2021 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT

ALABAMA POWER COMPANY
PLANT GORGAS
GYPSUM POND

January 31, 2022

Prepared for

Alabama Power Company
Birmingham, Alabama

By

Southern Company Services
Earth Science and Environmental Engineering

CERTIFICATION STATEMENT

This *2021 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.

1/31/2022

Robert F. Singleton, III Date

AL Registered Professional Geologist No. 1584

1/31/2022

Gregory Whetstone, PE Date

AL Registered Professional Engineer No. 27885

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 2021 Annual Groundwater Monitoring and Corrective Action Report has been prepared to document 2021 semi-annual assessment groundwater monitoring activities at the Plant Gorgas Gypsum Pond and to satisfy the requirements of § 257.90(e), ADEM Admin. Code r. 335-13-15-.06(1)(f), and Part E of AO No. 18-096-GW. Semi-annual assessment monitoring and associated reporting for Plant Gorgas Gypsum Pond is performed in accordance with the monitoring requirements § 257.90 through § 257.95 and ADEM Admin. Code r. 335-13-15-.06(1) through r. 335-13-15-.06(6).

The Semi-Annual Progress Reports have historically been provided to the Department in March and September. In an effort to streamline and provide more thorough reports to ADEM, APC requested approval to combine the information provided in the Semi-Annual Progress Reports described in Part E of AO No. 18-096-GW into the Semi-Annual Groundwater Monitoring and Corrective Action Reports on March 15, 2021. ADEM approved this approach and revised timeline for submittals on March 16, 2021. APC will now provide the Department with the combined semi-annual reports in January and July of each year.

The CCR unit began the monitoring period in assessment monitoring pursuant to § 257.95 and ADEM Admin. Code r. 335-13-15-.06(6). 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 § 257.96, ADEM Admin. Code r. 335-13-15-.06(7), and AO No. 18-096-GW.

The following summarizes results and activities conducted during the first and second semi-annual monitoring events of 2021:

- Statistical evaluation of the assessment monitoring data did not identify SSLs for Appendix IV constituents in Site compliance wells during the first or second semi-annual events.
- Submitted the 2020 Annual Groundwater Monitoring and Corrective Action Report on January 31, 2021.

- Submitted the Semi-Annual Remedy Selection and Design Progress Report on June 11, 2021, which included the Gypsum Pond.
- Began evaluation of the occurrence of lithium in groundwater and Site soils at the Site, including boron isotopic studies, source characterization, and evaluating the presence of naturally occurring lithium in Site soils.
- Submitted the Groundwater Remedy Selection Report in December 2021, which included the Gypsum Pond.

The CCR unit concluded the monitoring period in assessment monitoring, and Alabama Power Company (APC) will begin implementing the selected groundwater remedies identified in the Groundwater Remedy Selection Report submitted to ADEM in December 2021.

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

- Develop the Corrective Action Groundwater Monitoring Program and submit the Groundwater Remedy Monitoring Plan in March 2022, which will include the Gypsum Pond.
- Complete additional analyses into the occurrence of lithium in Site groundwater and soils.
- Conduct the first semi-annual assessment monitoring event in 2022 and submit the semi-annual groundwater monitoring and corrective action report summarizing the findings to ADEM by July 31, 2022.

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

Assessment Monitoring Inintiated: January 15, 2018
Monitoring Period: January 1 - December 31, 2021
Beginning Status: Assessment
Ending Status: Assessment

Statistical Analysis Results *

Appendix III SSIs

Parameter	Wells
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
Fluoride	GS-GSA-MW-3
pH	MW-1 (upgradient), MW-2 (upgradient), MW-4 (upgradient)
Sulfate	GS-GSA-MW-4
TDS	GS-GSA-MW-4

Appendix IV SSLs

Parameter	Wells
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

Selected During Period: Yes
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 increase

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

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 *2021 Annual Groundwater Monitoring and Corrective Action Report* has been prepared to document 2021 semi-annual assessment groundwater monitoring activities at the Plant Gorgas Gypsum Pond (Gypsum Pond) and to satisfy the requirements of § 257.90(e), ADEM Admin. Code r. 335-13-15-.06(1)(f), 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 § 257.90 through § 257.95 and ADEM Admin. Code r. 335-13-15-.06(1) through r. 335-13-15-.06(6).

On March 15, 2021, in an effort to streamline reporting cycles and provide a single set of comprehensive semi-annual reports to ADEM, APC requested approval to re-locate the discussion of delineation results routinely provided in Semi-Annual Progress Reports to Semi-Annual Groundwater Monitoring and Corrective Action Reports. The Semi-Annual Progress Reports have historically been provided to the Department in March and September and covers content described in Part E of Administrative Order No. 18-096-GW. ADEM approved this approach and revised timeline for submittals on March 16, 2021. Semi-Annual Groundwater Monitoring and Corrective Action Reports will now include an update on groundwater delineation activities completed since the submittal of the Facility Plan for Groundwater Investigation (November 13, 2018) and will continue until released in writing by ADEM.

2.0 MONITORING PROGRAM STATUS

The Site is currently in assessment monitoring and is evaluating groundwater corrective action alternatives. In accordance with § 257.94(e) and ADEM Admin. Code r. 335-13-15-.06(5)(e), APC implemented assessment monitoring in January 2018. SSIs of Appendix III parameters were identified at the Gorgas Gypsum Pond during the first semi-annual sampling event conducted in 2021; however, no SSLs of Appendix IV parameters were identified. Pursuant to § 257.95(g)(3)(i) and ADEM Admin. Code r. 335-13-15-.06(6)(g)4.(i), APC completed an ACM in accordance with § 257.96, ADEM Admin. Code r. 335-13-15-.06(7), and AO No. 18-096-GW. The ACM was completed June 12, 2019 and a public meeting was held to discuss the ACM on July 1, 2020.

In accordance with § 257.95 and ADEM Admin. Code r. 335-13-15-.06(6), APC will continue semi-annual assessment monitoring, including all monitoring wells in the certified groundwater monitoring system and any well installed to characterize the horizontal and vertical extent of SSLs.

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.

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

3.2.2 Uppermost Aquifer

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

Beneath and adjacent to the Gypsum Pond, groundwater yielding zones are now generalized into 5 discrete flow systems. They are the: (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.

The Upper-Water Table Flow System exists only across central and southern portions of the Site and generally is comprised 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 comprised 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. This water quality itself can be highly variable and enriched in trace metals owing to the heterogeneity of mine backfill deposits and mineralogy (e.g., clay minerals and sulfides). Based on published data, groundwater quality produced from the Pottsville Formation can be characterized by high concentrations of sulfate, iron, and other trace metals (Jennings and Cook, 2010). Trace metals in Pottsville Formation groundwater are associated with sulfide minerals contained in organic-rich strata (e.g., mudstones and coal seams) and siliceous/carbonate healed fractures and joints. Trace element enrichment is likely the result of migrating hydrothermal fluids generated during the late Paleozoic Allegheny orogeny (Diehl et al., 2004). Arsenic, antimony, molybdenum, selenium, copper, thallium, and mercury are elevated in Warrior Basin coal strata (Goldhaber et al., 2002).

3.2.3 Flow Interpretation

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, locally, flow may also occur towards the southeast and southwest mimicking the natural topography of the Site. West of the gypsum pond, flow is (A) towards northern and central portions of the gypsum pond or (B) 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 as groundwater elevations display vertical separation and downward vertical gradients. Flow through these systems likely converge to similar hydraulic potential near "Blue Pond" south of the Plant Gorgas Gypsum Pond.

3.3 GROUNDWATER MONITORING SYSTEM

Pursuant to § 257.91 and ADEM Admin. Code r. 335-13-15-.06(2), Plant Gorgas has installed a groundwater monitoring system to monitor groundwater within the uppermost aquifer. The certified groundwater monitoring system for the Plant Gorgas Gypsum Pond is designed to monitor groundwater passing the waste boundary of the CCR unit within the uppermost aquifer. Wells were located 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. Attempts at installing upgradient well locations west, north, and east of the Gypsum Pond were unsuccessful because water-bearing zones were not encountered. 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 proximal to the Site, have not been affected by a CCR unit release, and are installed in similar geology. Each of these sites 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 § 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.

Delineation wells are identified on **Figure 5**. All delineation wells are sampled semi-annually as part of the semi-annual assessment 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

Horizontal delineation well GS-GSA-MW-10H was converted from delineation location to piezometer. This well location did not produce sufficient groundwater yield for well development and low-flow sampling methods. Locations GS-GSA-PZ-2A, GS-GSA-MW-1, and GS-GSA-MW-2 recently changed to water-level only piezometers for the purpose of better depicting groundwater flow direction. These locations were installed in 2015 but did not produce sufficient groundwater yield for well development or low-flow sampling methods.

Locations GS-GSA-PZ-16 through GS-GSA-PZ-22 were installed in May 2020 to be used as water-level only piezometers. However, locations GS-GSA-PZ-17 through GS-GSA-PZ-22 have been sampled semi-

annual since August 2020 as part of the semi-annual monitoring events for purposes of evaluating as potential upgradient locations. Some of these piezometers were installed in the vicinity of a previously unknown strip-mined coal storage area, and further historical use research of the area is ongoing. These locations will continue to be sampled and evaluated. It is anticipated that after 4 or 5 sampling events and further study, a recommendation will be made to continue with water-level only monitoring or potentially request permission to redesignate subsets that appear as suitable upgradient locations.

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

During 2021, no monitoring well replacement or abandonment activities occurred.

3.4 GROUNDWATER MONITORING HISTORY

In accordance with § 257.94(b) and ADEM Admin. Code r. 335-13-15-.06(5)(b), eight independent samples were collected from each background and downgradient well and analyzed for the constituents listed in Appendix III and IV prior to 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 assessment 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 SSLs of Appendix IV constituents above the GWPS, and the Site performed an Assessment of Corrective Measures. Pursuant to § 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 is available for the groundwater monitoring history outlined in **Section 3.4** Tabulated results for Appendix III and Appendix IV constituents by monitoring well are included in **Appendix A, Groundwater Analytical Data**.

3.4.2 Historical Groundwater Flow

Groundwater flow systems and flow pattern interpretations have changed over the years as additional hydrogeologic data has become available in the form of piezometers and delineation wells. The following factors contribute to complex Site hydrogeology: (1) Historic strip mining of uppermost aquifer (Pratt and American Coals), (2) potential dewatering of historic mine Site, (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/production, (6) overall relatively low groundwater recharge rates to wells, and (7) overall lack of groundwater yield north and east of the Gypsum Pond. Groundwater data and the discretization of intermediate flow systems will continue to be evaluated over the coming sampling events and interpretations may be modified after these evaluations or if new data is available. Tables summarizing groundwater elevations from all groundwater monitoring events are included in **Appendix B, Historical Groundwater Elevations Summary**.

3.4.3 Monitoring Variance

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

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

3.5 GROUNDWATER SAMPLING AND ANALYSIS

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

During routine semi-annual monitoring events, all compliance wells are sampled and analyzed for Appendix III and Appendix IV constituents. Additional general chemistry constituents (major ions and anions) are now being collected routinely as well. 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 § 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 5 NTU.
- Temperature and ORP – record only, no stabilization criteria.

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

3.5.2 Sample Preservation and Handling

Groundwater samples were collected within the designated size and type of laboratory-supplied containers required for specific parameters. Sample bottles were pre-preserved by the laboratory.

Where temperature control was required, samples were placed in an ice-packed cooler and cooled to less than 6 °C immediately after collection. Blue ice or other cooling packs were not used for cooling samples. An ice-packed cooler was on hand when samples were collected.

3.5.3 Chain of Custody

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

3.5.4 Laboratory Analysis

Laboratory analyses were performed by the APC Environmental Laboratory (APCEL) in Calera, Alabama 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 C**.

3.5.5 Monitoring Period Sampling Events

As required by § 257.90(e) and ADEM Admin. Code r. 335-13-15-.06(1)(f), the following describes monitoring-related activities performed during the preceding year. Semi-annual Assessment Monitoring sampling events occurred in February-March 2021 and July 2021

The first semi-annual assessment monitoring event took place between February 22, 2021 and March 3, 2021. A groundwater monitoring report summarizing data and activities from the first semi-annual sampling event was submitted to the Department in July 2021. The second semi-annual assessment monitoring event took place between July 12, 2021 and July 15, 2021.

Groundwater samples were analyzed for the full list of Appendix III and Appendix IV parameters during each Assessment Monitoring event. All groundwater sampling activities were conducted by APC Field and Water Services. Pace Analytical Services performed the laboratory analyses of Radium-226 and Radium-228 (reported combined). APCEL performed the remaining Appendix III and Appendix IV analyses.

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

4.0 GROUNDWATER ELEVATIONS AND FLOW

During the first semi-annual sampling event groundwater elevations ranged from 240.62 to 430.61 feet NAVD88 (feet above reference 1988 North American Vertical Datum). **Figure 6A, Potentiometric Surface Contour Map – Water-Table (February 22, 2021)**, **Figure 6B, Potentiometric Surface Contour Map – Intermediate 1 (February 22, 2021)**, **Figure 6C, Potentiometric Surface Contour Map – Intermediate 2 (February 22, 2021), Figure 6D, Potentiometric Surface Contour Map – Intermediate 3 (February 22, 2021),** and **Figure 6E, Potentiometric Surface Contour Map – Deep Interval (February 22, 2021)** depict groundwater elevations and inferred groundwater flow direction from higher elevation to lower.

During the second semi-annual sampling event groundwater elevations ranged from 253.93 to 429.91 feet NAVD88 (feet above reference 1988 North American Vertical Datum). **Figure 7A, Potentiometric Surface Contour Map – Water-Table (July 12, 2021)**, **Figure 7B, Potentiometric Surface Contour Map – Intermediate 1 (July 12, 2021)**, **Figure 7C, Potentiometric Surface Contour Map – Intermediate 2 (July 12, 2021), Figure 7D, Potentiometric Surface Contour Map – Intermediate 3 (July 12, 2021),** and **Figure 7E, Potentiometric Surface Contour Map – Deep Interval (July, 2021)** depict groundwater elevations and inferred groundwater flow direction from higher elevation to lower.

As shown on **Figures 6A** and **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 towards the Mulberry Fork of the Black Warrior River. 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 as compliance well GS-GSA-MW-3 as well as piezometers GS-GSA-MW-1 and GS-GSA-MW-2 could also potentially be grouped into Intermediate Flow System 1 based upon stratigraphy and elevations screened (previous report interpretation and presentation).

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 upward vertical gradients

notable in south of the sedimentation pond and proximal to "Blue Pond". This data indicates 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 fit a 6th discrete zone between the Water Table Flow System and Intermediate Flow System 1 and was not factored into contours. Location GS-GSA-MW-12V appears to be recovering from development activities in 2020 as observed by the relatively large increase in groundwater elevation compared to other Site locations. Piezometer, GS-GSA-PZ-2A, was not used in groundwater elevation contouring as it was effectively dry.

Recent available groundwater elevation data have been tabulated and included in **Table 3, Recent Groundwater Elevations Summary**. All available groundwater elevation data recorded since 2016 have been tabulated and included in **Appendix C**

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 typically produce preferential groundwater flow paths, so groundwater velocity is much more variable than in uniform porous media such as sand.

The hydrogeologic characteristics of mine spoils and fractured rock can produce preferential groundwater flow paths, so groundwater velocity is much more variable than in uniform porous media such as sand. These flow paths correspond to more permeable lenses in mine spoil and fractures, zones of fracture concentration, bedding planes, and other discontinuities in the rock. Lateral or vertical transitions from mine spoils to natural overburden materials also adds complexity to groundwater velocity and flow paths. For mine spoil materials, slug testing provided horizontal hydraulic conductivities for the uppermost aquifer between 5.11 x 10^{-3} centimeters per second (cm/sec) and 2.47 x 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 x 10^{-3} cm/sec and 1.22 x 10^{-5} cm/sec with an average of 4.52 x 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 x 10^{-7} cm/sec to a high of 4 x 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, as a whole, provide a bias towards higher permeability. This is because intervals tested were largely selected based upon observations of yield in borehole geophysics, hydrophysics, or field observations (i.e., no yield or poor yielding zones not often tested/quantified). The data reviewed suggests 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 will typically provide hydraulic conductivities in the range of 10^{-6} and 10^{-7} cm/sec. Therefore, groundwater flow velocity at the Site will be highly variable.

5.0 EVALUATION OF GROUNDWATER QUALITY DATA

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

5.1 DATA VALIDATION – QUALITY ASSURANCE/QUALITY CONTROL

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

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

Where:

RPD = Relative Percent Difference (%)

Conc1 = Higher concentration of the sample or field duplicate

Conc2 = Lower concentration of the sample or field duplicate

Where the RPD is below 20%, the difference is considered acceptable and no further action is needed. Where an RPD is greater than 20%, further evaluation is required to attempt to determine the cause of the difference and potentially result in qualified data. **Table 4a, Relative Percent Difference (RPD) Calculations,** provides the RPD for sample and sample duplicates during 2021 sampling events. RPDs were below 20% for the 2021 sampling events with the exception of molybdenum at GS-GSA-MW-13H during the second semi-annual sampling event. An RPD of 24.67% was calculated for the field sample at GS-GSA-MW-13H and its field duplicate collected during the second semi-annual sampling event.

However, because the results are not five times greater than the RL and the difference of the results is less that the RL, no data validation qualifiers were applied to data received.

Chromium was detected at a low level in the field blank collected on July 13, 2021 during the second semi-annual sampling event as shown in **Table 4b, Field QC: Blank Detections**. This detection was an estimated concentration of 0.000244 mg/L and qualified in the laboratory analytical report with a "J flag." The concentration reported is well below established background concentration and the GWPS. Samples collected on the same day as this field blank with chromium results that are less than five times the blank's chromium concentration are validated and qualified with (+)U*. Three samples (GS-GSA-MW-14H, GS-GSA-MW-9V, and GS-GSA-MW-9H) met this criteria and data validation for these samples are summarized in **Table 4c, Field QC: Data Validations Results (Blanks).**

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 SSIs over background. Interwell prediction limits pool upgradient well data to establish a background limit for an individual constituent. The most recent sample from each downgradient well is compared to the background limit to identify SSIs.

Groundwater Stats Consulting demonstrated that these test methods were appropriate in the October 2017 Statistical Analysis Plan, which was updated in the September 2019 data screening evaluation. Time series plots were used to screen proposed background data for suspected outliers, or extreme values that would result in limits that are not conservative from a regulatory perspective. Suspected outliers 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 assessment monitoring, 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 (i.e. UTLs) were calculated using pooled upgradient well data for Appendix IV parameters with a target of 95% confidence and 95% coverage. The confidence and coverage levels for nonparametric tolerance limits are dependent on the number of background samples. The UTLs were then used as the GWPS.

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

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

(iv) Molybdenum 0.100 mg/L.

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

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

5.3 STATISTICAL EXCEEDANCES

Analytical data from the first semi-annual monitoring event of 2021 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 assessment monitoring parameters were evaluated to determine if concentrations statistically exceeded the established groundwater protection standard.

5.3.1 Appendix III Constituents

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

5.3.2 Appendix IV Constituents

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

Statistical analysis of Appendix IV data did not identify any Appendix IV SSLs during the first or second semi-annual monitoring events of 2021 in Site compliance wells. **Table 6a, First Semi-Annual Monitoring Event Analytical Summary** and **Table 6b, Second Semi-Annual Monitoring Event Analytical Summary** provide a summary of all constituents for the first and second semi-annual sampling events of 2021. The following subsections describe elevated concentrations observed in Site delineation wells.

5.3.2.1 First Semi-Annual Monitoring Event

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 over Site GWPS during the first semi-annual sampling event:

- GS-GSA-MW-9V: Lithium
- GS-GSA-MW-8V: Arsenic
- GS-GSA-MW-12H: Lithium
- GS-GSA-MW-13H: Arsenic
- GS-GSA-MW-14H: Lithium
- GS-GSA-MW-3V: Lithium

5.3.2.2 Second Semi-Annual Monitoring Event

A review of analytical data derived from delineation wells identified the following concentrations over Site GWPS during the second semi-annual sampling event:

- GS-GSA-MW-12H: Lithium
- GS-GSA-MW-13H: Arsenic
- GS-GSA-MW-14H: Lithium
- GS-GSA-MW-3V: Lithium

Elevated arsenic was encountered in well GS-GSA-MW-13H during the 2021 semi-annual sampling events. 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 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.

5.3.2.3 Additional Upgradient Piezometers

Piezometers GS-GSA-PZ-16 through GS-GSA-PZ-22 were installed in May 2020 as part of Phase III delineation efforts. These wells were intended to serve as potentially upgradient wells for the Site. A review

of historical aerial photography indicated that the wells were installed in the vicinity of a former strip-mined coal storage area. Analytical results compare with previously referenced publications that document elevated trace metals in Pottsville and Pottsville coal strata as discussed in **Section 3.2.1**. Further historical use research of the area is ongoing. During the first and second 2021 semi-annual monitoring events, exceedances for arsenic were observed in GS-GSA-PZ-22. Additionally, lithium concentrations over GWPS were observed at GS-GSA-PZ-17 and GS-GSA-PZ-18 during the second 2021 semi-annual sampling event.

Average lithium concentrations from these upgradient piezometers show that lithium is either naturally occurring at elevated concentrations or historic mining related activities enhanced lithium concentrations. A factor that may apply downgradient and around the Gypsum Pond as well. Average lithium concentrations observed are (from highest to lowest):

- GS-GSA-PZ-17: 0.9133 mg/L
- GS-GSA-PZ-18: 0.4033 mg/L
- GS-GSA-PZ-20: 0.1367 mg/L
- GS-GSA-PZ-19: 0.0867 mg/L
- GS-GSA-PZ-22: 0.0677 mg/L
- GS-GSA-PZ-21: 0.02 mg/L (100% non-detect).

Limited data from these wells tend to show seasonality where concentrations are higher during late summer sampling events and lower during the late winter/early spring. This pattern may reflect a delayed response to elevated rainfall during the wetter season months in the spring.

Figure 8, GWPS Exceedances Map (Arsenic, Lithium – July 2021) depicts GWPS exceedances in Site delineation wells from the second semi-annual sampling event of 2021.

6.0 GROUNDWATER ASSESSMENT

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 were 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 have been completed to a sufficient degree to define the spatial extent of groundwater impacts and to inform a groundwater remedy selection plan.

6.1 CHRONOLOGY OF DELINEATION ACTIVITIES

Beginning in 2019, Semi-Annual Progress Reports have routinely been 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 timeline for submittals on March 16, 2021. APC will now provide the Department with a discussion of delineation results and activities in each Semi-Annual Groundwater Monitoring and Corrective Action Report until released in writing.

6.1.1 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 wells 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 the Department 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 the Department on July 11, 2019 as required by Part C of the Order.
- Submitted a Phase II – Groundwater Delineation Plan to the Department on August 15, 2019. This plan documented planned activities associated with proposed Phase II delineation efforts.
- On December 30, 2019, provided the Department with a response to comments received from the Department 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 the Department in a Phase II Delineation Plan submitted August 15, 2019 to further delineate extent of groundwater impacts. Phase II was conducted between the dates of October 2019 to March 2020. The following summarizes all activities that were complete 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) off-set 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 eleven (11) piezometers previously installed at the Site in 2015 or prior 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 the dates of May 2, 2020 and June 11, 2020. The following summarizes all activities that were complete 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, 2020 and May 5, 2020. Horizontal delineation well GS-GSA-MW-15H did not yield sufficient water for development and sampling and will be utilized as 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, 2020 and May 31, 2020.
- Completed semi-annual assessment groundwater sampling event between August 3, 2020 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. Additionally, 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.

6.1.2 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 and estimated quantity of material released, sampling of

gypsum material was conducted from near the surface of the Gypsum Pond. Samples were collected based upon 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.

6.1.3 Discussion of Delineation Results

Previous Groundwater Monitoring and Corrective Action Reports for the Plant Gorgas Gypsum Pond have identified SSLs in groundwater for lithium; however, there were not SSLs for lithium during the 2021 monitoring period. 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. **Figure 8** depicts exceedances and SSLs at the Gypsum Pond during the second semi-annual monitoring event of 2021.

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

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

As shown on **Table 1b**, eleven (11) delineation wells have been installed at the Site to assess potential impacts. Additionally, two (2) delineation wells were installed (GS-GSA-MW-10H and GS-GSA-MW-15H) were installed but did not produce sufficient groundwater yield to sample (**Table 1c**).

At the Site, SSLs for lithium have been historically observed at compliance well GS-GSA-MW-3, though no SSLs were noted during the 2021 monitoring period. Additionally, exceedances for lithium were noted at the following delineation wells and piezometers during the 2021 monitoring period:

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

Figure 9A, Lithium Concentrations Along Geologic Cross-Section D-D' and **Figure 9B, Lithium Concentrations Along Geologic Cross-Section E-E'** depict the lateral and vertical distribution of lithium concentrations downgradient of the gypsum pond.

Certain wells at the Site have a degree of uncertainty whether observed lithium concentrations are attributable to the gypsum pond as a leachate source. To clarify this uncertainty, additional investigation and analysis is being conducted to assess whether an Alternate Source Demonstration is feasible for elevated lithium concentrations observed. As part of this investigation, an isotopic analysis of boron was conducted on samples from these well locations. A negative δ(11)B ratio would indicate a CCR leachate source, whereas a positive ratio would confirm a natural source and therefore, imply observations of elevated lithium would also be naturally occurring in these wells. Boron isotope results, lithium-boron ratios, and piper diagrams are included in **Appendix E, Lithium Data**.

In addition to boron isotope data, samples were collected from each of the three sedimentation ponds at the Site to further assess the potential impacts source material may have on groundwater if a release has occurred. The samples were analyzed for Appendix III and Appendix IV constituents (minus combined radium) along with major ions and general chemistry parameters.

6.1.3.1 Preliminary Results

GS-GSA-MW-12H and GS-GSA-MW-14H

Elevated lithium concentrations observed in horizontal delineation wells GS-GSA-MW-12H and GS-GSA-MW-14H do not appear to be attributable to the gypsum pond based on preliminary results, and factors that contribute to this reasoning include:

1) Elevated lithium at these locations are not accompanied by elevated boron concentrations which would generally be expected. Boron-lithium ratio comparisons between the potential source and these wells are significantly different. These ratios are:
    a. SP-1 (Sedimentation Pond 1) – 8.66 (B/Li)
    b. SP-2 (Sedimentation Pond 2) – 218.06 (B/Li)
    c. SP-3 (Sedimentation Pond 3) – 219.70 (B/Li)
    d. GS-GSA-MW-12H – 0.18 (B/Li)
    e. GS-GSA-MW-14H – 0.32 (B/Li)
2) GS-GSA-MW-14H is not hydraulically downgradient of the Gypsum Pond as shown on **Figures 6A** and **7A**.
3) Boron isotopic analysis does not indicate a CCR leachate source of boron in wells GS-GSA-MW-12H and GS-GSA-MW-14H. Boron isotopic fractionation show positive $\delta^{11}B$ ratios of 8.8 and 11.3, respectively. CCR sources typically show a negative ratio.

GS-GSA-MW-3 and GS-GSA-MW-3V

Elevated lithium concentrations observed in compliance wells GS-GSA-MW-3 and GS-GSA-MW-3V are likely not attributable to the gypsum pond based on preliminary results, though further analysis is warranted before a conclusion is obtained. Factors that indicate that lithium concentrations at the locations are not attributed to a release from the gypsum pond include:

1) Boron isotopic analysis does not indicate a CCR leachate source.
2) While boron is slightly elevated at these locations, the signature does not match the ratio observed in samples collected from the sedimentation ponds.
3) SSLs for lithium in compliance well GS-GSA-MW-3 have not been observed since the second semi-annual assessment event of 2020.
4) There has been no discernable trend for lithium concentrations in GS-GSA-MW-3V over the last four sample events, and lithium concentrations remain stable.

GS-GSA-MW-9V

Elevated lithium concentrations at GS-GSA-MW-9V appear to be independent sources relative to GS-GSA-MW-3 and GS-GSA-MW-3V based on the lithium to boron ratio signatures. GS-GSA-MW-9V is delineated to the south in the direction of groundwater flow by well GS-GSA-MW-13 (**Figure 9B**). As shown on **Figure 9B**, although designated as a horizontal delineation well, location GS-GSA-MW-13H is screened across the same or very proximal stratigraphy as GS-GSA-MW-9V. Lithium is non-detect or has

been detected at relatively low concentrations below the GWPS in horizontal delineation wells GS-GSA-MW-9H, GS-GSA-MW-11H, and GS-GSA-MW-13H, located downgradient of horizontal delineation wells with observed lithium exceedances.

6.2 STATUS OF DELINEATION

Lithium impacts to groundwater have been horizontally delineated in the direction of groundwater flow away from the facility in multiple flow systems. These potential impacts do not extend off-Site as shown on **Figure 8**, **Figure 9A,** and **Figure 9B**. Based on preliminary analysis of the lithium evaluation, elevated lithium in wells GS-GSA-MW-12H and GS-GSA-MW-14H do not appear to be attributable to a release from the gypsum pond because (A) they are not in the direction of groundwater flow away from the facility, (B) they do not display expected lithium-boron correlations, and (C) boron isotopic data does not indicate a CCR leachate source.

In the direction of groundwater flow away from the facility, lithium exceedances are only found in the deepest of the five flow systems, which given Site hydrogeology and the prevalence of low permeability, confining strata, introduces a degree of uncertainty as to the source of elevated lithium. This is compounded by the fact that the Plant Gorgas Gypsum Pond is a lined facility. Lithium exceedances noted at wells GS-GSA-MW-3 and GS-GSA-MW-3V do not appear to indicate a CCR source because (A) boron isotopic analysis does not indicate a CCR leachate source, (B) the boron-lithium ratio signature does not match the signature observed in samples collected from the sedimentation ponds, (C) SSLs for lithium in compliance well GS-GSA-MW-3 have not been observed since the second semi-annual assessment event of 2020, (D) there has been no discernable trend for lithium concentrations in GS-GSA-MW-3V over the last four sample events, and (E) lithium concentrations remain stable. The lithium exceedances noted at GS-GSA-MW-9V need to be further evaluated, but the exceedances at that location appear to be independently sourced compared to other locations.

At the time of this writing, further analysis is underway on the occurrence of natural lithium in material at the Site. Upon receipt and review of data collected from this additional investigation, a recommendation will be made to either

1) Continue delineation activities as necessary, or
2) Consider delineation complete on the basis of an alternate source of lithium.

7.0 EVALUATION OF GROUNDWATER CORRECTIVE MEASURES

Groundwater remedy selection has occurred in the following two stages: 1) completing an ACM to identify potentially feasible remedies for the Site after the initial determination that GWPSs have been exceeded; and 2) evaluating potential remedies to develop a Site-specific remedy plan.

7.1 REMEDY SELECTION

Since submittal of the revised ACM in February 2020 (Anchor QEA, 2020), extensive investigations have been performed to select effective corrective measures for COIs in groundwater at the Site. Semi-annual and annual status reports regarding investigation and evaluation have been submitted to the Department and posted to the Site's CCR compliance webpage. Based on investigations and evaluation, the following corrective measures were proposed in the Groundwater Remedy Selection Report submitted in December 2021 to address GWPS exceedances at the Plant Gorgas Gypsum Pond:

3) Source control;
4) Monitored Natural Attenuation (MNA); and,
5) Adaptive Site management

7.1.1 Source Control

Source control at the Gypsum Pond will be accomplished by complete removal of the CCR material from the unit and regrading of the area as needed to facilitate stormwater management. Closure activities are planned to begin in 2022. The Gypsum Pond is lined with a 60-mil high-density polyethylene (HDPE) geomembrane liner, which was installed after existing soils/mine spoils were graded, the subgrade proof rolled, and a granular fill placed beneath the liner. The liner is expected to continue reducing the potential for source contributions to groundwater during closure activities.

The Gypsum Pond is being closed by removal of CCR in accordance with 40 CFR § 257.102(c) and ADEM Admin. Code r. 335-13-15-.07(3)(c). The proposed corrective action strategy incorporates the closure of the Unit, which will effectively remove the potential source of CCR constituents to groundwater.

The Gypsum Pond contains approximately 600,000 cubic yards of CCR with a current pond footprint of approximately 18 acres. After closure, the embankments will be modified so the pond no longer impounds water. The closure consists of excavation of CCR from above the existing HDPE liner, followed by removal of the HDPE liner and underlying 12-inch layer of granular material that consists primarily of bottom ash. During closure, the Gypsum Pond will be progressively dewatered as required to facilitate closure by

removal. Water from the Gypsum Pond will continue to be directed to the lower ponds. Water will be returned to the plant for treatment in the wastewater treatment facility. Once the Gypsum Pond is closed through the removal of the gypsum, liner, and underlying granular layer, decommissioning of the lower sedimentation pond, clear pool, and emergency storage pond will take place. This will involve removing any sediment and the HDPE liners. This area will then be regraded for management of stormwater runoff for the closed facility. Final construction activities and Site restoration are expected to be complete in 2023.

7.1.2 Monitored Natural Attenuation (MNA)

MNA is a selected remedy for the Gypsum Pond. The trends observed in concentration versus time and concentration versus distance graphs provide evidence that natural attenuation is currently occurring in several areas at the Site, even without source control. Concentration versus distance graphs along nine upgradient-to-downgradient well transects at the nearby Ash Pond indicate that arsenic and lithium concentrations are generally decreasing with distance from the respective Unit boundary.

Based on the geochemical investigations, several lines of evidence support multiple attenuating mechanisms for arsenic and lithium. The major attenuating mechanisms include the sorption on iron oxides (arsenic), the precipitation of arsenate phases (arsenic), and cation exchange on clays (lithium).

All COIs are subject to physical attenuation mechanisms such as dispersion and flushing, which will contribute to decreased concentrations with time and distance from the Gypsum Pond. Rates of attenuation were determined by extrapolating recent decreasing trends on the concentration versus time graphs to the GWPS for areas where decreasing trends were observed. Depending on the COI and well (area), MNA alone is estimated to achieve GWPSs within 24 years, not considering the benefits of closure. This time frame is reasonable compared to other, more aggressive corrective action technologies, which are not expected to achieve GWPSs in less than 24 years.

Column studies were performed to assess the ability for the aquifer (soil) to chemically attenuate COIs and to help determine the stability of the attenuated COIs. Column studies indicate arsenic and lithium are attenuated by aquifer media (residual soils). The attenuation capacity of aquifer soils determined from column testing was scaled up to the entire volume of the aquifer downgradient of the Unit but within the property boundary. The extrapolation showed attenuating capacity of the aquifer greatly exceeds the mass of arsenic and lithium requiring attenuation.

Selective sequential extraction (SSE) was performed on samples of well solids (precipitates) and soils used in the column studies to assess the stability of the attenuated COIs and their host minerals. Several of the

well solids (precipitates) extracts, particularly lithium, were below detection limits for the COIs. Based on available SSE data for well solids (precipitates), arsenic was primarily in the F4 (oxidizable) fraction, with some in the F2 (exchangeable) and F5 (residual) fractions. Lithium was primarily in the F5 (residual) fractions. For SSE of the post-column soils, arsenic was primarily in the F2 (exchangeable) and F5 (residual) fractions, with some in the F3 (reducible) and F4 (oxidizable) fractions. All of the lithium was in the F5 (residual) fraction in the SSE of the post-column soils. Therefore, arsenic and lithium are expected to remain immobile (not remobilize back into groundwater) because is attenuated primarily in stable mineral phases.

Reactive transport modeling was performed along simulated fracture pathways in rock and demonstrated that the migration of arsenic and lithium are significantly retarded (slower) as compared to a nonreactive constituent such as chloride. The attenuation of arsenic is dominated by geochemical reactions near the fracture, and the attenuation of lithium is dominated by matrix diffusion and cation exchange on clay minerals in the rock matrix.

7.1.3 Adaptive Site Management

As applied here, adaptive Site management is a component of the corrective action monitoring program, in which monitoring results are continually evaluated to determine if the system is making progress toward achieving remedy goals. Based on system performance—either achieving goals or not making expected progress—the remedy system may need to be adapted or changed. Adaptation of the system may include ceasing actions no longer necessary or changing the system because it is not performing as expected. The adaptive Site management approach plans for changes at the Site and provides a process to make changes as necessary.

7.2 CORRECTIVE ACTION MONITORING PROGRAM

As required by 40 CFR § 257.98(a) and ADEM Admin. Code r. 335-13-15-.06(9)(a), the owner/operator must implement the groundwater remedy within 90 days of selecting a remedy, including establishing a corrective action groundwater monitoring program. That monitoring program must perform the following actions: 1) meet the assessment monitoring requirements of 40 CFR § 257.95 and ADEM Admin. Code r. 335-13-15-.06(6); 2) document the effectiveness of the remedy; and 3) demonstrate compliance with the GWPS. A corrective action groundwater monitoring program providing Site-specific remedy monitoring details will be submitted within 90 days of the Groundwater Remedy Selection Report (Anchor 2021).

7.3 REMEDY IMPLEMENTATION

In accordance with 40 CFR § 257.97(d) and ADEM Admin. Code r. 335-13-15-.06(8)(d), a schedule was developed for implementing and completing remedial activities at the Site. As described in **Section 7.1.1**, unit closure is scheduled to begin in 2022. The MNA process is currently being implemented at the Site, although a formalized process to evaluate and document the process has not been established. MNA will be implemented by establishing the detailed MNA sampling, analysis, and evaluation plan in 90 days as part of the corrective action groundwater monitoring program.

8.0 SUMMARY AND CONCLUSIONS

Based on the results of statistical analysis presented in this report, the Gypsum Pond remains in assessment monitoring.

The certified compliance monitoring well network is sampled on a semi-annual basis. The groundwater samples were analyzed for all Appendix III and IV parameters. Statistical evaluations of the February-March 2021 and July 2021 assessment monitoring did not identify SSLs of Appendix IV constituents in any of the Site monitoring wells. Arsenic and lithium GWPS exceedances were noted in several of the Site delineation wells and piezometers.

Additional investigations into the occurrence of lithium in Site groundwater is currently underway. Preliminary results of these investigations are presented in the report, and final results will be published in subsequent reports.

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

- Develop the Corrective Action Groundwater Monitoring Program and submit the Groundwater Remedy Monitoring Plan in March 2022, which will include the Gypsum Pond.
- Complete additional analyses into the occurrence of lithium in Site groundwater and soils.
- Conduct the first semi-annual assessment monitoring event in 2022 and submit the semi-annual groundwater monitoring and corrective action report summarizing the findings to ADEM by July 31, 2022.

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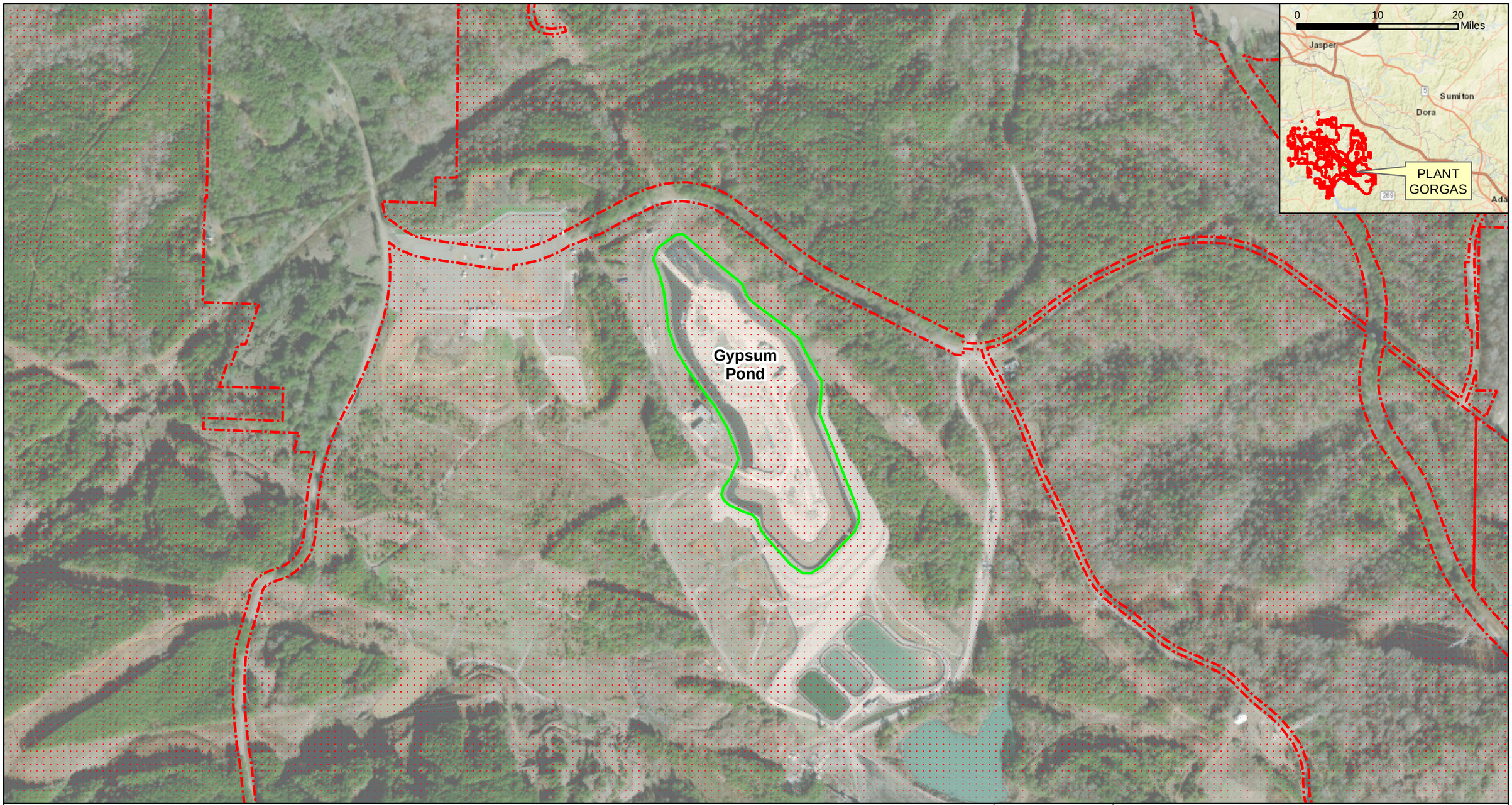
Figures



Legend

- Gypsum Pond Boundary
- Property Boundary (Approximate)

N

0 500 1,000 2,000 Feet

SCALE	1:6,000
DATE	11/10/2020
DRAWN BY	KWR
CHECKED BY	GBD

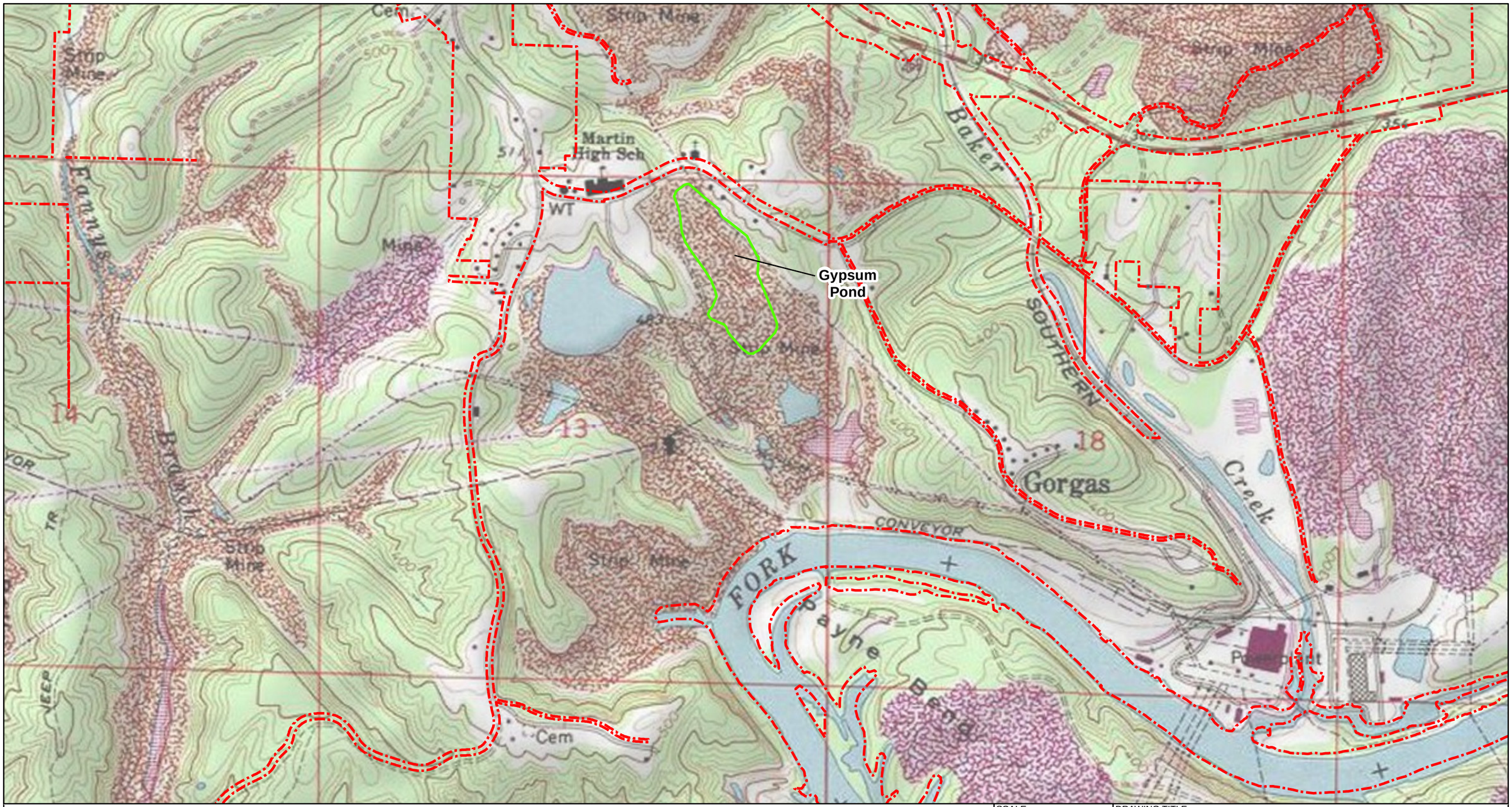
DRAWING TITLE

SITE LOCATION MAP
PLANT GORGAS GYPSUM POND

FIGURE NO

FIGURE 1

Southern Company



Legend

- Gypsum Pond Boundary
- Property Boundary (Approximate)

N

0 1,000 2,000 4,000 Feet

SCALE	1:12,000
DATE	11/10/2020
DRAWN BY	KWR
CHECKED BY	GBD

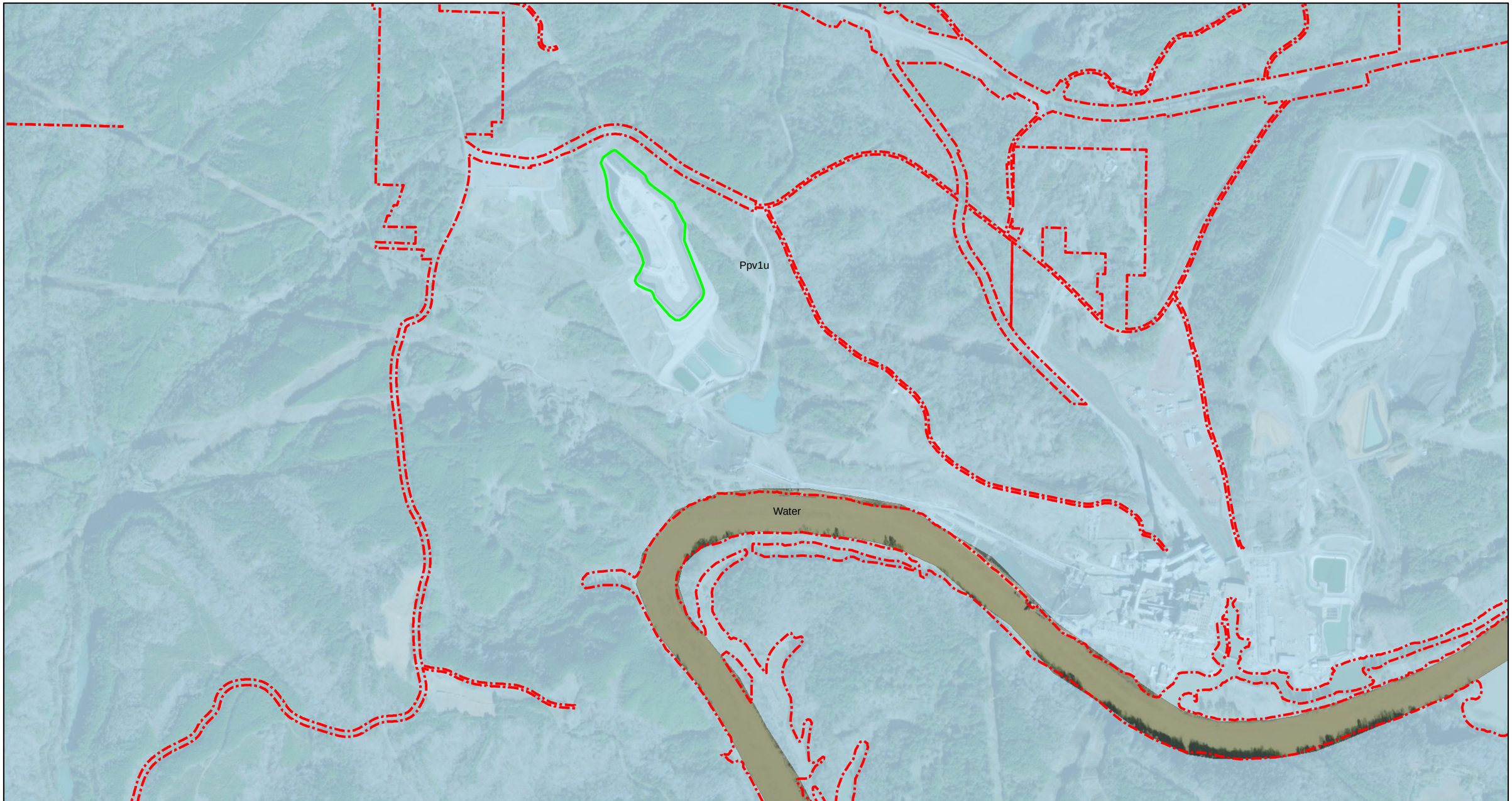
DRAWING TITLE

SITE TOPOGRAPHIC MAP
PLANT GORGAS GYPSUM POND

FIGURE NO

FIGURE 2

Southern Company



Legend

Gypsum Pond Boundary

Property Boundary (Approximate)

Geologic Units

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

N

0 500 1,000 2,000 3,000 4,000 Feet

SCALE	1:12,000
DATE	11/10/2020
DRAWN BY	KWR
CHECKED BY	GBD

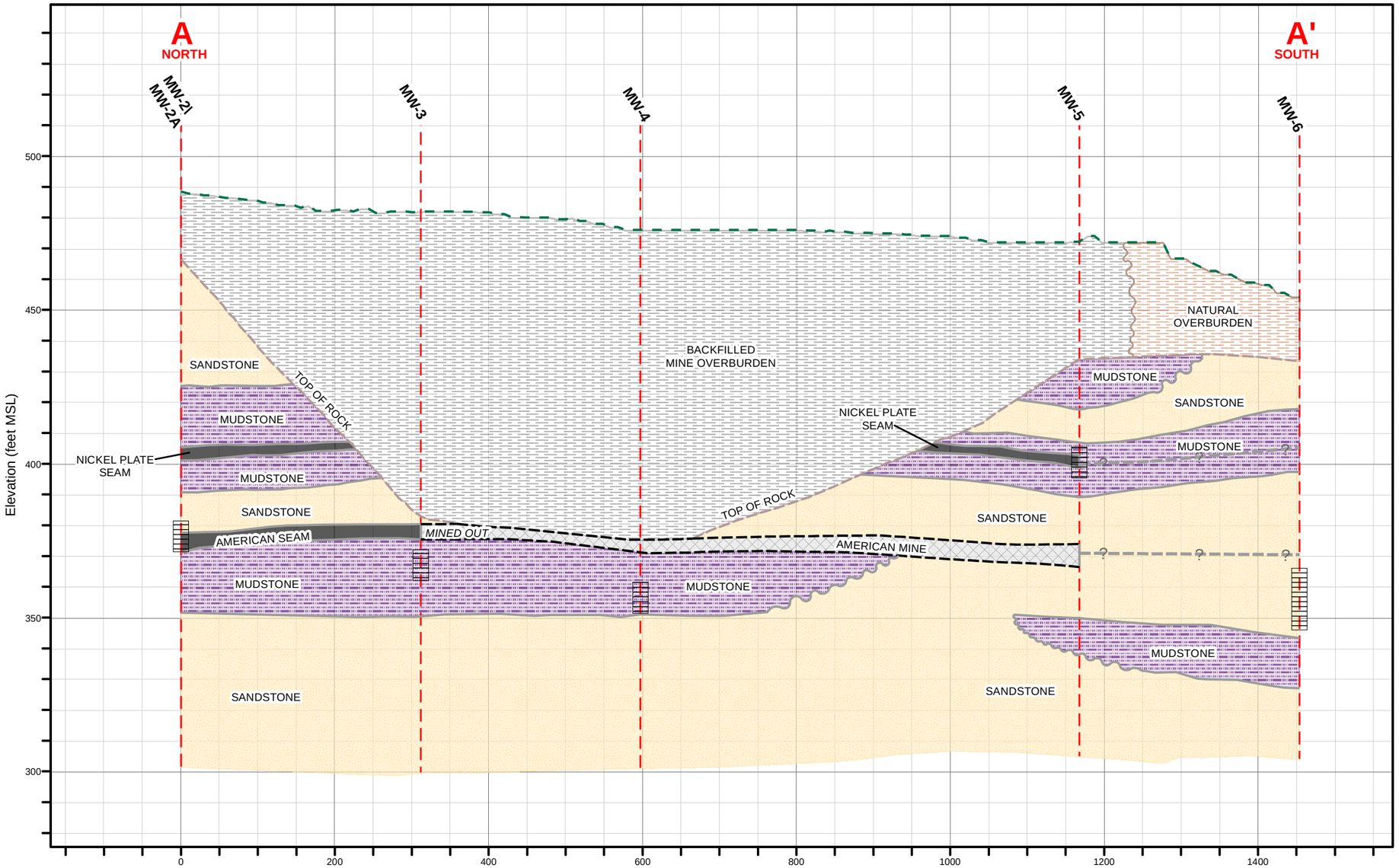
DRAWING TITLE

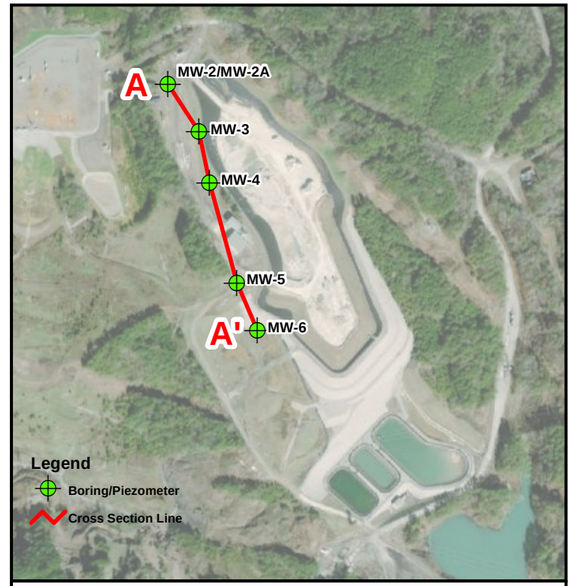
SITE GEOLOGIC MAP
PLANT GORGAS GYPSUM POND

FIGURE NO

FIGURE 3

Southern Company





NOTES:
1. Stratagraphic layers were correlated using a combination of boring data and gamma logs.
2. Vertical exaggeration = 4.

