brooke Caton:

Enclosed are the analytical results for sample(s) received by the laboratory on October 26, 2023. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Greensburg

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Skyler C. Richmond
skyler.richmond@pacelabs.com
(724)850-5600
Project Manager

Enclosures

cc: Blaine Denton, Alabama Power
Renee Jernigan, Alabama Power

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

CERTIFICATIONS

Project: WMWGORG_1431
Pace Project No.: 30634058

Pace Analytical Services Pennsylvania
1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
ANABISO/IEC 17025:2017 Rad Cert#: L24170
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 2950
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA010
Louisiana DEQ/TNI Certification #: 04086
Maine Certification #: 2023021
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification #: 9991
Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572023-03
New Hampshire/TNI Certification #: 297622
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Ohio EPA Rad Approval: #41249
Oregon/TNI Certification #: PA200002-015
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: TN02867
Texas/TNI Certification #: T104704188-22-18
Utah/TNI Certification #: PA014572223-14
USDA Soil Permit #: 525-23-67-77263
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Approve List for Rad

Pace Analytical Services, LLC
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Greensburg, PA 15601
(724)850-5600

SAMPLE SUMMARY

Project: WMWGORG_1431
Pace Project No.: 30634058

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30634058001	**BD19323 MW-11H**	Water	10/19/23 09:24	10/26/23 10:00

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Greensburg, PA 15601
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SAMPLE ANALYTE COUNT

Project: WMWGORG_1431
Pace Project No.: 30634058

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30634058001	**BD19323 MW-11H**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA

PASI-PA = Pace Analytical Services - Greensburg

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Greensburg, PA 15601
(724)850-5600

PROJECT NARRATIVE

Project: WMWGORG_1431
Pace Project No.: 30634058

Method: **EPA 9315**
Description: 9315 Total Radium
Client: Alabama Power
Date: November 28, 2023

General Information:
1 sample was analyzed for EPA 9315 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

Pace Analytical Services, LLC
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Greensburg, PA 15601
(724)850-5600

PROJECT NARRATIVE

Project: WMWGORG_1431
Pace Project No.: 30634058

Method: **EPA 9320**
Description: 9320 Radium 228
Client: Alabama Power
Date: November 28, 2023

General Information:
1 sample was analyzed for EPA 9320 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

Pace Analytical Services, LLC
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Greensburg, PA 15601
(724)850-5600

PROJECT NARRATIVE

Project: WMWGORG_1431
Pace Project No.: 30634058

Method: **Total Radium Calculation**
Description: Total Radium 228+226
Client: Alabama Power
Date: November 28, 2023

General Information:
1 sample was analyzed for Total Radium Calculation by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

Pace Analytical Services, LLC
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Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORG_1431
Pace Project No.: 30634058

Sample: BD19323 MW-11H **Lab ID: 30634058001** Collected: 10/19/23 09:24 Received: 10/26/23 10:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**-0.0251U ± 0.149 (0.431) C:97% T:NA**	pCi/L	11/27/23 08:20	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.588U ± 0.379 (0.702) C:85% T:81%**	pCi/L	11/09/23 16:13	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.588U ± 0.528 (1.13)**	pCi/L	11/27/23 13:11	7440-14-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL - RADIOCHEMISTRY

Project: WMWGORG_1431
Pace Project No.: 30634058

QC Batch: 626722
QC Batch Method: EPA 9320
Analysis Method: EPA 9320
Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30634058001

METHOD BLANK: 3054986 Matrix: Water
Associated Lab Samples: 30634058001

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.624 ± 0.404 (0.766) C:82% T:75%	pCi/L	11/09/23 12:41	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL - RADIOCHEMISTRY

Project: WMWGORG_1431
Pace Project No.: 30634058

QC Batch: 625947
QC Batch Method: EPA 9315
Analysis Method: EPA 9315
Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30634058001

METHOD BLANK: 3051015 Matrix: Water
Associated Lab Samples: 30634058001

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	-0.0171 ± 0.0412 (0.143) C:98% T:NA	pCi/L	11/27/23 08:15	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALIFIERS

Project: WMWGORG_1431
Pace Project No.: 30634058

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Act - Activity

Unc - Uncertainty: For Safe Drinking Water Act (SDWA) analyses, the reported Unc. Is the calculated Count Uncertainty (95% confidence interval) using a coverage factor of 1.96. For all other matrices (non-SDWA), the reported Unc. is the calculated Expanded Uncertainty (aka Combined Standard Uncertainty, CSU), reported at the 95% confidence interval using a coverage factor of 1.96.

Gamma Spec: The Unc. reported for all gamma-spectroscopy analyses (EPA 901.1), is the calculated Expanded Uncertainty (CSU) at the 95.4% confidence interval, using a coverage factor of 2.0.

(MDC) - Minimum Detectable Concentration

Trac - Tracer Recovery (%)

Carr - Carrier Recovery (%)

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

Pace Analytical Services, LLC
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Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: WMWGORG_1431
Pace Project No.: 30634058

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30634058001	**BD19323 MW-11H**	EPA 9315	625947		
30634058001	**BD19323 MW-11H**	EPA 9320	626722		
30634058001	**BD19323 MW-11H**	Total Radium Calculation	632102		

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	Alabama Power Company	Report To:	Brooke Caton	Attention:	Brooke Caton
Address:	744 Highway 87 GSC Bldg #8	Copy To:	Renee Jernigan & Blaine Denton	Company Name:	Alabama Power Co.
	Calera, AL 35040			Address:	744 Highway 87 GSC Bldg #8
Email To:	tbwill@southernco.com	Purchase Order #:	APC87119-0001	Pace Quote:	CCR
Phone:	205-664-6101 Fax:	Project Name:	Plant Gorgas Gypsum	Pace Project Manager:	Skyler Richmond
Requested Due Date:	Normal	Project Number:	WMWGORG_1431	Pace Profile #:	16788

Regulatory Agency: | State / Location: AL

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)	Description	Station Name Location_Code	Site Name Facility_ID	Sample Duplicate	Matrix Spike/Matrix Spike Duplicate	Field Filtered	MATRIX CODE	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	# OF CONTAINERS	Preservatives: Unpreserved	NaOH+ZnAcetate	HNO3			Y/N	Analyses Test: EPA 9315	EPA 9320	Total Radium Sum	Total Sulfide		Residual Chlorine (Y/N)	
1	BD19323	MW-11H	APCO-GS-GSA-MW-11H	APCO_Gorgas_GypsumStore				GW	G	10/19/2023	9:24	1			X				X	X	X				001
2																									
3																									
4																									
5																									
6																									
7																									
8																									
9																									
10																									
11																									
12																									

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	Brooke Caton/ APC GTL	10/23/2023	15:11	RWBarton	10/26/23	1000	–	N	Y	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER:

SIGNATURE of SAMPLER: | DATE Signed:

TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

WO#: 30634058

30634058

DC#_Title: ENV-FRM-GBUR-0088 v06_Sample Condition Upon Receipt-Pittsburgh

Effective Date: 09/20/2023

WO# : 30634058

PM: SCR Due Date: 11/27/23

CLIENT: ALABAMA PWR

Client Name: Alabama Pwr

Courier: ☑ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace ☐ Other

Tracking Number: 7017 6814 5959

Initial / Date

Examined By: PS 10/26/23

Labeled By: PS 10/26/23

Temped By: ____

Custody Seal on Cooler/Box Present: ☑ Yes ☐ No Seals Intact: ☑ Yes ☐ No

Thermometer Used: ____ Type of Ice: Wet Blue (None)

Cooler Temperature: Observed Temp ____ °C Correction Factor: ____ °C Final Temp: ____ °C

Temp should be above freezing to 6°C

pH paper Lot# 10PAN1131 D.P.D. Residual Chlorine Lot #

Comments:	Yes	No	NA	
Chain of Custody Present	✓			1.
Chain of Custody Filled Out:	✓			2.
-Were client corrections present on COC		✓		
Chain of Custody Relinquished PS 10/26/23	✓	✓		3. No Sig.
Sampler Name & Signature on COC:		✓		4.
Sample Labels match COC:	✓			5.
-Includes date/time/ID Matrix:	WT			
Samples Arrived within Hold Time:	✓			6.
Short Hold Time Analysis (<72hr remaining):		✓		7.
Rush Turn Around Time Requested:		✓		8.
Sufficient Volume:	✓			9.
Correct Containers Used:	✓			10.
-Pace Containers Used	✓			
Containers Intact:	✓			11.
Orthophosphate field filtered:			✓	12.
Hex Cr Aqueous samples field filtered:			✓	13.
Organic Samples checked for dechlorination			✓	14:
Filtered volume received for dissolved tests:			✓	15:
All containers checked for preservation: exceptions: VOA, coliform, TOC, O&G, Phenolics, Radon, non-aqueous matrix	✓			16. PH<2
All containers meet method preservation requirements:	✓			Initial when completed PS Date/Time of Preservation; Lot# of added Preservative
8260C/D: Headspace in VOA Vials (> 6mm)			✓	17.
624.1: Headspace in VOA Vials (0mm)			✓	18.
Trip Blank Present:			✓	Trip blank custody seal present? YES or NO
Rad Samples Screened <.05 mrem/hr.	✓			Initial when completed PS Date: 10/26/23 Survey Meter SN: 250143 80

Comments:

Note: For NC compliance samples with discrepancies, a copy of this form must be sent to the DEHNR Certification office.
PM Review is documented electronically in LIMS through the SRF Review schedule in the Workorder Edit Screen.

Quality Control Sample Performance Assessment

Pace Analytical™
www.pacelabs.com

Test:	Ra-226
Analyst:	SLC
Date:	11/1/2023
Worklist:	76062
Matrix:	DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	3051015
MB concentration:	-0.017
M/B Counting Uncertainty:	0.041
MB MDC:	0.143
MB Numerical Performance Indicator:	-0.81
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	N
	LCS76062	LCSD76062
Count Date:	11/27/2023	
Spike I.D.:	23-014	
Decay Corrected Spike Concentration (pCi/mL):	25.028	
Volume Used (mL):	0.10	
Aliquot Volume (L, g, F):	0.509	
Target Conc. (pCi/L, g, F):	4.918	
Uncertainty (Calculated):	0.231	
Result (pCi/L, g, F):	4.834	
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.451	
Numerical Performance Indicator:	-0.33	
Percent Recovery:	98.28%	
Status vs Numerical Indicator:	N/A	
Status vs Recovery:	Pass	
Upper % Recovery Limits:	125%	
Lower % Recovery Limits:	75%	

Sample Matrix Spike Control Assessment	MS/MSD 1	MS/MSD 2
Sample Collection Date:	10/18/2023	10/18/2023
Sample I.D.	30633936005	30634060001
Sample MS I.D.	30633936006	30634060002
Sample MSD I.D.	30633936007	30634060003
Spike I.D.:	23-014	23-014
MS/MSD Decay Corrected Spike Concentration (pCi/mL):	25.030	25.030
Spike Volume Used in MS (mL):	0.20	0.20
Spike Volume Used in MSD (mL):	0.20	0.20
MS Aliquot (L, g, F):	0.202	0.207
MS Target Conc.(pCi/L, g, F):	24.770	24.176
MSD Aliquot (L, g, F):	0.215	0.207
MSD Target Conc. (pCi/L, g, F):	23.258	24.145
MS Spike Uncertainty (calculated):	1.164	1.136
MSD Spike Uncertainty (calculated):	1.093	1.135
Sample Result:	0.244	0.709
Sample Result Counting Uncertainty (pCi/L, g, F):	0.255	0.336
Sample Matrix Spike Result:	24.960	24.873
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):	1.610	1.596
Sample Matrix Spike Duplicate Result:	23.820	24.057
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):	1.544	1.588
MS Numerical Performance Indicator:	-0.052	-0.013
MSD Numerical Performance Indicator:	0.326	-0.789
MS Percent Recovery:	99.78%	99.95%
MSD Percent Recovery:	101.37%	96.70%
MS Status vs Numerical Indicator:	N/A	N/A
MSD Status vs Numerical Indicator:	N/A	N/A
MS Status vs Recovery:	Pass	Pass
MSD Status vs Recovery:	Pass	Pass
MS/MSD Upper % Recovery Limits:	125%	125%
MS/MSD Lower % Recovery Limits:	75%	75%

Duplicate Sample Assessment		
Sample I.D.:		
Duplicate Sample I.D.		
Sample Result (pCi/L, g, F):		
Sample Result Counting Uncertainty (pCi/L, g, F):		
Sample Duplicate Result (pCi/L, g, F):		
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):		
Are sample and/or duplicate results below RL?	See Below ##	
Duplicate Numerical Performance Indicator:		
Duplicate RPD:		
Duplicate Status vs Numerical Indicator:		
Duplicate Status vs RPD:		
% RPD Limit:		

Matrix Spike/Matrix Spike Duplicate Sample Assessment		
Sample I.D.	30633936005	30634060001
Sample MS I.D.	30633936006	30634060002
Sample MSD I.D.	30633936007	30634060003
Sample Matrix Spike Result:	24.960	24.873
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):	1.610	1.596
Sample Matrix Spike Duplicate Result:	23.820	24.057
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):	1.544	1.588
Duplicate Numerical Performance Indicator:	1.002	0.710
(Based on the Percent Recoveries) MS/ MSD Duplicate RPD:	1.57%	3.30%
MS/ MSD Duplicate Status vs Numerical Indicator:	N/A	N/A
MS/ MSD Duplicate Status vs RPD:	Pass	Pass
% RPD Limit:	25%	25%

Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

Comments:

SLC 11/27/23

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Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

Test:	Ra-228
Analyst:	VAL
Date:	11/6/2023
Worklist:	76138
Matrix:	WT

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	3054986
MB concentration:	0.624
M/B 2 Sigma CSU:	0.404
MB MDC:	0.766
MB Numerical Performance Indicator:	3.03
MB Status vs Numerical Indicator:	Fail*
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	N
	LCS76138	LCSD76138
Count Date:	11/9/2023	
Spike I.D.:	23-043	
Decay Corrected Spike Concentration (pCi/mL):	39.096	
Volume Used (mL):	0.10	
Aliquot Volume (L, g, F):	0.818	
Target Conc. (pCi/L, g, F):	4.778	
Uncertainty (Calculated):	0.234	
Result (pCi/L, g, F):	4.377	
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	1.040	
Numerical Performance Indicator:	-0.74	
Percent Recovery:	91.62%	
Status vs Numerical Indicator:	N/A	
Status vs Recovery:	Pass	
Upper % Recovery Limits:	135%	
Lower % Recovery Limits:	60%	

Sample Matrix Spike Control Assessment	MS/MSD 1	MS/MSD 2
Sample Collection Date:	10/18/2023	10/18/2023
Sample I.D.	30633936005	30634060001
Sample MS I.D.	30633936006	30634060002
Sample MSD I.D.	30633936007	30634060003
Spike I.D.:	23-043	23-043
MS/MSD Decay Corrected Spike Concentration (pCi/mL):	39.383	39.383
Spike Volume Used in MS (mL):	0.20	0.20
Spike Volume Used in MSD (mL):	0.20	0.20
MS Aliquot (L, g, F):	0.809	0.805
MS Target Conc.(pCi/L, g, F):	9.742	9.783
MSD Aliquot (L, g, F):	0.809	0.807
MSD Target Conc. (pCi/L, g, F):	9.735	9.760
MS Spike Uncertainty (calculated):	0.477	0.479
MSD Spike Uncertainty (calculated):	0.477	0.478
Sample Result:	0.623	0.139
Sample Result 2 Sigma CSU (pCi/L, g, F):	0.398	0.325
Sample Matrix Spike Result:	9.779	9.589
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):	1.984	1.944
Sample Matrix Spike Duplicate Result:	8.720	12.306
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):	1.786	2.464
MS Numerical Performance Indicator:	-0.552	-0.321
MSD Numerical Performance Indicator:	-1.697	1.864
MS Percent Recovery:	93.98%	96.60%
MSD Percent Recovery:	83.18%	124.66%
MS Status vs Numerical Indicator:	Pass	Pass
MSD Status vs Numerical Indicator:	Pass	Pass
MS Status vs Recovery:	Pass	Pass
MSD Status vs Recovery:	Pass	Pass
MS/MSD Upper % Recovery Limits:	135%	135%
MS/MSD Lower % Recovery Limits:	60%	60%

Duplicate Sample Assessment		Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Sample I.D.:		
Duplicate Sample I.D.		
Sample Result (pCi/L, g, F):		
Sample Result 2 Sigma CSU (pCi/L, g, F):		
Sample Duplicate Result (pCi/L, g, F):		
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):		
Are sample and/or duplicate results below RL?	See Below ##	
Duplicate Numerical Performance Indicator:		
Duplicate RPD:		
Duplicate Status vs Numerical Indicator:		
Duplicate Status vs RPD:		
% RPD Limit:		

Matrix Spike/Matrix Spike Duplicate Sample Assessment		
Sample I.D.	30633936005	30634060001
Sample MS I.D.	30633936006	30634060002
Sample MSD I.D.	30633936007	30634060003
Sample Matrix Spike Result:	9.779	9.589
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):	1.984	1.944
Sample Matrix Spike Duplicate Result:	8.720	12.306
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):	1.786	2.464
Duplicate Numerical Performance Indicator:	0.777	-1.696
(Based on the Percent Recoveries) MS/ MSD Duplicate RPD:	12.20%	25.36%
MS/ MSD Duplicate Status vs Numerical Indicator:	Pass	Pass
MS/ MSD Duplicate Status vs RPD:	Pass	Pass
% RPD Limit:	36%	36%

Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

Comments:
~~*If the lowest activity sample in this batch is greater than ten times the blank value, the blank is acceptable; otherwise this batch must be re-prepped.~~

MB results < MDC, Pass
Qu 11/10/23

VAL
11/10/23

TC
11-10-23

1 of 1

Appendix E

GROUNDWATER STATS CONSULTING

May 30, 2023

Southern Company Services
Attn: Mr. Greg Dyer
3535 Colonnade Parkway
Birmingham, AL 35243

Re: Plant Gorgas Gypsum Pond
1st Semi-Annual Statistical Analysis – February/March 2023

Dear Mr. Dyer,

Groundwater Stats Consulting, formerly the statistical consulting division of Sanitas Technologies, is pleased to provide the statistical analysis of groundwater data for the February/March 2023 1st semi-annual sample event for Alabama Power Company's Plant Gorgas Gypsum Pond. The analysis complies with the federal rule for the Disposal of Coal Combustion Residuals (CCR) from Electric Utilities (CCR Rule, 2015) as well as with the United States Environmental Protection Agency (USEPA) Unified Guidance (2009).

Sampling began at this site for the CCR program in 2016. The monitoring well network, as provided by Southern Company Services, consists of the following:

- **Upgradient wells:** MW-1, MW-2, MW-3, and MW-4
- **Downgradient wells:** GS-GSA-MW-3, GS-GSA-MW-4, and GS-GSA-MW-8
- **Delineation wells:** GS-GSA-MW-3V, GS-GSA-MW-4V, GS-GSA-MW-8V, GS-GSA-MW-9H, GS-GSA-MW-9V, GS-GSA-MW-11H, GS-GSA-MW-12H, GS-GSA-MW-12V, GS-GSA-MW-13H, GS-GSA-MW-14H, GS-GSA-MW-23VA
- **Piezometers:** GS-GSA-MW-01, GS-GSA-MW-02, GS-GSA-MW-10H, GS-GSA-MW-15H, GS-GSA-PZ-16, GS-GSA-PZ-17, GS-GSA-PZ-18, GS-GSA-PZ-19, GS-GSA-PZ-20, GS-GSA-PZ-21, GS-GSA-PZ-22, and GS-GSA-PZ-2A

Note that data from delineation wells did not require statistics; therefore, data were plotted only on time series and box plots. Delineation wells GS-GSA-MW-15H and GS-GSA-MW-23VA did not produce enough water to be sampled during this event. Piezometers only monitor water levels; therefore, they are not included in this analysis.

Data were sent electronically to Groundwater Stats Consulting, and the statistical analysis was prepared according to the Statistical Analysis Plan approved by Dr. Kirk Cameron, PhD Statistician with MacStat Consulting, primary author of the USEPA Unified Guidance, and Senior Advisor to Groundwater Stats Consulting. The analysis was reviewed by Andrew Collins, Project Manager of Groundwater Stats Consulting.

The CCR program consists of the constituents listed below. The terms "parameters" and "constituents" are used interchangeably.

> **Appendix III** (Detection Monitoring) - boron, calcium, chloride, fluoride, pH, sulfate, and TDS
> **Appendix IV** (Assessment Monitoring) - antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, combined radium 226 + 228, fluoride, lead, lithium, mercury, molybdenum, selenium, and thallium

Note that when there are no detections present in downgradient wells for a given constituent, statistical analyses are not required. A list of Appendix IV downgradient well/constituent pairs containing 100% non-detects follows this letter.

Time series plots for Appendix III and IV parameters at all wells are provided for the purpose of screening data at these wells (Figure A). A substitution of the most recent reporting limit is used for non-detect data. Additionally, a separate section of box plots is included for all constituents at upgradient and downgradient wells (Figure B). The time series plots are used to initially screen for suspected outliers and trends, while the box plots provide visual representation of variation within individual wells and between all wells.

In earlier analyses, data at all wells were evaluated for the following: 1) outliers; 2) trends; 3) most appropriate statistical method for Appendix III parameters based on analysis of the spatial variability of groundwater quality data among wells upgradient of the facility; and 4) eligibility of downgradient wells when intrawell statistical methods are recommended. Power curves are provided in this report to demonstrate that the selected statistical methods for Appendix III parameters comply with the USEPA Unified Guidance. The EPA suggests that the selected statistical method should provide at least 55% power at 3 standard deviations or at least 80% power at 4 standard deviations. Power curves are based on the following statistical methods and site/data characteristics:

- Semi-Annual Sampling
- Intrawell Prediction Limits with 1-of-2 resample plan
- Interwell Prediction Limits with 1-of-2 resample plan

- # Background Samples (Intrawell): 16
- # Background Samples (Interwell): 106
- # Constituents: 7
- # Downgradient wells: 3

Summary of Statistical Methods – Appendix III Parameters

Based on the earlier evaluation described above, the following statistical methods were selected:

- Intrawell prediction limits, combined with a 1-of-2 resample plan for pH, sulfate, and TDS
- Interwell prediction limits, combined with a 1-of-2 resample plan for boron, calcium, chloride, and fluoride

Parametric prediction limits are utilized when the screened historical data follow a normal or transformed-normal distribution. When data cannot be normalized or the majority of data are non-detects, a nonparametric test is utilized. While the annual false positive rate associated with parametric limits is fixed at 10% as recommended by the EPA Unified Guidance (2009), the false positive rate associated with nonparametric limits is not fixed and depends upon the available background sample size, number of future comparisons, and verification resample plan. The distribution of data is tested using the Shapiro-Wilk/Shapiro-Francia test for normality. After testing for normality and performing any adjustments as discussed below (US EPA, 2009), data are analyzed using either parametric or non-parametric prediction limits as appropriate. Non-detects are handled as follows:

- No statistical analyses are required on wells and analytes containing 100% non-detects (USEPA Unified Guidance, 2009, Chapter 6).
- When data contain <15% non-detects, simple substitution of one-half the reporting limit is utilized in the statistical analysis. The reporting limit utilized for non-detects is the most recent practical quantification limit (PQL) as reported by the laboratory.
- When data contain between 15-50% non-detects, the Kaplan-Meier non-detect adjustment is applied to the background data. This technique adjusts the mean and standard deviation of the historical concentrations to account for concentrations below the reporting limit.
- Nonparametric prediction limits are used on data containing greater than 50% non-detects.

Natural systems continuously evolve due to physical changes made to the environment. Examples include capping a landfill, paving areas near a well, or lining a drainage channel to prevent erosion. Periodic updating of background statistical limits is necessary to accommodate these types of changes. In the intrawell case, data for all wells and constituents may be re-evaluated when a minimum of 4 new data points are available to determine whether earlier concentrations are representative of present-day groundwater quality. In the interwell case, prediction limits are updated with upgradient well data following each sampling event after careful screening for any new outliers. While not required for this report, in some cases, deselecting the earlier portion of data may be necessary prior to construction of limits so that resulting statistical limits are conservative (lower) from a regulatory perspective and capable of rapidly detecting changes in groundwater quality. While the data are excluded from the calculation, the values will continue to be reported and shown in tables and graphs.

Background Update Summaries

Fall 2019

Intrawell prediction limits, which compare the most recent compliance sample from a given well to historical data from the same well, are updated by testing for the appropriateness of consolidating new sampling observations with the screened background data and were last updated in September 2019. As discussed in the Statistical Analysis Plan (August 2020), intrawell prediction limits are used to evaluate pH, sulfate, and TDS at all wells due to natural spatial variation for these parameters. Historical data were evaluated for updating with newer data through May 2019 through the use of time series graphs and Tukey's outlier test to identify potential outliers, when necessary, as well as the Mann Whitney test for equality of medians. This process is described below for the 2021 update and requires a minimum of four new data points. During the 2019 screening, all background data sets for constituents using intrawell prediction limits with the exception of TDS for downgradient well GS-GSA-MW-8 were updated through May 2019 and a summary of these results was included with the Mann Whitney test section in that report.

Interwell prediction limits are used to compare the most recent sample from each downgradient well to statistical limits constructed from pooled upgradient well data for boron, calcium, chloride, and fluoride. As mentioned above, these limits are updated following each sampling event after careful screening for new outliers. Data from upgradient wells are also periodically re-screened for newly developing trends, which may require adjustment of the background period to eliminate the trend. No adjustments were required in upgradient wells for constituents evaluated using interwell prediction limits.

Fall 2021

Outlier Analysis

Prior to performing prediction limits, proposed background data--through March 2021 for intrawell parameters and through July 2021 for interwell parameters--were reviewed through visual screening to identify any newly suspected outliers at all wells for pH, sulfate, and TDS, and at upgradient wells for boron, calcium, chloride, and fluoride. When values are identified as outliers, these measurements are flagged with "o" and excluded to reduce variation, better represent background conditions, and provide limits that are conservative from a regulatory perspective.

During the screening, a high non-detect value for boron in upgradient well MW-4 and high detected values for sulfate and TDS in upgradient well MW-1 were flagged as outliers. Additionally, a low value for pH in upgradient well MW-3 was flagged. As mentioned above, flagged data are displayed in a lighter font and as a disconnected symbol on the time series graphs, as well as in a lighter font on the accompanying data pages. A summary of flagged outliers follows this report (Figure C).

Intrawell – Mann-Whitney

For constituents requiring intrawell prediction limits, the Mann-Whitney (Wilcoxon Rank Sum) test was used to compare the medians of historical data through May 2019 to compliance data through March 2021. When no statistically significant difference in medians between the two groups is found at a 99% confidence level, background data may be updated with newer compliance data. Statistically significant differences (either an increase or decrease in median concentrations) were found between the two groups for the following well/constituent pairs:

Increase

- None

Decrease

- pH: MW-1 (upgradient)

Typically, when the test concludes that the medians of the two groups are statistically significantly different, particularly in the downgradient wells, the background data are not updated to include the newer data unless it can be reasonably justified that the change in concentrations reflects a naturally occurring shift unrelated to practices at the site. In studies such as the current one, in which at least one of the segments being compared is

of short duration, the comparison is complicated by the fact that normal short-term variation may be mistaken for long-term change in medians.

Although a statistically significant decrease was identified for pH in upgradient well MW-1, the decrease in median concentrations was upgradient of the facility and not a representation of impacts from the facility. Additionally, the magnitude of the difference was small relative to the existing concentrations in background, and the compliance samples were stable. Therefore, this record was updated and all background data sets for CCR Appendix III constituents that use intrawell methods were updated. All records will be re-evaluated during the next background update.

Interwell – Trend Test Evaluation

The Sen's Slope/Mann Kendall trend test was used to evaluate the entire record of data from upgradient wells for parameters utilizing interwell prediction limits. When statistically significant increasing trends are identified in upgradient wells, the earlier portion of data may require deselection prior to construction of interwell statistical limits if the trending data would result in statistical limits that are not conservative from a regulatory perspective.

No statistically significant trends were noted in upgradient wells except for increasing trends for boron and fluoride in upgradient well MW-2; however, the increasing trends for boron is the result of high non-detects in the latter part of the record and the trend in fluoride is small relative to average concentrations. Therefore, no adjustments were made at this time. A summary of the results was submitted with the screening.

Evaluation of Appendix III Parameters – February/March 2023

Prediction Limits

Intrawell prediction limits, combined with a 1-of-2 resample plan, were constructed for pH, sulfate, and TDS at each well using screened background data through March 2021 (Figure D). Intrawell limits constructed from carefully screened background data from within each well serve to provide statistical limits that are representative of the background data population, and that will rapidly identify a change in more recent compliance data from within a given well. This statistical method removes the element of variation across wells and eliminates the chance of mistaking natural spatial variation for a release from the facility. The February/March 2023 observation at each well is compared to its respective background from the same well to determine whether initial exceedances are present.

Interwell prediction limits, combined with a 1-of-2 resample plan, were constructed for boron, calcium, chloride, and fluoride (Figure E). Interwell prediction limits pool upgradient well data through March 2023 to establish a background limit for an individual constituent. The February/March 2023 sample from each downgradient well is compared to the background limit to determine whether initial exceedances are present.

In the event of an initial exceedance of compliance well data, the 1-of-2 resample plan allows for collection of one additional sample to determine whether the initial exceedance is confirmed. When the resample confirms the initial exceedance, a statistically significant increase (SSI) is identified, and further research is required to identify the cause of the exceedance (i.e., impact from the site, natural variation, or an off-site source). If a resample falls within the statistical limit, the initial exceedance is considered to be a false positive result; therefore, no further action is necessary.

Complete prediction limits results and a summary of exceedances follow this letter (pages 13-16). Exceedances were identified for the following well/constituent pairs:

Intrawell:

- pH: MW-2, MW-3, MW-4 (all upgradient), and GS-GSA-MW-4
- Sulfate: GS-GSA-MW-4
- TDS: GS-GSA-MW-4

Interwell:

- Boron: GS-GSA-MW-3, GS-GSA-MW-4, and GS-GSA-MW-8
- Calcium: GS-GSA-MW-3
- Chloride: GS-GSA-MW-3, GS-GSA-MW-4, and GS-GSA-MW-8

Trend Test Evaluation – Appendix III

When prediction limit exceedances are identified in downgradient wells, data are further evaluated using the Sen's Slope/Mann Kendall trend test at the 99% confidence level to determine whether concentrations are statistically increasing, decreasing, or stable (Figure F). Upgradient wells are included in the trend analyses for all parameters found to exceed their prediction limit in downgradient wells to identify whether similar patterns exist upgradient of the site. The existence of similar trends in both upgradient and downgradient wells is an indication of natural variability in groundwater that is unrelated to practices at the site. A summary of the trend test results follows this letter (pages 17-18). Statistically significant trends were identified for the following well/constituent pairs:

Increasing

- Boron: MW-1, MW-2, MW-3 (all upgradient), and GS-GSA-MW-8
- Chloride: GS-GSA-MW-8
- pH: MW-2 (upgradient)

Decreasing

- pH: MW-1 (upgradient)
- Sulfate: MW-4 (upgradient)
- TDS: MW-4 (upgradient)

Evaluation of Appendix IV Parameters – February/March 2023

Data from upgradient wells for Appendix IV parameters were assessed for outliers during previous analyses. No new outliers were flagged during this analysis.

During the previous screening, high values for cobalt and lead in upgradient well MW-3 were flagged in order to construct statistical limits that are conservative (i.e., lower) from a regulatory perspective. A previously flagged value of selenium (0.0209 mg/L) was unflagged in well MW-3. A summary of all flagged outliers follows this report (Figure C).

In accordance with Alabama Department of Environmental Management, the Groundwater Protections Standards (GWPS) were updated during the 2021 2nd semi-annual statistical analysis. The GWPS will be updated again during the 2023 2nd semi-annual statistical analysis. The methodology used to create these GWPS is described below.

Interwell Upper Tolerance Limits

First, background limits were determined using tolerance limits constructed from pooled upgradient well data through July 2021 (Figure G). The tolerance limits contain a known fraction (coverage) of the background population with a known level of confidence. The confidence and coverage levels for nonparametric tolerance limits are dependent upon the number of background samples. As requested by ADEM to eliminate variation among upgradient well data, nonparametric tolerance limits, which use the highest value in background as the statistical limit, were constructed. A summary of the tolerance limits follows this report (page 19).

Groundwater Protection Standards

These background limits were then compared to the Maximum Contaminant Levels (MCLs) for each parameter, and the higher of the two was used as the GWPS

(Figure H, page 20) in the confidence interval comparisons described below. Exceptions are noted in Figure H for beryllium and cadmium. For these two parameters, the MCL's were used as the GWPS rather than the higher background UTLs to maintain the more conservative standard.

Confidence Intervals

Confidence intervals were then constructed on downgradient wells using a maximum of the most recent 8 samples through February 2023 for each of the Appendix IV parameters (Figure I). These intervals were constructed as either parametric or nonparametric confidence intervals depending on the data distribution and percentage of non-detects. When data followed a normal or transformed-normal distribution, parametric confidence intervals were used for Appendix IV parameters. Nonparametric confidence intervals were constructed when data did not follow a normal or transformed-normal distribution or when there were greater than 50% non-detects. The lower confidence limit, which is constructed with 99% confidence for parametric confidence intervals, is compared to the GWPS prepared as described above. The confidence level associated with nonparametric confidence intervals is dependent upon the number samples available.

As mentioned above, well/constituent pairs containing 100% non-detects for the most recent 8 samples did not require statistics; therefore, they were deselected prior to construction of confidence intervals. A list of deselected well/constituent pairs follows this report. Each confidence interval was compared with the corresponding GWPS. Only when the entire confidence interval is above the GWPS is the well/constituent pair considered to exceed its respective standard. Both a tabular summary and graphical presentation of the confidence interval results follow this letter (page 21). No exceedances were noted for any of the well/constituent pairs.

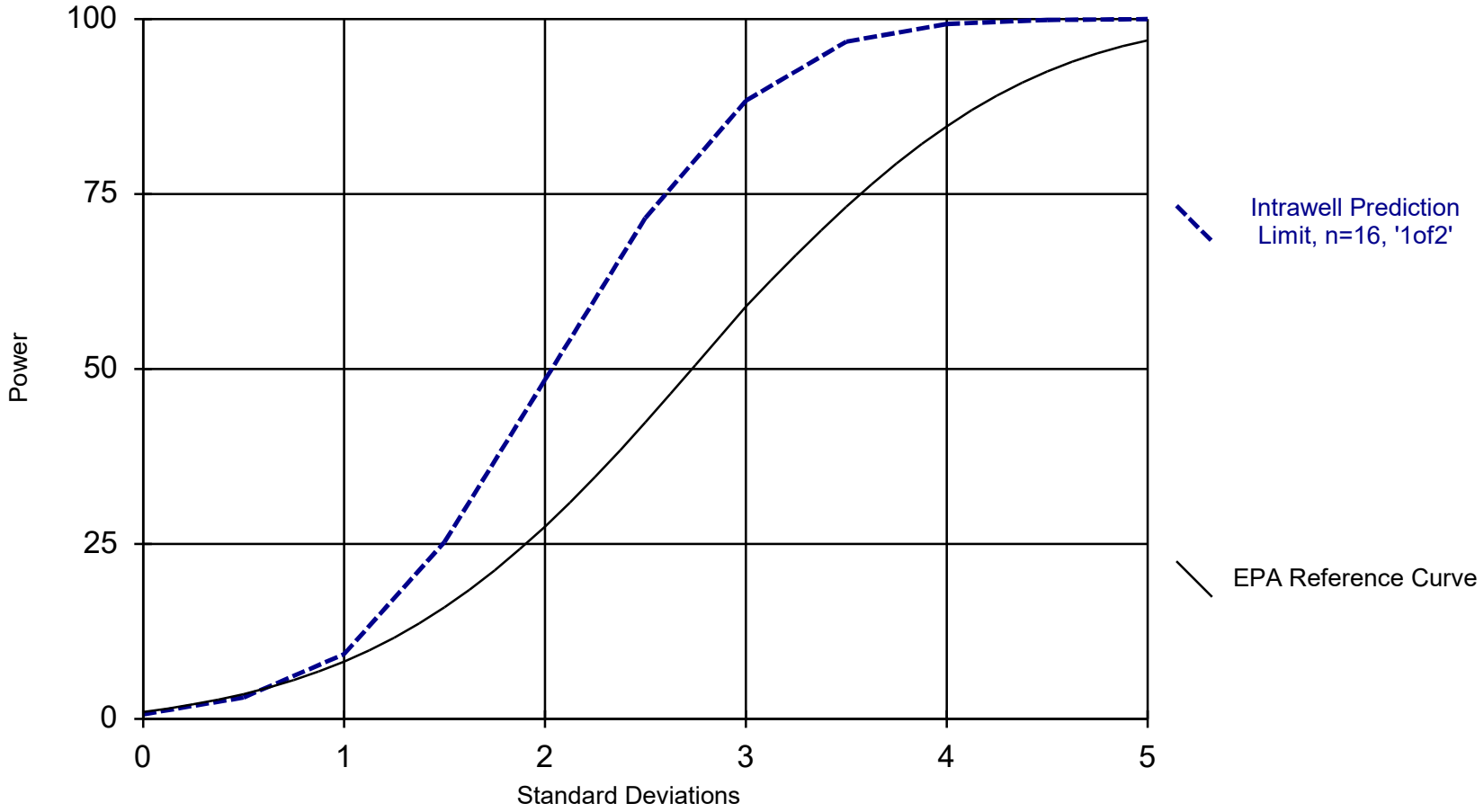
Thank you for the opportunity to assist you in the statistical analysis of groundwater quality for Gorgas Gypsum Pond. If you have any questions or comments, please feel free to contact us.

For Groundwater Stats Consulting,

Easton Rayner
Groundwater Analyst

Andrew Collins
Project Manager

Intrawell Power Curve

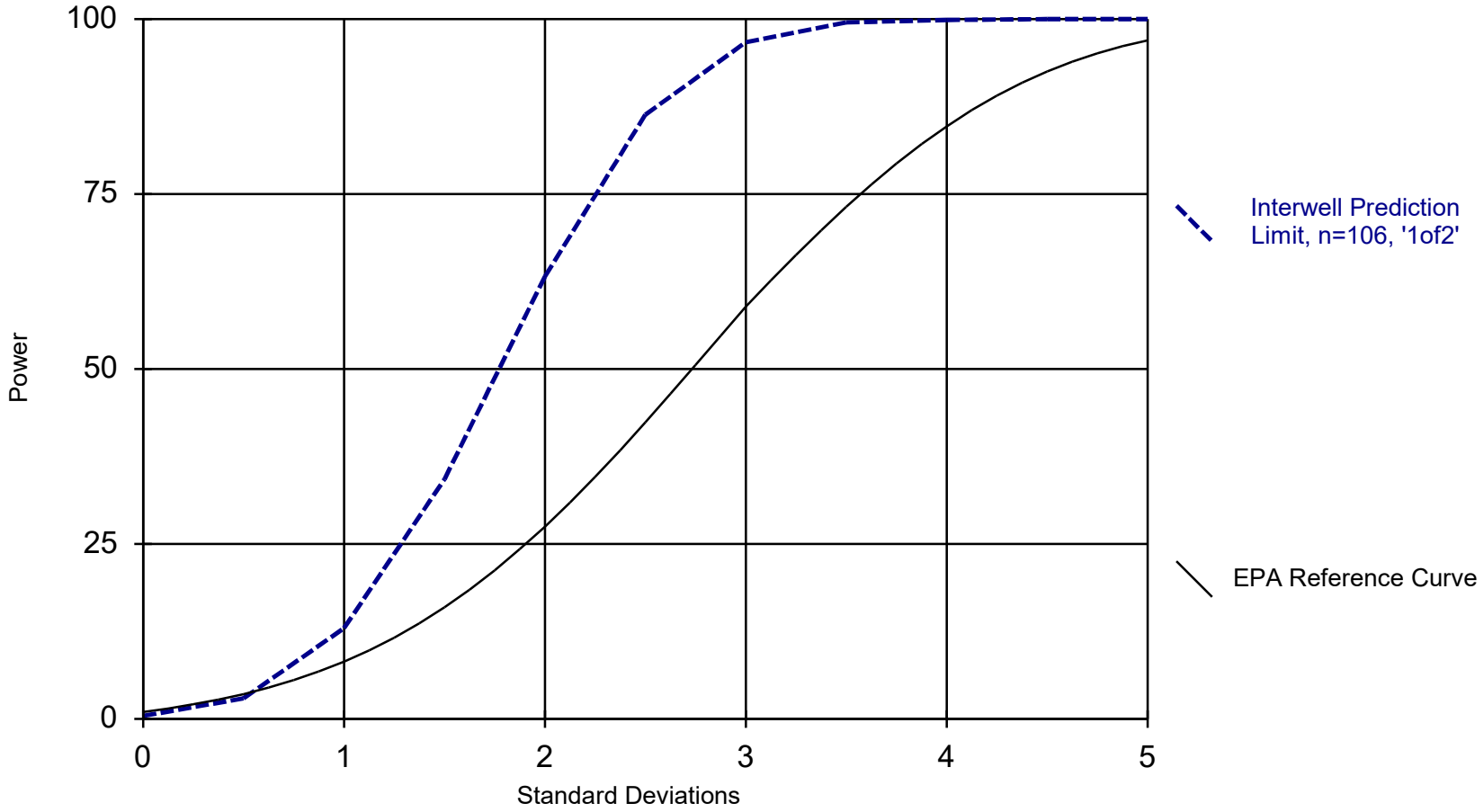


Kappa = 1.97, based on 3 compliance wells and 7 constituents, evaluated semi-annually (this report reflects annual total).

Analysis Run 5/18/2023 1:50 PM View: Descriptive

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Interwell Power Curve



Kappa = 1.671, based on 3 compliance wells and 7 constituents, evaluated semi-annually (this report reflects annual total).

Analysis Run 5/18/2023 1:49 PM View: Descriptive

Plant Gorgas Client: Southern Company Data: Gorgas GSA

100% Non-Detects: Appendix IV Downgradient

Analysis Run 5/18/2023 1:34 PM View: AIV
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Antimony (mg/L)
GS-GSA-MW-4, GS-GSA-MW-8

Beryllium (mg/L)
GS-GSA-MW-8

Cadmium (mg/L)
GS-GSA-MW-3, GS-GSA-MW-8

Fluoride (mg/L)
GS-GSA-MW-4

Mercury (mg/L)
GS-GSA-MW-3, GS-GSA-MW-4, GS-GSA-MW-8

Molybdenum (mg/L)
GS-GSA-MW-4

Selenium (mg/L)
GS-GSA-MW-8

Thallium (mg/L)
GS-GSA-MW-3, GS-GSA-MW-8

Intrawell Prediction Limits - Significant Results

Plant Gorgas Client: Southern Company Data: Gorgas GSA Printed 5/18/2023, 1:18 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Wells	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
pH (pH)	**GS-GSA-MW-4**	**3.896**	**3.699**	**3/1/2023**	**3.5**	**Yes**	**17**	**n/a**	**3.798**	**0.05044**	**0**	**None**	**No**	**0.001253**	**Param Intra 1 of 2**
pH (pH)	**MW-2**	**6.145**	**5.788**	**2/20/2023**	**6.24**	**Yes**	**23**	**n/a**	**5.967**	**0.09604**	**0**	**None**	**No**	**0.001253**	**Param Intra 1 of 2**
pH (pH)	**MW-3**	**5.987**	**4.38**	**2/20/2023**	**6.01**	**Yes**	**23**	**n/a**	**149.3**	**35.15**	**0**	**None**	**x^3**	**0.001253**	**Param Intra 1 of 2**
pH (pH)	**MW-4**	**6.237**	**6.076**	**2/21/2023**	**6.35**	**Yes**	**23**	**n/a**	**6.157**	**0.04323**	**0**	**None**	**No**	**0.001253**	**Param Intra 1 of 2**
Sulfate (mg/L)	**GS-GSA-MW-4**	**653.2**	**n/a**	**3/1/2023**	**2130**	**Yes**	**16**	**n/a**	**569.6**	**42.43**	**0**	**None**	**No**	**0.002505**	**Param Intra 1 of 2**
Total dissolved solids (mg/L)	**GS-GSA-MW-4**	**1084**	**n/a**	**3/1/2023**	**3310**	**Yes**	**16**	**n/a**	**987.9**	**48.59**	**0**	**None**	**No**	**0.002505**	**Param Intra 1 of 2**

Intrawell Prediction Limits - All Results

Plant Gorgas Client: Southern Company Data: Gorgas GSA Printed 5/18/2023, 1:18 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Wells	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
pH (pH)	GS-GSA-MW-3	6.38	5.66	2/27/2023	5.83	No	17	n/a	6.02	0.1846	0	None	No	0.001253	Param Intra 1 of 2
pH (pH)	**GS-GSA-MW-4**	**3.896**	**3.699**	**3/1/2023**	**3.5**	**Yes**	**17**	**n/a**	**3.798**	**0.05044**	**0**	**None**	**No**	**0.001253**	**Param Intra 1 of 2**
pH (pH)	GS-GSA-MW-8	7.149	6.399	2/28/2023	6.93	No	17	n/a	6.774	0.1922	0	None	No	0.001253	Param Intra 1 of 2
pH (pH)	MW-1	5.249	5.046	2/20/2023	5.07	No	23	n/a	5.147	0.05471	0	None	No	0.001253	Param Intra 1 of 2
pH (pH)	**MW-2**	**6.145**	**5.788**	**2/20/2023**	**6.24**	**Yes**	**23**	**n/a**	**5.967**	**0.09604**	**0**	**None**	**No**	**0.001253**	**Param Intra 1 of 2**
pH (pH)	**MW-3**	**5.987**	**4.38**	**2/20/2023**	**6.01**	**Yes**	**23**	**n/a**	**149.3**	**35.15**	**0**	**None**	**x^3**	**0.001253**	**Param Intra 1 of 2**
pH (pH)	**MW-4**	**6.237**	**6.076**	**2/21/2023**	**6.35**	**Yes**	**23**	**n/a**	**6.157**	**0.04323**	**0**	**None**	**No**	**0.001253**	**Param Intra 1 of 2**
Sulfate (mg/L)	GS-GSA-MW-3	3163	n/a	2/27/2023	2770	No	16	n/a	2.3e10	4.4e9	0	None	x^3	0.002505	Param Intra 1 of 2
Sulfate (mg/L)	**GS-GSA-MW-4**	**653.2**	**n/a**	**3/1/2023**	**2130**	**Yes**	**16**	**n/a**	**569.6**	**42.43**	**0**	**None**	**No**	**0.002505**	**Param Intra 1 of 2**
Sulfate (mg/L)	GS-GSA-MW-8	2169	n/a	2/28/2023	1390	No	16	n/a	1541	318.8	0	None	No	0.002505	Param Intra 1 of 2
Sulfate (mg/L)	MW-1	1653	n/a	2/20/2023	1520	No	22	n/a	1456	105.3	0	None	No	0.002505	Param Intra 1 of 2
Sulfate (mg/L)	MW-2	1257	n/a	2/20/2023	767	No	23	n/a	1001	137.9	0	None	No	0.002505	Param Intra 1 of 2
Sulfate (mg/L)	MW-3	3195	n/a	2/20/2023	2110	No	23	n/a	2487	381.4	0	None	No	0.002505	Param Intra 1 of 2
Sulfate (mg/L)	MW-4	3107	n/a	2/21/2023	1930	No	22	n/a	2505	321.9	0	None	No	0.002505	Param Intra 1 of 2
Total dissolved solids (mg/L)	GS-GSA-MW-3	5170	n/a	2/27/2023	5000	No	16	n/a	n/a	n/a	0	n/a	n/a	0.006456	NP Intra (normality) 1 of 2
Total dissolved solids (mg/L)	**GS-GSA-MW-4**	**1084**	**n/a**	**3/1/2023**	**3310**	**Yes**	**16**	**n/a**	**987.9**	**48.59**	**0**	**None**	**No**	**0.002505**	**Param Intra 1 of 2**
Total dissolved solids (mg/L)	GS-GSA-MW-8	4017	n/a	2/28/2023	2620	No	16	n/a	2978	527.4	0	None	No	0.002505	Param Intra 1 of 2
Total dissolved solids (mg/L)	MW-1	2516	n/a	2/20/2023	2280	No	22	n/a	2201	168.2	0	None	No	0.002505	Param Intra 1 of 2
Total dissolved solids (mg/L)	MW-2	2005	n/a	2/20/2023	1420	No	23	n/a	1648	192.4	0	None	No	0.002505	Param Intra 1 of 2
Total dissolved solids (mg/L)	MW-3	4954	n/a	2/20/2023	3230	No	23	n/a	3773	635.9	0	None	No	0.002505	Param Intra 1 of 2
Total dissolved solids (mg/L)	MW-4	4484	n/a	2/21/2023	3160	No	22	n/a	5.8e10	1.7e10	0	None	x^3	0.002505	Param Intra 1 of 2

Interwell Prediction Limits - Significant Results

Plant Gorgas Client: Southern Company Data: Gorgas GSA Printed 5/18/2023, 1:21 PM

Constituent	Well	Upper Lim.	Date	Observ.	Sig.	Bg N	Bg Wells	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	**GS-GSA-MW-3**	**0.1015**	**2/27/2023**	**2.78**	**Yes**	**106**	**MW-1,MW-2,MW-3,MW-4**	**n/a**	**n/a**	**24.53**	**n/a**	**n/a**	**0.0001761**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**GS-GSA-MW-4**	**0.1015**	**3/1/2023**	**8.02**	**Yes**	**106**	**MW-1,MW-2,MW-3,MW-4**	**n/a**	**n/a**	**24.53**	**n/a**	**n/a**	**0.0001761**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**GS-GSA-MW-8**	**0.1015**	**2/28/2023**	**1.91**	**Yes**	**106**	**MW-1,MW-2,MW-3,MW-4**	**n/a**	**n/a**	**24.53**	**n/a**	**n/a**	**0.0001761**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**GS-GSA-MW-3**	**431**	**2/27/2023**	**516**	**Yes**	**107**	**MW-2,MW-1,MW-3,MW-4**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0001732**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	**GS-GSA-MW-3**	**3.654**	**2/27/2023**	**254**	**Yes**	**107**	**MW-1,MW-2,MW-3,MW-4**	**0.7368**	**0.3346**	**2.804**	**None**	**ln(x)**	**0.002505**	**Param Inter 1 of 2**
Chloride (mg/L)	**GS-GSA-MW-4**	**3.654**	**3/1/2023**	**113**	**Yes**	**107**	**MW-1,MW-2,MW-3,MW-4**	**0.7368**	**0.3346**	**2.804**	**None**	**ln(x)**	**0.002505**	**Param Inter 1 of 2**
Chloride (mg/L)	**GS-GSA-MW-8**	**3.654**	**2/28/2023**	**86.9**	**Yes**	**107**	**MW-1,MW-2,MW-3,MW-4**	**0.7368**	**0.3346**	**2.804**	**None**	**ln(x)**	**0.002505**	**Param Inter 1 of 2**

Interwell Prediction Limits - All Results

Plant Gorgas Client: Southern Company Data: Gorgas GSA Printed 5/18/2023, 1:21 PM

Constituent	Well	Upper Lim.	Date	Observ.	Sig.	Bg N	Bg Wells	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	**GS-GSA-MW-3**	**0.1015**	**2/27/2023**	**2.78**	**Yes**	**106**	**MW-1,MW-2,MW-3,MW-4**	**n/a**	**n/a**	**24.53**	**n/a**	**n/a**	**0.0001761**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**GS-GSA-MW-4**	**0.1015**	**3/1/2023**	**8.02**	**Yes**	**106**	**MW-1,MW-2,MW-3,MW-4**	**n/a**	**n/a**	**24.53**	**n/a**	**n/a**	**0.0001761**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**GS-GSA-MW-8**	**0.1015**	**2/28/2023**	**1.91**	**Yes**	**106**	**MW-1,MW-2,MW-3,MW-4**	**n/a**	**n/a**	**24.53**	**n/a**	**n/a**	**0.0001761**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**GS-GSA-MW-3**	**431**	**2/27/2023**	**516**	**Yes**	**107**	**MW-2,MW-1,MW-3,MW-4**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0001732**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	GS-GSA-MW-4	431	3/1/2023	327	No	107	MW-2,MW-1,MW-3,MW-4	n/a	n/a	0	n/a	n/a	0.0001732	NP Inter (normality) 1 of 2
Calcium (mg/L)	GS-GSA-MW-8	431	2/28/2023	353	No	107	MW-2,MW-1,MW-3,MW-4	n/a	n/a	0	n/a	n/a	0.0001732	NP Inter (normality) 1 of 2
Chloride (mg/L)	**GS-GSA-MW-3**	**3.654**	**2/27/2023**	**254**	**Yes**	**107**	**MW-1,MW-2,MW-3,MW-4**	**0.7368**	**0.3346**	**2.804**	**None**	**ln(x)**	**0.002505**	**Param Inter 1 of 2**
Chloride (mg/L)	**GS-GSA-MW-4**	**3.654**	**3/1/2023**	**113**	**Yes**	**107**	**MW-1,MW-2,MW-3,MW-4**	**0.7368**	**0.3346**	**2.804**	**None**	**ln(x)**	**0.002505**	**Param Inter 1 of 2**
Chloride (mg/L)	**GS-GSA-MW-8**	**3.654**	**2/28/2023**	**86.9**	**Yes**	**107**	**MW-1,MW-2,MW-3,MW-4**	**0.7368**	**0.3346**	**2.804**	**None**	**ln(x)**	**0.002505**	**Param Inter 1 of 2**
Fluoride (mg/L)	GS-GSA-MW-3	0.63	2/27/2023	0.292	No	111	MW-2,MW-1,MW-3,MW-4	n/a	n/a	0.9009	n/a	n/a	0.0001615	NP Inter (normality) 1 of 2
Fluoride (mg/L)	GS-GSA-MW-4	0.63	3/1/2023	0.05ND	No	111	MW-2,MW-1,MW-3,MW-4	n/a	n/a	0.9009	n/a	n/a	0.0001615	NP Inter (normality) 1 of 2
Fluoride (mg/L)	GS-GSA-MW-8	0.63	2/28/2023	0.161	No	111	MW-2,MW-1,MW-3,MW-4	n/a	n/a	0.9009	n/a	n/a	0.0001615	NP Inter (normality) 1 of 2

Trend Tests - Prediction Limit Exceedances - Significant Results

Plant Gorgas Client: Southern Company Data: Gorgas GSA Printed 5/18/2023, 1:25 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	**GS-GSA-MW-8**	**0.3952**	**144**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**MW-1 (bg)**	**0.004867**	**144**	**124**	**Yes**	**27**	**37.04**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**MW-2 (bg)**	**0.008534**	**167**	**124**	**Yes**	**27**	**29.63**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**MW-3 (bg)**	**0.006729**	**125**	**124**	**Yes**	**27**	**29.63**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**GS-GSA-MW-8**	**20.58**	**94**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
pH (pH)	**MW-1 (bg)**	**-0.02192**	**-190**	**-124**	**Yes**	**27**	**0**	**n/a**	**n/a**	**0.01**	**NP**
pH (pH)	**MW-2 (bg)**	**0.04188**	**172**	**124**	**Yes**	**27**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**MW-4 (bg)**	**-118.1**	**-153**	**-118**	**Yes**	**26**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total dissolved solids (mg/L)	**MW-4 (bg)**	**-161.1**	**-157**	**-118**	**Yes**	**26**	**0**	**n/a**	**n/a**	**0.01**	**NP**

Trend Tests - Prediction Limit Exceedances - All Results

Plant Gorgas Client: Southern Company Data: Gorgas GSA Printed 5/18/2023, 1:25 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	GS-GSA-MW-3	0.02576	6	81	No	20	0	n/a	n/a	0.01	NP
Boron (mg/L)	GS-GSA-MW-4	-0.1298	-16	-81	No	20	0	n/a	n/a	0.01	NP
Boron (mg/L)	**GS-GSA-MW-8**	**0.3952**	**144**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**MW-1 (bg)**	**0.004867**	**144**	**124**	**Yes**	**27**	**37.04**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**MW-2 (bg)**	**0.008534**	**167**	**124**	**Yes**	**27**	**29.63**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**MW-3 (bg)**	**0.006729**	**125**	**124**	**Yes**	**27**	**29.63**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	MW-4 (bg)	-0.0004495	-56	-111	No	25	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GS-GSA-MW-3	-5.205	-40	-81	No	20	0	n/a	n/a	0.01	NP
Calcium (mg/L)	MW-1 (bg)	2.21	104	124	No	27	0	n/a	n/a	0.01	NP
Calcium (mg/L)	MW-2 (bg)	0.6618	24	124	No	27	0	n/a	n/a	0.01	NP
Calcium (mg/L)	MW-3 (bg)	8.217	56	124	No	27	0	n/a	n/a	0.01	NP
Calcium (mg/L)	MW-4 (bg)	-7.42	-89	-118	No	26	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GS-GSA-MW-3	-4.405	-28	-81	No	20	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GS-GSA-MW-4	-5.829	-46	-81	No	20	0	n/a	n/a	0.01	NP
Chloride (mg/L)	**GS-GSA-MW-8**	**20.58**	**94**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	MW-1 (bg)	-0.035	-69	-124	No	27	0	n/a	n/a	0.01	NP
Chloride (mg/L)	MW-2 (bg)	-0.144	-74	-124	No	27	0	n/a	n/a	0.01	NP
Chloride (mg/L)	MW-3 (bg)	0.07228	85	124	No	27	7.407	n/a	n/a	0.01	NP
Chloride (mg/L)	MW-4 (bg)	-0.06041	-95	-118	No	26	3.846	n/a	n/a	0.01	NP
pH (pH)	GS-GSA-MW-4	-0.01608	-59	-87	No	21	0	n/a	n/a	0.01	NP
pH (pH)	**MW-1 (bg)**	**-0.02192**	**-190**	**-124**	**Yes**	**27**	**0**	**n/a**	**n/a**	**0.01**	**NP**
pH (pH)	**MW-2 (bg)**	**0.04188**	**172**	**124**	**Yes**	**27**	**0**	**n/a**	**n/a**	**0.01**	**NP**
pH (pH)	MW-3 (bg)	0.02668	20	124	No	27	0	n/a	n/a	0.01	NP
pH (pH)	MW-4 (bg)	0.008166	59	124	No	27	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GS-GSA-MW-4	24.43	60	81	No	20	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	MW-1 (bg)	15.99	77	118	No	26	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	MW-2 (bg)	-40.38	-106	-124	No	27	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	MW-3 (bg)	99.57	108	124	No	27	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	**MW-4 (bg)**	**-118.1**	**-153**	**-118**	**Yes**	**26**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total dissolved solids (mg/L)	GS-GSA-MW-4	39.77	52	81	No	20	0	n/a	n/a	0.01	NP
Total dissolved solids (mg/L)	MW-1 (bg)	37.16	116	118	No	26	0	n/a	n/a	0.01	NP
Total dissolved solids (mg/L)	MW-2 (bg)	-40.62	-89	-124	No	27	0	n/a	n/a	0.01	NP
Total dissolved solids (mg/L)	MW-3 (bg)	160.6	100	124	No	27	0	n/a	n/a	0.01	NP
Total dissolved solids (mg/L)	**MW-4 (bg)**	**-161.1**	**-157**	**-118**	**Yes**	**26**	**0**	**n/a**	**n/a**	**0.01**	**NP**

Upper Tolerance Limits Summary Table

Plant Gorgas Client: Southern Company Data: Gorgas GSA Printed 11/16/2021, 4:56 PM

Constituent	Well	Upper Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	n/a	0.00143	n/a	n/a	n/a	95	n/a	n/a	93.68	n/a	n/a	0.007651	NP Inter
Arsenic (mg/L)	n/a	0.005	n/a	n/a	n/a	95	n/a	n/a	83.16	n/a	n/a	0.007651	NP Inter
Barium (mg/L)	n/a	0.0166	n/a	n/a	n/a	95	n/a	n/a	0	n/a	n/a	0.007651	NP Inter
Beryllium (mg/L)	n/a	0.0121	n/a	n/a	n/a	93	n/a	n/a	83.87	n/a	n/a	0.008478	NP Inter
Cadmium (mg/L)	n/a	0.00652	n/a	n/a	n/a	94	n/a	n/a	44.68	n/a	n/a	0.008054	NP Inter
Chromium (mg/L)	n/a	0.0105	n/a	n/a	n/a	95	n/a	n/a	89.47	n/a	n/a	0.007651	NP Inter
Cobalt (mg/L)	n/a	0.64	n/a	n/a	n/a	93	n/a	n/a	24.73	n/a	n/a	0.008478	NP Inter
Combined Radium 226 + 228 (pCi/L)	n/a	1.47	n/a	n/a	n/a	81	n/a	n/a	0	n/a	n/a	0.01569	NP Inter
Fluoride (mg/L)	n/a	0.63	n/a	n/a	n/a	99	n/a	n/a	1.01	n/a	n/a	0.006232	NP Inter
Lead (mg/L)	n/a	0.002	n/a	n/a	n/a	94	n/a	n/a	94.68	n/a	n/a	0.008054	NP Inter
Lithium (mg/L)	n/a	0.419	n/a	n/a	n/a	95	n/a	n/a	0	n/a	n/a	0.007651	NP Inter
Mercury (mg/L)	n/a	0.0005	n/a	n/a	n/a	95	n/a	n/a	100	n/a	n/a	0.007651	NP Inter
Molybdenum (mg/L)	n/a	0.0002	n/a	n/a	n/a	95	n/a	n/a	97.89	n/a	n/a	0.007651	NP Inter
Selenium (mg/L)	n/a	0.0209	n/a	n/a	n/a	95	n/a	n/a	58.95	n/a	n/a	0.007651	NP Inter
Thallium (mg/L)	n/a	0.000226	n/a	n/a	n/a	95	n/a	n/a	96.84	n/a	n/a	0.007651	NP Inter

GORGAS GYPSUM POND GWPS			
Analyte	**Units**	**Background**	**GWPS**
Antimony	mg/L	0.00143	0.006
Arsenic	mg/L	0.005	0.01
Barium	mg/L	0.0166	2
Beryllium	mg/L	0.0121	0.004
Cadmium	mg/L	0.00652	0.005
Chromium	mg/L	0.0105	0.1
Cobalt	mg/L	0.64	0.64
Combined Radium-226/228	pCi/L	1.47	5
Fluoride	mg/L	0.63	4
Lead	mg/L	0.00692	0.015
Lithium	mg/L	0.419	0.419
Mercury	mg/L	0.0005	0.002
Molybdenum	mg/L	0.0002	0.1
Selenium	mg/L	0.0181	0.05
Thallium	mg/L	0.000226	0.002

Notes:

1. mg/L - Milligrams per liter

2. pCi/L - Picocuries per liter

3. The background limits were used as the groundwater protection standard (GWPS) when appropriate under 40 CFR §257.95(h), ADEM Rule 335-13-15-.06(h), and the ADEM Variance.

4. GWPS established during second semi-annual sampling event in 2021.

Confidence Interval Summary Table - All Results (No Significant)

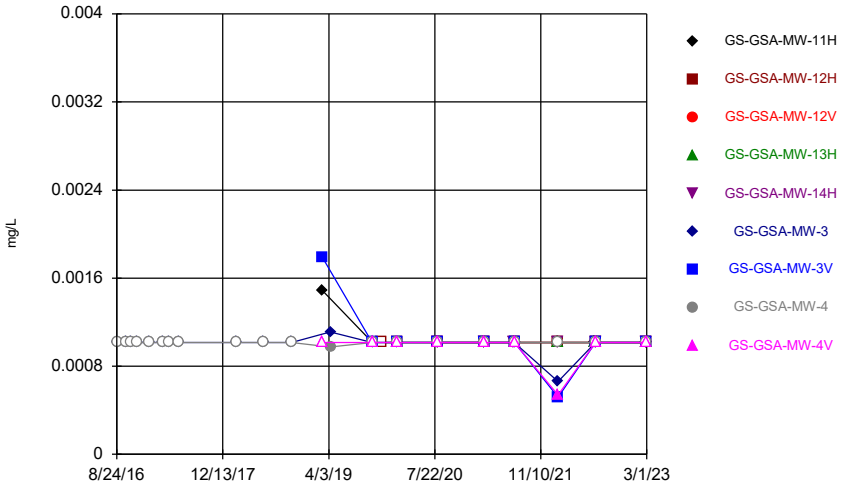
Plant Gorgas Client: Southern Company Data: Gorgas GSA Printed 5/18/2023, 1:35 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	GS-GSA-MW-3	0.001015	0.00066	0.006	No	8	87.5	None	No	0.004	NP (NDs)
Arsenic (mg/L)	GS-GSA-MW-3	0.001441	0.0005624	0.01	No	8	37.5	Kaplan-Meier	ln(x)	0.01	Param.
Arsenic (mg/L)	GS-GSA-MW-4	0.00694	0.00115	0.01	No	8	0	None	No	0.004	NP (normality)
Arsenic (mg/L)	GS-GSA-MW-8	0.005	0.000156	0.01	No	8	37.5	None	No	0.004	NP (normality)
Barium (mg/L)	GS-GSA-MW-3	0.01498	0.01242	2	No	8	0	None	No	0.01	Param.
Barium (mg/L)	GS-GSA-MW-4	0.01423	0.009645	2	No	8	0	None	No	0.01	Param.
Barium (mg/L)	GS-GSA-MW-8	0.02364	0.02041	2	No	8	0	None	No	0.01	Param.
Beryllium (mg/L)	GS-GSA-MW-3	0.001938	0.00152	0.004	No	8	0	None	No	0.01	Param.
Beryllium (mg/L)	GS-GSA-MW-4	0.0228	0.00385	0.004	No	8	0	None	No	0.004	NP (normality)
Cadmium (mg/L)	GS-GSA-MW-4	0.00687	0.00143	0.005	No	8	0	None	No	0.004	NP (normality)
Chromium (mg/L)	GS-GSA-MW-3	0.01	0.000341	0.1	No	8	37.5	None	No	0.004	NP (normality)
Chromium (mg/L)	GS-GSA-MW-4	0.002747	0.0006118	0.1	No	8	37.5	Kaplan-Meier	ln(x)	0.01	Param.
Chromium (mg/L)	GS-GSA-MW-8	0.01	0.000258	0.1	No	8	37.5	None	No	0.004	NP (normality)
Cobalt (mg/L)	GS-GSA-MW-3	0.1648	0.05126	0.64	No	8	0	None	ln(x)	0.01	Param.
Cobalt (mg/L)	GS-GSA-MW-4	0.878	0.213	0.64	No	8	0	None	No	0.004	NP (normality)
Cobalt (mg/L)	GS-GSA-MW-8	0.00546	0.000233	0.64	No	8	37.5	None	No	0.004	NP (normality)
Combined Radium 226 + 228 (pCi/L)	GS-GSA-MW-3	0.5564	0.2066	5	No	8	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-GSA-MW-4	1.282	0.268	5	No	8	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-GSA-MW-8	0.9581	0.04817	5	No	8	0	None	No	0.01	Param.
Fluoride (mg/L)	GS-GSA-MW-3	0.5538	0.322	4	No	8	0	None	No	0.01	Param.
Fluoride (mg/L)	GS-GSA-MW-8	0.1862	0.1008	4	No	8	0	None	No	0.01	Param.
Lead (mg/L)	GS-GSA-MW-3	0.005	0.000095	0.015	No	8	37.5	None	No	0.004	NP (normality)
Lead (mg/L)	GS-GSA-MW-4	0.001799	0.0006755	0.015	No	8	37.5	Kaplan-Meier	ln(x)	0.01	Param.
Lead (mg/L)	GS-GSA-MW-8	0.000203	0.000078	0.015	No	8	62.5	None	No	0.004	NP (normality)
Lithium (mg/L)	GS-GSA-MW-3	0.4934	0.2919	0.419	No	8	0	None	x^2	0.01	Param.
Lithium (mg/L)	GS-GSA-MW-4	1.89	0.262	0.419	No	8	0	None	No	0.004	NP (normality)
Lithium (mg/L)	GS-GSA-MW-8	0.2119	0.1621	0.419	No	8	0	None	No	0.01	Param.
Molybdenum (mg/L)	GS-GSA-MW-3	0.01	0.000191	0.1	No	8	37.5	None	No	0.004	NP (normality)
Molybdenum (mg/L)	GS-GSA-MW-8	0.01	0.00012	0.1	No	8	37.5	None	No	0.004	NP (normality)
Selenium (mg/L)	GS-GSA-MW-3	0.01	0.00117	0.05	No	8	37.5	None	No	0.004	NP (normality)
Selenium (mg/L)	GS-GSA-MW-4	0.01591	0.001386	0.05	No	8	25	Kaplan-Meier	No	0.01	Param.
Thallium (mg/L)	GS-GSA-MW-4	0.0003919	0.0001277	0.002	No	8	25	Kaplan-Meier	sqrt(x)	0.01	Param.

FIGURE A.

Sanitas™ v.9.6.37 . UG
Hollow symbols indicate censored values.

Time Series



Constituent: Antimony Analysis Run 5/27/2023 9:13 AM View: Descriptive
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.37 . UG
Hollow symbols indicate censored values.

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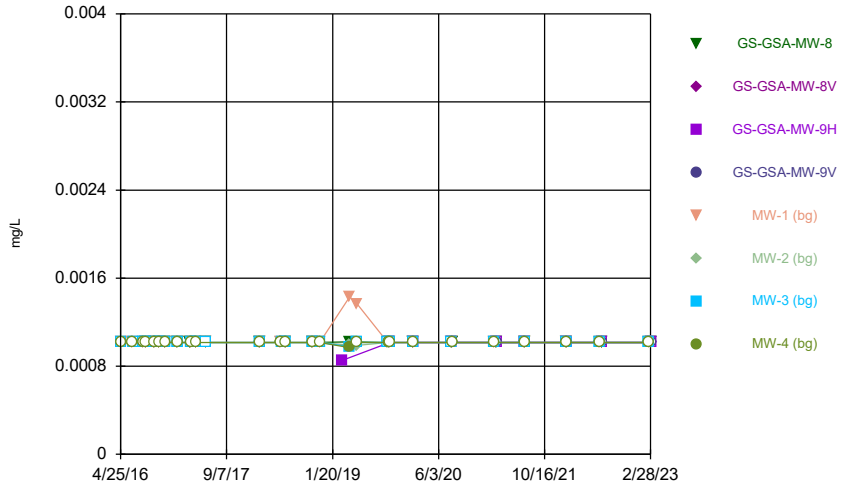

Constituent: Antimony Analysis Run 5/27/2023 9:13 AM View: Descriptive
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.37 . UG
Hollow symbols indicate censored values.

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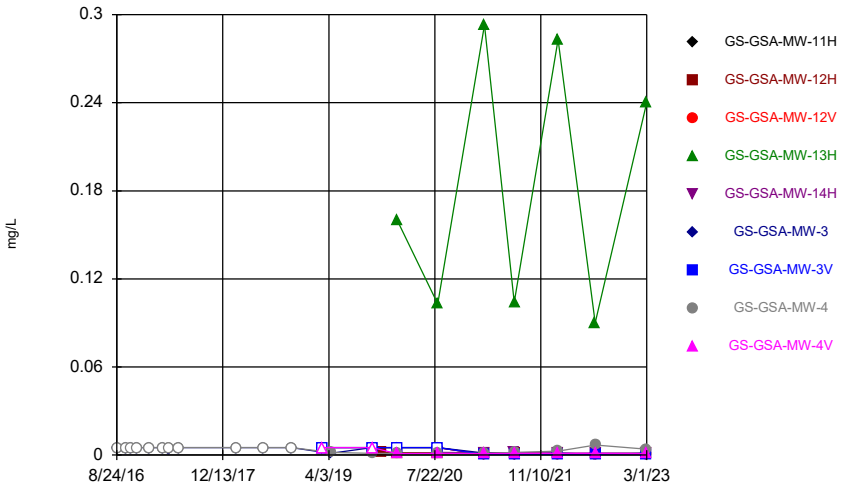
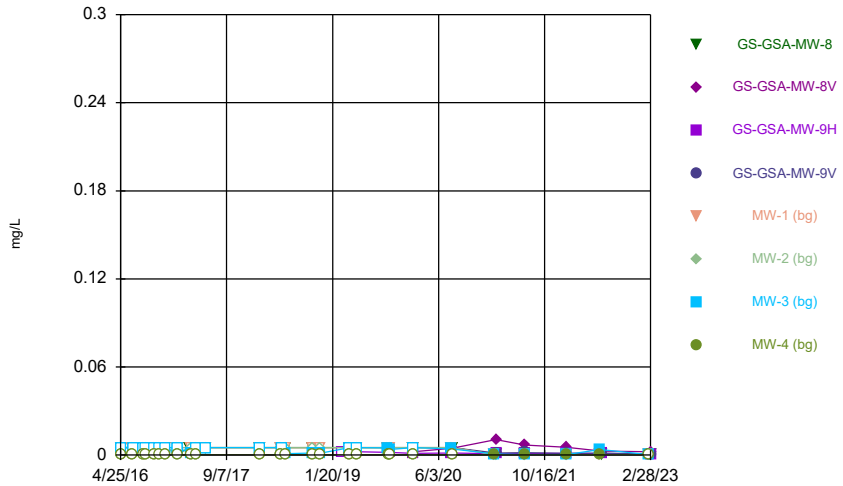


Constituent: Arsenic Analysis Run 5/27/2023 9:13 AM View: Descriptive
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.37 . UG
Hollow symbols indicate censored values.

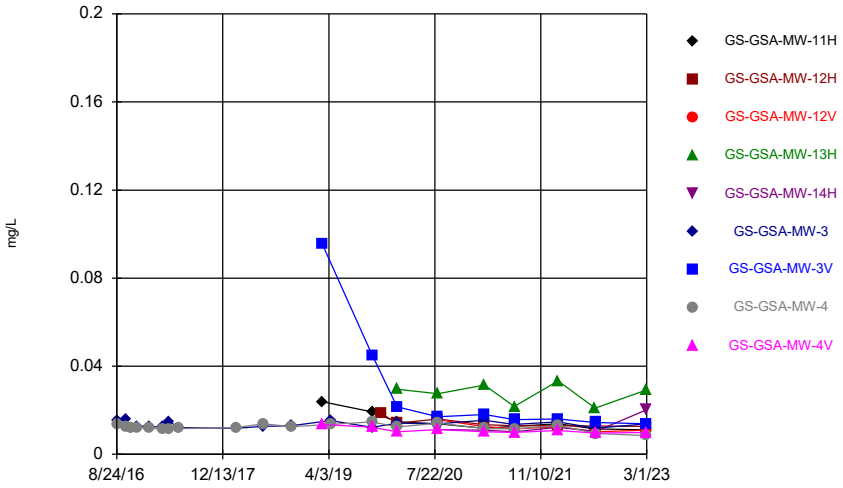
Time Series



Constituent: Arsenic Analysis Run 5/27/2023 9:13 AM View: Descriptive
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.37 . UG

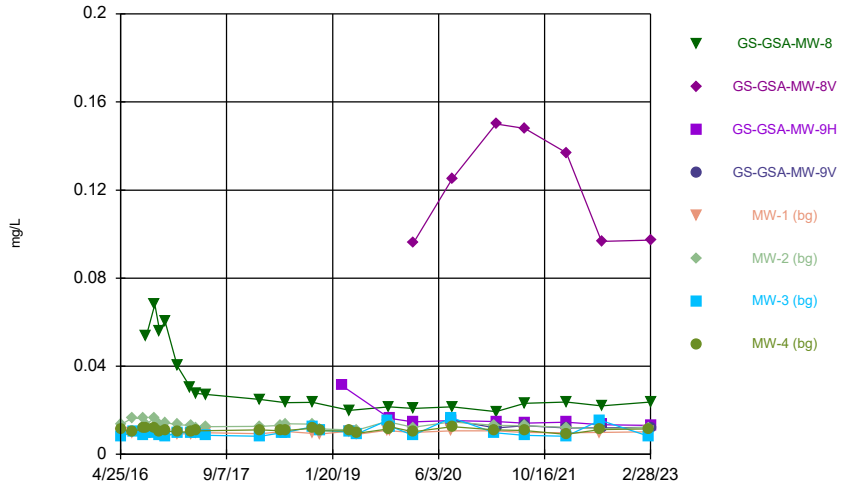
Time Series



Constituent: Barium Analysis Run 5/27/2023 9:13 AM View: Descriptive
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.37 . UG

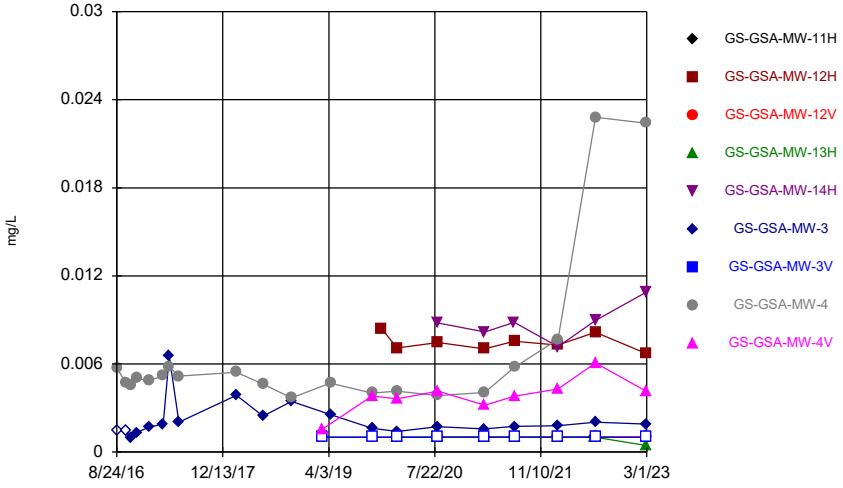
Time Series



Constituent: Barium Analysis Run 5/27/2023 9:13 AM View: Descriptive
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.37 . UG
Hollow symbols indicate censored values.

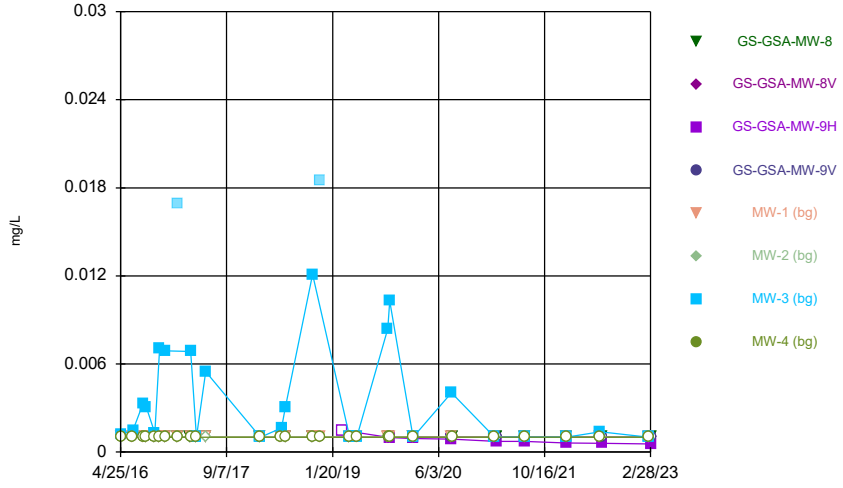
Time Series



Constituent: Beryllium Analysis Run 5/27/2023 9:13 AM View: Descriptive
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.37 . UG
Hollow symbols indicate censored values.

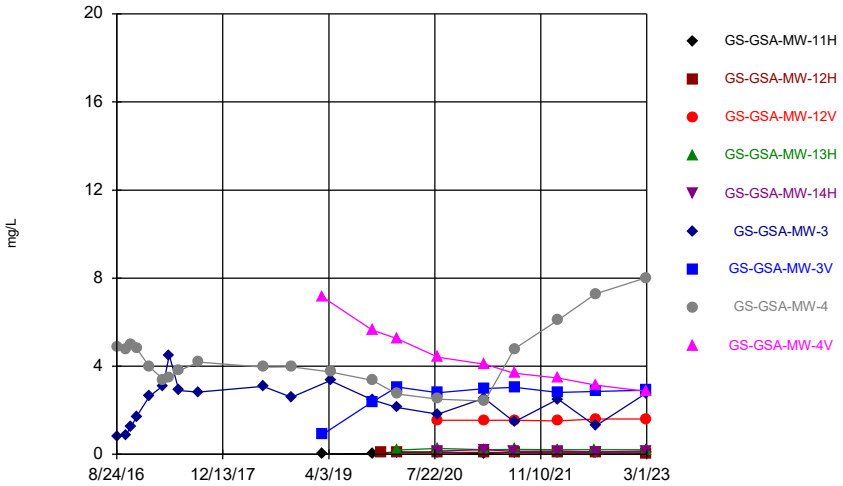
Time Series



Constituent: Beryllium Analysis Run 5/27/2023 9:13 AM View: Descriptive
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.37 . UG
Hollow symbols indicate censored values.

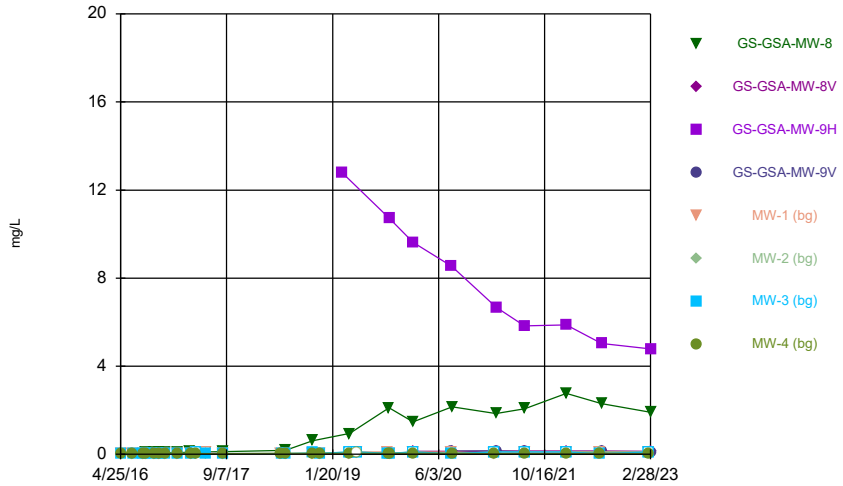
Time Series



Constituent: Boron Analysis Run 5/27/2023 9:13 AM View: Descriptive
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.37 . UG
Hollow symbols indicate censored values.

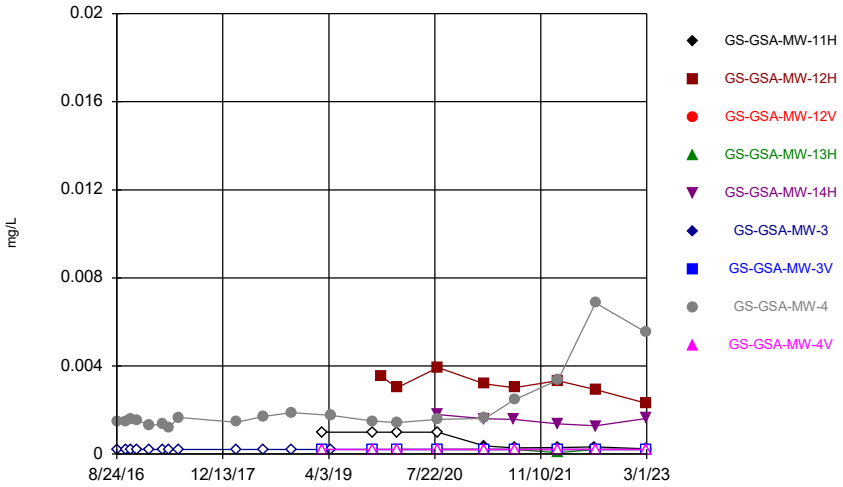
Time Series



Constituent: Boron Analysis Run 5/27/2023 9:13 AM View: Descriptive
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.37 . UG
Hollow symbols indicate censored values.

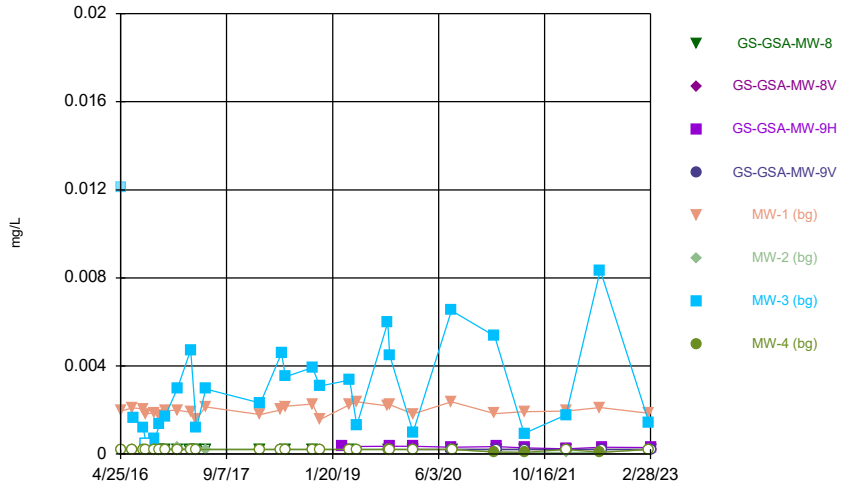
Time Series



Constituent: Cadmium Analysis Run 5/27/2023 9:13 AM View: Descriptive
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.37 . UG
Hollow symbols indicate censored values.

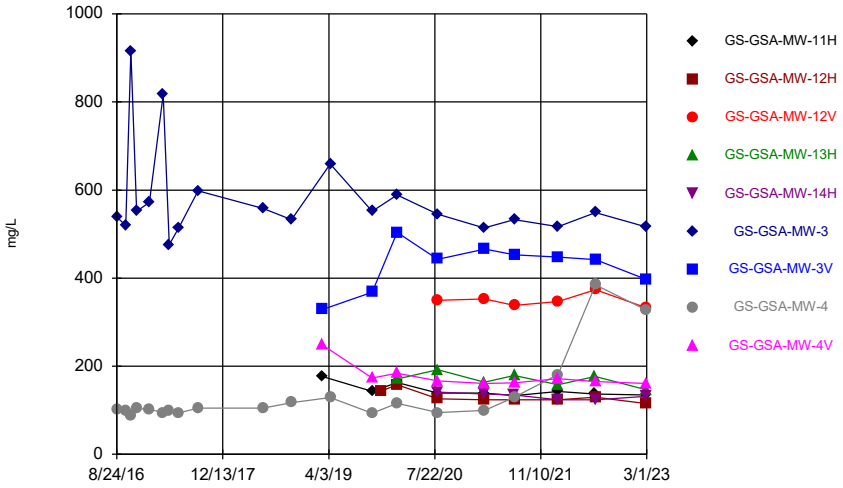
Time Series



Constituent: Cadmium Analysis Run 5/27/2023 9:13 AM View: Descriptive
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.37 . UG

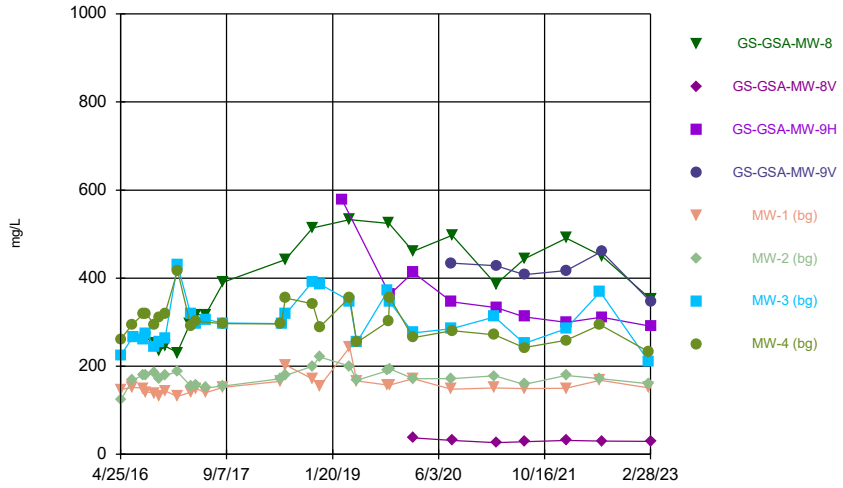
Time Series



Constituent: Calcium Analysis Run 5/27/2023 9:13 AM View: Descriptive
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.37 . UG

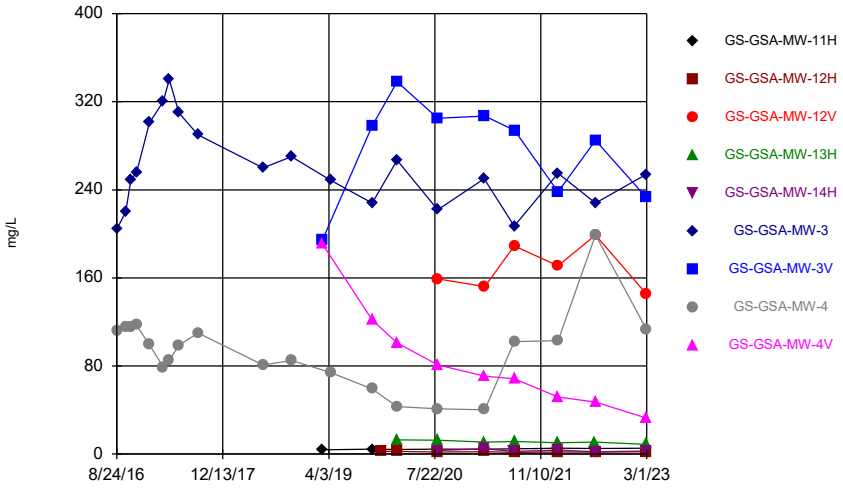
Time Series



Constituent: Calcium Analysis Run 5/27/2023 9:13 AM View: Descriptive
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.37 . UG

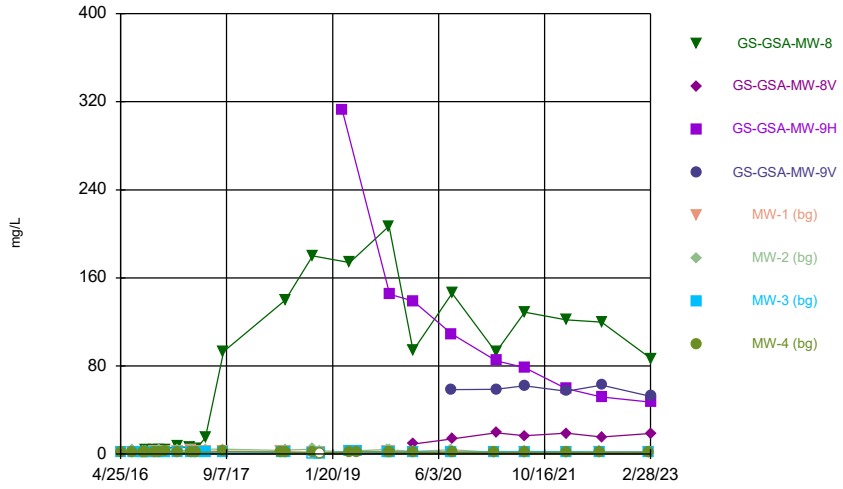
Time Series



Constituent: Chloride Analysis Run 5/27/2023 9:13 AM View: Descriptive
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.37 . UG
Hollow symbols indicate censored values.

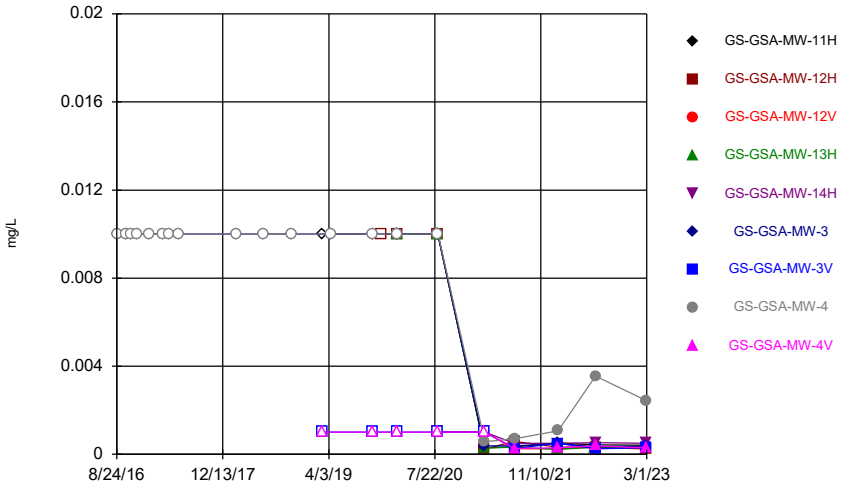
Time Series



Constituent: Chloride Analysis Run 5/27/2023 9:13 AM View: Descriptive
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.37 . UG
Hollow symbols indicate censored values.

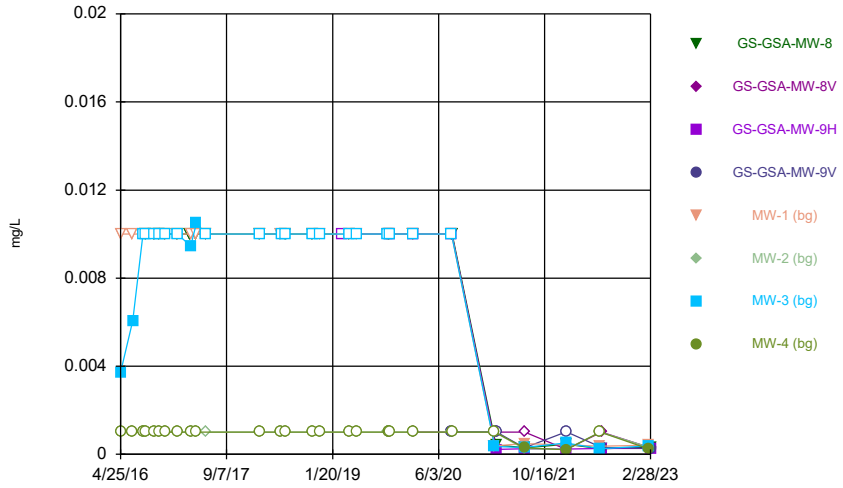
Time Series



Constituent: Chromium Analysis Run 5/27/2023 9:13 AM View: Descriptive
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.37 . UG
Hollow symbols indicate censored values.

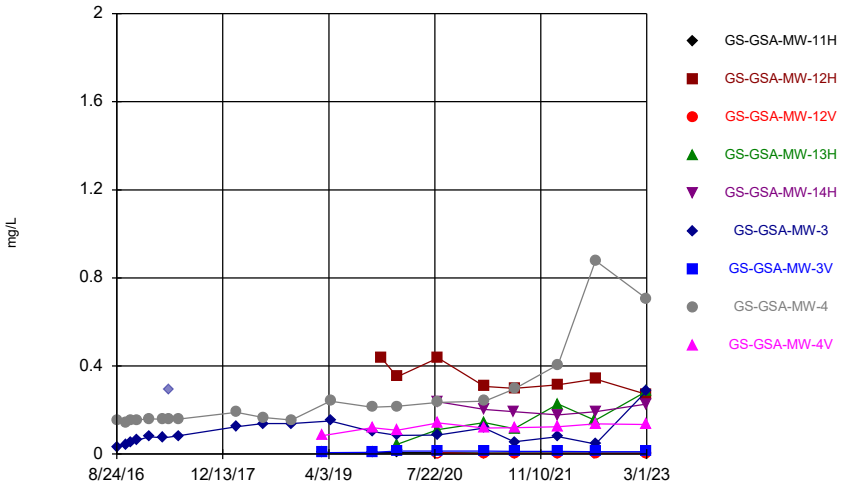
Time Series



Constituent: Chromium Analysis Run 5/27/2023 9:13 AM View: Descriptive
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.37 . UG
Hollow symbols indicate censored values.

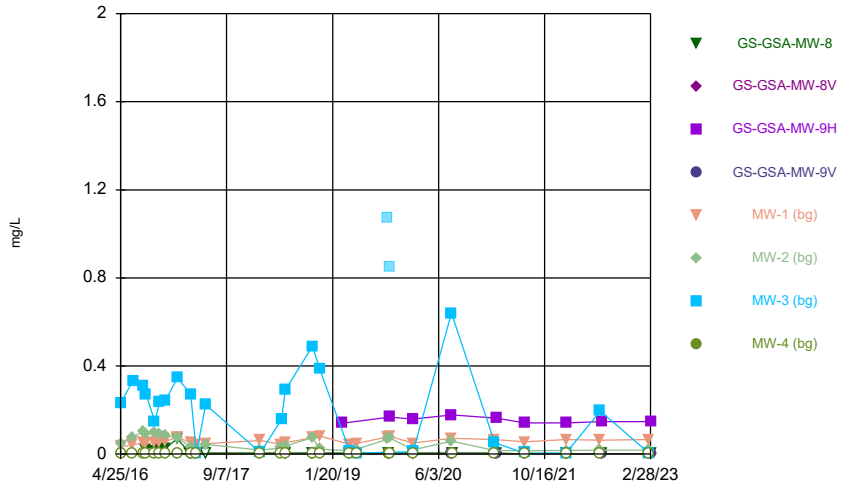
Time Series



Constituent: Cobalt Analysis Run 5/27/2023 9:13 AM View: Descriptive
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.37 . UG
Hollow symbols indicate censored values.

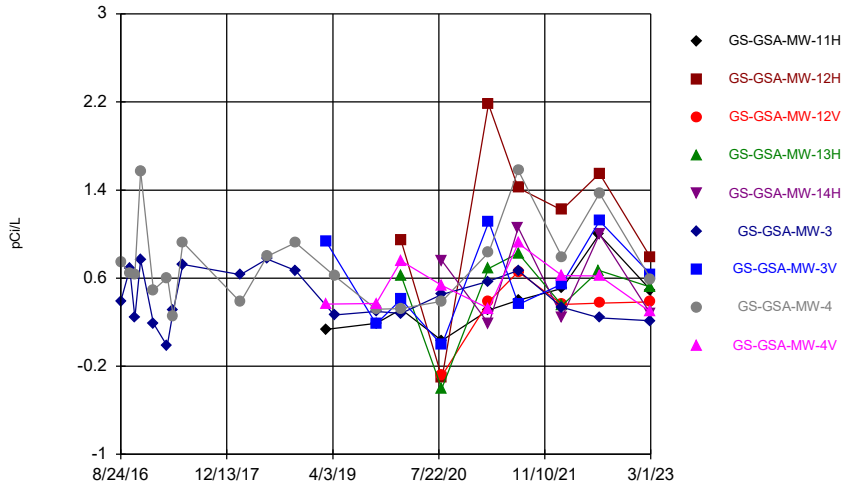
Time Series



Constituent: Cobalt Analysis Run 5/27/2023 9:13 AM View: Descriptive
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.37 . UG

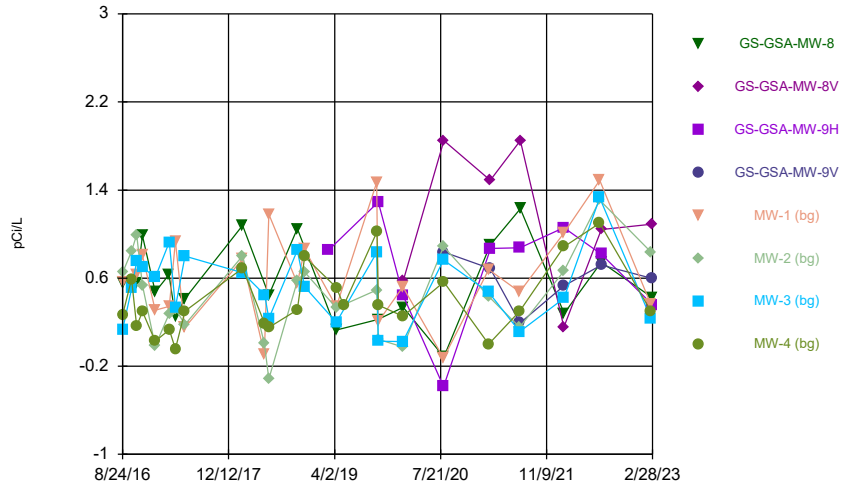
Time Series



Constituent: Combined Radium 226 + 228 Analysis Run 5/27/2023 9:13 AM View: Descriptive
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.37 . UG

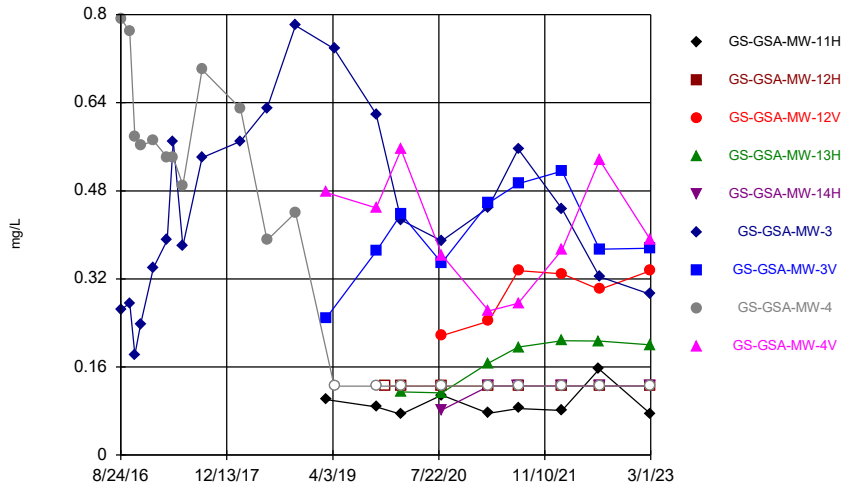
Time Series



Constituent: Combined Radium 226 + 228 Analysis Run 5/27/2023 9:13 AM View: Descriptive
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.37 . UG
Hollow symbols indicate censored values.

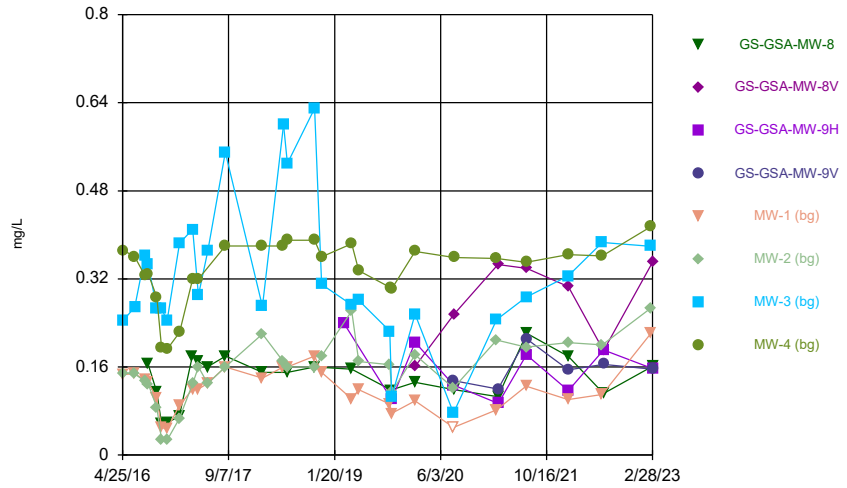
Time Series



Constituent: Fluoride Analysis Run 5/27/2023 9:13 AM View: Descriptive
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.37 . UG
Hollow symbols indicate censored values.

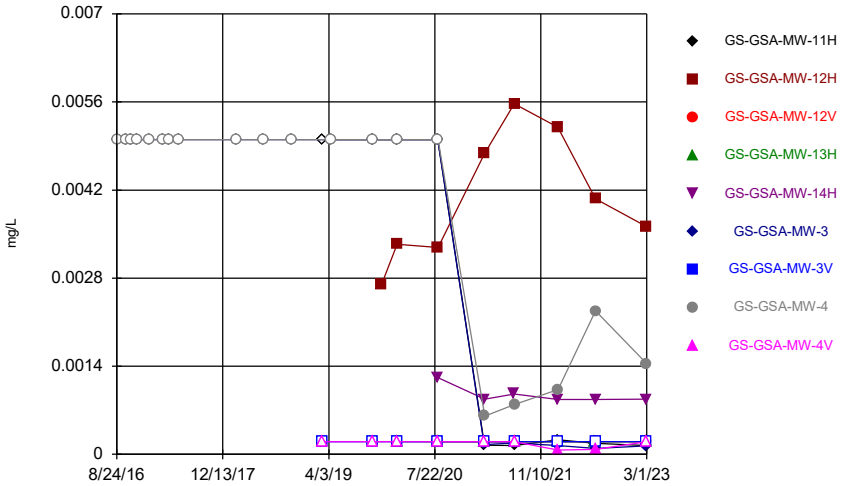
Time Series



Constituent: Fluoride Analysis Run 5/27/2023 9:13 AM View: Descriptive
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.37 . UG
Hollow symbols indicate censored values.

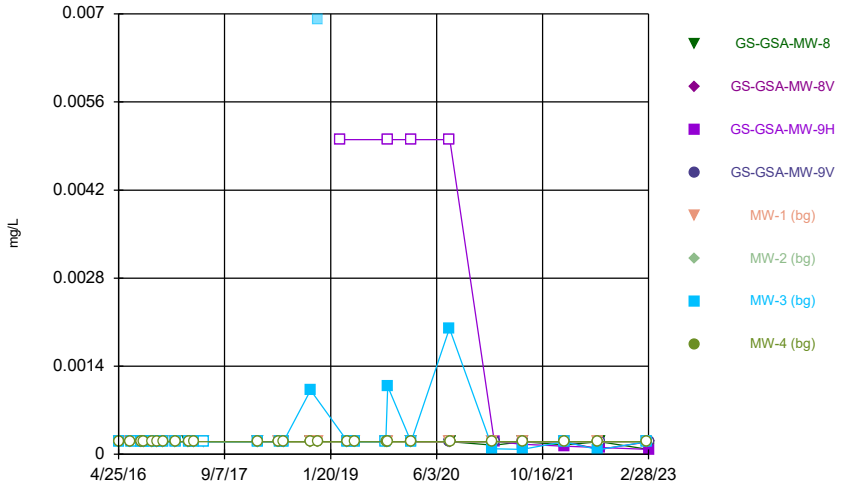
Time Series



Constituent: Lead Analysis Run 5/27/2023 9:13 AM View: Descriptive
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.37 . UG
Hollow symbols indicate censored values.

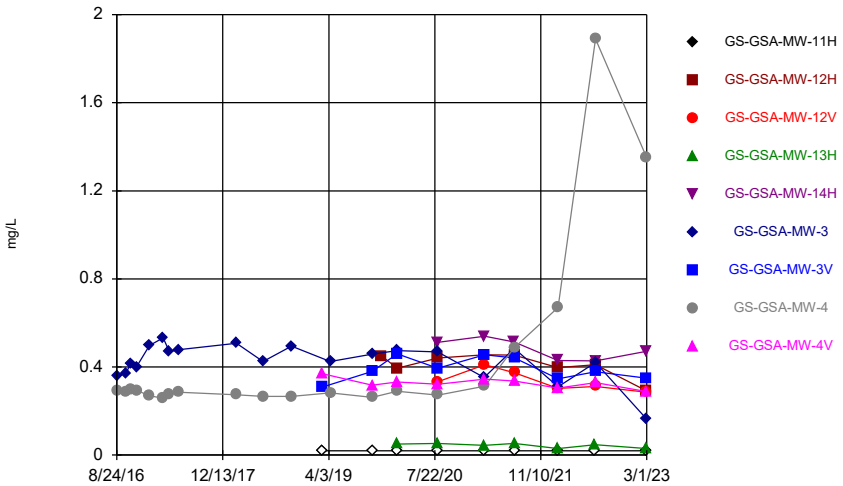
Time Series



Constituent: Lead Analysis Run 5/27/2023 9:13 AM View: Descriptive
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.37 . UG
Hollow symbols indicate censored values.

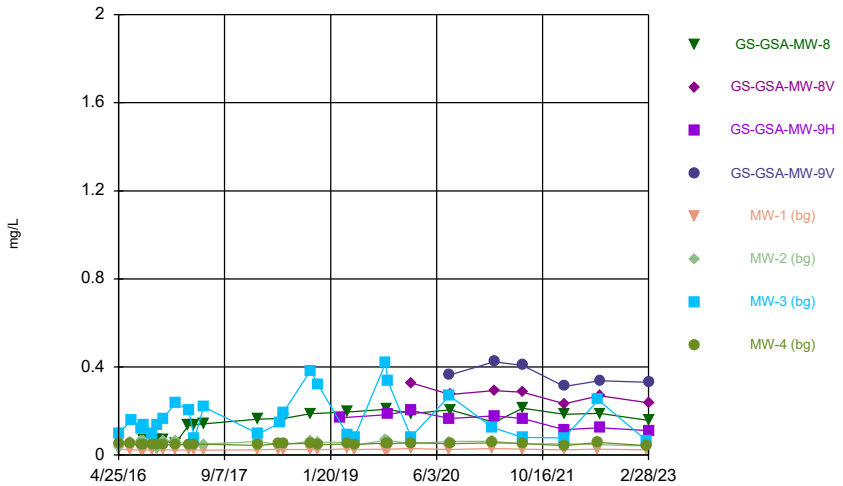
Time Series



Constituent: Lithium Analysis Run 5/27/2023 9:13 AM View: Descriptive
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.37 . UG

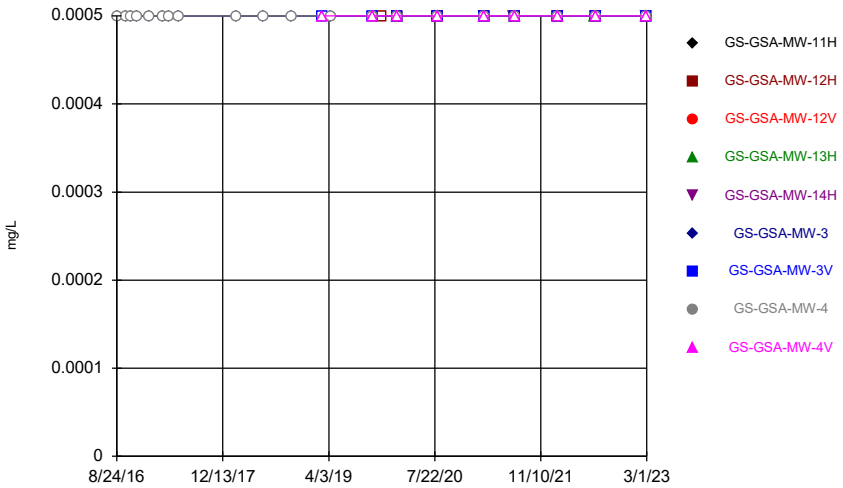
Time Series



Constituent: Lithium Analysis Run 5/27/2023 9:13 AM View: Descriptive
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.37 . UG
Hollow symbols indicate censored values.

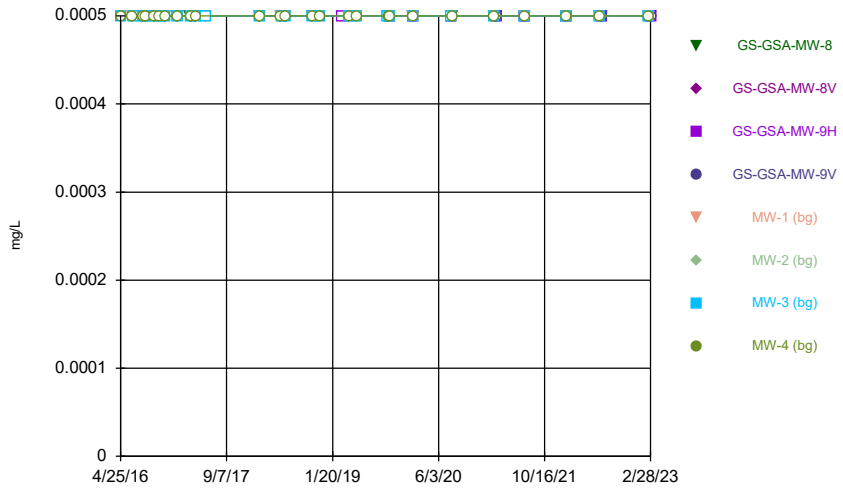
Time Series



Constituent: Mercury Analysis Run 5/27/2023 9:13 AM View: Descriptive
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.37 . UG
Hollow symbols indicate censored values.

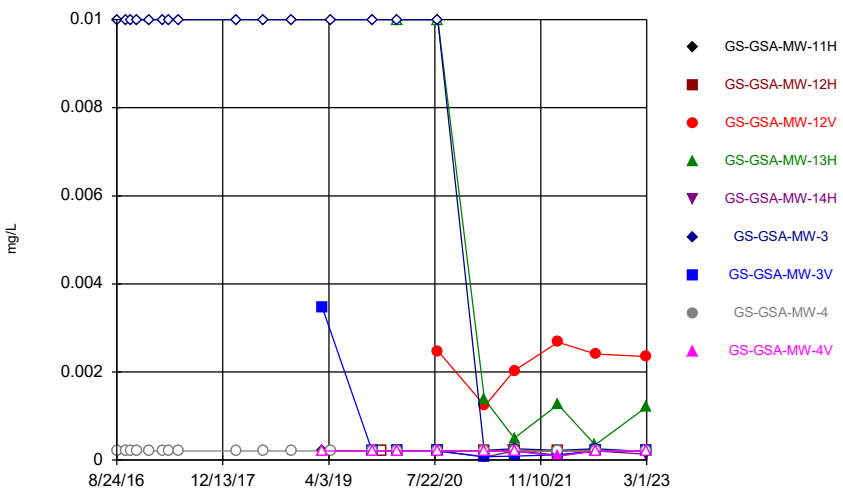
Time Series



Constituent: Mercury Analysis Run 5/27/2023 9:13 AM View: Descriptive
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.37 . UG
Hollow symbols indicate censored values.

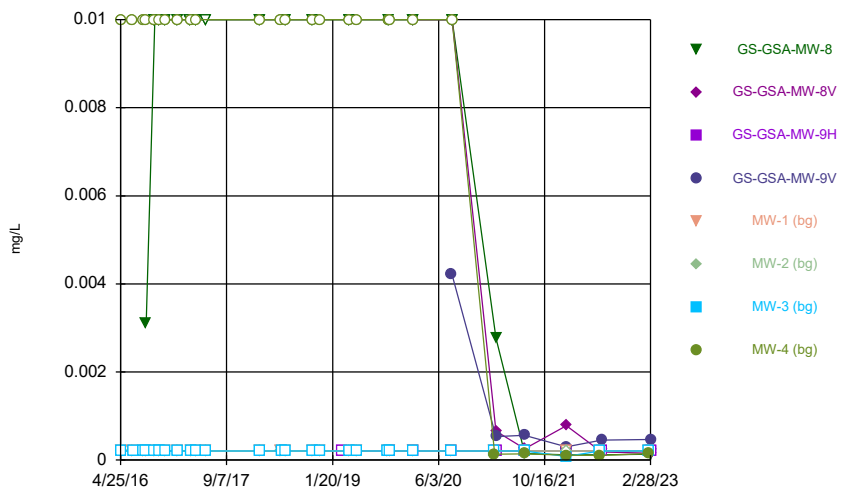
Time Series



Constituent: Molybdenum Analysis Run 5/27/2023 9:13 AM View: Descriptive
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.37 . UG
Hollow symbols indicate censored values.

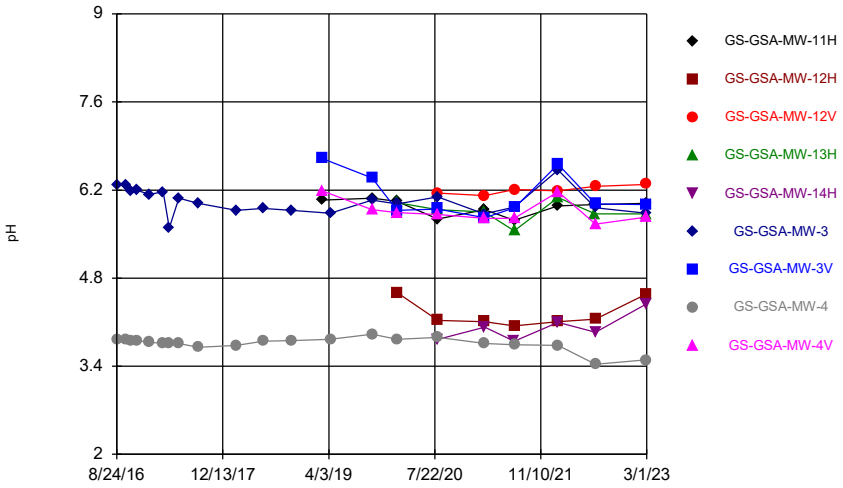
Time Series



Constituent: Molybdenum Analysis Run 5/27/2023 9:13 AM View: Descriptive
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.37 . UG

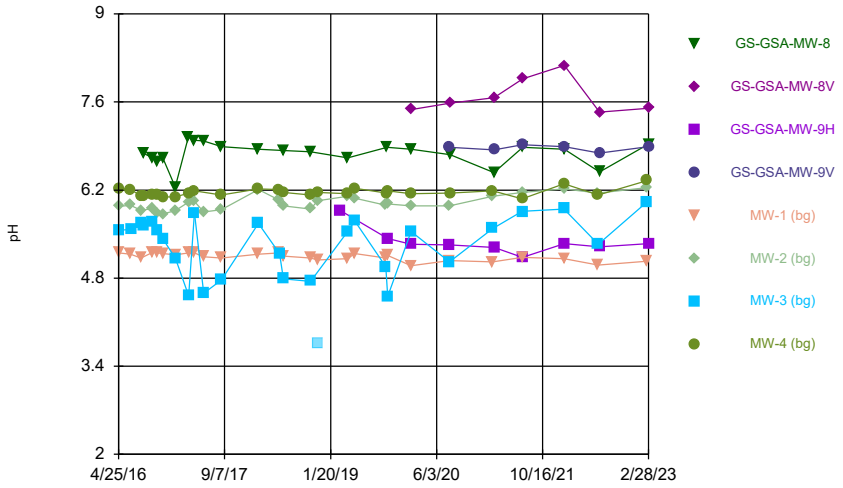
Time Series



Constituent: pH Analysis Run 5/27/2023 9:13 AM View: Descriptive
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.37 . UG

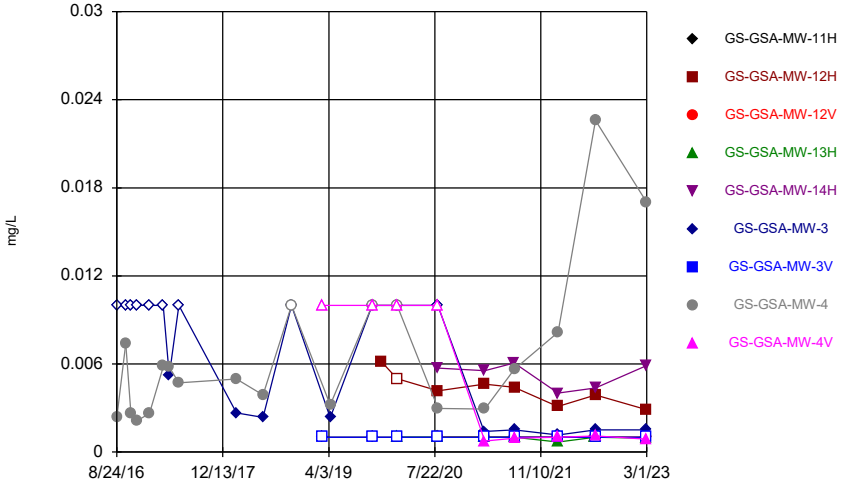
Time Series



Constituent: pH Analysis Run 5/27/2023 9:13 AM View: Descriptive
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.37 . UG
Hollow symbols indicate censored values.

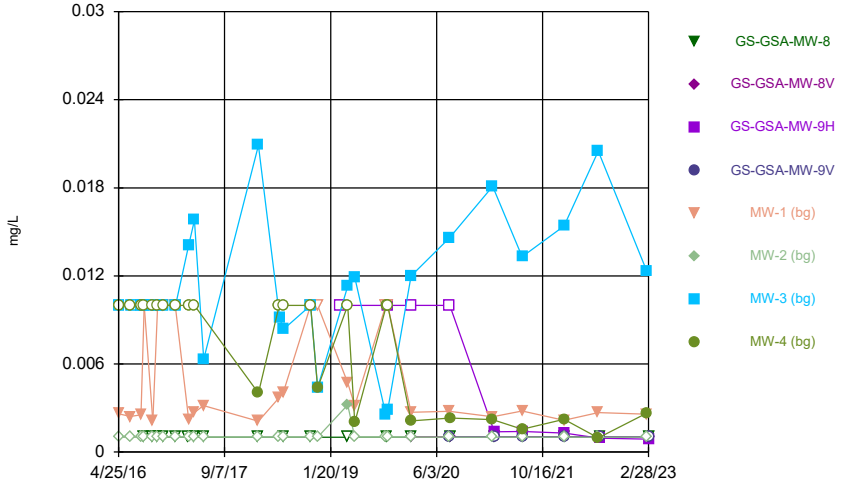
Time Series



Constituent: Selenium Analysis Run 5/27/2023 9:13 AM View: Descriptive
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.37 . UG
Hollow symbols indicate censored values.

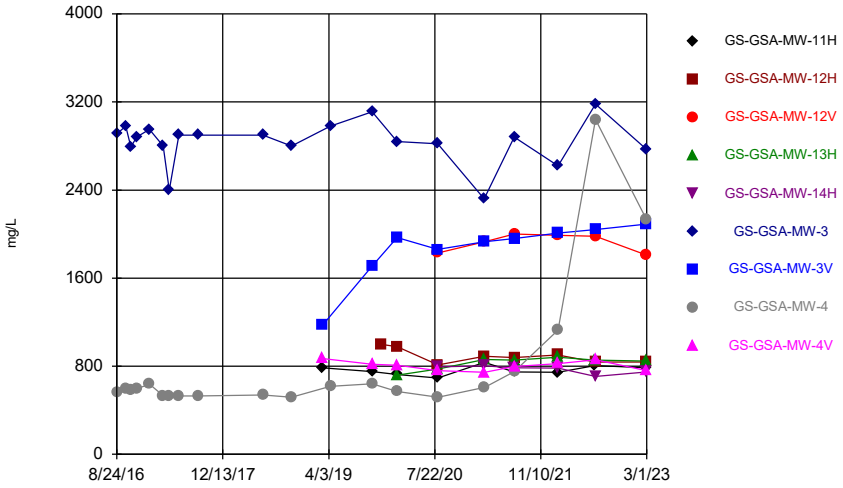
Time Series



Constituent: Selenium Analysis Run 5/27/2023 9:13 AM View: Descriptive
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.37 . UG

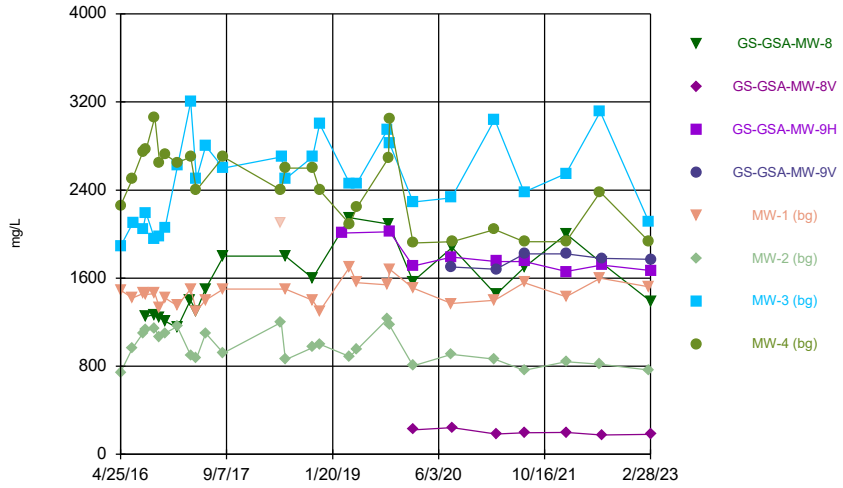
Time Series



Constituent: Sulfate Analysis Run 5/27/2023 9:13 AM View: Descriptive
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.37 . UG

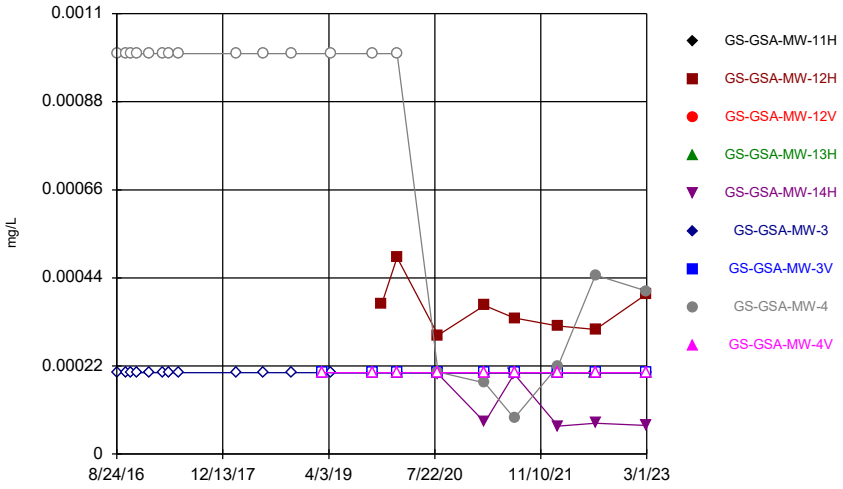
Time Series



Constituent: Sulfate Analysis Run 5/27/2023 9:13 AM View: Descriptive
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.37 . UG
Hollow symbols indicate censored values.

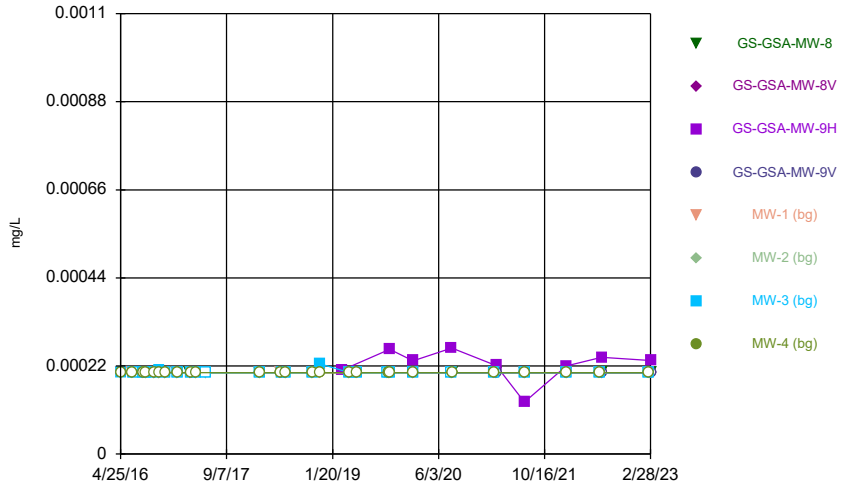
Time Series



Constituent: Thallium Analysis Run 5/27/2023 9:13 AM View: Descriptive
Plant Gorgas Client: Southern Company Data: Gorgas GSA

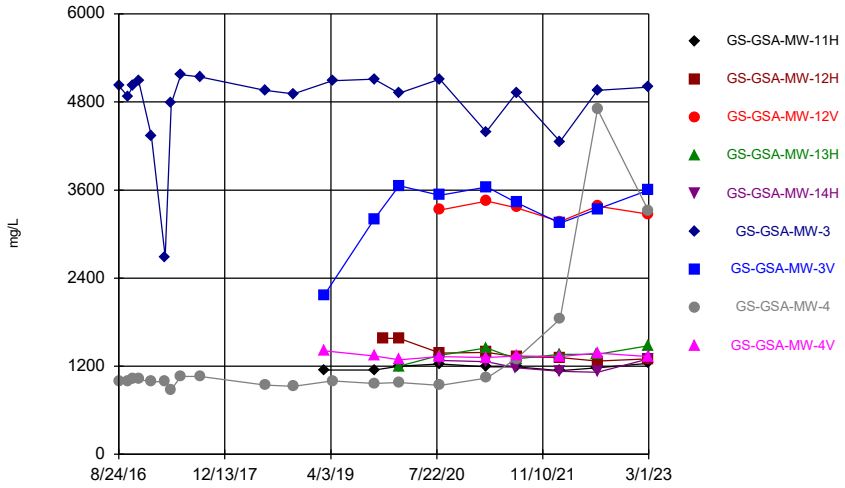
Sanitas™ v.9.6.37 . UG
Hollow symbols indicate censored values.