Legend

- 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	9/22/2020
DRAWN BY	KAR
CHECKED BY	GBD

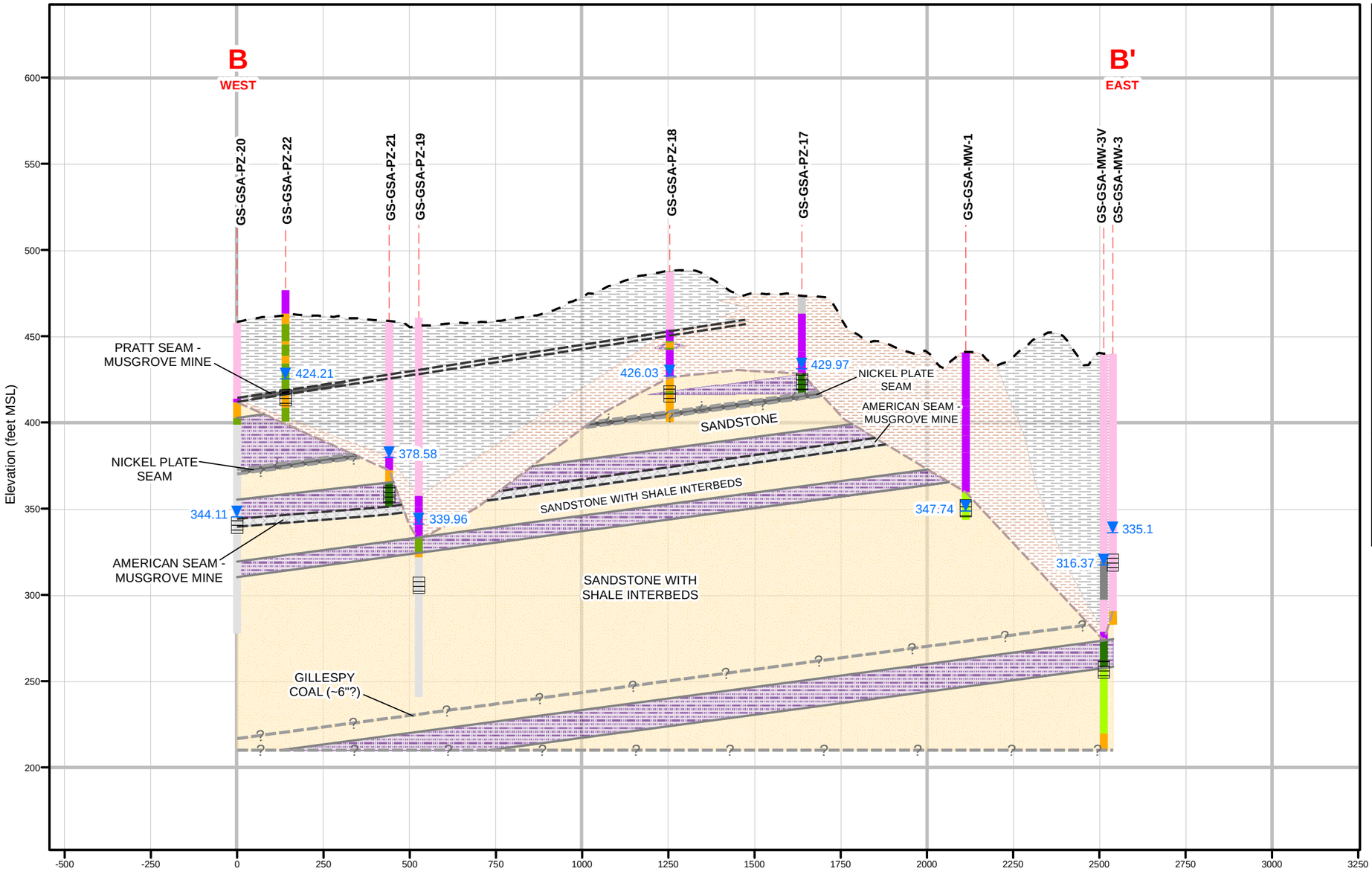
DRAWING TITLE

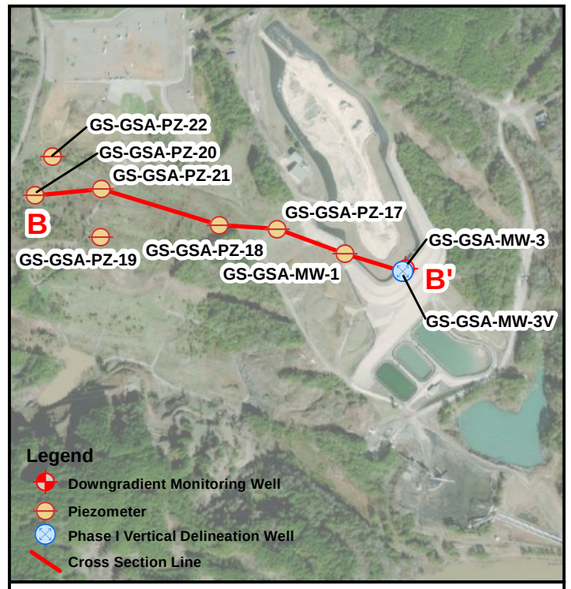
GEOLOGIC CROSS SECTION A - A'
PLANT GORGAS GYPSUM POND

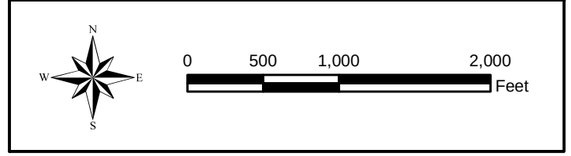
FIGURE NO

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 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	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	9/23/2020
DRAWN BY	KAR
CHECKED BY	GBD

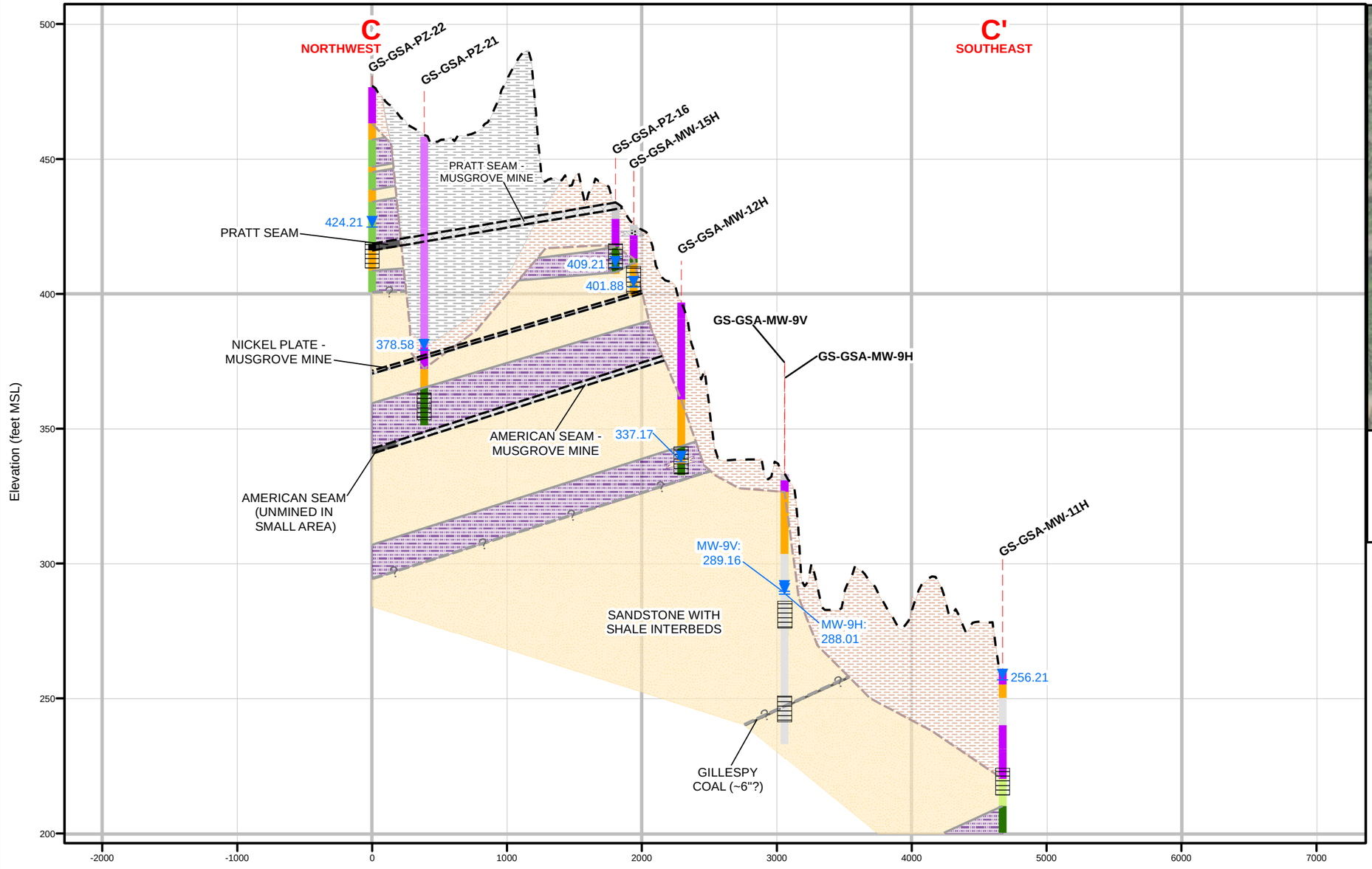
DRAWING TITLE

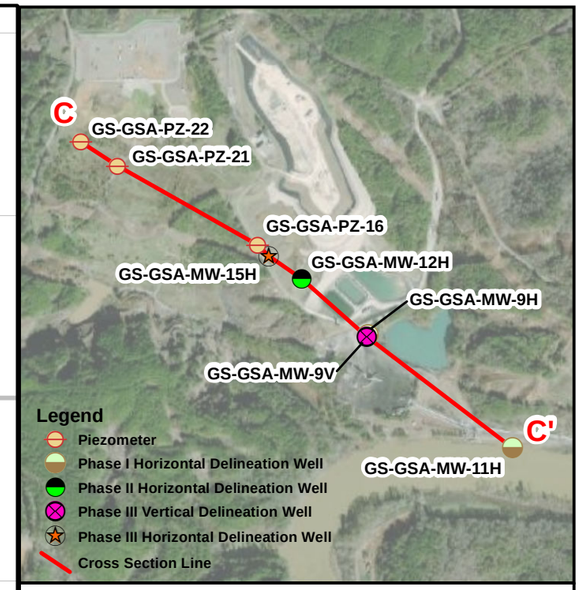
GEOLOGIC CROSS SECTION B - B'
PLANT GORGAS GYPSUM POND

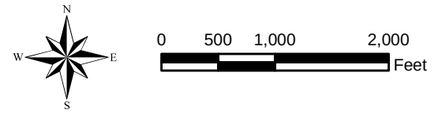
FIGURE NO

FIGURE 4B

Southern Company







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 3, 2020.
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	9/23/2020
DRAWN BY	KAR
CHECKED BY	GBD

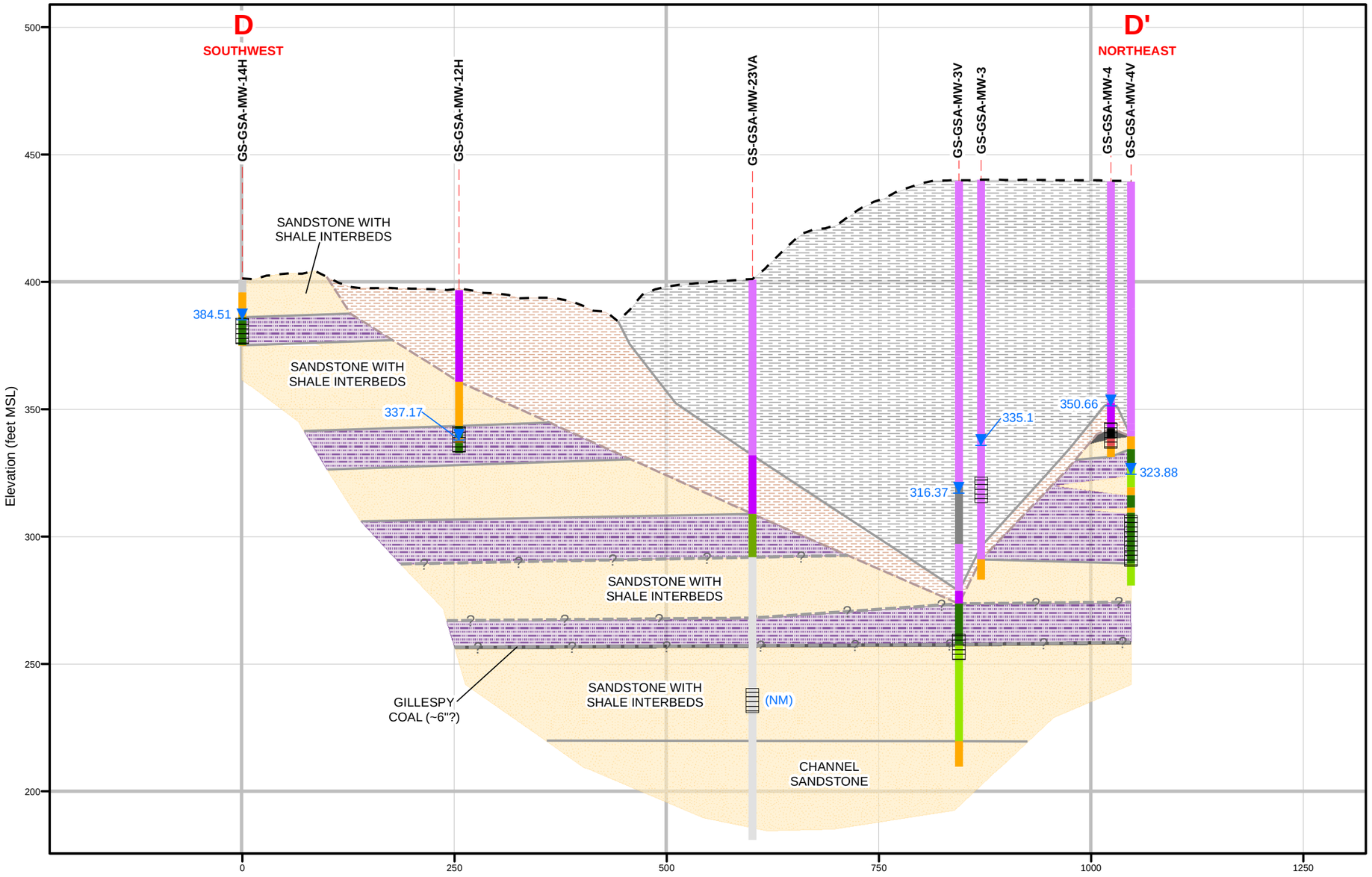
DRAWING TITLE

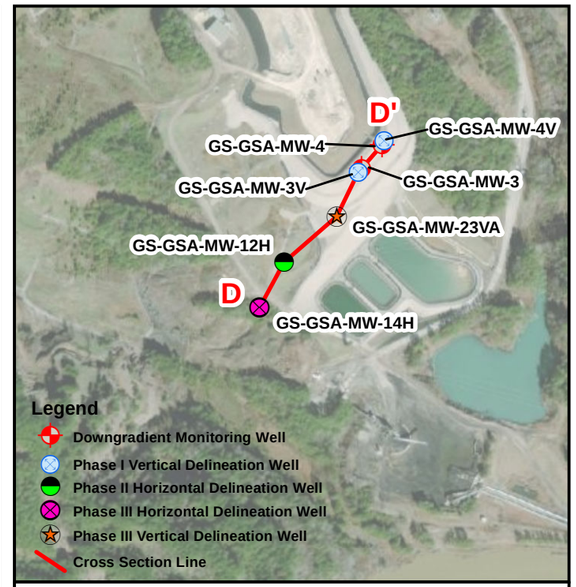
GEOLOGIC CROSS SECTION C - C'
PLANT GORGAS GYPSUM POND

FIGURE NO

FIGURE 4C

Southern Company





NOTES:
1. Groundwater levels measured on August 3, 2020.
2. NM indicates water level not measured.
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

Borehole Description

- Top of Rock
- Strata Boundary
- Inferred Strata
- Mine
- CCR Fill
- Fill Materials
- Overburden
- MINESPOILS
- COAL
- Hydroexcavated
- No Recovery
- Partially Weathered Rock
- Sandstone
- Sandstone and Siltstone
- Siltstone
- Shale

Geologic Units

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

SCALE	AS SHOWN
DATE	9/23/2020
DRAWN BY	KAR
CHECKED BY	GBD

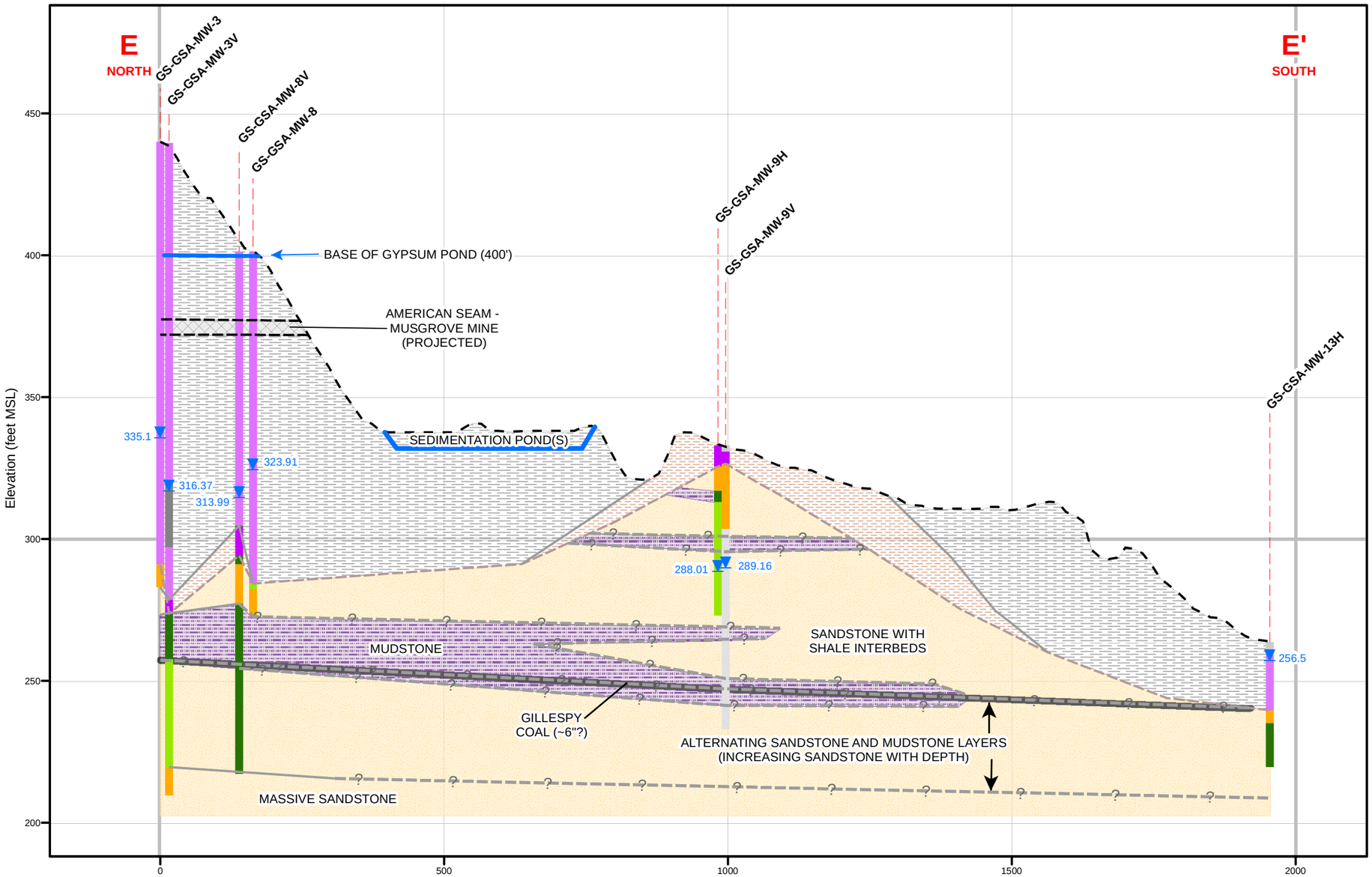
DRAWING TITLE

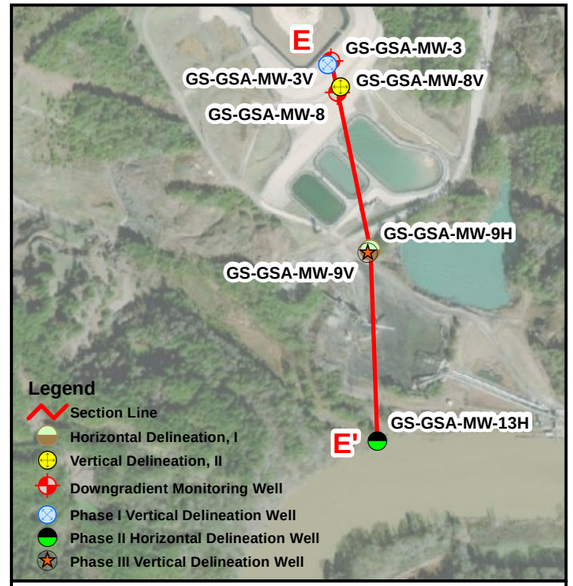
GEOLOGIC CROSS SECTION D - D'
PLANT GORGAS GYPSUM POND

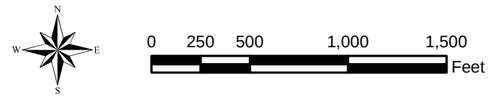
FIGURE NO

FIGURE 4D

Southern Company







NOTES:

1. GS-GSA-MW-3V, MW-8V, and MW-9V are projected onto the cross-section line, so the ground surface deviates from the well surface elevation at these locations.
2. Groundwater levels measured on August 3, 2020.
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
- Top of Rock
- Strata Boundary
- Inferred Strata
- Mine

Borehole Description

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

Geologic Units

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

SCALE	AS SHOWN
DATE	9/23/2020
DRAWN BY	KAR
CHECKED BY	GBD

DRAWING TITLE

GEOLOGIC CROSS SECTION E - E'
PLANT GORGAS GYPSUM POND

FIGURE NO

FIGURE 4E

Southern Company

Legend

- Downgradient Monitoring Well
- Upgradient Monitoring Well
- Piezometer
- Phase I Horizontal Delineation Well
- Phase II Horizontal Delineation Well
- Phase III Horizontal Delineation Well
- Phase I Vertical Delineation Well
- Phase II Vertical Delineation Well
- Phase III Vertical Delineation Well
- Upgradient Monitoring Well
- Property Boundary (Approximiate)
- Gypsum Pond Boundary
- Gypsum CCR Landfill Boundary

N

0 250 500 1,000 1,500 Feet

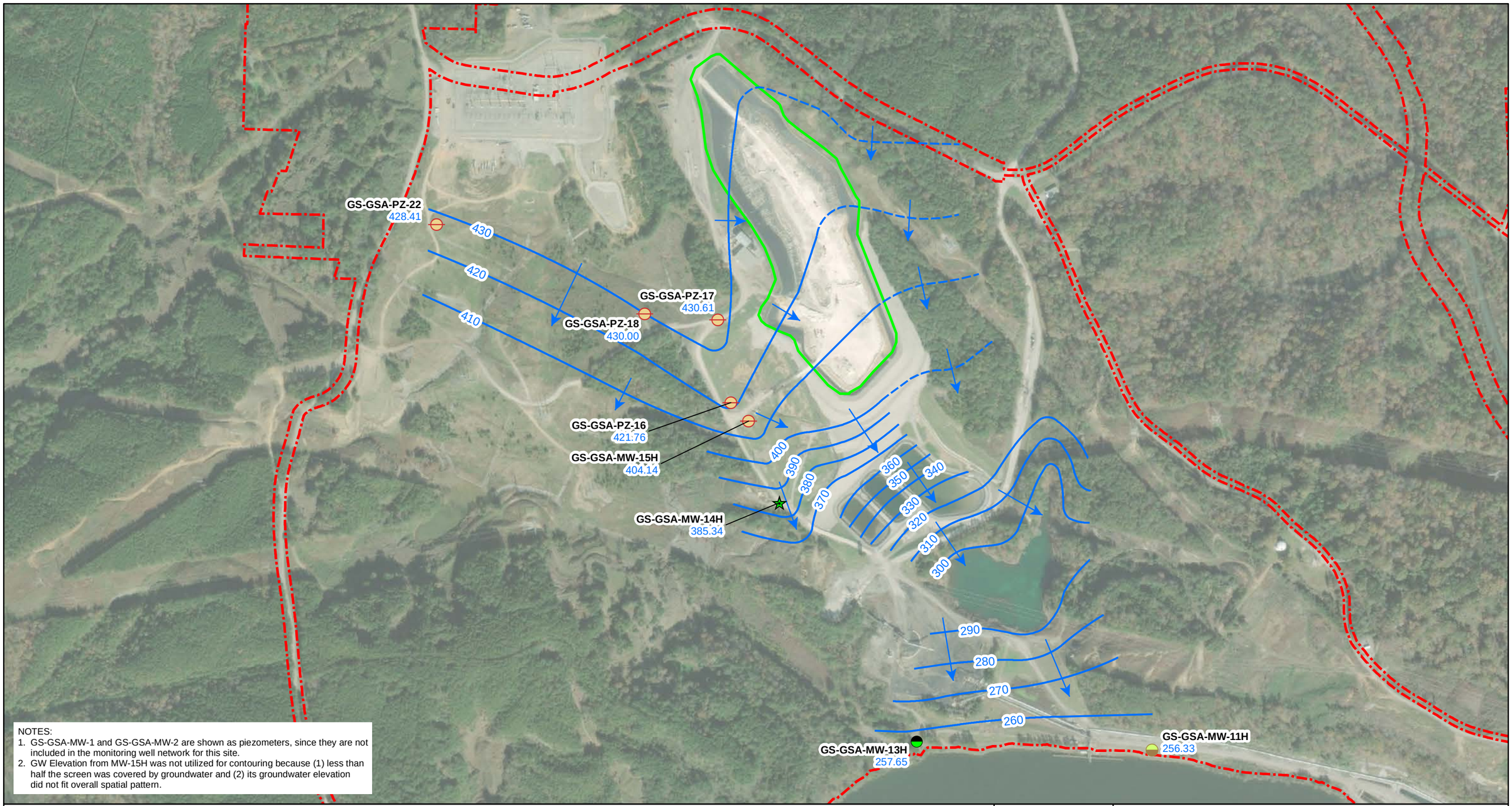
SCALE	1:6,000
DATE	8/25/2020
DRAWN BY	KAR
CHECKED BY	GBD

DRAWING TITLE

MONITORING WELL LOCATION MAP
PLANT GORGAS GYPSUM POND

FIGURE NO **FIGURE 5**

Southern Company



NOTES:
1. GS-GSA-MW-1 and GS-GSA-MW-2 are shown as piezometers, since they are not included in the monitoring well network for this site.
2. 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.

Legend

- Piezometer ; Piezometer, III
- Phase I Horizontal Delineation Well
- Phase II Horizontal Delineation Well
- Phase III Horizontal Delineation Well

GS-GSA-PZ-17 Well ID
430.61 Groundwater Elevation

- Potentiometric Surface Contour (ft NAVD88)
- Inferred Potentiometric Surface Contour (ft NAVD 88)
- Approximate Groundwater Flow Direction
- Property Boundary (Approximate)
- Gypsum Pond Boundary

N

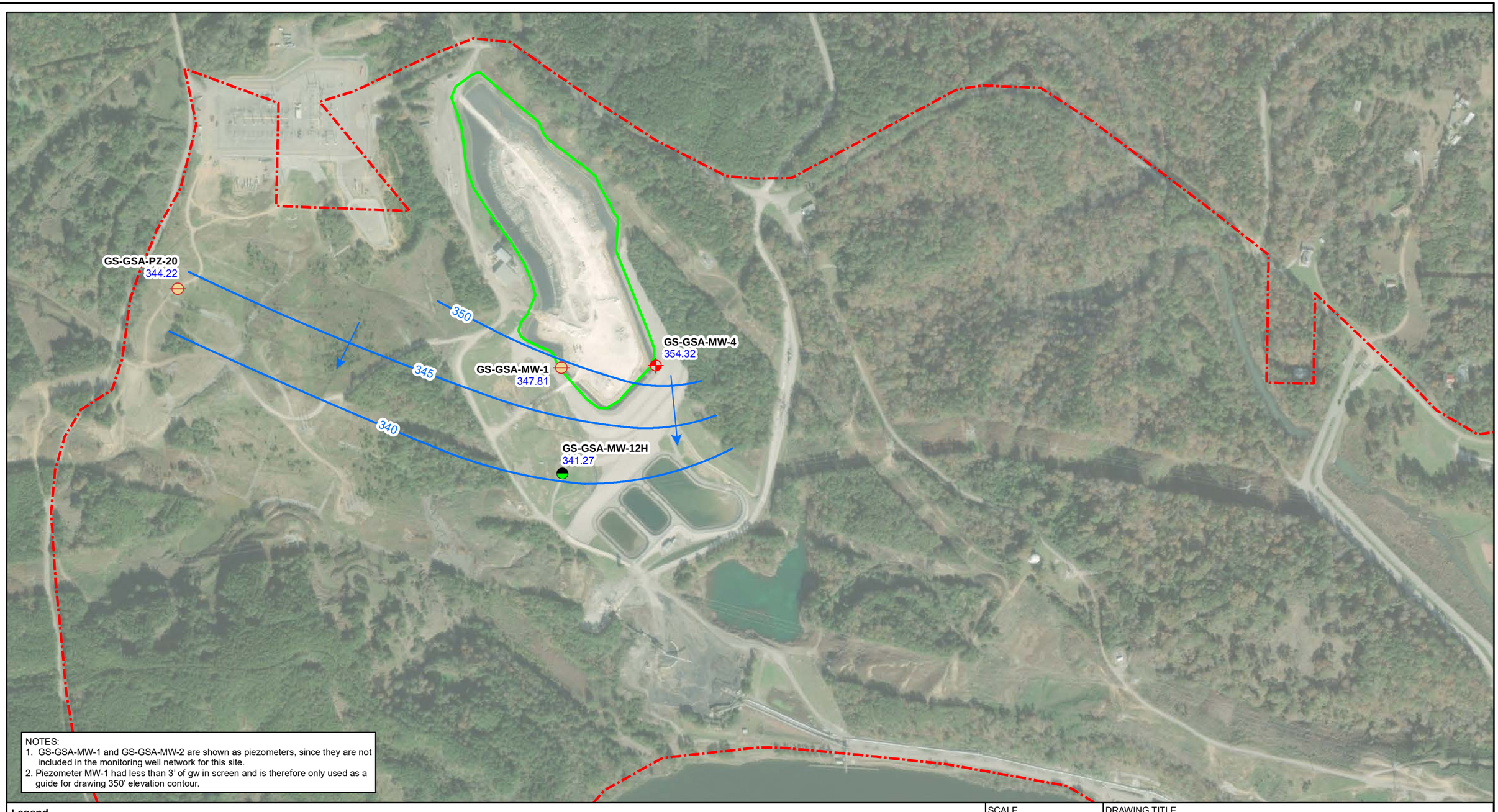
0 250 500 1,000 1,500 Feet

SCALE	1:6,000
DATE	7/19/2021
DRAWN BY	KAR
CHECKED BY	RFS

DRAWING TITLE
POTENTIOMETRIC SURFACE CONTOUR MAP
FEBRUARY 22, 2021
WATER TABLE
PLANT GORGAS GYPSUM POND

FIGURE NO
FIGURE 6A

Southern Company



NOTES:
1. GS-GSA-MW-1 and GS-GSA-MW-2 are shown as piezometers, since they are 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.

Legend

- Downgradient Monitoring Well
- Piezometer
- Phase II Horizontal Delineation Well
- Potentiometric Surface Contour (ft NAVD88)
- Approximate Groundwater Flow Direction
- Property Boundary (Approximiate)
- Gypsum Pond Boundary

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

N

0 250 500 1,000 1,500 Feet

SCALE	1:6,000
DATE	7/19/2021
DRAWN BY	KAR
CHECKED BY	RFS

DRAWING TITLE
POTENTIOMETRIC SURFACE CONTOUR MAP
FEBRUARY 22, 2021
INTERMEDIATE FLOW SYSTEM 1
PLANT GORGAS GYPSUM POND

FIGURE NO
FIGURE 6B

Southern Company

GS-GSA-MW-3
334.59

GS-GSA-MW-2
334.94

334

330

325

320

GS-GSA-MW-10H
319.6

NOTES:
1. GS-GSA-MW-1 and GS-GSA-MW-2 are shown as piezometers, since they are 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.

Legend

- Downgradient Monitoring Well
- Piezometer
- Potentiometric Surface Contour (ft NAVD88)
- Approximate Groundwater Flow Direction
- Property Boundary (Approximiate)
- Gypsum Pond Boundary

GS-GSA-MW-2 Well ID
354.94 Groundwater Elevation

N

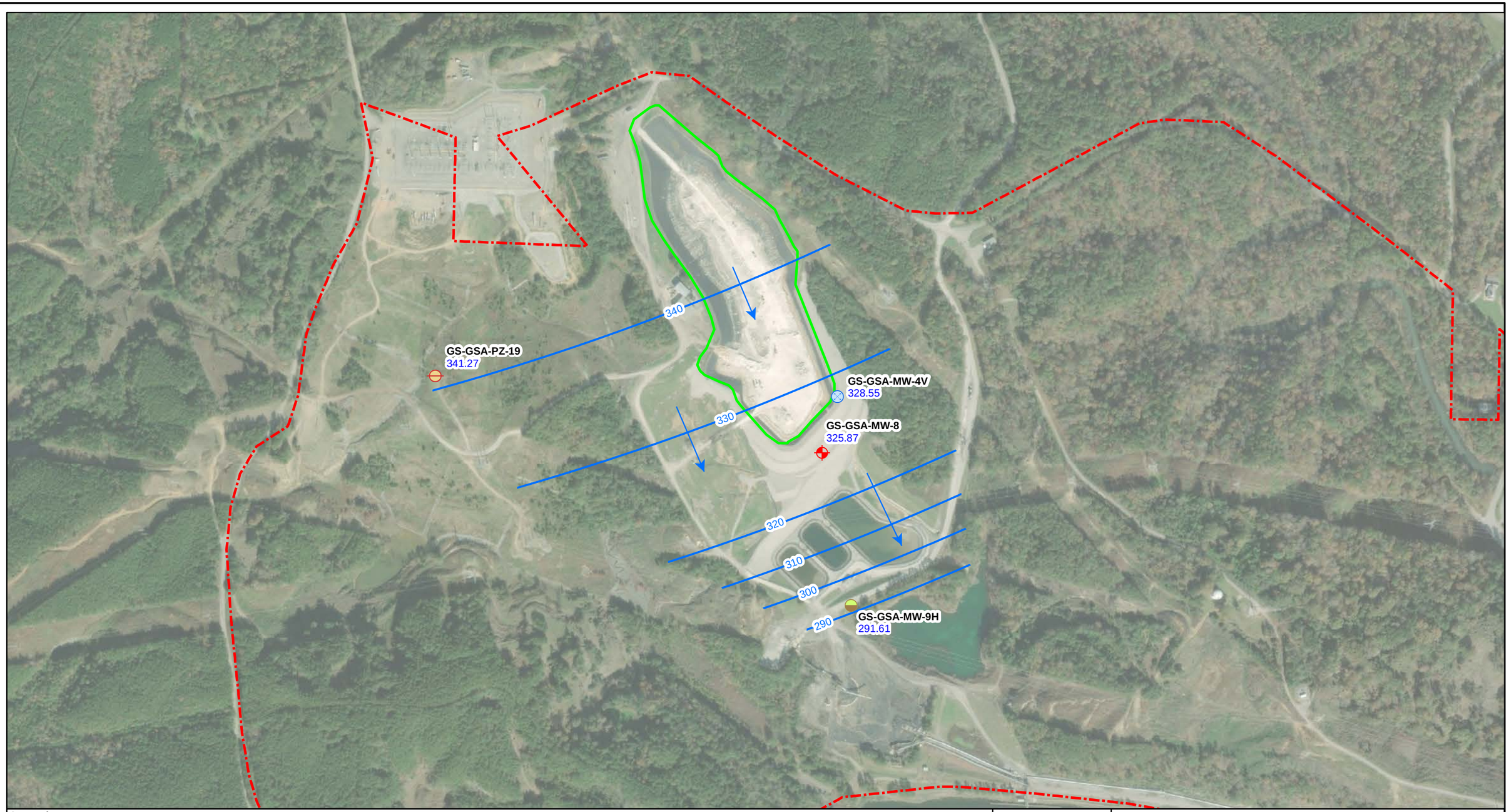
0 250 500 1,000 1,500 Feet

SCALE	1:6,000
DATE	7/20/2021
DRAWN BY	KAR
CHECKED BY	RFS

DRAWING TITLE
POTENTIOMETRIC SURFACE CONTOUR MAP
FEBRUARY 22, 2021
INTERMEDIATE FLOW SYSTEM 2
PLANT GORGAS GYPSUM POND

FIGURE NO
FIGURE 6C

Southern Company



Legend

- Downgradient Monitoring Well
- Piezometer
- Phase I Horizontal Delineation Well
- Phase I Vertical Delineation Well
- Potentiometric Surface Contour (ft NAVD88)
- Approximate Groundwater Flow Direction
- Property Boundary (Approximiate)
- Gypsum Pond Boundary

GS-GSA-MW-9H Well ID
291.61 Groundwater Elevation

N

0 250 500 1,000 1,500 Feet

SCALE	1:6,000
DATE	8/2/2021
DRAWN BY	KAR
CHECKED BY	RFS

DRAWING TITLE
POTENTIOMETRIC SURFACE CONTOUR MAP
FEBRUARY 22, 2021
INTERMEDIATE FLOW SYSTEM 3
PLANT GORGAS GYPSUM POND

FIGURE NO
FIGURE 6D

Southern Company

Legend

- Phase I Vertical Delineation Well
- Phase II Vertical Delineation Well
- Phase III Vertical Delineation Well

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

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

N

0 250 500 1,000 1,500 Feet

SCALE	1:6,000
DATE	7/20/2021
DRAWN BY	KAR
CHECKED BY	RFS

DRAWING TITLE
POTENTIOMETRIC SURFACE CONTOUR MAP
FEBRUARY 22, 2021
DEEP INTERVAL
PLANT GORGAS GYPSUM POND

FIGURE NO
FIGURE 6E

Southern Company

GS-GSA-PZ-22
427.17

GS-GSA-PZ-17
429.91

GS-GSA-PZ-18
428.24

GS-GSA-PZ-16
412.02

GS-GSA-MW-15H
402.77

GS-GSA-MW-14H
384.82

GS-GSA-MW-13H
256.48

GS-GSA-MW-11H
256.39

430
420
410
400
390
380
370
360
350
330
320
310
300
290
280
270
260

NOTE:
GS-GSA-MW-1 and GS-GSA-MW-2 are shown as piezometers, since they are not included in the monitoring well network for this site.

Legend

- Piezometer ; Piezometer, III
- Phase I Horizontal Delineation Well
- Phase II Horizontal Delineation Well
- Phase III Horizontal Delineation Well
- **GS-GSA-PZ-17** Well ID
  429.91 Groundwater Elevation
- Potentiometric Surface Contour (ft NAVD88)
- Inferred Potentiometric Surface Contour (ft NAVD 88)
- Approximate Groundwater Flow Direction
- Property Boundary (Approximate)
- Gypsum Pond Boundary

N

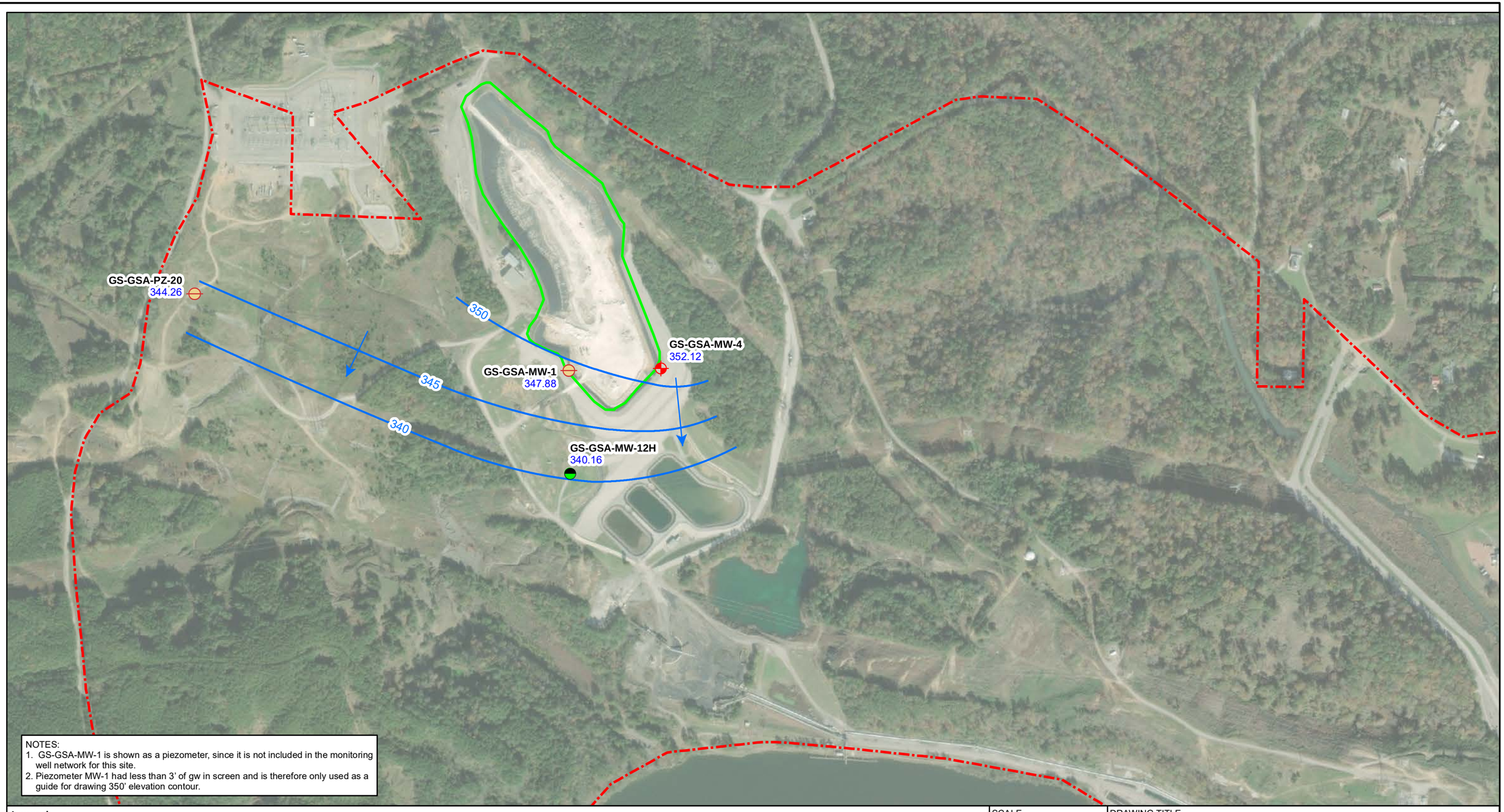
0 250 500 1,000 1,500 Feet

SCALE	1:6,000
DATE	12/2/2021
DRAWN BY	KWR
CHECKED BY	RFS

DRAWING TITLE
POTENTIOMETRIC SURFACE CONTOUR MAP
JULY 12, 2021
WATER TABLE
PLANT GORGAS GYPSUM POND

FIGURE NO
FIGURE 7A

Southern Company



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.

Legend

- Downgradient Monitoring Well
- Piezometer
- Phase II Horizontal Delineation Well

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

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

N

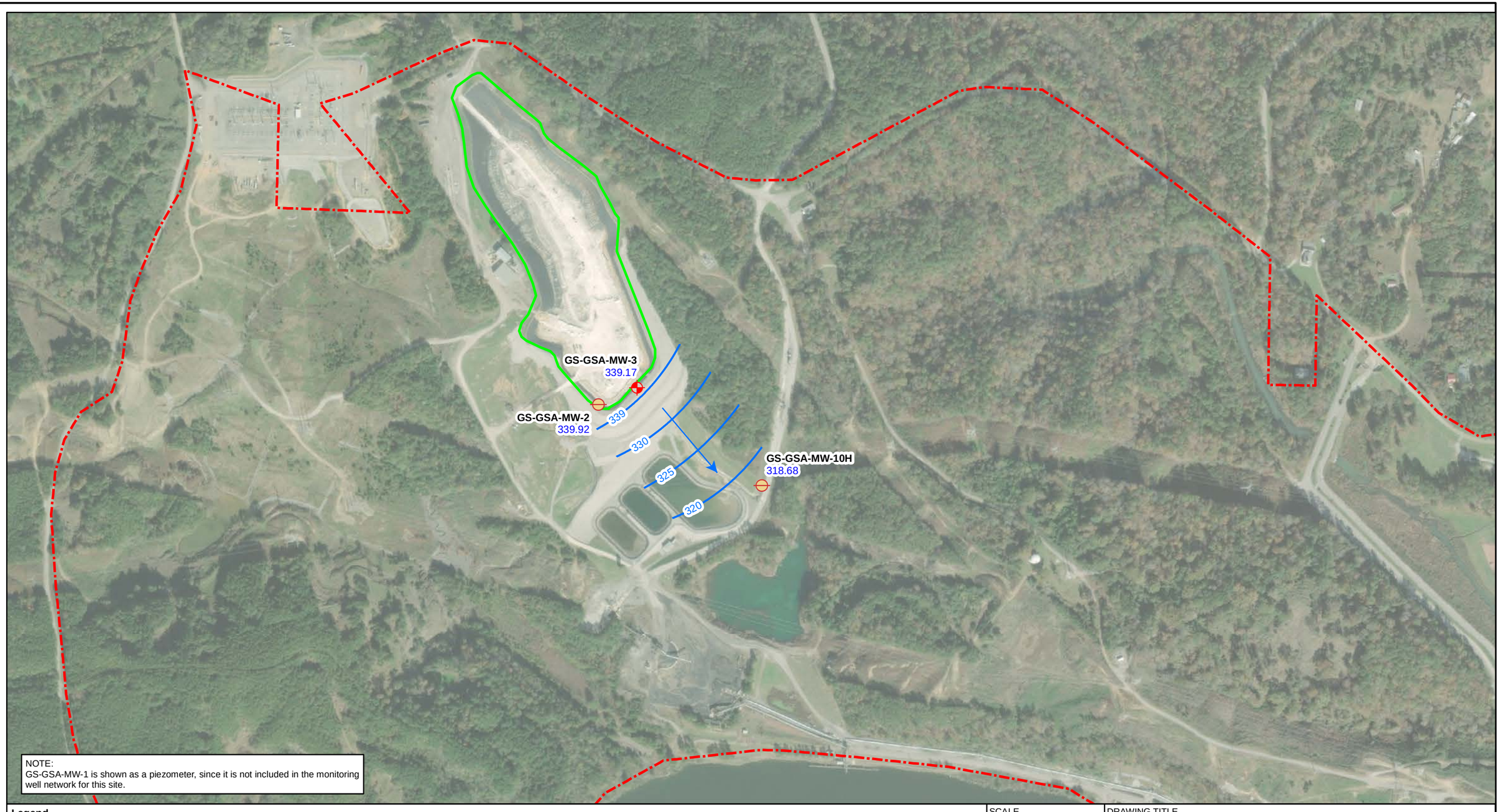
0 250 500 1,000 1,500 Feet

SCALE	1:6,174
DATE	1/24/2022
DRAWN BY	KWR
CHECKED BY	RFS

DRAWING TITLE
POTENTIOMETRIC SURFACE CONTOUR MAP
JULY 12, 2021
INTERMEDIATE FLOW SYSTEM 1
PLANT GORGAS GYPSUM POND

FIGURE NO
FIGURE 7B

Southern Company



Legend

- Downgradient Monitoring Well
- Piezometer

GS-GSA-MW-2 Well ID
339.92 Groundwater Elevation

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

N

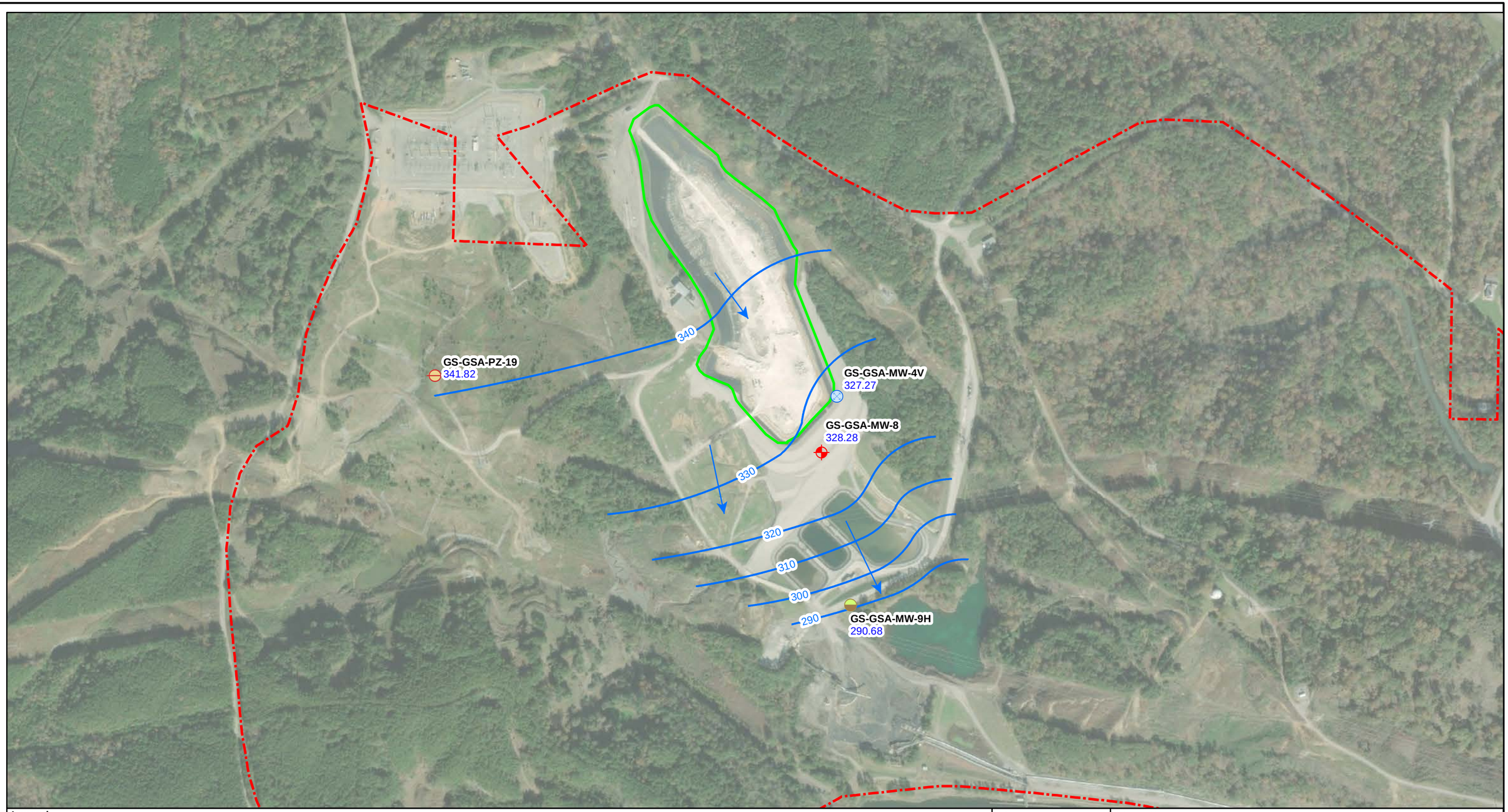
0 250 500 1,000 1,500 Feet

SCALE	1:6,000
DATE	1/24/2022
DRAWN BY	KWR
CHECKED BY	RFS

DRAWING TITLE
POTENTIOMETRIC SURFACE CONTOUR MAP
JULY 12, 2021
INTERMEDIATE FLOW SYSTEM 2
PLANT GORGAS GYPSUM POND

FIGURE NO
FIGURE 7C

Southern Company



Legend

- Downgradient Monitoring Well
- Piezometer
- Phase I Horizontal Delineation Well
- Phase I Vertical Delineation Well
- Potentiometric Surface Contour (ft NAVD88)
- Approximate Groundwater Flow Direction
- Property Boundary (Approximiate)
- Gypsum Pond Boundary

GS-GSA-MW-9H Well ID
290.68 Groundwater Elevation

N

0 250 500 1,000 1,500 Feet

SCALE	1:6,000
DATE	12/2/2021
DRAWN BY	KWR
CHECKED BY	RFS

DRAWING TITLE
POTENTIOMETRIC SURFACE CONTOUR MAP
JULY 12, 2021
INTERMEDIATE FLOW SYSTEM 3
PLANT GORGAS GYPSUM POND

FIGURE NO
FIGURE 7D

Southern Company

Legend

- Phase I Vertical Delineation Well
- Phase II Vertical Delineation Well
- Phase III Vertical Delineation Well

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

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

N

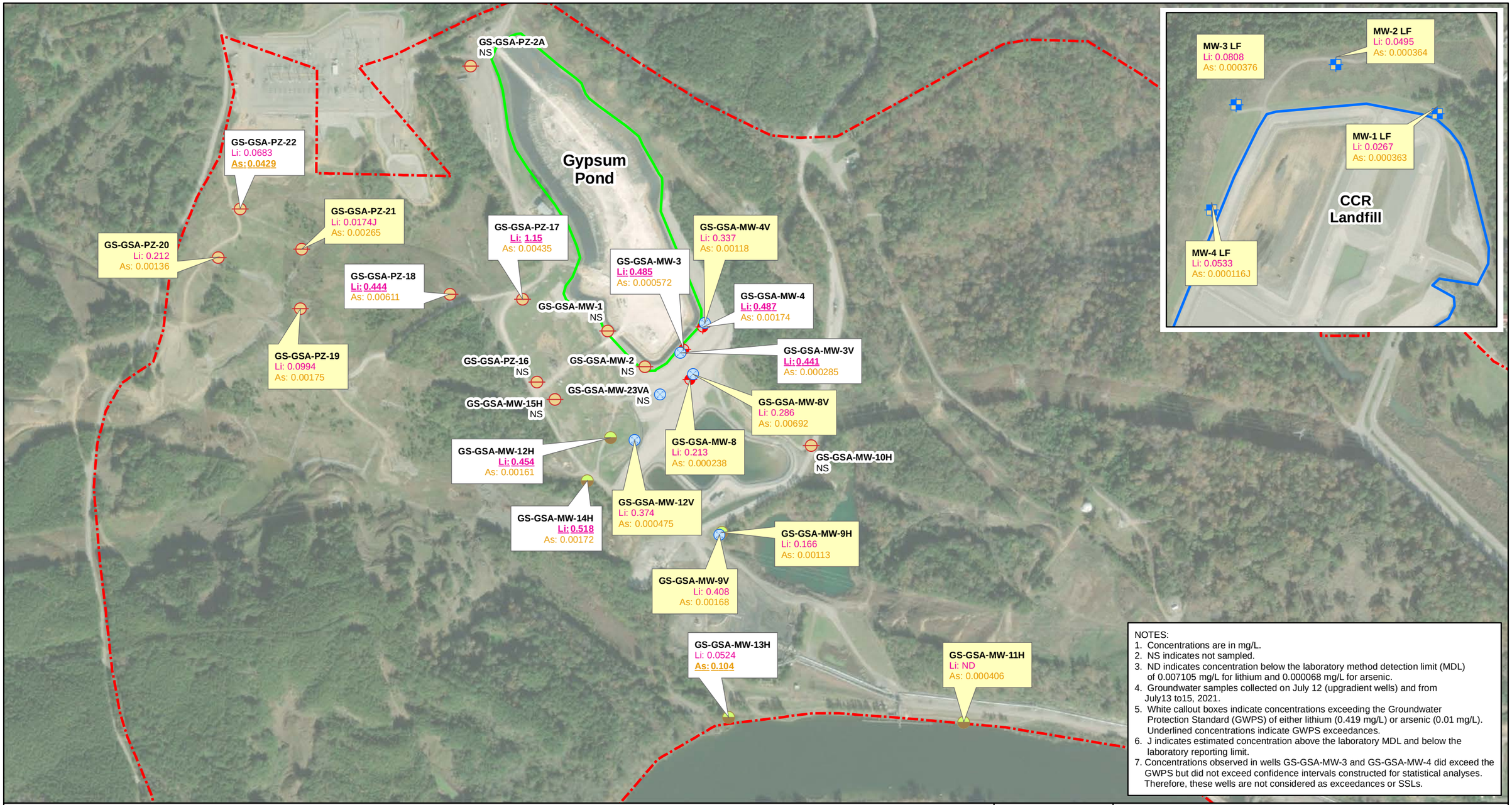
0 250 500 1,000 1,500 Feet

SCALE	1:6,000
DATE	12/2/2021
DRAWN BY	KWR
CHECKED BY	RFS

DRAWING TITLE
POTENTIOMETRIC SURFACE CONTOUR MAP
JULY 12, 2021
DEEP INTERVAL
PLANT GORGAS GYPSUM POND

FIGURE NO
FIGURE 7E

Southern Company



NOTES:
1. Concentrations are in mg/L.
2. NS indicates not sampled.
3. ND indicates concentration below the laboratory method detection limit (MDL) of 0.007105 mg/L for lithium and 0.000068 mg/L for arsenic.
4. Groundwater samples collected on July 12 (upgradient wells) and from July13 to15, 2021.
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.
7. Concentrations observed in wells GS-GSA-MW-3 and GS-GSA-MW-4 did exceed the GWPS but did not exceed confidence intervals constructed for statistical analyses. Therefore, these wells are not considered as exceedances or SSLs.

Legend

- Upgradient Monitoring Well
- Downgradient Monitoring 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: 0.166 Lithium Concentration (mg/L)
As: 0.00168 Arsenic Concentration (mg/L)

N

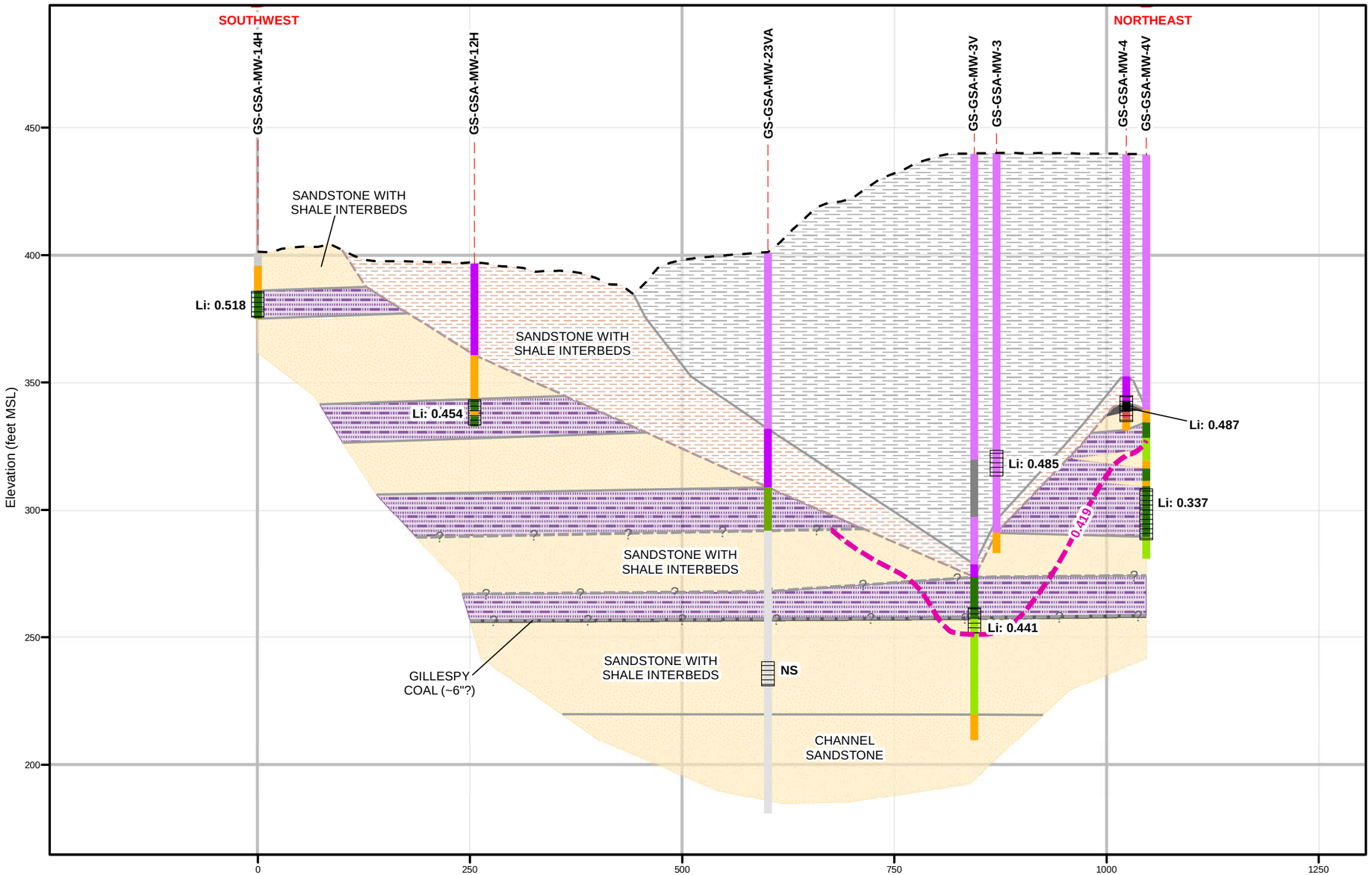
0 250 500 1,000 Feet

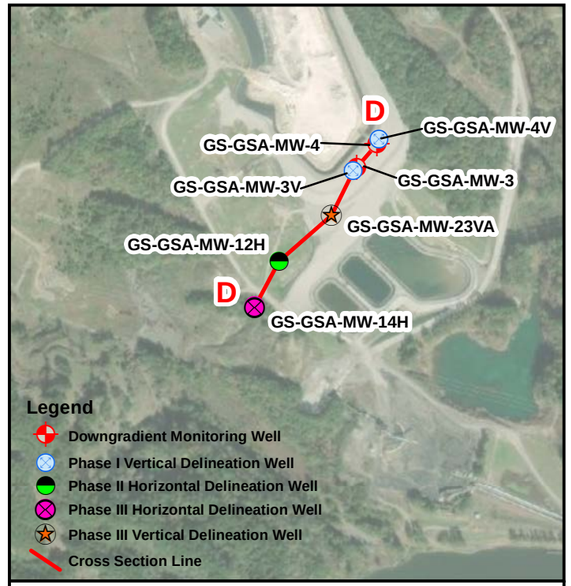
SCALE	1:6,000
DATE	1/24/2022
DRAWN BY	KWR
CHECKED BY	RFS

DRAWING TITLE
GWPS EXCEEDANCES MAP
ARSENIC, LITHIUM
JULY 2021
PLANT GORGAS GYPSUM POND

FIGURE NO
FIGURE 8

Southern Company





NOTES:

1. Groundwater samples collected July 12 to 15, 2021.
2. Deeper strata projected from structural elevations of coal seams from Musgrove Mine records or from neighboring borings that extend deeper.
3. NS indicates not sampled due to lack of water sufficient for well development (GS-GSA-MW23VA was not sampled).
4. Vertical exaggeration = 5.
5. Li indicates lithium concentration in mg/L.
6. GWPS indicated Groundwater Protection Standard.
7. GS-GSA-MW-3 and GS-GSA-MW-4 did not exceed confidence intervals and are not SSLs.
8. Average lithium concentration in GS-GSA-MW-3V is 0.4083 mg/L (below the GWPS).
9. Elevated lithium concentrations in wells GS-GSA-MW-12H and GS-GSA-MW-14H appear to be unrelated to the Gypsum Pond.

Legend

- Ground Surface Elevation
- GWPS Isoconcentration for Lithium (0.419 mg/L)
- Borehole Location
- Screened Interval
- Top of Rock
- Strata Boundary
- Inferred Strata
- Mine
- CCR Fill
- Fill Materials
- Overburden
- MINESPOILS

Borehole Description

- COAL
- Hydroexcavated
- No Recovery
- Partially Weathered Rock
- Sandstone
- Sandstone and Siltstone
- Siltstone
- Shale

Geologic Units

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

SCALE	AS SHOWN
DATE	1/24/2022
DRAWN BY	KWR
CHECKED BY	GBD

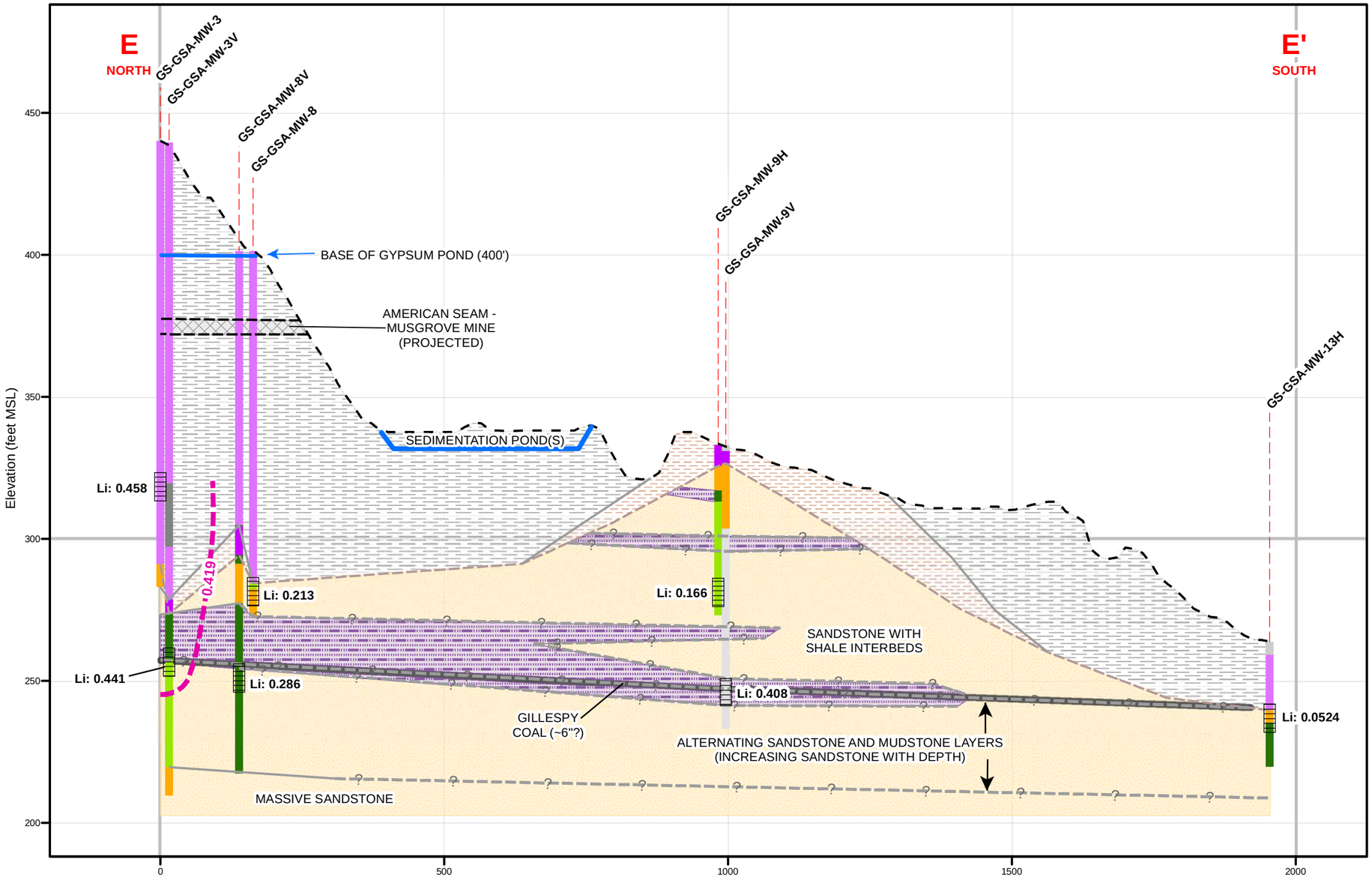
DRAWING TITLE

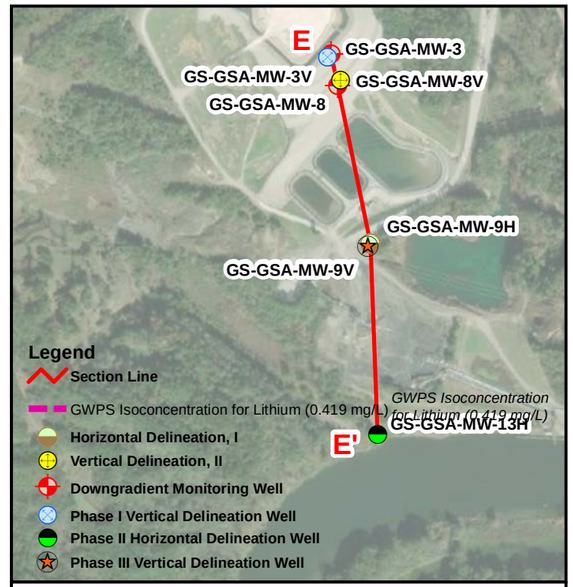
LITHIUM CONCENTRATIONS ALONG GEOLOGIC CROSS SECTION D - D'
JULY, 2021
PLANT GORGAS GYPSUM POND

FIGURE NO

FIGURE 9A

Southern Company





NOTES:

1. GS-GSA-MW-3V, MW-8V, and MW-9V are projected onto the cross-section line, so the ground surface deviates from the well surface elevation at these locations.
2. Groundwater samples collected July 12 to 15, 2021.
3. Vertical exaggeration = 5.
4. Li indicates lithium concentration in mg/L.
5. GWPS indicates Groundwater Protection Standard.

Legend

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

Borehole Description

- Top of Rock
- Strata Boundary
- Inferred Strata
- Mine
- CCR Fill
- Fill Materials
- Overburden
- Hydroexcavated
- No Recovery
- Sandstone
- Sandstone and Siltstone
- Shale

Geologic Units

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

SCALE	AS SHOWN
DATE	1/24/2022
DRAWN BY	KWR
CHECKED BY	RFS

DRAWING TITLE

LITHIUM CONCENTRATIONS ALONG GEOLOGIC CROSS SECTION E - E'
JULY, 2021
PLANT GORGAS GYPSUM POND

FIGURE NO

FIGURE 9B

Southern Company

Tables

Southern Company

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

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	499.19	502.38	104.5	405.10	395.10	10	1/15/2014
MW-2	Upgradient	Mine Spoil - Pottsville Fm Interface	33.65899	-87.19258	498.54	502.17	91.0	417.90	407.90	10	10/23/2014
MW-3	Upgradient	Mine Spoil - Pottsville Fm Interface	33.65841	-87.1943	522.23	525.90	115.5	417.10	407.10	10	10/23/2014
MW-4	Upgradient	Mine Spoil - Pottsville Fm Interface	33.65689	-87.19473	516.67	517.89	126.7	400.40	390.40	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 WGS84 from NAD 27/83, State Plane, Alabama, feet.
(2) Vertical elevations are in feet relative to the North American Vertical Datum (NAVD)1988.
(3) Total well depth accounts for sump if data provided on well construction logs.

Southern Company

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

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-23VA	Vertical Delineation	Pottsville Fm	33.65278	-87.2169	400.84	403.60	173.2	240.80	230.80	10	6/11/2020
GS-GSA-MW-3V	Vertical Delineation	Pottsville Fm	33.65339	-87.21655	439.60	442.68	192.7	260.43	250.43	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	251.55	241.55	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-15H	Horizontal Delineation	Overburden-Pottsville Fm	33.65271	-87.21872	425.62	428.16	28.3	410.26	400.26	10	5/5/2020
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 WGS84 from NAD 27/83, State Plane, Alabama, feet.

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

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

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

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	121.8	331.41	321.41	10	12/16/2015
GS-GSA-MW-10H	Piezometer	Overburden-Pottsville Fm	33.65204	-87.2143	336.56	339.52	29.5	320.56	310.56	10	2/4/2019
GS-GSA-PZ-16	Piezometer	Overburden-Pottsville Fm	33.65297	-87.21902	433.79	436.40	27.9	418.90	408.90	10	5/3/2020
GS-GSA-PZ-17	Piezometer	Overburden-Pottsville Fm	33.65416	-87.21927	475.94	475.94	57.7	428.64	418.64	10	5/2/2020
GS-GSA-PZ-18	Piezometer	Overburden-Pottsville Fm	33.65424	-87.22053	489.93	489.93	78.2	422.13	412.13	10	5/19/2020
GS-GSA-PZ-19	Piezometer	Pottsville Fm	33.65403	-87.22311	463.50	463.50	162.6	311.30	301.30	10	5/29/2020
GS-GSA-PZ-20	Piezometer	Pottsville Fm	33.65478	-87.22453	460.34	460.34	124.8	345.94	335.94	10	5/18/2020
GS-GSA-PZ-21	Piezometer	Pottsville Fm	33.6549	-87.22308	458.21	460.94	70.2	401.14	391.14	10	5/14/2020
GS-GSA-PZ-22	Piezometer	Overburden-Pottsville Fm	33.65548	-87.22414	476.56	479.46	76.0	413.86	403.86	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 WGS84 from NAD 27/83, State Plane, Alabama, feet.
(2) Vertical elevations are in feet relative to the North American Vertical Datum (NAVD)1988.
(3) Total well depth accounts for sump if data provided on well construction logs.

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Table 2. Parameters And Reporting Limits

Plant Gorgas Gypsum Storage Pond (Old)
02/22/2021 - 07/15/2021

Appendix III Parameters			
Parameters	**Analytical Methods**	**Reporting Limits**	**Units of Measure**
Boron	EPA 200.7	0.1015-1.015	mg/L
Calcium	EPA 200.7	0.406-40.599998	mg/L
Chloride	SM4500Cl E	1-80	mg/L
Fluoride	SM4500F G 2017	0.1	mg/L
pH_Field	Field Sampling	NA	SU
Sulfate	SM4500SO4 E 2011	1-160	mg/L
TDS	NA	NA	mg/L
Appendix IV Parameters			
Parameters	**Analytical Methods**	**Reporting Limits**	**Units of Measure**
Antimony	EPA 200.8	0.001015	mg/L
Arsenic	EPA 200.8	0.000203	mg/L
Barium	EPA 200.8	0.000203	mg/L
Beryllium	EPA 200.8	0.001015	mg/L
Cadmium	EPA 200.8	0.000203	mg/L
Chromium	EPA 200.8	0.001015	mg/L
Cobalt	EPA 200.8	0.000203	mg/L
Fluoride	SM4500F G 2017	0.1	Fluoride
Lead	EPA 200.8	0.000203	mg/L
Lithium	EPA 200.7	0.019999-0.02	mg/L
Mercury	EPA 245.1	0.0005	mg/L
Molybdenum	EPA 200.8	0.000203	mg/L
Selenium	EPA 200.8	0.001015	mg/L
Thallium	EPA 200.8	0.000203	mg/L
Combined Radium 226 + 228	Total Radium Calculation	NA	pCi/L

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

Table 3. - Recent Groundwater Elevations Summary

Plant Gorgas Gypsum Storage Pond

Well Name	Top of Casing Elevation	Groundwater Elevation (ft. MSL)											
		2/13/2018	6/11/2018	10/17/2018	3/4/2019	3/13/2019	4/10/2019	10/14/2019	11/26/2019	2/3/2020	8/3/2020	2/22/2021	7/12/2021
MW-1[3]	502.38	411.02	411.41	410.78	--	412.24	412.08	410.85	--	411.94	412.32	411.72	411.67
MW-2[3]	502.17	419.34	417.08	416.44	--	417.75	421.20	416.67	--	417.57	417.15	418.55	417.80
MW-3[3]	525.90	418.49	415.77	414.92	--	418.31	417.41	415.14	--	416.62	415.49	419.94	421.54
MW-4[3]	517.89	401.93	401.27	399.56	--	401.94	402.12	399.59	--	401.68	400.63	402.38	401.56
GS-GSA-MW-3	442.63	332.79	336.36	332.37	--	341.46	341.33	332.37	--	339.32	335.10	334.59	339.17
GS-GSA-MW-4	442.10	353.06	351.52	349.56	--	353.06	353.00	349.08	--	352.42	350.66	354.32	352.12
GS-GSA-MW-8	404.38	320.01	324.40	319.03	--	334.46	330.27	319.20	--	329.85	323.91	325.87	328.28
GS-GSA-MW-3V	442.68	--	--	--	327.13	326.34	--	313.29	--	321.66	316.37	318.85	319.46
GS-GSA-MW-4V	442.18	--	--	--	333.31	332.35	--	322.28	--	328.85	323.88	328.55	327.27
GS-GSA-MW-9H	335.83	--	--	--	294.33	293.64	--	286.47	--	291.69	288.01	291.61	290.68
GS-GSA-MW-10H	339.52	--	--	--	--	321.80	--	--	--	319.09	312.41	319.60	318.68
GS-GSA-MW-11H	263.02	--	--	--	257.01	256.30	--	255.09	--	256.29	256.21	256.33	256.39
GS-GSA-MW-8V	404.43	--	--	--	--	--	--	--	310.82	319.53	313.99	318.10	318.06
GS-GSA-MW-12H	399.73	--	--	--	--	--	--	--	339.57	341.15	337.17	341.27	340.16
GS-GSA-MW-13H	266.46	--	--	--	--	--	--	--	257.06	257.03	256.50	257.65	256.48
GS-GSA-MW-1	442.96	--	--	--	--	--	--	--	--	347.96	347.74	347.81	347.88
GS-GSA-MW-2	442.84	--	--	--	--	--	--	--	--	340.10	335.87	334.94	339.92
GS-GSA-PZ-2A	491.52	--	--	--	--	--	--	--	--	372.06	371.55	371.55	371.82
GS-GSA-MW-9V	336.22	--	--	--	--	--	--	--	--	--	289.16	291.53	291.30
GS-GSA-MW-12V	379.50	--	--	--	--	--	--	--	--	--	294.01	318.04	317.98
GS-GSA-MW-14H	403.66	--	--	--	--	--	--	--	--	--	384.51	385.34	384.82
GS-GSA-MW-15H	428.16	--	--	--	--	--	--	--	--	--	401.88	404.14	402.77
GS-GSA-MW-23VA	403.60	--	--	--	--	--	--	--	--	--	--	240.62	253.93
GS-GSA-PZ-16	436.40	--	--	--	--	--	--	--	--	--	409.21	421.76	412.02
GS-GSA-PZ-17	475.94	--	--	--	--	--	--	--	--	--	429.97	430.61	429.91
GS-GSA-PZ-18	489.93	--	--	--	--	--	--	--	--	--	426.03	430.00	428.24
GS-GSA-PZ-19	463.50	--	--	--	--	--	--	--	--	--	339.96	341.27	341.82
GS-GSA-PZ-20	460.34	--	--	--	--	--	--	--	--	--	344.11	344.22	344.26
GS-GSA-PZ-22	479.46	--	--	--	--	--	--	--	--	--	424.21	428.41	427.17
GS-GSA-PZ-21	460.94	--	--	--	--	--	--	--	--	--	378.58	377.13	377.35

Notes:
1. ft. AMSL - feet above mean sea level
2. -- Not Measured
3. Upgradient monitoring well located at the CCR Landfill

Table 4a. Relative Percent Difference (RPD) Calculations

Plant Gorgas Gypsum Storage Pond

02/22/2021 - 07/14/2021

GS-GSA-MW-13H				
Sample Date = 3/2/2021				
Analyte	**Units**	**Original Result**	**Duplicate Result**	**RPD (%)**
Boron	mg/L	0.206	0.2	2.96%
Calcium	mg/L	164	168	2.41%
Chloride	mg/L	10.9	10.9	0.00%
Fluoride	mg/L	0.167	0.167	0.00%
pH	mg/L	5.85	5.85	0.00%
Sulfate	mg/L	861	856	0.58%
TDS	mg/L	1450	1480	2.05%
Arsenic	mg/L	0.293	0.295	0.68%
Barium	mg/L	0.0315	0.0325	3.13%
Cobalt	mg/L	0.143	0.145	1.39%
Lithium	mg/L	0.0439	0.0431	1.84%
Molybdenum	mg/L	0.00138	0.00127	8.30%
GS-GSA-PZ-20				
Sample Date = 3/2/2021				
Analyte	**Units**	**Original Result**	**Duplicate Result**	**RPD (%)**
Boron	mg/L	0.0806	0.0793	1.63%
Calcium	mg/L	89.1	90.5	1.56%
Chloride	mg/L	11.6	11.6	0.00%
Fluoride	mg/L	0.191	0.195	2.07%
pH	mg/L	6.23	6.23	0.00%
Sulfate	mg/L	344	344	0.00%
TDS	mg/L	774	770	0.52%
Arsenic	mg/L	0.00234	0.00243	3.77%
Barium	mg/L	0.0205	0.0208	1.45%
Cobalt	mg/L	0.00254	0.0026	2.33%
Lithium	mg/L	0.0992	0.0998	0.60%
Molybdenum	mg/L	0.00125	0.00129	3.15%
Selenium	mg/L	0.00222	0.0021	5.56%
Thallium	mg/L	0.000206	0.000194	6.00%

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Table 4a. Relative Percent Difference (RPD) Calculations

Plant Gorgas Gypsum Storage Pond

02/22/2021 - 07/14/2021

GS-GSA-MW-13H				
Sample Date = 7/14/2021				
Analyte	**Units**	**Original Result**	**Duplicate Result**	**RPD (%)**
Boron	mg/L	0.229	0.229	0.00%
Calcium	mg/L	179	172	3.99%
Chloride	mg/L	11.5	11.4	0.87%
Fluoride	mg/L	0.196	0.187	4.70%
Sulfate	mg/L	857	880	2.65%
TDS	mg/L	1300	1400	7.41%
Arsenic	mg/L	0.104	0.103	0.97%
Barium	mg/L	0.0217	0.0224	3.18%
Cobalt	mg/L	0.116	0.119	2.55%
Lithium	mg/L	0.0524	0.0524	0.00%
Molybdenum	mg/L	0.0005	0.00039	24.97%
GS-GSA-MW-14H				
Sample Date = 7/13/2021				
Analyte	**Units**	**Original Result**	**Duplicate Result**	**RPD (%)**
Boron	mg/L	0.139	0.139	0.00%
Calcium	mg/L	135	131	3.01%
Chloride	mg/L	2.41	2.42	0.41%
Sulfate	mg/L	787	748	5.08%
TDS	mg/L	1180	1210	2.51%
Arsenic	mg/L	0.00172	0.00191	10.47%
Barium	mg/L	0.0102	0.0117	13.70%
Beryllium	mg/L	0.00883	0.00888	0.57%
Cadmium	mg/L	0.00157	0.00142	10.03%
Cobalt	mg/L	0.193	0.207	7.00%
Lead	mg/L	0.00096	0.00095	1.05%
Lithium	mg/L	0.514	0.518	0.78%
Selenium	mg/L	0.00607	0.00628	3.40%

Table 4a. Relative Percent Difference (RPD) Calculations

Plant Gorgas Gypsum Storage Pond

02/22/2021 - 07/14/2021

MW-1				
Sample Date = 7/12/2021				
Analyte	**Units**	**Original Result**	**Duplicate Result**	**RPD (%)**
Calcium	mg/L	149	152	1.99%
Chloride	mg/L	2.19	2.25	2.70%
Fluoride	mg/L	0.125	0.112	10.97%
Sulfate	mg/L	1560	1500	3.92%
TDS	mg/L	2210	2210	0.00%
Arsenic	mg/L	0.00036	0.0003	19.01%
Barium	mg/L	0.00991	0.00984	0.71%
Cadmium	mg/L	0.00193	0.00185	4.23%
Cobalt	mg/L	0.0556	0.0549	1.27%
Lithium	mg/L	0.0266	0.0267	0.38%
Selenium	mg/L	0.0028	0.00245	13.33%

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
02/22/2021 - 07/15/2021

Parameters Detected Above MDL					
Sample Date	**QC Location**	**Parameter**	**Blank Concentration**	**Units**	**MDL**
07/13/2021	FB-1	Chromium	0.000244 J	mg/L	0.000203

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 4c – Field QC: Data Validation Results (Blanks)

Plant Gorgas Gypsum Storage Pond

02/22/2021 - 07/15/2021

List of Compliance Sample Concentrations < 5x Blank Concentrations							
Sample Date	**QC Sample**	**Parameter**	**QC Sample Result (5x)**	**Sample Location**	**Result**	**Units**	**Validation Flag**
7/13/2021	FB-1	Chromium	0.00122	GS-GSA-MW-14H	0.000500 J	mg/L	(+)U*
7/13/2021	FB-1	Chromium	0.00122	GS-GSA-MW-9V	0.000304 J	mg/L	(+)U*
7/13/2021	FB-1	Chromium	0.00122	GS-GSA-MW-9H	0.000264 J	mg/L	(+)U*

Notes:

1. Lab qualifiers have been appended to result when applicable
2. QC Sample listed represents the source of comparison, validation flag.
3. Only Appendix 4 Constituents were compared and validated. Radium data was not

Table 5. Summary of Background Levels and Groundwater Protection Standards

Plant Gorgas Gypsum Storage Pond

Appendix IV Analytes			
Analyte	**Units**	**Background**	**GWPS**
Antimony	mg/L	0.00143	0.006
Arsenic	mg/L	0.005	0.01
Barium	mg/L	0.0166	2
Beryllium	mg/L	0.0121	0.0185
Cadmium	mg/L	0.00652	0.005
Chromium	mg/L	0.0105	0.1
Cobalt	mg/L	0.64	1.07
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
Combined Radium 226 + 228	pCi/L	1.47	5

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

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Table 6a. First Semi-Annual Monitoring Event Analytical Summary

Plant Gorgas Gypsum Storage Pond

02/22/2021 - 03/03/2021

Analyte	Units	GROUNDWATER MONITORING WELLS											
		GS-GSA-MW-11H	GS-GSA-MW-12H	GS-GSA-MW-12V	GS-GSA-MW-13H	GS-GSA-MW-14H	GS-GSA-MW-3V	GS-GSA-MW-4V	GS-GSA-MW-8V	GS-GSA-MW-9H	GS-GSA-MW-9V	GS-GSA-PZ-17	GS-GSA-PZ-18
		03/02/2021	03/02/2021	03/03/2021	03/02/2021	03/03/2021	03/03/2021	03/03/2021	03/01/2021	03/02/2021	03/01/2021	03/03/2021	03/03/2021
Appendix III													
Boron	mg/L	0.0305 J	0.0875 J	1.54	0.206	0.203	2.99	4.09	0.145	6.68	0.147	0.0643 J	0.108
Calcium	mg/L	139	124	353	164	137	466	161	26.2	333	428	54.3	98.9
Chloride	mg/L	4.63	2.28	152	10.9	4.8	307	70.8	19.4	84.7	58.7	1.58	4.48
Fluoride	mg/L	0.0758 J	<0.06	0.243	0.167	<0.06	0.458	0.262	0.346	0.094 J	0.12	<0.06	<0.06
pH_Field	SU	5.89	4.11	6.11	5.85	4.02	5.76	5.75	7.67	5.29	6.84	4.21	3.83
Sulfate	mg/L	835	890	1930	861	803	1930	746	183	1750	1680	320	597
TDS	mg/L	1190	1390	3450	1450	1260	3640	1320	1060	2860	3140	571	974
Appendix IV													
Antimony	mg/L	<0.000507	<0.000507	<0.000507	<0.000507	<0.000507	<0.000507	<0.000507	<0.000507	<0.000507	<0.000507	<0.000507	<0.000507
Arsenic	mg/L	0.00039	0.00138	0.000339	0.293	0.00155	0.000296	0.00107	0.0105	0.00105	0.00136	0.000966	0.00515
Barium	mg/L	0.0118	0.0134	0.0126	0.0315	0.0109	0.0181	0.0103	0.15	0.0149	0.012	0.0154	0.0114
Beryllium	mg/L	<0.000406	0.00703	<0.000406	<0.000406	0.00818	<0.000406	0.0032	<0.000406	0.000724 J	<0.000406	0.00334	0.006
Cadmium	mg/L	0.000366	0.00319	<6.8e-005	<6.8e-005	0.0016	<6.8e-005	<6.8e-005	<6.8e-005	0.000338	<6.8e-005	0.000927	0.000128 J
Chromium	mg/L	0.000295 J	0.000242 J	<0.000203	0.000285 J	<0.000203	<0.000203	<0.000203	<0.000203	0.000218 J	<0.000203	0.000525 J	0.00196
Cobalt	mg/L	0.00512	0.307	0.00028	0.143	0.202	0.0134	0.118	<6.8e-005	0.163	0.000992	0.0898	0.097
Combined Radium 226 + 228	pCi/L	0.308 U	2.18	0.388 U	0.686 U	0.185 U	1.11 U	0.325 U	1.49	0.87 U	0.686 U	0.517 U	0.662 U
Lead	mg/L	0.000145 J	0.00478	<6.8e-005	<6.8e-005	0.000876	<6.8e-005	<6.8e-005	<6.8e-005	0.000206	<6.8e-005	0.00178	0.00053
Lithium	mg/L	<0.007105	0.456	0.411	0.0439	0.54	0.455	0.345	0.292	0.178	0.424	0.196	0.346
Mercury	mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Molybdenum	mg/L	<6.8e-005	<6.8e-005	0.00123	0.00138	7.06e-005 J	7.93e-005 J	<6.8e-005	0.000654	<6.8e-005	0.000532	<6.8e-005	0.000107 J
Selenium	mg/L	<0.000507	0.00463	<0.000507	<0.000507	0.00554	<0.000507	0.000749 J	<0.000507	0.00138	<0.000507	0.00137	0.00404
Thallium	mg/L	<6.8e-005	0.000371	<6.8e-005	<6.8e-005	7.98e-005 J	<6.8e-005	<6.8e-005	<6.8e-005	0.000221	<6.8e-005	0.000118 J	0.000109 J

Notes:

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

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Table 6a. First Semi-Annual Monitoring Event Analytical Summary

Plant Gorgas Gypsum Storage Pond

02/22/2021 - 03/03/2021

Analyte	Units	GROUNDWATER MONITORING WELLS										
		GS-GSA-PZ-19	GS-GSA-PZ-20	GS-GSA-PZ-21	GS-GSA-PZ-22	MW-1	MW-2	GS-GSA-MW-3	MW-3	GS-GSA-MW-4	MW-4	GS-GSA-MW-8
		03/02/2021	03/02/2021	03/02/2021	03/02/2021	02/22/2021	02/22/2021	03/01/2021	02/22/2021	03/03/2021	02/22/2021	03/01/2021
Appendix III												
Boron	mg/L	0.066 J	0.0806 J	<0.03	0.0823 J	0.0307 J	<0.03	2.55	<0.03	2.42	0.0397 J	1.85
Calcium	mg/L	112	89.1	36.1	73	151	178	514	312	100	271	386
Chloride	mg/L	15.8	11.6	12.6	5.76	2.16	1.72	250	2.22	40.3	1.52	92.5
Fluoride	mg/L	0.21	0.191	0.319	0.117	0.082 J	0.209	0.449	0.246	<0.06	0.357	0.106
pH_Field	SU	6.46	6.23	6.87	6.24	5.06	6.1	5.82	5.59	3.76	6.19	6.48
Sulfate	mg/L	243	344	22.7	366	1400	864	2320	3040	609	2040	1450
TDS	mg/L	737	774	445	662	2230	1620	4390	4670	1040	3190	2870
Appendix IV												
Antimony	mg/L	<0.000507	<0.000507	<0.000507	<0.000507	<0.000507	<0.000507	<0.000507	<0.000507	<0.000507	<0.000507	<0.000507
Arsenic	mg/L	0.00218	0.00234	0.00237	0.0331	0.000403	0.000295	0.0014	0.000789	0.00116	0.000125 J	0.000633
Barium	mg/L	0.0409	0.0205	0.134	0.0216	0.0107	0.0132	0.0154	0.00981	0.0117	0.0111	0.0194
Beryllium	mg/L	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406	0.00157	<0.000406	0.00406	<0.000406	<0.000406
Cadmium	mg/L	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	0.00184	8.96e-005 J	<6.8e-005	0.00536	0.00162	8.96e-005 J	<6.8e-005
Chromium	mg/L	<0.000203	0.000216 J	0.000244 J	<0.000203	0.000382 J	<0.000203	0.000386 J	0.00035 J	0.000567 J	<0.000203	0.000423 J
Cobalt	mg/L	0.000808	0.00254	0.00193	0.00213	0.0657	0.0161	0.119	0.0515	0.24	<6.8e-005	0.00546
Combined Radium 226 + 228	pCi/L	0.186 U	0.52 U	0.776 U	0.607 U	0.677 U	0.434 U	0.57 U	0.472 U	0.836 U	0 U	0.902 U
Lead	mg/L	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	0.000157 J	8.8e-005 J	0.000609	<6.8e-005	0.000145 J
Lithium	mg/L	0.0822	0.0992	0.0168 J	0.0722	0.0301	0.0625	0.353	0.126	0.313	0.0558	0.149
Mercury	mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Molybdenum	mg/L	0.000804	0.00125	0.00353	0.00146	<6.8e-005	<6.8e-005	0.00022	<6.8e-005	<6.8e-005	0.000131 J	0.00277
Selenium	mg/L	<0.000507	0.00222	<0.000507	<0.000507	0.00241	<0.000507	0.00141	0.0181	0.00294	0.00222	<0.000507
Thallium	mg/L	<6.8e-005	0.000206	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	0.000178 J	<6.8e-005	<6.8e-005

Notes:

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

Southern Company

Table 6b. Second Semi-Annual Monitoring Event Analytical Summary

Plant Gorgas Gypsum Storage Pond

07/12/2021 - 07/15/2021

Analyte	Units	GROUNDWATER MONITORING WELLS											
		GS-GSA-MW-11H	GS-GSA-MW-12H	GS-GSA-MW-12V	GS-GSA-MW-13H	GS-GSA-MW-14H	GS-GSA-MW-3V	GS-GSA-MW-4V	GS-GSA-MW-8V	GS-GSA-MW-9H	GS-GSA-MW-9V	GS-GSA-PZ-17	GS-GSA-PZ-18
		07/14/2021	07/14/2021	07/14/2021	07/14/2021	07/13/2021	07/15/2021	07/14/2021	07/14/2021	07/13/2021	07/13/2021	07/13/2021	07/13/2021
Appendix III													
Boron	mg/L	<0.03	0.0742 J	1.55	0.229	0.139	3.04	3.68	0.147	5.84	0.125	0.111	0.0557 J
Calcium	mg/L	133	124	338	172	131	453	162	29	312	408	165	109
Chloride	mg/L	4.7	1.69	189	11.4	2.41	294	68.4	16.7	78.6	62	1.39	2.01
Fluoride	mg/L	0.0848 J	<0.06	0.335	0.196	<0.06	0.493	0.276	0.339	0.182	0.211	<0.06	<0.06
pH_Field	SU	5.72	4.04	6.21	5.55	3.8	5.92	5.75	7.97	5.13	6.92	4.36	3.94
Sulfate	mg/L	747	878	2000	857	748	1960	797	196	1750	1820	1010	675
TDS	mg/L	1190	1330	3360	1300	1180	3430	1340	1060	2640	2870	1550	1060
Appendix IV													
Antimony	mg/L	<0.000508	<0.000508	<0.000508	<0.000508	<0.000508	<0.000508	<0.000508	<0.000508	<0.000508	<0.000508	<0.000508	<0.000508
Arsenic	mg/L	0.000406	0.00161	0.000475	0.104	0.00191	0.000285	0.00118	0.00692	0.00113	0.00168	0.00435	0.00611
Barium	mg/L	0.0127	0.013	0.0116	0.0224	0.0102	0.0157	0.01	0.148	0.0141	0.013	0.0144	0.0101
Beryllium	mg/L	<0.000406	0.00755	<0.000406	<0.000406	0.00888	<0.000406	0.00381	<0.000406	0.000731 J	<0.000406	0.012	0.00776
Cadmium	mg/L	0.000285	0.00301	<6.8e-005	<6.8e-005	0.00157	<6.8e-005	<6.8e-005	<6.8e-005	0.000281	<6.8e-005	0.00231	0.000354
Chromium	mg/L	0.00034 J	0.000592 J	0.000252 J	0.000322 J	0.000534 J	0.00027 J	0.000266 J	<0.000203	0.000264 J	0.000304 J	0.002	0.00215
Cobalt	mg/L	0.00475	0.299	0.000178 J	0.119	0.193	0.0121	0.12	<6.8e-005	0.141	0.000774	0.31	0.121
Combined Radium 226 + 228	pCi/L	0.398 U	1.42	0.657 U	0.826 U	1.06 U	0.362 U	0.917 U	1.85	0.877 U	0.194 U	1.27 U	1.24 U
Lead	mg/L	0.00014 J	0.00557	<6.8e-005	<6.8e-005	0.00095	<6.8e-005	<6.8e-005	<6.8e-005	0.000155 J	<6.8e-005	0.00473	0.000624
Lithium	mg/L	<0.007105	0.454	0.374	0.0524	0.514	0.441	0.337	0.286	0.166	0.408	1.15	0.444
Mercury	mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Molybdenum	mg/L	<6.8e-005	<6.8e-005	0.00203	0.000389	<6.8e-005	8.72e-005 J	<6.8e-005	0.000258	<6.8e-005	0.000562	<6.8e-005	<6.8e-005
Selenium	mg/L	<0.000508	0.00441	<0.000508	<0.000508	0.00628	<0.000508	0.000952 J	<0.000508	0.00141	<0.000508	0.0121	0.00621
Thallium	mg/L	<6.8e-005	0.000343	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	0.000131 J	<6.8e-005	7.93e-005 J	<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

Table 6b. Second Semi-Annual Monitoring Event Analytical Summary

Plant Gorgas Gypsum Storage Pond

07/12/2021 - 07/15/2021

Analyte	Units	GROUNDWATER MONITORING WELLS										
		GS-GSA-PZ-19	GS-GSA-PZ-20	GS-GSA-PZ-21	GS-GSA-PZ-22	MW-1	MW-2	GS-GSA-MW-3	MW-3	GS-GSA-MW-4	MW-4	GS-GSA-MW-8
		07/14/2021	07/14/2021	07/14/2021	07/14/2021	07/12/2021	07/12/2021	07/14/2021	07/12/2021	07/14/2021	07/12/2021	07/14/2021
Appendix III												
Boron	mg/L	0.0597 J	0.118	<0.03	0.0841 J	<0.03	<0.03	1.47	<0.03	4.78	0.0411 J	2.07
Calcium	mg/L	122	132	37.6	74.4	152	159	533	252	130	242	444
Chloride	mg/L	14.3	19.7	13.1	5.68	2.19	2.36	207	2.13	102	1.56	129
Fluoride	mg/L	0.208	0.141	0.331	0.145	0.112	0.196	0.556	0.287	<0.06	0.35	0.221
pH_Field	SU	6.57	5.9	6.67	6.1	5.13	6.16	5.93	5.86	3.74	6.06	6.88
Sulfate	mg/L	369	711	24.4	385	1500	763	2880	2380	752	1930	1700
TDS	mg/L	945	1170	455	664	2210	1390	4920	3510	1300	3000	3150
Appendix IV												
Antimony	mg/L	<0.000508	<0.000508	<0.000508	<0.000508	<0.000508	<0.000508	<0.000508	<0.000508	<0.000508	<0.000508	<0.000508
Arsenic	mg/L	0.00175	0.00136	0.00265	0.0429	0.0003	0.000364	0.000572	0.000376	0.00174	0.000116 J	0.000238
Barium	mg/L	0.0401	0.018	0.145	0.019	0.00984	0.013	0.0136	0.00857	0.0115	0.0108	0.0232
Beryllium	mg/L	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406	0.00175	<0.000406	0.00577	<0.000406	<0.000406
Cadmium	mg/L	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	0.00185	8.27e-005 J	<6.8e-005	0.000937	0.00246	8.19e-005 J	<6.8e-005
Chromium	mg/L	0.000219 J	0.000297 J	0.000283 J	0.000219 J	0.000389 J	0.000251 J	0.000392 J	0.000307 J	0.000701 J	0.000302 J	0.000302 J
Cobalt	mg/L	0.001	0.0218	0.0019	0.00141	0.0549	0.0155	0.0555	0.00567	0.296	<6.8e-005	0.000262
Combined Radium 226 + 228	pCi/L	0.744 U	0.347 U	1.29	0.806 U	0.476 U	0.155 U	0.668 U	0.114 U	1.58	0.301 U	1.23 U
Lead	mg/L	<6.8e-005	0.000255	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	0.00018 J	8.42e-005 J	0.000792	<6.8e-005	<6.8e-005
Lithium	mg/L	0.0994	0.212	0.0174 J	0.0683	0.0267	0.0495	0.485	0.0808	0.487	0.0533	0.213
Mercury	mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Molybdenum	mg/L	0.000842	0.000102 J	0.00353	0.00155	<6.8e-005	<6.8e-005	0.000264	<6.8e-005	<6.8e-005	0.000138 J	0.000151 J
Selenium	mg/L	<0.000508	0.00283	<0.000508	<0.000508	0.00245	<0.000508	0.00151	0.0133	0.00563	0.00155	<0.000508
Thallium	mg/L	<6.8e-005	0.000386	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	8.68e-005 J	<6.8e-005	<6.8e-005

Notes:

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

Appendix A

Southern Company

Appendix A.
Historical Groundwater Analytical Data
Gorgas Gypsum Pond
2016-Present

Analytes	Wells	GS-GSA-MW-11H						GS-GSA-MW-12H						GS-GSA-MW-12V		
	Date	03/04/2019	10/16/2019	02/04/2020	08/04/2020	03/02/2021	07/14/2021	11/26/2019	01/23/2020	02/04/2020	08/05/2020	03/02/2021	07/14/2021	08/05/2020	03/03/2021	07/14/2021
Appendix III																
Boron	mg/L	<0.02	0.0352 J	<0.03	<0.03	0.0305 J	<0.03	0.0798 J	--	0.0748 J	0.0748 J	0.0875 J	0.0742 J	1.55	1.54	1.55
Calcium	mg/L	160	143	163	139	139	133	144	--	158	126	124	124	350	353	338
Chloride	mg/L	3.84	4.45	4.27	4.51	4.63	4.7	2.43	--	2.34	2	2.28	1.69	159	152	189
Fluoride	mg/L	0.0973 J	0.0875 J	0.0743 J	0.109	0.0758 J	0.0848 J	<0.05	--	<0.05	<0.06	<0.06	<0.06	0.217	0.243	0.335
pH_Field	SU	6.04	6.07	6.02	5.74	5.89	5.72	4.37	--	4.57	4.13	4.11	4.04	6.15	6.11	6.21
Sulfate	mg/L	779	750	725	694	835	747	997	--	978	811	890	878	1830	1930	2000
TDS	mg/L	1120	1150	1200	1230	1190	1190	1580	--	1580	1380	1390	1330	3330	3450	3360
Appendix IV																
Antimony	mg/L	0.00109 J	<0.0008	<0.0008	<0.0008	<0.000507	<0.000508	<0.0008	--	<0.0008	<0.0008	<0.000507	<0.000508	<0.0008	<0.000507	<0.000508
Arsenic	mg/L	<0.001	<0.001	<0.001	<0.001	0.00039	0.000406	0.00194 J	--	0.00157 J	0.00158 J	0.00138	0.00161	<0.001	0.000339	0.000475
Barium	mg/L	0.0247	0.0192	0.0148	0.0138	0.0118	0.0127	0.0184	--	0.0141	0.016	0.0134	0.013	0.0157	0.0126	0.0116
Beryllium	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.000406	<0.000406	0.0084	--	0.00709	0.00747	0.00703	0.00755	<0.0006	<0.000406	<0.000406
Cadmium	mg/L	<0.0003	<0.0003	<0.0003	<0.0003	0.000366	0.000285	0.00351	--	0.00301	0.00393	0.00319	0.00301	<0.0003	<6.8e-005	<6.8e-005
Chromium	mg/L	<0.002	<0.002	<0.002	<0.002	0.000295 J	0.00034 J	<0.002	--	<0.002	<0.002	0.000242 J	0.000592 J	<0.002	<0.000203	0.000252 J
Cobalt	mg/L	0.00664	0.00598	0.00582	0.0061	0.00512	0.00475	0.435	--	0.351	0.436	0.307	0.299	<0.002	0.00028	0.000178 J
Combined Radium 226 + 228	pCi/L	0.135 U	0.189 U	0.319 U	0.0315 U	0.308 U	0.398 U	0.996	1.02	0.939	-0.306 U	2.18	1.42	-0.284 U	0.388 U	0.657 U
Fluoride	mg/L	0.0973 J	0.0875 J	0.0743 J	0.109	0.0758 J	0.0848 J	<0.05	--	<0.05	<0.06	<0.06	<0.06	0.217	0.243	0.335
Lead	mg/L	<0.001	<0.001	<0.001	<0.001	0.000145 J	0.00014 J	0.00271 J	--	0.00334 J	0.00329 J	0.00478	0.00557	<0.001	<6.8e-005	<6.8e-005
Lithium	mg/L	<0.01	<0.01	<0.01	<0.01	<0.007105	<0.007105	0.449	--	0.394	0.441	0.456	0.454	0.334	0.411	0.374
Mercury	mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Molybdenum	mg/L	<0.002	<0.002	<0.002	<0.002	<6.8e-005	<6.8e-005	<0.002	--	<0.002	<0.002	<6.8e-005	<6.8e-005	0.00247 J	0.00123	0.00203
Selenium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.000507	<0.000508	0.00614 J	--	<0.002	0.00417 J	0.00463	0.00441	<0.002	<0.000507	<0.000508
Thallium	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<6.8e-005	<6.8e-005	0.000375 J	--	0.000491 J	0.000297 J	0.000371	0.000343	<0.0002	<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
4. "<MDL" or "U" indicates non-detect

Southern Company

Appendix A.
Historical Groundwater Analytical Data
Gorgas Gypsum Pond
2016-Present

Analytes	Wells	GS-GSA-MW-13H						GS-GSA-MW-14H			GS-GSA-MW-3V					
	Date	11/26/2019	01/23/2020	02/04/2020	08/04/2020	03/02/2021	07/14/2021	08/05/2020	03/03/2021	07/13/2021	03/05/2019	10/14/2019	02/03/2020	08/04/2020	03/03/2021	07/15/2021
Appendix III																
Boron	mg/L	0.201	--	0.202	0.263	0.206	0.229	0.158	0.203	0.139	0.895	2.38	3.06	2.8	2.99	3.04
Calcium	mg/L	166	--	171	192	164	172	141	137	131	329	368	504	443	466	453
Chloride	mg/L	13.1	--	12.9	12.7	10.9	11.5	3.28	4.8	2.41	194	298	338	305	307	294
Fluoride	mg/L	0.18	--	0.115	0.113	0.167	0.187	0.082 J	<0.06	<0.06	0.249	0.37	0.438	0.349	0.458	0.493
pH_Field	SU	6.03	--	6	5.89	5.85	5.55	3.83	4.02	3.8	6.7	6.39	5.88	5.9	5.76	5.92
Sulfate	mg/L	731	--	720	773	861	880	796	803	748	1170	1710	1970	1860	1930	1960
TDS	mg/L	1220	--	1200	1350	1450	1300	1280	1260	1180	2170	3200	3660	3530	3640	3430
Appendix IV																
Antimony	mg/L	<0.0008	--	<0.0008	<0.0008	<0.000507	<0.000508	<0.0008	<0.000507	<0.000508	0.00179 J	<0.0008	<0.0008	<0.0008	<0.000507	<0.000508
Arsenic	mg/L	0.075	--	0.16	0.103	0.293	0.104	0.00181 J	0.00155	0.00172	<0.001	<0.001	<0.001	<0.001	0.000296	0.000285
Barium	mg/L	0.0431	--	0.0296	0.0275	0.0315	0.0224	0.0113	0.0109	0.0117	0.0956	0.0451	0.0215	0.017	0.0181	0.0157
Beryllium	mg/L	<0.0006	--	<0.0006	<0.0006	<0.000406	<0.000406	0.00879	0.00818	0.00883	<0.0006	<0.0006	<0.0006	<0.0006	<0.000406	<0.000406
Cadmium	mg/L	<0.0003	--	<0.0003	<0.0003	<6.8e-005	<6.8e-005	0.0018	0.0016	0.00142	<0.0003	<0.0003	<0.0003	<0.0003	<6.8e-005	<6.8e-005
Chromium	mg/L	<0.002	--	<0.002	<0.002	0.000285 J	0.000322 J	<0.002	<0.000203	0.0005 J	<0.002	<0.002	<0.002	<0.002	<0.000203	0.00027 J
Cobalt	mg/L	0.0488	--	0.0442	0.111	0.143	0.119	0.237	0.202	0.207	0.0059	0.00845	0.0135	0.0133	0.0134	0.0121
Combined Radium 226 + 228	pCi/L	0.559	0.55	0.624	-0.402 U	0.686 U	0.826 U	0.758 U	0.185 U	1.06 U	0.932	0.184 U	0.408 U	-0.00668 U	1.11 U	0.362 U
Fluoride	mg/L	0.18	--	0.115	0.113	0.167	0.187	0.082 J	<0.06	<0.06	0.249	0.37	0.438	0.349	0.458	0.493
Lead	mg/L	<0.001	--	<0.001	<0.001	<6.8e-005	<6.8e-005	0.00122 J	0.000876	0.00096	<0.001	<0.001	<0.001	<0.001	<6.8e-005	<6.8e-005
Lithium	mg/L	0.0509	--	0.0506	0.0534	0.0439	0.0524	0.512	0.54	0.518	0.309	0.38	0.46	0.395	0.455	0.441
Mercury	mg/L	<0.0003	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Molybdenum	mg/L	<0.002	--	<0.002	<0.002	0.00138	0.000389	<0.002	7.06e-005 J	<6.8e-005	0.00347 J	<0.002	<0.002	<0.002	7.93e-005 J	8.72e-005 J
Selenium	mg/L	<0.002	--	<0.002	<0.002	<0.000507	<0.000508	0.00571 J	0.00554	0.00607	<0.002	<0.002	<0.002	<0.002	<0.000507	<0.000508
Thallium	mg/L	<0.0002	--	<0.0002	<0.0002	<6.8e-005	<6.8e-005	<0.0002	7.98e-005 J	<6.8e-005	<0.0002	<0.0002	<0.0002	<0.0002	<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
4. "<MDL" or "U" indicates non-detect

Southern Company

Appendix A.
Historical Groundwater Analytical Data
Gorgas Gypsum Pond
2016-Present