Time Series



Constituent: Thallium Analysis Run 5/27/2023 9:13 AM View: Descriptive
Plant Gorgas Client: Southern Company Data: Gorgas GSA

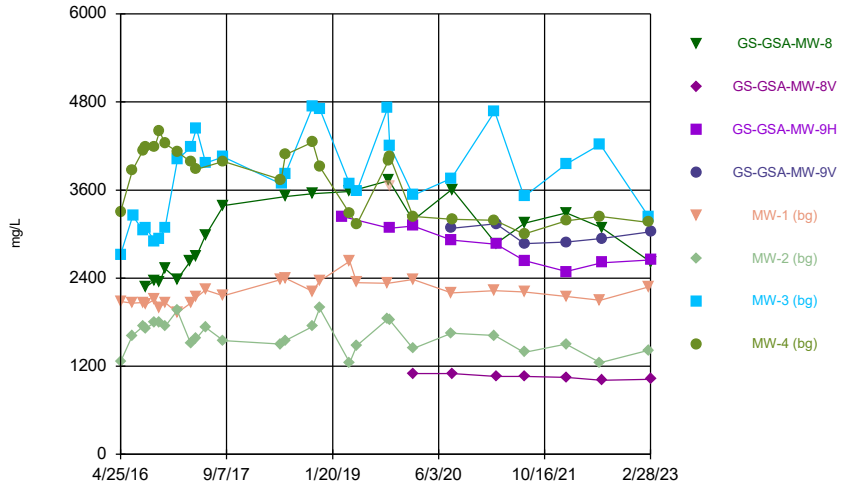
Time Series



Constituent: Total dissolved solids Analysis Run 5/27/2023 9:13 AM View: Descriptive
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.37 . UG

Time Series



Constituent: Total dissolved solids Analysis Run 5/27/2023 9:14 AM View: Descriptive
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Time Series

Constituent: Antimony (mg/L) Analysis Run 5/27/2023 9:14 AM View: Descriptive

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-11H	GS-GSA-MW-12H	GS-GSA-MW-12V	GS-GSA-MW-13H	GS-GSA-MW-14H	GS-GSA-MW-3	GS-GSA-MW-3V	GS-GSA-MW-4	GS-GSA-MW-4V
8/24/2016						<0.001015		<0.001015	
10/3/2016						<0.001015		<0.001015	
10/26/2016						<0.001015		<0.001015	
11/21/2016						<0.001015		<0.001015	
1/17/2017						<0.001015		<0.001015	
3/20/2017						<0.001015			
3/21/2017								<0.001015	
4/17/2017						<0.001015		<0.001015	
5/30/2017						<0.001015		<0.001015	
2/13/2018						<0.001015		<0.001015	
6/11/2018						<0.001015		<0.001015	
10/17/2018						<0.001015		<0.001015	
3/4/2019	0.00149 (J)								
3/5/2019							0.00179 (J)		<0.001015
4/10/2019						0.00111 (J)		0.000976 (J)	
10/14/2019						<0.001015	<0.001015	<0.001015	<0.001015
10/16/2019	<0.001015								
11/26/2019		<0.001015							
2/3/2020						<0.001015	<0.001015		<0.001015
2/4/2020	<0.001015	<0.001015		<0.001015				<0.001015	
8/4/2020	<0.001015			<0.001015		<0.001015	<0.001015		
8/5/2020		<0.001015	<0.001015		<0.001015			<0.001015	<0.001015
3/1/2021						<0.001015			
3/2/2021	<0.001015	<0.001015		<0.001015					
3/3/2021			<0.001015		<0.001015		<0.001015	<0.001015	<0.001015
7/13/2021					<0.001015				
7/14/2021	<0.001015	<0.001015	<0.001015	<0.001015		<0.001015		<0.001015	<0.001015
7/15/2021							<0.001015		
1/25/2022		<0.001015							
1/26/2022	<0.001015			<0.001015		0.00066 (J)	0.00052 (J)		
1/27/2022			<0.001015		<0.001015			<0.001015	0.00054 (J)
7/12/2022	<0.001015			<0.001015					
7/13/2022		<0.001015	<0.001015		<0.001015	<0.001015	<0.001015	<0.001015	<0.001015
2/27/2023						<0.001015	<0.001015		
2/28/2023	<0.001015			<0.001015	<0.001015				
3/1/2023		<0.001015	<0.001015					<0.001015	<0.001015

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Antimony (mg/L) Analysis Run 5/27/2023 9:14 AM View: Descriptive

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-8	GS-GSA-MW-8V	GS-GSA-MW-9H	GS-GSA-MW-9V	MW-1 (bg)	MW-2 (bg)	MW-3 (bg)	MW-4 (bg)
4/25/2016						<0.001015	<0.001015	<0.001015
4/26/2016					<0.001015			
6/20/2016					<0.001015	<0.001015		<0.001015
6/22/2016							<0.001015	
8/8/2016					<0.001015	<0.001015		
8/9/2016							<0.001015	<0.001015
8/24/2016	<0.001015				<0.001015	<0.001015	<0.001015	<0.001015
10/3/2016	<0.001015				<0.001015	<0.001015		<0.001015
10/4/2016							<0.001015	
10/26/2016	<0.001015				<0.001015	<0.001015	<0.001015	<0.001015
11/21/2016	<0.001015				<0.001015	<0.001015	<0.001015	<0.001015
1/17/2017	<0.001015				<0.001015	<0.001015		
1/18/2017							<0.001015	<0.001015
3/20/2017	<0.001015							
3/22/2017					<0.001015	<0.001015	<0.001015	<0.001015
4/18/2017	<0.001015				<0.001015	<0.001015	<0.001015	<0.001015
5/30/2017	<0.001015				<0.001015			
5/31/2017						<0.001015	<0.001015	
2/13/2018	<0.001015				<0.001015	<0.001015	<0.001015	<0.001015
5/22/2018					<0.001015	<0.001015		
5/23/2018								<0.001015
5/24/2018							<0.001015	
6/12/2018	<0.001015				<0.001015	<0.001015	<0.001015	<0.001015
10/17/2018	<0.001015				<0.001015	<0.001015	<0.001015	<0.001015
11/19/2018					<0.001015	<0.001015	<0.001015	<0.001015
3/5/2019			0.000852 (J)					
4/10/2019	0.00102 (J)				0.00143 (J)	0.000993 (J)	0.000978 (J)	0.00097 (J)
5/14/2019					0.00137 (J)	0.000989 (J)	<0.001015	<0.001015
10/8/2019					<0.001015	<0.001015	<0.001015	
10/10/2019								<0.001015
10/14/2019	<0.001015							
10/16/2019			<0.001015		<0.001015	<0.001015	<0.001015	<0.001015
2/3/2020					<0.001015	<0.001015	<0.001015	<0.001015
2/4/2020	<0.001015		<0.001015					
2/5/2020		<0.001015						
8/3/2020					<0.001015	<0.001015	<0.001015	
8/4/2020			<0.001015	<0.001015				
8/5/2020	<0.001015	<0.001015						<0.001015
2/22/2021					<0.001015	<0.001015	<0.001015	<0.001015
3/1/2021	<0.001015	<0.001015		<0.001015				
3/2/2021			<0.001015					
7/12/2021					<0.001015	<0.001015	<0.001015	<0.001015
7/13/2021			<0.001015	<0.001015				
7/14/2021	<0.001015	<0.001015						
1/25/2022					<0.001015	<0.001015	<0.001015	<0.001015
1/26/2022		<0.001015	<0.001015	<0.001015				
1/27/2022	<0.001015							
7/5/2022					<0.001015	<0.001015	<0.001015	<0.001015
7/12/2022	<0.001015	<0.001015	<0.001015	<0.001015				
2/20/2023					<0.001015	<0.001015	<0.001015	
2/21/2023								<0.001015
2/28/2023	<0.001015	<0.001015	<0.001015	<0.001015				

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Arsenic (mg/L) Analysis Run 5/27/2023 9:14 AM View: Descriptive

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-11H	GS-GSA-MW-12H	GS-GSA-MW-12V	GS-GSA-MW-13H	GS-GSA-MW-14H	GS-GSA-MW-3	GS-GSA-MW-3V	GS-GSA-MW-4	GS-GSA-MW-4V
8/24/2016						<0.005		<0.005	
10/3/2016						<0.005		<0.005	
10/26/2016						<0.005		<0.005	
11/21/2016						<0.005		<0.005	
1/17/2017						<0.005		<0.005	
3/20/2017						<0.005			
3/21/2017								<0.005	
4/17/2017						0.00405 (J)		<0.005	
5/30/2017						<0.005		<0.005	
2/13/2018						<0.005		<0.005	
6/11/2018						<0.005		<0.005	
10/17/2018						<0.005		<0.005	
3/4/2019	<0.005								
3/5/2019							<0.005		<0.005
4/10/2019						0.00121 (J)		0.00176 (J)	
10/14/2019						<0.005	<0.005	0.0012 (J)	<0.005
10/16/2019	<0.005								
11/26/2019		0.00194 (J)							
2/3/2020						<0.005	<0.005		0.00101 (J)
2/4/2020	<0.005	0.00157 (J)		0.16				0.00128 (J)	
8/4/2020	<0.005			0.103		<0.005	<0.005		
8/5/2020		0.00158 (J)	<0.005		0.00181 (J)			0.00115 (J)	0.00116 (J)
3/1/2021						0.0014			
3/2/2021	0.00039	0.00138		0.293					
3/3/2021			0.000339		0.00155		0.000296	0.00116	0.00107
7/13/2021					0.00172				
7/14/2021	0.00041	0.00161	0.00048	0.104		0.00057		0.00174	0.00118
7/15/2021							0.00028		
1/25/2022		0.00129							
1/26/2022	0.00043			0.283		0.00136	0.00036		
1/27/2022			0.00066		0.00128			0.00274	0.00124
7/12/2022	0.000292			0.0902					
7/13/2022		0.00106	0.000522		0.0013	0.000491	0.000178 (J)	0.00694	0.00117
2/27/2023						0.00111	0.000197 (J)		
2/28/2023	0.000311			0.24	0.00147				
3/1/2023		0.00092	0.000328					0.00412	0.000882

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Arsenic (mg/L) Analysis Run 5/27/2023 9:14 AM View: Descriptive

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-8	GS-GSA-MW-8V	GS-GSA-MW-9H	GS-GSA-MW-9V	MW-1 (bg)	MW-2 (bg)	MW-3 (bg)	MW-4 (bg)
4/25/2016						<0.005	<0.005	<0.000203
4/26/2016					<0.005			
6/20/2016					<0.005	<0.005		<0.000203
6/22/2016							<0.005	
8/8/2016					<0.005	<0.005		
8/9/2016							<0.005	<0.000203
8/24/2016	0.00119 (J)				<0.005	<0.005	<0.005	<0.000203
10/3/2016	0.00114 (J)				<0.005	<0.005		<0.000203
10/4/2016							<0.005	
10/26/2016	0.0011 (J)				<0.005	<0.005	<0.005	<0.000203
11/21/2016	<0.005				<0.005	0.00111 (J)	<0.005	<0.000203
1/17/2017	0.00103 (J)				<0.005	<0.005		
1/18/2017							<0.005	<0.000203
3/20/2017	<0.005							
3/22/2017					<0.005	<0.005	0.00122 (J)	<0.000203
4/18/2017	<0.005				<0.005	<0.005	<0.005	<0.000203
5/30/2017	<0.005				<0.005			
5/31/2017						<0.005	<0.005	
2/13/2018	<0.005				<0.005	<0.005	<0.005	<0.000203
5/22/2018					<0.005	<0.005		
5/23/2018								<0.000203
5/24/2018							<0.005	
6/12/2018	<0.005				<0.005	<0.005	0.00103 (J)	<0.000203
10/17/2018	<0.005				<0.005	<0.005	0.00133 (J)	<0.000203
11/19/2018					<0.005	<0.005	0.0012 (J)	<0.000203
3/5/2019			<0.005					
4/10/2019	<0.005				<0.005	<0.005	<0.005	<0.000203
5/14/2019					<0.005	<0.005	<0.005	<0.000203
10/8/2019					<0.005	<0.005	0.0048 (J)	
10/10/2019								<0.000203
10/14/2019	<0.005							
10/16/2019			0.0019 (J)		<0.005	<0.005	0.00389 (J)	<0.000203
2/3/2020					<0.005	<0.005	<0.005	<0.000203
2/4/2020	<0.005		0.00123 (J)					
2/5/2020		0.00232 (J)						
8/3/2020					<0.005	<0.005	0.00426 (J)	
8/4/2020			0.00137 (J)	<0.005				
8/5/2020	<0.005	0.00476 (J)						<0.000203
2/22/2021					0.000403	0.000295	0.000789	0.000125 (J)
3/1/2021	0.000633	0.0105		0.00136				
3/2/2021			0.00105					
7/12/2021					0.00036	0.00036	0.00038	0.00012 (J)
7/13/2021			0.00113	0.00168				
7/14/2021	0.00024	0.00692						
1/25/2022					0.00025	0.00033	0.00027	9E-05 (J)
1/26/2022		0.00542	0.00113	0.00128				
1/27/2022	0.00027							
7/5/2022					0.000281	0.00035	0.00374	0.000118 (J)
7/12/2022	0.000156 (J)	0.00276	0.000982	0.00137				
2/20/2023					0.000275	0.000243	0.000224	
2/21/2023								<0.000203
2/28/2023	0.000177 (J)	0.00219	0.000633	0.000762				

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Barium (mg/L) Analysis Run 5/27/2023 9:14 AM View: Descriptive

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-11H	GS-GSA-MW-12H	GS-GSA-MW-12V	GS-GSA-MW-13H	GS-GSA-MW-14H	GS-GSA-MW-3	GS-GSA-MW-3V	GS-GSA-MW-4	GS-GSA-MW-4V
8/24/2016						0.0155		0.0135	
10/3/2016						0.0156		0.0127	
10/26/2016						0.0122		0.0118	
11/21/2016						0.0128		0.012	
1/17/2017						0.0125		0.0119	
3/20/2017						0.0124			
3/21/2017								0.0116	
4/17/2017						0.0149		0.0112	
5/30/2017						0.0121		0.0117	
2/13/2018						0.0118		0.0121	
6/11/2018						0.0127		0.0139	
10/17/2018						0.013		0.0125	
3/4/2019	0.0239								
3/5/2019							0.0956		0.0136
4/10/2019						0.0153		0.0136	
10/14/2019						0.0122	0.0451	0.0147	0.0123
10/16/2019	0.0192								
11/26/2019		0.0184							
2/3/2020						0.0141	0.0215		0.0103
2/4/2020	0.0148	0.0141		0.0296				0.0124	
8/4/2020	0.0138			0.0275		0.0139	0.017		
8/5/2020		0.016	0.0157		0.0113			0.0142	0.0112
3/1/2021						0.0154			
3/2/2021	0.0118	0.0134		0.0315					
3/3/2021			0.0126		0.0109		0.0181	0.0117	0.0103
7/13/2021					0.0102				
7/14/2021	0.0127	0.013	0.0116	0.0217		0.0136		0.0115	0.01
7/15/2021							0.0157		
1/25/2022		0.013							
1/26/2022	0.0139			0.0334		0.0148	0.0161		
1/27/2022			0.0125		0.0122			0.0131	0.0108
7/12/2022	0.0115			0.021					
7/13/2022		0.0129	0.0103		0.0104	0.0118	0.0145	0.00947	0.00969
2/27/2023						0.0138	0.0139		
2/28/2023	0.0111			0.0292	0.0202				
3/1/2023		0.0127	0.011					0.00845	0.01

Time Series

Constituent: Barium (mg/L) Analysis Run 5/27/2023 9:14 AM View: Descriptive

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-8	GS-GSA-MW-8V	GS-GSA-MW-9H	GS-GSA-MW-9V	MW-1 (bg)	MW-2 (bg)	MW-3 (bg)	MW-4 (bg)
4/25/2016						0.0134	0.00803 (J)	0.0114
4/26/2016					0.00941 (J)			
6/20/2016					0.00951 (J)	0.0165		0.0103
6/22/2016							0.0101	
8/8/2016					0.00991 (J)	0.0162		
8/9/2016							0.00889 (J)	0.0119
8/24/2016	0.0536				0.00949 (J)	0.0139	0.00962 (J)	0.0118
10/3/2016	0.0681				0.0105	0.0164		0.0119
10/4/2016							0.00984 (J)	
10/26/2016	0.0562				0.00931 (J)	0.0138	0.00878 (J)	0.0104
11/21/2016	0.0604				0.00879 (J)	0.0144	0.00833 (J)	0.0106
1/17/2017	0.0402				0.00929 (J)	0.0135		
1/18/2017							0.00966 (J)	0.0101
3/20/2017	0.0305							
3/22/2017					0.00938 (J)	0.0132	0.00991 (J)	0.0103
4/18/2017	0.0276				0.00964 (J)	0.012	0.00976 (J)	0.0107
5/30/2017	0.0272				0.00982 (J)			
5/31/2017						0.0126	0.00866 (J)	
2/13/2018	0.0249				0.00937 (J)	0.0127	0.00821 (J)	0.0111
5/22/2018					0.0102	0.0131		
5/23/2018								0.0107
5/24/2018							0.00977 (J)	
6/12/2018	0.0234				0.0104	0.0138	0.00997 (J)	0.0108
10/17/2018	0.0236				0.00952 (J)	0.0137	0.0126	0.0119
11/19/2018					0.00915 (J)	0.0115	0.0109	0.0107
3/5/2019			0.0312					
4/10/2019	0.02				0.0105	0.0111	0.0101	0.0107
5/14/2019					0.00913 (J)	0.0109	0.00922 (J)	0.00949 (J)
10/8/2019					0.0109	0.0151	0.0154	
10/10/2019								0.0116
10/14/2019	0.0215							
10/16/2019			0.0163		0.0106	0.0146	0.0128	0.0125
2/3/2020					0.00995 (J)	0.0122	0.0086 (J)	0.0103
2/4/2020	0.0209		0.0148					
2/5/2020		0.096						
8/3/2020					0.0107	0.0147	0.0166	
8/4/2020			0.0153	0.0155				
8/5/2020	0.0216	0.125						0.0125
2/22/2021					0.0107	0.0132	0.00981	0.0111
3/1/2021	0.0194	0.15		0.012				
3/2/2021			0.0149					
7/12/2021					0.00991	0.013	0.00857	0.0108
7/13/2021			0.0141	0.013				
7/14/2021	0.0232	0.148						
1/25/2022					0.0098	0.0122	0.00821	0.00908
1/26/2022		0.137	0.0146	0.012				
1/27/2022	0.0238							
7/5/2022					0.01	0.0116	0.0155	0.0113
7/12/2022	0.022	0.0967	0.0134	0.012				
2/20/2023					0.0102	0.0122	0.00822	
2/21/2023								0.0116
2/28/2023	0.0238	0.0973	0.0131	0.0122				

Time Series

Constituent: Beryllium (mg/L) Analysis Run 5/27/2023 9:14 AM View: Descriptive

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-11H	GS-GSA-MW-12H	GS-GSA-MW-12V	GS-GSA-MW-13H	GS-GSA-MW-14H	GS-GSA-MW-3	GS-GSA-MW-3V	GS-GSA-MW-4	GS-GSA-MW-4V
8/24/2016						<0.003		0.00576	
10/3/2016						<0.003		0.00469	
10/26/2016						0.000922 (J)		0.00459	
11/21/2016						0.00133 (J)		0.00502	
1/17/2017						0.0017 (J)		0.00488	
3/20/2017						0.00191 (J)			
3/21/2017								0.00521	
4/17/2017						0.00655		0.0058	
5/30/2017						0.00204 (J)		0.00517	
2/13/2018						0.00387		0.00544	
6/11/2018						0.00244 (J)		0.00463	
10/17/2018						0.00345		0.00369	
3/4/2019	<0.001015								
3/5/2019							<0.001015		0.00155 (J)
4/10/2019						0.00257 (J)		0.00469	
10/14/2019						0.00162 (J)	<0.001015	0.00403	0.00382
10/16/2019	<0.001015								
11/26/2019		0.0084							
2/3/2020						0.00141 (J)	<0.001015		0.00362
2/4/2020	<0.001015	0.00709		<0.001015				0.00415	
8/4/2020	<0.001015			<0.001015		0.00174 (J)	<0.001015		
8/5/2020		0.00747	<0.001015		0.00879			0.00385	0.00416
3/1/2021						0.00157			
3/2/2021	<0.001015	0.00703		<0.001015					
3/3/2021			<0.001015		0.00818		<0.001015	0.00406	0.0032
7/13/2021					0.00883				
7/14/2021	<0.001015	0.00755	<0.001015	<0.001015		0.00175		0.00577	0.00381
7/15/2021							<0.001015		
1/25/2022		0.00729							
1/26/2022	<0.001015			<0.001015		0.00179	<0.001015		
1/27/2022			<0.001015		0.00718			0.00768	0.00431
7/12/2022	<0.001015			<0.001015					
7/13/2022		0.00817	<0.001015		0.00896	0.00204	<0.001015	0.0228	0.00607
2/27/2023						0.00191	<0.001015		
2/28/2023	<0.001015			0.000451 (J)	0.0109				
3/1/2023		0.0067	<0.001015					0.0224	0.00412

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Beryllium (mg/L) Analysis Run 5/27/2023 9:14 AM View: Descriptive

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-8	GS-GSA-MW-8V	GS-GSA-MW-9H	GS-GSA-MW-9V	MW-1 (bg)	MW-2 (bg)	MW-3 (bg)	MW-4 (bg)
4/25/2016						<0.001015	0.00122 (J)	<0.001015
4/26/2016					<0.001015			
6/20/2016					<0.001015	<0.001015		<0.001015
6/22/2016							0.00144 (J)	
8/8/2016					<0.001015	<0.001015		
8/9/2016							0.00331	<0.001015
8/24/2016	<0.001015				<0.001015	<0.001015	0.00308	<0.001015
10/3/2016	<0.001015				<0.001015	<0.001015		<0.001015
10/4/2016							0.00129 (J)	
10/26/2016	<0.001015				<0.001015	<0.001015	0.0071	<0.001015
11/21/2016	<0.001015				<0.001015	<0.001015	0.00689	<0.001015
1/17/2017	<0.001015				<0.001015	<0.001015		
1/18/2017							0.0169 (o)	<0.001015
3/20/2017	<0.001015							
3/22/2017					<0.001015	<0.001015	0.00686	<0.001015
4/18/2017	<0.001015				<0.001015	<0.001015	<0.001015	<0.001015
5/30/2017	<0.001015				<0.001015			
5/31/2017						<0.001015	0.00547	
2/13/2018	<0.001015				<0.001015	<0.001015	<0.001015	<0.001015
5/22/2018					<0.001015	<0.001015		
5/23/2018								<0.001015
5/24/2018							0.00164 (J)	
6/12/2018	<0.001015				<0.001015	<0.001015	0.00306	<0.001015
10/17/2018	<0.001015				<0.001015	<0.001015	0.0121	<0.001015
11/19/2018					<0.001015	<0.001015	0.0185 (o)	<0.001015
3/5/2019			<0.003					
4/10/2019	<0.001015				<0.001015	<0.001015	<0.001015	<0.001015
5/14/2019					<0.001015	<0.001015	<0.001015	<0.001015
10/8/2019					<0.001015	<0.001015	0.0084	
10/10/2019								<0.001015
10/14/2019	<0.001015							
10/16/2019			0.000985 (J)		<0.001015	<0.001015	0.0103	<0.001015
2/3/2020					<0.001015	<0.001015	<0.001015	<0.001015
2/4/2020	<0.001015		0.000929 (J)					
2/5/2020		<0.001015						
8/3/2020					<0.001015	<0.001015	0.00405	
8/4/2020			0.000882 (J)	<0.001015				
8/5/2020	<0.001015	<0.001015						<0.001015
2/22/2021					<0.001015	<0.001015	<0.001015	<0.001015
3/1/2021	<0.001015	<0.001015		<0.001015				
3/2/2021			0.000724 (J)					
7/12/2021					<0.001015	<0.001015	<0.001015	<0.001015
7/13/2021			0.00073 (J)	<0.001015				
7/14/2021	<0.001015	<0.001015						
1/25/2022					<0.001015	<0.001015	<0.001015	<0.001015
1/26/2022		<0.001015	0.00063 (J)	<0.001015				
1/27/2022	<0.001015							
7/5/2022					<0.001015	<0.001015	0.00139	<0.001015
7/12/2022	<0.001015	<0.001015	0.000599 (J)	<0.001015				
2/20/2023					<0.001015	<0.001015	<0.001015	
2/21/2023								<0.001015
2/28/2023	<0.001015	<0.001015	0.000563 (J)	<0.001015				

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Boron (mg/L) Analysis Run 5/27/2023 9:14 AM View: Descriptive

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-11H	GS-GSA-MW-12H	GS-GSA-MW-12V	GS-GSA-MW-13H	GS-GSA-MW-14H	GS-GSA-MW-3	GS-GSA-MW-3V	GS-GSA-MW-4	GS-GSA-MW-4V
8/24/2016						0.799		4.88	
10/3/2016						0.889		4.75	
10/26/2016						1.23		4.96	
11/21/2016						1.72		4.82	
1/17/2017						2.63		3.97	
3/20/2017						3.11			
3/21/2017								3.39	
4/17/2017						4.51		3.46	
5/30/2017						2.9		3.79	
8/24/2017						2.83		4.19	
6/11/2018						3.09		3.96	
10/17/2018						2.59		3.98	
3/4/2019	0.0235 (J)								
3/5/2019							0.895		7.15
4/10/2019						3.35		3.74	
10/14/2019						2.48	2.38	3.37	5.64
10/16/2019	0.0352 (J)								
11/26/2019		0.0798 (J)							
2/3/2020						2.13	3.06		5.25
2/4/2020	<0.1015	0.0748 (J)		0.202				2.74	
8/4/2020	<0.1015			0.263		1.82	2.8		
8/5/2020		0.0748 (J)	1.55		0.158			2.51	4.41
3/1/2021						2.55			
3/2/2021	0.0305 (J)	0.0875 (J)		0.206					
3/3/2021			1.54		0.203		2.99	2.42	4.09
7/13/2021					0.139				
7/14/2021	<0.1015	0.0742 (J)	1.55	0.229		1.47		4.78	3.68
7/15/2021							3.04		
1/25/2022		0.0645 (J)							
1/26/2022	<0.1015			0.206		2.5	2.81		
1/27/2022			1.52		0.148			6.1	3.47
7/12/2022	<0.1015			0.209					
7/13/2022		0.0687 (J)	1.61		0.106	1.29	2.85	7.29	3.15
2/27/2023						2.78	2.91		
2/28/2023	<0.1015			0.203	0.157				
3/1/2023		0.0549 (J)	1.6					8.02	2.85

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Boron (mg/L) Analysis Run 5/27/2023 9:14 AM View: Descriptive

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-8	GS-GSA-MW-8V	GS-GSA-MW-9H	GS-GSA-MW-9V	MW-1 (bg)	MW-2 (bg)	MW-3 (bg)	MW-4 (bg)
4/25/2016						0.0241 (J)	0.028 (J)	0.0414 (J)
4/26/2016					0.0231 (J)			
6/20/2016					0.0227 (J)	0.0284 (J)		0.0434 (J)
6/22/2016							0.0433 (J)	
8/8/2016					0.0278 (J)	0.034 (J)		
8/9/2016							0.0429 (J)	0.0453 (J)
8/24/2016	0.0898 (J)				0.0247 (J)	0.0316 (J)	0.0431 (J)	0.0451 (J)
10/3/2016	0.0821 (J)				0.0307 (J)	0.0367 (J)		0.0511 (J)
10/4/2016							0.04 (J)	
10/26/2016	0.0889 (J)				0.0241 (J)	0.0331 (J)	0.0375 (J)	0.0507 (J)
11/21/2016	0.0788 (J)				0.0202 (J)	0.035 (J)	0.0406 (J)	0.0458 (J)
1/17/2017	0.0607 (J)				0.0201 (J)	0.0259 (J)		
1/18/2017							0.0548 (J)	0.0445 (J)
3/20/2017	0.114							
3/22/2017					0.0224 (J)	0.0243 (J)	0.0344 (J)	0.0432 (J)
4/18/2017	0.108				<0.1015	0.0206 (J)	<0.1015	0.0409 (J)
5/30/2017	0.105				<0.1015			
5/31/2017						0.0234 (J)	0.0454 (J)	
8/23/2017					0.0253 (J)	0.0267 (J)	0.0425 (J)	0.042 (J)
8/24/2017	0.12							
5/22/2018					0.0224 (J)	0.0251 (J)		
5/23/2018								0.0433 (J)
5/24/2018							0.0339 (J)	
6/12/2018	0.181				0.0214 (J)	0.0275 (J)	0.0371 (J)	0.0478 (J)
10/17/2018	0.616				0.0216 (J)	0.0321 (J)	0.0596 (J)	0.0468 (J)
11/19/2018					0.0237 (J)	0.0324 (J)	0.0514 (J)	0.0526 (J)
3/5/2019			12.8					
4/10/2019	0.944				0.0304 (J)	<0.1015	<0.1015	0.0438 (J)
5/14/2019					<0.1015	<0.1015	<0.1015	<0.203 (o)
10/8/2019					<0.1015	0.0371 (J)	0.0537 (J)	
10/10/2019								0.0487 (J)
10/14/2019	2.11							
10/16/2019			10.7		0.0385 (J)	0.0419 (J)	0.05 (J)	0.0505 (J)
2/3/2020					<0.1015	<0.1015	<0.1015	0.0433 (J)
2/4/2020	1.47		9.63					
2/5/2020		0.136						
8/3/2020					<0.1015	0.0317 (J)	0.0424 (J)	
8/4/2020			8.53	0.149				
8/5/2020	2.16	0.131						0.0459 (J)
2/22/2021					0.0307 (J)	<0.1015	<0.1015	0.0397 (J)
3/1/2021	1.85	0.145		0.147				
3/2/2021			6.68					
7/12/2021					<0.1015	<0.1015	<0.1015	0.0411 (J)
7/13/2021			5.84	0.125				
7/14/2021	2.07	0.147						
1/25/2022					<0.1015	<0.1015	<0.1015	0.0408 (J)
1/26/2022		0.153	5.87	0.11				
1/27/2022	2.76							
7/5/2022					<0.1015	<0.1015	0.0374 (J)	0.0433 (J)
7/12/2022	2.3	0.148	5.04	0.118				
2/20/2023					<0.1015	<0.1015	<0.1015	
2/21/2023								0.0408 (J)

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Boron (mg/L) Analysis Run 5/27/2023 9:14 AM View: Descriptive

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-8	GS-GSA-MW-8V	GS-GSA-MW-9H	GS-GSA-MW-9V	MW-1 (bg)	MW-2 (bg)	MW-3 (bg)	MW-4 (bg)
2/28/2023	1.91	0.142	4.79	0.104				

Time Series

Constituent: Cadmium (mg/L) Analysis Run 5/27/2023 9:14 AM View: Descriptive

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-11H	GS-GSA-MW-12H	GS-GSA-MW-12V	GS-GSA-MW-13H	GS-GSA-MW-14H	GS-GSA-MW-3	GS-GSA-MW-3V	GS-GSA-MW-4	GS-GSA-MW-4V
8/24/2016						<0.000203		0.00148	
10/3/2016						<0.000203		0.00147	
10/26/2016						<0.000203		0.00157	
11/21/2016						<0.000203		0.00154	
1/17/2017						<0.000203		0.00131	
3/20/2017						<0.000203			
3/21/2017								0.00134	
4/17/2017						<0.000203		0.00122	
5/30/2017						<0.000203		0.00167	
2/13/2018						<0.000203		0.00145	
6/11/2018						<0.000203		0.00171	
10/17/2018						<0.000203		0.00188	
3/4/2019	<0.001								
3/5/2019							<0.000203		<0.000203
4/10/2019						<0.000203		0.00176	
10/14/2019						<0.000203	<0.000203	0.0015	<0.000203
10/16/2019	<0.001								
11/26/2019		0.00351							
2/3/2020						<0.000203	<0.000203		<0.000203
2/4/2020	<0.001	0.00301		<0.000203				0.00143	
8/4/2020	<0.001			<0.000203		<0.000203	<0.000203		
8/5/2020		0.00393	<0.000203		0.0018			0.00157	<0.000203
3/1/2021						<0.000203			
3/2/2021	0.000366	0.00319		<0.000203					
3/3/2021			<0.000203		0.0016		<0.000203	0.00162	<0.000203
7/13/2021					0.00157				
7/14/2021	0.00028	0.00301	<0.000203	<0.000203		<0.000203		0.00246	<0.000203
7/15/2021							<0.000203		
1/25/2022		0.00333							
1/26/2022	0.00029			7E-05 (J)		<0.000203	<0.000203		
1/27/2022			<0.000203		0.00137			0.00336	<0.000203
7/12/2022	0.000327			<0.000203					
7/13/2022		0.00293	<0.000203		0.00128	<0.000203	<0.000203	0.00687	<0.000203
2/27/2023						<0.000203	<0.000203		
2/28/2023	0.000242			<0.000203	0.00162				
3/1/2023		0.0023	<0.000203					0.00552	<0.000203

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cadmium (mg/L) Analysis Run 5/27/2023 9:14 AM View: Descriptive

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-8	GS-GSA-MW-8V	GS-GSA-MW-9H	GS-GSA-MW-9V	MW-1 (bg)	MW-2 (bg)	MW-3 (bg)	MW-4 (bg)
4/25/2016						<0.000203	0.0121 (o)	<0.000203
4/26/2016					0.00196			
6/20/2016					0.0021	<0.000203		<0.000203
6/22/2016							0.00163	
8/8/2016					0.00206	<0.000203		
8/9/2016							0.00122	<0.000203
8/24/2016	<0.000203				0.00182	<0.000203	<0.001	<0.000203
10/3/2016	<0.000203				0.00188	<0.000203		<0.000203
10/4/2016							0.000689 (J)	
10/26/2016	<0.000203				0.00175	<0.000203	0.00136	<0.000203
11/21/2016	<0.000203				0.00197	<0.000203	0.00171	<0.000203
1/17/2017	<0.000203				0.002	0.000311 (J)		
1/18/2017							0.003	<0.000203
3/20/2017	<0.000203							
3/22/2017					0.0019	<0.000203	0.00473	<0.000203
4/18/2017	<0.000203				0.00159	<0.000203	0.00117	<0.000203
5/30/2017	<0.000203				0.00214			
5/31/2017						0.000212 (J)	0.00296	
2/13/2018	<0.000203				0.0018	<0.000203	0.00232	<0.000203
5/22/2018					0.00201	<0.000203		
5/23/2018								<0.000203
5/24/2018							0.00459	
6/12/2018	<0.000203				0.00217	<0.000203	0.00351	<0.000203
10/17/2018	<0.000203				0.00228	<0.000203	0.00393	<0.000203
11/19/2018					0.00156	<0.000203	0.00309	<0.000203
3/5/2019			0.000336 (J)					
4/10/2019	<0.000203				0.00224	<0.000203	0.00337	<0.000203
5/14/2019					0.00238	<0.000203	0.0013	<0.000203
10/8/2019					0.00218	<0.000203	0.00598	
10/10/2019								<0.000203
10/14/2019	<0.000203							
10/16/2019			0.000362 (J)		0.00225	<0.000203	0.00448	<0.000203
2/3/2020					0.00182	<0.000203	0.000988 (J)	<0.000203
2/4/2020	<0.000203		0.000349 (J)					
2/5/2020		<0.000203						
8/3/2020					0.00237	<0.000203	0.00652	
8/4/2020			0.000308 (J)	<0.000203				
8/5/2020	<0.000203	<0.000203						<0.000203
2/22/2021					0.00184	8.96E-05 (J)	0.00536	8.96E-05 (J)
3/1/2021	<0.000203	<0.000203		<0.000203				
3/2/2021			0.000338					
7/12/2021					0.00193	8E-05 (J)	0.00094	8E-05 (J)
7/13/2021			0.00028	<0.000203				
7/14/2021	<0.000203	<0.000203						
1/25/2022					0.00196	8E-05 (J)	0.00178	<0.000203
1/26/2022		<0.000203	0.00024	<0.000203				
1/27/2022	<0.000203							
7/5/2022					0.00211	8.4E-05 (J)	0.00835	7.5E-05 (J)
7/12/2022	<0.000203	<0.000203	0.000309	<0.000203				
2/20/2023					0.00185	<0.000203	0.00144	
2/21/2023								<0.000203
2/28/2023	<0.000203	<0.000203	0.000298	<0.000203				

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Calcium (mg/L) Analysis Run 5/27/2023 9:14 AM View: Descriptive

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-11H	GS-GSA-MW-12H	GS-GSA-MW-12V	GS-GSA-MW-13H	GS-GSA-MW-14H	GS-GSA-MW-3	GS-GSA-MW-3V	GS-GSA-MW-4	GS-GSA-MW-4V
8/24/2016						539		102	
10/3/2016						519.7		98.4	
10/26/2016						916		88.7	
11/21/2016						552		104	
1/17/2017						572		102	
3/20/2017						817			
3/21/2017								94.7	
4/17/2017						476		97.9	
5/30/2017						515		93.9	
8/24/2017						598		105	
6/11/2018						558		105	
10/17/2018						533		117	
3/4/2019	177								
3/5/2019							329		249
4/10/2019						659		129	
10/14/2019						552	368	93.5	173
10/16/2019	143								
11/26/2019		144							
2/3/2020						589	504		184
2/4/2020	163	158		171				116	
8/4/2020	139			192		545	443		
8/5/2020		126	350		141			94.7	167
3/1/2021						514			
3/2/2021	139	124		164					
3/3/2021			353		137		466	100	161
7/13/2021					135				
7/14/2021	133	124	338	179		533		130	162
7/15/2021							453		
1/25/2022		124							
1/26/2022	143			158		517	448		
1/27/2022			347		124			181	172
7/12/2022	137			177					
7/13/2022		130	374		124	549	442	385	165
2/27/2023						516	397		
2/28/2023	135			146	132				
3/1/2023		115	332					327	161

Time Series

Constituent: Calcium (mg/L) Analysis Run 5/27/2023 9:14 AM View: Descriptive

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-8	GS-GSA-MW-8V	GS-GSA-MW-9H	GS-GSA-MW-9V	MW-1 (bg)	MW-2 (bg)	MW-3 (bg)	MW-4 (bg)
4/25/2016						123	224	261
4/26/2016					147			
6/20/2016					152	168		295
6/22/2016							266	
8/8/2016					150	180		
8/9/2016							260	318
8/24/2016	263				142	180	274	319
10/3/2016	253				139	184		293
10/4/2016							243	
10/26/2016	235				133	171	254	311
11/21/2016	246				144	179	263	320
1/17/2017	231				131	188		
1/18/2017							431	417
3/20/2017	298							
3/22/2017					141	155	318	292
4/18/2017	317				149	156	296	302
5/30/2017	316				140			
5/31/2017						151	306	
8/23/2017					152	155	298	297
8/24/2017	391							
5/22/2018					166	172		
5/23/2018								296
5/24/2018							297	
6/12/2018	442				203	179	318	355
10/17/2018	514				171	200	392	342
11/19/2018					154	221	387	289
3/5/2019			578					
4/10/2019	533				243	200	348	356
5/14/2019					167	168	254	254
10/8/2019					157	190	371	
10/10/2019								302
10/14/2019	524							
10/16/2019			363		157	194	346	356
2/3/2020					172	172	276	265
2/4/2020	461		413					
2/5/2020		37.3						
8/3/2020					148	172	285	
8/4/2020			346	434				
8/5/2020	497	31.9						281
2/22/2021					151	178	312	271
3/1/2021	386	26.2		428				
3/2/2021			333					
7/12/2021					149	159	252	242
7/13/2021			312	408				
7/14/2021	444	29						
1/25/2022					150	179	285	259
1/26/2022		31.5	300	417				
1/27/2022	491							
7/5/2022					168	172	369	294
7/12/2022	451	30.4	311	460				
2/20/2023					151	160	210	
2/21/2023								232

Time Series

Constituent: Calcium (mg/L) Analysis Run 5/27/2023 9:14 AM View: Descriptive

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-8	GS-GSA-MW-8V	GS-GSA-MW-9H	GS-GSA-MW-9V	MW-1 (bg)	MW-2 (bg)	MW-3 (bg)	MW-4 (bg)
2/28/2023	353	29.6	291	347				

Time Series

Constituent: Chloride (mg/L) Analysis Run 5/27/2023 9:14 AM View: Descriptive

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-11H	GS-GSA-MW-12H	GS-GSA-MW-12V	GS-GSA-MW-13H	GS-GSA-MW-14H	GS-GSA-MW-3	GS-GSA-MW-3V	GS-GSA-MW-4	GS-GSA-MW-4V
8/24/2016						204		112	
10/3/2016						220		115	
10/26/2016						249		115	
11/21/2016						256		117	
1/17/2017						301		99.3	
3/20/2017						320			
3/21/2017								79	
4/17/2017						340		85	
5/30/2017						310		99	
8/24/2017						290		110	
6/11/2018						260		81	
10/17/2018						270		85	
3/4/2019	3.81								
3/5/2019							194		191
4/10/2019						249		74.3	
10/14/2019						228	298	59.1	122
10/16/2019	4.45								
11/26/2019		2.43							
2/3/2020						267	338		101
2/4/2020	4.27	2.34		12.9				43.2	
8/4/2020	4.51			12.7		222	305		
8/5/2020		2	159		3.28			41	80.9
3/1/2021						250			
3/2/2021	4.63	2.28		10.9					
3/3/2021			152		4.8		307	40.3	70.8
7/13/2021					2.41				
7/14/2021	4.7	1.69	189	11.5		207		102	68.4
7/15/2021							294		
1/25/2022		1.83							
1/26/2022	5.4			10.2		255	238		
1/27/2022			171		3.75			103	51.9
7/12/2022	5.18			10.8					
7/13/2022		1.77	199		2.15	228	285	199	47.200001
2/27/2023						254	233		
2/28/2023	5.49			8.99	2.88				
3/1/2023		2.17	145					113	32.8

Time Series

Constituent: Chloride (mg/L) Analysis Run 5/27/2023 9:14 AM View: Descriptive

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-8	GS-GSA-MW-8V	GS-GSA-MW-9H	GS-GSA-MW-9V	MW-1 (bg)	MW-2 (bg)	MW-3 (bg)	MW-4 (bg)
4/25/2016						1.9	1.32	1.53
4/26/2016					1.94			
6/20/2016					2.09	3.43		1.85
6/22/2016							1.46	
8/8/2016					2.18	3.31		
8/9/2016							1.35	1.95
8/24/2016	4.03				2.22	3.23	1.47	2.07
10/3/2016	3.87				2.34	3.21		2.02
10/4/2016							1.59	
10/26/2016	4.08				2.34	3.35	1.27	2.07
11/21/2016	4.39				2.5	3.34	1.38	2.39
1/17/2017	7.22				2.68	3.58		
1/18/2017							1.34	1.9
3/20/2017	5.7							
3/22/2017					3.7	3.4	2	1.5 (J)
4/18/2017	4.7				2.4	2.6	2.2	1.6 (J)
5/30/2017	15				2.6			
5/31/2017						4.4	1.5 (J)	
8/23/2017					2.7	4.4	1.8 (J)	2.3
8/24/2017	93							
5/22/2018					2.3	3.2		
5/23/2018								2
5/24/2018							1.6 (J)	
6/12/2018	140				2.3	3.7	1.4 (J)	1.7 (J)
10/17/2018	180				1.7 (J)	4.6	<2	1.5 (J)
11/19/2018					1.7 (J)	3	<2	<2
3/5/2019			313					
4/10/2019	174				2.36	1.76	2.25	1.88
5/14/2019					2.28	2.98	2.28	1.82
10/8/2019					2.31	4.26	1.36	
10/10/2019								1.93
10/14/2019	207							
10/16/2019			145		2.42	4.04	1.4	1.92
2/3/2020					2.07	2.48	2.12	1.72
2/4/2020	94.1		139					
2/5/2020		9.05						
8/3/2020					2.05	4.03	1.17	
8/4/2020			109	58.6				
8/5/2020	146	13.9						1.57
2/22/2021					2.16	1.72	2.22	1.52
3/1/2021	92.5	19.4		58.7				
3/2/2021			84.7					
7/12/2021					2.19	2.36	2.13	1.56
7/13/2021			78.6	62				
7/14/2021	129	16.7						
1/25/2022					2.09	2.14	2.12	1.54
1/26/2022		18.9	59.3	57.2				
1/27/2022	122							
7/5/2022					2.07	2.53	1.59	1.63
7/12/2022	120	15.5	51.900002	62.5				
2/20/2023					2.05	1.7	1.94	
2/21/2023								1.58

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Chloride (mg/L) Analysis Run 5/27/2023 9:14 AM View: Descriptive

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-8	GS-GSA-MW-8V	GS-GSA-MW-9H	GS-GSA-MW-9V	MW-1 (bg)	MW-2 (bg)	MW-3 (bg)	MW-4 (bg)
2/28/2023	86.9	18.6	47.1	52.4				

Time Series

Constituent: Chromium (mg/L) Analysis Run 5/27/2023 9:14 AM View: Descriptive

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-11H	GS-GSA-MW-12H	GS-GSA-MW-12V	GS-GSA-MW-13H	GS-GSA-MW-14H	GS-GSA-MW-3	GS-GSA-MW-3V	GS-GSA-MW-4	GS-GSA-MW-4V
8/24/2016						<0.01		<0.01	
10/3/2016						<0.01		<0.01	
10/26/2016						<0.01		<0.01	
11/21/2016						<0.01		<0.01	
1/17/2017						<0.01		<0.01	
3/20/2017						<0.01			
3/21/2017								<0.01	
4/17/2017						<0.01		<0.01	
5/30/2017						<0.01		<0.01	
2/13/2018						<0.01		<0.01	
6/11/2018						<0.01		<0.01	
10/17/2018						<0.01		<0.01	
3/4/2019	<0.01								
3/5/2019							<0.001015		<0.001015
4/10/2019						<0.01		<0.01	
10/14/2019						<0.01	<0.001015	<0.01	<0.001015
10/16/2019	<0.01								
11/26/2019		<0.01							
2/3/2020						<0.01	<0.001015		<0.001015
2/4/2020	<0.01	<0.01		<0.01				<0.01	
8/4/2020	<0.01			<0.01		<0.01	<0.001015		
8/5/2020		<0.01	<0.001015		<0.001015			<0.01	<0.001015
3/1/2021						0.000386 (J)			
3/2/2021	0.000295 (J)	0.000242 (J)		0.000285 (J)					
3/3/2021			<0.001015		<0.001015		<0.001015	0.000567 (J)	<0.001015
7/13/2021					0.0005 (J)				
7/14/2021	0.00034 (J)	0.00059 (J)	0.00025 (J)	0.00032 (J)		0.00039 (J)		0.0007 (J)	0.00027 (J)
7/15/2021							0.00027 (J)		
1/25/2022		0.00033 (J)							
1/26/2022	0.00052 (J)			0.00023 (J)		0.00048 (J)	0.0005 (J)		
1/27/2022			0.00025 (J)		0.0005 (J)			0.00107	0.00029 (J)
7/12/2022	0.000425 (J)			0.000331 (J)					
7/13/2022		0.000329 (J)	0.000325 (J)		0.000526 (J)	0.000341 (J)	0.000255 (J)	0.00355	0.00039 (J)
2/27/2023						0.00037 (J)	0.000298 (J)		
2/28/2023	0.000413 (J)			0.000325 (J)	0.000504 (J)				
3/1/2023		0.000271 (J)	0.000234 (J)					0.00243	0.000293 (J)

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Chromium (mg/L) Analysis Run 5/27/2023 9:14 AM View: Descriptive

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-8	GS-GSA-MW-8V	GS-GSA-MW-9H	GS-GSA-MW-9V	MW-1 (bg)	MW-2 (bg)	MW-3 (bg)	MW-4 (bg)
4/25/2016						<0.001015	0.00373 (J)	<0.001015
4/26/2016					<0.01			
6/20/2016					<0.01	<0.001015		<0.001015
6/22/2016							0.00606 (J)	
8/8/2016					<0.01	<0.001015		
8/9/2016							<0.01	<0.001015
8/24/2016	<0.01				<0.01	<0.001015	<0.01	<0.001015
10/3/2016	<0.01				<0.01	<0.001015		<0.001015
10/4/2016							<0.01	
10/26/2016	<0.01				<0.01	<0.001015	<0.01	<0.001015
11/21/2016	<0.01				<0.01	<0.001015	<0.01	<0.001015
1/17/2017	<0.01				<0.01	<0.001015		
1/18/2017							<0.01	<0.001015
3/20/2017	<0.01							
3/22/2017					<0.01	<0.001015	0.00945 (J)	<0.001015
4/18/2017	<0.01				<0.01	<0.001015	0.0105	<0.001015
5/30/2017	<0.01				<0.01			
5/31/2017						<0.001015	<0.01	
2/13/2018	<0.01				<0.01	<0.001015	<0.01	<0.001015
5/22/2018					<0.01	<0.001015		
5/23/2018								<0.001015
5/24/2018							<0.01	
6/12/2018	<0.01				<0.01	<0.001015	<0.01	<0.001015
10/17/2018	<0.01				<0.01	<0.001015	<0.01	<0.001015
11/19/2018					<0.01	<0.001015	<0.01	<0.001015
3/5/2019			<0.01					
4/10/2019	<0.01				<0.01	<0.001015	<0.01	<0.001015
5/14/2019					<0.01	<0.001015	<0.01	<0.001015
10/8/2019					<0.01	<0.001015	<0.01	
10/10/2019								<0.001015
10/14/2019	<0.01							
10/16/2019			<0.01		<0.01	<0.001015	<0.01	<0.001015
2/3/2020					<0.01	<0.001015	<0.01	<0.001015
2/4/2020	<0.01		<0.01					
2/5/2020		<0.001015						
8/3/2020					<0.01	<0.001015	<0.01	
8/4/2020			<0.01	<0.00102				
8/5/2020	<0.01	<0.001015						<0.001015
2/22/2021					0.000382 (J)	<0.001015	0.00035 (J)	<0.001015
3/1/2021	0.000423 (J)	<0.001015		<0.00102				
3/2/2021			0.000218 (J)					
7/12/2021					0.00049 (J)	0.00025 (J)	0.00031 (J)	0.0003 (J)
7/13/2021			0.00026 (J)	0.0003 (J)				
7/14/2021	0.0003 (J)	<0.001015						
1/25/2022					0.00043 (J)	0.00022 (J)	0.00051 (J)	0.00021 (J)
1/26/2022		0.00023 (J)	0.00024 (J)	<0.00102				
1/27/2022	0.00046 (J)							
7/5/2022					0.000364 (J)	<0.001015	0.00025 (J)	<0.001015
7/12/2022	0.000258 (J)	<0.001015	0.000265 (J)	0.000313 (J)				
2/20/2023					0.000409 (J)	0.00033 (J)	0.000384 (J)	
2/21/2023								0.000244 (J)
2/28/2023	0.000325 (J)	0.000293 (J)	0.000273 (J)	0.000269 (J)				

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cobalt (mg/L) Analysis Run 5/27/2023 9:14 AM View: Descriptive

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-11H	GS-GSA-MW-12H	GS-GSA-MW-12V	GS-GSA-MW-13H	GS-GSA-MW-14H	GS-GSA-MW-3	GS-GSA-MW-3V	GS-GSA-MW-4	GS-GSA-MW-4V
8/24/2016						0.0303		0.151	
10/3/2016						0.041		0.143	
10/26/2016						0.0505		0.154	
11/21/2016						0.0617		0.155	
1/17/2017						0.0793		0.16	
3/20/2017						0.0726			
3/21/2017								0.158	
4/17/2017						0.294 (o)		0.159	
5/30/2017						0.0832		0.159	
2/13/2018						0.124		0.19	
6/11/2018						0.138		0.166	
10/17/2018						0.138		0.154	
3/4/2019	0.0066								
3/5/2019							0.0059		0.0836
4/10/2019						0.151		0.241	
10/14/2019						0.102	0.00845	0.213	0.12
10/16/2019	0.00598								
11/26/2019		0.435							
2/3/2020						0.0843	0.0135		0.108
2/4/2020	0.00582	0.351		0.0442				0.217	
8/4/2020	0.0061			0.111		0.0862	0.0133		
8/5/2020		0.436	<0.005		0.237			0.235	0.141
3/1/2021						0.119			
3/2/2021	0.00512	0.307		0.143					
3/3/2021			0.00028		0.202		0.0134	0.24	0.118
7/13/2021					0.193				
7/14/2021	0.00475	0.299	0.00018 (J)	0.116		0.0555		0.296	0.12
7/15/2021							0.0121		
1/25/2022		0.315							
1/26/2022	0.00479			0.228		0.0794	0.012		
1/27/2022			0.00022		0.178			0.406	0.124
7/12/2022	0.00494			0.153					
7/13/2022		0.34	0.000166 (J)		0.192	0.046	0.0115	0.878	0.137
2/27/2023						0.285	0.0113		
2/28/2023	0.0049			0.285	0.227				
3/1/2023		0.271	0.000201 (J)					0.705	0.134

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cobalt (mg/L) Analysis Run 5/27/2023 9:14 AM View: Descriptive

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-8	GS-GSA-MW-8V	GS-GSA-MW-9H	GS-GSA-MW-9V	MW-1 (bg)	MW-2 (bg)	MW-3 (bg)	MW-4 (bg)
4/25/2016						0.0487	0.232	<0.000203
4/26/2016					0.0343			
6/20/2016					0.0413	0.0767		<0.000203
6/22/2016							0.332	
8/8/2016					0.0513	0.103		
8/9/2016							0.311	<0.000203
8/24/2016	0.0201				0.0471	0.093	0.271	<0.000203
10/3/2016	0.0167				0.0525	0.0964		<0.000203
10/4/2016							0.148	
10/26/2016	0.0253				0.0527	0.0904	0.236	<0.000203
11/21/2016	0.0233				0.0569	0.0857	0.241	<0.000203
1/17/2017	0.0708				0.0768	0.0745		
1/18/2017							0.347	<0.000203
3/20/2017	0.00277 (J)							
3/22/2017					0.0535	0.0328	0.271	<0.000203
4/18/2017	<0.005				0.0442	0.0242	0.00324 (J)	<0.000203
5/30/2017	<0.005				0.0465			
5/31/2017						0.0441	0.225	
2/13/2018	0.00492 (J)				0.062	0.0179	0.00661 (J)	<0.000203
5/22/2018					0.0443	0.028		
5/23/2018								<0.000203
5/24/2018							0.158	
6/12/2018	<0.005				0.0512	0.0366	0.291	<0.000203
10/17/2018	<0.005				0.0751	0.0745	0.49	<0.000203
11/19/2018					0.0825	0.0225	0.386	<0.000203
3/5/2019			0.14					
4/10/2019	<0.005				0.0445	0.0152	0.0144	<0.000203
5/14/2019					0.0485	0.0222	0.00536	<0.000203
10/8/2019					0.0778	0.0674	1.07 (o)	
10/10/2019								<0.000203
10/14/2019	<0.005							
10/16/2019			0.168		0.08	0.073	0.848 (o)	<0.000203
2/3/2020					0.0495	0.0193	0.0114	<0.000203
2/4/2020	<0.005		0.159					
2/5/2020		<0.000203						
8/3/2020					0.0722	0.0589	0.64	
8/4/2020			0.178	0.00412 (J)				
8/5/2020	<0.005	<0.000203						<0.000203
2/22/2021					0.0657	0.0161	0.0515	<0.000203
3/1/2021	0.00546	<0.000203		0.000992				
3/2/2021			0.163					
7/12/2021					0.0556	0.0155	0.00567	<0.000203
7/13/2021			0.141	0.00077				
7/14/2021	0.00026	<0.000203						
1/25/2022					0.0654	0.0166	0.0051	<0.000203
1/26/2022		<0.000203	0.141	0.00054				
1/27/2022	0.00067							
7/5/2022					0.0627	0.0184	0.195	<0.000203
7/12/2022	0.000233	<0.000203	0.148	0.000425				
2/20/2023					0.0665	0.0187	0.00435	
2/21/2023								<0.000203
2/28/2023	0.000248	<0.000203	0.147	0.000403				

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 5/27/2023 9:14 AM View: Descriptive

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-11H	GS-GSA-MW-12H	GS-GSA-MW-12V	GS-GSA-MW-13H	GS-GSA-MW-14H	GS-GSA-MW-3	GS-GSA-MW-3V	GS-GSA-MW-4	GS-GSA-MW-4V
8/24/2016						0.389 (U)		0.741	
10/3/2016						0.683		0.648	
10/26/2016						0.242 (U)		0.632	
11/21/2016						0.764		1.57	
1/17/2017						0.191 (U)		0.493	
3/20/2017						-0.0158 (U)			
3/21/2017								0.604 (U)	
4/17/2017						0.307 (U)		0.252 (U)	
5/30/2017						0.724		0.925	
2/13/2018						0.633		0.382	
6/11/2018						0.773		0.796	
10/17/2018						0.668		0.922	
3/4/2019	0.135 (U)								
3/5/2019							0.932		0.364 (U)
4/10/2019						0.265 (U)		0.622	
10/14/2019						0.297 (U)	0.184 (U)	0.317 (U)	0.369 (U)
10/16/2019	0.189 (U)								
2/3/2020						0.28 (U)	0.408 (U)		0.758
2/4/2020	0.319 (U)	0.939		0.624				0.324 (U)	
8/4/2020	0.0315 (U)			-0.402 (U)		0.45 (U)	-0.00668 (U)		
8/5/2020		-0.306 (U)	-0.284 (U)		0.758 (U)			0.389 (U)	0.533 (U)
3/1/2021						0.57 (U)			
3/2/2021	0.308 (U)	2.18		0.686 (U)					
3/3/2021			0.388 (U)		0.185 (U)		1.11 (U)	0.836 (U)	0.325 (U)
7/13/2021					1.06 (U)				
7/14/2021	0.398 (U)	1.42	0.657 (U)	0.826 (U)		0.668 (U)		1.58	0.917 (U)
7/15/2021							0.362 (U)		
1/25/2022		1.22 (U)							
1/26/2022	0.506 (U)			0.354 (U)		0.335 (U)	0.546 (U)		
1/27/2022			0.361 (U)		0.247 (U)			0.791 (U)	0.624 (U)
7/12/2022	0.997 (U)			0.669 (U)					
7/13/2022		1.55	0.373 (U)		1 (U)	0.239 (U)	1.12	1.37	0.62 (U)
2/27/2023						0.213 (U)	0.637 (U)		
2/28/2023	0.491 (U)			0.518 (U)	0.274 (U)				
3/1/2023		0.786 (U)	0.386 (U)					0.593 (U)	0.293 (U)

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 5/27/2023 9:14 AM View: Descriptive

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-8	GS-GSA-MW-8V	GS-GSA-MW-9H	GS-GSA-MW-9V	MW-1 (bg)	MW-2 (bg)	MW-3 (bg)	MW-4 (bg)
8/24/2016	0.558 (U)				0.566 (U)	0.65	0.131 (U)	0.266 (U)
10/3/2016	0.565				0.537 (U)	0.845		0.59 (U)
10/4/2016							0.514 (U)	
10/26/2016	0.555 (U)				0.636	0.994	0.755	0.164 (U)
11/21/2016	0.987				0.807	0.537 (U)	0.7	0.296 (U)
1/17/2017	0.476 (U)				0.308 (U)	-0.0159 (U)		
1/18/2017							0.606	0.0267 (U)
3/20/2017	0.633 (U)							
3/22/2017					0.344 (U)	0.279 (U)	0.927	0.132 (U)
4/18/2017	0.248 (U)				0.934	0.32 (U)	0.334 (U)	-0.0439 (U)
5/30/2017	0.412 (U)				0.149 (U)			
5/31/2017						0.178 (U)	0.8	0.3 (U)
2/13/2018	1.08				0.774	0.804	0.649	0.69
5/22/2018					-0.091 (U)	0.0077 (U)		
5/23/2018								0.186 (U)
5/24/2018							0.448 (U)	
6/12/2018	0.446 (U)				1.18	-0.315 (U)	0.234 (U)	0.153 (U)
10/17/2018	1.05				0.553 (U)	0.574 (U)	0.852	0.313 (U)
11/19/2018					0.862	0.654	0.521	0.794
3/5/2019			0.852					
4/10/2019	0.128 (U)				0.342 (U)	0.329 (U)	0.198 (U)	0.515
5/14/2019								0.352 (U)
10/8/2019					1.47	0.493 (U)	0.833 (U)	
10/10/2019								1.02 (U)
10/14/2019	0.225 (U)							
10/16/2019			1.29		0.204 (U)	0.046 (U)	0.0279 (U)	0.356 (U)
2/3/2020					0.521 (U)	-0.0245 (U)	0.0246 (U)	0.254 (U)
2/4/2020	0.336 (U)		0.441 (U)					
2/5/2020		0.576						
8/3/2020					-0.127 (U)	0.888 (U)	0.765 (U)	
8/4/2020			-0.385 (U)	0.837 (U)				
8/5/2020	-0.115 (U)	1.85						0.565 (U)
2/22/2021					0.677 (U)	0.434 (U)	0.472 (U)	0 (U)
3/1/2021	0.902 (U)	1.49		0.686 (U)				
3/2/2021			0.87 (U)					
7/12/2021					0.476 (U)	0.155 (U)	0.114 (U)	0.301 (U)
7/13/2021			0.877 (U)	0.194 (U)				
7/14/2021	1.23 (U)	1.85						
1/25/2022					1.01 (U)	0.663 (U)	0.418 (U)	0.884 (U)
1/26/2022		0.155 (U)	1.06	0.53 (U)				
1/27/2022	0.28 (U)							
7/5/2022					1.49	1.31	1.33	1.1
7/12/2022	0.745 (U)	1.04 (U)	0.818 (U)	0.718 (U)				
2/20/2023					0.36 (U)	0.837 (U)	0.234 (U)	
2/21/2023								0.3 (U)
2/28/2023	0.422 (U)	1.09	0.357 (U)	0.596 (U)				

Time Series

Constituent: Fluoride (mg/L) Analysis Run 5/27/2023 9:14 AM View: Descriptive

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-11H	GS-GSA-MW-12H	GS-GSA-MW-12V	GS-GSA-MW-13H	GS-GSA-MW-14H	GS-GSA-MW-3	GS-GSA-MW-3V	GS-GSA-MW-4	GS-GSA-MW-4V
8/24/2016						0.264 (J)		0.793	
10/3/2016						0.276 (J)		0.769	
10/26/2016						0.182 (J)		0.578	
11/21/2016						0.238 (J)		0.562	
1/17/2017						0.34		0.571	
3/20/2017						0.39			
3/21/2017								0.54	
4/17/2017						0.57		0.54	
5/30/2017						0.38		0.49	
8/24/2017						0.54		0.7	
2/13/2018						0.57		0.63	
6/11/2018						0.63		0.39	
10/17/2018						0.78		0.44	
3/4/2019	0.101								
3/5/2019							0.249		0.477
4/10/2019						0.738		<0.125	
10/14/2019						0.619	0.37	<0.125	0.449
10/16/2019	0.0875 (J)								
11/26/2019		<0.125							
2/3/2020						0.427	0.438		0.555
2/4/2020	0.0743 (J)	<0.125		0.115				<0.125	
8/4/2020	0.109			0.113		0.389	0.349		
8/5/2020		<0.125	0.217		0.082 (J)			<0.125	0.363
3/1/2021						0.449			
3/2/2021	0.0758 (J)	<0.125		0.167					
3/3/2021			0.243		<0.125		0.458	<0.125	0.262
7/13/2021					<0.125				
7/14/2021	0.0848 (J)	<0.125	0.335	0.196		0.556		<0.125	0.276
7/15/2021							0.493		
1/25/2022		<0.125							
1/26/2022	0.0809 (J)			0.208		0.447	0.516		
1/27/2022			0.329		<0.125			<0.125	0.373
7/12/2022	0.156			0.207					
7/13/2022		<0.125	0.301		<0.125	0.324	0.374	<0.125	0.536
2/27/2023						0.292	0.376		
2/28/2023	0.0747 (J)			0.2	<0.125				
3/1/2023		<0.125	0.335					<0.125	0.39

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Fluoride (mg/L) Analysis Run 5/27/2023 9:14 AM View: Descriptive

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-8	GS-GSA-MW-8V	GS-GSA-MW-9H	GS-GSA-MW-9V	MW-1 (bg)	MW-2 (bg)	MW-3 (bg)	MW-4 (bg)
4/25/2016						0.149 (J)	0.243 (J)	0.372
4/26/2016					0.146 (J)			
6/20/2016					0.148 (J)	0.148 (J)		0.361
6/22/2016							0.269 (J)	
8/8/2016					0.137 (J)	0.134 (J)		
8/9/2016							0.363	0.326
8/24/2016	0.165 (J)				0.133 (J)	0.129 (J)	0.346	0.329
10/3/2016	0.114 (J)				0.103 (J)	0.086 (J)		0.287 (J)
10/4/2016							0.266 (J)	
10/26/2016	0.056 (J)				0.05 (J)	0.027 (J)	0.266 (J)	0.194 (J)
11/21/2016	0.059 (J)				0.047 (J)	0.027 (J)	0.244 (J)	0.192 (J)
1/17/2017	0.07 (J)				0.09 (J)	0.066 (J)		
1/18/2017							0.385	0.223 (J)
3/20/2017	0.18							
3/22/2017					0.12	0.13	0.41	0.32
4/18/2017	0.17				0.12	0.16	0.29	0.32
5/30/2017	0.16				0.13			
5/31/2017						0.13	0.37	
8/23/2017					0.16	0.16	0.55	0.38
8/24/2017	0.18							
2/13/2018	0.15				0.14	0.22	0.27	0.38
5/22/2018					0.16	0.17		
5/23/2018								0.38
5/24/2018							0.6	
6/12/2018	0.15				0.16	0.16	0.53	0.39
10/17/2018	0.16				0.18	0.16	0.63	0.39
11/19/2018					0.15	0.18	0.31	0.36
3/5/2019			0.239					
4/10/2019	0.156				0.102	0.262	0.273	0.384
5/14/2019					0.119	0.17	0.281	0.335
10/8/2019					0.0924 (J)	0.164	0.225	
10/10/2019								0.304
10/14/2019	0.118							
10/16/2019			0.101		0.0756 (J)	0.114	0.106	0.302
2/3/2020					0.0982 (J)	0.182	0.256	0.37
2/4/2020	0.132		0.205					
2/5/2020		0.162						
8/3/2020					<0.1	0.122	0.0766 (J)	
8/4/2020			0.127	0.135				
8/5/2020	0.119	0.256						0.359
2/22/2021					0.082 (J)	0.209	0.246	0.357
3/1/2021	0.106	0.346		0.12				
3/2/2021			0.094 (J)					
7/12/2021					0.125	0.196	0.287	0.35
7/13/2021			0.182	0.211				
7/14/2021	0.221	0.339						
1/25/2022					0.101	0.204	0.325	0.364
1/26/2022		0.306	0.117	0.155				
1/27/2022	0.179							
7/5/2022					0.11 (J)	0.2	0.386	0.362
7/12/2022	0.112 (J)	0.19	0.191	0.165				
2/20/2023					0.221	0.267	0.379	

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Fluoride (mg/L) Analysis Run 5/27/2023 9:14 AM View: Descriptive

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-8	GS-GSA-MW-8V	GS-GSA-MW-9H	GS-GSA-MW-9V	MW-1 (bg)	MW-2 (bg)	MW-3 (bg)	MW-4 (bg)
2/21/2023								0.415
2/28/2023	0.161	0.35	0.157	0.156				

Time Series

Constituent: Lead (mg/L) Analysis Run 5/27/2023 9:14 AM View: Descriptive

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-11H	GS-GSA-MW-12H	GS-GSA-MW-12V	GS-GSA-MW-13H	GS-GSA-MW-14H	GS-GSA-MW-3	GS-GSA-MW-3V	GS-GSA-MW-4	GS-GSA-MW-4V
8/24/2016						<0.005		<0.005	
10/3/2016						<0.005		<0.005	
10/26/2016						<0.005		<0.005	
11/21/2016						<0.005		<0.005	
1/17/2017						<0.005		<0.005	
3/20/2017						<0.005			
3/21/2017								<0.005	
4/17/2017						<0.005		<0.005	
5/30/2017						<0.005		<0.005	
2/13/2018						<0.005		<0.005	
6/11/2018						<0.005		<0.005	
10/17/2018						<0.005		<0.005	
3/4/2019	<0.005								
3/5/2019							<0.000203		<0.000203
4/10/2019						<0.005		<0.005	
10/14/2019						<0.005	<0.000203	<0.005	<0.000203
10/16/2019	<0.005								
11/26/2019		0.00271 (J)							
2/3/2020						<0.005	<0.000203		<0.000203
2/4/2020	<0.005	0.00334 (J)		<0.000203				<0.005	
8/4/2020	<0.005			<0.000203		<0.005	<0.000203		
8/5/2020		0.00329 (J)	<0.000203		0.00122 (J)			<0.005	<0.000203
3/1/2021						0.000157 (J)			
3/2/2021	0.000145 (J)	0.00478		<0.000203					
3/3/2021			<0.000203		0.000876		<0.000203	0.000609	<0.000203
7/13/2021					0.00096				
7/14/2021	0.00014 (J)	0.00557	<0.000203	<0.000203		0.00018 (J)		0.00079	<0.000203
7/15/2021							<0.000203		
1/25/2022		0.0052							
1/26/2022	0.00023			<0.000203		0.00014 (J)	<0.000203		
1/27/2022			<0.000203		0.00087			0.00103	7E-05 (J)
7/12/2022	0.000175 (J)			<0.000203					
7/13/2022		0.00406	<0.000203		0.000874	9.5E-05 (J)	<0.000203	0.00228	8E-05 (J)
2/27/2023						0.000132 (J)	<0.000203		
2/28/2023	0.000142 (J)			<0.000203	0.000876				
3/1/2023		0.00362	<0.000203					0.00144	<0.000203

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Lead (mg/L) Analysis Run 5/27/2023 9:14 AM View: Descriptive

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-8	GS-GSA-MW-8V	GS-GSA-MW-9H	GS-GSA-MW-9V	MW-1 (bg)	MW-2 (bg)	MW-3 (bg)	MW-4 (bg)
4/25/2016						<0.000203	<0.000203	<0.000203
4/26/2016					<0.000203			
6/20/2016					<0.000203	<0.000203		<0.000203
6/22/2016							<0.000203	
8/8/2016					<0.000203	<0.000203		
8/9/2016							<0.000203	<0.000203
8/24/2016	<0.000203				<0.000203	<0.000203	<0.000203	<0.000203
10/3/2016	<0.000203				<0.000203	<0.000203		<0.000203
10/4/2016							<0.000203	
10/26/2016	<0.000203				<0.000203	<0.000203	<0.000203	<0.000203
11/21/2016	<0.000203				<0.000203	<0.000203	<0.000203	<0.000203
1/17/2017	<0.000203				<0.000203	<0.000203		
1/18/2017							<0.000203	<0.000203
3/20/2017	<0.000203							
3/22/2017					<0.000203	<0.000203	<0.000203	<0.000203
4/18/2017	<0.000203				<0.000203	<0.000203	<0.000203	<0.000203
5/30/2017	<0.000203				<0.000203			
5/31/2017						<0.000203	<0.000203	
2/13/2018	<0.000203				<0.000203	<0.000203	<0.000203	<0.000203
5/22/2018					<0.000203	<0.000203		
5/23/2018								<0.000203
5/24/2018							<0.000203	
6/12/2018	<0.000203				<0.000203	<0.000203	<0.000203	<0.000203
10/17/2018	<0.000203				<0.000203	<0.000203	0.00102 (J)	<0.000203
11/19/2018					<0.000203	<0.000203	0.00692 (o)	<0.000203
3/5/2019			<0.005					
4/10/2019	<0.000203				<0.000203	<0.000203	<0.000203	<0.000203
5/14/2019					<0.000203	<0.000203	<0.000203	<0.000203
10/8/2019					<0.000203	<0.000203	<0.000203	
10/10/2019								<0.000203
10/14/2019	<0.000203							
10/16/2019			<0.005		<0.000203	<0.000203	0.00108 (J)	<0.000203
2/3/2020					<0.000203	<0.000203	<0.000203	<0.000203
2/4/2020	<0.000203		<0.005					
2/5/2020		<0.000203						
8/3/2020					<0.000203	<0.000203	0.002 (J)	
8/4/2020			<0.005	<0.000203				
8/5/2020	<0.000203	<0.000203						<0.000203
2/22/2021					<0.000203	<0.000203	8.8E-05 (J)	<0.000203
3/1/2021	0.000145 (J)	<0.000203		<0.000203				
3/2/2021			0.000206					
7/12/2021					<0.000203	<0.000203	8E-05 (J)	<0.000203
7/13/2021			0.00016 (J)	<0.000203				
7/14/2021	<0.000203	<0.000203						
1/25/2022					<0.000203	<0.000203	<0.000203	<0.000203
1/26/2022		<0.000203	0.00013 (J)	<0.000203				
1/27/2022	0.00015 (J)							
7/5/2022					<0.000203	<0.000203	7.3E-05 (J)	<0.000203
7/12/2022	<0.000203	8.1E-05 (J)	0.00011 (J)	<0.000203				
2/20/2023					<0.000203	<0.000203	<0.000203	
2/21/2023								<0.000203
2/28/2023	7.8E-05 (J)	<0.000203	7.72E-05 (J)	<0.000203				

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Lithium (mg/L) Analysis Run 5/27/2023 9:14 AM View: Descriptive

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-11H	GS-GSA-MW-12H	GS-GSA-MW-12V	GS-GSA-MW-13H	GS-GSA-MW-14H	GS-GSA-MW-3	GS-GSA-MW-3V	GS-GSA-MW-4	GS-GSA-MW-4V
8/24/2016						0.362		0.291	
10/3/2016						0.371		0.287	
10/26/2016						0.416		0.298	
11/21/2016						0.401		0.294	
1/17/2017						0.497		0.27	
3/20/2017						0.533			
3/21/2017								0.258	
4/17/2017						0.47		0.274	
5/30/2017						0.479		0.285	
2/13/2018						0.508		0.274	
6/11/2018						0.425		0.266	
10/17/2018						0.494		0.266	
3/4/2019	<0.01999956								
3/5/2019							0.309		0.369
4/10/2019						0.425		0.282	
10/14/2019						0.459	0.38	0.262	0.317
10/16/2019	<0.01999956								
11/26/2019		0.449							
2/3/2020						0.474	0.46		0.332
2/4/2020	<0.01999956	0.394		0.0506				0.29	
8/4/2020	<0.01999956			0.0534		0.468	0.395		
8/5/2020		0.441	0.334		0.512			0.273	0.322
3/1/2021						0.353			
3/2/2021	<0.01999956	0.456		0.0439					
3/3/2021			0.411		0.54		0.455	0.313	0.345
7/13/2021					0.514				
7/14/2021	<0.01999956	0.454	0.374	0.0524		0.485		0.487	0.337
7/15/2021							0.441		
1/25/2022		0.397							
1/26/2022	<0.01999956			0.0301		0.31	0.347		
1/27/2022			0.303		0.43			0.671	0.305
7/12/2022	<0.01999956			0.047					
7/13/2022		0.411	0.312		0.428	0.421	0.379	1.89	0.329
2/27/2023						0.165	0.35		
2/28/2023	<0.01999956			0.0291	0.471				
3/1/2023		0.291	0.286					1.35	0.288

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Lithium (mg/L) Analysis Run 5/27/2023 9:14 AM View: Descriptive

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-8	GS-GSA-MW-8V	GS-GSA-MW-9H	GS-GSA-MW-9V	MW-1 (bg)	MW-2 (bg)	MW-3 (bg)	MW-4 (bg)
4/25/2016						0.0353 (J)	0.0964	0.0528
4/26/2016					0.0264 (J)			
6/20/2016					0.0246 (J)	0.0583		0.0554
6/22/2016							0.156	
8/8/2016					0.0229 (J)	0.0627		
8/9/2016							0.122	0.0452 (J)
8/24/2016	0.0683				0.0236 (J)	0.0651	0.138	0.0488 (J)
10/3/2016	0.0661				0.0229 (J)	0.0622		0.0476 (J)
10/4/2016							0.0966	
10/26/2016	0.0681				0.0227 (J)	0.0293 (J)	0.134	0.049 (J)
11/21/2016	0.0682				0.0236 (J)	0.0667	0.167	0.0477 (J)
1/17/2017	0.0516				0.0228 (J)	0.0636		
1/18/2017							0.237	0.045 (J)
3/20/2017	0.135							
3/22/2017					0.0238 (J)	0.0464 (J)	0.203	0.0493 (J)
4/18/2017	0.139				0.0242 (J)	0.0446 (J)	0.0764	0.0494 (J)
5/30/2017	0.141				0.0229 (J)			
5/31/2017						0.0496 (J)	0.218	
2/13/2018	0.163				0.0233 (J)	0.0615	0.0964	0.0446 (J)
5/22/2018					0.0263 (J)	0.0465 (J)		
5/23/2018								0.0513
5/24/2018							0.145	
6/12/2018	0.166				0.0251 (J)	0.0472 (J)	0.194	0.0511
10/17/2018	0.188				0.025 (J)	0.0633	0.384	0.0532
11/19/2018					0.0241	0.0584	0.323	0.0467
3/5/2019			0.169					
4/10/2019	0.195				0.0285	0.0574	0.0905	0.0504
5/14/2019					0.026 (J)	0.0445	0.0828	0.0485
10/8/2019					0.0268	0.0677	0.419	
10/10/2019								0.054
10/14/2019	0.209							
10/16/2019			0.184		0.0263	0.0661	0.337	0.052
2/3/2020					0.0292	0.0534	0.0825	0.0556
2/4/2020	0.188		0.203					
2/5/2020		0.327						
8/3/2020					0.0259	0.0611	0.27	
8/4/2020			0.166	0.364				
8/5/2020	0.206	0.275						0.0519
2/22/2021					0.0301	0.0625	0.126	0.0558
3/1/2021	0.149	0.292		0.424				
3/2/2021			0.178					
7/12/2021					0.0266	0.0495	0.0808	0.0533
7/13/2021			0.166	0.408				
7/14/2021	0.213	0.286						
1/25/2022					0.0239	0.051	0.077	0.0433
1/26/2022		0.233	0.115	0.312				
1/27/2022	0.185							
7/5/2022					0.0274	0.0469	0.251	0.0566
7/12/2022	0.189	0.269	0.124	0.338				
2/20/2023					0.0241	0.0412	0.0649	
2/21/2023								0.0424
2/28/2023	0.157	0.238	0.111	0.331				

Time Series

Constituent: Mercury (mg/L) Analysis Run 5/27/2023 9:14 AM View: Descriptive

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-11H	GS-GSA-MW-12H	GS-GSA-MW-12V	GS-GSA-MW-13H	GS-GSA-MW-14H	GS-GSA-MW-3	GS-GSA-MW-3V	GS-GSA-MW-4	GS-GSA-MW-4V
8/24/2016						<0.0005		<0.0005	
10/3/2016						<0.0005		<0.0005	
10/26/2016						<0.0005		<0.0005	
11/21/2016						<0.0005		<0.0005	
1/17/2017						<0.0005		<0.0005	
3/20/2017						<0.0005			
3/21/2017								<0.0005	
4/17/2017						<0.0005		<0.0005	
5/30/2017						<0.0005		<0.0005	
2/13/2018						<0.0005		<0.0005	
6/11/2018						<0.0005		<0.0005	
10/17/2018						<0.0005		<0.0005	
3/4/2019	<0.0005								
3/5/2019							<0.0005		<0.0005
4/10/2019						<0.0005		<0.0005	
10/14/2019						<0.0005	<0.0005	<0.0005	<0.0005
10/16/2019	<0.0005								
11/26/2019		<0.0005							
2/3/2020						<0.0005	<0.0005		<0.0005
2/4/2020	<0.0005	<0.0005		<0.0005				<0.0005	
8/4/2020	<0.0005			<0.0005		<0.0005	<0.0005		
8/5/2020		<0.0005	<0.0005		<0.0005			<0.0005	<0.0005
3/1/2021						<0.0005			
3/2/2021	<0.0005	<0.0005		<0.0005					
3/3/2021			<0.0005		<0.0005		<0.0005	<0.0005	<0.0005
7/13/2021					<0.0005				
7/14/2021	<0.0005	<0.0005	<0.0005	<0.0005		<0.0005		<0.0005	<0.0005
7/15/2021							<0.0005		
1/25/2022		<0.0005							
1/26/2022	<0.0005			<0.0005		<0.0005	<0.0005		
1/27/2022			<0.0005		<0.0005			<0.0005	<0.0005
7/12/2022	<0.0005			<0.0005					
7/13/2022		<0.0005	<0.0005		<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
2/27/2023						<0.0005	<0.0005		
2/28/2023	<0.0005			<0.0005	<0.0005				
3/1/2023		<0.0005	<0.0005					<0.0005	<0.0005

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Mercury (mg/L) Analysis Run 5/27/2023 9:14 AM View: Descriptive

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-8	GS-GSA-MW-8V	GS-GSA-MW-9H	GS-GSA-MW-9V	MW-1 (bg)	MW-2 (bg)	MW-3 (bg)	MW-4 (bg)
4/25/2016						<0.0005	<0.0005	<0.0005
4/26/2016					<0.0005			
6/20/2016					<0.0005	<0.0005		<0.0005
6/22/2016							<0.0005	
8/8/2016					<0.0005	<0.0005		
8/9/2016							<0.0005	<0.0005
8/24/2016	<0.0005				<0.0005	<0.0005	<0.0005	<0.0005
10/3/2016	<0.0005				<0.0005	<0.0005		<0.0005
10/4/2016							<0.0005	
10/26/2016	<0.0005				<0.0005	<0.0005	<0.0005	<0.0005
11/21/2016	<0.0005				<0.0005	<0.0005	<0.0005	<0.0005
1/17/2017	<0.0005				<0.0005	<0.0005		
1/18/2017							<0.0005	<0.0005
3/20/2017	<0.0005							
3/22/2017					<0.0005	<0.0005	<0.0005	<0.0005
4/18/2017	<0.0005				<0.0005	<0.0005	<0.0005	<0.0005
5/30/2017	<0.0005				<0.0005			
5/31/2017						<0.0005	<0.0005	
2/13/2018	<0.0005				<0.0005	<0.0005	<0.0005	<0.0005
5/22/2018					<0.0005	<0.0005		
5/23/2018								<0.0005
5/24/2018							<0.0005	
6/12/2018	<0.0005				<0.0005	<0.0005	<0.0005	<0.0005
10/17/2018	<0.0005				<0.0005	<0.0005	<0.0005	<0.0005
11/19/2018					<0.0005	<0.0005	<0.0005	<0.0005
3/5/2019			<0.0005					
4/10/2019	<0.0005				<0.0005	<0.0005	<0.0005	<0.0005
5/14/2019					<0.0005	<0.0005	<0.0005	<0.0005
10/8/2019					<0.0005	<0.0005	<0.0005	
10/10/2019								<0.0005
10/14/2019	<0.0005							
10/16/2019			<0.0005		<0.0005	<0.0005	<0.0005	<0.0005
2/3/2020					<0.0005	<0.0005	<0.0005	<0.0005
2/4/2020	<0.0005		<0.0005					
2/5/2020		<0.0005						
8/3/2020					<0.0005	<0.0005	<0.0005	
8/4/2020			<0.0005	<0.0005				
8/5/2020	<0.0005	<0.0005						<0.0005
2/22/2021					<0.0005	<0.0005	<0.0005	<0.0005
3/1/2021	<0.0005	<0.0005		<0.0005				
3/2/2021			<0.0005					
7/12/2021					<0.0005	<0.0005	<0.0005	<0.0005
7/13/2021			<0.0005	<0.0005				
7/14/2021	<0.0005	<0.0005						
1/25/2022					<0.0005	<0.0005	<0.0005	<0.0005
1/26/2022		<0.0005	<0.0005	<0.0005				
1/27/2022	<0.0005							
7/5/2022					<0.0005	<0.0005	<0.0005	<0.0005
7/12/2022	<0.0005	<0.0005	<0.0005	<0.0005				
2/20/2023					<0.0005	<0.0005	<0.0005	
2/21/2023								<0.0005
2/28/2023	<0.0005	<0.0005	<0.0005	<0.0005				

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 5/27/2023 9:14 AM View: Descriptive

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-11H	GS-GSA-MW-12H	GS-GSA-MW-12V	GS-GSA-MW-13H	GS-GSA-MW-14H	GS-GSA-MW-3	GS-GSA-MW-3V	GS-GSA-MW-4	GS-GSA-MW-4V
8/24/2016						<0.01		<0.000203	
10/3/2016						<0.01		<0.000203	
10/26/2016						<0.01		<0.000203	
11/21/2016						<0.01		<0.000203	
1/17/2017						<0.01		<0.000203	
3/20/2017						<0.01			
3/21/2017								<0.000203	
4/17/2017						<0.01		<0.000203	
5/30/2017						<0.01		<0.000203	
2/13/2018						<0.01		<0.000203	
6/11/2018						<0.01		<0.000203	
10/17/2018						<0.01		<0.000203	
3/4/2019	<0.000203								
3/5/2019							0.00347 (J)		<0.000203
4/10/2019						<0.01		<0.000203	
10/14/2019						<0.01	<0.000203	<0.000203	<0.000203
10/16/2019	<0.000203								
11/26/2019		<0.000203							
2/3/2020						<0.01	<0.000203		<0.000203
2/4/2020	<0.000203	<0.000203		<0.01				<0.000203	
8/4/2020	<0.000203			<0.01		<0.01	<0.000203		
8/5/2020		<0.000203	0.00247 (J)		<0.000203			<0.000203	<0.000203
3/1/2021						0.00022			
3/2/2021	<0.000203	<0.000203		0.00138					
3/3/2021			0.00123		7.06E-05 (J)		7.93E-05 (J)	<0.000203	<0.000203
7/13/2021					<0.000203				
7/14/2021	<0.000203	<0.000203	0.00203	0.0005		0.00026		<0.000203	<0.000203
7/15/2021							9E-05 (J)		
1/25/2022		<0.000203							
1/26/2022	0.00011 (J)			0.00126		0.00022	0.00012 (J)		
1/27/2022			0.00268		9E-05 (J)			<0.000203	9E-05 (J)
7/12/2022	<0.000203			0.000344					
7/13/2022		<0.000203	0.00241		<0.000203	0.000257	<0.000203	<0.000203	<0.000203
2/27/2023						0.000191 (J)	<0.000203		
2/28/2023	<0.000203			0.00121	0.000133 (J)				
3/1/2023		<0.000203	0.00235					<0.000203	<0.000203

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 5/27/2023 9:14 AM View: Descriptive

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-8	GS-GSA-MW-8V	GS-GSA-MW-9H	GS-GSA-MW-9V	MW-1 (bg)	MW-2 (bg)	MW-3 (bg)	MW-4 (bg)
4/25/2016						<0.000203	<0.000203	<0.01
4/26/2016					<0.000203			
6/20/2016					<0.000203	<0.000203		<0.01
6/22/2016							<0.000203	
8/8/2016					<0.000203	<0.000203		
8/9/2016							<0.000203	<0.01
8/24/2016	0.0031 (J)				<0.000203	<0.000203	<0.000203	<0.01
10/3/2016	<0.01				<0.000203	<0.000203		<0.01
10/4/2016							<0.000203	
10/26/2016	<0.01				<0.000203	<0.000203	<0.000203	<0.01
11/21/2016	<0.01				<0.000203	<0.000203	<0.000203	<0.01
1/17/2017	<0.01				<0.000203	<0.000203		
1/18/2017							<0.000203	<0.01
3/20/2017	<0.01							
3/22/2017					<0.000203	<0.000203	<0.000203	<0.01
4/18/2017	<0.01				<0.000203	<0.000203	<0.000203	<0.01
5/30/2017	<0.01				<0.000203			
5/31/2017						<0.000203	<0.000203	
2/13/2018	<0.01				<0.000203	<0.000203	<0.000203	<0.01
5/22/2018					<0.000203	<0.000203		
5/23/2018								<0.01
5/24/2018							<0.000203	
6/12/2018	<0.01				<0.000203	<0.000203	<0.000203	<0.01
10/17/2018	<0.01				<0.000203	<0.000203	<0.000203	<0.01
11/19/2018					<0.000203	<0.000203	<0.000203	<0.01
3/5/2019			<0.000203					
4/10/2019	<0.01				<0.000203	<0.000203	<0.000203	<0.01
5/14/2019					<0.000203	<0.000203	<0.000203	<0.01
10/8/2019					<0.000203	<0.000203	<0.000203	
10/10/2019								<0.01
10/14/2019	<0.01							
10/16/2019			<0.000203		<0.000203	<0.000203	<0.000203	<0.01
2/3/2020					<0.000203	<0.000203	<0.000203	<0.01
2/4/2020	<0.01		<0.000203					
2/5/2020		<0.01						
8/3/2020					<0.000203	<0.000203	<0.000203	
8/4/2020			<0.000203	0.00423 (J)				
8/5/2020	<0.01	<0.01						<0.01
2/22/2021					<0.000203	<0.000203	<0.000203	0.000131 (J)
3/1/2021	0.00277	0.000654		0.000532				
3/2/2021			<0.000203					
7/12/2021					<0.000203	<0.000203	<0.000203	0.00014 (J)
7/13/2021			<0.000203	0.00056				
7/14/2021	0.00015 (J)	0.00026						
1/25/2022					<0.000203	<0.000203	8E-05 (J)	0.00011 (J)
1/26/2022		0.00078	<0.000203	0.0003				
1/27/2022	0.00012 (J)							
7/5/2022					<0.000203	<0.000203	<0.000203	0.000108 (J)
7/12/2022	0.000122 (J)	0.000186 (J)	<0.000203	0.000457				
2/20/2023					<0.000203	<0.000203	<0.000203	
2/21/2023								0.00015 (J)
2/28/2023	0.000135 (J)	0.000158 (J)	<0.000203	0.000467				

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: pH (pH) Analysis Run 5/27/2023 9:14 AM View: Descriptive

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-11H	GS-GSA-MW-12H	GS-GSA-MW-12V	GS-GSA-MW-13H	GS-GSA-MW-14H	GS-GSA-MW-3	GS-GSA-MW-3V	GS-GSA-MW-4	GS-GSA-MW-4V
8/24/2016						6.28		3.83 (E)	
10/3/2016						6.28		3.82 (E)	
10/26/2016						6.19		3.81 (E)	
11/21/2016						6.2		3.81	
1/17/2017						6.13		3.78	
3/20/2017						6.17			
3/21/2017								3.76	
4/17/2017						5.6		3.76	
5/30/2017						6.07		3.76	
8/24/2017						5.99		3.7	
2/13/2018						5.88		3.73	
6/11/2018						5.91		3.8	
10/17/2018						5.88		3.81	
3/4/2019	6.04								
3/5/2019							6.7		6.19
4/10/2019						5.83		3.83	
10/14/2019						6.04	6.39	3.91	5.89
10/16/2019	6.07								
2/3/2020						5.98	5.88		5.84
2/4/2020	6.02	4.57		6				3.83	
8/4/2020	5.74			5.89		6.09	5.9		
8/5/2020		4.13	6.15		3.83			3.86	5.81
3/1/2021						5.82			
3/2/2021	5.89	4.11		5.85					
3/3/2021			6.11		4.02		5.76	3.76	5.75
7/13/2021					3.8				
7/14/2021	5.72	4.04	6.21	5.55		5.93		3.74	5.75
7/15/2021							5.92		
1/25/2022		4.11							
1/26/2022	5.95			6.08		6.52	6.61		
1/27/2022			6.19		4.1			3.73	6.17
7/12/2022	5.97			5.82					
7/13/2022		4.15	6.26		3.94	5.92	5.98	3.43	5.66
2/27/2023						5.83	5.97		
2/28/2023	5.99			5.82	4.39				
3/1/2023		4.55	6.29					3.5	5.77

Time Series

Constituent: pH (pH) Analysis Run 5/27/2023 9:14 AM View: Descriptive

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-8	GS-GSA-MW-8V	GS-GSA-MW-9H	GS-GSA-MW-9V	MW-1 (bg)	MW-2 (bg)	MW-3 (bg)	MW-4 (bg)
4/25/2016						5.94	5.56	6.22
4/26/2016					5.2			
6/20/2016					5.18	5.96		6.21
6/22/2016							5.57	
8/8/2016					5.12	5.88		
8/9/2016							5.67	6.11
8/24/2016	6.78						5.63	6.11
10/3/2016	6.71				5.21	5.91		6.13
10/4/2016							5.69	
10/26/2016	6.65				5.2	5.84	5.56	6.12
11/21/2016	6.7				5.19	5.82	5.42	6.09
1/17/2017	6.25				5.17	5.87		
1/18/2017							5.11	6.09
3/20/2017	7.04							
3/22/2017					5.2	6.01	4.52	6.15
4/18/2017	6.99				5.2	6.02	5.84	6.19
5/30/2017	6.98				5.14			
5/31/2017						5.85	4.56	
8/23/2017					5.12	5.89	4.77	6.12
8/24/2017	6.89							
2/13/2018	6.85				5.18	6.21	5.67	6.22
5/22/2018					5.2	6.04		
5/23/2018								6.21
5/24/2018							5.19	
6/12/2018	6.83				5.15	5.95	4.79	6.16
10/17/2018	6.81				5.12	5.9	4.75	6.12
11/19/2018					5.09	6.03	3.77 (o)	6.16
3/5/2019			5.88					
4/10/2019	6.71				5.11	6.1	5.54	6.14
5/14/2019					5.19	6.07	5.71	6.23
10/8/2019					5.12	5.96	4.98	
10/10/2019								6.15
10/14/2019	6.88							
10/16/2019			5.43		5.16	5.98	4.51	6.19
2/3/2020					5	5.95	5.54	6.14
2/4/2020	6.85		5.34					
2/5/2020		7.48						
8/3/2020					5.08	5.95	5.06	
8/4/2020			5.33	6.88				
8/5/2020	6.76	7.58						6.15
2/22/2021					5.06	6.1	5.59	6.19
3/1/2021	6.48	7.67		6.84				
3/2/2021			5.29					
7/12/2021					5.13	6.16	5.86	6.06
7/13/2021			5.13	6.92				
7/14/2021	6.88	7.97						
1/25/2022					5.11	6.22	5.9	6.3
1/26/2022		8.18	5.35	6.89				
1/27/2022	6.85							
7/5/2022					5.01	6.15	5.34	6.12
7/12/2022	6.49	7.44	5.3	6.79				
2/20/2023					5.07	6.24	6.01	

Time Series

Constituent: pH (pH) Analysis Run 5/27/2023 9:14 AM View: Descriptive

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-8	GS-GSA-MW-8V	GS-GSA-MW-9H	GS-GSA-MW-9V	MW-1 (bg)	MW-2 (bg)	MW-3 (bg)	MW-4 (bg)
2/21/2023								6.35
2/28/2023	6.93	7.5	5.35	6.89				

Time Series

Constituent: Selenium (mg/L) Analysis Run 5/27/2023 9:14 AM View: Descriptive

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-11H	GS-GSA-MW-12H	GS-GSA-MW-12V	GS-GSA-MW-13H	GS-GSA-MW-14H	GS-GSA-MW-3	GS-GSA-MW-3V	GS-GSA-MW-4	GS-GSA-MW-4V
8/24/2016						<0.01		0.00234 (J)	
10/3/2016						<0.01		0.00739 (J)	
10/26/2016						<0.01		0.00266 (J)	
11/21/2016						<0.01		0.00212 (J)	
1/17/2017						<0.01		0.00263 (J)	
3/20/2017						<0.01			
3/21/2017								0.00588 (J)	
4/17/2017						0.00521 (J)		0.00579 (J)	
5/30/2017						<0.01		0.00471 (J)	
2/13/2018						0.00267 (J)		0.00498 (J)	
6/11/2018						0.00236 (J)		0.00388 (J)	
10/17/2018						<0.01		<0.01	
3/4/2019	<0.001015								
3/5/2019							<0.001015		<0.01
4/10/2019						0.00234 (J)		0.00322 (J)	
10/14/2019						<0.01	<0.001015	<0.01	<0.01
10/16/2019	<0.001015								
11/26/2019		0.00614 (J)							
2/3/2020						<0.01	<0.001015		<0.01
2/4/2020	<0.001015	<0.01		<0.001015				<0.01	
8/4/2020	<0.001015			<0.001015		<0.01	<0.001015		
8/5/2020		0.00417 (J)	<0.001015		0.00571 (J)			0.00298 (J)	<0.01
3/1/2021						0.00141			
3/2/2021	<0.001015	0.00463		<0.001015					
3/3/2021			<0.001015		0.00554		<0.001015	0.00294	0.000749 (J)
7/13/2021					0.00607				
7/14/2021	<0.001015	0.00441	<0.001015	<0.001015		0.00151		0.00563	0.00095 (J)
7/15/2021							<0.001015		
1/25/2022		0.00311							
1/26/2022	<0.001015			0.00069 (J)		0.00117	<0.001015		
1/27/2022			<0.001015		0.00401			0.00817	0.00101 (J)
7/12/2022	<0.001015			<0.001015					
7/13/2022		0.0039	<0.001015		0.00436	0.00151	<0.001015	0.0226	0.00111
2/27/2023						0.00152	<0.001015		
2/28/2023	<0.001015			0.000954 (J)	0.00589				
3/1/2023		0.00288	<0.001015					0.017	0.000882 (J)

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Selenium (mg/L) Analysis Run 5/27/2023 9:14 AM View: Descriptive

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-8	GS-GSA-MW-8V	GS-GSA-MW-9H	GS-GSA-MW-9V	MW-1 (bg)	MW-2 (bg)	MW-3 (bg)	MW-4 (bg)
4/25/2016						<0.001015	<0.01	<0.01
4/26/2016					0.00261 (J)			
6/20/2016					0.00242 (J)	<0.001015		<0.01
6/22/2016							<0.01	
8/8/2016					0.00253 (J)	<0.001015		
8/9/2016							<0.01	<0.01
8/24/2016	<0.001015				<0.01	<0.001015	<0.01	<0.01
10/3/2016	<0.001015				0.00211 (J)	<0.001015		<0.01
10/4/2016							<0.01	
10/26/2016	<0.001015				<0.01	<0.001015	<0.01	<0.01
11/21/2016	<0.001015				<0.01	<0.001015	<0.01	<0.01
1/17/2017	<0.001015				<0.01	<0.001015		
1/18/2017							<0.01	<0.01
3/20/2017	<0.001015							
3/22/2017					0.0022 (J)	<0.001015	0.0141	<0.01
4/18/2017	<0.001015				0.0027 (J)	<0.001015	0.0158	<0.01
5/30/2017	<0.001015				0.00316 (J)			
5/31/2017						<0.001015	0.00632 (J)	
2/13/2018	<0.001015				0.00211 (J)	<0.001015	0.0209	0.00403 (J)
5/22/2018					0.00372 (J)	<0.001015		
5/23/2018								<0.01
5/24/2018							0.00918 (J)	
6/12/2018	<0.001015				0.00409 (J)	<0.001015	0.00836 (J)	<0.01
10/17/2018	<0.001015				<0.01	<0.001015	<0.01	<0.01
11/19/2018					<0.01	<0.001015	0.00439 (J)	0.00436 (J)
3/5/2019			<0.01					
4/10/2019	<0.001015				0.00471 (J)	0.00322 (J)	0.0113	<0.01
5/14/2019					0.00316 (J)	<0.001015	0.0119	0.00201 (J)
10/8/2019					<0.01	<0.001015	0.00256 (J)	
10/10/2019								<0.01
10/14/2019	<0.001015							
10/16/2019			<0.01		<0.01	<0.001015	0.00286 (J)	<0.01
2/3/2020					0.00272 (J)	<0.001015	0.012	0.00212 (J)
2/4/2020	<0.001015		<0.01					
2/5/2020		<0.001015						
8/3/2020					0.00278 (J)	<0.001015	0.0146	
8/4/2020			<0.01	<0.001015				
8/5/2020	<0.001015	<0.001015						0.00232 (J)
2/22/2021					0.00241	<0.001015	0.0181	0.00222
3/1/2021	<0.001015	<0.001015		<0.001015				
3/2/2021			0.00138					
7/12/2021					0.0028	<0.001015	0.0133	0.00155
7/13/2021			0.00141	<0.001015				
7/14/2021	<0.001015	<0.001015						
1/25/2022					0.00216	<0.001015	0.0154	0.00224
1/26/2022		<0.001015	0.00129	<0.001015				
1/27/2022	<0.001015							
7/5/2022					0.00269	<0.001015	0.0205	0.000961 (J)
7/12/2022	<0.001015	<0.001015	0.000944 (J)	<0.001015				
2/20/2023					0.00258	<0.001015	0.0123	
2/21/2023								0.00266
2/28/2023	<0.001015	<0.001015	0.000886 (J)	<0.001015				

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Sulfate (mg/L) Analysis Run 5/27/2023 9:14 AM View: Descriptive

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-11H	GS-GSA-MW-12H	GS-GSA-MW-12V	GS-GSA-MW-13H	GS-GSA-MW-14H	GS-GSA-MW-3	GS-GSA-MW-3V	GS-GSA-MW-4	GS-GSA-MW-4V
8/24/2016						2910		567	
10/3/2016						2980		596	
10/26/2016						2790		585	
11/21/2016						2880		593	
1/17/2017						2950		637	
3/20/2017						2800			
3/21/2017								530	
4/17/2017						2400		530	
5/30/2017						2900		530	
8/24/2017						2900		530	
6/11/2018						2900		540	
10/17/2018						2800		520	
3/4/2019	785								
3/5/2019							1170		871
4/10/2019						2980		616	
10/14/2019						3110	1710	641	818
10/16/2019	750								
11/26/2019		997							
2/3/2020						2840	1970		808
2/4/2020	725	978		720				571	
8/4/2020	694			773		2820	1860		
8/5/2020		811	1830		796			519	761
3/1/2021						2320			
3/2/2021	835	890		861					
3/3/2021			1930		803		1930	609	746
7/13/2021					787				
7/14/2021	747	878	2000	857		2880		752	797
7/15/2021							1960		
1/25/2022		903							
1/26/2022	745			883		2620	2010		
1/27/2022			1990		784			1130	825
7/12/2022	807			857					
7/13/2022		839	1980		707	3180	2040	3040	858
2/27/2023						2770	2090		
2/28/2023	787			847	748				
3/1/2023		837	1810					2130	759

Time Series

Constituent: Sulfate (mg/L) Analysis Run 5/27/2023 9:14 AM View: Descriptive

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-8	GS-GSA-MW-8V	GS-GSA-MW-9H	GS-GSA-MW-9V	MW-1 (bg)	MW-2 (bg)	MW-3 (bg)	MW-4 (bg)
4/25/2016						745	1890	2260
4/26/2016					1490			
6/20/2016					1420	964		2500
6/22/2016							2100	
8/8/2016					1460	1100		
8/9/2016							2050	2750
8/24/2016	1250				1450	1130	2190	2770
10/3/2016	1270				1460	1140		3060
10/4/2016							1950	
10/26/2016	1240				1330	1060	1980	2650
11/21/2016	1210				1420	1100	2060	2720
1/17/2017	1150				1350	1160		
1/18/2017							2620	2650
3/20/2017	1400							
3/22/2017					1500	900	3200	2700
4/18/2017	1300				1300	870	2500	2400
5/30/2017	1500				1400			
5/31/2017						1100	2800	
8/23/2017					1500	920	2600	2700
8/24/2017	1800							
5/22/2018					2100 (o)	1200		
5/23/2018								2400
5/24/2018							2700	
6/12/2018	1800				1500	860	2500	2600
10/17/2018	1600				1400	970	2700	2600
11/19/2018					1300	1000	3000	2400
3/5/2019			2010					
4/10/2019	2150				1700	889	2460	2090
5/14/2019					1560	948	2460	2240
10/8/2019					1540	1230	2950	
10/10/2019								2690
10/14/2019	2090							
10/16/2019			2020		1680	1170	2820	3050
2/3/2020					1510	803	2290	1920
2/4/2020	1570		1710					
2/5/2020		223						
8/3/2020					1370	907	2330	
8/4/2020			1790	1700				
8/5/2020	1880	243						1930
2/22/2021					1400	864	3040	2040
3/1/2021	1450	183		1680				
3/2/2021			1750					
7/12/2021					1560	763	2380	1930
7/13/2021			1750	1820				
7/14/2021	1700	196						
1/25/2022					1430	842	2550	1930
1/26/2022		199	1660	1820				
1/27/2022	2000							
7/5/2022					1600	819	3110	2380
7/12/2022	1740	177	1720	1780				
2/20/2023					1520	767	2110	
2/21/2023								1930

Time Series

Constituent: Sulfate (mg/L) Analysis Run 5/27/2023 9:14 AM View: Descriptive

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-8	GS-GSA-MW-8V	GS-GSA-MW-9H	GS-GSA-MW-9V	MW-1 (bg)	MW-2 (bg)	MW-3 (bg)	MW-4 (bg)
2/28/2023	1390	182	1670	1770				

Time Series

Constituent: Thallium (mg/L) Analysis Run 5/27/2023 9:14 AM View: Descriptive

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-11H	GS-GSA-MW-12H	GS-GSA-MW-12V	GS-GSA-MW-13H	GS-GSA-MW-14H	GS-GSA-MW-3	GS-GSA-MW-3V	GS-GSA-MW-4	GS-GSA-MW-4V
8/24/2016						<0.000203		<0.001	
10/3/2016						<0.000203		<0.001	
10/26/2016						<0.000203		<0.001	
11/21/2016						<0.000203		<0.001	
1/17/2017						<0.000203		<0.001	
3/20/2017						<0.000203			
3/21/2017								<0.001	
4/17/2017						<0.000203		<0.001	
5/30/2017						<0.000203		<0.001	
2/13/2018						<0.000203		<0.001	
6/11/2018						<0.000203		<0.001	
10/17/2018						<0.000203		<0.001	
3/4/2019	<0.000203								
3/5/2019							<0.000203		<0.000203
4/10/2019						<0.000203		<0.001	
10/14/2019						<0.000203	<0.000203	<0.001	<0.000203
10/16/2019	<0.000203								
11/26/2019		0.000375 (J)							
2/3/2020						<0.000203	<0.000203		<0.000203
2/4/2020	<0.000203	0.000491 (J)		<0.000203				<0.001	
8/4/2020	<0.000203			<0.000203		<0.000203	<0.000203		
8/5/2020		0.000297 (J)	<0.000203		<0.0002			0.000205 (J)	<0.000203
3/1/2021						<0.000203			
3/2/2021	<0.000203	0.000371		<0.000203					
3/3/2021			<0.000203		7.98E-05 (J)		<0.000203	0.000178 (J)	<0.000203
7/13/2021					<0.0002				
7/14/2021	<0.000203	0.00034	<0.000203	<0.000203		<0.000203		9E-05 (J)	<0.000203
7/15/2021							<0.000203		
1/25/2022		0.00032							
1/26/2022	<0.000203			<0.000203		<0.000203	<0.000203		
1/27/2022			<0.000203		7E-05 (J)			0.00022	<0.000203
7/12/2022	<0.000203			<0.000203					
7/13/2022		0.000311	<0.000203		7.7E-05 (J)	<0.000203	<0.000203	0.000447	<0.000203
2/27/2023						<0.000203	<0.000203		
2/28/2023	<0.000203			<0.000203	7.16E-05 (J)				
3/1/2023		0.0004	<0.000203					0.000407	<0.000203

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Thallium (mg/L) Analysis Run 5/27/2023 9:14 AM View: Descriptive

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-8	GS-GSA-MW-8V	GS-GSA-MW-9H	GS-GSA-MW-9V	MW-1 (bg)	MW-2 (bg)	MW-3 (bg)	MW-4 (bg)
4/25/2016						<0.000203	0.000205 (J)	<0.000203
4/26/2016					<0.000203			
6/20/2016					<0.000203	<0.000203		<0.000203
6/22/2016							<0.000203	
8/8/2016					<0.000203	<0.000203		
8/9/2016							<0.000203	<0.000203
8/24/2016	<0.000203				<0.000203	<0.000203	<0.000203	<0.000203
10/3/2016	<0.000203				<0.000203	<0.000203		<0.000203
10/4/2016							<0.000203	
10/26/2016	<0.000203				<0.000203	<0.000203	0.000209 (J)	<0.000203
11/21/2016	<0.000203				<0.000203	<0.000203	<0.000203	<0.000203
1/17/2017	<0.000203				<0.000203	<0.000203		
1/18/2017							<0.000203	<0.000203
3/20/2017	<0.000203							
3/22/2017					<0.000203	<0.000203	<0.000203	<0.000203
4/18/2017	<0.000203				<0.000203	<0.000203	<0.000203	<0.000203
5/30/2017	<0.000203				<0.000203			
5/31/2017						<0.000203	<0.000203	
2/13/2018	<0.000203				<0.000203	<0.000203	<0.000203	<0.000203
5/22/2018					<0.000203	<0.000203		
5/23/2018								<0.000203
5/24/2018							<0.000203	
6/12/2018	<0.000203				<0.000203	<0.000203	<0.000203	<0.000203
10/17/2018	<0.000203				<0.000203	<0.000203	<0.000203	<0.000203
11/19/2018					<0.000203	<0.000203	0.000226 (J)	<0.000203
3/5/2019			0.00021 (J)					
4/10/2019	<0.000203				<0.000203	<0.000203	<0.000203	<0.000203
5/14/2019					<0.000203	<0.000203	<0.000203	<0.000203
10/8/2019					<0.000203	<0.000203	<0.000203	
10/10/2019								<0.000203
10/14/2019	<0.000203							
10/16/2019			0.000262 (J)		<0.000203	<0.000203	<0.000203	<0.000203
2/3/2020					<0.000203	<0.000203	<0.000203	<0.000203
2/4/2020	<0.000203		0.000233 (J)					
2/5/2020		<0.000203						
8/3/2020					<0.000203	<0.000203	<0.000203	
8/4/2020			0.000265 (J)	<0.000203				
8/5/2020	<0.000203	<0.000203						<0.000203
2/22/2021					<0.000203	<0.000203	<0.000203	<0.000203
3/1/2021	<0.000203	<0.000203		<0.000203				
3/2/2021			0.000221					
7/12/2021					<0.000203	<0.000203	<0.000203	<0.000203
7/13/2021			0.00013 (J)	<0.000203				
7/14/2021	<0.000203	<0.000203						
1/25/2022					<0.000203	<0.000203	<0.000203	<0.000203
1/26/2022		<0.000203	0.00022	<0.000203				
1/27/2022	<0.000203							
7/5/2022					<0.000203	<0.000203	<0.000203	<0.000203
7/12/2022	<0.000203	<0.000203	0.000242	<0.000203				
2/20/2023					<0.000203	<0.000203	<0.000203	
2/21/2023								<0.000203
2/28/2023	<0.000203	<0.000203	0.000234	<0.000203				

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Total dissolved solids (mg/L) Analysis Run 5/27/2023 9:14 AM View: Descriptive

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-11H	GS-GSA-MW-12H	GS-GSA-MW-12V	GS-GSA-MW-13H	GS-GSA-MW-14H	GS-GSA-MW-3	GS-GSA-MW-3V	GS-GSA-MW-4	GS-GSA-MW-4V
8/24/2016						5020		992	
10/3/2016						4880		988	
10/26/2016						5020		1030	
11/21/2016						5090		1020	
1/17/2017						4330		988	
3/20/2017						2690			
3/21/2017								990	
4/17/2017						4780		884	
5/30/2017						5170		1060	
8/24/2017						5140		1060	
6/11/2018						4960		944	
10/17/2018						4910		928	
3/4/2019	1150								
3/5/2019							2170		1410
4/10/2019						5090		1000	
10/14/2019						5110	3200	967	1340
10/16/2019	1150								
11/26/2019		1580							
2/3/2020						4920	3660		1290
2/4/2020	1200	1580		1200				978	
8/4/2020	1230			1350		5110	3530		
8/5/2020		1380	3330		1280			938	1330
3/1/2021						4390			
3/2/2021	1190	1390		1450					
3/3/2021			3450		1260		3640	1040	1320
7/13/2021					1180				
7/14/2021	1190	1330	3360	1300		4920		1300	1340
7/15/2021							3430		
1/25/2022		1320							
1/26/2022	1140			1360		4260	3150		
1/27/2022			3170		1130			1840	1330
7/12/2022	1180			1360					
7/13/2022		1270	3380		1120	4960	3340	4700	1380
2/27/2023						5000	3600		
2/28/2023	1240			1480	1300				
3/1/2023		1300	3270					3310	1330

Time Series

Constituent: Total dissolved solids (mg/L) Analysis Run 5/27/2023 9:14 AM View: Descriptive

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-8	GS-GSA-MW-8V	GS-GSA-MW-9H	GS-GSA-MW-9V	MW-1 (bg)	MW-2 (bg)	MW-3 (bg)	MW-4 (bg)
4/25/2016						1260	2720	3300
4/26/2016					2080			
6/20/2016					2060	1620		3870
6/22/2016							3250	
8/8/2016					2070	1740		
8/9/2016							3050	4140
8/24/2016	2280				2040	1720	3080	4190
10/3/2016	2370				2110	1800		4190
10/4/2016							2900	
10/26/2016	2350				2000	1800	2940	4400
11/21/2016	2530				2070	1740	3090	4230
1/17/2017	2380				1930	1960		
1/18/2017							4020	4120
3/20/2017	2630							
3/22/2017					2060	1510	4180	3980
4/18/2017	2700				2140	1580	4440	3880
5/30/2017	2980				2240			
5/31/2017						1730	3970	
8/23/2017					2160	1550	4050	3990
8/24/2017	3390							
5/22/2018					2380	1500		
5/23/2018								3740
5/24/2018							3680	
6/12/2018	3510				2400	1550	3820	4080
10/17/2018	3550				2220	1740	4730	4250
11/19/2018					2360	1990	4710	3920
3/5/2019			3240					
4/10/2019	3580				2630	1250	3680	3280
5/14/2019					2340	1480	3580	3130 (D)
10/8/2019					2330	1840	4720	
10/10/2019								4000
10/14/2019	3730							
10/16/2019			3080		3650 (o)	1830	4210	4060
2/3/2020					2380	1440	3530	3240
2/4/2020	3190		3110					
2/5/2020		1100						
8/3/2020					2200	1650	3760	
8/4/2020			2920	3080				
8/5/2020	3610	1100						3200
2/22/2021					2230	1620	4670	3190
3/1/2021	2870	1060		3140				
3/2/2021			2860					
7/12/2021					2210	1390	3510	3000
7/13/2021			2640	2870				
7/14/2021	3150	1060						
1/25/2022					2150	1500	3950	3180
1/26/2022		1050	2490	2890				
1/27/2022	3290							
7/5/2022					2100	1250	4220	3240
7/12/2022	3090	1010	2610	2940				
2/20/2023					2280	1420	3230	
2/21/2023								3160

Time Series

Constituent: Total dissolved solids (mg/L) Analysis Run 5/27/2023 9:14 AM View: Descriptive

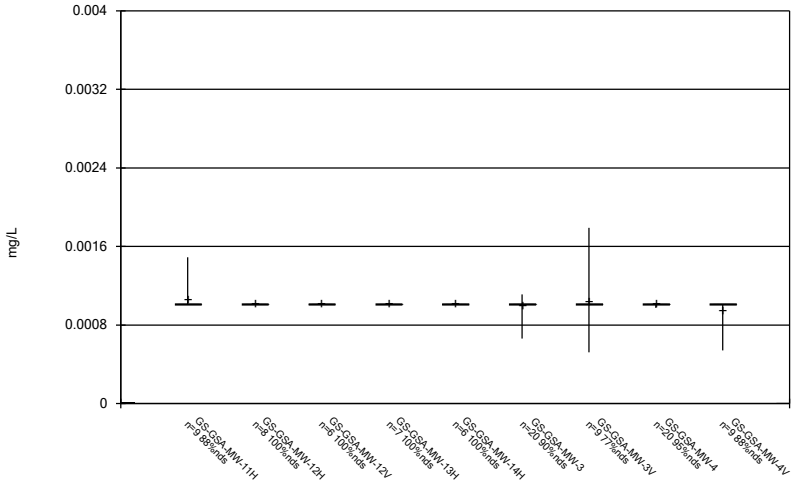
Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-8	GS-GSA-MW-8V	GS-GSA-MW-9H	GS-GSA-MW-9V	MW-1 (bg)	MW-2 (bg)	MW-3 (bg)	MW-4 (bg)
2/28/2023	2620	1020	2650	3030				

FIGURE B.

Sanitas™ v.9.6.37 . UG

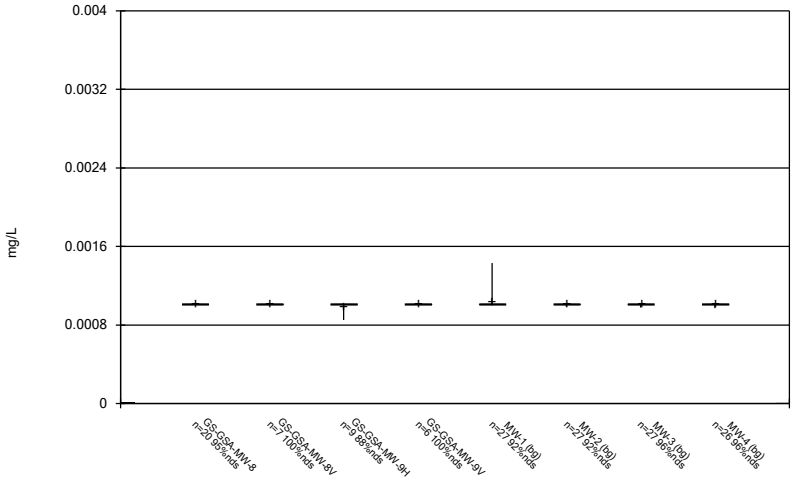
Box & Whiskers Plot



Constituent: Antimony Analysis Run 5/27/2023 9:15 AM View: Descriptive
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.37 . UG

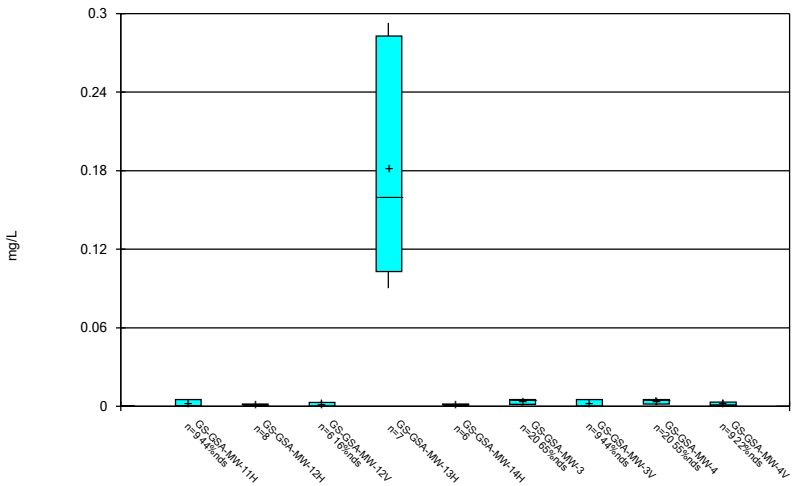
Box & Whiskers Plot



Constituent: Antimony Analysis Run 5/27/2023 9:15 AM View: Descriptive
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.37 . UG

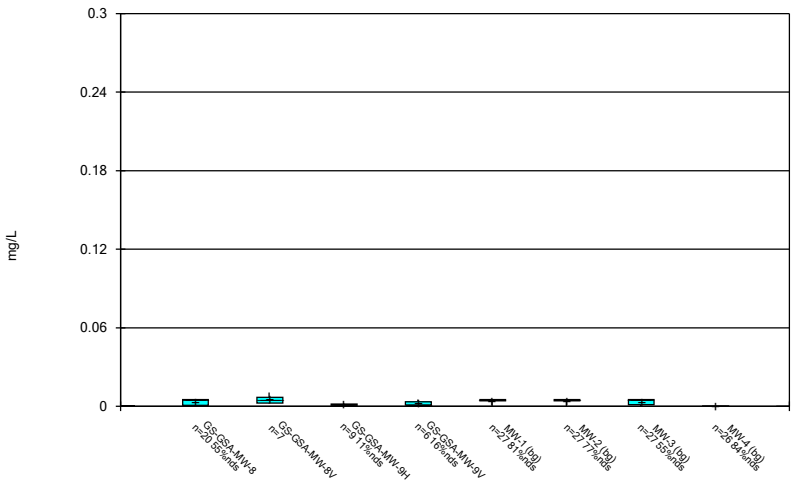
Box & Whiskers Plot



Constituent: Arsenic Analysis Run 5/27/2023 9:15 AM View: Descriptive
Plant Gorgas Client: Southern Company Data: Gorgas GSA

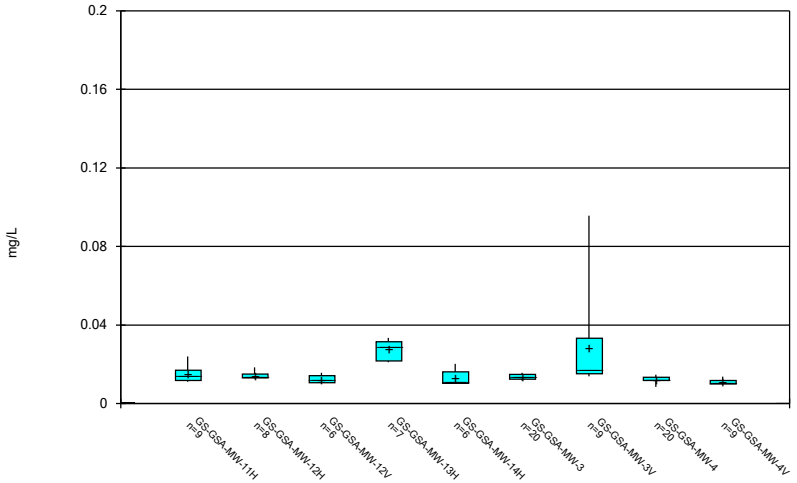
Sanitas™ v.9.6.37 . UG

Box & Whiskers Plot



Constituent: Arsenic Analysis Run 5/27/2023 9:15 AM View: Descriptive
Plant Gorgas Client: Southern Company Data: Gorgas GSA

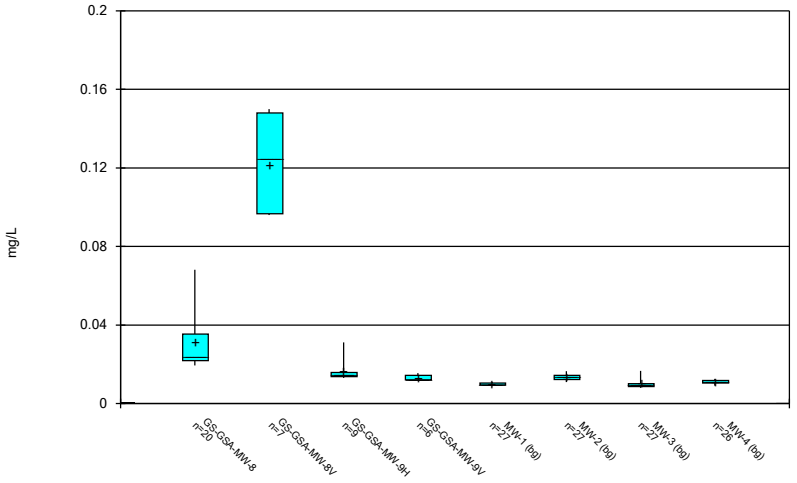
Box & Whiskers Plot



Constituent: Barium Analysis Run 5/27/2023 9:15 AM View: Descriptive
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.37 . UG

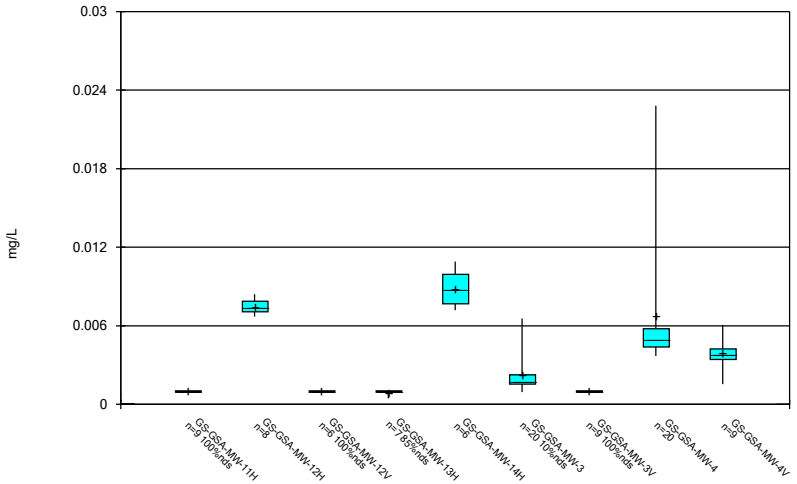
Box & Whiskers Plot



Constituent: Barium Analysis Run 5/27/2023 9:15 AM View: Descriptive
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.37 . UG

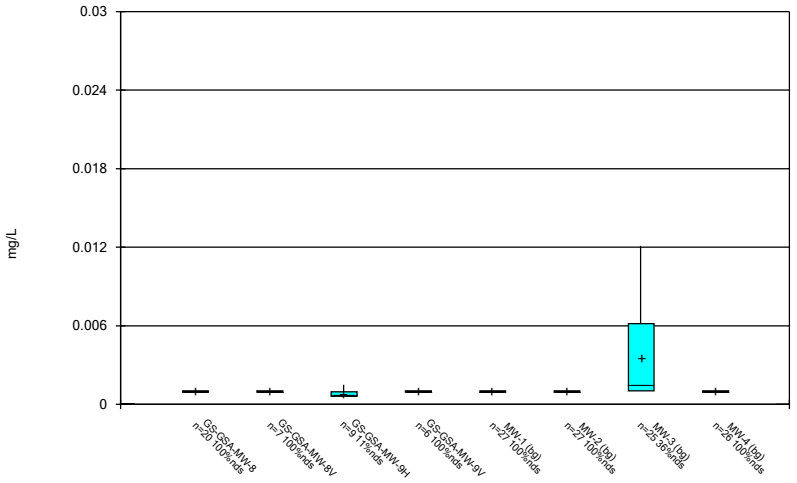
Box & Whiskers Plot



Constituent: Beryllium Analysis Run 5/27/2023 9:15 AM View: Descriptive
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.37 . UG

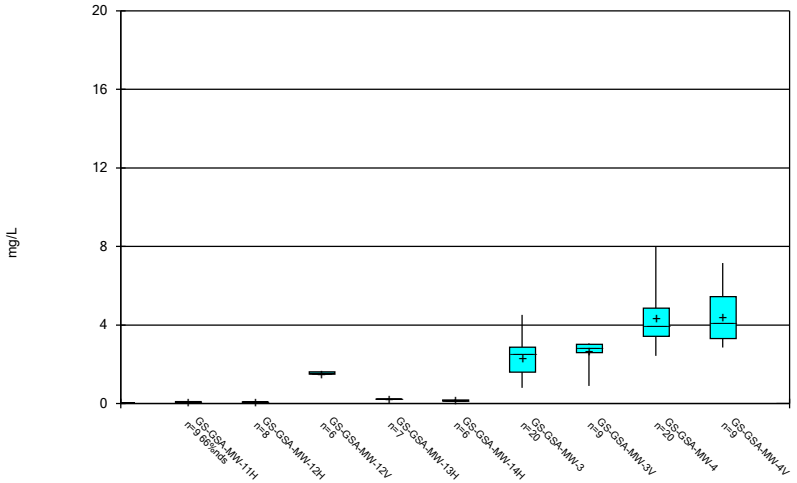
Box & Whiskers Plot



Constituent: Beryllium Analysis Run 5/27/2023 9:15 AM View: Descriptive
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.37 . UG

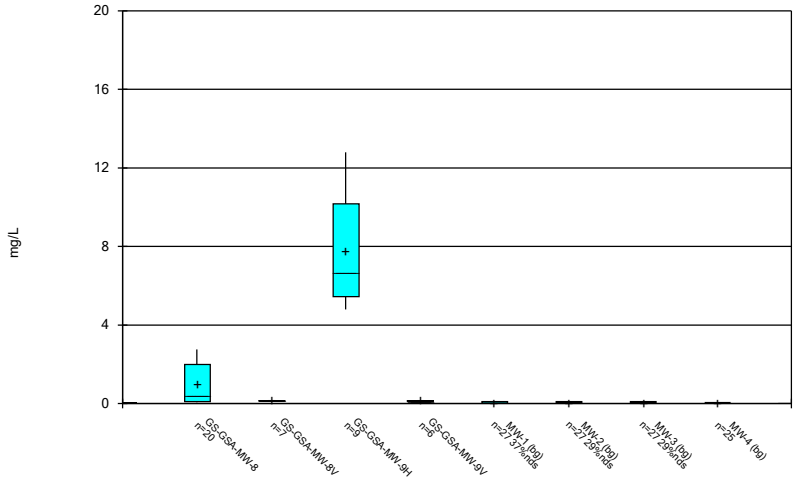
Box & Whiskers Plot



Constituent: Boron Analysis Run 5/27/2023 9:15 AM View: Descriptive
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.37 . UG

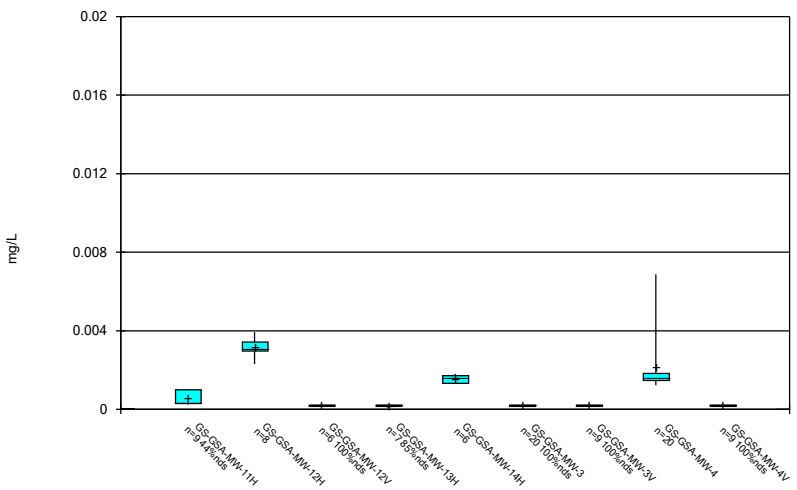
Box & Whiskers Plot



Constituent: Boron Analysis Run 5/27/2023 9:15 AM View: Descriptive
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.37 . UG

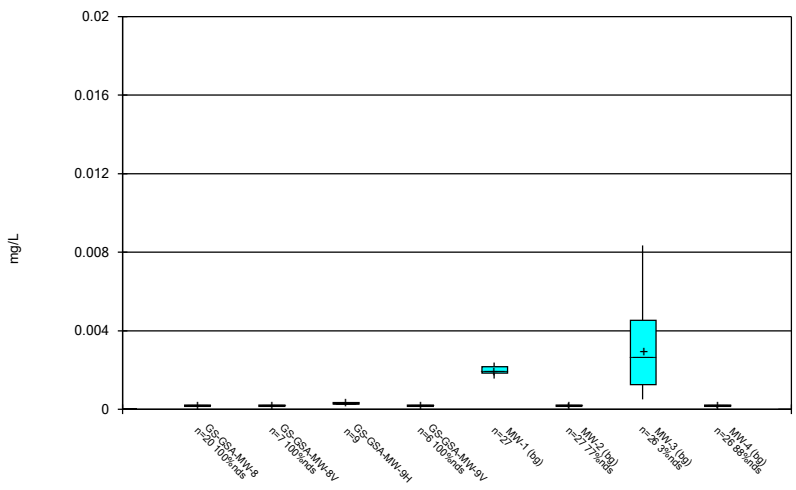
Box & Whiskers Plot



Constituent: Cadmium Analysis Run 5/27/2023 9:15 AM View: Descriptive
Plant Gorgas Client: Southern Company Data: Gorgas GSA

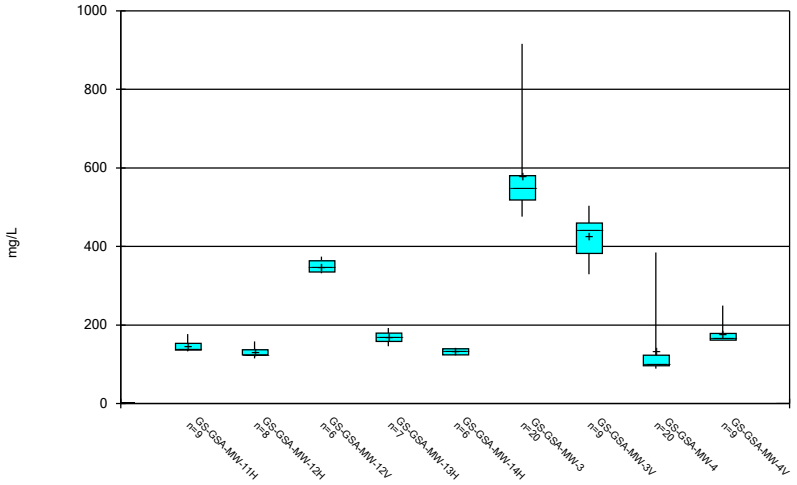
Sanitas™ v.9.6.37 . UG

Box & Whiskers Plot



Constituent: Cadmium Analysis Run 5/27/2023 9:15 AM View: Descriptive
Plant Gorgas Client: Southern Company Data: Gorgas GSA

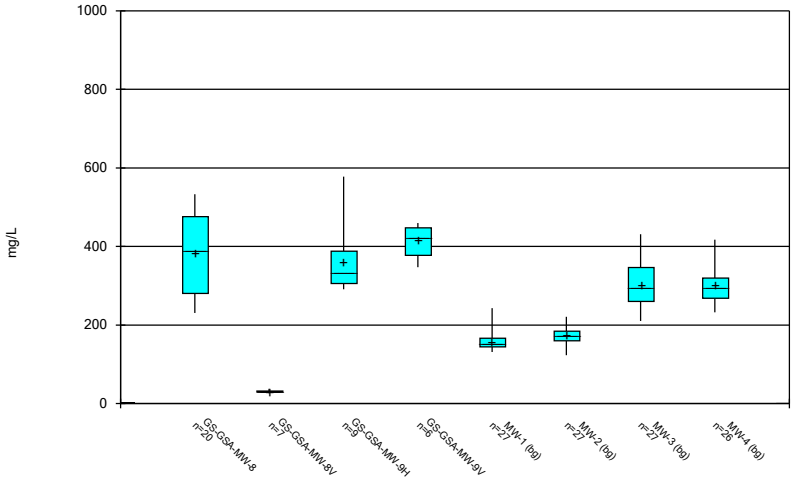
Box & Whiskers Plot



Constituent: Calcium Analysis Run 5/27/2023 9:15 AM View: Descriptive
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.37 . UG

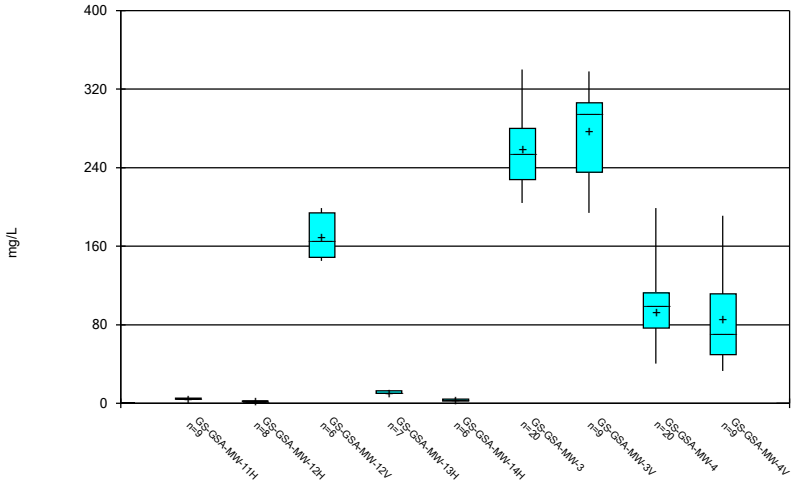
Box & Whiskers Plot



Constituent: Calcium Analysis Run 5/27/2023 9:15 AM View: Descriptive
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.37 . UG

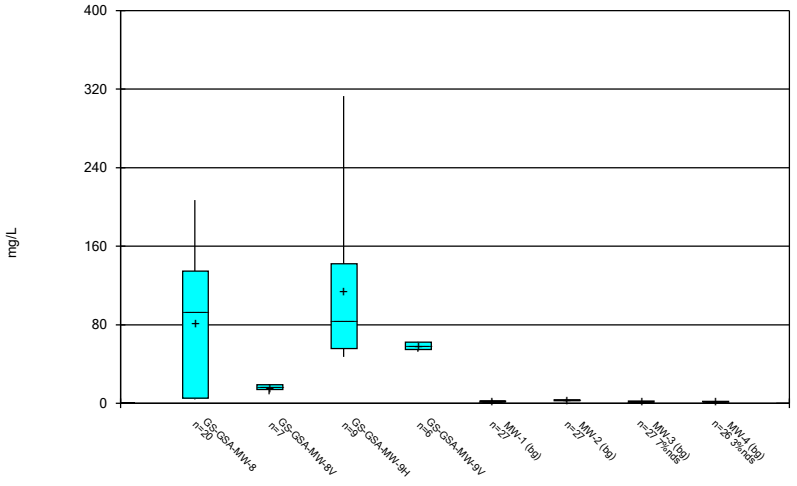
Box & Whiskers Plot



Constituent: Chloride Analysis Run 5/27/2023 9:15 AM View: Descriptive
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.37 . UG

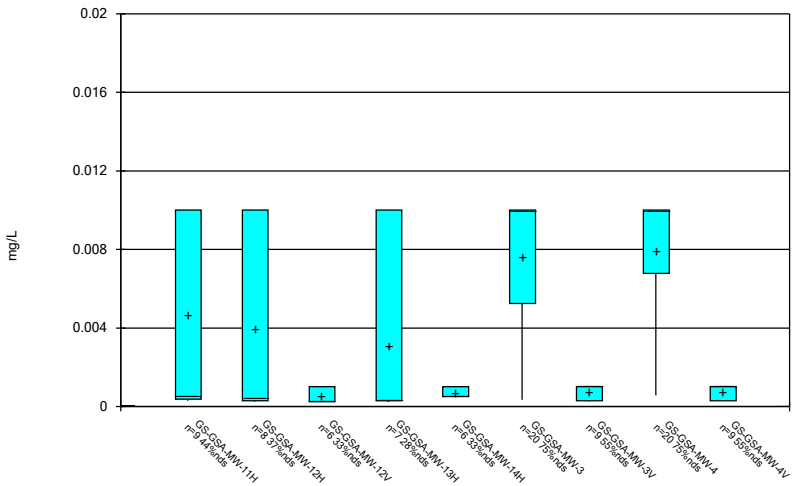
Box & Whiskers Plot



Constituent: Chloride Analysis Run 5/27/2023 9:15 AM View: Descriptive
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.37 . UG

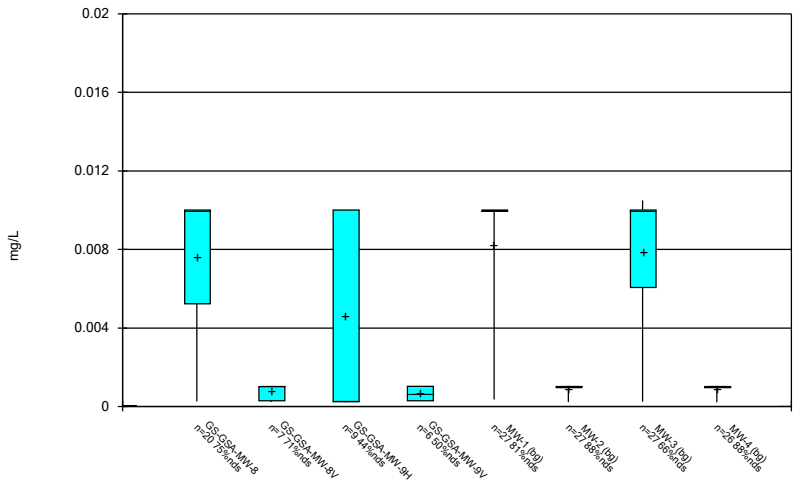
Box & Whiskers Plot



Constituent: Chromium Analysis Run 5/27/2023 9:15 AM View: Descriptive
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.37 . UG

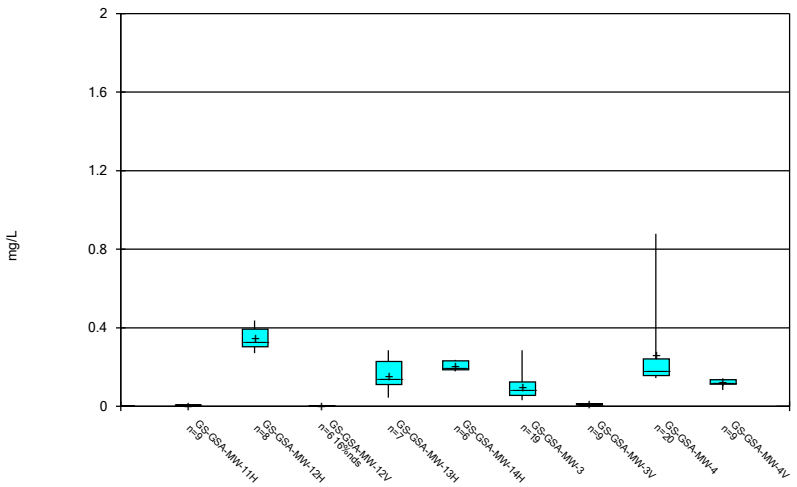
Box & Whiskers Plot



Constituent: Chromium Analysis Run 5/27/2023 9:15 AM View: Descriptive
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.37 . UG

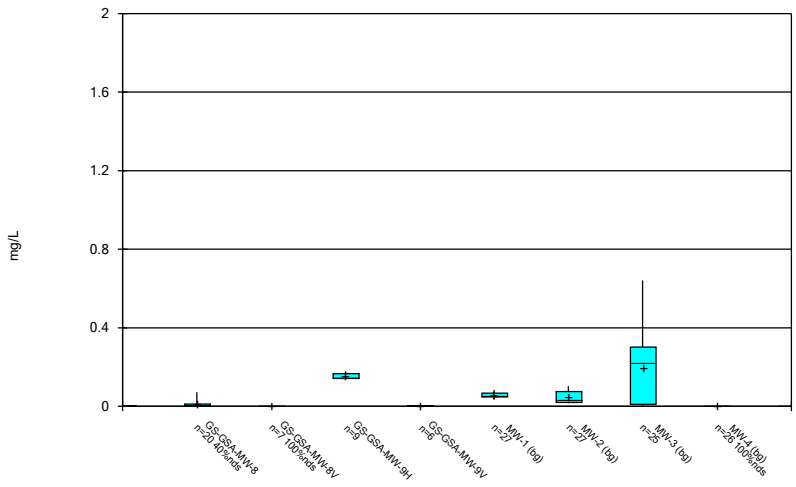
Box & Whiskers Plot



Constituent: Cobalt Analysis Run 5/27/2023 9:15 AM View: Descriptive
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.37 . UG

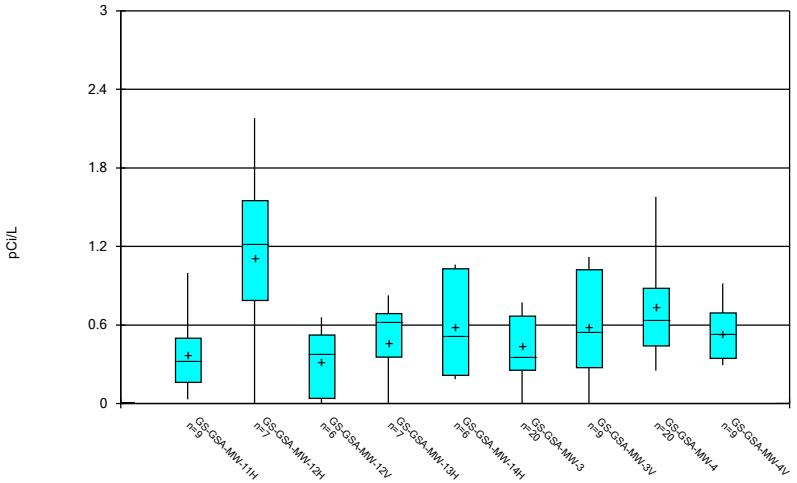
Box & Whiskers Plot



Constituent: Cobalt Analysis Run 5/27/2023 9:15 AM View: Descriptive
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.37 . UG

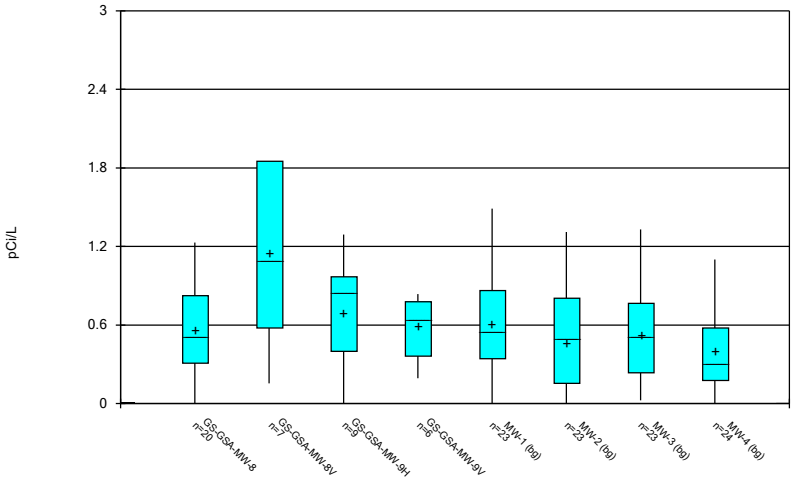
Box & Whiskers Plot



Constituent: Combined Radium 226 + 228 Analysis Run 5/27/2023 9:15 AM View: Descriptive
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.37 . UG

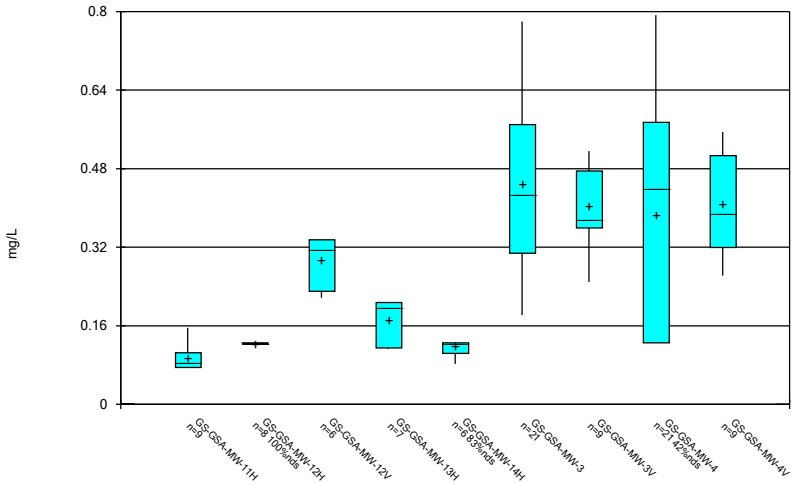
Box & Whiskers Plot



Constituent: Combined Radium 226 + 228 Analysis Run 5/27/2023 9:15 AM View: Descriptive
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.37 . UG