Analytes	Wells	GS-GSA-MW-4V						GS-GSA-MW-8V						GS-GSA-MW-9H						GS-GSA-MW-9V			GS-GSA-PZ-17		
	Date	03/05/2019	10/14/2019	02/03/2020	08/05/2020	03/03/2021	07/14/2021	11/26/2019	01/22/2020	02/05/2020	08/05/2020	03/01/2021	07/14/2021	03/05/2019	10/16/2019	02/04/2020	08/04/2020	03/02/2021	07/13/2021	08/04/2020	03/01/2021	07/13/2021	08/04/2020	03/03/2021	07/13/2021
Appendix III																									
Boron	mg/L	7.15	5.64	5.25	4.41	4.09	3.68	0.134	--	0.136	0.131	0.145	0.147	12.8	10.7	9.63	8.53	6.68	5.84	0.149	0.147	0.125	0.168	0.0643 J	0.111
Calcium	mg/L	249	173	184	167	161	162	37	--	37.3	31.9	26.2	29	578	363	413	346	333	312	434	428	408	218	54.3	165
Chloride	mg/L	191	122	101	80.9	70.8	68.4	6.88	--	9.05	13.9	19.4	16.7	313	145	139	109	84.7	78.6	58.6	58.7	62	1.7	1.58	1.39
Fluoride	mg/L	0.477	0.449	0.555	0.363	0.262	0.276	0.195	--	0.162	0.256	0.346	0.339	0.239	0.101	0.205	0.127	0.094 J	0.182	0.135	0.12	0.211	<0.06	<0.06	<0.06
pH_Field	SU	6.19	5.89	5.84	5.81	5.75	5.75	7.54	--	7.48	7.58	7.67	7.97	5.88	5.43	5.34	5.33	5.29	5.13	6.88	6.84	6.92	4.08	4.21	4.36
Sulfate	mg/L	871	818	808	761	746	797	277	--	223	243	183	196	2010	2020	1710	1790	1750	1750	1700	1680	1820	1310	320	1010
TDS	mg/L	1410	1340	1290	1330	1320	1340	1100	--	1100	1100	1060	1060	3240	3080	3110	2920	2860	2640	3080	3140	2870	2160	571	1550
Appendix IV																									
Antimony	mg/L	<0.0008	<0.0008	<0.0008	<0.0008	<0.000507	<0.000508	<0.0008	--	<0.0008	<0.0008	<0.000507	<0.000508	0.000852 J	<0.0008	<0.0008	<0.0008	<0.000507	<0.000508	<0.0008	<0.000507	<0.000508	<0.0008	<0.000507	<0.000508
Arsenic	mg/L	<0.001	<0.001	0.00101 J	0.00116 J	0.00107	0.00118	0.00737	--	0.00232 J	0.00476 J	0.0105	0.00692	<0.001	0.0019 J	0.00123 J	0.00137 J	0.00105	0.00113	<0.001	0.00136	0.00168	0.00495 J	0.000966	0.00435
Barium	mg/L	0.0136	0.0123	0.0103	0.0112	0.0103	0.01	0.0904	--	0.096	0.125	0.15	0.148	0.0312	0.0163	0.0148	0.0153	0.0149	0.0141	0.0155	0.012	0.013	0.0181	0.0154	0.0144
Beryllium	mg/L	0.00155 J	0.00382	0.00362	0.00416	0.0032	0.00381	<0.0006	--	<0.0006	<0.0006	<0.000406	<0.000406	<0.0006	0.000985 J	0.000929 J	0.000882 J	0.000724 J	0.000731 J	<0.0006	<0.000406	<0.000406	0.0145	0.00334	0.012
Cadmium	mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<6.8e-005	<6.8e-005	<0.0003	--	<0.0003	<0.0003	<6.8e-005	<6.8e-005	0.000336 J	0.000362 J	0.000349 J	0.000308 J	0.000338	0.000281	<0.0003	<6.8e-005	<6.8e-005	0.00197	0.000927	0.00231
Chromium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.000203	0.000266 J	<0.002	--	<0.002	<0.002	<0.000203	<0.000203	<0.002	<0.002	<0.002	<0.002	0.000218 J	0.000264 J	<0.002	<0.000203	0.000304 J	0.00254 J	0.000525 J	0.002
Cobalt	mg/L	0.0836	0.12	0.108	0.141	0.118	0.12	<0.002	--	<0.002	<0.002	<6.8e-005	<6.8e-005	0.14	0.168	0.159	0.178	0.163	0.141	0.00412 J	0.000992	0.000774	0.471	0.0898	0.31
Combined Radium 226 + 228	pCi/L	0.364 U	0.369 U	0.758	0.533 U	0.325 U	0.917 U	0.569	0.524	0.576	1.85	1.49	1.85	0.852	1.29	0.441 U	-0.385 U	0.87 U	0.877 U	0.837 U	0.686 U	0.194 U	0.407 U	0.517 U	1.27 U
Fluoride	mg/L	0.477	0.449	0.555	0.363	0.262	0.276	0.195	--	0.162	0.256	0.346	0.339	0.239	0.101	0.205	0.127	0.094 J	0.182	0.135	0.12	0.211	<0.06	<0.06	<0.06
Lead	mg/L	<0.001	<0.001	<0.001	<0.001	<6.8e-005	<6.8e-005	<0.001	--	<0.001	<0.001	<6.8e-005	<6.8e-005	<0.001	<0.001	<0.001	<0.001	0.000206	0.000155 J	<0.001	<6.8e-005	<6.8e-005	0.00582	0.00178	0.00473
Lithium	mg/L	0.369	0.317	0.332	0.322	0.345	0.337	0.28	--	0.327	0.275	0.292	0.286	0.169	0.184	0.203	0.166	0.178	0.166	0.364	0.424	0.408	1.39	0.196	1.15
Mercury	mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<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	<0.002	--	<0.002	<0.002	0.000654	0.000258	<0.002	<0.002	<0.002	<0.002	<6.8e-005	<6.8e-005	0.00423 J	0.000532	0.000562	<0.002	<6.8e-005	<6.8e-005
Selenium	mg/L	<0.002	<0.002	<0.002	<0.002	0.000749 J	0.000952 J	<0.002	--	<0.002	<0.002	<0.000507	<0.000508	<0.002	<0.002	<0.002	<0.002	0.00138	0.00141	<0.002	<0.000507	<0.000508	0.0135	0.00137	0.0121
Thallium	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<6.8e-005	<6.8e-005	<0.0002	--	<0.0002	<0.0002	<6.8e-005	<6.8e-005	0.00021 J	0.000262 J	0.000233 J	0.000265 J	0.000221	0.000131 J	<0.0002	<6.8e-005	<6.8e-005	0.000242 J	0.000118 J	7.93e-005 J

Notes:
1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value
4. "<MDL" or "U" indicates non-detect

Southern Company

Appendix A.
Historical Groundwater Analytical Data
Gorgas Gypsum Pond
2016-Present

Analytes	Wells	GS-GSA-PZ-18			GS-GSA-PZ-19			GS-GSA-PZ-20			GS-GSA-PZ-21			GS-GSA-PZ-22		
	Date	08/03/2020	03/03/2021	07/13/2021	08/03/2020	03/02/2021	07/14/2021	08/03/2020	03/02/2021	07/14/2021	08/04/2020	03/02/2021	07/14/2021	08/04/2020	03/02/2021	07/14/2021
Appendix III																
Boron	mg/L	0.0671 J	0.108	0.0557 J	0.0553 J	0.066 J	0.0597 J	0.0833 J	0.0806 J	0.118	<0.03	<0.03	<0.03	0.108	0.0823 J	0.0841 J
Calcium	mg/L	106	98.9	109	88	112	122	76.9	89.1	132	36.4	36.1	37.6	70.4	73	74.4
Chloride	mg/L	4.55	4.48	2.01	21.7	15.8	14.3	15	11.6	19.7	13.6	12.6	13.1	7.77	5.76	5.68
Fluoride	mg/L	<0.06	<0.06	<0.06	0.18	0.21	0.208	0.188	0.191	0.141	0.323	0.319	0.331	0.167	0.117	0.145
pH_Field	SU	4.09	3.83	3.94	6.32	6.46	6.57	6.03	6.23	5.9	6.94	6.87	6.67	6.42	6.24	6.1
Sulfate	mg/L	729	597	675	210	243	369	379	344	711	23.8	22.7	24.4	340	366	385
TDS	mg/L	1210	974	1060	740	737	945	798	774	1170	447	445	455	638	662	664
Appendix IV																
Antimony	mg/L	0.00113 J	<0.000507	<0.000508	<0.0008	<0.000507	<0.000508	<0.0008	<0.000507	<0.000508	<0.0008	<0.000507	<0.000508	<0.0008	<0.000507	<0.000508
Arsenic	mg/L	0.0114	0.00515	0.00611	0.00279 J	0.00218	0.00175	0.00214 J	0.00234	0.00136	0.00204 J	0.00237	0.00265	0.0297	0.0331	0.0429
Barium	mg/L	0.0111	0.0114	0.0101	0.047	0.0409	0.0401	0.0211	0.0205	0.018	0.12	0.134	0.145	0.0243	0.0216	0.019
Beryllium	mg/L	0.00829	0.006	0.00776	<0.0006	<0.000406	<0.000406	<0.0006	<0.000406	<0.000406	<0.0006	<0.000406	<0.000406	<0.0006	<0.000406	<0.000406
Cadmium	mg/L	0.0012	0.000128 J	0.000354	<0.0003	<6.8e-005	<6.8e-005	<0.0003	<6.8e-005	<6.8e-005	<0.0003	<6.8e-005	<6.8e-005	<0.0003	<6.8e-005	<6.8e-005
Chromium	mg/L	0.00315 J	0.00196	0.00215	<0.002	<0.000203	0.000219 J	<0.002	0.000216 J	0.000297 J	<0.002	0.000244 J	0.000283 J	<0.002	<0.000203	0.000219 J
Cobalt	mg/L	0.156	0.097	0.121	<0.002	0.000808	0.001	0.00734	0.00254	0.0218	<0.002	0.00193	0.0019	0.0021 J	0.00213	0.00141
Combined Radium 226 + 228	pCi/L	0.511 U	0.662 U	1.24 U	0.652 U	0.186 U	0.744 U	0.0893 U	0.52 U	0.347 U	0.839	0.776 U	1.29	0.114 U	0.607 U	0.806 U
Fluoride	mg/L	<0.06	<0.06	<0.06	0.18	0.21	0.208	0.188	0.191	0.141	0.323	0.319	0.331	0.167	0.117	0.145
Lead	mg/L	0.00366 J	0.00053	0.000624	<0.001	<6.8e-005	<6.8e-005	<0.001	<6.8e-005	0.000255	<0.001	<6.8e-005	<6.8e-005	<0.001	<6.8e-005	<6.8e-005
Lithium	mg/L	0.422	0.346	0.444	0.0753	0.0822	0.0994	0.102	0.0992	0.212	0.0182 J	0.0168 J	0.0174 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	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Molybdenum	mg/L	<0.002	0.000107 J	<6.8e-005	<0.002	0.000804	0.000842	<0.002	0.00125	0.000102 J	0.00347 J	0.00353	0.00353	0.00267 J	0.00146	0.00155
Selenium	mg/L	0.00616 J	0.00404	0.00621	<0.002	<0.000507	<0.000508	<0.002	0.00222	0.00283	<0.002	<0.000507	<0.000508	<0.002	<0.000507	<0.000508
Thallium	mg/L	<0.0002	0.000109 J	<6.8e-005	<0.0002	<6.8e-005	<6.8e-005	<0.0002	0.000206	0.000386	<0.0002	<6.8e-005	<6.8e-005	<0.0002	<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
4. "<MDL" or "U" indicates non-detect

Southern Company

Appendix A.
Historical Groundwater Analytical Data
Gorgas Gypsum Pond
2016-Present

Analytes	Wells	MW-1																									
	Date	04/26/2016	06/20/2016	08/08/2016	08/24/2016	10/03/2016	10/26/2016	11/21/2016	01/17/2017	03/22/2017	04/18/2017	05/30/2017	08/23/2017	02/13/2018	05/22/2018	06/12/2018	10/17/2018	11/19/2018	05/14/2019	10/08/2019	10/16/2019	02/03/2020	04/06/2020	07/13/2020	08/03/2020	02/22/2021	07/12/2021
Appendix III																											
Boron	mg/L	0.0231 J	0.0227 J	0.0278 J	0.0247 J	0.0307 J	0.0241 J	0.0202 J	0.0201 J	0.0224 J	<0.02	<0.02	0.0253 J	--	0.0224 J	0.0214 J	0.0216 J	0.0237 J	<0.0609	<0.03	0.0385 J	<0.03	<0.03	<0.03	<0.03	0.0307 J	<0.03
Calcium	mg/L	147	152	150	142	139	133	144	131	141	149	140	152	--	166	203	171	154	167	157	157	172	149	147	148	151	152
Chloride	mg/L	1.94	2.09	2.18	2.22	2.34	2.34	2.5	2.68	2.4	2.4	2.6	2.7	--	2.3	2.3	--	1.7 J	2.28	2.31	2.42	2.07	2.01	2.1	2.05	2.16	2.19
Fluoride	mg/L	0.146 J	0.148 J	0.137 J	0.133 J	0.103 J	0.05 J	0.047 J	0.09 J	0.12	0.12	0.13	0.16	0.14	0.16	0.16	--	0.15	0.119	0.0924 J	0.0756 J	0.0982 J	0.101	0.0678 J	<0.06	0.082 J	0.125
pH_Field	SU	5.2	5.18	5.12	--	5.21	5.2	5.19	5.17	5.2	5.2	5.14	5.12	5.18	5.2	5.15	5.12	5.09	5.19	5.12	5.16	5	5.21	5.14	5.08	5.06	5.13
Sulfate	mg/L	1490	1420	1460	1450	1460	1330	1420	1350	1500	1300	1400	1500	--	2100	1500	--	1300	1560	1540	1680	1510	1530	1450	1370	1400	1560
TDS	mg/L	2080	2060	2070	2040	2110	2000	2070	1930	2060	2140	2240	2160	--	2380	2400	2220	2360	2340	2330	3650	2380	2240	2240	2200	2230	2210
Appendix IV																											
Antimony	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	--	<0.0006	<0.0006	<0.0006	<0.0008	<0.0008	0.00137 J	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.000507	<0.000508
Arsenic	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.000403	0.000363
Barium	mg/L	0.00941 J	0.00951 J	0.00991 J	0.00949 J	0.0105	0.00931 J	0.00879 J	0.00929 J	0.00938 J	0.00964 J	0.00982 J	--	0.00937 J	0.0102	0.0104	0.00952 J	0.00915 J	0.00913 J	0.0109	0.0106	0.00995 J	0.00971 J	0.0101	0.0107	0.0107	0.00984
Beryllium	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	--	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.000406	<0.000406
Cadmium	mg/L	0.00196	0.0021	0.00206	0.00182	0.00188	0.00175	0.00197	0.002	0.0019	0.00159	0.00214	--	0.0018	0.00201	0.00217	0.00228	0.00156	0.00238	0.00218	0.00225	0.00182	0.00184	0.0019	0.00237	0.00184	0.00185
Chromium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.000382 J	0.000487 J
Cobalt	mg/L	0.0343	0.0413	0.0513	0.0471	0.0525	0.0527	0.0569	0.0768	0.0535	0.0442	0.0465	--	0.062	0.0443	0.0512	0.0751	0.0825	0.0485	0.0778	0.08	0.0495	0.0417	0.0532	0.0722	0.0657	0.0549
Combined Radium 226 + 228	pCi/L	0.622	0.159 U	0.511 U	0.566 U	0.537 U	0.636	0.807	0.308 U	0.344 U	0.934	0.149 U	--	0.774	-0.091 U	1.18	--	0.862	0.509	1.47	0.204 U	0.521 U	0.309 U	0.219 U	-0.127 U	0.677 U	0.476 U
Fluoride	mg/L	0.146 J	0.148 J	0.137 J	0.133 J	0.103 J	0.05 J	0.047 J	0.09 J	0.12	0.12	0.13	0.16	0.14	0.16	0.16	--	0.15	0.119	0.0924 J	0.0756 J	0.0982 J	0.101	0.0678 J	<0.06	0.082 J	0.125
Lead	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<6.8e-005	<6.8e-005
Lithium	mg/L	0.0264 J	0.0246 J	0.0229 J	0.0236 J	0.0229 J	0.0227 J	0.0236 J	0.0228 J	0.0238 J	0.0242 J	0.0229 J	--	0.0233 J	0.0263 J	0.0251 J	0.025 J	0.0241	0.026 J	0.0268	0.0263	0.0292	0.0278	0.028	0.0259	0.0301	0.0266
Mercury	mg/L	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	--	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Molybdenum	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<6.8e-005	<6.8e-005
Selenium	mg/L	0.00261 J	0.00242 J	0.00253 J	<0.002	0.00211 J	<0.002	<0.002	<0.002	0.0022 J	0.0027 J	0.00316 J	--	0.00211 J	0.00372 J	0.00409 J	<0.002	<0.002	0.00316 J	<0.002	<0.002	0.00272 J	0.00275 J	0.0025 J	0.00278 J	0.00241	0.0028
Thallium	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<6.8e-005	<6.8e-005

Notes:
1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value
4. "<MDL" or "U" indicates non-detect

Southern Company

Appendix A.
Historical Groundwater Analytical Data
Gorgas Gypsum Pond
2016-Present

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

Notes:
1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value
4. "<MDL" or "U" indicates non-detect

Southern Company

Appendix A.
Historical Groundwater Analytical Data
Gorgas Gypsum Pond
2016-Present

Analytes	Wells	GS-GSA-MW-3																	
	Date	08/24/2016	10/03/2016	10/26/2016	11/21/2016	01/17/2017	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	08/04/2020	03/01/2021	07/14/2021
Appendix III																			
Boron	mg/L	0.799	0.889	1.23	1.72	2.63	3.11	4.51	2.9	2.83	--	3.09	2.59	3.35	2.48	2.13	1.82	2.55	1.47
Calcium	mg/L	539	519.7	916	552	572	817	476	515	598	--	558	392	659	552	589	545	514	533
Chloride	mg/L	204	220	249	256	301	320	340	310	290	--	260	--	249	228	267	222	250	207
Fluoride	mg/L	0.264 J	0.276 J	0.182 J	0.238 J	0.34	0.39	0.57	0.38	0.54	0.57	0.63	--	0.738	0.619	0.427	0.389	0.449	0.556
pH_Field	SU	6.28	6.28	6.19	6.2	6.13	6.17	5.6	6.07	5.99	5.88	5.91	5.88	5.83	6.04	5.98	6.09	5.82	5.93
Sulfate	mg/L	2910	2980	2790	2880	2950	<14	2400	2900	2900	--	2900	--	2980	3110	2840	2820	2320	2880
TDS	mg/L	5020	4880	5020	5090	4330	2690	4780	5170	5140	--	4960	4910	5090	5110	4920	5110	4390	4920
Appendix IV																			
Antimony	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	--	<0.0006	<0.0006	<0.0008	0.00111 J	<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	0.00405 J	<0.001	--	<0.001	<0.001	<0.001	0.00121 J	<0.001	<0.001	<0.001	0.0014	0.000572
Barium	mg/L	0.0155	0.0156	0.0122	0.0128	0.0125	0.0124	0.0149	0.0121	--	0.0118	0.0127	0.0126	0.0153	0.0122	0.0141	0.0139	0.0154	0.0136
Beryllium	mg/L	<0.0006	<0.0006	0.000922 J	0.00133 J	0.0017 J	0.00191 J	0.00655	0.00204 J	--	0.00387	0.00244 J	0.00345	0.00257 J	0.00162 J	0.00141 J	0.00174 J	0.00157	0.00175
Cadmium	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	--	<0.0003	<0.0003	0.00393	<0.0003	<0.0003	<0.0003	<0.0003	<6.8e-005	<6.8e-005
Chromium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.000386 J	0.000392 J
Cobalt	mg/L	0.0303	0.041	0.0505	0.0617	0.0793	0.0726	0.294	0.0832	--	0.124	0.138	0.49	0.151	0.102	0.0843	0.0862	0.119	0.0555
Combined Radium 226 + 228	pCi/L	0.389 U	0.683	0.242 U	0.764	0.191 U	-0.0158 U	0.307 U	0.724	--	0.633	0.773	--	--	0.297 U	--	0.45 U	0.57 U	0.668 U
Fluoride	mg/L	0.264 J	0.276 J	0.182 J	0.238 J	0.34	0.39	0.57	0.38	0.54	0.57	0.63	--	0.738	0.619	0.427	0.389	0.449	0.556
Lead	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.000157 J	0.00018 J
Lithium	mg/L	0.362	0.371	0.416	0.401	0.497	0.533	0.47	0.479	--	0.508	0.425	0.384	0.425	0.459	0.474	0.468	0.353	0.485
Mercury	mg/L	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	--	<0.00025	<0.00025	<0.00025	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Molybdenum	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.00022	0.000264
Selenium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.00521 J	<0.002	--	0.00267 J	0.00236 J	<0.002	0.00234 J	<0.002	<0.002	<0.002	0.00141	0.00151
Thallium	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<6.8e-005	<6.8e-005

Notes:
1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value
4. "<MDL" or "U" indicates non-detect

Southern Company

Appendix A.
Historical Groundwater Analytical Data
Gorgas Gypsum Pond
2016-Present

Analytes	Wells	MW-3																								
	Date	04/25/2016	06/22/2016	08/09/2016	08/24/2016	10/04/2016	10/26/2016	11/21/2016	01/18/2017	03/22/2017	04/18/2017	05/31/2017	08/23/2017	02/13/2018	05/24/2018	06/12/2018	11/19/2018	04/10/2019	05/14/2019	10/08/2019	10/16/2019	02/03/2020	04/06/2020	07/13/2020	08/03/2020	02/22/2021	07/12/2021
Appendix III																											
Boron	mg/L	0.028 J	0.0433 J	0.0429 J	0.0431 J	0.04 J	0.0375 J	0.0406 J	0.0548 J	0.0344 J	<0.02	0.0454 J	0.0425 J	--	0.0339 J	0.0371 J	0.0514 J	<0.03	<0.0609	0.0537 J	0.05 J	--	<0.03	0.0366 J	0.0424 J	<0.03	<0.03
Calcium	mg/L	224	266	260	274	243	254	263	431	318	296	306	298	--	297	318	387	348	254	371	346	--	177	264	285	312	252
Chloride	mg/L	1.32	1.46	1.35	1.47	1.59	1.27	1.38	1.34	2	2.2	1.5 J	1.8 J	--	1.6 J	1.4 J	<1.4	2.25	2.28	1.36	1.4	--	1.72	1.34	1.17	2.22	2.13
Fluoride	mg/L	0.243 J	0.269 J	0.363	0.346	0.266 J	0.266 J	0.244 J	0.385	0.41	0.29	0.37	0.55	0.27	0.6	0.53	0.31	0.273	0.281	0.225	0.106	--	0.314	0.13	0.0766 J	0.246	0.287
pH_Field	SU	5.56	5.57	5.67	5.63	5.69	5.56	5.42	5.11	4.52	5.84	4.56	4.77	5.67	5.19	4.79	3.77	5.54	5.71	4.98	4.51	--	5.91	5.16	5.06	5.59	5.86
Sulfate	mg/L	1890	2100	2050	2190	1950	1980	2060	2620	3200	2500	2800	2600	--	2700	2500	3000	2460	2460	2950	2820	--	1670	2130	2330	3040	2380
TDS	mg/L	2720	3250	3050	3080	2900	2940	3090	4020	4180	4440	3970	4050	--	3680	3820	4710	3680	3580	4720	4210	--	2630	3650	3760	4670	3510
Appendix IV																											
Antimony	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	--	<0.0006	<0.0006	<0.0006	<0.0008	0.000978 J	<0.0008	<0.0008	<0.0008	--	<0.0008	<0.0008	<0.0008	<0.000507	<0.000508
Arsenic	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.00122 J	<0.001	<0.001	--	<0.001	<0.001	0.00103 J	0.0012 J	<0.001	<0.001	0.0048 J	0.00389 J	--	<0.001	0.0032 J	0.00426 J	0.000789	0.000376
Barium	mg/L	0.00803 J	0.0101	0.00889 J	0.00962 J	0.00984 J	0.00878 J	0.00833 J	0.00966 J	0.00991 J	0.00976 J	0.00866 J	--	0.00821 J	0.00977 J	0.00997 J	0.0109	0.0101	0.00922 J	0.0154	0.0128	--	0.00931 J	0.0142	0.0166	0.00981	0.00857
Beryllium	mg/L	0.00122 J	0.00144 J	0.00331	0.00308	0.00129 J	0.0071	0.00689	0.0169	0.00686	<0.0006	0.00547	--	<0.0006	0.00164 J	0.00306	0.0185	<0.0006	<0.0006	0.0084	0.0103	--	<0.0006	0.0021 J	0.00405	<0.000406	<0.000406
Cadmium	mg/L	0.0121	0.00163	0.00122	<0.0002	0.000689 J	0.00136	0.00171	0.003	0.00473	0.00117	0.00296	--	0.00232	0.00459	0.00351	0.00309	0.00337	0.0013	0.00598	0.00448	--	0.000645 J	0.0089	0.00652	0.00536	0.000937
Chromium	mg/L	0.00373 J	0.00606 J	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.00945 J	0.0105	<0.002	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	<0.002	0.00035 J	0.000307 J
Cobalt	mg/L	0.232	0.332	0.311	0.271	0.148	0.236	0.241	0.347	0.271	0.00324 J	0.225	--	0.00661 J	0.158	0.291	0.386	0.0144	0.00536	1.07	0.848	--	<0.002	0.47	0.64	0.0515	0.00567
Combined Radium 226 + 228	pCi/L	0.484 U	0.2 U	0.378 U	0.131 U	0.514 U	0.755	0.7	0.606	0.927	0.334 U	0.8	--	0.649	0.448 U	0.234 U	0.521	--	0.176 U	0.833 U	0.0279 U	0.0246 U	0.569 U	0.53	0.765 U	0.472 U	0.114 U
Fluoride	mg/L	0.243 J	0.269 J	0.363	0.346	0.266 J	0.266 J	0.244 J	0.385	0.41	0.29	0.37	0.55	0.27	0.6	0.53	0.31	0.273	0.281	0.225	0.106	--	0.314	0.13	0.0766 J	0.246	0.287
Lead	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	<0.001	0.00692	<0.001	<0.001	<0.001	0.00108 J	--	<0.001	<0.001	0.002 J	8.8e-005 J	8.42e-005 J
Lithium	mg/L	0.0964	0.156	0.122	0.138	0.0966	0.134	0.167	0.237	0.203	0.0764	0.218	--	0.0964	0.145	0.194	0.323	0.0905	0.0828	0.419	0.337	--	0.0689	0.256	0.27	0.126	0.0808
Mercury	mg/L	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	--	<0.00025	<0.00025	<0.00025	<0.00025	<0.0003	<0.0003	<0.0003	<0.0003	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Molybdenum	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	<0.002	<6.8e-005	<6.8e-005
Selenium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.0141	0.0158	0.00632 J	--	0.0209	0.00918 J	0.00836 J	0.00439 J	0.0113	0.0119	0.00256 J	0.00286 J	--	0.01	0.0134	0.0146	0.0181	0.0133
Thallium	mg/L	0.000205 J	<0.0002	<0.0002	<0.0002	<0.0002	0.000209 J	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	--	<0.0002	<0.0002	<0.0002	0.000226 J	<0.0002	<0.0002	<0.0002	<0.0002	--	<0.0002	<0.0002	<0.0002	<6.8e-005	<6.8e-005

Notes:
1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value
4. "<MDL" or "U" indicates non-detect

Southern Company

Appendix A.
Historical Groundwater Analytical Data
Gorgas Gypsum Pond
2016-Present

Analytes	Wells	GS-GSA-MW-4																	
	Date	08/24/2016	10/03/2016	10/26/2016	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	02/03/2020	02/04/2020	08/05/2020	03/03/2021	07/14/2021
Appendix III																			
Boron	mg/L	4.88	4.75	4.96	4.82	3.97	3.39	3.46	3.79	4.19	--	3.96	3.98	3.37	0.0433 J	2.74	2.51	2.42	4.78
Calcium	mg/L	102	98.4	88.7	104	102	94.7	97.9	93.9	105	--	105	342	93.5	265	116	94.7	100	130
Chloride	mg/L	112	115	115	117	99.3	79	85	99	110	--	81	--	59.1	1.72	43.2	41	40.3	102
Fluoride	mg/L	0.793	0.769	0.578	0.562	0.571	0.54	0.54	0.49	0.7	0.63	0.39	--	<0.05	0.37	<0.05	<0.06	<0.06	<0.06
pH_Field	SU	3.83	3.82	3.81	3.81	3.78	3.76	3.76	3.76	3.7	3.73	3.8	3.81	3.91	6.14	3.83	3.86	3.76	3.74
Sulfate	mg/L	567	596	585	593	637	530	530	530	530	--	540	--	641	1920	571	519	609	752
TDS	mg/L	992	988	1030	1020	988	990	884	1060	1060	--	944	4250	967	3240	978	938	1040	1300
Appendix IV																			
Antimony	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	--	<0.0006	<0.0006	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.000507	<0.000508
Arsenic	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	<0.001	0.0012 J	<0.001	0.00128 J	0.00115 J	0.00116	0.00174
Barium	mg/L	0.0135	0.0127	0.0118	0.012	0.0119	0.0116	0.0112	0.0117	--	0.0121	0.0139	0.0119	0.0147	0.0103	0.0124	0.0142	0.0117	0.0115
Beryllium	mg/L	0.00576	0.00469	0.00459	0.00502	0.00488	0.00521	0.0058	0.00517	--	0.00544	0.00463	0.00369	0.00403	<0.0006	0.00415	0.00385	0.00406	0.00577
Cadmium	mg/L	0.00148	0.00147	0.00157	0.00154	0.00131	0.00134	0.00122	0.00167	--	0.00145	0.00171	<0.0003	0.0015	<0.0003	0.00143	0.00157	0.00162	0.00246
Chromium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.000567 J	0.000701 J
Cobalt	mg/L	0.151	0.143	0.154	0.155	0.16	0.158	0.159	0.159	--	0.19	0.166	<0.002	0.213	<0.002	0.217	0.235	0.24	0.296
Combined Radium 226 + 228	pCi/L	0.741	0.648	0.632	1.57	0.493	0.604 U	0.252 U	0.925	--	0.382	0.796	--	0.317 U	--	0.324 U	0.389 U	0.836 U	1.58
Fluoride	mg/L	0.793	0.769	0.578	0.562	0.571	0.54	0.54	0.49	0.7	0.63	0.39	--	<0.05	0.37	<0.05	<0.06	<0.06	<0.06
Lead	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.000609	0.000792
Lithium	mg/L	0.291	0.287	0.298	0.294	0.27	0.258	0.274	0.285	--	0.274	0.266	0.0532	0.262	0.0556	0.29	0.273	0.313	0.487
Mercury	mg/L	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	--	<0.00025	<0.00025	<0.00025	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Molybdenum	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<6.8e-005	<6.8e-005
Selenium	mg/L	0.00234 J	0.00739 J	0.00266 J	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	0.00212 J	<0.002	0.00298 J	0.00294	0.00563
Thallium	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.000205 J	0.000178 J	8.68e-005 J

Notes:
1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value
4. "<MDL" or "U" indicates non-detect

Southern Company

Appendix A.
Historical Groundwater Analytical Data
Gorgas Gypsum Pond
2016-Present

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

Notes:
1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value
4. "<MDL" or "U" indicates non-detect

Southern Company

Appendix A.
Historical Groundwater Analytical Data
Gorgas Gypsum Pond
2016-Present

Analytes	Wells	GS-GSA-MW-8																	
	Date	08/24/2016	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	10/17/2018	04/10/2019	10/14/2019	02/04/2020	08/05/2020	03/01/2021	07/14/2021
Appendix III																			
Boron	mg/L	0.0898 J	0.0821 J	0.0889 J	0.0788 J	0.0607 J	0.114	0.108	0.105	0.12	--	0.181	0.616	0.944	2.11	1.47	2.16	1.85	2.07
Calcium	mg/L	263	253	235	246	231	298	317	316	391	--	442	514	533	524	461	497	386	444
Chloride	mg/L	4.03	3.87	4.08	4.39	7.22	5.7	4.7	15	93	--	140	--	174	207	94.1	146	92.5	129
Fluoride	mg/L	0.165 J	0.114 J	0.056 J	0.059 J	0.07 J	0.18	0.17	0.16	0.18	0.15	0.15	--	0.156	0.118	0.132	0.119	0.106	0.221
pH_Field	SU	6.78	6.71	6.65	6.7	6.25	7.04	6.99	6.98	6.89	6.85	6.83	6.81	6.71	6.88	6.85	6.76	6.48	6.88
Sulfate	mg/L	1250	1270	1240	1210	1150	1400	1300	1500	1800	--	1800	--	2150	2090	1570	1880	1450	1700
TDS	mg/L	2280	2370	2350	2530	2380	2630	2700	2980	3390	--	3510	3550	3580	3730	3190	3610	2870	3150
Appendix IV																			
Antimony	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	--	<0.0006	<0.0006	<0.0008	0.00102 J	<0.0008	<0.0008	<0.0008	<0.000507	<0.000508
Arsenic	mg/L	0.00119 J	0.00114 J	0.0011 J	<0.001	0.00103 J	<0.001	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.000633	0.000238
Barium	mg/L	0.0536	0.0681	0.0562	0.0604	0.0402	0.0305	0.0276	0.0272	--	0.0249	0.0234	0.0236	0.02	0.0215	0.0209	0.0216	0.0194	0.0232
Beryllium	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	--	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.000406	<0.000406
Cadmium	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<6.8e-005	<6.8e-005
Chromium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.000423 J	0.000302 J
Cobalt	mg/L	0.0201	0.0167	0.0253	0.0233	0.0708	0.00277 J	<0.002	<0.002	--	0.00492 J	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.00546	0.000262
Combined Radium 226 + 228	pCi/L	0.558 U	0.565	0.555 U	0.987	0.476 U	0.633 U	0.248 U	0.412 U	--	1.08	0.446 U	--	--	0.225 U	0.336 U	-0.115 U	0.902 U	1.23 U
Fluoride	mg/L	0.165 J	0.114 J	0.056 J	0.059 J	0.07 J	0.18	0.17	0.16	0.18	0.15	0.15	--	0.156	0.118	0.132	0.119	0.106	0.221
Lead	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.000145 J	<6.8e-005
Lithium	mg/L	0.0683	0.0661	0.0681	0.0682	0.0516	0.135	0.139	0.141	--	0.163	0.166	0.188	0.195	0.209	0.188	0.206	0.149	0.213
Mercury	mg/L	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	--	<0.00025	<0.00025	<0.00025	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Molybdenum	mg/L	0.0031 J	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.00277	0.000151 J
Selenium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.000507	<0.000508
Thallium	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<6.8e-005	<6.8e-005

Notes:
1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value
4. "<MDL" or "U" indicates non-detect

Southern Company

Appendix A.
Historical Groundwater Analytical Data
Gorgas Gypsum Pond
2016-Present

Analytes	**Wells**		
	Date		
Appendix III			
Boron	mg/L		
Calcium	mg/L		
Chloride	mg/L		
Fluoride	mg/L		
pH_Field	SU		
Sulfate	mg/L		
TDS	mg/L		
Appendix IV			
Antimony	mg/L		
Arsenic	mg/L		
Barium	mg/L		
Beryllium	mg/L		
Cadmium	mg/L		
Chromium	mg/L		
Cobalt	mg/L		
Combined Radium 226 + 228	pCi/L		
Fluoride	mg/L		
Lead	mg/L		
Lithium	mg/L		
Mercury	mg/L		
Molybdenum	mg/L		
Selenium	mg/L		
Thallium	mg/L		

Notes:
1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value
4. "<MDL" or "U" indicates non-detect

Appendix B

Appendix B
Historical Groundwater Elevations Summary

Well Name	Top of Casing Elevation	Groundwater Elevation (ft. MSL)										
		8/24/2016	10/3/2016	10/26/2016	11/21/2016	1/17/2017	3/20/2017	4/17/2017	5/30/2017	8/23/2017	2/13/2018	6/11/2018
MW-1[3]	502.38	410.56	410.44	410.32	410.23	410.20	410.80	411.07	410.93	411.19	411.02	411.41
MW-2[3]	502.17	416.47	416.26	416.13	416.03	416.67	417.29	417.39	416.99	417.07	419.34	417.08
MW-3[3]	525.90	415.08	414.82	414.64	414.43	415.27	416.07	417.21	415.63	415.73	418.49	415.77
MW-4[3]	517.89	399.83	399.35	399.09	398.79	399.77	401.28	401.59	400.94	401.03	401.93	401.27
GS-GSA-MW-3	442.63	332.11	331.71	331.53	331.33	331.02	333.43	334.12	334.72	336.19	332.79	336.36
GS-GSA-MW-4	442.10	350.00	349.10	348.71	348.26	349.61	351.50	352.75	351.17	351.02	353.06	351.52
GS-GSA-MW-8	404.38	318.89	317.35	316.33	315.43	315.89	320.12	322.22	321.64	323.71	320.01	324.40
GS-GSA-MW-3V	442.68	--	--	--	--	--	--	--	--	--	--	--
GS-GSA-MW-4V	442.18	--	--	--	--	--	--	--	--	--	--	--
GS-GSA-MW-9H	335.83	--	--	--	--	--	--	--	--	--	--	--
GS-GSA-MW-10H	339.52	--	--	--	--	--	--	--	--	--	--	--
GS-GSA-MW-11H	263.02	--	--	--	--	--	--	--	--	--	--	--
GS-GSA-MW-8V	404.43	--	--	--	--	--	--	--	--	--	--	--
GS-GSA-MW-12H	399.73	--	--	--	--	--	--	--	--	--	--	--
GS-GSA-MW-13H	266.46	--	--	--	--	--	--	--	--	--	--	--
GS-GSA-MW-1	442.96	--	--	--	--	--	--	--	--	--	--	--
GS-GSA-MW-2	442.84	--	--	--	--	--	--	--	--	--	--	--
GS-GSA-PZ-2A	491.52	--	--	--	--	--	--	--	--	--	--	--
GS-GSA-MW-9V	336.22	--	--	--	--	--	--	--	--	--	--	--
GS-GSA-MW-12V	379.50	--	--	--	--	--	--	--	--	--	--	--
GS-GSA-MW-14H	403.66	--	--	--	--	--	--	--	--	--	--	--
GS-GSA-MW-15H	428.16	--	--	--	--	--	--	--	--	--	--	--
GS-GSA-MW-23VA	403.60	--	--	--	--	--	--	--	--	--	--	--
GS-GSA-PZ-16	436.40	--	--	--	--	--	--	--	--	--	--	--
GS-GSA-PZ-17	475.94	--	--	--	--	--	--	--	--	--	--	--
GS-GSA-PZ-18	489.93	--	--	--	--	--	--	--	--	--	--	--
GS-GSA-PZ-19	463.50	--	--	--	--	--	--	--	--	--	--	--
GS-GSA-PZ-20	460.34	--	--	--	--	--	--	--	--	--	--	--
GS-GSA-PZ-22	479.46	--	--	--	--	--	--	--	--	--	--	--
GS-GSA-PZ-21	460.94	--	--	--	--	--	--	--	--	--	--	--

Notes:
1. ft. AMSL - feet above mean sea level
2. -- Not Measured
3. Upgradient monitoring well located at the CCR Landfill

Appendix B
Historical Groundwater Elevations Summary

Well Name	Top of Casing Elevation	Groundwater Elevation (ft. MSL)									
		10/17/2018	3/4/2019	3/13/2019	4/10/2019	10/14/2019	11/26/2019	2/3/2020	8/3/2020	2/22/2021	7/12/2021
MW-1[3]	502.38	410.78	--	412.24	412.08	410.85	--	411.94	412.32	411.72	411.67
MW-2[3]	502.17	416.44	--	417.75	421.20	416.67	--	417.57	417.15	418.55	417.80
MW-3[3]	525.90	414.92	--	418.31	417.41	415.14	--	416.62	415.49	419.94	421.54
MW-4[3]	517.89	399.56	--	401.94	402.12	399.59	--	401.68	400.63	402.38	401.56
GS-GSA-MW-3	442.63	332.37	--	341.46	341.33	332.37	--	339.32	335.10	334.59	339.17
GS-GSA-MW-4	442.10	349.56	--	353.06	353.00	349.08	--	352.42	350.66	354.32	352.12
GS-GSA-MW-8	404.38	319.03	--	334.46	330.27	319.20	--	329.85	323.91	325.87	328.28
GS-GSA-MW-3V	442.68	--	327.13	326.34	--	313.29	--	321.66	316.37	318.85	319.46
GS-GSA-MW-4V	442.18	--	333.31	332.35	--	322.28	--	328.85	323.88	328.55	327.27
GS-GSA-MW-9H	335.83	--	294.33	293.64	--	286.47	--	291.69	288.01	291.61	290.68
GS-GSA-MW-10H	339.52	--	--	321.80	--	--	--	319.09	312.41	319.60	318.68
GS-GSA-MW-11H	263.02	--	257.01	256.30	--	255.09	--	256.29	256.21	256.33	256.39
GS-GSA-MW-8V	404.43	--	--	--	--	--	310.82	319.53	313.99	318.10	318.06
GS-GSA-MW-12H	399.73	--	--	--	--	--	339.57	341.15	337.17	341.27	340.16
GS-GSA-MW-13H	266.46	--	--	--	--	--	257.06	257.03	256.50	257.65	256.48
GS-GSA-MW-1	442.96	--	--	--	--	--	--	347.96	347.74	347.81	347.88
GS-GSA-MW-2	442.84	--	--	--	--	--	--	340.10	335.87	334.94	339.92
GS-GSA-PZ-2A	491.52	--	--	--	--	--	--	372.06	371.55	371.55	371.82
GS-GSA-MW-9V	336.22	--	--	--	--	--	--	--	289.16	291.53	291.30
GS-GSA-MW-12V	379.50	--	--	--	--	--	--	--	294.01	318.04	317.98
GS-GSA-MW-14H	403.66	--	--	--	--	--	--	--	384.51	385.34	384.82
GS-GSA-MW-15H	428.16	--	--	--	--	--	--	--	401.88	404.14	402.77
GS-GSA-MW-23VA	403.60	--	--	--	--	--	--	--	--	240.62	253.93
GS-GSA-PZ-16	436.40	--	--	--	--	--	--	--	409.21	421.76	412.02
GS-GSA-PZ-17	475.94	--	--	--	--	--	--	--	429.97	430.61	429.91
GS-GSA-PZ-18	489.93	--	--	--	--	--	--	--	426.03	430.00	428.24
GS-GSA-PZ-19	463.50	--	--	--	--	--	--	--	339.96	341.27	341.82
GS-GSA-PZ-20	460.34	--	--	--	--	--	--	--	344.11	344.22	344.26
GS-GSA-PZ-22	479.46	--	--	--	--	--	--	--	424.21	428.41	427.17
GS-GSA-PZ-21	460.94	--	--	--	--	--	--	--	378.58	377.13	377.35

Notes:
1. ft. AMSL - feet above mean sea level
2. -- Not Measured
3. Upgradient monitoring well located at the CC

Appendix C

1st
Semi-Annual
Monitoring Event

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

2021 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).

Rainy conditions were present when pumping and sampling wells MW-8V, MW-8, MW-11H, MW-9H, MW-3, MW-9V, PZ-20 and PZ-21.

Suspected iron bacteria was present during initial pumping of wells MW-12H and MW-14H.

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
205-664-6001

Analytical Report

Alabama Power

Sample Group : WMWGORG_1310

Project/Site : Gorgas Gypsum
Parrish, AL 35580

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

Attention : Dustin Brooks & Greg Dyer

Released By : Laura Midkiff
lbmidkif@southernco.com
(205) 664-6197

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

April 07, 2021

Dear Dustin Brooks,

Enclosed are the analytical results for sample(s) received by the laboratory between March 02, 2021 and March 04, 2021. All results reported herein conform to the laboratory's most current Quality Assurance Manual. Results marked with an asterisk conform to the most current applicable TNI/NELAC requirements. Exceptions will be noted in the body of the report.

Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2021

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

Sincerely,

Quality Control: Laura Midkiff

Digitally signed by Laura Midkiff
DN: cn=Laura Midkiff, o=Alabama Power Company, ou=Environmental Affairs, email=lbmidkif@southernco.com, c=US
Date: 2021.04.07 13:58:24 -05'00'

Supervision: T. Durant Maske

Digitally signed by T. Durant Maske
DN: cn=T. Durant Maske, o=Alabama Power Company, ou=Environmental Affairs, email=tdmaske@southernco.com, c=US
Date: 2021.04.08 13:21:24 -05'00'

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

Case Narrative

Alabama Power

Total Metals ICP

Gorgas Gypsum

WMWGORG_1310

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
BB04458	694370	WMWGORG_1310
BB04459	694370	WMWGORG_1310
BB04460	694370	WMWGORG_1310
BB04461	694370	WMWGORG_1310
BB04462	694370	WMWGORG_1310
BB04463	694370	WMWGORG_1310
BB04464	694370	WMWGORG_1310
BB04465	694370	WMWGORG_1310
BB04466	694370	WMWGORG_1310
BB04467	694370	WMWGORG_1310
BB04468	694371	WMWGORG_1310
BB04469	694371	WMWGORG_1310
BB04470	694371	WMWGORG_1310
BB04471	694371	WMWGORG_1310
BB04472	694371	WMWGORG_1310
BB04671	694371	WMWGORG_1310
BB04672	694371	WMWGORG_1310
BB04673	694371	WMWGORG_1310
BB04674	694371	WMWGORG_1310
BB04675	694371	WMWGORG_1310
BB04676	694372	WMWGORG_1310
BB04677	694372	WMWGORG_1310
BB04678	694372	WMWGORG_1310
BB04679	694372	WMWGORG_1310

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

General Quality Control Procedures:

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

Matrix Specific Quality Control Procedures:

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

- A matrix spike and matrix spike duplicate were digested and analyzed with each ICP batch. All acceptance criteria for accuracy were met, except for the following:
    - BB04467 Lithium MS/MSD recoveries were outside of the specification limits. Post digestion spike and serial dilution were performed. Matrix issue is suspected.
    - BB04467 Calcium, Iron, Sodium, and Magnesium MS/MSD spike levels were less than 30% of the sample nominal concentrations.
    - BB04679 Iron MS/MSD spike level was less than 30% of sample nominal concentration.
- 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
BB04458	Calcium, Iron, Magnesium, Sodium	101.5
BB04459	Calcium, Magnesium, Sodium	101.5
BB04460	Calcium, Magnesium, Sodium	10.15
BB04461	Calcium, Iron, Magnesium, Sodium	10.15
BB04462	Calcium, Iron, Magnesium, Sodium	10.15
BB04463	Sodium	10.15
BB04465	Calcium, Iron	50.75
BB04466	Sodium	101.5
BB04467	Calcium, Iron, Magnesium, Sodium	50.75
BB04469	Calcium, Iron, Magnesium, Sodium	50.75
BB04470	Calcium, Iron, Magnesium, Sodium	50.75
BB04471	Calcium, Magnesium, Sodium	10.15
BB04472	Calcium, Iron, Magnesium, Sodium	50.75
BB04671	Calcium, Iron, Magnesium, Sodium	101.5
BB04672	Calcium, Magnesium, Iron	10.15
BB04673	Calcium, Magnesium, Iron	20.3
BB04674	Calcium, Magnesium, Iron	10.15
BB04676	Calcium, Magnesium	10.15
BB04677	Calcium, Iron, Magnesium, Sodium	101.5
BB04678	Calcium, Magnesium, Iron	10.15
BB04679	Calcium, Iron	10.15

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

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

Case Narrative

Alabama Power

Dissolved Metals ICP

Gorgas Gypsum

WMWGORG_1310

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
BB04458	693839	WMWGORG_1310
BB04459	693839	WMWGORG_1310
BB04460	693839	WMWGORG_1310
BB04461	693839	WMWGORG_1310
BB04462	693839	WMWGORG_1310
BB04463	693839	WMWGORG_1310
BB04465	693839	WMWGORG_1310
BB04466	693839	WMWGORG_1310
BB04467	693839	WMWGORG_1310
BB04469	693839	WMWGORG_1310
BB04470	693840	WMWGORG_1310
BB04471	693840	WMWGORG_1310
BB04472	693840	WMWGORG_1310
BB04671	693840	WMWGORG_1310
BB04672	693840	WMWGORG_1310
BB04673	693840	WMWGORG_1310
BB04674	693840	WMWGORG_1310
BB04676	693840	WMWGORG_1310
BB04677	693840	WMWGORG_1310
BB04678	693840	WMWGORG_1310
BB04679	693841	WMWGORG_1310

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

General Quality Control Procedures:

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

Matrix Specific Quality Control Procedures:

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

- A matrix spike and matrix spike duplicate were analyzed with each ICP batch. All acceptance criteria for accuracy were met except, for the following:
    - BB04469, BB04678, and BB04679 Iron MS/MSD spike levels were less than 30% of sample nominal 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
BB04458	Iron	101.5
BB04461	Iron	10.15
BB04462	Iron	10.15
BB04465	Iron	101.5
BB04467	Iron	10.15
BB04469	Iron	101.5
BB04470	Iron	101.5
BB04472	Iron	10.15
BB04671	Iron	101.5
BB04672	Iron	10.15
BB04673	Iron	101.5
BB04674	Iron	10.15
BB04677	Iron	101.5
BB04678	Iron	10.15
BB04679	Iron	10.15

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

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

Case Narrative

Alabama Power

Total Metals ICPMS

Gorgas Gypsum

WMWGORG_1310

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
BB04458	694468	WMWGORG_1310
BB04459	694468	WMWGORG_1310
BB04460	694468	WMWGORG_1310
BB04461	694468	WMWGORG_1310
BB04462	694468	WMWGORG_1310
BB04463	694468	WMWGORG_1310
BB04464	694468	WMWGORG_1310
BB04465	694468	WMWGORG_1310
BB04466	694468	WMWGORG_1310
BB04467	694468	WMWGORG_1310
BB04468	694469	WMWGORG_1310
BB04469	694469	WMWGORG_1310
BB04470	694469	WMWGORG_1310
BB04471	694469	WMWGORG_1310
BB04472	694469	WMWGORG_1310
BB04671	694469	WMWGORG_1310
BB04672	694469	WMWGORG_1310
BB04673	694469	WMWGORG_1310
BB04674	694469	WMWGORG_1310
BB04675	694469	WMWGORG_1310
BB04676	694470	WMWGORG_1310
BB04677	694470	WMWGORG_1310
BB04678	694470	WMWGORG_1310
BB04679	694470	WMWGORG_1310

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.

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:
    - BB04467 and BB04679 Manganese MS/MSD spike levels were less than 30% of the sample nominal 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
BB04458	Mn	92.365
BB04459	Mn	5.075
BB04463	Mn	5.075
BB04465	Mn	5.075
BB04467	Mn	92.365
BB04469	Mn	92.365
BB04470	Mn	92.365
BB04471	Mn	5.075
BB04472	Mn	92.365
BB04671	Mn	92.365
BB04672	Mn	10.15
BB04673	Mn	5.075
BB04674	Mn	5.075
BB04676	Mn	92.365
BB04677	Mn	92.365
BB04678	Mn	10.15
BB04679	Mn	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_1310

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
BB04458	694423	WMWGORG_1310
BB04459	694423	WMWGORG_1310
BB04460	694423	WMWGORG_1310
BB04461	694423	WMWGORG_1310
BB04462	694423	WMWGORG_1310
BB04463	694423	WMWGORG_1310
BB04465	694423	WMWGORG_1310
BB04466	694423	WMWGORG_1310
BB04467	694423	WMWGORG_1310
BB04469	694423	WMWGORG_1310
BB04470	694424	WMWGORG_1310
BB04471	694424	WMWGORG_1310
BB04472	694424	WMWGORG_1310
BB04671	694424	WMWGORG_1310
BB04672	694424	WMWGORG_1310
BB04673	694424	WMWGORG_1310
BB04674	694424	WMWGORG_1310
BB04676	694424	WMWGORG_1310
BB04677	694424	WMWGORG_1310
BB04678	694424	WMWGORG_1310
BB04679	694425	WMWGORG_1310

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.

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:
    - BB04469, BB04678, and BB04679 Manganese MS/MSD spike levels were less than 30% of sample nominal 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
BB04458	Mn	92.365
BB04459	Mn	5.075
BB04463	Mn	5.075
BB04465	Mn	5.075
BB04467	Mn	92.365
BB04469	Mn	92.365
BB04470	Mn	92.365
BB04471	Mn	5.075
BB04472	Mn	92.365
BB04671	Mn	92.365
BB04672	Mn	10.15
BB04673	Mn	5.075
BB04674	Mn	5.075
BB04676	Mn	92.365
BB04677	Mn	92.365
BB04678	Mn	10.15
BB04679	Mn	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_1310

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
BB04458	693487	WMWGORG_1310
BB04459	693487	WMWGORG_1310
BB04460	693487	WMWGORG_1310
BB04461	693487	WMWGORG_1310
BB04462	693487	WMWGORG_1310
BB04463	693487	WMWGORG_1310
BB04464	693487	WMWGORG_1310
BB04465	693487	WMWGORG_1310
BB04466	693487	WMWGORG_1310
BB04467	693487	WMWGORG_1310
BB04468	693488	WMWGORG_1310
BB04469	693488	WMWGORG_1310
BB04470	693488	WMWGORG_1310
BB04471	693488	WMWGORG_1310
BB04472	693488	WMWGORG_1310
BB04671	693488	WMWGORG_1310
BB04672	693488	WMWGORG_1310
BB04673	693488	WMWGORG_1310
BB04674	693488	WMWGORG_1310
BB04675	693488	WMWGORG_1310
BB04676	693489	WMWGORG_1310
BB04677	693489	WMWGORG_1310
BB04678	693489	WMWGORG_1310
BB04679	693489	WMWGORG_1310

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

General Quality Control Procedures:

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

Matrix Specific Quality Control Procedures:

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

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

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

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

Case Narrative

Alabama Power

TDS

Gorgas Gypsum

WMWGORG_1310

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
BB04458	693400	WMWGORG_1310
BB04459	693400	WMWGORG_1310
BB04460	693400	WMWGORG_1310
BB04461	693400	WMWGORG_1310
BB04462	693400	WMWGORG_1310
BB04463	693400	WMWGORG_1310
BB04464	693400	WMWGORG_1310
BB04465	693400	WMWGORG_1310
BB04466	693400	WMWGORG_1310
BB04467	693400	WMWGORG_1310
BB04468	693401	WMWGORG_1310
BB04469	693401	WMWGORG_1310
BB04470	693401	WMWGORG_1310
BB04471	693401	WMWGORG_1310
BB04472	693401	WMWGORG_1310
BB04671	693453	WMWGORG_1310
BB04672	693453	WMWGORG_1310
BB04673	693453	WMWGORG_1310
BB04674	693453	WMWGORG_1310
BB04675	693453	WMWGORG_1310
BB04676	693453	WMWGORG_1310
BB04677	693453	WMWGORG_1310
BB04678	693453	WMWGORG_1310
BB04679	693453	WMWGORG_1310

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

General Quality Control Procedures:

- A Method Blank was analyzed with each batch. All criteria were met.
- All final weights of samples, standards, and blanks agreed within 0.5mg of the previous weight.
- A sample duplicate was analyzed with each batch. RPD/2 was less than 5%.
- A laboratory control sample was analyzed with each batch. All criteria were met.
- Samples were between 2.5mg and 200mg residue.
- All samples with residue <2.5mg had the maximum volume of 150mL filtered. Affected samples are as follows:
    - BB04464
    - BB04468
    - BB04675

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

Case Narrative

Alabama Power

Anions

Gorgas Gypsum

WMWGORG_1310

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
BB04458	693402, 693405, & 693408	WMWGORG_1310
BB04459	693402, 693405, & 693408	WMWGORG_1310
BB04460	693402, 693405, & 693408	WMWGORG_1310
BB04461	693402, 693405, & 693408	WMWGORG_1310
BB04462	693402, 693405, & 693408	WMWGORG_1310
BB04463	693402, 693405, & 693408	WMWGORG_1310
BB04464	693402, 693405, & 693408	WMWGORG_1310
BB04465	693402, 693405, & 693408	WMWGORG_1310
BB04466	693402, 693405, & 693408	WMWGORG_1310
BB04467	693402, 693405, & 693408	WMWGORG_1310
BB04468	693403, 693406, & 693409	WMWGORG_1310
BB04469	693403, 693406, & 693409	WMWGORG_1310
BB04470	693403, 693406, & 693409	WMWGORG_1310
BB04471	693403, 693406, & 693409	WMWGORG_1310
BB04472	693403, 693406, & 693409	WMWGORG_1310
BB04671	693404, 693407, & 693410	WMWGORG_1310
BB04672	693404, 693407, & 693410	WMWGORG_1310
BB04673	693404, 693407, & 693410	WMWGORG_1310
BB04674	693404, 693407, & 693410	WMWGORG_1310
BB04675	693404, 693407, & 693410	WMWGORG_1310
BB04676	693404, 693407, & 693410	WMWGORG_1310
BB04677	693404, 693407, & 693410	WMWGORG_1310
BB04678	693404, 693407, & 693410	WMWGORG_1310
BB04679	693404, 693407, & 693410	WMWGORG_1310

4. All of the above samples 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 half the limit of quantitation for the requested analyte.
- It is noted that the QC summary page typically provides the QC results from the original batch analytical sequence. If dilutions were subsequently performed to bring sample concentrations within the calibration range, any additional QC data from the dilution analyses may need to be obtained from the laboratory. Any qualifications applied to original analyses or dilution re-analyses are based upon QC data available at the time of review.

Matrix Specific Quality Control Procedures:

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

- A matrix spike was analyzed with each batch. Acceptance criteria for accuracy were met, except for the following:
    - BB04679 Fluoride MS recovery was outside of the specification limit due to potential matrix interference.
- A sample duplicate was analyzed with each batch. Acceptance criteria for precision were met.

7. Samples BB04674, BB04676, BB04678, and BB04679 Fluoride results are qualified due to potential matrix interference.

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
BB04458	Chloride & Sulfate	25 & 100
BB04459	Chloride & Sulfate	10 & 80
BB04460	Sulfate	16
BB04461	Sulfate	20
BB04462	Sulfate	20
BB04465	Sulfate	25
BB04466	Sulfate	10
BB04467	Chloride & Sulfate	25 & 100
BB04469	Sulfate	32
BB04470	Sulfate	32
BB04471	Sulfate	32
BB04472	Chloride & Sulfate	16 & 100
BB04671	Chloride & Sulfate	80 & 50
BB04672	Chloride & Sulfate	4 & 25
BB04673	Chloride & Sulfate	8 & 32
BB04674	Sulfate	25
BB04676	Sulfate	32
BB04677	Chloride & Sulfate	40 & 50
BB04678	Sulfate	32
BB04679	Sulfate	25

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

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

Case Narrative

Alkalinity

Gorgas Gypsum

WMWGORG_1310

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
BB04458	693809 & 693810	WMWGORG_1310
BB04459	693809 & 693810	WMWGORG_1310
BB04460	693809 & 693810	WMWGORG_1310
BB04461	693809 & 693810	WMWGORG_1310
BB04462	693809 & 693810	WMWGORG_1310
BB04463	693809 & 693810	WMWGORG_1310
BB04465	693809 & 693810	WMWGORG_1310
BB04466	693809 & 693810	WMWGORG_1310
BB04467	693809 & 693810	WMWGORG_1310
BB04469	693809 & 693810	WMWGORG_1310
BB04470	693809 & 693810	WMWGORG_1310
BB04471	693809 & 693810	WMWGORG_1310
BB04472	693809 & 693810	WMWGORG_1310
BB04671	693809 & 693810	WMWGORG_1310
BB04672	693809 & 693810	WMWGORG_1310
BB04673	693809 & 693810	WMWGORG_1310
BB04674	693809 & 693810	WMWGORG_1310
BB04676	693809 & 693810	WMWGORG_1310
BB04677	693809 & 693810	WMWGORG_1310
BB04678	693809 & 693810	WMWGORG_1310
BB04679	693809 & 693810	WMWGORG_1310

4. All of the above samples were analyzed by Standard Method 2320B, except for the following.
    - Samples BB04672, BB04674, BB04676, BB04678, and BB04679 were not performed for Alkalinity due to the initial pH readings were below the titration end point of 4.5 SU.
5. All samples were analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

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

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Gypsum - MW-3

Location Code: WMWGORG
Collected: 3/1/21 10:33
Customer ID:
Submittal Date: 3/2/21 16:15

Laboratory ID Number: BB04458

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	3/16/21 10:24	3/22/21 11:13		1.015	2.55	mg/L	0.030000	0.1015	
* Calcium, Total	3/16/21 10:24	3/22/21 13:43		101.5	514	mg/L	7.0035	40.6	
* Iron, Total	3/16/21 10:24	3/22/21 13:43		101.5	135	mg/L	0.8120	4.06	
* Lithium, Total	3/16/21 10:24	3/22/21 11:13		1.015	0.353	mg/L	0.007105	0.01999956	
* Magnesium, Total	3/16/21 10:24	3/22/21 13:43		101.5	320	mg/L	2.1315	40.6	
* Sodium, Total	3/16/21 10:24	3/22/21 13:43		101.5	183	mg/L	2.030	40.6	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Iron, Dissolved	3/15/21 11:44	3/19/21 11:48		101.5	134	mg/L	0.8120	4.06	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/4/21 14:51	3/8/21 09:52		1.015	Not Detected	mg/L	0.000507	0.001015	U
* Arsenic, Total	3/4/21 14:51	3/8/21 09:52		1.015	0.00140	mg/L	0.000068	0.000203	
* Barium, Total	3/4/21 14:51	3/8/21 09:52		1.015	0.0154	mg/L	0.000101	0.000203	
* Beryllium, Total	3/4/21 14:51	3/8/21 09:52		1.015	0.00157	mg/L	0.000406	0.001015	
* Cadmium, Total	3/4/21 14:51	3/8/21 09:52		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	3/4/21 14:51	3/8/21 09:52		1.015	0.000386	mg/L	0.000203	0.001015	J
* Cobalt, Total	3/4/21 14:51	3/8/21 09:52		1.015	0.119	mg/L	0.000068	0.000203	
* Lead, Total	3/4/21 14:51	3/8/21 09:52		1.015	0.000157	mg/L	0.000068	0.000203	J
* Molybdenum, Total	3/4/21 14:51	3/8/21 09:52		1.015	0.000220	mg/L	0.000068	0.000203	
* Potassium, Total	3/4/21 14:51	3/8/21 09:52		1.015	8.31	mg/L	0.169505	0.5075	
* Manganese, Total	3/4/21 14:51	3/8/21 14:04		92.365	53.2	mg/L	0.006188	0.018473	
* Selenium, Total	3/4/21 14:51	3/8/21 09:52		1.015	0.00141	mg/L	0.000507	0.001015	
* Thallium, Total	3/4/21 14:51	3/8/21 09:52		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Manganese, Dissolved	3/8/21 14:58	3/8/21 17:10		92.365	51.0	mg/L	0.006188	0.018473	
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	3/9/21 12:35	3/10/21 13:05		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2320 B	***Analyst: JAG***								
Alkalinity, Total as CaCO3	3/12/21 09:39	3/12/21 11:19		1	182	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: TJW***								
* Solids, Dissolved	3/5/21 14:45	3/10/21 10:30		1	4390	mg/L		250	

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

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 4/5/21

Reported: 4/7/2021
Version: 3.2
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: 3/1/21 10:33
Customer ID:
Submittal Date: 3/2/21 16:15

Laboratory ID Number: BB04458

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 4500CO2 D	***Analyst: JAG***								
Bicarbonate Alkalinity, (calc.)	3/12/21 09:39	3/12/21 11:19		1	182	mg/L			
Carbonate Alkalinity, (calc.)	3/12/21 09:39	3/12/21 11:19		1	0.04	mg/L			
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	3/4/21 12:25	3/4/21 12:25		25	250	mg/L	12.50	25	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	3/4/21 14:32	3/4/21 14:32		1	0.449	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	3/5/21 10:47	3/5/21 10:47		100	2320	mg/L	50.00	100	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	3/1/21 10:29	3/1/21 10:29			4367.28	uS/cm			FA
pH	3/1/21 10:29	3/1/21 10:29			5.82	SU			FA
Temperature	3/1/21 10:29	3/1/21 10:29			19.84	C			FA
Turbidity	3/1/21 10:29	3/1/21 10:29			7	NTU			FA

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

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 4/5/21

Reported: 4/7/2021
Version: 3.2
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: 3/1/21 10:33
Customer ID:
Delivery Date: 3/2/21 16:15

Description: Gorgas Gypsum - MW-3

Laboratory ID Number: BB04458

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB04469	Iron, Dissolved	mg/L	-0.000126	0.0176	0.2	57.1	57.2	0.206	0.170 to 0.230	-200	70.0 to 130	0.175	20.0
BB04467	Cadmium, Total	mg/L	0.00000	0.000147	0.10	0.0978	0.0963	0.0982	0.0850 to 0.115	97.8	70.0 to 130	1.48	20.0
BB04467	Chromium, Total	mg/L	-0.0000882	0.000440	0.10	0.101	0.0980	0.101	0.0850 to 0.115	101	70.0 to 130	2.95	20.0
BB04467	Selenium, Total	mg/L	0.0000276	0.00100	0.10	0.102	0.103	0.100	0.0850 to 0.115	102	70.0 to 130	0.904	20.0
BB04467	Arsenic, Total	mg/L	0.0000309	0.000147	0.10	0.106	0.107	0.102	0.0850 to 0.115	106	70.0 to 130	0.933	20.0
BB04467	Cobalt, Total	mg/L	-0.0000057	0.000147	0.10	0.106	0.104	0.102	0.0850 to 0.115	100	70.0 to 130	1.53	20.0
BB04467	Lithium, Total	mg/L	0.0000933	0.0154	0.20	0.427	0.425	0.199	0.170 to 0.230	139	70.0 to 130	0.501	20.0
BB04467	Boron, Total	mg/L	0.0116	0.0650	1.00	2.88	2.91	1.00	0.850 to 1.15	103	70.0 to 130	0.874	20.0
BB04467	Manganese, Total	mg/L	0.0000028	0.000147	0.10	17.9	17.8	0.0997	0.0850 to 0.115	1970	70.0 to 130	0.338	20.0
BB04467	Sodium, Total	mg/L	0.00165	0.0660	5.00	164	161	5.01	4.25 to 5.75	-36.4	70.0 to 130	1.37	20.0
BB04467	Lead, Total	mg/L	0.0000087	0.000147	0.10	0.0994	0.0980	0.0985	0.0850 to 0.115	99.2	70.0 to 130	1.34	20.0
BB04467	Antimony, Total	mg/L	0.000158	0.00100	0.10	0.103	0.103	0.0963	0.0850 to 0.115	103	70.0 to 130	0.454	20.0
BB04467	Magnesium, Total	mg/L	-0.00180	0.0462	5.00	241	236	5.13	4.25 to 5.75	-28.6	70.0 to 130	2.22	20.0
BB04467	Molybdenum, Total	mg/L	0.0000002	0.000147	0.10	0.100	0.102	0.0979	0.0850 to 0.115	97.3	70.0 to 130	1.94	20.0
BB04467	Thallium, Total	mg/L	0.0000071	0.000147	0.10	0.0972	0.0966	0.0976	0.0850 to 0.115	97.2	70.0 to 130	0.651	20.0
BB04467	Barium, Total	mg/L	0.0000116	0.000200	0.10	0.124	0.122	0.0978	0.0850 to 0.115	105	70.0 to 130	1.85	20.0
BB04467	Beryllium, Total	mg/L	0.0000249	0.000880	0.10	0.0897	0.0880	0.0933	0.0850 to 0.115	89.7	70.0 to 130	1.95	20.0
BB04467	Calcium, Total	mg/L	0.00266	0.152	5.00	382	379	5.25	4.25 to 5.75	-64.9	70.0 to 130	0.876	20.0
BB04467	Iron, Total	mg/L	0.000898	0.0176	0.2	13.8	13.6	0.207	0.170 to 0.230	-129	70.0 to 130	1.53	20.0
BB04467	Mercury, Total by CVAA	mg/L	0.0000428	0.000500	0.004	0.00385	0.00382	0.00430	0.00340 to 0.00460	96.2	70.0 to 130	0.782	20.0
BB04467	Potassium, Total	mg/L	0.0101	0.367	10.0	18.0	17.6	10.4	8.50 to 11.5	104	70.0 to 130	2.49	20.0
BB04469	Manganese, Dissolved	mg/L	0.000002	0.000147	0.10	16.5	16.7	0.0970	0.0850 to 0.115	-300	70.0 to 130	1.20	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 4/5/21

Reported: 4/7/2021
Version: 3.2
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: 3/1/21 10:33
Customer ID:
Delivery Date: 3/2/21 16:15

Description: Gorgas Gypsum - MW-3

Laboratory ID Number: BB04458

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB04467	Solids, Dissolved	mg/L	-1.00	25.0			2820	54.0	40.0 to 60.0			0.879	5.00
BB04467	Sulfate	mg/L	-0.578	0.500	2000	3580	1470	18.1	18.0 to 22.0	106	80.0 to 120	1.37	20.0
BB04467	Chloride	mg/L	-0.0564	0.500	250	347	82.9	10.1	9.00 to 11.0	102	80.0 to 120	10.9	20.0
BB04467	Fluoride	mg/L	0.0126	0.0500	2.50	2.63	0.106	2.64	2.25 to 2.75	101	80.0 to 120	0.00	20.0
BB04677	Alkalinity, Total as CaCO3	mg/L					324	52.3	45.0 to 55.0			0.557	10.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 4/5/21

Reported: 4/7/2021
Version: 3.2
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: 3/1/21 12:32
Customer ID:
Submittal Date: 3/2/21 16:15

Laboratory ID Number: BB04459

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	3/16/21 10:24	3/22/21 11:17		1.015	0.147	mg/L	0.030000	0.1015	
* Calcium, Total	3/16/21 10:24	3/22/21 13:46		101.5	428	mg/L	7.0035	40.6	
* Iron, Total	3/16/21 10:24	3/22/21 11:17		1.015	1.15	mg/L	0.008120	0.0406	
* Lithium, Total	3/16/21 10:24	3/22/21 11:17		1.015	0.424	mg/L	0.007105	0.01999956	
* Magnesium, Total	3/16/21 10:24	3/22/21 13:46		101.5	171	mg/L	2.1315	40.6	
* Sodium, Total	3/16/21 10:24	3/22/21 13:46		101.5	287	mg/L	2.030	40.6	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Iron, Dissolved	3/15/21 11:44	3/16/21 11:21		1.015	1.15	mg/L	0.008120	0.0406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/4/21 14:51	3/8/21 09:55		1.015	Not Detected	mg/L	0.000507	0.001015	U
* Arsenic, Total	3/4/21 14:51	3/8/21 09:55		1.015	0.00136	mg/L	0.000068	0.000203	
* Barium, Total	3/4/21 14:51	3/8/21 09:55		1.015	0.0120	mg/L	0.000101	0.000203	
* Beryllium, Total	3/4/21 14:51	3/8/21 09:55		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	3/4/21 14:51	3/8/21 09:55		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	3/4/21 14:51	3/8/21 09:55		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	3/4/21 14:51	3/8/21 09:55		1.015	0.000992	mg/L	0.000068	0.000203	
* Lead, Total	3/4/21 14:51	3/8/21 09:55		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Molybdenum, Total	3/4/21 14:51	3/8/21 09:55		1.015	0.000532	mg/L	0.000068	0.000203	
* Potassium, Total	3/4/21 14:51	3/8/21 09:55		1.015	7.92	mg/L	0.169505	0.5075	
* Manganese, Total	3/4/21 14:51	3/8/21 14:07		5.075	1.54	mg/L	0.000340	0.001015	
* Selenium, Total	3/4/21 14:51	3/8/21 09:55		1.015	Not Detected	mg/L	0.000507	0.001015	U
* Thallium, Total	3/4/21 14:51	3/8/21 09:55		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Manganese, Dissolved	3/8/21 14:58	3/8/21 17:13		5.075	1.41	mg/L	0.000340	0.001015	
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	3/9/21 12:35	3/10/21 13:07		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2320 B	***Analyst: JAG***								
Alkalinity, Total as CaCO3	3/12/21 09:39	3/12/21 11:19		1	362	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: TJW***								
* Solids, Dissolved	3/5/21 14:45	3/10/21 10:30		1	3140	mg/L		62.5	

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

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 4/5/21

Reported: 4/7/2021
Version: 3.2
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: 3/1/21 12:32
Customer ID:
Submittal Date: 3/2/21 16:15

Laboratory ID Number: BB04459

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 4500CO2 D	***Analyst: JAG***								
Bicarbonate Alkalinity, (calc.)	3/12/21 09:39	3/12/21 11:19		1	362	mg/L			
Carbonate Alkalinity, (calc.)	3/12/21 09:39	3/12/21 11:19		1	0.52	mg/L			
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	3/4/21 12:27	3/4/21 12:27		10	58.7	mg/L	5.00	10	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	3/4/21 14:33	3/4/21 14:33		1	0.120	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	3/5/21 10:48	3/5/21 10:48		80	1680	mg/L	40.00	80	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	3/1/21 12:28	3/1/21 12:28			3469.67	uS/cm			FA
pH	3/1/21 12:28	3/1/21 12:28			6.84	SU			FA
Temperature	3/1/21 12:28	3/1/21 12:28			18.97	C			FA
Turbidity	3/1/21 12:28	3/1/21 12:28			0.76	NTU			FA

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

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 4/5/21

Reported: 4/7/2021
Version: 3.2
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: 3/1/21 12:32
Customer ID:
Delivery Date: 3/2/21 16:15

Description: Gorgas Gypsum - MW-9V

Laboratory ID Number: BB04459

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB04469	Iron, Dissolved	mg/L	-0.000126	0.0176	0.2	57.1	57.2	0.206	0.170 to 0.230	-200	70.0 to 130	0.175	20.0
BB04467	Cadmium, Total	mg/L	0.00000	0.000147	0.10	0.0978	0.0963	0.0982	0.0850 to 0.115	97.8	70.0 to 130	1.48	20.0
BB04467	Chromium, Total	mg/L	-0.0000882	0.000440	0.10	0.101	0.0980	0.101	0.0850 to 0.115	101	70.0 to 130	2.95	20.0
BB04467	Selenium, Total	mg/L	0.0000276	0.00100	0.10	0.102	0.103	0.100	0.0850 to 0.115	102	70.0 to 130	0.904	20.0
BB04467	Magnesium, Total	mg/L	-0.00180	0.0462	5.00	241	236	5.13	4.25 to 5.75	-28.6	70.0 to 130	2.22	20.0
BB04467	Molybdenum, Total	mg/L	0.0000002	0.000147	0.10	0.100	0.102	0.0979	0.0850 to 0.115	97.3	70.0 to 130	1.94	20.0
BB04467	Thallium, Total	mg/L	0.0000071	0.000147	0.10	0.0972	0.0966	0.0976	0.0850 to 0.115	97.2	70.0 to 130	0.651	20.0
BB04467	Boron, Total	mg/L	0.0116	0.0650	1.00	2.88	2.91	1.00	0.850 to 1.15	103	70.0 to 130	0.874	20.0
BB04467	Manganese, Total	mg/L	0.0000028	0.000147	0.10	17.9	17.8	0.0997	0.0850 to 0.115	1970	70.0 to 130	0.338	20.0
BB04467	Sodium, Total	mg/L	0.00165	0.0660	5.00	164	161	5.01	4.25 to 5.75	-36.4	70.0 to 130	1.37	20.0
BB04467	Lead, Total	mg/L	0.0000087	0.000147	0.10	0.0994	0.0980	0.0985	0.0850 to 0.115	99.2	70.0 to 130	1.34	20.0
BB04467	Antimony, Total	mg/L	0.000158	0.00100	0.10	0.103	0.103	0.0963	0.0850 to 0.115	103	70.0 to 130	0.454	20.0
BB04467	Arsenic, Total	mg/L	0.0000309	0.000147	0.10	0.106	0.107	0.102	0.0850 to 0.115	106	70.0 to 130	0.933	20.0
BB04467	Cobalt, Total	mg/L	-0.0000057	0.000147	0.10	0.106	0.104	0.102	0.0850 to 0.115	100	70.0 to 130	1.53	20.0
BB04467	Lithium, Total	mg/L	0.0000933	0.0154	0.20	0.427	0.425	0.199	0.170 to 0.230	139	70.0 to 130	0.501	20.0
BB04467	Barium, Total	mg/L	0.0000116	0.000200	0.10	0.124	0.122	0.0978	0.0850 to 0.115	105	70.0 to 130	1.85	20.0
BB04467	Beryllium, Total	mg/L	0.0000249	0.000880	0.10	0.0897	0.0880	0.0933	0.0850 to 0.115	89.7	70.0 to 130	1.95	20.0
BB04467	Calcium, Total	mg/L	0.00266	0.152	5.00	382	379	5.25	4.25 to 5.75	-64.9	70.0 to 130	0.876	20.0
BB04467	Iron, Total	mg/L	0.000898	0.0176	0.2	13.8	13.6	0.207	0.170 to 0.230	-129	70.0 to 130	1.53	20.0
BB04467	Mercury, Total by CVAA	mg/L	0.0000428	0.000500	0.004	0.00385	0.00382	0.00430	0.00340 to 0.00460	96.2	70.0 to 130	0.782	20.0
BB04467	Potassium, Total	mg/L	0.0101	0.367	10.0	18.0	17.6	10.4	8.50 to 11.5	104	70.0 to 130	2.49	20.0
BB04469	Manganese, Dissolved	mg/L	0.000002	0.000147	0.10	16.5	16.7	0.0970	0.0850 to 0.115	-300	70.0 to 130	1.20	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 4/5/21

Reported: 4/7/2021
Version: 3.2
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: 3/1/21 12:32
Customer ID:
Delivery Date: 3/2/21 16:15

Description: Gorgas Gypsum - MW-9V

Laboratory ID Number: BB04459

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB04467	Solids, Dissolved	mg/L	-1.00	25.0			2820	54.0	40.0 to 60.0			0.879	5.00
BB04467	Sulfate	mg/L	-0.578	0.500	2000	3580	1470	18.1	18.0 to 22.0	106	80.0 to 120	1.37	20.0
BB04677	Alkalinity, Total as CaCO3	mg/L					324	52.3	45.0 to 55.0			0.557	10.0
BB04467	Chloride	mg/L	-0.0564	0.500	250	347	82.9	10.1	9.00 to 11.0	102	80.0 to 120	10.9	20.0
BB04467	Fluoride	mg/L	0.0126	0.0500	2.50	2.63	0.106	2.64	2.25 to 2.75	101	80.0 to 120	0.00	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 4/5/21

Reported: 4/7/2021
Version: 3.2
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: 3/2/21 08:49
Customer ID:
Submittal Date: 3/2/21 16:15

Laboratory ID Number: BB04460

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	3/16/21 10:24	3/22/21 11:20		1.015	0.0660	mg/L	0.030000	0.1015	J
* Calcium, Total	3/16/21 10:24	3/22/21 13:50		10.15	112	mg/L	0.70035	4.06	
* Iron, Total	3/16/21 10:24	3/22/21 11:20		1.015	3.17	mg/L	0.008120	0.0406	
* Lithium, Total	3/16/21 10:24	3/22/21 11:20		1.015	0.0822	mg/L	0.007105	0.01999956	
* Magnesium, Total	3/16/21 10:24	3/22/21 13:50		10.15	51.2	mg/L	0.21315	4.06	
* Sodium, Total	3/16/21 10:24	3/22/21 13:50		10.15	123	mg/L	0.2030	4.06	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Iron, Dissolved	3/15/21 11:44	3/16/21 11:24		1.015	3.07	mg/L	0.008120	0.0406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/4/21 14:51	3/8/21 09:59		1.015	Not Detected	mg/L	0.000507	0.001015	U
* Arsenic, Total	3/4/21 14:51	3/8/21 09:59		1.015	0.00218	mg/L	0.000068	0.000203	
* Barium, Total	3/4/21 14:51	3/8/21 09:59		1.015	0.0409	mg/L	0.000101	0.000203	
* Beryllium, Total	3/4/21 14:51	3/8/21 09:59		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	3/4/21 14:51	3/8/21 09:59		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	3/4/21 14:51	3/8/21 09:59		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	3/4/21 14:51	3/8/21 09:59		1.015	0.000808	mg/L	0.000068	0.000203	
* Lead, Total	3/4/21 14:51	3/8/21 09:59		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Molybdenum, Total	3/4/21 14:51	3/8/21 09:59		1.015	0.000804	mg/L	0.000068	0.000203	
* Potassium, Total	3/4/21 14:51	3/8/21 09:59		1.015	5.72	mg/L	0.169505	0.5075	
* Manganese, Total	3/4/21 14:51	3/8/21 09:59		1.015	0.861	mg/L	0.000068	0.000203	
* Selenium, Total	3/4/21 14:51	3/8/21 09:59		1.015	Not Detected	mg/L	0.000507	0.001015	U
* Thallium, Total	3/4/21 14:51	3/8/21 09:59		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Manganese, Dissolved	3/8/21 14:58	3/8/21 15:44		1.015	0.866	mg/L	0.000068	0.000203	
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	3/9/21 12:35	3/10/21 13:10		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2320 B	***Analyst: JAG***								
Alkalinity, Total as CaCO3	3/12/21 09:39	3/12/21 11:19		1	475	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: TJW***								
* Solids, Dissolved	3/5/21 14:45	3/10/21 10:30		1	737	mg/L		83.3	

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

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 4/5/21

Reported: 4/7/2021
Version: 3.2
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: 3/2/21 08:49
Customer ID:
Submittal Date: 3/2/21 16:15

Laboratory ID Number: BB04460

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 4500CO2 D	***Analyst: JAG***								
Bicarbonate Alkalinity, (calc.)	3/12/21 09:39	3/12/21 11:19		1	474	mg/L			
Carbonate Alkalinity, (calc.)	3/12/21 09:39	3/12/21 11:19		1	0.36	mg/L			
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	3/4/21 12:28	3/4/21 12:28		1	15.8	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	3/4/21 14:34	3/4/21 14:34		1	0.210	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	3/5/21 10:49	3/5/21 10:49		16	243	mg/L	8.00	16	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	3/2/21 08:45	3/2/21 08:45			1254.57	uS/cm			FA
pH	3/2/21 08:45	3/2/21 08:45			6.46	SU			FA
Temperature	3/2/21 08:45	3/2/21 08:45			17.14	C			FA
Turbidity	3/2/21 08:45	3/2/21 08:45			1.62	NTU			FA

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

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 4/5/21

Reported: 4/7/2021
Version: 3.2
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: 3/2/21 08:49
Customer ID:
Delivery Date: 3/2/21 16:15

Description: Gorgas Gypsum - PZ-19

Laboratory ID Number: BB04460

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB04469	Iron, Dissolved	mg/L	-0.000126	0.0176	0.2	57.1	57.2	0.206	0.170 to 0.230	-200	70.0 to 130	0.175	20.0
BB04467	Cadmium, Total	mg/L	0.00000	0.000147	0.10	0.0978	0.0963	0.0982	0.0850 to 0.115	97.8	70.0 to 130	1.48	20.0
BB04467	Chromium, Total	mg/L	-0.0000882	0.000440	0.10	0.101	0.0980	0.101	0.0850 to 0.115	101	70.0 to 130	2.95	20.0
BB04467	Selenium, Total	mg/L	0.0000276	0.00100	0.10	0.102	0.103	0.100	0.0850 to 0.115	102	70.0 to 130	0.904	20.0
BB04467	Arsenic, Total	mg/L	0.0000309	0.000147	0.10	0.106	0.107	0.102	0.0850 to 0.115	106	70.0 to 130	0.933	20.0
BB04467	Cobalt, Total	mg/L	-0.0000057	0.000147	0.10	0.106	0.104	0.102	0.0850 to 0.115	100	70.0 to 130	1.53	20.0
BB04467	Lithium, Total	mg/L	0.0000933	0.0154	0.20	0.427	0.425	0.199	0.170 to 0.230	139	70.0 to 130	0.501	20.0
BB04467	Magnesium, Total	mg/L	-0.00180	0.0462	5.00	241	236	5.13	4.25 to 5.75	-28.6	70.0 to 130	2.22	20.0
BB04467	Molybdenum, Total	mg/L	0.0000002	0.000147	0.10	0.100	0.102	0.0979	0.0850 to 0.115	97.3	70.0 to 130	1.94	20.0
BB04467	Thallium, Total	mg/L	0.0000071	0.000147	0.10	0.0972	0.0966	0.0976	0.0850 to 0.115	97.2	70.0 to 130	0.651	20.0
BB04467	Barium, Total	mg/L	0.0000116	0.000200	0.10	0.124	0.122	0.0978	0.0850 to 0.115	105	70.0 to 130	1.85	20.0
BB04467	Beryllium, Total	mg/L	0.0000249	0.000880	0.10	0.0897	0.0880	0.0933	0.0850 to 0.115	89.7	70.0 to 130	1.95	20.0
BB04467	Calcium, Total	mg/L	0.00266	0.152	5.00	382	379	5.25	4.25 to 5.75	-64.9	70.0 to 130	0.876	20.0
BB04467	Iron, Total	mg/L	0.000898	0.0176	0.2	13.8	13.6	0.207	0.170 to 0.230	-129	70.0 to 130	1.53	20.0
BB04467	Mercury, Total by CVAA	mg/L	0.0000428	0.000500	0.004	0.00385	0.00382	0.00430	0.00340 to 0.00460	96.2	70.0 to 130	0.782	20.0
BB04467	Potassium, Total	mg/L	0.0101	0.367	10.0	18.0	17.6	10.4	8.50 to 11.5	104	70.0 to 130	2.49	20.0
BB04469	Manganese, Dissolved	mg/L	0.000002	0.000147	0.10	16.5	16.7	0.0970	0.0850 to 0.115	-300	70.0 to 130	1.20	20.0
BB04467	Boron, Total	mg/L	0.0116	0.0650	1.00	2.88	2.91	1.00	0.850 to 1.15	103	70.0 to 130	0.874	20.0
BB04467	Manganese, Total	mg/L	0.0000028	0.000147	0.10	17.9	17.8	0.0997	0.0850 to 0.115	1970	70.0 to 130	0.338	20.0
BB04467	Sodium, Total	mg/L	0.00165	0.0660	5.00	164	161	5.01	4.25 to 5.75	-36.4	70.0 to 130	1.37	20.0
BB04467	Lead, Total	mg/L	0.0000087	0.000147	0.10	0.0994	0.0980	0.0985	0.0850 to 0.115	99.2	70.0 to 130	1.34	20.0
BB04467	Antimony, Total	mg/L	0.000158	0.00100	0.10	0.103	0.103	0.0963	0.0850 to 0.115	103	70.0 to 130	0.454	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 4/5/21

Reported: 4/7/2021
Version: 3.2
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: 3/2/21 08:49
Customer ID:
Delivery Date: 3/2/21 16:15

Description: Gorgas Gypsum - PZ-19

Laboratory ID Number: BB04460

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB04467	Solids, Dissolved	mg/L	-1.00	25.0			2820	54.0	40.0 to 60.0			0.879	5.00
BB04677	Alkalinity, Total as CaCO3	mg/L					324	52.3	45.0 to 55.0			0.557	10.0
BB04467	Sulfate	mg/L	-0.578	0.500	2000	3580	1470	18.1	18.0 to 22.0	106	80.0 to 120	1.37	20.0
BB04467	Chloride	mg/L	-0.0564	0.500	250	347	82.9	10.1	9.00 to 11.0	102	80.0 to 120	10.9	20.0
BB04467	Fluoride	mg/L	0.0126	0.0500	2.50	2.63	0.106	2.64	2.25 to 2.75	101	80.0 to 120	0.00	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 4/5/21

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: 3/2/21 09:53
Customer ID:
Submittal Date: 3/2/21 16:15

Laboratory ID Number: BB04461

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	3/16/21 10:24	3/22/21 11:23		1.015	0.0806	mg/L	0.030000	0.1015	J
* Calcium, Total	3/16/21 10:24	3/22/21 13:53		10.15	89.1	mg/L	0.70035	4.06	
* Iron, Total	3/16/21 10:24	3/22/21 13:53		10.15	5.20	mg/L	0.08120	0.406	
* Lithium, Total	3/16/21 10:24	3/22/21 11:23		1.015	0.0992	mg/L	0.007105	0.01999956	
* Magnesium, Total	3/16/21 10:24	3/22/21 13:53		10.15	48.1	mg/L	0.21315	4.06	
* Sodium, Total	3/16/21 10:24	3/22/21 13:53		10.15	102	mg/L	0.2030	4.06	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Iron, Dissolved	3/15/21 11:44	3/19/21 11:51		10.15	5.10	mg/L	0.08120	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/4/21 14:51	3/8/21 10:02		1.015	Not Detected	mg/L	0.000507	0.001015	U
* Arsenic, Total	3/4/21 14:51	3/8/21 10:02		1.015	0.00234	mg/L	0.000068	0.000203	
* Barium, Total	3/4/21 14:51	3/8/21 10:02		1.015	0.0205	mg/L	0.000101	0.000203	
* Beryllium, Total	3/4/21 14:51	3/8/21 10:02		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	3/4/21 14:51	3/8/21 10:02		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	3/4/21 14:51	3/8/21 10:02		1.015	0.000216	mg/L	0.000203	0.001015	J
* Cobalt, Total	3/4/21 14:51	3/8/21 10:02		1.015	0.00254	mg/L	0.000068	0.000203	
* Lead, Total	3/4/21 14:51	3/8/21 10:02		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Molybdenum, Total	3/4/21 14:51	3/8/21 10:02		1.015	0.00125	mg/L	0.000068	0.000203	
* Potassium, Total	3/4/21 14:51	3/8/21 10:02		1.015	4.57	mg/L	0.169505	0.5075	
* Manganese, Total	3/4/21 14:51	3/8/21 10:02		1.015	0.246	mg/L	0.000068	0.000203	
* Selenium, Total	3/4/21 14:51	3/8/21 10:02		1.015	0.00222	mg/L	0.000507	0.001015	
* Thallium, Total	3/4/21 14:51	3/8/21 10:02		1.015	0.000206	mg/L	0.000068	0.000203	
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Manganese, Dissolved	3/8/21 14:58	3/8/21 15:46		1.015	0.253	mg/L	0.000068	0.000203	
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	3/9/21 12:35	3/10/21 13:12		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2320 B	***Analyst: JAG***								
Alkalinity, Total as CaCO3	3/12/21 09:39	3/12/21 11:19		1	252	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: TJW***								
* Solids, Dissolved	3/5/21 14:45	3/10/21 10:30		1	774	mg/L		50	

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

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 4/5/21

Reported: 4/7/2021
Version: 3.2
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: 3/2/21 09:53
Customer ID:
Submittal Date: 3/2/21 16:15

Laboratory ID Number: BB04461

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 4500CO2 D	***Analyst: JAG***								
Bicarbonate Alkalinity, (calc.)	3/12/21 09:39	3/12/21 11:19		1	252	mg/L			
Carbonate Alkalinity, (calc.)	3/12/21 09:39	3/12/21 11:19		1	0.08	mg/L			
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	3/4/21 12:29	3/4/21 12:29		1	11.6	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	3/4/21 14:35	3/4/21 14:35		1	0.191	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	3/5/21 10:50	3/5/21 10:50		20	344	mg/L	10.00	20	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	3/2/21 09:50	3/2/21 09:50			1189.19	uS/cm			FA
pH	3/2/21 09:50	3/2/21 09:50			6.23	SU			FA
Temperature	3/2/21 09:50	3/2/21 09:50			17.07	C			FA
Turbidity	3/2/21 09:50	3/2/21 09:50			3.39	NTU			FA

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

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 4/5/21

Reported: 4/7/2021
Version: 3.2
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: 3/2/21 09:53
Customer ID:
Delivery Date: 3/2/21 16:15

Description: Gorgas Gypsum - PZ-20

Laboratory ID Number: BB04461

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB04469	Iron, Dissolved	mg/L	-0.000126	0.0176	0.2	57.1	57.2	0.206	0.170 to 0.230	-200	70.0 to 130	0.175	20.0
BB04467	Cadmium, Total	mg/L	0.00000	0.000147	0.10	0.0978	0.0963	0.0982	0.0850 to 0.115	97.8	70.0 to 130	1.48	20.0
BB04467	Chromium, Total	mg/L	-0.0000882	0.000440	0.10	0.101	0.0980	0.101	0.0850 to 0.115	101	70.0 to 130	2.95	20.0
BB04467	Selenium, Total	mg/L	0.0000276	0.00100	0.10	0.102	0.103	0.100	0.0850 to 0.115	102	70.0 to 130	0.904	20.0
BB04467	Arsenic, Total	mg/L	0.0000309	0.000147	0.10	0.106	0.107	0.102	0.0850 to 0.115	106	70.0 to 130	0.933	20.0
BB04467	Cobalt, Total	mg/L	-0.0000057	0.000147	0.10	0.106	0.104	0.102	0.0850 to 0.115	100	70.0 to 130	1.53	20.0
BB04467	Lithium, Total	mg/L	0.0000933	0.0154	0.20	0.427	0.425	0.199	0.170 to 0.230	139	70.0 to 130	0.501	20.0
BB04467	Boron, Total	mg/L	0.0116	0.0650	1.00	2.88	2.91	1.00	0.850 to 1.15	103	70.0 to 130	0.874	20.0
BB04467	Manganese, Total	mg/L	0.0000028	0.000147	0.10	17.9	17.8	0.0997	0.0850 to 0.115	1970	70.0 to 130	0.338	20.0
BB04467	Sodium, Total	mg/L	0.00165	0.0660	5.00	164	161	5.01	4.25 to 5.75	-36.4	70.0 to 130	1.37	20.0
BB04467	Lead, Total	mg/L	0.0000087	0.000147	0.10	0.0994	0.0980	0.0985	0.0850 to 0.115	99.2	70.0 to 130	1.34	20.0
BB04467	Antimony, Total	mg/L	0.000158	0.00100	0.10	0.103	0.103	0.0963	0.0850 to 0.115	103	70.0 to 130	0.454	20.0
BB04467	Barium, Total	mg/L	0.0000116	0.000200	0.10	0.124	0.122	0.0978	0.0850 to 0.115	105	70.0 to 130	1.85	20.0
BB04467	Beryllium, Total	mg/L	0.0000249	0.000880	0.10	0.0897	0.0880	0.0933	0.0850 to 0.115	89.7	70.0 to 130	1.95	20.0
BB04467	Calcium, Total	mg/L	0.00266	0.152	5.00	382	379	5.25	4.25 to 5.75	-64.9	70.0 to 130	0.876	20.0
BB04467	Iron, Total	mg/L	0.000898	0.0176	0.2	13.8	13.6	0.207	0.170 to 0.230	-129	70.0 to 130	1.53	20.0
BB04467	Mercury, Total by CVAA	mg/L	0.0000428	0.000500	0.004	0.00385	0.00382	0.00430	0.00340 to 0.00460	96.2	70.0 to 130	0.782	20.0
BB04467	Potassium, Total	mg/L	0.0101	0.367	10.0	18.0	17.6	10.4	8.50 to 11.5	104	70.0 to 130	2.49	20.0
BB04469	Manganese, Dissolved	mg/L	0.000002	0.000147	0.10	16.5	16.7	0.0970	0.0850 to 0.115	-300	70.0 to 130	1.20	20.0
BB04467	Magnesium, Total	mg/L	-0.00180	0.0462	5.00	241	236	5.13	4.25 to 5.75	-28.6	70.0 to 130	2.22	20.0
BB04467	Molybdenum, Total	mg/L	0.0000002	0.000147	0.10	0.100	0.102	0.0979	0.0850 to 0.115	97.3	70.0 to 130	1.94	20.0
BB04467	Thallium, Total	mg/L	0.0000071	0.000147	0.10	0.0972	0.0966	0.0976	0.0850 to 0.115	97.2	70.0 to 130	0.651	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 4/5/21

Reported: 4/7/2021
Version: 3.2
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: 3/2/21 09:53
Customer ID:
Delivery Date: 3/2/21 16:15

Description: Gorgas Gypsum - PZ-20

Laboratory ID Number: BB04461

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB04467	Solids, Dissolved	mg/L	-1.00	25.0			2820	54.0	40.0 to 60.0			0.879	5.00
BB04677	Alkalinity, Total as CaCO3	mg/L					324	52.3	45.0 to 55.0			0.557	10.0
BB04467	Sulfate	mg/L	-0.578	0.500	2000	3580	1470	18.1	18.0 to 22.0	106	80.0 to 120	1.37	20.0
BB04467	Chloride	mg/L	-0.0564	0.500	250	347	82.9	10.1	9.00 to 11.0	102	80.0 to 120	10.9	20.0
BB04467	Fluoride	mg/L	0.0126	0.0500	2.50	2.63	0.106	2.64	2.25 to 2.75	101	80.0 to 120	0.00	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 4/5/21

Reported: 4/7/2021
Version: 3.2
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 DUP

Location Code: WMWGORG
Collected: 3/2/21 09:53
Customer ID:
Submittal Date: 3/2/21 16:15

Laboratory ID Number: BB04462

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	3/16/21 10:24	3/22/21 11:27		1.015	0.0793	mg/L	0.030000	0.1015	J
* Calcium, Total	3/16/21 10:24	3/22/21 13:56		10.15	90.5	mg/L	0.70035	4.06	
* Iron, Total	3/16/21 10:24	3/22/21 13:56		10.15	5.23	mg/L	0.08120	0.406	
* Lithium, Total	3/16/21 10:24	3/22/21 11:27		1.015	0.0998	mg/L	0.007105	0.01999956	
* Magnesium, Total	3/16/21 10:24	3/22/21 13:56		10.15	48.0	mg/L	0.21315	4.06	
* Sodium, Total	3/16/21 10:24	3/22/21 13:56		10.15	101	mg/L	0.2030	4.06	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Iron, Dissolved	3/15/21 11:44	3/19/21 11:55		10.15	4.95	mg/L	0.08120	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/4/21 14:51	3/8/21 10:06		1.015	Not Detected	mg/L	0.000507	0.001015	U
* Arsenic, Total	3/4/21 14:51	3/8/21 10:06		1.015	0.00243	mg/L	0.000068	0.000203	
* Barium, Total	3/4/21 14:51	3/8/21 10:06		1.015	0.0208	mg/L	0.000101	0.000203	
* Beryllium, Total	3/4/21 14:51	3/8/21 10:06		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	3/4/21 14:51	3/8/21 10:06		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	3/4/21 14:51	3/8/21 10:06		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	3/4/21 14:51	3/8/21 10:06		1.015	0.00260	mg/L	0.000068	0.000203	
* Lead, Total	3/4/21 14:51	3/8/21 10:06		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Molybdenum, Total	3/4/21 14:51	3/8/21 10:06		1.015	0.00129	mg/L	0.000068	0.000203	
* Potassium, Total	3/4/21 14:51	3/8/21 10:06		1.015	4.71	mg/L	0.169505	0.5075	
* Manganese, Total	3/4/21 14:51	3/8/21 10:06		1.015	0.254	mg/L	0.000068	0.000203	
* Selenium, Total	3/4/21 14:51	3/8/21 10:06		1.015	0.00210	mg/L	0.000507	0.001015	
* Thallium, Total	3/4/21 14:51	3/8/21 10:06		1.015	0.000194	mg/L	0.000068	0.000203	J
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Manganese, Dissolved	3/8/21 14:58	3/8/21 15:49		1.015	0.252	mg/L	0.000068	0.000203	
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	3/9/21 12:35	3/10/21 13:15		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2320 B	***Analyst: JAG***								
Alkalinity, Total as CaCO3	3/12/21 09:39	3/12/21 11:19		1	252	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: TJW***								
* Solids, Dissolved	3/5/21 14:45	3/10/21 10:30		1	770	mg/L		50	

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

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 4/5/21

Reported: 4/7/2021
Version: 3.2
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 DUP

Location Code: WMWGORG
Collected: 3/2/21 09:53
Customer ID:
Submittal Date: 3/2/21 16:15

Laboratory ID Number: BB04462

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 4500CO2 D	***Analyst: JAG***								
Bicarbonate Alkalinity, (calc.)	3/12/21 09:39	3/12/21 11:19		1	252	mg/L			
Carbonate Alkalinity, (calc.)	3/12/21 09:39	3/12/21 11:19		1	0.08	mg/L			
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	3/4/21 12:30	3/4/21 12:30		1	11.6	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	3/4/21 14:36	3/4/21 14:36		1	0.195	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	3/5/21 10:52	3/5/21 10:52		20	344	mg/L	10.00	20	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	3/2/21 09:50	3/2/21 09:50			1189.19	uS/cm			FA
pH	3/2/21 09:50	3/2/21 09:50			6.23	SU			FA
Temperature	3/2/21 09:50	3/2/21 09:50			17.07	C			FA
Turbidity	3/2/21 09:50	3/2/21 09:50			3.39	NTU			FA

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

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 4/5/21

Reported: 4/7/2021
Version: 3.2
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: 3/2/21 09:53
Customer ID:
Delivery Date: 3/2/21 16:15

Description: Gorgas Gypsum - PZ-20 DUP

Laboratory ID Number: BB04462

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB04469	Iron, Dissolved	mg/L	-0.000126	0.0176	0.2	57.1	57.2	0.206	0.170 to 0.230	-200	70.0 to 130	0.175	20.0
BB04467	Arsenic, Total	mg/L	0.0000309	0.000147	0.10	0.106	0.107	0.102	0.0850 to 0.115	106	70.0 to 130	0.933	20.0
BB04467	Cobalt, Total	mg/L	-0.0000057	0.000147	0.10	0.106	0.104	0.102	0.0850 to 0.115	100	70.0 to 130	1.53	20.0
BB04467	Lithium, Total	mg/L	0.0000933	0.0154	0.20	0.427	0.425	0.199	0.170 to 0.230	139	70.0 to 130	0.501	20.0
BB04467	Cadmium, Total	mg/L	0.00000	0.000147	0.10	0.0978	0.0963	0.0982	0.0850 to 0.115	97.8	70.0 to 130	1.48	20.0
BB04467	Chromium, Total	mg/L	-0.0000882	0.000440	0.10	0.101	0.0980	0.101	0.0850 to 0.115	101	70.0 to 130	2.95	20.0
BB04467	Selenium, Total	mg/L	0.0000276	0.00100	0.10	0.102	0.103	0.100	0.0850 to 0.115	102	70.0 to 130	0.904	20.0
BB04467	Magnesium, Total	mg/L	-0.00180	0.0462	5.00	241	236	5.13	4.25 to 5.75	-28.6	70.0 to 130	2.22	20.0
BB04467	Molybdenum, Total	mg/L	0.0000002	0.000147	0.10	0.100	0.102	0.0979	0.0850 to 0.115	97.3	70.0 to 130	1.94	20.0
BB04467	Thallium, Total	mg/L	0.0000071	0.000147	0.10	0.0972	0.0966	0.0976	0.0850 to 0.115	97.2	70.0 to 130	0.651	20.0
BB04467	Boron, Total	mg/L	0.0116	0.0650	1.00	2.88	2.91	1.00	0.850 to 1.15	103	70.0 to 130	0.874	20.0
BB04467	Manganese, Total	mg/L	0.0000028	0.000147	0.10	17.9	17.8	0.0997	0.0850 to 0.115	1970	70.0 to 130	0.338	20.0
BB04467	Sodium, Total	mg/L	0.00165	0.0660	5.00	164	161	5.01	4.25 to 5.75	-36.4	70.0 to 130	1.37	20.0
BB04467	Lead, Total	mg/L	0.0000087	0.000147	0.10	0.0994	0.0980	0.0985	0.0850 to 0.115	99.2	70.0 to 130	1.34	20.0
BB04467	Antimony, Total	mg/L	0.000158	0.00100	0.10	0.103	0.103	0.0963	0.0850 to 0.115	103	70.0 to 130	0.454	20.0
BB04467	Barium, Total	mg/L	0.0000116	0.000200	0.10	0.124	0.122	0.0978	0.0850 to 0.115	105	70.0 to 130	1.85	20.0
BB04467	Beryllium, Total	mg/L	0.0000249	0.000880	0.10	0.0897	0.0880	0.0933	0.0850 to 0.115	89.7	70.0 to 130	1.95	20.0
BB04467	Calcium, Total	mg/L	0.00266	0.152	5.00	382	379	5.25	4.25 to 5.75	-64.9	70.0 to 130	0.876	20.0
BB04467	Iron, Total	mg/L	0.000898	0.0176	0.2	13.8	13.6	0.207	0.170 to 0.230	-129	70.0 to 130	1.53	20.0
BB04467	Mercury, Total by CVAA	mg/L	0.0000428	0.000500	0.004	0.00385	0.00382	0.00430	0.00340 to 0.00460	96.2	70.0 to 130	0.782	20.0
BB04467	Potassium, Total	mg/L	0.0101	0.367	10.0	18.0	17.6	10.4	8.50 to 11.5	104	70.0 to 130	2.49	20.0
BB04469	Manganese, Dissolved	mg/L	0.000002	0.000147	0.10	16.5	16.7	0.0970	0.0850 to 0.115	-300	70.0 to 130	1.20	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 4/5/21

Reported: 4/7/2021
Version: 3.2
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: 3/2/21 09:53
Customer ID:
Delivery Date: 3/2/21 16:15

Description: Gorgas Gypsum - PZ-20 DUP

Laboratory ID Number: BB04462

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB04467	Solids, Dissolved	mg/L	-1.00	25.0			2820	54.0	40.0 to 60.0			0.879	5.00
BB04467	Sulfate	mg/L	-0.578	0.500	2000	3580	1470	18.1	18.0 to 22.0	106	80.0 to 120	1.37	20.0
BB04677	Alkalinity, Total as CaCO3	mg/L					324	52.3	45.0 to 55.0			0.557	10.0
BB04467	Chloride	mg/L	-0.0564	0.500	250	347	82.9	10.1	9.00 to 11.0	102	80.0 to 120	10.9	20.0
BB04467	Fluoride	mg/L	0.0126	0.0500	2.50	2.63	0.106	2.64	2.25 to 2.75	101	80.0 to 120	0.00	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 4/5/21

Reported: 4/7/2021
Version: 3.2
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: 3/2/21 11:32
Customer ID:
Submittal Date: 3/2/21 16:15

Laboratory ID Number: BB04463

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	3/16/21 10:24	3/22/21 11:30		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	3/16/21 10:24	3/22/21 11:30		1.015	36.1	mg/L	0.070035	0.406	
* Iron, Total	3/16/21 10:24	3/22/21 11:30		1.015	3.73	mg/L	0.008120	0.0406	
* Lithium, Total	3/16/21 10:24	3/22/21 11:30		1.015	0.0168	mg/L	0.007105	0.01999956	J
* Magnesium, Total	3/16/21 10:24	3/22/21 11:30		1.015	34.4	mg/L	0.021315	0.406	
* Sodium, Total	3/16/21 10:24	3/22/21 14:00		10.15	94.6	mg/L	0.2030	4.06	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Iron, Dissolved	3/15/21 11:44	3/16/21 11:35		1.015	3.69	mg/L	0.008120	0.0406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/4/21 14:51	3/8/21 10:09		1.015	Not Detected	mg/L	0.000507	0.001015	U
* Arsenic, Total	3/4/21 14:51	3/8/21 10:09		1.015	0.00237	mg/L	0.000068	0.000203	
* Barium, Total	3/4/21 14:51	3/8/21 10:09		1.015	0.134	mg/L	0.000101	0.000203	
* Beryllium, Total	3/4/21 14:51	3/8/21 10:09		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	3/4/21 14:51	3/8/21 10:09		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	3/4/21 14:51	3/8/21 10:09		1.015	0.000244	mg/L	0.000203	0.001015	J
* Cobalt, Total	3/4/21 14:51	3/8/21 10:09		1.015	0.00193	mg/L	0.000068	0.000203	
* Lead, Total	3/4/21 14:51	3/8/21 10:09		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Molybdenum, Total	3/4/21 14:51	3/8/21 10:09		1.015	0.00353	mg/L	0.000068	0.000203	
* Potassium, Total	3/4/21 14:51	3/8/21 10:09		1.015	2.62	mg/L	0.169505	0.5075	
* Manganese, Total	3/4/21 14:51	3/8/21 14:11		5.075	1.88	mg/L	0.000340	0.001015	
* Selenium, Total	3/4/21 14:51	3/8/21 10:09		1.015	Not Detected	mg/L	0.000507	0.001015	U
* Thallium, Total	3/4/21 14:51	3/8/21 10:09		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Manganese, Dissolved	3/8/21 14:58	3/8/21 17:16		5.075	1.69	mg/L	0.000340	0.001015	
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	3/9/21 12:35	3/10/21 13:17		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2320 B	***Analyst: JAG***								
Alkalinity, Total as CaCO3	3/12/21 09:39	3/12/21 11:19		1	464	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: TJW***								
* Solids, Dissolved	3/5/21 14:45	3/10/21 10:30		1	445	mg/L		25	

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

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 4/5/21

Reported: 4/7/2021
Version: 3.2
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: 3/2/21 11:32
Customer ID:
Submittal Date: 3/2/21 16:15

Laboratory ID Number: BB04463

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 4500CO2 D	***Analyst: JAG***								
Bicarbonate Alkalinity, (calc.)	3/12/21 09:39	3/12/21 11:19		1	463	mg/L			
Carbonate Alkalinity, (calc.)	3/12/21 09:39	3/12/21 11:19		1	0.52	mg/L			
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	3/4/21 12:36	3/4/21 12:36		1	12.6	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	3/4/21 14:38	3/4/21 14:38		1	0.319	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	3/5/21 10:53	3/5/21 10:53		1	22.7	mg/L	0.50	1	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	3/2/21 11:29	3/2/21 11:29			784.30	uS/cm			FA
pH	3/2/21 11:29	3/2/21 11:29			6.87	SU			FA
Temperature	3/2/21 11:29	3/2/21 11:29			16.25	C			FA
Turbidity	3/2/21 11:29	3/2/21 11:29			1.01	NTU			FA

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

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 4/5/21

Reported: 4/7/2021
Version: 3.2
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: 3/2/21 11:32
Customer ID:
Delivery Date: 3/2/21 16:15

Description: Gorgas Gypsum - PZ-21

Laboratory ID Number: BB04463

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB04469	Iron, Dissolved	mg/L	-0.000126	0.0176	0.2	57.1	57.2	0.206	0.170 to 0.230	-200	70.0 to 130	0.175	20.0
BB04467	Cadmium, Total	mg/L	0.00000	0.000147	0.10	0.0978	0.0963	0.0982	0.0850 to 0.115	97.8	70.0 to 130	1.48	20.0
BB04467	Chromium, Total	mg/L	-0.0000882	0.000440	0.10	0.101	0.0980	0.101	0.0850 to 0.115	101	70.0 to 130	2.95	20.0
BB04467	Selenium, Total	mg/L	0.0000276	0.00100	0.10	0.102	0.103	0.100	0.0850 to 0.115	102	70.0 to 130	0.904	20.0
BB04467	Boron, Total	mg/L	0.0116	0.0650	1.00	2.88	2.91	1.00	0.850 to 1.15	103	70.0 to 130	0.874	20.0
BB04467	Manganese, Total	mg/L	0.0000028	0.000147	0.10	17.9	17.8	0.0997	0.0850 to 0.115	1970	70.0 to 130	0.338	20.0
BB04467	Sodium, Total	mg/L	0.00165	0.0660	5.00	164	161	5.01	4.25 to 5.75	-36.4	70.0 to 130	1.37	20.0
BB04467	Lead, Total	mg/L	0.0000087	0.000147	0.10	0.0994	0.0980	0.0985	0.0850 to 0.115	99.2	70.0 to 130	1.34	20.0
BB04467	Antimony, Total	mg/L	0.000158	0.00100	0.10	0.103	0.103	0.0963	0.0850 to 0.115	103	70.0 to 130	0.454	20.0
BB04467	Arsenic, Total	mg/L	0.0000309	0.000147	0.10	0.106	0.107	0.102	0.0850 to 0.115	106	70.0 to 130	0.933	20.0
BB04467	Cobalt, Total	mg/L	-0.0000057	0.000147	0.10	0.106	0.104	0.102	0.0850 to 0.115	100	70.0 to 130	1.53	20.0
BB04467	Lithium, Total	mg/L	0.0000933	0.0154	0.20	0.427	0.425	0.199	0.170 to 0.230	139	70.0 to 130	0.501	20.0
BB04467	Barium, Total	mg/L	0.0000116	0.000200	0.10	0.124	0.122	0.0978	0.0850 to 0.115	105	70.0 to 130	1.85	20.0
BB04467	Beryllium, Total	mg/L	0.0000249	0.000880	0.10	0.0897	0.0880	0.0933	0.0850 to 0.115	89.7	70.0 to 130	1.95	20.0
BB04467	Calcium, Total	mg/L	0.00266	0.152	5.00	382	379	5.25	4.25 to 5.75	-64.9	70.0 to 130	0.876	20.0
BB04467	Iron, Total	mg/L	0.000898	0.0176	0.2	13.8	13.6	0.207	0.170 to 0.230	-129	70.0 to 130	1.53	20.0
BB04467	Mercury, Total by CVAA	mg/L	0.0000428	0.000500	0.004	0.00385	0.00382	0.00430	0.00340 to 0.00460	96.2	70.0 to 130	0.782	20.0
BB04467	Potassium, Total	mg/L	0.0101	0.367	10.0	18.0	17.6	10.4	8.50 to 11.5	104	70.0 to 130	2.49	20.0
BB04469	Manganese, Dissolved	mg/L	0.000002	0.000147	0.10	16.5	16.7	0.0970	0.0850 to 0.115	-300	70.0 to 130	1.20	20.0
BB04467	Magnesium, Total	mg/L	-0.00180	0.0462	5.00	241	236	5.13	4.25 to 5.75	-28.6	70.0 to 130	2.22	20.0
BB04467	Molybdenum, Total	mg/L	0.0000002	0.000147	0.10	0.100	0.102	0.0979	0.0850 to 0.115	97.3	70.0 to 130	1.94	20.0
BB04467	Thallium, Total	mg/L	0.0000071	0.000147	0.10	0.0972	0.0966	0.0976	0.0850 to 0.115	97.2	70.0 to 130	0.651	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 4/5/21