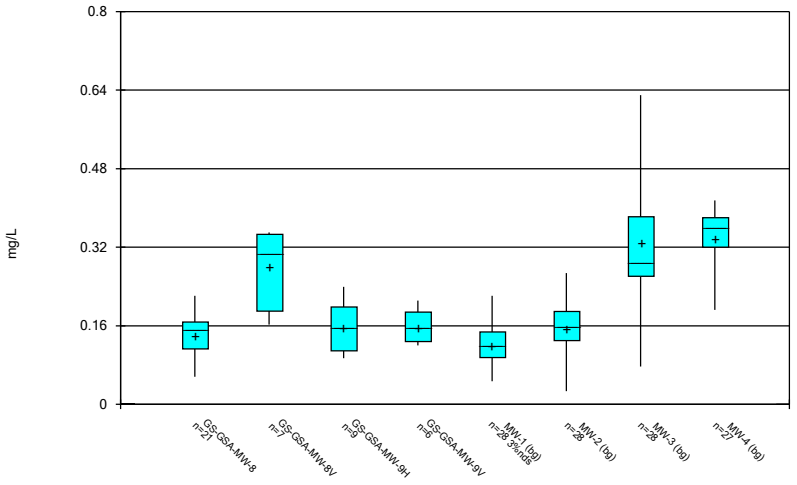
Box & Whiskers Plot



Constituent: Fluoride Analysis Run 5/27/2023 9:15 AM View: Descriptive
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.37 . UG

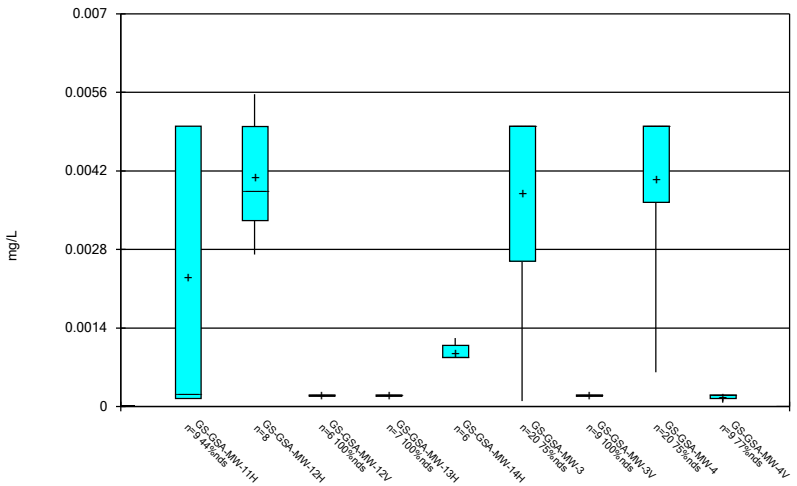
Box & Whiskers Plot



Constituent: Fluoride Analysis Run 5/27/2023 9:15 AM View: Descriptive
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.37 . UG

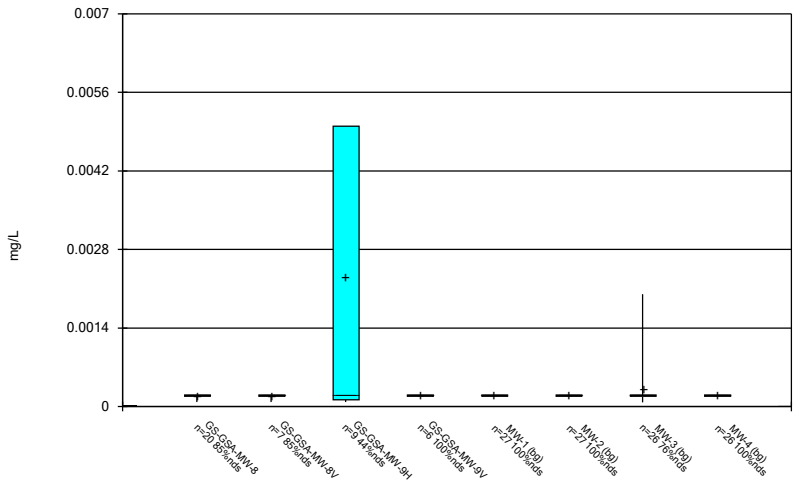
Box & Whiskers Plot



Constituent: Lead Analysis Run 5/27/2023 9:15 AM View: Descriptive
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.37 . UG

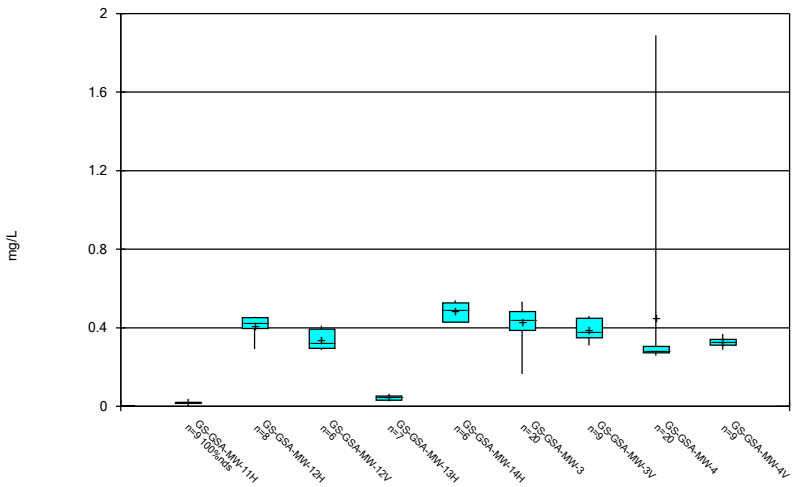
Box & Whiskers Plot



Constituent: Lead Analysis Run 5/27/2023 9:15 AM View: Descriptive
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.37 . UG

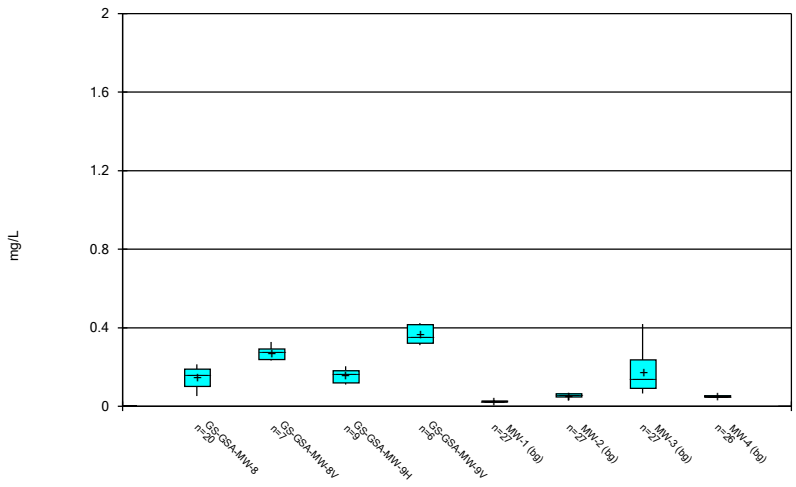
Box & Whiskers Plot



Constituent: Lithium Analysis Run 5/27/2023 9:15 AM View: Descriptive
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.37 . UG

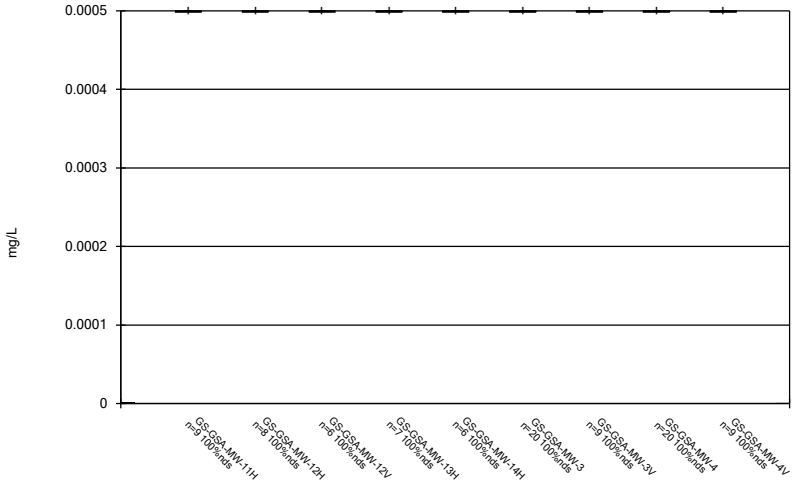
Box & Whiskers Plot



Constituent: Lithium Analysis Run 5/27/2023 9:15 AM View: Descriptive
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.37 . UG

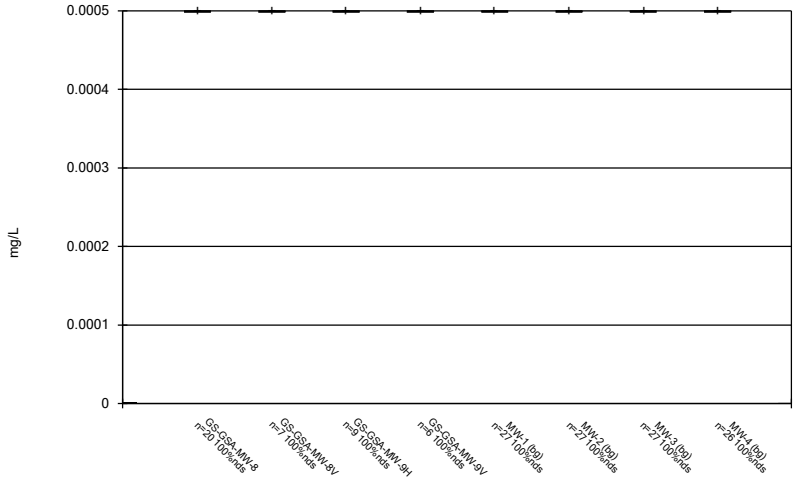
Box & Whiskers Plot



Constituent: Mercury Analysis Run 5/27/2023 9:15 AM View: Descriptive
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.37 . UG

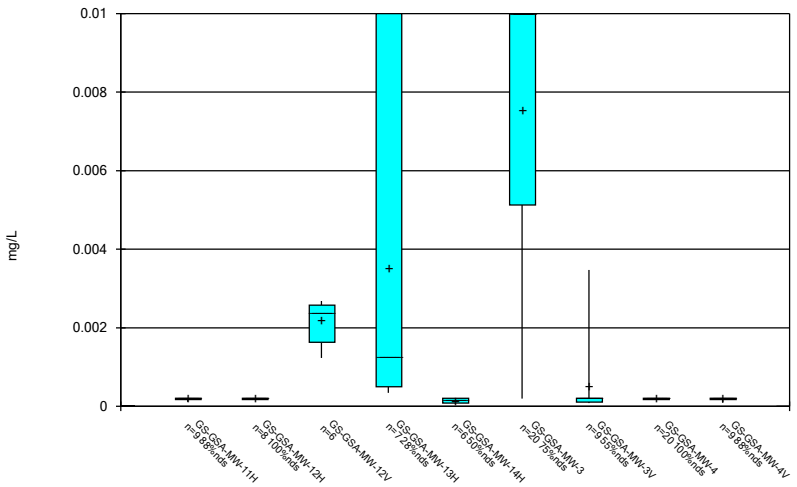
Box & Whiskers Plot



Constituent: Mercury Analysis Run 5/27/2023 9:15 AM View: Descriptive
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.37 . UG

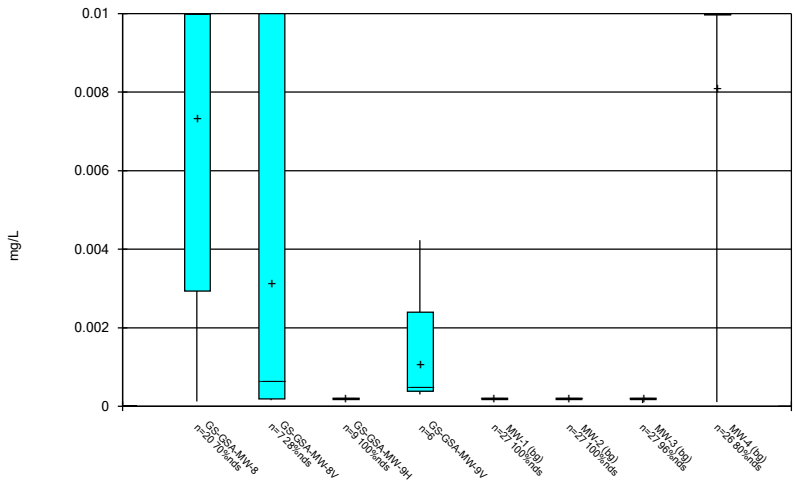
Box & Whiskers Plot



Constituent: Molybdenum Analysis Run 5/27/2023 9:15 AM View: Descriptive
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.37 . UG

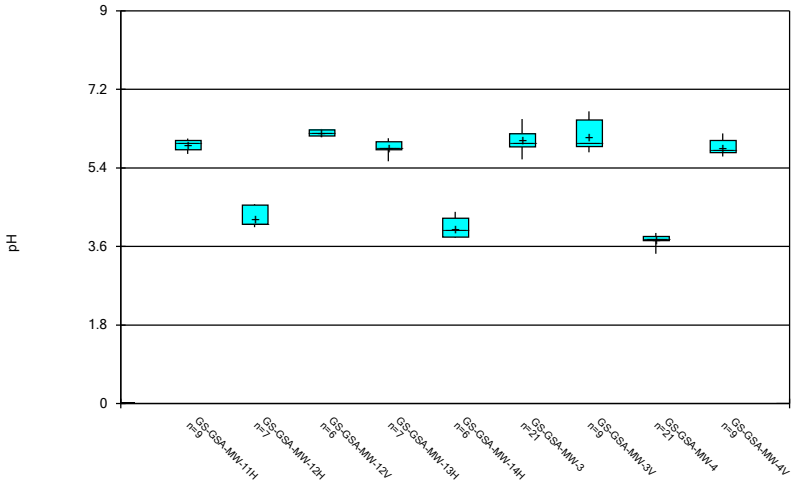
Box & Whiskers Plot



Constituent: Molybdenum Analysis Run 5/27/2023 9:15 AM View: Descriptive
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.37 . UG

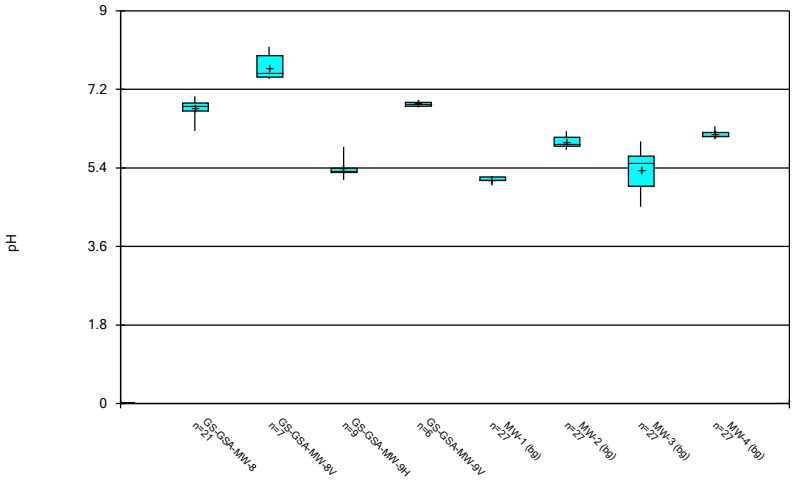
Box & Whiskers Plot



Constituent: pH Analysis Run 5/27/2023 9:15 AM View: Descriptive
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.37 . UG

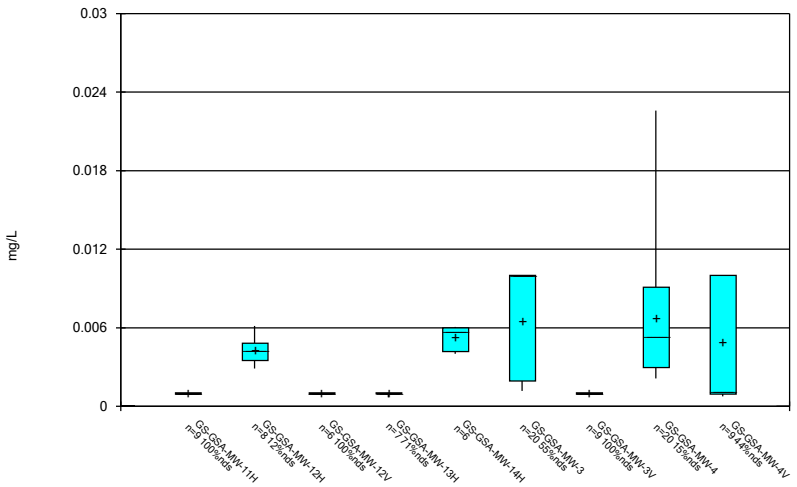
Box & Whiskers Plot



Constituent: pH Analysis Run 5/27/2023 9:15 AM View: Descriptive
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.37 . UG

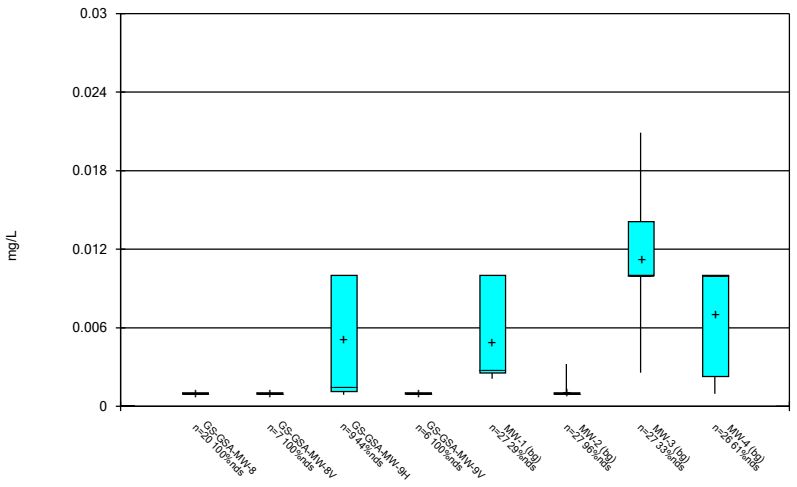
Box & Whiskers Plot



Constituent: Selenium Analysis Run 5/27/2023 9:15 AM View: Descriptive
Plant Gorgas Client: Southern Company Data: Gorgas GSA

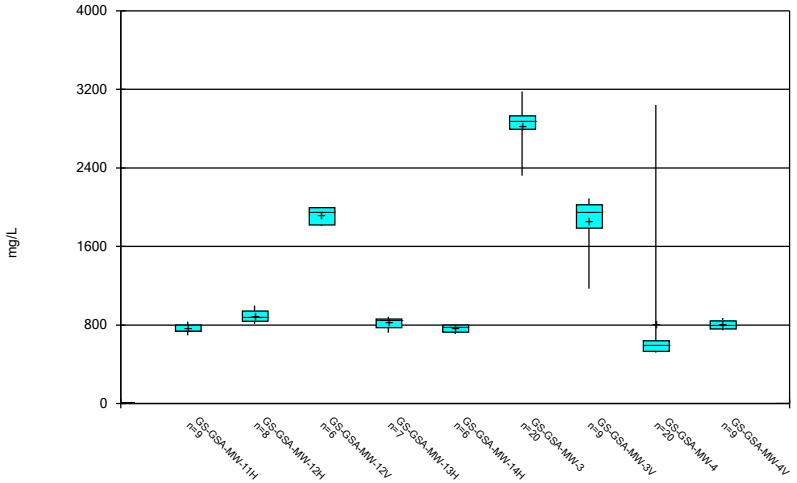
Sanitas™ v.9.6.37 . UG

Box & Whiskers Plot



Constituent: Selenium Analysis Run 5/27/2023 9:15 AM View: Descriptive
Plant Gorgas Client: Southern Company Data: Gorgas GSA

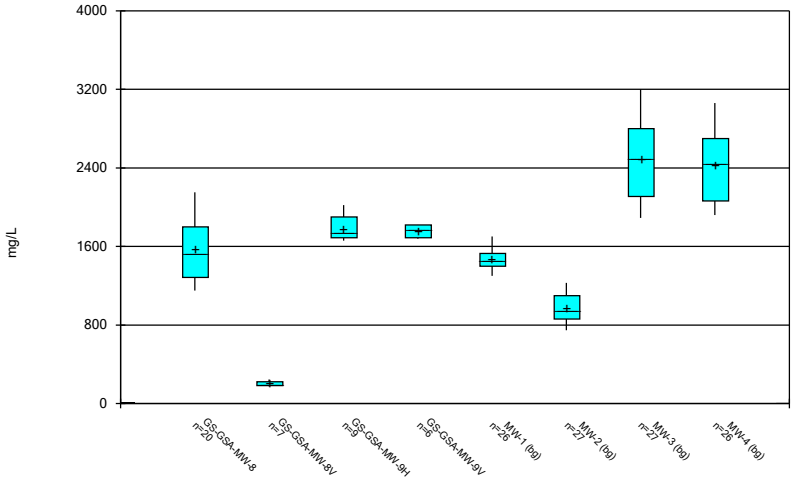
Box & Whiskers Plot



Constituent: Sulfate Analysis Run 5/27/2023 9:15 AM View: Descriptive
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.37 . UG

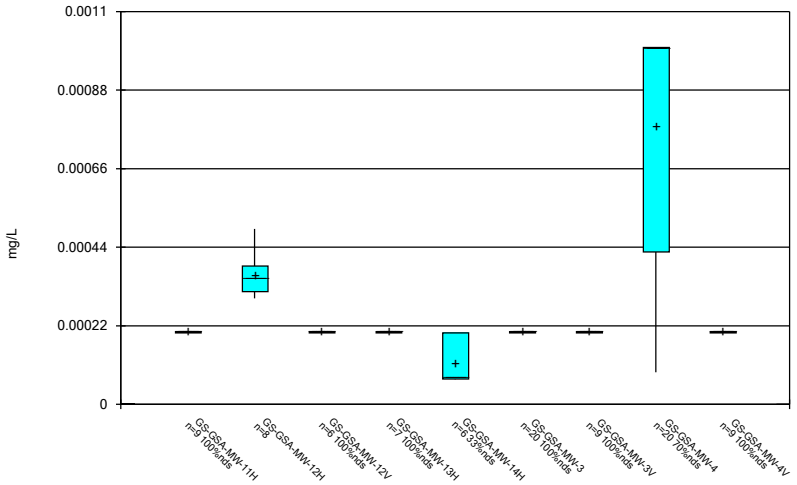
Box & Whiskers Plot



Constituent: Sulfate Analysis Run 5/27/2023 9:15 AM View: Descriptive
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.37 . UG

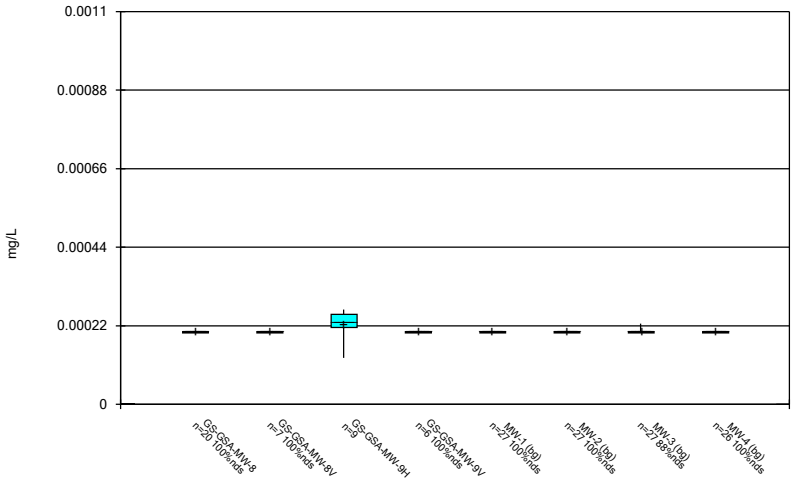
Box & Whiskers Plot



Constituent: Thallium Analysis Run 5/27/2023 9:15 AM View: Descriptive
Plant Gorgas Client: Southern Company Data: Gorgas GSA

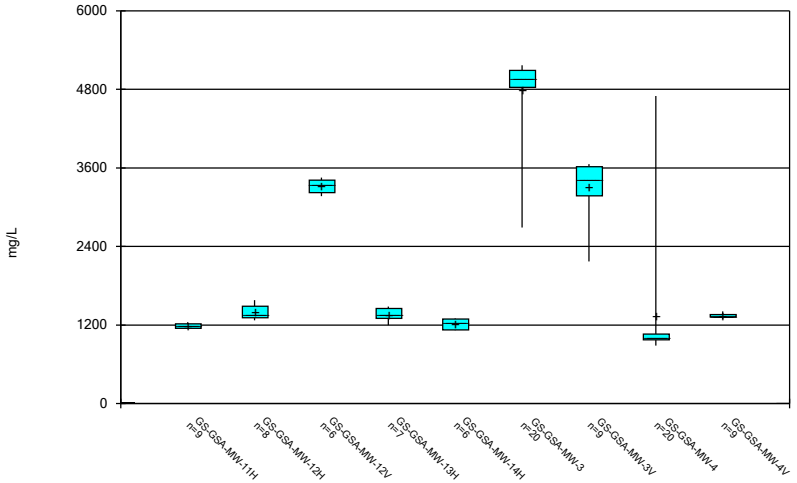
Sanitas™ v.9.6.37 . UG

Box & Whiskers Plot



Constituent: Thallium Analysis Run 5/27/2023 9:15 AM View: Descriptive
Plant Gorgas Client: Southern Company Data: Gorgas GSA

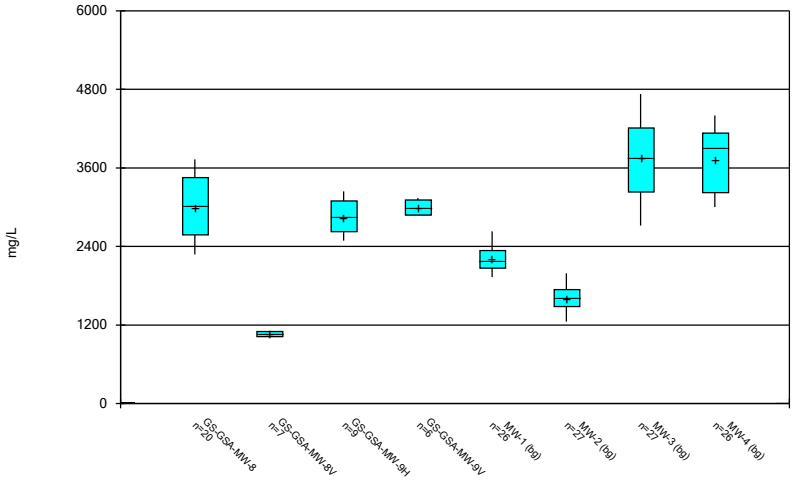
Box & Whiskers Plot



Constituent: Total dissolved solids Analysis Run 5/27/2023 9:15 AM View: Descriptive
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.37 . UG

Box & Whiskers Plot



Constituent: Total dissolved solids Analysis Run 5/27/2023 9:15 AM View: Descriptive
Plant Gorgas Client: Southern Company Data: Gorgas GSA

FIGURE C.

Outlier Summary

Plant Gorgas Client: Southern Company Data: Gorgas GSA Printed 5/18/2023, 1:51 PM

	MW-3 Beryllium (mg/L)	MW-4 Boron (mg/L)	MW-3 Cadmium (mg/L)	GS-GSA-MW-3 Cobalt (mg/L)	MW-3 Cobalt (mg/L)	MW-3 Lead (mg/L)	MW-3 pH (pH)	MW-1 Sulfate (mg/L)	MW-1 Total dissolved solids (mg/L)
4/25/2016			0.0121 (o)						
1/18/2017	0.0169 (o)								
4/17/2017				0.294 (o)					
5/22/2018								2100 (o)	
11/19/2018	0.0185 (o)					0.00692 (o)	3.77 (o)		
5/14/2019		<0.203 (o)							
10/8/2019					1.07 (o)				
10/16/2019					0.848 (o)				3650 (o)

FIGURE D.

Intrawell Prediction Limits - Significant Results

Plant Gorgas Client: Southern Company Data: Gorgas GSA Printed 5/18/2023, 1:18 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Wells	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
pH (pH)	**GS-GSA-MW-4**	**3.896**	**3.699**	**3/1/2023**	**3.5**	**Yes**	**17**	**n/a**	**3.798**	**0.05044**	**0**	**None**	**No**	**0.001253**	**Param Intra 1 of 2**
pH (pH)	**MW-2**	**6.145**	**5.788**	**2/20/2023**	**6.24**	**Yes**	**23**	**n/a**	**5.967**	**0.09604**	**0**	**None**	**No**	**0.001253**	**Param Intra 1 of 2**
pH (pH)	**MW-3**	**5.987**	**4.38**	**2/20/2023**	**6.01**	**Yes**	**23**	**n/a**	**149.3**	**35.15**	**0**	**None**	**x^3**	**0.001253**	**Param Intra 1 of 2**
pH (pH)	**MW-4**	**6.237**	**6.076**	**2/21/2023**	**6.35**	**Yes**	**23**	**n/a**	**6.157**	**0.04323**	**0**	**None**	**No**	**0.001253**	**Param Intra 1 of 2**
Sulfate (mg/L)	**GS-GSA-MW-4**	**653.2**	**n/a**	**3/1/2023**	**2130**	**Yes**	**16**	**n/a**	**569.6**	**42.43**	**0**	**None**	**No**	**0.002505**	**Param Intra 1 of 2**
Total dissolved solids (mg/L)	**GS-GSA-MW-4**	**1084**	**n/a**	**3/1/2023**	**3310**	**Yes**	**16**	**n/a**	**987.9**	**48.59**	**0**	**None**	**No**	**0.002505**	**Param Intra 1 of 2**

Intrawell Prediction Limits - All Results

Plant Gorgas Client: Southern Company Data: Gorgas GSA Printed 5/18/2023, 1:18 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Wells	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
pH (pH)	GS-GSA-MW-3	6.38	5.66	2/27/2023	5.83	No	17	n/a	6.02	0.1846	0	None	No	0.001253	Param Intra 1 of 2
pH (pH)	**GS-GSA-MW-4**	**3.896**	**3.699**	**3/1/2023**	**3.5**	**Yes**	**17**	**n/a**	**3.798**	**0.05044**	**0**	**None**	**No**	**0.001253**	**Param Intra 1 of 2**
pH (pH)	GS-GSA-MW-8	7.149	6.399	2/28/2023	6.93	No	17	n/a	6.774	0.1922	0	None	No	0.001253	Param Intra 1 of 2
pH (pH)	MW-1	5.249	5.046	2/20/2023	5.07	No	23	n/a	5.147	0.05471	0	None	No	0.001253	Param Intra 1 of 2
pH (pH)	**MW-2**	**6.145**	**5.788**	**2/20/2023**	**6.24**	**Yes**	**23**	**n/a**	**5.967**	**0.09604**	**0**	**None**	**No**	**0.001253**	**Param Intra 1 of 2**
pH (pH)	**MW-3**	**5.987**	**4.38**	**2/20/2023**	**6.01**	**Yes**	**23**	**n/a**	**149.3**	**35.15**	**0**	**None**	**x^3**	**0.001253**	**Param Intra 1 of 2**
pH (pH)	**MW-4**	**6.237**	**6.076**	**2/21/2023**	**6.35**	**Yes**	**23**	**n/a**	**6.157**	**0.04323**	**0**	**None**	**No**	**0.001253**	**Param Intra 1 of 2**
Sulfate (mg/L)	GS-GSA-MW-3	3163	n/a	2/27/2023	2770	No	16	n/a	2.3e10	4.4e9	0	None	x^3	0.002505	Param Intra 1 of 2
Sulfate (mg/L)	**GS-GSA-MW-4**	**653.2**	**n/a**	**3/1/2023**	**2130**	**Yes**	**16**	**n/a**	**569.6**	**42.43**	**0**	**None**	**No**	**0.002505**	**Param Intra 1 of 2**
Sulfate (mg/L)	GS-GSA-MW-8	2169	n/a	2/28/2023	1390	No	16	n/a	1541	318.8	0	None	No	0.002505	Param Intra 1 of 2
Sulfate (mg/L)	MW-1	1653	n/a	2/20/2023	1520	No	22	n/a	1456	105.3	0	None	No	0.002505	Param Intra 1 of 2
Sulfate (mg/L)	MW-2	1257	n/a	2/20/2023	767	No	23	n/a	1001	137.9	0	None	No	0.002505	Param Intra 1 of 2
Sulfate (mg/L)	MW-3	3195	n/a	2/20/2023	2110	No	23	n/a	2487	381.4	0	None	No	0.002505	Param Intra 1 of 2
Sulfate (mg/L)	MW-4	3107	n/a	2/21/2023	1930	No	22	n/a	2505	321.9	0	None	No	0.002505	Param Intra 1 of 2
Total dissolved solids (mg/L)	GS-GSA-MW-3	5170	n/a	2/27/2023	5000	No	16	n/a	n/a	n/a	0	n/a	n/a	0.006456	NP Intra (normality) 1 of 2
Total dissolved solids (mg/L)	**GS-GSA-MW-4**	**1084**	**n/a**	**3/1/2023**	**3310**	**Yes**	**16**	**n/a**	**987.9**	**48.59**	**0**	**None**	**No**	**0.002505**	**Param Intra 1 of 2**
Total dissolved solids (mg/L)	GS-GSA-MW-8	4017	n/a	2/28/2023	2620	No	16	n/a	2978	527.4	0	None	No	0.002505	Param Intra 1 of 2
Total dissolved solids (mg/L)	MW-1	2516	n/a	2/20/2023	2280	No	22	n/a	2201	168.2	0	None	No	0.002505	Param Intra 1 of 2
Total dissolved solids (mg/L)	MW-2	2005	n/a	2/20/2023	1420	No	23	n/a	1648	192.4	0	None	No	0.002505	Param Intra 1 of 2
Total dissolved solids (mg/L)	MW-3	4954	n/a	2/20/2023	3230	No	23	n/a	3773	635.9	0	None	No	0.002505	Param Intra 1 of 2
Total dissolved solids (mg/L)	MW-4	4484	n/a	2/21/2023	3160	No	22	n/a	5.8e10	1.7e10	0	None	x^3	0.002505	Param Intra 1 of 2

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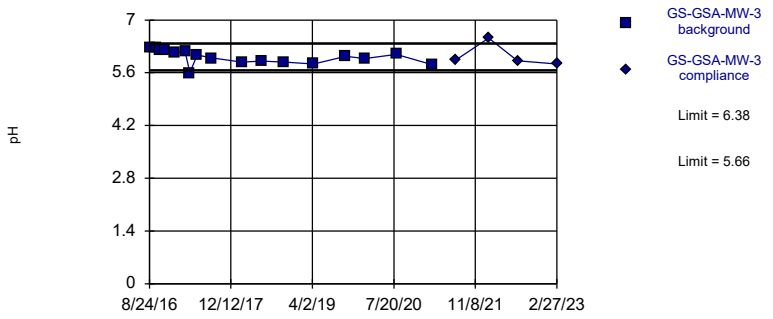
Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=6.02, Std. Dev.=0.1846, n=17. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9599, critical = 0.851. Kappa = 1.951 (c=7, w=3, 1 of 2, event alpha = 0.05132). Report alpha = 0.002505.

Constituent: pH Analysis Run 5/18/2023 1:16 PM View: AIII

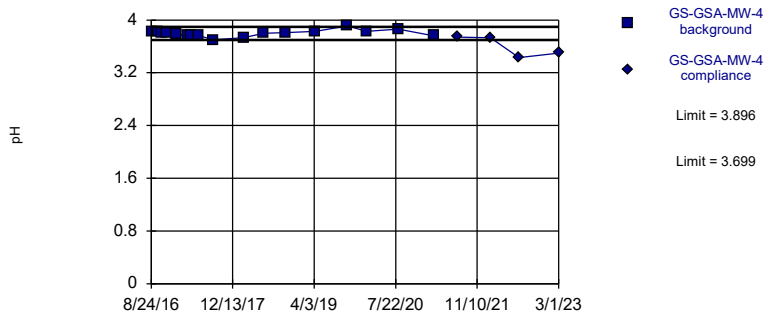
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.37 . UG

Exceeds Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=3.798, Std. Dev.=0.05044, n=17. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9673, critical = 0.851. Kappa = 1.951 (c=7, w=3, 1 of 2, event alpha = 0.05132). Report alpha = 0.002505.

Constituent: pH Analysis Run 5/18/2023 1:16 PM View: AIII

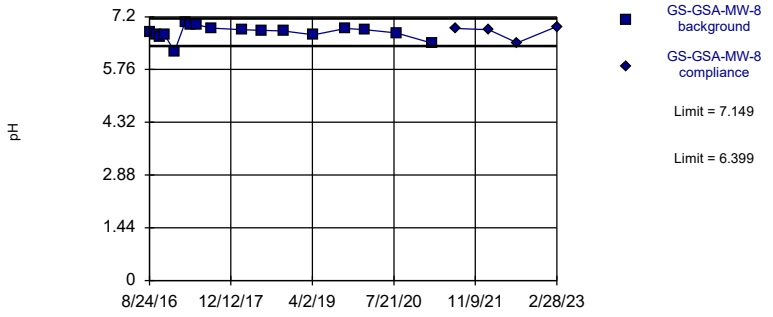
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.37 . UG

Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=6.774, Std. Dev.=0.1922, n=17. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9038, critical = 0.851. Kappa = 1.951 (c=7, w=3, 1 of 2, event alpha = 0.05132). Report alpha = 0.002505.

Constituent: pH Analysis Run 5/18/2023 1:16 PM View: AIII

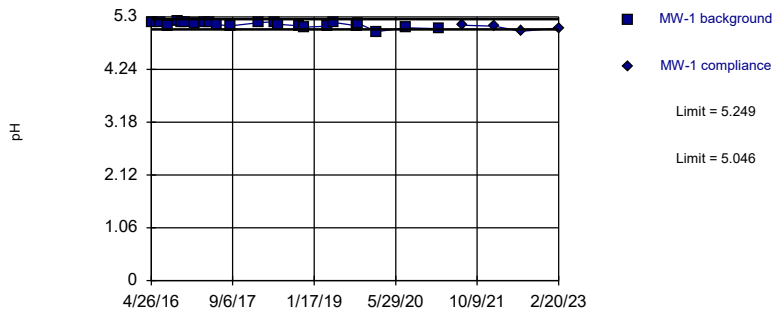
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.37 . UG

Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=5.147, Std. Dev.=0.05471, n=23. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8955, critical = 0.881. Kappa = 1.857 (c=7, w=3, 1 of 2, event alpha = 0.05132). Report alpha = 0.002505.

Constituent: pH Analysis Run 5/18/2023 1:16 PM View: AIII

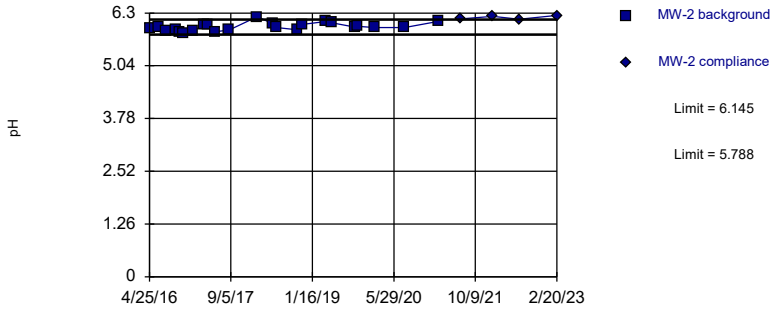
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.37 . UG

Exceeds Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=5.967, Std. Dev.=0.09604, n=23. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9622, critical = 0.881. Kappa = 1.857 (c=7, w=3, 1 of 2, event alpha = 0.05132). Report alpha = 0.002505.

Constituent: pH Analysis Run 5/18/2023 1:16 PM View: AIII

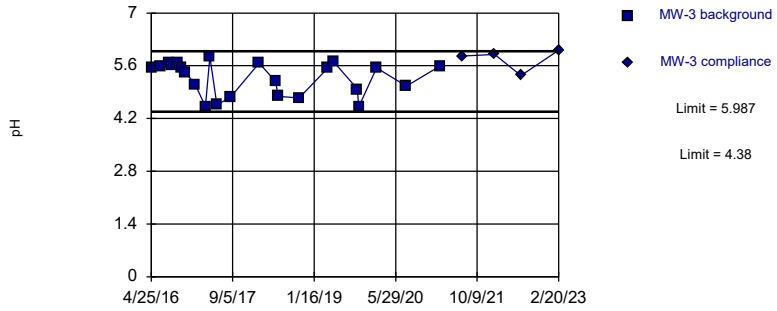
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.37 . UG

Exceeds Limits

Prediction Limit

Intrawell Parametric



Background Data Summary (based on cube transformation): Mean=149.3, Std. Dev.=35.15, n=23. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8845, critical = 0.881. Kappa = 1.857 (c=7, w=3, 1 of 2, event alpha = 0.05132). Report alpha = 0.002505.

Constituent: pH Analysis Run 5/18/2023 1:16 PM View: AIII

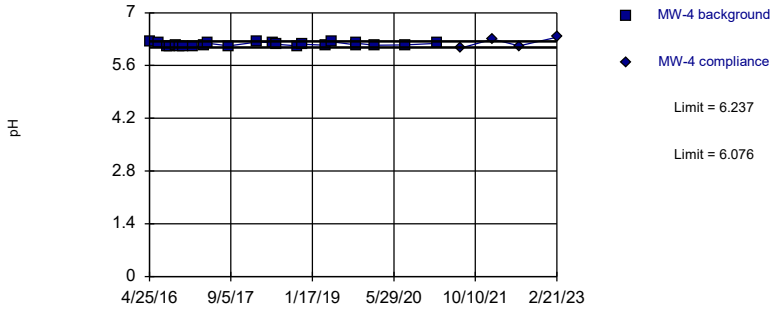
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.37 . UG

Exceeds Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=6.157, Std. Dev.=0.04323, n=23. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9401, critical = 0.881. Kappa = 1.857 (c=7, w=3, 1 of 2, event alpha = 0.05132). Report alpha = 0.002505.

Constituent: pH Analysis Run 5/18/2023 1:16 PM View: AIII

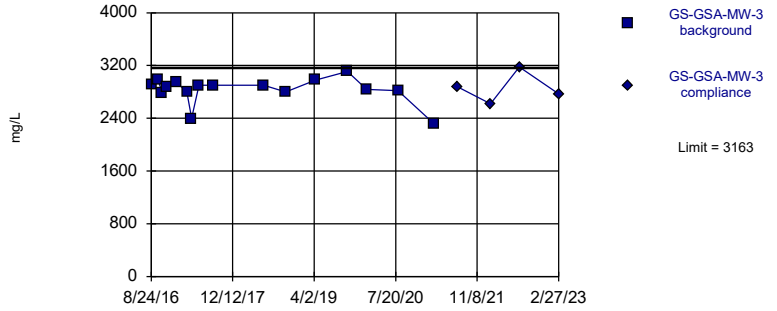
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.37 . UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on cube transformation): Mean=2.3e10, Std. Dev.=4.4e9, n=16. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8468, critical = 0.844. Kappa = 1.97 (c=7, w=3, 1 of 2, event alpha = 0.05132). Report alpha = 0.002505.

Constituent: Sulfate Analysis Run 5/18/2023 1:16 PM View: AIII

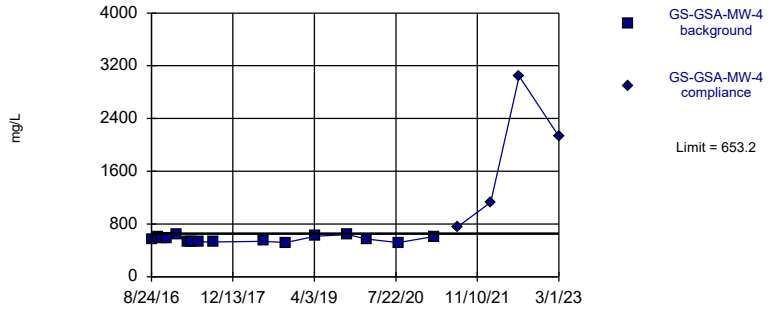
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.37 . UG

Exceeds Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=569.6, Std. Dev.=42.43, n=16. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8989, critical = 0.844. Kappa = 1.97 (c=7, w=3, 1 of 2, event alpha = 0.05132). Report alpha = 0.002505.

Constituent: Sulfate Analysis Run 5/18/2023 1:16 PM View: AIII

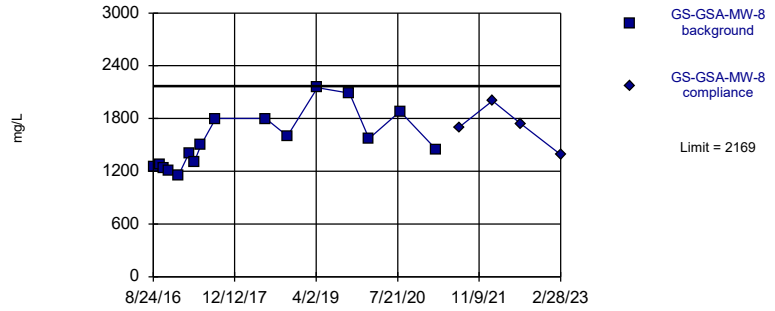
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.37 . UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=1541, Std. Dev.=318.8, n=16. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9147, critical = 0.844. Kappa = 1.97 (c=7, w=3, 1 of 2, event alpha = 0.05132). Report alpha = 0.002505.

Constituent: Sulfate Analysis Run 5/18/2023 1:16 PM View: AIII

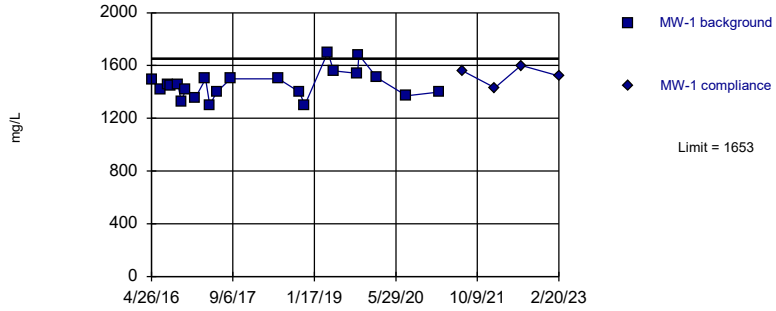
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.37 . UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=1456, Std. Dev.=105.3, n=22. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9431, critical = 0.878. Kappa = 1.869 (c=7, w=3, 1 of 2, event alpha = 0.05132). Report alpha = 0.002505.

Constituent: Sulfate Analysis Run 5/18/2023 1:16 PM View: AIII

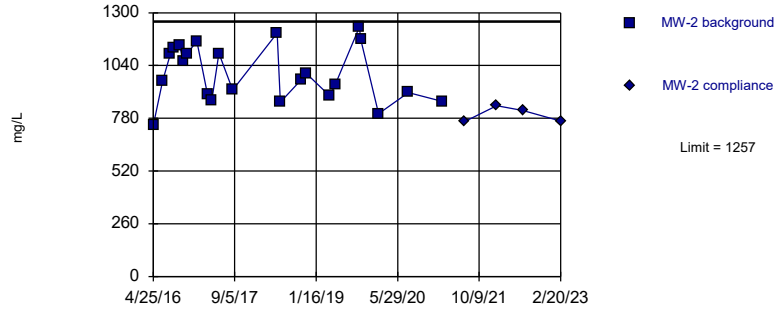
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.37 . UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=1001, Std. Dev.=137.9, n=23. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9535, critical = 0.881. Kappa = 1.857 (c=7, w=3, 1 of 2, event alpha = 0.05132). Report alpha = 0.002505.

Constituent: Sulfate Analysis Run 5/18/2023 1:16 PM View: AIII

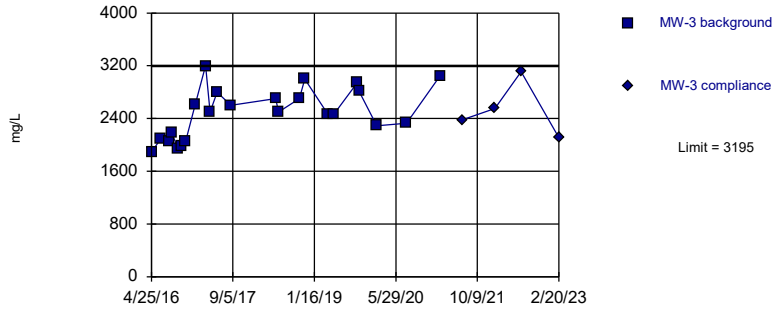
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.37 . UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=2487, Std. Dev.=381.4, n=23. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.964, critical = 0.881. Kappa = 1.857 (c=7, w=3, 1 of 2, event alpha = 0.05132). Report alpha = 0.002505.

Constituent: Sulfate Analysis Run 5/18/2023 1:16 PM View: AIII

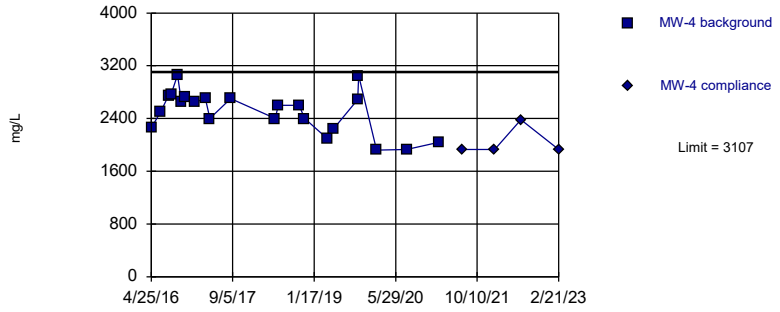
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.37 . UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=2505, Std. Dev.=321.9, n=22. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.945, critical = 0.878. Kappa = 1.869 (c=7, w=3, 1 of 2, event alpha = 0.05132). Report alpha = 0.002505.

Constituent: Sulfate Analysis Run 5/18/2023 1:16 PM View: AIII

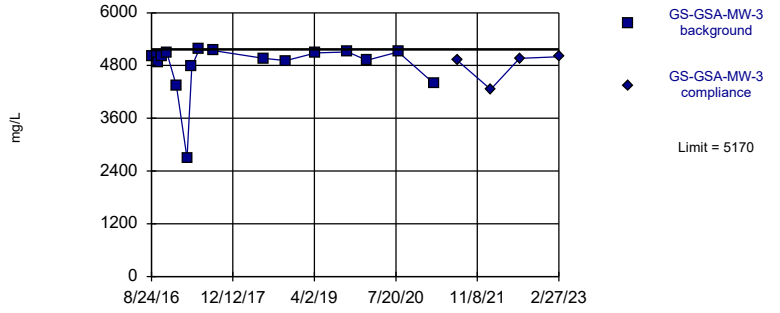
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.37 . UG

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 16 background values. Well-constituent pair annual alpha = 0.01287. Individual comparison alpha = 0.006456 (1 of 2).

Constituent: Total dissolved solids Analysis Run 5/18/2023 1:16 PM View: AIII

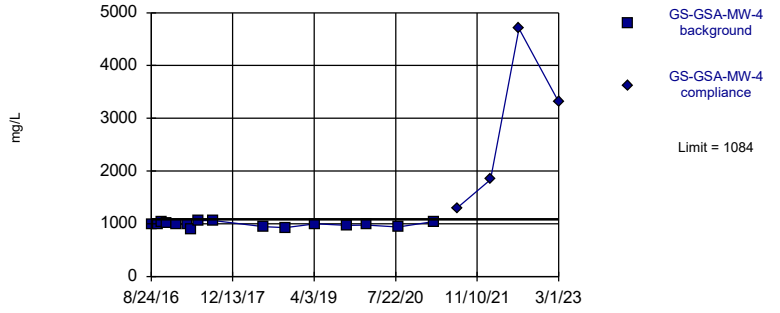
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.37 . UG

Exceeds Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=987.9, Std. Dev.=48.59, n=16. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9659, critical = 0.844. Kappa = 1.97 (c=7, w=3, 1 of 2, event alpha = 0.05132). Report alpha = 0.002505.

Constituent: Total dissolved solids Analysis Run 5/18/2023 1:16 PM View: AIII

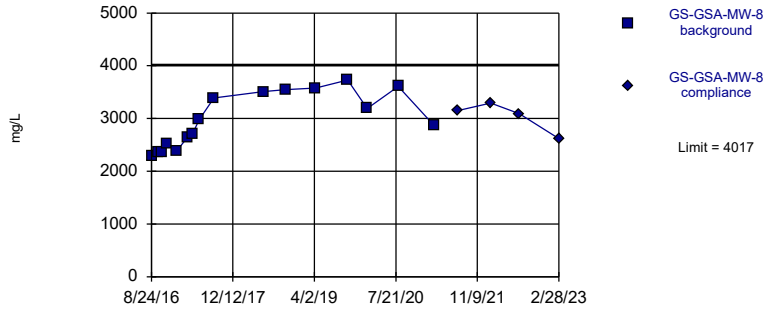
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.37 . UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=2978, Std. Dev.=527.4, n=16. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8919, critical = 0.844. Kappa = 1.97 (c=7, w=3, 1 of 2, event alpha = 0.05132). Report alpha = 0.002505.

Constituent: Total dissolved solids Analysis Run 5/18/2023 1:16 PM View: AIII

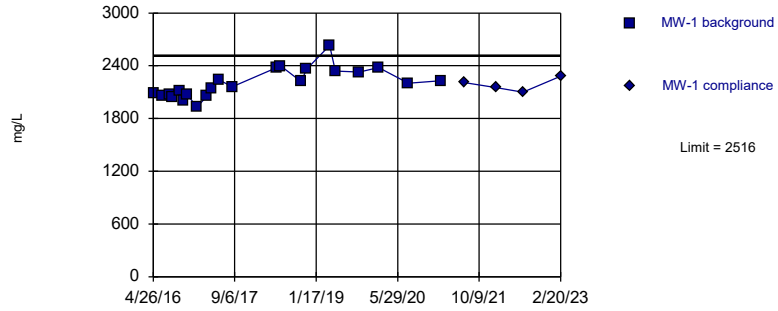
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.37 . UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=2201, Std. Dev.=168.2, n=22. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9467, critical = 0.878. Kappa = 1.869 (c=7, w=3, 1 of 2, event alpha = 0.05132). Report alpha = 0.002505.

Constituent: Total dissolved solids Analysis Run 5/18/2023 1:16 PM View: AIII

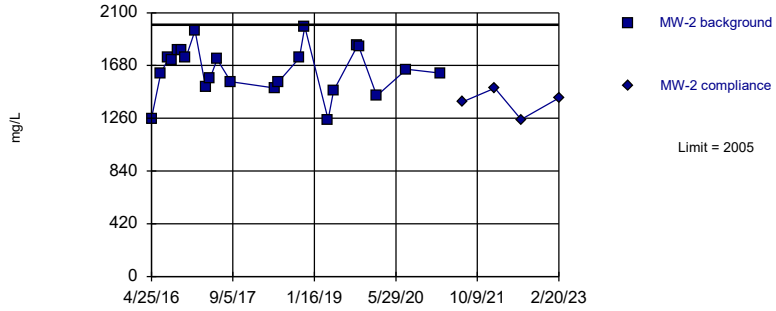
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.37 . UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=1648, Std. Dev.=192.4, n=23. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.968, critical = 0.881. Kappa = 1.857 (c=7, w=3, 1 of 2, event alpha = 0.05132). Report alpha = 0.002505.

Constituent: Total dissolved solids Analysis Run 5/18/2023 1:16 PM View: AIII

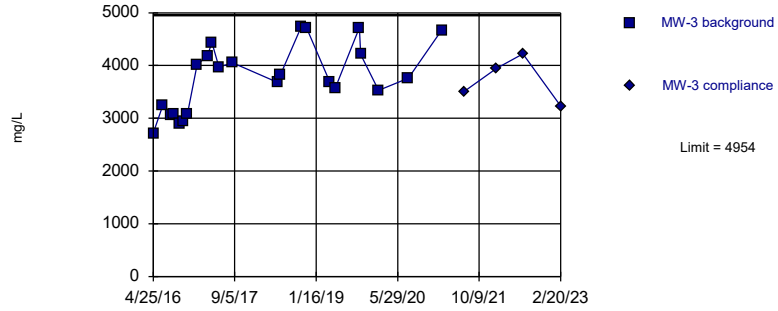
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.37 . UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=3773, Std. Dev.=635.9, n=23. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9443, critical = 0.881. Kappa = 1.857 (c=7, w=3, 1 of 2, event alpha = 0.05132). Report alpha = 0.002505.

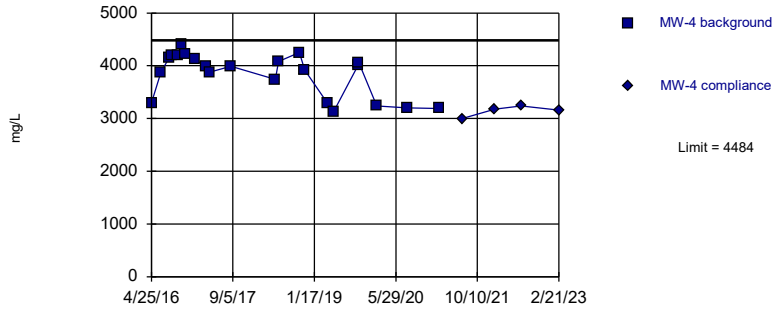
Constituent: Total dissolved solids Analysis Run 5/18/2023 1:16 PM View: AIII

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on cube transformation): Mean=5.8e10, Std. Dev.=1.7e10, n=22. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8912, critical = 0.878. Kappa = 1.869 (c=7, w=3, 1 of 2, event alpha = 0.05132). Report alpha = 0.002505.

Constituent: Total dissolved solids Analysis Run 5/18/2023 1:16 PM View: AIII

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Prediction Limit

Constituent: pH (pH) Analysis Run 5/18/2023 1:18 PM View: AIII

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-3	GS-GSA-MW-3
8/24/2016	6.28	
10/3/2016	6.28	
10/26/2016	6.19	
11/21/2016	6.2	
1/17/2017	6.13	
3/20/2017	6.17	
4/17/2017	5.6	
5/30/2017	6.07	
8/24/2017	5.99	
2/13/2018	5.88	
6/11/2018	5.91	
10/17/2018	5.88	
4/10/2019	5.83	
10/14/2019	6.04	
2/3/2020	5.98	
8/4/2020	6.09	
3/1/2021	5.82	
7/14/2021		5.93
1/26/2022		6.52
7/13/2022		5.92
2/27/2023		5.83

Prediction Limit

Constituent: pH (pH) Analysis Run 5/18/2023 1:18 PM View: AIII

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-4	GS-GSA-MW-4
8/24/2016	3.83 (E)	
10/3/2016	3.82 (E)	
10/26/2016	3.81 (E)	
11/21/2016	3.81	
1/17/2017	3.78	
3/21/2017	3.76	
4/17/2017	3.76	
5/30/2017	3.76	
8/24/2017	3.7	
2/13/2018	3.73	
6/11/2018	3.8	
10/17/2018	3.81	
4/10/2019	3.83	
10/14/2019	3.91	
2/4/2020	3.83	
8/5/2020	3.86	
3/3/2021	3.76	
7/14/2021		3.74
1/27/2022		3.73
7/13/2022		3.43
3/1/2023		3.5

Prediction Limit

Constituent: pH (pH) Analysis Run 5/18/2023 1:18 PM View: AIII

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-8	GS-GSA-MW-8
8/24/2016	6.78	
10/3/2016	6.71	
10/26/2016	6.65	
11/21/2016	6.7	
1/17/2017	6.25	
3/20/2017	7.04	
4/18/2017	6.99	
5/30/2017	6.98	
8/24/2017	6.89	
2/13/2018	6.85	
6/12/2018	6.83	
10/17/2018	6.81	
4/10/2019	6.71	
10/14/2019	6.88	
2/4/2020	6.85	
8/5/2020	6.76	
3/1/2021	6.48	
7/14/2021		6.88
1/27/2022		6.85
7/12/2022		6.49
2/28/2023		6.93

Prediction Limit

Constituent: pH (pH) Analysis Run 5/18/2023 1:18 PM View: AIII

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	MW-1	MW-1
4/26/2016	5.2	
6/20/2016	5.18	
8/8/2016	5.12	
10/3/2016	5.21	
10/26/2016	5.2	
11/21/2016	5.19	
1/17/2017	5.17	
3/22/2017	5.2	
4/18/2017	5.2	
5/30/2017	5.14	
8/23/2017	5.12	
2/13/2018	5.18	
5/22/2018	5.2	
6/12/2018	5.15	
10/17/2018	5.12	
11/19/2018	5.09	
4/10/2019	5.11	
5/14/2019	5.19	
10/8/2019	5.12	
10/16/2019	5.16	
2/3/2020	5	
8/3/2020	5.08	
2/22/2021	5.06	
7/12/2021		5.13
1/25/2022		5.11
7/5/2022		5.01
2/20/2023		5.07

Prediction Limit

Constituent: pH (pH) Analysis Run 5/18/2023 1:18 PM View: AIII

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	MW-2	MW-2
4/25/2016	5.94	
6/20/2016	5.96	
8/8/2016	5.88	
10/3/2016	5.91	
10/26/2016	5.84	
11/21/2016	5.82	
1/17/2017	5.87	
3/22/2017	6.01	
4/18/2017	6.02	
5/31/2017	5.85	
8/23/2017	5.89	
2/13/2018	6.21	
5/22/2018	6.04	
6/12/2018	5.95	
10/17/2018	5.9	
11/19/2018	6.03	
4/10/2019	6.1	
5/14/2019	6.07	
10/8/2019	5.96	
10/16/2019	5.98	
2/3/2020	5.95	
8/3/2020	5.95	
2/22/2021	6.1	
7/12/2021		6.16
1/25/2022		6.22
7/5/2022		6.15
2/20/2023		6.24

Prediction Limit

Constituent: pH (pH) Analysis Run 5/18/2023 1:18 PM View: AIII

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	MW-3	MW-3
4/25/2016	5.56	
6/22/2016	5.57	
8/9/2016	5.67	
8/24/2016	5.63	
10/4/2016	5.69	
10/26/2016	5.56	
11/21/2016	5.42	
1/18/2017	5.11	
3/22/2017	4.52	
4/18/2017	5.84	
5/31/2017	4.56	
8/23/2017	4.77	
2/13/2018	5.67	
5/24/2018	5.19	
6/12/2018	4.79	
10/17/2018	4.75	
11/19/2018	3.77 (o)	
4/10/2019	5.54	
5/14/2019	5.71	
10/8/2019	4.98	
10/16/2019	4.51	
2/3/2020	5.54	
8/3/2020	5.06	
2/22/2021	5.59	
7/12/2021		5.86
1/25/2022		5.9
7/5/2022		5.34
2/20/2023		6.01

Prediction Limit

Constituent: pH (pH) Analysis Run 5/18/2023 1:18 PM View: AIII

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	MW-4	MW-4
4/25/2016	6.22	
6/20/2016	6.21	
8/9/2016	6.11	
8/24/2016	6.11	
10/3/2016	6.13	
10/26/2016	6.12	
11/21/2016	6.09	
1/18/2017	6.09	
3/22/2017	6.15	
4/18/2017	6.19	
8/23/2017	6.12	
2/13/2018	6.22	
5/23/2018	6.21	
6/12/2018	6.16	
10/17/2018	6.12	
11/19/2018	6.16	
4/10/2019	6.14	
5/14/2019	6.23	
10/10/2019	6.15	
10/16/2019	6.19	
2/3/2020	6.14	
8/5/2020	6.15	
2/22/2021	6.19	
7/12/2021		6.06
1/25/2022		6.3
7/5/2022		6.12
2/21/2023		6.35

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 5/18/2023 1:18 PM View: AIII

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-3	GS-GSA-MW-3
8/24/2016	2910	
10/3/2016	2980	
10/26/2016	2790	
11/21/2016	2880	
1/17/2017	2950	
3/20/2017	2800	
4/17/2017	2400	
5/30/2017	2900	
8/24/2017	2900	
6/11/2018	2900	
10/17/2018	2800	
4/10/2019	2980	
10/14/2019	3110	
2/3/2020	2840	
8/4/2020	2820	
3/1/2021	2320	
7/14/2021		2880
1/26/2022		2620
7/13/2022		3180
2/27/2023		2770

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 5/18/2023 1:18 PM View: AIII

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-4	GS-GSA-MW-4
8/24/2016	567	
10/3/2016	596	
10/26/2016	585	
11/21/2016	593	
1/17/2017	637	
3/21/2017	530	
4/17/2017	530	
5/30/2017	530	
8/24/2017	530	
6/11/2018	540	
10/17/2018	520	
4/10/2019	616	
10/14/2019	641	
2/4/2020	571	
8/5/2020	519	
3/3/2021	609	
7/14/2021		752
1/27/2022		1130
7/13/2022		3040
3/1/2023		2130

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 5/18/2023 1:18 PM View: AIII

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-8	GS-GSA-MW-8
8/24/2016	1250	
10/3/2016	1270	
10/26/2016	1240	
11/21/2016	1210	
1/17/2017	1150	
3/20/2017	1400	
4/18/2017	1300	
5/30/2017	1500	
8/24/2017	1800	
6/12/2018	1800	
10/17/2018	1600	
4/10/2019	2150	
10/14/2019	2090	
2/4/2020	1570	
8/5/2020	1880	
3/1/2021	1450	
7/14/2021		1700
1/27/2022		2000
7/12/2022		1740
2/28/2023		1390

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 5/18/2023 1:18 PM View: AIII

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	MW-1	MW-1
4/26/2016	1490	
6/20/2016	1420	
8/8/2016	1460	
8/24/2016	1450	
10/3/2016	1460	
10/26/2016	1330	
11/21/2016	1420	
1/17/2017	1350	
3/22/2017	1500	
4/18/2017	1300	
5/30/2017	1400	
8/23/2017	1500	
5/22/2018	2100 (o)	
6/12/2018	1500	
10/17/2018	1400	
11/19/2018	1300	
4/10/2019	1700	
5/14/2019	1560	
10/8/2019	1540	
10/16/2019	1680	
2/3/2020	1510	
8/3/2020	1370	
2/22/2021	1400	
7/12/2021		1560
1/25/2022		1430
7/5/2022		1600
2/20/2023		1520

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 5/18/2023 1:18 PM View: AIII

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	MW-2	MW-2
4/25/2016	745	
6/20/2016	964	
8/8/2016	1100	
8/24/2016	1130	
10/3/2016	1140	
10/26/2016	1060	
11/21/2016	1100	
1/17/2017	1160	
3/22/2017	900	
4/18/2017	870	
5/31/2017	1100	
8/23/2017	920	
5/22/2018	1200	
6/12/2018	860	
10/17/2018	970	
11/19/2018	1000	
4/10/2019	889	
5/14/2019	948	
10/8/2019	1230	
10/16/2019	1170	
2/3/2020	803	
8/3/2020	907	
2/22/2021	864	
7/12/2021		763
1/25/2022		842
7/5/2022		819
2/20/2023		767

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 5/18/2023 1:18 PM View: AIII

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	MW-3	MW-3
4/25/2016	1890	
6/22/2016	2100	
8/9/2016	2050	
8/24/2016	2190	
10/4/2016	1950	
10/26/2016	1980	
11/21/2016	2060	
1/18/2017	2620	
3/22/2017	3200	
4/18/2017	2500	
5/31/2017	2800	
8/23/2017	2600	
5/24/2018	2700	
6/12/2018	2500	
10/17/2018	2700	
11/19/2018	3000	
4/10/2019	2460	
5/14/2019	2460	
10/8/2019	2950	
10/16/2019	2820	
2/3/2020	2290	
8/3/2020	2330	
2/22/2021	3040	
7/12/2021		2380
1/25/2022		2550
7/5/2022		3110
2/20/2023		2110

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 5/18/2023 1:18 PM View: AIII

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	MW-4	MW-4
4/25/2016	2260	
6/20/2016	2500	
8/9/2016	2750	
8/24/2016	2770	
10/3/2016	3060	
10/26/2016	2650	
11/21/2016	2720	
1/18/2017	2650	
3/22/2017	2700	
4/18/2017	2400	
8/23/2017	2700	
5/23/2018	2400	
6/12/2018	2600	
10/17/2018	2600	
11/19/2018	2400	
4/10/2019	2090	
5/14/2019	2240	
10/10/2019	2690	
10/16/2019	3050	
2/3/2020	1920	
8/5/2020	1930	
2/22/2021	2040	
7/12/2021		1930
1/25/2022		1930
7/5/2022		2380
2/21/2023		1930

Prediction Limit

Constituent: Total dissolved solids (mg/L) Analysis Run 5/18/2023 1:18 PM View: AIII

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-3	GS-GSA-MW-3
8/24/2016	5020	
10/3/2016	4880	
10/26/2016	5020	
11/21/2016	5090	
1/17/2017	4330	
3/20/2017	2690	
4/17/2017	4780	
5/30/2017	5170	
8/24/2017	5140	
6/11/2018	4960	
10/17/2018	4910	
4/10/2019	5090	
10/14/2019	5110	
2/3/2020	4920	
8/4/2020	5110	
3/1/2021	4390	
7/14/2021		4920
1/26/2022		4260
7/13/2022		4960
2/27/2023		5000

Prediction Limit

Constituent: Total dissolved solids (mg/L) Analysis Run 5/18/2023 1:18 PM View: AIII

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-4	GS-GSA-MW-4
8/24/2016	992	
10/3/2016	988	
10/26/2016	1030	
11/21/2016	1020	
1/17/2017	988	
3/21/2017	990	
4/17/2017	884	
5/30/2017	1060	
8/24/2017	1060	
6/11/2018	944	
10/17/2018	928	
4/10/2019	1000	
10/14/2019	967	
2/4/2020	978	
8/5/2020	938	
3/3/2021	1040	
7/14/2021		1300
1/27/2022		1840
7/13/2022		4700
3/1/2023		3310

Prediction Limit

Constituent: Total dissolved solids (mg/L) Analysis Run 5/18/2023 1:18 PM View: AIII

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-8	GS-GSA-MW-8
8/24/2016	2280	
10/3/2016	2370	
10/26/2016	2350	
11/21/2016	2530	
1/17/2017	2380	
3/20/2017	2630	
4/18/2017	2700	
5/30/2017	2980	
8/24/2017	3390	
6/12/2018	3510	
10/17/2018	3550	
4/10/2019	3580	
10/14/2019	3730	
2/4/2020	3190	
8/5/2020	3610	
3/1/2021	2870	
7/14/2021		3150
1/27/2022		3290
7/12/2022		3090
2/28/2023		2620

Prediction Limit

Constituent: Total dissolved solids (mg/L) Analysis Run 5/18/2023 1:18 PM View: AIII

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	MW-1	MW-1
4/26/2016	2080	
6/20/2016	2060	
8/8/2016	2070	
8/24/2016	2040	
10/3/2016	2110	
10/26/2016	2000	
11/21/2016	2070	
1/17/2017	1930	
3/22/2017	2060	
4/18/2017	2140	
5/30/2017	2240	
8/23/2017	2160	
5/22/2018	2380	
6/12/2018	2400	
10/17/2018	2220	
11/19/2018	2360	
4/10/2019	2630	
5/14/2019	2340	
10/8/2019	2330	
10/16/2019	3650 (o)	
2/3/2020	2380	
8/3/2020	2200	
2/22/2021	2230	
7/12/2021		2210
1/25/2022		2150
7/5/2022		2100
2/20/2023		2280

Prediction Limit

Constituent: Total dissolved solids (mg/L) Analysis Run 5/18/2023 1:18 PM View: AIII

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	MW-2	MW-2
4/25/2016	1260	
6/20/2016	1620	
8/8/2016	1740	
8/24/2016	1720	
10/3/2016	1800	
10/26/2016	1800	
11/21/2016	1740	
1/17/2017	1960	
3/22/2017	1510	
4/18/2017	1580	
5/31/2017	1730	
8/23/2017	1550	
5/22/2018	1500	
6/12/2018	1550	
10/17/2018	1740	
11/19/2018	1990	
4/10/2019	1250	
5/14/2019	1480	
10/8/2019	1840	
10/16/2019	1830	
2/3/2020	1440	
8/3/2020	1650	
2/22/2021	1620	
7/12/2021		1390
1/25/2022		1500
7/5/2022		1250
2/20/2023		1420

Prediction Limit

Constituent: Total dissolved solids (mg/L) Analysis Run 5/18/2023 1:18 PM View: AIII

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	MW-3	MW-3
4/25/2016	2720	
6/22/2016	3250	
8/9/2016	3050	
8/24/2016	3080	
10/4/2016	2900	
10/26/2016	2940	
11/21/2016	3090	
1/18/2017	4020	
3/22/2017	4180	
4/18/2017	4440	
5/31/2017	3970	
8/23/2017	4050	
5/24/2018	3680	
6/12/2018	3820	
10/17/2018	4730	
11/19/2018	4710	
4/10/2019	3680	
5/14/2019	3580	
10/8/2019	4720	
10/16/2019	4210	
2/3/2020	3530	
8/3/2020	3760	
2/22/2021	4670	
7/12/2021		3510
1/25/2022		3950
7/5/2022		4220
2/20/2023		3230

Prediction Limit

Constituent: Total dissolved solids (mg/L) Analysis Run 5/18/2023 1:18 PM View: AIII

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	MW-4	MW-4
4/25/2016	3300	
6/20/2016	3870	
8/9/2016	4140	
8/24/2016	4190	
10/3/2016	4190	
10/26/2016	4400	
11/21/2016	4230	
1/18/2017	4120	
3/22/2017	3980	
4/18/2017	3880	
8/23/2017	3990	
5/23/2018	3740	
6/12/2018	4080	
10/17/2018	4250	
11/19/2018	3920	
4/10/2019	3280	
5/14/2019	3130 (D)	
10/10/2019	4000	
10/16/2019	4060	
2/3/2020	3240	
8/5/2020	3200	
2/22/2021	3190	
7/12/2021		3000
1/25/2022		3180
7/5/2022		3240
2/21/2023		3160

FIGURE E.

Interwell Prediction Limits - Significant Results

Plant Gorgas Client: Southern Company Data: Gorgas GSA Printed 5/18/2023, 1:21 PM

Constituent	Well	Upper Lim.	Date	Observ.	Sig.	Bg N	Bg Wells	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	**GS-GSA-MW-3**	**0.1015**	**2/27/2023**	**2.78**	**Yes**	**106**	**MW-1,MW-2,MW-3,MW-4**	**n/a**	**n/a**	**24.53**	**n/a**	**n/a**	**0.0001761**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**GS-GSA-MW-4**	**0.1015**	**3/1/2023**	**8.02**	**Yes**	**106**	**MW-1,MW-2,MW-3,MW-4**	**n/a**	**n/a**	**24.53**	**n/a**	**n/a**	**0.0001761**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**GS-GSA-MW-8**	**0.1015**	**2/28/2023**	**1.91**	**Yes**	**106**	**MW-1,MW-2,MW-3,MW-4**	**n/a**	**n/a**	**24.53**	**n/a**	**n/a**	**0.0001761**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**GS-GSA-MW-3**	**431**	**2/27/2023**	**516**	**Yes**	**107**	**MW-2,MW-1,MW-3,MW-4**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0001732**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	**GS-GSA-MW-3**	**3.654**	**2/27/2023**	**254**	**Yes**	**107**	**MW-1,MW-2,MW-3,MW-4**	**0.7368**	**0.3346**	**2.804**	**None**	**ln(x)**	**0.002505**	**Param Inter 1 of 2**
Chloride (mg/L)	**GS-GSA-MW-4**	**3.654**	**3/1/2023**	**113**	**Yes**	**107**	**MW-1,MW-2,MW-3,MW-4**	**0.7368**	**0.3346**	**2.804**	**None**	**ln(x)**	**0.002505**	**Param Inter 1 of 2**
Chloride (mg/L)	**GS-GSA-MW-8**	**3.654**	**2/28/2023**	**86.9**	**Yes**	**107**	**MW-1,MW-2,MW-3,MW-4**	**0.7368**	**0.3346**	**2.804**	**None**	**ln(x)**	**0.002505**	**Param Inter 1 of 2**

Interwell Prediction Limits - All Results

Plant Gorgas Client: Southern Company Data: Gorgas GSA Printed 5/18/2023, 1:21 PM

Constituent	Well	Upper Lim.	Date	Observ.	Sig.	Bg N	Bg Wells	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	**GS-GSA-MW-3**	**0.1015**	**2/27/2023**	**2.78**	**Yes**	**106**	**MW-1,MW-2,MW-3,MW-4**	**n/a**	**n/a**	**24.53**	**n/a**	**n/a**	**0.0001761**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**GS-GSA-MW-4**	**0.1015**	**3/1/2023**	**8.02**	**Yes**	**106**	**MW-1,MW-2,MW-3,MW-4**	**n/a**	**n/a**	**24.53**	**n/a**	**n/a**	**0.0001761**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**GS-GSA-MW-8**	**0.1015**	**2/28/2023**	**1.91**	**Yes**	**106**	**MW-1,MW-2,MW-3,MW-4**	**n/a**	**n/a**	**24.53**	**n/a**	**n/a**	**0.0001761**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**GS-GSA-MW-3**	**431**	**2/27/2023**	**516**	**Yes**	**107**	**MW-2,MW-1,MW-3,MW-4**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0001732**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	GS-GSA-MW-4	431	3/1/2023	327	No	107	MW-2,MW-1,MW-3,MW-4	n/a	n/a	0	n/a	n/a	0.0001732	NP Inter (normality) 1 of 2
Calcium (mg/L)	GS-GSA-MW-8	431	2/28/2023	353	No	107	MW-2,MW-1,MW-3,MW-4	n/a	n/a	0	n/a	n/a	0.0001732	NP Inter (normality) 1 of 2
Chloride (mg/L)	**GS-GSA-MW-3**	**3.654**	**2/27/2023**	**254**	**Yes**	**107**	**MW-1,MW-2,MW-3,MW-4**	**0.7368**	**0.3346**	**2.804**	**None**	**ln(x)**	**0.002505**	**Param Inter 1 of 2**
Chloride (mg/L)	**GS-GSA-MW-4**	**3.654**	**3/1/2023**	**113**	**Yes**	**107**	**MW-1,MW-2,MW-3,MW-4**	**0.7368**	**0.3346**	**2.804**	**None**	**ln(x)**	**0.002505**	**Param Inter 1 of 2**
Chloride (mg/L)	**GS-GSA-MW-8**	**3.654**	**2/28/2023**	**86.9**	**Yes**	**107**	**MW-1,MW-2,MW-3,MW-4**	**0.7368**	**0.3346**	**2.804**	**None**	**ln(x)**	**0.002505**	**Param Inter 1 of 2**
Fluoride (mg/L)	GS-GSA-MW-3	0.63	2/27/2023	0.292	No	111	MW-2,MW-1,MW-3,MW-4	n/a	n/a	0.9009	n/a	n/a	0.0001615	NP Inter (normality) 1 of 2
Fluoride (mg/L)	GS-GSA-MW-4	0.63	3/1/2023	0.05ND	No	111	MW-2,MW-1,MW-3,MW-4	n/a	n/a	0.9009	n/a	n/a	0.0001615	NP Inter (normality) 1 of 2
Fluoride (mg/L)	GS-GSA-MW-8	0.63	2/28/2023	0.161	No	111	MW-2,MW-1,MW-3,MW-4	n/a	n/a	0.9009	n/a	n/a	0.0001615	NP Inter (normality) 1 of 2

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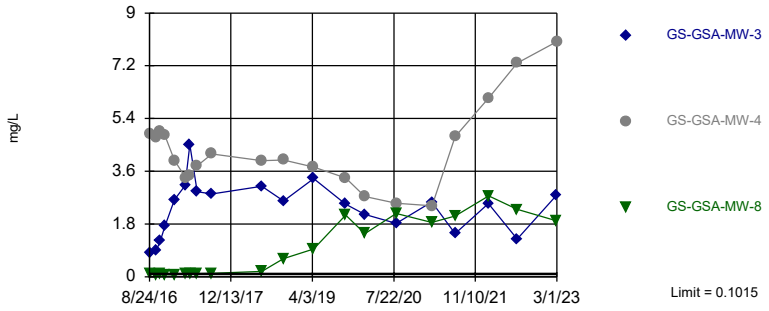
Exceeds Limit: GS-GSA-MW-3, GS-GSA-MW-4, GS-GSA-MW-8

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 106 background values. 24.53% NDs. Annual per-constituent alpha = 0.001056. Individual comparison alpha = 0.0001761 (1 of 2). Comparing 3 points to limit.

Constituent: Boron Analysis Run 5/18/2023 1:19 PM View: AIII

Plant Gorgas Client: Southern Company Data: Gorgas GSA

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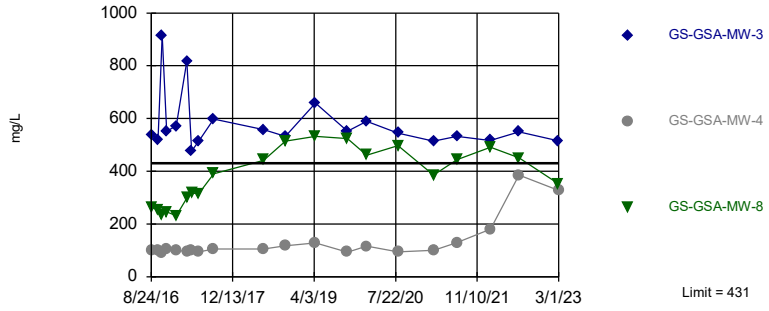
Exceeds Limit: GS-GSA-MW-3

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 107 background values. Annual per-constituent alpha = 0.001039. Individual comparison alpha = 0.0001732 (1 of 2). Comparing 3 points to limit.

Constituent: Calcium Analysis Run 5/18/2023 1:19 PM View: AIII

Plant Gorgas Client: Southern Company Data: Gorgas GSA

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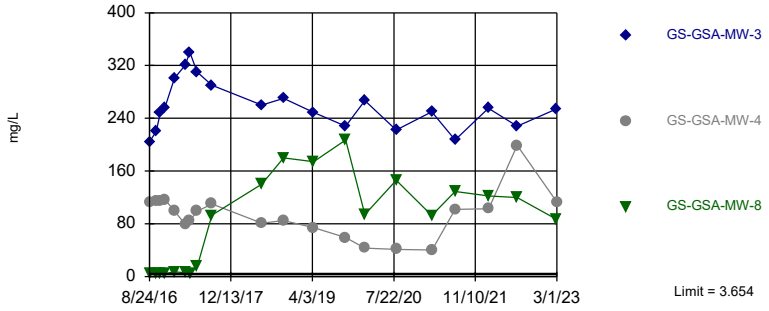
Exceeds Limit: GS-GSA-MW-3, GS-GSA-MW-4, GS-GSA-MW-8

Prediction Limit

Interwell Parametric



Background Data Summary (based on natural log transformation): Mean=0.7368, Std. Dev.=0.3346, n=107, 2.804% NDs. Normality test: Chi Squared @alpha = 0.01, calculated = 13.84, critical = 14.07. Kappa = 1.671 (c=7, w=3, 1 of 2, event alpha = 0.05132). Report alpha = 0.007498. Individual comparison alpha = 0.002505. Comparing 3 points to limit.

Constituent: Chloride Analysis Run 5/18/2023 1:19 PM View: AIII

Plant Gorgas Client: Southern Company Data: Gorgas GSA

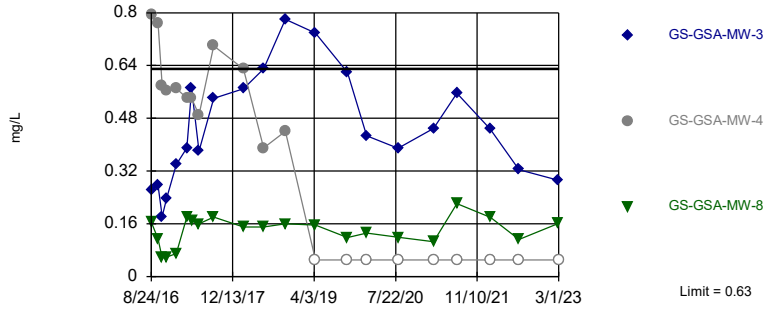
Sanitas™ v.9.6.37 . UG

Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 111 background values. 0.9009% NDs. Annual per-constituent alpha = 0.0009688. Individual comparison alpha = 0.0001615 (1 of 2). Comparing 3 points to limit.

Constituent: Fluoride Analysis Run 5/18/2023 1:19 PM View: AIII

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 5/18/2023 1:21 PM View: AIII

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	MW-3 (bg)	MW-4 (bg)	MW-2 (bg)	MW-1 (bg)	GS-GSA-MW-4	GS-GSA-MW-3	GS-GSA-MW-8
4/25/2016	0.028 (J)	0.0414 (J)	0.0241 (J)				
4/26/2016				0.0231 (J)			
6/20/2016		0.0434 (J)	0.0284 (J)	0.0227 (J)			
6/22/2016	0.0433 (J)						
8/8/2016			0.034 (J)	0.0278 (J)			
8/9/2016	0.0429 (J)	0.0453 (J)					
8/24/2016	0.0431 (J)	0.0451 (J)	0.0316 (J)	0.0247 (J)	4.88	0.799	0.0898 (J)
10/3/2016		0.0511 (J)	0.0367 (J)	0.0307 (J)	4.75	0.889	0.0821 (J)
10/4/2016	0.04 (J)						
10/26/2016	0.0375 (J)	0.0507 (J)	0.0331 (J)	0.0241 (J)	4.96	1.23	0.0889 (J)
11/21/2016	0.0406 (J)	0.0458 (J)	0.035 (J)	0.0202 (J)	4.82	1.72	0.0788 (J)
1/17/2017			0.0259 (J)	0.0201 (J)	3.97	2.63	0.0607 (J)
1/18/2017	0.0548 (J)	0.0445 (J)					
3/20/2017						3.11	0.114
3/21/2017					3.39		
3/22/2017	0.0344 (J)	0.0432 (J)	0.0243 (J)	0.0224 (J)			
4/17/2017					3.46	4.51	
4/18/2017	<0.1015	0.0409 (J)	0.0206 (J)	<0.1015			0.108
5/30/2017				<0.1015	3.79	2.9	0.105
5/31/2017	0.0454 (J)		0.0234 (J)				
8/23/2017	0.0425 (J)	0.042 (J)	0.0267 (J)	0.0253 (J)			
8/24/2017					4.19	2.83	0.12
5/22/2018			0.0251 (J)	0.0224 (J)			
5/23/2018		0.0433 (J)					
5/24/2018	0.0339 (J)						
6/11/2018					3.96	3.09	
6/12/2018	0.0371 (J)	0.0478 (J)	0.0275 (J)	0.0214 (J)			0.181
10/17/2018	0.0596 (J)	0.0468 (J)	0.0321 (J)	0.0216 (J)	3.98	2.59	0.616
11/19/2018	0.0514 (J)	0.0526 (J)	0.0324 (J)	0.0237 (J)			
4/10/2019	<0.1015	0.0438 (J)	<0.1015	0.0304 (J)	3.74	3.35	0.944
5/14/2019	<0.1015	<0.203 (o)	<0.1015	<0.1015			
10/8/2019	0.0537 (J)		0.0371 (J)	<0.1015			
10/10/2019		0.0487 (J)					
10/14/2019					3.37	2.48	2.11
10/16/2019	0.05 (J)	0.0505 (J)	0.0419 (J)	0.0385 (J)			
2/3/2020	<0.1015	0.0433 (J)	<0.1015	<0.1015		2.13	
2/4/2020					2.74		1.47
8/3/2020	0.0424 (J)		0.0317 (J)	<0.1015			
8/4/2020						1.82	
8/5/2020		0.0459 (J)			2.51		2.16
2/22/2021	<0.1015	0.0397 (J)	<0.1015	0.0307 (J)			
3/1/2021						2.55	1.85
3/3/2021					2.42		
7/12/2021	<0.1015	0.0411 (J)	<0.1015	<0.1015			
7/14/2021					4.78	1.47	2.07
1/25/2022	<0.1015	0.0408 (J)	<0.1015	<0.1015			
1/26/2022						2.5	
1/27/2022					6.1		2.76
7/5/2022	0.0374 (J)	0.0433 (J)	<0.1015	<0.1015			
7/12/2022							2.3
7/13/2022					7.29	1.29	
2/20/2023	<0.1015		<0.1015	<0.1015			

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 5/18/2023 1:21 PM View: AIII

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	MW-3 (bg)	MW-4 (bg)	MW-2 (bg)	MW-1 (bg)	GS-GSA-MW-4	GS-GSA-MW-3	GS-GSA-MW-8
2/21/2023		0.0408 (J)					
2/27/2023						2.78	
2/28/2023							1.91
3/1/2023					8.02		

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 5/18/2023 1:21 PM View: AIII

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	MW-4 (bg)	MW-3 (bg)	MW-2 (bg)	MW-1 (bg)	GS-GSA-MW-8	GS-GSA-MW-4	GS-GSA-MW-3
4/25/2016	261	224	123				
4/26/2016				147			
6/20/2016	295		168	152			
6/22/2016		266					
8/8/2016			180	150			
8/9/2016	318	260					
8/24/2016	319	274	180	142	263	102	539
10/3/2016	293		184	139	253	98.4	519.7
10/4/2016		243					
10/26/2016	311	254	171	133	235	88.7	916
11/21/2016	320	263	179	144	246	104	552
1/17/2017			188	131	231	102	572
1/18/2017	417	431					
3/20/2017					298		817
3/21/2017						94.7	
3/22/2017	292	318	155	141			
4/17/2017						97.9	476
4/18/2017	302	296	156	149	317		
5/30/2017				140	316	93.9	515
5/31/2017		306	151				
8/23/2017	297	298	155	152			
8/24/2017					391	105	598
5/22/2018			172	166			
5/23/2018	296						
5/24/2018		297					
6/11/2018						105	558
6/12/2018	355	318	179	203	442		
10/17/2018	342	392	200	171	514	117	533
11/19/2018	289	387	221	154			
4/10/2019	356	348	200	243	533	129	659
5/14/2019	254	254	168	167			
10/8/2019		371	190	157			
10/10/2019	302						
10/14/2019					524	93.5	552
10/16/2019	356	346	194	157			
2/3/2020	265	276	172	172			589
2/4/2020					461	116	
8/3/2020		285	172	148			
8/4/2020							545
8/5/2020	281				497	94.7	
2/22/2021	271	312	178	151			
3/1/2021					386		514
3/3/2021						100	
7/12/2021	242	252	159	149			
7/14/2021					444	130	533
1/25/2022	259	285	179	150			
1/26/2022							517
1/27/2022					491	181	
7/5/2022	294	369	172	168			
7/12/2022					451		
7/13/2022						385	549
2/20/2023		210	160	151			

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 5/18/2023 1:21 PM View: AIII

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	MW-4 (bg)	MW-3 (bg)	MW-2 (bg)	MW-1 (bg)	GS-GSA-MW-8	GS-GSA-MW-4	GS-GSA-MW-3
2/21/2023	232						
2/27/2023							516
2/28/2023					353		
3/1/2023						327	

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 5/18/2023 1:21 PM View: AIII

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	MW-4 (bg)	MW-3 (bg)	MW-2 (bg)	MW-1 (bg)	GS-GSA-MW-8	GS-GSA-MW-4	GS-GSA-MW-3
4/25/2016	1.53	1.32	1.9				
4/26/2016				1.94			
6/20/2016	1.85		3.43	2.09			
6/22/2016		1.46					
8/8/2016			3.31	2.18			
8/9/2016	1.95	1.35					
8/24/2016	2.07	1.47	3.23	2.22	4.03	112	204
10/3/2016	2.02		3.21	2.34	3.87	115	220
10/4/2016		1.59					
10/26/2016	2.07	1.27	3.35	2.34	4.08	115	249
11/21/2016	2.39	1.38	3.34	2.5	4.39	117	256
1/17/2017			3.58	2.68	7.22	99.3	301
1/18/2017	1.9	1.34					
3/20/2017					5.7		320
3/21/2017						79	
3/22/2017	1.5 (J)	2	3.4	3.7			
4/17/2017						85	340
4/18/2017	1.6 (J)	2.2	2.6	2.4	4.7		
5/30/2017				2.6	15	99	310
5/31/2017		1.5 (J)	4.4				
8/23/2017	2.3	1.8 (J)	4.4	2.7			
8/24/2017					93	110	290
5/22/2018			3.2	2.3			
5/23/2018	2						
5/24/2018		1.6 (J)					
6/11/2018						81	260
6/12/2018	1.7 (J)	1.4 (J)	3.7	2.3	140		
10/17/2018	1.5 (J)	<2	4.6	1.7 (J)	180	85	270
11/19/2018	<2	<2	3	1.7 (J)			
4/10/2019	1.88	2.25	1.76	2.36	174	74.3	249
5/14/2019	1.82	2.28	2.98	2.28			
10/8/2019		1.36	4.26	2.31			
10/10/2019	1.93						
10/14/2019					207	59.1	228
10/16/2019	1.92	1.4	4.04	2.42			
2/3/2020	1.72	2.12	2.48	2.07			267
2/4/2020					94.1	43.2	
8/3/2020		1.17	4.03	2.05			
8/4/2020							222
8/5/2020	1.57				146	41	
2/22/2021	1.52	2.22	1.72	2.16			
3/1/2021					92.5		250
3/3/2021						40.3	
7/12/2021	1.56	2.13	2.36	2.19			
7/14/2021					129	102	207
1/25/2022	1.54	2.12	2.14	2.09			
1/26/2022							255
1/27/2022					122	103	
7/5/2022	1.63	1.59	2.53	2.07			
7/12/2022					120		
7/13/2022						199	228
2/20/2023		1.94	1.7	2.05			

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 5/18/2023 1:21 PM View: AIII

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	MW-4 (bg)	MW-3 (bg)	MW-2 (bg)	MW-1 (bg)	GS-GSA-MW-8	GS-GSA-MW-4	GS-GSA-MW-3
2/21/2023	1.58						
2/27/2023							254
2/28/2023					86.9		
3/1/2023						113	

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 5/18/2023 1:21 PM View: AIII

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	MW-2 (bg)	MW-3 (bg)	MW-4 (bg)	MW-1 (bg)	GS-GSA-MW-4	GS-GSA-MW-3	GS-GSA-MW-8
4/25/2016	0.149 (J)	0.243 (J)	0.372				
4/26/2016				0.146 (J)			
6/20/2016	0.148 (J)		0.361	0.148 (J)			
6/22/2016		0.269 (J)					
8/8/2016	0.134 (J)			0.137 (J)			
8/9/2016		0.363	0.326				
8/24/2016	0.129 (J)	0.346	0.329	0.133 (J)	0.793	0.264 (J)	0.165 (J)
10/3/2016	0.086 (J)		0.287 (J)	0.103 (J)	0.769	0.276 (J)	0.114 (J)
10/4/2016		0.266 (J)					
10/26/2016	0.027 (J)	0.266 (J)	0.194 (J)	0.05 (J)	0.578	0.182 (J)	0.056 (J)
11/21/2016	0.027 (J)	0.244 (J)	0.192 (J)	0.047 (J)	0.562	0.238 (J)	0.059 (J)
1/17/2017	0.066 (J)			0.09 (J)	0.571	0.34	0.07 (J)
1/18/2017		0.385	0.223 (J)				
3/20/2017						0.39	0.18
3/21/2017					0.54		
3/22/2017	0.13	0.41	0.32	0.12			
4/17/2017					0.54	0.57	
4/18/2017	0.16	0.29	0.32	0.12			0.17
5/30/2017				0.13	0.49	0.38	0.16
5/31/2017	0.13	0.37					
8/23/2017	0.16	0.55	0.38	0.16			
8/24/2017					0.7	0.54	0.18
2/13/2018	0.22	0.27	0.38	0.14	0.63	0.57	0.15
5/22/2018	0.17			0.16			
5/23/2018			0.38				
5/24/2018		0.6					
6/11/2018					0.39	0.63	
6/12/2018	0.16	0.53	0.39	0.16			0.15
10/17/2018	0.16	0.63	0.39	0.18	0.44	0.78	0.16
11/19/2018	0.18	0.31	0.36	0.15			
4/10/2019	0.262	0.273	0.384	0.102	<0.1	0.738	0.156
5/14/2019	0.17	0.281	0.335	0.119			
10/8/2019	0.164	0.225		0.0924 (J)			
10/10/2019			0.304				
10/14/2019					<0.1	0.619	0.118
10/16/2019	0.114	0.106	0.302	0.0756 (J)			
2/3/2020	0.182	0.256	0.37	0.0982 (J)		0.427	
2/4/2020					<0.1		0.132
8/3/2020	0.122	0.0766 (J)		<0.1			
8/4/2020						0.389	
8/5/2020			0.359		<0.1		0.119
2/22/2021	0.209	0.246	0.357	0.082 (J)			
3/1/2021						0.449	0.106
3/3/2021					<0.1		
7/12/2021	0.196	0.287	0.35	0.125			
7/14/2021					<0.1	0.556	0.221
1/25/2022	0.204	0.325	0.364	0.101			
1/26/2022						0.447	
1/27/2022					<0.1		0.179
7/5/2022	0.2	0.386	0.362	0.11 (J)			
7/12/2022							0.112 (J)
7/13/2022					<0.1	0.324	

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 5/18/2023 1:21 PM View: AIII

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	MW-2 (bg)	MW-3 (bg)	MW-4 (bg)	MW-1 (bg)	GS-GSA-MW-4	GS-GSA-MW-3	GS-GSA-MW-8
2/20/2023	0.267	0.379		0.221			
2/21/2023			0.415				
2/27/2023						0.292	
2/28/2023							0.161
3/1/2023					<0.1		

ND substitution: RL or RL/2 if <15% NDs.

FIGURE F.

Trend Tests - Prediction Limit Exceedances - Significant Results

Plant Gorgas Client: Southern Company Data: Gorgas GSA Printed 5/18/2023, 1:25 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	**GS-GSA-MW-8**	**0.3952**	**144**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**MW-1 (bg)**	**0.004867**	**144**	**124**	**Yes**	**27**	**37.04**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**MW-2 (bg)**	**0.008534**	**167**	**124**	**Yes**	**27**	**29.63**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**MW-3 (bg)**	**0.006729**	**125**	**124**	**Yes**	**27**	**29.63**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**GS-GSA-MW-8**	**20.58**	**94**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
pH (pH)	**MW-1 (bg)**	**-0.02192**	**-190**	**-124**	**Yes**	**27**	**0**	**n/a**	**n/a**	**0.01**	**NP**
pH (pH)	**MW-2 (bg)**	**0.04188**	**172**	**124**	**Yes**	**27**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**MW-4 (bg)**	**-118.1**	**-153**	**-118**	**Yes**	**26**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total dissolved solids (mg/L)	**MW-4 (bg)**	**-161.1**	**-157**	**-118**	**Yes**	**26**	**0**	**n/a**	**n/a**	**0.01**	**NP**

Trend Tests - Prediction Limit Exceedances - All Results

Plant Gorgas Client: Southern Company Data: Gorgas GSA Printed 5/18/2023, 1:25 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	GS-GSA-MW-3	0.02576	6	81	No	20	0	n/a	n/a	0.01	NP
Boron (mg/L)	GS-GSA-MW-4	-0.1298	-16	-81	No	20	0	n/a	n/a	0.01	NP
Boron (mg/L)	**GS-GSA-MW-8**	**0.3952**	**144**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**MW-1 (bg)**	**0.004867**	**144**	**124**	**Yes**	**27**	**37.04**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**MW-2 (bg)**	**0.008534**	**167**	**124**	**Yes**	**27**	**29.63**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**MW-3 (bg)**	**0.006729**	**125**	**124**	**Yes**	**27**	**29.63**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	MW-4 (bg)	-0.0004495	-56	-111	No	25	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GS-GSA-MW-3	-5.205	-40	-81	No	20	0	n/a	n/a	0.01	NP
Calcium (mg/L)	MW-1 (bg)	2.21	104	124	No	27	0	n/a	n/a	0.01	NP
Calcium (mg/L)	MW-2 (bg)	0.6618	24	124	No	27	0	n/a	n/a	0.01	NP
Calcium (mg/L)	MW-3 (bg)	8.217	56	124	No	27	0	n/a	n/a	0.01	NP
Calcium (mg/L)	MW-4 (bg)	-7.42	-89	-118	No	26	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GS-GSA-MW-3	-4.405	-28	-81	No	20	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GS-GSA-MW-4	-5.829	-46	-81	No	20	0	n/a	n/a	0.01	NP
Chloride (mg/L)	**GS-GSA-MW-8**	**20.58**	**94**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	MW-1 (bg)	-0.035	-69	-124	No	27	0	n/a	n/a	0.01	NP
Chloride (mg/L)	MW-2 (bg)	-0.144	-74	-124	No	27	0	n/a	n/a	0.01	NP
Chloride (mg/L)	MW-3 (bg)	0.07228	85	124	No	27	7.407	n/a	n/a	0.01	NP
Chloride (mg/L)	MW-4 (bg)	-0.06041	-95	-118	No	26	3.846	n/a	n/a	0.01	NP
pH (pH)	GS-GSA-MW-4	-0.01608	-59	-87	No	21	0	n/a	n/a	0.01	NP
pH (pH)	**MW-1 (bg)**	**-0.02192**	**-190**	**-124**	**Yes**	**27**	**0**	**n/a**	**n/a**	**0.01**	**NP**
pH (pH)	**MW-2 (bg)**	**0.04188**	**172**	**124**	**Yes**	**27**	**0**	**n/a**	**n/a**	**0.01**	**NP**
pH (pH)	MW-3 (bg)	0.02668	20	124	No	27	0	n/a	n/a	0.01	NP
pH (pH)	MW-4 (bg)	0.008166	59	124	No	27	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GS-GSA-MW-4	24.43	60	81	No	20	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	MW-1 (bg)	15.99	77	118	No	26	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	MW-2 (bg)	-40.38	-106	-124	No	27	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	MW-3 (bg)	99.57	108	124	No	27	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	**MW-4 (bg)**	**-118.1**	**-153**	**-118**	**Yes**	**26**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total dissolved solids (mg/L)	GS-GSA-MW-4	39.77	52	81	No	20	0	n/a	n/a	0.01	NP
Total dissolved solids (mg/L)	MW-1 (bg)	37.16	116	118	No	26	0	n/a	n/a	0.01	NP
Total dissolved solids (mg/L)	MW-2 (bg)	-40.62	-89	-124	No	27	0	n/a	n/a	0.01	NP
Total dissolved solids (mg/L)	MW-3 (bg)	160.6	100	124	No	27	0	n/a	n/a	0.01	NP
Total dissolved solids (mg/L)	**MW-4 (bg)**	**-161.1**	**-157**	**-118**	**Yes**	**26**	**0**	**n/a**	**n/a**	**0.01**	**NP**

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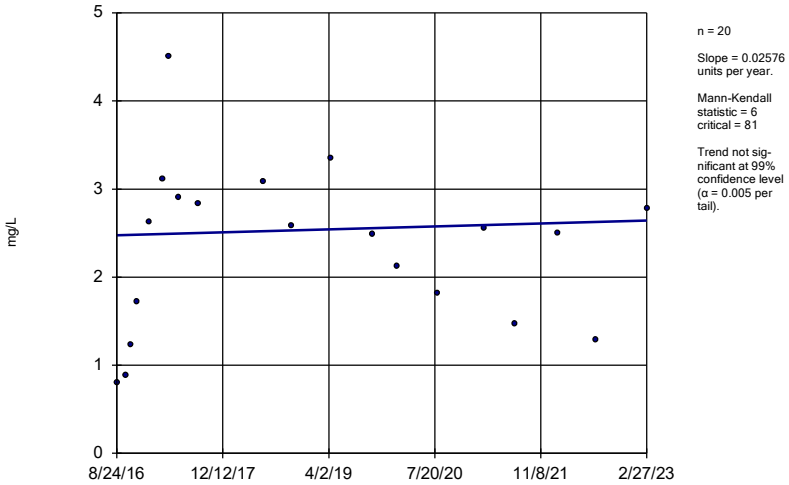
Sen's Slope Estimator

GS-GSA-MW-3



n = 20

Slope = 0.02576 units per year.

Mann-Kendall statistic = 6
critical = 81

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 5/18/2023 1:23 PM View: AIII Trend
Plant Gorgas Client: Southern Company Data: Gorgas GSA

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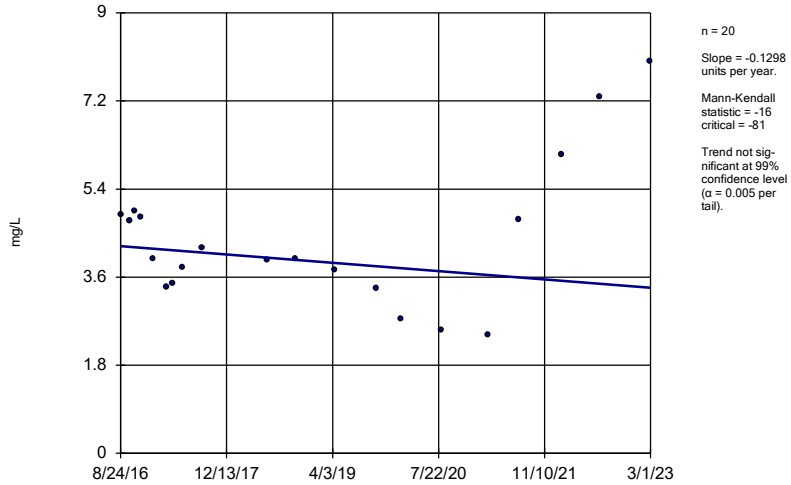
Sen's Slope Estimator

GS-GSA-MW-4



n = 20

Slope = -0.1298 units per year.

Mann-Kendall statistic = -16
critical = -81

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 5/18/2023 1:23 PM View: AIII Trend
Plant Gorgas Client: Southern Company Data: Gorgas GSA

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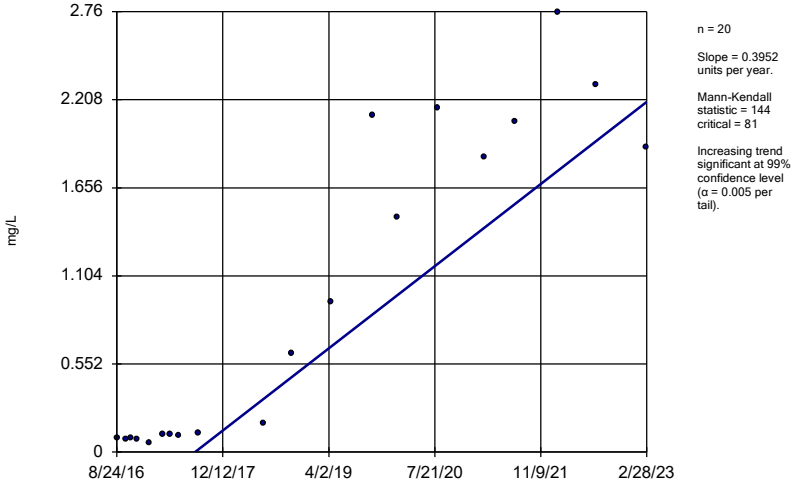
Sen's Slope Estimator

GS-GSA-MW-8



n = 20

Slope = 0.3952 units per year.

Mann-Kendall statistic = 144
critical = 81

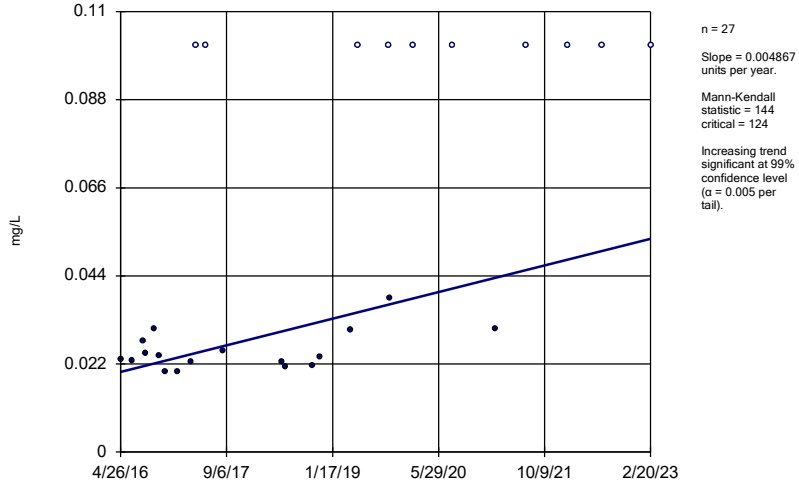
Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 5/18/2023 1:23 PM View: AIII Trend
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.37 . UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-1 (bg)



n = 27

Slope = 0.004867 units per year.

Mann-Kendall statistic = 144
critical = 124

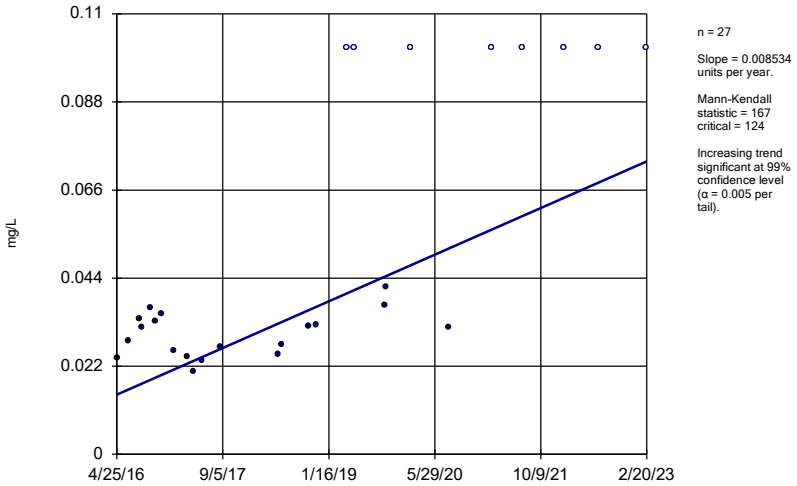
Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 5/18/2023 1:23 PM View: AIII Trend
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.37 . UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-2 (bg)



n = 27

Slope = 0.008534 units per year.

Mann-Kendall statistic = 167
critical = 124

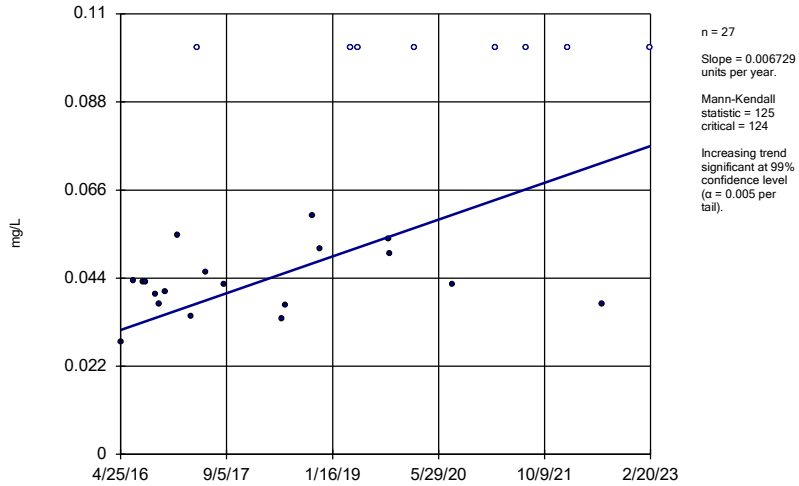
Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 5/18/2023 1:23 PM View: AIII Trend
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.37 . UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-3 (bg)



n = 27

Slope = 0.006729 units per year.

Mann-Kendall statistic = 125
critical = 124

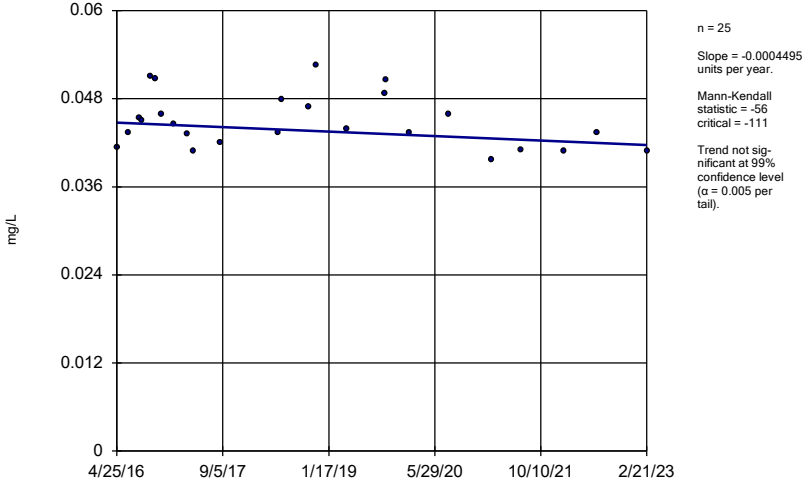
Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 5/18/2023 1:23 PM View: AIII Trend
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.37 . UG

Sen's Slope Estimator

MW-4 (bg)



n = 25

Slope = -0.0004495 units per year.

Mann-Kendall statistic = -56
critical = -111

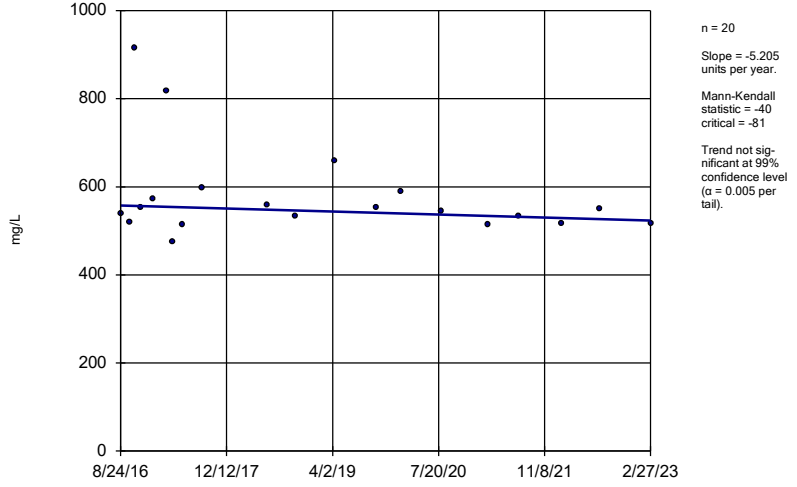
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 5/18/2023 1:23 PM View: AIII Trend
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.37 . UG

Sen's Slope Estimator

GS-GSA-MW-3



n = 20

Slope = -5.205 units per year.

Mann-Kendall statistic = -40
critical = -81

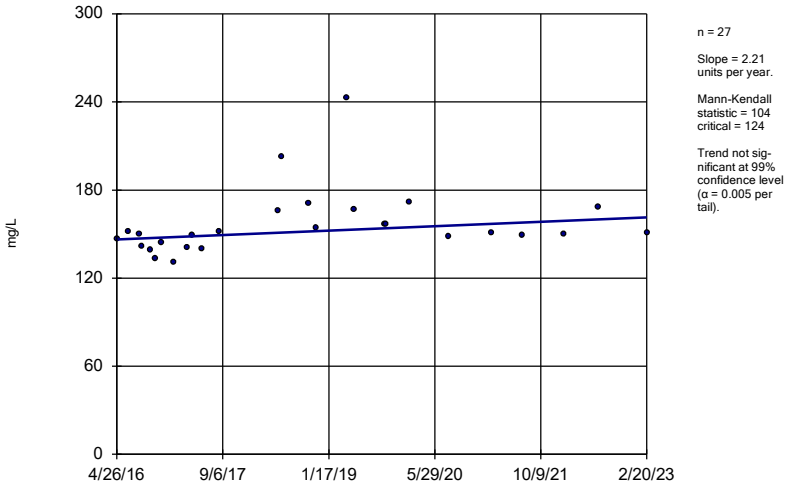
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 5/18/2023 1:23 PM View: AIII Trend
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.37 . UG

Sen's Slope Estimator

MW-1 (bg)



n = 27

Slope = 2.21 units per year.

Mann-Kendall statistic = 104 critical = 124

Trend not significant at 99% confidence level (α = 0.005 per tail).

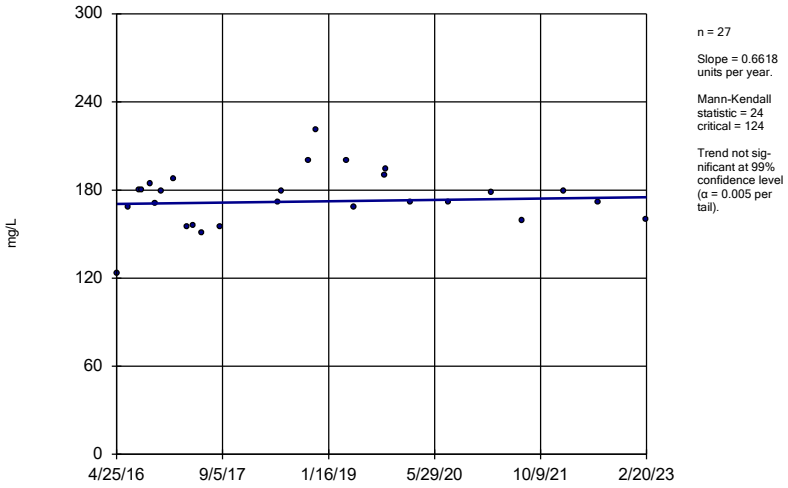
Constituent: Calcium Analysis Run 5/18/2023 1:23 PM View: AIII Trend

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.37 . UG

Sen's Slope Estimator

MW-2 (bg)



n = 27

Slope = 0.6618 units per year.

Mann-Kendall statistic = 24 critical = 124

Trend not significant at 99% confidence level (α = 0.005 per tail).

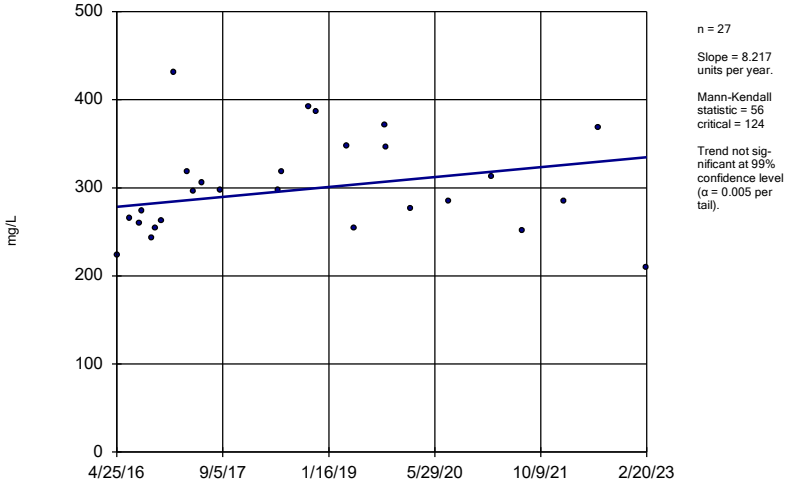
Constituent: Calcium Analysis Run 5/18/2023 1:23 PM View: AIII Trend

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.37 . UG

Sen's Slope Estimator

MW-3 (bg)



n = 27

Slope = 8.217 units per year.

Mann-Kendall statistic = 56 critical = 124

Trend not significant at 99% confidence level (α = 0.005 per tail).

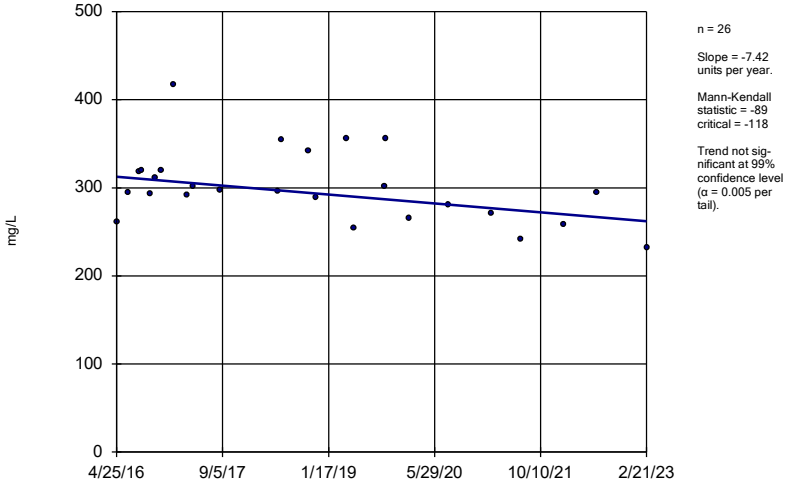
Constituent: Calcium Analysis Run 5/18/2023 1:23 PM View: AIII Trend

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.37 . UG

Sen's Slope Estimator

MW-4 (bg)



n = 26

Slope = -7.42 units per year.

Mann-Kendall statistic = -89 critical = -118

Trend not significant at 99% confidence level (α = 0.005 per tail).

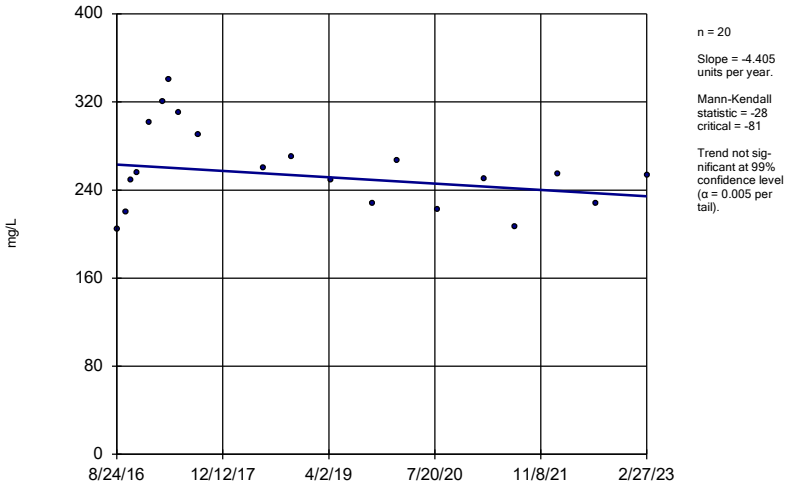
Constituent: Calcium Analysis Run 5/18/2023 1:23 PM View: AIII Trend

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.37 . UG

Sen's Slope Estimator

GS-GSA-MW-3



n = 20

Slope = -4.405 units per year.

Mann-Kendall statistic = -28
critical = -81

Trend not significant at 99% confidence level (α = 0.005 per tail).

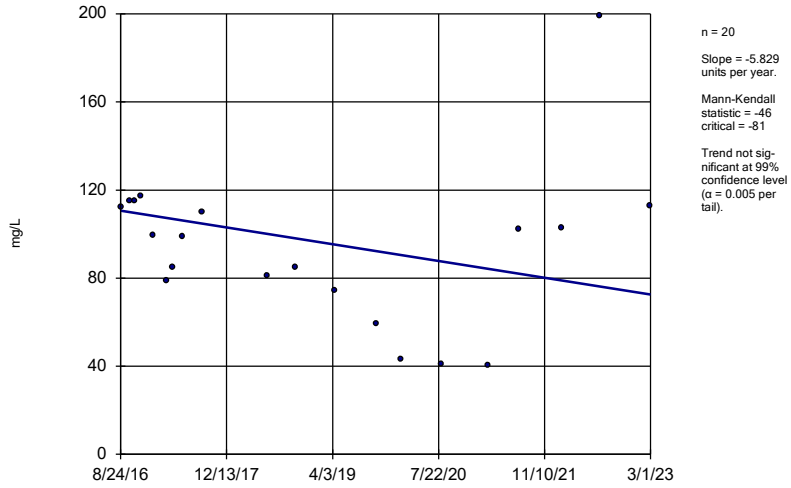
Constituent: Chloride Analysis Run 5/18/2023 1:23 PM View: AIII Trend

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.37 . UG

Sen's Slope Estimator

GS-GSA-MW-4



n = 20

Slope = -5.829 units per year.

Mann-Kendall statistic = -46
critical = -81

Trend not significant at 99% confidence level (α = 0.005 per tail).

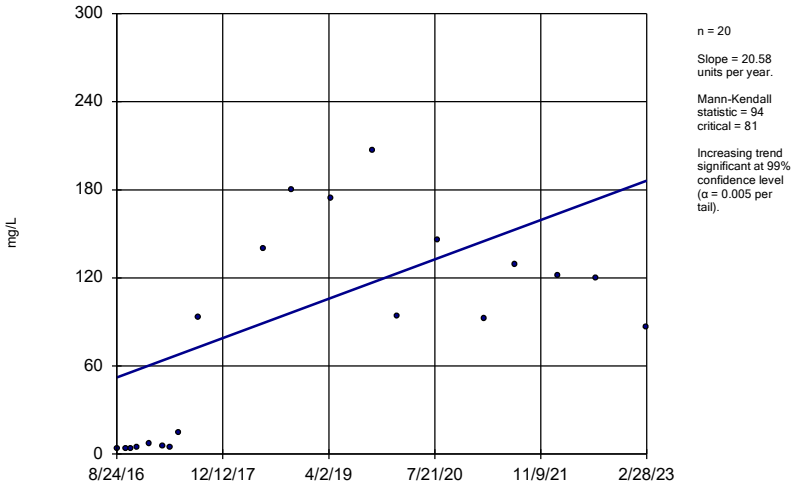
Constituent: Chloride Analysis Run 5/18/2023 1:23 PM View: AIII Trend

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.37 . UG

Sen's Slope Estimator

GS-GSA-MW-8



n = 20

Slope = 20.58 units per year.

Mann-Kendall statistic = 94
critical = 81

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

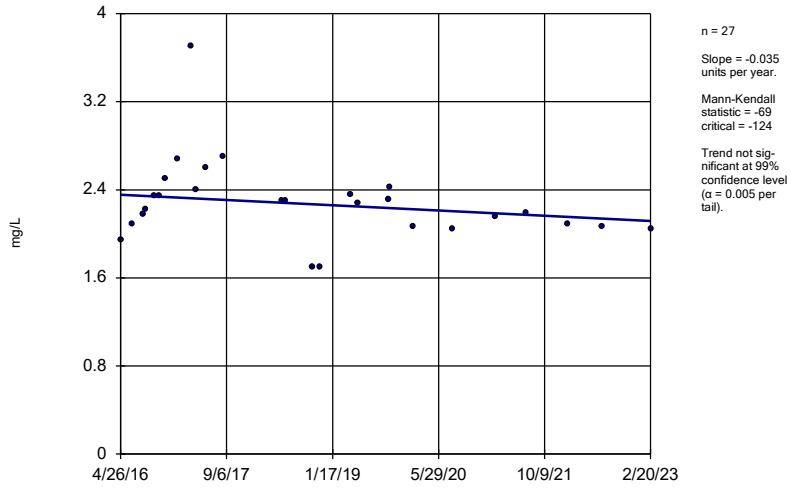
Constituent: Chloride Analysis Run 5/18/2023 1:23 PM View: AIII Trend

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.37 . UG

Sen's Slope Estimator

MW-1 (bg)



n = 27

Slope = -0.035 units per year.

Mann-Kendall statistic = -69
critical = -124

Trend not significant at 99% confidence level (α = 0.005 per tail).

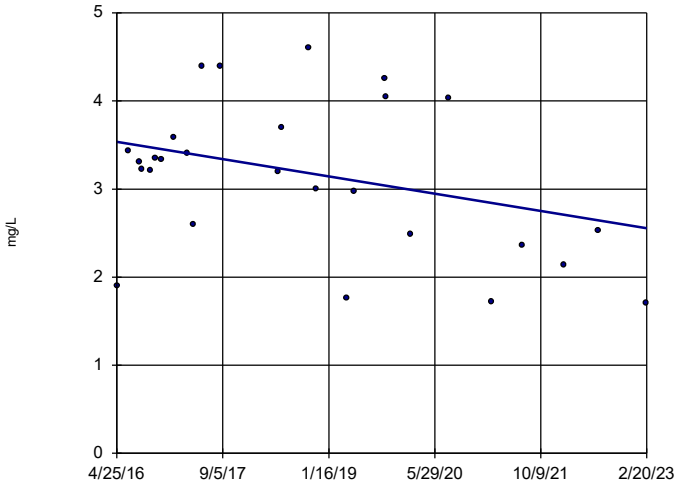
Constituent: Chloride Analysis Run 5/18/2023 1:23 PM View: AIII Trend

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.37 . UG

Sen's Slope Estimator

MW-2 (bg)



n = 27

Slope = -0.144 units per year.

Mann-Kendall statistic = -74
critical = -124

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 5/18/2023 1:23 PM View: AIII Trend

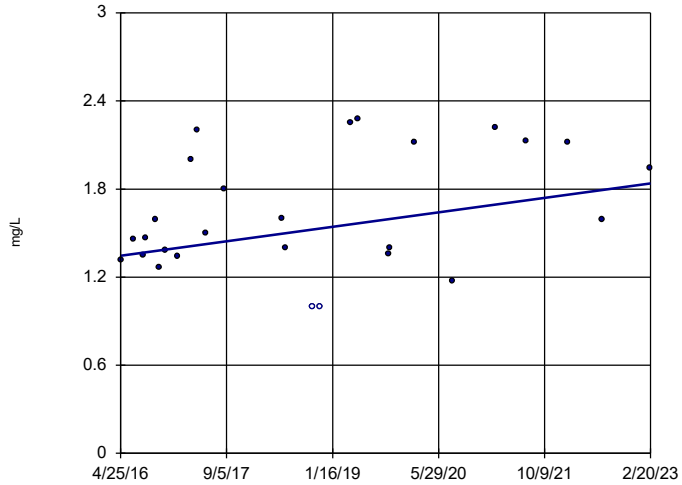
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.37 . UG

Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-3 (bg)



n = 27

Slope = 0.07228 units per year.

Mann-Kendall statistic = 85
critical = 124

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 5/18/2023 1:23 PM View: AIII Trend

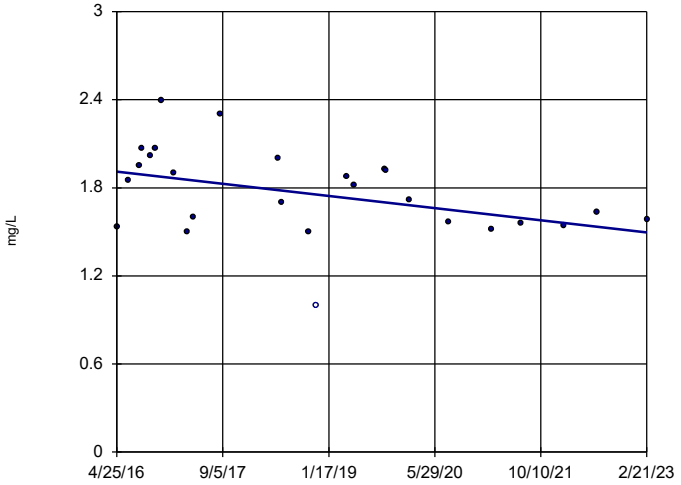
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.37 . UG

Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-4 (bg)



n = 26

Slope = -0.06041 units per year.

Mann-Kendall statistic = -95
critical = -118

Trend not significant at 99% confidence level (α = 0.005 per tail).

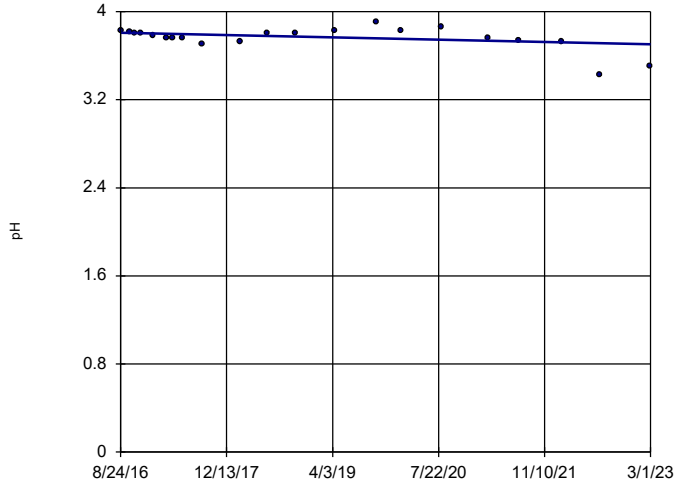
Constituent: Chloride Analysis Run 5/18/2023 1:23 PM View: AIII Trend

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.37 . UG

Sen's Slope Estimator

GS-GSA-MW-4



n = 21

Slope = -0.01608 units per year.

Mann-Kendall statistic = -59
critical = -87

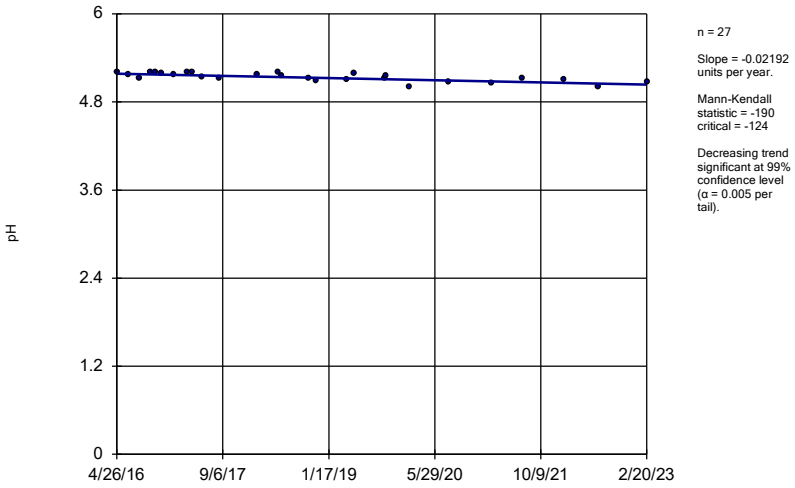
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH Analysis Run 5/18/2023 1:23 PM View: AIII Trend

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sen's Slope Estimator

MW-1 (bg)



n = 27

Slope = -0.02192 units per year.

Mann-Kendall statistic = -190
critical = -124

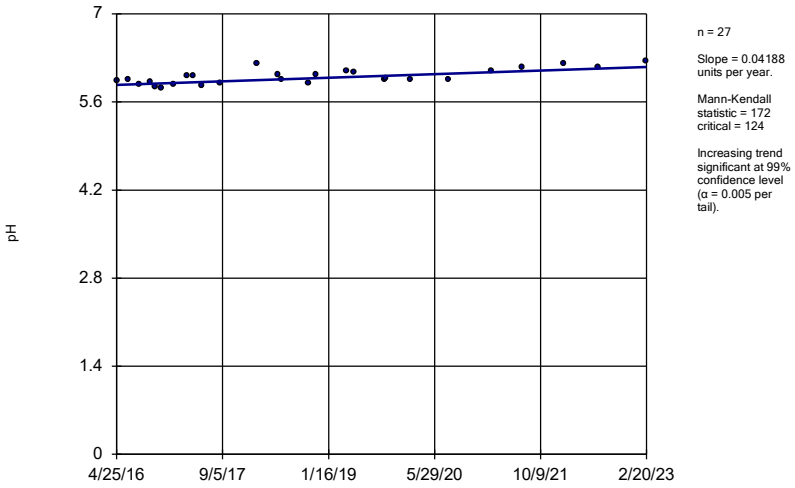
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH Analysis Run 5/18/2023 1:23 PM View: AIII Trend
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.37 . UG

Sen's Slope Estimator

MW-2 (bg)



n = 27

Slope = 0.04188 units per year.

Mann-Kendall statistic = 172
critical = 124

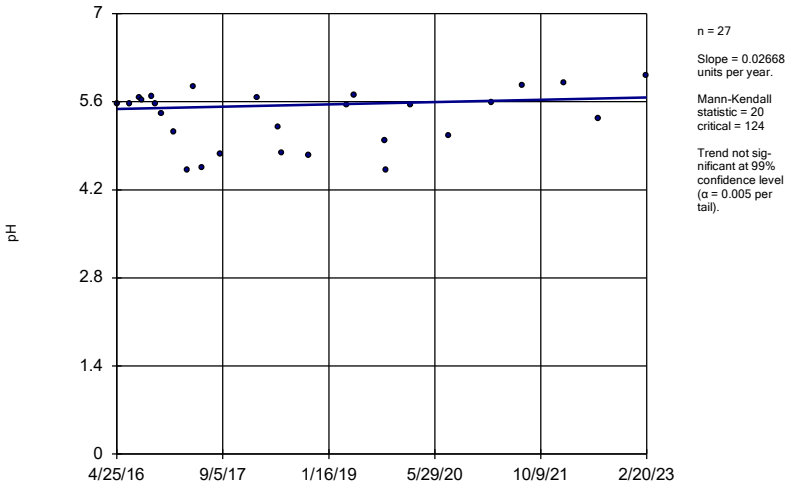
Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH Analysis Run 5/18/2023 1:23 PM View: AIII Trend
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.37 . UG

Sen's Slope Estimator

MW-3 (bg)



n = 27

Slope = 0.02668 units per year.

Mann-Kendall statistic = 20
critical = 124

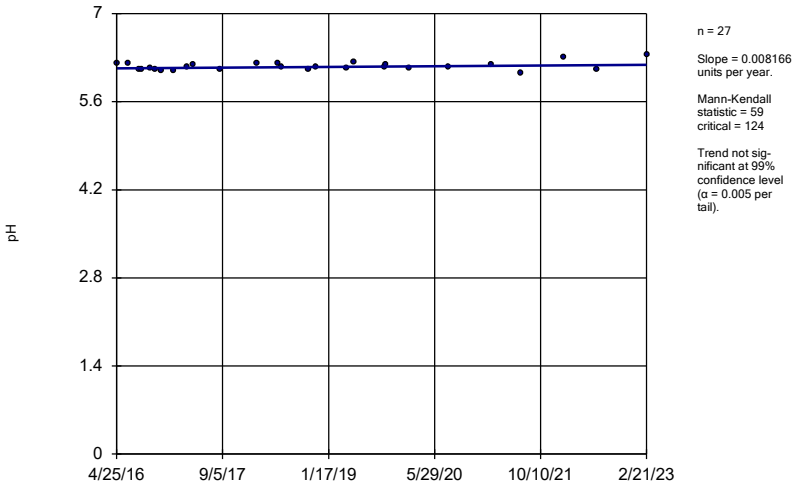
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH Analysis Run 5/18/2023 1:23 PM View: AIII Trend
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.37 . UG

Sen's Slope Estimator

MW-4 (bg)



n = 27

Slope = 0.008166 units per year.