Reported: 4/7/2021
Version: 3.2
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: 3/2/21 11:32
Customer ID:
Delivery Date: 3/2/21 16:15

Description: Gorgas Gypsum - PZ-21

Laboratory ID Number: BB04463

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB04467	Solids, Dissolved	mg/L	-1.00	25.0			2820	54.0	40.0 to 60.0			0.879	5.00
BB04677	Alkalinity, Total as CaCO3	mg/L					324	52.3	45.0 to 55.0			0.557	10.0
BB04467	Sulfate	mg/L	-0.578	0.500	2000	3580	1470	18.1	18.0 to 22.0	106	80.0 to 120	1.37	20.0
BB04467	Chloride	mg/L	-0.0564	0.500	250	347	82.9	10.1	9.00 to 11.0	102	80.0 to 120	10.9	20.0
BB04467	Fluoride	mg/L	0.0126	0.0500	2.50	2.63	0.106	2.64	2.25 to 2.75	101	80.0 to 120	0.00	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 4/5/21

Reported: 4/7/2021
Version: 3.2
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: 3/2/21 12:15
Customer ID:
Submittal Date: 3/2/21 16:15

Laboratory ID Number: BB04464

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	3/16/21 10:24	3/22/21 11:34		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	3/16/21 10:24	3/22/21 11:34		1.015	Not Detected	mg/L	0.070035	0.406	U
* Iron, Total	3/16/21 10:24	3/22/21 11:34		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Total	3/16/21 10:24	3/22/21 11:34		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	3/16/21 10:24	3/22/21 11:34		1.015	Not Detected	mg/L	0.021315	0.406	U
* Sodium, Total	3/16/21 10:24	3/22/21 11:34		1.015	Not Detected	mg/L	0.02030	0.406	U
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/4/21 14:51	3/8/21 10:13		1.015	Not Detected	mg/L	0.000507	0.001015	U
* Arsenic, Total	3/4/21 14:51	3/8/21 10:13		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Barium, Total	3/4/21 14:51	3/8/21 10:13		1.015	Not Detected	mg/L	0.000101	0.000203	U
* Beryllium, Total	3/4/21 14:51	3/8/21 10:13		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	3/4/21 14:51	3/8/21 10:13		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	3/4/21 14:51	3/8/21 10:13		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	3/4/21 14:51	3/8/21 10:13		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	3/4/21 14:51	3/8/21 10:13		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Molybdenum, Total	3/4/21 14:51	3/8/21 10:13		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	3/4/21 14:51	3/8/21 10:13		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Potassium, Total	3/4/21 14:51	3/8/21 10:13		1.015	Not Detected	mg/L	0.169505	0.5075	U
* Selenium, Total	3/4/21 14:51	3/8/21 10:13		1.015	Not Detected	mg/L	0.000507	0.001015	U
* Thallium, Total	3/4/21 14:51	3/8/21 10:13		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	3/9/21 12:35	3/10/21 13:19		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2540C	***Analyst: TJW***								
* Solids, Dissolved	3/5/21 14:45	3/10/21 10:30		1	Not Detected	mg/L		25	U
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	3/4/21 12:33	3/4/21 12:33		1	Not Detected	mg/L	0.50	1	U
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	3/4/21 14:39	3/4/21 14:39		1	Not Detected	mg/L	0.06	0.1	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	3/5/21 10:54	3/5/21 10:54		1	Not Detected	mg/L	0.50	1	U

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

Comments:

Reported: 4/7/2021
Version: 3.2
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: 3/2/21 12:15
Customer ID:
Delivery Date: 3/2/21 16:15

Description: Gorgas Gypsum Field Blank-1

Laboratory ID Number: BB04464

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB04467	Magnesium, Total	mg/L	-0.00180	0.0462	5.00	241	236	5.13	4.25 to 5.75	-28.6	70.0 to 130	2.22	20.0
BB04467	Molybdenum, Total	mg/L	0.0000002	0.000147	0.10	0.100	0.102	0.0979	0.0850 to 0.115	97.3	70.0 to 130	1.94	20.0
BB04467	Thallium, Total	mg/L	0.0000071	0.000147	0.10	0.0972	0.0966	0.0976	0.0850 to 0.115	97.2	70.0 to 130	0.651	20.0
BB04467	Arsenic, Total	mg/L	0.0000309	0.000147	0.10	0.106	0.107	0.102	0.0850 to 0.115	106	70.0 to 130	0.933	20.0
BB04467	Cobalt, Total	mg/L	-0.0000057	0.000147	0.10	0.106	0.104	0.102	0.0850 to 0.115	100	70.0 to 130	1.53	20.0
BB04467	Lithium, Total	mg/L	0.0000933	0.0154	0.20	0.427	0.425	0.199	0.170 to 0.230	139	70.0 to 130	0.501	20.0
BB04467	Barium, Total	mg/L	0.0000116	0.000200	0.10	0.124	0.122	0.0978	0.0850 to 0.115	105	70.0 to 130	1.85	20.0
BB04467	Beryllium, Total	mg/L	0.0000249	0.000880	0.10	0.0897	0.0880	0.0933	0.0850 to 0.115	89.7	70.0 to 130	1.95	20.0
BB04467	Calcium, Total	mg/L	0.00266	0.152	5.00	382	379	5.25	4.25 to 5.75	-64.9	70.0 to 130	0.876	20.0
BB04467	Iron, Total	mg/L	0.000898	0.0176	0.2	13.8	13.6	0.207	0.170 to 0.230	-129	70.0 to 130	1.53	20.0
BB04467	Mercury, Total by CVAA	mg/L	0.0000428	0.000500	0.004	0.00385	0.00382	0.00430	0.00340 to 0.00460	96.2	70.0 to 130	0.782	20.0
BB04467	Potassium, Total	mg/L	0.0101	0.367	10.0	18.0	17.6	10.4	8.50 to 11.5	104	70.0 to 130	2.49	20.0
BB04467	Cadmium, Total	mg/L	0.00000	0.000147	0.10	0.0978	0.0963	0.0982	0.0850 to 0.115	97.8	70.0 to 130	1.48	20.0
BB04467	Chromium, Total	mg/L	-0.0000882	0.000440	0.10	0.101	0.0980	0.101	0.0850 to 0.115	101	70.0 to 130	2.95	20.0
BB04467	Selenium, Total	mg/L	0.0000276	0.00100	0.10	0.102	0.103	0.100	0.0850 to 0.115	102	70.0 to 130	0.904	20.0
BB04467	Boron, Total	mg/L	0.0116	0.0650	1.00	2.88	2.91	1.00	0.850 to 1.15	103	70.0 to 130	0.874	20.0
BB04467	Manganese, Total	mg/L	0.0000028	0.000147	0.10	17.9	17.8	0.0997	0.0850 to 0.115	1970	70.0 to 130	0.338	20.0
BB04467	Sodium, Total	mg/L	0.00165	0.0660	5.00	164	161	5.01	4.25 to 5.75	-36.4	70.0 to 130	1.37	20.0
BB04467	Lead, Total	mg/L	0.0000087	0.000147	0.10	0.0994	0.0980	0.0985	0.0850 to 0.115	99.2	70.0 to 130	1.34	20.0
BB04467	Antimony, Total	mg/L	0.000158	0.00100	0.10	0.103	0.103	0.0963	0.0850 to 0.115	103	70.0 to 130	0.454	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: 3/2/21 12:15
Customer ID:
Delivery Date: 3/2/21 16:15

Description: Gorgas Gypsum Field Blank-1

Laboratory ID Number: BB04464

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB04467	Sulfate	mg/L	-0.578	0.500	2000	3580	1470	18.1	18.0 to 22.0	106	80.0 to 120	1.37	20.0
BB04467	Solids, Dissolved	mg/L	-1.00	25.0			2820	54.0	40.0 to 60.0			0.879	5.00
BB04467	Chloride	mg/L	-0.0564	0.500	250	347	82.9	10.1	9.00 to 11.0	102	80.0 to 120	10.9	20.0
BB04467	Fluoride	mg/L	0.0126	0.0500	2.50	2.63	0.106	2.64	2.25 to 2.75	101	80.0 to 120	0.00	20.0

Comments:

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Gypsum - PZ-22

Location Code: WMWGORG
Collected: 3/2/21 12:40
Customer ID:
Submittal Date: 3/2/21 16:15

Laboratory ID Number: BB04465

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	3/16/21 10:24	3/22/21 11:37		1.015	0.0823	mg/L	0.030000	0.1015	J
* Calcium, Total	3/16/21 10:24	3/22/21 14:03		50.75	73.0	mg/L	3.50175	20.3	
* Iron, Total	3/16/21 10:24	3/22/21 14:03		50.75	54.3	mg/L	0.40600	2.03	
* Lithium, Total	3/16/21 10:24	3/22/21 11:37		1.015	0.0722	mg/L	0.007105	0.01999956	
* Magnesium, Total	3/16/21 10:24	3/22/21 11:37		1.015	38.0	mg/L	0.021315	0.406	
* Sodium, Total	3/16/21 10:24	3/22/21 11:37		1.015	36.8	mg/L	0.02030	0.406	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Iron, Dissolved	3/15/21 11:44	3/19/21 11:58		101.5	52.4	mg/L	0.8120	4.06	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/4/21 14:51	3/8/21 10:17		1.015	Not Detected	mg/L	0.000507	0.001015	U
* Arsenic, Total	3/4/21 14:51	3/8/21 10:17		1.015	0.0331	mg/L	0.000068	0.000203	
* Barium, Total	3/4/21 14:51	3/8/21 10:17		1.015	0.0216	mg/L	0.000101	0.000203	
* Beryllium, Total	3/4/21 14:51	3/8/21 10:17		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	3/4/21 14:51	3/8/21 10:17		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	3/4/21 14:51	3/8/21 10:17		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	3/4/21 14:51	3/8/21 10:17		1.015	0.00213	mg/L	0.000068	0.000203	
* Lead, Total	3/4/21 14:51	3/8/21 10:17		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Molybdenum, Total	3/4/21 14:51	3/8/21 10:17		1.015	0.00146	mg/L	0.000068	0.000203	
* Potassium, Total	3/4/21 14:51	3/8/21 10:17		1.015	6.40	mg/L	0.169505	0.5075	
* Manganese, Total	3/4/21 14:51	3/8/21 14:14		5.075	2.15	mg/L	0.000340	0.001015	
* Selenium, Total	3/4/21 14:51	3/8/21 10:17		1.015	Not Detected	mg/L	0.000507	0.001015	U
* Thallium, Total	3/4/21 14:51	3/8/21 10:17		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Manganese, Dissolved	3/8/21 14:58	3/8/21 17:18		5.075	2.03	mg/L	0.000340	0.001015	
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	3/9/21 12:35	3/10/21 13:22		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2320 B	***Analyst: JAG***								
Alkalinity, Total as CaCO3	3/12/21 09:39	3/12/21 11:19		1	90.7	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: TJW***								
* Solids, Dissolved	3/5/21 14:45	3/10/21 10:30		1	662	mg/L		50	

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

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 4/5/21

Reported: 4/7/2021
Version: 3.2
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: 3/2/21 12:40
Customer ID:
Submittal Date: 3/2/21 16:15

Laboratory ID Number: BB04465

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 4500CO2 D	***Analyst: JAG***								
Bicarbonate Alkalinity, (calc.)	3/12/21 09:39	3/12/21 11:19		1	90.7	mg/L			
Carbonate Alkalinity, (calc.)	3/12/21 09:39	3/12/21 11:19		1	0.02	mg/L			
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	3/4/21 12:34	3/4/21 12:34		1	5.76	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	3/4/21 14:40	3/4/21 14:40		1	0.117	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	3/5/21 10:55	3/5/21 10:55		25	366	mg/L	12.50	25	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	3/2/21 12:37	3/2/21 12:37			931.01	uS/cm			FA
pH	3/2/21 12:37	3/2/21 12:37			6.24	SU			FA
Temperature	3/2/21 12:37	3/2/21 12:37			16.15	C			FA
Turbidity	3/2/21 12:37	3/2/21 12:37			0.68	NTU			FA

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

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 4/5/21

Reported: 4/7/2021
Version: 3.2
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: 3/2/21 12:40
Customer ID:
Delivery Date: 3/2/21 16:15

Description: Gorgas Gypsum - PZ-22

Laboratory ID Number: BB04465

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB04469	Iron, Dissolved	mg/L	-0.000126	0.0176	0.2	57.1	57.2	0.206	0.170 to 0.230	-200	70.0 to 130	0.175	20.0
BB04467	Cadmium, Total	mg/L	0.00000	0.000147	0.10	0.0978	0.0963	0.0982	0.0850 to 0.115	97.8	70.0 to 130	1.48	20.0
BB04467	Chromium, Total	mg/L	-0.0000882	0.000440	0.10	0.101	0.0980	0.101	0.0850 to 0.115	101	70.0 to 130	2.95	20.0
BB04467	Selenium, Total	mg/L	0.0000276	0.00100	0.10	0.102	0.103	0.100	0.0850 to 0.115	102	70.0 to 130	0.904	20.0
BB04467	Magnesium, Total	mg/L	-0.00180	0.0462	5.00	241	236	5.13	4.25 to 5.75	-28.6	70.0 to 130	2.22	20.0
BB04467	Molybdenum, Total	mg/L	0.0000002	0.000147	0.10	0.100	0.102	0.0979	0.0850 to 0.115	97.3	70.0 to 130	1.94	20.0
BB04467	Thallium, Total	mg/L	0.0000071	0.000147	0.10	0.0972	0.0966	0.0976	0.0850 to 0.115	97.2	70.0 to 130	0.651	20.0
BB04467	Arsenic, Total	mg/L	0.0000309	0.000147	0.10	0.106	0.107	0.102	0.0850 to 0.115	106	70.0 to 130	0.933	20.0
BB04467	Cobalt, Total	mg/L	-0.0000057	0.000147	0.10	0.106	0.104	0.102	0.0850 to 0.115	100	70.0 to 130	1.53	20.0
BB04467	Lithium, Total	mg/L	0.0000933	0.0154	0.20	0.427	0.425	0.199	0.170 to 0.230	139	70.0 to 130	0.501	20.0
BB04467	Boron, Total	mg/L	0.0116	0.0650	1.00	2.88	2.91	1.00	0.850 to 1.15	103	70.0 to 130	0.874	20.0
BB04467	Manganese, Total	mg/L	0.0000028	0.000147	0.10	17.9	17.8	0.0997	0.0850 to 0.115	1970	70.0 to 130	0.338	20.0
BB04467	Sodium, Total	mg/L	0.00165	0.0660	5.00	164	161	5.01	4.25 to 5.75	-36.4	70.0 to 130	1.37	20.0
BB04467	Lead, Total	mg/L	0.0000087	0.000147	0.10	0.0994	0.0980	0.0985	0.0850 to 0.115	99.2	70.0 to 130	1.34	20.0
BB04467	Antimony, Total	mg/L	0.000158	0.00100	0.10	0.103	0.103	0.0963	0.0850 to 0.115	103	70.0 to 130	0.454	20.0
BB04467	Barium, Total	mg/L	0.0000116	0.000200	0.10	0.124	0.122	0.0978	0.0850 to 0.115	105	70.0 to 130	1.85	20.0
BB04467	Beryllium, Total	mg/L	0.0000249	0.000880	0.10	0.0897	0.0880	0.0933	0.0850 to 0.115	89.7	70.0 to 130	1.95	20.0
BB04467	Calcium, Total	mg/L	0.00266	0.152	5.00	382	379	5.25	4.25 to 5.75	-64.9	70.0 to 130	0.876	20.0
BB04467	Iron, Total	mg/L	0.000898	0.0176	0.2	13.8	13.6	0.207	0.170 to 0.230	-129	70.0 to 130	1.53	20.0
BB04467	Mercury, Total by CVAA	mg/L	0.0000428	0.000500	0.004	0.00385	0.00382	0.00430	0.00340 to 0.00460	96.2	70.0 to 130	0.782	20.0
BB04467	Potassium, Total	mg/L	0.0101	0.367	10.0	18.0	17.6	10.4	8.50 to 11.5	104	70.0 to 130	2.49	20.0
BB04469	Manganese, Dissolved	mg/L	0.000002	0.000147	0.10	16.5	16.7	0.0970	0.0850 to 0.115	-300	70.0 to 130	1.20	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 4/5/21

Reported: 4/7/2021
Version: 3.2
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: 3/2/21 12:40
Customer ID:
Delivery Date: 3/2/21 16:15

Description: Gorgas Gypsum - PZ-22

Laboratory ID Number: BB04465

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB04467	Solids, Dissolved	mg/L	-1.00	25.0			2820	54.0	40.0 to 60.0			0.879	5.00
BB04467	Sulfate	mg/L	-0.578	0.500	2000	3580	1470	18.1	18.0 to 22.0	106	80.0 to 120	1.37	20.0
BB04467	Chloride	mg/L	-0.0564	0.500	250	347	82.9	10.1	9.00 to 11.0	102	80.0 to 120	10.9	20.0
BB04467	Fluoride	mg/L	0.0126	0.0500	2.50	2.63	0.106	2.64	2.25 to 2.75	101	80.0 to 120	0.00	20.0
BB04677	Alkalinity, Total as CaCO3	mg/L					324	52.3	45.0 to 55.0			0.557	10.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 4/5/21

Reported: 4/7/2021
Version: 3.2
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: 3/1/21 11:38
Customer ID:
Submittal Date: 3/2/21 16:15

Laboratory ID Number: BB04466

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	3/16/21 10:24	3/22/21 11:40		1.015	0.145	mg/L	0.030000	0.1015	
* Calcium, Total	3/16/21 10:24	3/22/21 11:40		1.015	26.2	mg/L	0.070035	0.406	
* Iron, Total	3/16/21 10:24	3/22/21 11:40		1.015	0.110	mg/L	0.008120	0.0406	
* Lithium, Total	3/16/21 10:24	3/22/21 11:40		1.015	0.292	mg/L	0.007105	0.01999956	
* Magnesium, Total	3/16/21 10:24	3/22/21 11:40		1.015	9.94	mg/L	0.021315	0.406	
* Sodium, Total	3/16/21 10:24	3/22/21 14:06		101.5	372	mg/L	2.030	40.6	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Iron, Dissolved	3/15/21 11:44	3/16/21 11:41		1.015	0.0722	mg/L	0.008120	0.0406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/4/21 14:51	3/8/21 10:20		1.015	Not Detected	mg/L	0.000507	0.001015	U
* Arsenic, Total	3/4/21 14:51	3/8/21 10:20		1.015	0.0105	mg/L	0.000068	0.000203	
* Barium, Total	3/4/21 14:51	3/8/21 10:20		1.015	0.150	mg/L	0.000101	0.000203	
* Beryllium, Total	3/4/21 14:51	3/8/21 10:20		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	3/4/21 14:51	3/8/21 10:20		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	3/4/21 14:51	3/8/21 10:20		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	3/4/21 14:51	3/8/21 10:20		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	3/4/21 14:51	3/8/21 10:20		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Molybdenum, Total	3/4/21 14:51	3/8/21 10:20		1.015	0.000654	mg/L	0.000068	0.000203	
* Potassium, Total	3/4/21 14:51	3/8/21 10:20		1.015	3.67	mg/L	0.169505	0.5075	
* Manganese, Total	3/4/21 14:51	3/8/21 10:20		1.015	0.0961	mg/L	0.000068	0.000203	
* Selenium, Total	3/4/21 14:51	3/8/21 10:20		1.015	Not Detected	mg/L	0.000507	0.001015	U
* Thallium, Total	3/4/21 14:51	3/8/21 10:20		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Manganese, Dissolved	3/8/21 14:58	3/8/21 15:57		1.015	0.0997	mg/L	0.000068	0.000203	
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	3/9/21 12:35	3/10/21 13:24		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2320 B	***Analyst: JAG***								
Alkalinity, Total as CaCO3	3/12/21 09:39	3/12/21 11:19		1	914	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: TJW***								
* Solids, Dissolved	3/5/21 14:45	3/10/21 10:30		1	1060	mg/L		100	

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

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 4/5/21

Reported: 4/7/2021
Version: 3.2
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: 3/1/21 11:38
Customer ID:
Submittal Date: 3/2/21 16:15

Laboratory ID Number: BB04466

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 4500CO2 D	***Analyst: JAG***								
Bicarbonate Alkalinity, (calc.)	3/12/21 09:39	3/12/21 11:19		1	906	mg/L			
Carbonate Alkalinity, (calc.)	3/12/21 09:39	3/12/21 11:19		1	7.59	mg/L			
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	3/4/21 12:35	3/4/21 12:35		1	19.4	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	3/4/21 14:41	3/4/21 14:41		1	0.346	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	3/5/21 10:56	3/5/21 10:56		10	183	mg/L	5.00	10	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	3/1/21 11:34	3/1/21 11:34			1803.28	uS/cm			FA
pH	3/1/21 11:34	3/1/21 11:34			7.67	SU			FA
Temperature	3/1/21 11:34	3/1/21 11:34			19.91	C			FA
Turbidity	3/1/21 11:34	3/1/21 11:34			0.73	NTU			FA

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

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 4/5/21

Reported: 4/7/2021
Version: 3.2
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: 3/1/21 11:38
Customer ID:
Delivery Date: 3/2/21 16:15

Description: Gorgas Gypsum - MW-8V

Laboratory ID Number: BB04466

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB04469	Iron, Dissolved	mg/L	-0.000126	0.0176	0.2	57.1	57.2	0.206	0.170 to 0.230	-200	70.0 to 130	0.175	20.0
BB04467	Cadmium, Total	mg/L	0.00000	0.000147	0.10	0.0978	0.0963	0.0982	0.0850 to 0.115	97.8	70.0 to 130	1.48	20.0
BB04467	Chromium, Total	mg/L	-0.0000882	0.000440	0.10	0.101	0.0980	0.101	0.0850 to 0.115	101	70.0 to 130	2.95	20.0
BB04467	Selenium, Total	mg/L	0.0000276	0.00100	0.10	0.102	0.103	0.100	0.0850 to 0.115	102	70.0 to 130	0.904	20.0
BB04467	Arsenic, Total	mg/L	0.0000309	0.000147	0.10	0.106	0.107	0.102	0.0850 to 0.115	106	70.0 to 130	0.933	20.0
BB04467	Cobalt, Total	mg/L	-0.0000057	0.000147	0.10	0.106	0.104	0.102	0.0850 to 0.115	100	70.0 to 130	1.53	20.0
BB04467	Lithium, Total	mg/L	0.0000933	0.0154	0.20	0.427	0.425	0.199	0.170 to 0.230	139	70.0 to 130	0.501	20.0
BB04467	Magnesium, Total	mg/L	-0.00180	0.0462	5.00	241	236	5.13	4.25 to 5.75	-28.6	70.0 to 130	2.22	20.0
BB04467	Molybdenum, Total	mg/L	0.0000002	0.000147	0.10	0.100	0.102	0.0979	0.0850 to 0.115	97.3	70.0 to 130	1.94	20.0
BB04467	Thallium, Total	mg/L	0.0000071	0.000147	0.10	0.0972	0.0966	0.0976	0.0850 to 0.115	97.2	70.0 to 130	0.651	20.0
BB04467	Boron, Total	mg/L	0.0116	0.0650	1.00	2.88	2.91	1.00	0.850 to 1.15	103	70.0 to 130	0.874	20.0
BB04467	Manganese, Total	mg/L	0.0000028	0.000147	0.10	17.9	17.8	0.0997	0.0850 to 0.115	1970	70.0 to 130	0.338	20.0
BB04467	Sodium, Total	mg/L	0.00165	0.0660	5.00	164	161	5.01	4.25 to 5.75	-36.4	70.0 to 130	1.37	20.0
BB04467	Lead, Total	mg/L	0.0000087	0.000147	0.10	0.0994	0.0980	0.0985	0.0850 to 0.115	99.2	70.0 to 130	1.34	20.0
BB04467	Antimony, Total	mg/L	0.000158	0.00100	0.10	0.103	0.103	0.0963	0.0850 to 0.115	103	70.0 to 130	0.454	20.0
BB04467	Barium, Total	mg/L	0.0000116	0.000200	0.10	0.124	0.122	0.0978	0.0850 to 0.115	105	70.0 to 130	1.85	20.0
BB04467	Beryllium, Total	mg/L	0.0000249	0.000880	0.10	0.0897	0.0880	0.0933	0.0850 to 0.115	89.7	70.0 to 130	1.95	20.0
BB04467	Calcium, Total	mg/L	0.00266	0.152	5.00	382	379	5.25	4.25 to 5.75	-64.9	70.0 to 130	0.876	20.0
BB04467	Iron, Total	mg/L	0.000898	0.0176	0.2	13.8	13.6	0.207	0.170 to 0.230	-129	70.0 to 130	1.53	20.0
BB04467	Mercury, Total by CVAA	mg/L	0.0000428	0.000500	0.004	0.00385	0.00382	0.00430	0.00340 to 0.00460	96.2	70.0 to 130	0.782	20.0
BB04467	Potassium, Total	mg/L	0.0101	0.367	10.0	18.0	17.6	10.4	8.50 to 11.5	104	70.0 to 130	2.49	20.0
BB04469	Manganese, Dissolved	mg/L	0.000002	0.000147	0.10	16.5	16.7	0.0970	0.0850 to 0.115	-300	70.0 to 130	1.20	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 4/5/21

Reported: 4/7/2021
Version: 3.2
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: 3/1/21 11:38
Customer ID:
Delivery Date: 3/2/21 16:15

Description: Gorgas Gypsum - MW-8V

Laboratory ID Number: BB04466

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB04467	Solids, Dissolved	mg/L	-1.00	25.0			2820	54.0	40.0 to 60.0			0.879	5.00
BB04467	Sulfate	mg/L	-0.578	0.500	2000	3580	1470	18.1	18.0 to 22.0	106	80.0 to 120	1.37	20.0
BB04677	Alkalinity, Total as CaCO3	mg/L					324	52.3	45.0 to 55.0			0.557	10.0
BB04467	Chloride	mg/L	-0.0564	0.500	250	347	82.9	10.1	9.00 to 11.0	102	80.0 to 120	10.9	20.0
BB04467	Fluoride	mg/L	0.0126	0.0500	2.50	2.63	0.106	2.64	2.25 to 2.75	101	80.0 to 120	0.00	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 4/5/21

Reported: 4/7/2021
Version: 3.2
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: 3/1/21 13:05
Customer ID:
Submittal Date: 3/2/21 16:15

Laboratory ID Number: BB04467

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	3/16/21 10:24	3/22/21 11:44		1.015	1.85	mg/L	0.030000	0.1015	
* Calcium, Total	3/16/21 10:24	3/22/21 14:10		50.75	386	mg/L	3.50175	20.3	RA
* Iron, Total	3/16/21 10:24	3/22/21 14:10		50.75	14.1	mg/L	0.40600	2.03	RA
* Lithium, Total	3/16/21 10:24	3/22/21 11:44		1.015	0.149	mg/L	0.007105	0.019999	R
* Magnesium, Total	3/16/21 10:24	3/22/21 14:10		50.75	242	mg/L	1.06575	20.3	RA
* Sodium, Total	3/16/21 10:24	3/22/21 14:10		50.75	165	mg/L	1.0150	20.3	RA
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Iron, Dissolved	3/15/21 11:44	3/19/21 12:01		10.15	13.5	mg/L	0.08120	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/4/21 14:51	3/8/21 10:24		1.015	Not Detected	mg/L	0.000507	0.001015	U
* Arsenic, Total	3/4/21 14:51	3/8/21 10:24		1.015	0.000633	mg/L	0.000068	0.000203	
* Barium, Total	3/4/21 14:51	3/8/21 10:24		1.015	0.0194	mg/L	0.000101	0.000203	
* Beryllium, Total	3/4/21 14:51	3/8/21 10:24		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	3/4/21 14:51	3/8/21 10:24		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	3/4/21 14:51	3/8/21 10:24		1.015	0.000423	mg/L	0.000203	0.001015	J
* Cobalt, Total	3/4/21 14:51	3/8/21 10:24		1.015	0.00546	mg/L	0.000068	0.000203	
* Lead, Total	3/4/21 14:51	3/8/21 10:24		1.015	0.000145	mg/L	0.000068	0.000203	J
* Molybdenum, Total	3/4/21 14:51	3/8/21 10:24		1.015	0.00277	mg/L	0.000068	0.000203	
* Potassium, Total	3/4/21 14:51	3/8/21 10:24		1.015	7.63	mg/L	0.169505	0.5075	
* Manganese, Total	3/4/21 14:51	3/8/21 14:18		92.365	15.9	mg/L	0.006188	0.018473	RA
* Selenium, Total	3/4/21 14:51	3/8/21 10:24		1.015	Not Detected	mg/L	0.000507	0.001015	U
* Thallium, Total	3/4/21 14:51	3/8/21 10:24		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Manganese, Dissolved	3/8/21 14:58	3/8/21 17:21		92.365	16.6	mg/L	0.006188	0.018473	
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	3/9/21 12:35	3/10/21 13:26		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2320 B	***Analyst: JAG***								
Alkalinity, Total as CaCO3	3/12/21 09:39	3/12/21 11:19		1	580	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: TJW***								
* Solids, Dissolved	3/5/21 14:45	3/10/21 10:30		1	2870	mg/L		178.6	

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

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified. Lithium MS/MSD recoveries failed. Post digestion spike and serial dilution were performed. Matrix issue is suspected. LBM 4/5/21

Reported: 4/7/2021
Version: 3.2
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: 3/1/21 13:05
Customer ID:
Submittal Date: 3/2/21 16:15

Laboratory ID Number: BB04467

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 4500CO2 D	***Analyst: JAG***								
Bicarbonate Alkalinity, (calc.)	3/12/21 09:39	3/12/21 11:19		1	580	mg/L			
Carbonate Alkalinity, (calc.)	3/12/21 09:39	3/12/21 11:19		1	0.35	mg/L			
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	3/4/21 12:37	3/4/21 12:37		25	92.5	mg/L	12.50	25	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	3/4/21 14:42	3/4/21 14:42		1	0.106	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	3/5/21 10:58	3/5/21 10:58		100	1450	mg/L	50.00	100	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	3/1/21 13:01	3/1/21 13:01			3406.62	uS/cm			FA
pH	3/1/21 13:01	3/1/21 13:01			6.48	SU			FA
Temperature	3/1/21 13:01	3/1/21 13:01			18.89	C			FA
Turbidity	3/1/21 13:01	3/1/21 13:01			2.81	NTU			FA

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

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified. Lithium MS/MSD recoveries failed. Post digestion spike and serial dilution were performed. Matrix issue is suspected. LBM 4/5/21

Reported: 4/7/2021
Version: 3.2
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: 3/1/21 13:05
Customer ID:
Delivery Date: 3/2/21 16:15

Description: Gorgas Gypsum - MW-8

Laboratory ID Number: BB04467

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB04467	Cadmium, Total	mg/L	0.00000	0.000147	0.10	0.0978	0.0963	0.0982	0.0850 to 0.115	97.8	70.0 to 130	1.48	20.0
BB04467	Chromium, Total	mg/L	-0.0000882	0.000440	0.10	0.101	0.0980	0.101	0.0850 to 0.115	101	70.0 to 130	2.95	20.0
BB04467	Selenium, Total	mg/L	0.0000276	0.00100	0.10	0.102	0.103	0.100	0.0850 to 0.115	102	70.0 to 130	0.904	20.0
BB04467	Magnesium, Total	mg/L	-0.00180	0.0462	5.00	241	236	5.13	4.25 to 5.75	-28.6	70.0 to 130	2.22	20.0
BB04467	Molybdenum, Total	mg/L	0.0000002	0.000147	0.10	0.100	0.102	0.0979	0.0850 to 0.115	97.3	70.0 to 130	1.94	20.0
BB04467	Thallium, Total	mg/L	0.0000071	0.000147	0.10	0.0972	0.0966	0.0976	0.0850 to 0.115	97.2	70.0 to 130	0.651	20.0
BB04467	Arsenic, Total	mg/L	0.0000309	0.000147	0.10	0.106	0.107	0.102	0.0850 to 0.115	106	70.0 to 130	0.933	20.0
BB04467	Cobalt, Total	mg/L	-0.0000057	0.000147	0.10	0.106	0.104	0.102	0.0850 to 0.115	100	70.0 to 130	1.53	20.0
BB04467	Lithium, Total	mg/L	0.0000933	0.0154	0.20	0.427	0.425	0.199	0.170 to 0.230	139	70.0 to 130	0.501	20.0
BB04467	Boron, Total	mg/L	0.0116	0.0650	1.00	2.88	2.91	1.00	0.850 to 1.15	103	70.0 to 130	0.874	20.0
BB04467	Manganese, Total	mg/L	0.0000028	0.000147	0.10	17.9	17.8	0.0997	0.0850 to 0.115	1970	70.0 to 130	0.338	20.0
BB04467	Sodium, Total	mg/L	0.00165	0.0660	5.00	164	161	5.01	4.25 to 5.75	-36.4	70.0 to 130	1.37	20.0
BB04467	Lead, Total	mg/L	0.0000087	0.000147	0.10	0.0994	0.0980	0.0985	0.0850 to 0.115	99.2	70.0 to 130	1.34	20.0
BB04467	Antimony, Total	mg/L	0.000158	0.00100	0.10	0.103	0.103	0.0963	0.0850 to 0.115	103	70.0 to 130	0.454	20.0
BB04467	Barium, Total	mg/L	0.0000116	0.000200	0.10	0.124	0.122	0.0978	0.0850 to 0.115	105	70.0 to 130	1.85	20.0
BB04467	Beryllium, Total	mg/L	0.0000249	0.000880	0.10	0.0897	0.0880	0.0933	0.0850 to 0.115	89.7	70.0 to 130	1.95	20.0
BB04467	Calcium, Total	mg/L	0.00266	0.152	5.00	382	379	5.25	4.25 to 5.75	-64.9	70.0 to 130	0.876	20.0
BB04467	Iron, Total	mg/L	0.000898	0.0176	0.2	13.8	13.6	0.207	0.170 to 0.230	-129	70.0 to 130	1.53	20.0
BB04467	Mercury, Total by CVAA	mg/L	0.0000428	0.000500	0.004	0.00385	0.00382	0.00430	0.00340 to 0.00460	96.2	70.0 to 130	0.782	20.0
BB04467	Potassium, Total	mg/L	0.0101	0.367	10.0	18.0	17.6	10.4	8.50 to 11.5	104	70.0 to 130	2.49	20.0
BB04469	Manganese, Dissolved	mg/L	0.000002	0.000147	0.10	16.5	16.7	0.0970	0.0850 to 0.115	-300	70.0 to 130	1.20	20.0
BB04469	Iron, Dissolved	mg/L	-0.000126	0.0176	0.2	57.1	57.2	0.206	0.170 to 0.230	-200	70.0 to 130	0.175	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified. Lithium MS/MSD recoveries failed. Post digestion spike and serial dilution were performed. Matrix issue is suspected. LBM 4/5/21

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

Alabama Power

Batch QC Summary

Customer Account: WMWGORG
Sample Date: 3/1/21 13:05
Customer ID:
Delivery Date: 3/2/21 16:15

Description: Gorgas Gypsum - MW-8

Laboratory ID Number: BB04467

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB04467	Solids, Dissolved	mg/L	-1.00	25.0			2820	54.0	40.0 to 60.0			0.879	5.00
BB04677	Alkalinity, Total as CaCO3	mg/L					324	52.3	45.0 to 55.0			0.557	10.0
BB04467	Sulfate	mg/L	-0.578	0.500	2000	3580	1470	18.1	18.0 to 22.0	106	80.0 to 120	1.37	20.0
BB04467	Chloride	mg/L	-0.0564	0.500	250	347	82.9	10.1	9.00 to 11.0	102	80.0 to 120	10.9	20.0
BB04467	Fluoride	mg/L	0.0126	0.0500	2.50	2.63	0.106	2.64	2.25 to 2.75	101	80.0 to 120	0.00	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified. Lithium MS/MSD recoveries failed. Post digestion spike and serial dilution were performed. Matrix issue is suspected. LBM 4/5/21

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: 3/1/21 13:45
Customer ID:
Submittal Date: 3/2/21 16:15

Laboratory ID Number: BB04468

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	3/16/21 10:24	3/22/21 12:01		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	3/16/21 10:24	3/22/21 12:01		1.015	Not Detected	mg/L	0.070035	0.406	U
* Iron, Total	3/16/21 10:24	3/22/21 12:01		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Total	3/16/21 10:24	3/22/21 12:01		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	3/16/21 10:24	3/22/21 12:01		1.015	Not Detected	mg/L	0.021315	0.406	U
* Sodium, Total	3/16/21 10:24	3/22/21 12:01		1.015	Not Detected	mg/L	0.02030	0.406	U
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/4/21 14:51	3/8/21 10:45		1.015	Not Detected	mg/L	0.000507	0.001015	U
* Arsenic, Total	3/4/21 14:51	3/8/21 10:45		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Barium, Total	3/4/21 14:51	3/8/21 10:45		1.015	Not Detected	mg/L	0.000101	0.000203	U
* Beryllium, Total	3/4/21 14:51	3/8/21 10:45		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	3/4/21 14:51	3/8/21 10:45		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	3/4/21 14:51	3/8/21 10:45		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	3/4/21 14:51	3/8/21 10:45		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	3/4/21 14:51	3/8/21 10:45		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Molybdenum, Total	3/4/21 14:51	3/8/21 10:45		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	3/4/21 14:51	3/8/21 10:45		1.015	0.0000946	mg/L	0.000068	0.000203	J
* Potassium, Total	3/4/21 14:51	3/8/21 10:45		1.015	Not Detected	mg/L	0.169505	0.5075	U
* Selenium, Total	3/4/21 14:51	3/8/21 10:45		1.015	Not Detected	mg/L	0.000507	0.001015	U
* Thallium, Total	3/4/21 14:51	3/8/21 10:45		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	3/9/21 12:35	3/10/21 12:27		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2540C	***Analyst: TJW***								
* Solids, Dissolved	3/5/21 14:45	3/10/21 10:30		1	Not Detected	mg/L		25	U
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	3/4/21 12:50	3/4/21 12:50		1	Not Detected	mg/L	0.50	1	U
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	3/4/21 14:59	3/4/21 14:59		1	Not Detected	mg/L	0.06	0.1	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	3/5/21 11:54	3/5/21 11:54		1	Not Detected	mg/L	0.50	1	U

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

Comments:

Reported: 4/7/2021
Version: 3.2
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: 3/1/21 13:45
Customer ID:
Delivery Date: 3/2/21 16:15

Description: Gorgas Gypsum Field Blank-2

Laboratory ID Number: BB04468

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB04675	Lead, Total	mg/L	0.0000087	0.000147	0.10	0.0973	0.0992	0.0985	0.0850 to 0.115	97.3	70.0 to 130	1.98	20.0
BB04675	Calcium, Total	mg/L	0.00266	0.152	5.00	5.21	5.18	5.25	4.25 to 5.75	104	70.0 to 130	0.726	20.0
BB04675	Antimony, Total	mg/L	0.000158	0.00100	0.10	0.0954	0.0958	0.0963	0.0850 to 0.115	95.4	70.0 to 130	0.444	20.0
BB04675	Arsenic, Total	mg/L	0.0000309	0.000147	0.10	0.0991	0.0993	0.102	0.0850 to 0.115	99.1	70.0 to 130	0.220	20.0
BB04675	Barium, Total	mg/L	0.0000116	0.000200	0.10	0.102	0.0992	0.0978	0.0850 to 0.115	102	70.0 to 130	3.16	20.0
BB04675	Cobalt, Total	mg/L	-0.0000057	0.000147	0.10	0.0992	0.0981	0.102	0.0850 to 0.115	99.2	70.0 to 130	1.13	20.0
BB04675	Cadmium, Total	mg/L	0.00000	0.000147	0.10	0.0958	0.0971	0.0982	0.0850 to 0.115	95.8	70.0 to 130	1.36	20.0
BB04675	Selenium, Total	mg/L	0.0000276	0.00100	0.10	0.0983	0.100	0.100	0.0850 to 0.115	98.3	70.0 to 130	2.05	20.0
BB04675	Boron, Total	mg/L	0.0116	0.0650	1.00	1.02	1.03	1.00	0.850 to 1.15	102	70.0 to 130	0.648	20.0
BB04675	Chromium, Total	mg/L	-0.0000882	0.000440	0.10	0.0966	0.0973	0.101	0.0850 to 0.115	96.6	70.0 to 130	0.651	20.0
BB04675	Mercury, Total by CVAA	mg/L	0.0000390	0.000500	0.004	0.00431	0.00437	0.00428	0.00340 to 0.00460	108	70.0 to 130	1.38	20.0
BB04675	Molybdenum, Total	mg/L	0.0000002	0.000147	0.10	0.0945	0.0966	0.0979	0.0850 to 0.115	94.5	70.0 to 130	2.18	20.0
BB04675	Beryllium, Total	mg/L	0.0000249	0.000880	0.10	0.0893	0.0904	0.0933	0.0850 to 0.115	89.3	70.0 to 130	1.24	20.0
BB04675	Potassium, Total	mg/L	0.0101	0.367	10.0	10.2	10.2	10.4	8.50 to 11.5	102	70.0 to 130	0.148	20.0
BB04675	Lithium, Total	mg/L	0.0000933	0.0154	0.20	0.197	0.201	0.199	0.170 to 0.230	98.5	70.0 to 130	2.00	20.0
BB04675	Manganese, Total	mg/L	0.0000028	0.000147	0.10	0.0979	0.0973	0.0997	0.0850 to 0.115	97.8	70.0 to 130	0.682	20.0
BB04675	Sodium, Total	mg/L	0.00165	0.0660	5.00	4.93	5.03	5.01	4.25 to 5.75	98.7	70.0 to 130	1.97	20.0
BB04675	Thallium, Total	mg/L	0.0000071	0.000147	0.10	0.0972	0.0990	0.0976	0.0850 to 0.115	97.2	70.0 to 130	1.89	20.0
BB04675	Iron, Total	mg/L	0.000898	0.0176	0.2	0.206	0.206	0.207	0.170 to 0.230	103	70.0 to 130	0.126	20.0
BB04675	Magnesium, Total	mg/L	-0.00180	0.0462	5.00	5.10	5.13	5.13	4.25 to 5.75	102	70.0 to 130	0.451	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: 3/1/21 13:45
Customer ID:
Delivery Date: 3/2/21 16:15

Description: Gorgas Gypsum Field Blank-2

Laboratory ID Number: BB04468

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB04472	Fluoride	mg/L	0.0077	0.0500	2.50	2.44	0.0959	2.61	2.25 to 2.75	93.8	80.0 to 120	2.00	20.0
BB04472	Chloride	mg/L	-0.121	0.500	160	253	94.9	10.1	9.00 to 11.0	105	80.0 to 120	11.4	20.0
BB04472	Sulfate	mg/L	-0.350	0.500	2000	3830	1710	19.1	18.0 to 22.0	104	80.0 to 120	2.31	20.0
BB04472	Solids, Dissolved	mg/L	-1.00	25.0			2880	54.0	40.0 to 60.0			0.348	5.00

Comments:

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: 3/2/21 08:45
Customer ID:
Submittal Date: 3/2/21 16:15

Laboratory ID Number: BB04469

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	3/16/21 10:24	3/22/21 12:04		1.015	0.206	mg/L	0.030000	0.1015	
* Calcium, Total	3/16/21 10:24	3/22/21 14:27		50.75	164	mg/L	3.50175	20.3	
* Iron, Total	3/16/21 10:24	3/22/21 14:27		50.75	57.2	mg/L	0.40600	2.03	
* Lithium, Total	3/16/21 10:24	3/22/21 12:04		1.015	0.0439	mg/L	0.007105	0.01999956	
* Magnesium, Total	3/16/21 10:24	3/22/21 14:27		50.75	105	mg/L	1.06575	20.3	
* Sodium, Total	3/16/21 10:24	3/22/21 14:27		50.75	51.6	mg/L	1.0150	20.3	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Iron, Dissolved	3/15/21 11:44	3/19/21 12:05		101.5	57.5	mg/L	0.8120	4.06	RA
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/4/21 14:51	3/8/21 10:49		1.015	Not Detected	mg/L	0.000507	0.001015	U
* Arsenic, Total	3/4/21 14:51	3/8/21 10:49		1.015	0.293	mg/L	0.000068	0.000203	
* Barium, Total	3/4/21 14:51	3/8/21 10:49		1.015	0.0315	mg/L	0.000101	0.000203	
* Beryllium, Total	3/4/21 14:51	3/8/21 10:49		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	3/4/21 14:51	3/8/21 10:49		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	3/4/21 14:51	3/8/21 10:49		1.015	0.000285	mg/L	0.000203	0.001015	J
* Cobalt, Total	3/4/21 14:51	3/8/21 10:49		1.015	0.143	mg/L	0.000068	0.000203	
* Lead, Total	3/4/21 14:51	3/8/21 10:49		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Molybdenum, Total	3/4/21 14:51	3/8/21 10:49		1.015	0.00138	mg/L	0.000068	0.000203	
* Potassium, Total	3/4/21 14:51	3/8/21 10:49		1.015	9.11	mg/L	0.169505	0.5075	
* Manganese, Total	3/4/21 14:51	3/15/21 15:04		92.365	14.6	mg/L	0.006188	0.018473	
* Selenium, Total	3/4/21 14:51	3/8/21 10:49		1.015	Not Detected	mg/L	0.000507	0.001015	U
* Thallium, Total	3/4/21 14:51	3/8/21 10:49		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Manganese, Dissolved	3/8/21 14:58	3/15/21 14:53		92.365	16.8	mg/L	0.006188	0.018473	RA
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	3/9/21 12:35	3/10/21 12:30		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2320 B	***Analyst: JAG***								
Alkalinity, Total as CaCO3	3/12/21 09:39	3/12/21 11:19		1	209	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: TJW***								
* Solids, Dissolved	3/5/21 14:45	3/10/21 10:30		1	1450	mg/L		100	

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

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 4/5/21

Reported: 4/7/2021
Version: 3.2
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: 3/2/21 08:45
Customer ID:
Submittal Date: 3/2/21 16:15

Laboratory ID Number: BB04469

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 4500CO2 D	***Analyst: JAG***								
Bicarbonate Alkalinity, (calc.)	3/12/21 09:39	3/12/21 11:19		1	209	mg/L			
Carbonate Alkalinity, (calc.)	3/12/21 09:39	3/12/21 11:19		1	0.03	mg/L			
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	3/4/21 12:51	3/4/21 12:51		1	10.9	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	3/4/21 15:00	3/4/21 15:00		1	0.167	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	3/5/21 11:55	3/5/21 11:55		32	861	mg/L	16.00	32	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	3/2/21 08:42	3/2/21 08:42			1763.47	uS/cm			FA
pH	3/2/21 08:42	3/2/21 08:42			5.85	SU			FA
Temperature	3/2/21 08:42	3/2/21 08:42			18.25	C			FA
Turbidity	3/2/21 08:42	3/2/21 08:42			2.02	NTU			FA

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

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 4/5/21

Reported: 4/7/2021
Version: 3.2
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: 3/2/21 08:45
Customer ID:
Delivery Date: 3/2/21 16:15

Description: Gorgas Gypsum - MW-13H

Laboratory ID Number: BB04469

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB04675	Lead, Total	mg/L	0.0000087	0.000147	0.10	0.0973	0.0992	0.0985	0.0850 to 0.115	97.3	70.0 to 130	1.98	20.0
BB04469	Manganese, Dissolved	mg/L	0.000002	0.000147	0.10	16.5	16.7	0.0970	0.0850 to 0.115	-300	70.0 to 130	1.20	20.0
BB04675	Calcium, Total	mg/L	0.00266	0.152	5.00	5.21	5.18	5.25	4.25 to 5.75	104	70.0 to 130	0.726	20.0
BB04675	Antimony, Total	mg/L	0.000158	0.00100	0.10	0.0954	0.0958	0.0963	0.0850 to 0.115	95.4	70.0 to 130	0.444	20.0
BB04469	Iron, Dissolved	mg/L	-0.000126	0.0176	0.2	57.1	57.2	0.206	0.170 to 0.230	-200	70.0 to 130	0.175	20.0
BB04675	Arsenic, Total	mg/L	0.0000309	0.000147	0.10	0.0991	0.0993	0.102	0.0850 to 0.115	99.1	70.0 to 130	0.220	20.0
BB04675	Barium, Total	mg/L	0.0000116	0.000200	0.10	0.102	0.0992	0.0978	0.0850 to 0.115	102	70.0 to 130	3.16	20.0
BB04675	Cobalt, Total	mg/L	-0.0000057	0.000147	0.10	0.0992	0.0981	0.102	0.0850 to 0.115	99.2	70.0 to 130	1.13	20.0
BB04675	Cadmium, Total	mg/L	0.00000	0.000147	0.10	0.0958	0.0971	0.0982	0.0850 to 0.115	95.8	70.0 to 130	1.36	20.0
BB04675	Selenium, Total	mg/L	0.0000276	0.00100	0.10	0.0983	0.100	0.100	0.0850 to 0.115	98.3	70.0 to 130	2.05	20.0
BB04675	Beryllium, Total	mg/L	0.0000249	0.000880	0.10	0.0893	0.0904	0.0933	0.0850 to 0.115	89.3	70.0 to 130	1.24	20.0
BB04675	Potassium, Total	mg/L	0.0101	0.367	10.0	10.2	10.2	10.4	8.50 to 11.5	102	70.0 to 130	0.148	20.0
BB04675	Lithium, Total	mg/L	0.0000933	0.0154	0.20	0.197	0.201	0.199	0.170 to 0.230	98.5	70.0 to 130	2.00	20.0
BB04675	Manganese, Total	mg/L	0.0000028	0.000147	0.10	0.0979	0.0973	0.0997	0.0850 to 0.115	97.8	70.0 to 130	0.682	20.0
BB04675	Sodium, Total	mg/L	0.00165	0.0660	5.00	4.93	5.03	5.01	4.25 to 5.75	98.7	70.0 to 130	1.97	20.0
BB04675	Thallium, Total	mg/L	0.0000071	0.000147	0.10	0.0972	0.0990	0.0976	0.0850 to 0.115	97.2	70.0 to 130	1.89	20.0
BB04675	Boron, Total	mg/L	0.0116	0.0650	1.00	1.02	1.03	1.00	0.850 to 1.15	102	70.0 to 130	0.648	20.0
BB04675	Chromium, Total	mg/L	-0.0000882	0.000440	0.10	0.0966	0.0973	0.101	0.0850 to 0.115	96.6	70.0 to 130	0.651	20.0
BB04675	Mercury, Total by CVAA	mg/L	0.0000390	0.000500	0.004	0.00431	0.00437	0.00428	0.00340 to 0.00460	108	70.0 to 130	1.38	20.0
BB04675	Molybdenum, Total	mg/L	0.0000002	0.000147	0.10	0.0945	0.0966	0.0979	0.0850 to 0.115	94.5	70.0 to 130	2.18	20.0
BB04675	Iron, Total	mg/L	0.000898	0.0176	0.2	0.206	0.206	0.207	0.170 to 0.230	103	70.0 to 130	0.126	20.0
BB04675	Magnesium, Total	mg/L	-0.00180	0.0462	5.00	5.10	5.13	5.13	4.25 to 5.75	102	70.0 to 130	0.451	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 4/5/21

Reported: 4/7/2021
Version: 3.2
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: 3/2/21 08:45
Customer ID:
Delivery Date: 3/2/21 16:15

Description: Gorgas Gypsum - MW-13H

Laboratory ID Number: BB04469

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB04472	Fluoride	mg/L	0.0077	0.0500	2.50	2.44	0.0959	2.61	2.25 to 2.75	93.8	80.0 to 120	2.00	20.0
BB04677	Alkalinity, Total as CaCO3	mg/L					324	52.3	45.0 to 55.0			0.557	10.0
BB04472	Chloride	mg/L	-0.121	0.500	160	253	94.9	10.1	9.00 to 11.0	105	80.0 to 120	11.4	20.0
BB04472	Sulfate	mg/L	-0.350	0.500	2000	3830	1710	19.1	18.0 to 22.0	104	80.0 to 120	2.31	20.0
BB04472	Solids, Dissolved	mg/L	-1.00	25.0			2880	54.0	40.0 to 60.0			0.348	5.00

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 4/5/21

Reported: 4/7/2021
Version: 3.2
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: 3/2/21 08:45
Customer ID:
Submittal Date: 3/2/21 16:15

Laboratory ID Number: BB04470

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	3/16/21 10:24	3/22/21 12:07		1.015	0.200	mg/L	0.030000	0.1015	
* Calcium, Total	3/16/21 10:24	3/22/21 14:30		50.75	168	mg/L	3.50175	20.3	
* Iron, Total	3/16/21 10:24	3/22/21 14:30		50.75	59.7	mg/L	0.40600	2.03	
* Lithium, Total	3/16/21 10:24	3/22/21 12:07		1.015	0.0431	mg/L	0.007105	0.01999956	
* Magnesium, Total	3/16/21 10:24	3/22/21 14:30		50.75	108	mg/L	1.06575	20.3	
* Sodium, Total	3/16/21 10:24	3/22/21 14:30		50.75	53.2	mg/L	1.0150	20.3	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Iron, Dissolved	3/15/21 11:44	3/19/21 12:15		101.5	57.5	mg/L	0.8120	4.06	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/4/21 14:51	3/8/21 10:52		1.015	Not Detected	mg/L	0.000507	0.001015	U
* Arsenic, Total	3/4/21 14:51	3/8/21 10:52		1.015	0.295	mg/L	0.000068	0.000203	
* Barium, Total	3/4/21 14:51	3/8/21 10:52		1.015	0.0325	mg/L	0.000101	0.000203	
* Beryllium, Total	3/4/21 14:51	3/8/21 10:52		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	3/4/21 14:51	3/8/21 10:52		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	3/4/21 14:51	3/8/21 10:52		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	3/4/21 14:51	3/8/21 10:52		1.015	0.145	mg/L	0.000068	0.000203	
* Lead, Total	3/4/21 14:51	3/8/21 10:52		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Molybdenum, Total	3/4/21 14:51	3/8/21 10:52		1.015	0.00127	mg/L	0.000068	0.000203	
* Potassium, Total	3/4/21 14:51	3/8/21 10:52		1.015	9.02	mg/L	0.169505	0.5075	
* Manganese, Total	3/4/21 14:51	3/8/21 14:29		92.365	14.6	mg/L	0.006188	0.018473	
* Selenium, Total	3/4/21 14:51	3/8/21 10:52		1.015	Not Detected	mg/L	0.000507	0.001015	U
* Thallium, Total	3/4/21 14:51	3/8/21 10:52		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Manganese, Dissolved	3/8/21 14:58	3/8/21 17:24		92.365	16.0	mg/L	0.006188	0.018473	
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	3/9/21 12:35	3/10/21 12:32		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2320 B	***Analyst: JAG***								
Alkalinity, Total as CaCO3	3/12/21 09:39	3/12/21 11:19		1	205	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: TJW***								
* Solids, Dissolved	3/5/21 14:45	3/10/21 10:30		1	1480	mg/L		100	