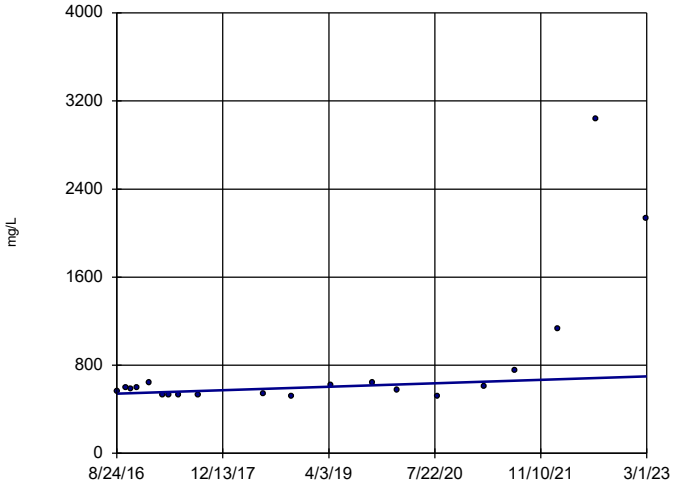
Mann-Kendall statistic = 59
critical = 124

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH Analysis Run 5/18/2023 1:23 PM View: AIII Trend
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sen's Slope Estimator

GS-GSA-MW-4



n = 20

Slope = 24.43 units per year.

Mann-Kendall statistic = 60 critical = 81

Trend not significant at 99% confidence level (α = 0.005 per tail).

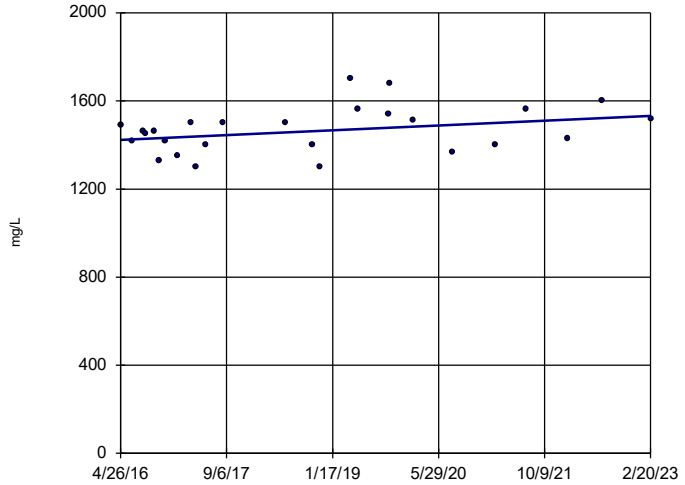
Constituent: Sulfate Analysis Run 5/18/2023 1:23 PM View: AIII Trend

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.37 . UG

Sen's Slope Estimator

MW-1 (bg)



n = 26

Slope = 15.99 units per year.

Mann-Kendall statistic = 77 critical = 118

Trend not significant at 99% confidence level (α = 0.005 per tail).

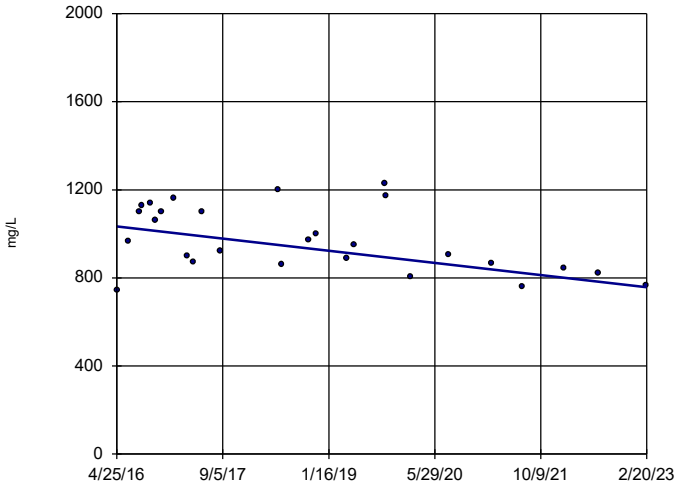
Constituent: Sulfate Analysis Run 5/18/2023 1:23 PM View: AIII Trend

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.37 . UG

Sen's Slope Estimator

MW-2 (bg)



n = 27

Slope = -40.38 units per year.

Mann-Kendall statistic = -106 critical = -124

Trend not significant at 99% confidence level (α = 0.005 per tail).

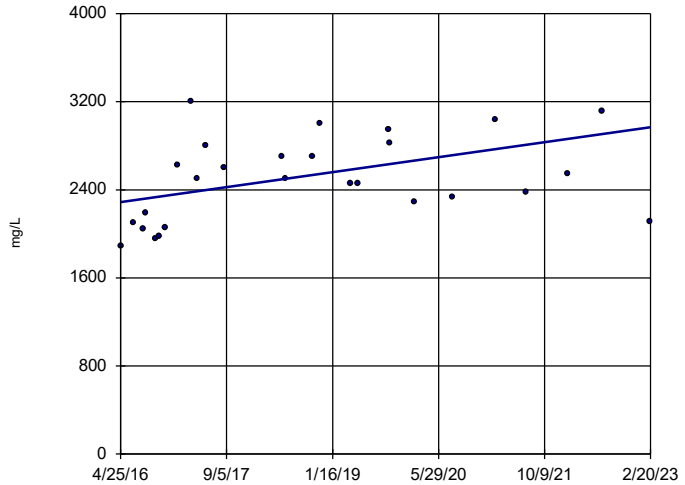
Constituent: Sulfate Analysis Run 5/18/2023 1:23 PM View: AIII Trend

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.37 . UG

Sen's Slope Estimator

MW-3 (bg)



n = 27

Slope = 99.57 units per year.

Mann-Kendall statistic = 108 critical = 124

Trend not significant at 99% confidence level (α = 0.005 per tail).

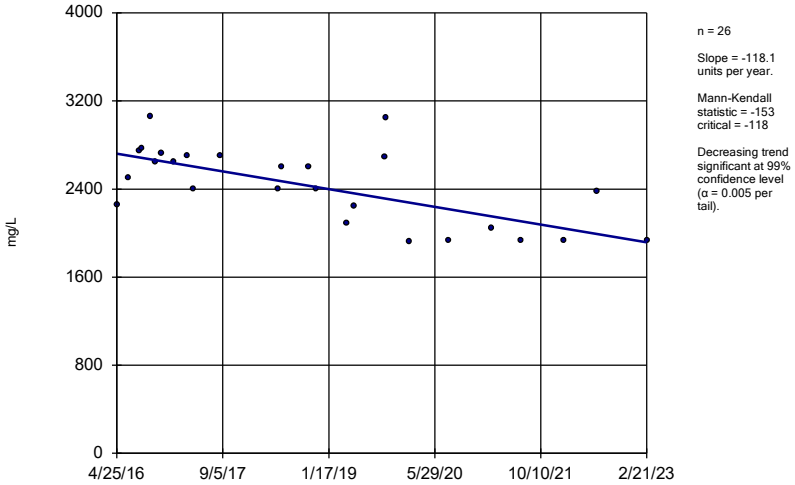
Constituent: Sulfate Analysis Run 5/18/2023 1:23 PM View: AIII Trend

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.37 . UG

Sen's Slope Estimator

MW-4 (bg)



n = 26

Slope = -118.1 units per year.

Mann-Kendall statistic = -153
critical = -118

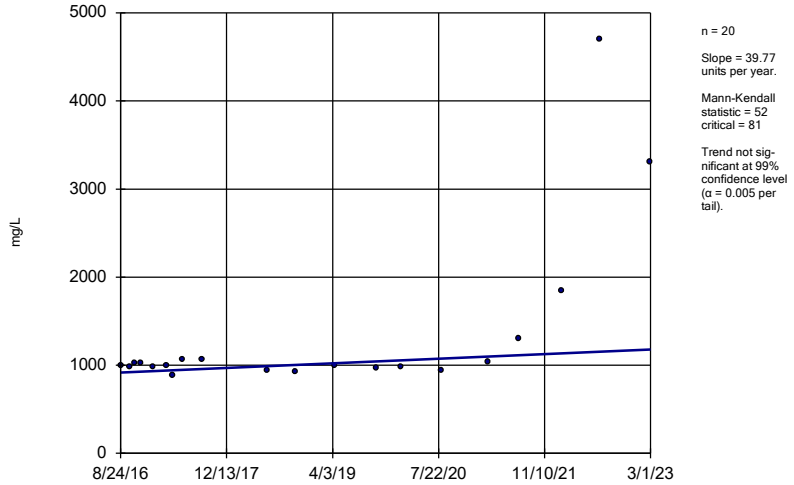
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 5/18/2023 1:23 PM View: AIII Trend
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.37 . UG

Sen's Slope Estimator

GS-GSA-MW-4



n = 20

Slope = 39.77 units per year.

Mann-Kendall statistic = 52
critical = 81

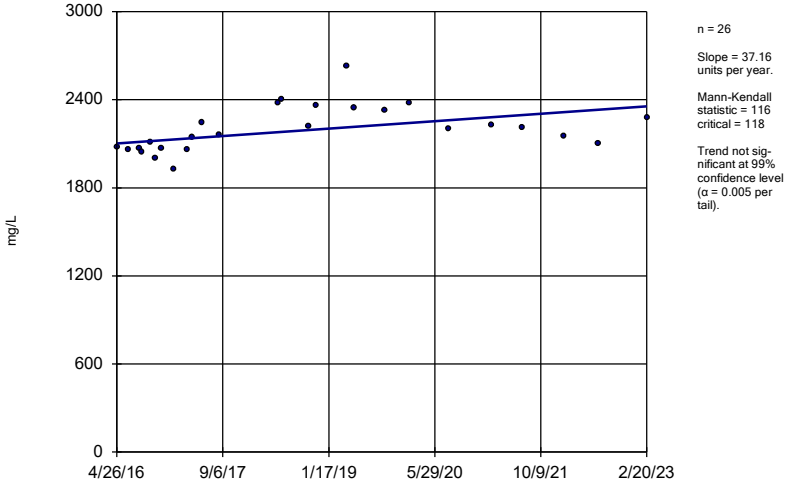
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total dissolved solids Analysis Run 5/18/2023 1:23 PM View: AIII Trend
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.37 . UG

Sen's Slope Estimator

MW-1 (bg)



n = 26

Slope = 37.16 units per year.

Mann-Kendall statistic = 116
critical = 118

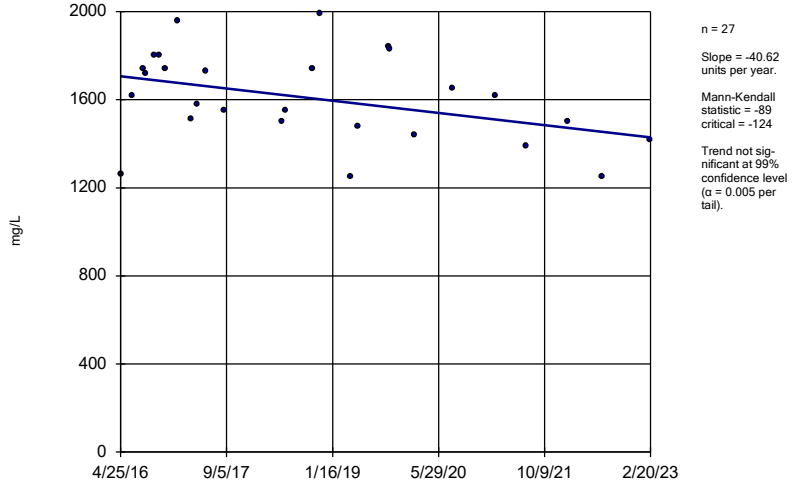
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total dissolved solids Analysis Run 5/18/2023 1:23 PM View: AIII Trend
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.37 . UG

Sen's Slope Estimator

MW-2 (bg)



n = 27

Slope = -40.62 units per year.

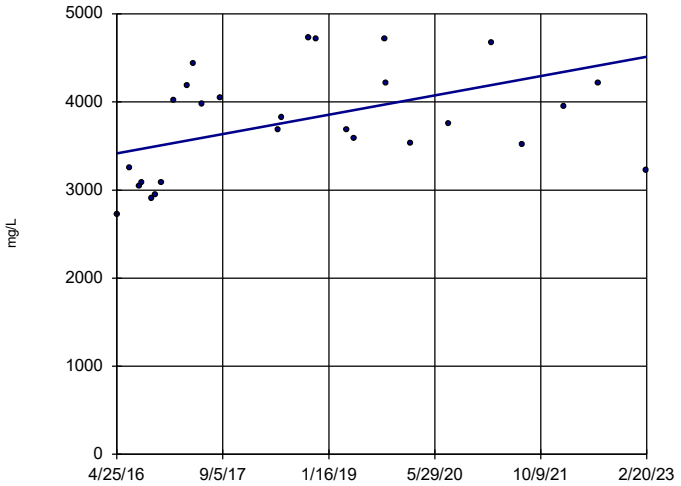
Mann-Kendall statistic = -89
critical = -124

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total dissolved solids Analysis Run 5/18/2023 1:23 PM View: AIII Trend
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sen's Slope Estimator

MW-3 (bg)



n = 27

Slope = 160.6 units per year.

Mann-Kendall statistic = 100
critical = 124

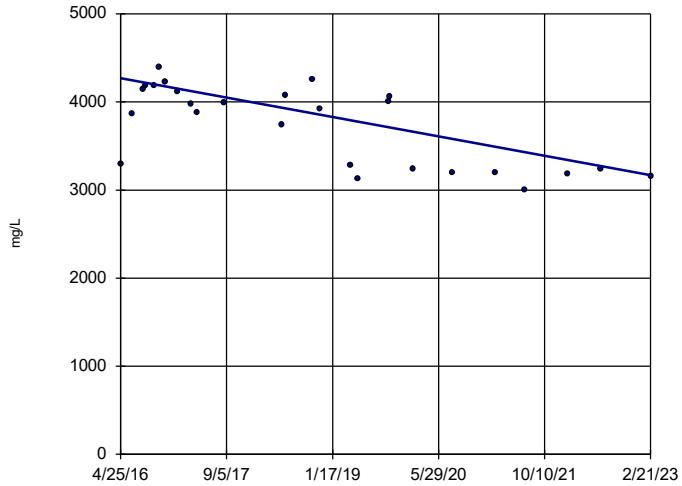
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total dissolved solids Analysis Run 5/18/2023 1:23 PM View: AIII Trend
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.37 . UG

Sen's Slope Estimator

MW-4 (bg)



n = 26

Slope = -161.1 units per year.

Mann-Kendall statistic = -157
critical = -118

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total dissolved solids Analysis Run 5/18/2023 1:23 PM View: AIII Trend
Plant Gorgas Client: Southern Company Data: Gorgas GSA

FIGURE G.

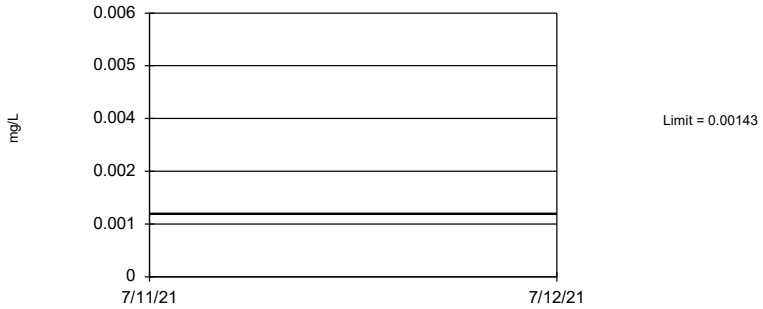
Upper Tolerance Limits Summary Table

Plant Gorgas Client: Southern Company Data: Gorgas GSA Printed 11/16/2021, 4:56 PM

Constituent	Well	Upper Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	n/a	0.00143	n/a	n/a	n/a	95	n/a	n/a	93.68	n/a	n/a	0.007651	NP Inter
Arsenic (mg/L)	n/a	0.005	n/a	n/a	n/a	95	n/a	n/a	83.16	n/a	n/a	0.007651	NP Inter
Barium (mg/L)	n/a	0.0166	n/a	n/a	n/a	95	n/a	n/a	0	n/a	n/a	0.007651	NP Inter
Beryllium (mg/L)	n/a	0.0121	n/a	n/a	n/a	93	n/a	n/a	83.87	n/a	n/a	0.008478	NP Inter
Cadmium (mg/L)	n/a	0.00652	n/a	n/a	n/a	94	n/a	n/a	44.68	n/a	n/a	0.008054	NP Inter
Chromium (mg/L)	n/a	0.0105	n/a	n/a	n/a	95	n/a	n/a	89.47	n/a	n/a	0.007651	NP Inter
Cobalt (mg/L)	n/a	0.64	n/a	n/a	n/a	93	n/a	n/a	24.73	n/a	n/a	0.008478	NP Inter
Combined Radium 226 + 228 (pCi/L)	n/a	1.47	n/a	n/a	n/a	81	n/a	n/a	0	n/a	n/a	0.01569	NP Inter
Fluoride (mg/L)	n/a	0.63	n/a	n/a	n/a	99	n/a	n/a	1.01	n/a	n/a	0.006232	NP Inter
Lead (mg/L)	n/a	0.002	n/a	n/a	n/a	94	n/a	n/a	94.68	n/a	n/a	0.008054	NP Inter
Lithium (mg/L)	n/a	0.419	n/a	n/a	n/a	95	n/a	n/a	0	n/a	n/a	0.007651	NP Inter
Mercury (mg/L)	n/a	0.0005	n/a	n/a	n/a	95	n/a	n/a	100	n/a	n/a	0.007651	NP Inter
Molybdenum (mg/L)	n/a	0.0002	n/a	n/a	n/a	95	n/a	n/a	97.89	n/a	n/a	0.007651	NP Inter
Selenium (mg/L)	n/a	0.0209	n/a	n/a	n/a	95	n/a	n/a	58.95	n/a	n/a	0.007651	NP Inter
Thallium (mg/L)	n/a	0.000226	n/a	n/a	n/a	95	n/a	n/a	96.84	n/a	n/a	0.007651	NP Inter

Tolerance Limit

Interwell Non-parametric



NP test selected by user. Limit is highest of 95 background values. 93.68% NDs. 95.12% coverage at alpha=0.01; 97.07% coverage at alpha=0.05; 99.41% coverage at alpha=0.5. Report alpha = 0.007651.

Constituent: Antimony Analysis Run 11/16/2021 4:55 PM View: UTLs

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Tolerance Limit

Interwell Non-parametric

NP test selected by user. Limit is highest of 95 background values. 83.16% NDs. 95.12% coverage at alpha=0.01; 97.07% coverage at alpha=0.05; 99.41% coverage at alpha=0.5. Report alpha = 0.007651.

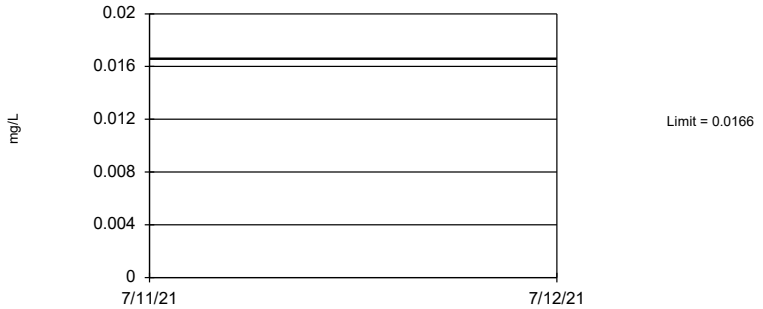
Constituent: Arsenic Analysis Run 11/16/2021 4:55 PM View: UTLs

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Tolerance Limit

Interwell Non-parametric



NP test selected by user. Limit is highest of 95 background values. 95.12% coverage at alpha=0.01; 97.07% coverage at alpha=0.05; 99.41% coverage at alpha=0.5. Report alpha = 0.007651.

Constituent: Barium Analysis Run 11/16/2021 4:55 PM View: UTLs

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Tolerance Limit

Interwell Non-parametric

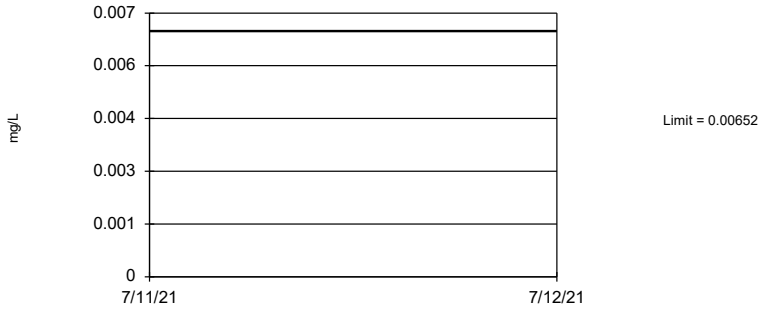
NP test selected by user. Limit is highest of 93 background values. 83.87% NDs. 95.12% coverage at alpha=0.01; 96.68% coverage at alpha=0.05; 99.41% coverage at alpha=0.5. Report alpha = 0.008478.

Constituent: Beryllium Analysis Run 11/16/2021 4:55 PM View: UTLs

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Tolerance Limit

Interwell Non-parametric



NP test selected by user. Limit is highest of 94 background values. 44.68% NDs. 95.12% coverage at alpha=0.01; 96.68% coverage at alpha=0.05; 99.41% coverage at alpha=0.5. Report alpha = 0.008054.

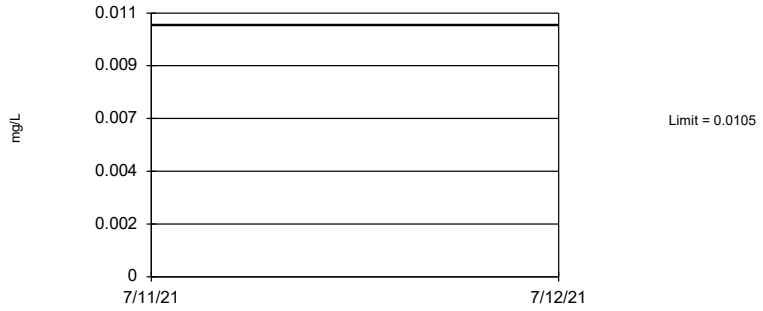
Constituent: Cadmium Analysis Run 11/16/2021 4:55 PM View: UTLs

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Tolerance Limit

Interwell Non-parametric



NP test selected by user. Limit is highest of 95 background values. 89.47% NDs. 95.12% coverage at alpha=0.01; 97.07% coverage at alpha=0.05; 99.41% coverage at alpha=0.5. Report alpha = 0.007651.

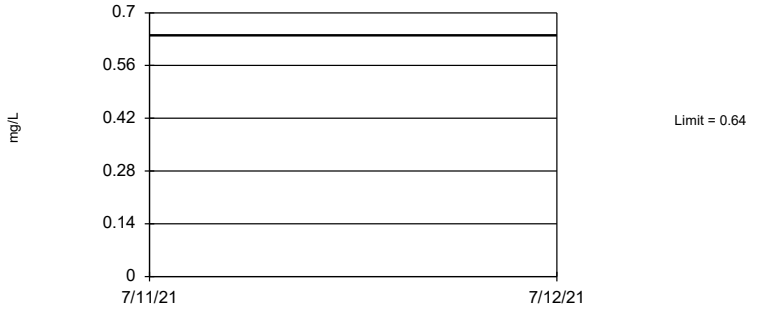
Constituent: Chromium Analysis Run 11/16/2021 4:55 PM View: UTLs

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Tolerance Limit

Interwell Non-parametric



NP test selected by user. Limit is highest of 93 background values. 24.73% NDs. 95.12% coverage at alpha=0.01; 96.68% coverage at alpha=0.05; 99.41% coverage at alpha=0.5. Report alpha = 0.008478.

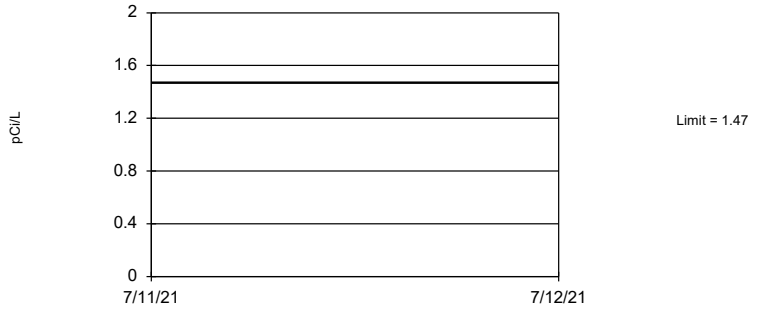
Constituent: Cobalt Analysis Run 11/16/2021 4:55 PM View: UTLs

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Tolerance Limit

Interwell Non-parametric



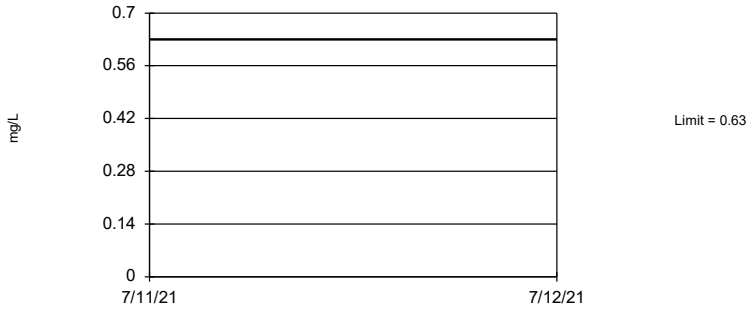
NP test selected by user. Limit is highest of 81 background values. 94.34% coverage at alpha=0.01; 96.29% coverage at alpha=0.05; 99.02% coverage at alpha=0.5. Report alpha = 0.01569.

Constituent: Combined Radium 226 + 228 Analysis Run 11/16/2021 4:55 PM View: UTLs

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Tolerance Limit

Interwell Non-parametric



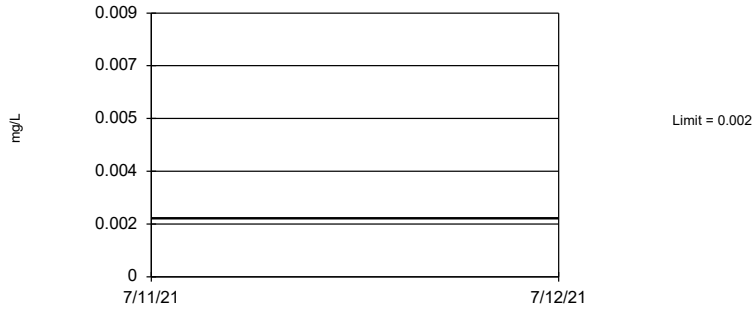
NP test selected by user. Limit is highest of 99 background values. 1.01% NDs. 95.51% coverage at alpha=0.01; 97.07% coverage at alpha=0.05; 99.41% coverage at alpha=0.5. Report alpha = 0.006232.

Constituent: Fluoride Analysis Run 11/16/2021 4:55 PM View: UTLs

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Tolerance Limit

Interwell Non-parametric



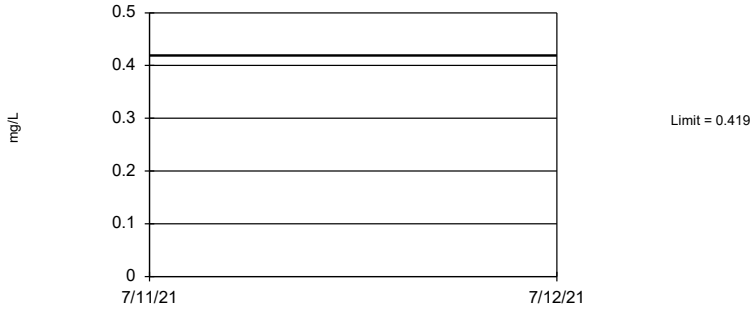
NP test selected by user. Limit is highest of 94 background values. 94.68% NDs. 95.12% coverage at alpha=0.01; 96.68% coverage at alpha=0.05; 99.41% coverage at alpha=0.5. Report alpha = 0.008054.

Constituent: Lead Analysis Run 11/16/2021 4:55 PM View: UTLs

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Tolerance Limit

Interwell Non-parametric



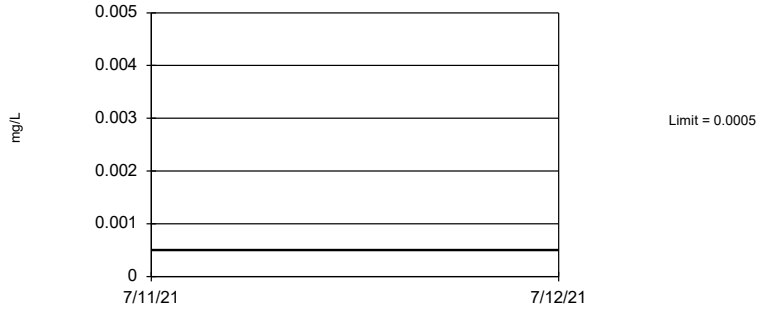
NP test selected by user. Limit is highest of 95 background values. 95.12% coverage at alpha=0.01; 97.07% coverage at alpha=0.05; 99.41% coverage at alpha=0.5. Report alpha = 0.007651.

Constituent: Lithium Analysis Run 11/16/2021 4:55 PM View: UTLs

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Tolerance Limit

Interwell Non-parametric



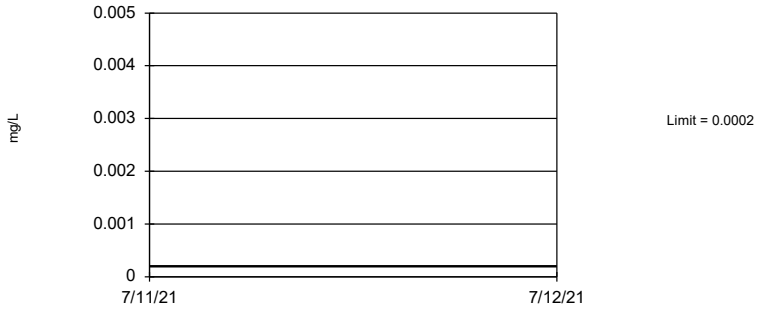
NP test selected by user. All background values were censored; limit is most recent reporting limit. 95.12% coverage at alpha=0.01; 97.07% coverage at alpha=0.05; 99.41% coverage at alpha=0.5. Report alpha = 0.007651.

Constituent: Mercury Analysis Run 11/16/2021 4:55 PM View: UTLs

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Tolerance Limit

Interwell Non-parametric



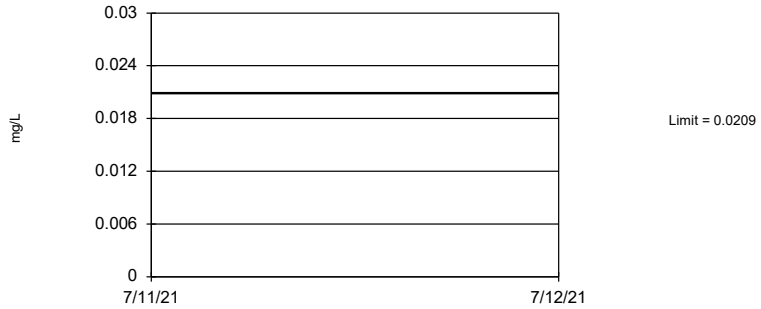
NP test selected by user. Limit is highest of 95 background values. 97.89% NDs. 95.12% coverage at alpha=0.01; 97.07% coverage at alpha=0.05; 99.41% coverage at alpha=0.5. Report alpha = 0.007651.

Constituent: Molybdenum Analysis Run 11/16/2021 4:55 PM View: UTLs

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Tolerance Limit

Interwell Non-parametric



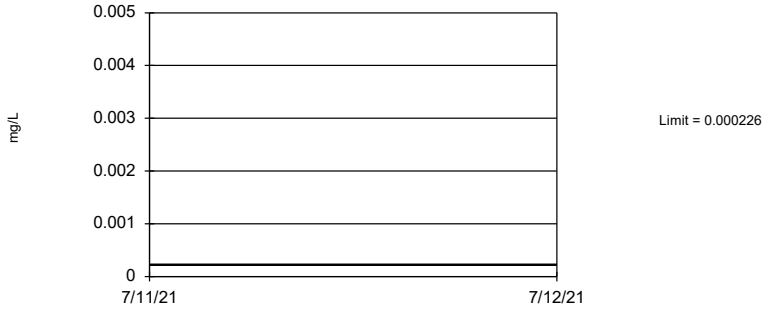
NP test selected by user. Limit is highest of 95 background values. 58.95% NDs. 95.12% coverage at alpha=0.01; 97.07% coverage at alpha=0.05; 99.41% coverage at alpha=0.5. Report alpha = 0.007651.

Constituent: Selenium Analysis Run 11/16/2021 4:55 PM View: UTLs

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Tolerance Limit

Interwell Non-parametric



NP test selected by user. Limit is highest of 95 background values. 96.84% NDs. 95.12% coverage at alpha=0.01; 97.07% coverage at alpha=0.05; 99.41% coverage at alpha=0.5. Report alpha = 0.007651.

Constituent: Thallium Analysis Run 11/16/2021 4:55 PM View: UTLs

Plant Gorgas Client: Southern Company Data: Gorgas GSA

FIGURE H.

GORGAS GYPSUM POND GWPS			
Analyte	**Units**	**Background**	**GWPS**
Antimony	mg/L	0.00143	0.006
Arsenic	mg/L	0.005	0.01
Barium	mg/L	0.0166	2
Beryllium	mg/L	0.0121	0.004
Cadmium	mg/L	0.00652	0.005
Chromium	mg/L	0.0105	0.1
Cobalt	mg/L	0.64	0.64
Combined Radium-226/228	pCi/L	1.47	5
Fluoride	mg/L	0.63	4
Lead	mg/L	0.00692	0.015
Lithium	mg/L	0.419	0.419
Mercury	mg/L	0.0005	0.002
Molybdenum	mg/L	0.0002	0.1
Selenium	mg/L	0.0181	0.05
Thallium	mg/L	0.000226	0.002

Notes:

1. mg/L - Milligrams per liter

2. pCi/L - Picocuries per liter

3. The background limits were used as the groundwater protection standard (GWPS) when appropriate under 40 CFR §257.95(h), ADEM Rule 335-13-15-.06(h), and the ADEM Variance.

4. GWPS established during second semi-annual sampling event in 2021.

FIGURE I.

Confidence Interval Summary Table - All Results (No Significant)

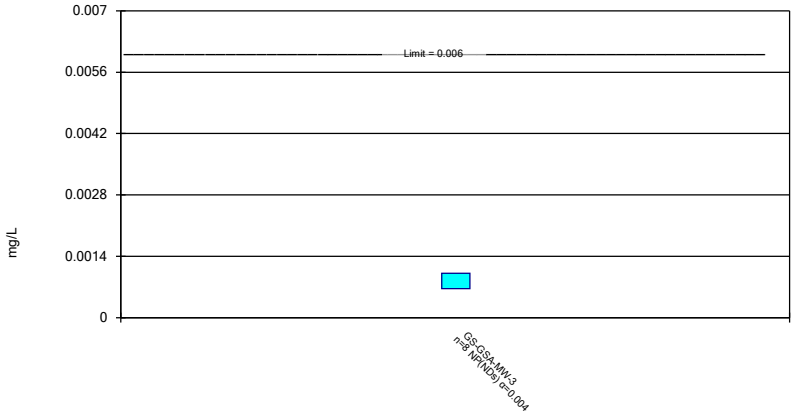
Plant Gorgas Client: Southern Company Data: Gorgas GSA Printed 5/18/2023, 1:35 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	GS-GSA-MW-3	0.001015	0.00066	0.006	No	8	87.5	None	No	0.004	NP (NDs)
Arsenic (mg/L)	GS-GSA-MW-3	0.001441	0.0005624	0.01	No	8	37.5	Kaplan-Meier	ln(x)	0.01	Param.
Arsenic (mg/L)	GS-GSA-MW-4	0.00694	0.00115	0.01	No	8	0	None	No	0.004	NP (normality)
Arsenic (mg/L)	GS-GSA-MW-8	0.005	0.000156	0.01	No	8	37.5	None	No	0.004	NP (normality)
Barium (mg/L)	GS-GSA-MW-3	0.01498	0.01242	2	No	8	0	None	No	0.01	Param.
Barium (mg/L)	GS-GSA-MW-4	0.01423	0.009645	2	No	8	0	None	No	0.01	Param.
Barium (mg/L)	GS-GSA-MW-8	0.02364	0.02041	2	No	8	0	None	No	0.01	Param.
Beryllium (mg/L)	GS-GSA-MW-3	0.001938	0.00152	0.004	No	8	0	None	No	0.01	Param.
Beryllium (mg/L)	GS-GSA-MW-4	0.0228	0.00385	0.004	No	8	0	None	No	0.004	NP (normality)
Cadmium (mg/L)	GS-GSA-MW-4	0.00687	0.00143	0.005	No	8	0	None	No	0.004	NP (normality)
Chromium (mg/L)	GS-GSA-MW-3	0.01	0.000341	0.1	No	8	37.5	None	No	0.004	NP (normality)
Chromium (mg/L)	GS-GSA-MW-4	0.002747	0.0006118	0.1	No	8	37.5	Kaplan-Meier	ln(x)	0.01	Param.
Chromium (mg/L)	GS-GSA-MW-8	0.01	0.000258	0.1	No	8	37.5	None	No	0.004	NP (normality)
Cobalt (mg/L)	GS-GSA-MW-3	0.1648	0.05126	0.64	No	8	0	None	ln(x)	0.01	Param.
Cobalt (mg/L)	GS-GSA-MW-4	0.878	0.213	0.64	No	8	0	None	No	0.004	NP (normality)
Cobalt (mg/L)	GS-GSA-MW-8	0.00546	0.000233	0.64	No	8	37.5	None	No	0.004	NP (normality)
Combined Radium 226 + 228 (pCi/L)	GS-GSA-MW-3	0.5564	0.2066	5	No	8	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-GSA-MW-4	1.282	0.268	5	No	8	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-GSA-MW-8	0.9581	0.04817	5	No	8	0	None	No	0.01	Param.
Fluoride (mg/L)	GS-GSA-MW-3	0.5538	0.322	4	No	8	0	None	No	0.01	Param.
Fluoride (mg/L)	GS-GSA-MW-8	0.1862	0.1008	4	No	8	0	None	No	0.01	Param.
Lead (mg/L)	GS-GSA-MW-3	0.005	0.000095	0.015	No	8	37.5	None	No	0.004	NP (normality)
Lead (mg/L)	GS-GSA-MW-4	0.001799	0.0006755	0.015	No	8	37.5	Kaplan-Meier	ln(x)	0.01	Param.
Lead (mg/L)	GS-GSA-MW-8	0.000203	0.000078	0.015	No	8	62.5	None	No	0.004	NP (normality)
Lithium (mg/L)	GS-GSA-MW-3	0.4934	0.2919	0.419	No	8	0	None	x^2	0.01	Param.
Lithium (mg/L)	GS-GSA-MW-4	1.89	0.262	0.419	No	8	0	None	No	0.004	NP (normality)
Lithium (mg/L)	GS-GSA-MW-8	0.2119	0.1621	0.419	No	8	0	None	No	0.01	Param.
Molybdenum (mg/L)	GS-GSA-MW-3	0.01	0.000191	0.1	No	8	37.5	None	No	0.004	NP (normality)
Molybdenum (mg/L)	GS-GSA-MW-8	0.01	0.00012	0.1	No	8	37.5	None	No	0.004	NP (normality)
Selenium (mg/L)	GS-GSA-MW-3	0.01	0.00117	0.05	No	8	37.5	None	No	0.004	NP (normality)
Selenium (mg/L)	GS-GSA-MW-4	0.01591	0.001386	0.05	No	8	25	Kaplan-Meier	No	0.01	Param.
Thallium (mg/L)	GS-GSA-MW-4	0.0003919	0.0001277	0.002	No	8	25	Kaplan-Meier	sqrt(x)	0.01	Param.

Sanitas™ v.9.6.37 . UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded.

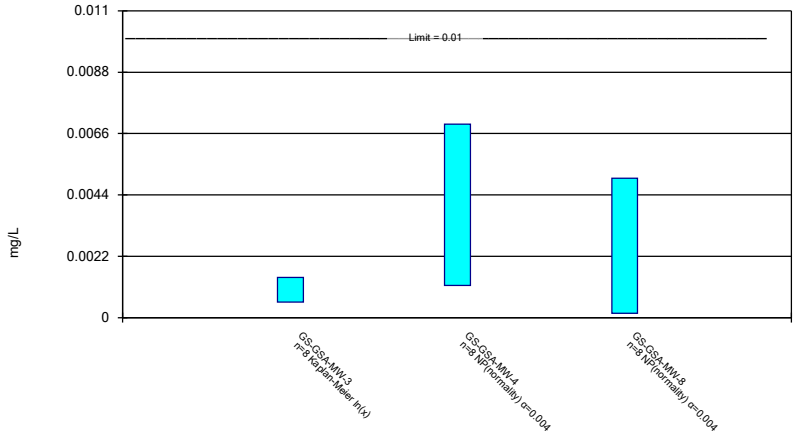


Constituent: Antimony Analysis Run 5/18/2023 1:34 PM View: AIV
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.37 . UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.

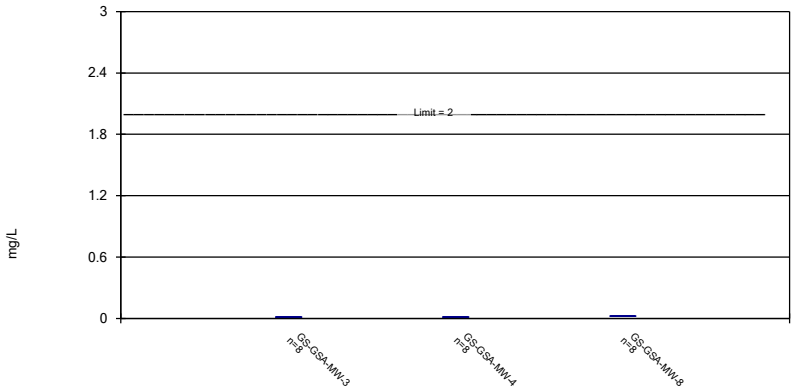


Constituent: Arsenic Analysis Run 5/18/2023 1:35 PM View: AIV
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.37 . UG

Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.

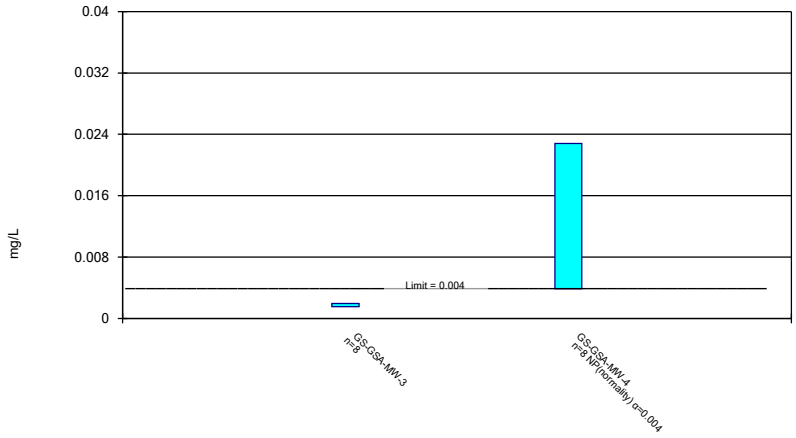


Constituent: Barium Analysis Run 5/18/2023 1:35 PM View: AIV
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.37 . UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.

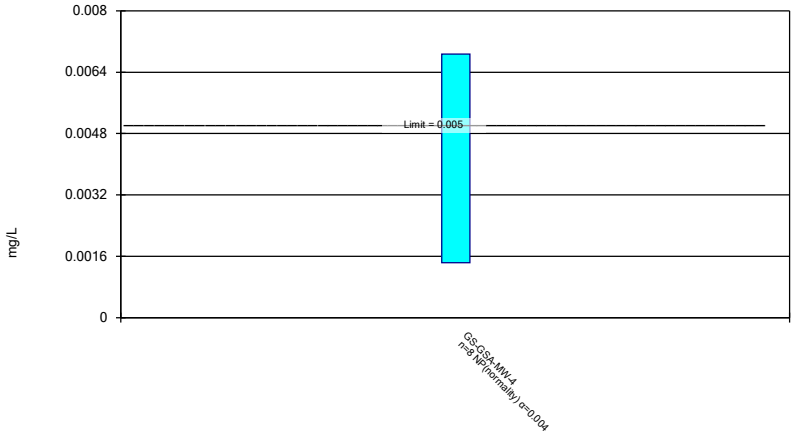


Constituent: Beryllium Analysis Run 5/18/2023 1:35 PM View: AIV
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.37 . UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded.



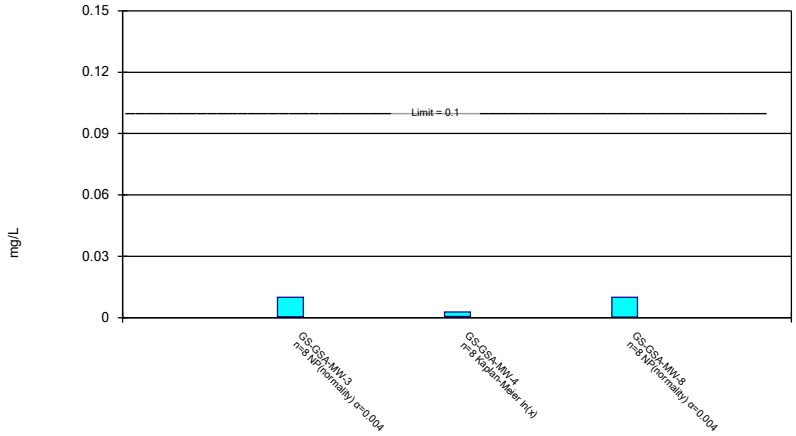
Constituent: Cadmium Analysis Run 5/18/2023 1:35 PM View: AIV

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.37 . UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



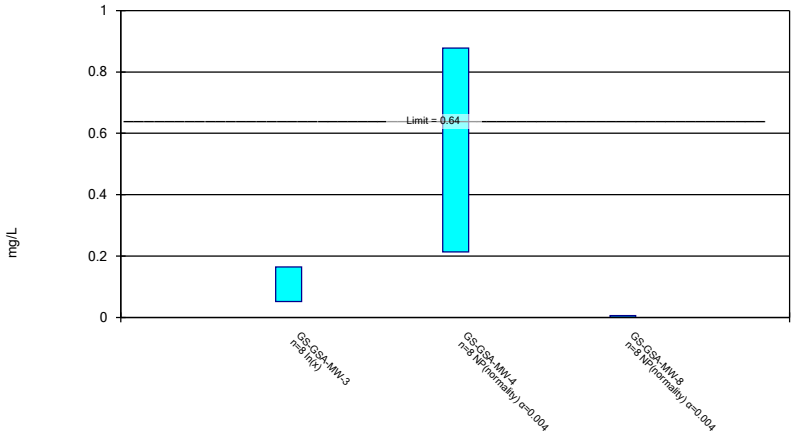
Constituent: Chromium Analysis Run 5/18/2023 1:35 PM View: AIV

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.37 . UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



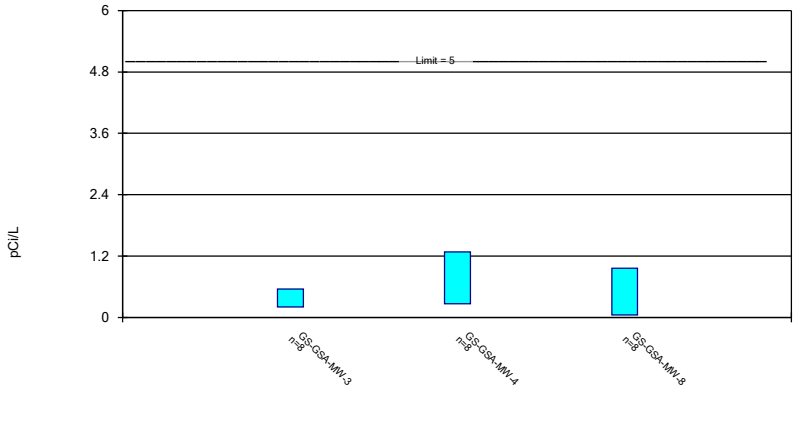
Constituent: Cobalt Analysis Run 5/18/2023 1:35 PM View: AIV

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.37 . UG

Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



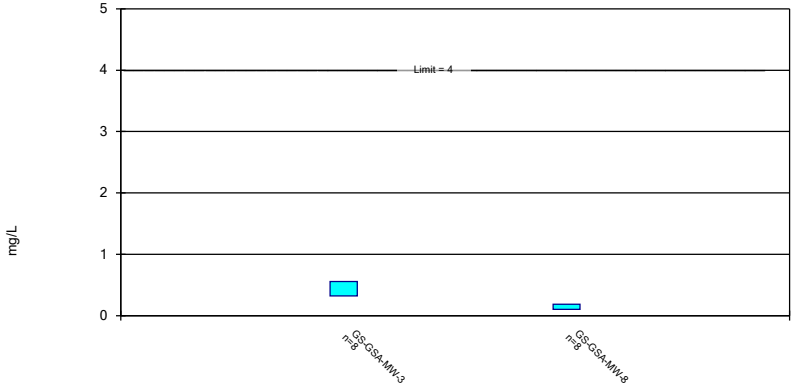
Constituent: Combined Radium 226 + 228 Analysis Run 5/18/2023 1:35 PM View: AIV

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.37 . UG

Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



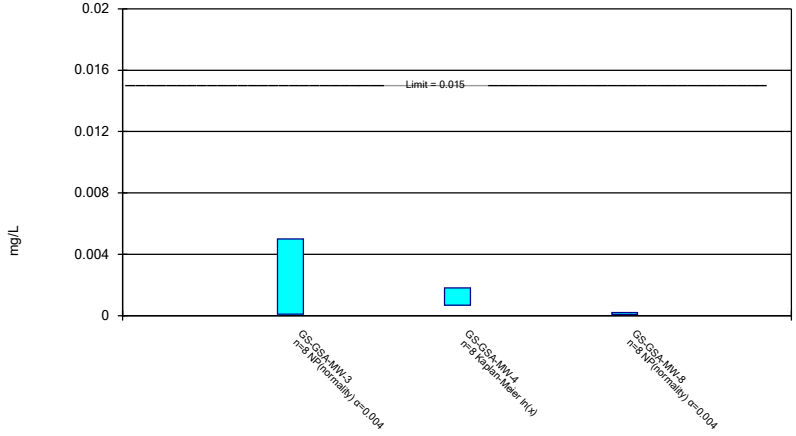
Constituent: Fluoride Analysis Run 5/18/2023 1:35 PM View: AIV

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.37 . UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



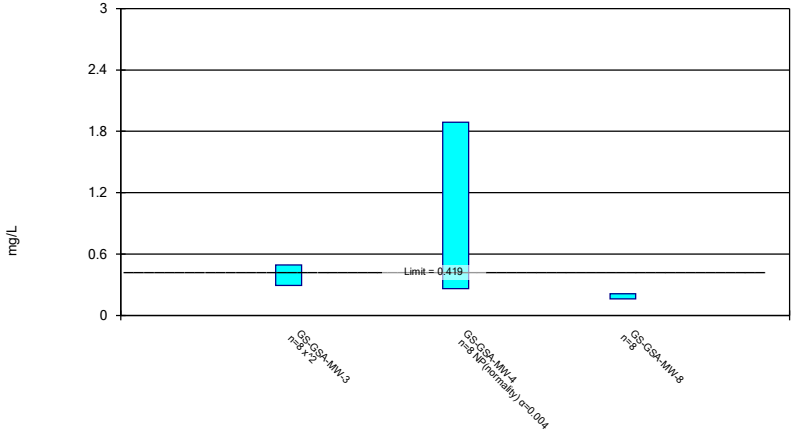
Constituent: Lead Analysis Run 5/18/2023 1:35 PM View: AIV

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.37 . UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



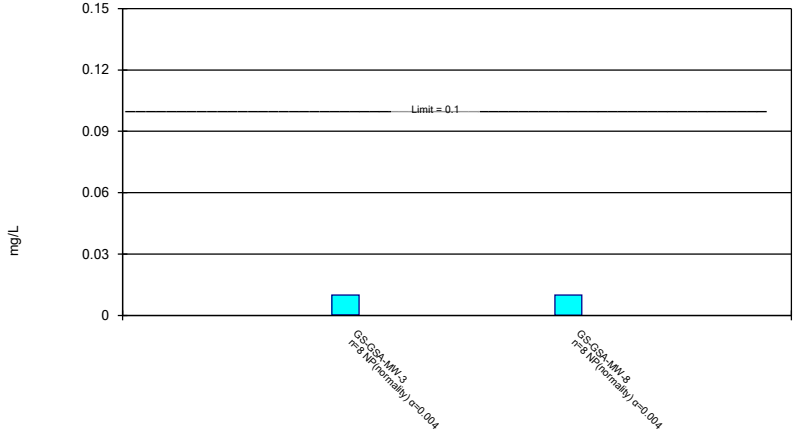
Constituent: Lithium Analysis Run 5/18/2023 1:35 PM View: AIV

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.37 . UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded.

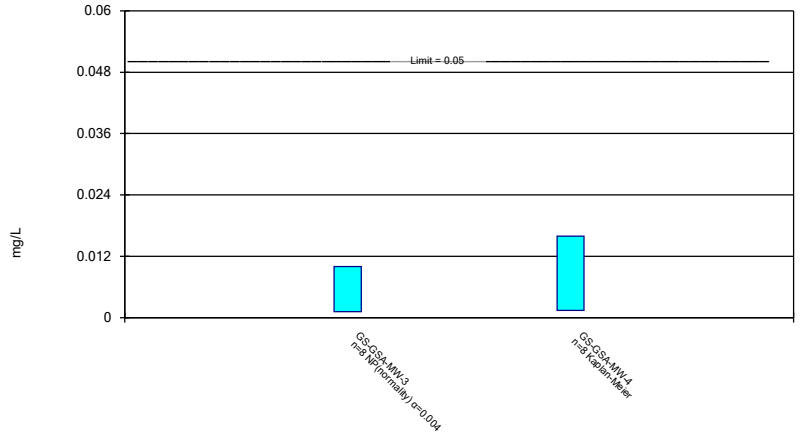


Constituent: Molybdenum Analysis Run 5/18/2023 1:35 PM View: AIV

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



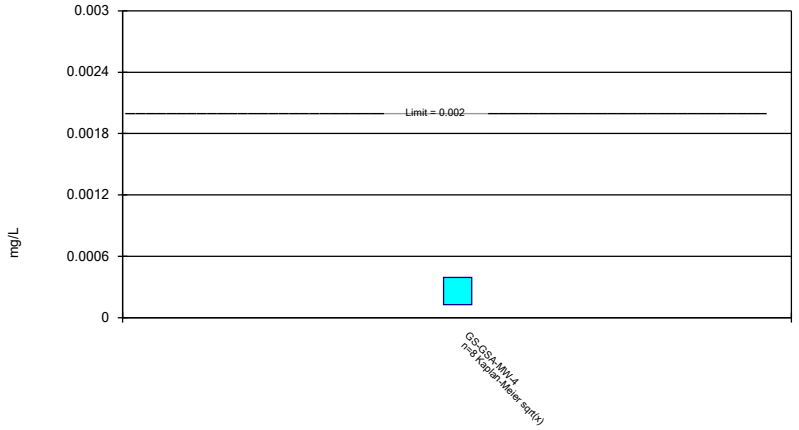
Constituent: Selenium Analysis Run 5/18/2023 1:35 PM View: AIV

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.37 . UG

Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Thallium Analysis Run 5/18/2023 1:35 PM View: AIV

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Confidence Interval

Constituent: Antimony (mg/L) Analysis Run 5/23/2023 3:07 PM View: AIV

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-3
10/14/2019	<0.001015
2/3/2020	<0.001015
8/4/2020	<0.001015
3/1/2021	<0.001015
7/14/2021	<0.001015
1/26/2022	0.00066 (J)
7/13/2022	<0.001015
2/27/2023	<0.001015
Mean	0.0009706
Std. Dev.	0.0001255
Upper Lim.	0.001015
Lower Lim.	0.00066

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Arsenic (mg/L) Analysis Run 5/23/2023 3:07 PM View: AIV

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-3	GS-GSA-MW-4	GS-GSA-MW-8
10/14/2019	<0.005	0.0012 (J)	<0.005
2/3/2020	<0.005		
2/4/2020		0.00128 (J)	<0.005
8/4/2020	<0.005		
8/5/2020		0.00115 (J)	<0.005
3/1/2021	0.0014		0.000633
3/3/2021		0.00116	
7/14/2021	0.00057	0.00174	0.00024
1/26/2022	0.00136		
1/27/2022		0.00274	0.00027
7/12/2022			0.000156 (J)
7/13/2022	0.000491	0.00694	
2/27/2023	0.00111		
2/28/2023			0.000177 (J)
3/1/2023		0.00412	
Mean	0.002491	0.002541	0.002059
Std. Dev.	0.002103	0.002062	0.002439
Upper Lim.	0.001441	0.00694	0.005
Lower Lim.	0.0005624	0.00115	0.000156

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Barium (mg/L) Analysis Run 5/23/2023 3:07 PM View: AIV

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-3	GS-GSA-MW-4	GS-GSA-MW-8
10/14/2019	0.0122	0.0147	0.0215
2/3/2020	0.0141		
2/4/2020		0.0124	0.0209
8/4/2020	0.0139		
8/5/2020		0.0142	0.0216
3/1/2021	0.0154		0.0194
3/3/2021		0.0117	
7/14/2021	0.0136	0.0115	0.0232
1/26/2022	0.0148		
1/27/2022		0.0131	0.0238
7/12/2022			0.022
7/13/2022	0.0118	0.00947	
2/27/2023	0.0138		
2/28/2023			0.0238
3/1/2023		0.00845	
Mean	0.0137	0.01194	0.02203
Std. Dev.	0.001206	0.002165	0.001526
Upper Lim.	0.01498	0.01423	0.02364
Lower Lim.	0.01242	0.009645	0.02041

Confidence Interval

Constituent: Beryllium (mg/L) Analysis Run 5/23/2023 3:07 PM View: AIV

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-3	GS-GSA-MW-4
10/14/2019	0.00162 (J)	0.00403
2/3/2020	0.00141 (J)	
2/4/2020		0.00415
8/4/2020	0.00174 (J)	
8/5/2020		0.00385
3/1/2021	0.00157	
3/3/2021		0.00406
7/14/2021	0.00175	0.00577
1/26/2022	0.00179	
1/27/2022		0.00768
7/13/2022	0.00204	0.0228
2/27/2023	0.00191	
3/1/2023		0.0224
Mean	0.001729	0.009343
Std. Dev.	0.0001974	0.008284
Upper Lim.	0.001938	0.0228
Lower Lim.	0.00152	0.00385

Confidence Interval

Constituent: Cadmium (mg/L) Analysis Run 5/23/2023 3:07 PM View: AIV

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-4
10/14/2019	0.0015
2/4/2020	0.00143
8/5/2020	0.00157
3/3/2021	0.00162
7/14/2021	0.00246
1/27/2022	0.00336
7/13/2022	0.00687
3/1/2023	0.00552
Mean	0.003041
Std. Dev.	0.002084
Upper Lim.	0.00687
Lower Lim.	0.00143

Confidence Interval

Constituent: Chromium (mg/L) Analysis Run 5/23/2023 3:07 PM View: AIV

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-3	GS-GSA-MW-4	GS-GSA-MW-8
10/14/2019	<0.01	<0.01	<0.01
2/3/2020	<0.01		
2/4/2020		<0.01	<0.01
8/4/2020	<0.01		
8/5/2020		<0.01	<0.01
3/1/2021	0.000386 (J)		0.000423 (J)
3/3/2021		0.000567 (J)	
7/14/2021	0.00039 (J)	0.0007 (J)	0.0003 (J)
1/26/2022	0.00048 (J)		
1/27/2022		0.00107	0.00046 (J)
7/12/2022			0.000258 (J)
7/13/2022	0.000341 (J)	0.00355	
2/27/2023	0.00037 (J)		
2/28/2023			0.000325 (J)
3/1/2023		0.00243	
Mean	0.003996	0.00479	0.003971
Std. Dev.	0.004972	0.004423	0.004993
Upper Lim.	0.01	0.002747	0.01
Lower Lim.	0.000341	0.0006118	0.000258

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Cobalt (mg/L) Analysis Run 5/23/2023 3:07 PM View: AIV

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-3	GS-GSA-MW-4	GS-GSA-MW-8
10/14/2019	0.102	0.213	<0.005
2/3/2020	0.0843		
2/4/2020		0.217	<0.005
8/4/2020	0.0862		
8/5/2020		0.235	<0.005
3/1/2021	0.119		0.00546
3/3/2021		0.24	
7/14/2021	0.0555	0.296	0.00026
1/26/2022	0.0794		
1/27/2022		0.406	0.00067
7/12/2022			0.000233
7/13/2022	0.046	0.878	
2/27/2023	0.285		
2/28/2023			0.000248
3/1/2023		0.705	
Mean	0.1072	0.3988	0.002734
Std. Dev.	0.07553	0.2546	0.002554
Upper Lim.	0.1648	0.878	0.00546
Lower Lim.	0.05126	0.213	0.000233

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 5/23/2023 3:07 PM View: AIV

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-3	GS-GSA-MW-4	GS-GSA-MW-8
10/14/2019	0.297 (U)	0.317 (U)	0.225 (U)
2/3/2020	0.28 (U)		
2/4/2020		0.324 (U)	0.336 (U)
8/4/2020	0.45 (U)		
8/5/2020		0.389 (U)	-0.115 (U)
3/1/2021	0.57 (U)		0.902 (U)
3/3/2021		0.836 (U)	
7/14/2021	0.668 (U)	1.58	1.23 (U)
1/26/2022	0.335 (U)		
1/27/2022		0.791 (U)	0.28 (U)
7/12/2022			0.745 (U)
7/13/2022	0.239 (U)	1.37	
2/27/2023	0.213 (U)		
2/28/2023			0.422 (U)
3/1/2023		0.593 (U)	
Mean	0.3815	0.775	0.5031
Std. Dev.	0.165	0.4783	0.4292
Upper Lim.	0.5564	1.282	0.9581
Lower Lim.	0.2066	0.268	0.04817

Confidence Interval

Constituent: Fluoride (mg/L) Analysis Run 5/23/2023 3:07 PM View: AIV

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-3	GS-GSA-MW-8
10/14/2019	0.619	0.118
2/3/2020	0.427	
2/4/2020		0.132
8/4/2020	0.389	
8/5/2020		0.119
3/1/2021	0.449	0.106
7/14/2021	0.556	0.221
1/26/2022	0.447	
1/27/2022		0.179
7/12/2022		0.112 (J)
7/13/2022	0.324	
2/27/2023	0.292	
2/28/2023		0.161
Mean	0.4379	0.1435
Std. Dev.	0.1094	0.04027
Upper Lim.	0.5538	0.1862
Lower Lim.	0.322	0.1008

Confidence Interval

Constituent: Lead (mg/L) Analysis Run 5/23/2023 3:07 PM View: AIV

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-3	GS-GSA-MW-4	GS-GSA-MW-8
10/14/2019	<0.005	<0.005	<0.000203
2/3/2020	<0.005		
2/4/2020		<0.005	<0.000203
8/4/2020	<0.005		
8/5/2020		<0.005	<0.000203
3/1/2021	0.000157 (J)		0.000145 (J)
3/3/2021		0.000609	
7/14/2021	0.00018 (J)	0.00079	<0.000203
1/26/2022	0.00014 (J)		
1/27/2022		0.00103	0.00015 (J)
7/12/2022			<0.000203
7/13/2022	9.5E-05 (J)	0.00228	
2/27/2023	0.000132 (J)		
2/28/2023			7.8E-05 (J)
3/1/2023		0.00144	
Mean	0.001963	0.002644	0.0001735
Std. Dev.	0.002515	0.002015	4.604E-05
Upper Lim.	0.005	0.001799	0.000203
Lower Lim.	9.5E-05	0.0006755	7.8E-05

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Lithium (mg/L) Analysis Run 5/23/2023 3:07 PM View: AIV

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-3	GS-GSA-MW-4	GS-GSA-MW-8
10/14/2019	0.459	0.262	0.209
2/3/2020	0.474		
2/4/2020		0.29	0.188
8/4/2020	0.468		
8/5/2020		0.273	0.206
3/1/2021	0.353		0.149
3/3/2021		0.313	
7/14/2021	0.485	0.487	0.213
1/26/2022	0.31		
1/27/2022		0.671	0.185
7/12/2022			0.189
7/13/2022	0.421	1.89	
2/27/2023	0.165		
2/28/2023			0.157
3/1/2023		1.35	
Mean	0.3919	0.692	0.187
Std. Dev.	0.111	0.6067	0.02353
Upper Lim.	0.4934	1.89	0.2119
Lower Lim.	0.2919	0.262	0.1621

Confidence Interval

Constituent: Molybdenum (mg/L) Analysis Run 5/23/2023 3:07 PM View: AIV

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-3	GS-GSA-MW-8
10/14/2019	<0.01	<0.01
2/3/2020	<0.01	
2/4/2020		<0.01
8/4/2020	<0.01	
8/5/2020		<0.01
3/1/2021	0.00022	0.00277
7/14/2021	0.00026	0.00015 (J)
1/26/2022	0.00022	
1/27/2022		0.00012 (J)
7/12/2022		0.000122 (J)
7/13/2022	0.000257	
2/27/2023	0.000191 (J)	
2/28/2023		0.000135 (J)
Mean	0.003893	0.004162
Std. Dev.	0.005057	0.004916
Upper Lim.	0.01	0.01
Lower Lim.	0.000191	0.00012

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Selenium (mg/L) Analysis Run 5/23/2023 3:07 PM View: AIV

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-3	GS-GSA-MW-4
10/14/2019	<0.01	<0.01
2/3/2020	<0.01	
2/4/2020		<0.01
8/4/2020	<0.01	
8/5/2020		0.00298 (J)
3/1/2021	0.00141	
3/3/2021		0.00294
7/14/2021	0.00151	0.00563
1/26/2022	0.00117	
1/27/2022		0.00817
7/13/2022	0.00151	0.0226
2/27/2023	0.00152	
3/1/2023		0.017
Mean	0.00464	0.009915
Std. Dev.	0.00444	0.006858
Upper Lim.	0.01	0.01591
Lower Lim.	0.00117	0.001386

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Thallium (mg/L) Analysis Run 5/23/2023 3:07 PM View: AIV

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-4
10/14/2019	<0.001
2/4/2020	<0.001
8/5/2020	0.000205 (J)
3/3/2021	0.000178 (J)
7/14/2021	9E-05 (J)
1/27/2022	0.00022
7/13/2022	0.000447
3/1/2023	0.000407
Mean	0.0004434
Std. Dev.	0.0003631
Upper Lim.	0.0003919
Lower Lim.	0.0001277

ND substitution: RL or RL/2 if <15% NDs.

GROUNDWATER STATS CONSULTING

December 22, 2023

Southern Company Services
Attn: Mr. Greg Budd
3535 Colonnade Parkway
Birmingham, AL 35243

Re: Plant Gorgas Gypsum Pond
2nd Semi-Annual Background Update and Analysis – August 2023

Dear Mr. Budd,

Groundwater Stats Consulting, formerly the statistical consulting division of Sanitas Technologies, is pleased to provide the statistical background update and analysis of groundwater data for the August 2023 2nd semi-annual sample event for Alabama Power Company's Plant Gorgas Gypsum Pond. The analysis complies with the federal rule for the Disposal of Coal Combustion Residuals (CCR) from Electric Utilities (CCR Rule, 2015) as well as with the United States Environmental Protection Agency (USEPA) Unified Guidance (2009).

Sampling began at this site for the CCR program in 2016. The monitoring well network, as provided by Southern Company Services, consists of the following:

- **Upgradient wells:** MW-1, MW-2, MW-3, and MW-4
- **Downgradient wells:** GS-GSA-MW-3, GS-GSA-MW-4, and GS-GSA-MW-8
- **Delineation wells:** GS-GSA-MW-3V, GS-GSA-MW-4V, GS-GSA-MW-8V, GS-GSA-MW-9H, GS-GSA-MW-9V, GS-GSA-MW-11H, GS-GSA-MW-12H, GS-GSA-MW-12V, GS-GSA-MW-13H, and GS-GSA-MW-14H
- **Piezometers:** GS-GSA-MW-01, GS-GSA-MW-02, GS-GSA-MW-06, GS-GSA-MW-07, GS-GSA-MW-09, GS-GSA-MW-10H, GS-GSA-MW-15H, GS-GSA-PZ-04, GS-GSA-PZ-05, GS-GSA-PZ-16, GS-GSA-PZ-17, GS-GSA-PZ-18, GS-GSA-PZ-19, GS-GSA-PZ-20, GS-GSA-PZ-21, GS-GSA-PZ-22, GS-GSA-PZ-2A, and GS-GSA-MW-23VA

Data from delineation wells did not require statistics; therefore, data were plotted only on time series and box plots. Note that a resample for delineation well GS-GSA-MW-11H was

collected in October 2023. Piezometers only monitor water levels; therefore, data from these wells are not included in this analysis.

Data were sent electronically to Groundwater Stats Consulting, and the statistical analysis was prepared according to the Statistical Analysis Plan approved by Dr. Kirk Cameron, PhD Statistician with MacStat Consulting, primary author of the USEPA Unified Guidance, and Senior Advisor to Groundwater Stats Consulting. The analysis was reviewed by Andrew Collins, Project Manager of Groundwater Stats Consulting.

The CCR program consists of the constituents listed below. The terms "parameters" and "constituents" are used interchangeably.

> **Appendix III** (Detection Monitoring) - boron, calcium, chloride, fluoride, pH, sulfate, and TDS
> **Appendix IV** (Assessment Monitoring) - antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, combined radium 226 + 228, fluoride, lead, lithium, mercury, molybdenum, selenium, and thallium

Note that when there are no detections present in downgradient wells for a given constituent, statistical analyses are not required. A list of Appendix IV downgradient well/constituent pairs containing 100% non-detects follows this letter.

Time series plots for Appendix III and IV parameters at all wells are provided for the purpose of screening data at these wells (Figure A). A substitution of the most recent reporting limit is used for non-detect data. Additionally, a separate section of box plots is included for all constituents at upgradient and downgradient wells (Figure B). The time series plots are used to initially screen for suspected outliers and trends, while the box plots provide visual representation of variation within individual wells and between all wells.

In earlier analyses, data at all wells were evaluated for the following: 1) outliers; 2) trends; 3) most appropriate statistical method for Appendix III parameters based on analysis of the spatial variability of groundwater quality data among wells upgradient of the facility; and 4) eligibility of downgradient wells when intrawell statistical methods are recommended. Power curves are provided in this report to demonstrate that the selected statistical methods for Appendix III parameters comply with the USEPA Unified Guidance. The EPA suggests that the selected statistical method should provide at least 55% power at 3 standard deviations or at least 80% power at 4 standard deviations. Power curves are based on the following statistical methods and site/data characteristics:

- Semi-Annual Sampling
- Intrawell Prediction Limits with 1-of-2 resample plan
- Interwell Prediction Limits with 1-of-2 resample plan
- # Background Samples (Intrawell): 16
- # Background Samples (Interwell): 111
- # Constituents: 7
- # Downgradient wells: 3

Summary of Statistical Methods – Appendix III Parameters

Based on the earlier evaluation described above, the following statistical methods were selected:

- Intrawell prediction limits, combined with a 1-of-2 resample plan for pH, sulfate, and TDS
- Interwell prediction limits, combined with a 1-of-2 resample plan for boron, calcium, chloride, and fluoride

Parametric prediction limits are utilized when the screened historical data follow a normal or transformed-normal distribution. When data cannot be normalized or the majority of data are non-detects, a nonparametric test is utilized. While the annual false positive rate associated with parametric limits is fixed at 10% as recommended by the EPA Unified Guidance (2009), the false positive rate associated with nonparametric limits is not fixed and depends upon the available background sample size, number of future comparisons, and verification resample plan. The distribution of data is tested using the Shapiro-Wilk/Shapiro-Francia test for normality. After testing for normality and performing any adjustments as discussed below (US EPA, 2009), data are analyzed using either parametric or non-parametric prediction limits as appropriate. Non-detects are handled as follows:

- No statistical analyses are required on wells and analytes containing 100% non-detects (USEPA Unified Guidance, 2009, Chapter 6).
- When data contain <15% non-detects, simple substitution of one-half the reporting limit is utilized in the statistical analysis. The reporting limit utilized for non-detects is the most recent practical quantification limit (PQL) as reported by the laboratory.
- When data contain between 15-50% non-detects, the Kaplan-Meier non-detect adjustment is applied to the background data for parametric limits. This technique adjusts the mean and standard deviation of the historical concentrations to account for concentrations below the reporting limit.

- Nonparametric prediction limits are used on data containing greater than 50% non-detects.

Natural systems continuously evolve due to physical changes made to the environment. Examples include capping a landfill, paving areas near a well, or lining a drainage channel to prevent erosion. Periodic updating of background statistical limits is necessary to accommodate these types of changes. In the intrawell case, data for all wells and constituents may be re-evaluated when a minimum of 4 new data points are available to determine whether earlier concentrations are representative of present-day groundwater quality. In the interwell case, prediction limits are updated with upgradient well data following each sampling event after careful screening for any new outliers. In some cases, deselecting the earlier portion of data may be necessary prior to construction of limits so that resulting statistical limits are conservative (lower) from a regulatory perspective and capable of rapidly detecting changes in groundwater quality. While the data are excluded from the calculation, the values will continue to be reported and shown in tables and graphs.

Background Update Summaries – Conducted in Fall 2023

Intrawell prediction limits, which compare the most recent compliance sample from a given well to historical data from the same well, are periodically updated by testing for the appropriateness of consolidating new sampling observations with the screened background data. As discussed in the Statistical Analysis Plan (August 2020), intrawell prediction limits are used to evaluate pH, sulfate, and TDS at all wells due to spatial variation for these parameters. Interwell prediction limits are used to compare the most recent sample from each downgradient well to statistical limits constructed from pooled upgradient well data for boron, calcium, chloride, and fluoride.

Outlier Analysis

Prior to constructing prediction limits, proposed background data--through February/March 2023 for intrawell prediction limits and through August 2023 for interwell prediction limits--were reviewed through visual screening to identify any newly suspected outliers at all wells for pH, sulfate, and TDS, and at upgradient wells for boron, calcium, chloride, and fluoride.

Tukey's outlier tests identified outliers for calcium, chloride, fluoride, sulfate, and TDS. Previously flagged values were confirmed by visual screening and Tukey's outlier tests. No additional measurements for Appendix III parameters were flagged as concentrations

identified by Tukey's test appeared to be representative of spatial variation or were recent measurements that could be indicative of future trends.

Outliers are flagged with "o" and excluded to reduce variation, better represent background conditions, and provide limits that are conservative (i.e., lower) from a regulatory perspective. As mentioned above, flagged data are displayed in a lighter font and as a disconnected symbol on the time series reports, as well as in a lighter font on the accompanying data pages. A summary Tukey's test results along with a list of flagged outliers follows this report (Figure C).

Intrawell – Mann-Whitney

For constituents requiring intrawell prediction limits, the Mann-Whitney (Wilcoxon Rank Sum) test was used to compare the medians of historical data through March 2021 to compliance data through February/March 2023. When no statistically significant difference in medians between the two groups is found at a 99% confidence level, background data may be updated with newer compliance data. Statistically significant differences (either an increase or decrease in median concentrations) were found between the two groups for the following well/constituent pairs:

Increase
- pH: MW-2 (upgradient)
- Sulfate: GS-GSA-MW-4
- TDS: GS-GSA-MW-4

Decrease
- pH: GS-GSA-MW-4
- Sulfate: MW-2 (upgradient)
- TDS: MW-4 (upgradient)

Typically, when the test concludes that the medians of the two groups are statistically significantly different, particularly in the downgradient wells, the background data are not updated to include the newer data unless it can be reasonably justified that the change in concentrations reflects a shift unrelated to practices at the site. In studies such as the current one, in which at least one of the segments being compared is of short duration, the comparison is complicated by the fact that normal short-term variation may be mistaken for long-term change in medians.

For well/constituent pairs with statistically significant decreases in medians, the compliance measurements were either within the range of historic concentrations or

marginally outside of that range. Therefore, the background datasets were updated with new measurements at lower concentrations in order to construct statistical limits that are conservative (i.e., lower) from a regulatory perspective and be representative of present-day groundwater quality.

Although a statistically significant increase was identified for pH in upgradient well MW-2, the increase in median concentrations was upgradient of the facility and is assumed to represent groundwater quality conditions rather than impacts from the facility. Additionally, the magnitude of the difference was small relative to the existing concentrations in background, and the compliance samples were stable. Therefore, this record was updated.

Statistically significant increases in median concentrations were identified for sulfate and TDS at downgradient well GS-GSA-MW-4. In order to maintain conservative limits from a regulatory perspective, these records were not updated with compliance data at this time.

All other background data sets for CCR Appendix III constituents that use intrawell methods were updated with compliance data through February/March 2023. A list of well/constituent pairs with a truncated portion of their record follows this letter (Date Ranges). All records will be re-evaluated during the next background update.

Interwell – Trend Test Evaluation

The Sen's Slope/Mann Kendall trend test was used to evaluate the entire record of data from upgradient wells for parameters utilizing interwell prediction limits. When statistically significant increasing trends are identified in upgradient wells, the earlier portion of data may require deselection prior to construction of interwell statistical limits if the trending data would result in statistical limits that are not conservative from a regulatory perspective.

No statistically significant trends were noted in upgradient wells except for increasing trends for boron in upgradient wells MW-1 and MW-2 and fluoride in upgradient well MW-2; however, the increasing trends for boron is the result of high non-detects in the latter part of the record and the trend in fluoride is small relative to average concentrations. Therefore, no adjustments were made at this time. A summary of the results was submitted with the screening.

Evaluation of Appendix III Parameters – August 2023

Prediction Limits

Intrawell prediction limits, combined with a 1-of-2 resample plan, were constructed for pH, sulfate, and TDS at each well using screened background data through February/March 2023 (Figure F). Intrawell limits constructed from carefully screened background data from within each well serve to provide statistical limits that are representative of the background data population, and that will rapidly identify a change in more recent compliance data from within a given well. This statistical method removes the element of variation across wells and eliminates the chance of mistaking spatial variation for a release from the facility. The August 2023 observation at each well is compared to its respective background from the same well to determine whether initial exceedances are present.

Interwell prediction limits, combined with a 1-of-2 resample plan, were constructed for boron, calcium, chloride, and fluoride (Figure G). Interwell prediction limits pool upgradient well data through March 2023 to establish a background limit for an individual constituent. The August 2023 sample from each downgradient well is compared to the background limit to determine whether initial exceedances are present.

In the event of an initial exceedance of compliance well data, the 1-of-2 resample plan allows for collection of one additional sample to determine whether the initial exceedance is confirmed. When the resample confirms the initial exceedance, a statistically significant increase (SSI) is identified, and further research is required to identify the cause of the exceedance (i.e., impact from the site, natural variation, or an off-site source). If a resample falls within the statistical limit, the initial exceedance is considered to be a false positive result; therefore, no further action is necessary.

Complete prediction limits results and a summary of exceedances follow this letter. Exceedances were identified for the following well/constituent pairs:

Intrawell:

- pH: MW-1 and MW-4 (both upgradient)
- Sulfate: GS-GSA-MW-3 and GS-GSA-MW-4
- TDS: GS-GSA-MW-3 and GS-GSA-MW-4

Interwell:

- Boron: GS-GSA-MW-3, GS-GSA-MW-4, and GS-GSA-MW-8
- Calcium: GS-GSA-MW-3 and GS-GSA-MW-8
- Chloride: GS-GSA-MW-3, GS-GSA-MW-4, and GS-GSA-MW-8

Trend Test Evaluation – Appendix III

When prediction limit exceedances are identified in downgradient wells, data are further evaluated using the Sen's Slope/Mann Kendall trend test at the 99% confidence level to determine whether concentrations are statistically increasing, decreasing, or stable (Figure H). Upgradient wells are included in the trend analyses for all parameters found to exceed their prediction limit in downgradient wells to identify whether similar patterns exist upgradient of the site. The existence of similar trends in both upgradient and downgradient wells is an indication of variability in groundwater that is unrelated to practices at the site. A summary of the trend test results follows this letter. Statistically significant trends were identified for the following well/constituent pairs:

Increasing

- Boron: MW-1, MW-2 (both upgradient), and GS-GSA-MW-8
- Calcium: GS-GSA-MW-8
- Chloride: GS-GSA-MW-8
- Sulfate: MW-3 (upgradient)

Decreasing

- Sulfate: MW-4 (upgradient)
- TDS: MW-4 (upgradient)

Evaluation of Appendix IV Parameters – August 2023

Prior to evaluating Appendix IV parameters, upgradient well data were screened through visual screening and Tukey's outlier test for potential outliers and extreme trending patterns that would lead to artificially elevated statistical limits. A discussion of those findings is provided below.

Tukey's outlier test on pooled upgradient well data for Appendix IV parameters through August 2023 identified values for barium, cobalt, combined radium 226 + 228, fluoride, and lithium (Figure C). However, no additional outliers were flagged for these constituents as all measurements appeared to be representative of spatial variation or were similar to remaining concentrations among pooled upgradient well data. Previously flagged values were confirmed by visual screening and Tukey's outlier test, except for a previously flagged measurement of 0.294 mg/L for cobalt in downgradient well GS-GSA-MW-3. This measurement was unflagged during this update due to concentrations of similar magnitude later in the record and the value was no longer considered spurious.

Additionally, downgradient well data through August 2023 were screened through visual screening using time series graphs. Since the downgradient well data are used to construct confidence intervals, a regulatory conservative approach is taken in that values that are marginally high relative to the rest of the data are retained unless there is particular justification for excluding them. No outliers were flagged among downgradient wells for Appendix IV parameters.

Interwell Upper Tolerance Limits

Background limits were determined using tolerance limits constructed from pooled upgradient well data through August 2023 (Figure I). The tolerance limits contain a known fraction (coverage) of the background population with a known level of confidence. The confidence and coverage levels for nonparametric tolerance limits are dependent upon the number of background samples. As requested by ADEM to eliminate variation among upgradient well data, nonparametric tolerance limits, which use the highest value in screened background as the statistical limit, were constructed. A summary of the tolerance limits follows this report.

Groundwater Protection Standards

These background limits were then compared to the Maximum Contaminant Levels (MCLs) for each parameter, and the higher of the two was used as the GWPS (Figure J) in the confidence interval comparisons described below.

In accordance with Alabama Department of Environmental Management, the Groundwater Protections Standards (GWPS) were updated during this 2023 2nd semi-annual statistical analysis. The GWPS will be updated again during the 2025 2nd semi-annual statistical analysis. The methodology used to create the GWPS is described below.

Confidence Intervals

Confidence intervals were then constructed on downgradient wells using a maximum of the most recent 8 samples through August 2023 for each of the Appendix IV parameters (Figure K). These intervals were either parametric or nonparametric confidence intervals depending on the data distribution and percentage of non-detects. When data followed a normal or transformed-normal distribution, parametric confidence intervals were used for Appendix IV parameters. Nonparametric confidence intervals, which use the highest and lowest values as interval limits when n=8, were constructed when data did not follow a normal or transformed-normal distribution or when there were greater than 50% non-detects. The lower confidence limit, which is constructed with 99% confidence for

parametric confidence intervals, is compared to the GWPS prepared as described above. The confidence level associated with nonparametric confidence intervals is dependent upon the number samples available.

As mentioned above, well/constituent pairs containing 100% non-detects for the most recent 8 samples did not require statistics; therefore, they were deselected prior to construction of confidence intervals. A list of deselected well/constituent pairs follows this report. Each confidence interval was compared with the corresponding GWPS. Only when the entire confidence interval is above the GWPS is the well/constituent pair considered to exceed its respective standard. Both a tabular summary and graphical presentation of the confidence interval results follow this letter. No exceedances were noted for any of the well/constituent pairs.

Trend Test Evaluation – Appendix IV

When confidence interval exceedances are identified in downgradient wells, data are further evaluated using the Sen's Slope/Mann Kendall trend test to determine whether concentrations are statistically increasing, decreasing, or stable at the 95% confidence level. Utilizing the 95% confidence level for trend tests readily identifies significant trends and is more sensitive than the 99% confidence level without drastically increasing the false negative rate. Upgradient wells are included in the trend analyses for all parameters found to exceed their confidence interval in downgradient wells. When similar patterns exist upgradient of the site, it is an indication of variability in groundwater which may be unrelated to practices at the site. Since no exceedances were identified, no trend tests were required.

Thank you for the opportunity to assist you in the statistical analysis of groundwater quality for Gorgas Gypsum Pond. If you have any questions or comments, please feel free to contact us.

For Groundwater Stats Consulting,

Abdul Diane
Groundwater Analyst

Andrew T. Collins
Project Manager

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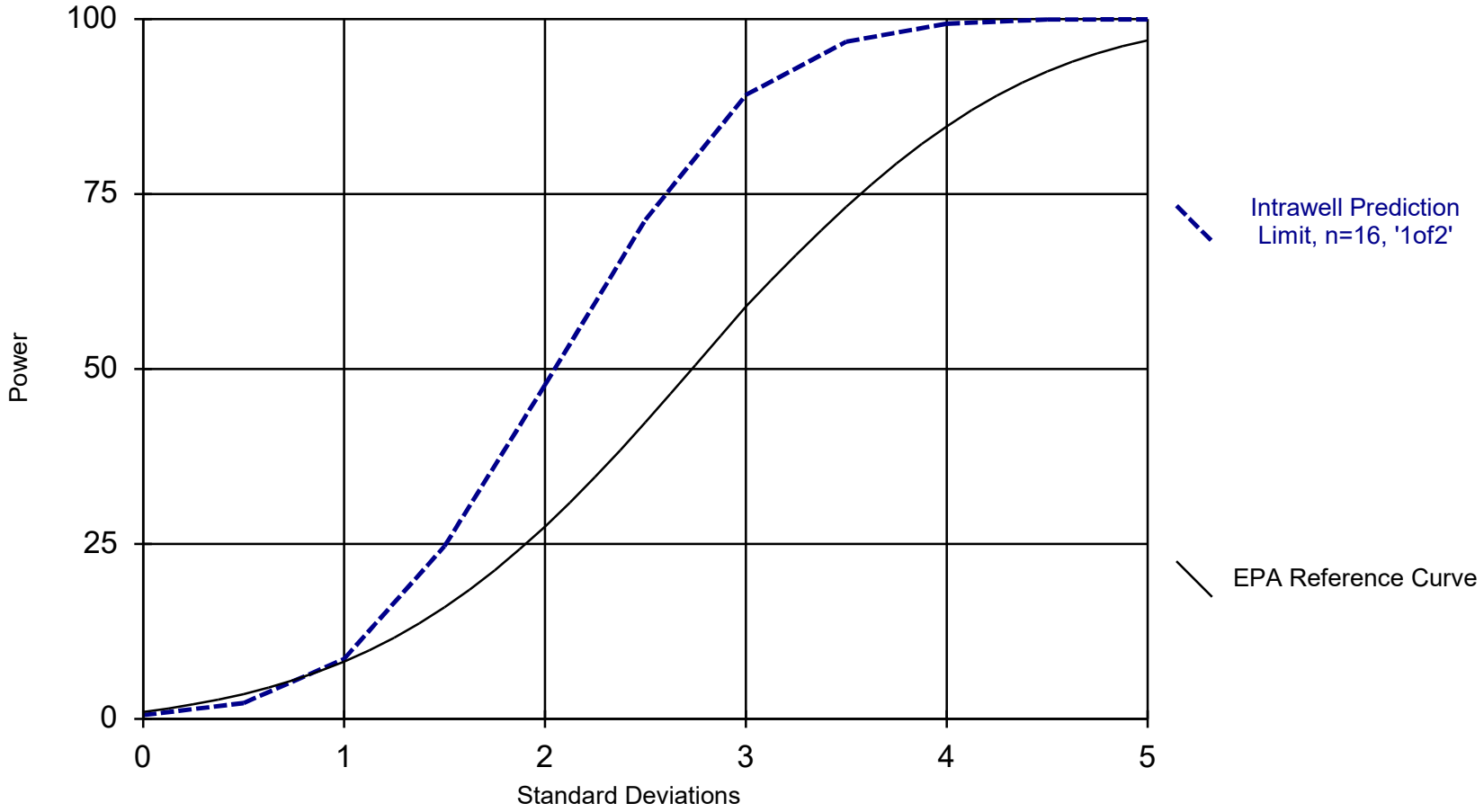
Intrawell Power Curve

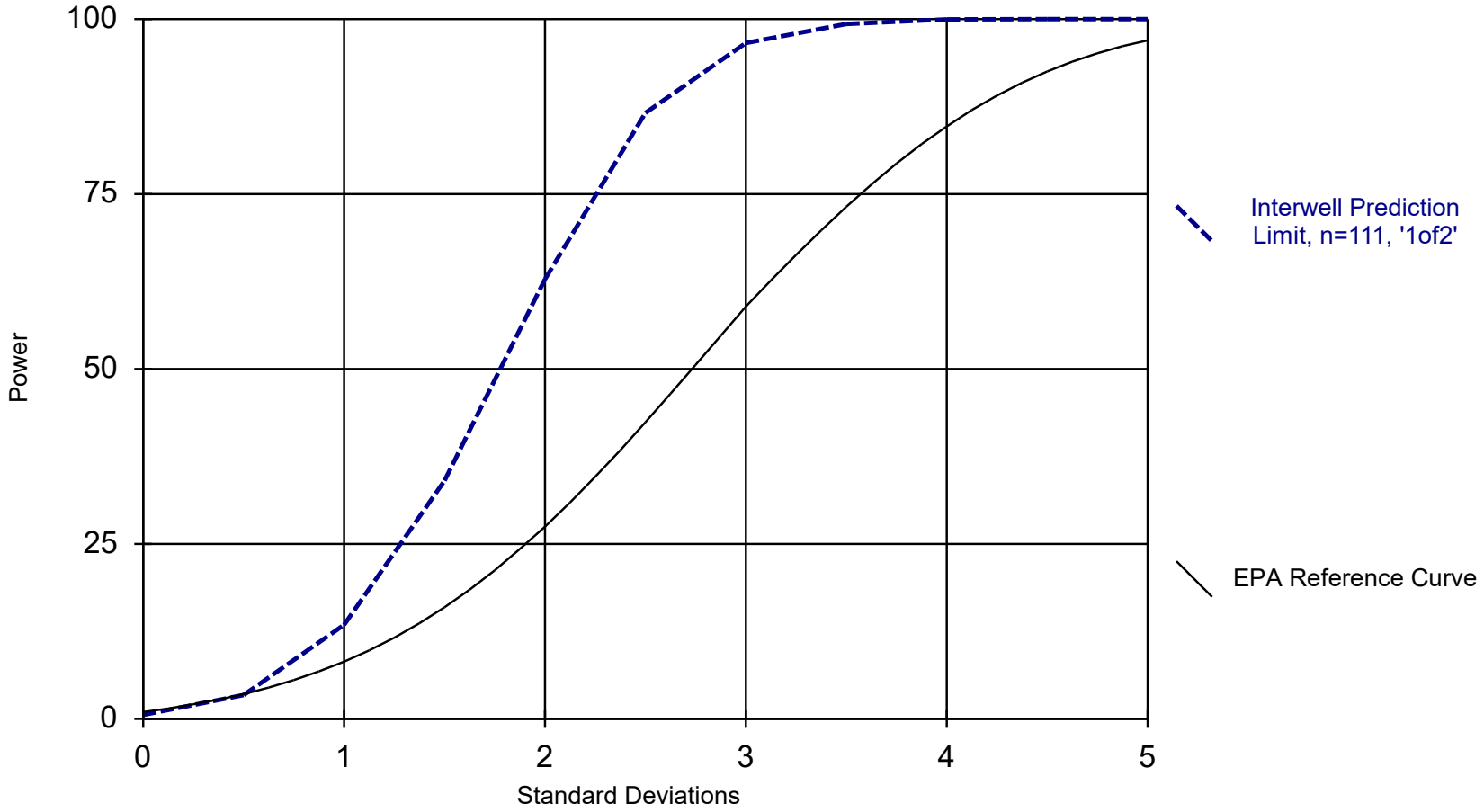


Kappa = 1.97, based on 3 compliance wells and 7 constituents, evaluated semi-annually (this report reflects annual total).

Analysis Run 12/19/2023 2:10 PM View: Appendix III - Interwell

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Interwell Power Curve



Kappa = 1.67, based on 3 compliance wells and 7 constituents, evaluated semi-annually (this report reflects annual total).

Analysis Run 12/22/2023 3:00 PM

Plant Gorgas Data: Gorgas GSA

Date Ranges

Date: 12/14/2023 3:50 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sulfate (mg/L)

GS-GSA-MW-4 background:8/24/2016-3/1/2021

Total dissolved solids (mg/L)

GS-GSA-MW-4 background:8/24/2016-3/1/2021

100% Non-Detects: Appendix IV Downgradient

Analysis Run 12/22/2023 2:50 PM View: Appendix IV
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Antimony (mg/L)
GS-GSA-MW-4, GS-GSA-MW-8

Beryllium (mg/L)
GS-GSA-MW-8

Cadmium (mg/L)
GS-GSA-MW-3, GS-GSA-MW-8

Fluoride (mg/L)
GS-GSA-MW-4

Mercury (mg/L)
GS-GSA-MW-3, GS-GSA-MW-4, GS-GSA-MW-8

Molybdenum (mg/L)
GS-GSA-MW-4

Selenium (mg/L)
GS-GSA-MW-8

Thallium (mg/L)
GS-GSA-MW-3, GS-GSA-MW-8

Welch's t-test/Mann-Whitney - Significant Results

Plant Gorgas Client: Southern Company Data: Gorgas GSA Printed 12/22/2023, 2:10 PM

Constituent	Well	Calc.	0.01	Alpha	Sig.	Method
pH (pH)	**GS-GSA-MW-4**	**-2.794**	**Yes**	**0.01**	**Yes**	**Mann-W**
pH (pH)	**MW-2 (bg)**	**2.972**	**Yes**	**0.01**	**Yes**	**Mann-W**
Sulfate (mg/L)	**GS-GSA-MW-4**	**2.988**	**Yes**	**0.01**	**Yes**	**Mann-W**
Sulfate (mg/L)	**MW-2 (bg)**	**-2.766**	**Yes**	**0.01**	**Yes**	**Mann-W**
Total dissolved solids (mg/L)	**GS-GSA-MW-4**	**2.979**	**Yes**	**0.01**	**Yes**	**Mann-W**
Total dissolved solids (mg/L)	**MW-4 (bg)**	**-2.799**	**Yes**	**0.01**	**Yes**	**Mann-W**

Welch's t-test/Mann-Whitney - All Results

Plant Gorgas Client: Southern Company Data: Gorgas GSA Printed 12/22/2023, 2:10 PM

Constituent	Well	Calc.	0.01	Alpha	Sig.	Method
pH (pH)	GS-GSA-MW-3	-0.2689	No	0.01	No	Mann-W
pH (pH)	**GS-GSA-MW-4**	**-2.794**	**Yes**	**0.01**	**Yes**	**Mann-W**
pH (pH)	GS-GSA-MW-8	0.4487	No	0.01	No	Mann-W
pH (pH)	MW-1 (bg)	-2.058	No	0.01	No	Mann-W
pH (pH)	**MW-2 (bg)**	**2.972**	**Yes**	**0.01**	**Yes**	**Mann-W**
pH (pH)	MW-3 (bg)	2.219	No	0.01	No	Mann-W
pH (pH)	MW-4 (bg)	0.3294	No	0.01	No	Mann-W
Sulfate (mg/L)	GS-GSA-MW-3	-0.4737	No	0.01	No	Mann-W
Sulfate (mg/L)	**GS-GSA-MW-4**	**2.988**	**Yes**	**0.01**	**Yes**	**Mann-W**
Sulfate (mg/L)	GS-GSA-MW-8	0.898	No	0.01	No	Mann-W
Sulfate (mg/L)	MW-1 (bg)	1.638	No	0.01	No	Mann-W
Sulfate (mg/L)	**MW-2 (bg)**	**-2.766**	**Yes**	**0.01**	**Yes**	**Mann-W**
Sulfate (mg/L)	MW-3 (bg)	0.239	No	0.01	No	Mann-W
Sulfate (mg/L)	MW-4 (bg)	-2.465	No	0.01	No	Mann-W
Total dissolved solids (mg/L)	GS-GSA-MW-3	-0.8994	No	0.01	No	Mann-W
Total dissolved solids (mg/L)	**GS-GSA-MW-4**	**2.979**	**Yes**	**0.01**	**Yes**	**Mann-W**
Total dissolved solids (mg/L)	GS-GSA-MW-8	0.04725	No	0.01	No	Mann-W
Total dissolved solids (mg/L)	MW-1 (bg)	0.03555	No	0.01	No	Mann-W
Total dissolved solids (mg/L)	MW-2 (bg)	-2.563	No	0.01	No	Mann-W
Total dissolved solids (mg/L)	MW-3 (bg)	-0.1707	No	0.01	No	Mann-W
Total dissolved solids (mg/L)	**MW-4 (bg)**	**-2.799**	**Yes**	**0.01**	**Yes**	**Mann-W**

Upgradient Wells - Trend Tests Summary - Significant Results

Plant Gorgas Client: Southern Company Data: Gorgas GSA Printed 12/22/2023, 2:21 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Alpha	Method
Boron (mg/L)	**MW-1 (bg)**	**0.006286**	**161**	**131**	**Yes**	**28**	**39.29**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**MW-2 (bg)**	**0.009837**	**186**	**131**	**Yes**	**28**	**32.14**	**n/a**	**0.01**	**NP**
Fluoride (mg/L)	**MW-2 (bg)**	**0.01319**	**197**	**139**	**Yes**	**29**	**0**	**n/a**	**0.01**	**NP**

Upgradient Wells - Trend Tests Summary - All Results

Plant Gorgas Client: Southern Company Data: Gorgas GSA Printed 12/22/2023, 2:21 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Alpha	Method
Boron (mg/L)	**MW-1 (bg)**	**0.006286**	**161**	**131**	**Yes**	**28**	**39.29**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**MW-2 (bg)**	**0.009837**	**186**	**131**	**Yes**	**28**	**32.14**	**n/a**	**0.01**	**NP**
Boron (mg/L)	MW-3 (bg)	0.004142	106	131	No	28	28.57	n/a	0.01	NP
Boron (mg/L)	MW-4 (bg)	-0.0003115	-47	-124	No	27	0	n/a	0.01	NP
Calcium (mg/L)	MW-1 (bg)	2.888	127	131	No	28	0	n/a	0.01	NP
Calcium (mg/L)	MW-2 (bg)	0	13	131	No	28	0	n/a	0.01	NP
Calcium (mg/L)	MW-3 (bg)	9.735	73	131	No	28	0	n/a	0.01	NP
Calcium (mg/L)	MW-4 (bg)	-6.218	-104	-131	No	28	0	n/a	0.01	NP
Chloride (mg/L)	MW-1 (bg)	-0.02503	-56	-131	No	28	0	n/a	0.01	NP
Chloride (mg/L)	MW-2 (bg)	-0.1196	-79	-131	No	28	0	n/a	0.01	NP
Chloride (mg/L)	MW-3 (bg)	0.04365	66	131	No	28	7.143	n/a	0.01	NP
Chloride (mg/L)	MW-4 (bg)	-0.05154	-98	-131	No	28	3.571	n/a	0.01	NP
Fluoride (mg/L)	MW-1 (bg)	-0.0003867	-15	-139	No	29	3.448	n/a	0.01	NP
Fluoride (mg/L)	**MW-2 (bg)**	**0.01319**	**197**	**139**	**Yes**	**29**	**0**	**n/a**	**0.01**	**NP**
Fluoride (mg/L)	MW-3 (bg)	0.0003253	3	139	No	29	0	n/a	0.01	NP
Fluoride (mg/L)	MW-4 (bg)	0.006957	83	139	No	29	0	n/a	0.01	NP

Appendix III - Intrawell Prediction Limits - Significant Results

Plant Gorgas Client: Southern Company Data: Gorgas GSA Printed 12/22/2023, 2:16 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
pH (pH)	**MW-1**	**5.244**	**5.03**	**8/22/2023**	**4.92**	**Yes**	**27**	**5.137**	**0.05874**	**0**	**None**	**No**	**0.001253**	**Param Intra 1 of 2**
pH (pH)	**MW-4**	**6.278**	**6.047**	**8/22/2023**	**6.28**	**Yes**	**28**	**6.163**	**0.06365**	**0**	**None**	**No**	**0.001253**	**Param Intra 1 of 2**
Sulfate (mg/L)	**GS-GSA-MW-3**	**3220**	**n/a**	**8/23/2023**	**3290**	**Yes**	**20**	**2837**	**202.9**	**0**	**None**	**No**	**0.002505**	**Param Intra 1 of 2**
Sulfate (mg/L)	**GS-GSA-MW-4**	**653.2**	**n/a**	**8/23/2023**	**828**	**Yes**	**16**	**569.6**	**42.43**	**0**	**None**	**No**	**0.002505**	**Param Intra 1 of 2**
Total dissolved solids (mg/L)	**GS-GSA-MW-3**	**5170**	**n/a**	**8/23/2023**	**5360**	**Yes**	**20**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.004291**	**NP Intra (normality) 1 of 2**
Total dissolved solids (mg/L)	**GS-GSA-MW-4**	**1084**	**n/a**	**8/23/2023**	**1460**	**Yes**	**16**	**987.9**	**48.59**	**0**	**None**	**No**	**0.002505**	**Param Intra 1 of 2**

Appendix III - Intrawell Prediction Limits - All Results

Plant Gorgas Client: Southern Company Data: Gorgas GSA Printed 12/22/2023, 2:16 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
pH (pH)	GS-GSA-MW-3	6.413	5.638	8/23/2023	6.03	No	21	6.026	0.206	0	None	No	0.001253	Param Intra 1 of 2
pH (pH)	GS-GSA-MW-4	3.91	3.43	8/23/2023	3.74	No	21	n/a	n/a	0	n/a	n/a	0.007998	NP Intra (normality) 1 of 2
pH (pH)	GS-GSA-MW-8	7.132	6.422	8/23/2023	6.83	No	21	6.777	0.1888	0	None	No	0.001253	Param Intra 1 of 2
pH (pH)	**MW-1**	**5.244**	**5.03**	**8/22/2023**	**4.92**	**Yes**	**27**	**5.137**	**0.05874**	**0**	**None**	**No**	**0.001253**	**Param Intra 1 of 2**
pH (pH)	MW-2	6.221	5.779	8/22/2023	5.81	No	27	6	0.1213	0	None	No	0.001253	Param Intra 1 of 2
pH (pH)	MW-3	6.173	4.519	8/22/2023	5.04	No	27	5.346	0.4545	0	None	No	0.001253	Param Intra 1 of 2
pH (pH)	**MW-4**	**6.278**	**6.047**	**8/22/2023**	**6.28**	**Yes**	**28**	**6.163**	**0.06365**	**0**	**None**	**No**	**0.001253**	**Param Intra 1 of 2**
Sulfate (mg/L)	**GS-GSA-MW-3**	**3220**	**n/a**	**8/23/2023**	**3290**	**Yes**	**20**	**2837**	**202.9**	**0**	**None**	**No**	**0.002505**	**Param Intra 1 of 2**
Sulfate (mg/L)	**GS-GSA-MW-4**	**653.2**	**n/a**	**8/23/2023**	**828**	**Yes**	**16**	**569.6**	**42.43**	**0**	**None**	**No**	**0.002505**	**Param Intra 1 of 2**
Sulfate (mg/L)	GS-GSA-MW-8	2157	n/a	8/23/2023	1830	No	20	1575	307.9	0	None	No	0.002505	Param Intra 1 of 2
Sulfate (mg/L)	MW-1	1656	n/a	8/22/2023	1560	No	26	1467	103.1	0	None	No	0.002505	Param Intra 1 of 2
Sulfate (mg/L)	MW-2	1239	n/a	8/22/2023	912	No	27	971.1	147.3	0	None	No	0.002505	Param Intra 1 of 2
Sulfate (mg/L)	MW-3	3185	n/a	8/22/2023	3140	No	27	2494	379.5	0	None	No	0.002505	Param Intra 1 of 2
Sulfate (mg/L)	MW-4	3075	n/a	8/22/2023	2390	No	27	2444	346.5	0	None	No	0.002505	Param Intra 1 of 2
Total dissolved solids (mg/L)	**GS-GSA-MW-3**	**5170**	**n/a**	**8/23/2023**	**5360**	**Yes**	**20**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.004291**	**NP Intra (normality) 1 of 2**
Total dissolved solids (mg/L)	**GS-GSA-MW-4**	**1084**	**n/a**	**8/23/2023**	**1460**	**Yes**	**16**	**987.9**	**48.59**	**0**	**None**	**No**	**0.002505**	**Param Intra 1 of 2**
Total dissolved solids (mg/L)	GS-GSA-MW-8	3904	n/a	8/23/2023	3280	No	20	2990	483.2	0	None	No	0.002505	Param Intra 1 of 2
Total dissolved solids (mg/L)	MW-1	2485	n/a	8/22/2023	2160	No	26	2199	156.6	0	None	No	0.002505	Param Intra 1 of 2
Total dissolved solids (mg/L)	MW-2	1980	n/a	8/22/2023	1520	No	27	1610	203.2	0	None	No	0.002505	Param Intra 1 of 2
Total dissolved solids (mg/L)	MW-3	4866	n/a	8/22/2023	4820	No	27	3766	604.2	0	None	No	0.002505	Param Intra 1 of 2
Total dissolved solids (mg/L)	MW-4	4370	n/a	8/22/2023	3780	No	27	3.3e21	2.0e21	0	None	x^6	0.002505	Param Intra 1 of 2

Appendix III - Interwell Prediction Limits - Significant Results

Plant Gorgas Client: Southern Company Data: Gorgas GSA Printed 12/22/2023, 2:26 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	**GS-GSA-MW-3**	**0.1015**	**n/a**	**8/23/2023**	**1.57**	**Yes**	**111**	**n/a**	**n/a**	**25.23**	**n/a**	**n/a**	**0.0001615**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**GS-GSA-MW-4**	**0.1015**	**n/a**	**8/23/2023**	**2.24**	**Yes**	**111**	**n/a**	**n/a**	**25.23**	**n/a**	**n/a**	**0.0001615**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**GS-GSA-MW-8**	**0.1015**	**n/a**	**8/23/2023**	**2.22**	**Yes**	**111**	**n/a**	**n/a**	**25.23**	**n/a**	**n/a**	**0.0001615**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**GS-GSA-MW-3**	**431**	**n/a**	**8/23/2023**	**585**	**Yes**	**112**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0001586**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**GS-GSA-MW-8**	**431**	**n/a**	**8/23/2023**	**451**	**Yes**	**112**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0001586**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	**GS-GSA-MW-3**	**4.6**	**n/a**	**8/23/2023**	**212**	**Yes**	**112**	**n/a**	**n/a**	**2.679**	**n/a**	**n/a**	**0.0001586**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	**GS-GSA-MW-4**	**4.6**	**n/a**	**8/23/2023**	**22.5**	**Yes**	**112**	**n/a**	**n/a**	**2.679**	**n/a**	**n/a**	**0.0001586**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	**GS-GSA-MW-8**	**4.6**	**n/a**	**8/23/2023**	**90**	**Yes**	**112**	**n/a**	**n/a**	**2.679**	**n/a**	**n/a**	**0.0001586**	**NP Inter (normality) 1 of 2**

Appendix III - Interwell Prediction Limits - All Results

Plant Gorgas Client: Southern Company Data: Gorgas GSA Printed 12/22/2023, 2:26 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	**GS-GSA-MW-3**	**0.1015**	**n/a**	**8/23/2023**	**1.57**	**Yes**	**111**	**n/a**	**n/a**	**25.23**	**n/a**	**n/a**	**0.0001615**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**GS-GSA-MW-4**	**0.1015**	**n/a**	**8/23/2023**	**2.24**	**Yes**	**111**	**n/a**	**n/a**	**25.23**	**n/a**	**n/a**	**0.0001615**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**GS-GSA-MW-8**	**0.1015**	**n/a**	**8/23/2023**	**2.22**	**Yes**	**111**	**n/a**	**n/a**	**25.23**	**n/a**	**n/a**	**0.0001615**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**GS-GSA-MW-3**	**431**	**n/a**	**8/23/2023**	**585**	**Yes**	**112**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0001586**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	GS-GSA-MW-4	431	n/a	8/23/2023	156	No	112	n/a	n/a	0	n/a	n/a	0.0001586	NP Inter (normality) 1 of 2
Calcium (mg/L)	**GS-GSA-MW-8**	**431**	**n/a**	**8/23/2023**	**451**	**Yes**	**112**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0001586**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	**GS-GSA-MW-3**	**4.6**	**n/a**	**8/23/2023**	**212**	**Yes**	**112**	**n/a**	**n/a**	**2.679**	**n/a**	**n/a**	**0.0001586**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	**GS-GSA-MW-4**	**4.6**	**n/a**	**8/23/2023**	**22.5**	**Yes**	**112**	**n/a**	**n/a**	**2.679**	**n/a**	**n/a**	**0.0001586**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	**GS-GSA-MW-8**	**4.6**	**n/a**	**8/23/2023**	**90**	**Yes**	**112**	**n/a**	**n/a**	**2.679**	**n/a**	**n/a**	**0.0001586**	**NP Inter (normality) 1 of 2**
Fluoride (mg/L)	GS-GSA-MW-3	0.63	n/a	8/23/2023	0.542	No	116	n/a	n/a	0.8621	n/a	n/a	0.0001469	NP Inter (normality) 1 of 2
Fluoride (mg/L)	GS-GSA-MW-4	0.63	n/a	8/23/2023	0.05ND	No	116	n/a	n/a	0.8621	n/a	n/a	0.0001469	NP Inter (normality) 1 of 2
Fluoride (mg/L)	GS-GSA-MW-8	0.63	n/a	8/23/2023	0.139	No	116	n/a	n/a	0.8621	n/a	n/a	0.0001469	NP Inter (normality) 1 of 2

Appendix III - Trend Tests Summary - Significant Results

Plant Gorgas Client: Southern Company Data: Gorgas GSA Printed 12/22/2023, 2:29 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Alpha	Method
Boron (mg/L)	**GS-GSA-MW-8**	**0.3589**	**160**	**87**	**Yes**	**21**	**0**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**MW-1 (bg)**	**0.006286**	**161**	**131**	**Yes**	**28**	**39.29**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**MW-2 (bg)**	**0.009837**	**186**	**131**	**Yes**	**28**	**32.14**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**GS-GSA-MW-8**	**36.13**	**97**	**87**	**Yes**	**21**	**0**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**GS-GSA-MW-8**	**19.64**	**92**	**87**	**Yes**	**21**	**0**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**MW-3 (bg)**	**102.2**	**133**	**131**	**Yes**	**28**	**0**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**MW-4 (bg)**	**-95.63**	**-172**	**-131**	**Yes**	**28**	**0**	**n/a**	**0.01**	**NP**
Total dissolved solids (mg/L)	**MW-4 (bg)**	**-136.9**	**-170**	**-131**	**Yes**	**28**	**0**	**n/a**	**0.01**	**NP**

Appendix III - Trend Tests Summary - All Results

Plant Gorgas Client: Southern Company Data: Gorgas GSA Printed 12/22/2023, 2:29 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Alpha	Method
Boron (mg/L)	GS-GSA-MW-3	-0.01658	-4	-87	No	21	0	n/a	0.01	NP
Boron (mg/L)	GS-GSA-MW-4	-0.2357	-36	-87	No	21	0	n/a	0.01	NP
Boron (mg/L)	**GS-GSA-MW-8**	**0.3589**	**160**	**87**	**Yes**	**21**	**0**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**MW-1 (bg)**	**0.006286**	**161**	**131**	**Yes**	**28**	**39.29**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**MW-2 (bg)**	**0.009837**	**186**	**131**	**Yes**	**28**	**32.14**	**n/a**	**0.01**	**NP**
Boron (mg/L)	MW-3 (bg)	0.004142	106	131	No	28	28.57	n/a	0.01	NP
Boron (mg/L)	MW-4 (bg)	-0.0003115	-47	-124	No	27	0	n/a	0.01	NP
Calcium (mg/L)	GS-GSA-MW-3	-3.604	-30	-87	No	21	0	n/a	0.01	NP
Calcium (mg/L)	**GS-GSA-MW-8**	**36.13**	**97**	**87**	**Yes**	**21**	**0**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	MW-1 (bg)	2.888	127	131	No	28	0	n/a	0.01	NP
Calcium (mg/L)	MW-2 (bg)	0	13	131	No	28	0	n/a	0.01	NP
Calcium (mg/L)	MW-3 (bg)	9.735	73	131	No	28	0	n/a	0.01	NP
Calcium (mg/L)	MW-4 (bg)	-6.218	-104	-131	No	28	0	n/a	0.01	NP
Chloride (mg/L)	GS-GSA-MW-3	-6.477	-44	-87	No	21	0	n/a	0.01	NP
Chloride (mg/L)	GS-GSA-MW-4	-9.635	-66	-87	No	21	0	n/a	0.01	NP
Chloride (mg/L)	**GS-GSA-MW-8**	**19.64**	**92**	**87**	**Yes**	**21**	**0**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	MW-1 (bg)	-0.02503	-56	-131	No	28	0	n/a	0.01	NP
Chloride (mg/L)	MW-2 (bg)	-0.1196	-79	-131	No	28	0	n/a	0.01	NP
Chloride (mg/L)	MW-3 (bg)	0.04365	66	131	No	28	7.143	n/a	0.01	NP
Chloride (mg/L)	MW-4 (bg)	-0.05154	-98	-131	No	28	3.571	n/a	0.01	NP
Sulfate (mg/L)	GS-GSA-MW-3	0	-4	-87	No	21	0	n/a	0.01	NP
Sulfate (mg/L)	GS-GSA-MW-4	35.04	74	87	No	21	0	n/a	0.01	NP
Sulfate (mg/L)	MW-1 (bg)	15.92	95	124	No	27	0	n/a	0.01	NP
Sulfate (mg/L)	MW-2 (bg)	-33.63	-109	-131	No	28	0	n/a	0.01	NP
Sulfate (mg/L)	**MW-3 (bg)**	**102.2**	**133**	**131**	**Yes**	**28**	**0**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**MW-4 (bg)**	**-95.63**	**-172**	**-131**	**Yes**	**28**	**0**	**n/a**	**0.01**	**NP**
Total dissolved solids (mg/L)	GS-GSA-MW-3	10.23	17	87	No	21	0	n/a	0.01	NP
Total dissolved solids (mg/L)	GS-GSA-MW-4	57.41	66	87	No	21	0	n/a	0.01	NP
Total dissolved solids (mg/L)	MW-1 (bg)	32.59	115	124	No	27	0	n/a	0.01	NP
Total dissolved solids (mg/L)	MW-2 (bg)	-35.3	-96	-131	No	28	0	n/a	0.01	NP
Total dissolved solids (mg/L)	MW-3 (bg)	168.3	127	131	No	28	0	n/a	0.01	NP
Total dissolved solids (mg/L)	**MW-4 (bg)**	**-136.9**	**-170**	**-131**	**Yes**	**28**	**0**	**n/a**	**0.01**	**NP**

Upper Tolerance Limits Summary Table

Plant Gorgas Client: Southern Company Data: Gorgas GSA Printed 12/22/2023, 2:45 PM

Constituent	Upper Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	0.00143	n/a	n/a	n/a	112	n/a	n/a	94.64	n/a	n/a	0.003199	NP Inter
Arsenic (mg/L)	0.0048	n/a	n/a	n/a	112	n/a	n/a	72.32	n/a	n/a	0.003199	NP Inter
Barium (mg/L)	0.0166	n/a	n/a	n/a	112	n/a	n/a	0	n/a	n/a	0.003199	NP Inter
Beryllium (mg/L)	0.0121	n/a	n/a	n/a	110	n/a	n/a	84.55	n/a	n/a	0.003545	NP Inter
Cadmium (mg/L)	0.00867	n/a	n/a	n/a	111	n/a	n/a	41.44	n/a	n/a	0.003368	NP Inter
Chromium (mg/L)	0.0105	n/a	n/a	n/a	112	n/a	n/a	81.25	n/a	n/a	0.003199	NP Inter
Cobalt (mg/L)	0.64	n/a	n/a	n/a	110	n/a	n/a	24.55	n/a	n/a	0.003545	NP Inter
Combined Radium 226 + 228 (pCi/L)	1.49	n/a	n/a	n/a	109	n/a	n/a	0	n/a	n/a	0.003731	NP Inter
Fluoride (mg/L)	0.63	n/a	n/a	n/a	116	n/a	n/a	0.8621	n/a	n/a	0.002606	NP Inter
Lead (mg/L)	0.002	n/a	n/a	n/a	111	n/a	n/a	92.79	n/a	n/a	0.003368	NP Inter
Lithium (mg/L)	0.419	n/a	n/a	n/a	112	n/a	n/a	0	n/a	n/a	0.003199	NP Inter
Mercury (mg/L)	0.0005	n/a	n/a	n/a	112	n/a	n/a	100	n/a	n/a	0.003199	NP Inter
Molybdenum (mg/L)	0.01015	n/a	n/a	n/a	112	n/a	n/a	94.64	n/a	n/a	0.003199	NP Inter
Selenium (mg/L)	0.0209	n/a	n/a	n/a	112	n/a	n/a	54.46	n/a	n/a	0.003199	NP Inter
Thallium (mg/L)	0.000226	n/a	n/a	n/a	112	n/a	n/a	97.32	n/a	n/a	0.003199	NP Inter

GORGAS GYPSUM POND GWPS			
Analyte	**Units**	**Background**	**GWPS**
Antimony	mg/L	0.00143	0.006
Arsenic	mg/L	0.0048	0.01
Barium	mg/L	0.0166	2
Beryllium	mg/L	0.0121	0.0121
Cadmium	mg/L	0.00867	0.00867
Chromium	mg/L	0.0105	0.1
Cobalt	mg/L	0.64	0.64
Combined Radium-226/228	pCi/L	1.49	5
Fluoride	mg/L	0.63	4
Lead	mg/L	0.002	0.015
Lithium	mg/L	0.419	0.419
Mercury	mg/L	0.0005	0.002
Molybdenum	mg/L	0.01015	0.1
Selenium	mg/L	0.0209	0.05
Thallium	mg/L	0.000226	0.002

Notes:

1. mg/L - Milligrams per liter

2. pCi/L - Picocuries per liter

3. The background limits were used as the groundwater protection standard (GWPS) when appropriate under 40 CFR §257.95(h), ADEM Rule 335-13-15-.06(h), and the ADEM Variance.

4. GWPS established during second semi-annual sampling event in 2023.

Confidence Intervals - All Results (No Significant)

Plant Gorgas Client: Southern Company Data: Gorgas GSA Printed 12/22/2023, 2:52 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	GS-GSA-MW-3	0.001015	0.00066	0.006	No	8	0.0009706	0.0001255	87.5	None	No	0.004	NP (NDs)
Arsenic (mg/L)	GS-GSA-MW-3	0.001335	0.0004811	0.01	No	8	0.001922	0.001936	25	Kaplan-Meier	ln(x)	0.01	Param.
Arsenic (mg/L)	GS-GSA-MW-4	0.004441	0.0007311	0.01	No	8	0.0025	0.002096	0	None	sqrt(x)	0.01	Param.
Arsenic (mg/L)	GS-GSA-MW-8	0.005	0.000156	0.01	No	8	0.001455	0.002194	25	None	No	0.004	NP (normality)
Barium (mg/L)	GS-GSA-MW-3	0.01509	0.01203	2	No	8	0.01356	0.001441	0	None	No	0.01	Param.
Barium (mg/L)	GS-GSA-MW-4	0.0134	0.009302	2	No	8	0.01135	0.001935	0	None	No	0.01	Param.
Barium (mg/L)	GS-GSA-MW-8	0.02376	0.02054	2	No	8	0.02215	0.001518	0	None	No	0.01	Param.
Beryllium (mg/L)	GS-GSA-MW-3	0.002082	0.00153	0.0121	No	8	0.001806	0.0002603	0	None	No	0.01	Param.
Beryllium (mg/L)	GS-GSA-MW-4	0.0228	0.00385	0.0121	No	8	0.009694	0.008084	0	None	No	0.004	NP (normality)
Cadmium (mg/L)	GS-GSA-MW-4	0.005121	0.001287	0.00867	No	8	0.003134	0.002021	0	None	sqrt(x)	0.01	Param.
Chromium (mg/L)	GS-GSA-MW-3	0.01	0.000248	0.1	No	8	0.002777	0.004459	25	None	No	0.004	NP (normality)
Chromium (mg/L)	GS-GSA-MW-4	0.002444	0.0005942	0.1	No	8	0.003644	0.004052	25	Kaplan-Meier	ln(x)	0.01	Param.
Chromium (mg/L)	GS-GSA-MW-8	0.001015	0.000258	0.1	No	8	0.0006014	0.0003485	37.5	None	No	0.004	NP (normality)
Cobalt (mg/L)	GS-GSA-MW-3	0.1568	0.04529	0.64	No	8	0.1008	0.07815	0	None	ln(x)	0.01	Param.
Cobalt (mg/L)	GS-GSA-MW-4	0.6488	0.1998	0.64	No	8	0.4164	0.2446	0	None	x^(1/3)	0.01	Param.
Cobalt (mg/L)	GS-GSA-MW-8	0.00546	0.000084	0.64	No	8	0.002119	0.002522	25	None	No	0.004	NP (normality)
Combined Radium 226 + 228 (pCi/L)	GS-GSA-MW-3	0.5618	0.219	5	No	8	0.3904	0.1617	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-GSA-MW-4	1.391	0.3997	5	No	8	0.8954	0.4676	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-GSA-MW-8	1.012	0.1219	5	No	8	0.5669	0.4198	0	None	No	0.01	Param.
Fluoride (mg/L)	GS-GSA-MW-3	0.5272	0.3293	4	No	8	0.4283	0.09336	0	None	No	0.01	Param.
Fluoride (mg/L)	GS-GSA-MW-8	0.1875	0.1047	4	No	8	0.1461	0.03904	0	None	No	0.01	Param.
Lead (mg/L)	GS-GSA-MW-3	0.0001707	0.0001109	0.015	No	8	0.0001641	0.00004005	37.5	Kaplan-Meier	No	0.01	Param.
Lead (mg/L)	GS-GSA-MW-4	0.001653	0.0006225	0.015	No	8	0.002102	0.001868	25	Kaplan-Meier	ln(x)	0.01	Param.
Lead (mg/L)	GS-GSA-MW-8	0.000203	0.000078	0.015	No	8	0.0001735	0.00004604	62.5	Kaplan-Meier	No	0.004	NP (NDs)
Lithium (mg/L)	GS-GSA-MW-3	0.4952	0.2668	0.419	No	8	0.381	0.1077	0	None	No	0.01	Param.
Lithium (mg/L)	GS-GSA-MW-4	1.247	0.2341	0.419	No	8	0.7179	0.5899	0	None	x^(1/3)	0.01	Param.
Lithium (mg/L)	GS-GSA-MW-8	0.2058	0.1587	0.419	No	8	0.1823	0.02225	0	None	No	0.01	Param.
Molybdenum (mg/L)	GS-GSA-MW-3	0.01015	0.000191	0.1	No	8	0.00395	0.005134	37.5	None	No	0.004	NP (normality)
Molybdenum (mg/L)	GS-GSA-MW-8	0.01015	0.00012	0.1	No	8	0.004218	0.004992	37.5	None	No	0.004	NP (normality)
Selenium (mg/L)	GS-GSA-MW-3	0.01	0.00103	0.05	No	8	0.003519	0.004004	25	None	No	0.004	NP (normality)
Selenium (mg/L)	GS-GSA-MW-4	0.01455	0.002654	0.05	No	8	0.008399	0.007413	12.5	None	ln(x)	0.01	Param.
Thallium (mg/L)	GS-GSA-MW-4	0.0004373	0.000109	0.002	No	8	0.0002731	0.0001549	12.5	None	No	0.01	Param.

FIGURE A.