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

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 4/5/21

Reported: 4/7/2021
Version: 3.2
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: 3/2/21 08:45
Customer ID:
Submittal Date: 3/2/21 16:15

Laboratory ID Number: BB04470

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 4500CO2 D	***Analyst: JAG***								
Bicarbonate Alkalinity, (calc.)	3/12/21 09:39	3/12/21 11:19		1	205	mg/L			
Carbonate Alkalinity, (calc.)	3/12/21 09:39	3/12/21 11:19		1	0.04	mg/L			
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	3/4/21 12:52	3/4/21 12:52		1	10.9	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	3/4/21 15:01	3/4/21 15:01		1	0.167	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	3/5/21 11:56	3/5/21 11:56		32	856	mg/L	16.00	32	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	3/2/21 08:42	3/2/21 08:42			1763.47	uS/cm			FA
pH	3/2/21 08:42	3/2/21 08:42			5.85	SU			FA
Temperature	3/2/21 08:42	3/2/21 08:42			18.25	C			FA
Turbidity	3/2/21 08:42	3/2/21 08:42			2.02	NTU			FA

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

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 4/5/21

Reported: 4/7/2021
Version: 3.2
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: 3/2/21 08:45
Customer ID:
Delivery Date: 3/2/21 16:15

Description: Gorgas Gypsum - MW-13H DUP

Laboratory ID Number: BB04470

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB04675	Lead, Total	mg/L	0.0000087	0.000147	0.10	0.0973	0.0992	0.0985	0.0850 to 0.115	97.3	70.0 to 130	1.98	20.0
BB04675	Calcium, Total	mg/L	0.00266	0.152	5.00	5.21	5.18	5.25	4.25 to 5.75	104	70.0 to 130	0.726	20.0
BB04675	Antimony, Total	mg/L	0.000158	0.00100	0.10	0.0954	0.0958	0.0963	0.0850 to 0.115	95.4	70.0 to 130	0.444	20.0
BB04675	Boron, Total	mg/L	0.0116	0.0650	1.00	1.02	1.03	1.00	0.850 to 1.15	102	70.0 to 130	0.648	20.0
BB04675	Chromium, Total	mg/L	-0.0000882	0.000440	0.10	0.0966	0.0973	0.101	0.0850 to 0.115	96.6	70.0 to 130	0.651	20.0
BB04675	Mercury, Total by CVAA	mg/L	0.0000390	0.000500	0.004	0.00431	0.00437	0.00428	0.00340 to 0.00460	108	70.0 to 130	1.38	20.0
BB04675	Molybdenum, Total	mg/L	0.0000002	0.000147	0.10	0.0945	0.0966	0.0979	0.0850 to 0.115	94.5	70.0 to 130	2.18	20.0
BB04675	Arsenic, Total	mg/L	0.0000309	0.000147	0.10	0.0991	0.0993	0.102	0.0850 to 0.115	99.1	70.0 to 130	0.220	20.0
BB04675	Barium, Total	mg/L	0.0000116	0.000200	0.10	0.102	0.0992	0.0978	0.0850 to 0.115	102	70.0 to 130	3.16	20.0
BB04675	Cobalt, Total	mg/L	-0.0000057	0.000147	0.10	0.0992	0.0981	0.102	0.0850 to 0.115	99.2	70.0 to 130	1.13	20.0
BB04678	Manganese, Dissolved	mg/L	0.000002	0.000147	0.10	8.14	8.45	0.0970	0.0850 to 0.115	-106	70.0 to 130	3.81	20.0
BB04675	Cadmium, Total	mg/L	0.00000	0.000147	0.10	0.0958	0.0971	0.0982	0.0850 to 0.115	95.8	70.0 to 130	1.36	20.0
BB04675	Selenium, Total	mg/L	0.0000276	0.00100	0.10	0.0983	0.100	0.100	0.0850 to 0.115	98.3	70.0 to 130	2.05	20.0
BB04675	Beryllium, Total	mg/L	0.0000249	0.000880	0.10	0.0893	0.0904	0.0933	0.0850 to 0.115	89.3	70.0 to 130	1.24	20.0
BB04675	Potassium, Total	mg/L	0.0101	0.367	10.0	10.2	10.2	10.4	8.50 to 11.5	102	70.0 to 130	0.148	20.0
BB04675	Lithium, Total	mg/L	0.0000933	0.0154	0.20	0.197	0.201	0.199	0.170 to 0.230	98.5	70.0 to 130	2.00	20.0
BB04675	Manganese, Total	mg/L	0.0000028	0.000147	0.10	0.0979	0.0973	0.0997	0.0850 to 0.115	97.8	70.0 to 130	0.682	20.0
BB04675	Sodium, Total	mg/L	0.00165	0.0660	5.00	4.93	5.03	5.01	4.25 to 5.75	98.7	70.0 to 130	1.97	20.0
BB04675	Thallium, Total	mg/L	0.0000071	0.000147	0.10	0.0972	0.0990	0.0976	0.0850 to 0.115	97.2	70.0 to 130	1.89	20.0
BB04675	Iron, Total	mg/L	0.000898	0.0176	0.2	0.206	0.206	0.207	0.170 to 0.230	103	70.0 to 130	0.126	20.0
BB04675	Magnesium, Total	mg/L	-0.00180	0.0462	5.00	5.10	5.13	5.13	4.25 to 5.75	102	70.0 to 130	0.451	20.0
BB04678	Iron, Dissolved	mg/L	-0.000126	0.0176	0.2	12.1	13.1	0.206	0.170 to 0.230	-170	70.0 to 130	8.14	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 4/5/21

Reported: 4/7/2021
Version: 3.2
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: 3/2/21 08:45
Customer ID:
Delivery Date: 3/2/21 16:15

Description: Gorgas Gypsum - MW-13H DUP

Laboratory ID Number: BB04470

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB04472	Fluoride	mg/L	0.0077	0.0500	2.50	2.44	0.0959	2.61	2.25 to 2.75	93.8	80.0 to 120	2.00	20.0
BB04677	Alkalinity, Total as CaCO3	mg/L					324	52.3	45.0 to 55.0			0.557	10.0
BB04472	Chloride	mg/L	-0.121	0.500	160	253	94.9	10.1	9.00 to 11.0	105	80.0 to 120	11.4	20.0
BB04472	Sulfate	mg/L	-0.350	0.500	2000	3830	1710	19.1	18.0 to 22.0	104	80.0 to 120	2.31	20.0
BB04472	Solids, Dissolved	mg/L	-1.00	25.0			2880	54.0	40.0 to 60.0			0.348	5.00

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 4/5/21

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: 3/2/21 09:54
Customer ID:
Submittal Date: 3/2/21 16:15

Laboratory ID Number: BB04471

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	3/16/21 10:24	3/22/21 12:11		1.015	0.0305	mg/L	0.030000	0.1015	J
* Calcium, Total	3/16/21 10:24	3/22/21 14:34		10.15	139	mg/L	0.70035	4.06	
* Iron, Total	3/16/21 10:24	3/22/21 12:11		1.015	1.70	mg/L	0.008120	0.0406	
* Lithium, Total	3/16/21 10:24	3/22/21 12:11		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	3/16/21 10:24	3/22/21 14:34		10.15	118	mg/L	0.21315	4.06	
* Sodium, Total	3/16/21 10:24	3/22/21 14:34		10.15	41.1	mg/L	0.2030	4.06	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Iron, Dissolved	3/15/21 11:44	3/16/21 12:08		1.015	1.58	mg/L	0.008120	0.0406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/4/21 14:51	3/8/21 10:56		1.015	Not Detected	mg/L	0.000507	0.001015	U
* Arsenic, Total	3/4/21 14:51	3/8/21 10:56		1.015	0.000390	mg/L	0.000068	0.000203	
* Barium, Total	3/4/21 14:51	3/8/21 10:56		1.015	0.0118	mg/L	0.000101	0.000203	
* Beryllium, Total	3/4/21 14:51	3/8/21 10:56		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	3/4/21 14:51	3/8/21 10:56		1.015	0.000366	mg/L	0.000068	0.000203	
* Chromium, Total	3/4/21 14:51	3/8/21 10:56		1.015	0.000295	mg/L	0.000203	0.001015	J
* Cobalt, Total	3/4/21 14:51	3/8/21 10:56		1.015	0.00512	mg/L	0.000068	0.000203	
* Lead, Total	3/4/21 14:51	3/8/21 10:56		1.015	0.000145	mg/L	0.000068	0.000203	J
* Molybdenum, Total	3/4/21 14:51	3/8/21 10:56		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Potassium, Total	3/4/21 14:51	3/8/21 10:56		1.015	0.956	mg/L	0.169505	0.5075	
* Manganese, Total	3/4/21 14:51	3/8/21 14:32		5.075	1.95	mg/L	0.000340	0.001015	
* Selenium, Total	3/4/21 14:51	3/8/21 10:56		1.015	Not Detected	mg/L	0.000507	0.001015	U
* Thallium, Total	3/4/21 14:51	3/8/21 10:56		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Manganese, Dissolved	3/8/21 14:58	3/8/21 17:26		5.075	1.88	mg/L	0.000340	0.001015	
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	3/9/21 12:35	3/10/21 12:34		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2320 B	***Analyst: JAG***								
Alkalinity, Total as CaCO3	3/12/21 09:39	3/12/21 11:19		1	91.5	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: TJW***								
* Solids, Dissolved	3/5/21 14:45	3/10/21 10:30		1	1190	mg/L		83.3	

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

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 4/5/21

Reported: 4/7/2021
Version: 3.2
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: 3/2/21 09:54
Customer ID:
Submittal Date: 3/2/21 16:15

Laboratory ID Number: BB04471

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 4500CO2 D	***Analyst: JAG***								
Bicarbonate Alkalinity, (calc.)	3/12/21 09:39	3/12/21 11:19		1	91.5	mg/L			
Carbonate Alkalinity, (calc.)	3/12/21 09:39	3/12/21 11:19		1	0.01	mg/L			
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	3/4/21 12:53	3/4/21 12:53		1	4.63	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	3/4/21 15:02	3/4/21 15:02		1	0.0758	mg/L	0.06	0.1	J
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	3/5/21 11:57	3/5/21 11:57		32	835	mg/L	16.00	32	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	3/2/21 09:50	3/2/21 09:50			1580.42	uS/cm			FA
pH	3/2/21 09:50	3/2/21 09:50			5.89	SU			FA
Temperature	3/2/21 09:50	3/2/21 09:50			18.32	C			FA
Turbidity	3/2/21 09:50	3/2/21 09:50			6.15	NTU			FA

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

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 4/5/21

Reported: 4/7/2021
Version: 3.2
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: 3/2/21 09:54
Customer ID:
Delivery Date: 3/2/21 16:15

Description: Gorgas Gypsum - MW-11H

Laboratory ID Number: BB04471

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB04675	Lead, Total	mg/L	0.0000087	0.000147	0.10	0.0973	0.0992	0.0985	0.0850 to 0.115	97.3	70.0 to 130	1.98	20.0
BB04675	Calcium, Total	mg/L	0.00266	0.152	5.00	5.21	5.18	5.25	4.25 to 5.75	104	70.0 to 130	0.726	20.0
BB04675	Antimony, Total	mg/L	0.000158	0.00100	0.10	0.0954	0.0958	0.0963	0.0850 to 0.115	95.4	70.0 to 130	0.444	20.0
BB04675	Beryllium, Total	mg/L	0.0000249	0.000880	0.10	0.0893	0.0904	0.0933	0.0850 to 0.115	89.3	70.0 to 130	1.24	20.0
BB04675	Potassium, Total	mg/L	0.0101	0.367	10.0	10.2	10.2	10.4	8.50 to 11.5	102	70.0 to 130	0.148	20.0
BB04675	Lithium, Total	mg/L	0.0000933	0.0154	0.20	0.197	0.201	0.199	0.170 to 0.230	98.5	70.0 to 130	2.00	20.0
BB04675	Manganese, Total	mg/L	0.0000028	0.000147	0.10	0.0979	0.0973	0.0997	0.0850 to 0.115	97.8	70.0 to 130	0.682	20.0
BB04675	Sodium, Total	mg/L	0.00165	0.0660	5.00	4.93	5.03	5.01	4.25 to 5.75	98.7	70.0 to 130	1.97	20.0
BB04675	Thallium, Total	mg/L	0.0000071	0.000147	0.10	0.0972	0.0990	0.0976	0.0850 to 0.115	97.2	70.0 to 130	1.89	20.0
BB04675	Arsenic, Total	mg/L	0.0000309	0.000147	0.10	0.0991	0.0993	0.102	0.0850 to 0.115	99.1	70.0 to 130	0.220	20.0
BB04675	Barium, Total	mg/L	0.0000116	0.000200	0.10	0.102	0.0992	0.0978	0.0850 to 0.115	102	70.0 to 130	3.16	20.0
BB04675	Cobalt, Total	mg/L	-0.0000057	0.000147	0.10	0.0992	0.0981	0.102	0.0850 to 0.115	99.2	70.0 to 130	1.13	20.0
BB04678	Manganese, Dissolved	mg/L	0.000002	0.000147	0.10	8.14	8.45	0.0970	0.0850 to 0.115	-106	70.0 to 130	3.81	20.0
BB04675	Boron, Total	mg/L	0.0116	0.0650	1.00	1.02	1.03	1.00	0.850 to 1.15	102	70.0 to 130	0.648	20.0
BB04675	Chromium, Total	mg/L	-0.0000882	0.000440	0.10	0.0966	0.0973	0.101	0.0850 to 0.115	96.6	70.0 to 130	0.651	20.0
BB04675	Mercury, Total by CVAA	mg/L	0.0000390	0.000500	0.004	0.00431	0.00437	0.00428	0.00340 to 0.00460	108	70.0 to 130	1.38	20.0
BB04675	Molybdenum, Total	mg/L	0.0000002	0.000147	0.10	0.0945	0.0966	0.0979	0.0850 to 0.115	94.5	70.0 to 130	2.18	20.0
BB04675	Iron, Total	mg/L	0.000898	0.0176	0.2	0.206	0.206	0.207	0.170 to 0.230	103	70.0 to 130	0.126	20.0
BB04675	Magnesium, Total	mg/L	-0.00180	0.0462	5.00	5.10	5.13	5.13	4.25 to 5.75	102	70.0 to 130	0.451	20.0
BB04678	Iron, Dissolved	mg/L	-0.000126	0.0176	0.2	12.1	13.1	0.206	0.170 to 0.230	-170	70.0 to 130	8.14	20.0
BB04675	Cadmium, Total	mg/L	0.00000	0.000147	0.10	0.0958	0.0971	0.0982	0.0850 to 0.115	95.8	70.0 to 130	1.36	20.0
BB04675	Selenium, Total	mg/L	0.0000276	0.00100	0.10	0.0983	0.100	0.100	0.0850 to 0.115	98.3	70.0 to 130	2.05	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 4/5/21

Reported: 4/7/2021
Version: 3.2
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: 3/2/21 09:54
Customer ID:
Delivery Date: 3/2/21 16:15

Description: Gorgas Gypsum - MW-11H

Laboratory ID Number: BB04471

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB04472	Fluoride	mg/L	0.0077	0.0500	2.50	2.44	0.0959	2.61	2.25 to 2.75	93.8	80.0 to 120	2.00	20.0
BB04677	Alkalinity, Total as CaCO3	mg/L					324	52.3	45.0 to 55.0			0.557	10.0
BB04472	Chloride	mg/L	-0.121	0.500	160	253	94.9	10.1	9.00 to 11.0	105	80.0 to 120	11.4	20.0
BB04472	Sulfate	mg/L	-0.350	0.500	2000	3830	1710	19.1	18.0 to 22.0	104	80.0 to 120	2.31	20.0
BB04472	Solids, Dissolved	mg/L	-1.00	25.0			2880	54.0	40.0 to 60.0			0.348	5.00

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 4/5/21

Reported: 4/7/2021
Version: 3.2
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: 3/2/21 11:20
Customer ID:
Submittal Date: 3/2/21 16:16

Laboratory ID Number: BB04472

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	3/16/21 10:24	3/22/21 12:14		1.015	6.68	mg/L	0.030000	0.1015	
* Calcium, Total	3/16/21 10:24	3/22/21 14:37		50.75	333	mg/L	3.50175	20.3	
* Iron, Total	3/16/21 10:24	3/22/21 14:37		50.75	19.6	mg/L	0.40600	2.03	
* Lithium, Total	3/16/21 10:24	3/22/21 12:14		1.015	0.178	mg/L	0.007105	0.01999956	
* Magnesium, Total	3/16/21 10:24	3/22/21 14:37		50.75	221	mg/L	1.06575	20.3	
* Sodium, Total	3/16/21 10:24	3/22/21 14:37		50.75	128	mg/L	1.0150	20.3	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Iron, Dissolved	3/15/21 11:44	3/19/21 12:18		10.15	18.1	mg/L	0.08120	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/4/21 14:51	3/8/21 10:59		1.015	Not Detected	mg/L	0.000507	0.001015	U
* Arsenic, Total	3/4/21 14:51	3/8/21 10:59		1.015	0.00105	mg/L	0.000068	0.000203	
* Barium, Total	3/4/21 14:51	3/8/21 10:59		1.015	0.0149	mg/L	0.000101	0.000203	
* Beryllium, Total	3/4/21 14:51	3/8/21 10:59		1.015	0.000724	mg/L	0.000406	0.001015	J
* Cadmium, Total	3/4/21 14:51	3/8/21 10:59		1.015	0.000338	mg/L	0.000068	0.000203	
* Chromium, Total	3/4/21 14:51	3/8/21 10:59		1.015	0.000218	mg/L	0.000203	0.001015	J
* Cobalt, Total	3/4/21 14:51	3/8/21 10:59		1.015	0.163	mg/L	0.000068	0.000203	
* Lead, Total	3/4/21 14:51	3/8/21 10:59		1.015	0.000206	mg/L	0.000068	0.000203	
* Molybdenum, Total	3/4/21 14:51	3/8/21 10:59		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Potassium, Total	3/4/21 14:51	3/8/21 10:59		1.015	8.42	mg/L	0.169505	0.5075	
* Manganese, Total	3/4/21 14:51	3/8/21 14:36		92.365	20.9	mg/L	0.006188	0.018473	
* Selenium, Total	3/4/21 14:51	3/8/21 10:59		1.015	0.00138	mg/L	0.000507	0.001015	
* Thallium, Total	3/4/21 14:51	3/8/21 10:59		1.015	0.000221	mg/L	0.000068	0.000203	
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Manganese, Dissolved	3/8/21 14:58	3/8/21 17:29		92.365	20.5	mg/L	0.006188	0.018473	
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	3/9/21 12:35	3/10/21 12:37		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2320 B	***Analyst: JAG***								
Alkalinity, Total as CaCO3	3/12/21 09:39	3/12/21 11:19		1	54.3	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: TJW***								
* Solids, Dissolved	3/5/21 14:45	3/10/21 10:30		1	2860	mg/L		125	

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

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 4/5/21

Reported: 4/7/2021
Version: 3.2
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: 3/2/21 11:20
Customer ID:
Submittal Date: 3/2/21 16:16

Laboratory ID Number: BB04472

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 4500CO2 D	***Analyst: JAG***								
Bicarbonate Alkalinity, (calc.)	3/12/21 09:39	3/12/21 11:19		1	54.3	mg/L			
Carbonate Alkalinity, (calc.)	3/12/21 09:39	3/12/21 11:19		1	0.00	mg/L			
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	3/4/21 13:06	3/4/21 13:06		16	84.7	mg/L	8.00	16	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	3/4/21 15:03	3/4/21 15:03		1	0.094	mg/L	0.06	0.1	J
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	3/5/21 11:58	3/5/21 11:58		100	1750	mg/L	50.00	100	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	3/2/21 11:16	3/2/21 11:16			3165.41	uS/cm			FA
pH	3/2/21 11:16	3/2/21 11:16			5.29	SU			FA
Temperature	3/2/21 11:16	3/2/21 11:16			19.43	C			FA
Turbidity	3/2/21 11:16	3/2/21 11:16			4.91	NTU			FA

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

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 4/5/21

Reported: 4/7/2021
Version: 3.2
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: 3/2/21 11:20
Customer ID:
Delivery Date: 3/2/21 16:16

Description: Gorgas Gypsum - MW-9H

Laboratory ID Number: BB04472

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB04675	Lead, Total	mg/L	0.0000087	0.000147	0.10	0.0973	0.0992	0.0985	0.0850 to 0.115	97.3	70.0 to 130	1.98	20.0
BB04675	Calcium, Total	mg/L	0.00266	0.152	5.00	5.21	5.18	5.25	4.25 to 5.75	104	70.0 to 130	0.726	20.0
BB04675	Antimony, Total	mg/L	0.000158	0.00100	0.10	0.0954	0.0958	0.0963	0.0850 to 0.115	95.4	70.0 to 130	0.444	20.0
BB04675	Cadmium, Total	mg/L	0.00000	0.000147	0.10	0.0958	0.0971	0.0982	0.0850 to 0.115	95.8	70.0 to 130	1.36	20.0
BB04675	Selenium, Total	mg/L	0.0000276	0.00100	0.10	0.0983	0.100	0.100	0.0850 to 0.115	98.3	70.0 to 130	2.05	20.0
BB04675	Beryllium, Total	mg/L	0.0000249	0.000880	0.10	0.0893	0.0904	0.0933	0.0850 to 0.115	89.3	70.0 to 130	1.24	20.0
BB04675	Potassium, Total	mg/L	0.0101	0.367	10.0	10.2	10.2	10.4	8.50 to 11.5	102	70.0 to 130	0.148	20.0
BB04675	Lithium, Total	mg/L	0.0000933	0.0154	0.20	0.197	0.201	0.199	0.170 to 0.230	98.5	70.0 to 130	2.00	20.0
BB04675	Manganese, Total	mg/L	0.0000028	0.000147	0.10	0.0979	0.0973	0.0997	0.0850 to 0.115	97.8	70.0 to 130	0.682	20.0
BB04675	Sodium, Total	mg/L	0.00165	0.0660	5.00	4.93	5.03	5.01	4.25 to 5.75	98.7	70.0 to 130	1.97	20.0
BB04675	Thallium, Total	mg/L	0.0000071	0.000147	0.10	0.0972	0.0990	0.0976	0.0850 to 0.115	97.2	70.0 to 130	1.89	20.0
BB04675	Boron, Total	mg/L	0.0116	0.0650	1.00	1.02	1.03	1.00	0.850 to 1.15	102	70.0 to 130	0.648	20.0
BB04675	Chromium, Total	mg/L	-0.0000882	0.000440	0.10	0.0966	0.0973	0.101	0.0850 to 0.115	96.6	70.0 to 130	0.651	20.0
BB04675	Mercury, Total by CVAA	mg/L	0.0000390	0.000500	0.004	0.00431	0.00437	0.00428	0.00340 to 0.00460	108	70.0 to 130	1.38	20.0
BB04675	Molybdenum, Total	mg/L	0.0000002	0.000147	0.10	0.0945	0.0966	0.0979	0.0850 to 0.115	94.5	70.0 to 130	2.18	20.0
BB04675	Arsenic, Total	mg/L	0.0000309	0.000147	0.10	0.0991	0.0993	0.102	0.0850 to 0.115	99.1	70.0 to 130	0.220	20.0
BB04675	Barium, Total	mg/L	0.0000116	0.000200	0.10	0.102	0.0992	0.0978	0.0850 to 0.115	102	70.0 to 130	3.16	20.0
BB04675	Cobalt, Total	mg/L	-0.0000057	0.000147	0.10	0.0992	0.0981	0.102	0.0850 to 0.115	99.2	70.0 to 130	1.13	20.0
BB04678	Manganese, Dissolved	mg/L	0.000002	0.000147	0.10	8.14	8.45	0.0970	0.0850 to 0.115	-106	70.0 to 130	3.81	20.0
BB04675	Iron, Total	mg/L	0.000898	0.0176	0.2	0.206	0.206	0.207	0.170 to 0.230	103	70.0 to 130	0.126	20.0
BB04675	Magnesium, Total	mg/L	-0.00180	0.0462	5.00	5.10	5.13	5.13	4.25 to 5.75	102	70.0 to 130	0.451	20.0
BB04678	Iron, Dissolved	mg/L	-0.000126	0.0176	0.2	12.1	13.1	0.206	0.170 to 0.230	-170	70.0 to 130	8.14	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 4/5/21

Reported: 4/7/2021
Version: 3.2
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: 3/2/21 11:20
Customer ID:
Delivery Date: 3/2/21 16:16

Description: Gorgas Gypsum - MW-9H

Laboratory ID Number: BB04472

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB04472	Fluoride	mg/L	0.0077	0.0500	2.50	2.44	0.0959	2.61	2.25 to 2.75	93.8	80.0 to 120	2.00	20.0
BB04677	Alkalinity, Total as CaCO3	mg/L					324	52.3	45.0 to 55.0			0.557	10.0
BB04472	Chloride	mg/L	-0.121	0.500	160	253	94.9	10.1	9.00 to 11.0	105	80.0 to 120	11.4	20.0
BB04472	Sulfate	mg/L	-0.350	0.500	2000	3830	1710	19.1	18.0 to 22.0	104	80.0 to 120	2.31	20.0
BB04472	Solids, Dissolved	mg/L	-1.00	25.0			2880	54.0	40.0 to 60.0			0.348	5.00

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 4/5/21

Reported: 4/7/2021
Version: 3.2
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: 3/3/21 09:00
Customer ID:
Submittal Date: 3/4/21 11:18

Laboratory ID Number: BB04671

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	3/16/21 10:24	3/22/21 12:18		1.015	2.99	mg/L	0.030000	0.1015	
* Calcium, Total	3/16/21 10:24	3/22/21 14:40		101.5	466	mg/L	7.0035	40.6	
* Iron, Total	3/16/21 10:24	3/22/21 14:40		101.5	36.2	mg/L	0.8120	4.06	
* Lithium, Total	3/16/21 10:24	3/22/21 12:18		1.015	0.455	mg/L	0.007105	0.01999956	
* Magnesium, Total	3/16/21 10:24	3/22/21 14:40		101.5	241	mg/L	2.1315	40.6	
* Sodium, Total	3/16/21 10:24	3/22/21 14:40		101.5	217	mg/L	2.030	40.6	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Iron, Dissolved	3/15/21 11:44	3/19/21 12:22		101.5	34.6	mg/L	0.8120	4.06	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/4/21 14:51	3/8/21 11:03		1.015	Not Detected	mg/L	0.000507	0.001015	U
* Arsenic, Total	3/4/21 14:51	3/8/21 11:03		1.015	0.000296	mg/L	0.000068	0.000203	
* Barium, Total	3/4/21 14:51	3/8/21 11:03		1.015	0.0181	mg/L	0.000101	0.000203	
* Beryllium, Total	3/4/21 14:51	3/8/21 11:03		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	3/4/21 14:51	3/8/21 11:03		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	3/4/21 14:51	3/8/21 11:03		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	3/4/21 14:51	3/8/21 11:03		1.015	0.0134	mg/L	0.000068	0.000203	
* Lead, Total	3/4/21 14:51	3/8/21 11:03		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Molybdenum, Total	3/4/21 14:51	3/8/21 11:03		1.015	0.0000793	mg/L	0.000068	0.000203	J
* Potassium, Total	3/4/21 14:51	3/8/21 11:03		1.015	7.38	mg/L	0.169505	0.5075	
* Manganese, Total	3/4/21 14:51	3/8/21 14:40		92.365	14.1	mg/L	0.006188	0.018473	
* Selenium, Total	3/4/21 14:51	3/8/21 11:03		1.015	Not Detected	mg/L	0.000507	0.001015	U
* Thallium, Total	3/4/21 14:51	3/8/21 11:03		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Manganese, Dissolved	3/8/21 14:58	3/8/21 17:32		92.365	13.3	mg/L	0.006188	0.018473	
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	3/9/21 12:35	3/10/21 12:39		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2320 B	***Analyst: JAG***								
Alkalinity, Total as CaCO3	3/12/21 11:25	3/12/21 11:31		1	200	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: TJW***								
* Solids, Dissolved	3/8/21 13:00	3/9/21 15:30		1	3640	mg/L		250	

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

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 4/5/21

Reported: 4/7/2021
Version: 3.2
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: 3/3/21 09:00
Customer ID:
Submittal Date: 3/4/21 11:18

Laboratory ID Number: BB04671

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 4500CO2 D	***Analyst: JAG***								
Bicarbonate Alkalinity, (calc.)	3/12/21 11:25	3/12/21 11:31		1	200	mg/L			
Carbonate Alkalinity, (calc.)	3/12/21 11:25	3/12/21 11:31		1	0.03	mg/L			
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	3/4/21 13:36	3/4/21 13:36		80	307	mg/L	40.00	80	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	3/4/21 15:14	3/4/21 15:14		1	0.458	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	3/5/21 13:15	3/5/21 13:15		50	1930	mg/L	25.00	50	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	3/3/21 08:56	3/3/21 08:56			3659.81	uS/cm			FA
pH	3/3/21 08:56	3/3/21 08:56			5.76	SU			FA
Temperature	3/3/21 08:56	3/3/21 08:56			18.24	C			FA
Turbidity	3/3/21 08:56	3/3/21 08:56			1.61	NTU			FA

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

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 4/5/21

Reported: 4/7/2021
Version: 3.2
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: 3/3/21 09:00
Customer ID:
Delivery Date: 3/4/21 11:18

Description: Gorgas Gypsum - MW-3V

Laboratory ID Number: BB04671

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB04675	Lead, Total	mg/L	0.0000087	0.000147	0.10	0.0973	0.0992	0.0985	0.0850 to 0.115	97.3	70.0 to 130	1.98	20.0
BB04675	Beryllium, Total	mg/L	0.0000249	0.000880	0.10	0.0893	0.0904	0.0933	0.0850 to 0.115	89.3	70.0 to 130	1.24	20.0
BB04675	Potassium, Total	mg/L	0.0101	0.367	10.0	10.2	10.2	10.4	8.50 to 11.5	102	70.0 to 130	0.148	20.0
BB04675	Lithium, Total	mg/L	0.0000933	0.0154	0.20	0.197	0.201	0.199	0.170 to 0.230	98.5	70.0 to 130	2.00	20.0
BB04675	Manganese, Total	mg/L	0.0000028	0.000147	0.10	0.0979	0.0973	0.0997	0.0850 to 0.115	97.8	70.0 to 130	0.682	20.0
BB04675	Sodium, Total	mg/L	0.00165	0.0660	5.00	4.93	5.03	5.01	4.25 to 5.75	98.7	70.0 to 130	1.97	20.0
BB04675	Thallium, Total	mg/L	0.0000071	0.000147	0.10	0.0972	0.0990	0.0976	0.0850 to 0.115	97.2	70.0 to 130	1.89	20.0
BB04675	Arsenic, Total	mg/L	0.0000309	0.000147	0.10	0.0991	0.0993	0.102	0.0850 to 0.115	99.1	70.0 to 130	0.220	20.0
BB04675	Barium, Total	mg/L	0.0000116	0.000200	0.10	0.102	0.0992	0.0978	0.0850 to 0.115	102	70.0 to 130	3.16	20.0
BB04675	Cobalt, Total	mg/L	-0.0000057	0.000147	0.10	0.0992	0.0981	0.102	0.0850 to 0.115	99.2	70.0 to 130	1.13	20.0
BB04678	Manganese, Dissolved	mg/L	0.000002	0.000147	0.10	8.14	8.45	0.0970	0.0850 to 0.115	-106	70.0 to 130	3.81	20.0
BB04675	Cadmium, Total	mg/L	0.00000	0.000147	0.10	0.0958	0.0971	0.0982	0.0850 to 0.115	95.8	70.0 to 130	1.36	20.0
BB04675	Selenium, Total	mg/L	0.0000276	0.00100	0.10	0.0983	0.100	0.100	0.0850 to 0.115	98.3	70.0 to 130	2.05	20.0
BB04675	Boron, Total	mg/L	0.0116	0.0650	1.00	1.02	1.03	1.00	0.850 to 1.15	102	70.0 to 130	0.648	20.0
BB04675	Chromium, Total	mg/L	-0.0000882	0.000440	0.10	0.0966	0.0973	0.101	0.0850 to 0.115	96.6	70.0 to 130	0.651	20.0
BB04675	Mercury, Total by CVAA	mg/L	0.0000390	0.000500	0.004	0.00431	0.00437	0.00428	0.00340 to 0.00460	108	70.0 to 130	1.38	20.0
BB04675	Molybdenum, Total	mg/L	0.0000002	0.000147	0.10	0.0945	0.0966	0.0979	0.0850 to 0.115	94.5	70.0 to 130	2.18	20.0
BB04675	Iron, Total	mg/L	0.000898	0.0176	0.2	0.206	0.206	0.207	0.170 to 0.230	103	70.0 to 130	0.126	20.0
BB04675	Magnesium, Total	mg/L	-0.00180	0.0462	5.00	5.10	5.13	5.13	4.25 to 5.75	102	70.0 to 130	0.451	20.0
BB04678	Iron, Dissolved	mg/L	-0.000126	0.0176	0.2	12.1	13.1	0.206	0.170 to 0.230	-170	70.0 to 130	8.14	20.0
BB04675	Calcium, Total	mg/L	0.00266	0.152	5.00	5.21	5.18	5.25	4.25 to 5.75	104	70.0 to 130	0.726	20.0
BB04675	Antimony, Total	mg/L	0.000158	0.00100	0.10	0.0954	0.0958	0.0963	0.0850 to 0.115	95.4	70.0 to 130	0.444	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 4/5/21

Reported: 4/7/2021
Version: 3.2
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: 3/3/21 09:00
Customer ID:
Delivery Date: 3/4/21 11:18

Description: Gorgas Gypsum - MW-3V

Laboratory ID Number: BB04671

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB04679	Solids, Dissolved	mg/L	2.00	25.0			529	52.0	40.0 to 60.0			3.82	5.00
BB04679	Chloride	mg/L	-0.0292	0.500	10.0	11.9	1.54	10.1	9.00 to 11.0	103	80.0 to 120	2.56	20.0
BB04671	Alkalinity, Total as CaCO3	mg/L					202	52.3	45.0 to 55.0			1.03	10.0
BB04679	Fluoride	mg/L	-0.00417	0.0500	2.50	0.112	-0.213	2.53	2.25 to 2.75	4.48	80.0 to 120	0.00	20.0
BB04679	Sulfate	mg/L	-0.0911	0.500	500	789	319	19.8	18.0 to 22.0	93.8	80.0 to 120	0.313	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 4/5/21

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: 3/3/21 10:19
Customer ID:
Submittal Date: 3/4/21 11:18

Laboratory ID Number: BB04672

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	3/16/21 10:24	3/22/21 12:21		1.015	2.42	mg/L	0.030000	0.1015	
* Calcium, Total	3/16/21 10:24	3/22/21 14:44		10.15	100	mg/L	0.70035	4.06	
* Iron, Total	3/16/21 10:24	3/22/21 14:44		10.15	13.1	mg/L	0.08120	0.406	
* Lithium, Total	3/16/21 10:24	3/22/21 12:21		1.015	0.313	mg/L	0.007105	0.01999956	
* Magnesium, Total	3/16/21 10:24	3/22/21 14:44		10.15	85.3	mg/L	0.21315	4.06	
* Sodium, Total	3/16/21 10:24	3/22/21 12:21		1.015	16.9	mg/L	0.02030	0.406	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Iron, Dissolved	3/15/21 11:44	3/19/21 12:25		10.15	13.1	mg/L	0.08120	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/4/21 14:51	3/8/21 11:06		1.015	Not Detected	mg/L	0.000507	0.001015	U
* Arsenic, Total	3/4/21 14:51	3/8/21 11:06		1.015	0.00116	mg/L	0.000068	0.000203	
* Barium, Total	3/4/21 14:51	3/8/21 11:06		1.015	0.0117	mg/L	0.000101	0.000203	
* Beryllium, Total	3/4/21 14:51	3/8/21 11:06		1.015	0.00406	mg/L	0.000406	0.001015	
* Cadmium, Total	3/4/21 14:51	3/8/21 11:06		1.015	0.00162	mg/L	0.000068	0.000203	
* Chromium, Total	3/4/21 14:51	3/8/21 11:06		1.015	0.000567	mg/L	0.000203	0.001015	J
* Cobalt, Total	3/4/21 14:51	3/8/21 11:06		1.015	0.240	mg/L	0.000068	0.000203	
* Lead, Total	3/4/21 14:51	3/8/21 11:06		1.015	0.000609	mg/L	0.000068	0.000203	
* Molybdenum, Total	3/4/21 14:51	3/8/21 11:06		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Potassium, Total	3/4/21 14:51	3/8/21 11:06		1.015	4.45	mg/L	0.169505	0.5075	
* Manganese, Total	3/4/21 14:51	3/8/21 14:54		10.15	11.1	mg/L	0.000680	0.00203	
* Selenium, Total	3/4/21 14:51	3/8/21 11:06		1.015	0.00294	mg/L	0.000507	0.001015	
* Thallium, Total	3/4/21 14:51	3/8/21 11:06		1.015	0.000178	mg/L	0.000068	0.000203	J
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Manganese, Dissolved	3/8/21 14:58	3/8/21 17:42		10.15	10.2	mg/L	0.000680	0.00203	
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	3/9/21 12:35	3/10/21 12:41		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2540C	***Analyst: TJW***								
* Solids, Dissolved	3/8/21 13:00	3/9/21 15:30		1	1040	mg/L		83.3	
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	3/4/21 13:38	3/4/21 13:38		4	40.3	mg/L	2.00	4	

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

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified. Alkalinity was not performed due to the initial pH was less than the titration end point of 4.5 SU. LBM 4/5/21

Reported: 4/7/2021
Version: 3.2
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: 3/3/21 10:19
Customer ID:
Submittal Date: 3/4/21 11:18

Laboratory ID Number: BB04672

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500F G 2017		***Analyst: JCC***							
* Fluoride	3/4/21 15:15	3/4/21 15:15		1	Not Detected	mg/L	0.06	0.1	U
Analytical Method: SM4500SO4 E 2011		***Analyst: JCC***							
* Sulfate	3/5/21 13:16	3/5/21 13:16		25	609	mg/L	12.50	25	
Analytical Method: Field Measurements		***Analyst: DKG***							
Conductivity	3/3/21 10:15	3/3/21 10:15			1240.42	uS/cm			FA
pH	3/3/21 10:15	3/3/21 10:15			3.76	SU			FA
Temperature	3/3/21 10:15	3/3/21 10:15			19.97	C			FA
Turbidity	3/3/21 10:15	3/3/21 10:15			4.1	NTU			FA

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

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified. Alkalinity was not performed due to the initial pH was less than the titration end point of 4.5 SU. LBM 4/5/21

Reported: 4/7/2021
Version: 3.2
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: 3/3/21 10:19
Customer ID:
Delivery Date: 3/4/21 11:18

Description: Gorgas Gypsum - MW-4

Laboratory ID Number: BB04672

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB04675	Lead, Total	mg/L	0.0000087	0.000147	0.10	0.0973	0.0992	0.0985	0.0850 to 0.115	97.3	70.0 to 130	1.98	20.0
BB04675	Calcium, Total	mg/L	0.00266	0.152	5.00	5.21	5.18	5.25	4.25 to 5.75	104	70.0 to 130	0.726	20.0
BB04675	Antimony, Total	mg/L	0.000158	0.00100	0.10	0.0954	0.0958	0.0963	0.0850 to 0.115	95.4	70.0 to 130	0.444	20.0
BB04675	Cadmium, Total	mg/L	0.00000	0.000147	0.10	0.0958	0.0971	0.0982	0.0850 to 0.115	95.8	70.0 to 130	1.36	20.0
BB04675	Selenium, Total	mg/L	0.0000276	0.00100	0.10	0.0983	0.100	0.100	0.0850 to 0.115	98.3	70.0 to 130	2.05	20.0
BB04675	Boron, Total	mg/L	0.0116	0.0650	1.00	1.02	1.03	1.00	0.850 to 1.15	102	70.0 to 130	0.648	20.0
BB04675	Chromium, Total	mg/L	-0.0000882	0.000440	0.10	0.0966	0.0973	0.101	0.0850 to 0.115	96.6	70.0 to 130	0.651	20.0
BB04675	Mercury, Total by CVAA	mg/L	0.0000390	0.000500	0.004	0.00431	0.00437	0.00428	0.00340 to 0.00460	108	70.0 to 130	1.38	20.0
BB04675	Molybdenum, Total	mg/L	0.0000002	0.000147	0.10	0.0945	0.0966	0.0979	0.0850 to 0.115	94.5	70.0 to 130	2.18	20.0
BB04675	Beryllium, Total	mg/L	0.0000249	0.000880	0.10	0.0893	0.0904	0.0933	0.0850 to 0.115	89.3	70.0 to 130	1.24	20.0
BB04675	Potassium, Total	mg/L	0.0101	0.367	10.0	10.2	10.2	10.4	8.50 to 11.5	102	70.0 to 130	0.148	20.0
BB04675	Lithium, Total	mg/L	0.0000933	0.0154	0.20	0.197	0.201	0.199	0.170 to 0.230	98.5	70.0 to 130	2.00	20.0
BB04675	Manganese, Total	mg/L	0.0000028	0.000147	0.10	0.0979	0.0973	0.0997	0.0850 to 0.115	97.8	70.0 to 130	0.682	20.0
BB04675	Sodium, Total	mg/L	0.00165	0.0660	5.00	4.93	5.03	5.01	4.25 to 5.75	98.7	70.0 to 130	1.97	20.0
BB04675	Thallium, Total	mg/L	0.0000071	0.000147	0.10	0.0972	0.0990	0.0976	0.0850 to 0.115	97.2	70.0 to 130	1.89	20.0
BB04675	Arsenic, Total	mg/L	0.0000309	0.000147	0.10	0.0991	0.0993	0.102	0.0850 to 0.115	99.1	70.0 to 130	0.220	20.0
BB04675	Barium, Total	mg/L	0.0000116	0.000200	0.10	0.102	0.0992	0.0978	0.0850 to 0.115	102	70.0 to 130	3.16	20.0
BB04675	Cobalt, Total	mg/L	-0.0000057	0.000147	0.10	0.0992	0.0981	0.102	0.0850 to 0.115	99.2	70.0 to 130	1.13	20.0
BB04678	Manganese, Dissolved	mg/L	0.000002	0.000147	0.10	8.14	8.45	0.0970	0.0850 to 0.115	-106	70.0 to 130	3.81	20.0
BB04675	Iron, Total	mg/L	0.000898	0.0176	0.2	0.206	0.206	0.207	0.170 to 0.230	103	70.0 to 130	0.126	20.0
BB04675	Magnesium, Total	mg/L	-0.00180	0.0462	5.00	5.10	5.13	5.13	4.25 to 5.75	102	70.0 to 130	0.451	20.0
BB04678	Iron, Dissolved	mg/L	-0.000126	0.0176	0.2	12.1	13.1	0.206	0.170 to 0.230	-170	70.0 to 130	8.14	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified. Alkalinity was not performed due to the initial pH was less than the titration end point of 4.5 SU. LBM 4/5/21

Reported: 4/7/2021
Version: 3.2
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: 3/3/21 10:19
Customer ID:
Delivery Date: 3/4/21 11:18

Description: Gorgas Gypsum - MW-4

Laboratory ID Number: BB04672

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB04679	Solids, Dissolved	mg/L	2.00	25.0			529	52.0	40.0 to 60.0			3.82	5.00
BB04679	Chloride	mg/L	-0.0292	0.500	10.0	11.9	1.54	10.1	9.00 to 11.0	103	80.0 to 120	2.56	20.0
BB04679	Fluoride	mg/L	-0.00417	0.0500	2.50	0.112	-0.213	2.53	2.25 to 2.75	4.48	80.0 to 120	0.00	20.0
BB04679	Sulfate	mg/L	-0.0911	0.500	500	789	319	19.8	18.0 to 22.0	93.8	80.0 to 120	0.313	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified. Alkalinity was not performed due to the initial pH was less than the titration end point of 4.5 SU. LBM 4/5/21

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: 3/3/21 11:36
Customer ID:
Submittal Date: 3/4/21 11:18

Laboratory ID Number: BB04673

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	3/16/21 10:24	3/22/21 12:24		1.015	4.09	mg/L	0.030000	0.1015	
* Calcium, Total	3/16/21 10:24	3/22/21 14:47		20.3	161	mg/L	1.4007	8.12	
* Iron, Total	3/16/21 10:24	3/22/21 14:47		20.3	37.7	mg/L	0.1624	0.812	
* Lithium, Total	3/16/21 10:24	3/22/21 12:24		1.015	0.345	mg/L	0.007105	0.01999956	
* Magnesium, Total	3/16/21 10:24	3/22/21 14:47		20.3	105	mg/L	0.4263	8.12	
* Sodium, Total	3/16/21 10:24	3/22/21 12:24		1.015	30.6	mg/L	0.02030	0.406	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Iron, Dissolved	3/15/21 11:44	3/19/21 12:35		101.5	37.3	mg/L	0.8120	4.06	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/4/21 14:51	3/8/21 11:10		1.015	Not Detected	mg/L	0.000507	0.001015	U
* Arsenic, Total	3/4/21 14:51	3/8/21 11:10		1.015	0.00107	mg/L	0.000068	0.000203	
* Barium, Total	3/4/21 14:51	3/8/21 11:10		1.015	0.0103	mg/L	0.000101	0.000203	
* Beryllium, Total	3/4/21 14:51	3/8/21 11:10		1.015	0.00320	mg/L	0.000406	0.001015	
* Cadmium, Total	3/4/21 14:51	3/8/21 11:10		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	3/4/21 14:51	3/8/21 11:10		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	3/4/21 14:51	3/8/21 11:10		1.015	0.118	mg/L	0.000068	0.000203	
* Lead, Total	3/4/21 14:51	3/8/21 11:10		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Molybdenum, Total	3/4/21 14:51	3/8/21 11:10		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Potassium, Total	3/4/21 14:51	3/8/21 11:10		1.015	4.44	mg/L	0.169505	0.5075	
* Manganese, Total	3/4/21 14:51	3/8/21 14:58		5.075	4.67	mg/L	0.000340	0.001015	
* Selenium, Total	3/4/21 14:51	3/8/21 11:10		1.015	0.000749	mg/L	0.000507	0.001015	J
* Thallium, Total	3/4/21 14:51	3/8/21 11:10		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Manganese, Dissolved	3/8/21 14:58	3/8/21 17:45		5.075	4.31	mg/L	0.000340	0.001015	
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	3/9/21 12:35	3/10/21 12:44		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2320 B	***Analyst: JAG***								
Alkalinity, Total as CaCO3	3/12/21 09:39	3/12/21 11:19		1	40.2	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: TJW***								
* Solids, Dissolved	3/8/21 13:00	3/9/21 15:30		1	1320	mg/L		83.3	

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

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 4/5/21

Reported: 4/7/2021
Version: 3.2
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: 3/3/21 11:36
Customer ID:
Submittal Date: 3/4/21 11:18

Laboratory ID Number: BB04673

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 4500CO2 D	***Analyst: JAG***								
Bicarbonate Alkalinity, (calc.)	3/12/21 09:39	3/12/21 11:19		1	40.2	mg/L			
Carbonate Alkalinity, (calc.)	3/12/21 09:39	3/12/21 11:19		1	0.00	mg/L			
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	3/4/21 13:39	3/4/21 13:39		8	70.8	mg/L	4.00	8	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	3/4/21 15:17	3/4/21 15:17		1	0.262	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	3/5/21 13:17	3/5/21 13:17		32	746	mg/L	16.00	32	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	3/3/21 11:33	3/3/21 11:33			1554.01	uS/cm			FA
pH	3/3/21 11:33	3/3/21 11:33			5.75	SU			FA
Temperature	3/3/21 11:33	3/3/21 11:33			19.19	C			FA
Turbidity	3/3/21 11:33	3/3/21 11:33			4.82	NTU			FA

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

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 4/5/21

Reported: 4/7/2021
Version: 3.2
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: 3/3/21 11:36
Customer ID:
Delivery Date: 3/4/21 11:18

Description: Gorgas Gypsum - MW-4V

Laboratory ID Number: BB04673

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB04675	Lead, Total	mg/L	0.0000087	0.000147	0.10	0.0973	0.0992	0.0985	0.0850 to 0.115	97.3	70.0 to 130	1.98	20.0
BB04675	Calcium, Total	mg/L	0.00266	0.152	5.00	5.21	5.18	5.25	4.25 to 5.75	104	70.0 to 130	0.726	20.0
BB04675	Antimony, Total	mg/L	0.000158	0.00100	0.10	0.0954	0.0958	0.0963	0.0850 to 0.115	95.4	70.0 to 130	0.444	20.0
BB04675	Cadmium, Total	mg/L	0.00000	0.000147	0.10	0.0958	0.0971	0.0982	0.0850 to 0.115	95.8	70.0 to 130	1.36	20.0
BB04675	Selenium, Total	mg/L	0.0000276	0.00100	0.10	0.0983	0.100	0.100	0.0850 to 0.115	98.3	70.0 to 130	2.05	20.0
BB04675	Arsenic, Total	mg/L	0.0000309	0.000147	0.10	0.0991	0.0993	0.102	0.0850 to 0.115	99.1	70.0 to 130	0.220	20.0
BB04675	Barium, Total	mg/L	0.0000116	0.000200	0.10	0.102	0.0992	0.0978	0.0850 to 0.115	102	70.0 to 130	3.16	20.0
BB04675	Cobalt, Total	mg/L	-0.0000057	0.000147	0.10	0.0992	0.0981	0.102	0.0850 to 0.115	99.2	70.0 to 130	1.13	20.0
BB04678	Manganese, Dissolved	mg/L	0.000002	0.000147	0.10	8.14	8.45	0.0970	0.0850 to 0.115	-106	70.0 to 130	3.81	20.0
BB04675	Boron, Total	mg/L	0.0116	0.0650	1.00	1.02	1.03	1.00	0.850 to 1.15	102	70.0 to 130	0.648	20.0
BB04675	Chromium, Total	mg/L	-0.0000882	0.000440	0.10	0.0966	0.0973	0.101	0.0850 to 0.115	96.6	70.0 to 130	0.651	20.0
BB04675	Mercury, Total by CVAA	mg/L	0.0000390	0.000500	0.004	0.00431	0.00437	0.00428	0.00340 to 0.00460	108	70.0 to 130	1.38	20.0
BB04675	Molybdenum, Total	mg/L	0.0000002	0.000147	0.10	0.0945	0.0966	0.0979	0.0850 to 0.115	94.5	70.0 to 130	2.18	20.0
BB04675	Beryllium, Total	mg/L	0.0000249	0.000880	0.10	0.0893	0.0904	0.0933	0.0850 to 0.115	89.3	70.0 to 130	1.24	20.0
BB04675	Potassium, Total	mg/L	0.0101	0.367	10.0	10.2	10.2	10.4	8.50 to 11.5	102	70.0 to 130	0.148	20.0
BB04675	Lithium, Total	mg/L	0.0000933	0.0154	0.20	0.197	0.201	0.199	0.170 to 0.230	98.5	70.0 to 130	2.00	20.0
BB04675	Manganese, Total	mg/L	0.0000028	0.000147	0.10	0.0979	0.0973	0.0997	0.0850 to 0.115	97.8	70.0 to 130	0.682	20.0
BB04675	Sodium, Total	mg/L	0.00165	0.0660	5.00	4.93	5.03	5.01	4.25 to 5.75	98.7	70.0 to 130	1.97	20.0
BB04675	Thallium, Total	mg/L	0.0000071	0.000147	0.10	0.0972	0.0990	0.0976	0.0850 to 0.115	97.2	70.0 to 130	1.89	20.0
BB04675	Iron, Total	mg/L	0.000898	0.0176	0.2	0.206	0.206	0.207	0.170 to 0.230	103	70.0 to 130	0.126	20.0
BB04675	Magnesium, Total	mg/L	-0.00180	0.0462	5.00	5.10	5.13	5.13	4.25 to 5.75	102	70.0 to 130	0.451	20.0
BB04678	Iron, Dissolved	mg/L	-0.000126	0.0176	0.2	12.1	13.1	0.206	0.170 to 0.230	-170	70.0 to 130	8.14	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 4/5/21

Reported: 4/7/2021
Version: 3.2
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: 3/3/21 11:36
Customer ID:
Delivery Date: 3/4/21 11:18

Description: Gorgas Gypsum - MW-4V

Laboratory ID Number: BB04673

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB04679	Solids, Dissolved	mg/L	2.00	25.0			529	52.0	40.0 to 60.0			3.82	5.00
BB04679	Chloride	mg/L	-0.0292	0.500	10.0	11.9	1.54	10.1	9.00 to 11.0	103	80.0 to 120	2.56	20.0
BB04679	Fluoride	mg/L	-0.00417	0.0500	2.50	0.112	-0.213	2.53	2.25 to 2.75	4.48	80.0 to 120	0.00	20.0
BB04679	Sulfate	mg/L	-0.0911	0.500	500	789	319	19.8	18.0 to 22.0	93.8	80.0 to 120	0.313	20.0
BB04677	Alkalinity, Total as CaCO3	mg/L					324	52.3	45.0 to 55.0			0.557	10.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 4/5/21

Reported: 4/7/2021
Version: 3.2
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: 3/3/21 12:45
Customer ID:
Submittal Date: 3/4/21 11:18

Laboratory ID Number: BB04674

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	3/16/21 10:24	3/22/21 12:28		1.015	0.108	mg/L	0.030000	0.1015	
* Calcium, Total	3/16/21 10:24	3/22/21 14:50		10.15	98.9	mg/L	0.70035	4.06	
* Iron, Total	3/16/21 10:24	3/22/21 14:50		10.15	9.19	mg/L	0.08120	0.406	
* Lithium, Total	3/16/21 10:24	3/22/21 12:28		1.015	0.346	mg/L	0.007105	0.01999956	
* Magnesium, Total	3/16/21 10:24	3/22/21 14:50		10.15	61.0	mg/L	0.21315	4.06	
* Sodium, Total	3/16/21 10:24	3/22/21 12:28		1.015	23.8	mg/L	0.02030	0.406	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Iron, Dissolved	3/15/21 11:44	3/19/21 12:38		10.15	9.20	mg/L	0.08120	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/4/21 14:51	3/8/21 11:13		1.015	Not Detected	mg/L	0.000507	0.001015	U
* Arsenic, Total	3/4/21 14:51	3/8/21 11:13		1.015	0.00515	mg/L	0.000068	0.000203	
* Barium, Total	3/4/21 14:51	3/8/21 11:13		1.015	0.0114	mg/L	0.000101	0.000203	
* Beryllium, Total	3/4/21 14:51	3/8/21 11:13		1.015	0.00600	mg/L	0.000406	0.001015	
* Cadmium, Total	3/4/21 14:51	3/8/21 11:13		1.015	0.000128	mg/L	0.000068	0.000203	J
* Chromium, Total	3/4/21 14:51	3/8/21 11:13		1.015	0.00196	mg/L	0.000203	0.001015	
* Cobalt, Total	3/4/21 14:51	3/8/21 11:13		1.015	0.0970	mg/L	0.000068	0.000203	
* Lead, Total	3/4/21 14:51	3/8/21 11:13		1.015	0.000530	mg/L	0.000068	0.000203	
* Molybdenum, Total	3/4/21 14:51	3/8/21 11:13		1.015	0.000107	mg/L	0.000068	0.000203	J
* Potassium, Total	3/4/21 14:51	3/8/21 11:13		1.015	4.28	mg/L	0.169505	0.5075	
* Manganese, Total	3/4/21 14:51	3/8/21 15:01		5.075	3.33	mg/L	0.000340	0.001015	
* Selenium, Total	3/4/21 14:51	3/8/21 11:13		1.015	0.00404	mg/L	0.000507	0.001015	
* Thallium, Total	3/4/21 14:51	3/8/21 11:13		1.015	0.000109	mg/L	0.000068	0.000203	J
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Manganese, Dissolved	3/8/21 14:58	3/8/21 17:47		5.075	3.19	mg/L	0.000340	0.001015	
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	3/9/21 12:35	3/10/21 12:46		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2540C	***Analyst: TJW***								
* Solids, Dissolved	3/8/21 13:00	3/9/21 15:30		1	974	mg/L		50	
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	3/4/21 13:40	3/4/21 13:40		1	4.48	mg/L	0.50	1	