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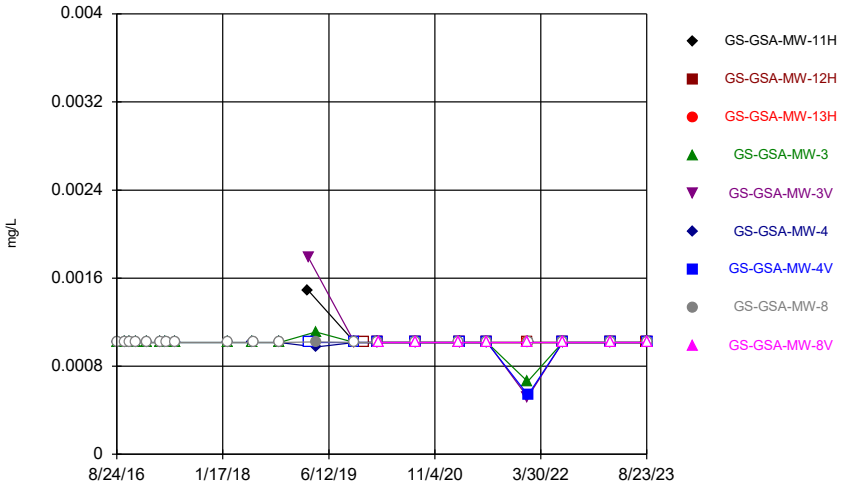
Time Series



Constituent: Antimony Analysis Run 12/22/2023 2:05 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

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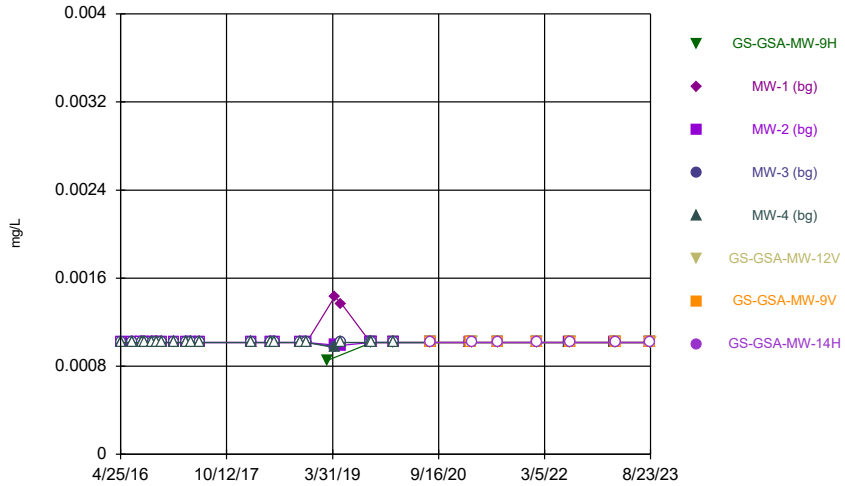

Constituent: Antimony Analysis Run 12/22/2023 2:05 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

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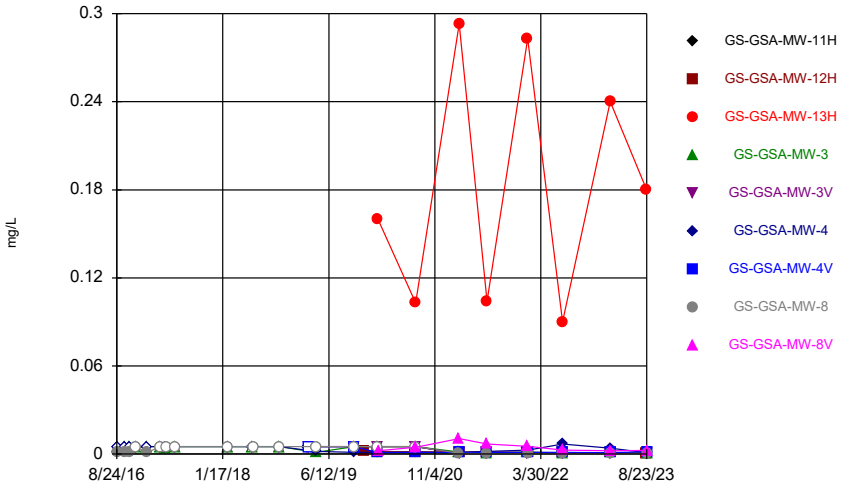

Constituent: Arsenic Analysis Run 12/22/2023 2:05 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

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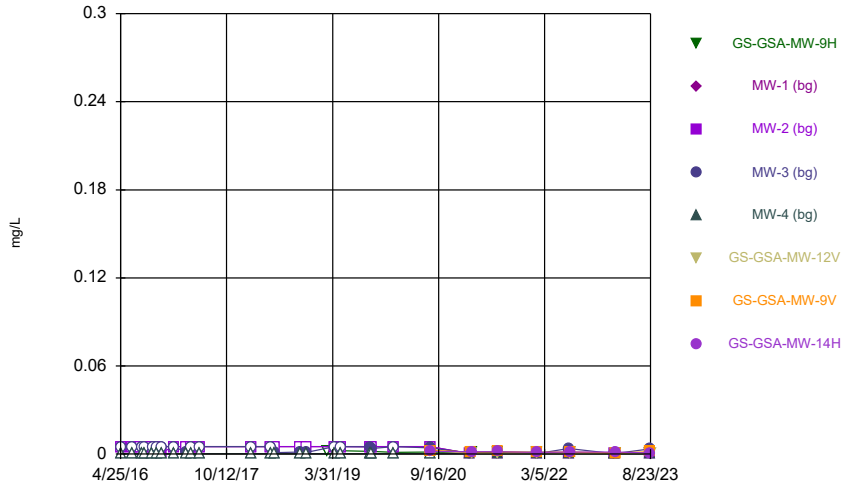

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Plant Gorgas Client: Southern Company Data: Gorgas GSA

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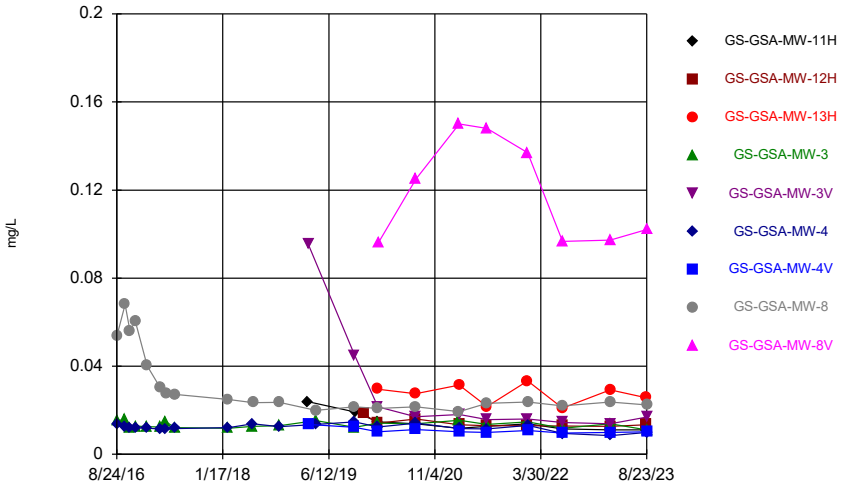

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Plant Gorgas Client: Southern Company Data: Gorgas GSA

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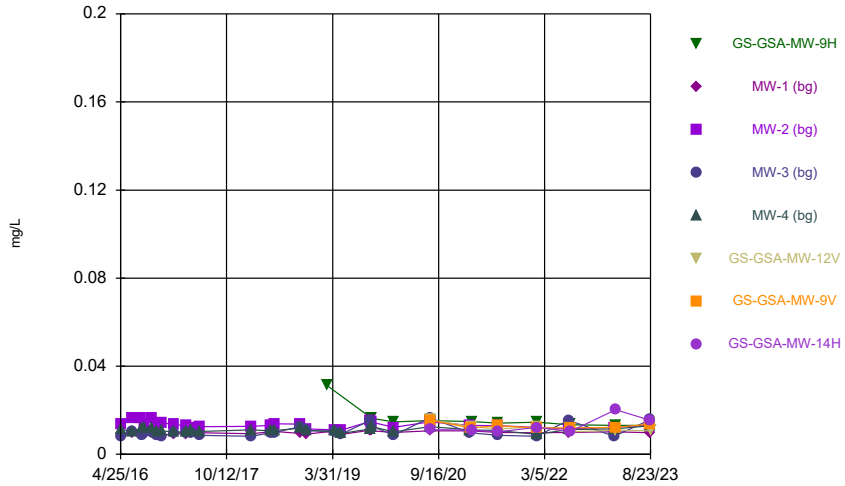
Time Series



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Plant Gorgas Client: Southern Company Data: Gorgas GSA

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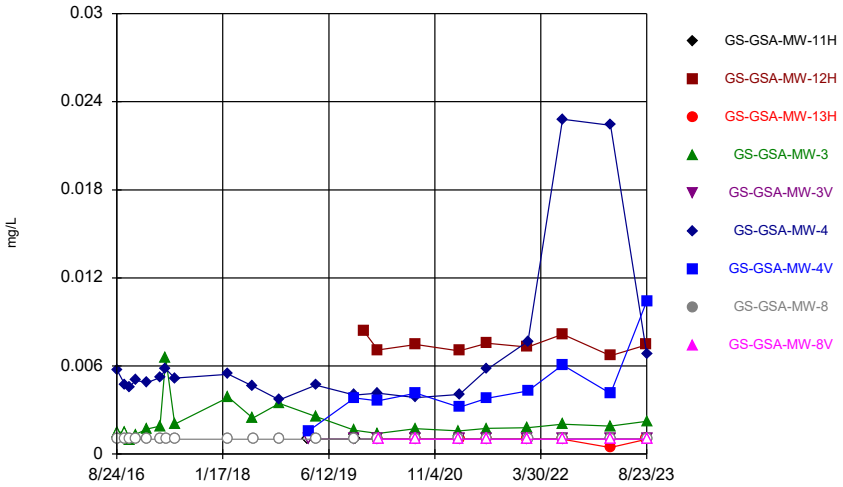

Constituent: Beryllium Analysis Run 12/22/2023 2:05 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

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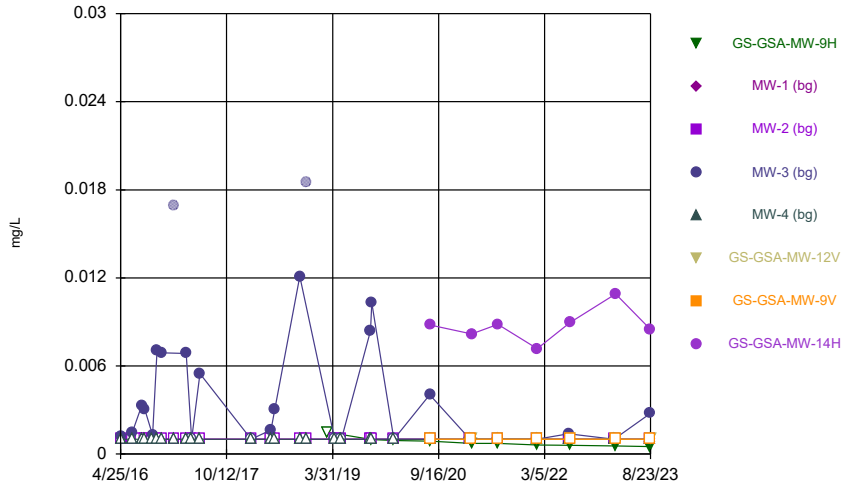

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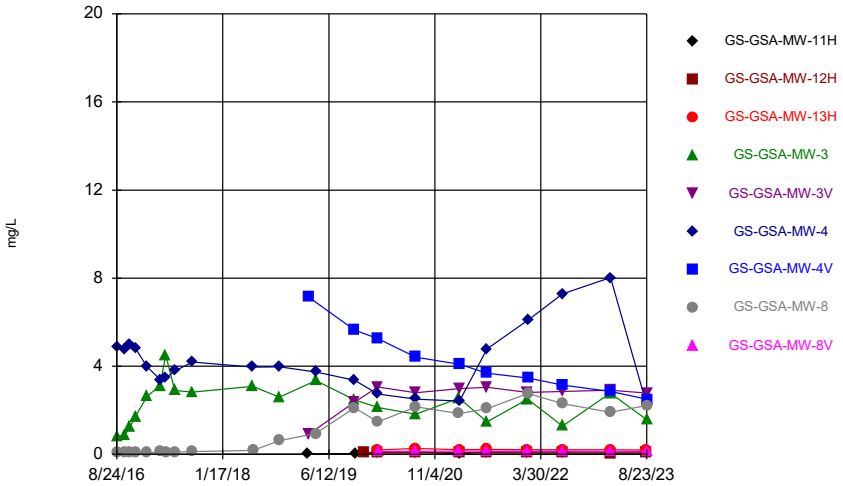

Constituent: Boron Analysis Run 12/22/2023 2:05 PM
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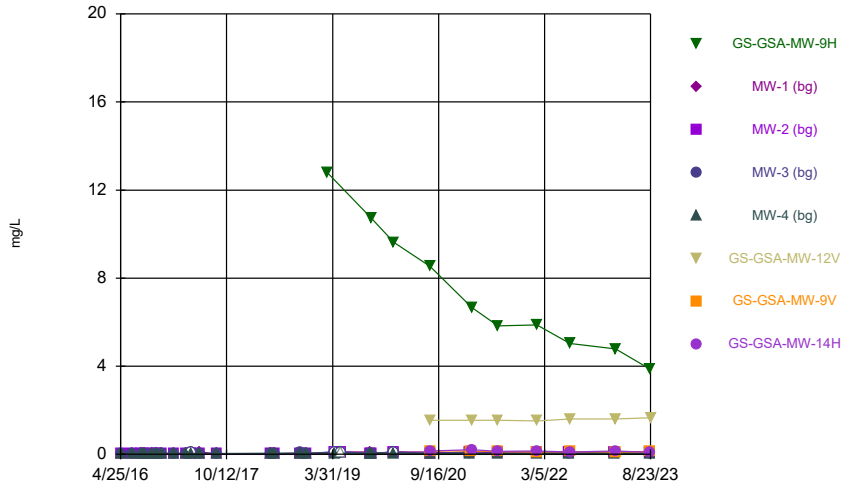

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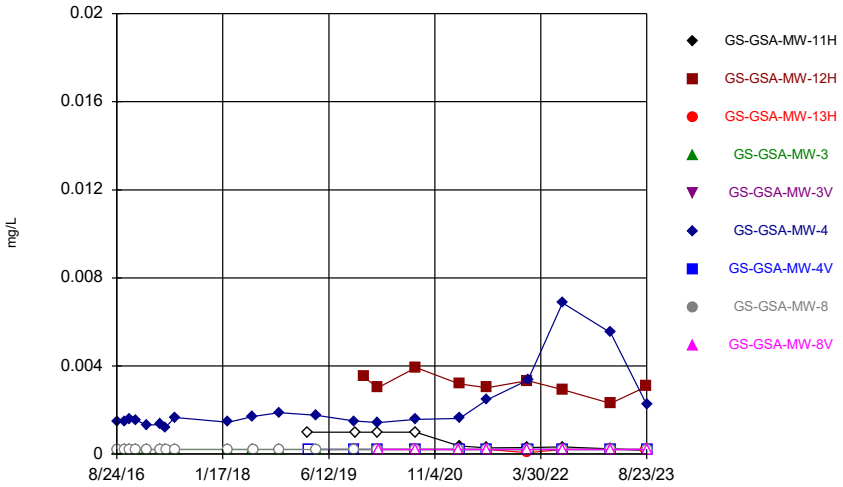

Constituent: Cadmium Analysis Run 12/22/2023 2:05 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

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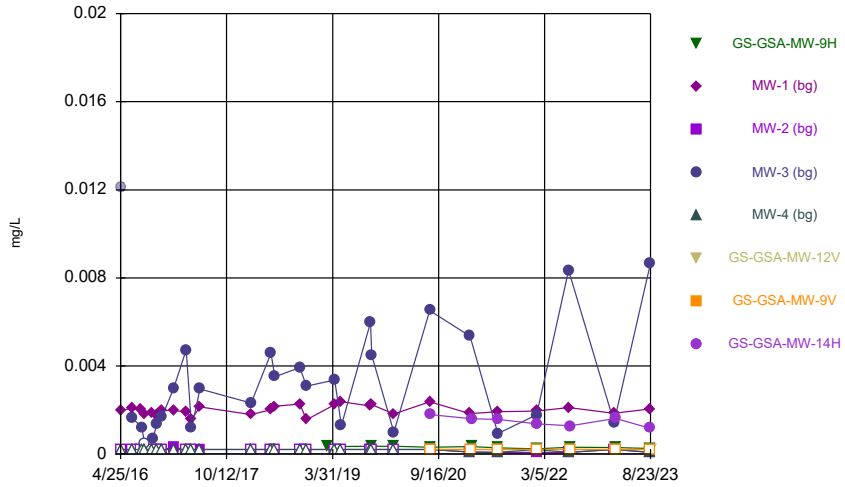

Constituent: Cadmium Analysis Run 12/22/2023 2:05 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

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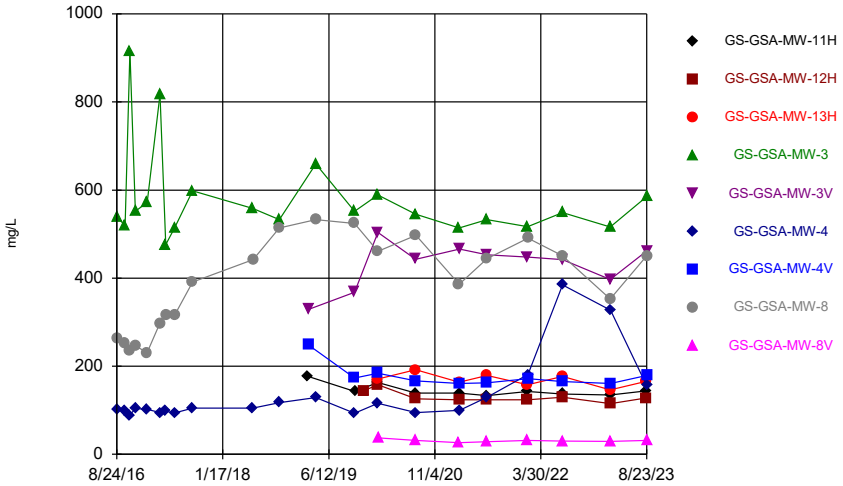

Constituent: Calcium Analysis Run 12/22/2023 2:05 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

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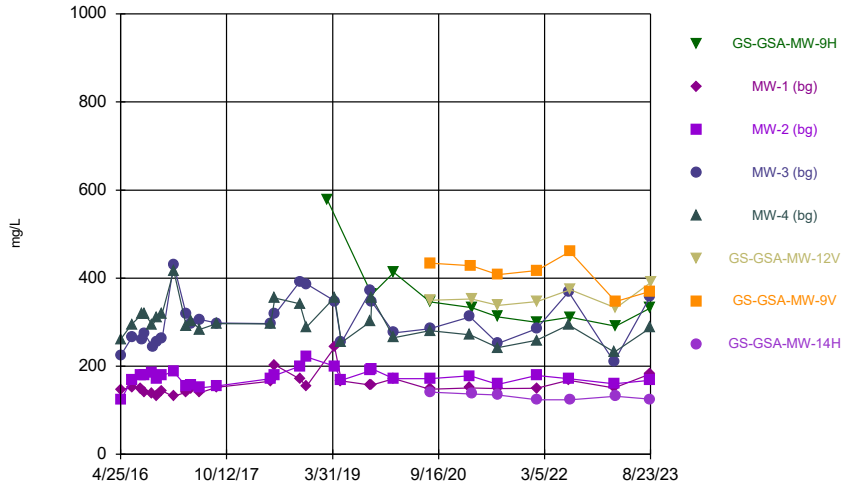
Time Series



Constituent: Calcium Analysis Run 12/22/2023 2:05 PM

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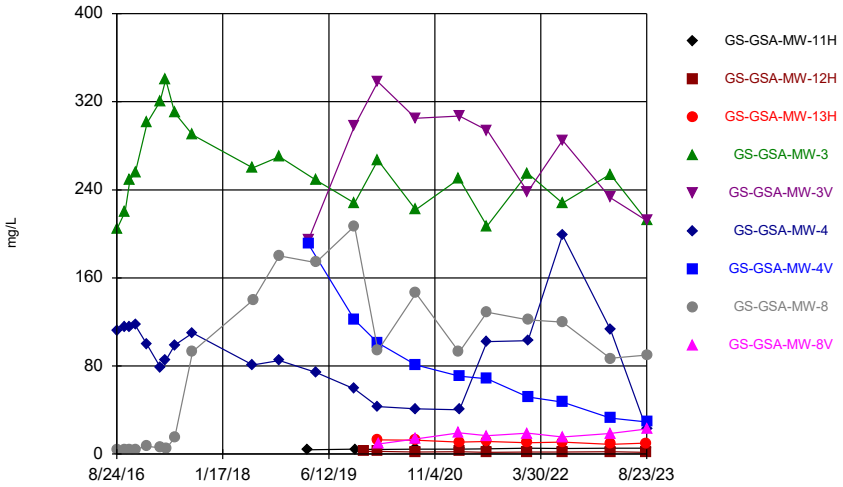

Constituent: Chloride Analysis Run 12/22/2023 2:05 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

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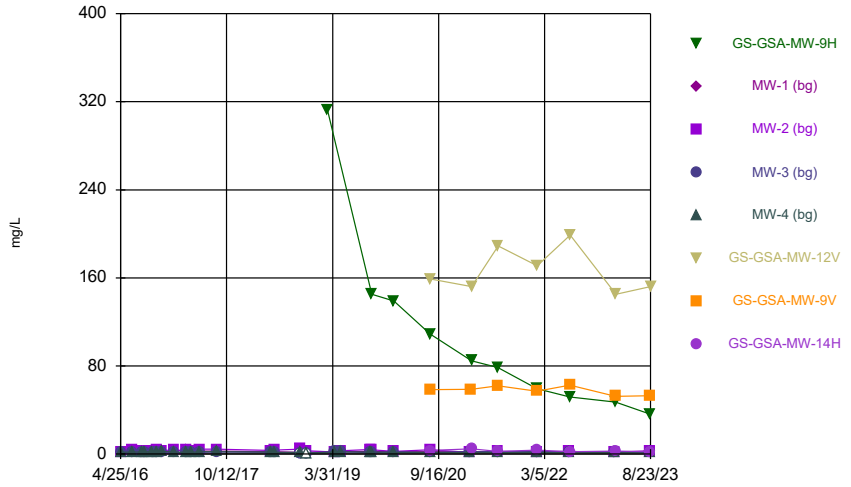

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Plant Gorgas Client: Southern Company Data: Gorgas GSA

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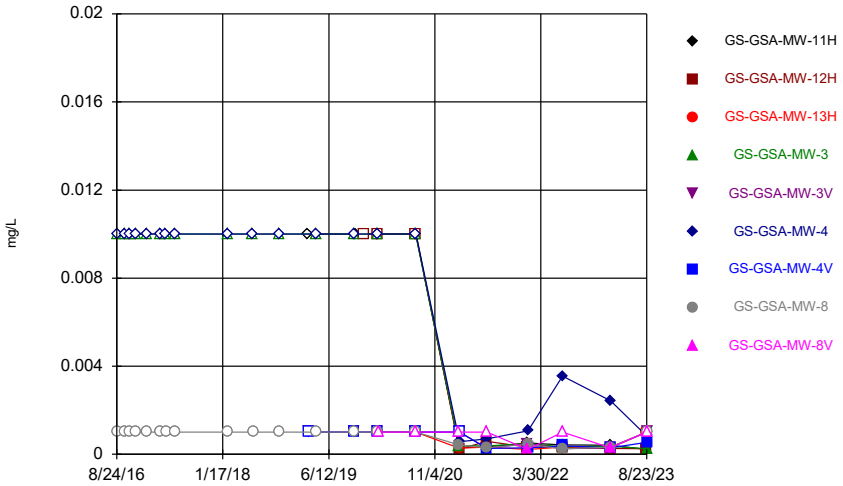

Constituent: Chromium Analysis Run 12/22/2023 2:05 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

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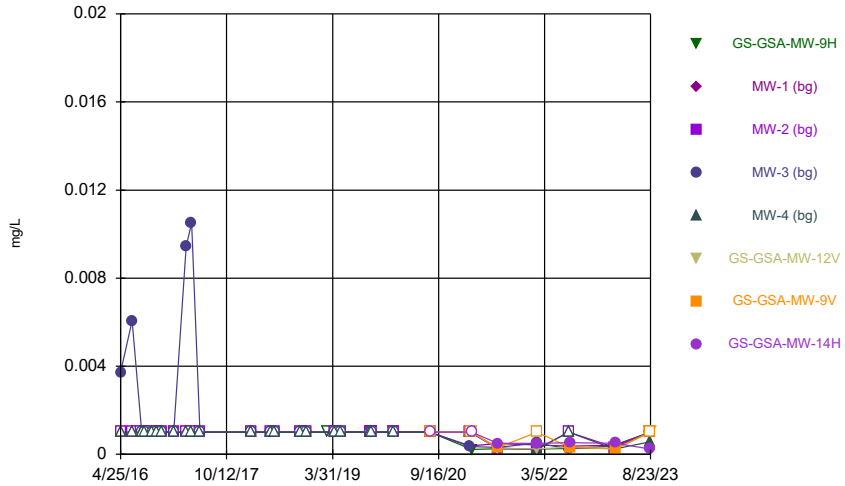

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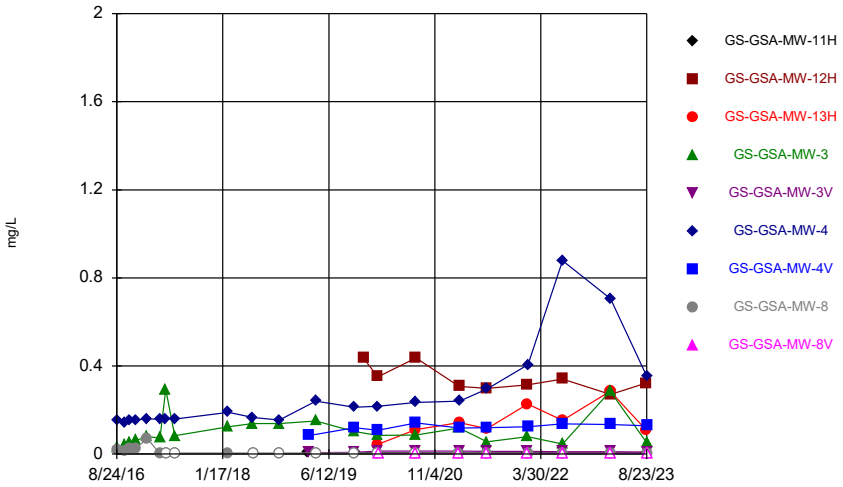

Constituent: Cobalt Analysis Run 12/22/2023 2:05 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

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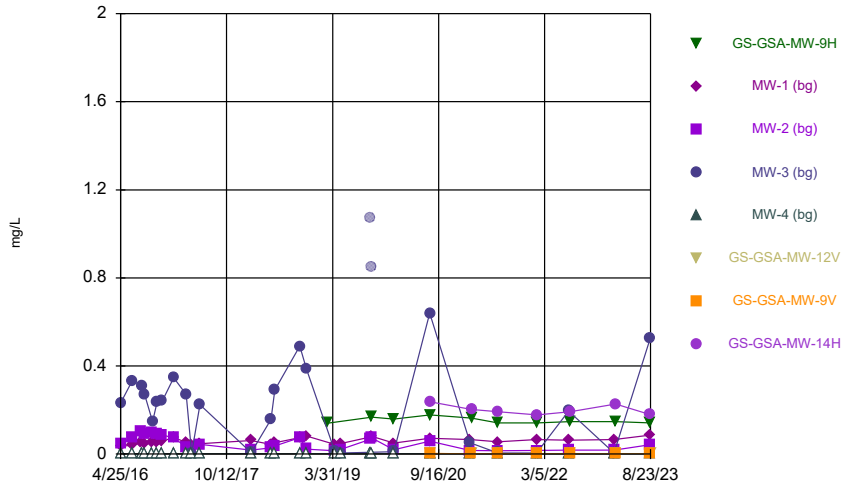

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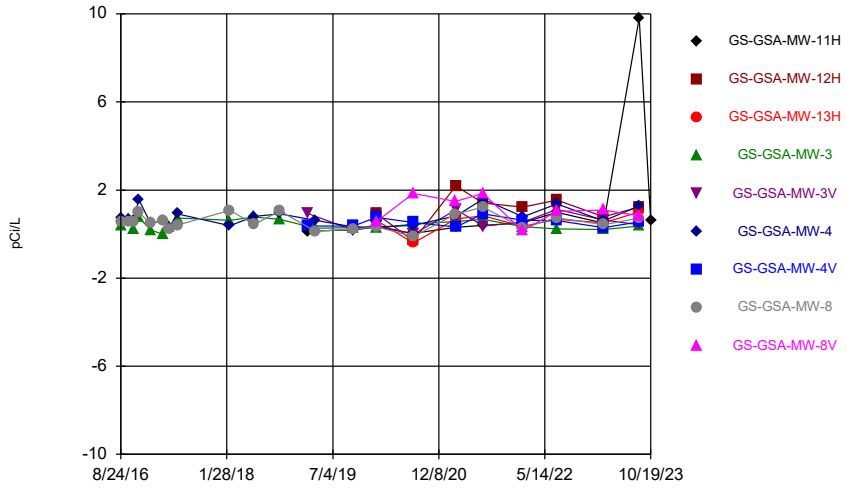

Constituent: Combined Radium 226 + 228 Analysis Run 12/22/2023 2:05 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

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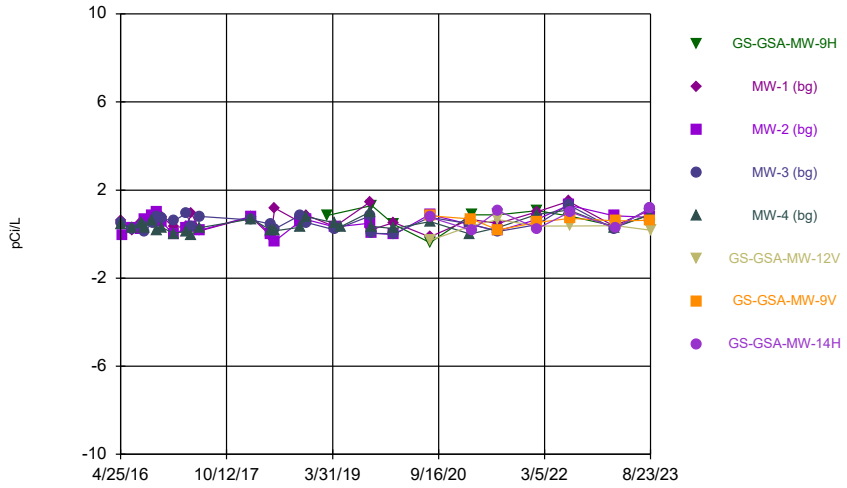

Constituent: Combined Radium 226 + 228 Analysis Run 12/22/2023 2:05 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

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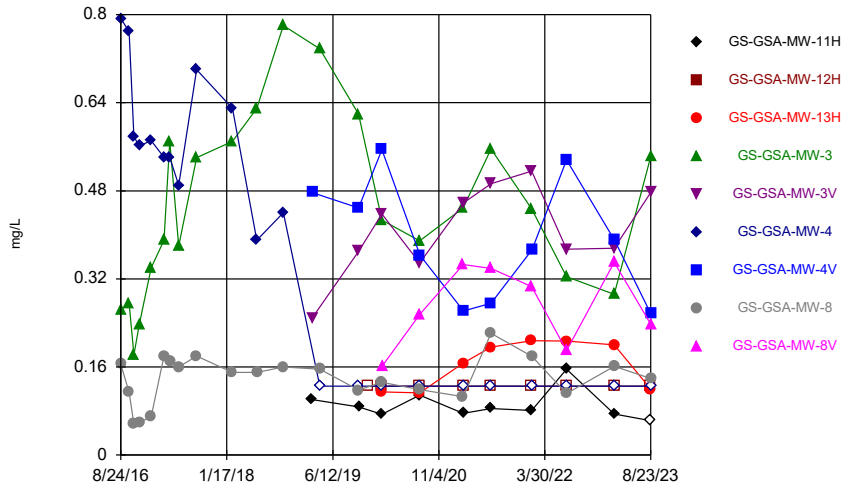

Constituent: Fluoride Analysis Run 12/22/2023 2:05 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

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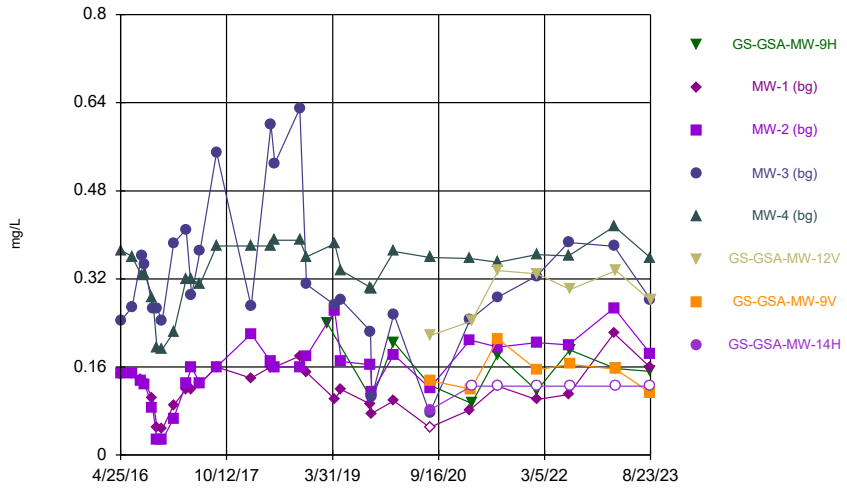

Constituent: Fluoride Analysis Run 12/22/2023 2:05 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

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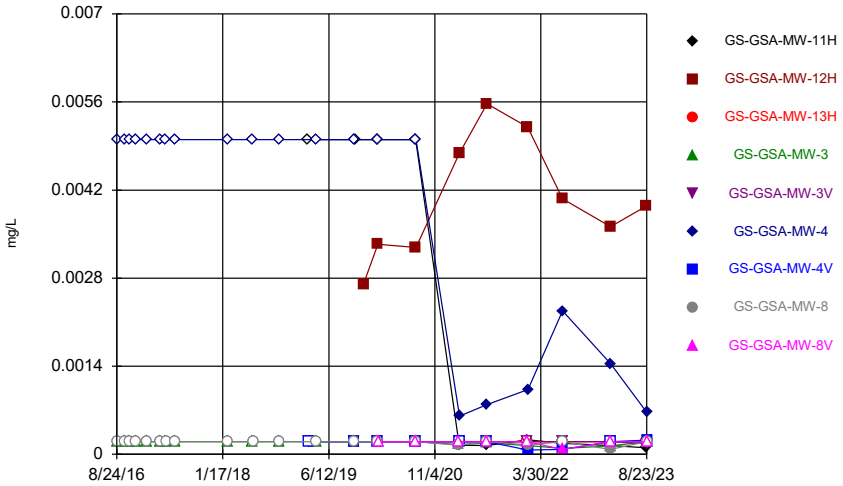

Constituent: Lead Analysis Run 12/22/2023 2:05 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

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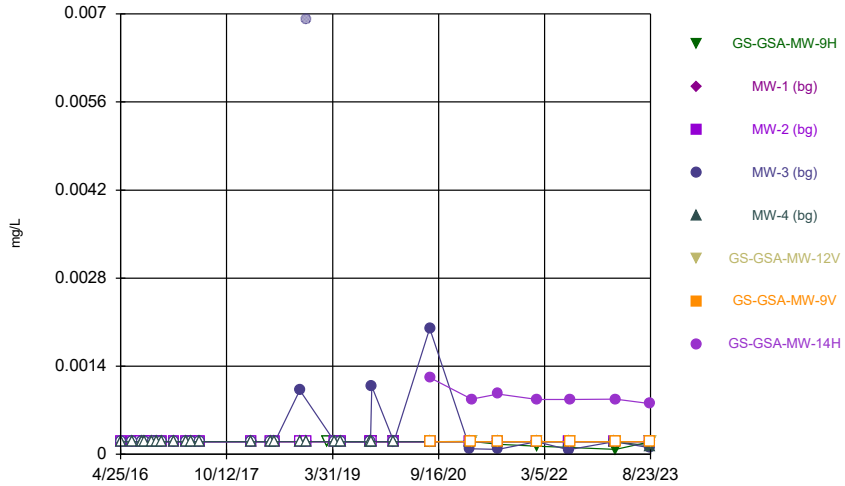

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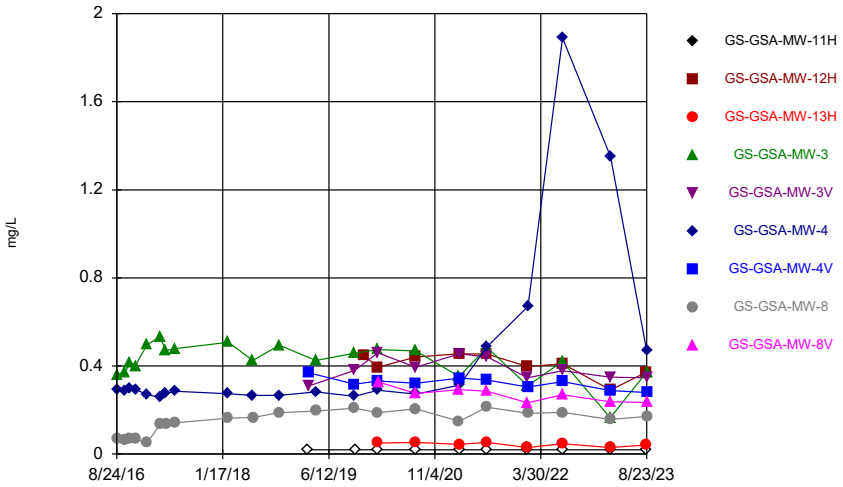

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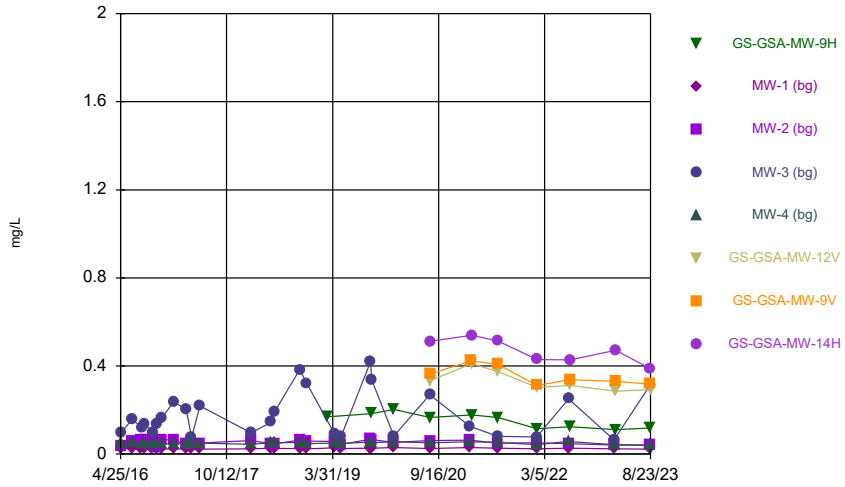

Constituent: Lithium Analysis Run 12/22/2023 2:05 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

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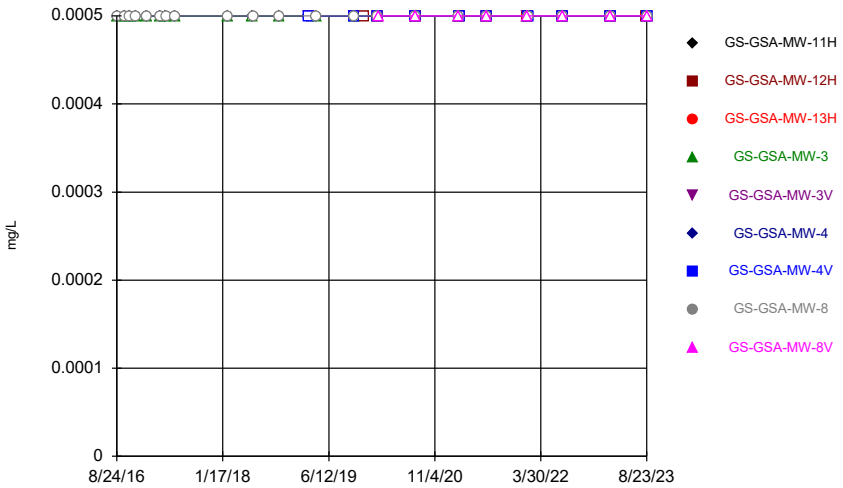

Constituent: Mercury Analysis Run 12/22/2023 2:05 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

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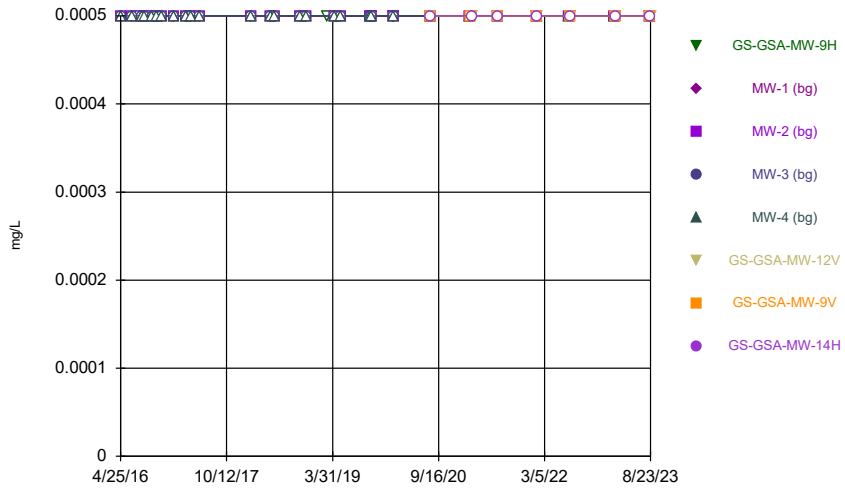
Hollow symbols indicate censored values.

Time Series



Constituent: Mercury Analysis Run 12/22/2023 2:05 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

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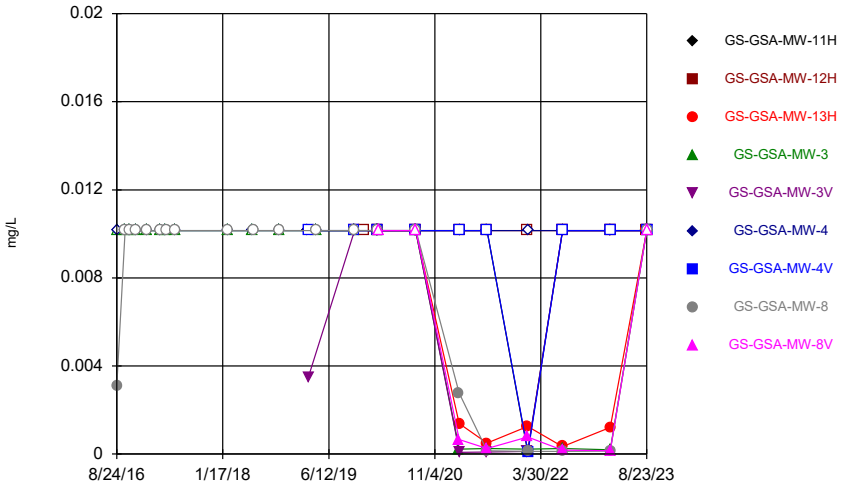

Constituent: Molybdenum Analysis Run 12/22/2023 2:05 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

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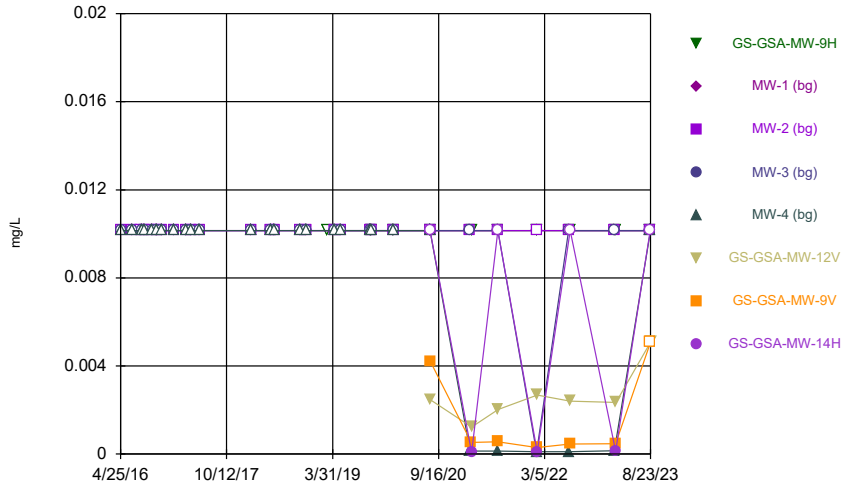
Hollow symbols indicate censored values.

Time Series



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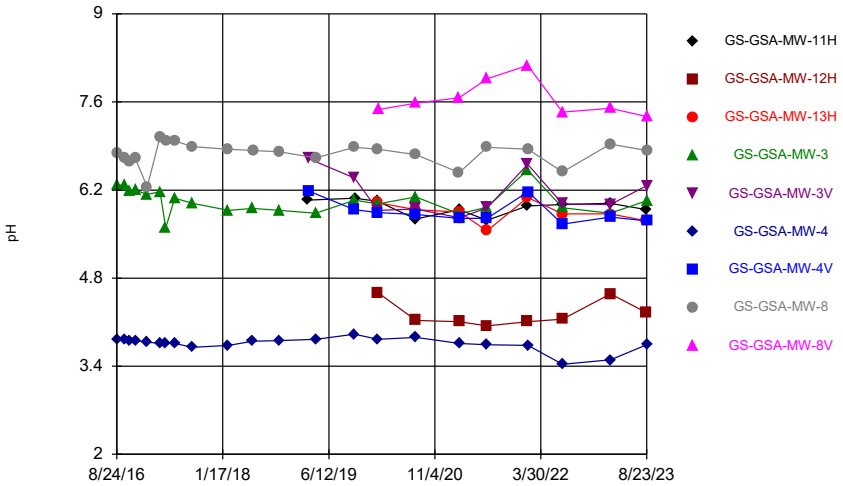
Sanitas™ v.10.0.15 Software licensed to . UG

Time Series



Constituent: pH Analysis Run 12/22/2023 2:05 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

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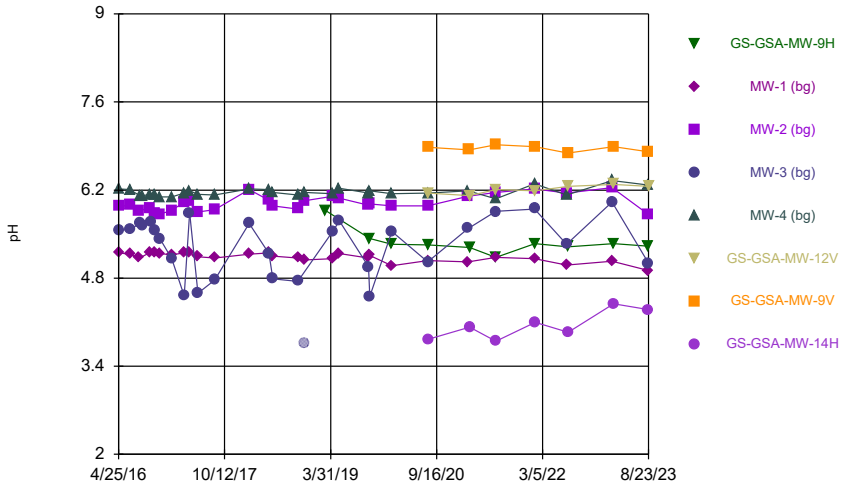
Time Series



Constituent: pH Analysis Run 12/22/2023 2:05 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

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Hollow symbols indicate censored values.

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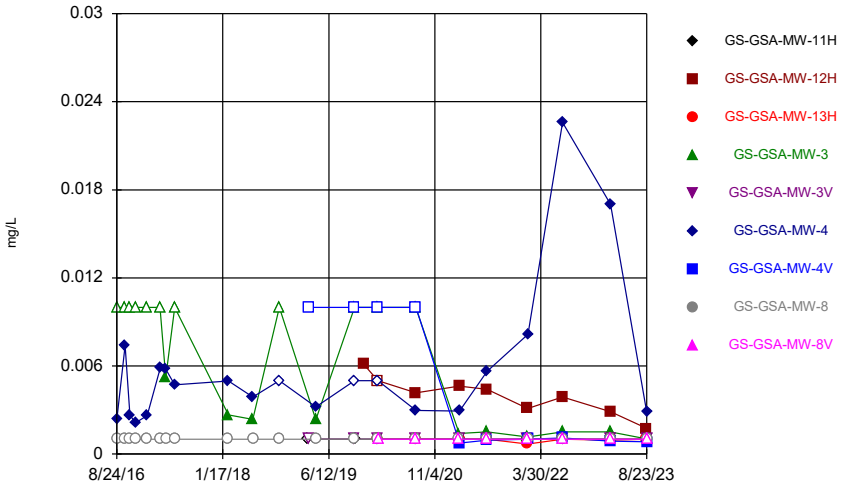

Constituent: Selenium Analysis Run 12/22/2023 2:05 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

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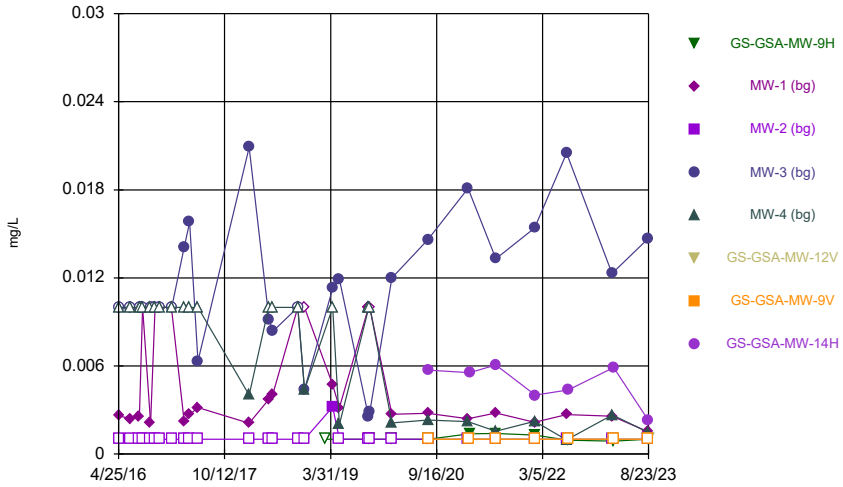
Hollow symbols indicate censored values.

Time Series



Constituent: Selenium Analysis Run 12/22/2023 2:05 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

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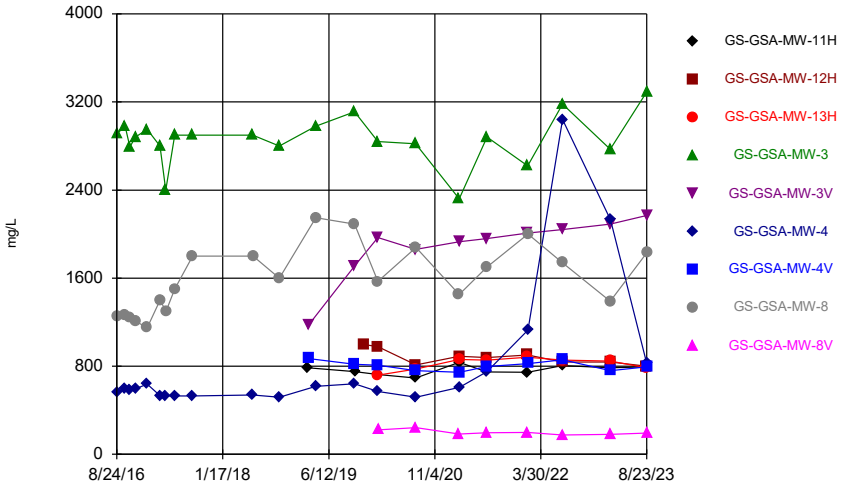
Time Series



Constituent: Sulfate Analysis Run 12/22/2023 2:05 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

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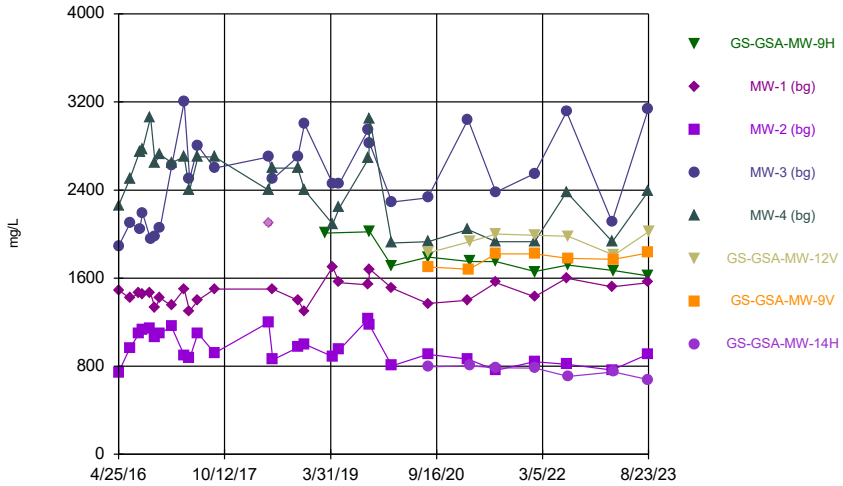
Time Series



Constituent: Sulfate Analysis Run 12/22/2023 2:05 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

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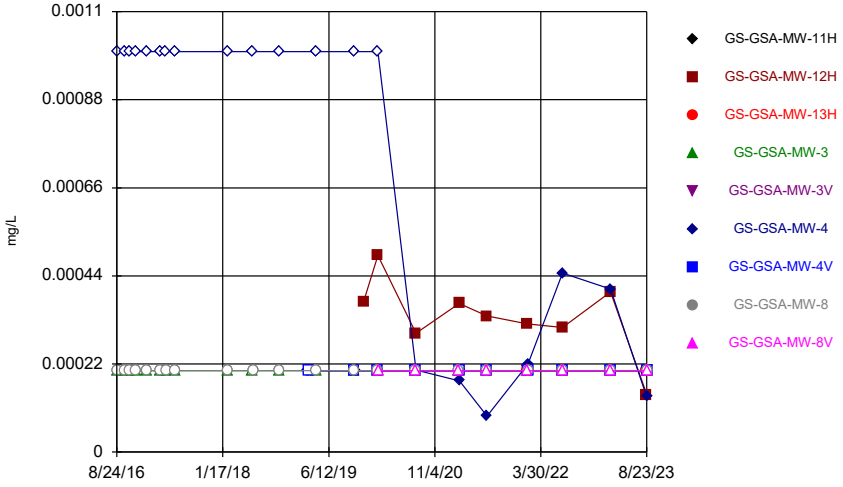
Hollow symbols indicate censored values.

Time Series



Constituent: Thallium Analysis Run 12/22/2023 2:05 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

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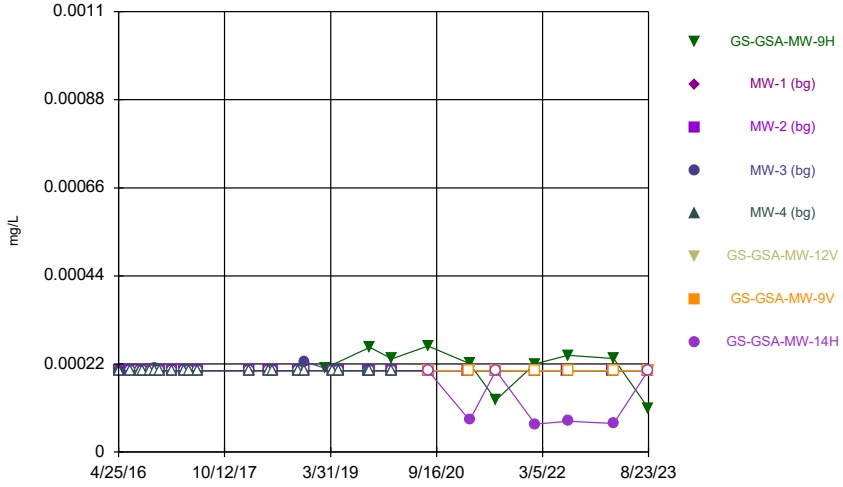
Hollow symbols indicate censored values.

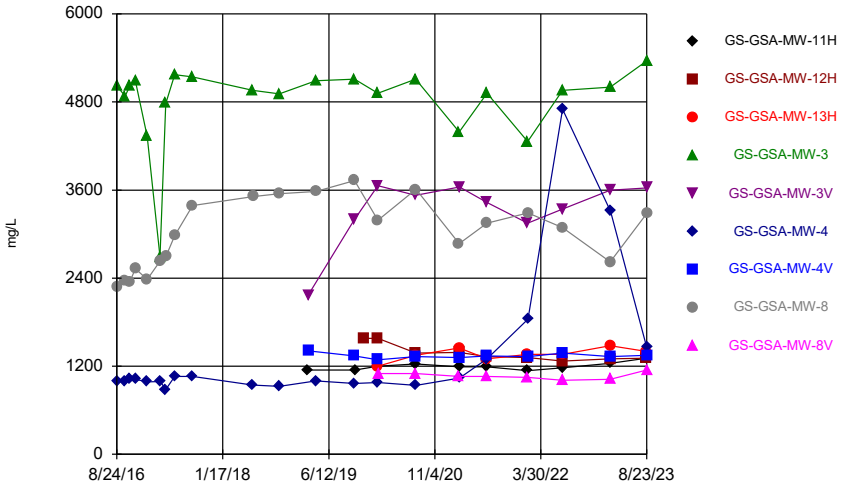
Time Series



Constituent: Thallium Analysis Run 12/22/2023 2:05 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Time Series

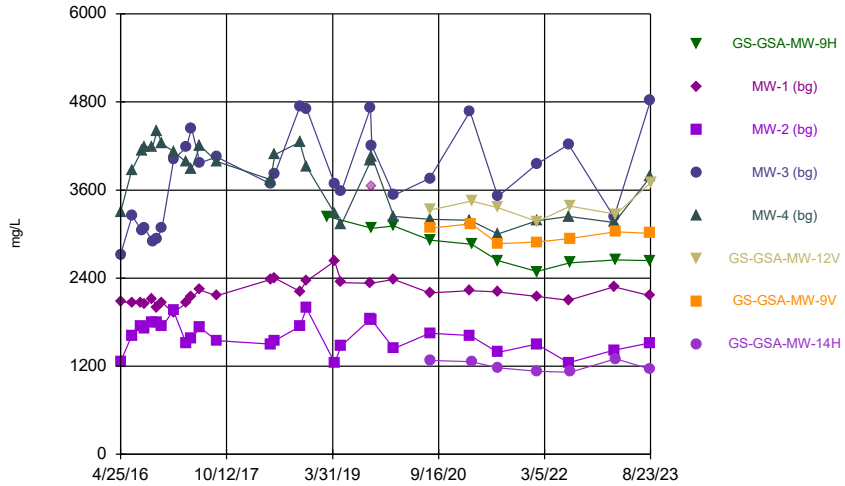


Constituent: Total dissolved solids Analysis Run 12/22/2023 2:05 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.10.0.15 Software licensed to . UG

Time Series



Constituent: Total dissolved solids Analysis Run 12/22/2023 2:05 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Time Series

Constituent: Antimony (mg/L) Analysis Run 12/22/2023 2:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-11H	GS-GSA-MW-12H	GS-GSA-MW-13H	GS-GSA-MW-3	GS-GSA-MW-3V	GS-GSA-MW-4	GS-GSA-MW-4V	GS-GSA-MW-8	GS-GSA-MW-8V
8/24/2016				<0.001015		<0.001015		<0.001015	
10/3/2016				<0.001015		<0.001015		<0.001015	
10/26/2016				<0.001015		<0.001015		<0.001015	
11/21/2016				<0.001015		<0.001015		<0.001015	
1/17/2017				<0.001015		<0.001015		<0.001015	
3/20/2017				<0.001015				<0.001015	
3/21/2017						<0.001015			
4/17/2017				<0.001015		<0.001015			
4/18/2017								<0.001015	
5/30/2017				<0.001015		<0.001015		<0.001015	
2/13/2018				<0.001015		<0.001015		<0.001015	
6/11/2018				<0.001015		<0.001015			
6/12/2018								<0.001015	
10/17/2018				<0.001015		<0.001015		<0.001015	
3/4/2019	0.00149 (J)								
3/5/2019					0.00179 (J)		<0.001015		
4/10/2019				0.00111 (J)		0.000976 (J)		0.00102 (J)	
10/14/2019				<0.001015	<0.001015	<0.001015	<0.001015	<0.001015	
10/16/2019	<0.001015								
11/26/2019		<0.001015							
2/3/2020				<0.001015	<0.001015		<0.001015		
2/4/2020	<0.001015	<0.001015	<0.001015			<0.001015		<0.001015	
2/5/2020									<0.001015
8/4/2020	<0.001015		<0.001015	<0.001015	<0.001015				
8/5/2020		<0.001015				<0.001015	<0.001015	<0.001015	<0.001015
3/1/2021				<0.001015				<0.001015	<0.001015
3/2/2021	<0.001015	<0.001015	<0.001015						
3/3/2021					<0.001015	<0.001015	<0.001015		
7/14/2021	<0.001015	<0.001015	<0.001015	<0.001015		<0.001015	<0.001015	<0.001015	<0.001015
7/15/2021					<0.001015				
1/25/2022		<0.001015							
1/26/2022	<0.001015		<0.001015	0.00066 (J)	0.00052 (J)				<0.001015
1/27/2022						<0.001015	0.00054 (J)	<0.001015	
7/12/2022	<0.001015		<0.001015					<0.001015	<0.001015
7/13/2022		<0.001015		<0.001015	<0.001015	<0.001015	<0.001015		
2/27/2023				<0.001015	<0.001015				
2/28/2023	<0.001015		<0.001015					<0.001015	<0.001015
3/1/2023		<0.001015				<0.001015	<0.001015		
8/22/2023	<0.001015	<0.001015	<0.001015						
8/23/2023				<0.001015	<0.001015	<0.001015	<0.001015	<0.001015	<0.001015

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Antimony (mg/L) Analysis Run 12/22/2023 2:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-9H	MW-1 (bg)	MW-2 (bg)	MW-3 (bg)	MW-4 (bg)	GS-GSA-MW-12V	GS-GSA-MW-9V	GS-GSA-MW-14H
4/25/2016			<0.001015	<0.001015	<0.001015			
4/26/2016		<0.001015						
6/20/2016		<0.001015	<0.001015		<0.001015			
6/22/2016				<0.001015				
8/8/2016		<0.001015	<0.001015					
8/9/2016				<0.001015	<0.001015			
8/24/2016		<0.001015	<0.001015	<0.001015	<0.001015			
10/3/2016		<0.001015	<0.001015		<0.001015			
10/4/2016				<0.001015				
10/26/2016		<0.001015	<0.001015	<0.001015	<0.001015			
11/21/2016		<0.001015	<0.001015	<0.001015	<0.001015			
1/17/2017		<0.001015	<0.001015					
1/18/2017				<0.001015	<0.001015			
3/22/2017		<0.001015	<0.001015	<0.001015	<0.001015			
4/18/2017		<0.001015	<0.001015	<0.001015	<0.001015			
5/30/2017		<0.001015						
5/31/2017			<0.001015	<0.001015	<0.001015			
2/13/2018		<0.001015	<0.001015	<0.001015	<0.001015			
5/22/2018		<0.001015	<0.001015					
5/23/2018					<0.001015			
5/24/2018				<0.001015				
6/12/2018		<0.001015	<0.001015	<0.001015	<0.001015			
10/17/2018		<0.001015	<0.001015	<0.001015	<0.001015			
11/19/2018		<0.001015	<0.001015	<0.001015	<0.001015			
3/5/2019	0.000852 (J)							
4/10/2019		0.00143 (J)	0.000993 (J)	0.000978 (J)	0.00097 (J)			
5/14/2019		0.00137 (J)	0.000989 (J)	<0.001015	<0.001015			
10/8/2019		<0.001015	<0.001015	<0.001015				
10/10/2019					<0.001015			
10/16/2019	<0.001015	<0.001015	<0.001015	<0.001015	<0.001015			
2/3/2020		<0.001015	<0.001015	<0.001015	<0.001015			
2/4/2020	<0.001015							
8/3/2020		<0.001015	<0.001015	<0.001015				
8/4/2020	<0.001015						<0.001015	
8/5/2020					<0.001015	<0.001015		<0.001015
2/22/2021		<0.001015	<0.001015	<0.001015	<0.001015			
3/1/2021							<0.001015	
3/2/2021	<0.001015							
3/3/2021						<0.001015		<0.001015
7/12/2021		<0.001015	<0.001015	<0.001015	<0.001015			
7/13/2021	<0.001015						<0.001015	<0.001015
7/14/2021						<0.001015		
1/25/2022		<0.001015	<0.001015	<0.001015	<0.001015			
1/26/2022	<0.001015						<0.001015	
1/27/2022						<0.001015		<0.001015
7/5/2022		<0.001015	<0.001015	<0.001015	<0.001015			
7/12/2022	<0.001015						<0.001015	
7/13/2022						<0.001015		<0.001015
2/20/2023		<0.001015	<0.001015	<0.001015				
2/21/2023					<0.001015			
2/28/2023	<0.001015						<0.001015	<0.001015
3/1/2023						<0.001015		

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Antimony (mg/L) Analysis Run 12/22/2023 2:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-9H	MW-1 (bg)	MW-2 (bg)	MW-3 (bg)	MW-4 (bg)	GS-GSA-MW-12V	GS-GSA-MW-9V	GS-GSA-MW-14H
8/21/2023								<0.001015
8/22/2023	<0.001015	<0.001015	<0.001015	<0.001015	<0.001015		<0.001015	
8/23/2023						<0.001015		

Time Series

Constituent: Arsenic (mg/L) Analysis Run 12/22/2023 2:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-11H	GS-GSA-MW-12H	GS-GSA-MW-13H	GS-GSA-MW-3	GS-GSA-MW-3V	GS-GSA-MW-4	GS-GSA-MW-4V	GS-GSA-MW-8	GS-GSA-MW-8V
8/24/2016				<0.005		<0.005		0.00119 (J)	
10/3/2016				<0.005		<0.005		0.00114 (J)	
10/26/2016				<0.005		<0.005		0.0011 (J)	
11/21/2016				<0.005		<0.005		<0.005	
1/17/2017				<0.005		<0.005		0.00103 (J)	
3/20/2017				<0.005				<0.005	
3/21/2017						<0.005			
4/17/2017				0.00405 (J)		<0.005			
4/18/2017								<0.005	
5/30/2017				<0.005		<0.005		<0.005	
2/13/2018				<0.005		<0.005		<0.005	
6/11/2018				<0.005		<0.005			
6/12/2018								<0.005	
10/17/2018				<0.005		<0.005		<0.005	
3/4/2019	<0.005								
3/5/2019					<0.005		<0.005		
4/10/2019				0.00121 (J)		0.00176 (J)		<0.005	
10/14/2019				<0.005	<0.005	0.0012 (J)	<0.005	<0.005	
10/16/2019	<0.005								
11/26/2019		0.00194 (J)							
2/3/2020				<0.005	<0.005		0.00101 (J)		
2/4/2020	<0.005	0.00157 (J)	0.16			0.00128 (J)		<0.005	
2/5/2020									0.00232 (J)
8/4/2020	<0.005		0.103	<0.005	<0.005				
8/5/2020		0.00158 (J)				0.00115 (J)	0.00116 (J)	<0.005	0.00476 (J)
3/1/2021				0.0014				0.000633	0.0105
3/2/2021	0.00039	0.00138	0.293						
3/3/2021					0.000296	0.00116	0.00107		
7/14/2021	0.00041	0.00161	0.104	0.00057		0.00174	0.00118	0.00024	0.00692
7/15/2021					0.00028				
1/25/2022		0.00129							
1/26/2022	0.00043		0.283	0.00136	0.00036				0.00542
1/27/2022						0.00274	0.00124	0.00027	
7/12/2022	0.000292		0.0902					0.000156 (J)	0.00276
7/13/2022		0.00106		0.000491	0.000178 (J)	0.00694	0.00117		
2/27/2023				0.00111	0.000197 (J)				
2/28/2023	0.000311		0.24					0.000177 (J)	0.00219
3/1/2023		0.00092				0.00412	0.000882		
8/22/2023	0.000284	0.000726	0.18						
8/23/2023				0.000448	0.000327	0.000866	0.00159	0.000162 (J)	0.00242

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Arsenic (mg/L) Analysis Run 12/22/2023 2:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-9H	MW-1 (bg)	MW-2 (bg)	MW-3 (bg)	MW-4 (bg)	GS-GSA-MW-12V	GS-GSA-MW-9V	GS-GSA-MW-14H
4/25/2016			<0.005	<0.005	<0.000203			
4/26/2016		<0.005						
6/20/2016		<0.005	<0.005		<0.000203			
6/22/2016				<0.005				
8/8/2016		<0.005	<0.005					
8/9/2016				<0.005	<0.000203			
8/24/2016		<0.005	<0.005	<0.005	<0.000203			
10/3/2016		<0.005	<0.005		<0.000203			
10/4/2016				<0.005				
10/26/2016		<0.005	<0.005	<0.005	<0.000203			
11/21/2016		<0.005	0.00111 (J)	<0.005	<0.000203			
1/17/2017		<0.005	<0.005					
1/18/2017				<0.005	<0.000203			
3/22/2017		<0.005	<0.005	0.00122 (J)	<0.000203			
4/18/2017		<0.005	<0.005	<0.005	<0.000203			
5/30/2017		<0.005						
5/31/2017			<0.005	<0.005	<0.000203			
2/13/2018		<0.005	<0.005	<0.005	<0.000203			
5/22/2018		<0.005	<0.005					
5/23/2018					<0.000203			
5/24/2018				<0.005				
6/12/2018		<0.005	<0.005	0.00103 (J)	<0.000203			
10/17/2018		<0.005	<0.005	0.00133 (J)	<0.000203			
11/19/2018		<0.005	<0.005	0.0012 (J)	<0.000203			
3/5/2019	<0.005							
4/10/2019		<0.005	<0.005	<0.005	<0.000203			
5/14/2019		<0.005	<0.005	<0.005	<0.000203			
10/8/2019		<0.005	<0.005	0.0048 (J)				
10/10/2019					<0.000203			
10/16/2019	0.0019 (J)	<0.005	<0.005	0.00389 (J)	<0.000203			
2/3/2020		<0.005	<0.005	<0.005	<0.000203			
2/4/2020	0.00123 (J)							
8/3/2020		<0.005	<0.005	0.00426 (J)				
8/4/2020	0.00137 (J)						<0.005	
8/5/2020					<0.000203	<0.005		0.00181 (J)
2/22/2021		0.000403	0.000295	0.000789	0.000125 (J)			
3/1/2021							0.00136	
3/2/2021	0.00105							
3/3/2021						0.000339		0.00155
7/12/2021		0.00036	0.00036	0.00038	0.00012 (J)			
7/13/2021	0.00113						0.00168	0.00172
7/14/2021						0.00048		
1/25/2022		0.00025	0.00033	0.00027	9E-05 (J)			
1/26/2022	0.00113						0.00128	
1/27/2022						0.00066		0.00128
7/5/2022		0.000281	0.00035	0.00374	0.000118 (J)			
7/12/2022	0.000982						0.00137	
7/13/2022						0.000522		0.0013
2/20/2023		0.000275	0.000243	0.000224				
2/21/2023					<0.000203			
2/28/2023	0.000633						0.000762	0.00147
3/1/2023						0.000328		

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Arsenic (mg/L) Analysis Run 12/22/2023 2:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-9H	MW-1 (bg)	MW-2 (bg)	MW-3 (bg)	MW-4 (bg)	GS-GSA-MW-12V	GS-GSA-MW-9V	GS-GSA-MW-14H
8/21/2023								0.000711
8/22/2023	0.000582	0.000187 (J)	0.000371	0.00361	0.000145 (J)		0.00172	
8/23/2023						0.000308		

Time Series

Constituent: Barium (mg/L) Analysis Run 12/22/2023 2:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-11H	GS-GSA-MW-12H	GS-GSA-MW-13H	GS-GSA-MW-3	GS-GSA-MW-3V	GS-GSA-MW-4	GS-GSA-MW-4V	GS-GSA-MW-8	GS-GSA-MW-8V
8/24/2016				0.0155		0.0135		0.0536	
10/3/2016				0.0156		0.0127		0.0681	
10/26/2016				0.0122		0.0118		0.0562	
11/21/2016				0.0128		0.012		0.0604	
1/17/2017				0.0125		0.0119		0.0402	
3/20/2017				0.0124				0.0305	
3/21/2017						0.0116			
4/17/2017				0.0149		0.0112			
4/18/2017								0.0276	
5/30/2017				0.0121		0.0117		0.0272	
2/13/2018				0.0118		0.0121		0.0249	
6/11/2018				0.0127		0.0139			
6/12/2018								0.0234	
10/17/2018				0.013		0.0125		0.0236	
3/4/2019	0.0239								
3/5/2019					0.0956		0.0136		
4/10/2019				0.0153		0.0136		0.02	
10/14/2019				0.0122	0.0451	0.0147	0.0123	0.0215	
10/16/2019	0.0192								
11/26/2019		0.0184							
2/3/2020				0.0141	0.0215		0.0103		
2/4/2020	0.0148	0.0141	0.0296			0.0124		0.0209	
2/5/2020									0.096
8/4/2020	0.0138		0.0275	0.0139	0.017				
8/5/2020		0.016				0.0142	0.0112	0.0216	0.125
3/1/2021				0.0154				0.0194	0.15
3/2/2021	0.0118	0.0134	0.0315						
3/3/2021					0.0181	0.0117	0.0103		
7/14/2021	0.0127	0.013	0.0217	0.0136		0.0115	0.01	0.0232	0.148
7/15/2021					0.0157				
1/25/2022		0.013							
1/26/2022	0.0139		0.0334	0.0148	0.0161				0.137
1/27/2022						0.0131	0.0108	0.0238	
7/12/2022	0.0115		0.021					0.022	0.0967
7/13/2022		0.0129		0.0118	0.0145	0.00947	0.00969		
2/27/2023				0.0138	0.0139				
2/28/2023	0.0111		0.0292					0.0238	0.0973
3/1/2023		0.0127				0.00845	0.01		
8/22/2023	0.0111	0.0135	0.0257						
8/23/2023				0.0111	0.0169	0.01	0.0102	0.0225	0.102

Time Series

Constituent: Barium (mg/L) Analysis Run 12/22/2023 2:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-9H	MW-1 (bg)	MW-2 (bg)	MW-3 (bg)	MW-4 (bg)	GS-GSA-MW-12V	GS-GSA-MW-9V	GS-GSA-MW-14H
4/25/2016			0.0134	0.00803 (J)	0.0114			
4/26/2016		0.00941 (J)						
6/20/2016		0.00951 (J)	0.0165		0.0103			
6/22/2016				0.0101				
8/8/2016		0.00991 (J)	0.0162					
8/9/2016				0.00889 (J)	0.0119			
8/24/2016		0.00949 (J)	0.0139	0.00962 (J)	0.0118			
10/3/2016		0.0105	0.0164		0.0119			
10/4/2016				0.00984 (J)				
10/26/2016		0.00931 (J)	0.0138	0.00878 (J)	0.0104			
11/21/2016		0.00879 (J)	0.0144	0.00833 (J)	0.0106			
1/17/2017		0.00929 (J)	0.0135					
1/18/2017				0.00966 (J)	0.0101			
3/22/2017		0.00938 (J)	0.0132	0.00991 (J)	0.0103			
4/18/2017		0.00964 (J)	0.012	0.00976 (J)	0.0107			
5/30/2017		0.00982 (J)						
5/31/2017			0.0126	0.00866 (J)	0.0104			
2/13/2018		0.00937 (J)	0.0127	0.00821 (J)	0.0111			
5/22/2018		0.0102	0.0131					
5/23/2018					0.0107			
5/24/2018				0.00977 (J)				
6/12/2018		0.0104	0.0138	0.00997 (J)	0.0108			
10/17/2018		0.00952 (J)	0.0137	0.0126	0.0119			
11/19/2018		0.00915 (J)	0.0115	0.0109	0.0107			
3/5/2019	0.0312							
4/10/2019		0.0105	0.0111	0.0101	0.0107			
5/14/2019		0.00913 (J)	0.0109	0.00922 (J)	0.00949 (J)			
10/8/2019		0.0109	0.0151	0.0154				
10/10/2019					0.0116			
10/16/2019	0.0163	0.0106	0.0146	0.0128	0.0125			
2/3/2020		0.00995 (J)	0.0122	0.0086 (J)	0.0103			
2/4/2020	0.0148							
8/3/2020		0.0107	0.0147	0.0166				
8/4/2020	0.0153						0.0155	
8/5/2020					0.0125	0.0157		0.0113
2/22/2021		0.0107	0.0132	0.00981	0.0111			
3/1/2021							0.012	
3/2/2021	0.0149							
3/3/2021						0.0126		0.0109
7/12/2021		0.00991	0.013	0.00857	0.0108			
7/13/2021	0.0141						0.013	0.0102
7/14/2021						0.0116		
1/25/2022		0.0098	0.0122	0.00821	0.00908			
1/26/2022	0.0146						0.012	
1/27/2022						0.0125		0.0122
7/5/2022		0.01	0.0116	0.0155	0.0113			
7/12/2022	0.0134						0.012	
7/13/2022						0.0103		0.0104
2/20/2023		0.0102	0.0122	0.00822				
2/21/2023					0.0116			
2/28/2023	0.0131						0.0122	0.0202
3/1/2023						0.011		

Time Series

Constituent: Barium (mg/L) Analysis Run 12/22/2023 2:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-9H	MW-1 (bg)	MW-2 (bg)	MW-3 (bg)	MW-4 (bg)	GS-GSA-MW-12V	GS-GSA-MW-9V	GS-GSA-MW-14H
8/21/2023								0.0154
8/22/2023	0.0132	0.00976	0.0134	0.0158	0.013		0.0137	
8/23/2023						0.0106		

Time Series

Constituent: Beryllium (mg/L) Analysis Run 12/22/2023 2:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-11H	GS-GSA-MW-12H	GS-GSA-MW-13H	GS-GSA-MW-3	GS-GSA-MW-3V	GS-GSA-MW-4	GS-GSA-MW-4V	GS-GSA-MW-8	GS-GSA-MW-8V
8/24/2016				<0.003		0.00576		<0.001015	
10/3/2016				<0.003		0.00469		<0.001015	
10/26/2016				0.000922 (J)		0.00459		<0.001015	
11/21/2016				0.00133 (J)		0.00502		<0.001015	
1/17/2017				0.0017 (J)		0.00488		<0.001015	
3/20/2017				0.00191 (J)				<0.001015	
3/21/2017						0.00521			
4/17/2017				0.00655		0.0058			
4/18/2017								<0.001015	
5/30/2017				0.00204 (J)		0.00517		<0.001015	
2/13/2018				0.00387		0.00544		<0.001015	
6/11/2018				0.00244 (J)		0.00463			
6/12/2018								<0.001015	
10/17/2018				0.00345		0.00369		<0.001015	
3/4/2019	<0.001015								
3/5/2019					<0.001015		0.00155 (J)		
4/10/2019				0.00257 (J)		0.00469		<0.001015	
10/14/2019				0.00162 (J)	<0.001015	0.00403	0.00382	<0.001015	
10/16/2019	<0.001015								
11/26/2019		0.0084							
2/3/2020				0.00141 (J)	<0.001015		0.00362		
2/4/2020	<0.001015	0.00709	<0.001015			0.00415		<0.001015	
2/5/2020									<0.001015
8/4/2020	<0.001015		<0.001015	0.00174 (J)	<0.001015				
8/5/2020		0.00747				0.00385	0.00416	<0.001015	<0.001015
3/1/2021				0.00157				<0.001015	<0.001015
3/2/2021	<0.001015	0.00703	<0.001015						
3/3/2021					<0.001015	0.00406	0.0032		
7/14/2021	<0.001015	0.00755	<0.001015	0.00175		0.00577	0.00381	<0.001015	<0.001015
7/15/2021					<0.001015				
1/25/2022		0.00729							
1/26/2022	<0.001015		<0.001015	0.00179	<0.001015				<0.001015
1/27/2022						0.00768	0.00431	<0.001015	
7/12/2022	<0.001015		<0.001015					<0.001015	<0.001015
7/13/2022		0.00817		0.00204	<0.001015	0.0228	0.00607		
2/27/2023				0.00191	<0.001015				
2/28/2023	<0.001015		0.000451 (J)					<0.001015	<0.001015
3/1/2023		0.0067				0.0224	0.00412		
8/22/2023	<0.001015	0.00745	<0.001015						
8/23/2023				0.00224	<0.001015	0.00684	0.0104	<0.001015	<0.001015

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Beryllium (mg/L) Analysis Run 12/22/2023 2:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-9H	MW-1 (bg)	MW-2 (bg)	MW-3 (bg)	MW-4 (bg)	GS-GSA-MW-12V	GS-GSA-MW-9V	GS-GSA-MW-14H
4/25/2016			<0.001015	0.00122 (J)	<0.001015			
4/26/2016		<0.001015						
6/20/2016		<0.001015	<0.001015		<0.001015			
6/22/2016				0.00144 (J)				
8/8/2016		<0.001015	<0.001015					
8/9/2016				0.00331	<0.001015			
8/24/2016		<0.001015	<0.001015	0.00308	<0.001015			
10/3/2016		<0.001015	<0.001015		<0.001015			
10/4/2016				0.00129 (J)				
10/26/2016		<0.001015	<0.001015	0.0071	<0.001015			
11/21/2016		<0.001015	<0.001015	0.00689	<0.001015			
1/17/2017		<0.001015	<0.001015					
1/18/2017				0.0169 (o)	<0.001015			
3/22/2017		<0.001015	<0.001015	0.00686	<0.001015			
4/18/2017		<0.001015	<0.001015	<0.001015	<0.001015			
5/30/2017		<0.001015						
5/31/2017			<0.001015	0.00547	<0.001015			
2/13/2018		<0.001015	<0.001015	<0.001015	<0.001015			
5/22/2018		<0.001015	<0.001015					
5/23/2018					<0.001015			
5/24/2018				0.00164 (J)				
6/12/2018		<0.001015	<0.001015	0.00306	<0.001015			
10/17/2018		<0.001015	<0.001015	0.0121	<0.001015			
11/19/2018		<0.001015	<0.001015	0.0185 (o)	<0.001015			
3/5/2019	<0.003							
4/10/2019		<0.001015	<0.001015	<0.001015	<0.001015			
5/14/2019		<0.001015	<0.001015	<0.001015	<0.001015			
10/8/2019		<0.001015	<0.001015	0.0084				
10/10/2019					<0.001015			
10/16/2019	0.000985 (J)	<0.001015	<0.001015	0.0103	<0.001015			
2/3/2020		<0.001015	<0.001015	<0.001015	<0.001015			
2/4/2020	0.000929 (J)							
8/3/2020		<0.001015	<0.001015	0.00405				
8/4/2020	0.000882 (J)						<0.001015	
8/5/2020					<0.001015	<0.001015		0.00879
2/22/2021		<0.001015	<0.001015	<0.001015	<0.001015			
3/1/2021							<0.001015	
3/2/2021	0.000724 (J)							
3/3/2021						<0.001015		0.00818
7/12/2021		<0.001015	<0.001015	<0.001015	<0.001015			
7/13/2021	0.00073 (J)						<0.001015	0.00883
7/14/2021						<0.001015		
1/25/2022		<0.001015	<0.001015	<0.001015	<0.001015			
1/26/2022	0.00063 (J)						<0.001015	
1/27/2022						<0.001015		0.00718
7/5/2022		<0.001015	<0.001015	0.00139	<0.001015			
7/12/2022	0.000599 (J)						<0.001015	
7/13/2022						<0.001015		0.00896
2/20/2023		<0.001015	<0.001015	<0.001015				
2/21/2023					<0.001015			
2/28/2023	0.000563 (J)						<0.001015	0.0109
3/1/2023						<0.001015		

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Beryllium (mg/L) Analysis Run 12/22/2023 2:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-9H	MW-1 (bg)	MW-2 (bg)	MW-3 (bg)	MW-4 (bg)	GS-GSA-MW-12V	GS-GSA-MW-9V	GS-GSA-MW-14H
8/21/2023								0.00851
8/22/2023	0.000501 (J)	<0.001015	<0.001015	0.00277	<0.001015		<0.001015	
8/23/2023						<0.001015		

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Boron (mg/L) Analysis Run 12/22/2023 2:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-11H	GS-GSA-MW-12H	GS-GSA-MW-13H	GS-GSA-MW-3	GS-GSA-MW-3V	GS-GSA-MW-4	GS-GSA-MW-4V	GS-GSA-MW-8	GS-GSA-MW-8V
8/24/2016				0.799		4.88		0.0898 (J)	
10/3/2016				0.889		4.75		0.0821 (J)	
10/26/2016				1.23		4.96		0.0889 (J)	
11/21/2016				1.72		4.82		0.0788 (J)	
1/17/2017				2.63		3.97		0.0607 (J)	
3/20/2017				3.11				0.114	
3/21/2017						3.39			
4/17/2017				4.51		3.46			
4/18/2017								0.108	
5/30/2017				2.9		3.79		0.105	
8/24/2017				2.83		4.19		0.12	
6/11/2018				3.09		3.96			
6/12/2018								0.181	
10/17/2018				2.59		3.98		0.616	
3/4/2019	0.0235 (J)								
3/5/2019					0.895		7.15		
4/10/2019				3.35		3.74		0.944	
10/14/2019				2.48	2.38	3.37	5.64	2.11	
10/16/2019	0.0352 (J)								
11/26/2019		0.0798 (J)							
2/3/2020				2.13	3.06		5.25		
2/4/2020	<0.1015	0.0748 (J)	0.202			2.74		1.47	
2/5/2020									0.136
8/4/2020	<0.1015		0.263	1.82	2.8				
8/5/2020		0.0748 (J)				2.51	4.41	2.16	0.131
3/1/2021				2.55				1.85	0.145
3/2/2021	0.0305 (J)	0.0875 (J)	0.206						
3/3/2021					2.99	2.42	4.09		
7/14/2021	<0.1015	0.0742 (J)	0.229	1.47		4.78	3.68	2.07	0.147
7/15/2021					3.04				
1/25/2022		0.0645 (J)							
1/26/2022	<0.1015		0.206	2.5	2.81				0.153
1/27/2022						6.1	3.47	2.76	
7/12/2022	<0.1015		0.209					2.3	0.148
7/13/2022		0.0687 (J)		1.29	2.85	7.29	3.15		
2/27/2023				2.78	2.91				
2/28/2023	<0.1015		0.203					1.91	0.142
3/1/2023		0.0549 (J)				8.02	2.85		
8/22/2023	<0.1015	0.0633 (J)	0.189						
8/23/2023				1.57	2.78	2.24	2.5	2.22	0.157

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Boron (mg/L) Analysis Run 12/22/2023 2:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-9H	MW-1 (bg)	MW-2 (bg)	MW-3 (bg)	MW-4 (bg)	GS-GSA-MW-12V	GS-GSA-MW-9V	GS-GSA-MW-14H
4/25/2016			0.0241 (J)	0.028 (J)	0.0414 (J)			
4/26/2016		0.0231 (J)						
6/20/2016		0.0227 (J)	0.0284 (J)		0.0434 (J)			
6/22/2016				0.0433 (J)				
8/8/2016		0.0278 (J)	0.034 (J)					
8/9/2016				0.0429 (J)	0.0453 (J)			
8/24/2016		0.0247 (J)	0.0316 (J)	0.0431 (J)	0.0451 (J)			
10/3/2016		0.0307 (J)	0.0367 (J)		0.0511 (J)			
10/4/2016				0.04 (J)				
10/26/2016		0.0241 (J)	0.0331 (J)	0.0375 (J)	0.0507 (J)			
11/21/2016		0.0202 (J)	0.035 (J)	0.0406 (J)	0.0458 (J)			
1/17/2017		0.0201 (J)	0.0259 (J)					
1/18/2017				0.0548 (J)	0.0445 (J)			
3/22/2017		0.0224 (J)	0.0243 (J)	0.0344 (J)	0.0432 (J)			
4/18/2017		<0.1015	0.0206 (J)	<0.1015	0.0409 (J)			
5/30/2017		<0.1015						
5/31/2017			0.0234 (J)	0.0454 (J)	0.0392 (J)			
8/23/2017		0.0253 (J)	0.0267 (J)	0.0425 (J)	0.042 (J)			
5/22/2018		0.0224 (J)	0.0251 (J)					
5/23/2018					0.0433 (J)			
5/24/2018				0.0339 (J)				
6/12/2018		0.0214 (J)	0.0275 (J)	0.0371 (J)	0.0478 (J)			
10/17/2018		0.0216 (J)	0.0321 (J)	0.0596 (J)	0.0468 (J)			
11/19/2018		0.0237 (J)	0.0324 (J)	0.0514 (J)	0.0526 (J)			
3/5/2019	12.8							
4/10/2019		0.0304 (J)	<0.1015	<0.1015	0.0438 (J)			
5/14/2019		<0.1015	<0.1015	<0.1015	<0.203 (o)			
10/8/2019		<0.1015	0.0371 (J)	0.0537 (J)				
10/10/2019					0.0487 (J)			
10/16/2019	10.7	0.0385 (J)	0.0419 (J)	0.05 (J)	0.0505 (J)			
2/3/2020		<0.1015	<0.1015	<0.1015	0.0433 (J)			
2/4/2020	9.63							
8/3/2020		<0.1015	0.0317 (J)	0.0424 (J)				
8/4/2020	8.53						0.149	
8/5/2020					0.0459 (J)	1.55		0.158
2/22/2021		0.0307 (J)	<0.1015	<0.1015	0.0397 (J)			
3/1/2021							0.147	
3/2/2021	6.68							
3/3/2021						1.54		0.203
7/12/2021		<0.1015	<0.1015	<0.1015	0.0411 (J)			
7/13/2021	5.84						0.125	0.139
7/14/2021						1.55		
1/25/2022		<0.1015	<0.1015	<0.1015	0.0408 (J)			
1/26/2022	5.87						0.11	
1/27/2022						1.52		0.148
7/5/2022		<0.1015	<0.1015	0.0374 (J)	0.0433 (J)			
7/12/2022	5.04						0.118	
7/13/2022						1.61		0.106
2/20/2023		<0.1015	<0.1015	<0.1015				
2/21/2023					0.0408 (J)			
2/28/2023	4.79						0.104	0.157
3/1/2023						1.6		

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Boron (mg/L) Analysis Run 12/22/2023 2:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-9H	MW-1 (bg)	MW-2 (bg)	MW-3 (bg)	MW-4 (bg)	GS-GSA-MW-12V	GS-GSA-MW-9V	GS-GSA-MW-14H
8/21/2023								0.1 (J)
8/22/2023	3.86	<0.1015	<0.1015	0.0373 (J)	0.0448 (J)		0.114	
8/23/2023						1.67		

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cadmium (mg/L) Analysis Run 12/22/2023 2:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-11H	GS-GSA-MW-12H	GS-GSA-MW-13H	GS-GSA-MW-3	GS-GSA-MW-3V	GS-GSA-MW-4	GS-GSA-MW-4V	GS-GSA-MW-8	GS-GSA-MW-8V
8/24/2016				<0.000203		0.00148		<0.000203	
10/3/2016				<0.000203		0.00147		<0.000203	
10/26/2016				<0.000203		0.00157		<0.000203	
11/21/2016				<0.000203		0.00154		<0.000203	
1/17/2017				<0.000203		0.00131		<0.000203	
3/20/2017				<0.000203				<0.000203	
3/21/2017						0.00134			
4/17/2017				<0.000203		0.00122			
4/18/2017								<0.000203	
5/30/2017				<0.000203		0.00167		<0.000203	
2/13/2018				<0.000203		0.00145		<0.000203	
6/11/2018				<0.000203		0.00171			
6/12/2018								<0.000203	
10/17/2018				<0.000203		0.00188		<0.000203	
3/4/2019	<0.001								
3/5/2019					<0.000203		<0.000203		
4/10/2019				<0.000203		0.00176		<0.000203	
10/14/2019				<0.000203	<0.000203	0.0015	<0.000203	<0.000203	
10/16/2019	<0.001								
11/26/2019		0.00351							
2/3/2020				<0.000203	<0.000203		<0.000203		
2/4/2020	<0.001	0.00301	<0.000203			0.00143		<0.000203	
2/5/2020									<0.000203
8/4/2020	<0.001		<0.000203	<0.000203	<0.000203				
8/5/2020		0.00393				0.00157	<0.000203	<0.000203	<0.000203
3/1/2021				<0.000203				<0.000203	<0.000203
3/2/2021	0.000366	0.00319	<0.000203						
3/3/2021					<0.000203	0.00162	<0.000203		
7/14/2021	0.00028	0.00301	<0.000203	<0.000203		0.00246	<0.000203	<0.000203	<0.000203
7/15/2021					<0.000203				
1/25/2022		0.00333							
1/26/2022	0.00029		7E-05 (J)	<0.000203	<0.000203				<0.000203
1/27/2022						0.00336	<0.000203	<0.000203	
7/12/2022	0.000327		<0.000203					<0.000203	<0.000203
7/13/2022		0.00293		<0.000203	<0.000203	0.00687	<0.000203		
2/27/2023				<0.000203	<0.000203				
2/28/2023	0.000242		<0.000203					<0.000203	<0.000203
3/1/2023		0.0023				0.00552	<0.000203		
8/22/2023	0.000168 (J)	0.00307	<0.000203						
8/23/2023				<0.000203	<0.000203	0.00224	<0.000203	<0.000203	<0.000203

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cadmium (mg/L) Analysis Run 12/22/2023 2:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-9H	MW-1 (bg)	MW-2 (bg)	MW-3 (bg)	MW-4 (bg)	GS-GSA-MW-12V	GS-GSA-MW-9V	GS-GSA-MW-14H
4/25/2016			<0.000203	0.0121 (o)	<0.000203			
4/26/2016		0.00196						
6/20/2016		0.0021	<0.000203		<0.000203			
6/22/2016				0.00163				
8/8/2016		0.00206	<0.000203					
8/9/2016				0.00122	<0.000203			
8/24/2016		0.00182	<0.000203	<0.001	<0.000203			
10/3/2016		0.00188	<0.000203		<0.000203			
10/4/2016				0.000689 (J)				
10/26/2016		0.00175	<0.000203	0.00136	<0.000203			
11/21/2016		0.00197	<0.000203	0.00171	<0.000203			
1/17/2017		0.002	0.000311 (J)					
1/18/2017				0.003	<0.000203			
3/22/2017		0.0019	<0.000203	0.00473	<0.000203			
4/18/2017		0.00159	<0.000203	0.00117	<0.000203			
5/30/2017		0.00214						
5/31/2017			0.000212 (J)	0.00296	<0.000203			
2/13/2018		0.0018	<0.000203	0.00232	<0.000203			
5/22/2018		0.00201	<0.000203					
5/23/2018					<0.000203			
5/24/2018				0.00459				
6/12/2018		0.00217	<0.000203	0.00351	<0.000203			
10/17/2018		0.00228	<0.000203	0.00393	<0.000203			
11/19/2018		0.00156	<0.000203	0.00309	<0.000203			
3/5/2019	0.000336 (J)							
4/10/2019		0.00224	<0.000203	0.00337	<0.000203			
5/14/2019		0.00238	<0.000203	0.0013	<0.000203			
10/8/2019		0.00218	<0.000203	0.00598				
10/10/2019					<0.000203			
10/16/2019	0.000362 (J)	0.00225	<0.000203	0.00448	<0.000203			
2/3/2020		0.00182	<0.000203	0.000988 (J)	<0.000203			
2/4/2020	0.000349 (J)							
8/3/2020		0.00237	<0.000203	0.00652				
8/4/2020	0.000308 (J)						<0.000203	
8/5/2020					<0.000203	<0.000203		0.0018
2/22/2021		0.00184	8.96E-05 (J)	0.00536	8.96E-05 (J)			
3/1/2021							<0.000203	
3/2/2021	0.000338							
3/3/2021						<0.000203		0.0016
7/12/2021		0.00193	8E-05 (J)	0.00094	8E-05 (J)			
7/13/2021	0.00028						<0.000203	0.00157
7/14/2021						<0.000203		
1/25/2022		0.00196	8E-05 (J)	0.00178	<0.000203			
1/26/2022	0.00024						<0.000203	
1/27/2022						<0.000203		0.00137
7/5/2022		0.00211	8.4E-05 (J)	0.00835	7.5E-05 (J)			
7/12/2022	0.000309						<0.000203	
7/13/2022						<0.000203		0.00128
2/20/2023		0.00185	<0.000203	0.00144				
2/21/2023					<0.000203			
2/28/2023	0.000298						<0.000203	0.00162
3/1/2023						<0.000203		

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cadmium (mg/L) Analysis Run 12/22/2023 2:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-9H	MW-1 (bg)	MW-2 (bg)	MW-3 (bg)	MW-4 (bg)	GS-GSA-MW-12V	GS-GSA-MW-9V	GS-GSA-MW-14H
8/21/2023								0.00117
8/22/2023	0.000248	0.00205	8.5E-05 (J)	0.00867	8.5E-05 (J)		<0.000203	
8/23/2023						<0.000203		

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Calcium (mg/L) Analysis Run 12/22/2023 2:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-11H	GS-GSA-MW-12H	GS-GSA-MW-13H	GS-GSA-MW-3	GS-GSA-MW-3V	GS-GSA-MW-4	GS-GSA-MW-4V	GS-GSA-MW-8	GS-GSA-MW-8V
8/24/2016				539		102		263	
10/3/2016				519.7		98.4		253	
10/26/2016				916		88.7		235	
11/21/2016				552		104		246	
1/17/2017				572		102		231	
3/20/2017				817				298	
3/21/2017						94.7			
4/17/2017				476		97.9			
4/18/2017								317	
5/30/2017				515		93.9		316	
8/24/2017				598		105		391	
6/11/2018				558		105			
6/12/2018								442	
10/17/2018				533		117		514	
3/4/2019	177								
3/5/2019					329		249		
4/10/2019				659		129		533	
10/14/2019				552	368	93.5	173	524	
10/16/2019	143								
11/26/2019		144							
2/3/2020				589	504		184		
2/4/2020	163	158	171			116		461	
2/5/2020									37.3
8/4/2020	139		192	545	443				
8/5/2020		126				94.7	167	497	31.9
3/1/2021				514				386	26.2
3/2/2021	139	124	164						
3/3/2021					466	100	161		
7/14/2021	133	124	179	533		130	162	444	29
7/15/2021					453				
1/25/2022		124							
1/26/2022	143		158	517	448				31.5
1/27/2022						181	172	491	
7/12/2022	137		177					451	30.4
7/13/2022		130		549	442	385	165		
2/27/2023				516	397				
2/28/2023	135		146					353	29.6
3/1/2023		115				327	161		
8/22/2023	144	128	166						
8/23/2023				585	462	156	179	451	31.5

Time Series

Constituent: Calcium (mg/L) Analysis Run 12/22/2023 2:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-9H	MW-1 (bg)	MW-2 (bg)	MW-3 (bg)	MW-4 (bg)	GS-GSA-MW-12V	GS-GSA-MW-9V	GS-GSA-MW-14H
4/25/2016			123	224	261			
4/26/2016		147						
6/20/2016		152	168		295			
6/22/2016				266				
8/8/2016		150	180					
8/9/2016				260	318			
8/24/2016		142	180	274	319			
10/3/2016		139	184		293			
10/4/2016				243				
10/26/2016		133	171	254	311			
11/21/2016		144	179	263	320			
1/17/2017		131	188					
1/18/2017				431	417			
3/22/2017		141	155	318	292			
4/18/2017		149	156	296	302			
5/30/2017		140						
5/31/2017			151	306	284			
8/23/2017		152	155	298	297			
5/22/2018		166	172					
5/23/2018					296			
5/24/2018				297				
6/12/2018		203	179	318	355			
10/17/2018		171	200	392	342			
11/19/2018		154	221	387	289			
3/5/2019	578							
4/10/2019		243	200	348	356			
5/14/2019		167	168	254	254			
10/8/2019		157	190	371				
10/10/2019					302			
10/16/2019	363	157	194	346	356			
2/3/2020		172	172	276	265			
2/4/2020	413							
8/3/2020		148	172	285				
8/4/2020	346						434	
8/5/2020					281	350		141
2/22/2021		151	178	312	271			
3/1/2021							428	
3/2/2021	333							
3/3/2021						353		137
7/12/2021		149	159	252	242			
7/13/2021	312						408	135
7/14/2021						338		
1/25/2022		150	179	285	259			
1/26/2022	300						417	
1/27/2022						347		124
7/5/2022		168	172	369	294			
7/12/2022	311						460	
7/13/2022						374		124
2/20/2023		151	160	210				
2/21/2023					232			
2/28/2023	291						347	132
3/1/2023						332		

Time Series

Constituent: Calcium (mg/L) Analysis Run 12/22/2023 2:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-9H	MW-1 (bg)	MW-2 (bg)	MW-3 (bg)	MW-4 (bg)	GS-GSA-MW-12V	GS-GSA-MW-9V	GS-GSA-MW-14H
8/21/2023								125
8/22/2023	332	183	168	359	287		370	
8/23/2023						390		

Time Series

Constituent: Chloride (mg/L) Analysis Run 12/22/2023 2:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-11H	GS-GSA-MW-12H	GS-GSA-MW-13H	GS-GSA-MW-3	GS-GSA-MW-3V	GS-GSA-MW-4	GS-GSA-MW-4V	GS-GSA-MW-8	GS-GSA-MW-8V
8/24/2016				204		112		4.03	
10/3/2016				220		115		3.87	
10/26/2016				249		115		4.08	
11/21/2016				256		117		4.39	
1/17/2017				301		99.3		7.22	
3/20/2017				320				5.7	
3/21/2017						79			
4/17/2017				340		85			
4/18/2017								4.7	
5/30/2017				310		99		15	
8/24/2017				290		110		93	
6/11/2018				260		81			
6/12/2018								140	
10/17/2018				270		85		180	
3/4/2019	3.81								
3/5/2019					194		191		
4/10/2019				249		74.3		174	
10/14/2019				228	298	59.1	122	207	
10/16/2019	4.45								
11/26/2019		2.43							
2/3/2020				267	338		101		
2/4/2020	4.27	2.34	12.9			43.2		94.1	
2/5/2020									9.05
8/4/2020	4.51		12.7	222	305				
8/5/2020		2				41	80.9	146	13.9
3/1/2021				250				92.5	19.4
3/2/2021	4.63	2.28	10.9						
3/3/2021					307	40.3	70.8		
7/14/2021	4.7	1.69	11.5	207		102	68.4	129	16.7
7/15/2021					294				
1/25/2022		1.83							
1/26/2022	5.4		10.2	255	238				18.9
1/27/2022						103	51.9	122	
7/12/2022	5.18		10.8					120	15.5
7/13/2022		1.77		228	285	199	47.200001		
2/27/2023				254	233				
2/28/2023	5.49		8.99					86.9	18.6
3/1/2023		2.17				113	32.8		
8/22/2023	5.4	1.63	10						
8/23/2023				212	212	22.5	29.200001	90	22.799999

Time Series

Constituent: Chloride (mg/L) Analysis Run 12/22/2023 2:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-9H	MW-1 (bg)	MW-2 (bg)	MW-3 (bg)	MW-4 (bg)	GS-GSA-MW-12V	GS-GSA-MW-9V	GS-GSA-MW-14H
4/25/2016			1.9	1.32	1.53			
4/26/2016		1.94						
6/20/2016		2.09	3.43		1.85			
6/22/2016				1.46				
8/8/2016		2.18	3.31					
8/9/2016				1.35	1.95			
8/24/2016		2.22	3.23	1.47	2.07			
10/3/2016		2.34	3.21		2.02			
10/4/2016				1.59				
10/26/2016		2.34	3.35	1.27	2.07			
11/21/2016		2.5	3.34	1.38	2.39			
1/17/2017		2.68	3.58					
1/18/2017				1.34	1.9			
3/22/2017		3.7	3.4	2	1.5 (J)			
4/18/2017		2.4	2.6	2.2	1.6 (J)			
5/30/2017		2.6						
5/31/2017			4.4	1.5 (J)	2.1			
8/23/2017		2.7	4.4	1.8 (J)	2.3			
5/22/2018		2.3	3.2					
5/23/2018					2			
5/24/2018				1.6 (J)				
6/12/2018		2.3	3.7	1.4 (J)	1.7 (J)			
10/17/2018		1.7 (J)	4.6	<2	1.5 (J)			
11/19/2018		1.7 (J)	3	<2	<2			
3/5/2019	313							
4/10/2019		2.36	1.76	2.25	1.88			
5/14/2019		2.28	2.98	2.28	1.82			
10/8/2019		2.31	4.26	1.36				
10/10/2019					1.93			
10/16/2019	145	2.42	4.04	1.4	1.92			
2/3/2020		2.07	2.48	2.12	1.72			
2/4/2020	139							
8/3/2020		2.05	4.03	1.17				
8/4/2020	109						58.6	
8/5/2020					1.57	159		3.28
2/22/2021		2.16	1.72	2.22	1.52			
3/1/2021							58.7	
3/2/2021	84.7							
3/3/2021						152		4.8
7/12/2021		2.19	2.36	2.13	1.56			
7/13/2021	78.6						62	2.41
7/14/2021						189		
1/25/2022		2.09	2.14	2.12	1.54			
1/26/2022	59.3						57.2	
1/27/2022						171		3.75
7/5/2022		2.07	2.53	1.59	1.63			
7/12/2022	51.900002						62.5	
7/13/2022						199		2.15
2/20/2023		2.05	1.7	1.94				
2/21/2023					1.58			
2/28/2023	47.1						52.4	2.88
3/1/2023						145		

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Chloride (mg/L) Analysis Run 12/22/2023 2:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-9H	MW-1 (bg)	MW-2 (bg)	MW-3 (bg)	MW-4 (bg)	GS-GSA-MW-12V	GS-GSA-MW-9V	GS-GSA-MW-14H
8/21/2023								2.19
8/22/2023	36.200001	2.38	3.13	1.31	1.86		52.900002	
8/23/2023						152		

Time Series

Constituent: Chromium (mg/L) Analysis Run 12/22/2023 2:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-11H	GS-GSA-MW-12H	GS-GSA-MW-13H	GS-GSA-MW-3	GS-GSA-MW-3V	GS-GSA-MW-4	GS-GSA-MW-4V	GS-GSA-MW-8	GS-GSA-MW-8V
8/24/2016				<0.01		<0.01		<0.001015	
10/3/2016				<0.01		<0.01		<0.001015	
10/26/2016				<0.01		<0.01		<0.001015	
11/21/2016				<0.01		<0.01		<0.001015	
1/17/2017				<0.01		<0.01		<0.001015	
3/20/2017				<0.01				<0.001015	
3/21/2017						<0.01			
4/17/2017				<0.01		<0.01			
4/18/2017								<0.001015	
5/30/2017				<0.01		<0.01		<0.001015	
2/13/2018				<0.01		<0.01		<0.001015	
6/11/2018				<0.01		<0.01			
6/12/2018								<0.001015	
10/17/2018				<0.01		<0.01		<0.001015	
3/4/2019	<0.01								
3/5/2019					<0.001015		<0.001015		
4/10/2019				<0.01		<0.01		<0.001015	
10/14/2019				<0.01	<0.001015	<0.01	<0.001015	<0.001015	
10/16/2019	<0.01								
11/26/2019		<0.01							
2/3/2020				<0.01	<0.001015		<0.001015		
2/4/2020	<0.01	<0.01	<0.001015			<0.01		<0.001015	
2/5/2020									<0.001015
8/4/2020	<0.01		<0.001015	<0.01	<0.001015				
8/5/2020		<0.01				<0.01	<0.001015	<0.001015	<0.001015
3/1/2021				0.000386 (J)				0.000423 (J)	<0.001015
3/2/2021	0.000295 (J)	0.000242 (J)	0.000285 (J)						
3/3/2021					<0.001015	0.000567 (J)	<0.001015		
7/14/2021	0.00034 (J)	0.00059 (J)	0.00032 (J)	0.00039 (J)		0.0007 (J)	0.00027 (J)	0.0003 (J)	<0.001015
7/15/2021					0.00027 (J)				
1/25/2022		0.00033 (J)							
1/26/2022	0.00052 (J)		0.00023 (J)	0.00048 (J)	0.0005 (J)				0.00023 (J)
1/27/2022						0.00107	0.00029 (J)	0.00046 (J)	
7/12/2022	0.000425 (J)		0.000331 (J)					0.000258 (J)	<0.001015
7/13/2022		0.000329 (J)		0.000341 (J)	0.000255 (J)	0.00355	0.00039 (J)		
2/27/2023				0.00037 (J)	0.000298 (J)				
2/28/2023	0.000413 (J)		0.000325 (J)					0.000325 (J)	0.000293 (J)
3/1/2023		0.000271 (J)				0.00243	0.000293 (J)		
8/22/2023	0.000218 (J)	0.00026 (J)	<0.001015						
8/23/2023				0.000248 (J)	<0.001015	0.000836 (J)	0.000548 (J)	<0.001015	<0.001015

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Chromium (mg/L) Analysis Run 12/22/2023 2:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-9H	MW-1 (bg)	MW-2 (bg)	MW-3 (bg)	MW-4 (bg)	GS-GSA-MW-12V	GS-GSA-MW-9V	GS-GSA-MW-14H
4/25/2016			<0.001015	0.00373 (J)	<0.001015			
4/26/2016		<0.001015						
6/20/2016		<0.001015	<0.001015		<0.001015			
6/22/2016				0.00606 (J)				
8/8/2016		<0.001015	<0.001015					
8/9/2016				<0.001015	<0.001015			
8/24/2016		<0.001015	<0.001015	<0.001015	<0.001015			
10/3/2016		<0.001015	<0.001015		<0.001015			
10/4/2016				<0.001015				
10/26/2016		<0.001015	<0.001015	<0.001015	<0.001015			
11/21/2016		<0.001015	<0.001015	<0.001015	<0.001015			
1/17/2017		<0.001015	<0.001015					
1/18/2017				<0.001015	<0.001015			
3/22/2017		<0.001015	<0.001015	0.00945 (J)	<0.001015			
4/18/2017		<0.001015	<0.001015	0.0105	<0.001015			
5/30/2017		<0.001015						
5/31/2017			<0.001015	<0.001015	<0.001015			
2/13/2018		<0.001015	<0.001015	<0.001015	<0.001015			
5/22/2018		<0.001015	<0.001015					
5/23/2018					<0.001015			
5/24/2018				<0.001015				
6/12/2018		<0.001015	<0.001015	<0.001015	<0.001015			
10/17/2018		<0.001015	<0.001015	<0.001015	<0.001015			
11/19/2018		<0.001015	<0.001015	<0.001015	<0.001015			
3/5/2019	<0.001015							
4/10/2019		<0.001015	<0.001015	<0.001015	<0.001015			
5/14/2019		<0.001015	<0.001015	<0.001015	<0.001015			
10/8/2019		<0.001015	<0.001015	<0.001015				
10/10/2019					<0.001015			
10/16/2019	<0.001015	<0.001015	<0.001015	<0.001015	<0.001015			
2/3/2020		<0.001015	<0.001015	<0.001015	<0.001015			
2/4/2020	<0.001015							
8/3/2020		<0.001015	<0.001015	<0.001015				
8/4/2020	<0.001015						<0.001015	
8/5/2020					<0.001015	<0.001015		<0.001015
2/22/2021		0.000382 (J)	<0.001015	0.00035 (J)	<0.001015			
3/1/2021							<0.001015	
3/2/2021	0.000218 (J)							
3/3/2021						<0.001015		<0.001015
7/12/2021		0.00049 (J)	0.00025 (J)	0.00031 (J)	0.0003 (J)			
7/13/2021	0.00026 (J)						0.0003 (J)	0.0005 (J)
7/14/2021						0.00025 (J)		
1/25/2022		0.00043 (J)	0.00022 (J)	0.00051 (J)	0.00021 (J)			
1/26/2022	0.00024 (J)						<0.001015	
1/27/2022						0.00025 (J)		0.0005 (J)
7/5/2022		0.000364 (J)	<0.001015	0.00025 (J)	<0.001015			
7/12/2022	0.000265 (J)						0.000313 (J)	
7/13/2022						0.000325 (J)		0.000526 (J)
2/20/2023		0.000409 (J)	0.00033 (J)	0.000384 (J)				
2/21/2023					0.000244 (J)			
2/28/2023	0.000273 (J)						0.000269 (J)	0.000504 (J)
3/1/2023						0.000234 (J)		

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Chromium (mg/L) Analysis Run 12/22/2023 2:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-9H	MW-1 (bg)	MW-2 (bg)	MW-3 (bg)	MW-4 (bg)	GS-GSA-MW-12V	GS-GSA-MW-9V	GS-GSA-MW-14H
8/21/2023								0.000236 (J)
8/22/2023	<0.001015	<0.001015	<0.001015	<0.001015	0.000571 (J)		<0.001015	
8/23/2023						<0.001015		

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cobalt (mg/L) Analysis Run 12/22/2023 2:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-11H	GS-GSA-MW-12H	GS-GSA-MW-13H	GS-GSA-MW-3	GS-GSA-MW-3V	GS-GSA-MW-4	GS-GSA-MW-4V	GS-GSA-MW-8	GS-GSA-MW-8V
8/24/2016				0.0303		0.151		0.0201	
10/3/2016				0.041		0.143		0.0167	
10/26/2016				0.0505		0.154		0.0253	
11/21/2016				0.0617		0.155		0.0233	
1/17/2017				0.0793		0.16		0.0708	
3/20/2017				0.0726				0.00277 (J)	
3/21/2017						0.158			
4/17/2017				0.294		0.159			
4/18/2017								<0.005	
5/30/2017				0.0832		0.159		<0.005	
2/13/2018				0.124		0.19		0.00492 (J)	
6/11/2018				0.138		0.166			
6/12/2018								<0.005	
10/17/2018				0.138		0.154		<0.005	
3/4/2019	0.0066								
3/5/2019					0.0059		0.0836		
4/10/2019				0.151		0.241		<0.005	
10/14/2019				0.102	0.00845	0.213	0.12	<0.005	
10/16/2019	0.00598								
11/26/2019		0.435							
2/3/2020				0.0843	0.0135		0.108		
2/4/2020	0.00582	0.351	0.0442			0.217		<0.005	
2/5/2020									<0.000203
8/4/2020	0.0061		0.111	0.0862	0.0133				
8/5/2020		0.436				0.235	0.141	<0.005	<0.000203
3/1/2021				0.119				0.00546	<0.000203
3/2/2021	0.00512	0.307	0.143						
3/3/2021					0.0134	0.24	0.118		
7/14/2021	0.00475	0.299	0.116	0.0555		0.296	0.12	0.00026	<0.000203
7/15/2021					0.0121				
1/25/2022		0.315							
1/26/2022	0.00479		0.228	0.0794	0.012				<0.000203
1/27/2022						0.406	0.124	0.00067	
7/12/2022	0.00494		0.153					0.000233	<0.000203
7/13/2022		0.34		0.046	0.0115	0.878	0.137		
2/27/2023				0.285	0.0113				
2/28/2023	0.0049		0.285					0.000248	<0.000203
3/1/2023		0.271				0.705	0.134		
8/22/2023	0.00459	0.323	0.107						
8/23/2023				0.0509	0.00949	0.354	0.129	8.4E-05 (J)	<0.000203

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cobalt (mg/L) Analysis Run 12/22/2023 2:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-9H	MW-1 (bg)	MW-2 (bg)	MW-3 (bg)	MW-4 (bg)	GS-GSA-MW-12V	GS-GSA-MW-9V	GS-GSA-MW-14H
4/25/2016			0.0487	0.232	<0.000203			
4/26/2016		0.0343						
6/20/2016		0.0413	0.0767		<0.000203			
6/22/2016				0.332				
8/8/2016		0.0513	0.103					
8/9/2016				0.311	<0.000203			
8/24/2016		0.0471	0.093	0.271	<0.000203			
10/3/2016		0.0525	0.0964		<0.000203			
10/4/2016				0.148				
10/26/2016		0.0527	0.0904	0.236	<0.000203			
11/21/2016		0.0569	0.0857	0.241	<0.000203			
1/17/2017		0.0768	0.0745					
1/18/2017				0.347	<0.000203			
3/22/2017		0.0535	0.0328	0.271	<0.000203			
4/18/2017		0.0442	0.0242	0.00324 (J)	<0.000203			
5/30/2017		0.0465						
5/31/2017			0.0441	0.225	<0.000203			
2/13/2018		0.062	0.0179	0.00661 (J)	<0.000203			
5/22/2018		0.0443	0.028					
5/23/2018					<0.000203			
5/24/2018				0.158				
6/12/2018		0.0512	0.0366	0.291	<0.000203			
10/17/2018		0.0751	0.0745	0.49	<0.000203			
11/19/2018		0.0825	0.0225	0.386	<0.000203			
3/5/2019	0.14							
4/10/2019		0.0445	0.0152	0.0144	<0.000203			
5/14/2019		0.0485	0.0222	0.00536	<0.000203			
10/8/2019		0.0778	0.0674	1.07 (o)				
10/10/2019					<0.000203			
10/16/2019	0.168	0.08	0.073	0.848 (o)	<0.000203			
2/3/2020		0.0495	0.0193	0.0114	<0.000203			
2/4/2020	0.159							
8/3/2020		0.0722	0.0589	0.64				
8/4/2020	0.178						0.00412 (J)	
8/5/2020					<0.000203	<0.005		0.237
2/22/2021		0.0657	0.0161	0.0515	<0.000203			
3/1/2021							0.000992	
3/2/2021	0.163							
3/3/2021						0.00028		0.202
7/12/2021		0.0556	0.0155	0.00567	<0.000203			
7/13/2021	0.141						0.00077	0.193
7/14/2021						0.00018 (J)		
1/25/2022		0.0654	0.0166	0.0051	<0.000203			
1/26/2022	0.141						0.00054	
1/27/2022						0.00022		0.178
7/5/2022		0.0627	0.0184	0.195	<0.000203			
7/12/2022	0.148						0.000425	
7/13/2022						0.000166 (J)		0.192
2/20/2023		0.0665	0.0187	0.00435				
2/21/2023					<0.000203			
2/28/2023	0.147						0.000403	0.227
3/1/2023						0.000201 (J)		

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cobalt (mg/L) Analysis Run 12/22/2023 2:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-9H	MW-1 (bg)	MW-2 (bg)	MW-3 (bg)	MW-4 (bg)	GS-GSA-MW-12V	GS-GSA-MW-9V	GS-GSA-MW-14H
8/21/2023								0.179
8/22/2023	0.141	0.086	0.0434	0.529	0.000142 (J)		0.000525	
8/23/2023						0.000128 (J)		

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 12/22/2023 2:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-11H	GS-GSA-MW-12H	GS-GSA-MW-13H	GS-GSA-MW-3	GS-GSA-MW-3V	GS-GSA-MW-4	GS-GSA-MW-4V	GS-GSA-MW-8	GS-GSA-MW-8V
8/24/2016				0.389 (U)		0.741		0.558 (U)	
10/3/2016				0.683		0.648		0.565	
10/26/2016				0.242 (U)		0.632		0.555 (U)	
11/21/2016				0.764		1.57		0.987	
1/17/2017				0.191 (U)		0.493		0.476 (U)	
3/20/2017				-0.0158 (U)				0.633 (U)	
3/21/2017						0.604 (U)			
4/17/2017				0.307 (U)		0.252 (U)			
4/18/2017								0.248 (U)	
5/30/2017				0.724		0.925		0.412 (U)	
2/13/2018				0.633		0.382		1.08	
6/11/2018				0.773		0.796			
6/12/2018								0.446 (U)	
10/17/2018				0.668		0.922		1.05	
3/4/2019	0.135 (U)								
3/5/2019					0.932		0.364 (U)		
4/10/2019				0.265 (U)		0.622		0.128 (U)	
10/14/2019				0.297 (U)	0.184 (U)	0.317 (U)	0.369 (U)	0.225 (U)	
10/16/2019	0.189 (U)								
2/3/2020				0.28 (U)	0.408 (U)		0.758		
2/4/2020	0.319 (U)	0.939	0.624			0.324 (U)		0.336 (U)	
2/5/2020									0.576
8/4/2020	0.0315 (U)		-0.402 (U)	0.45 (U)	-0.00668 (U)				
8/5/2020		-0.306 (U)				0.389 (U)	0.533 (U)	-0.115 (U)	1.85
3/1/2021				0.57 (U)				0.902 (U)	1.49
3/2/2021	0.308 (U)	2.18	0.686 (U)						
3/3/2021					1.11 (U)	0.836 (U)	0.325 (U)		
7/14/2021	0.398 (U)	1.42	0.826 (U)	0.668 (U)		1.58	0.917 (U)	1.23 (U)	1.85
7/15/2021					0.362 (U)				
1/25/2022		1.22 (U)							
1/26/2022	0.506 (U)		0.354 (U)	0.335 (U)	0.546 (U)				0.155 (U)
1/27/2022						0.791 (U)	0.624 (U)	0.28 (U)	
7/12/2022	0.997 (U)		0.669 (U)					0.745 (U)	1.04 (U)
7/13/2022		1.55		0.239 (U)	1.12	1.37	0.62 (U)		
2/27/2023				0.213 (U)	0.637 (U)				
2/28/2023	0.491 (U)		0.518 (U)					0.422 (U)	1.09
3/1/2023		0.786 (U)				0.593 (U)	0.293 (U)		
8/22/2023	9.81	1.23	0.999 (U)						
8/23/2023				0.368 (U)	0.421 (U)	1.28	0.559 (U)	0.735 (U)	0.837 (U)
10/19/2023	0.588 (U)								

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 12/22/2023 2:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-9H	MW-1 (bg)	MW-2 (bg)	MW-3 (bg)	MW-4 (bg)	GS-GSA-MW-12V	GS-GSA-MW-9V	GS-GSA-MW-14H
4/25/2016				0.484 (U)	0.434 (U)			
4/26/2016		0.622						
5/5/2016			-0.0718 (U)					
6/20/2016		0.159 (U)	0.295 (U)		0.287 (U)			
6/22/2016				0.2 (U)				
8/8/2016		0.511 (U)	0.231 (U)					
8/9/2016				0.378 (U)	0.516 (U)			
8/24/2016		0.566 (U)	0.65	0.131 (U)	0.266 (U)			
10/3/2016		0.537 (U)	0.845		0.59 (U)			
10/4/2016				0.514 (U)				
10/26/2016		0.636	0.994	0.755	0.164 (U)			
11/21/2016		0.807	0.537 (U)	0.7	0.296 (U)			
1/17/2017		0.308 (U)	-0.0159 (U)					
1/18/2017				0.606	0.0267 (U)			
3/22/2017		0.344 (U)	0.279 (U)	0.927	0.132 (U)			
4/18/2017		0.934	0.32 (U)	0.334 (U)	-0.0439 (U)			
5/30/2017		0.149 (U)						
5/31/2017			0.178 (U)	0.8	0.3 (U)			
2/13/2018		0.774	0.804	0.649	0.69			
5/22/2018		-0.091 (U)	0.0077 (U)					
5/23/2018					0.186 (U)			
5/24/2018				0.448 (U)				
6/12/2018		1.18	-0.315 (U)	0.234 (U)	0.153 (U)			
10/17/2018		0.553 (U)	0.574 (U)	0.852	0.313 (U)			
11/19/2018		0.862	0.654	0.521	0.794			
3/5/2019	0.852							
4/10/2019		0.342 (U)	0.329 (U)	0.198 (U)	0.515			
5/14/2019					0.352 (U)			
10/8/2019		1.47	0.493 (U)	0.833 (U)				
10/10/2019					1.02 (U)			
10/16/2019	1.29	0.204 (U)	0.046 (U)	0.0279 (U)	0.356 (U)			
2/3/2020		0.521 (U)	-0.0245 (U)	0.0246 (U)	0.254 (U)			
2/4/2020	0.441 (U)							
8/3/2020		-0.127 (U)	0.888 (U)	0.765 (U)				
8/4/2020	-0.385 (U)						0.837 (U)	
8/5/2020					0.565 (U)	-0.284 (U)		0.758 (U)
2/22/2021		0.677 (U)	0.434 (U)	0.472 (U)	0 (U)			
3/1/2021							0.686 (U)	
3/2/2021	0.87 (U)							
3/3/2021						0.388 (U)		0.185 (U)
7/12/2021		0.476 (U)	0.155 (U)	0.114 (U)	0.301 (U)			
7/13/2021	0.877 (U)						0.194 (U)	1.06 (U)
7/14/2021						0.657 (U)		
1/25/2022		1.01 (U)	0.663 (U)	0.418 (U)	0.884 (U)			
1/26/2022	1.06						0.53 (U)	
1/27/2022						0.361 (U)		0.247 (U)
7/5/2022		1.49	1.31	1.33	1.1			
7/12/2022	0.818 (U)						0.718 (U)	
7/13/2022						0.373 (U)		1 (U)
2/20/2023		0.36 (U)	0.837 (U)	0.234 (U)				
2/21/2023					0.3 (U)			
2/28/2023	0.357 (U)						0.596 (U)	0.274 (U)

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 12/22/2023 2:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-9H	MW-1 (bg)	MW-2 (bg)	MW-3 (bg)	MW-4 (bg)	GS-GSA-MW-12V	GS-GSA-MW-9V	GS-GSA-MW-14H
3/1/2023						0.386 (U)		
8/21/2023								1.16 (U)
8/22/2023	0.872 (U)	1.1 (U)	0.763 (U)	1.19 (U)	0.887 (U)		0.625 (U)	
8/23/2023						0.176 (U)		

Time Series

Constituent: Fluoride (mg/L) Analysis Run 12/22/2023 2:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-11H	GS-GSA-MW-12H	GS-GSA-MW-13H	GS-GSA-MW-3	GS-GSA-MW-3V	GS-GSA-MW-4	GS-GSA-MW-4V	GS-GSA-MW-8	GS-GSA-MW-8V
8/24/2016				0.264 (J)		0.793		0.165 (J)	
10/3/2016				0.276 (J)		0.769		0.114 (J)	
10/26/2016				0.182 (J)		0.578		0.056 (J)	
11/21/2016				0.238 (J)		0.562		0.059 (J)	
1/17/2017				0.34		0.571		0.07 (J)	
3/20/2017				0.39				0.18	
3/21/2017						0.54			
4/17/2017				0.57		0.54			
4/18/2017								0.17	
5/30/2017				0.38		0.49		0.16	
8/24/2017				0.54		0.7		0.18	
2/13/2018				0.57		0.63		0.15	
6/11/2018				0.63		0.39			
6/12/2018								0.15	
10/17/2018				0.78		0.44		0.16	
3/4/2019	0.101								
3/5/2019					0.249		0.477		
4/10/2019				0.738		<0.125		0.156	
10/14/2019				0.619	0.37	<0.125	0.449	0.118	
10/16/2019	0.0875 (J)								
11/26/2019		<0.125							
2/3/2020				0.427	0.438		0.555		
2/4/2020	0.0743 (J)	<0.125	0.115			<0.125		0.132	
2/5/2020									0.162
8/4/2020	0.109		0.113	0.389	0.349				
8/5/2020		<0.125				<0.125	0.363	0.119	0.256
3/1/2021				0.449				0.106	0.346
3/2/2021	0.0758 (J)	<0.125	0.167						
3/3/2021					0.458	<0.125	0.262		
7/14/2021	0.0848 (J)	<0.125	0.196	0.556		<0.125	0.276	0.221	0.339
7/15/2021					0.493				
1/25/2022		<0.125							
1/26/2022	0.0809 (J)		0.208	0.447	0.516				0.306
1/27/2022						<0.125	0.373	0.179	
7/12/2022	0.156		0.207					0.112 (J)	0.19
7/13/2022		<0.125		0.324	0.374	<0.125	0.536		
2/27/2023				0.292	0.376				
2/28/2023	0.0747 (J)		0.2					0.161	0.35
3/1/2023		<0.125				<0.125	0.39		
8/22/2023	<0.125	<0.125	0.12 (J)						
8/23/2023				0.542	0.477	<0.125	0.257	0.139	0.238

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Fluoride (mg/L) Analysis Run 12/22/2023 2:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-9H	MW-1 (bg)	MW-2 (bg)	MW-3 (bg)	MW-4 (bg)	GS-GSA-MW-12V	GS-GSA-MW-9V	GS-GSA-MW-14H
4/25/2016			0.149 (J)	0.243 (J)	0.372			
4/26/2016		0.146 (J)						
6/20/2016		0.148 (J)	0.148 (J)		0.361			
6/22/2016				0.269 (J)				
8/8/2016		0.137 (J)	0.134 (J)					
8/9/2016				0.363	0.326			
8/24/2016		0.133 (J)	0.129 (J)	0.346	0.329			
10/3/2016		0.103 (J)	0.086 (J)		0.287 (J)			
10/4/2016				0.266 (J)				
10/26/2016		0.05 (J)	0.027 (J)	0.266 (J)	0.194 (J)			
11/21/2016		0.047 (J)	0.027 (J)	0.244 (J)	0.192 (J)			
1/17/2017		0.09 (J)	0.066 (J)					
1/18/2017				0.385	0.223 (J)			
3/22/2017		0.12	0.13	0.41	0.32			
4/18/2017		0.12	0.16	0.29	0.32			
5/30/2017		0.13						
5/31/2017			0.13	0.37	0.31			
8/23/2017		0.16	0.16	0.55	0.38			
2/13/2018		0.14	0.22	0.27	0.38			
5/22/2018		0.16	0.17					
5/23/2018					0.38			
5/24/2018				0.6				
6/12/2018		0.16	0.16	0.53	0.39			
10/17/2018		0.18	0.16	0.63	0.39			
11/19/2018		0.15	0.18	0.31	0.36			
3/5/2019	0.239							
4/10/2019		0.102	0.262	0.273	0.384			
5/14/2019		0.119	0.17	0.281	0.335			
10/8/2019		0.0924 (J)	0.164	0.225				
10/10/2019					0.304			
10/16/2019	0.101	0.0756 (J)	0.114	0.106	0.302			
2/3/2020		0.0982 (J)	0.182	0.256	0.37			
2/4/2020	0.205							
8/3/2020		<0.1	0.122	0.0766 (J)				
8/4/2020	0.127						0.135	
8/5/2020					0.359	0.217		0.082 (J)
2/22/2021		0.082 (J)	0.209	0.246	0.357			
3/1/2021							0.12	
3/2/2021	0.094 (J)							
3/3/2021						0.243		<0.125
7/12/2021		0.125	0.196	0.287	0.35			
7/13/2021	0.182						0.211	<0.125
7/14/2021						0.335		
1/25/2022		0.101	0.204	0.325	0.364			
1/26/2022	0.117						0.155	
1/27/2022						0.329		<0.125
7/5/2022		0.11 (J)	0.2	0.386	0.362			
7/12/2022	0.191						0.165	
7/13/2022						0.301		<0.125
2/20/2023		0.221	0.267	0.379				
2/21/2023					0.415			
2/28/2023	0.157						0.156	<0.125

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Fluoride (mg/L) Analysis Run 12/22/2023 2:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-9H	MW-1 (bg)	MW-2 (bg)	MW-3 (bg)	MW-4 (bg)	GS-GSA-MW-12V	GS-GSA-MW-9V	GS-GSA-MW-14H
3/1/2023						0.335		
8/21/2023								<0.125
8/22/2023	0.152	0.159	0.184	0.283	0.358		0.113 (J)	
8/23/2023						0.281		

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Lead (mg/L) Analysis Run 12/22/2023 2:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-11H	GS-GSA-MW-12H	GS-GSA-MW-13H	GS-GSA-MW-3	GS-GSA-MW-3V	GS-GSA-MW-4	GS-GSA-MW-4V	GS-GSA-MW-8	GS-GSA-MW-8V
8/24/2016				<0.000203		<0.005		<0.000203	
10/3/2016				<0.000203		<0.005		<0.000203	
10/26/2016				<0.000203		<0.005		<0.000203	
11/21/2016				<0.000203		<0.005		<0.000203	
1/17/2017				<0.000203		<0.005		<0.000203	
3/20/2017				<0.000203				<0.000203	
3/21/2017						<0.005			
4/17/2017				<0.000203		<0.005			
4/18/2017								<0.000203	
5/30/2017				<0.000203		<0.005		<0.000203	
2/13/2018				<0.000203		<0.005		<0.000203	
6/11/2018				<0.000203		<0.005			
6/12/2018								<0.000203	
10/17/2018				<0.000203		<0.005		<0.000203	
3/4/2019	<0.005								
3/5/2019					<0.000203		<0.000203		
4/10/2019				<0.000203		<0.005		<0.000203	
10/14/2019				<0.000203	<0.000203	<0.005	<0.000203	<0.000203	
10/16/2019	<0.005								
11/26/2019		0.00271 (J)							
2/3/2020				<0.000203	<0.000203		<0.000203		
2/4/2020	<0.005	0.00334 (J)	<0.000203			<0.005		<0.000203	
2/5/2020									<0.000203
8/4/2020	<0.005		<0.000203	<0.000203	<0.000203				
8/5/2020		0.00329 (J)				<0.005	<0.000203	<0.000203	<0.000203
3/1/2021				0.000157 (J)				0.000145 (J)	<0.000203
3/2/2021	0.000145 (J)	0.00478	<0.000203						
3/3/2021					<0.000203	0.000609	<0.000203		
7/14/2021	0.00014 (J)	0.00557	<0.000203	0.00018 (J)		0.00079	<0.000203	<0.000203	<0.000203
7/15/2021					<0.000203				
1/25/2022		0.0052							
1/26/2022	0.00023		<0.000203	0.00014 (J)	<0.000203				<0.000203
1/27/2022						0.00103	7E-05 (J)	0.00015 (J)	
7/12/2022	0.000175 (J)		<0.000203					<0.000203	8.1E-05 (J)
7/13/2022		0.00406		9.5E-05 (J)	<0.000203	0.00228	8E-05 (J)		
2/27/2023				0.000132 (J)	<0.000203				
2/28/2023	0.000142 (J)		<0.000203					7.8E-05 (J)	<0.000203
3/1/2023		0.00362				0.00144	<0.000203		
8/22/2023	0.000105 (J)	0.00395	<0.000203						
8/23/2023				<0.000203	0.00017 (J)	0.00067	0.000227	<0.000203	<0.000203

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Lead (mg/L) Analysis Run 12/22/2023 2:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-9H	MW-1 (bg)	MW-2 (bg)	MW-3 (bg)	MW-4 (bg)	GS-GSA-MW-12V	GS-GSA-MW-9V	GS-GSA-MW-14H
4/25/2016			<0.000203	<0.000203	<0.000203			
4/26/2016		<0.000203						
6/20/2016		<0.000203	<0.000203		<0.000203			
6/22/2016				<0.000203				
8/8/2016		<0.000203	<0.000203					
8/9/2016				<0.000203	<0.000203			
8/24/2016		<0.000203	<0.000203	<0.000203	<0.000203			
10/3/2016		<0.000203	<0.000203		<0.000203			
10/4/2016				<0.000203				
10/26/2016		<0.000203	<0.000203	<0.000203	<0.000203			
11/21/2016		<0.000203	<0.000203	<0.000203	<0.000203			
1/17/2017		<0.000203	<0.000203					
1/18/2017				<0.000203	<0.000203			
3/22/2017		<0.000203	<0.000203	<0.000203	<0.000203			
4/18/2017		<0.000203	<0.000203	<0.000203	<0.000203			
5/30/2017		<0.000203						
5/31/2017			<0.000203	<0.000203	<0.000203			
2/13/2018		<0.000203	<0.000203	<0.000203	<0.000203			
5/22/2018		<0.000203	<0.000203					
5/23/2018					<0.000203			
5/24/2018				<0.000203				
6/12/2018		<0.000203	<0.000203	<0.000203	<0.000203			
10/17/2018		<0.000203	<0.000203	0.00102 (J)	<0.000203			
11/19/2018		<0.000203	<0.000203	0.00692 (o)	<0.000203			
3/5/2019	<0.000203							
4/10/2019		<0.000203	<0.000203	<0.000203	<0.000203			
5/14/2019		<0.000203	<0.000203	<0.000203	<0.000203			
10/8/2019		<0.000203	<0.000203	<0.000203				
10/10/2019					<0.000203			
10/16/2019	<0.000203	<0.000203	<0.000203	0.00108 (J)	<0.000203			
2/3/2020		<0.000203	<0.000203	<0.000203	<0.000203			
2/4/2020	<0.000203							
8/3/2020		<0.000203	<0.000203	0.002 (J)				
8/4/2020	<0.000203						<0.000203	
8/5/2020					<0.000203	<0.000203		0.00122 (J)
2/22/2021		<0.000203	<0.000203	8.8E-05 (J)	<0.000203			
3/1/2021							<0.000203	
3/2/2021	0.000206							
3/3/2021						<0.000203		0.000876
7/12/2021		<0.000203	<0.000203	8E-05 (J)	<0.000203			
7/13/2021	0.00016 (J)						<0.000203	0.00096
7/14/2021						<0.000203		
1/25/2022		<0.000203	<0.000203	<0.000203	<0.000203			
1/26/2022	0.00013 (J)						<0.000203	
1/27/2022						<0.000203		0.00087
7/5/2022		<0.000203	<0.000203	7.3E-05 (J)	<0.000203			
7/12/2022	0.00011 (J)						<0.000203	
7/13/2022						<0.000203		0.000874
2/20/2023		<0.000203	<0.000203	<0.000203				
2/21/2023					<0.000203			
2/28/2023	7.72E-05 (J)						<0.000203	0.000876
3/1/2023						<0.000203		

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Lead (mg/L) Analysis Run 12/22/2023 2:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-9H	MW-1 (bg)	MW-2 (bg)	MW-3 (bg)	MW-4 (bg)	GS-GSA-MW-12V	GS-GSA-MW-9V	GS-GSA-MW-14H
8/21/2023								0.000808
8/22/2023	<0.000203	<0.000203	<0.000203	0.000105 (J)	0.000136 (J)		<0.000203	
8/23/2023						<0.000203		

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Lithium (mg/L) Analysis Run 12/22/2023 2:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-11H	GS-GSA-MW-12H	GS-GSA-MW-13H	GS-GSA-MW-3	GS-GSA-MW-3V	GS-GSA-MW-4	GS-GSA-MW-4V	GS-GSA-MW-8	GS-GSA-MW-8V
8/24/2016				0.362		0.291		0.0683	
10/3/2016				0.371		0.287		0.0661	
10/26/2016				0.416		0.298		0.0681	
11/21/2016				0.401		0.294		0.0682	
1/17/2017				0.497		0.27		0.0516	
3/20/2017				0.533				0.135	
3/21/2017						0.258			
4/17/2017				0.47		0.274			
4/18/2017								0.139	
5/30/2017				0.479		0.285		0.141	
2/13/2018				0.508		0.274		0.163	
6/11/2018				0.425		0.266			
6/12/2018								0.166	
10/17/2018				0.494		0.266		0.188	
3/4/2019	<0.02								
3/5/2019					0.309		0.369		
4/10/2019				0.425		0.282		0.195	
10/14/2019				0.459	0.38	0.262	0.317	0.209	
10/16/2019	<0.02								
11/26/2019		0.449							
2/3/2020				0.474	0.46		0.332		
2/4/2020	<0.02	0.394	0.0506			0.29		0.188	
2/5/2020									0.327
8/4/2020	<0.02		0.0534	0.468	0.395				
8/5/2020		0.441				0.273	0.322	0.206	0.275
3/1/2021				0.353				0.149	0.292
3/2/2021	<0.02	0.456	0.0439						
3/3/2021					0.455	0.313	0.345		
7/14/2021	<0.02	0.454	0.0524	0.485		0.487	0.337	0.213	0.286
7/15/2021					0.441				
1/25/2022		0.397							
1/26/2022	<0.02		0.0301	0.31	0.347				0.233
1/27/2022						0.671	0.305	0.185	
7/12/2022	<0.02		0.047					0.189	0.269
7/13/2022		0.411		0.421	0.379	1.89	0.329		
2/27/2023				0.165	0.35				
2/28/2023	<0.02		0.0291					0.157	0.238
3/1/2023		0.291				1.35	0.288		
8/22/2023	<0.02	0.373	0.0416						
8/23/2023				0.372	0.346	0.469	0.279	0.171	0.235

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Lithium (mg/L) Analysis Run 12/22/2023 2:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-9H	MW-1 (bg)	MW-2 (bg)	MW-3 (bg)	MW-4 (bg)	GS-GSA-MW-12V	GS-GSA-MW-9V	GS-GSA-MW-14H
4/25/2016			0.0353 (J)	0.0964	0.0528			
4/26/2016		0.0264 (J)						
6/20/2016		0.0246 (J)	0.0583		0.0554			
6/22/2016				0.156				
8/8/2016		0.0229 (J)	0.0627					
8/9/2016				0.122	0.0452 (J)			
8/24/2016		0.0236 (J)	0.0651	0.138	0.0488 (J)			
10/3/2016		0.0229 (J)	0.0622		0.0476 (J)			
10/4/2016				0.0966				
10/26/2016		0.0227 (J)	0.0293 (J)	0.134	0.049 (J)			
11/21/2016		0.0236 (J)	0.0667	0.167	0.0477 (J)			
1/17/2017		0.0228 (J)	0.0636					
1/18/2017				0.237	0.045 (J)			
3/22/2017		0.0238 (J)	0.0464 (J)	0.203	0.0493 (J)			
4/18/2017		0.0242 (J)	0.0446 (J)	0.0764	0.0494 (J)			
5/30/2017		0.0229 (J)						
5/31/2017			0.0496 (J)	0.218	0.0501			
2/13/2018		0.0233 (J)	0.0615	0.0964	0.0446 (J)			
5/22/2018		0.0263 (J)	0.0465 (J)					
5/23/2018					0.0513			
5/24/2018				0.145				
6/12/2018		0.0251 (J)	0.0472 (J)	0.194	0.0511			
10/17/2018		0.025 (J)	0.0633	0.384	0.0532			
11/19/2018		0.0241	0.0584	0.323	0.0467			
3/5/2019	0.169							
4/10/2019		0.0285	0.0574	0.0905	0.0504			
5/14/2019		0.026 (J)	0.0445	0.0828	0.0485			
10/8/2019		0.0268	0.0677	0.419				
10/10/2019					0.054			
10/16/2019	0.184	0.0263	0.0661	0.337	0.052			
2/3/2020		0.0292	0.0534	0.0825	0.0556			
2/4/2020	0.203							
8/3/2020		0.0259	0.0611	0.27				
8/4/2020	0.166						0.364	
8/5/2020					0.0519	0.334		0.512
2/22/2021		0.0301	0.0625	0.126	0.0558			
3/1/2021							0.424	
3/2/2021	0.178							
3/3/2021						0.411		0.54
7/12/2021		0.0266	0.0495	0.0808	0.0533			
7/13/2021	0.166						0.408	0.514
7/14/2021						0.374		
1/25/2022		0.0239	0.051	0.077	0.0433			
1/26/2022	0.115						0.312	
1/27/2022						0.303		0.43
7/5/2022		0.0274	0.0469	0.251	0.0566			
7/12/2022	0.124						0.338	
7/13/2022						0.312		0.428
2/20/2023		0.0241	0.0412	0.0649				
2/21/2023					0.0424			
2/28/2023	0.111						0.331	0.471
3/1/2023						0.286		

Time Series

Constituent: Lithium (mg/L) Analysis Run 12/22/2023 2:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-9H	MW-1 (bg)	MW-2 (bg)	MW-3 (bg)	MW-4 (bg)	GS-GSA-MW-12V	GS-GSA-MW-9V	GS-GSA-MW-14H
8/21/2023								0.388
8/22/2023	0.119	0.0225	0.0404	0.316	0.0416		0.318	
8/23/2023						0.292		

Time Series

Constituent: Mercury (mg/L) Analysis Run 12/22/2023 2:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-11H	GS-GSA-MW-12H	GS-GSA-MW-13H	GS-GSA-MW-3	GS-GSA-MW-3V	GS-GSA-MW-4	GS-GSA-MW-4V	GS-GSA-MW-8	GS-GSA-MW-8V
8/24/2016				<0.0005		<0.0005		<0.0005	
10/3/2016				<0.0005		<0.0005		<0.0005	
10/26/2016				<0.0005		<0.0005		<0.0005	
11/21/2016				<0.0005		<0.0005		<0.0005	
1/17/2017				<0.0005		<0.0005		<0.0005	
3/20/2017				<0.0005				<0.0005	
3/21/2017						<0.0005			
4/17/2017				<0.0005		<0.0005			
4/18/2017								<0.0005	
5/30/2017				<0.0005		<0.0005		<0.0005	
2/13/2018				<0.0005		<0.0005		<0.0005	
6/11/2018				<0.0005		<0.0005			
6/12/2018								<0.0005	
10/17/2018				<0.0005		<0.0005		<0.0005	
3/4/2019	<0.0005								
3/5/2019					<0.0005		<0.0005		
4/10/2019				<0.0005		<0.0005		<0.0005	
10/14/2019				<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	
10/16/2019	<0.0005								
11/26/2019		<0.0005							
2/3/2020				<0.0005	<0.0005		<0.0005		
2/4/2020	<0.0005	<0.0005	<0.0005			<0.0005		<0.0005	
2/5/2020									<0.0005
8/4/2020	<0.0005		<0.0005	<0.0005	<0.0005				
8/5/2020		<0.0005				<0.0005	<0.0005	<0.0005	<0.0005
3/1/2021				<0.0005				<0.0005	<0.0005
3/2/2021	<0.0005	<0.0005	<0.0005						
3/3/2021					<0.0005	<0.0005	<0.0005		
7/14/2021	<0.0005	<0.0005	<0.0005	<0.0005		<0.0005	<0.0005	<0.0005	<0.0005
7/15/2021					<0.0005				
1/25/2022		<0.0005							
1/26/2022	<0.0005		<0.0005	<0.0005	<0.0005				<0.0005
1/27/2022						<0.0005	<0.0005	<0.0005	
7/12/2022	<0.0005		<0.0005					<0.0005	<0.0005
7/13/2022		<0.0005		<0.0005	<0.0005	<0.0005	<0.0005		
2/27/2023				<0.0005	<0.0005				
2/28/2023	<0.0005		<0.0005					<0.0005	<0.0005
3/1/2023		<0.0005				<0.0005	<0.0005		
8/22/2023	<0.0005	<0.0005	<0.0005						
8/23/2023				<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Mercury (mg/L) Analysis Run 12/22/2023 2:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-9H	MW-1 (bg)	MW-2 (bg)	MW-3 (bg)	MW-4 (bg)	GS-GSA-MW-12V	GS-GSA-MW-9V	GS-GSA-MW-14H
4/25/2016			<0.0005	<0.0005	<0.0005			
4/26/2016		<0.0005						
6/20/2016		<0.0005	<0.0005		<0.0005			
6/22/2016				<0.0005				
8/8/2016		<0.0005	<0.0005					
8/9/2016				<0.0005	<0.0005			
8/24/2016		<0.0005	<0.0005	<0.0005	<0.0005			
10/3/2016		<0.0005	<0.0005		<0.0005			
10/4/2016				<0.0005				
10/26/2016		<0.0005	<0.0005	<0.0005	<0.0005			
11/21/2016		<0.0005	<0.0005	<0.0005	<0.0005			
1/17/2017		<0.0005	<0.0005					
1/18/2017				<0.0005	<0.0005			
3/22/2017		<0.0005	<0.0005	<0.0005	<0.0005			
4/18/2017		<0.0005	<0.0005	<0.0005	<0.0005			
5/30/2017		<0.0005						
5/31/2017			<0.0005	<0.0005	<0.0005			
2/13/2018		<0.0005	<0.0005	<0.0005	<0.0005			
5/22/2018		<0.0005	<0.0005					
5/23/2018					<0.0005			
5/24/2018				<0.0005				
6/12/2018		<0.0005	<0.0005	<0.0005	<0.0005			
10/17/2018		<0.0005	<0.0005	<0.0005	<0.0005			
11/19/2018		<0.0005	<0.0005	<0.0005	<0.0005			
3/5/2019	<0.0005							
4/10/2019		<0.0005	<0.0005	<0.0005	<0.0005			
5/14/2019		<0.0005	<0.0005	<0.0005	<0.0005			
10/8/2019		<0.0005	<0.0005	<0.0005				
10/10/2019					<0.0005			
10/16/2019	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005			
2/3/2020		<0.0005	<0.0005	<0.0005	<0.0005			
2/4/2020	<0.0005							
8/3/2020		<0.0005	<0.0005	<0.0005				
8/4/2020	<0.0005						<0.0005	
8/5/2020					<0.0005	<0.0005		<0.0005
2/22/2021		<0.0005	<0.0005	<0.0005	<0.0005			
3/1/2021							<0.0005	
3/2/2021	<0.0005							
3/3/2021						<0.0005		<0.0005
7/12/2021		<0.0005	<0.0005	<0.0005	<0.0005			
7/13/2021	<0.0005						<0.0005	<0.0005
7/14/2021						<0.0005		
1/25/2022		<0.0005	<0.0005	<0.0005	<0.0005			
1/26/2022	<0.0005						<0.0005	
1/27/2022						<0.0005		<0.0005
7/5/2022		<0.0005	<0.0005	<0.0005	<0.0005			
7/12/2022	<0.0005						<0.0005	
7/13/2022						<0.0005		<0.0005
2/20/2023		<0.0005	<0.0005	<0.0005				
2/21/2023					<0.0005			
2/28/2023	<0.0005						<0.0005	<0.0005
3/1/2023						<0.0005		

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Mercury (mg/L) Analysis Run 12/22/2023 2:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-9H	MW-1 (bg)	MW-2 (bg)	MW-3 (bg)	MW-4 (bg)	GS-GSA-MW-12V	GS-GSA-MW-9V	GS-GSA-MW-14H
8/21/2023								<0.0005
8/22/2023	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005		<0.0005	
8/23/2023						<0.0005		

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 12/22/2023 2:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-11H	GS-GSA-MW-12H	GS-GSA-MW-13H	GS-GSA-MW-3	GS-GSA-MW-3V	GS-GSA-MW-4	GS-GSA-MW-4V	GS-GSA-MW-8	GS-GSA-MW-8V
8/24/2016				<0.01015		<0.01015		0.0031 (J)	
10/3/2016				<0.01015		<0.01015		<0.01015	
10/26/2016				<0.01015		<0.01015		<0.01015	
11/21/2016				<0.01015		<0.01015		<0.01015	
1/17/2017				<0.01015		<0.01015		<0.01015	
3/20/2017				<0.01015				<0.01015	
3/21/2017						<0.01015			
4/17/2017				<0.01015		<0.01015			
4/18/2017								<0.01015	
5/30/2017				<0.01015		<0.01015		<0.01015	
2/13/2018				<0.01015		<0.01015		<0.01015	
6/11/2018				<0.01015		<0.01015			
6/12/2018								<0.01015	
10/17/2018				<0.01015		<0.01015		<0.01015	
3/4/2019	<0.01015								
3/5/2019					0.00347 (J)		<0.01015		
4/10/2019				<0.01015		<0.01015		<0.01015	
10/14/2019				<0.01015	<0.01015	<0.01015	<0.01015	<0.01015	
10/16/2019	<0.01015								
11/26/2019		<0.01015							
2/3/2020				<0.01015	<0.01015		<0.01015		
2/4/2020	<0.01015	<0.01015	<0.01015			<0.01015		<0.01015	
2/5/2020									<0.01015
8/4/2020	<0.01015		<0.01015	<0.01015	<0.01015				
8/5/2020		<0.01015				<0.01015	<0.01015	<0.01015	<0.01015
3/1/2021				0.00022				0.00277	0.000654
3/2/2021	<0.01015	<0.01015	0.00138						
3/3/2021					7.93E-05 (J)	<0.01015	<0.01015		
7/14/2021	<0.01015	<0.01015	0.0005	0.00026		<0.01015	<0.01015	0.00015 (J)	0.00026
7/15/2021					9E-05 (J)				
1/25/2022		<0.01015							
1/26/2022	0.00011 (J)		0.00126	0.00022	0.00012 (J)				0.00078
1/27/2022						<0.01015	9E-05 (J)	0.00012 (J)	
7/12/2022	<0.01015		0.000344					0.000122 (J)	0.000186 (J)
7/13/2022		<0.01015		0.000257	<0.01015	<0.01015	<0.01015		
2/27/2023				0.000191 (J)	<0.01015				
2/28/2023	<0.01015		0.00121					0.000135 (J)	0.000158 (J)
3/1/2023		<0.01015				<0.01015	<0.01015		
8/22/2023	<0.01015	<0.01015	<0.01015						
8/23/2023				<0.01015	<0.01015	<0.01015	<0.01015	<0.01015	<0.01015

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 12/22/2023 2:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-9H	MW-1 (bg)	MW-2 (bg)	MW-3 (bg)	MW-4 (bg)	GS-GSA-MW-12V	GS-GSA-MW-9V	GS-GSA-MW-14H
4/25/2016			<0.01015	<0.01015	<0.01015			
4/26/2016		<0.01015						
6/20/2016		<0.01015	<0.01015		<0.01015			
6/22/2016				<0.01015				
8/8/2016		<0.01015	<0.01015					
8/9/2016				<0.01015	<0.01015			
8/24/2016		<0.01015	<0.01015	<0.01015	<0.01015			
10/3/2016		<0.01015	<0.01015		<0.01015			
10/4/2016				<0.01015				
10/26/2016		<0.01015	<0.01015	<0.01015	<0.01015			
11/21/2016		<0.01015	<0.01015	<0.01015	<0.01015			
1/17/2017		<0.01015	<0.01015					
1/18/2017				<0.01015	<0.01015			
3/22/2017		<0.01015	<0.01015	<0.01015	<0.01015			
4/18/2017		<0.01015	<0.01015	<0.01015	<0.01015			
5/30/2017		<0.01015						
5/31/2017			<0.01015	<0.01015	<0.01015			
2/13/2018		<0.01015	<0.01015	<0.01015	<0.01015			
5/22/2018		<0.01015	<0.01015					
5/23/2018					<0.01015			
5/24/2018				<0.01015				
6/12/2018		<0.01015	<0.01015	<0.01015	<0.01015			
10/17/2018		<0.01015	<0.01015	<0.01015	<0.01015			
11/19/2018		<0.01015	<0.01015	<0.01015	<0.01015			
3/5/2019	<0.01015							
4/10/2019		<0.01015	<0.01015	<0.01015	<0.01015			
5/14/2019		<0.01015	<0.01015	<0.01015	<0.01015			
10/8/2019		<0.01015	<0.01015	<0.01015				
10/10/2019					<0.01015			
10/16/2019	<0.01015	<0.01015	<0.01015	<0.01015	<0.01015			
2/3/2020		<0.01015	<0.01015	<0.01015	<0.01015			
2/4/2020	<0.01015							
8/3/2020		<0.01015	<0.01015	<0.01015				
8/4/2020	<0.01015						0.00423 (J)	
8/5/2020					<0.01015	0.00247 (J)		<0.01015
2/22/2021		<0.01015	<0.01015	<0.01015	0.000131 (J)			
3/1/2021							0.000532	
3/2/2021	<0.01015							
3/3/2021						0.00123		7.06E-05 (J)
7/12/2021		<0.01015	<0.01015	<0.01015	0.00014 (J)			
7/13/2021	<0.01015						0.00056	<0.01015
7/14/2021						0.00203		
1/25/2022		<0.01015	<0.01015	8E-05 (J)	0.00011 (J)			
1/26/2022	<0.01015						0.0003	
1/27/2022						0.00268		9E-05 (J)
7/5/2022		<0.01015	<0.01015	<0.01015	0.000108 (J)			
7/12/2022	<0.01015						0.000457	
7/13/2022						0.00241		<0.01015
2/20/2023		<0.01015	<0.01015	<0.01015				
2/21/2023					0.00015 (J)			
2/28/2023	<0.01015						0.000467	0.000133 (J)
3/1/2023						0.00235		

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 12/22/2023 2:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-9H	MW-1 (bg)	MW-2 (bg)	MW-3 (bg)	MW-4 (bg)	GS-GSA-MW-12V	GS-GSA-MW-9V	GS-GSA-MW-14H
8/21/2023								<0.01015
8/22/2023	<0.01015	<0.01015	<0.01015	<0.01015	<0.01015		<0.01015	
8/23/2023						<0.01015		

Time Series

Constituent: pH (pH) Analysis Run 12/22/2023 2:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-11H	GS-GSA-MW-12H	GS-GSA-MW-13H	GS-GSA-MW-3	GS-GSA-MW-3V	GS-GSA-MW-4	GS-GSA-MW-4V	GS-GSA-MW-8	GS-GSA-MW-8V
8/24/2016				6.28		3.83 (E)		6.78	
10/3/2016				6.28		3.82 (E)		6.71	
10/26/2016				6.19		3.81 (E)		6.65	
11/21/2016				6.2		3.81		6.7	
1/17/2017				6.13		3.78		6.25	
3/20/2017				6.17				7.04	
3/21/2017						3.76			
4/17/2017				5.6		3.76			
4/18/2017								6.99	
5/30/2017				6.07		3.76		6.98	
8/24/2017				5.99		3.7		6.89	
2/13/2018				5.88		3.73		6.85	
6/11/2018				5.91		3.8			
6/12/2018								6.83	
10/17/2018				5.88		3.81		6.81	
3/4/2019	6.04								
3/5/2019					6.7		6.19		
4/10/2019				5.83		3.83		6.71	
10/14/2019				6.04	6.39	3.91	5.89	6.88	
10/16/2019	6.07								
2/3/2020				5.98	5.88		5.84		
2/4/2020	6.02	4.57	6			3.83		6.85	
2/5/2020									7.48
8/4/2020	5.74		5.89	6.09	5.9				
8/5/2020		4.13				3.86	5.81	6.76	7.58
3/1/2021				5.82				6.48	7.67
3/2/2021	5.89	4.11	5.85						
3/3/2021					5.76	3.76	5.75		
7/14/2021	5.72	4.04	5.55	5.93		3.74	5.75	6.88	7.97
7/15/2021					5.92				
1/25/2022		4.11							
1/26/2022	5.95		6.08	6.52	6.61				8.18
1/27/2022						3.73	6.17	6.85	
7/12/2022	5.97		5.82					6.49	7.44
7/13/2022		4.15		5.92	5.98	3.43	5.66		
2/27/2023				5.83	5.97				
2/28/2023	5.99		5.82					6.93	7.5
3/1/2023		4.55				3.5	5.77		
8/22/2023	5.89	4.25	5.71						
8/23/2023				6.03	6.27	3.74	5.71	6.83	7.37

Time Series

Constituent: pH (pH) Analysis Run 12/22/2023 2:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-9H	MW-1 (bg)	MW-2 (bg)	MW-3 (bg)	MW-4 (bg)	GS-GSA-MW-12V	GS-GSA-MW-9V	GS-GSA-MW-14H
4/25/2016			5.94	5.56	6.22			
4/26/2016		5.2						
6/20/2016		5.18	5.96		6.21			
6/22/2016				5.57				
8/8/2016		5.12	5.88					
8/9/2016				5.67	6.11			
8/24/2016				5.63	6.11			
10/3/2016		5.21	5.91		6.13			
10/4/2016				5.69				
10/26/2016		5.2	5.84	5.56	6.12			
11/21/2016		5.19	5.82	5.42	6.09			
1/17/2017		5.17	5.87					
1/18/2017				5.11	6.09			
3/22/2017		5.2	6.01	4.52	6.15			
4/18/2017		5.2	6.02	5.84	6.19			
5/30/2017		5.14						
5/31/2017			5.85	4.56	6.13			
8/23/2017		5.12	5.89	4.77	6.12			
2/13/2018		5.18	6.21	5.67	6.22			
5/22/2018		5.2	6.04					
5/23/2018					6.21			
5/24/2018				5.19				
6/12/2018		5.15	5.95	4.79	6.16			
10/17/2018		5.12	5.9	4.75	6.12			
11/19/2018		5.09	6.03	3.77 (o)	6.16			
3/5/2019	5.88							
4/10/2019		5.11	6.1	5.54	6.14			
5/14/2019		5.19	6.07	5.71	6.23			
10/8/2019		5.12	5.96	4.98				
10/10/2019					6.15			
10/16/2019	5.43	5.16	5.98	4.51	6.19			
2/3/2020		5	5.95	5.54	6.14			
2/4/2020	5.34							
8/3/2020		5.08	5.95	5.06				
8/4/2020	5.33						6.88	
8/5/2020					6.15	6.15		3.83
2/22/2021		5.06	6.1	5.59	6.19			
3/1/2021							6.84	
3/2/2021	5.29							
3/3/2021						6.11		4.02
7/12/2021		5.13	6.16	5.86	6.06			
7/13/2021	5.13						6.92	3.8
7/14/2021						6.21		
1/25/2022		5.11	6.22	5.9	6.3			
1/26/2022	5.35						6.89	
1/27/2022						6.19		4.1
7/5/2022		5.01	6.15	5.34	6.12			
7/12/2022	5.3						6.79	
7/13/2022						6.26		3.94
2/20/2023		5.07	6.24	6.01				
2/21/2023					6.35			
2/28/2023	5.35						6.89	4.39

Time Series

Constituent: pH (pH) Analysis Run 12/22/2023 2:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-9H	MW-1 (bg)	MW-2 (bg)	MW-3 (bg)	MW-4 (bg)	GS-GSA-MW-12V	GS-GSA-MW-9V	GS-GSA-MW-14H
3/1/2023						6.29		
8/21/2023								4.3
8/22/2023	5.31	4.92	5.81	5.04	6.28		6.81	
8/23/2023						6.26		

Time Series

Constituent: Selenium (mg/L) Analysis Run 12/22/2023 2:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-11H	GS-GSA-MW-12H	GS-GSA-MW-13H	GS-GSA-MW-3	GS-GSA-MW-3V	GS-GSA-MW-4	GS-GSA-MW-4V	GS-GSA-MW-8	GS-GSA-MW-8V
8/24/2016				<0.01		0.00234 (J)		<0.001015	
10/3/2016				<0.01		0.00739 (J)		<0.001015	
10/26/2016				<0.01		0.00266 (J)		<0.001015	
11/21/2016				<0.01		0.00212 (J)		<0.001015	
1/17/2017				<0.01		0.00263 (J)		<0.001015	
3/20/2017				<0.01				<0.001015	
3/21/2017						0.00588 (J)			
4/17/2017				0.00521 (J)		0.00579 (J)			
4/18/2017								<0.001015	
5/30/2017				<0.01		0.00471 (J)		<0.001015	
2/13/2018				0.00267 (J)		0.00498 (J)		<0.001015	
6/11/2018				0.00236 (J)		0.00388 (J)			
6/12/2018								<0.001015	
10/17/2018				<0.01		<0.01		<0.001015	
3/4/2019	<0.001015								
3/5/2019					<0.001015		<0.01		
4/10/2019				0.00234 (J)		0.00322 (J)		<0.001015	
10/14/2019				<0.01	<0.001015	<0.01	<0.01	<0.001015	
10/16/2019	<0.001015								
11/26/2019		0.00614 (J)							
2/3/2020				<0.01	<0.001015		<0.01		
2/4/2020	<0.001015	<0.01	<0.001015			<0.01		<0.001015	
2/5/2020									<0.001015
8/4/2020	<0.001015		<0.001015	<0.01	<0.001015				
8/5/2020		0.00417 (J)				0.00298 (J)	<0.01	<0.001015	<0.001015
3/1/2021				0.00141				<0.001015	<0.001015
3/2/2021	<0.001015	0.00463	<0.001015						
3/3/2021					<0.001015	0.00294	0.000749 (J)		
7/14/2021	<0.001015	0.00441	<0.001015	0.00151		0.00563	0.00095 (J)	<0.001015	<0.001015
7/15/2021					<0.001015				
1/25/2022		0.00311							
1/26/2022	<0.001015		0.00069 (J)	0.00117	<0.001015				<0.001015
1/27/2022						0.00817	0.00101 (J)	<0.001015	
7/12/2022	<0.001015		<0.001015					<0.001015	<0.001015
7/13/2022		0.0039		0.00151	<0.001015	0.0226	0.00111		
2/27/2023				0.00152	<0.001015				
2/28/2023	<0.001015		0.000954 (J)					<0.001015	<0.001015
3/1/2023		0.00288				0.017	0.000882 (J)		
8/22/2023	<0.001015	0.00175	<0.001015						
8/23/2023				0.00103	<0.001015	0.00287	0.000831 (J)	<0.001015	<0.001015

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Selenium (mg/L) Analysis Run 12/22/2023 2:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-9H	MW-1 (bg)	MW-2 (bg)	MW-3 (bg)	MW-4 (bg)	GS-GSA-MW-12V	GS-GSA-MW-9V	GS-GSA-MW-14H
4/25/2016			<0.001015	<0.01	<0.01			
4/26/2016		0.00261 (J)						
6/20/2016		0.00242 (J)	<0.001015		<0.01			
6/22/2016				<0.01				
8/8/2016		0.00253 (J)	<0.001015					
8/9/2016				<0.01	<0.01			
8/24/2016		<0.01	<0.001015	<0.01	<0.01			
10/3/2016		0.00211 (J)	<0.001015		<0.01			
10/4/2016				<0.01				
10/26/2016		<0.01	<0.001015	<0.01	<0.01			
11/21/2016		<0.01	<0.001015	<0.01	<0.01			
1/17/2017		<0.01	<0.001015					
1/18/2017				<0.01	<0.01			
3/22/2017		0.0022 (J)	<0.001015	0.0141	<0.01			
4/18/2017		0.0027 (J)	<0.001015	0.0158	<0.01			
5/30/2017		0.00316 (J)						
5/31/2017			<0.001015	0.00632 (J)	<0.01			
2/13/2018		0.00211 (J)	<0.001015	0.0209	0.00403 (J)			
5/22/2018		0.00372 (J)	<0.001015					
5/23/2018					<0.01			
5/24/2018				0.00918 (J)				
6/12/2018		0.00409 (J)	<0.001015	0.00836 (J)	<0.01			
10/17/2018		<0.01	<0.001015	<0.01	<0.01			
11/19/2018		<0.01	<0.001015	0.00439 (J)	0.00436 (J)			
3/5/2019	<0.001015							
4/10/2019		0.00471 (J)	0.00322 (J)	0.0113	<0.01			
5/14/2019		0.00316 (J)	<0.001015	0.0119	0.00201 (J)			
10/8/2019		<0.01	<0.001015	0.00256 (J)				
10/10/2019					<0.01			
10/16/2019	<0.001015	<0.01	<0.001015	0.00286 (J)	<0.01			
2/3/2020		0.00272 (J)	<0.001015	0.012	0.00212 (J)			
2/4/2020	<0.001015							
8/3/2020		0.00278 (J)	<0.001015	0.0146				
8/4/2020	<0.001015						<0.001015	
8/5/2020					0.00232 (J)	<0.001015		0.00571 (J)
2/22/2021		0.00241	<0.001015	0.0181	0.00222			
3/1/2021							<0.001015	
3/2/2021	0.00138							
3/3/2021						<0.001015		0.00554
7/12/2021		0.0028	<0.001015	0.0133	0.00155			
7/13/2021	0.00141						<0.001015	0.00607
7/14/2021						<0.001015		
1/25/2022		0.00216	<0.001015	0.0154	0.00224			
1/26/2022	0.00129						<0.001015	
1/27/2022						<0.001015		0.00401
7/5/2022		0.00269	<0.001015	0.0205	0.000961 (J)			
7/12/2022	0.000944 (J)						<0.001015	
7/13/2022						<0.001015		0.00436
2/20/2023		0.00258	<0.001015	0.0123				
2/21/2023					0.00266			
2/28/2023	0.000886 (J)						<0.001015	0.00589
3/1/2023						<0.001015		

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Selenium (mg/L) Analysis Run 12/22/2023 2:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-9H	MW-1 (bg)	MW-2 (bg)	MW-3 (bg)	MW-4 (bg)	GS-GSA-MW-12V	GS-GSA-MW-9V	GS-GSA-MW-14H
8/21/2023								0.00232
8/22/2023	<0.001015	0.00151	<0.001015	0.0147	0.00148		<0.001015	
8/23/2023						<0.001015		

Time Series

Constituent: Sulfate (mg/L) Analysis Run 12/22/2023 2:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-11H	GS-GSA-MW-12H	GS-GSA-MW-13H	GS-GSA-MW-3	GS-GSA-MW-3V	GS-GSA-MW-4	GS-GSA-MW-4V	GS-GSA-MW-8	GS-GSA-MW-8V
8/24/2016				2910		567		1250	
10/3/2016				2980		596		1270	
10/26/2016				2790		585		1240	
11/21/2016				2880		593		1210	
1/17/2017				2950		637		1150	
3/20/2017				2800				1400	
3/21/2017						530			
4/17/2017				2400		530			
4/18/2017								1300	
5/30/2017				2900		530		1500	
8/24/2017				2900		530		1800	
6/11/2018				2900		540			
6/12/2018								1800	
10/17/2018				2800		520		1600	
3/4/2019	785								
3/5/2019					1170		871		
4/10/2019				2980		616		2150	
10/14/2019				3110	1710	641	818	2090	
10/16/2019	750								
11/26/2019		997							
2/3/2020				2840	1970		808		
2/4/2020	725	978	720			571		1570	
2/5/2020									223
8/4/2020	694		773	2820	1860				
8/5/2020		811				519	761	1880	243
3/1/2021				2320				1450	183
3/2/2021	835	890	861						
3/3/2021					1930	609	746		
7/14/2021	747	878	857	2880		752	797	1700	196
7/15/2021					1960				
1/25/2022		903							
1/26/2022	745		883	2620	2010				199
1/27/2022						1130	825	2000	
7/12/2022	807		857					1740	177
7/13/2022		839		3180	2040	3040	858		
2/27/2023				2770	2090				
2/28/2023	787		847					1390	182
3/1/2023		837				2130	759		
8/22/2023	796	801	786						
8/23/2023				3290	2170	828	795	1830	194

Time Series

Constituent: Sulfate (mg/L) Analysis Run 12/22/2023 2:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-9H	MW-1 (bg)	MW-2 (bg)	MW-3 (bg)	MW-4 (bg)	GS-GSA-MW-12V	GS-GSA-MW-9V	GS-GSA-MW-14H
4/25/2016			745	1890	2260			
4/26/2016		1490						
6/20/2016		1420	964		2500			
6/22/2016				2100				
8/8/2016		1460	1100					
8/9/2016				2050	2750			
8/24/2016		1450	1130	2190	2770			
10/3/2016		1460	1140		3060			
10/4/2016				1950				
10/26/2016		1330	1060	1980	2650			
11/21/2016		1420	1100	2060	2720			
1/17/2017		1350	1160					
1/18/2017				2620	2650			
3/22/2017		1500	900	3200	2700			
4/18/2017		1300	870	2500	2400			
5/30/2017		1400						
5/31/2017			1100	2800	2700			
8/23/2017		1500	920	2600	2700			
5/22/2018		2100 (o)	1200					
5/23/2018					2400			
5/24/2018				2700				
6/12/2018		1500	860	2500	2600			
10/17/2018		1400	970	2700	2600			
11/19/2018		1300	1000	3000	2400			
3/5/2019	2010							
4/10/2019		1700	889	2460	2090			
5/14/2019		1560	948	2460	2240			
10/8/2019		1540	1230	2950				
10/10/2019					2690			
10/16/2019	2020	1680	1170	2820	3050			
2/3/2020		1510	803	2290	1920			
2/4/2020	1710							
8/3/2020		1370	907	2330				
8/4/2020	1790						1700	
8/5/2020					1930	1830		796
2/22/2021		1400	864	3040	2040			
3/1/2021							1680	
3/2/2021	1750							
3/3/2021						1930		803
7/12/2021		1560	763	2380	1930			
7/13/2021	1750						1820	787
7/14/2021						2000		
1/25/2022		1430	842	2550	1930			
1/26/2022	1660						1820	
1/27/2022						1990		784
7/5/2022		1600	819	3110	2380			
7/12/2022	1720						1780	
7/13/2022						1980		707
2/20/2023		1520	767	2110				
2/21/2023					1930			
2/28/2023	1670						1770	748
3/1/2023						1810		

Time Series

Constituent: Sulfate (mg/L) Analysis Run 12/22/2023 2:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-9H	MW-1 (bg)	MW-2 (bg)	MW-3 (bg)	MW-4 (bg)	GS-GSA-MW-12V	GS-GSA-MW-9V	GS-GSA-MW-14H
8/21/2023								677
8/22/2023	1620	1560	912	3140	2390		1830	
8/23/2023						2020		

Time Series

Constituent: Thallium (mg/L) Analysis Run 12/22/2023 2:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-11H	GS-GSA-MW-12H	GS-GSA-MW-13H	GS-GSA-MW-3	GS-GSA-MW-3V	GS-GSA-MW-4	GS-GSA-MW-4V	GS-GSA-MW-8	GS-GSA-MW-8V
8/24/2016				<0.000203		<0.001		<0.000203	
10/3/2016				<0.000203		<0.001		<0.000203	
10/26/2016				<0.000203		<0.001		<0.000203	
11/21/2016				<0.000203		<0.001		<0.000203	
1/17/2017				<0.000203		<0.001		<0.000203	
3/20/2017				<0.000203				<0.000203	
3/21/2017						<0.001			
4/17/2017				<0.000203		<0.001			
4/18/2017								<0.000203	
5/30/2017				<0.000203		<0.001		<0.000203	
2/13/2018				<0.000203		<0.001		<0.000203	
6/11/2018				<0.000203		<0.001			
6/12/2018								<0.000203	
10/17/2018				<0.000203		<0.001		<0.000203	
3/4/2019	<0.000203								
3/5/2019					<0.000203		<0.000203		
4/10/2019				<0.000203		<0.001		<0.000203	
10/14/2019				<0.000203	<0.000203	<0.001	<0.000203	<0.000203	
10/16/2019	<0.000203								
11/26/2019		0.000375 (J)							
2/3/2020				<0.000203	<0.000203		<0.000203		
2/4/2020	<0.000203	0.000491 (J)	<0.000203			<0.001		<0.000203	
2/5/2020									<0.000203
8/4/2020	<0.000203		<0.000203	<0.000203	<0.000203				
8/5/2020		0.000297 (J)				0.000205 (J)	<0.000203	<0.000203	<0.000203
3/1/2021				<0.000203				<0.000203	<0.000203
3/2/2021	<0.000203	0.000371	<0.000203						
3/3/2021					<0.000203	0.000178 (J)	<0.000203		
7/14/2021	<0.000203	0.00034	<0.000203	<0.000203		9E-05 (J)	<0.000203	<0.000203	<0.000203
7/15/2021					<0.000203				
1/25/2022		0.00032							
1/26/2022	<0.000203		<0.000203	<0.000203	<0.000203				<0.000203
1/27/2022						0.00022	<0.000203	<0.000203	
7/12/2022	<0.000203		<0.000203					<0.000203	<0.000203
7/13/2022		0.000311		<0.000203	<0.000203	0.000447	<0.000203		
2/27/2023				<0.000203	<0.000203				
2/28/2023	<0.000203		<0.000203					<0.000203	<0.000203
3/1/2023		0.0004				0.000407	<0.000203		
8/22/2023	<0.000203	0.000144 (J)	<0.000203						
8/23/2023				<0.000203	<0.000203	0.000138 (J)	<0.000203	<0.000203	<0.000203

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Thallium (mg/L) Analysis Run 12/22/2023 2:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-9H	MW-1 (bg)	MW-2 (bg)	MW-3 (bg)	MW-4 (bg)	GS-GSA-MW-12V	GS-GSA-MW-9V	GS-GSA-MW-14H
4/25/2016			<0.000203	0.000205 (J)	<0.000203			
4/26/2016		<0.000203						
6/20/2016		<0.000203	<0.000203		<0.000203			
6/22/2016				<0.000203				
8/8/2016		<0.000203	<0.000203					
8/9/2016				<0.000203	<0.000203			
8/24/2016		<0.000203	<0.000203	<0.000203	<0.000203			
10/3/2016		<0.000203	<0.000203		<0.000203			
10/4/2016				<0.000203				
10/26/2016		<0.000203	<0.000203	0.000209 (J)	<0.000203			
11/21/2016		<0.000203	<0.000203	<0.000203	<0.000203			
1/17/2017		<0.000203	<0.000203					
1/18/2017				<0.000203	<0.000203			
3/22/2017		<0.000203	<0.000203	<0.000203	<0.000203			
4/18/2017		<0.000203	<0.000203	<0.000203	<0.000203			
5/30/2017		<0.000203						
5/31/2017			<0.000203	<0.000203	<0.000203			
2/13/2018		<0.000203	<0.000203	<0.000203	<0.000203			
5/22/2018		<0.000203	<0.000203					
5/23/2018					<0.000203			
5/24/2018				<0.000203				
6/12/2018		<0.000203	<0.000203	<0.000203	<0.000203			
10/17/2018		<0.000203	<0.000203	<0.000203	<0.000203			
11/19/2018		<0.000203	<0.000203	0.000226 (J)	<0.000203			
3/5/2019	0.00021 (J)							
4/10/2019		<0.000203	<0.000203	<0.000203	<0.000203			
5/14/2019		<0.000203	<0.000203	<0.000203	<0.000203			
10/8/2019		<0.000203	<0.000203	<0.000203				
10/10/2019					<0.000203			
10/16/2019	0.000262 (J)	<0.000203	<0.000203	<0.000203	<0.000203			
2/3/2020		<0.000203	<0.000203	<0.000203	<0.000203			
2/4/2020	0.000233 (J)							
8/3/2020		<0.000203	<0.000203	<0.000203				
8/4/2020	0.000265 (J)						<0.000203	
8/5/2020					<0.000203	<0.000203		<0.000203
2/22/2021		<0.000203	<0.000203	<0.000203	<0.000203			
3/1/2021							<0.000203	
3/2/2021	0.000221							
3/3/2021						<0.000203		7.98E-05 (J)
7/12/2021		<0.000203	<0.000203	<0.000203	<0.000203			
7/13/2021	0.00013 (J)						<0.000203	<0.000203
7/14/2021						<0.000203		
1/25/2022		<0.000203	<0.000203	<0.000203	<0.000203			
1/26/2022	0.00022						<0.000203	
1/27/2022						<0.000203		7E-05 (J)
7/5/2022		<0.000203	<0.000203	<0.000203	<0.000203			
7/12/2022	0.000242						<0.000203	
7/13/2022						<0.000203		7.7E-05 (J)
2/20/2023		<0.000203	<0.000203	<0.000203				
2/21/2023					<0.000203			
2/28/2023	0.000234						<0.000203	7.16E-05 (J)
3/1/2023						<0.000203		

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Thallium (mg/L) Analysis Run 12/22/2023 2:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-9H	MW-1 (bg)	MW-2 (bg)	MW-3 (bg)	MW-4 (bg)	GS-GSA-MW-12V	GS-GSA-MW-9V	GS-GSA-MW-14H
8/21/2023								<0.000203
8/22/2023	0.000109 (J)	<0.000203	<0.000203	<0.000203	<0.000203		<0.000203	
8/23/2023						<0.000203		

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Total dissolved solids (mg/L) Analysis Run 12/22/2023 2:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-11H	GS-GSA-MW-12H	GS-GSA-MW-13H	GS-GSA-MW-3	GS-GSA-MW-3V	GS-GSA-MW-4	GS-GSA-MW-4V	GS-GSA-MW-8	GS-GSA-MW-8V
8/24/2016				5020		992		2280	
10/3/2016				4880		988		2370	
10/26/2016				5020		1030		2350	
11/21/2016				5090		1020		2530	
1/17/2017				4330		988		2380	
3/20/2017				2690				2630	
3/21/2017						990			
4/17/2017				4780		884			
4/18/2017								2700	
5/30/2017				5170		1060		2980	
8/24/2017				5140		1060		3390	
6/11/2018				4960		944			
6/12/2018								3510	
10/17/2018				4910		928		3550	
3/4/2019	1150								
3/5/2019					2170		1410		
4/10/2019				5090		1000		3580	
10/14/2019				5110	3200	967	1340	3730	
10/16/2019	1150								
11/26/2019		1580							
2/3/2020				4920	3660		1290		
2/4/2020	1200	1580	1200			978		3190	
2/5/2020									1100
8/4/2020	1230		1350	5110	3530				
8/5/2020		1380				938	1330	3610	1100
3/1/2021				4390				2870	1060
3/2/2021	1190	1390	1450						
3/3/2021					3640	1040	1320		
7/14/2021	1190	1330	1300	4920		1300	1340	3150	1060
7/15/2021					3430				
1/25/2022		1320							
1/26/2022	1140		1360	4260	3150				1050
1/27/2022						1840	1330	3290	
7/12/2022	1180		1360					3090	1010
7/13/2022		1270		4960	3340	4700	1380		
2/27/2023				5000	3600				
2/28/2023	1240		1480					2620	1020
3/1/2023		1300				3310	1330		
8/22/2023	1310	1310	1400						
8/23/2023				5360	3630	1460	1350	3280	1150

Time Series

Constituent: Total dissolved solids (mg/L) Analysis Run 12/22/2023 2:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-9H	MW-1 (bg)	MW-2 (bg)	MW-3 (bg)	MW-4 (bg)	GS-GSA-MW-12V	GS-GSA-MW-9V	GS-GSA-MW-14H
4/25/2016			1260	2720	3300			
4/26/2016		2080						
6/20/2016		2060	1620		3870			
6/22/2016				3250				
8/8/2016		2070	1740					
8/9/2016				3050	4140			
8/24/2016		2040	1720	3080	4190			
10/3/2016		2110	1800		4190			
10/4/2016				2900				
10/26/2016		2000	1800	2940	4400			
11/21/2016		2070	1740	3090	4230			
1/17/2017		1930	1960					
1/18/2017				4020	4120			
3/22/2017		2060	1510	4180	3980			
4/18/2017		2140	1580	4440	3880			
5/30/2017		2240						
5/31/2017			1730	3970	4210			
8/23/2017		2160	1550	4050	3990			
5/22/2018		2380	1500					
5/23/2018					3740			
5/24/2018				3680				
6/12/2018		2400	1550	3820	4080			
10/17/2018		2220	1740	4730	4250			
11/19/2018		2360	1990	4710	3920			
3/5/2019	3240							
4/10/2019		2630	1250	3680	3280			
5/14/2019		2340	1480	3580	3130 (D)			
10/8/2019		2330	1840	4720				
10/10/2019					4000			
10/16/2019	3080	3650 (o)	1830	4210	4060			
2/3/2020		2380	1440	3530	3240			
2/4/2020	3110							
8/3/2020		2200	1650	3760				
8/4/2020	2920						3080	
8/5/2020					3200	3330		1280
2/22/2021		2230	1620	4670	3190			
3/1/2021							3140	
3/2/2021	2860							
3/3/2021						3450		1260
7/12/2021		2210	1390	3510	3000			
7/13/2021	2640						2870	1180
7/14/2021						3360		
1/25/2022		2150	1500	3950	3180			
1/26/2022	2490						2890	
1/27/2022						3170		1130
7/5/2022		2100	1250	4220	3240			
7/12/2022	2610						2940	
7/13/2022						3380		1120
2/20/2023		2280	1420	3230				
2/21/2023					3160			
2/28/2023	2650						3030	1300
3/1/2023						3270		

Time Series

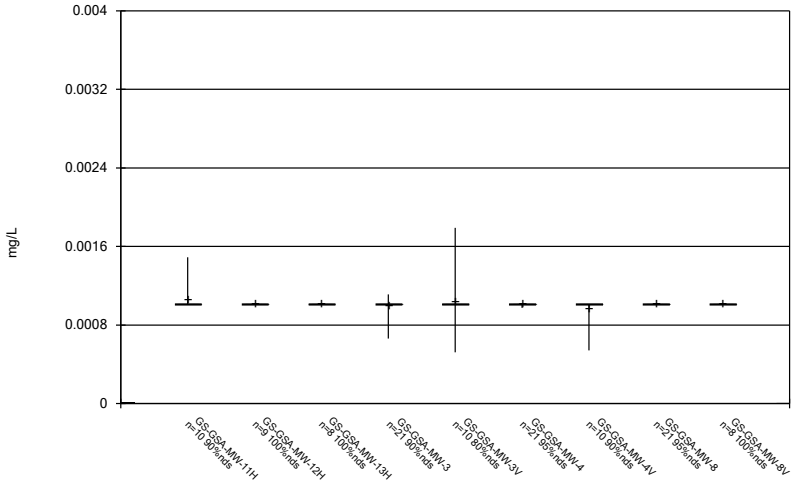
Constituent: Total dissolved solids (mg/L) Analysis Run 12/22/2023 2:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-9H	MW-1 (bg)	MW-2 (bg)	MW-3 (bg)	MW-4 (bg)	GS-GSA-MW-12V	GS-GSA-MW-9V	GS-GSA-MW-14H
8/21/2023								1160
8/22/2023	2640	2160	1520	4820	3780		3010	
8/23/2023						3700		

FIGURE B.

Box & Whiskers Plot



Constituent: Antimony Analysis Run 12/22/2023 2:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

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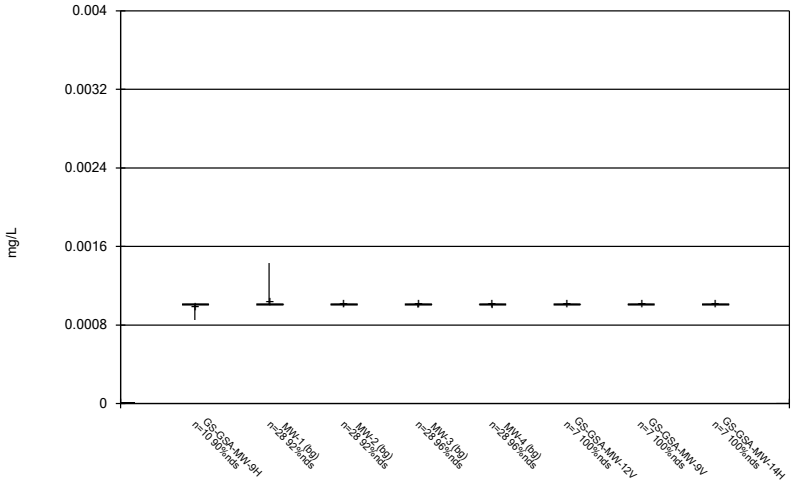
Box & Whiskers Plot



Constituent: Antimony Analysis Run 12/22/2023 2:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

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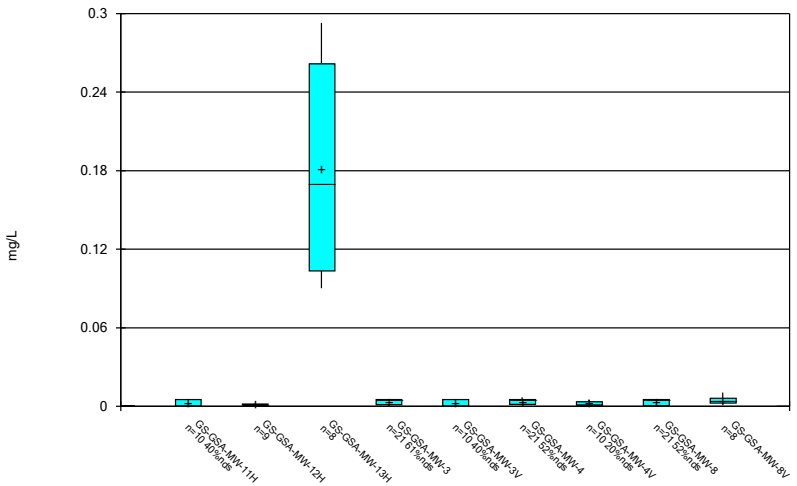
Box & Whiskers Plot



Constituent: Arsenic Analysis Run 12/22/2023 2:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

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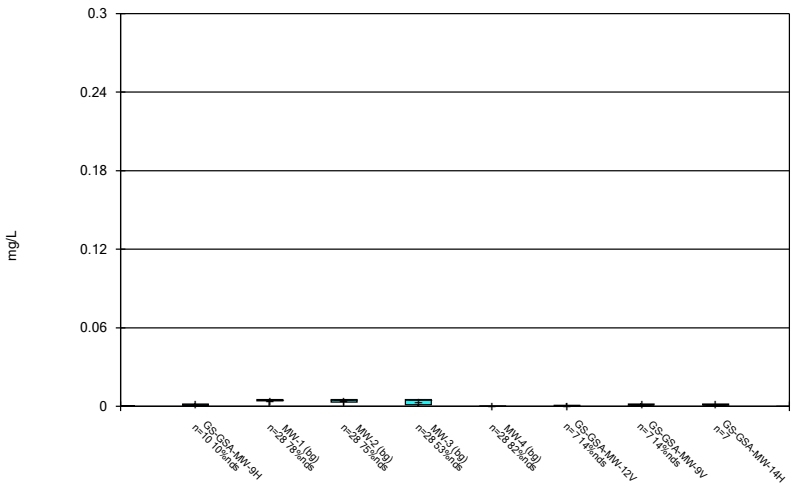
Box & Whiskers Plot



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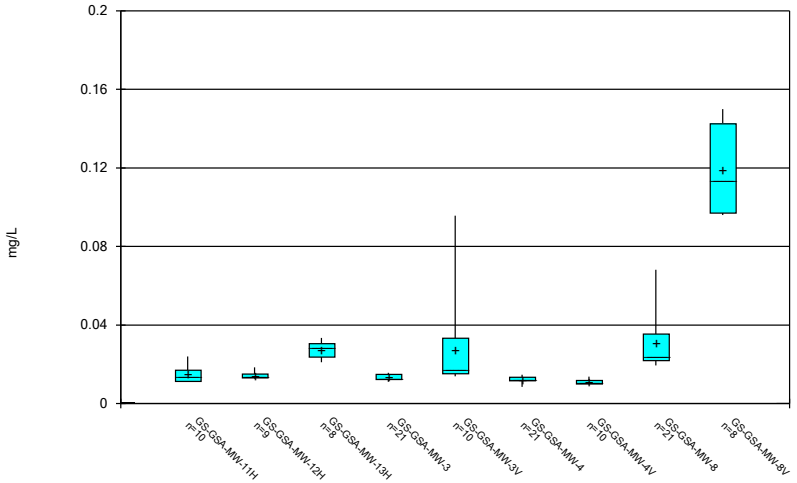
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Box & Whiskers Plot



Constituent: Barium Analysis Run 12/22/2023 2:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

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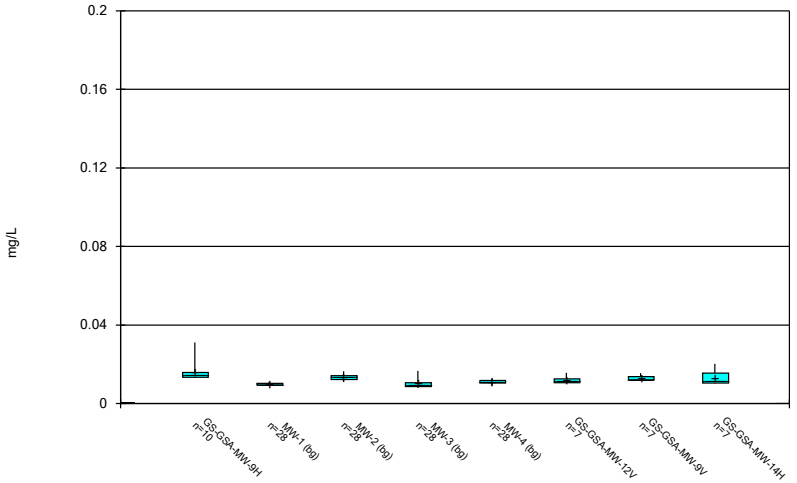
Box & Whiskers Plot



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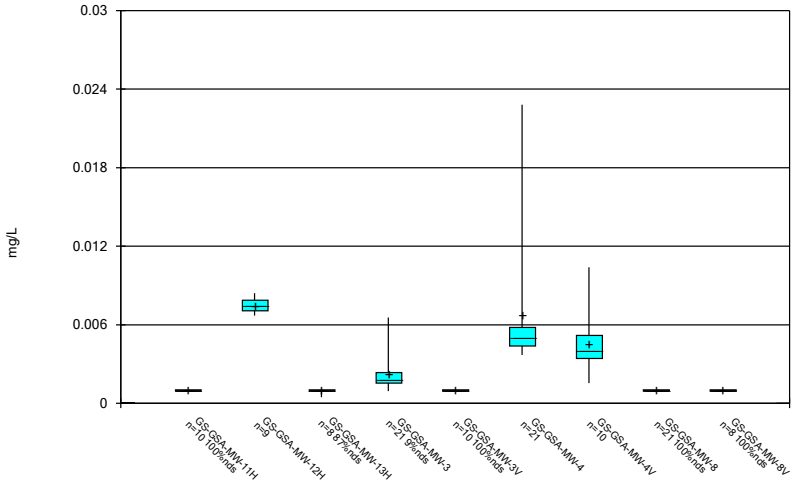
Box & Whiskers Plot



Constituent: Beryllium Analysis Run 12/22/2023 2:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

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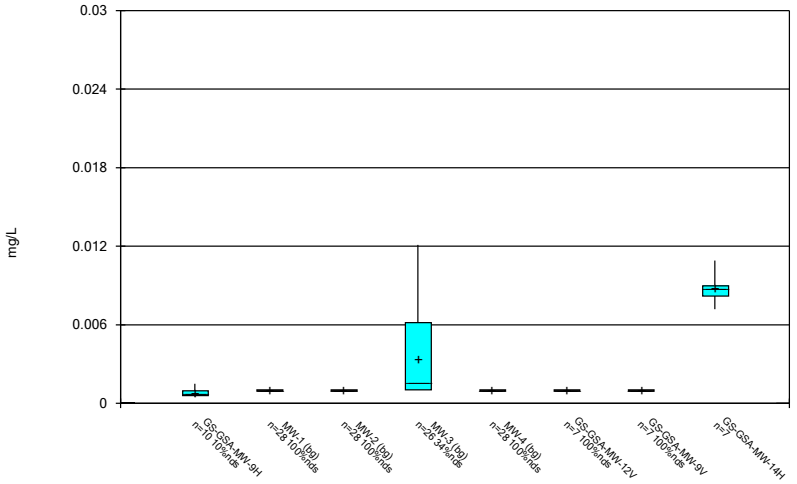
Box & Whiskers Plot



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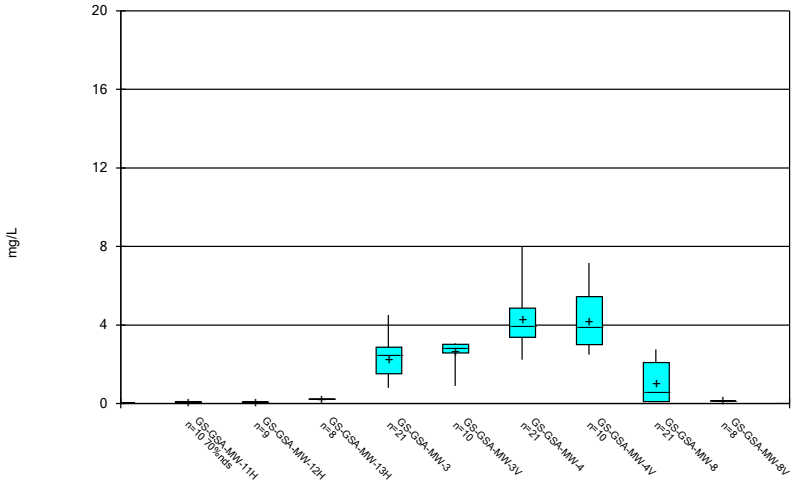

Constituent: Boron Analysis Run 12/22/2023 2:06 PM

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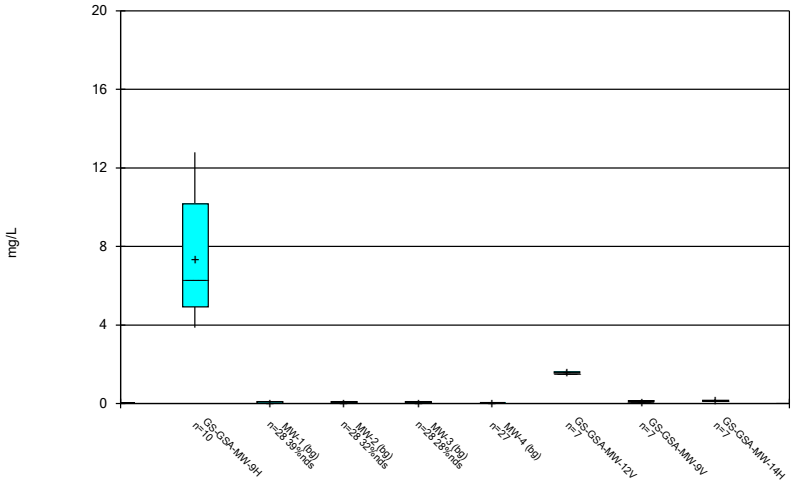

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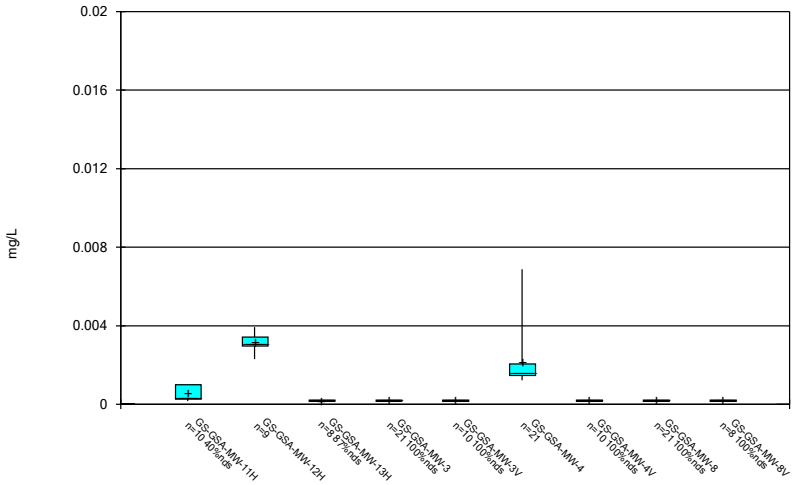

Constituent: Cadmium Analysis Run 12/22/2023 2:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

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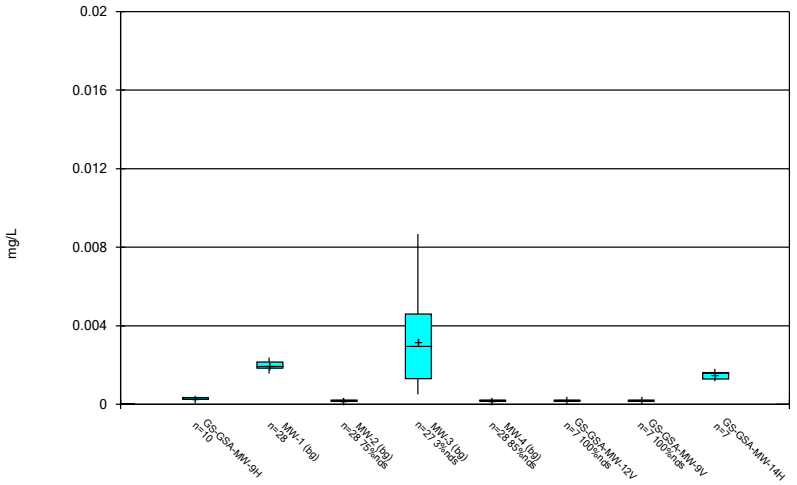
Box & Whiskers Plot



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Plant Gorgas Client: Southern Company Data: Gorgas GSA

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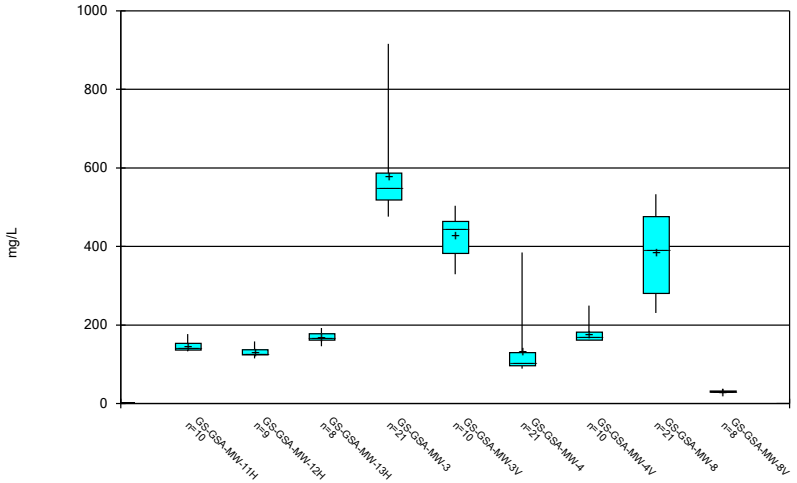

Constituent: Calcium Analysis Run 12/22/2023 2:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

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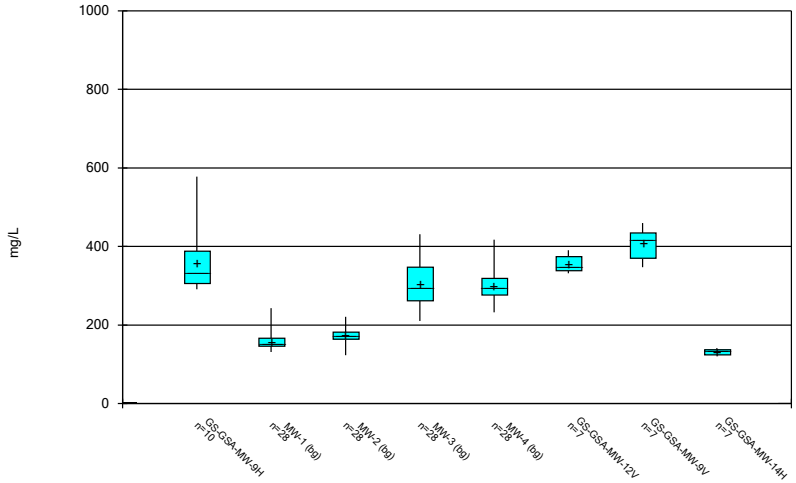
Box & Whiskers Plot



Constituent: Calcium Analysis Run 12/22/2023 2:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

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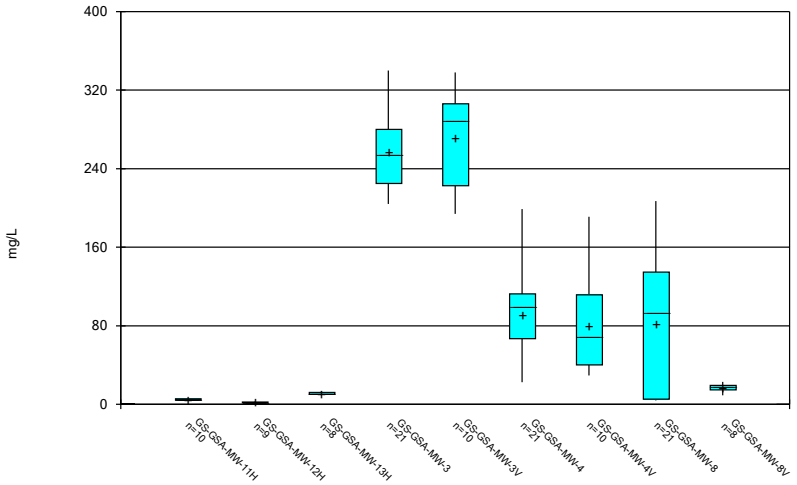
Box & Whiskers Plot



Constituent: Chloride Analysis Run 12/22/2023 2:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

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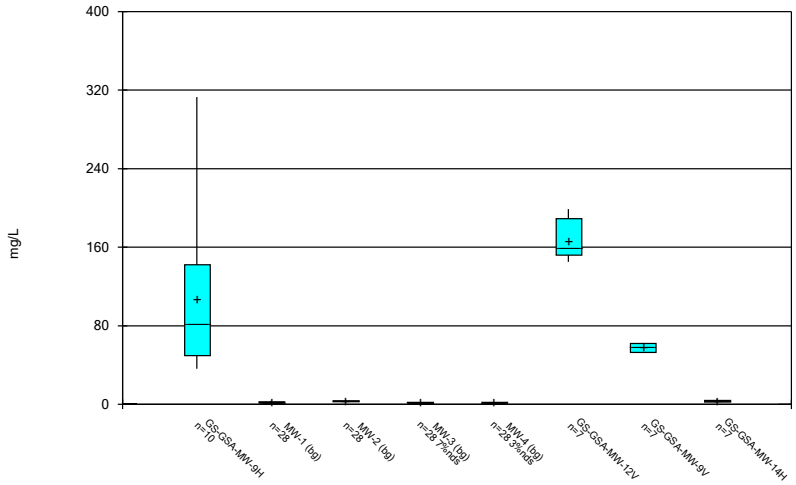
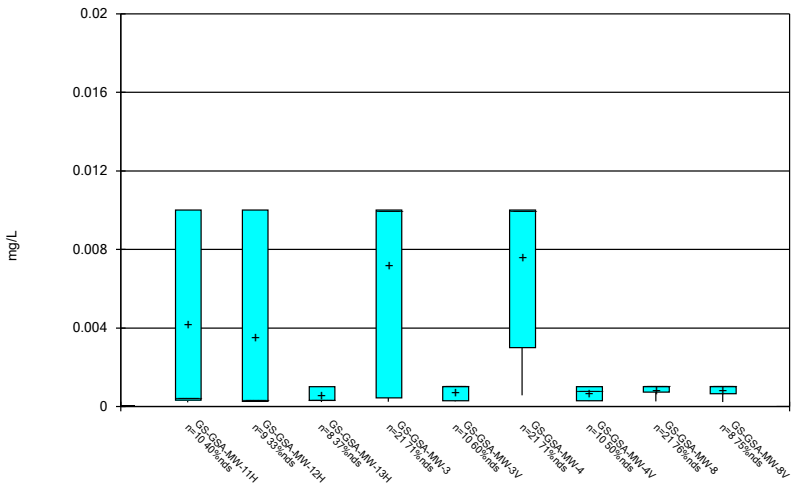
Box & Whiskers Plot



Constituent: Chloride Analysis Run 12/22/2023 2:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Box & Whiskers Plot



Constituent: Chromium Analysis Run 12/22/2023 2:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

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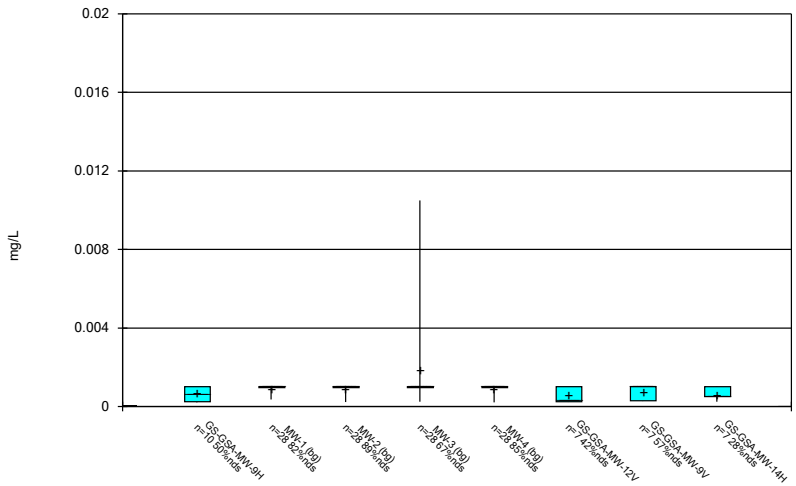
Box & Whiskers Plot



Constituent: Chromium Analysis Run 12/22/2023 2:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

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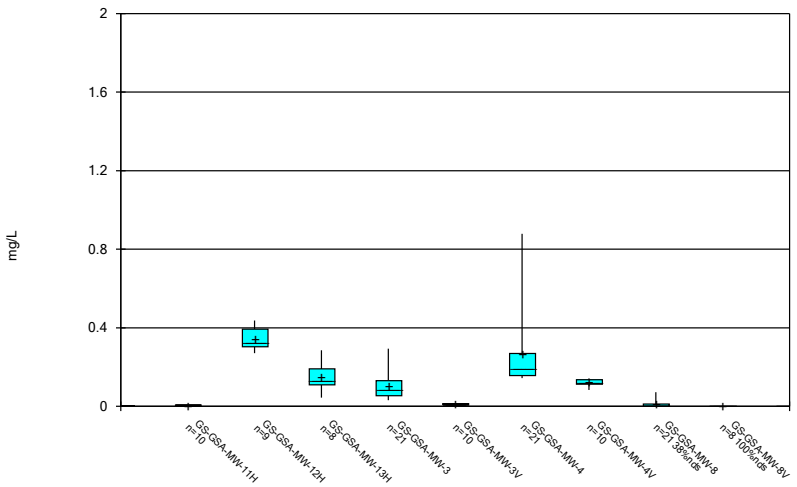
Box & Whiskers Plot



Constituent: Cobalt Analysis Run 12/22/2023 2:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

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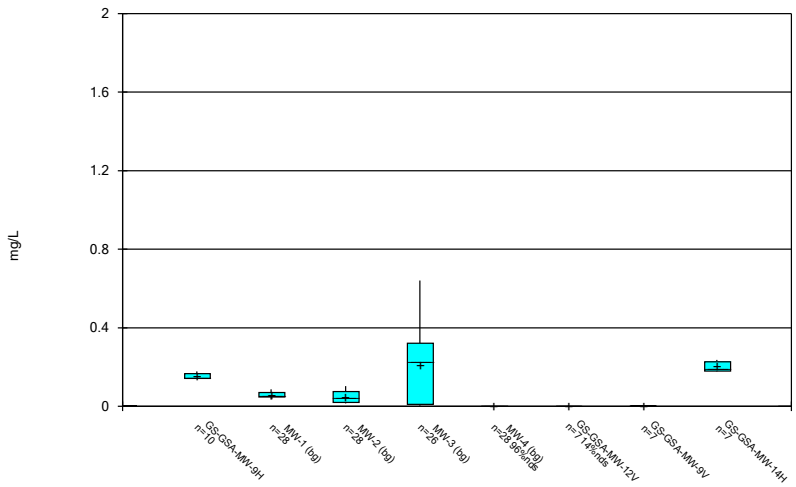
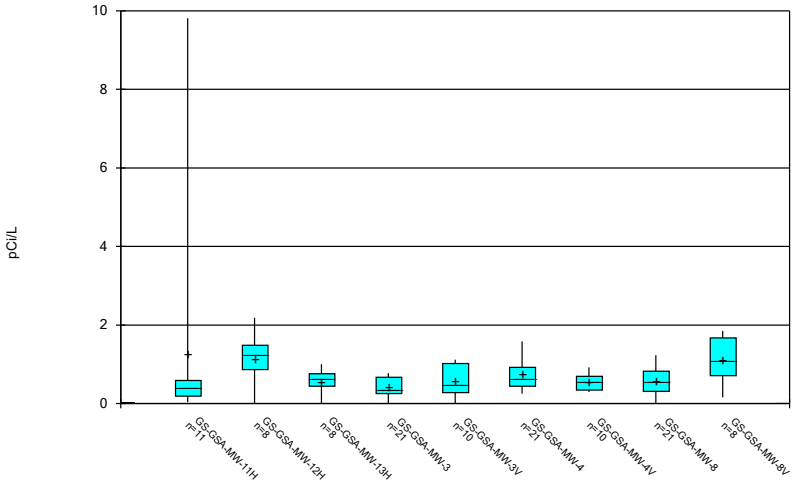
Box & Whiskers Plot



Constituent: Cobalt Analysis Run 12/22/2023 2:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Box & Whiskers Plot



Constituent: Combined Radium 226 + 228 Analysis Run 12/22/2023 2:07 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

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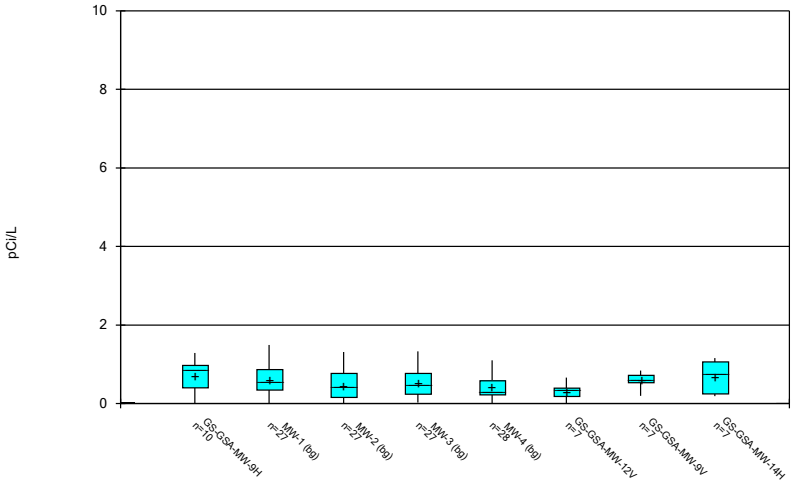
Box & Whiskers Plot



Constituent: Combined Radium 226 + 228 Analysis Run 12/22/2023 2:07 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

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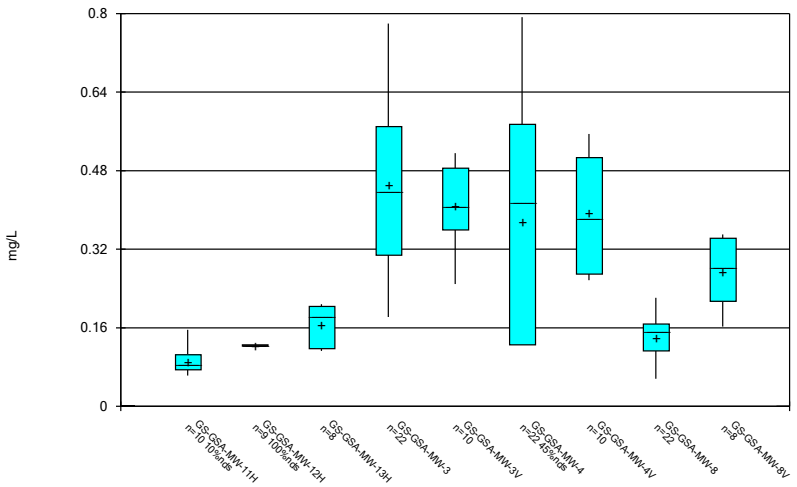
Box & Whiskers Plot



Constituent: Fluoride Analysis Run 12/22/2023 2:07 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

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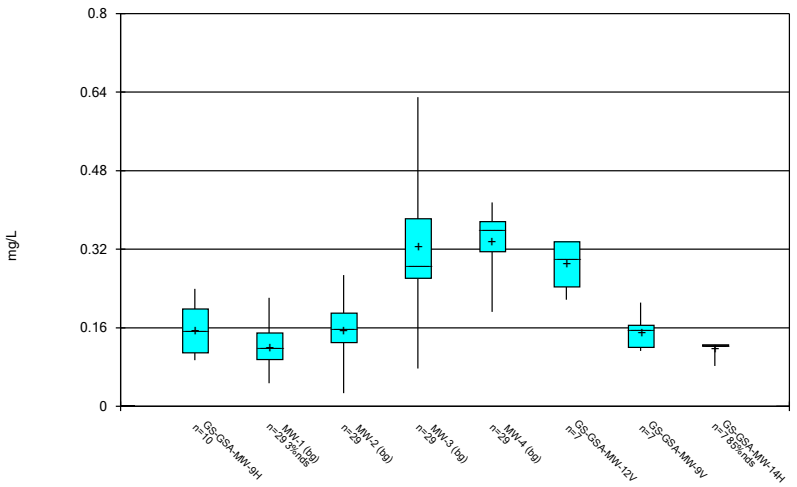
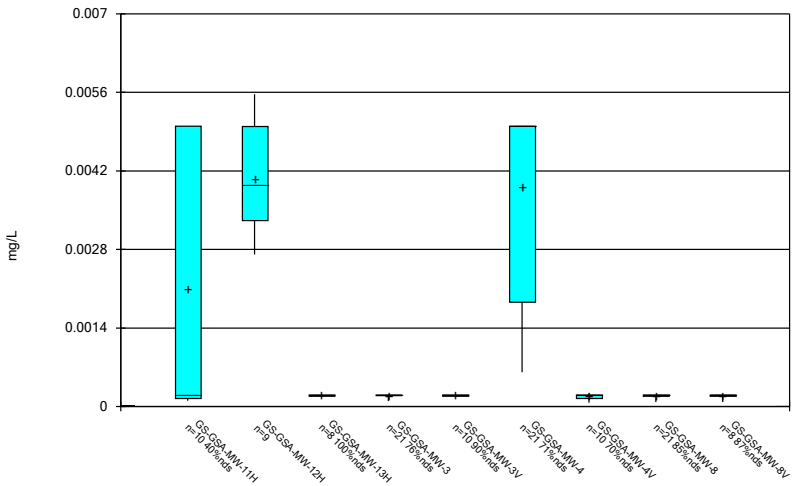
Box & Whiskers Plot



Constituent: Fluoride Analysis Run 12/22/2023 2:07 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Box & Whiskers Plot



Constituent: Lead Analysis Run 12/22/2023 2:07 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

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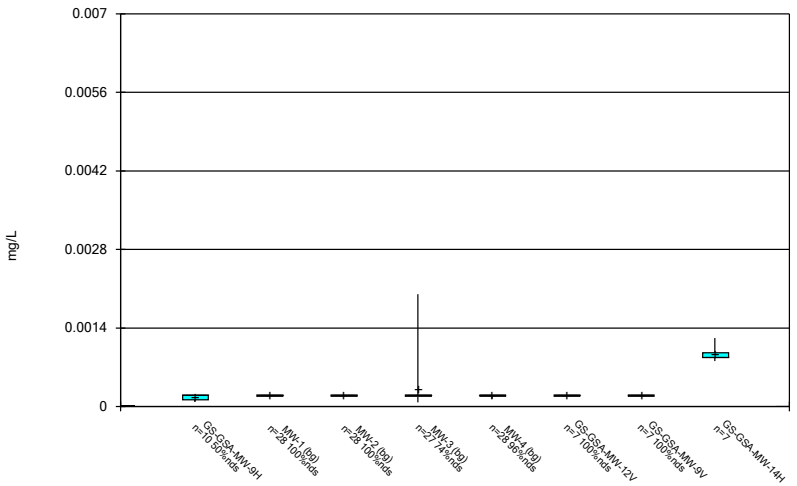
Box & Whiskers Plot



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Plant Gorgas Client: Southern Company Data: Gorgas GSA

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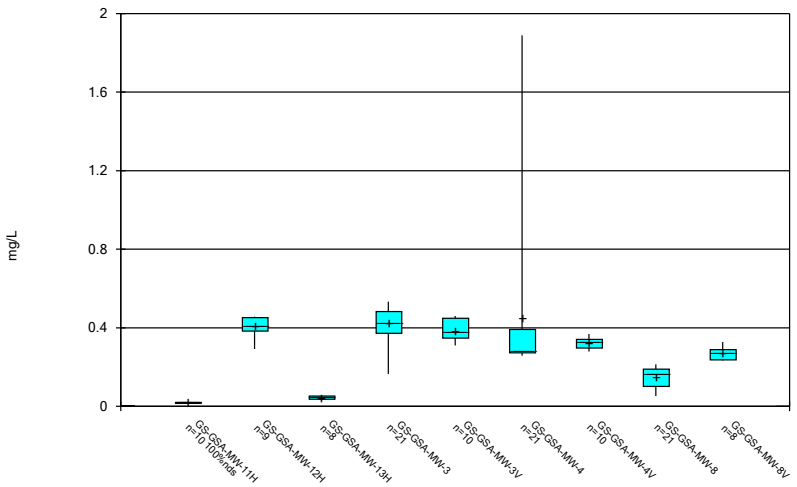
Box & Whiskers Plot



Constituent: Lithium Analysis Run 12/22/2023 2:07 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

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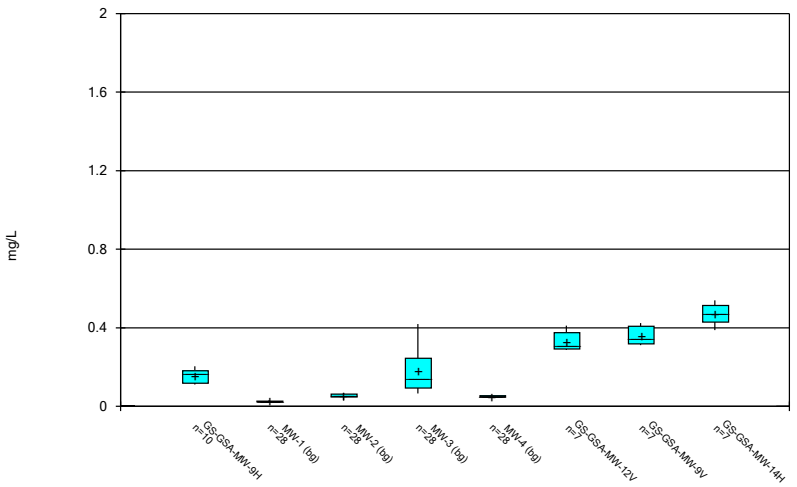
Box & Whiskers Plot



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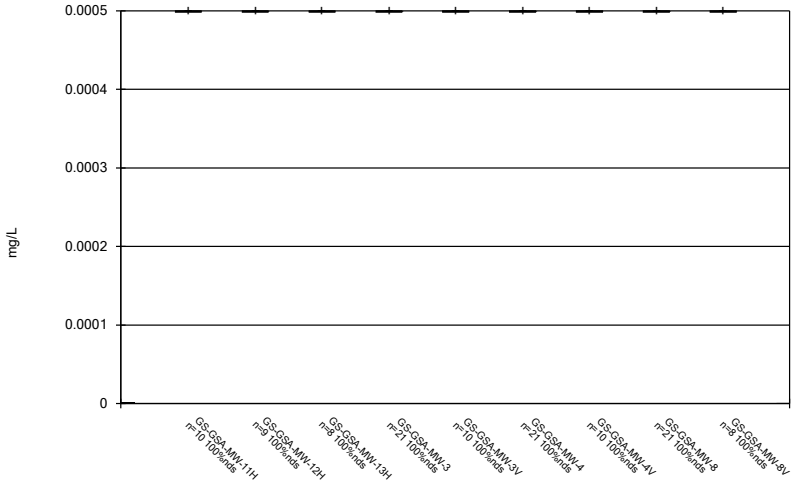
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Box & Whiskers Plot



Constituent: Mercury Analysis Run 12/22/2023 2:07 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

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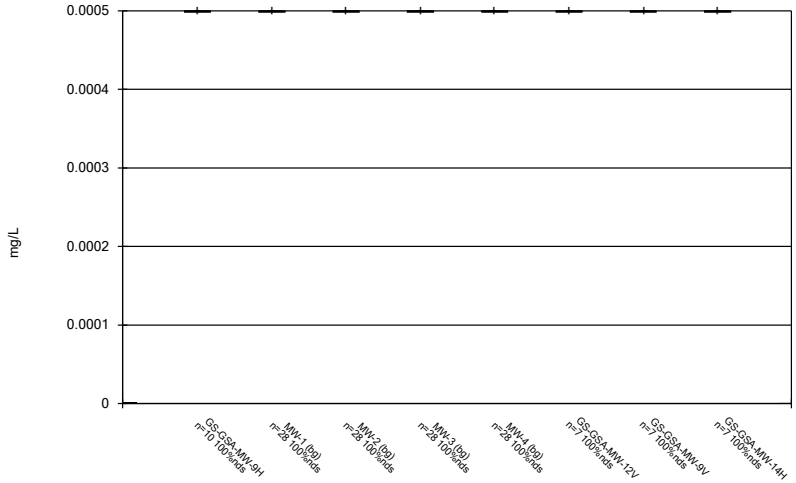
Box & Whiskers Plot



Constituent: Mercury Analysis Run 12/22/2023 2:07 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

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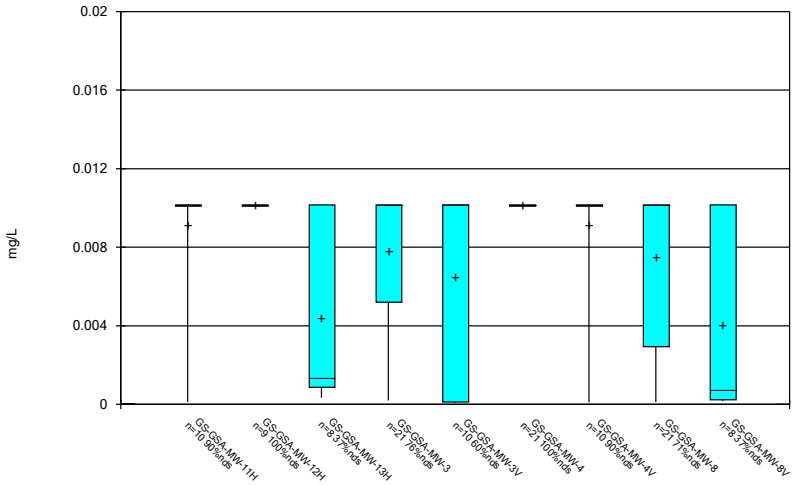
Box & Whiskers Plot



Constituent: Molybdenum Analysis Run 12/22/2023 2:07 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

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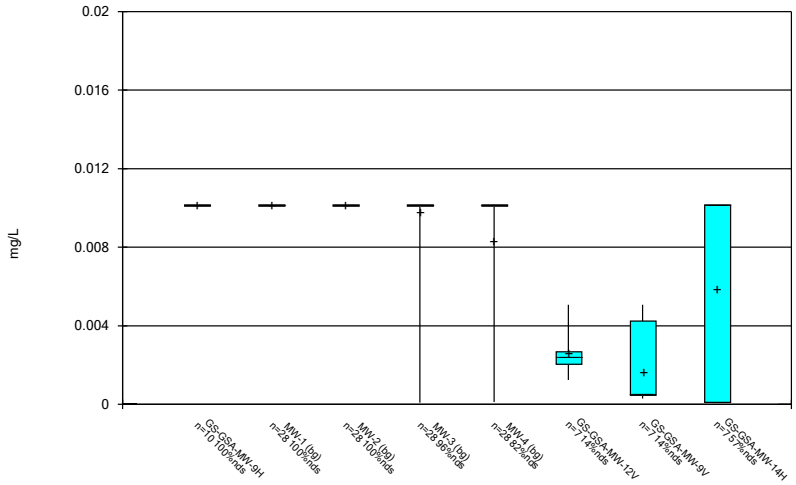
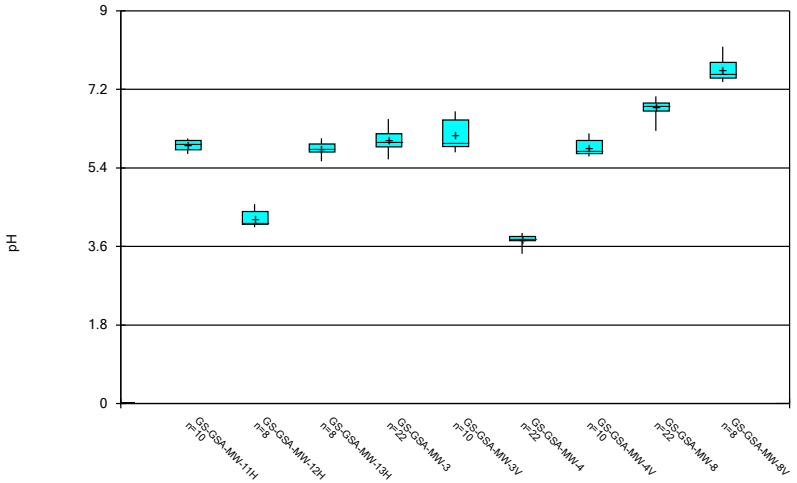
Box & Whiskers Plot



Constituent: Molybdenum Analysis Run 12/22/2023 2:07 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Box & Whiskers Plot



Constituent: pH Analysis Run 12/22/2023 2:07 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

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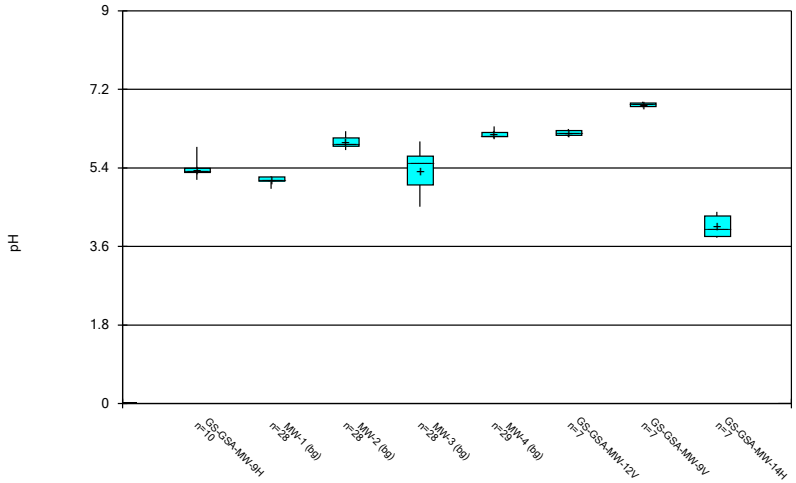
Box & Whiskers Plot



Constituent: pH Analysis Run 12/22/2023 2:07 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

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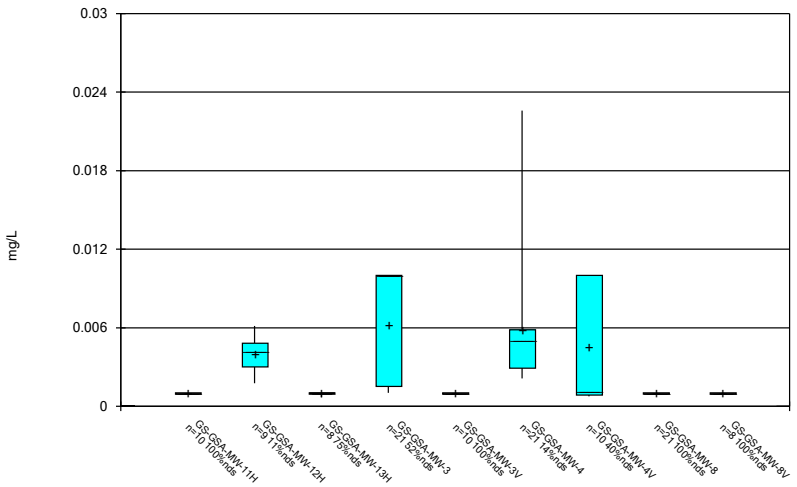
Box & Whiskers Plot



Constituent: Selenium Analysis Run 12/22/2023 2:07 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

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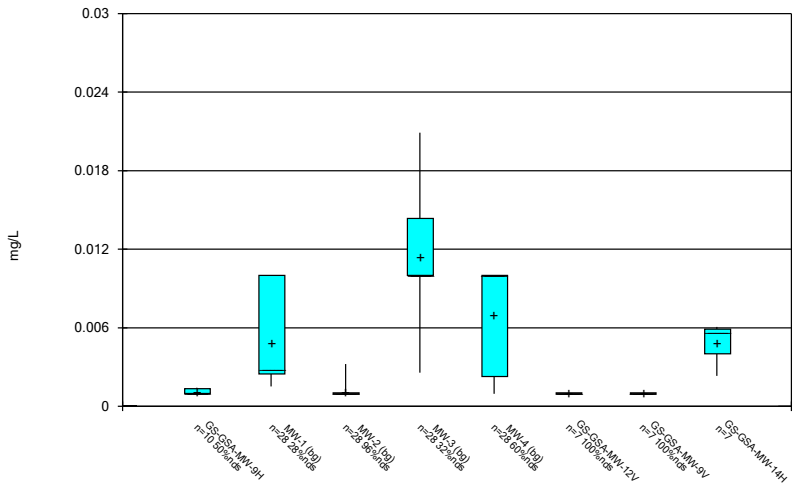
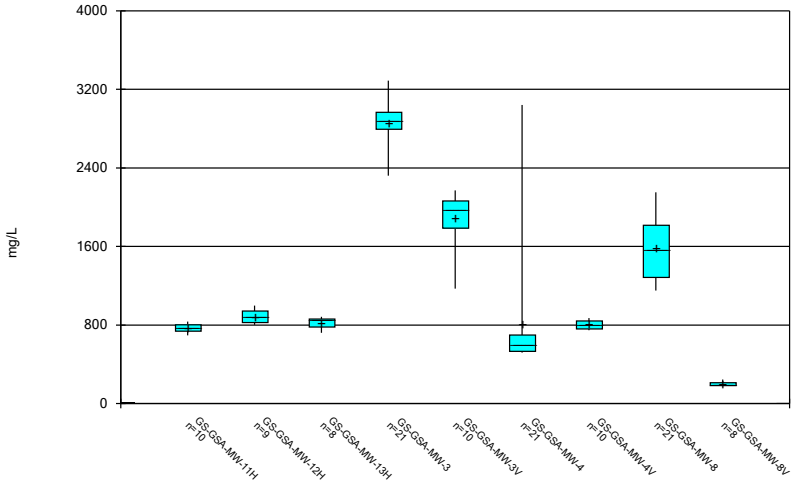
Box & Whiskers Plot



Constituent: Selenium Analysis Run 12/22/2023 2:07 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Box & Whiskers Plot



Constituent: Sulfate Analysis Run 12/22/2023 2:07 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

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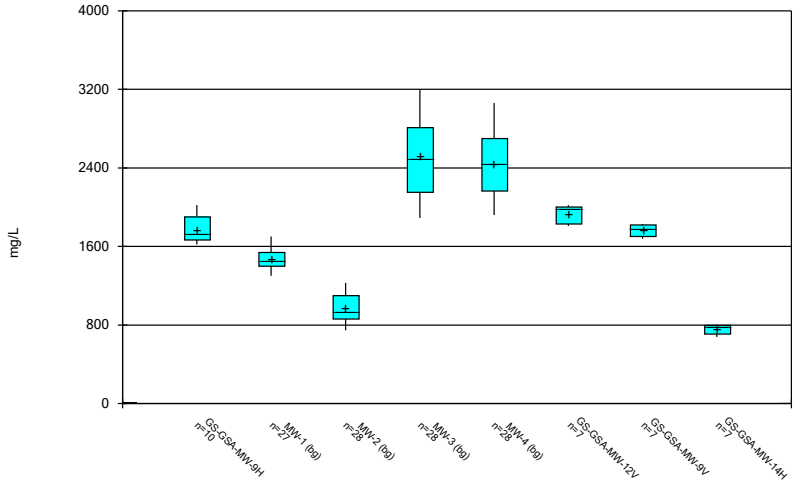
Box & Whiskers Plot



Constituent: Sulfate Analysis Run 12/22/2023 2:07 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

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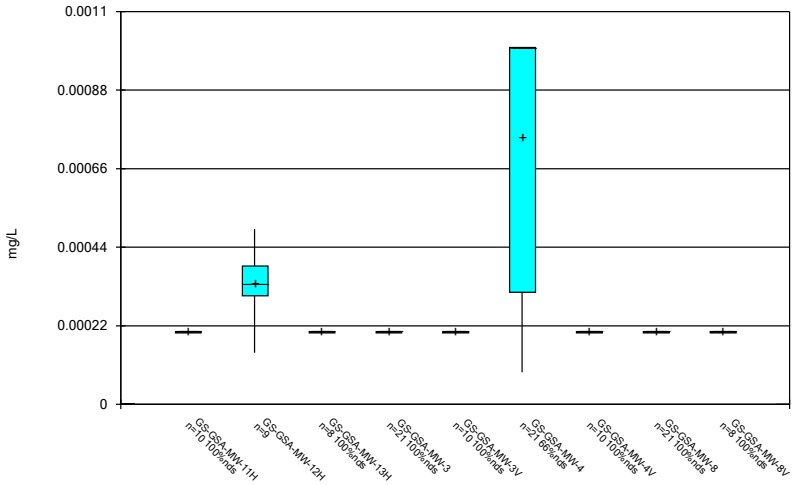
Box & Whiskers Plot



Constituent: Thallium Analysis Run 12/22/2023 2:07 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

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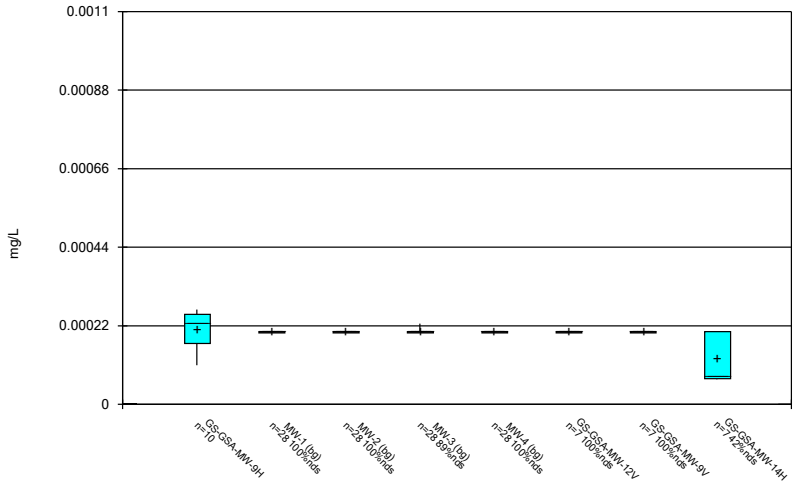
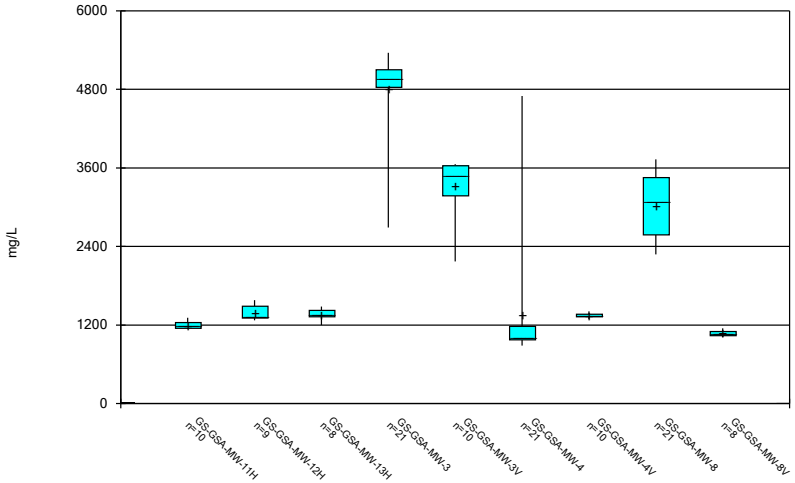
Box & Whiskers Plot



Constituent: Thallium Analysis Run 12/22/2023 2:07 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Box & Whiskers Plot



Constituent: Total dissolved solids Analysis Run 12/22/2023 2:07 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

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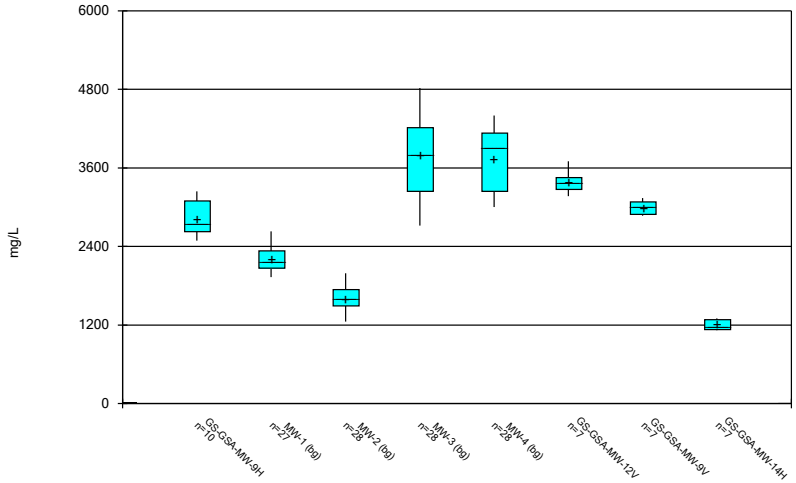
Box & Whiskers Plot



Constituent: Total dissolved solids Analysis Run 12/22/2023 2:07 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

FIGURE C.

Outlier Summary

Plant Gorgas Data: Gorgas GSA Printed 12/19/2023, 9:47 PM

	MW-3 Beryllium (mg/L)	MW-4 Boron (mg/L)	MW-3 Cadmium (mg/L)	MW-3 Cobalt (mg/L)	MW-3 Lead (mg/L)	MW-3 pH (pH)	MW-1 Sulfate (mg/L)	MW-1 Total dissolved solids (mg/L)
4/25/2016			0.0121 (o)					
1/18/2017	0.0169 (o)							
5/22/2018							2100 (o)	
11/19/2018	0.0185 (o)				0.00692 (o)	3.77 (o)		
5/14/2019		<0.203 (o)						
10/8/2019				1.07 (o)				
10/16/2019				0.848 (o)				3650 (o)

Tukey's Outlier Test - Significant Results

Plant Gorgas Client: Southern Company Data: Gorgas GSA Printed 12/22/2023, 2:03 PM

Constituent	Well	Outlier	Value(s)	Method	Alpha	N	Mean	Std. Dev.	Distribution	Normality Test
Sulfate (mg/L)	**GS-GSA-MW-4**	**Yes**	**1130,3040,2130**	**NP**	**NaN**	**20**	**808.3**	**639.6**	**ln(x)**	**ShapiroWilk**
Sulfate (mg/L)	**MW-1 (bg)**	**Yes**	**2100**	**NP**	**NaN**	**27**	**1491**	**158.3**	**ln(x)**	**ShapiroWilk**
Total dissolved solids (mg/L)	**GS-GSA-MW-4**	**Yes**	**1840,4700,3310**	**NP**	**NaN**	**20**	**1348**	**958.1**	**ln(x)**	**ShapiroWilk**
Total dissolved solids (mg/L)	**MW-1 (bg)**	**Yes**	**3650**	**NP**	**NaN**	**27**	**2253**	**318.7**	**ln(x)**	**ShapiroWilk**

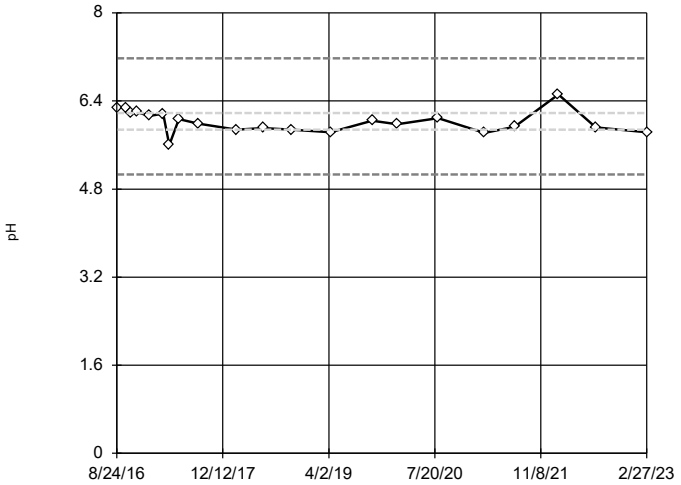
Tukey's Outlier Test - All Results

Plant Gorgas Client: Southern Company Data: Gorgas GSA Printed 12/22/2023, 2:03 PM

Constituent	Well	Outlier	Value(s)	Method	Alpha	N	Mean	Std. Dev.	Distribution	Normality Test
pH (pH)	GS-GSA-MW-3	No	n/a	NP	NaN	21	6.026	0.206	ln(x)	ShapiroWilk
pH (pH)	GS-GSA-MW-4	No	n/a	NP	NaN	21	3.76	0.1101	x^6	ShapiroWilk
pH (pH)	GS-GSA-MW-8	No	n/a	NP	NaN	21	6.777	0.1888	x^6	ShapiroWilk
pH (pH)	MW-1 (bg)	No	n/a	NP	NaN	27	5.137	0.05874	x^6	ShapiroWilk
pH (pH)	MW-2 (bg)	No	n/a	NP	NaN	27	6	0.1213	ln(x)	ShapiroWilk
pH (pH)	MW-3 (bg)	No	n/a	NP	NaN	28	5.29	0.5363	x^6	ShapiroWilk
pH (pH)	MW-4 (bg)	No	n/a	NP	NaN	28	6.163	0.06365	ln(x)	ShapiroWilk
Sulfate (mg/L)	GS-GSA-MW-3	No	n/a	NP	NaN	20	2837	202.9	x^6	ShapiroWilk
Sulfate (mg/L)	**GS-GSA-MW-4**	**Yes**	**1130,3040,2130**	**NP**	**NaN**	**20**	**808.3**	**639.6**	**ln(x)**	**ShapiroWilk**
Sulfate (mg/L)	GS-GSA-MW-8	No	n/a	NP	NaN	20	1575	307.9	ln(x)	ShapiroWilk
Sulfate (mg/L)	**MW-1 (bg)**	**Yes**	**2100**	**NP**	**NaN**	**27**	**1491**	**158.3**	**ln(x)**	**ShapiroWilk**
Sulfate (mg/L)	MW-2 (bg)	No	n/a	NP	NaN	27	971.1	147.3	ln(x)	ShapiroWilk
Sulfate (mg/L)	MW-3 (bg)	No	n/a	NP	NaN	27	2494	379.5	sqrt(x)	ShapiroWilk
Sulfate (mg/L)	MW-4 (bg)	No	n/a	NP	NaN	27	2444	346.5	x^2	ShapiroWilk
Total dissolved solids (mg/L)	GS-GSA-MW-3	No	n/a	NP	NaN	20	4788	560.9	x^6	ShapiroWilk
Total dissolved solids (mg/L)	**GS-GSA-MW-4**	**Yes**	**1840,4700,3310**	**NP**	**NaN**	**20**	**1348**	**958.1**	**ln(x)**	**ShapiroWilk**
Total dissolved solids (mg/L)	GS-GSA-MW-8	No	n/a	NP	NaN	20	2990	483.2	normal	ShapiroWilk
Total dissolved solids (mg/L)	**MW-1 (bg)**	**Yes**	**3650**	**NP**	**NaN**	**27**	**2253**	**318.7**	**ln(x)**	**ShapiroWilk**
Total dissolved solids (mg/L)	MW-2 (bg)	No	n/a	NP	NaN	27	1610	203.2	x^2	ShapiroWilk
Total dissolved solids (mg/L)	MW-3 (bg)	No	n/a	NP	NaN	27	3766	604.2	sqrt(x)	ShapiroWilk
Total dissolved solids (mg/L)	MW-4 (bg)	No	n/a	NP	NaN	27	3747	456.1	x^6	ShapiroWilk

Tukey's Outlier Screening

GS-GSA-MW-3



n = 21

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 7.175, low cutoff = 5.065, based on IQR multiplier of 3.

Constituent: pH Analysis Run 12/22/2023 1:59 PM View: Outliers

Plant Gorgas Client: Southern Company Data: Gorgas GSA

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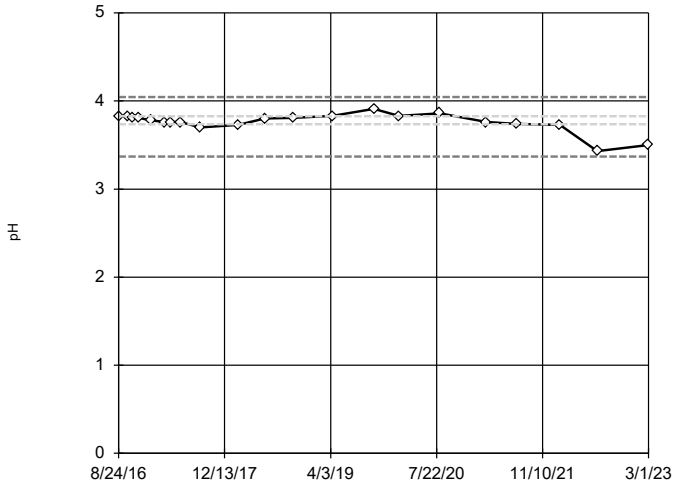
Tukey's Outlier Screening

GS-GSA-MW-4



n = 21

No outliers found. Tukey's method selected by user.

Data were x^6 transformed to achieve best W statistic (graph shown in original units).

High cutoff = 4.045, low cutoff = 3.37, based on IQR multiplier of 3.

Constituent: pH Analysis Run 12/22/2023 1:59 PM View: Outliers

Plant Gorgas Client: Southern Company Data: Gorgas GSA

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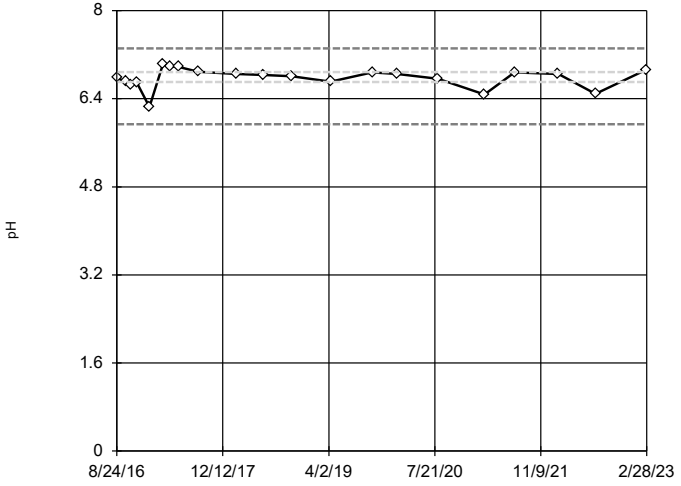
Tukey's Outlier Screening

GS-GSA-MW-8



n = 21

No outliers found. Tukey's method selected by user.

Data were x^6 transformed to achieve best W statistic (graph shown in original units).

High cutoff = 7.317, low cutoff = 5.939, based on IQR multiplier of 3.

Constituent: pH Analysis Run 12/22/2023 1:59 PM View: Outliers

Plant Gorgas Client: Southern Company Data: Gorgas GSA

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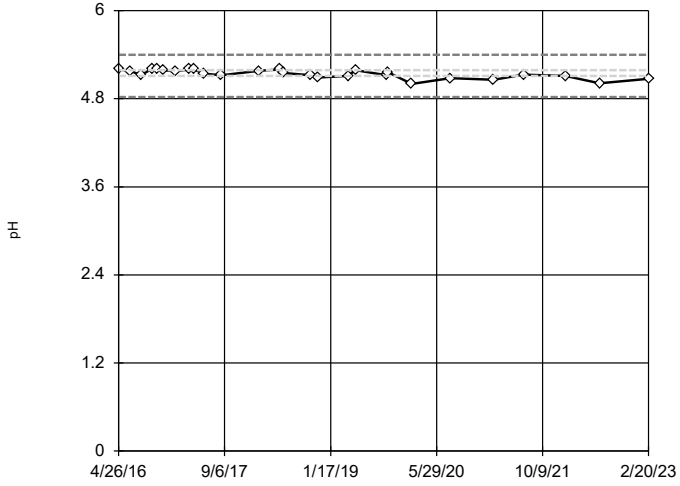
Tukey's Outlier Screening

MW-1 (bg)



n = 27

No outliers found. Tukey's method selected by user.

Data were x^6 transformed to achieve best W statistic (graph shown in original units).

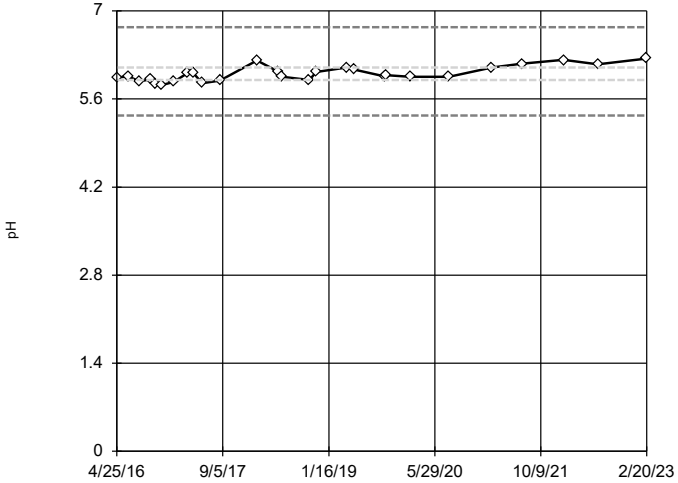
High cutoff = 5.399, low cutoff = 4.823, based on IQR multiplier of 3.

Constituent: pH Analysis Run 12/22/2023 1:59 PM View: Outliers

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Tukey's Outlier Screening

MW-2 (bg)



n = 27

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 6.742, low cutoff = 5.338, based on IQR multiplier of 3.

Constituent: pH Analysis Run 12/22/2023 1:59 PM View: Outliers

Plant Gorgas Client: Southern Company Data: Gorgas GSA

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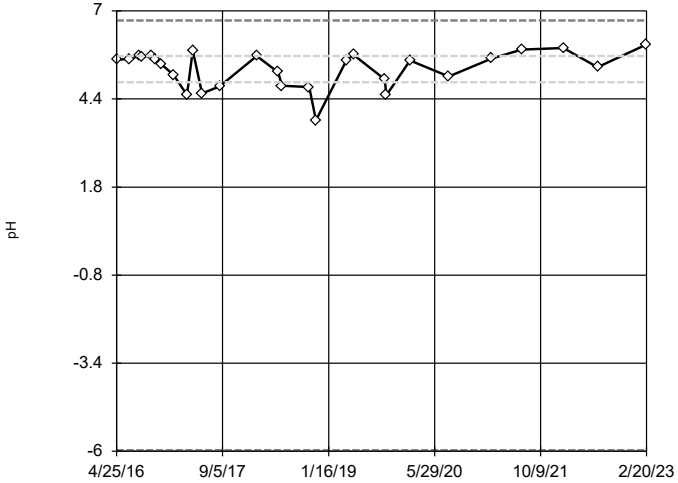
Tukey's Outlier Screening

MW-3 (bg)



n = 28

No outliers found. Tukey's method selected by user.

Data were x^6 transformed to achieve best W statistic (graph shown in original units).

High cutoff = 6.718, low cutoff = -5.964, based on IQR multiplier of 3.

Constituent: pH Analysis Run 12/22/2023 1:59 PM View: Outliers

Plant Gorgas Client: Southern Company Data: Gorgas GSA

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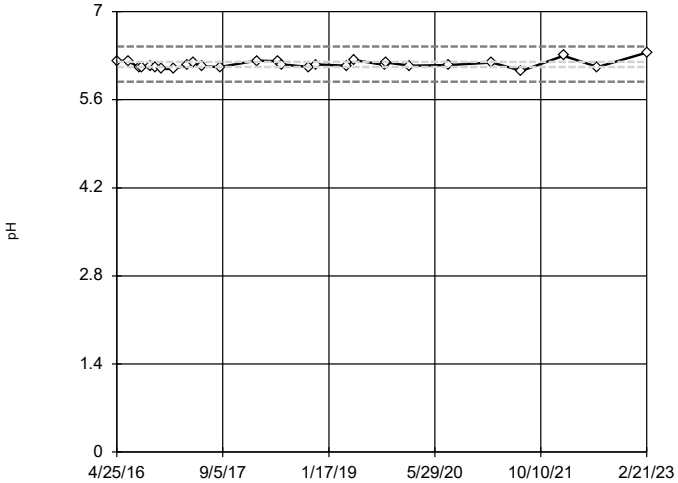
Tukey's Outlier Screening

MW-4 (bg)



n = 28

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 6.446, low cutoff = 5.886, based on IQR multiplier of 3.

Constituent: pH Analysis Run 12/22/2023 1:59 PM View: Outliers

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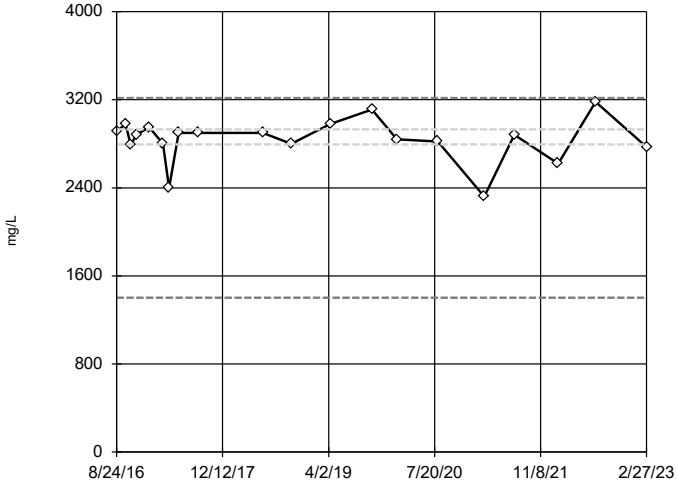
Tukey's Outlier Screening

GS-GSA-MW-3



n = 20

No outliers found. Tukey's method selected by user.

Data were x^6 transformed to achieve best W statistic (graph shown in original units).

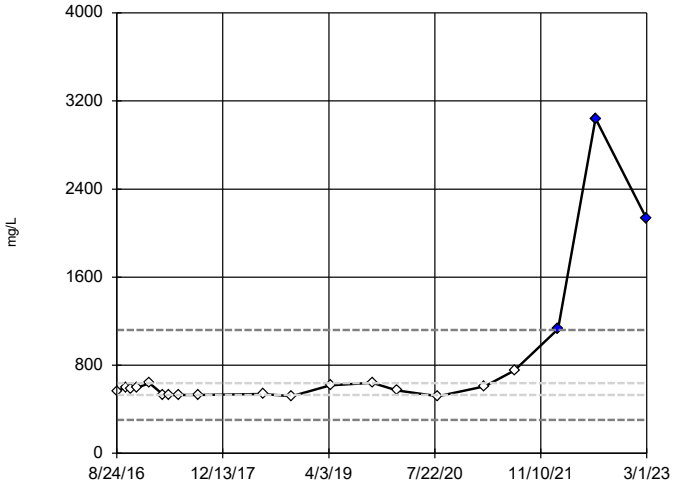
High cutoff = 3214, low cutoff = 1403, based on IQR multiplier of 3.

Constituent: Sulfate Analysis Run 12/22/2023 1:59 PM View: Outliers

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Tukey's Outlier Screening

GS-GSA-MW-4



n = 20

Outliers are drawn as solid.
Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 1120, low cutoff = 302.4, based on IQR multiplier of 3.

Constituent: Sulfate Analysis Run 12/22/2023 1:59 PM View: Outliers
Plant Gorgas Client: Southern Company Data: Gorgas GSA

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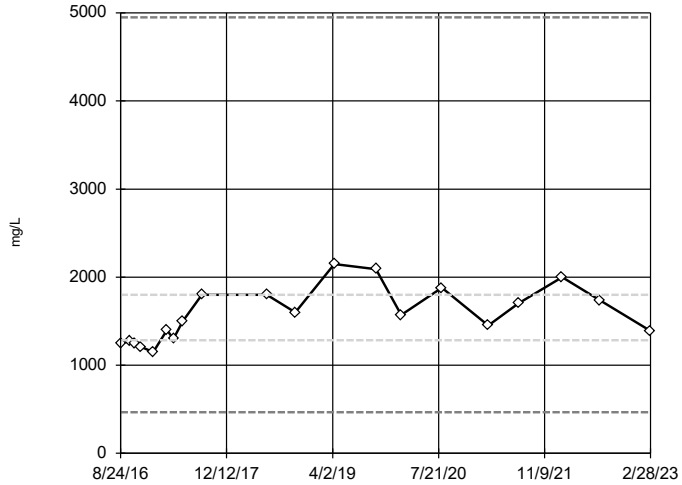
Tukey's Outlier Screening

GS-GSA-MW-8



n = 20

No outliers found.
Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 4948, low cutoff = 467.4, based on IQR multiplier of 3.

Constituent: Sulfate Analysis Run 12/22/2023 1:59 PM View: Outliers
Plant Gorgas Client: Southern Company Data: Gorgas GSA

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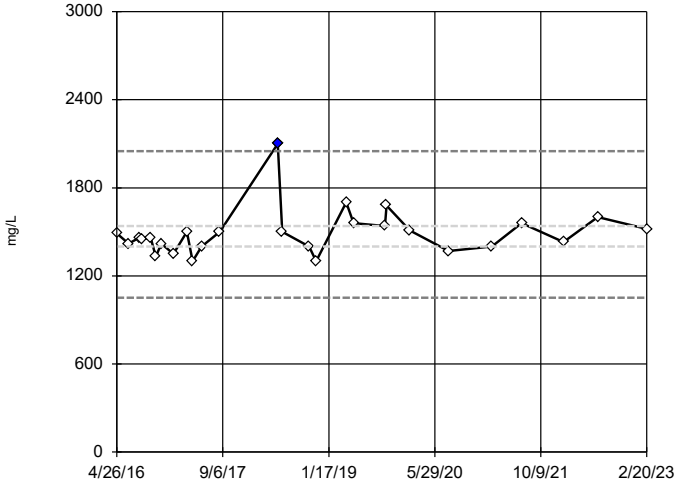
Tukey's Outlier Screening

MW-1 (bg)



n = 27

Outlier is drawn as solid.
Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 2050, low cutoff = 1052, based on IQR multiplier of 3.

Constituent: Sulfate Analysis Run 12/22/2023 1:59 PM View: Outliers
Plant Gorgas Client: Southern Company Data: Gorgas GSA

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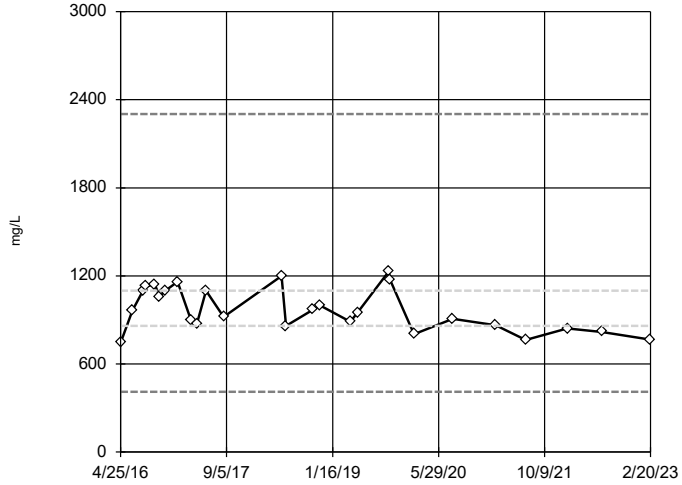
Tukey's Outlier Screening

MW-2 (bg)



n = 27

No outliers found.
Tukey's method selected by user.

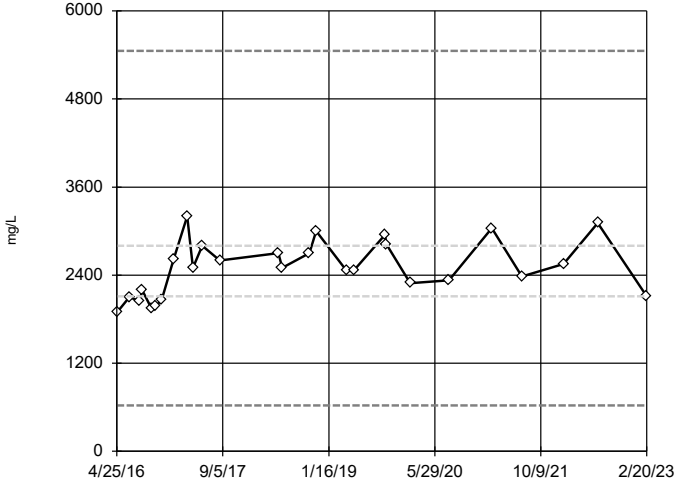
Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 2302, low cutoff = 411, based on IQR multiplier of 3.

Constituent: Sulfate Analysis Run 12/22/2023 1:59 PM View: Outliers
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Tukey's Outlier Screening

MW-3 (bg)



n = 27

No outliers found.
Tukey's method selected by user.

Data were square root transformed to achieve best W statistic (graph shown in original units).

High cutoff = 5455, low cutoff = 624.7, based on IQR multiplier of 3.

Constituent: Sulfate Analysis Run 12/22/2023 1:59 PM View: Outliers
Plant Gorgas Client: Southern Company Data: Gorgas GSA

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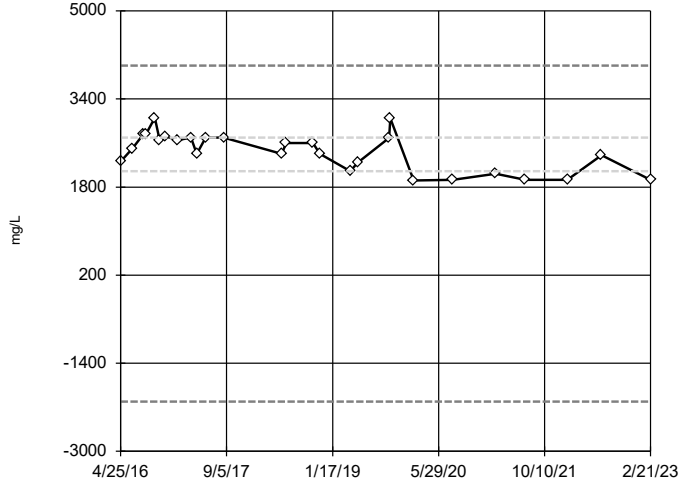
Tukey's Outlier Screening

MW-4 (bg)



n = 27

No outliers found.
Tukey's method selected by user.

Data were square transformed to achieve best W statistic (graph shown in original units).

High cutoff = 4007, low cutoff = -2097, based on IQR multiplier of 3.

Constituent: Sulfate Analysis Run 12/22/2023 1:59 PM View: Outliers
Plant Gorgas Client: Southern Company Data: Gorgas GSA

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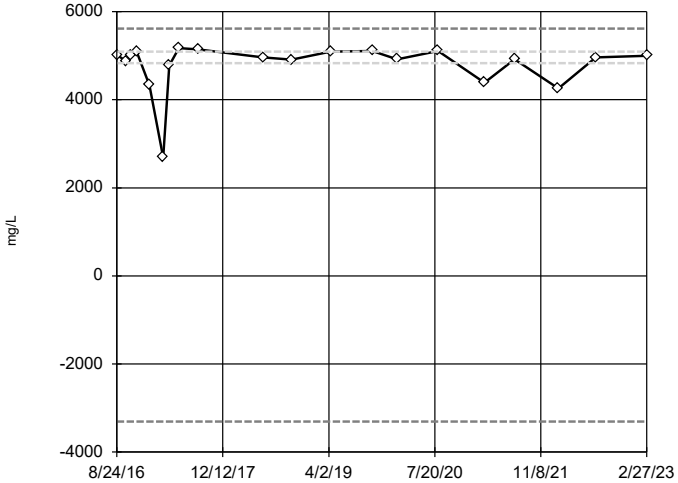
Tukey's Outlier Screening

GS-GSA-MW-3



n = 20

No outliers found.
Tukey's method selected by user.

Data were x^6 transformed to achieve best W statistic (graph shown in original units).

High cutoff = 5617, low cutoff = -3305, based on IQR multiplier of 3.

Constituent: Total dissolved solids Analysis Run 12/22/2023 1:59 PM View: Outliers
Plant Gorgas Client: Southern Company Data: Gorgas GSA

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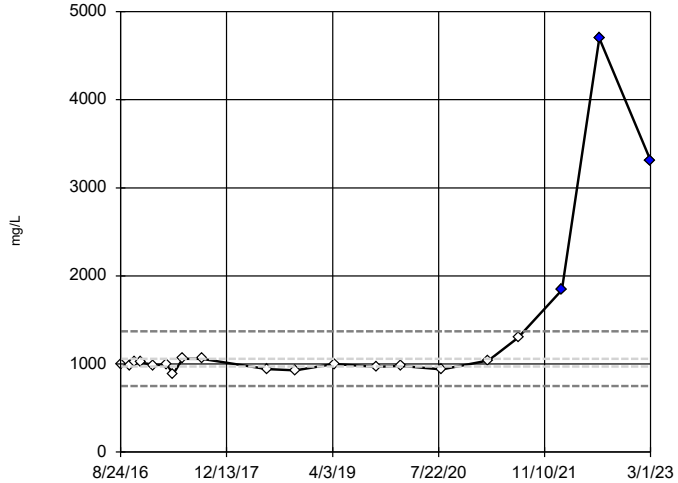
Tukey's Outlier Screening

GS-GSA-MW-4



n = 20

Outliers are drawn as solid.
Tukey's method selected by user.

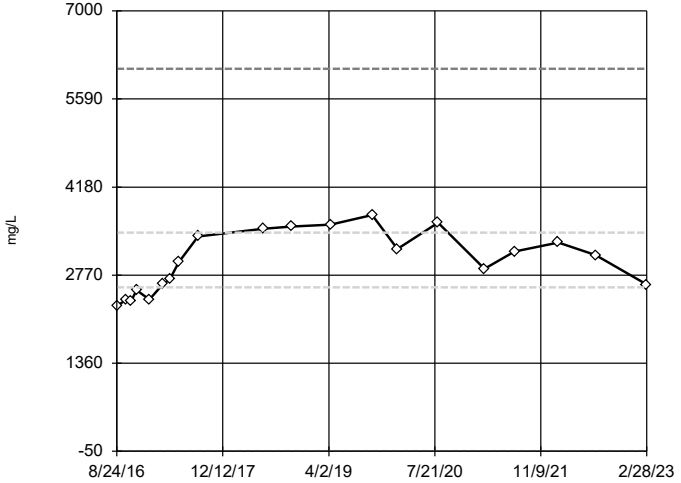
Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 1373, low cutoff = 751, based on IQR multiplier of 3.

Constituent: Total dissolved solids Analysis Run 12/22/2023 1:59 PM View: Outliers
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Tukey's Outlier Screening

GS-GSA-MW-8



n = 20

No outliers found. Tukey's method selected by user.

Ladder of Powers transformations did not improve normality; analysis run on raw data.

High cutoff = 6075, low cutoff = -50, based on IQR multiplier of 3.

Constituent: Total dissolved solids Analysis Run 12/22/2023 1:59 PM View: Outliers

Plant Gorgas Client: Southern Company Data: Gorgas GSA

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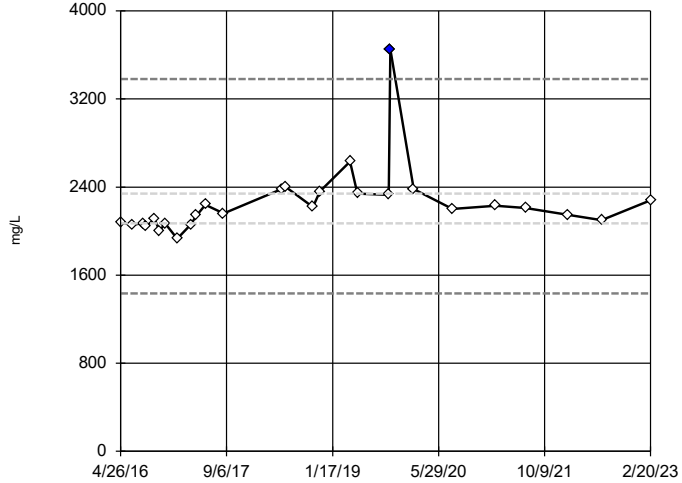
Tukey's Outlier Screening

MW-1 (bg)



n = 27

Outlier is drawn as solid. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 3380, low cutoff = 1433, based on IQR multiplier of 3.

Constituent: Total dissolved solids Analysis Run 12/22/2023 1:59 PM View: Outliers

Plant Gorgas Client: Southern Company Data: Gorgas GSA

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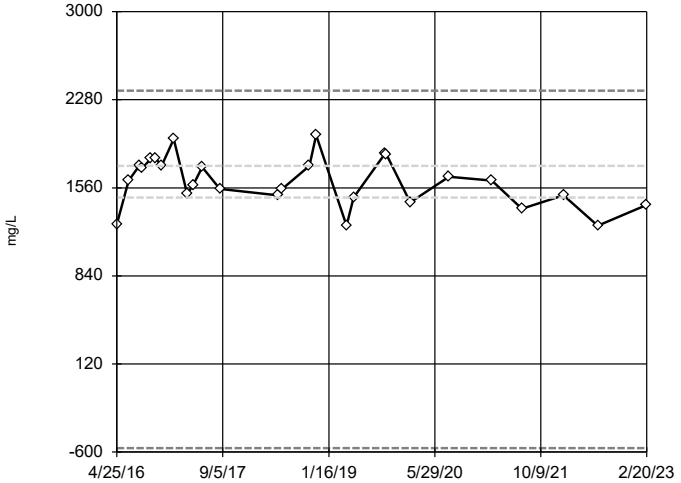
Tukey's Outlier Screening

MW-2 (bg)



n = 27

No outliers found. Tukey's method selected by user.

Data were square transformed to achieve best W statistic (graph shown in original units).

High cutoff = 2354, low cutoff = -566.7, based on IQR multiplier of 3.

Constituent: Total dissolved solids Analysis Run 12/22/2023 1:59 PM View: Outliers

Plant Gorgas Client: Southern Company Data: Gorgas GSA

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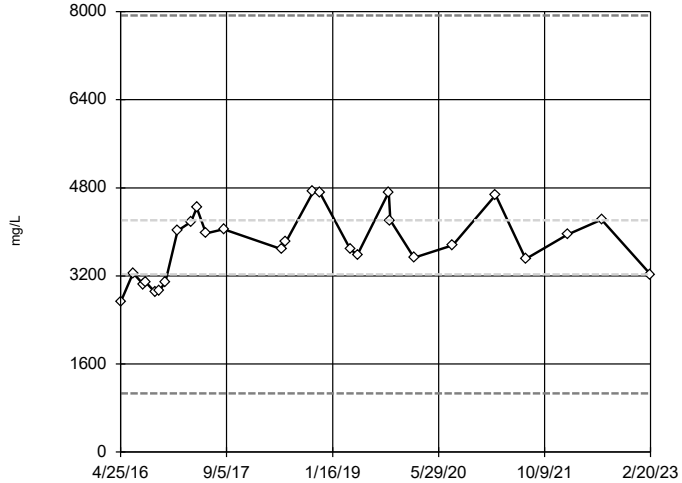
Tukey's Outlier Screening

MW-3 (bg)



n = 27

No outliers found. Tukey's method selected by user.

Data were square root transformed to achieve best W statistic (graph shown in original units).

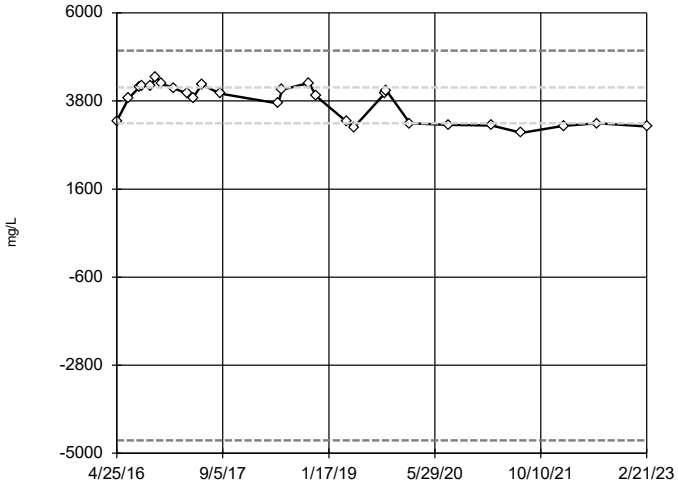
High cutoff = 7928, low cutoff = 1068, based on IQR multiplier of 3.

Constituent: Total dissolved solids Analysis Run 12/22/2023 1:59 PM View: Outliers

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Tukey's Outlier Screening

MW-4 (bg)



n = 27

No outliers found. Tukey's method selected by user.

Data were x^6 transformed to achieve best W statistic (graph shown in original units).

High cutoff = 5054, low cutoff = -4678, based on IQR multiplier of 3.

Constituent: Total dissolved solids Analysis Run 12/22/2023 2:00 PM View: Outliers

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Tukey's Outlier Test - Upgradient Wells - Significant Results

Plant Gorgas Client: Southern Company Data: Gorgas GSA Printed 12/22/2023, 1:20 PM

Constituent	Well	Outlier	Value(s)	Method	Alpha	N	Mean	Std. Dev.	Distribution	Normality Test
Barium (mg/L)	**MW-1,MW-2,MW-3,MW-4**	**Yes**	**0.0165,0.0162,0.0164,0.0166,0.0158**	**NP**	**NaN**	**112**	**0.01117**	**0.002049**	**x^5**	**ChiSquared**
Calcium (mg/L)	**MW-1,MW-2,MW-3,MW-4**	**Yes**	**431,417**	**NP**	**NaN**	**112**	**233.6**	**77.49**	**x^4**	**ChiSquared**
Chloride (mg/L)	**MW-1,MW-2,MW-3,MW-4**	**Yes**	**3.7,3.7,3.43,3.31,3.23,3.21,3.35,3.34,3.58,4.4,4.**	**NP**	**NaN**	**112**	**2.21**	**0.7834**	**x^6**	**ChiSquared**
Cobalt (mg/L)	**MW-1,MW-2,MW-3,MW-4**	**Yes**	**0.103,0.232,0.332,0.311,0.271,0.271,0.148,0.236,0**	**NP**	**NaN**	**112**	**0.09209**	**0.1657**	**x^6**	**ChiSquared**
Combined Radium 226 + 228 (pCi/L)	**MW-1,MW-2,MW-3,MW-4**	**Yes**	**1.18,1.47,1.01,1.49,1.1,0.994,1.31,1.33,1.19,1.02**	**NP**	**NaN**	**109**	**0.4955**	**0.365**	**x^6**	**ChiSquared**
Fluoride (mg/L)	**MW-1,MW-2,MW-3,MW-4**	**Yes**	**0.55,0.6,0.53,0.63**	**NP**	**NaN**	**116**	**0.235**	**0.1243**	**x^5**	**ChiSquared**
Lithium (mg/L)	**MW-1,MW-2,MW-3,MW-4**	**Yes**	**0.0964,0.0964,0.156,0.122,0.138,0.0966,0.134,0.16**	**NP**	**NaN**	**112**	**0.07661**	**0.07862**	**x^6**	**ChiSquared**

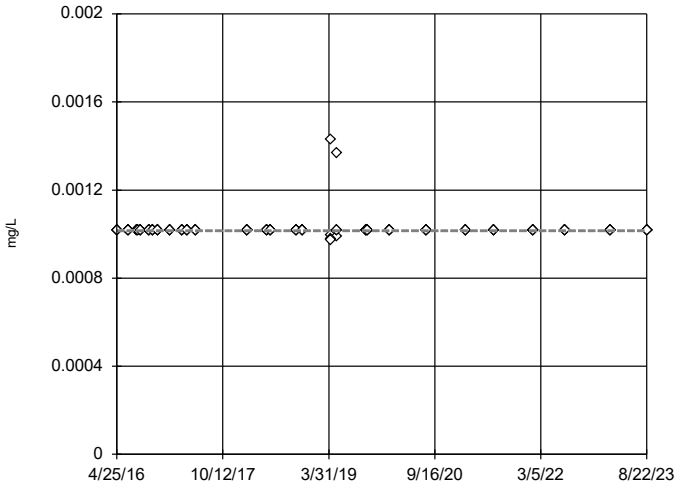
Tukey's Outlier Test - Upgradient Wells - All Results

Plant Gorgas Client: Southern Company Data: Gorgas GSA Printed 12/22/2023, 1:20 PM

Constituent	Well	Outlier	Value(s)	Method	Alpha	N	Mean	Std. Dev.	Distribution	Normality Test
Antimony (mg/L)	MW-1,MW-2,MW-3,MW-4	n/a	n/a	NP	NaN	112	0.001021	0.00005191	unknown	ChiSquared
Arsenic (mg/L)	MW-1,MW-2,MW-3,MW-4	n/a	n/a	NP	NaN	112	0.0004339	0.0008205	unknown	ChiSquared
Barium (mg/L)	**MW-1,MW-2,MW-3,MW-4**	**Yes**	**0.0165,0.0162,0.0164,0.0166,0.0158**	**NP**	**NaN**	**112**	**0.01117**	**0.002049**	**x^5**	**ChiSquared**
Beryllium (mg/L)	MW-1,MW-2,MW-3,MW-4	n/a	n/a	NP	NaN	112	0.001876	0.002833	unknown	ChiSquared
Boron (mg/L)	MW-1,MW-2,MW-3,MW-4	No	n/a	NP	NaN	112	0.05362	0.02966	x^6	ChiSquared
Cadmium (mg/L)	MW-1,MW-2,MW-3,MW-4	n/a	n/a	NP	NaN	112	0.001462	0.001966	unknown	ChiSquared
Calcium (mg/L)	**MW-1,MW-2,MW-3,MW-4**	**Yes**	**431,417**	**NP**	**NaN**	**112**	**233.6**	**77.49**	**x^4**	**ChiSquared**
Chloride (mg/L)	**MW-1,MW-2,MW-3,MW-4**	**Yes**	**3.7,3.7,3.43,3.31,3.23,3.21,3.35,3.34,3.58,4.4,4.**	**NP**	**NaN**	**112**	**2.21**	**0.7834**	**x^6**	**ChiSquared**
Chromium (mg/L)	MW-1,MW-2,MW-3,MW-4	n/a	n/a	NP	NaN	112	0.001144	0.001341	unknown	ChiSquared
Cobalt (mg/L)	**MW-1,MW-2,MW-3,MW-4**	**Yes**	**0.103,0.232,0.332,0.311,0.271,0.271,0.148,0.236,0**	**NP**	**NaN**	**112**	**0.09209**	**0.1657**	**x^6**	**ChiSquared**
Combined Radium 226 + 228 (pCi/L)	**MW-1,MW-2,MW-3,MW-4**	**Yes**	**1.18,1.47,1.01,1.49,1.1,0.994,1.31,1.33,1.19,1.02**	**NP**	**NaN**	**109**	**0.4955**	**0.365**	**x^6**	**ChiSquared**
Fluoride (mg/L)	**MW-1,MW-2,MW-3,MW-4**	**Yes**	**0.55,0.6,0.53,0.63**	**NP**	**NaN**	**116**	**0.235**	**0.1243**	**x^5**	**ChiSquared**
Lead (mg/L)	MW-1,MW-2,MW-3,MW-4	n/a	n/a	NP	NaN	112	0.0002894	0.0006645	unknown	ChiSquared
Lithium (mg/L)	**MW-1,MW-2,MW-3,MW-4**	**Yes**	**0.0964,0.0964,0.156,0.122,0.138,0.0966,0.134,0.16**	**NP**	**NaN**	**112**	**0.07661**	**0.07862**	**x^6**	**ChiSquared**
Mercury (mg/L)	MW-1,MW-2,MW-3,MW-4	n/a	n/a	NP	NaN	112	0.0005	0	unknown	ChiSquared
Molybdenum (mg/L)	MW-1,MW-2,MW-3,MW-4	n/a	n/a	NP	NaN	112	0.009613	0.002269	unknown	ChiSquared
Selenium (mg/L)	MW-1,MW-2,MW-3,MW-4	n/a	n/a	NP	NaN	112	0.003347	0.004574	unknown	ChiSquared
Thallium (mg/L)	MW-1,MW-2,MW-3,MW-4	n/a	n/a	NP	NaN	112	0.0002033	0.000002247	unknown	ChiSquared

Tukey's Outlier Screening, Pooled Background

MW-1,MW-2,MW-3,MW-4



n = 112

No outliers found.
Tukey's method selected by user.

Data were x^5 transformed to achieve best W statistic (graph shown in original units).

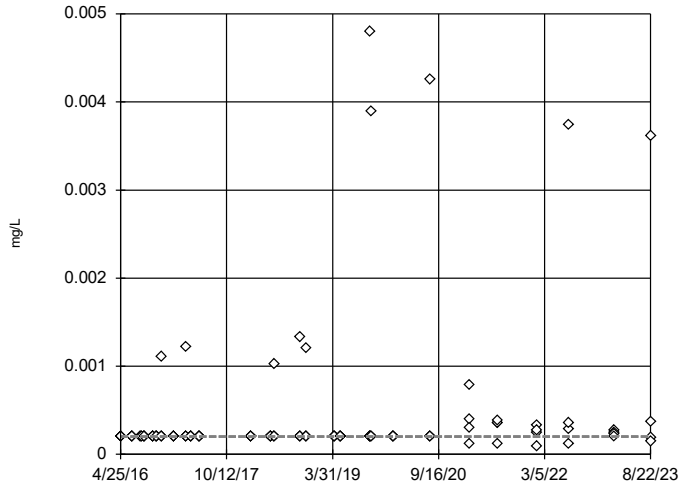
The results were invalidated, because the lower and upper quartiles are equal.

Constituent: Antimony Analysis Run 12/22/2023 1:15 PM View: Outliers - Upgradient
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.10.0.15 Software licensed to . UG

Tukey's Outlier Screening, Pooled Background

MW-1,MW-2,MW-3,MW-4



n = 112

No outliers found.
Tukey's method selected by user.

Data were cube transformed to achieve best W statistic (graph shown in original units).

The results were invalidated, because the lower and upper quartiles are equal.

Constituent: Arsenic Analysis Run 12/22/2023 1:15 PM View: Outliers - Upgradient
Plant Gorgas Client: Southern Company Data: Gorgas GSA

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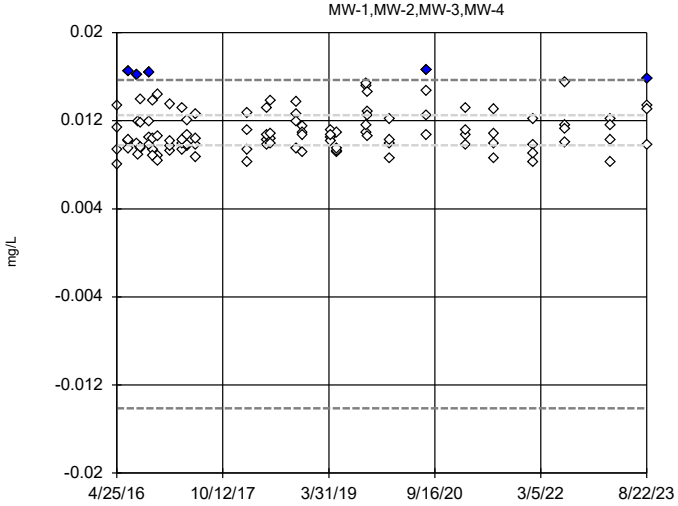
Tukey's Outlier Screening, Pooled Background

MW-1,MW-2,MW-3,MW-4



n = 112

Outliers are drawn as solid.
Tukey's method selected by user.

Data were x^5 transformed to achieve best W statistic (graph shown in original units).

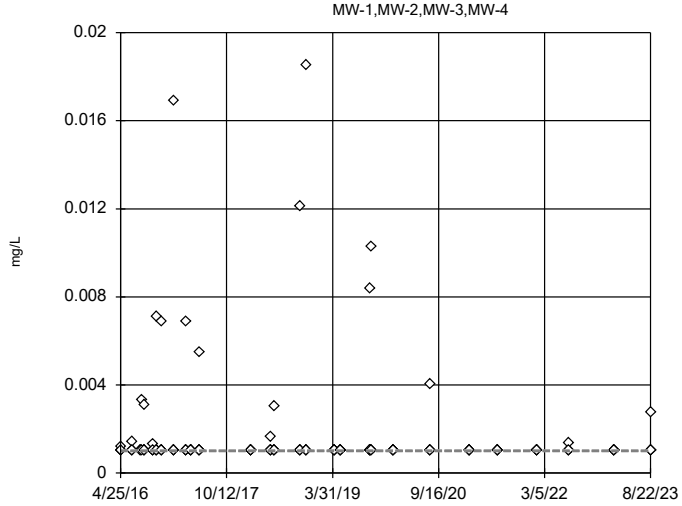
High cutoff = 0.0157, low cutoff = -0.01412, based on IQR multiplier of 3.

Constituent: Barium Analysis Run 12/22/2023 1:15 PM View: Outliers - Upgradient
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.10.0.15 Software licensed to . UG

Tukey's Outlier Screening, Pooled Background

MW-1,MW-2,MW-3,MW-4



n = 112

No outliers found.
Tukey's method selected by user.

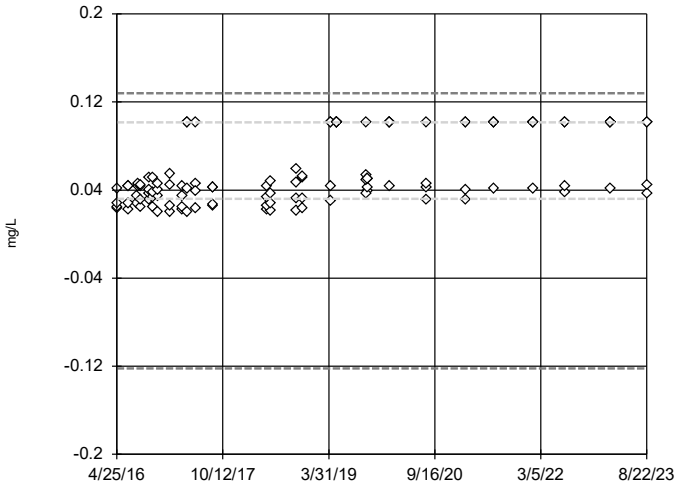
Data were x^6 transformed to achieve best W statistic (graph shown in original units).

The results were invalidated, because the lower and upper quartiles are equal.

Constituent: Beryllium Analysis Run 12/22/2023 1:15 PM View: Outliers - Upgradient
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Tukey's Outlier Screening, Pooled Background

MW-1,MW-2,MW-3,MW-4



n = 112

No outliers found.
Tukey's method selected by user.

Data were x^6 transformed to achieve best W statistic (graph shown in original units).

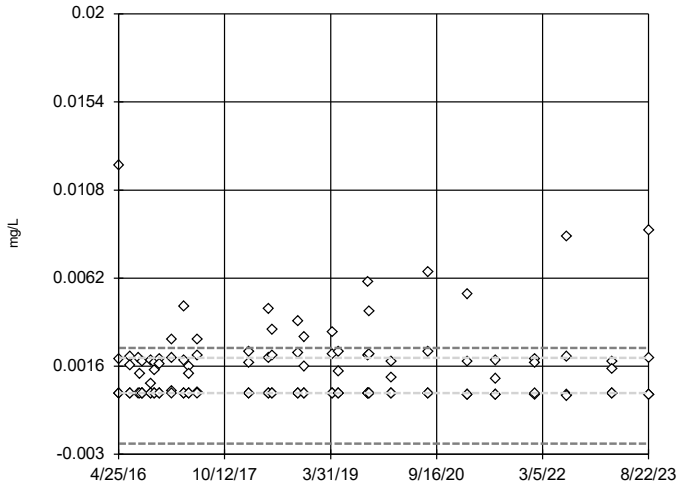
High cutoff = 0.1279, low cutoff = -0.1219, based on IQR multiplier of 3.

Constituent: Boron Analysis Run 12/22/2023 1:15 PM View: Outliers - Upgradient
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.10.0.15 Software licensed to . UG

Tukey's Outlier Screening, Pooled Background

MW-1,MW-2,MW-3,MW-4



n = 112

No outliers found.
Tukey's method selected by user.

Data were x^6 transformed to achieve best W statistic (graph shown in original units).

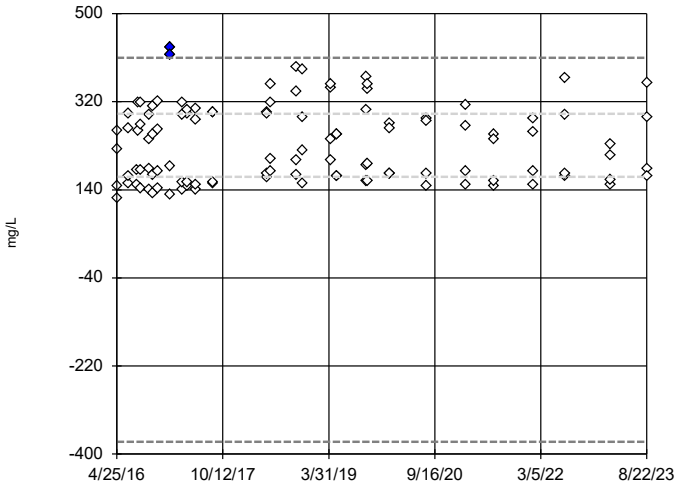
The results were invalidated, because both the lower and upper quartiles represent reporting limits.

Constituent: Cadmium Analysis Run 12/22/2023 1:15 PM View: Outliers - Upgradient
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.10.0.15 Software licensed to . UG

Tukey's Outlier Screening, Pooled Background

MW-1,MW-2,MW-3,MW-4



n = 112

Outliers are drawn as solid.
Tukey's method selected by user.

Data were x^4 transformed to achieve best W statistic (graph shown in original units).

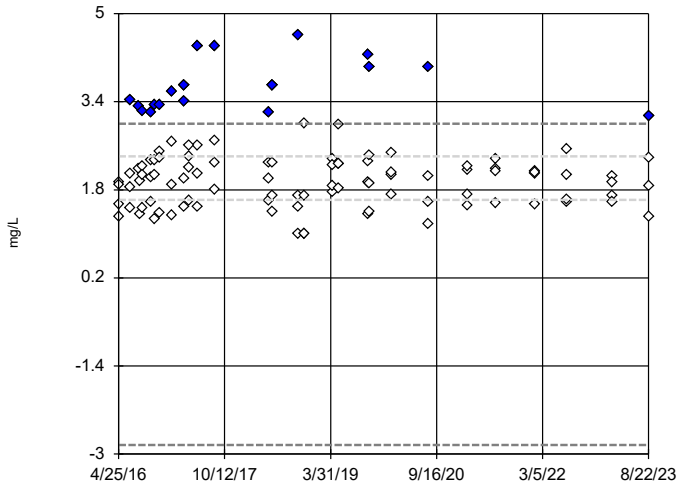
High cutoff = 409.8, low cutoff = -375.1, based on IQR multiplier of 3.

Constituent: Calcium Analysis Run 12/22/2023 1:15 PM View: Outliers - Upgradient
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.10.0.15 Software licensed to . UG

Tukey's Outlier Screening, Pooled Background

MW-1,MW-2,MW-3,MW-4



n = 112

Outliers are drawn as solid.
Tukey's method selected by user.

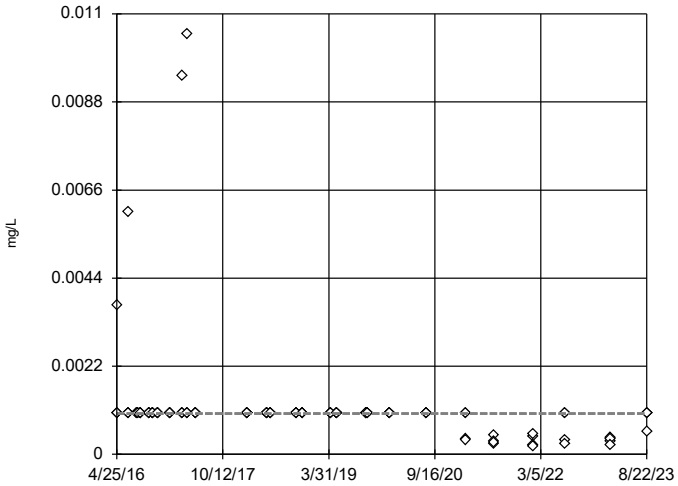
Data were x^6 transformed to achieve best W statistic (graph shown in original units).

High cutoff = 3.001, low cutoff = -2.833, based on IQR multiplier of 3.

Constituent: Chloride Analysis Run 12/22/2023 1:15 PM View: Outliers - Upgradient
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Tukey's Outlier Screening, Pooled Background

MW-1,MW-2,MW-3,MW-4



n = 112

No outliers found.
Tukey's method selected by user.

Data were x^4 transformed to achieve best W statistic (graph shown in original units).

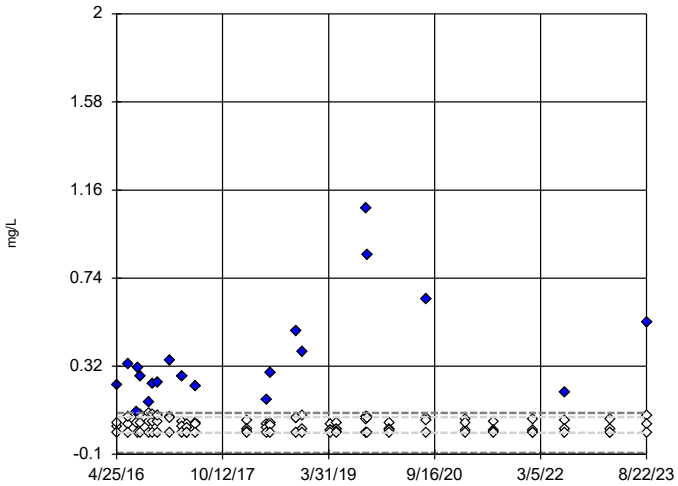
The results were invalidated, because the lower and upper quartiles are equal.

Constituent: Chromium Analysis Run 12/22/2023 1:15 PM View: Outliers - Upgradient
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.10.0.15 Software licensed to . UG

Tukey's Outlier Screening, Pooled Background

MW-1,MW-2,MW-3,MW-4



n = 112

Outliers are drawn as solid.
Tukey's method selected by user.

Data were x^6 transformed to achieve best W statistic (graph shown in original units).

High cutoff = 0.0974, low cutoff = -0.09284, based on IQR multiplier of 3.

Constituent: Cobalt Analysis Run 12/22/2023 1:15 PM View: Outliers - Upgradient
Plant Gorgas Client: Southern Company Data: Gorgas GSA

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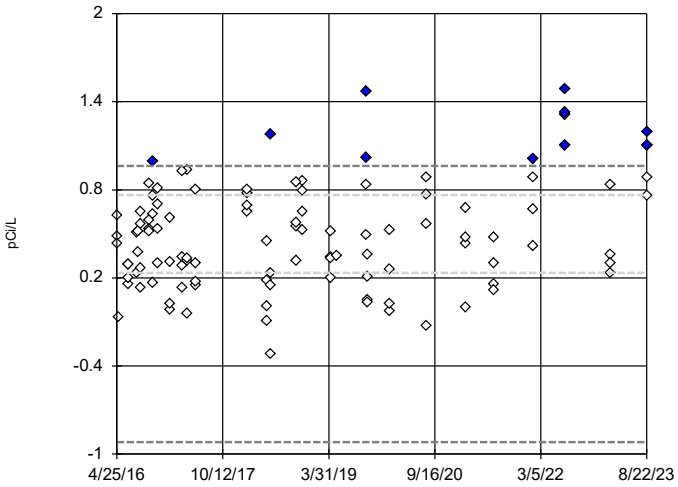
Tukey's Outlier Screening, Pooled Background

MW-1,MW-2,MW-3,MW-4



n = 109

Outliers are drawn as solid.
Tukey's method selected by user.

Data were x^6 transformed to achieve best W statistic (graph shown in original units).

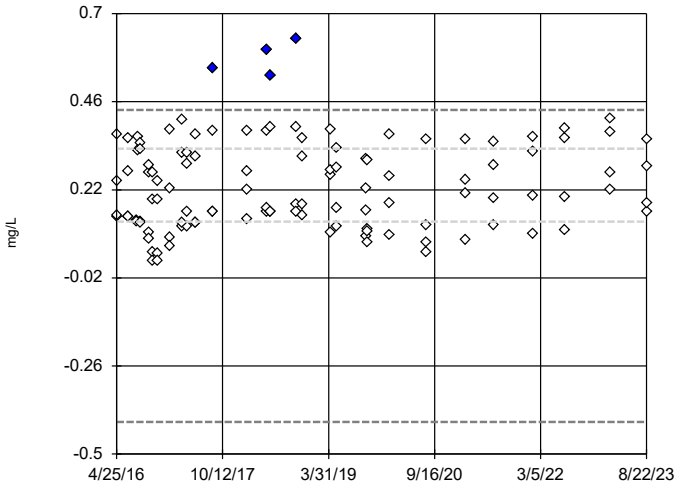
High cutoff = 0.9625, low cutoff = -0.9174, based on IQR multiplier of 3.

Constituent: Combined Radium 226 + 228 Analysis Run 12/22/2023 1:15 PM View: Outliers - Upgradient
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.10.0.15 Software licensed to . UG

Tukey's Outlier Screening, Pooled Background

MW-1,MW-2,MW-3,MW-4



n = 116

Outliers are drawn as solid.
Tukey's method selected by user.

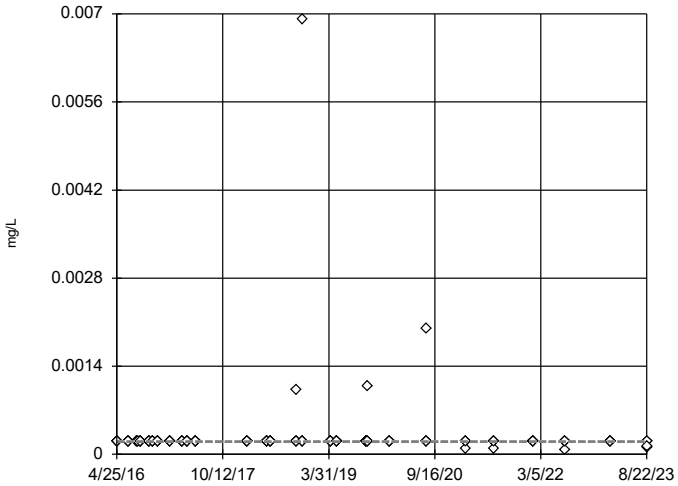
Data were x^5 transformed to achieve best W statistic (graph shown in original units).

High cutoff = 0.4375, low cutoff = -0.4125, based on IQR multiplier of 3.

Constituent: Fluoride Analysis Run 12/22/2023 1:15 PM View: Outliers - Upgradient
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Tukey's Outlier Screening, Pooled Background

MW-1,MW-2,MW-3,MW-4



n = 112

No outliers found.
Tukey's method selected by user.

Data were x^4 transformed to achieve best W statistic (graph shown in original units).

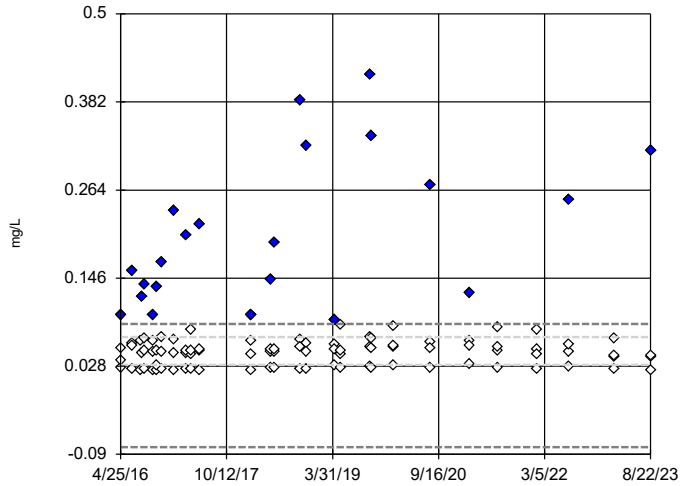
The results were invalidated, because the lower and upper quartiles are equal.

Constituent: Lead Analysis Run 12/22/2023 1:15 PM View: Outliers - Upgradient
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.10.0.15 Software licensed to . UG

Tukey's Outlier Screening, Pooled Background

MW-1,MW-2,MW-3,MW-4



n = 112

Outliers are drawn as solid.
Tukey's method selected by user.

Data were x^6 transformed to achieve best W statistic (graph shown in original units).

High cutoff = 0.0846, low cutoff = -0.08058, based on IQR multiplier of 3.

Constituent: Lithium Analysis Run 12/22/2023 1:15 PM View: Outliers - Upgradient
Plant Gorgas Client: Southern Company Data: Gorgas GSA

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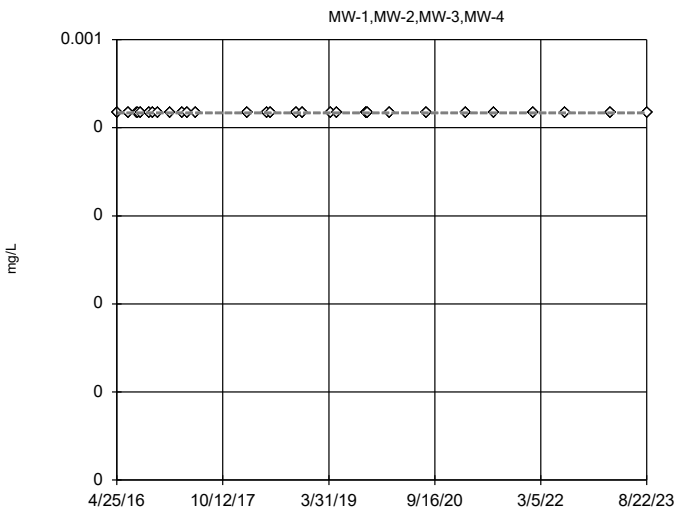
Tukey's Outlier Screening, Pooled Background

MW-1,MW-2,MW-3,MW-4



n = 112

No outliers found.
Tukey's method selected by user.

Data were cube root transformed to achieve best W statistic (graph shown in original units).

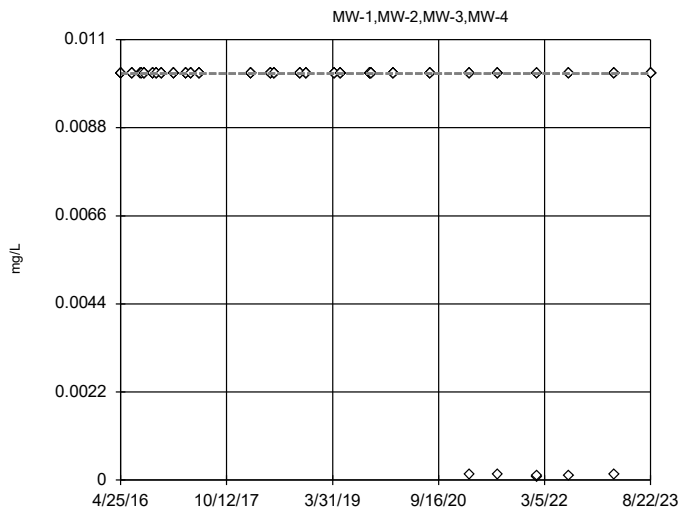
The results were invalidated, because the lower and upper quartiles are equal.

Constituent: Mercury Analysis Run 12/22/2023 1:15 PM View: Outliers - Upgradient
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.10.0.15 Software licensed to . UG

Tukey's Outlier Screening, Pooled Background

MW-1,MW-2,MW-3,MW-4



n = 112

No outliers found.
Tukey's method selected by user.

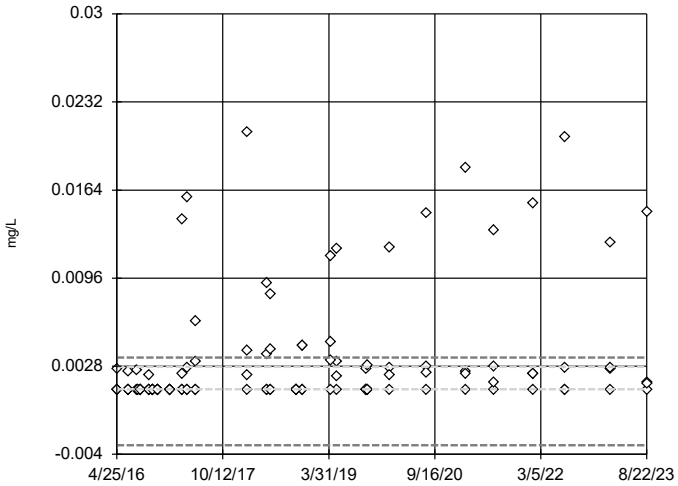
Ladder of Powers transformations did not improve normality; analysis run on raw data.

The results were invalidated, because the lower and upper quartiles are equal.

Constituent: Molybdenum Analysis Run 12/22/2023 1:15 PM View: Outliers - Upgradient
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Tukey's Outlier Screening, Pooled Background

MW-1,MW-2,MW-3,MW-4



n = 112

No outliers found. Tukey's method selected by user.

Data were x^6 transformed to achieve best W statistic (graph shown in original units).

The results were invalidated, because both the lower and upper quartiles represent reporting limits.

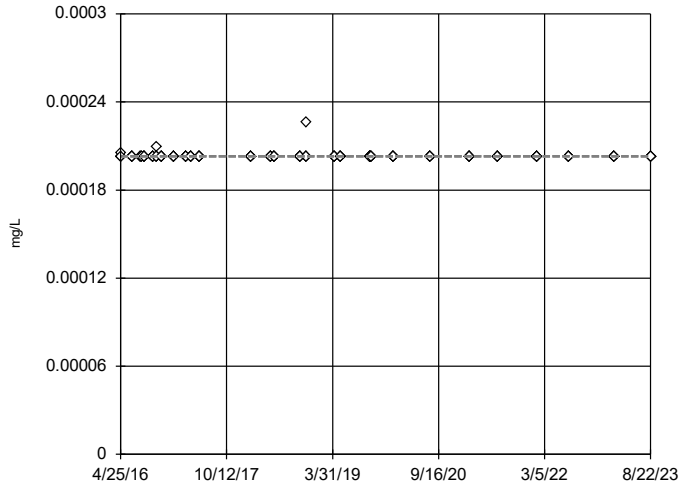
Constituent: Selenium Analysis Run 12/22/2023 1:15 PM View: Outliers - Upgradient

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.10.0.15 Software licensed to . UG

Tukey's Outlier Screening, Pooled Background

MW-1,MW-2,MW-3,MW-4



n = 112

No outliers found. Tukey's method selected by user.

Ladder of Powers transformations did not improve normality; analysis run on raw data.

The results were invalidated, because the lower and upper quartiles are equal.

Constituent: Thallium Analysis Run 12/22/2023 1:15 PM View: Outliers - Upgradient

Plant Gorgas Client: Southern Company Data: Gorgas GSA

FIGURE D.

Welch's t-test/Mann-Whitney - Significant Results

Plant Gorgas Client: Southern Company Data: Gorgas GSA Printed 12/22/2023, 2:10 PM

Constituent	Well	Calc.	0.01	Alpha	Sig.	Method
pH (pH)	**GS-GSA-MW-4**	**-2.794**	**Yes**	**0.01**	**Yes**	**Mann-W**
pH (pH)	**MW-2 (bg)**	**2.972**	**Yes**	**0.01**	**Yes**	**Mann-W**
Sulfate (mg/L)	**GS-GSA-MW-4**	**2.988**	**Yes**	**0.01**	**Yes**	**Mann-W**
Sulfate (mg/L)	**MW-2 (bg)**	**-2.766**	**Yes**	**0.01**	**Yes**	**Mann-W**
Total dissolved solids (mg/L)	**GS-GSA-MW-4**	**2.979**	**Yes**	**0.01**	**Yes**	**Mann-W**
Total dissolved solids (mg/L)	**MW-4 (bg)**	**-2.799**	**Yes**	**0.01**	**Yes**	**Mann-W**

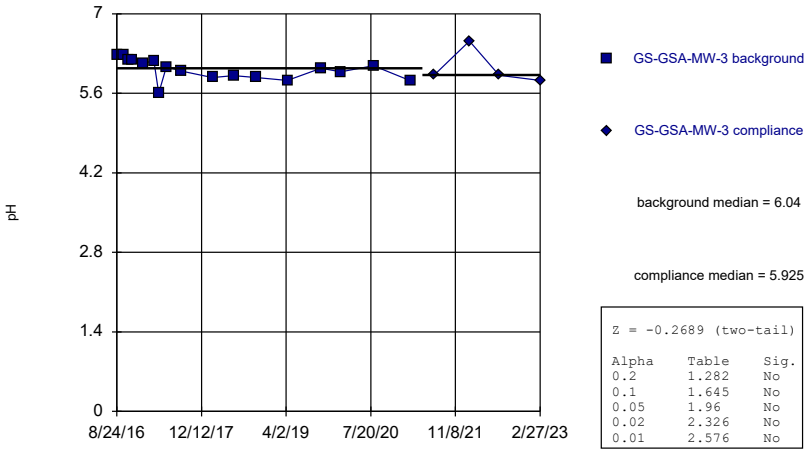
Welch's t-test/Mann-Whitney - All Results

Plant Gorgas Client: Southern Company Data: Gorgas GSA Printed 12/22/2023, 2:10 PM

Constituent	Well	Calc.	0.01	Alpha	Sig.	Method
pH (pH)	GS-GSA-MW-3	-0.2689	No	0.01	No	Mann-W
pH (pH)	**GS-GSA-MW-4**	**-2.794**	**Yes**	**0.01**	**Yes**	**Mann-W**
pH (pH)	GS-GSA-MW-8	0.4487	No	0.01	No	Mann-W
pH (pH)	MW-1 (bg)	-2.058	No	0.01	No	Mann-W
pH (pH)	**MW-2 (bg)**	**2.972**	**Yes**	**0.01**	**Yes**	**Mann-W**
pH (pH)	MW-3 (bg)	2.219	No	0.01	No	Mann-W
pH (pH)	MW-4 (bg)	0.3294	No	0.01	No	Mann-W
Sulfate (mg/L)	GS-GSA-MW-3	-0.4737	No	0.01	No	Mann-W
Sulfate (mg/L)	**GS-GSA-MW-4**	**2.988**	**Yes**	**0.01**	**Yes**	**Mann-W**
Sulfate (mg/L)	GS-GSA-MW-8	0.898	No	0.01	No	Mann-W
Sulfate (mg/L)	MW-1 (bg)	1.638	No	0.01	No	Mann-W
Sulfate (mg/L)	**MW-2 (bg)**	**-2.766**	**Yes**	**0.01**	**Yes**	**Mann-W**
Sulfate (mg/L)	MW-3 (bg)	0.239	No	0.01	No	Mann-W
Sulfate (mg/L)	MW-4 (bg)	-2.465	No	0.01	No	Mann-W
Total dissolved solids (mg/L)	GS-GSA-MW-3	-0.8994	No	0.01	No	Mann-W
Total dissolved solids (mg/L)	**GS-GSA-MW-4**	**2.979**	**Yes**	**0.01**	**Yes**	**Mann-W**
Total dissolved solids (mg/L)	GS-GSA-MW-8	0.04725	No	0.01	No	Mann-W
Total dissolved solids (mg/L)	MW-1 (bg)	0.03555	No	0.01	No	Mann-W
Total dissolved solids (mg/L)	MW-2 (bg)	-2.563	No	0.01	No	Mann-W
Total dissolved solids (mg/L)	MW-3 (bg)	-0.1707	No	0.01	No	Mann-W
Total dissolved solids (mg/L)	**MW-4 (bg)**	**-2.799**	**Yes**	**0.01**	**Yes**	**Mann-W**

Mann-Whitney (Wilcoxon Rank Sum)

GS-GSA-MW-3



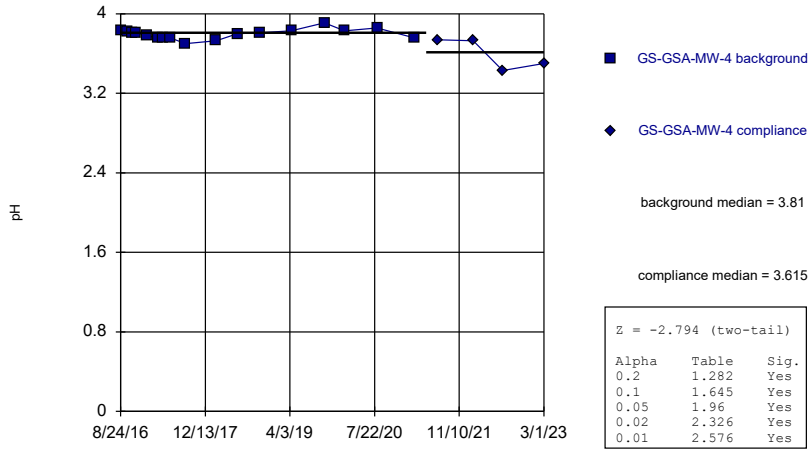
Z = -0.2689 (two-tail)

Alpha	Table	Sig.
0.2	1.282	No
0.1	1.645	No
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

Constituent: pH Analysis Run 12/22/2023 2:09 PM View: Mann-Whitney
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Mann-Whitney (Wilcoxon Rank Sum)

GS-GSA-MW-4



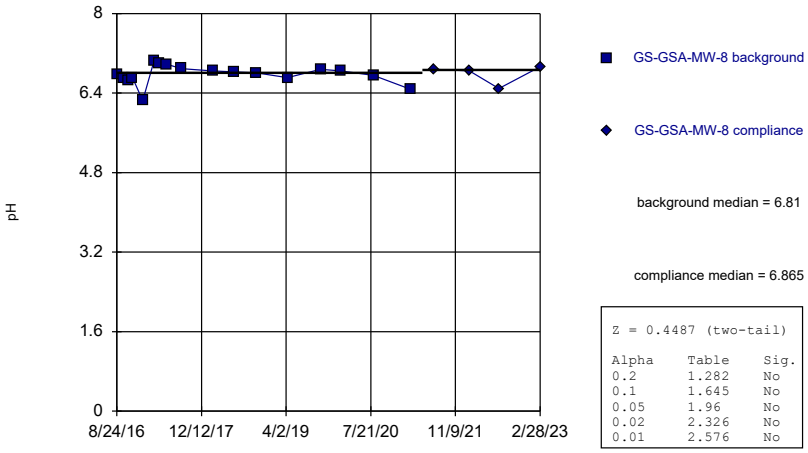
Z = -2.794 (two-tail)

Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	Yes
0.05	1.96	Yes
0.02	2.326	Yes
0.01	2.576	Yes

Constituent: pH Analysis Run 12/22/2023 2:09 PM View: Mann-Whitney
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Mann-Whitney (Wilcoxon Rank Sum)

GS-GSA-MW-8



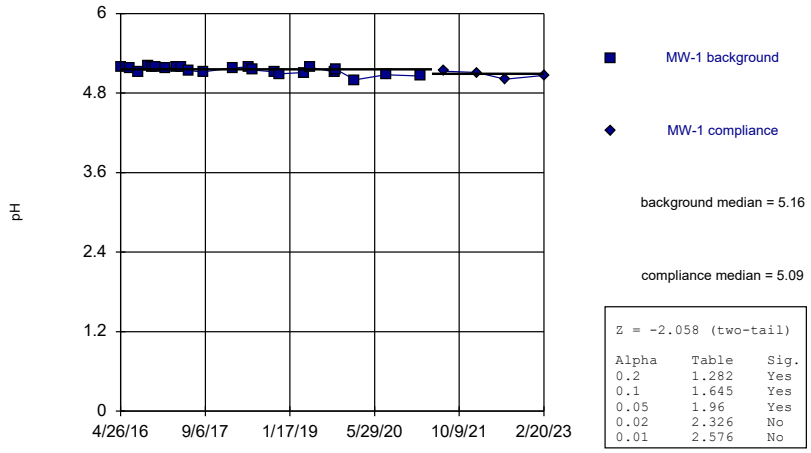
Z = 0.4487 (two-tail)

Alpha	Table	Sig.
0.2	1.282	No
0.1	1.645	No
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

Constituent: pH Analysis Run 12/22/2023 2:09 PM View: Mann-Whitney
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Mann-Whitney (Wilcoxon Rank Sum)

MW-1 (bg)



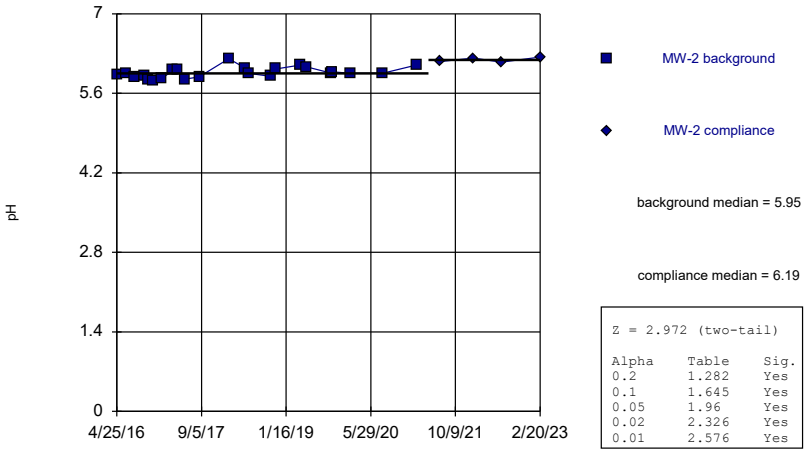
Z = -2.058 (two-tail)

Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	Yes
0.05	1.96	Yes
0.02	2.326	No
0.01	2.576	No

Constituent: pH Analysis Run 12/22/2023 2:09 PM View: Mann-Whitney
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Mann-Whitney (Wilcoxon Rank Sum)

MW-2 (bg)



background median = 5.95

compliance median = 6.19

Z = 2.972 (two-tail)

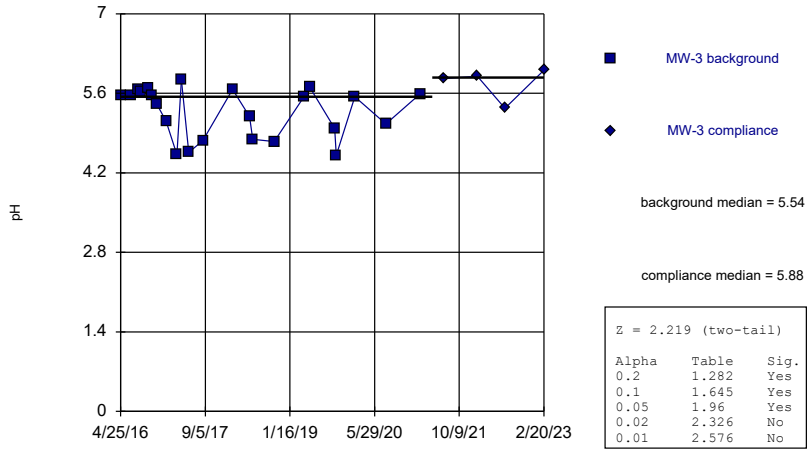
Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	Yes
0.05	1.96	Yes
0.02	2.326	Yes
0.01	2.576	Yes

Constituent: pH Analysis Run 12/22/2023 2:09 PM View: Mann-Whitney

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Mann-Whitney (Wilcoxon Rank Sum)

MW-3 (bg)



background median = 5.54

compliance median = 5.88

Z = 2.219 (two-tail)

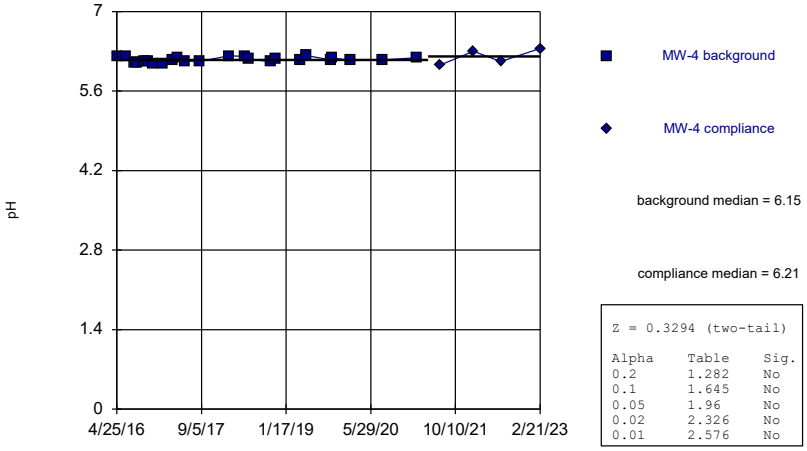
Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	Yes
0.05	1.96	Yes
0.02	2.326	No
0.01	2.576	No

Constituent: pH Analysis Run 12/22/2023 2:09 PM View: Mann-Whitney

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Mann-Whitney (Wilcoxon Rank Sum)

MW-4 (bg)



background median = 6.15

compliance median = 6.21

Z = 0.3294 (two-tail)

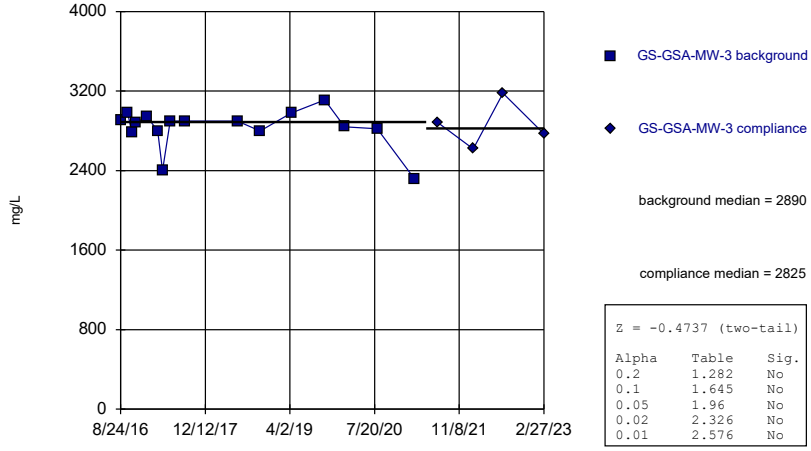
Alpha	Table	Sig.
0.2	1.282	No
0.1	1.645	No
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

Constituent: pH Analysis Run 12/22/2023 2:09 PM View: Mann-Whitney

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Mann-Whitney (Wilcoxon Rank Sum)

GS-GSA-MW-3



background median = 2890

compliance median = 2825

Z = -0.4737 (two-tail)

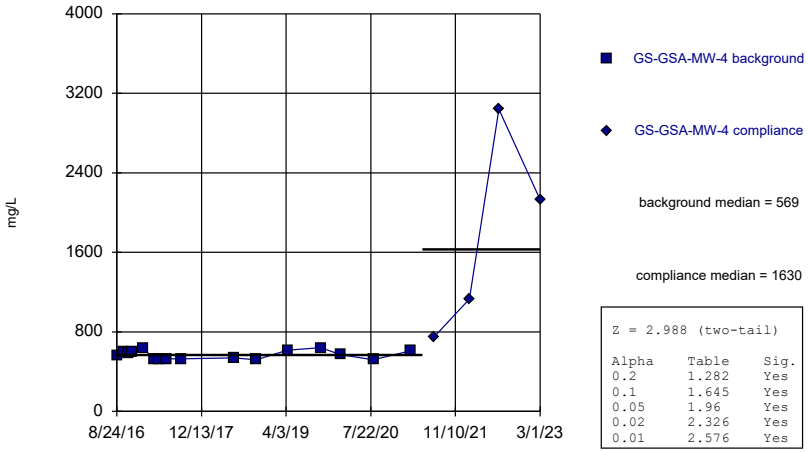
Alpha	Table	Sig.
0.2	1.282	No
0.1	1.645	No
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

Constituent: Sulfate Analysis Run 12/22/2023 2:09 PM View: Mann-Whitney

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Mann-Whitney (Wilcoxon Rank Sum)

GS-GSA-MW-4



Z = 2.988 (two-tail)

Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	Yes
0.05	1.96	Yes
0.02	2.326	Yes
0.01	2.576	Yes

Constituent: Sulfate Analysis Run 12/22/2023 2:09 PM View: Mann-Whitney
Plant Gorgas Client: Southern Company Data: Gorgas GSA

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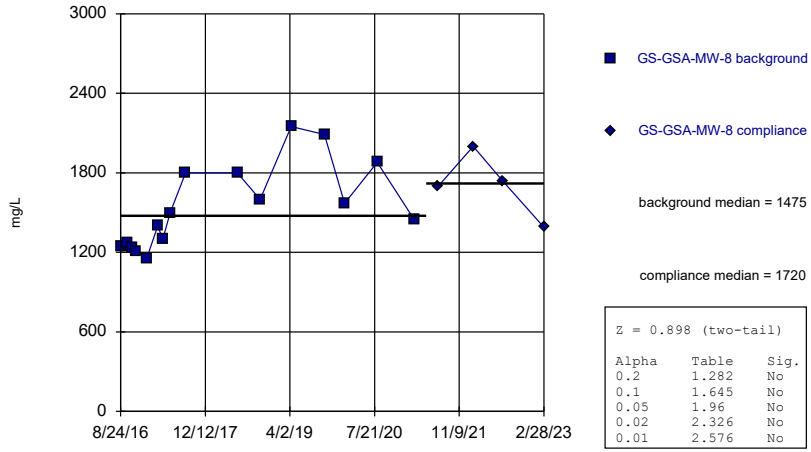
Mann-Whitney (Wilcoxon Rank Sum)

GS-GSA-MW-8



Z = 0.898 (two-tail)

Alpha	Table	Sig.
0.2	1.282	No
0.1	1.645	No
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

Constituent: Sulfate Analysis Run 12/22/2023 2:09 PM View: Mann-Whitney
Plant Gorgas Client: Southern Company Data: Gorgas GSA

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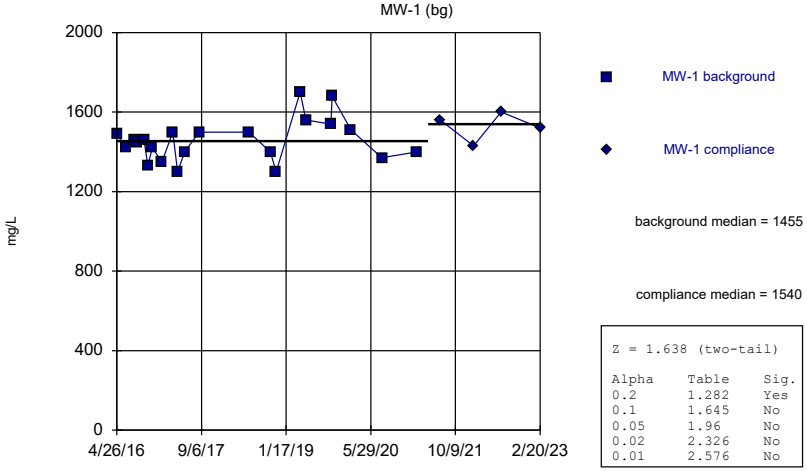
Mann-Whitney (Wilcoxon Rank Sum)

MW-1 (bg)



Z = 1.638 (two-tail)

Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	No
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

Constituent: Sulfate Analysis Run 12/22/2023 2:09 PM View: Mann-Whitney
Plant Gorgas Client: Southern Company Data: Gorgas GSA

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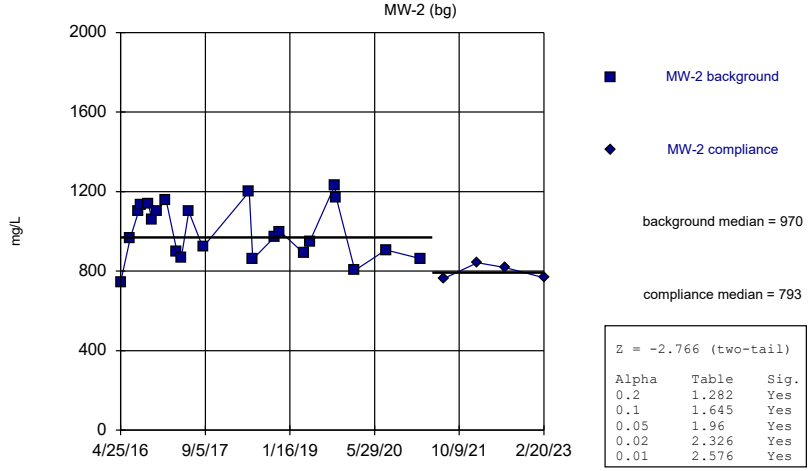
Mann-Whitney (Wilcoxon Rank Sum)

MW-2 (bg)



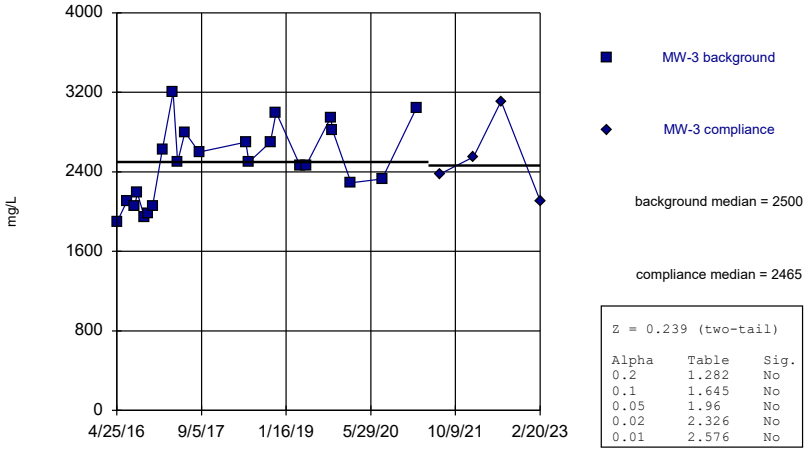
Z = -2.766 (two-tail)

Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	Yes
0.05	1.96	Yes
0.02	2.326	Yes
0.01	2.576	Yes

Constituent: Sulfate Analysis Run 12/22/2023 2:09 PM View: Mann-Whitney
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Mann-Whitney (Wilcoxon Rank Sum)

MW-3 (bg)



background median = 2500

compliance median = 2465

Z = 0.239 (two-tail)

Alpha	Table	Sig.
0.2	1.282	No
0.1	1.645	No
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

Constituent: Sulfate Analysis Run 12/22/2023 2:09 PM View: Mann-Whitney

Plant Gorgas Client: Southern Company Data: Gorgas GSA

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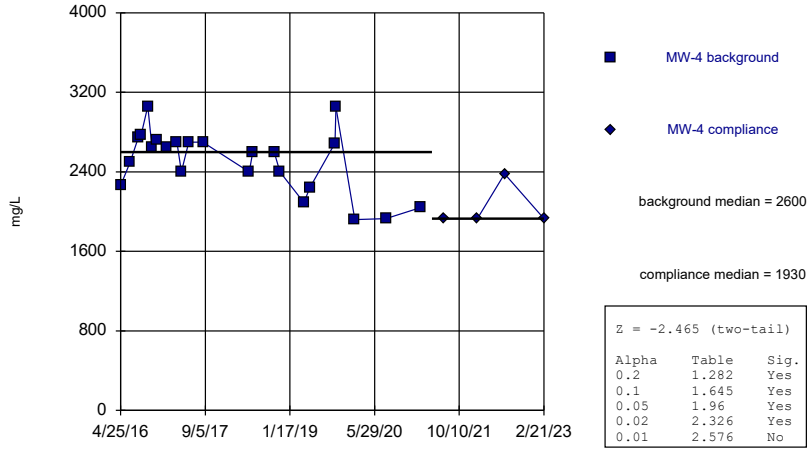
Mann-Whitney (Wilcoxon Rank Sum)

MW-4 (bg)



background median = 2600

compliance median = 1930

Z = -2.465 (two-tail)

Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	Yes
0.05	1.96	Yes
0.02	2.326	Yes
0.01	2.576	No

Constituent: Sulfate Analysis Run 12/22/2023 2:09 PM View: Mann-Whitney

Plant Gorgas Client: Southern Company Data: Gorgas GSA

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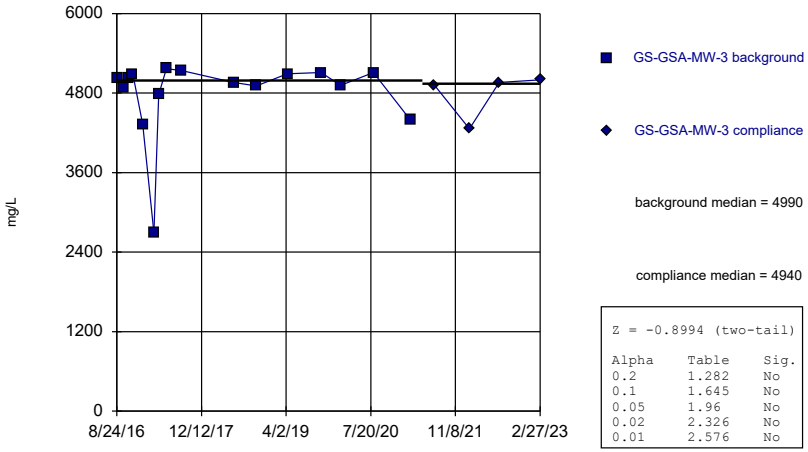
Mann-Whitney (Wilcoxon Rank Sum)

GS-GSA-MW-3



background median = 4990

compliance median = 4940

Z = -0.8994 (two-tail)

Alpha	Table	Sig.
0.2	1.282	No
0.1	1.645	No
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

Constituent: Total dissolved solids Analysis Run 12/22/2023 2:09 PM View: Mann-Whitney

Plant Gorgas Client: Southern Company Data: Gorgas GSA

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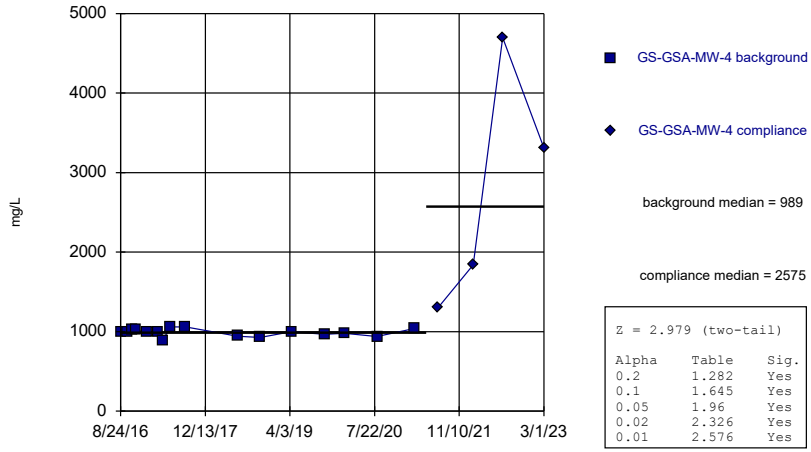
Mann-Whitney (Wilcoxon Rank Sum)

GS-GSA-MW-4



background median = 989

compliance median = 2575

Z = 2.979 (two-tail)

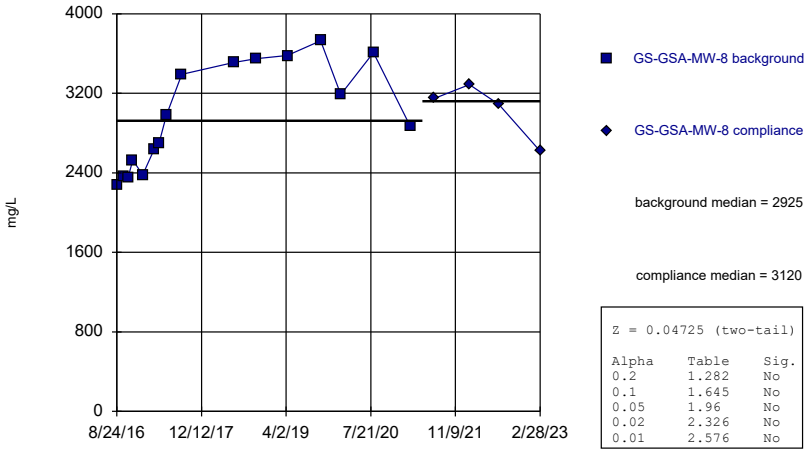
Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	Yes
0.05	1.96	Yes
0.02	2.326	Yes
0.01	2.576	Yes

Constituent: Total dissolved solids Analysis Run 12/22/2023 2:09 PM View: Mann-Whitney

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Mann-Whitney (Wilcoxon Rank Sum)

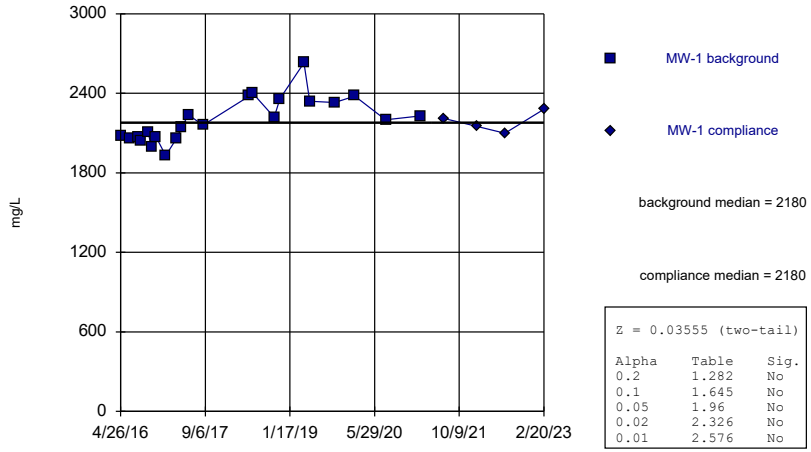
GS-GSA-MW-8



Constituent: Total dissolved solids Analysis Run 12/22/2023 2:09 PM View: Mann-Whitney
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Mann-Whitney (Wilcoxon Rank Sum)

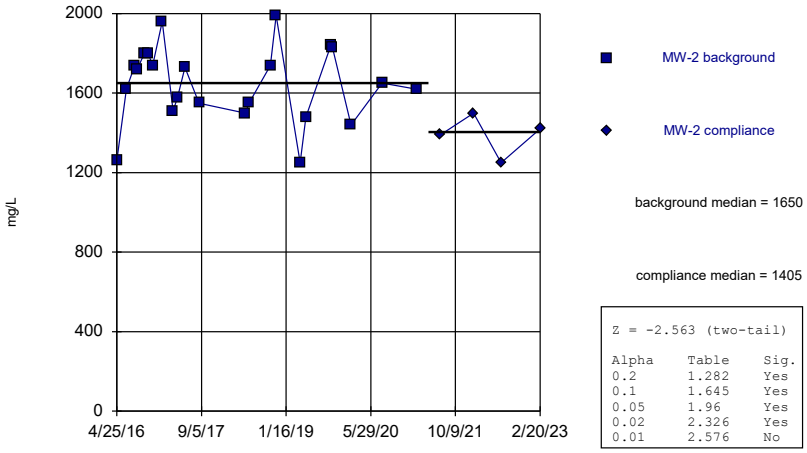
MW-1 (bg)



Constituent: Total dissolved solids Analysis Run 12/22/2023 2:09 PM View: Mann-Whitney
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Mann-Whitney (Wilcoxon Rank Sum)

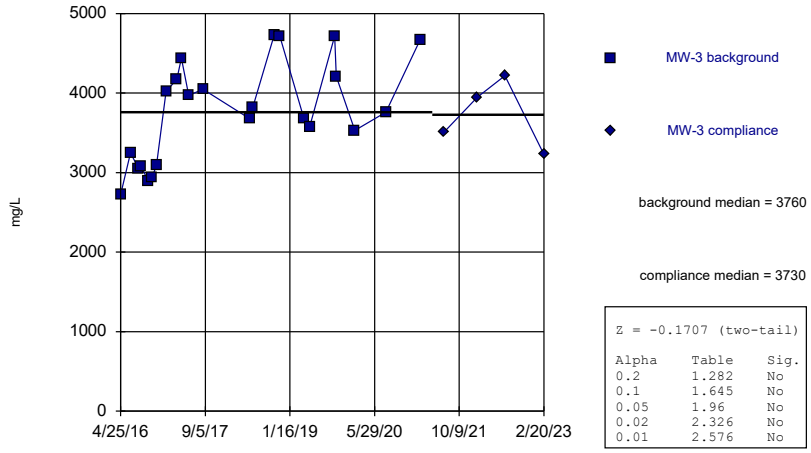
MW-2 (bg)



Constituent: Total dissolved solids Analysis Run 12/22/2023 2:09 PM View: Mann-Whitney
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Mann-Whitney (Wilcoxon Rank Sum)

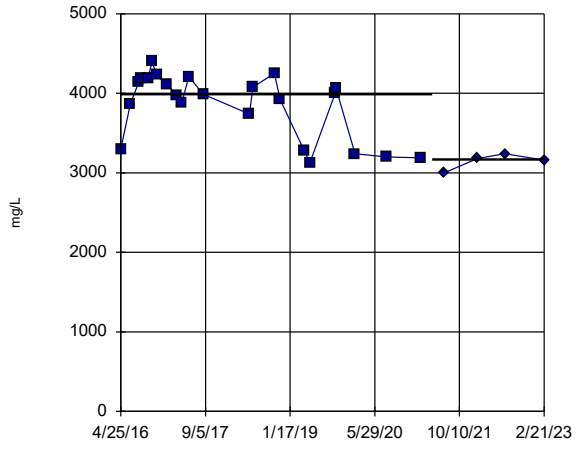
MW-3 (bg)



Constituent: Total dissolved solids Analysis Run 12/22/2023 2:09 PM View: Mann-Whitney
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Mann-Whitney (Wilcoxon Rank Sum)

MW-4 (bg)



MW-4 background

MW-4 compliance

background median = 3990

compliance median = 3170

Z = -2.799 (two-tail)

Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	Yes
0.05	1.96	Yes
0.02	2.326	Yes
0.01	2.576	Yes

Constituent: Total dissolved solids Analysis Run 12/22/2023 2:09 PM View: Mann-Whitney

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Mann-Whitney (Wilcoxon Rank Sum)

Constituent: pH (pH) Analysis Run 12/22/2023 2:10 PM View: Mann-Whitney

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-3	GS-GSA-MW-3
8/24/2016	6.28	
10/3/2016	6.28	
10/26/2016	6.19	
11/21/2016	6.2	
1/17/2017	6.13	
3/20/2017	6.17	
4/17/2017	5.6	
5/30/2017	6.07	
8/24/2017	5.99	
2/13/2018	5.88	
6/11/2018	5.91	
10/17/2018	5.88	
4/10/2019	5.83	
10/14/2019	6.04	
2/3/2020	5.98	
8/4/2020	6.09	
3/1/2021	5.82	
7/14/2021		5.93
1/26/2022		6.52
7/13/2022		5.92
2/27/2023		5.83

Mann-Whitney (Wilcoxon Rank Sum)

Constituent: pH (pH) Analysis Run 12/22/2023 2:10 PM View: Mann-Whitney

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-4	GS-GSA-MW-4
8/24/2016	3.83 (E)	
10/3/2016	3.82 (E)	
10/26/2016	3.81 (E)	
11/21/2016	3.81	
1/17/2017	3.78	
3/21/2017	3.76	
4/17/2017	3.76	
5/30/2017	3.76	
8/24/2017	3.7	
2/13/2018	3.73	
6/11/2018	3.8	
10/17/2018	3.81	
4/10/2019	3.83	
10/14/2019	3.91	
2/4/2020	3.83	
8/5/2020	3.86	
3/3/2021	3.76	
7/14/2021		3.74
1/27/2022		3.73
7/13/2022		3.43
3/1/2023		3.5

Mann-Whitney (Wilcoxon Rank Sum)

Constituent: pH (pH) Analysis Run 12/22/2023 2:10 PM View: Mann-Whitney

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-8	GS-GSA-MW-8
8/24/2016	6.78	
10/3/2016	6.71	
10/26/2016	6.65	
11/21/2016	6.7	
1/17/2017	6.25	
3/20/2017	7.04	
4/18/2017	6.99	
5/30/2017	6.98	
8/24/2017	6.89	
2/13/2018	6.85	
6/12/2018	6.83	
10/17/2018	6.81	
4/10/2019	6.71	
10/14/2019	6.88	
2/4/2020	6.85	
8/5/2020	6.76	
3/1/2021	6.48	
7/14/2021		6.88
1/27/2022		6.85
7/12/2022		6.49
2/28/2023		6.93

Mann-Whitney (Wilcoxon Rank Sum)

Constituent: pH (pH) Analysis Run 12/22/2023 2:10 PM View: Mann-Whitney

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	MW-1	MW-1
4/26/2016	5.2	
6/20/2016	5.18	
8/8/2016	5.12	
10/3/2016	5.21	
10/26/2016	5.2	
11/21/2016	5.19	
1/17/2017	5.17	
3/22/2017	5.2	
4/18/2017	5.2	
5/30/2017	5.14	
8/23/2017	5.12	
2/13/2018	5.18	
5/22/2018	5.2	
6/12/2018	5.15	
10/17/2018	5.12	
11/19/2018	5.09	
4/10/2019	5.11	
5/14/2019	5.19	
10/8/2019	5.12	
10/16/2019	5.16	
2/3/2020	5	
8/3/2020	5.08	
2/22/2021	5.06	
7/12/2021		5.13
1/25/2022		5.11
7/5/2022		5.01
2/20/2023		5.07

Mann-Whitney (Wilcoxon Rank Sum)

Constituent: pH (pH) Analysis Run 12/22/2023 2:10 PM View: Mann-Whitney

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	MW-2	MW-2
4/25/2016	5.94	
6/20/2016	5.96	
8/8/2016	5.88	
10/3/2016	5.91	
10/26/2016	5.84	
11/21/2016	5.82	
1/17/2017	5.87	
3/22/2017	6.01	
4/18/2017	6.02	
5/31/2017	5.85	
8/23/2017	5.89	
2/13/2018	6.21	
5/22/2018	6.04	
6/12/2018	5.95	
10/17/2018	5.9	
11/19/2018	6.03	
4/10/2019	6.1	
5/14/2019	6.07	
10/8/2019	5.96	
10/16/2019	5.98	
2/3/2020	5.95	
8/3/2020	5.95	
2/22/2021	6.1	
7/12/2021		6.16
1/25/2022		6.22
7/5/2022		6.15
2/20/2023		6.24

Mann-Whitney (Wilcoxon Rank Sum)

Constituent: pH (pH) Analysis Run 12/22/2023 2:10 PM View: Mann-Whitney

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	MW-3	MW-3
4/25/2016	5.56	
6/22/2016	5.57	
8/9/2016	5.67	
8/24/2016	5.63	
10/4/2016	5.69	
10/26/2016	5.56	
11/21/2016	5.42	
1/18/2017	5.11	
3/22/2017	4.52	
4/18/2017	5.84	
5/31/2017	4.56	
8/23/2017	4.77	
2/13/2018	5.67	
5/24/2018	5.19	
6/12/2018	4.79	
10/17/2018	4.75	
11/19/2018	3.77 (o)	
4/10/2019	5.54	
5/14/2019	5.71	
10/8/2019	4.98	
10/16/2019	4.51	
2/3/2020	5.54	
8/3/2020	5.06	
2/22/2021	5.59	
7/12/2021		5.86
1/25/2022		5.9
7/5/2022		5.34
2/20/2023		6.01

Mann-Whitney (Wilcoxon Rank Sum)

Constituent: pH (pH) Analysis Run 12/22/2023 2:10 PM View: Mann-Whitney

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	MW-4	MW-4
4/25/2016	6.22	
6/20/2016	6.21	
8/9/2016	6.11	
8/24/2016	6.11	
10/3/2016	6.13	
10/26/2016	6.12	
11/21/2016	6.09	
1/18/2017	6.09	
3/22/2017	6.15	
4/18/2017	6.19	
5/31/2017	6.13	
8/23/2017	6.12	
2/13/2018	6.22	
5/23/2018	6.21	
6/12/2018	6.16	
10/17/2018	6.12	
11/19/2018	6.16	
4/10/2019	6.14	
5/14/2019	6.23	
10/10/2019	6.15	
10/16/2019	6.19	
2/3/2020	6.14	
8/5/2020	6.15	
2/22/2021	6.19	
7/12/2021		6.06
1/25/2022		6.3
7/5/2022		6.12
2/21/2023		6.35

Mann-Whitney (Wilcoxon Rank Sum)

Constituent: Sulfate (mg/L) Analysis Run 12/22/2023 2:10 PM View: Mann-Whitney

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-3	GS-GSA-MW-3
8/24/2016	2910	
10/3/2016	2980	
10/26/2016	2790	
11/21/2016	2880	
1/17/2017	2950	
3/20/2017	2800	
4/17/2017	2400	
5/30/2017	2900	
8/24/2017	2900	
6/11/2018	2900	
10/17/2018	2800	
4/10/2019	2980	
10/14/2019	3110	
2/3/2020	2840	
8/4/2020	2820	
3/1/2021	2320	
7/14/2021		2880
1/26/2022		2620
7/13/2022		3180
2/27/2023		2770

Mann-Whitney (Wilcoxon Rank Sum)

Constituent: Sulfate (mg/L) Analysis Run 12/22/2023 2:10 PM View: Mann-Whitney

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-4	GS-GSA-MW-4
8/24/2016	567	
10/3/2016	596	
10/26/2016	585	
11/21/2016	593	
1/17/2017	637	
3/21/2017	530	
4/17/2017	530	
5/30/2017	530	
8/24/2017	530	
6/11/2018	540	
10/17/2018	520	
4/10/2019	616	
10/14/2019	641	
2/4/2020	571	
8/5/2020	519	
3/3/2021	609	
7/14/2021		752
1/27/2022		1130
7/13/2022		3040
3/1/2023		2130

Mann-Whitney (Wilcoxon Rank Sum)

Constituent: Sulfate (mg/L) Analysis Run 12/22/2023 2:10 PM View: Mann-Whitney

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-8	GS-GSA-MW-8
8/24/2016	1250	
10/3/2016	1270	
10/26/2016	1240	
11/21/2016	1210	
1/17/2017	1150	
3/20/2017	1400	
4/18/2017	1300	
5/30/2017	1500	
8/24/2017	1800	
6/12/2018	1800	
10/17/2018	1600	
4/10/2019	2150	
10/14/2019	2090	
2/4/2020	1570	
8/5/2020	1880	
3/1/2021	1450	
7/14/2021		1700
1/27/2022		2000
7/12/2022		1740
2/28/2023		1390

Mann-Whitney (Wilcoxon Rank Sum)

Constituent: Sulfate (mg/L) Analysis Run 12/22/2023 2:10 PM View: Mann-Whitney

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	MW-1	MW-1
4/26/2016	1490	
6/20/2016	1420	
8/8/2016	1460	
8/24/2016	1450	
10/3/2016	1460	
10/26/2016	1330	
11/21/2016	1420	
1/17/2017	1350	
3/22/2017	1500	
4/18/2017	1300	
5/30/2017	1400	
8/23/2017	1500	
5/22/2018	2100 (o)	
6/12/2018	1500	
10/17/2018	1400	
11/19/2018	1300	
4/10/2019	1700	
5/14/2019	1560	
10/8/2019	1540	
10/16/2019	1680	
2/3/2020	1510	
8/3/2020	1370	
2/22/2021	1400	
7/12/2021		1560
1/25/2022		1430
7/5/2022		1600
2/20/2023		1520

Mann-Whitney (Wilcoxon Rank Sum)

Constituent: Sulfate (mg/L) Analysis Run 12/22/2023 2:10 PM View: Mann-Whitney

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	MW-2	MW-2
4/25/2016	745	
6/20/2016	964	
8/8/2016	1100	
8/24/2016	1130	
10/3/2016	1140	
10/26/2016	1060	
11/21/2016	1100	
1/17/2017	1160	
3/22/2017	900	
4/18/2017	870	
5/31/2017	1100	
8/23/2017	920	
5/22/2018	1200	
6/12/2018	860	
10/17/2018	970	
11/19/2018	1000	
4/10/2019	889	
5/14/2019	948	
10/8/2019	1230	
10/16/2019	1170	
2/3/2020	803	
8/3/2020	907	
2/22/2021	864	
7/12/2021		763
1/25/2022		842
7/5/2022		819
2/20/2023		767

Mann-Whitney (Wilcoxon Rank Sum)

Constituent: Sulfate (mg/L) Analysis Run 12/22/2023 2:10 PM View: Mann-Whitney

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	MW-3	MW-3
4/25/2016	1890	
6/22/2016	2100	
8/9/2016	2050	
8/24/2016	2190	
10/4/2016	1950	
10/26/2016	1980	
11/21/2016	2060	
1/18/2017	2620	
3/22/2017	3200	
4/18/2017	2500	
5/31/2017	2800	
8/23/2017	2600	
5/24/2018	2700	
6/12/2018	2500	
10/17/2018	2700	
11/19/2018	3000	
4/10/2019	2460	
5/14/2019	2460	
10/8/2019	2950	
10/16/2019	2820	
2/3/2020	2290	
8/3/2020	2330	
2/22/2021	3040	
7/12/2021		2380
1/25/2022		2550
7/5/2022		3110
2/20/2023		2110

Mann-Whitney (Wilcoxon Rank Sum)

Constituent: Sulfate (mg/L) Analysis Run 12/22/2023 2:10 PM View: Mann-Whitney

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	MW-4	MW-4
4/25/2016	2260	
6/20/2016	2500	
8/9/2016	2750	
8/24/2016	2770	
10/3/2016	3060	
10/26/2016	2650	
11/21/2016	2720	
1/18/2017	2650	
3/22/2017	2700	
4/18/2017	2400	
5/31/2017	2700	
8/23/2017	2700	
5/23/2018	2400	
6/12/2018	2600	
10/17/2018	2600	
11/19/2018	2400	
4/10/2019	2090	
5/14/2019	2240	
10/10/2019	2690	
10/16/2019	3050	
2/3/2020	1920	
8/5/2020	1930	
2/22/2021	2040	
7/12/2021		1930
1/25/2022		1930
7/5/2022		2380
2/21/2023		1930

Mann-Whitney (Wilcoxon Rank Sum)

Constituent: Total dissolved solids (mg/L) Analysis Run 12/22/2023 2:10 PM View: Mann-Whitney

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-3	GS-GSA-MW-3
8/24/2016	5020	
10/3/2016	4880	
10/26/2016	5020	
11/21/2016	5090	
1/17/2017	4330	
3/20/2017	2690	
4/17/2017	4780	
5/30/2017	5170	
8/24/2017	5140	
6/11/2018	4960	
10/17/2018	4910	
4/10/2019	5090	
10/14/2019	5110	
2/3/2020	4920	
8/4/2020	5110	
3/1/2021	4390	
7/14/2021		4920
1/26/2022		4260
7/13/2022		4960
2/27/2023		5000

Mann-Whitney (Wilcoxon Rank Sum)

Constituent: Total dissolved solids (mg/L) Analysis Run 12/22/2023 2:10 PM View: Mann-Whitney

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-4	GS-GSA-MW-4
8/24/2016	992	
10/3/2016	988	
10/26/2016	1030	
11/21/2016	1020	
1/17/2017	988	
3/21/2017	990	
4/17/2017	884	
5/30/2017	1060	
8/24/2017	1060	
6/11/2018	944	
10/17/2018	928	
4/10/2019	1000	
10/14/2019	967	
2/4/2020	978	
8/5/2020	938	
3/3/2021	1040	
7/14/2021		1300
1/27/2022		1840
7/13/2022		4700
3/1/2023		3310

Mann-Whitney (Wilcoxon Rank Sum)

Constituent: Total dissolved solids (mg/L) Analysis Run 12/22/2023 2:10 PM View: Mann-Whitney

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-8	GS-GSA-MW-8
8/24/2016	2280	
10/3/2016	2370	
10/26/2016	2350	
11/21/2016	2530	
1/17/2017	2380	
3/20/2017	2630	
4/18/2017	2700	
5/30/2017	2980	
8/24/2017	3390	
6/12/2018	3510	
10/17/2018	3550	
4/10/2019	3580	
10/14/2019	3730	
2/4/2020	3190	
8/5/2020	3610	
3/1/2021	2870	
7/14/2021		3150
1/27/2022		3290
7/12/2022		3090
2/28/2023		2620

Mann-Whitney (Wilcoxon Rank Sum)

Constituent: Total dissolved solids (mg/L) Analysis Run 12/22/2023 2:10 PM View: Mann-Whitney

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	MW-1	MW-1
4/26/2016	2080	
6/20/2016	2060	
8/8/2016	2070	
8/24/2016	2040	
10/3/2016	2110	
10/26/2016	2000	
11/21/2016	2070	
1/17/2017	1930	
3/22/2017	2060	
4/18/2017	2140	
5/30/2017	2240	
8/23/2017	2160	
5/22/2018	2380	
6/12/2018	2400	
10/17/2018	2220	
11/19/2018	2360	
4/10/2019	2630	
5/14/2019	2340	
10/8/2019	2330	
10/16/2019	3650 (o)	
2/3/2020	2380	
8/3/2020	2200	
2/22/2021	2230	
7/12/2021		2210
1/25/2022		2150
7/5/2022		2100
2/20/2023		2280

Mann-Whitney (Wilcoxon Rank Sum)

Constituent: Total dissolved solids (mg/L) Analysis Run 12/22/2023 2:10 PM View: Mann-Whitney

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	MW-2	MW-2
4/25/2016	1260	
6/20/2016	1620	
8/8/2016	1740	
8/24/2016	1720	
10/3/2016	1800	
10/26/2016	1800	
11/21/2016	1740	
1/17/2017	1960	
3/22/2017	1510	
4/18/2017	1580	
5/31/2017	1730	
8/23/2017	1550	
5/22/2018	1500	
6/12/2018	1550	
10/17/2018	1740	
11/19/2018	1990	
4/10/2019	1250	
5/14/2019	1480	
10/8/2019	1840	
10/16/2019	1830	
2/3/2020	1440	
8/3/2020	1650	
2/22/2021	1620	
7/12/2021		1390
1/25/2022		1500
7/5/2022		1250
2/20/2023		1420

Mann-Whitney (Wilcoxon Rank Sum)

Constituent: Total dissolved solids (mg/L) Analysis Run 12/22/2023 2:10 PM View: Mann-Whitney

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	MW-3	MW-3
4/25/2016	2720	
6/22/2016	3250	
8/9/2016	3050	
8/24/2016	3080	
10/4/2016	2900	
10/26/2016	2940	
11/21/2016	3090	
1/18/2017	4020	
3/22/2017	4180	
4/18/2017	4440	
5/31/2017	3970	
8/23/2017	4050	
5/24/2018	3680	
6/12/2018	3820	
10/17/2018	4730	
11/19/2018	4710	
4/10/2019	3680	
5/14/2019	3580	
10/8/2019	4720	
10/16/2019	4210	
2/3/2020	3530	
8/3/2020	3760	
2/22/2021	4670	
7/12/2021		3510
1/25/2022		3950
7/5/2022		4220
2/20/2023		3230

Mann-Whitney (Wilcoxon Rank Sum)

Constituent: Total dissolved solids (mg/L) Analysis Run 12/22/2023 2:10 PM View: Mann-Whitney

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	MW-4	MW-4
4/25/2016	3300	
6/20/2016	3870	
8/9/2016	4140	
8/24/2016	4190	
10/3/2016	4190	
10/26/2016	4400	
11/21/2016	4230	
1/18/2017	4120	
3/22/2017	3980	
4/18/2017	3880	
5/31/2017	4210	
8/23/2017	3990	
5/23/2018	3740	
6/12/2018	4080	
10/17/2018	4250	
11/19/2018	3920	
4/10/2019	3280	
5/14/2019	3130 (D)	
10/10/2019	4000	
10/16/2019	4060	
2/3/2020	3240	
8/5/2020	3200	
2/22/2021	3190	
7/12/2021		3000
1/25/2022		3180
7/5/2022		3240
2/21/2023		3160

FIGURE E.

Upgradient Wells - Trend Tests Summary - Significant Results

Plant Gorgas Client: Southern Company Data: Gorgas GSA Printed 12/22/2023, 2:21 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Alpha	Method
Boron (mg/L)	**MW-1 (bg)**	**0.006286**	**161**	**131**	**Yes**	**28**	**39.29**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**MW-2 (bg)**	**0.009837**	**186**	**131**	**Yes**	**28**	**32.14**	**n/a**	**0.01**	**NP**
Fluoride (mg/L)	**MW-2 (bg)**	**0.01319**	**197**	**139**	**Yes**	**29**	**0**	**n/a**	**0.01**	**NP**

Upgradient Wells - Trend Tests Summary - All Results

Plant Gorgas Client: Southern Company Data: Gorgas GSA Printed 12/22/2023, 2:21 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Alpha	Method
Boron (mg/L)	**MW-1 (bg)**	**0.006286**	**161**	**131**	**Yes**	**28**	**39.29**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**MW-2 (bg)**	**0.009837**	**186**	**131**	**Yes**	**28**	**32.14**	**n/a**	**0.01**	**NP**
Boron (mg/L)	MW-3 (bg)	0.004142	106	131	No	28	28.57	n/a	0.01	NP
Boron (mg/L)	MW-4 (bg)	-0.0003115	-47	-124	No	27	0	n/a	0.01	NP
Calcium (mg/L)	MW-1 (bg)	2.888	127	131	No	28	0	n/a	0.01	NP
Calcium (mg/L)	MW-2 (bg)	0	13	131	No	28	0	n/a	0.01	NP
Calcium (mg/L)	MW-3 (bg)	9.735	73	131	No	28	0	n/a	0.01	NP
Calcium (mg/L)	MW-4 (bg)	-6.218	-104	-131	No	28	0	n/a	0.01	NP
Chloride (mg/L)	MW-1 (bg)	-0.02503	-56	-131	No	28	0	n/a	0.01	NP
Chloride (mg/L)	MW-2 (bg)	-0.1196	-79	-131	No	28	0	n/a	0.01	NP
Chloride (mg/L)	MW-3 (bg)	0.04365	66	131	No	28	7.143	n/a	0.01	NP
Chloride (mg/L)	MW-4 (bg)	-0.05154	-98	-131	No	28	3.571	n/a	0.01	NP
Fluoride (mg/L)	MW-1 (bg)	-0.0003867	-15	-139	No	29	3.448	n/a	0.01	NP
Fluoride (mg/L)	**MW-2 (bg)**	**0.01319**	**197**	**139**	**Yes**	**29**	**0**	**n/a**	**0.01**	**NP**
Fluoride (mg/L)	MW-3 (bg)	0.0003253	3	139	No	29	0	n/a	0.01	NP
Fluoride (mg/L)	MW-4 (bg)	0.006957	83	139	No	29	0	n/a	0.01	NP

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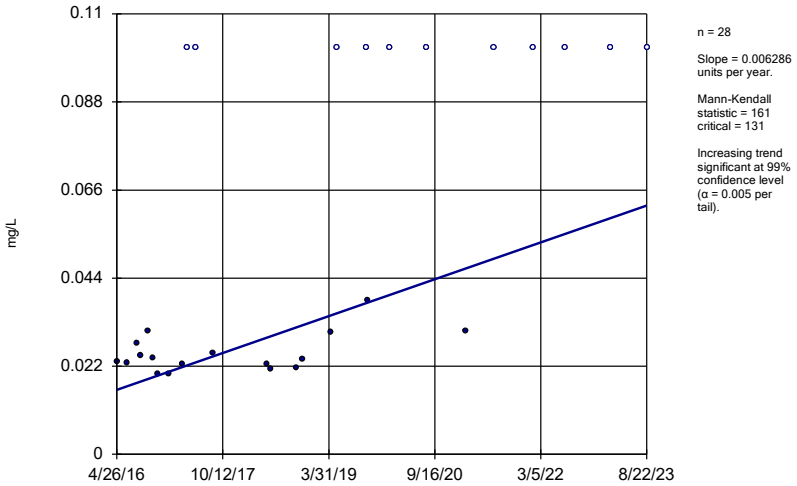
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-1 (bg)



n = 28

Slope = 0.006286 units per year.

Mann-Kendall statistic = 161
critical = 131

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 12/22/2023 2:20 PM View: Upgradient Wells - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas GSA

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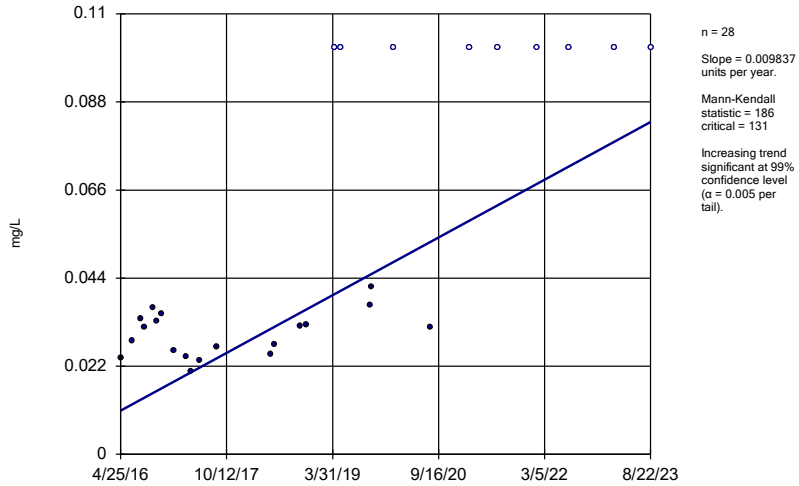
Sen's Slope Estimator

MW-2 (bg)



n = 28

Slope = 0.009837 units per year.

Mann-Kendall statistic = 186
critical = 131

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 12/22/2023 2:20 PM View: Upgradient Wells - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas GSA

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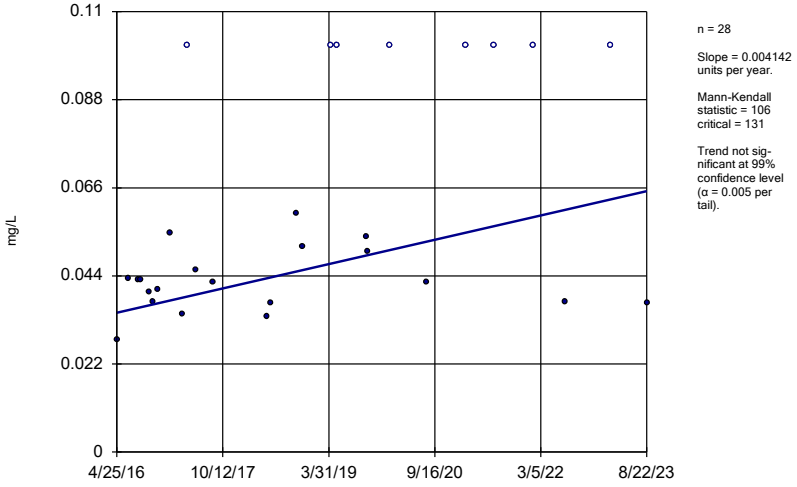
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-3 (bg)



n = 28

Slope = 0.004142 units per year.

Mann-Kendall statistic = 106
critical = 131

Trend not sig-nificant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 12/22/2023 2:20 PM View: Upgradient Wells - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas GSA

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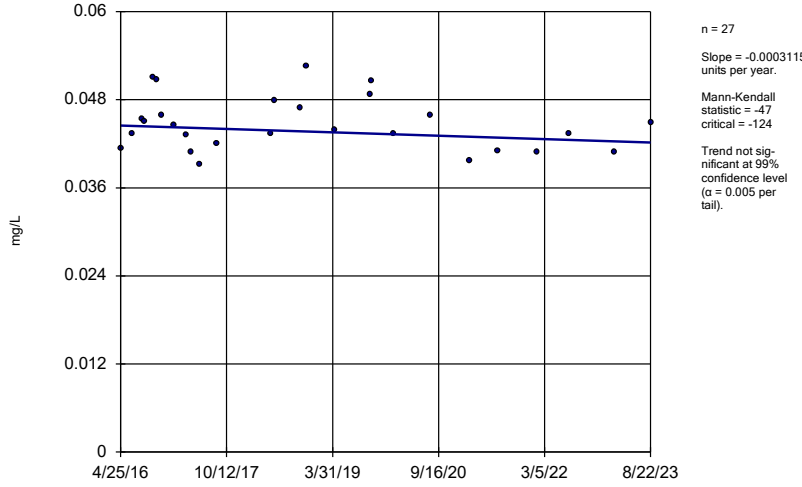
Sen's Slope Estimator

MW-4 (bg)



n = 27

Slope = -0.0003115 units per year.

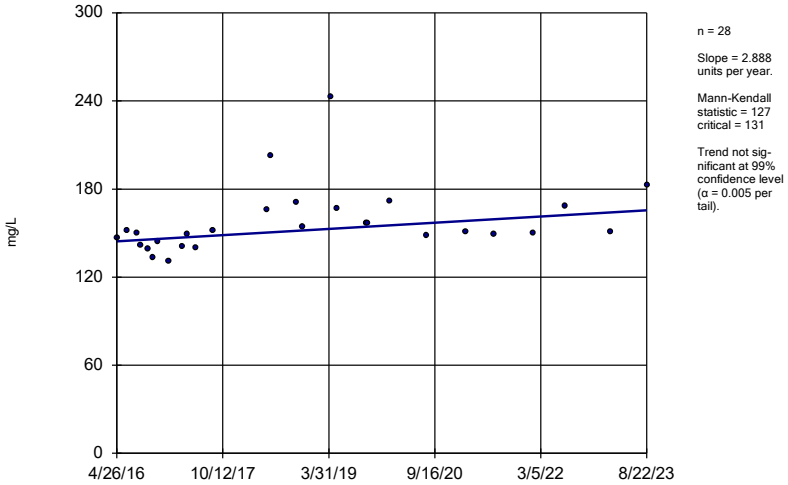
Mann-Kendall statistic = -47
critical = -124

Trend not sig-nificant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 12/22/2023 2:20 PM View: Upgradient Wells - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sen's Slope Estimator

MW-1 (bg)



n = 28

Slope = 2.888 units per year.

Mann-Kendall statistic = 127
critical = 131

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 12/22/2023 2:20 PM View: Upgradient Wells - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas GSA

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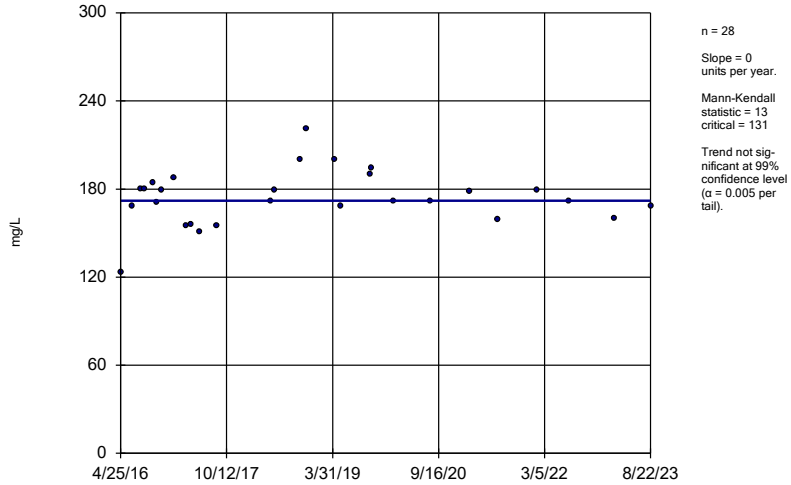
Sen's Slope Estimator

MW-2 (bg)



n = 28

Slope = 0 units per year.

Mann-Kendall statistic = 13
critical = 131

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 12/22/2023 2:20 PM View: Upgradient Wells - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas GSA

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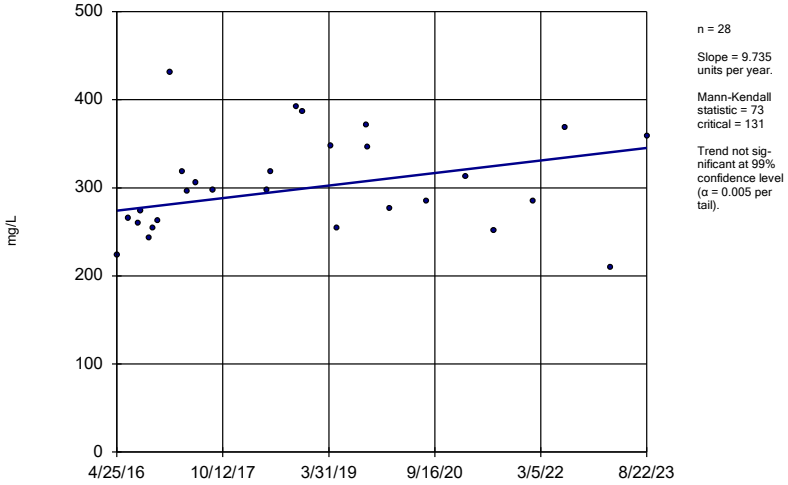
Sen's Slope Estimator

MW-3 (bg)



n = 28

Slope = 9.735 units per year.

Mann-Kendall statistic = 73
critical = 131

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 12/22/2023 2:20 PM View: Upgradient Wells - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas GSA

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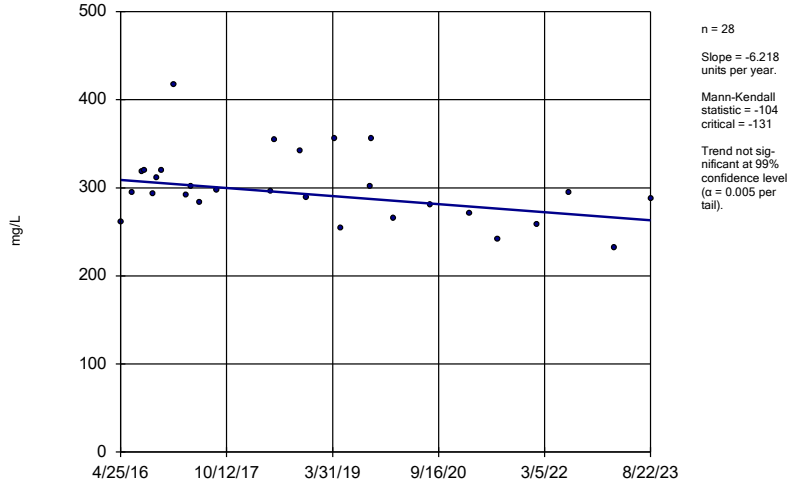
Sen's Slope Estimator

MW-4 (bg)



n = 28

Slope = -6.218 units per year.

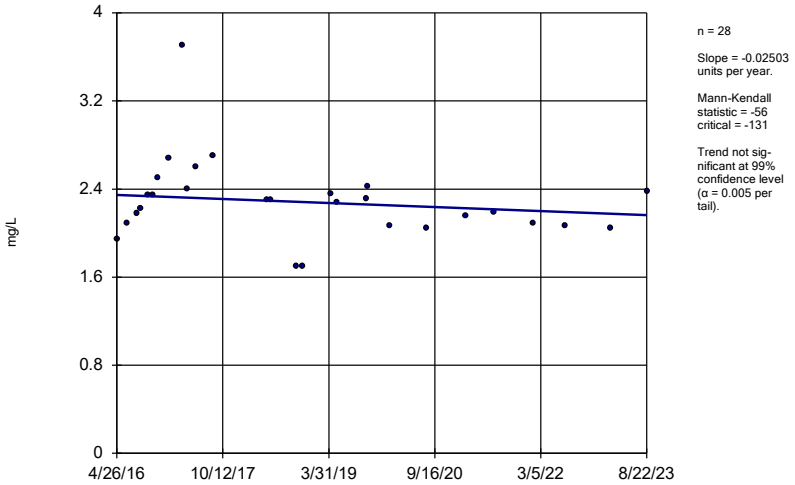
Mann-Kendall statistic = -104
critical = -131

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 12/22/2023 2:20 PM View: Upgradient Wells - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sen's Slope Estimator

MW-1 (bg)



n = 28

Slope = -0.02503 units per year.

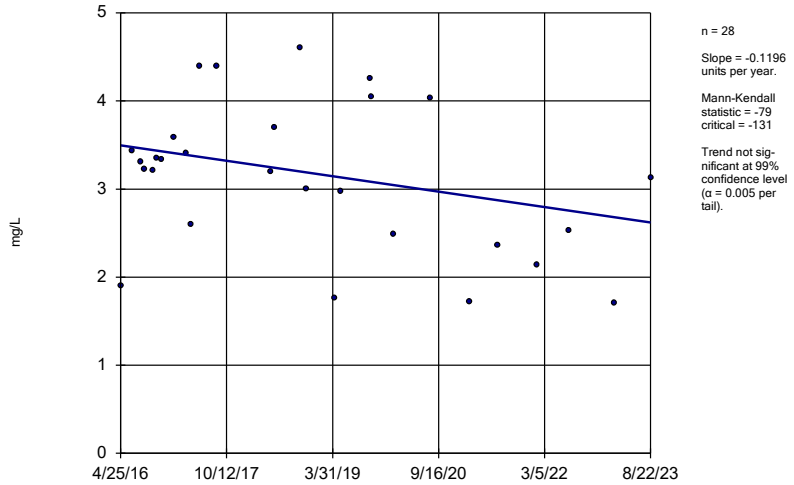
Mann-Kendall statistic = -56
critical = -131

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 12/22/2023 2:20 PM View: Upgradient Wells - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sen's Slope Estimator

MW-2 (bg)



n = 28

Slope = -0.1196 units per year.

Mann-Kendall statistic = -79
critical = -131

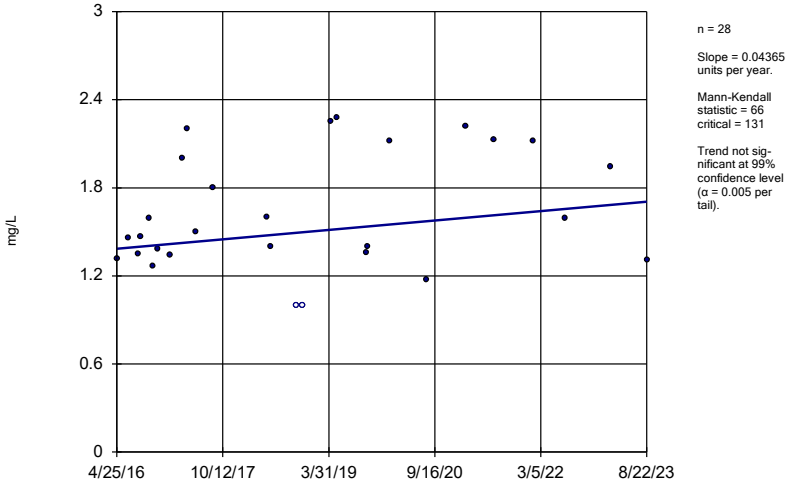
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 12/22/2023 2:20 PM View: Upgradient Wells - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-3 (bg)



n = 28

Slope = 0.04365 units per year.

Mann-Kendall statistic = 66
critical = 131

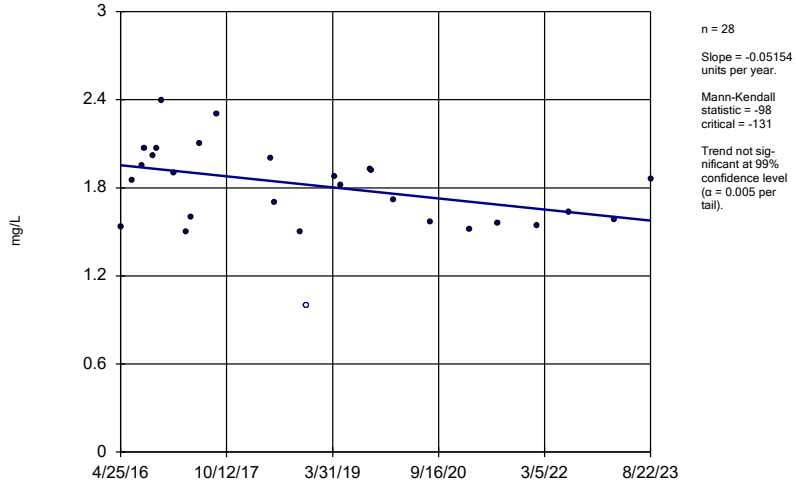
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 12/22/2023 2:20 PM View: Upgradient Wells - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-4 (bg)



n = 28

Slope = -0.05154 units per year.

Mann-Kendall statistic = -98
critical = -131

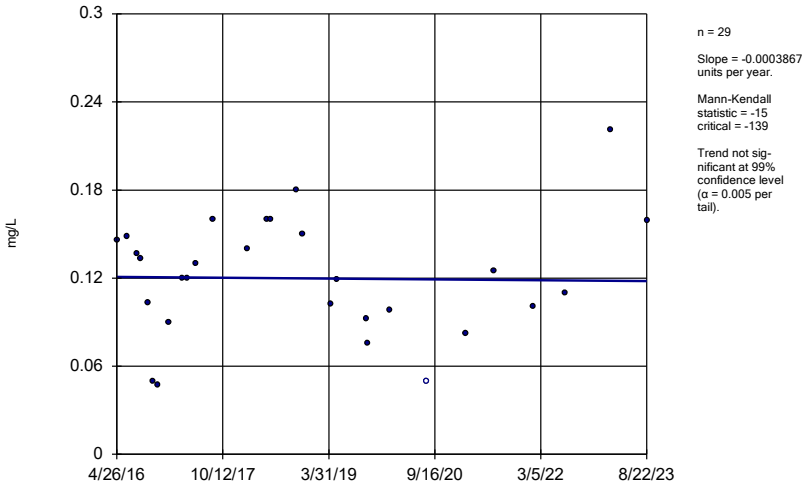
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 12/22/2023 2:20 PM View: Upgradient Wells - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-1 (bg)



n = 29

Slope = -0.0003867 units per year.

Mann-Kendall statistic = -15
critical = -139

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Fluoride Analysis Run 12/22/2023 2:20 PM View: Upgradient Wells - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas GSA

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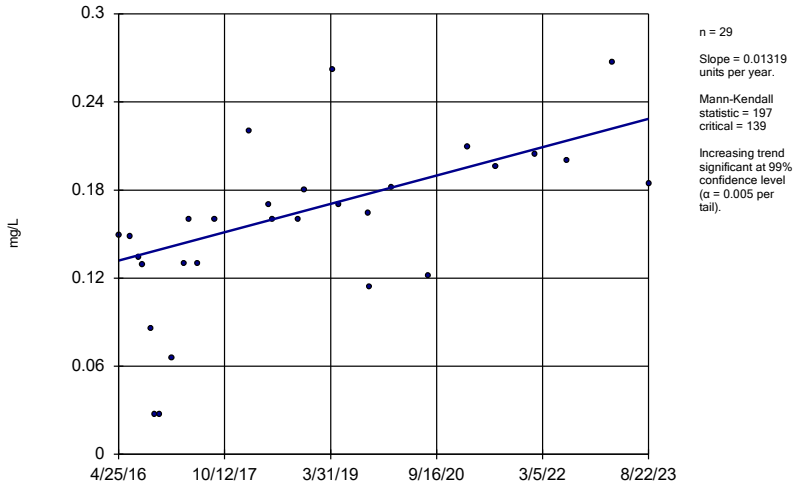
Sen's Slope Estimator

MW-2 (bg)



n = 29

Slope = 0.01319 units per year.

Mann-Kendall statistic = 197
critical = 139

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Fluoride Analysis Run 12/22/2023 2:20 PM View: Upgradient Wells - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas GSA

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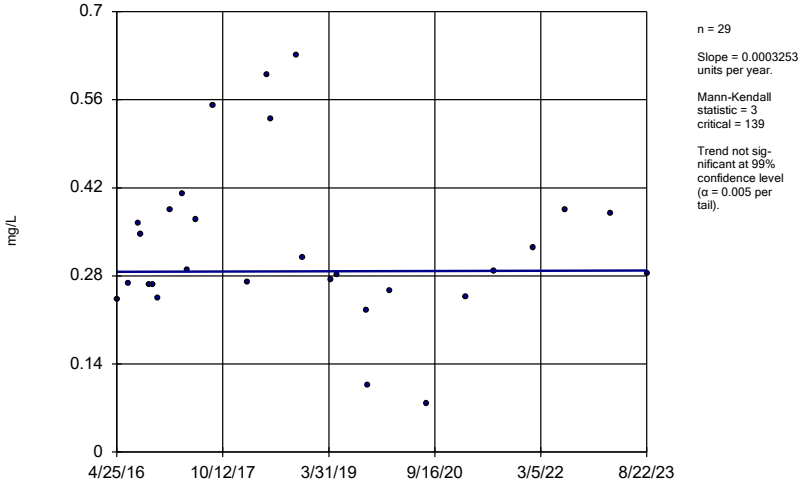
Sen's Slope Estimator

MW-3 (bg)



n = 29

Slope = 0.0003253 units per year.

Mann-Kendall statistic = 3
critical = 139

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Fluoride Analysis Run 12/22/2023 2:20 PM View: Upgradient Wells - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas GSA

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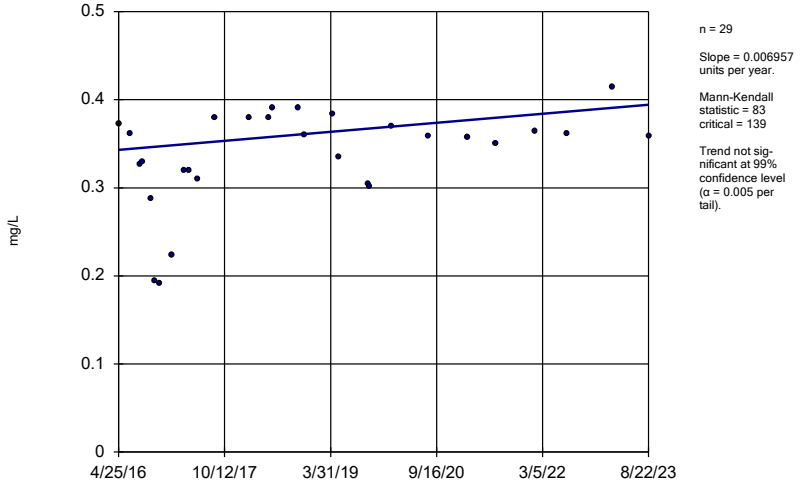
Sen's Slope Estimator

MW-4 (bg)



n = 29

Slope = 0.006957 units per year.

Mann-Kendall statistic = 83
critical = 139

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Fluoride Analysis Run 12/22/2023 2:20 PM View: Upgradient Wells - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas GSA

FIGURE F.

Appendix III - Intrawell Prediction Limits - Significant Results

Plant Gorgas Client: Southern Company Data: Gorgas GSA Printed 12/22/2023, 2:16 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
pH (pH)	**MW-1**	**5.244**	**5.03**	**8/22/2023**	**4.92**	**Yes**	**27**	**5.137**	**0.05874**	**0**	**None**	**No**	**0.001253**	**Param Intra 1 of 2**
pH (pH)	**MW-4**	**6.278**	**6.047**	**8/22/2023**	**6.28**	**Yes**	**28**	**6.163**	**0.06365**	**0**	**None**	**No**	**0.001253**	**Param Intra 1 of 2**
Sulfate (mg/L)	**GS-GSA-MW-3**	**3220**	**n/a**	**8/23/2023**	**3290**	**Yes**	**20**	**2837**	**202.9**	**0**	**None**	**No**	**0.002505**	**Param Intra 1 of 2**
Sulfate (mg/L)	**GS-GSA-MW-4**	**653.2**	**n/a**	**8/23/2023**	**828**	**Yes**	**16**	**569.6**	**42.43**	**0**	**None**	**No**	**0.002505**	**Param Intra 1 of 2**
Total dissolved solids (mg/L)	**GS-GSA-MW-3**	**5170**	**n/a**	**8/23/2023**	**5360**	**Yes**	**20**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.004291**	**NP Intra (normality) 1 of 2**
Total dissolved solids (mg/L)	**GS-GSA-MW-4**	**1084**	**n/a**	**8/23/2023**	**1460**	**Yes**	**16**	**987.9**	**48.59**	**0**	**None**	**No**	**0.002505**	**Param Intra 1 of 2**

Appendix III - Intrawell Prediction Limits - All Results

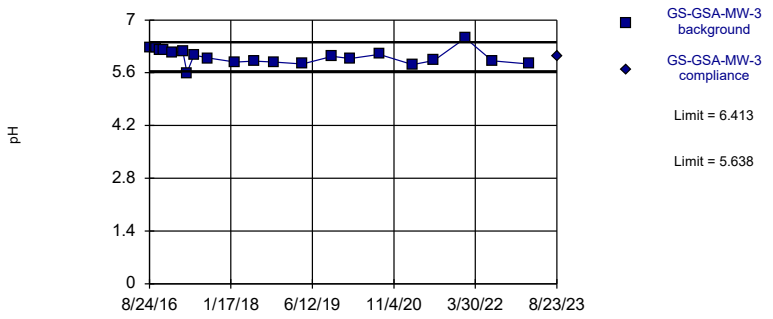
Plant Gorgas Client: Southern Company Data: Gorgas GSA Printed 12/22/2023, 2:16 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
pH (pH)	GS-GSA-MW-3	6.413	5.638	8/23/2023	6.03	No	21	6.026	0.206	0	None	No	0.001253	Param Intra 1 of 2
pH (pH)	GS-GSA-MW-4	3.91	3.43	8/23/2023	3.74	No	21	n/a	n/a	0	n/a	n/a	0.007998	NP Intra (normality) 1 of 2
pH (pH)	GS-GSA-MW-8	7.132	6.422	8/23/2023	6.83	No	21	6.777	0.1888	0	None	No	0.001253	Param Intra 1 of 2
pH (pH)	**MW-1**	**5.244**	**5.03**	**8/22/2023**	**4.92**	**Yes**	**27**	**5.137**	**0.05874**	**0**	**None**	**No**	**0.001253**	**Param Intra 1 of 2**
pH (pH)	MW-2	6.221	5.779	8/22/2023	5.81	No	27	6	0.1213	0	None	No	0.001253	Param Intra 1 of 2
pH (pH)	MW-3	6.173	4.519	8/22/2023	5.04	No	27	5.346	0.4545	0	None	No	0.001253	Param Intra 1 of 2
pH (pH)	**MW-4**	**6.278**	**6.047**	**8/22/2023**	**6.28**	**Yes**	**28**	**6.163**	**0.06365**	**0**	**None**	**No**	**0.001253**	**Param Intra 1 of 2**
Sulfate (mg/L)	**GS-GSA-MW-3**	**3220**	**n/a**	**8/23/2023**	**3290**	**Yes**	**20**	**2837**	**202.9**	**0**	**None**	**No**	**0.002505**	**Param Intra 1 of 2**
Sulfate (mg/L)	**GS-GSA-MW-4**	**653.2**	**n/a**	**8/23/2023**	**828**	**Yes**	**16**	**569.6**	**42.43**	**0**	**None**	**No**	**0.002505**	**Param Intra 1 of 2**
Sulfate (mg/L)	GS-GSA-MW-8	2157	n/a	8/23/2023	1830	No	20	1575	307.9	0	None	No	0.002505	Param Intra 1 of 2
Sulfate (mg/L)	MW-1	1656	n/a	8/22/2023	1560	No	26	1467	103.1	0	None	No	0.002505	Param Intra 1 of 2
Sulfate (mg/L)	MW-2	1239	n/a	8/22/2023	912	No	27	971.1	147.3	0	None	No	0.002505	Param Intra 1 of 2
Sulfate (mg/L)	MW-3	3185	n/a	8/22/2023	3140	No	27	2494	379.5	0	None	No	0.002505	Param Intra 1 of 2
Sulfate (mg/L)	MW-4	3075	n/a	8/22/2023	2390	No	27	2444	346.5	0	None	No	0.002505	Param Intra 1 of 2
Total dissolved solids (mg/L)	**GS-GSA-MW-3**	**5170**	**n/a**	**8/23/2023**	**5360**	**Yes**	**20**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.004291**	**NP Intra (normality) 1 of 2**
Total dissolved solids (mg/L)	**GS-GSA-MW-4**	**1084**	**n/a**	**8/23/2023**	**1460**	**Yes**	**16**	**987.9**	**48.59**	**0**	**None**	**No**	**0.002505**	**Param Intra 1 of 2**
Total dissolved solids (mg/L)	GS-GSA-MW-8	3904	n/a	8/23/2023	3280	No	20	2990	483.2	0	None	No	0.002505	Param Intra 1 of 2
Total dissolved solids (mg/L)	MW-1	2485	n/a	8/22/2023	2160	No	26	2199	156.6	0	None	No	0.002505	Param Intra 1 of 2
Total dissolved solids (mg/L)	MW-2	1980	n/a	8/22/2023	1520	No	27	1610	203.2	0	None	No	0.002505	Param Intra 1 of 2
Total dissolved solids (mg/L)	MW-3	4866	n/a	8/22/2023	4820	No	27	3766	604.2	0	None	No	0.002505	Param Intra 1 of 2
Total dissolved solids (mg/L)	MW-4	4370	n/a	8/22/2023	3780	No	27	3.3e21	2.0e21	0	None	x^6	0.002505	Param Intra 1 of 2

Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=6.026, Std. Dev.=0.206, n=21. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9739, critical = 0.873. Kappa = 1.88 (c=7, w=3, 1 of 2, event alpha = 0.05132). Report alpha = 0.002505.

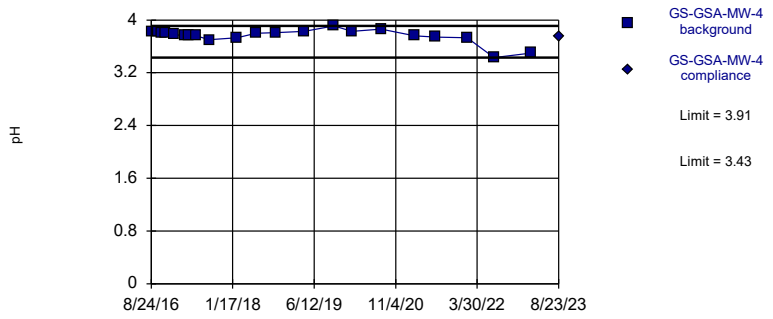
Constituent: pH Analysis Run 12/22/2023 2:13 PM View: Appendix III - Intrawell

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Within Limits

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limits are highest and lowest of 21 background values. Well-constituent pair annual alpha = 0.01596. Individual comparison alpha = 0.007998 (1 of 2).

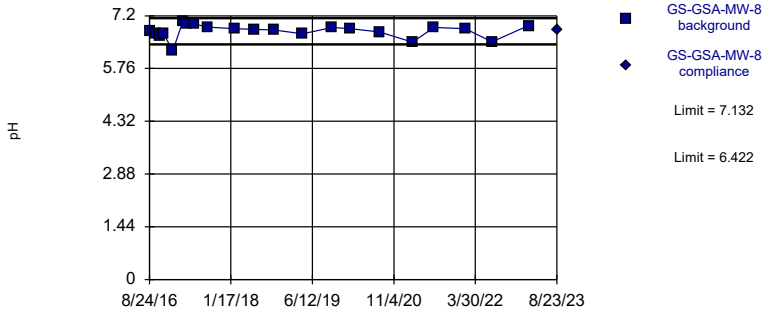
Constituent: pH Analysis Run 12/22/2023 2:13 PM View: Appendix III - Intrawell

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=6.777, Std. Dev.=0.1888, n=21. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.903, critical = 0.873. Kappa = 1.88 (c=7, w=3, 1 of 2, event alpha = 0.05132). Report alpha = 0.002505.

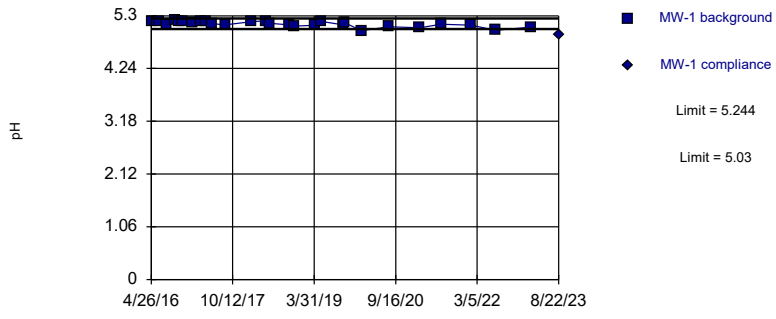
Constituent: pH Analysis Run 12/22/2023 2:13 PM View: Appendix III - Intrawell

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Exceeds Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=5.137, Std. Dev.=0.05874, n=27. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9123, critical = 0.894. Kappa = 1.82 (c=7, w=3, 1 of 2, event alpha = 0.05132). Report alpha = 0.002505.

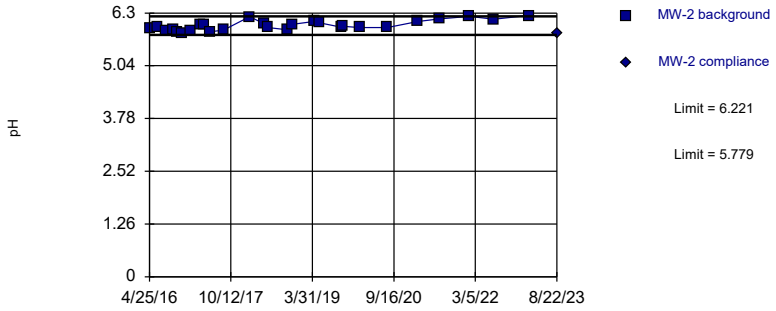
Constituent: pH Analysis Run 12/22/2023 2:13 PM View: Appendix III - Intrawell

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=6, Std. Dev.=0.1213, n=27. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9427, critical = 0.894. Kappa = 1.82 (c=7, w=3, 1 of 2, event alpha = 0.05132). Report alpha = 0.002505.

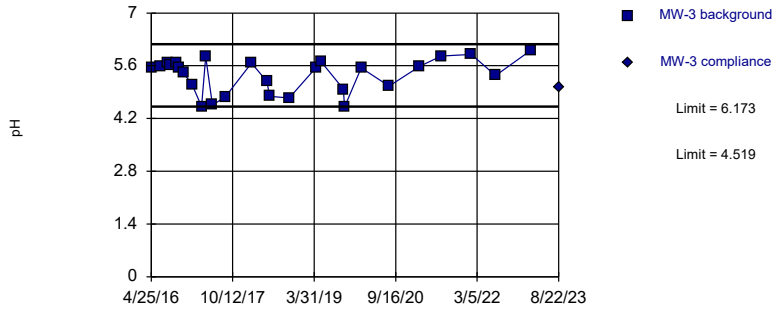
Constituent: pH Analysis Run 12/22/2023 2:13 PM View: Appendix III - Intrawell

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=5.346, Std. Dev.=0.4545, n=27. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9067, critical = 0.894. Kappa = 1.82 (c=7, w=3, 1 of 2, event alpha = 0.05132). Report alpha = 0.002505.

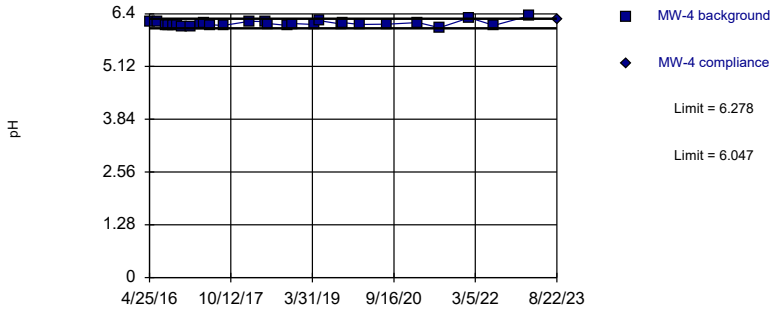
Constituent: pH Analysis Run 12/22/2023 2:13 PM View: Appendix III - Intrawell

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Exceeds Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=6.163, Std. Dev.=0.06365, n=28. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9175, critical = 0.896. Kappa = 1.814 (c=7, w=3, 1 of 2, event alpha = 0.05132). Report alpha = 0.002505.

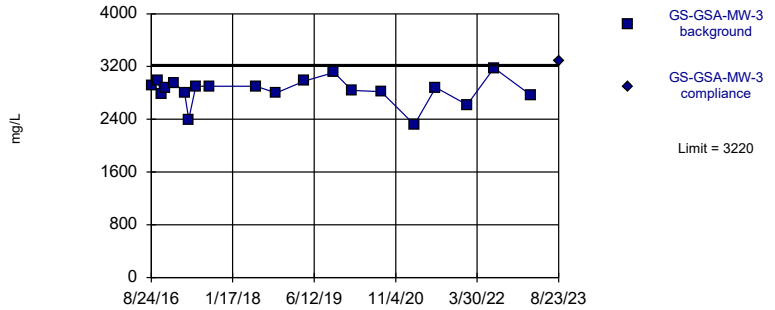
Constituent: pH Analysis Run 12/22/2023 2:13 PM View: Appendix III - Intrawell

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Exceeds Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=2837, Std. Dev.=202.9, n=20. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8837, critical = 0.868. Kappa = 1.892 (c=7, w=3, 1 of 2, event alpha = 0.05132). Report alpha = 0.002505.

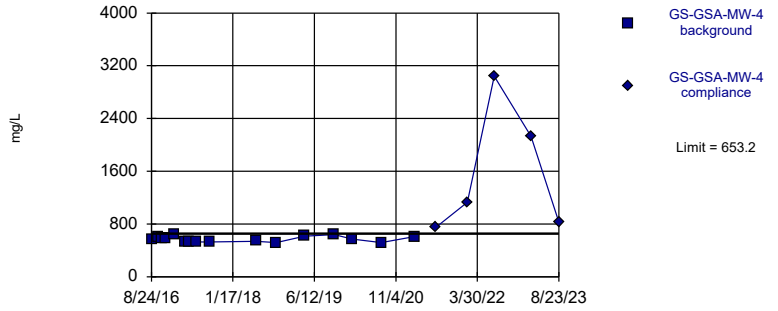
Constituent: Sulfate Analysis Run 12/22/2023 2:13 PM View: Appendix III - Intrawell

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Exceeds Limit

Prediction Limit

Intrawell Parametric



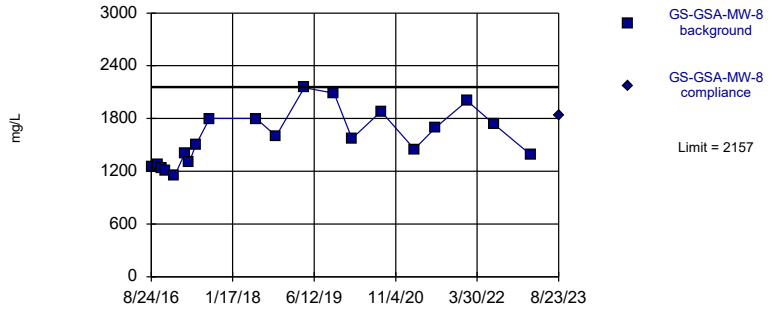
Background Data Summary: Mean=569.6, Std. Dev.=42.43, n=16. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.8989, critical = 0.887. Kappa = 1.97 (c=7, w=3, 1 of 2, event alpha = 0.05132). Report alpha = 0.002505.

Constituent: Sulfate Analysis Run 12/22/2023 2:13 PM View: Appendix III - Intrawell
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Within Limit

Prediction Limit

Intrawell Parametric



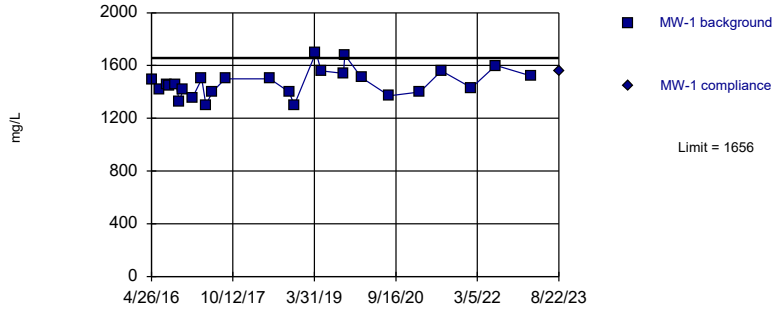
Background Data Summary: Mean=1575, Std. Dev.=307.9, n=20. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.942, critical = 0.868. Kappa = 1.892 (c=7, w=3, 1 of 2, event alpha = 0.05132). Report alpha = 0.002505.

Constituent: Sulfate Analysis Run 12/22/2023 2:13 PM View: Appendix III - Intrawell
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Within Limit

Prediction Limit

Intrawell Parametric



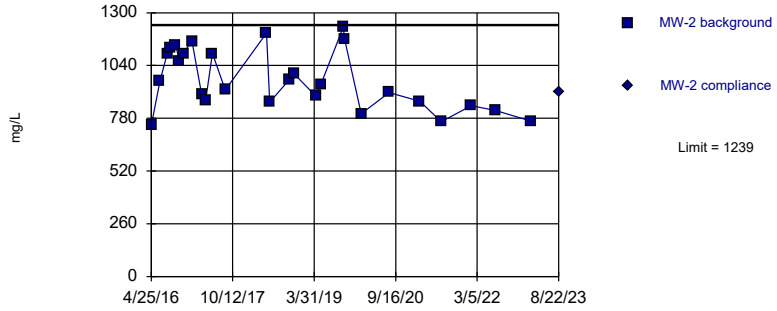
Background Data Summary: Mean=1467, Std. Dev.=103.1, n=26. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9669, critical = 0.891. Kappa = 1.827 (c=7, w=3, 1 of 2, event alpha = 0.05132). Report alpha = 0.002505.

Constituent: Sulfate Analysis Run 12/22/2023 2:13 PM View: Appendix III - Intrawell
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Within Limit

Prediction Limit

Intrawell Parametric



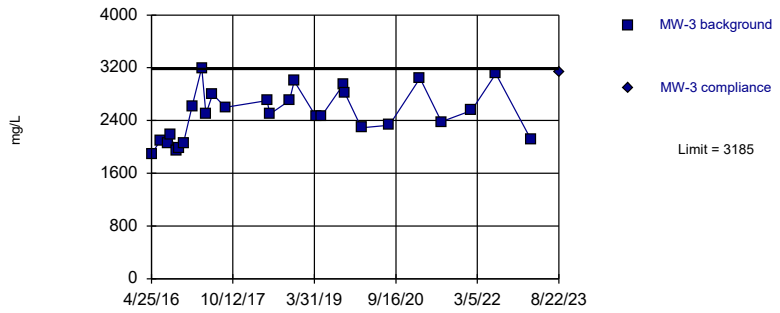
Background Data Summary: Mean=971.1, Std. Dev.=147.3, n=27. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9394, critical = 0.894. Kappa = 1.82 (c=7, w=3, 1 of 2, event alpha = 0.05132). Report alpha = 0.002505.

Constituent: Sulfate Analysis Run 12/22/2023 2:13 PM View: Appendix III - Intrawell
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=2494, Std. Dev.=379.5, n=27. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9616, critical = 0.894. Kappa = 1.82 (c=7, w=3, 1 of 2, event alpha = 0.05132). Report alpha = 0.002505.

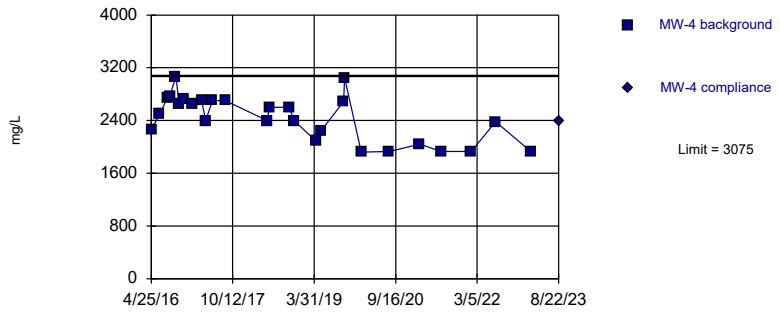
Constituent: Sulfate Analysis Run 12/22/2023 2:13 PM View: Appendix III - Intrawell

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=2444, Std. Dev.=346.5, n=27. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9172, critical = 0.894. Kappa = 1.82 (c=7, w=3, 1 of 2, event alpha = 0.05132). Report alpha = 0.002505.

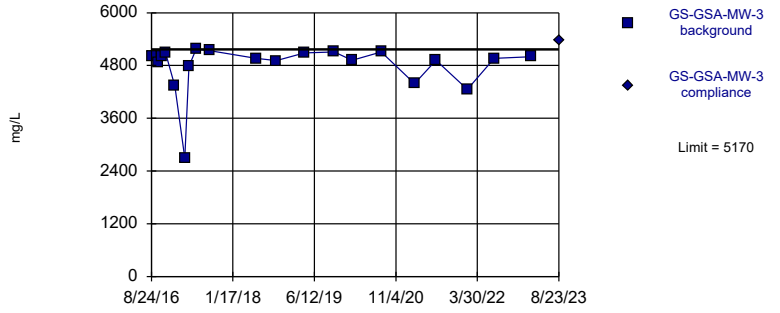
Constituent: Sulfate Analysis Run 12/22/2023 2:13 PM View: Appendix III - Intrawell

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Exceeds Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 20 background values. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

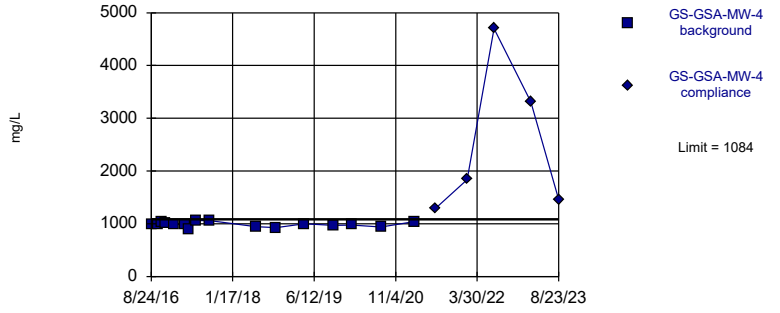
Constituent: Total dissolved solids Analysis Run 12/22/2023 2:13 PM View: Appendix III - Intrawell

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Exceeds Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=987.9, Std. Dev.=48.59, n=16. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9659, critical = 0.887. Kappa = 1.97 (c=7, w=3, 1 of 2, event alpha = 0.05132). Report alpha = 0.002505.

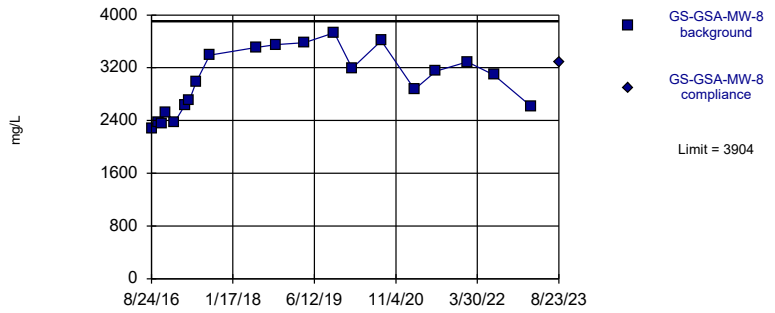
Constituent: Total dissolved solids Analysis Run 12/22/2023 2:13 PM View: Appendix III - Intrawell

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=2990, Std. Dev.=483.2, n=20. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9273, critical = 0.868. Kappa = 1.892 (c=7, w=3, 1 of 2, event alpha = 0.05132). Report alpha = 0.002505.

Constituent: Total dissolved solids Analysis Run 12/22/2023 2:13 PM View: Appendix III - Intrawell

Plant Gorgas Client: Southern Company Data: Gorgas GSA

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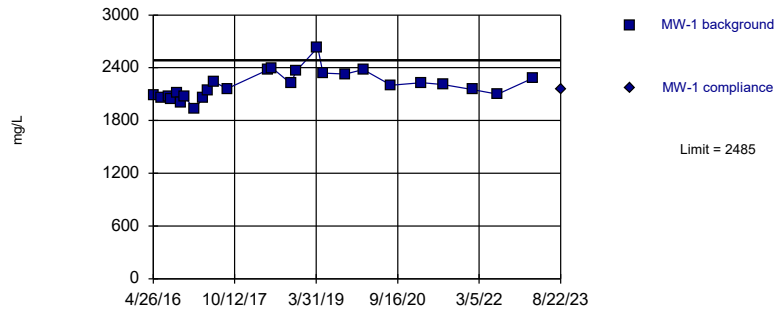
Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=2199, Std. Dev.=156.6, n=26. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.954, critical = 0.891. Kappa = 1.827 (c=7, w=3, 1 of 2, event alpha = 0.05132). Report alpha = 0.002505.

Constituent: Total dissolved solids Analysis Run 12/22/2023 2:13 PM View: Appendix III - Intrawell

Plant Gorgas Client: Southern Company Data: Gorgas GSA

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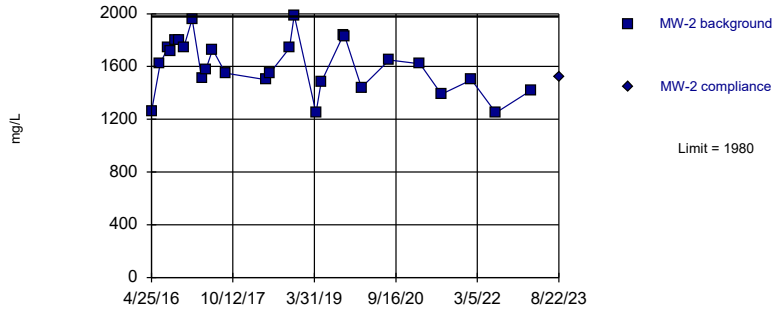
Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=1610, Std. Dev.=203.2, n=27. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9676, critical = 0.894. Kappa = 1.82 (c=7, w=3, 1 of 2, event alpha = 0.05132). Report alpha = 0.002505.

Constituent: Total dissolved solids Analysis Run 12/22/2023 2:13 PM View: Appendix III - Intrawell

Plant Gorgas Client: Southern Company Data: Gorgas GSA

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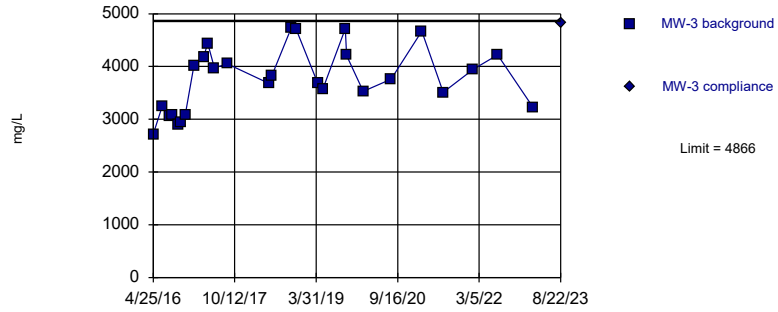
Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=3766, Std. Dev.=604.2, n=27. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9532, critical = 0.894. Kappa = 1.82 (c=7, w=3, 1 of 2, event alpha = 0.05132). Report alpha = 0.002505.

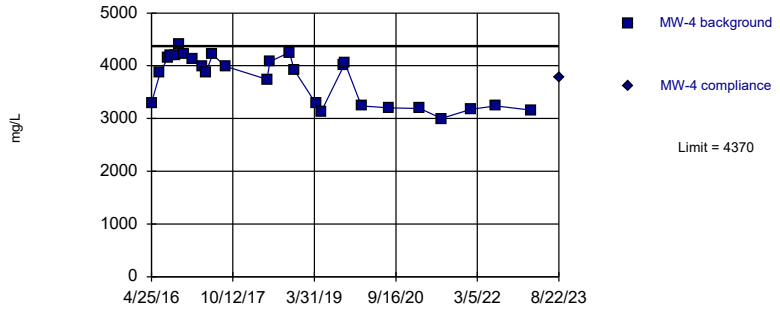
Constituent: Total dissolved solids Analysis Run 12/22/2023 2:13 PM View: Appendix III - Intrawell

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on x^6 transformation): Mean=3.3e21, Std. Dev.=2.0e21, n=27. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8941, critical = 0.894. Kappa = 1.82 (c=7, w=3, 1 of 2, event alpha = 0.05132). Report alpha = 0.002505.

Constituent: Total dissolved solids Analysis Run 12/22/2023 2:13 PM View: Appendix III - Intrawell

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Prediction Limit

Constituent: pH (pH) Analysis Run 12/22/2023 2:16 PM View: Appendix III - Intrawell

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-3	GS-GSA-MW-3
8/24/2016	6.28	
10/3/2016	6.28	
10/26/2016	6.19	
11/21/2016	6.2	
1/17/2017	6.13	
3/20/2017	6.17	
4/17/2017	5.6	
5/30/2017	6.07	
8/24/2017	5.99	
2/13/2018	5.88	
6/11/2018	5.91	
10/17/2018	5.88	
4/10/2019	5.83	
10/14/2019	6.04	
2/3/2020	5.98	
8/4/2020	6.09	
3/1/2021	5.82	
7/14/2021	5.93	
1/26/2022	6.52	
7/13/2022	5.92	
2/27/2023	5.83	
8/23/2023		6.03

Prediction Limit

Constituent: pH (pH) Analysis Run 12/22/2023 2:16 PM View: Appendix III - Intrawell

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-4	GS-GSA-MW-4
8/24/2016	3.83 (E)	
10/3/2016	3.82 (E)	
10/26/2016	3.81 (E)	
11/21/2016	3.81	
1/17/2017	3.78	
3/21/2017	3.76	
4/17/2017	3.76	
5/30/2017	3.76	
8/24/2017	3.7	
2/13/2018	3.73	
6/11/2018	3.8	
10/17/2018	3.81	
4/10/2019	3.83	
10/14/2019	3.91	
2/4/2020	3.83	
8/5/2020	3.86	
3/3/2021	3.76	
7/14/2021	3.74	
1/27/2022	3.73	
7/13/2022	3.43	
3/1/2023	3.5	
8/23/2023		3.74

Prediction Limit

Constituent: pH (pH) Analysis Run 12/22/2023 2:16 PM View: Appendix III - Intrawell

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-8	GS-GSA-MW-8
8/24/2016	6.78	
10/3/2016	6.71	
10/26/2016	6.65	
11/21/2016	6.7	
1/17/2017	6.25	
3/20/2017	7.04	
4/18/2017	6.99	
5/30/2017	6.98	
8/24/2017	6.89	
2/13/2018	6.85	
6/12/2018	6.83	
10/17/2018	6.81	
4/10/2019	6.71	
10/14/2019	6.88	
2/4/2020	6.85	
8/5/2020	6.76	
3/1/2021	6.48	
7/14/2021	6.88	
1/27/2022	6.85	
7/12/2022	6.49	
2/28/2023	6.93	
8/23/2023		6.83

Prediction Limit

Constituent: pH (pH) Analysis Run 12/22/2023 2:17 PM View: Appendix III - Intrawell

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	MW-1	MW-1
4/26/2016	5.2	
6/20/2016	5.18	
8/8/2016	5.12	
10/3/2016	5.21	
10/26/2016	5.2	
11/21/2016	5.19	
1/17/2017	5.17	
3/22/2017	5.2	
4/18/2017	5.2	
5/30/2017	5.14	
8/23/2017	5.12	
2/13/2018	5.18	
5/22/2018	5.2	
6/12/2018	5.15	
10/17/2018	5.12	
11/19/2018	5.09	
4/10/2019	5.11	
5/14/2019	5.19	
10/8/2019	5.12	
10/16/2019	5.16	
2/3/2020	5	
8/3/2020	5.08	
2/22/2021	5.06	
7/12/2021	5.13	
1/25/2022	5.11	
7/5/2022	5.01	
2/20/2023	5.07	
8/22/2023		4.92

Prediction Limit

Constituent: pH (pH) Analysis Run 12/22/2023 2:17 PM View: Appendix III - Intrawell

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	MW-2	MW-2
4/25/2016	5.94	
6/20/2016	5.96	
8/8/2016	5.88	
10/3/2016	5.91	
10/26/2016	5.84	
11/21/2016	5.82	
1/17/2017	5.87	
3/22/2017	6.01	
4/18/2017	6.02	
5/31/2017	5.85	
8/23/2017	5.89	
2/13/2018	6.21	
5/22/2018	6.04	
6/12/2018	5.95	
10/17/2018	5.9	
11/19/2018	6.03	
4/10/2019	6.1	
5/14/2019	6.07	
10/8/2019	5.96	
10/16/2019	5.98	
2/3/2020	5.95	
8/3/2020	5.95	
2/22/2021	6.1	
7/12/2021	6.16	
1/25/2022	6.22	
7/5/2022	6.15	
2/20/2023	6.24	
8/22/2023		5.81

Prediction Limit

Constituent: pH (pH) Analysis Run 12/22/2023 2:17 PM View: Appendix III - Intrawell

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	MW-3	MW-3
4/25/2016	5.56	
6/22/2016	5.57	
8/9/2016	5.67	
8/24/2016	5.63	
10/4/2016	5.69	
10/26/2016	5.56	
11/21/2016	5.42	
1/18/2017	5.11	
3/22/2017	4.52	
4/18/2017	5.84	
5/31/2017	4.56	
8/23/2017	4.77	
2/13/2018	5.67	
5/24/2018	5.19	
6/12/2018	4.79	
10/17/2018	4.75	
11/19/2018	3.77 (o)	
4/10/2019	5.54	
5/14/2019	5.71	
10/8/2019	4.98	
10/16/2019	4.51	
2/3/2020	5.54	
8/3/2020	5.06	
2/22/2021	5.59	
7/12/2021	5.86	
1/25/2022	5.9	
7/5/2022	5.34	
2/20/2023	6.01	
8/22/2023		5.04

Prediction Limit

Constituent: pH (pH) Analysis Run 12/22/2023 2:17 PM View: Appendix III - Intrawell

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	MW-4	MW-4
4/25/2016	6.22	
6/20/2016	6.21	
8/9/2016	6.11	
8/24/2016	6.11	
10/3/2016	6.13	
10/26/2016	6.12	
11/21/2016	6.09	
1/18/2017	6.09	
3/22/2017	6.15	
4/18/2017	6.19	
5/31/2017	6.13	
8/23/2017	6.12	
2/13/2018	6.22	
5/23/2018	6.21	
6/12/2018	6.16	
10/17/2018	6.12	
11/19/2018	6.16	
4/10/2019	6.14	
5/14/2019	6.23	
10/10/2019	6.15	
10/16/2019	6.19	
2/3/2020	6.14	
8/5/2020	6.15	
2/22/2021	6.19	
7/12/2021	6.06	
1/25/2022	6.3	
7/5/2022	6.12	
2/21/2023	6.35	
8/22/2023		6.28

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 12/22/2023 2:17 PM View: Appendix III - Intrawell

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-3	GS-GSA-MW-3
8/24/2016	2910	
10/3/2016	2980	
10/26/2016	2790	
11/21/2016	2880	
1/17/2017	2950	
3/20/2017	2800	
4/17/2017	2400	
5/30/2017	2900	
8/24/2017	2900	
6/11/2018	2900	
10/17/2018	2800	
4/10/2019	2980	
10/14/2019	3110	
2/3/2020	2840	
8/4/2020	2820	
3/1/2021	2320	
7/14/2021	2880	
1/26/2022	2620	
7/13/2022	3180	
2/27/2023	2770	
8/23/2023		3290

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 12/22/2023 2:17 PM View: Appendix III - Intrawell

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-4	GS-GSA-MW-4
8/24/2016	567	
10/3/2016	596	
10/26/2016	585	
11/21/2016	593	
1/17/2017	637	
3/21/2017	530	
4/17/2017	530	
5/30/2017	530	
8/24/2017	530	
6/11/2018	540	
10/17/2018	520	
4/10/2019	616	
10/14/2019	641	
2/4/2020	571	
8/5/2020	519	
3/3/2021	609	
7/14/2021		752
1/27/2022		1130
7/13/2022		3040
3/1/2023		2130
8/23/2023		828

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 12/22/2023 2:17 PM View: Appendix III - Intrawell

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-8	GS-GSA-MW-8
8/24/2016	1250	
10/3/2016	1270	
10/26/2016	1240	
11/21/2016	1210	
1/17/2017	1150	
3/20/2017	1400	
4/18/2017	1300	
5/30/2017	1500	
8/24/2017	1800	
6/12/2018	1800	
10/17/2018	1600	
4/10/2019	2150	
10/14/2019	2090	
2/4/2020	1570	
8/5/2020	1880	
3/1/2021	1450	
7/14/2021	1700	
1/27/2022	2000	
7/12/2022	1740	
2/28/2023	1390	
8/23/2023		1830

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 12/22/2023 2:17 PM View: Appendix III - Intrawell

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	MW-1	MW-1
4/26/2016	1490	
6/20/2016	1420	
8/8/2016	1460	
8/24/2016	1450	
10/3/2016	1460	
10/26/2016	1330	
11/21/2016	1420	
1/17/2017	1350	
3/22/2017	1500	
4/18/2017	1300	
5/30/2017	1400	
8/23/2017	1500	
5/22/2018	2100 (o)	
6/12/2018	1500	
10/17/2018	1400	
11/19/2018	1300	
4/10/2019	1700	
5/14/2019	1560	
10/8/2019	1540	
10/16/2019	1680	
2/3/2020	1510	
8/3/2020	1370	
2/22/2021	1400	
7/12/2021	1560	
1/25/2022	1430	
7/5/2022	1600	
2/20/2023	1520	
8/22/2023		1560

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 12/22/2023 2:17 PM View: Appendix III - Intrawell

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	MW-2	MW-2
4/25/2016	745	
6/20/2016	964	
8/8/2016	1100	
8/24/2016	1130	
10/3/2016	1140	
10/26/2016	1060	
11/21/2016	1100	
1/17/2017	1160	
3/22/2017	900	
4/18/2017	870	
5/31/2017	1100	
8/23/2017	920	
5/22/2018	1200	
6/12/2018	860	
10/17/2018	970	
11/19/2018	1000	
4/10/2019	889	
5/14/2019	948	
10/8/2019	1230	
10/16/2019	1170	
2/3/2020	803	
8/3/2020	907	
2/22/2021	864	
7/12/2021	763	
1/25/2022	842	
7/5/2022	819	
2/20/2023	767	
8/22/2023		912

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 12/22/2023 2:17 PM View: Appendix III - Intrawell

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	MW-3	MW-3
4/25/2016	1890	
6/22/2016	2100	
8/9/2016	2050	
8/24/2016	2190	
10/4/2016	1950	
10/26/2016	1980	
11/21/2016	2060	
1/18/2017	2620	
3/22/2017	3200	
4/18/2017	2500	
5/31/2017	2800	
8/23/2017	2600	
5/24/2018	2700	
6/12/2018	2500	
10/17/2018	2700	
11/19/2018	3000	
4/10/2019	2460	
5/14/2019	2460	
10/8/2019	2950	
10/16/2019	2820	
2/3/2020	2290	
8/3/2020	2330	
2/22/2021	3040	
7/12/2021	2380	
1/25/2022	2550	
7/5/2022	3110	
2/20/2023	2110	
8/22/2023		3140

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 12/22/2023 2:17 PM View: Appendix III - Intrawell

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	MW-4	MW-4
4/25/2016	2260	
6/20/2016	2500	
8/9/2016	2750	
8/24/2016	2770	
10/3/2016	3060	
10/26/2016	2650	
11/21/2016	2720	
1/18/2017	2650	
3/22/2017	2700	
4/18/2017	2400	
5/31/2017	2700	
8/23/2017	2700	
5/23/2018	2400	
6/12/2018	2600	
10/17/2018	2600	
11/19/2018	2400	
4/10/2019	2090	
5/14/2019	2240	
10/10/2019	2690	
10/16/2019	3050	
2/3/2020	1920	
8/5/2020	1930	
2/22/2021	2040	
7/12/2021	1930	
1/25/2022	1930	
7/5/2022	2380	
2/21/2023	1930	
8/22/2023		2390

Prediction Limit

Constituent: Total dissolved solids (mg/L) Analysis Run 12/22/2023 2:17 PM View: Appendix III - Intrawell

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-3	GS-GSA-MW-3
8/24/2016	5020	
10/3/2016	4880	
10/26/2016	5020	
11/21/2016	5090	
1/17/2017	4330	
3/20/2017	2690	
4/17/2017	4780	
5/30/2017	5170	
8/24/2017	5140	
6/11/2018	4960	
10/17/2018	4910	
4/10/2019	5090	
10/14/2019	5110	
2/3/2020	4920	
8/4/2020	5110	
3/1/2021	4390	
7/14/2021	4920	
1/26/2022	4260	
7/13/2022	4960	
2/27/2023	5000	
8/23/2023		5360

Prediction Limit

Constituent: Total dissolved solids (mg/L) Analysis Run 12/22/2023 2:17 PM View: Appendix III - Intrawell

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-4	GS-GSA-MW-4
8/24/2016	992	
10/3/2016	988	
10/26/2016	1030	
11/21/2016	1020	
1/17/2017	988	
3/21/2017	990	
4/17/2017	884	
5/30/2017	1060	
8/24/2017	1060	
6/11/2018	944	
10/17/2018	928	
4/10/2019	1000	
10/14/2019	967	
2/4/2020	978	
8/5/2020	938	
3/3/2021	1040	
7/14/2021		1300
1/27/2022		1840
7/13/2022		4700
3/1/2023		3310
8/23/2023		1460

Prediction Limit

Constituent: Total dissolved solids (mg/L) Analysis Run 12/22/2023 2:17 PM View: Appendix III - Intrawell

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-8	GS-GSA-MW-8
8/24/2016	2280	
10/3/2016	2370	
10/26/2016	2350	
11/21/2016	2530	
1/17/2017	2380	
3/20/2017	2630	
4/18/2017	2700	
5/30/2017	2980	
8/24/2017	3390	
6/12/2018	3510	
10/17/2018	3550	
4/10/2019	3580	
10/14/2019	3730	
2/4/2020	3190	
8/5/2020	3610	
3/1/2021	2870	
7/14/2021	3150	
1/27/2022	3290	
7/12/2022	3090	
2/28/2023	2620	
8/23/2023		3280

Prediction Limit

Constituent: Total dissolved solids (mg/L) Analysis Run 12/22/2023 2:17 PM View: Appendix III - Intrawell

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	MW-1	MW-1
4/26/2016	2080	
6/20/2016	2060	
8/8/2016	2070	
8/24/2016	2040	
10/3/2016	2110	
10/26/2016	2000	
11/21/2016	2070	
1/17/2017	1930	
3/22/2017	2060	
4/18/2017	2140	
5/30/2017	2240	
8/23/2017	2160	
5/22/2018	2380	
6/12/2018	2400	
10/17/2018	2220	
11/19/2018	2360	
4/10/2019	2630	
5/14/2019	2340	
10/8/2019	2330	
10/16/2019	3650 (o)	
2/3/2020	2380	
8/3/2020	2200	
2/22/2021	2230	
7/12/2021	2210	
1/25/2022	2150	
7/5/2022	2100	
2/20/2023	2280	
8/22/2023		2160

Prediction Limit

Constituent: Total dissolved solids (mg/L) Analysis Run 12/22/2023 2:17 PM View: Appendix III - Intrawell

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	MW-2	MW-2
4/25/2016	1260	
6/20/2016	1620	
8/8/2016	1740	
8/24/2016	1720	
10/3/2016	1800	
10/26/2016	1800	
11/21/2016	1740	
1/17/2017	1960	
3/22/2017	1510	
4/18/2017	1580	
5/31/2017	1730	
8/23/2017	1550	
5/22/2018	1500	
6/12/2018	1550	
10/17/2018	1740	
11/19/2018	1990	
4/10/2019	1250	
5/14/2019	1480	
10/8/2019	1840	
10/16/2019	1830	
2/3/2020	1440	
8/3/2020	1650	
2/22/2021	1620	
7/12/2021	1390	
1/25/2022	1500	
7/5/2022	1250	
2/20/2023	1420	
8/22/2023		1520

Prediction Limit

Constituent: Total dissolved solids (mg/L) Analysis Run 12/22/2023 2:17 PM View: Appendix III - Intrawell

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	MW-3	MW-3
4/25/2016	2720	
6/22/2016	3250	
8/9/2016	3050	
8/24/2016	3080	
10/4/2016	2900	
10/26/2016	2940	
11/21/2016	3090	
1/18/2017	4020	
3/22/2017	4180	
4/18/2017	4440	
5/31/2017	3970	
8/23/2017	4050	
5/24/2018	3680	
6/12/2018	3820	
10/17/2018	4730	
11/19/2018	4710	
4/10/2019	3680	
5/14/2019	3580	
10/8/2019	4720	
10/16/2019	4210	
2/3/2020	3530	
8/3/2020	3760	
2/22/2021	4670	
7/12/2021	3510	
1/25/2022	3950	
7/5/2022	4220	
2/20/2023	3230	
8/22/2023		4820

Prediction Limit

Constituent: Total dissolved solids (mg/L) Analysis Run 12/22/2023 2:17 PM View: Appendix III - Intrawell

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	MW-4	MW-4
4/25/2016	3300	
6/20/2016	3870	
8/9/2016	4140	
8/24/2016	4190	
10/3/2016	4190	
10/26/2016	4400	
11/21/2016	4230	
1/18/2017	4120	
3/22/2017	3980	
4/18/2017	3880	
5/31/2017	4210	
8/23/2017	3990	
5/23/2018	3740	
6/12/2018	4080	
10/17/2018	4250	
11/19/2018	3920	
4/10/2019	3280	
5/14/2019	3130 (D)	
10/10/2019	4000	
10/16/2019	4060	
2/3/2020	3240	
8/5/2020	3200	
2/22/2021	3190	
7/12/2021	3000	
1/25/2022	3180	
7/5/2022	3240	
2/21/2023	3160	
8/22/2023		3780

FIGURE G.

Appendix III - Interwell Prediction Limits - Significant Results

Plant Gorgas Client: Southern Company Data: Gorgas GSA Printed 12/22/2023, 2:26 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	**GS-GSA-MW-3**	**0.1015**	**n/a**	**8/23/2023**	**1.57**	**Yes**	**111**	**n/a**	**n/a**	**25.23**	**n/a**	**n/a**	**0.0001615**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**GS-GSA-MW-4**	**0.1015**	**n/a**	**8/23/2023**	**2.24**	**Yes**	**111**	**n/a**	**n/a**	**25.23**	**n/a**	**n/a**	**0.0001615**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**GS-GSA-MW-8**	**0.1015**	**n/a**	**8/23/2023**	**2.22**	**Yes**	**111**	**n/a**	**n/a**	**25.23**	**n/a**	**n/a**	**0.0001615**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**GS-GSA-MW-3**	**431**	**n/a**	**8/23/2023**	**585**	**Yes**	**112**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0001586**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**GS-GSA-MW-8**	**431**	**n/a**	**8/23/2023**	**451**	**Yes**	**112**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0001586**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	**GS-GSA-MW-3**	**4.6**	**n/a**	**8/23/2023**	**212**	**Yes**	**112**	**n/a**	**n/a**	**2.679**	**n/a**	**n/a**	**0.0001586**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	**GS-GSA-MW-4**	**4.6**	**n/a**	**8/23/2023**	**22.5**	**Yes**	**112**	**n/a**	**n/a**	**2.679**	**n/a**	**n/a**	**0.0001586**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	**GS-GSA-MW-8**	**4.6**	**n/a**	**8/23/2023**	**90**	**Yes**	**112**	**n/a**	**n/a**	**2.679**	**n/a**	**n/a**	**0.0001586**	**NP Inter (normality) 1 of 2**

Appendix III - Interwell Prediction Limits - All Results

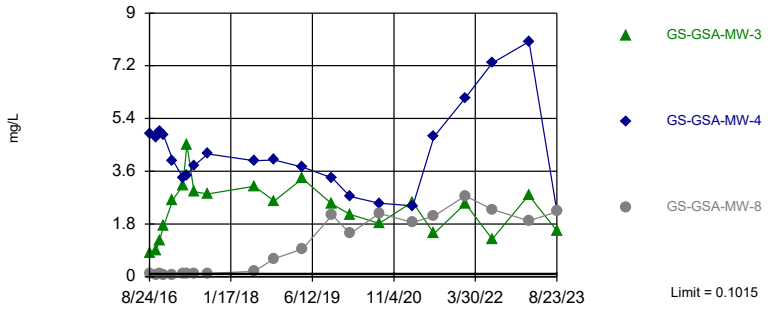
Plant Gorgas Client: Southern Company Data: Gorgas GSA Printed 12/22/2023, 2:26 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	**GS-GSA-MW-3**	**0.1015**	**n/a**	**8/23/2023**	**1.57**	**Yes**	**111**	**n/a**	**n/a**	**25.23**	**n/a**	**n/a**	**0.0001615**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**GS-GSA-MW-4**	**0.1015**	**n/a**	**8/23/2023**	**2.24**	**Yes**	**111**	**n/a**	**n/a**	**25.23**	**n/a**	**n/a**	**0.0001615**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**GS-GSA-MW-8**	**0.1015**	**n/a**	**8/23/2023**	**2.22**	**Yes**	**111**	**n/a**	**n/a**	**25.23**	**n/a**	**n/a**	**0.0001615**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**GS-GSA-MW-3**	**431**	**n/a**	**8/23/2023**	**585**	**Yes**	**112**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0001586**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	GS-GSA-MW-4	431	n/a	8/23/2023	156	No	112	n/a	n/a	0	n/a	n/a	0.0001586	NP Inter (normality) 1 of 2
Calcium (mg/L)	**GS-GSA-MW-8**	**431**	**n/a**	**8/23/2023**	**451**	**Yes**	**112**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0001586**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	**GS-GSA-MW-3**	**4.6**	**n/a**	**8/23/2023**	**212**	**Yes**	**112**	**n/a**	**n/a**	**2.679**	**n/a**	**n/a**	**0.0001586**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	**GS-GSA-MW-4**	**4.6**	**n/a**	**8/23/2023**	**22.5**	**Yes**	**112**	**n/a**	**n/a**	**2.679**	**n/a**	**n/a**	**0.0001586**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	**GS-GSA-MW-8**	**4.6**	**n/a**	**8/23/2023**	**90**	**Yes**	**112**	**n/a**	**n/a**	**2.679**	**n/a**	**n/a**	**0.0001586**	**NP Inter (normality) 1 of 2**
Fluoride (mg/L)	GS-GSA-MW-3	0.63	n/a	8/23/2023	0.542	No	116	n/a	n/a	0.8621	n/a	n/a	0.0001469	NP Inter (normality) 1 of 2
Fluoride (mg/L)	GS-GSA-MW-4	0.63	n/a	8/23/2023	0.05ND	No	116	n/a	n/a	0.8621	n/a	n/a	0.0001469	NP Inter (normality) 1 of 2
Fluoride (mg/L)	GS-GSA-MW-8	0.63	n/a	8/23/2023	0.139	No	116	n/a	n/a	0.8621	n/a	n/a	0.0001469	NP Inter (normality) 1 of 2

Exceeds Limit: GS-GSA-MW-3, GS-GSA-MW-4, GS-GSA-MW-8

Prediction Limit

Interwell Non-parametric



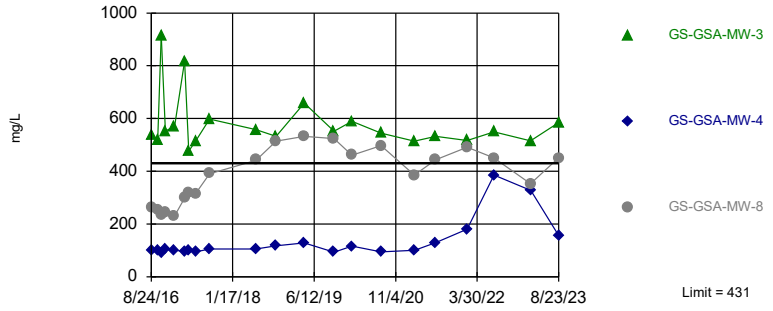
Non-parametric test used in lieu of parametric prediction limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 111 background values. 25.23% NDs. Annual per-constituent alpha = 0.0009688. Individual comparison alpha = 0.0001615 (1 of 2). Comparing 3 points to limit.

Constituent: Boron Analysis Run 12/22/2023 2:23 PM View: Appendix III - Interwell
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Exceeds Limit: GS-GSA-MW-3, GS-GSA-MW-8

Prediction Limit

Interwell Non-parametric



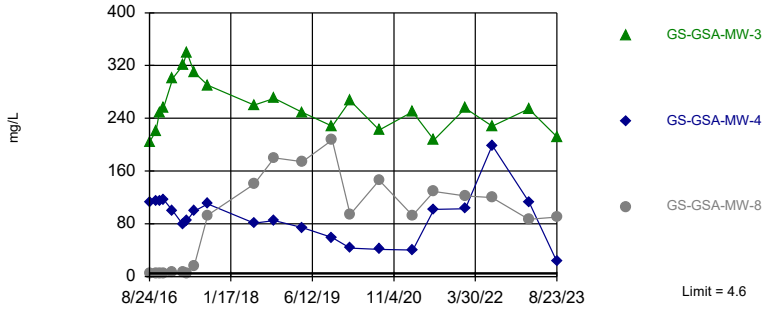
Non-parametric test used in lieu of parametric prediction limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 112 background values. Annual per-constituent alpha = 0.0009513. Individual comparison alpha = 0.0001586 (1 of 2). Comparing 3 points to limit.

Constituent: Calcium Analysis Run 12/22/2023 2:23 PM View: Appendix III - Interwell
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Exceeds Limit: GS-GSA-MW-3, GS-GSA-MW-4, GS-GSA-MW-8

Prediction Limit

Interwell Non-parametric



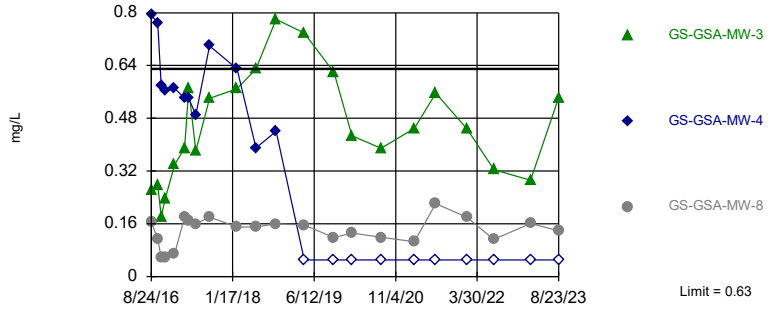
Non-parametric test used in lieu of parametric prediction limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 112 background values. 2.679% NDs. Annual per-constituent alpha = 0.0009513. Individual comparison alpha = 0.0001586 (1 of 2). Comparing 3 points to limit.

Constituent: Chloride Analysis Run 12/22/2023 2:23 PM View: Appendix III - Interwell
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 116 background values. 0.8621% NDs. Annual per-constituent alpha = 0.0008813. Individual comparison alpha = 0.0001469 (1 of 2). Comparing 3 points to limit.

Constituent: Fluoride Analysis Run 12/22/2023 2:23 PM View: Appendix III - Interwell
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 12/22/2023 2:26 PM View: Appendix III - Interwell

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	MW-2 (bg)	MW-3 (bg)	MW-4 (bg)	MW-1 (bg)	GS-GSA-MW-4	GS-GSA-MW-3	GS-GSA-MW-8
4/25/2016	0.0241 (J)	0.028 (J)	0.0414 (J)				
4/26/2016				0.0231 (J)			
6/20/2016	0.0284 (J)		0.0434 (J)	0.0227 (J)			
6/22/2016		0.0433 (J)					
8/8/2016	0.034 (J)			0.0278 (J)			
8/9/2016		0.0429 (J)	0.0453 (J)				
8/24/2016	0.0316 (J)	0.0431 (J)	0.0451 (J)	0.0247 (J)	4.88	0.799	0.0898 (J)
10/3/2016	0.0367 (J)		0.0511 (J)	0.0307 (J)	4.75	0.889	0.0821 (J)
10/4/2016		0.04 (J)					
10/26/2016	0.0331 (J)	0.0375 (J)	0.0507 (J)	0.0241 (J)	4.96	1.23	0.0889 (J)
11/21/2016	0.035 (J)	0.0406 (J)	0.0458 (J)	0.0202 (J)	4.82	1.72	0.0788 (J)
1/17/2017	0.0259 (J)			0.0201 (J)	3.97	2.63	0.0607 (J)
1/18/2017		0.0548 (J)	0.0445 (J)				
3/20/2017						3.11	0.114
3/21/2017					3.39		
3/22/2017	0.0243 (J)	0.0344 (J)	0.0432 (J)	0.0224 (J)			
4/17/2017					3.46	4.51	
4/18/2017	0.0206 (J)	<0.1015	0.0409 (J)	<0.1015			0.108
5/30/2017				<0.1015	3.79	2.9	0.105
5/31/2017	0.0234 (J)	0.0454 (J)	0.0392 (J)				
8/23/2017	0.0267 (J)	0.0425 (J)	0.042 (J)	0.0253 (J)			
8/24/2017					4.19	2.83	0.12
5/22/2018	0.0251 (J)			0.0224 (J)			
5/23/2018			0.0433 (J)				
5/24/2018		0.0339 (J)					
6/11/2018					3.96	3.09	
6/12/2018	0.0275 (J)	0.0371 (J)	0.0478 (J)	0.0214 (J)			0.181
10/17/2018	0.0321 (J)	0.0596 (J)	0.0468 (J)	0.0216 (J)	3.98	2.59	0.616
11/19/2018	0.0324 (J)	0.0514 (J)	0.0526 (J)	0.0237 (J)			
4/10/2019	<0.1015	<0.1015	0.0438 (J)	0.0304 (J)	3.74	3.35	0.944
5/14/2019	<0.1015	<0.1015	<0.203 (o)	<0.1015			
10/8/2019	0.0371 (J)	0.0537 (J)		<0.1015			
10/10/2019			0.0487 (J)				
10/14/2019					3.37	2.48	2.11
10/16/2019	0.0419 (J)	0.05 (J)	0.0505 (J)	0.0385 (J)			
2/3/2020	<0.1015	<0.1015	0.0433 (J)	<0.1015		2.13	
2/4/2020					2.74		1.47
8/3/2020	0.0317 (J)	0.0424 (J)		<0.1015			
8/4/2020						1.82	
8/5/2020			0.0459 (J)		2.51		2.16
2/22/2021	<0.1015	<0.1015	0.0397 (J)	0.0307 (J)			
3/1/2021						2.55	1.85
3/3/2021					2.42		
7/12/2021	<0.1015	<0.1015	0.0411 (J)	<0.1015			
7/14/2021					4.78	1.47	2.07
1/25/2022	<0.1015	<0.1015	0.0408 (J)	<0.1015			
1/26/2022						2.5	
1/27/2022					6.1		2.76
7/5/2022	<0.1015	0.0374 (J)	0.0433 (J)	<0.1015			
7/12/2022							2.3
7/13/2022					7.29	1.29	
2/20/2023	<0.1015	<0.1015		<0.1015			

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 12/22/2023 2:26 PM View: Appendix III - Interwell

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	MW-2 (bg)	MW-3 (bg)	MW-4 (bg)	MW-1 (bg)	GS-GSA-MW-4	GS-GSA-MW-3	GS-GSA-MW-8
2/21/2023			0.0408 (J)				
2/27/2023						2.78	
2/28/2023							1.91
3/1/2023					8.02		
8/22/2023	<0.1015	0.0373 (J)	0.0448 (J)	<0.1015			
8/23/2023					2.24	1.57	2.22

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 12/22/2023 2:26 PM View: Appendix III - Interwell

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	MW-4 (bg)	MW-3 (bg)	MW-2 (bg)	MW-1 (bg)	GS-GSA-MW-8	GS-GSA-MW-4	GS-GSA-MW-3
4/25/2016	261	224	123				
4/26/2016				147			
6/20/2016	295		168	152			
6/22/2016		266					
8/8/2016			180	150			
8/9/2016	318	260					
8/24/2016	319	274	180	142	263	102	539
10/3/2016	293		184	139	253	98.4	519.7
10/4/2016		243					
10/26/2016	311	254	171	133	235	88.7	916
11/21/2016	320	263	179	144	246	104	552
1/17/2017			188	131	231	102	572
1/18/2017	417	431					
3/20/2017					298		817
3/21/2017						94.7	
3/22/2017	292	318	155	141			
4/17/2017						97.9	476
4/18/2017	302	296	156	149	317		
5/30/2017				140	316	93.9	515
5/31/2017	284	306	151				
8/23/2017	297	298	155	152			
8/24/2017					391	105	598
5/22/2018			172	166			
5/23/2018	296						
5/24/2018		297					
6/11/2018						105	558
6/12/2018	355	318	179	203	442		
10/17/2018	342	392	200	171	514	117	533
11/19/2018	289	387	221	154			
4/10/2019	356	348	200	243	533	129	659
5/14/2019	254	254	168	167			
10/8/2019		371	190	157			
10/10/2019	302						
10/14/2019					524	93.5	552
10/16/2019	356	346	194	157			
2/3/2020	265	276	172	172			589
2/4/2020					461	116	
8/3/2020		285	172	148			
8/4/2020							545
8/5/2020	281				497	94.7	
2/22/2021	271	312	178	151			
3/1/2021					386		514
3/3/2021						100	
7/12/2021	242	252	159	149			
7/14/2021					444	130	533
1/25/2022	259	285	179	150			
1/26/2022							517
1/27/2022					491	181	
7/5/2022	294	369	172	168			
7/12/2022					451		
7/13/2022						385	549
2/20/2023		210	160	151			

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 12/22/2023 2:26 PM View: Appendix III - Interwell
Plant Gorgas Client: Southern Company Data: Gorgas GSA

	MW-4 (bg)	MW-3 (bg)	MW-2 (bg)	MW-1 (bg)	GS-GSA-MW-8	GS-GSA-MW-4	GS-GSA-MW-3
2/21/2023	232						
2/27/2023							516
2/28/2023					353		
3/1/2023						327	
8/22/2023	287	359	168	183			
8/23/2023					451	156	585

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 12/22/2023 2:26 PM View: Appendix III - Interwell

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	MW-4 (bg)	MW-3 (bg)	MW-2 (bg)	MW-1 (bg)	GS-GSA-MW-8	GS-GSA-MW-4	GS-GSA-MW-3
4/25/2016	1.53	1.32	1.9				
4/26/2016				1.94			
6/20/2016	1.85		3.43	2.09			
6/22/2016		1.46					
8/8/2016			3.31	2.18			
8/9/2016	1.95	1.35					
8/24/2016	2.07	1.47	3.23	2.22	4.03	112	204
10/3/2016	2.02		3.21	2.34	3.87	115	220
10/4/2016		1.59					
10/26/2016	2.07	1.27	3.35	2.34	4.08	115	249
11/21/2016	2.39	1.38	3.34	2.5	4.39	117	256
1/17/2017			3.58	2.68	7.22	99.3	301
1/18/2017	1.9	1.34					
3/20/2017					5.7		320
3/21/2017						79	
3/22/2017	1.5 (J)	2	3.4	3.7			
4/17/2017						85	340
4/18/2017	1.6 (J)	2.2	2.6	2.4	4.7		
5/30/2017				2.6	15	99	310
5/31/2017	2.1	1.5 (J)	4.4				
8/23/2017	2.3	1.8 (J)	4.4	2.7			
8/24/2017					93	110	290
5/22/2018			3.2	2.3			
5/23/2018	2						
5/24/2018		1.6 (J)					
6/11/2018						81	260
6/12/2018	1.7 (J)	1.4 (J)	3.7	2.3	140		
10/17/2018	1.5 (J)	<2	4.6	1.7 (J)	180	85	270
11/19/2018	<2	<2	3	1.7 (J)			
4/10/2019	1.88	2.25	1.76	2.36	174	74.3	249
5/14/2019	1.82	2.28	2.98	2.28			
10/8/2019		1.36	4.26	2.31			
10/10/2019	1.93						
10/14/2019					207	59.1	228
10/16/2019	1.92	1.4	4.04	2.42			
2/3/2020	1.72	2.12	2.48	2.07			267
2/4/2020					94.1	43.2	
8/3/2020		1.17	4.03	2.05			
8/4/2020							222
8/5/2020	1.57				146	41	
2/22/2021	1.52	2.22	1.72	2.16			
3/1/2021					92.5		250
3/3/2021						40.3	
7/12/2021	1.56	2.13	2.36	2.19			
7/14/2021					129	102	207
1/25/2022	1.54	2.12	2.14	2.09			
1/26/2022							255
1/27/2022					122	103	
7/5/2022	1.63	1.59	2.53	2.07			
7/12/2022					120		
7/13/2022						199	228
2/20/2023		1.94	1.7	2.05			

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 12/22/2023 2:26 PM View: Appendix III - Interwell

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	MW-4 (bg)	MW-3 (bg)	MW-2 (bg)	MW-1 (bg)	GS-GSA-MW-8	GS-GSA-MW-4	GS-GSA-MW-3
2/21/2023	1.58						
2/27/2023							254
2/28/2023					86.9		
3/1/2023						113	
8/22/2023	1.86	1.31	3.13	2.38			
8/23/2023					90	22.5	212

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 12/22/2023 2:26 PM View: Appendix III - Interwell

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	MW-2 (bg)	MW-3 (bg)	MW-4 (bg)	MW-1 (bg)	GS-GSA-MW-3	GS-GSA-MW-4	GS-GSA-MW-8
4/25/2016	0.149 (J)	0.243 (J)	0.372				
4/26/2016				0.146 (J)			
6/20/2016	0.148 (J)		0.361	0.148 (J)			
6/22/2016		0.269 (J)					
8/8/2016	0.134 (J)			0.137 (J)			
8/9/2016		0.363	0.326				
8/24/2016	0.129 (J)	0.346	0.329	0.133 (J)	0.264 (J)	0.793	0.165 (J)
10/3/2016	0.086 (J)		0.287 (J)	0.103 (J)	0.276 (J)	0.769	0.114 (J)
10/4/2016		0.266 (J)					
10/26/2016	0.027 (J)	0.266 (J)	0.194 (J)	0.05 (J)	0.182 (J)	0.578	0.056 (J)
11/21/2016	0.027 (J)	0.244 (J)	0.192 (J)	0.047 (J)	0.238 (J)	0.562	0.059 (J)
1/17/2017	0.066 (J)			0.09 (J)	0.34	0.571	0.07 (J)
1/18/2017		0.385	0.223 (J)				
3/20/2017					0.39		0.18
3/21/2017						0.54	
3/22/2017	0.13	0.41	0.32	0.12			
4/17/2017					0.57	0.54	
4/18/2017	0.16	0.29	0.32	0.12			0.17
5/30/2017				0.13	0.38	0.49	0.16
5/31/2017	0.13	0.37	0.31				
8/23/2017	0.16	0.55	0.38	0.16			
8/24/2017					0.54	0.7	0.18
2/13/2018	0.22	0.27	0.38	0.14	0.57	0.63	0.15
5/22/2018	0.17			0.16			
5/23/2018			0.38				
5/24/2018		0.6					
6/11/2018					0.63	0.39	
6/12/2018	0.16	0.53	0.39	0.16			0.15
10/17/2018	0.16	0.63	0.39	0.18	0.78	0.44	0.16
11/19/2018	0.18	0.31	0.36	0.15			
4/10/2019	0.262	0.273	0.384	0.102	0.738	<0.1	0.156
5/14/2019	0.17	0.281	0.335	0.119			
10/8/2019	0.164	0.225		0.0924 (J)			
10/10/2019			0.304				
10/14/2019					0.619	<0.1	0.118
10/16/2019	0.114	0.106	0.302	0.0756 (J)			
2/3/2020	0.182	0.256	0.37	0.0982 (J)	0.427		
2/4/2020						<0.1	0.132
8/3/2020	0.122	0.0766 (J)		<0.1			
8/4/2020					0.389		
8/5/2020			0.359			<0.1	0.119
2/22/2021	0.209	0.246	0.357	0.082 (J)			
3/1/2021					0.449		0.106
3/3/2021						<0.1	
7/12/2021	0.196	0.287	0.35	0.125			
7/14/2021					0.556	<0.1	0.221
1/25/2022	0.204	0.325	0.364	0.101			
1/26/2022					0.447		
1/27/2022						<0.1	0.179
7/5/2022	0.2	0.386	0.362	0.11 (J)			
7/12/2022							0.112 (J)
7/13/2022					0.324	<0.1	

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 12/22/2023 2:26 PM View: Appendix III - Interwell

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	MW-2 (bg)	MW-3 (bg)	MW-4 (bg)	MW-1 (bg)	GS-GSA-MW-3	GS-GSA-MW-4	GS-GSA-MW-8
2/20/2023	0.267	0.379		0.221			
2/21/2023			0.415				
2/27/2023					0.292		
2/28/2023							0.161
3/1/2023						<0.1	
8/22/2023	0.184	0.283	0.358	0.159			
8/23/2023					0.542	<0.1	0.139

ND substitution: RL or RL/2 if <15% NDs.

FIGURE H.

Appendix III - Trend Tests Summary - Significant Results

Plant Gorgas Client: Southern Company Data: Gorgas GSA Printed 12/22/2023, 2:29 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Alpha	Method
Boron (mg/L)	**GS-GSA-MW-8**	**0.3589**	**160**	**87**	**Yes**	**21**	**0**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**MW-1 (bg)**	**0.006286**	**161**	**131**	**Yes**	**28**	**39.29**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**MW-2 (bg)**	**0.009837**	**186**	**131**	**Yes**	**28**	**32.14**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**GS-GSA-MW-8**	**36.13**	**97**	**87**	**Yes**	**21**	**0**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**GS-GSA-MW-8**	**19.64**	**92**	**87**	**Yes**	**21**	**0**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**MW-3 (bg)**	**102.2**	**133**	**131**	**Yes**	**28**	**0**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**MW-4 (bg)**	**-95.63**	**-172**	**-131**	**Yes**	**28**	**0**	**n/a**	**0.01**	**NP**
Total dissolved solids (mg/L)	**MW-4 (bg)**	**-136.9**	**-170**	**-131**	**Yes**	**28**	**0**	**n/a**	**0.01**	**NP**

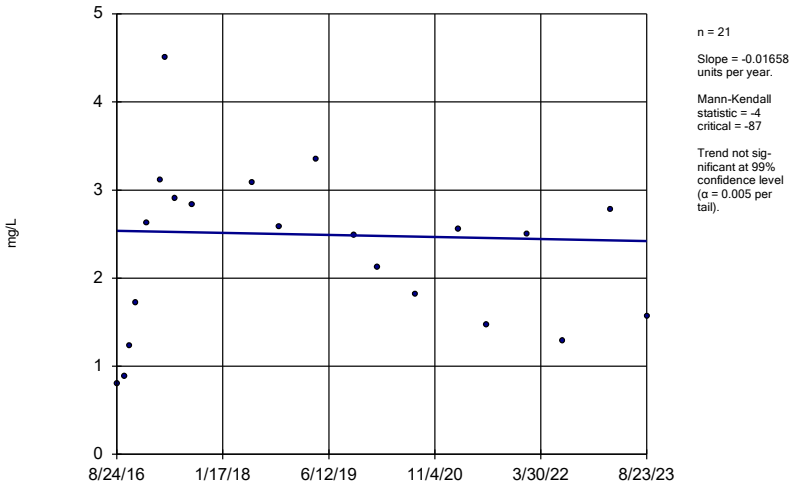
Appendix III - Trend Tests Summary - All Results

Plant Gorgas Client: Southern Company Data: Gorgas GSA Printed 12/22/2023, 2:29 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Alpha	Method
Boron (mg/L)	GS-GSA-MW-3	-0.01658	-4	-87	No	21	0	n/a	0.01	NP
Boron (mg/L)	GS-GSA-MW-4	-0.2357	-36	-87	No	21	0	n/a	0.01	NP
Boron (mg/L)	**GS-GSA-MW-8**	**0.3589**	**160**	**87**	**Yes**	**21**	**0**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**MW-1 (bg)**	**0.006286**	**161**	**131**	**Yes**	**28**	**39.29**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**MW-2 (bg)**	**0.009837**	**186**	**131**	**Yes**	**28**	**32.14**	**n/a**	**0.01**	**NP**
Boron (mg/L)	MW-3 (bg)	0.004142	106	131	No	28	28.57	n/a	0.01	NP
Boron (mg/L)	MW-4 (bg)	-0.0003115	-47	-124	No	27	0	n/a	0.01	NP
Calcium (mg/L)	GS-GSA-MW-3	-3.604	-30	-87	No	21	0	n/a	0.01	NP
Calcium (mg/L)	**GS-GSA-MW-8**	**36.13**	**97**	**87**	**Yes**	**21**	**0**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	MW-1 (bg)	2.888	127	131	No	28	0	n/a	0.01	NP
Calcium (mg/L)	MW-2 (bg)	0	13	131	No	28	0	n/a	0.01	NP
Calcium (mg/L)	MW-3 (bg)	9.735	73	131	No	28	0	n/a	0.01	NP
Calcium (mg/L)	MW-4 (bg)	-6.218	-104	-131	No	28	0	n/a	0.01	NP
Chloride (mg/L)	GS-GSA-MW-3	-6.477	-44	-87	No	21	0	n/a	0.01	NP
Chloride (mg/L)	GS-GSA-MW-4	-9.635	-66	-87	No	21	0	n/a	0.01	NP
Chloride (mg/L)	**GS-GSA-MW-8**	**19.64**	**92**	**87**	**Yes**	**21**	**0**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	MW-1 (bg)	-0.02503	-56	-131	No	28	0	n/a	0.01	NP
Chloride (mg/L)	MW-2 (bg)	-0.1196	-79	-131	No	28	0	n/a	0.01	NP
Chloride (mg/L)	MW-3 (bg)	0.04365	66	131	No	28	7.143	n/a	0.01	NP
Chloride (mg/L)	MW-4 (bg)	-0.05154	-98	-131	No	28	3.571	n/a	0.01	NP
Sulfate (mg/L)	GS-GSA-MW-3	0	-4	-87	No	21	0	n/a	0.01	NP
Sulfate (mg/L)	GS-GSA-MW-4	35.04	74	87	No	21	0	n/a	0.01	NP
Sulfate (mg/L)	MW-1 (bg)	15.92	95	124	No	27	0	n/a	0.01	NP
Sulfate (mg/L)	MW-2 (bg)	-33.63	-109	-131	No	28	0	n/a	0.01	NP
Sulfate (mg/L)	**MW-3 (bg)**	**102.2**	**133**	**131**	**Yes**	**28**	**0**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**MW-4 (bg)**	**-95.63**	**-172**	**-131**	**Yes**	**28**	**0**	**n/a**	**0.01**	**NP**
Total dissolved solids (mg/L)	GS-GSA-MW-3	10.23	17	87	No	21	0	n/a	0.01	NP
Total dissolved solids (mg/L)	GS-GSA-MW-4	57.41	66	87	No	21	0	n/a	0.01	NP
Total dissolved solids (mg/L)	MW-1 (bg)	32.59	115	124	No	27	0	n/a	0.01	NP
Total dissolved solids (mg/L)	MW-2 (bg)	-35.3	-96	-131	No	28	0	n/a	0.01	NP
Total dissolved solids (mg/L)	MW-3 (bg)	168.3	127	131	No	28	0	n/a	0.01	NP
Total dissolved solids (mg/L)	**MW-4 (bg)**	**-136.9**	**-170**	**-131**	**Yes**	**28**	**0**	**n/a**	**0.01**	**NP**

Sen's Slope Estimator

GS-GSA-MW-3



n = 21

Slope = -0.01658 units per year.

Mann-Kendall statistic = -4 critical = -87

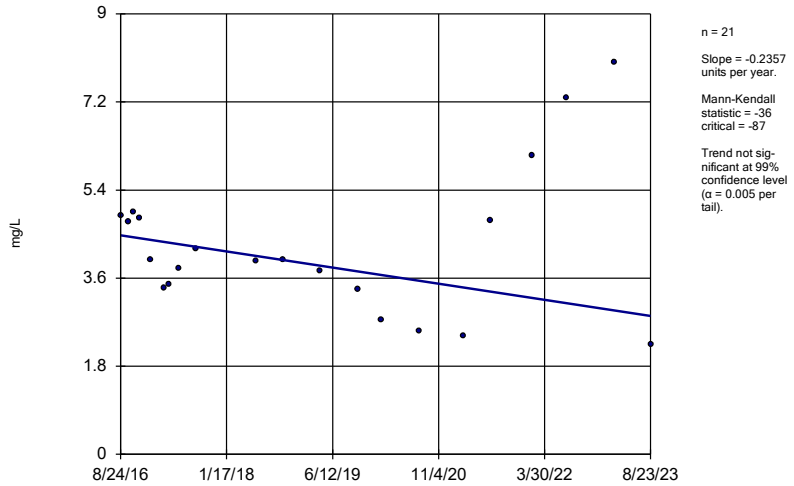
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 12/22/2023 2:27 PM View: Appendix III - Trend Tests

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sen's Slope Estimator

GS-GSA-MW-4



n = 21

Slope = -0.2357 units per year.

Mann-Kendall statistic = -36 critical = -87

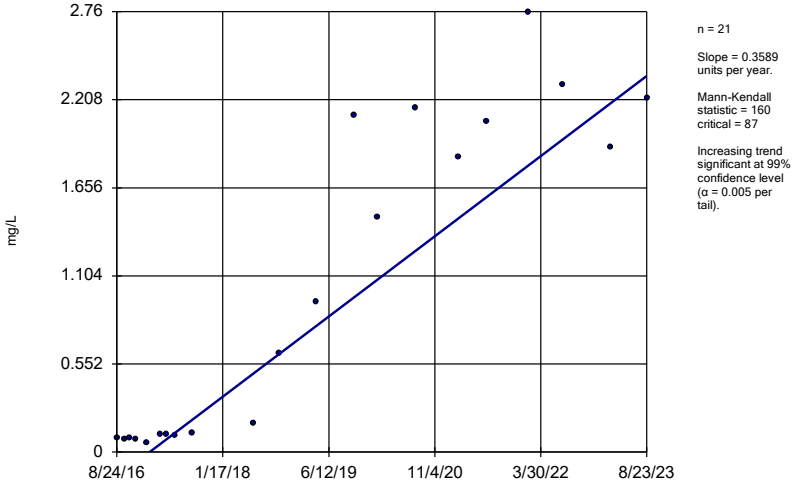
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 12/22/2023 2:27 PM View: Appendix III - Trend Tests

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sen's Slope Estimator

GS-GSA-MW-8



n = 21

Slope = 0.3589 units per year.

Mann-Kendall statistic = 160 critical = 87

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

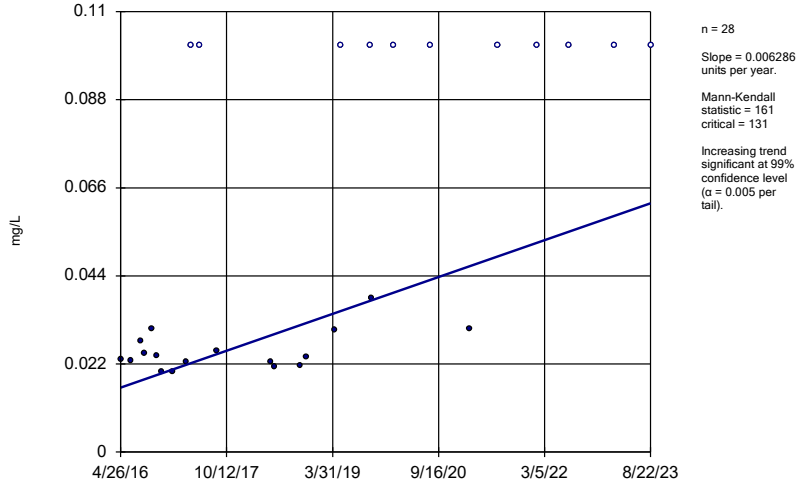
Constituent: Boron Analysis Run 12/22/2023 2:27 PM View: Appendix III - Trend Tests

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-1 (bg)



n = 28

Slope = 0.006286 units per year.

Mann-Kendall statistic = 161 critical = 131

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 12/22/2023 2:27 PM View: Appendix III - Trend Tests

Plant Gorgas Client: Southern Company Data: Gorgas GSA

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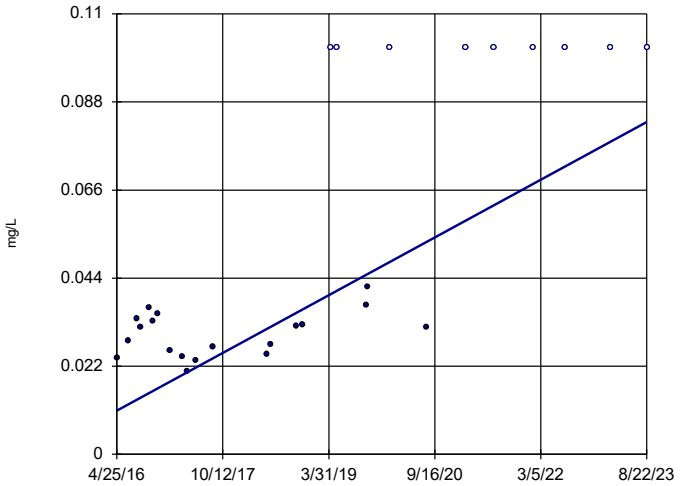
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-2 (bg)



n = 28

Slope = 0.009837 units per year.

Mann-Kendall statistic = 186
critical = 131

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 12/22/2023 2:27 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas GSA

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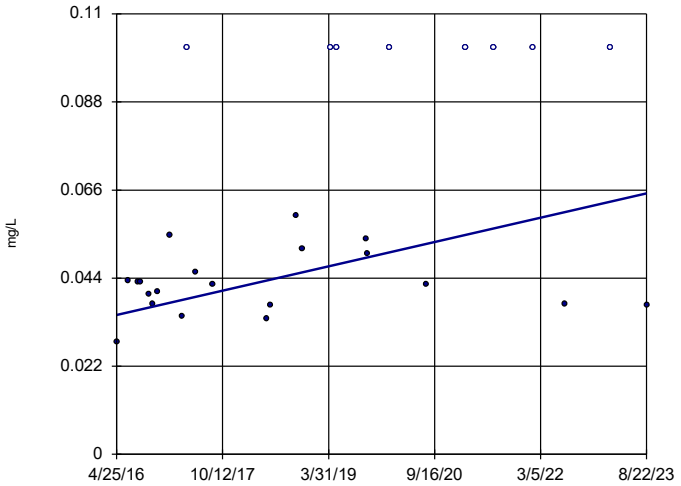
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-3 (bg)



n = 28

Slope = 0.004142 units per year.

Mann-Kendall statistic = 106
critical = 131

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 12/22/2023 2:27 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas GSA

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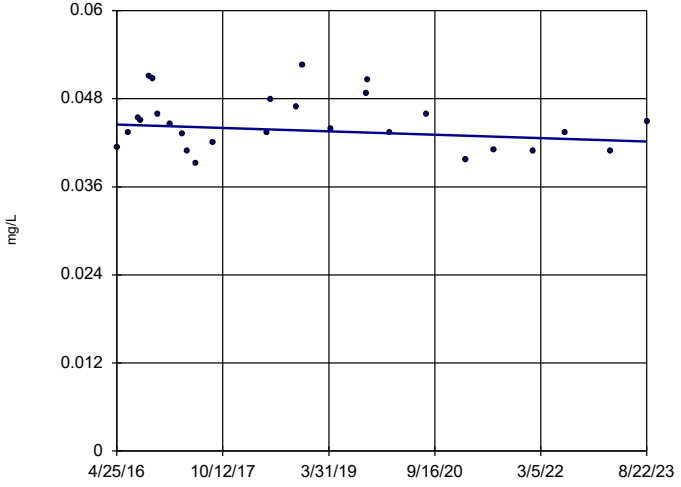
Sen's Slope Estimator

MW-4 (bg)



n = 27

Slope = -0.0003115 units per year.

Mann-Kendall statistic = -47
critical = -124

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 12/22/2023 2:27 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas GSA

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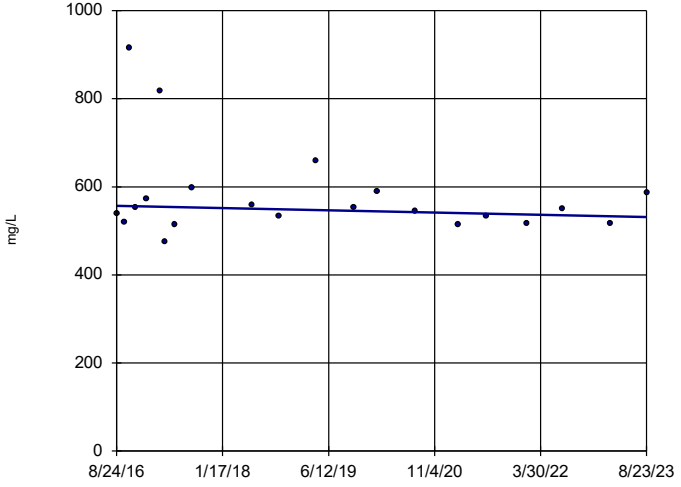
Sen's Slope Estimator

GS-GSA-MW-3



n = 21

Slope = -3.604 units per year.

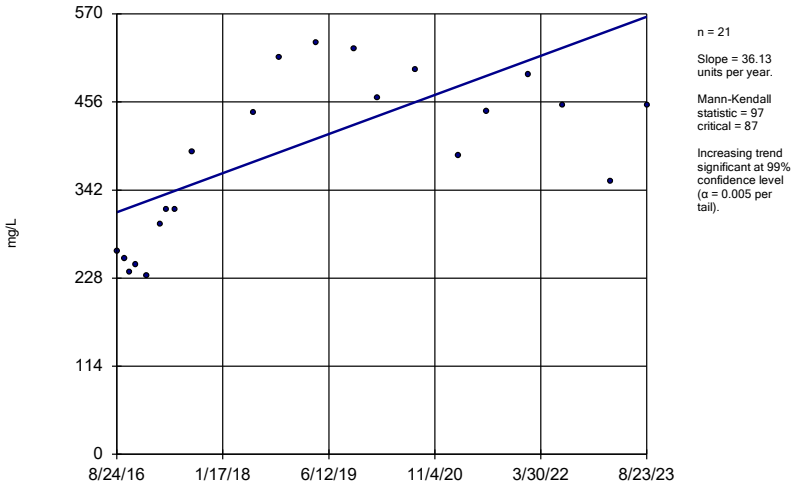
Mann-Kendall statistic = -30
critical = -87

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 12/22/2023 2:27 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sen's Slope Estimator

GS-GSA-MW-8



n = 21

Slope = 36.13 units per year.

Mann-Kendall statistic = 97 critical = 87

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 12/22/2023 2:27 PM View: Appendix III - Trend Tests

Plant Gorgas Client: Southern Company Data: Gorgas GSA

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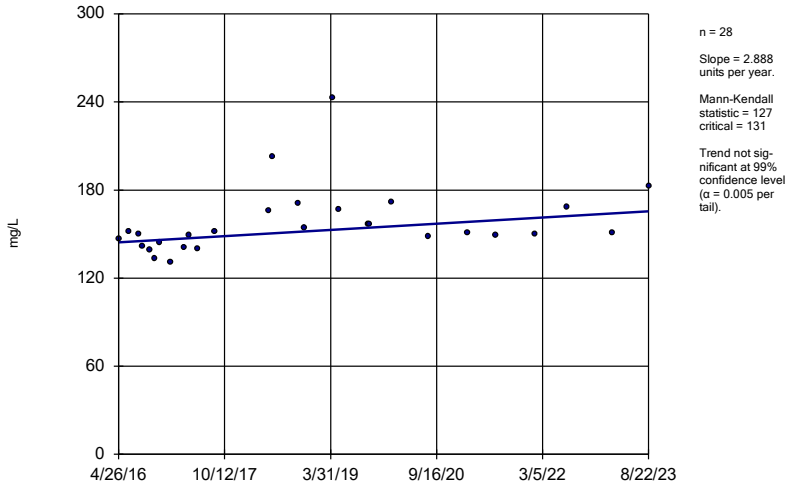
Sen's Slope Estimator

MW-1 (bg)



n = 28

Slope = 2.888 units per year.

Mann-Kendall statistic = 127 critical = 131

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 12/22/2023 2:27 PM View: Appendix III - Trend Tests

Plant Gorgas Client: Southern Company Data: Gorgas GSA

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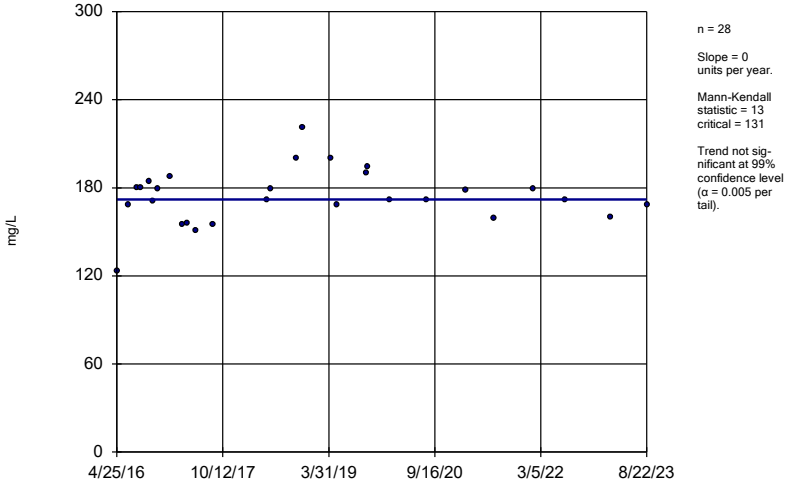
Sen's Slope Estimator

MW-2 (bg)



n = 28

Slope = 0 units per year.

Mann-Kendall statistic = 13 critical = 131

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 12/22/2023 2:27 PM View: Appendix III - Trend Tests

Plant Gorgas Client: Southern Company Data: Gorgas GSA

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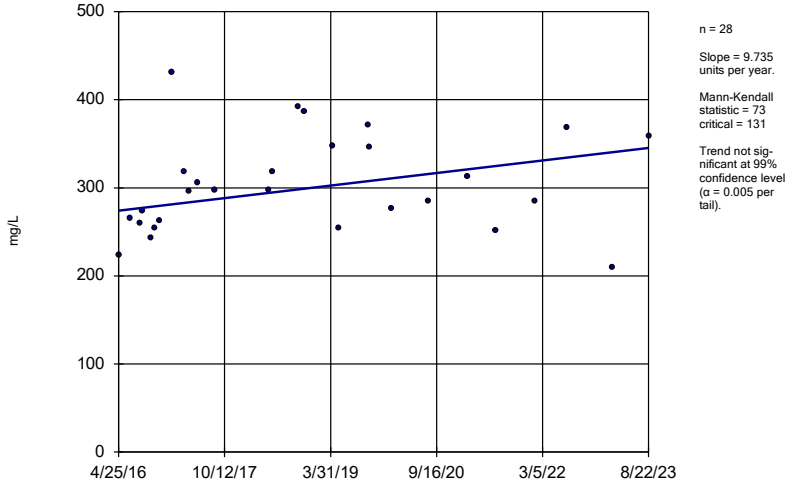
Sen's Slope Estimator

MW-3 (bg)



n = 28

Slope = 9.735 units per year.

Mann-Kendall statistic = 73 critical = 131

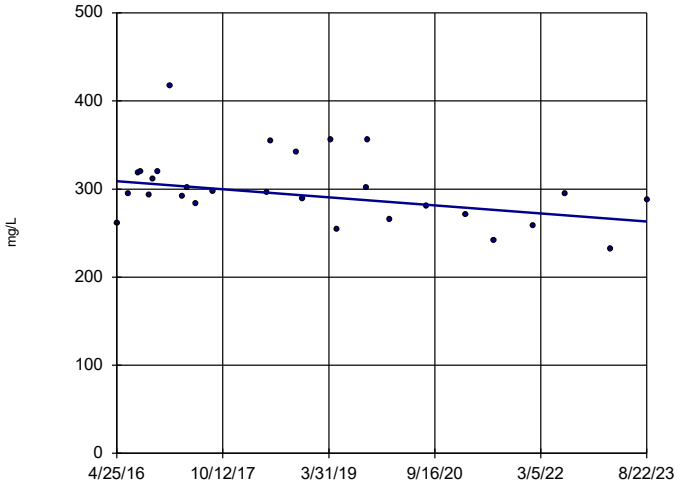
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 12/22/2023 2:27 PM View: Appendix III - Trend Tests

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sen's Slope Estimator

MW-4 (bg)



n = 28

Slope = -6.218 units per year.

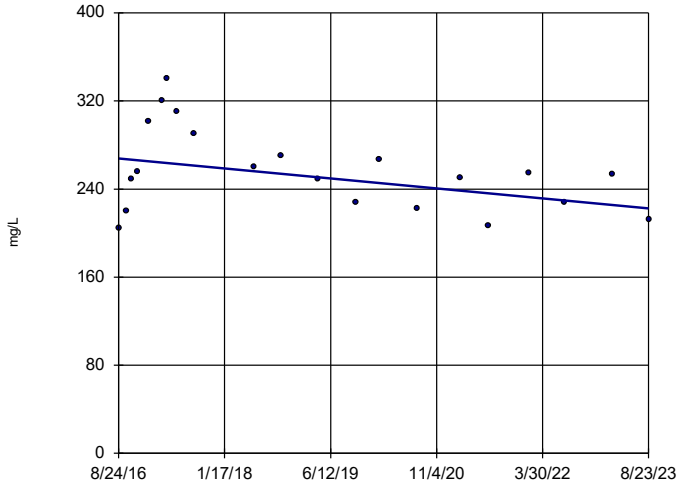
Mann-Kendall statistic = -104
critical = -131

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 12/22/2023 2:27 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sen's Slope Estimator

GS-GSA-MW-3



n = 21

Slope = -6.477 units per year.

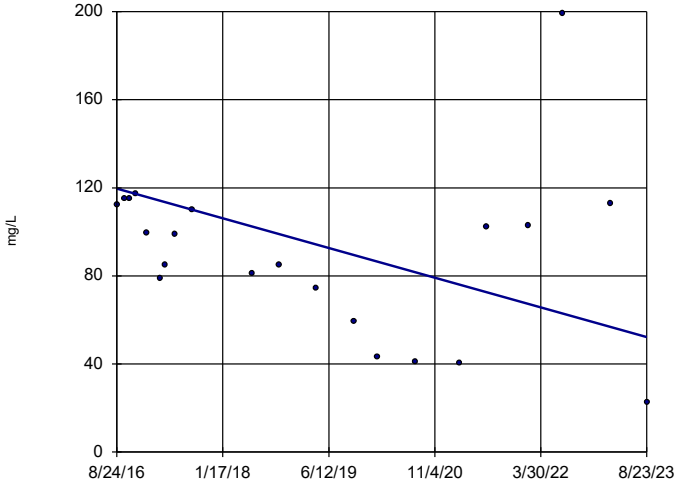
Mann-Kendall statistic = -44
critical = -87

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 12/22/2023 2:27 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sen's Slope Estimator

GS-GSA-MW-4



n = 21

Slope = -9.635 units per year.

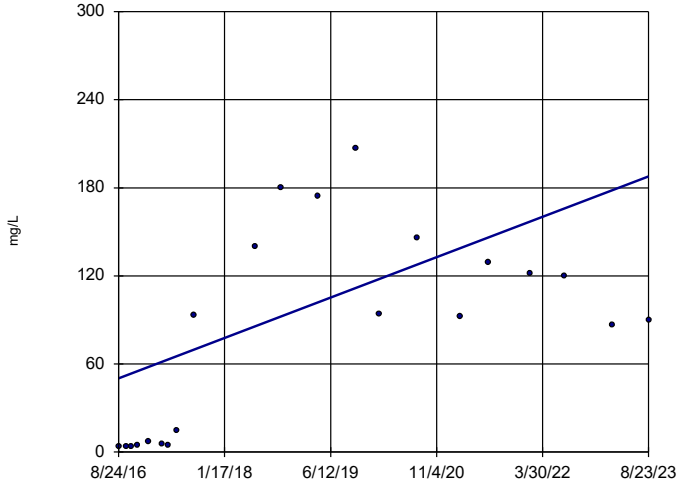
Mann-Kendall statistic = -66
critical = -87

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 12/22/2023 2:27 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sen's Slope Estimator

GS-GSA-MW-8



n = 21

Slope = 19.64 units per year.

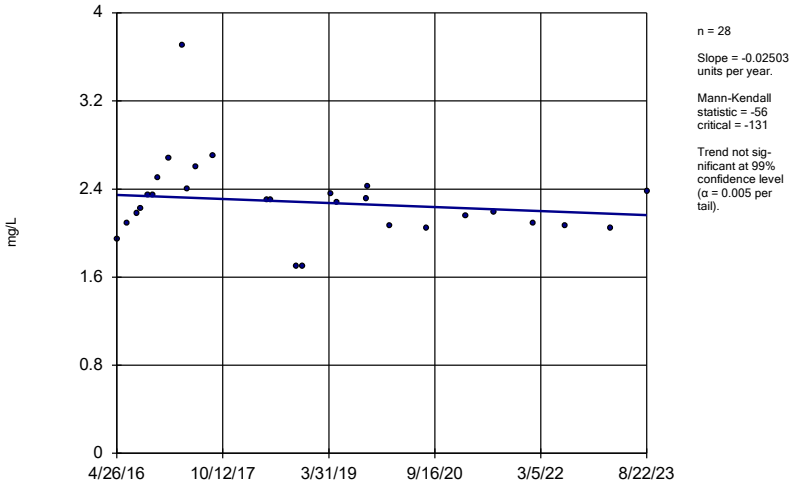
Mann-Kendall statistic = 92
critical = 87

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 12/22/2023 2:27 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sen's Slope Estimator

MW-1 (bg)



n = 28

Slope = -0.02503 units per year.

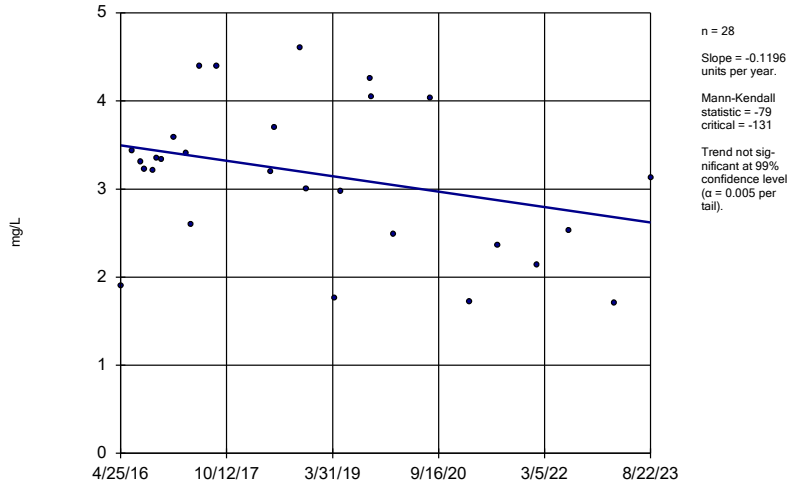
Mann-Kendall statistic = -56
critical = -131

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 12/22/2023 2:27 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sen's Slope Estimator

MW-2 (bg)



n = 28

Slope = -0.1196 units per year.

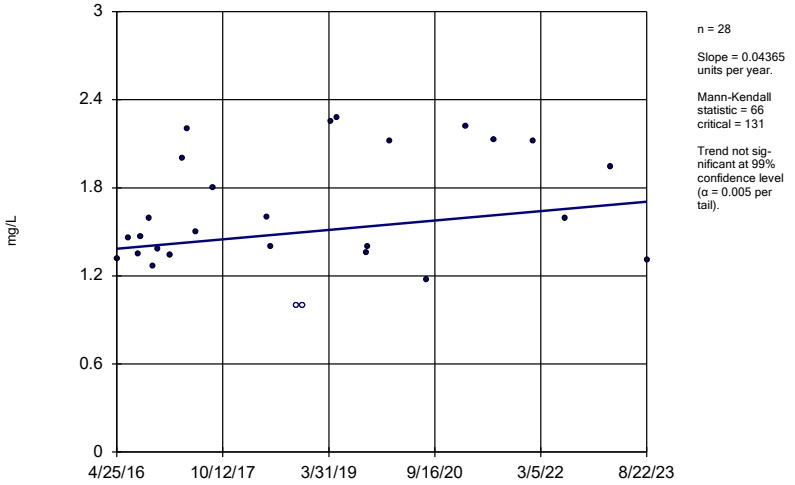
Mann-Kendall statistic = -79
critical = -131

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 12/22/2023 2:27 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sen's Slope Estimator

MW-3 (bg)



n = 28

Slope = 0.04365 units per year.

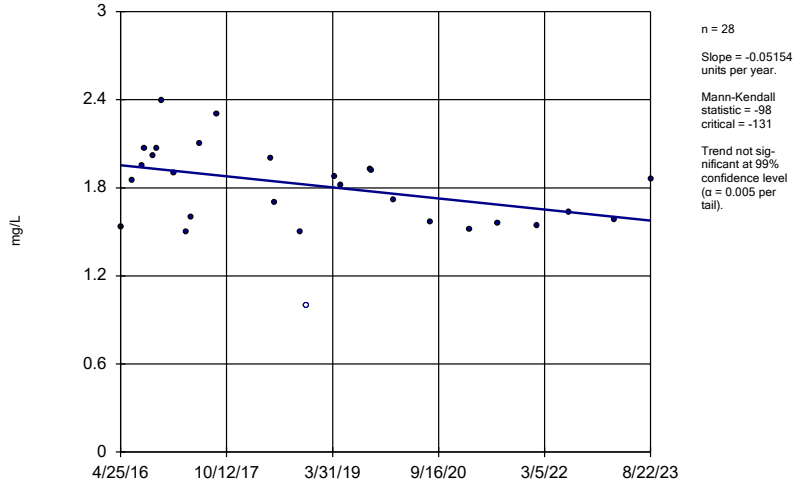
Mann-Kendall statistic = 66
critical = 131

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 12/22/2023 2:27 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sen's Slope Estimator

MW-4 (bg)



n = 28

Slope = -0.05154 units per year.

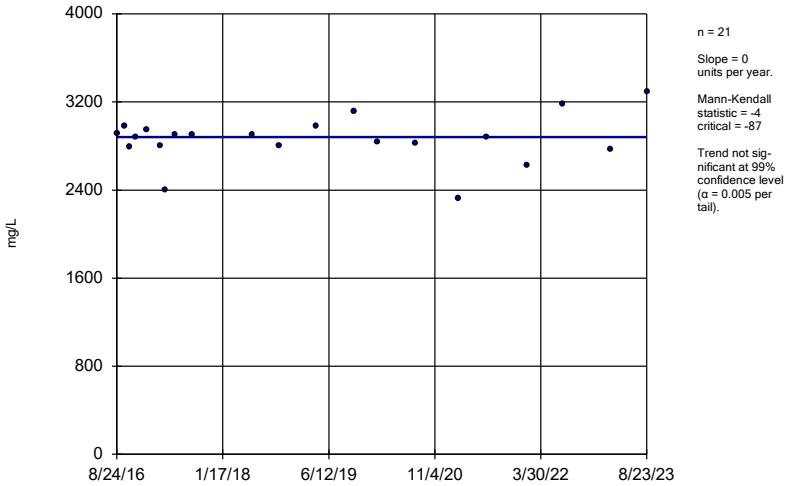
Mann-Kendall statistic = -98
critical = -131

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 12/22/2023 2:27 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sen's Slope Estimator

GS-GSA-MW-3



n = 21

Slope = 0 units per year.

Mann-Kendall statistic = -4 critical = -87

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 12/22/2023 2:27 PM View: Appendix III - Trend Tests

Plant Gorgas Client: Southern Company Data: Gorgas GSA

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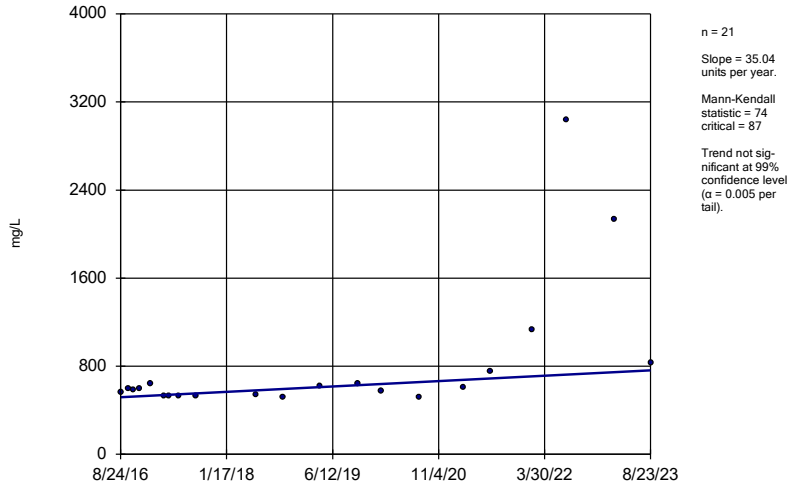
Sen's Slope Estimator

GS-GSA-MW-4



n = 21

Slope = 35.04 units per year.

Mann-Kendall statistic = 74 critical = 87

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 12/22/2023 2:27 PM View: Appendix III - Trend Tests

Plant Gorgas Client: Southern Company Data: Gorgas GSA

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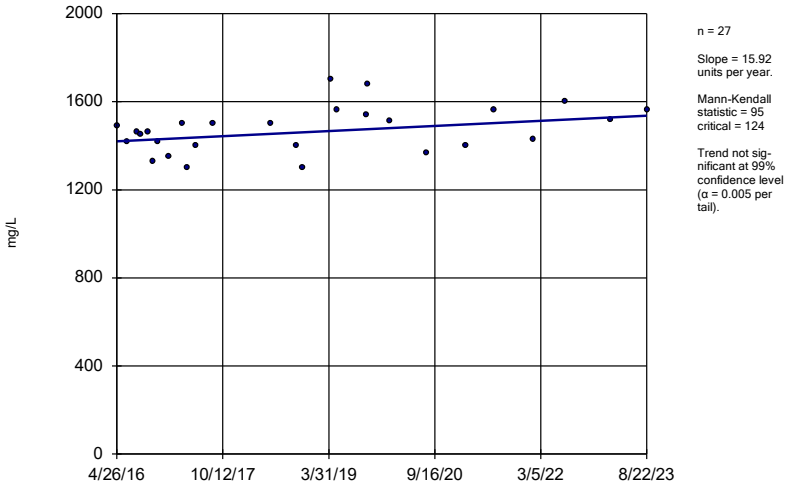
Sen's Slope Estimator

MW-1 (bg)



n = 27

Slope = 15.92 units per year.

Mann-Kendall statistic = 95 critical = 124

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 12/22/2023 2:27 PM View: Appendix III - Trend Tests

Plant Gorgas Client: Southern Company Data: Gorgas GSA

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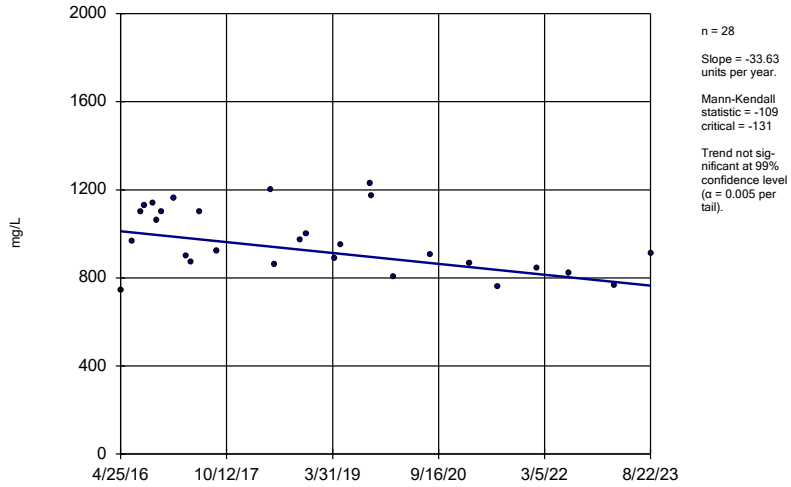
Sen's Slope Estimator

MW-2 (bg)



n = 28

Slope = -33.63 units per year.

Mann-Kendall statistic = -109 critical = -131

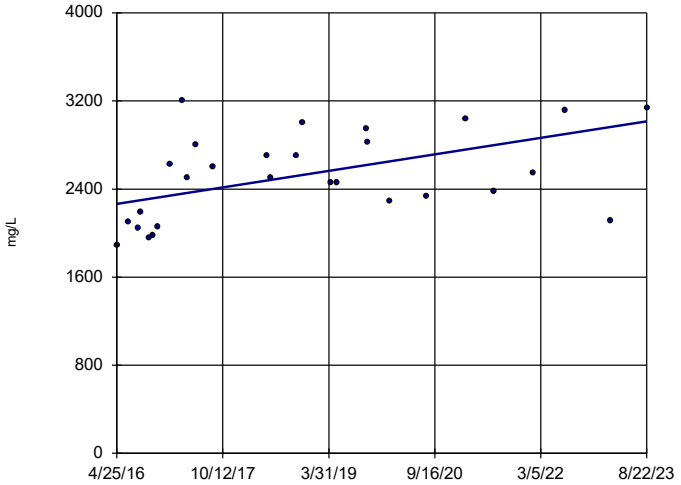
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 12/22/2023 2:27 PM View: Appendix III - Trend Tests

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sen's Slope Estimator

MW-3 (bg)



n = 28

Slope = 102.2 units per year.

Mann-Kendall statistic = 133
critical = 131

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 12/22/2023 2:27 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas GSA

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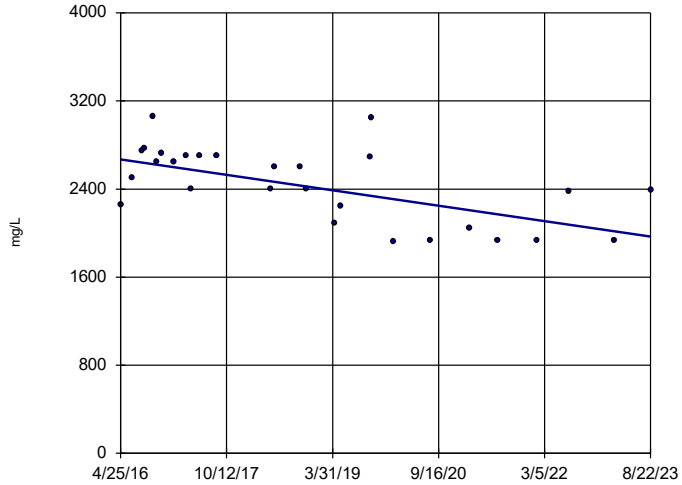
Sen's Slope Estimator

MW-4 (bg)



n = 28

Slope = -95.63 units per year.

Mann-Kendall statistic = -172
critical = -131

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 12/22/2023 2:27 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas GSA

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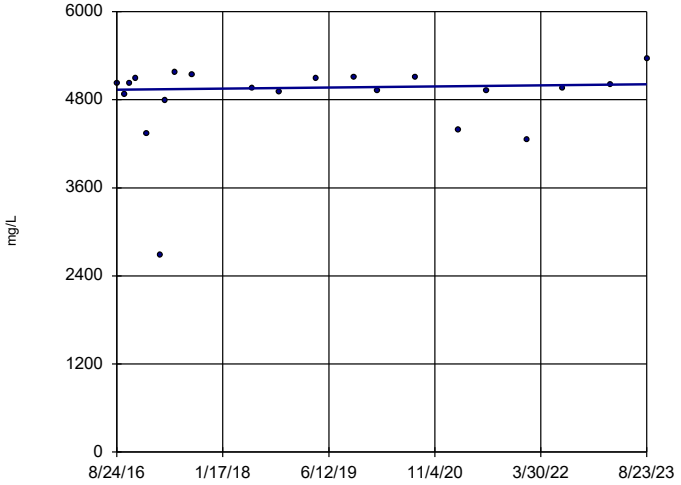
Sen's Slope Estimator

GS-GSA-MW-3



n = 21

Slope = 10.23 units per year.

Mann-Kendall statistic = 17
critical = 87

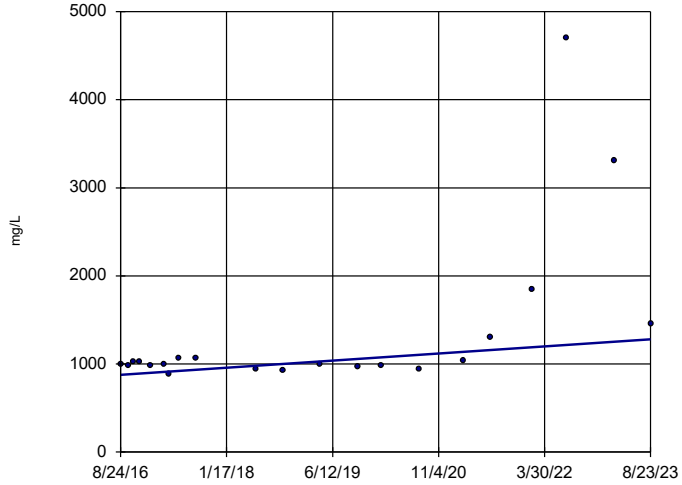
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total dissolved solids Analysis Run 12/22/2023 2:27 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.10.0.15 Software licensed to . UG

Sen's Slope Estimator

GS-GSA-MW-4



n = 21

Slope = 57.41 units per year.

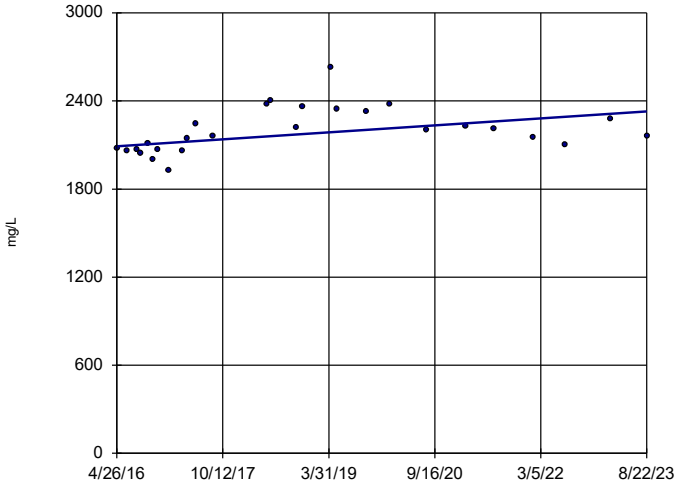
Mann-Kendall statistic = 66
critical = 87

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total dissolved solids Analysis Run 12/22/2023 2:27 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sen's Slope Estimator

MW-1 (bg)



n = 27

Slope = 32.59 units per year.

Mann-Kendall statistic = 115 critical = 124

Trend not significant at 99% confidence level (α = 0.005 per tail).

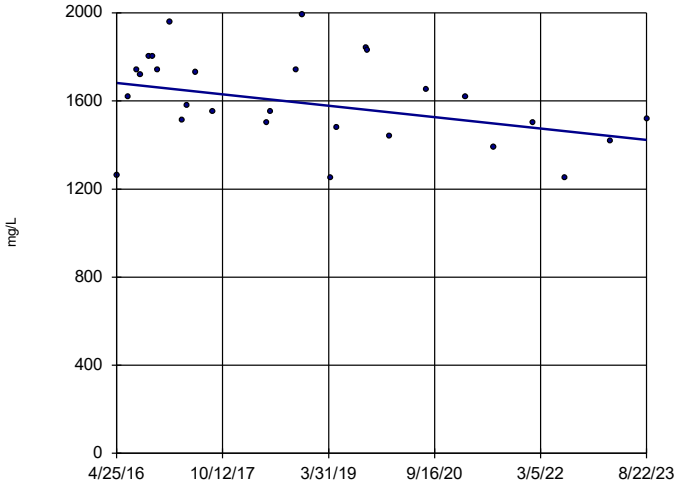
Constituent: Total dissolved solids Analysis Run 12/22/2023 2:27 PM View: Appendix III - Trend Tests

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.10.0.15 Software licensed to . UG

Sen's Slope Estimator

MW-2 (bg)



n = 28

Slope = -35.3 units per year.

Mann-Kendall statistic = -96 critical = -131

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total dissolved solids Analysis Run 12/22/2023 2:27 PM View: Appendix III - Trend Tests

Plant Gorgas Client: Southern Company Data: Gorgas GSA

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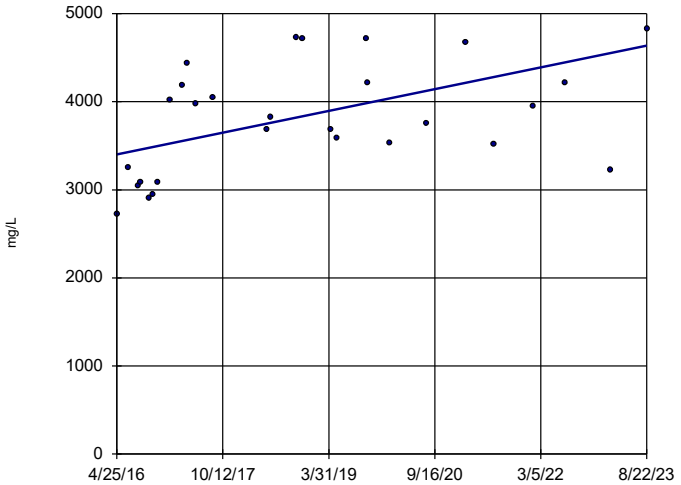
Sen's Slope Estimator

MW-3 (bg)



n = 28

Slope = 168.3 units per year.

Mann-Kendall statistic = 127 critical = 131

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total dissolved solids Analysis Run 12/22/2023 2:27 PM View: Appendix III - Trend Tests

Plant Gorgas Client: Southern Company Data: Gorgas GSA

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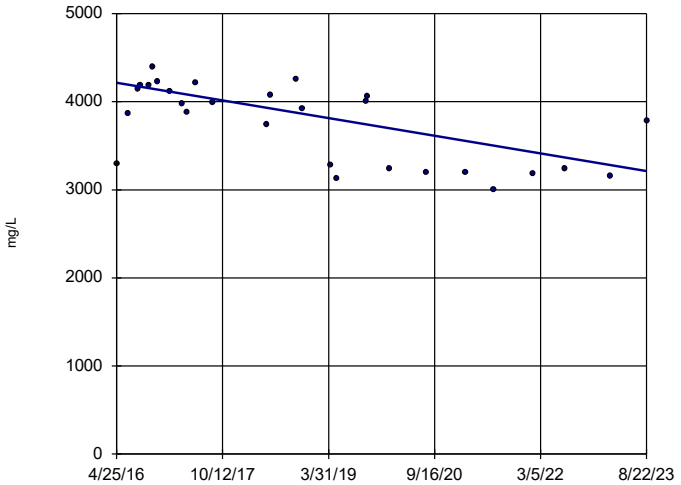
Sen's Slope Estimator

MW-4 (bg)



n = 28

Slope = -136.9 units per year.

Mann-Kendall statistic = -170 critical = -131

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total dissolved solids Analysis Run 12/22/2023 2:27 PM View: Appendix III - Trend Tests

Plant Gorgas Client: Southern Company Data: Gorgas GSA

FIGURE I.

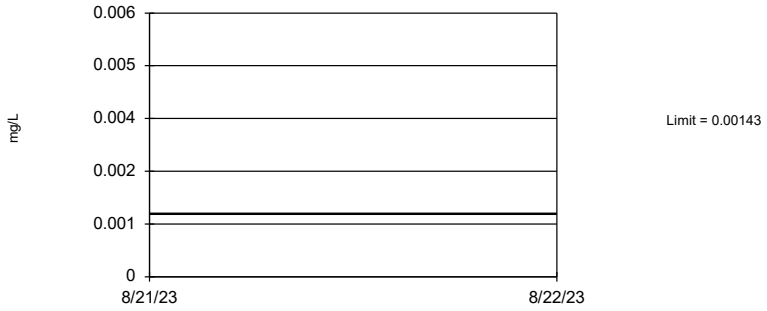
Upper Tolerance Limits Summary Table

Plant Gorgas Client: Southern Company Data: Gorgas GSA Printed 12/22/2023, 2:45 PM

Constituent	Upper Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	0.00143	n/a	n/a	n/a	112	n/a	n/a	94.64	n/a	n/a	0.003199	NP Inter
Arsenic (mg/L)	0.0048	n/a	n/a	n/a	112	n/a	n/a	72.32	n/a	n/a	0.003199	NP Inter
Barium (mg/L)	0.0166	n/a	n/a	n/a	112	n/a	n/a	0	n/a	n/a	0.003199	NP Inter
Beryllium (mg/L)	0.0121	n/a	n/a	n/a	110	n/a	n/a	84.55	n/a	n/a	0.003545	NP Inter
Cadmium (mg/L)	0.00867	n/a	n/a	n/a	111	n/a	n/a	41.44	n/a	n/a	0.003368	NP Inter
Chromium (mg/L)	0.0105	n/a	n/a	n/a	112	n/a	n/a	81.25	n/a	n/a	0.003199	NP Inter
Cobalt (mg/L)	0.64	n/a	n/a	n/a	110	n/a	n/a	24.55	n/a	n/a	0.003545	NP Inter
Combined Radium 226 + 228 (pCi/L)	1.49	n/a	n/a	n/a	109	n/a	n/a	0	n/a	n/a	0.003731	NP Inter
Fluoride (mg/L)	0.63	n/a	n/a	n/a	116	n/a	n/a	0.8621	n/a	n/a	0.002606	NP Inter
Lead (mg/L)	0.002	n/a	n/a	n/a	111	n/a	n/a	92.79	n/a	n/a	0.003368	NP Inter
Lithium (mg/L)	0.419	n/a	n/a	n/a	112	n/a	n/a	0	n/a	n/a	0.003199	NP Inter
Mercury (mg/L)	0.0005	n/a	n/a	n/a	112	n/a	n/a	100	n/a	n/a	0.003199	NP Inter
Molybdenum (mg/L)	0.01015	n/a	n/a	n/a	112	n/a	n/a	94.64	n/a	n/a	0.003199	NP Inter
Selenium (mg/L)	0.0209	n/a	n/a	n/a	112	n/a	n/a	54.46	n/a	n/a	0.003199	NP Inter
Thallium (mg/L)	0.000226	n/a	n/a	n/a	112	n/a	n/a	97.32	n/a	n/a	0.003199	NP Inter

Tolerance Limit

Interwell Non-parametric

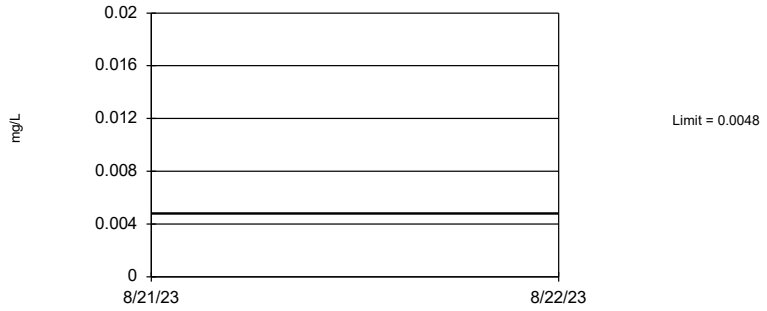


NP test selected by user. Limit is highest of 112 background values. 94.64% NDs. 95.9% coverage at alpha=0.01; 97.46% coverage at alpha=0.05; 99.41% coverage at alpha=0.5. Report alpha = 0.003199.

Constituent: Antimony Analysis Run 12/22/2023 2:45 PM View: UTLs
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Tolerance Limit

Interwell Non-parametric

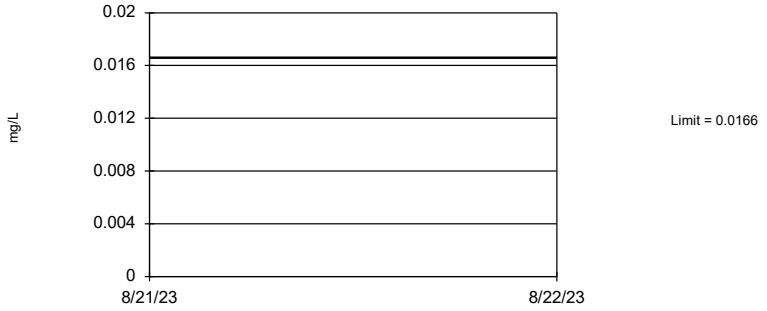


NP test selected by user. Limit is highest of 112 background values. 72.32% NDs. 95.9% coverage at alpha=0.01; 97.46% coverage at alpha=0.05; 99.41% coverage at alpha=0.5. Report alpha = 0.003199.

Constituent: Arsenic Analysis Run 12/22/2023 2:45 PM View: UTLs
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Tolerance Limit

Interwell Non-parametric

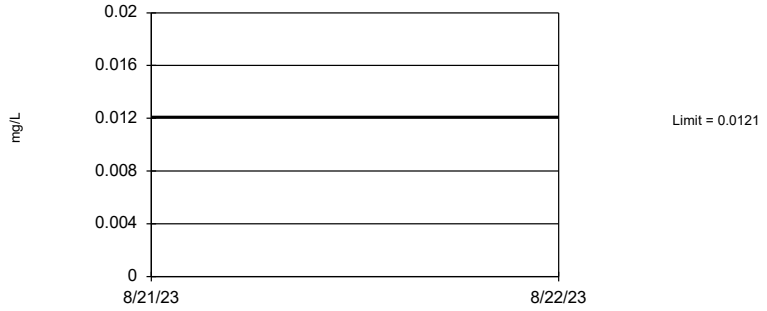


NP test selected by user. Limit is highest of 112 background values. 95.9% coverage at alpha=0.01; 97.46% coverage at alpha=0.05; 99.41% coverage at alpha=0.5. Report alpha = 0.003199.

Constituent: Barium Analysis Run 12/22/2023 2:45 PM View: UTLs
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Tolerance Limit

Interwell Non-parametric

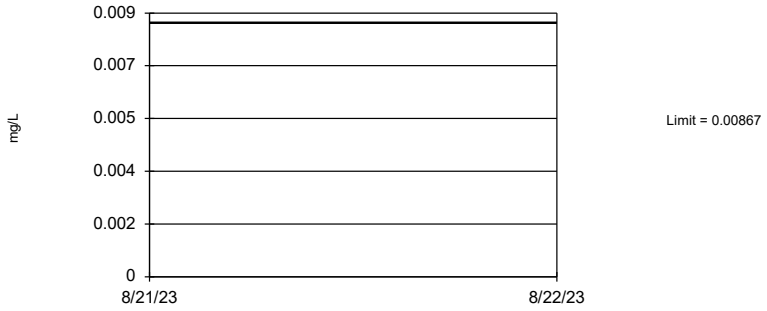


NP test selected by user. Limit is highest of 110 background values. 84.55% NDs. 95.9% coverage at alpha=0.01; 97.46% coverage at alpha=0.05; 99.41% coverage at alpha=0.5. Report alpha = 0.003545.

Constituent: Beryllium Analysis Run 12/22/2023 2:45 PM View: UTLs
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Tolerance Limit

Interwell Non-parametric

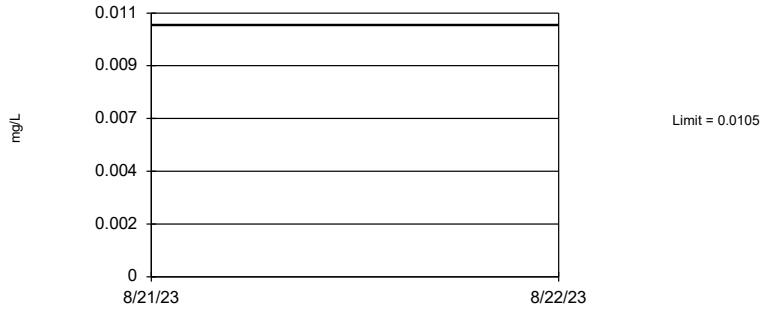


NP test selected by user. Limit is highest of 111 background values. 41.44% NDs. 95.9% coverage at alpha=0.01; 97.46% coverage at alpha=0.05; 99.41% coverage at alpha=0.5. Report alpha = 0.003368.

Constituent: Cadmium Analysis Run 12/22/2023 2:45 PM View: UTLs
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Tolerance Limit

Interwell Non-parametric

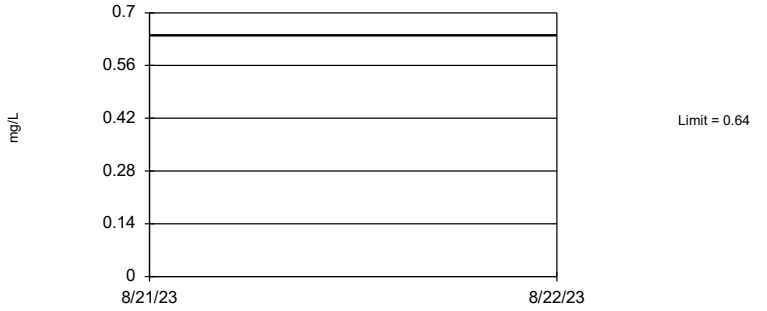


NP test selected by user. Limit is highest of 112 background values. 81.25% NDs. 95.9% coverage at alpha=0.01; 97.46% coverage at alpha=0.05; 99.41% coverage at alpha=0.5. Report alpha = 0.003199.

Constituent: Chromium Analysis Run 12/22/2023 2:45 PM View: UTLs
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Tolerance Limit

Interwell Non-parametric

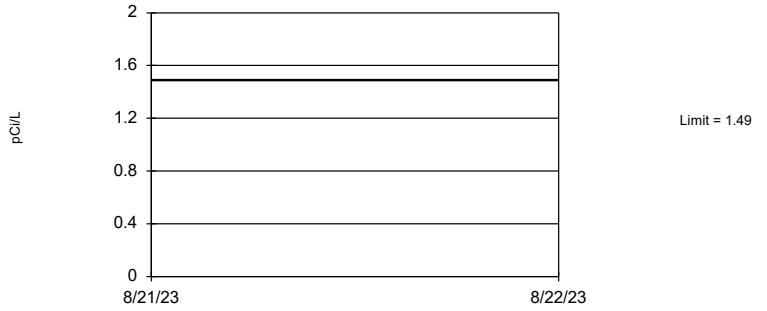


NP test selected by user. Limit is highest of 110 background values. 24.55% NDs. 95.9% coverage at alpha=0.01; 97.46% coverage at alpha=0.05; 99.41% coverage at alpha=0.5. Report alpha = 0.003545.

Constituent: Cobalt Analysis Run 12/22/2023 2:45 PM View: UTLs
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Tolerance Limit

Interwell Non-parametric

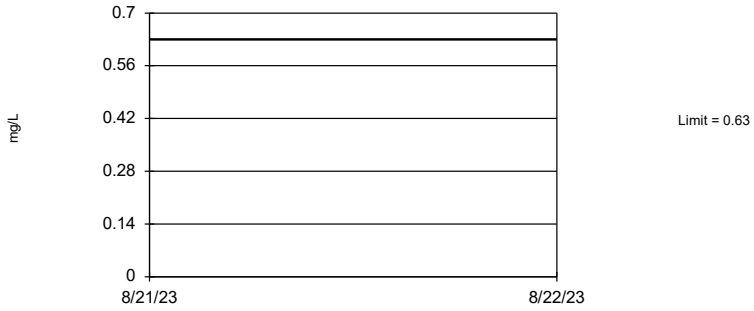


NP test selected by user. Limit is highest of 109 background values. 95.9% coverage at alpha=0.01; 97.46% coverage at alpha=0.05; 99.41% coverage at alpha=0.5. Report alpha = 0.003731.

Constituent: Combined Radium 226 + 228 Analysis Run 12/22/2023 2:45 PM View: UTLs
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Tolerance Limit

Interwell Non-parametric



NP test selected by user. Limit is highest of 116 background values. 0.8621% NDs. 96.29% coverage at alpha=0.01; 97.46% coverage at alpha=0.05; 99.41% coverage at alpha=0.5. Report alpha = 0.002606.

Constituent: Fluoride Analysis Run 12/22/2023 2:45 PM View: UTLs
Plant Gorgas Client: Southern Company Data: Gorgas GSA

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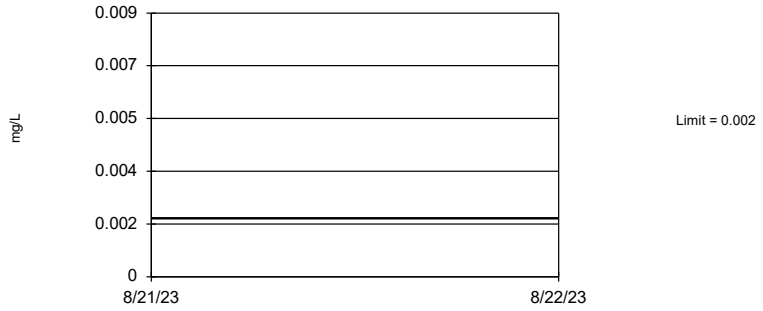
Tolerance Limit

Interwell Non-parametric



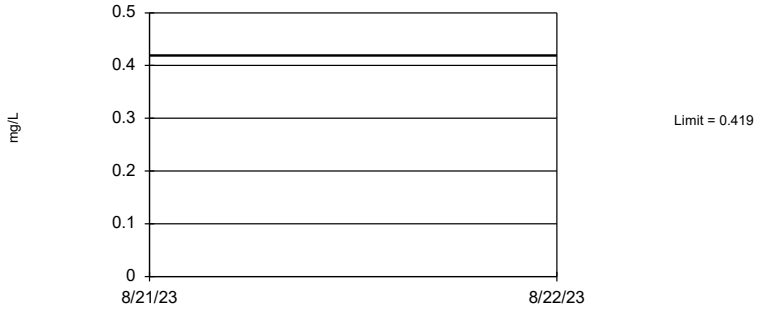
NP test selected by user. Limit is highest of 111 background values. 92.79% NDs. 95.9% coverage at alpha=0.01; 97.46% coverage at alpha=0.05; 99.41% coverage at alpha=0.5. Report alpha = 0.003368.

Constituent: Lead Analysis Run 12/22/2023 2:45 PM View: UTLs
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.10.0.15 Software licensed to . UG

Tolerance Limit

Interwell Non-parametric



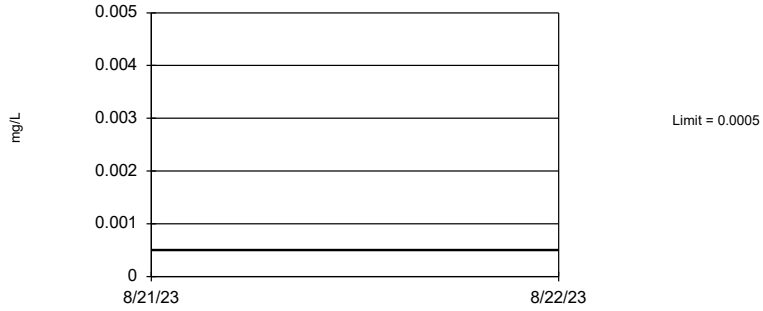
NP test selected by user. Limit is highest of 112 background values. 95.9% coverage at alpha=0.01; 97.46% coverage at alpha=0.05; 99.41% coverage at alpha=0.5. Report alpha = 0.003199.

Constituent: Lithium Analysis Run 12/22/2023 2:45 PM View: UTLs
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.10.0.15 Software licensed to . UG

Tolerance Limit

Interwell Non-parametric

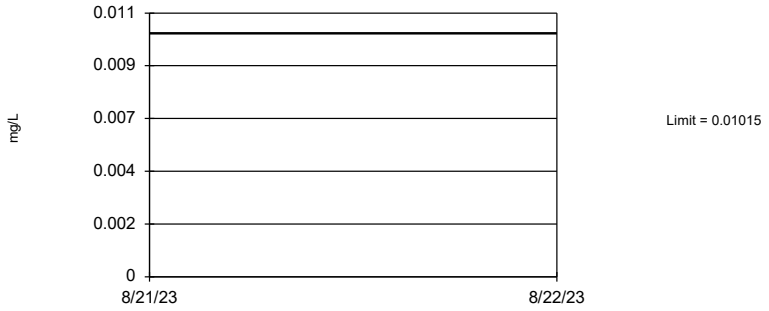


NP test selected by user. All background values were censored; limit is most recent reporting limit. 95.9% coverage at alpha=0.01; 97.46% coverage at alpha=0.05; 99.41% coverage at alpha=0.5. Report alpha = 0.003199.

Constituent: Mercury Analysis Run 12/22/2023 2:45 PM View: UTLs
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Tolerance Limit

Interwell Non-parametric



NP test selected by user. Limit is highest of 112 background values. 94.64% NDs. 95.9% coverage at alpha=0.01; 97.46% coverage at alpha=0.05; 99.41% coverage at alpha=0.5. Report alpha = 0.003199.

Constituent: Molybdenum Analysis Run 12/22/2023 2:45 PM View: UTLs
Plant Gorgas Client: Southern Company Data: Gorgas GSA

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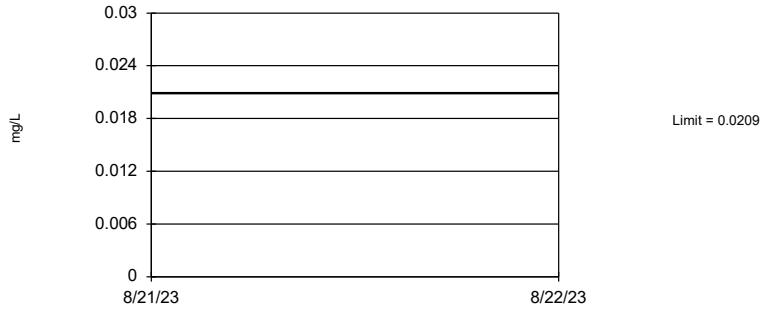
Tolerance Limit

Interwell Non-parametric



NP test selected by user. Limit is highest of 112 background values. 54.46% NDs. 95.9% coverage at alpha=0.01; 97.46% coverage at alpha=0.05; 99.41% coverage at alpha=0.5. Report alpha = 0.003199.

Constituent: Selenium Analysis Run 12/22/2023 2:45 PM View: UTLs
Plant Gorgas Client: Southern Company Data: Gorgas GSA

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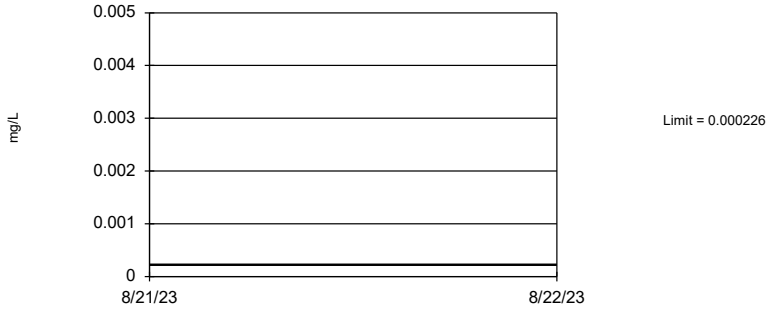
Tolerance Limit

Interwell Non-parametric



NP test selected by user. Limit is highest of 112 background values. 97.32% NDs. 95.9% coverage at alpha=0.01; 97.46% coverage at alpha=0.05; 99.41% coverage at alpha=0.5. Report alpha = 0.003199.

Constituent: Thallium Analysis Run 12/22/2023 2:45 PM View: UTLs
Plant Gorgas Client: Southern Company Data: Gorgas GSA

FIGURE J.

GORGAS GYPSUM POND GWPS			
Analyte	**Units**	**Background**	**GWPS**
Antimony	mg/L	0.00143	0.006
Arsenic	mg/L	0.0048	0.01
Barium	mg/L	0.0166	2
Beryllium	mg/L	0.0121	0.0121
Cadmium	mg/L	0.00867	0.00867
Chromium	mg/L	0.0105	0.1
Cobalt	mg/L	0.64	0.64
Combined Radium-226/228	pCi/L	1.49	5
Fluoride	mg/L	0.63	4
Lead	mg/L	0.002	0.015
Lithium	mg/L	0.419	0.419
Mercury	mg/L	0.0005	0.002
Molybdenum	mg/L	0.01015	0.1
Selenium	mg/L	0.0209	0.05
Thallium	mg/L	0.000226	0.002

Notes:

1. mg/L - Milligrams per liter

2. pCi/L - Picocuries per liter

3. The background limits were used as the groundwater protection standard (GWPS) when appropriate under 40 CFR §257.95(h), ADEM Rule 335-13-15-.06(h), and the ADEM Variance.

4. GWPS established during second semi-annual sampling event in 2023.

FIGURE K.

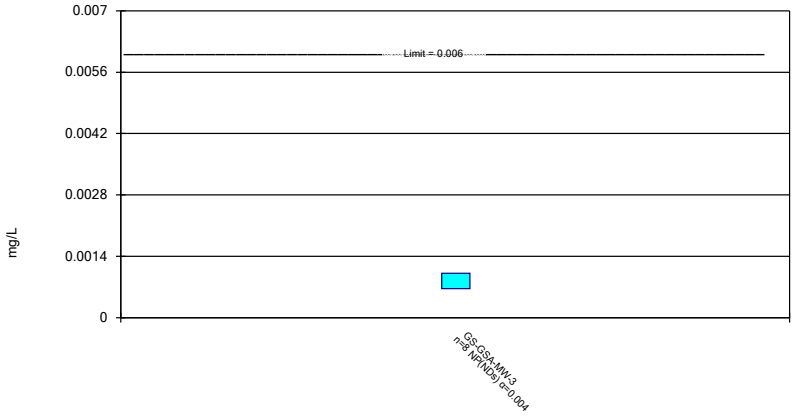
Confidence Intervals - All Results (No Significant)

Plant Gorgas Client: Southern Company Data: Gorgas GSA Printed 12/22/2023, 2:52 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	GS-GSA-MW-3	0.001015	0.00066	0.006	No	8	0.0009706	0.0001255	87.5	None	No	0.004	NP (NDs)
Arsenic (mg/L)	GS-GSA-MW-3	0.001335	0.0004811	0.01	No	8	0.001922	0.001936	25	Kaplan-Meier	ln(x)	0.01	Param.
Arsenic (mg/L)	GS-GSA-MW-4	0.004441	0.0007311	0.01	No	8	0.0025	0.002096	0	None	sqrt(x)	0.01	Param.
Arsenic (mg/L)	GS-GSA-MW-8	0.005	0.000156	0.01	No	8	0.001455	0.002194	25	None	No	0.004	NP (normality)
Barium (mg/L)	GS-GSA-MW-3	0.01509	0.01203	2	No	8	0.01356	0.001441	0	None	No	0.01	Param.
Barium (mg/L)	GS-GSA-MW-4	0.0134	0.009302	2	No	8	0.01135	0.001935	0	None	No	0.01	Param.
Barium (mg/L)	GS-GSA-MW-8	0.02376	0.02054	2	No	8	0.02215	0.001518	0	None	No	0.01	Param.
Beryllium (mg/L)	GS-GSA-MW-3	0.002082	0.00153	0.0121	No	8	0.001806	0.0002603	0	None	No	0.01	Param.
Beryllium (mg/L)	GS-GSA-MW-4	0.0228	0.00385	0.0121	No	8	0.009694	0.008084	0	None	No	0.004	NP (normality)
Cadmium (mg/L)	GS-GSA-MW-4	0.005121	0.001287	0.00867	No	8	0.003134	0.002021	0	None	sqrt(x)	0.01	Param.
Chromium (mg/L)	GS-GSA-MW-3	0.01	0.000248	0.1	No	8	0.002777	0.004459	25	None	No	0.004	NP (normality)
Chromium (mg/L)	GS-GSA-MW-4	0.002444	0.0005942	0.1	No	8	0.003644	0.004052	25	Kaplan-Meier	ln(x)	0.01	Param.
Chromium (mg/L)	GS-GSA-MW-8	0.001015	0.000258	0.1	No	8	0.0006014	0.0003485	37.5	None	No	0.004	NP (normality)
Cobalt (mg/L)	GS-GSA-MW-3	0.1568	0.04529	0.64	No	8	0.1008	0.07815	0	None	ln(x)	0.01	Param.
Cobalt (mg/L)	GS-GSA-MW-4	0.6488	0.1998	0.64	No	8	0.4164	0.2446	0	None	x^(1/3)	0.01	Param.
Cobalt (mg/L)	GS-GSA-MW-8	0.00546	0.000084	0.64	No	8	0.002119	0.002522	25	None	No	0.004	NP (normality)
Combined Radium 226 + 228 (pCi/L)	GS-GSA-MW-3	0.5618	0.219	5	No	8	0.3904	0.1617	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-GSA-MW-4	1.391	0.3997	5	No	8	0.8954	0.4676	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-GSA-MW-8	1.012	0.1219	5	No	8	0.5669	0.4198	0	None	No	0.01	Param.
Fluoride (mg/L)	GS-GSA-MW-3	0.5272	0.3293	4	No	8	0.4283	0.09336	0	None	No	0.01	Param.
Fluoride (mg/L)	GS-GSA-MW-8	0.1875	0.1047	4	No	8	0.1461	0.03904	0	None	No	0.01	Param.
Lead (mg/L)	GS-GSA-MW-3	0.0001707	0.0001109	0.015	No	8	0.0001641	0.00004005	37.5	Kaplan-Meier	No	0.01	Param.
Lead (mg/L)	GS-GSA-MW-4	0.001653	0.0006225	0.015	No	8	0.002102	0.001868	25	Kaplan-Meier	ln(x)	0.01	Param.
Lead (mg/L)	GS-GSA-MW-8	0.000203	0.000078	0.015	No	8	0.0001735	0.00004604	62.5	Kaplan-Meier	No	0.004	NP (NDs)
Lithium (mg/L)	GS-GSA-MW-3	0.4952	0.2668	0.419	No	8	0.381	0.1077	0	None	No	0.01	Param.
Lithium (mg/L)	GS-GSA-MW-4	1.247	0.2341	0.419	No	8	0.7179	0.5899	0	None	x^(1/3)	0.01	Param.
Lithium (mg/L)	GS-GSA-MW-8	0.2058	0.1587	0.419	No	8	0.1823	0.02225	0	None	No	0.01	Param.
Molybdenum (mg/L)	GS-GSA-MW-3	0.01015	0.000191	0.1	No	8	0.00395	0.005134	37.5	None	No	0.004	NP (normality)
Molybdenum (mg/L)	GS-GSA-MW-8	0.01015	0.00012	0.1	No	8	0.004218	0.004992	37.5	None	No	0.004	NP (normality)
Selenium (mg/L)	GS-GSA-MW-3	0.01	0.00103	0.05	No	8	0.003519	0.004004	25	None	No	0.004	NP (normality)
Selenium (mg/L)	GS-GSA-MW-4	0.01455	0.002654	0.05	No	8	0.008399	0.007413	12.5	None	ln(x)	0.01	Param.
Thallium (mg/L)	GS-GSA-MW-4	0.0004373	0.000109	0.002	No	8	0.0002731	0.0001549	12.5	None	No	0.01	Param.

Non-Parametric Confidence Interval

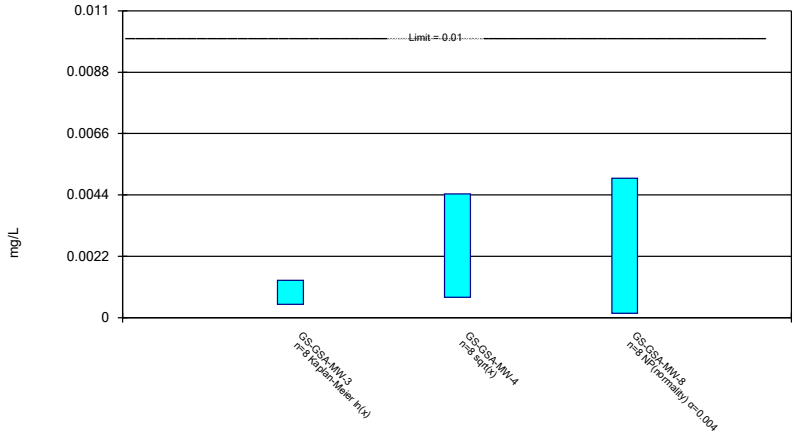
Compliance Limit is not exceeded.



Constituent: Antimony Analysis Run 12/22/2023 2:51 PM View: Appendix IV
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Parametric and Non-Parametric (NP) Confidence Interval

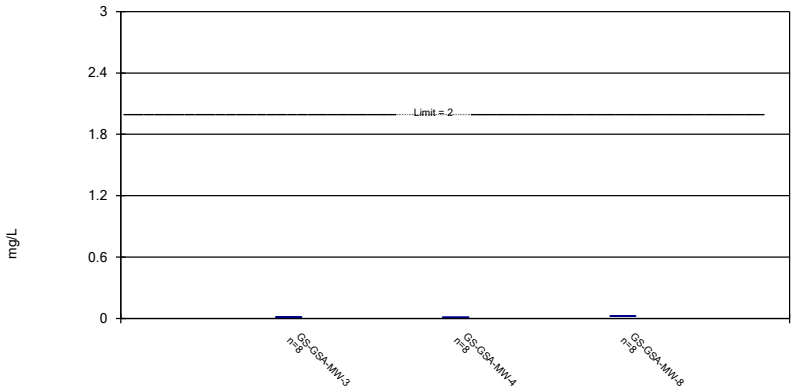
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Arsenic Analysis Run 12/22/2023 2:51 PM View: Appendix IV
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Parametric Confidence Interval

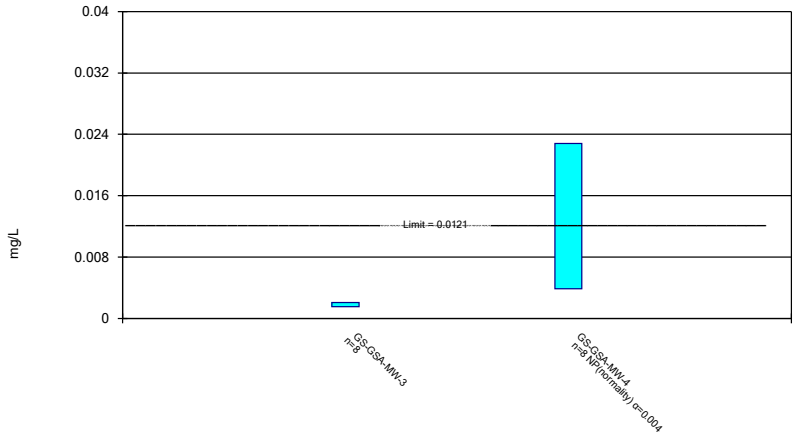
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Barium Analysis Run 12/22/2023 2:51 PM View: Appendix IV
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Parametric and Non-Parametric (NP) Confidence Interval

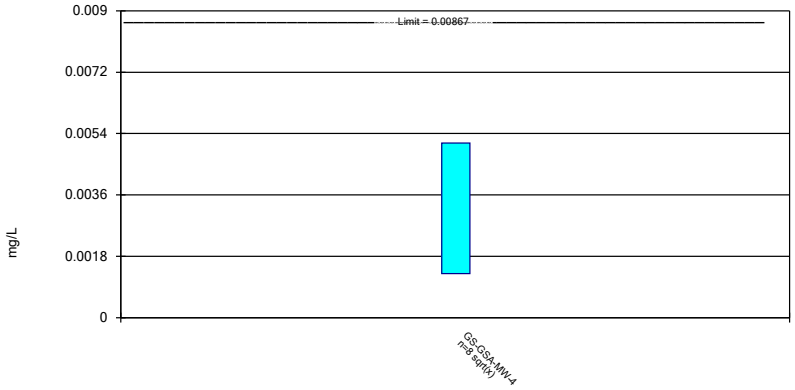
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Beryllium Analysis Run 12/22/2023 2:51 PM View: Appendix IV
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Parametric Confidence Interval

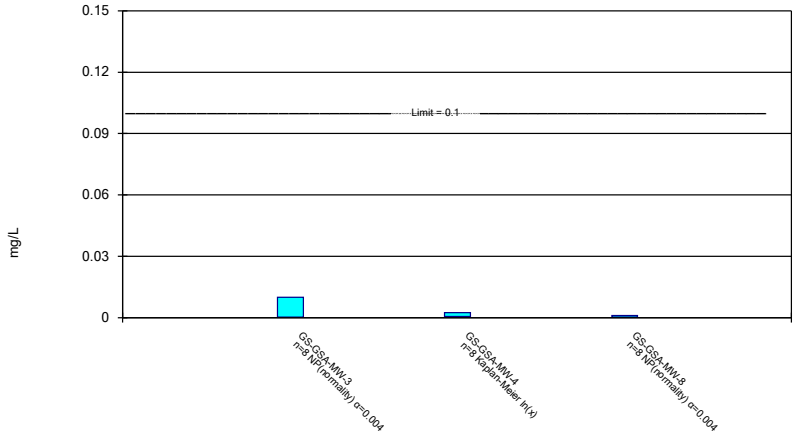
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Cadmium Analysis Run 12/22/2023 2:51 PM View: Appendix IV
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Parametric and Non-Parametric (NP) Confidence Interval

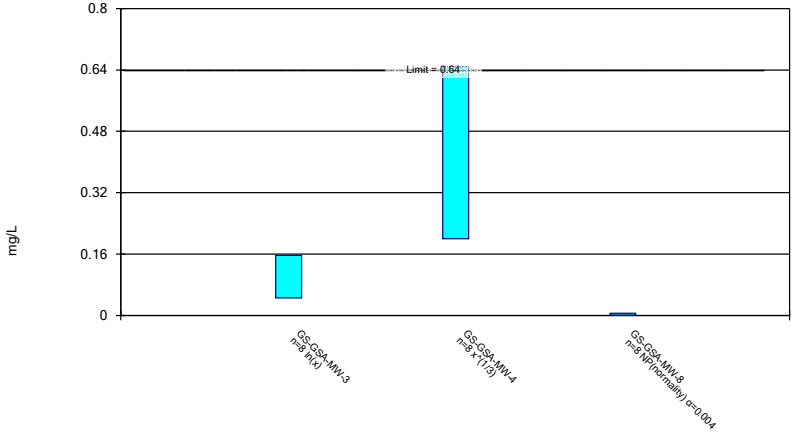
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Chromium Analysis Run 12/22/2023 2:51 PM View: Appendix IV
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Parametric and Non-Parametric (NP) Confidence Interval

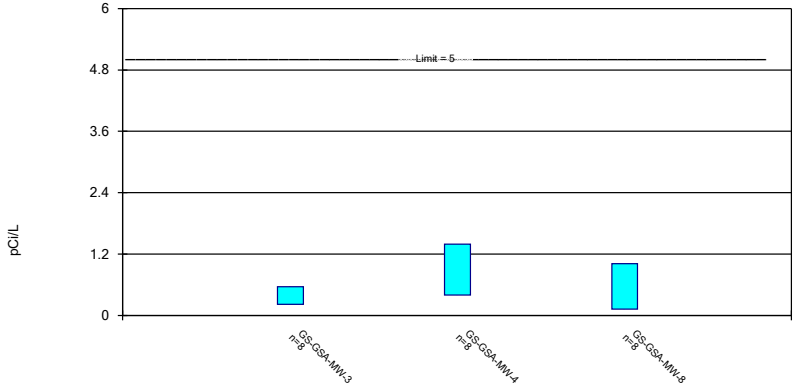
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Cobalt Analysis Run 12/22/2023 2:51 PM View: Appendix IV
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Parametric Confidence Interval

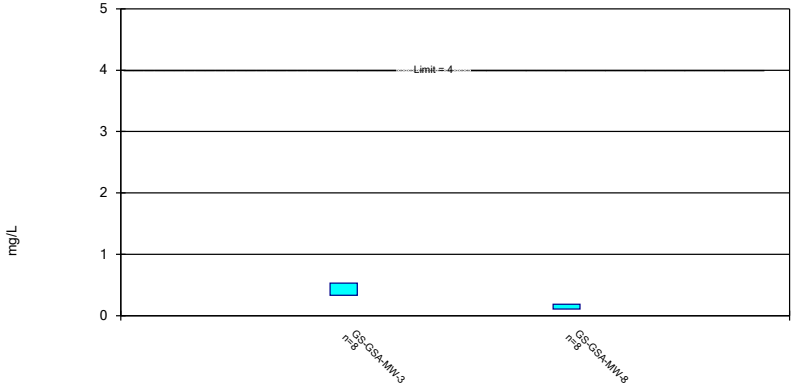
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Combined Radium 226 + 228 Analysis Run 12/22/2023 2:51 PM View: Appendix IV
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Parametric Confidence Interval

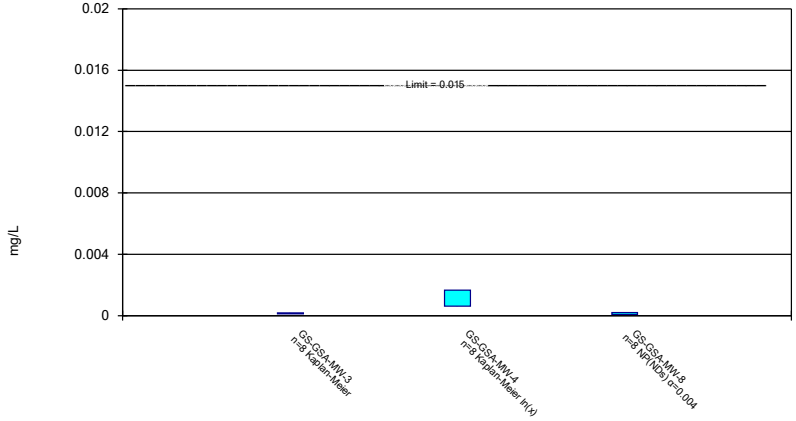
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Fluoride Analysis Run 12/22/2023 2:51 PM View: Appendix IV
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Parametric and Non-Parametric (NP) Confidence Interval

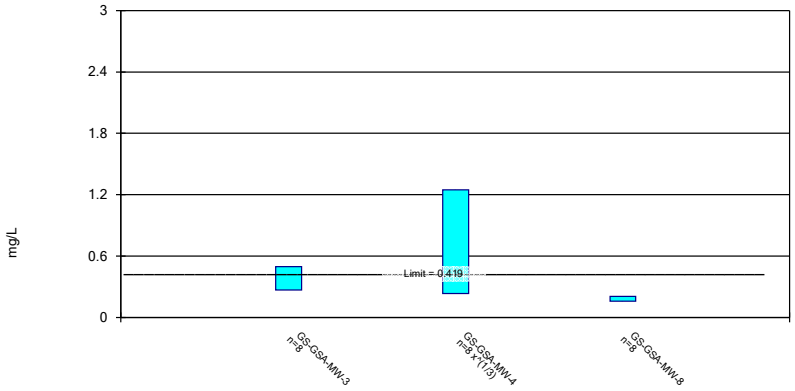
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Lead Analysis Run 12/22/2023 2:51 PM View: Appendix IV
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Parametric Confidence Interval

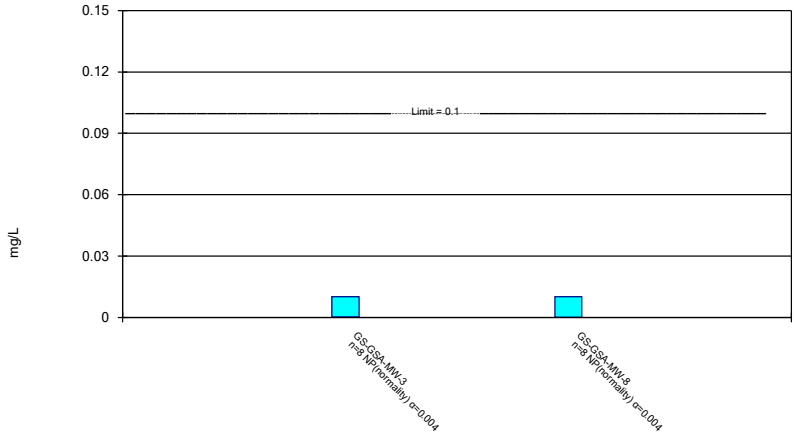
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Lithium Analysis Run 12/22/2023 2:51 PM View: Appendix IV
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Non-Parametric Confidence Interval

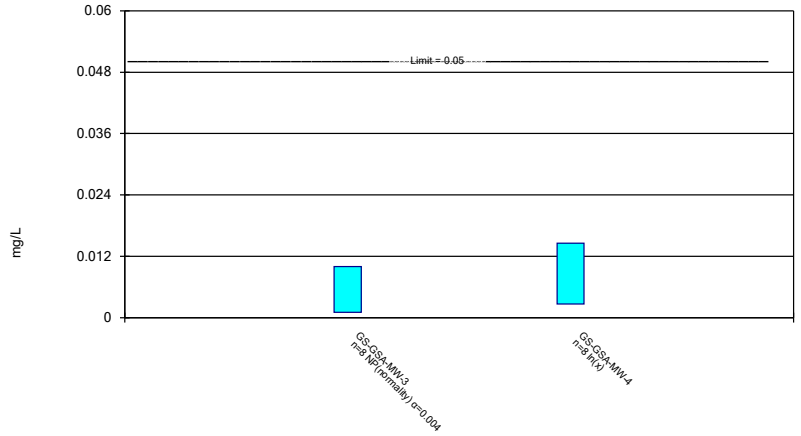
Compliance Limit is not exceeded.



Constituent: Molybdenum Analysis Run 12/22/2023 2:51 PM View: Appendix IV
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Selenium Analysis Run 12/22/2023 2:51 PM View: Appendix IV
Plant Gorgas Client: Southern Company Data: Gorgas GSA

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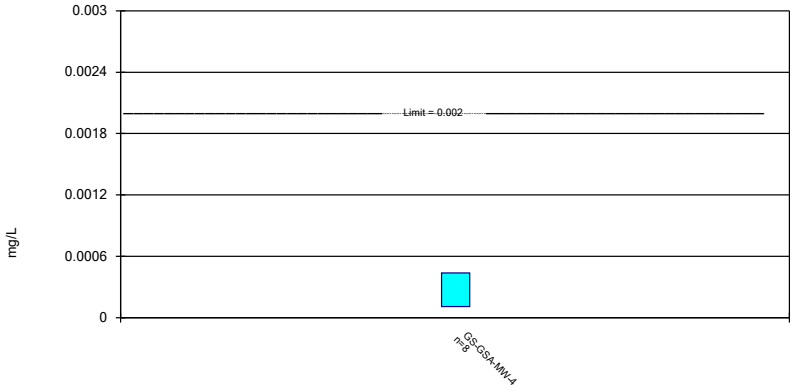
Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Thallium Analysis Run 12/22/2023 2:51 PM View: Appendix IV
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Confidence Interval

Constituent: Antimony (mg/L) Analysis Run 12/22/2023 2:52 PM View: Appendix IV

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-3
2/3/2020	<0.001015
8/4/2020	<0.001015
3/1/2021	<0.001015
7/14/2021	<0.001015
1/26/2022	0.00066 (J)
7/13/2022	<0.001015
2/27/2023	<0.001015
8/23/2023	<0.001015
Mean	0.0009706
Std. Dev.	0.0001255
Upper Lim.	0.001015
Lower Lim.	0.00066

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Arsenic (mg/L) Analysis Run 12/22/2023 2:52 PM View: Appendix IV

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-3	GS-GSA-MW-4	GS-GSA-MW-8
2/3/2020	<0.005		
2/4/2020		0.00128 (J)	<0.005
8/4/2020	<0.005		
8/5/2020		0.00115 (J)	<0.005
3/1/2021	0.0014		0.000633
3/3/2021		0.00116	
7/14/2021	0.00057	0.00174	0.00024
1/26/2022	0.00136		
1/27/2022		0.00274	0.00027
7/12/2022			0.000156 (J)
7/13/2022	0.000491	0.00694	
2/27/2023	0.00111		
2/28/2023			0.000177 (J)
3/1/2023		0.00412	
8/23/2023	0.000448	0.000866	0.000162 (J)
Mean	0.001922	0.0025	0.001455
Std. Dev.	0.001936	0.002096	0.002194
Upper Lim.	0.001335	0.004441	0.005
Lower Lim.	0.0004811	0.0007311	0.000156

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Barium (mg/L) Analysis Run 12/22/2023 2:52 PM View: Appendix IV

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-3	GS-GSA-MW-4	GS-GSA-MW-8
2/3/2020	0.0141		
2/4/2020		0.0124	0.0209
8/4/2020	0.0139		
8/5/2020		0.0142	0.0216
3/1/2021	0.0154		0.0194
3/3/2021		0.0117	
7/14/2021	0.0136	0.0115	0.0232
1/26/2022	0.0148		
1/27/2022		0.0131	0.0238
7/12/2022			0.022
7/13/2022	0.0118	0.00947	
2/27/2023	0.0138		
2/28/2023			0.0238
3/1/2023		0.00845	
8/23/2023	0.0111	0.01	0.0225
Mean	0.01356	0.01135	0.02215
Std. Dev.	0.001441	0.001935	0.001518
Upper Lim.	0.01509	0.0134	0.02376
Lower Lim.	0.01203	0.009302	0.02054

Confidence Interval

Constituent: Beryllium (mg/L) Analysis Run 12/22/2023 2:52 PM View: Appendix IV

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-3	GS-GSA-MW-4
2/3/2020	0.00141 (J)	
2/4/2020		0.00415
8/4/2020	0.00174 (J)	
8/5/2020		0.00385
3/1/2021	0.00157	
3/3/2021		0.00406
7/14/2021	0.00175	0.00577
1/26/2022	0.00179	
1/27/2022		0.00768
7/13/2022	0.00204	0.0228
2/27/2023	0.00191	
3/1/2023		0.0224
8/23/2023	0.00224	0.00684
Mean	0.001806	0.009694
Std. Dev.	0.0002603	0.008084
Upper Lim.	0.002082	0.0228
Lower Lim.	0.00153	0.00385

Confidence Interval

Constituent: Cadmium (mg/L) Analysis Run 12/22/2023 2:52 PM View: Appendix IV

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-4
2/4/2020	0.00143
8/5/2020	0.00157
3/3/2021	0.00162
7/14/2021	0.00246
1/27/2022	0.00336
7/13/2022	0.00687
3/1/2023	0.00552
8/23/2023	0.00224
Mean	0.003134
Std. Dev.	0.002021
Upper Lim.	0.005121
Lower Lim.	0.001287

Confidence Interval

Constituent: Chromium (mg/L) Analysis Run 12/22/2023 2:52 PM View: Appendix IV

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-3	GS-GSA-MW-4	GS-GSA-MW-8
2/3/2020	<0.01		
2/4/2020		<0.01	<0.001015
8/4/2020	<0.01		
8/5/2020		<0.01	<0.001015
3/1/2021	0.000386 (J)		0.000423 (J)
3/3/2021		0.000567 (J)	
7/14/2021	0.00039 (J)	0.0007 (J)	0.0003 (J)
1/26/2022	0.00048 (J)		
1/27/2022		0.00107	0.00046 (J)
7/12/2022			0.000258 (J)
7/13/2022	0.000341 (J)	0.00355	
2/27/2023	0.00037 (J)		
2/28/2023			0.000325 (J)
3/1/2023		0.00243	
8/23/2023	0.000248 (J)	0.000836 (J)	<0.001015
Mean	0.002777	0.003644	0.0006014
Std. Dev.	0.004459	0.004052	0.0003485
Upper Lim.	0.01	0.002444	0.001015
Lower Lim.	0.000248	0.0005942	0.000258

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Cobalt (mg/L) Analysis Run 12/22/2023 2:52 PM View: Appendix IV

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-3	GS-GSA-MW-4	GS-GSA-MW-8
2/3/2020	0.0843		
2/4/2020		0.217	<0.005
8/4/2020	0.0862		
8/5/2020		0.235	<0.005
3/1/2021	0.119		0.00546
3/3/2021		0.24	
7/14/2021	0.0555	0.296	0.00026
1/26/2022	0.0794		
1/27/2022		0.406	0.00067
7/12/2022			0.000233
7/13/2022	0.046	0.878	
2/27/2023	0.285		
2/28/2023			0.000248
3/1/2023		0.705	
8/23/2023	0.0509	0.354	8.4E-05 (J)
Mean	0.1008	0.4164	0.002119
Std. Dev.	0.07815	0.2446	0.002522
Upper Lim.	0.1568	0.6488	0.00546
Lower Lim.	0.04529	0.1998	8.4E-05

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 12/22/2023 2:52 PM View: Appendix IV

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-3	GS-GSA-MW-4	GS-GSA-MW-8
2/3/2020	0.28 (U)		
2/4/2020		0.324 (U)	0.336 (U)
8/4/2020	0.45 (U)		
8/5/2020		0.389 (U)	-0.115 (U)
3/1/2021	0.57 (U)		0.902 (U)
3/3/2021		0.836 (U)	
7/14/2021	0.668 (U)	1.58	1.23 (U)
1/26/2022	0.335 (U)		
1/27/2022		0.791 (U)	0.28 (U)
7/12/2022			0.745 (U)
7/13/2022	0.239 (U)	1.37	
2/27/2023	0.213 (U)		
2/28/2023			0.422 (U)
3/1/2023		0.593 (U)	
8/23/2023	0.368 (U)	1.28	0.735 (U)
Mean	0.3904	0.8954	0.5669
Std. Dev.	0.1617	0.4676	0.4198
Upper Lim.	0.5618	1.391	1.012
Lower Lim.	0.219	0.3997	0.1219

Confidence Interval

Constituent: Fluoride (mg/L) Analysis Run 12/22/2023 2:52 PM View: Appendix IV

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-3	GS-GSA-MW-8
2/3/2020	0.427	
2/4/2020		0.132
8/4/2020	0.389	
8/5/2020		0.119
3/1/2021	0.449	0.106
7/14/2021	0.556	0.221
1/26/2022	0.447	
1/27/2022		0.179
7/12/2022		0.112 (J)
7/13/2022	0.324	
2/27/2023	0.292	
2/28/2023		0.161
8/23/2023	0.542	0.139
Mean	0.4283	0.1461
Std. Dev.	0.09336	0.03904
Upper Lim.	0.5272	0.1875
Lower Lim.	0.3293	0.1047

Confidence Interval

Constituent: Lead (mg/L) Analysis Run 12/22/2023 2:52 PM View: Appendix IV

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-3	GS-GSA-MW-4	GS-GSA-MW-8
2/3/2020	<0.000203		
2/4/2020		<0.005	<0.000203
8/4/2020	<0.000203		
8/5/2020		<0.005	<0.000203
3/1/2021	0.000157 (J)		0.000145 (J)
3/3/2021		0.000609	
7/14/2021	0.00018 (J)	0.00079	<0.000203
1/26/2022	0.00014 (J)		
1/27/2022		0.00103	0.00015 (J)
7/12/2022			<0.000203
7/13/2022	9.5E-05 (J)	0.00228	
2/27/2023	0.000132 (J)		
2/28/2023			7.8E-05 (J)
3/1/2023		0.00144	
8/23/2023	<0.000203	0.00067	<0.000203
Mean	0.0001641	0.002102	0.0001735
Std. Dev.	4.005E-05	0.001868	4.604E-05
Upper Lim.	0.0001707	0.001653	0.000203
Lower Lim.	0.0001109	0.0006225	7.8E-05

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Lithium (mg/L) Analysis Run 12/22/2023 2:52 PM View: Appendix IV

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-3	GS-GSA-MW-4	GS-GSA-MW-8
2/3/2020	0.474		
2/4/2020		0.29	0.188
8/4/2020	0.468		
8/5/2020		0.273	0.206
3/1/2021	0.353		0.149
3/3/2021		0.313	
7/14/2021	0.485	0.487	0.213
1/26/2022	0.31		
1/27/2022		0.671	0.185
7/12/2022			0.189
7/13/2022	0.421	1.89	
2/27/2023	0.165		
2/28/2023			0.157
3/1/2023		1.35	
8/23/2023	0.372	0.469	0.171
Mean	0.381	0.7179	0.1823
Std. Dev.	0.1077	0.5899	0.02225
Upper Lim.	0.4952	1.247	0.2058
Lower Lim.	0.2668	0.2341	0.1587

Confidence Interval

Constituent: Molybdenum (mg/L) Analysis Run 12/22/2023 2:52 PM View: Appendix IV

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-3	GS-GSA-MW-8
2/3/2020	<0.01015	
2/4/2020		<0.01015
8/4/2020	<0.01015	
8/5/2020		<0.01015
3/1/2021	0.00022	0.00277
7/14/2021	0.00026	0.00015 (J)
1/26/2022	0.00022	
1/27/2022		0.00012 (J)
7/12/2022		0.000122 (J)
7/13/2022	0.000257	
2/27/2023	0.000191 (J)	
2/28/2023		0.000135 (J)
8/23/2023	<0.01015	<0.01015
Mean	0.00395	0.004218
Std. Dev.	0.005134	0.004992
Upper Lim.	0.01015	0.01015
Lower Lim.	0.000191	0.00012

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Selenium (mg/L) Analysis Run 12/22/2023 2:52 PM View: Appendix IV

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-3	GS-GSA-MW-4
2/3/2020	<0.01	
2/4/2020		<0.01
8/4/2020	<0.01	
8/5/2020		0.00298 (J)
3/1/2021	0.00141	
3/3/2021		0.00294
7/14/2021	0.00151	0.00563
1/26/2022	0.00117	
1/27/2022		0.00817
7/13/2022	0.00151	0.0226
2/27/2023	0.00152	
3/1/2023		0.017
8/23/2023	0.00103	0.00287
Mean	0.003519	0.008399
Std. Dev.	0.004004	0.007413
Upper Lim.	0.01	0.01455
Lower Lim.	0.00103	0.002654

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Thallium (mg/L) Analysis Run 12/22/2023 2:52 PM View: Appendix IV

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-4
2/4/2020	<0.001
8/5/2020	0.000205 (J)
3/3/2021	0.000178 (J)
7/14/2021	9E-05 (J)
1/27/2022	0.00022
7/13/2022	0.000447
3/1/2023	0.000407
8/23/2023	0.000138 (J)
Mean	0.0002731
Std. Dev.	0.0001549
Upper Lim.	0.0004373
Lower Lim.	0.000109

ND substitution: RL or RL/2 if <15% NDs.