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

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified. Alkalinity was not performed due to the initial pH was less than the titration end point of 4.5 SU. Fluoride result is qualified due to potential matrix interference. LBM 4/5/21

Reported: 4/7/2021
Version: 3.2
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: 3/3/21 12:45
Customer ID:
Submittal Date: 3/4/21 11:18

Laboratory ID Number: BB04674

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500F G 2017		***Analyst: JCC***							
* Fluoride	3/4/21 15:18	3/4/21 15:18		1	Not Detected	mg/L	0.06	0.1	U
Analytical Method: SM4500SO4 E 2011		***Analyst: JCC***							
* Sulfate	3/5/21 13:19	3/5/21 13:19		25	597	mg/L	12.50	25	
Analytical Method: Field Measurements		***Analyst: DKG***							
Conductivity	3/3/21 12:41	3/3/21 12:41			1091.60	uS/cm			FA
pH	3/3/21 12:41	3/3/21 12:41			3.83	SU			FA
Temperature	3/3/21 12:41	3/3/21 12:41			17.72	C			FA
Turbidity	3/3/21 12:41	3/3/21 12:41			1	NTU			FA

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

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified. Alkalinity was not performed due to the initial pH was less than the titration end point of 4.5 SU. Fluoride result is qualified due to potential matrix interference. LBM 4/5/21

Reported: 4/7/2021
Version: 3.2
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: 3/3/21 12:45
Customer ID:
Delivery Date: 3/4/21 11:18

Description: Gorgas Gypsum - PZ-18

Laboratory ID Number: BB04674

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB04675	Lead, Total	mg/L	0.0000087	0.000147	0.10	0.0973	0.0992	0.0985	0.0850 to 0.115	97.3	70.0 to 130	1.98	20.0
BB04675	Calcium, Total	mg/L	0.00266	0.152	5.00	5.21	5.18	5.25	4.25 to 5.75	104	70.0 to 130	0.726	20.0
BB04675	Antimony, Total	mg/L	0.000158	0.00100	0.10	0.0954	0.0958	0.0963	0.0850 to 0.115	95.4	70.0 to 130	0.444	20.0
BB04675	Cadmium, Total	mg/L	0.00000	0.000147	0.10	0.0958	0.0971	0.0982	0.0850 to 0.115	95.8	70.0 to 130	1.36	20.0
BB04675	Selenium, Total	mg/L	0.0000276	0.00100	0.10	0.0983	0.100	0.100	0.0850 to 0.115	98.3	70.0 to 130	2.05	20.0
BB04675	Beryllium, Total	mg/L	0.0000249	0.000880	0.10	0.0893	0.0904	0.0933	0.0850 to 0.115	89.3	70.0 to 130	1.24	20.0
BB04675	Potassium, Total	mg/L	0.0101	0.367	10.0	10.2	10.2	10.4	8.50 to 11.5	102	70.0 to 130	0.148	20.0
BB04675	Lithium, Total	mg/L	0.0000933	0.0154	0.20	0.197	0.201	0.199	0.170 to 0.230	98.5	70.0 to 130	2.00	20.0
BB04675	Manganese, Total	mg/L	0.0000028	0.000147	0.10	0.0979	0.0973	0.0997	0.0850 to 0.115	97.8	70.0 to 130	0.682	20.0
BB04675	Sodium, Total	mg/L	0.00165	0.0660	5.00	4.93	5.03	5.01	4.25 to 5.75	98.7	70.0 to 130	1.97	20.0
BB04675	Thallium, Total	mg/L	0.0000071	0.000147	0.10	0.0972	0.0990	0.0976	0.0850 to 0.115	97.2	70.0 to 130	1.89	20.0
BB04675	Boron, Total	mg/L	0.0116	0.0650	1.00	1.02	1.03	1.00	0.850 to 1.15	102	70.0 to 130	0.648	20.0
BB04675	Chromium, Total	mg/L	-0.0000882	0.000440	0.10	0.0966	0.0973	0.101	0.0850 to 0.115	96.6	70.0 to 130	0.651	20.0
BB04675	Mercury, Total by CVAA	mg/L	0.0000390	0.000500	0.004	0.00431	0.00437	0.00428	0.00340 to 0.00460	108	70.0 to 130	1.38	20.0
BB04675	Molybdenum, Total	mg/L	0.0000002	0.000147	0.10	0.0945	0.0966	0.0979	0.0850 to 0.115	94.5	70.0 to 130	2.18	20.0
BB04675	Iron, Total	mg/L	0.000898	0.0176	0.2	0.206	0.206	0.207	0.170 to 0.230	103	70.0 to 130	0.126	20.0
BB04675	Magnesium, Total	mg/L	-0.00180	0.0462	5.00	5.10	5.13	5.13	4.25 to 5.75	102	70.0 to 130	0.451	20.0
BB04678	Iron, Dissolved	mg/L	-0.000126	0.0176	0.2	12.1	13.1	0.206	0.170 to 0.230	-170	70.0 to 130	8.14	20.0
BB04675	Arsenic, Total	mg/L	0.0000309	0.000147	0.10	0.0991	0.0993	0.102	0.0850 to 0.115	99.1	70.0 to 130	0.220	20.0
BB04675	Barium, Total	mg/L	0.0000116	0.000200	0.10	0.102	0.0992	0.0978	0.0850 to 0.115	102	70.0 to 130	3.16	20.0
BB04675	Cobalt, Total	mg/L	-0.0000057	0.000147	0.10	0.0992	0.0981	0.102	0.0850 to 0.115	99.2	70.0 to 130	1.13	20.0
BB04678	Manganese, Dissolved	mg/L	0.000002	0.000147	0.10	8.14	8.45	0.0970	0.0850 to 0.115	-106	70.0 to 130	3.81	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified. Alkalinity was not performed due to the initial pH was less than the titration end point of 4.5 SU. Fluoride result is qualified due to potential matrix interference. LBM 4/5/21

Reported: 4/7/2021
Version: 3.2
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: 3/3/21 12:45
Customer ID:
Delivery Date: 3/4/21 11:18

Description: Gorgas Gypsum - PZ-18

Laboratory ID Number: BB04674

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB04679	Solids, Dissolved	mg/L	2.00	25.0			529	52.0	40.0 to 60.0			3.82	5.00
BB04679	Chloride	mg/L	-0.0292	0.500	10.0	11.9	1.54	10.1	9.00 to 11.0	103	80.0 to 120	2.56	20.0
BB04679	Fluoride	mg/L	-0.00417	0.0500	2.50	0.112	-0.213	2.53	2.25 to 2.75	4.48	80.0 to 120	0.00	20.0
BB04679	Sulfate	mg/L	-0.0911	0.500	500	789	319	19.8	18.0 to 22.0	93.8	80.0 to 120	0.313	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified. Alkalinity was not performed due to the initial pH was less than the titration end point of 4.5 SU. Fluoride result is qualified due to potential matrix interference. LBM 4/5/21

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: 3/3/21 13:20
Customer ID:
Submittal Date: 3/4/21 11:18

Laboratory ID Number: BB04675

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	3/16/21 10:24	3/22/21 12:31		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	3/16/21 10:24	3/22/21 12:31		1.015	Not Detected	mg/L	0.070035	0.406	U
* Iron, Total	3/16/21 10:24	3/22/21 12:31		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Total	3/16/21 10:24	3/22/21 12:31		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	3/16/21 10:24	3/22/21 12:31		1.015	Not Detected	mg/L	0.021315	0.406	U
* Sodium, Total	3/16/21 10:24	3/22/21 12:31		1.015	Not Detected	mg/L	0.02030	0.406	U
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/4/21 14:51	3/8/21 11:17		1.015	Not Detected	mg/L	0.000507	0.001015	U
* Arsenic, Total	3/4/21 14:51	3/8/21 11:17		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Barium, Total	3/4/21 14:51	3/8/21 11:17		1.015	Not Detected	mg/L	0.000101	0.000203	U
* Beryllium, Total	3/4/21 14:51	3/8/21 11:17		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	3/4/21 14:51	3/8/21 11:17		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	3/4/21 14:51	3/8/21 11:17		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	3/4/21 14:51	3/8/21 11:17		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	3/4/21 14:51	3/8/21 11:17		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Molybdenum, Total	3/4/21 14:51	3/8/21 11:17		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	3/4/21 14:51	3/8/21 11:17		1.015	0.000105	mg/L	0.000068	0.000203	J
* Potassium, Total	3/4/21 14:51	3/8/21 11:17		1.015	Not Detected	mg/L	0.169505	0.5075	U
* Selenium, Total	3/4/21 14:51	3/8/21 11:17		1.015	Not Detected	mg/L	0.000507	0.001015	U
* Thallium, Total	3/4/21 14:51	3/8/21 11:17		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	3/9/21 12:35	3/10/21 12:49		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2540C	***Analyst: TJW***								
* Solids, Dissolved	3/8/21 13:00	3/9/21 15:30		1	Not Detected	mg/L		25	U
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	3/4/21 13:41	3/4/21 13:41		1	Not Detected	mg/L	0.50	1	U
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	3/4/21 15:19	3/4/21 15:19		1	Not Detected	mg/L	0.06	0.1	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	3/5/21 13:20	3/5/21 13:20		1	Not Detected	mg/L	0.50	1	U

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

Comments:

Reported: 4/7/2021
Version: 3.2
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: 3/3/21 13:20
Customer ID:
Delivery Date: 3/4/21 11:18

Description: Gorgas Gypsum Equipment Blank-1

Laboratory ID Number: BB04675

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB04675	Lead, Total	mg/L	0.0000087	0.000147	0.10	0.0973	0.0992	0.0985	0.0850 to 0.115	97.3	70.0 to 130	1.98	20.0
BB04675	Calcium, Total	mg/L	0.00266	0.152	5.00	5.21	5.18	5.25	4.25 to 5.75	104	70.0 to 130	0.726	20.0
BB04675	Antimony, Total	mg/L	0.000158	0.00100	0.10	0.0954	0.0958	0.0963	0.0850 to 0.115	95.4	70.0 to 130	0.444	20.0
BB04675	Arsenic, Total	mg/L	0.0000309	0.000147	0.10	0.0991	0.0993	0.102	0.0850 to 0.115	99.1	70.0 to 130	0.220	20.0
BB04675	Barium, Total	mg/L	0.0000116	0.000200	0.10	0.102	0.0992	0.0978	0.0850 to 0.115	102	70.0 to 130	3.16	20.0
BB04675	Cobalt, Total	mg/L	-0.0000057	0.000147	0.10	0.0992	0.0981	0.102	0.0850 to 0.115	99.2	70.0 to 130	1.13	20.0
BB04675	Beryllium, Total	mg/L	0.0000249	0.000880	0.10	0.0893	0.0904	0.0933	0.0850 to 0.115	89.3	70.0 to 130	1.24	20.0
BB04675	Potassium, Total	mg/L	0.0101	0.367	10.0	10.2	10.2	10.4	8.50 to 11.5	102	70.0 to 130	0.148	20.0
BB04675	Lithium, Total	mg/L	0.0000933	0.0154	0.20	0.197	0.201	0.199	0.170 to 0.230	98.5	70.0 to 130	2.00	20.0
BB04675	Manganese, Total	mg/L	0.0000028	0.000147	0.10	0.0979	0.0973	0.0997	0.0850 to 0.115	97.8	70.0 to 130	0.682	20.0
BB04675	Sodium, Total	mg/L	0.00165	0.0660	5.00	4.93	5.03	5.01	4.25 to 5.75	98.7	70.0 to 130	1.97	20.0
BB04675	Thallium, Total	mg/L	0.0000071	0.000147	0.10	0.0972	0.0990	0.0976	0.0850 to 0.115	97.2	70.0 to 130	1.89	20.0
BB04675	Cadmium, Total	mg/L	0.00000	0.000147	0.10	0.0958	0.0971	0.0982	0.0850 to 0.115	95.8	70.0 to 130	1.36	20.0
BB04675	Selenium, Total	mg/L	0.0000276	0.00100	0.10	0.0983	0.100	0.100	0.0850 to 0.115	98.3	70.0 to 130	2.05	20.0
BB04675	Boron, Total	mg/L	0.0116	0.0650	1.00	1.02	1.03	1.00	0.850 to 1.15	102	70.0 to 130	0.648	20.0
BB04675	Chromium, Total	mg/L	-0.0000882	0.000440	0.10	0.0966	0.0973	0.101	0.0850 to 0.115	96.6	70.0 to 130	0.651	20.0
BB04675	Mercury, Total by CVAA	mg/L	0.0000390	0.000500	0.004	0.00431	0.00437	0.00428	0.00340 to 0.00460	108	70.0 to 130	1.38	20.0
BB04675	Molybdenum, Total	mg/L	0.0000002	0.000147	0.10	0.0945	0.0966	0.0979	0.0850 to 0.115	94.5	70.0 to 130	2.18	20.0
BB04675	Iron, Total	mg/L	0.000898	0.0176	0.2	0.206	0.206	0.207	0.170 to 0.230	103	70.0 to 130	0.126	20.0
BB04675	Magnesium, Total	mg/L	-0.00180	0.0462	5.00	5.10	5.13	5.13	4.25 to 5.75	102	70.0 to 130	0.451	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: 3/3/21 13:20
Customer ID:
Delivery Date: 3/4/21 11:18

Description: Gorgas Gypsum Equipment Blank-1

Laboratory ID Number: BB04675

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB04679	Solids, Dissolved	mg/L	2.00	25.0			529	52.0	40.0 to 60.0			3.82	5.00
BB04679	Chloride	mg/L	-0.0292	0.500	10.0	11.9	1.54	10.1	9.00 to 11.0	103	80.0 to 120	2.56	20.0
BB04679	Fluoride	mg/L	-0.00417	0.0500	2.50	0.112	-0.213	2.53	2.25 to 2.75	4.48	80.0 to 120	0.00	20.0
BB04679	Sulfate	mg/L	-0.0911	0.500	500	789	319	19.8	18.0 to 22.0	93.8	80.0 to 120	0.313	20.0

Comments:

Reported: 4/7/2021
Version: 3.2
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: 3/2/21 13:40
Customer ID:
Submittal Date: 3/4/21 11:18

Laboratory ID Number: BB04676

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	3/16/21 10:24	3/22/21 12:55		1.015	0.0875	mg/L	0.030000	0.1015	J
* Calcium, Total	3/16/21 10:24	3/22/21 15:01		10.15	124	mg/L	0.70035	4.06	
* Iron, Total	3/16/21 10:24	3/22/21 12:55		1.015	3.39	mg/L	0.008120	0.0406	
* Lithium, Total	3/16/21 10:24	3/22/21 12:55		1.015	0.456	mg/L	0.007105	0.01999956	
* Magnesium, Total	3/16/21 10:24	3/22/21 15:01		10.15	123	mg/L	0.21315	4.06	
* Sodium, Total	3/16/21 10:24	3/22/21 12:55		1.015	31.1	mg/L	0.02030	0.406	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Iron, Dissolved	3/15/21 11:44	3/16/21 12:29		1.015	2.36	mg/L	0.008120	0.0406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/4/21 14:51	3/8/21 11:46		1.015	Not Detected	mg/L	0.000507	0.001015	U
* Arsenic, Total	3/4/21 14:51	3/8/21 11:46		1.015	0.00138	mg/L	0.000068	0.000203	
* Barium, Total	3/4/21 14:51	3/8/21 11:46		1.015	0.0134	mg/L	0.000101	0.000203	
* Beryllium, Total	3/4/21 14:51	3/8/21 11:46		1.015	0.00703	mg/L	0.000406	0.001015	
* Cadmium, Total	3/4/21 14:51	3/8/21 11:46		1.015	0.00319	mg/L	0.000068	0.000203	
* Chromium, Total	3/4/21 14:51	3/8/21 11:46		1.015	0.000242	mg/L	0.000203	0.001015	J
* Cobalt, Total	3/4/21 14:51	3/8/21 11:46		1.015	0.307	mg/L	0.000068	0.000203	
* Lead, Total	3/4/21 14:51	3/8/21 11:46		1.015	0.00478	mg/L	0.000068	0.000203	
* Molybdenum, Total	3/4/21 14:51	3/8/21 11:46		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Potassium, Total	3/4/21 14:51	3/8/21 11:46		1.015	5.03	mg/L	0.169505	0.5075	
* Manganese, Total	3/4/21 14:51	3/8/21 15:05		92.365	10.8	mg/L	0.006188	0.018473	
* Selenium, Total	3/4/21 14:51	3/8/21 11:46		1.015	0.00463	mg/L	0.000507	0.001015	
* Thallium, Total	3/4/21 14:51	3/8/21 11:46		1.015	0.000371	mg/L	0.000068	0.000203	
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Manganese, Dissolved	3/8/21 14:58	3/8/21 17:50		92.365	13.7	mg/L	0.006188	0.018473	
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	3/9/21 12:35	3/10/21 13:43		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2540C	***Analyst: TJW***								
* Solids, Dissolved	3/8/21 13:00	3/9/21 15:30		1	1390	mg/L		83.3	
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	3/4/21 13:42	3/4/21 13:42		1	2.28	mg/L	0.50	1	

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

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified. Alkalinity was not performed due to the initial pH was less than the titration end point of 4.5 SU. Fluoride result is qualified due to potential matrix interference. LBM 4/5/21

Reported: 4/7/2021
Version: 3.2
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: 3/2/21 13:40
Customer ID:
Submittal Date: 3/4/21 11:18

Laboratory ID Number: BB04676

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	3/4/21 15:20	3/4/21 15:20		1	Not Detected	mg/L	0.06	0.1	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	3/5/21 13:21	3/5/21 13:21		32	890	mg/L	16.00	32	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	3/2/21 13:39	3/2/21 13:39			1626.15	uS/cm			FA
pH	3/2/21 13:39	3/2/21 13:39			4.11	SU			FA
Temperature	3/2/21 13:39	3/2/21 13:39			18.83	C			FA
Turbidity	3/2/21 13:39	3/2/21 13:39			8.58	NTU			FA

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

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified. Alkalinity was not performed due to the initial pH was less than the titration end point of 4.5 SU. Fluoride result is qualified due to potential matrix interference. LBM 4/5/21

Reported: 4/7/2021
Version: 3.2
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: 3/2/21 13:40
Customer ID:
Delivery Date: 3/4/21 11:18

Description: Gorgas Gypsum - MW-12H

Laboratory ID Number: BB04676

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB04679	Cobalt, Total	mg/L	-0.0000101	0.000147	0.10	0.185	0.186	0.103	0.0850 to 0.115	95.1	70.0 to 130	0.582	20.0
BB04679	Sodium, Total	mg/L	0.00174	0.0660	5.00	11.6	11.6	5.08	4.25 to 5.75	113	70.0 to 130	0.466	20.0
BB04679	Chromium, Total	mg/L	-0.0000802	0.000440	0.10	0.0943	0.0950	0.102	0.0850 to 0.115	93.8	70.0 to 130	0.757	20.0
BB04679	Lead, Total	mg/L	0.0000095	0.000147	0.10	0.0973	0.0973	0.0981	0.0850 to 0.115	95.5	70.0 to 130	0.0447	20.0
BB04678	Manganese, Dissolved	mg/L	0.000002	0.000147	0.10	8.14	8.45	0.0970	0.0850 to 0.115	-106	70.0 to 130	3.81	20.0
BB04679	Calcium, Total	mg/L	0.000606	0.152	5.00	60.4	60.7	5.28	4.25 to 5.75	122	70.0 to 130	0.576	20.0
BB04679	Selenium, Total	mg/L	-0.0000184	0.00100	0.10	0.0951	0.0969	0.101	0.0850 to 0.115	93.7	70.0 to 130	1.92	20.0
BB04679	Arsenic, Total	mg/L	-0.0000002	0.000147	0.10	0.0953	0.0954	0.102	0.0850 to 0.115	94.4	70.0 to 130	0.0621	20.0
BB04679	Cadmium, Total	mg/L	0.0000081	0.000147	0.10	0.0959	0.0945	0.103	0.0850 to 0.115	95.0	70.0 to 130	1.41	20.0
BB04679	Iron, Total	mg/L	0.000701	0.0176	0.2	4.97	5.02	0.210	0.170 to 0.230	120	70.0 to 130	1.08	20.0
BB04679	Potassium, Total	mg/L	0.00946	0.367	10.0	14.4	14.4	10.5	8.50 to 11.5	102	70.0 to 130	0.613	20.0
BB04679	Manganese, Total	mg/L	0.0000056	0.000147	0.10	3.86	3.99	0.102	0.0850 to 0.115	-1.82	70.0 to 130	3.34	20.0
BB04679	Molybdenum, Total	mg/L	0.0000003	0.000147	0.10	0.0909	0.0915	0.0995	0.0850 to 0.115	90.9	70.0 to 130	0.729	20.0
BB04679	Thallium, Total	mg/L	0.0000035	0.000147	0.10	0.0955	0.0958	0.0966	0.0850 to 0.115	95.4	70.0 to 130	0.377	20.0
BB04679	Magnesium, Total	mg/L	-0.00190	0.0462	5.00	38.3	38.3	5.18	4.25 to 5.75	92.9	70.0 to 130	0.144	20.0
BB04679	Antimony, Total	mg/L	0.000221	0.00100	0.10	0.0952	0.0942	0.0954	0.0850 to 0.115	95.2	70.0 to 130	1.04	20.0
BB04678	Iron, Dissolved	mg/L	-0.000126	0.0176	0.2	12.1	13.1	0.206	0.170 to 0.230	-170	70.0 to 130	8.14	20.0
BB04679	Boron, Total	mg/L	0.0131	0.0650	1.00	1.08	1.10	1.03	0.850 to 1.15	102	70.0 to 130	1.86	20.0
BB04679	Mercury, Total by CVAA	mg/L	0.0000374	0.000500	0.004	0.00438	0.00425	0.00435	0.00340 to 0.00460	110	70.0 to 130	3.01	20.0
BB04679	Barium, Total	mg/L	0.00000	0.000200	0.10	0.113	0.112	0.0981	0.0850 to 0.115	97.8	70.0 to 130	0.839	20.0
BB04679	Beryllium, Total	mg/L	0.0000222	0.000880	0.10	0.0884	0.0887	0.0921	0.0850 to 0.115	85.1	70.0 to 130	0.288	20.0
BB04679	Lithium, Total	mg/L	0.0000608	0.0154	0.20	0.423	0.426	0.203	0.170 to 0.230	113	70.0 to 130	0.668	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified. Alkalinity was not performed due to the initial pH was less than the titration end point of 4.5 SU. Fluoride result is qualified due to potential matrix interference. LBM 4/5/21

Reported: 4/7/2021
Version: 3.2
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: 3/2/21 13:40
Customer ID:
Delivery Date: 3/4/21 11:18

Description: Gorgas Gypsum - MW-12H

Laboratory ID Number: BB04676

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB04679	Solids, Dissolved	mg/L	2.00	25.0			529	52.0	40.0 to 60.0			3.82	5.00
BB04679	Chloride	mg/L	-0.0292	0.500	10.0	11.9	1.54	10.1	9.00 to 11.0	103	80.0 to 120	2.56	20.0
BB04679	Fluoride	mg/L	-0.00417	0.0500	2.50	0.112	-0.213	2.53	2.25 to 2.75	4.48	80.0 to 120	0.00	20.0
BB04679	Sulfate	mg/L	-0.0911	0.500	500	789	319	19.8	18.0 to 22.0	93.8	80.0 to 120	0.313	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified. Alkalinity was not performed due to the initial pH was less than the titration end point of 4.5 SU. Fluoride result is qualified due to potential matrix interference. LBM 4/5/21

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: 3/3/21 10:11
Customer ID:
Submittal Date: 3/4/21 11:18

Laboratory ID Number: BB04677

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	3/16/21 10:24	3/22/21 12:58		1.015	1.54	mg/L	0.030000	0.1015	
* Calcium, Total	3/16/21 10:24	3/22/21 15:04		101.5	353	mg/L	7.0035	40.6	
* Iron, Total	3/16/21 10:24	3/22/21 15:04		101.5	35.2	mg/L	0.8120	4.06	
* Lithium, Total	3/16/21 10:24	3/22/21 12:58		1.015	0.411	mg/L	0.007105	0.01999956	
* Magnesium, Total	3/16/21 10:24	3/22/21 15:04		101.5	215	mg/L	2.1315	40.6	
* Sodium, Total	3/16/21 10:24	3/22/21 15:04		101.5	327	mg/L	2.030	40.6	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Iron, Dissolved	3/15/21 11:44	3/19/21 12:42		101.5	34.5	mg/L	0.8120	4.06	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/4/21 14:51	3/8/21 11:49		1.015	Not Detected	mg/L	0.000507	0.001015	U
* Arsenic, Total	3/4/21 14:51	3/8/21 11:49		1.015	0.000339	mg/L	0.000068	0.000203	
* Barium, Total	3/4/21 14:51	3/8/21 11:49		1.015	0.0126	mg/L	0.000101	0.000203	
* Beryllium, Total	3/4/21 14:51	3/8/21 11:49		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	3/4/21 14:51	3/8/21 11:49		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	3/4/21 14:51	3/8/21 11:49		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	3/4/21 14:51	3/8/21 11:49		1.015	0.000280	mg/L	0.000068	0.000203	
* Lead, Total	3/4/21 14:51	3/8/21 11:49		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Molybdenum, Total	3/4/21 14:51	3/8/21 11:49		1.015	0.00123	mg/L	0.000068	0.000203	
* Potassium, Total	3/4/21 14:51	3/8/21 11:49		1.015	7.52	mg/L	0.169505	0.5075	
* Manganese, Total	3/4/21 14:51	3/8/21 15:08		92.365	23.1	mg/L	0.006188	0.018473	
* Selenium, Total	3/4/21 14:51	3/8/21 11:49		1.015	Not Detected	mg/L	0.000507	0.001015	U
* Thallium, Total	3/4/21 14:51	3/8/21 11:49		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Manganese, Dissolved	3/8/21 14:58	3/8/21 17:53		92.365	22.0	mg/L	0.006188	0.018473	
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	3/9/21 12:35	3/10/21 13:45		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2320 B	***Analyst: JAG***								
Alkalinity, Total as CaCO3	3/12/21 09:39	3/12/21 11:19		1	322	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: TJW***								
* Solids, Dissolved	3/8/21 13:00	3/9/21 15:30		1	3450	mg/L		250	

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

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 4/5/21

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: 3/3/21 10:11
Customer ID:
Submittal Date: 3/4/21 11:18

Laboratory ID Number: BB04677

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 4500CO2 D	***Analyst: JAG***								
Bicarbonate Alkalinity, (calc.)	3/12/21 09:39	3/12/21 11:19		1	322	mg/L			
Carbonate Alkalinity, (calc.)	3/12/21 09:39	3/12/21 11:19		1	0.03	mg/L			
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	3/4/21 13:44	3/4/21 13:44		40	152	mg/L	20.00	40	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	3/4/21 15:21	3/4/21 15:21		1	0.243	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	3/5/21 13:22	3/5/21 13:22		50	1930	mg/L	25.00	50	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	3/3/21 10:07	3/3/21 10:07			4064.6	uS/cm			FA
pH	3/3/21 10:07	3/3/21 10:07			6.11	SU			FA
Temperature	3/3/21 10:07	3/3/21 10:07			18.80	C			FA
Turbidity	3/3/21 10:07	3/3/21 10:07			0.14	NTU			FA

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

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 4/5/21

Reported: 4/7/2021
Version: 3.2
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: 3/3/21 10:11
Customer ID:
Delivery Date: 3/4/21 11:18

Description: Gorgas Gypsum - MW-12V

Laboratory ID Number: BB04677

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB04679	Magnesium, Total	mg/L	-0.00190	0.0462	5.00	38.3	38.3	5.18	4.25 to 5.75	92.9	70.0 to 130	0.144	20.0
BB04679	Antimony, Total	mg/L	0.000221	0.00100	0.10	0.0952	0.0942	0.0954	0.0850 to 0.115	95.2	70.0 to 130	1.04	20.0
BB04679	Barium, Total	mg/L	0.00000	0.000200	0.10	0.113	0.112	0.0981	0.0850 to 0.115	97.8	70.0 to 130	0.839	20.0
BB04679	Beryllium, Total	mg/L	0.0000222	0.000880	0.10	0.0884	0.0887	0.0921	0.0850 to 0.115	85.1	70.0 to 130	0.288	20.0
BB04679	Lithium, Total	mg/L	0.0000608	0.0154	0.20	0.423	0.426	0.203	0.170 to 0.230	113	70.0 to 130	0.668	20.0
BB04679	Chromium, Total	mg/L	-0.0000802	0.000440	0.10	0.0943	0.0950	0.102	0.0850 to 0.115	93.8	70.0 to 130	0.757	20.0
BB04679	Lead, Total	mg/L	0.0000095	0.000147	0.10	0.0973	0.0973	0.0981	0.0850 to 0.115	95.5	70.0 to 130	0.0447	20.0
BB04679	Cobalt, Total	mg/L	-0.0000101	0.000147	0.10	0.185	0.186	0.103	0.0850 to 0.115	95.1	70.0 to 130	0.582	20.0
BB04679	Sodium, Total	mg/L	0.00174	0.0660	5.00	11.6	11.6	5.08	4.25 to 5.75	113	70.0 to 130	0.466	20.0
BB04678	Manganese, Dissolved	mg/L	0.000002	0.000147	0.10	8.14	8.45	0.0970	0.0850 to 0.115	-106	70.0 to 130	3.81	20.0
BB04679	Calcium, Total	mg/L	0.000606	0.152	5.00	60.4	60.7	5.28	4.25 to 5.75	122	70.0 to 130	0.576	20.0
BB04679	Selenium, Total	mg/L	-0.0000184	0.00100	0.10	0.0951	0.0969	0.101	0.0850 to 0.115	93.7	70.0 to 130	1.92	20.0
BB04678	Iron, Dissolved	mg/L	-0.000126	0.0176	0.2	12.1	13.1	0.206	0.170 to 0.230	-170	70.0 to 130	8.14	20.0
BB04679	Boron, Total	mg/L	0.0131	0.0650	1.00	1.08	1.10	1.03	0.850 to 1.15	102	70.0 to 130	1.86	20.0
BB04679	Mercury, Total by CVAA	mg/L	0.0000374	0.000500	0.004	0.00438	0.00425	0.00435	0.00340 to 0.00460	110	70.0 to 130	3.01	20.0
BB04679	Arsenic, Total	mg/L	-0.0000002	0.000147	0.10	0.0953	0.0954	0.102	0.0850 to 0.115	94.4	70.0 to 130	0.0621	20.0
BB04679	Cadmium, Total	mg/L	0.0000081	0.000147	0.10	0.0959	0.0945	0.103	0.0850 to 0.115	95.0	70.0 to 130	1.41	20.0
BB04679	Iron, Total	mg/L	0.000701	0.0176	0.2	4.97	5.02	0.210	0.170 to 0.230	120	70.0 to 130	1.08	20.0
BB04679	Potassium, Total	mg/L	0.00946	0.367	10.0	14.4	14.4	10.5	8.50 to 11.5	102	70.0 to 130	0.613	20.0
BB04679	Manganese, Total	mg/L	0.0000056	0.000147	0.10	3.86	3.99	0.102	0.0850 to 0.115	-1.82	70.0 to 130	3.34	20.0
BB04679	Molybdenum, Total	mg/L	0.0000003	0.000147	0.10	0.0909	0.0915	0.0995	0.0850 to 0.115	90.9	70.0 to 130	0.729	20.0
BB04679	Thallium, Total	mg/L	0.0000035	0.000147	0.10	0.0955	0.0958	0.0966	0.0850 to 0.115	95.4	70.0 to 130	0.377	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 4/5/21

Reported: 4/7/2021
Version: 3.2
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: 3/3/21 10:11
Customer ID:
Delivery Date: 3/4/21 11:18

Description: Gorgas Gypsum - MW-12V

Laboratory ID Number: BB04677

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB04679	Solids, Dissolved	mg/L	2.00	25.0			529	52.0	40.0 to 60.0			3.82	5.00
BB04679	Chloride	mg/L	-0.0292	0.500	10.0	11.9	1.54	10.1	9.00 to 11.0	103	80.0 to 120	2.56	20.0
BB04677	Alkalinity, Total as CaCO3	mg/L					324	52.3	45.0 to 55.0			0.557	10.0
BB04679	Fluoride	mg/L	-0.00417	0.0500	2.50	0.112	-0.213	2.53	2.25 to 2.75	4.48	80.0 to 120	0.00	20.0
BB04679	Sulfate	mg/L	-0.0911	0.500	500	789	319	19.8	18.0 to 22.0	93.8	80.0 to 120	0.313	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 4/5/21

Reported: 4/7/2021
Version: 3.2
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: 3/3/21 11:18
Customer ID:
Submittal Date: 3/4/21 11:18

Laboratory ID Number: BB04678

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	3/16/21 10:24	3/22/21 13:01		1.015	0.203	mg/L	0.030000	0.1015	
* Calcium, Total	3/16/21 10:24	3/22/21 15:07		10.15	137	mg/L	0.70035	4.06	
* Iron, Total	3/16/21 10:24	3/22/21 15:07		10.15	12.5	mg/L	0.08120	0.406	
* Lithium, Total	3/16/21 10:24	3/22/21 13:01		1.015	0.540	mg/L	0.007105	0.01999956	
* Magnesium, Total	3/16/21 10:24	3/22/21 15:07		10.15	96.3	mg/L	0.21315	4.06	
* Sodium, Total	3/16/21 10:24	3/22/21 13:01		1.015	26.1	mg/L	0.02030	0.406	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Iron, Dissolved	3/15/21 11:44	3/19/21 12:45		10.15	12.4	mg/L	0.08120	0.406	RA
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/4/21 14:51	3/8/21 11:53		1.015	Not Detected	mg/L	0.000507	0.001015	U
* Arsenic, Total	3/4/21 14:51	3/8/21 11:53		1.015	0.00155	mg/L	0.000068	0.000203	
* Barium, Total	3/4/21 14:51	3/8/21 11:53		1.015	0.0109	mg/L	0.000101	0.000203	
* Beryllium, Total	3/4/21 14:51	3/8/21 11:53		1.015	0.00818	mg/L	0.000406	0.001015	
* Cadmium, Total	3/4/21 14:51	3/8/21 11:53		1.015	0.00160	mg/L	0.000068	0.000203	
* Chromium, Total	3/4/21 14:51	3/8/21 11:53		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	3/4/21 14:51	3/8/21 11:53		1.015	0.202	mg/L	0.000068	0.000203	
* Lead, Total	3/4/21 14:51	3/8/21 11:53		1.015	0.000876	mg/L	0.000068	0.000203	
* Molybdenum, Total	3/4/21 14:51	3/8/21 11:53		1.015	0.0000706	mg/L	0.000068	0.000203	J
* Potassium, Total	3/4/21 14:51	3/8/21 11:53		1.015	3.81	mg/L	0.169505	0.5075	
* Manganese, Total	3/4/21 14:51	3/8/21 15:12		10.15	9.14	mg/L	0.000680	0.00203	
* Selenium, Total	3/4/21 14:51	3/8/21 11:53		1.015	0.00554	mg/L	0.000507	0.001015	
* Thallium, Total	3/4/21 14:51	3/8/21 11:53		1.015	0.0000798	mg/L	0.000068	0.000203	J
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Manganese, Dissolved	3/8/21 14:58	3/8/21 17:55		10.15	8.24	mg/L	0.000680	0.00203	RA
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	3/9/21 12:35	3/10/21 13:48		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2540C	***Analyst: TJW***								
* Solids, Dissolved	3/8/21 13:00	3/9/21 15:30		1	1260	mg/L		83.3	
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	3/4/21 13:45	3/4/21 13:45		1	4.80	mg/L	0.50	1	

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

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified. Alkalinity was not performed due to the initial pH was less than the titration end point of 4.5 SU. Fluoride result is qualified due to potential matrix interference. LBM 4/5/21

Reported: 4/7/2021
Version: 3.2
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: 3/3/21 11:18
Customer ID:
Submittal Date: 3/4/21 11:18

Laboratory ID Number: BB04678

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	3/4/21 15:23	3/4/21 15:23		1	Not Detected	mg/L	0.06	0.1	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	3/5/21 13:23	3/5/21 13:23		32	803	mg/L	16.00	32	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	3/3/21 11:15	3/3/21 11:15			1523.96	uS/cm			FA
pH	3/3/21 11:15	3/3/21 11:15			4.02	SU			FA
Temperature	3/3/21 11:15	3/3/21 11:15			19.30	C			FA
Turbidity	3/3/21 11:15	3/3/21 11:15			4.35	NTU			FA

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

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified. Alkalinity was not performed due to the initial pH was less than the titration end point of 4.5 SU. Fluoride result is qualified due to potential matrix interference. LBM 4/5/21

Reported: 4/7/2021
Version: 3.2
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: 3/3/21 11:18
Customer ID:
Delivery Date: 3/4/21 11:18

Description: Gorgas Gypsum - MW-14H

Laboratory ID Number: BB04678

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB04679	Chromium, Total	mg/L	-0.0000802	0.000440	0.10	0.0943	0.0950	0.102	0.0850 to 0.115	93.8	70.0 to 130	0.757	20.0
BB04679	Lead, Total	mg/L	0.0000095	0.000147	0.10	0.0973	0.0973	0.0981	0.0850 to 0.115	95.5	70.0 to 130	0.0447	20.0
BB04679	Barium, Total	mg/L	0.00000	0.000200	0.10	0.113	0.112	0.0981	0.0850 to 0.115	97.8	70.0 to 130	0.839	20.0
BB04679	Beryllium, Total	mg/L	0.0000222	0.000880	0.10	0.0884	0.0887	0.0921	0.0850 to 0.115	85.1	70.0 to 130	0.288	20.0
BB04679	Lithium, Total	mg/L	0.0000608	0.0154	0.20	0.423	0.426	0.203	0.170 to 0.230	113	70.0 to 130	0.668	20.0
BB04679	Magnesium, Total	mg/L	-0.00190	0.0462	5.00	38.3	38.3	5.18	4.25 to 5.75	92.9	70.0 to 130	0.144	20.0
BB04679	Antimony, Total	mg/L	0.000221	0.00100	0.10	0.0952	0.0942	0.0954	0.0850 to 0.115	95.2	70.0 to 130	1.04	20.0
BB04678	Iron, Dissolved	mg/L	-0.000126	0.0176	0.2	12.1	13.1	0.206	0.170 to 0.230	-170	70.0 to 130	8.14	20.0
BB04679	Boron, Total	mg/L	0.0131	0.0650	1.00	1.08	1.10	1.03	0.850 to 1.15	102	70.0 to 130	1.86	20.0
BB04679	Mercury, Total by CVAA	mg/L	0.0000374	0.000500	0.004	0.00438	0.00425	0.00435	0.00340 to 0.00460	110	70.0 to 130	3.01	20.0
BB04679	Arsenic, Total	mg/L	-0.0000002	0.000147	0.10	0.0953	0.0954	0.102	0.0850 to 0.115	94.4	70.0 to 130	0.0621	20.0
BB04679	Cadmium, Total	mg/L	0.0000081	0.000147	0.10	0.0959	0.0945	0.103	0.0850 to 0.115	95.0	70.0 to 130	1.41	20.0
BB04679	Iron, Total	mg/L	0.000701	0.0176	0.2	4.97	5.02	0.210	0.170 to 0.230	120	70.0 to 130	1.08	20.0
BB04679	Potassium, Total	mg/L	0.00946	0.367	10.0	14.4	14.4	10.5	8.50 to 11.5	102	70.0 to 130	0.613	20.0
BB04679	Manganese, Total	mg/L	0.0000056	0.000147	0.10	3.86	3.99	0.102	0.0850 to 0.115	-1.82	70.0 to 130	3.34	20.0
BB04679	Molybdenum, Total	mg/L	0.0000003	0.000147	0.10	0.0909	0.0915	0.0995	0.0850 to 0.115	90.9	70.0 to 130	0.729	20.0
BB04679	Thallium, Total	mg/L	0.0000035	0.000147	0.10	0.0955	0.0958	0.0966	0.0850 to 0.115	95.4	70.0 to 130	0.377	20.0
BB04679	Cobalt, Total	mg/L	-0.0000101	0.000147	0.10	0.185	0.186	0.103	0.0850 to 0.115	95.1	70.0 to 130	0.582	20.0
BB04679	Sodium, Total	mg/L	0.00174	0.0660	5.00	11.6	11.6	5.08	4.25 to 5.75	113	70.0 to 130	0.466	20.0
BB04678	Manganese, Dissolved	mg/L	0.000002	0.000147	0.10	8.14	8.45	0.0970	0.0850 to 0.115	-106	70.0 to 130	3.81	20.0
BB04679	Calcium, Total	mg/L	0.000606	0.152	5.00	60.4	60.7	5.28	4.25 to 5.75	122	70.0 to 130	0.576	20.0
BB04679	Selenium, Total	mg/L	-0.0000184	0.00100	0.10	0.0951	0.0969	0.101	0.0850 to 0.115	93.7	70.0 to 130	1.92	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified. Alkalinity was not performed due to the initial pH was less than the titration end point of 4.5 SU. Fluoride result is qualified due to potential matrix interference. LBM 4/5/21

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

Alabama Power

Batch QC Summary

Customer Account: WMWGORG
Sample Date: 3/3/21 11:18
Customer ID:
Delivery Date: 3/4/21 11:18

Description: Gorgas Gypsum - MW-14H

Laboratory ID Number: BB04678

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB04679	Solids, Dissolved	mg/L	2.00	25.0			529	52.0	40.0 to 60.0			3.82	5.00
BB04679	Chloride	mg/L	-0.0292	0.500	10.0	11.9	1.54	10.1	9.00 to 11.0	103	80.0 to 120	2.56	20.0
BB04679	Fluoride	mg/L	-0.00417	0.0500	2.50	0.112	-0.213	2.53	2.25 to 2.75	4.48	80.0 to 120	0.00	20.0
BB04679	Sulfate	mg/L	-0.0911	0.500	500	789	319	19.8	18.0 to 22.0	93.8	80.0 to 120	0.313	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified. Alkalinity was not performed due to the initial pH was less than the titration end point of 4.5 SU. Fluoride result is qualified due to potential matrix interference. LBM 4/5/21

Reported: 4/7/2021
Version: 3.2
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: 3/3/21 13:04
Customer ID:
Submittal Date: 3/4/21 11:18

Laboratory ID Number: BB04679

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	3/16/21 10:24	3/22/21 13:05		1.015	0.0643	mg/L	0.030000	0.1015	J
* Calcium, Total	3/16/21 10:24	3/22/21 15:11		10.15	54.3	mg/L	0.70035	4.06	
* Iron, Total	3/16/21 10:24	3/22/21 15:11		10.15	4.73	mg/L	0.08120	0.406	RA
* Lithium, Total	3/16/21 10:24	3/22/21 13:05		1.015	0.196	mg/L	0.007105	0.01999956	
* Magnesium, Total	3/16/21 10:24	3/22/21 13:05		1.015	33.6	mg/L	0.021315	0.406	
* Sodium, Total	3/16/21 10:24	3/22/21 13:05		1.015	5.93	mg/L	0.02030	0.406	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Iron, Dissolved	3/15/21 11:44	3/19/21 12:55		10.15	4.39	mg/L	0.08120	0.406	RA
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/4/21 14:51	3/8/21 11:56		1.015	Not Detected	mg/L	0.000507	0.001015	U
* Arsenic, Total	3/4/21 14:51	3/8/21 11:56		1.015	0.000966	mg/L	0.000068	0.000203	
* Barium, Total	3/4/21 14:51	3/8/21 11:56		1.015	0.0154	mg/L	0.000101	0.000203	
* Beryllium, Total	3/4/21 14:51	3/8/21 11:56		1.015	0.00334	mg/L	0.000406	0.001015	
* Cadmium, Total	3/4/21 14:51	3/8/21 11:56		1.015	0.000927	mg/L	0.000068	0.000203	
* Chromium, Total	3/4/21 14:51	3/8/21 11:56		1.015	0.000525	mg/L	0.000203	0.001015	J
* Cobalt, Total	3/4/21 14:51	3/8/21 11:56		1.015	0.0898	mg/L	0.000068	0.000203	
* Lead, Total	3/4/21 14:51	3/8/21 11:56		1.015	0.00178	mg/L	0.000068	0.000203	
* Molybdenum, Total	3/4/21 14:51	3/8/21 11:56		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Potassium, Total	3/4/21 14:51	3/8/21 11:56		1.015	4.17	mg/L	0.169505	0.5075	
* Manganese, Total	3/4/21 14:51	3/8/21 15:16		5.075	3.86	mg/L	0.000340	0.001015	RA
* Selenium, Total	3/4/21 14:51	3/8/21 11:56		1.015	0.00137	mg/L	0.000507	0.001015	
* Thallium, Total	3/4/21 14:51	3/8/21 11:56		1.015	0.000118	mg/L	0.000068	0.000203	J
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Manganese, Dissolved	3/8/21 14:58	3/8/21 18:03		5.075	3.48	mg/L	0.000340	0.001015	RA
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	3/9/21 12:35	3/10/21 13:50		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2540C	***Analyst: TJW***								
* Solids, Dissolved	3/8/21 13:00	3/9/21 15:30		1	571	mg/L		357.1	
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	3/4/21 13:46	3/4/21 13:46		1	1.58	mg/L	0.50	1	

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

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified. MS recovery for Fluoride is outside of the specification limit. Fluoride result is qualified due to potential matrix interference. Alkalinity was not performed due to the initial pH was less than the titration end point of 4.5 SU. LBM 4/5/21

Reported: 4/7/2021
Version: 3.2
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: 3/3/21 13:04
Customer ID:
Submittal Date: 3/4/21 11:18

Laboratory ID Number: BB04679

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	3/4/21 15:24	3/4/21 15:24		1	Not Detected	mg/L	0.06	0.1	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	3/5/21 13:25	3/5/21 13:25		25	320	mg/L	12.50	25	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	3/3/21 13:00	3/3/21 13:00			691.26	uS/cm			FA
pH	3/3/21 13:00	3/3/21 13:00			4.21	SU			FA
Temperature	3/3/21 13:00	3/3/21 13:00			19.35	C			FA
Turbidity	3/3/21 13:00	3/3/21 13:00			0.26	NTU			FA

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

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified. MS recovery for Fluoride is outside of the specification limit. Fluoride result is qualified due to potential matrix interference. Alkalinity was not performed due to the initial pH was less than the titration end point of 4.5 SU. LBM 4/5/21

Reported: 4/7/2021
Version: 3.2
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: 3/3/21 13:04
Customer ID:
Delivery Date: 3/4/21 11:18

Description: Gorgas Gypsum - PZ-17

Laboratory ID Number: BB04679

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB04679	Calcium, Total	mg/L	0.000606	0.152	5.00	60.4	60.7	5.28	4.25 to 5.75	122	70.0 to 130	0.576	20.0
BB04679	Selenium, Total	mg/L	-0.0000184	0.00100	0.10	0.0951	0.0969	0.101	0.0850 to 0.115	93.7	70.0 to 130	1.92	20.0
BB04679	Barium, Total	mg/L	0.00000	0.000200	0.10	0.113	0.112	0.0981	0.0850 to 0.115	97.8	70.0 to 130	0.839	20.0
BB04679	Beryllium, Total	mg/L	0.0000222	0.000880	0.10	0.0884	0.0887	0.0921	0.0850 to 0.115	85.1	70.0 to 130	0.288	20.0
BB04679	Lithium, Total	mg/L	0.0000608	0.0154	0.20	0.423	0.426	0.203	0.170 to 0.230	113	70.0 to 130	0.668	20.0
BB04679	Magnesium, Total	mg/L	-0.00190	0.0462	5.00	38.3	38.3	5.18	4.25 to 5.75	92.9	70.0 to 130	0.144	20.0
BB04679	Antimony, Total	mg/L	0.000221	0.00100	0.10	0.0952	0.0942	0.0954	0.0850 to 0.115	95.2	70.0 to 130	1.04	20.0
BB04679	Arsenic, Total	mg/L	-0.0000002	0.000147	0.10	0.0953	0.0954	0.102	0.0850 to 0.115	94.4	70.0 to 130	0.0621	20.0
BB04679	Cadmium, Total	mg/L	0.0000081	0.000147	0.10	0.0959	0.0945	0.103	0.0850 to 0.115	95.0	70.0 to 130	1.41	20.0
BB04679	Iron, Total	mg/L	0.000701	0.0176	0.2	4.97	5.02	0.210	0.170 to 0.230	120	70.0 to 130	1.08	20.0
BB04679	Potassium, Total	mg/L	0.00946	0.367	10.0	14.4	14.4	10.5	8.50 to 11.5	102	70.0 to 130	0.613	20.0
BB04679	Manganese, Total	mg/L	0.0000056	0.000147	0.10	3.86	3.99	0.102	0.0850 to 0.115	-1.82	70.0 to 130	3.34	20.0
BB04679	Molybdenum, Total	mg/L	0.0000003	0.000147	0.10	0.0909	0.0915	0.0995	0.0850 to 0.115	90.9	70.0 to 130	0.729	20.0
BB04679	Thallium, Total	mg/L	0.0000035	0.000147	0.10	0.0955	0.0958	0.0966	0.0850 to 0.115	95.4	70.0 to 130	0.377	20.0
BB04679	Chromium, Total	mg/L	-0.0000802	0.000440	0.10	0.0943	0.0950	0.102	0.0850 to 0.115	93.8	70.0 to 130	0.757	20.0
BB04679	Manganese, Dissolved	mg/L	0.000107	0.000147	0.10	3.63	3.63	0.0988	0.0850 to 0.115	148	70.0 to 130	0.153	20.0
BB04679	Lead, Total	mg/L	0.0000095	0.000147	0.10	0.0973	0.0973	0.0981	0.0850 to 0.115	95.5	70.0 to 130	0.0447	20.0
BB04679	Boron, Total	mg/L	0.0131	0.0650	1.00	1.08	1.10	1.03	0.850 to 1.15	102	70.0 to 130	1.86	20.0
BB04679	Mercury, Total by CVAA	mg/L	0.0000374	0.000500	0.004	0.00438	0.00425	0.00435	0.00340 to 0.00460	110	70.0 to 130	3.01	20.0
BB04679	Cobalt, Total	mg/L	-0.0000101	0.000147	0.10	0.185	0.186	0.103	0.0850 to 0.115	95.1	70.0 to 130	0.582	20.0
BB04679	Sodium, Total	mg/L	0.00174	0.0660	5.00	11.6	11.6	5.08	4.25 to 5.75	113	70.0 to 130	0.466	20.0
BB04679	Iron, Dissolved	mg/L	0.000147	0.0176	0.2	4.65	4.78	0.205	0.170 to 0.230	127	70.0 to 130	2.81	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified. MS recovery for Fluoride is outside of the specification limit. Fluoride result is qualified due to potential matrix interference. Alkalinity was not performed due to the initial pH was less than the titration end point of 4.5 SU. LBM 4/5/21

Reported: 4/7/2021
Version: 3.2
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: 3/3/21 13:04
Customer ID:
Delivery Date: 3/4/21 11:18

Description: Gorgas Gypsum - PZ-17

Laboratory ID Number: BB04679

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB04679	Chloride	mg/L	-0.0292	0.500	10.0	11.9	1.54	10.1	9.00 to 11.0	103	80.0 to 120	2.56	20.0
BB04679	Fluoride	mg/L	-0.00417	0.0500	2.50	0.112	-0.213	2.53	2.25 to 2.75	4.48	80.0 to 120	0.00	20.0
BB04679	Sulfate	mg/L	-0.0911	0.500	500	789	319	19.8	18.0 to 22.0	93.8	80.0 to 120	0.313	20.0
BB04679	Solids, Dissolved	mg/L	2.00	25.0			529	52.0	40.0 to 60.0			3.82	5.00

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified. MS recovery for Fluoride is outside of the specification limit. Fluoride result is qualified due to potential matrix interference. Alkalinity was not performed due to the initial pH was less than the titration end point of 4.5 SU. LBM 4/5/21

Reported: 4/7/2021
Version: 3.2
COA_CCR

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

Definitions

Alabama Power

Abbreviation	Description
DF	Dilution Factor
LCS	Lab Control Sample
LFM	Lab Fortified Matrix
MB	Method Blank
MDL	Method Detection Limit; minimum concentration of an analyte that can be determined with 99% confidence that the concentration is greater than zero.
MS	Matrix Spike
MSD	Matrix Spike Duplicate
Prec	Precision (% RPD)
Q	Qualifier; comment used to note deviations or additional information associated with analytical results.
QC	Quality Control
Rec	Recovery of Matrix Spike
RL	Reporting Limit; lowest concentration at which an analyte can be quantitatively measured.
Vio Spec	Violation Specification; regulatory limit which has been exceeded by the sample analyzed.

Qualifier	Description
FA	Field results were reviewed by the Water Field Group.
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, Greg Dyer
Site Representative	John Pate	Requested By	Greg Dyer
Collector	TJ Daugherty	Location	Gorgas Gypsum

Bottles

1	Metals	500 mL	3	Hg	250 mL	5	Anions	250 mL	7	N/A	N/A
2	Diss Metals	500 mL	4	TDS	500 mL	6	Alkalinity	250 mL	8	N/A	N/A

Comments

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-8V	03/01/2021	11:38	6	Groundwater		BB04466
MW-8	03/01/2021	13:05	6	Groundwater		BB04467
FB-2	03/01/2021	13:45	4	Field Blank		BB04468
MW-13H	03/02/2021	08:45	6	Groundwater		BB04469
MW-13H Dup	03/02/2021	08:45	6	Sample Duplicate		BB04470
MW-11H	03/02/2021	09:54	6	Groundwater		BB04471
MW-9H	03/02/2021	11:20	6	Groundwater		BB04472

Relinquished By	Received By	Date/Time
		03/02/2021 13:34
		03/02/2021 15:06

SmarTroll ID	7586-41443-5-2	All metals and radiological bottles have pH < 2	☑
Turbidity ID	3901-20009-2-1	Cooler Temp	0.1 degrees C
Sample Event	1310	Thermometer ID	5408-27568-2-2
		pH Strip ID	8206-45803-10-7

Bottles/Pre-Preserved Bottles are provided by the GTL

Chain of Custody
Groundwater
APC General Testing Laboratory

☑ Field Complete ☐ Outside Lab
☑ Lab Complete

Lab ETA

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Site Representative	John Pate	Requested By	Greg Dyer
Collector	Dallas Gentry	Location	Gorgas Gypsum

Bottles												
1	Metals	500 mL	3	Hg	250 mL	5	Anions	250 mL	7	N/A	N/A
2	Dissolved Meta	500 mL	4	TDS	500 mL	6	Alkalinity	250 mL	8	N/A	N/A

Comments

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-3	03/01/2021	10:33	6	Groundwater		BB04458
MW-9V	03/01/2021	12:32	6	Groundwater		BB04459
PZ-19	03/02/2021	08:49	6	Groundwater		BB04460
PZ-20	03/02/2021	09:53	6	Groundwater		BB04461
PZ-20 dup	03/02/2021	09:53	6	Sample Duplicate		BB04462
PZ-21	03/02/2021	11:32	6	Groundwater		BB04463
FB-1	03/02/2021	12:15	4	Field Blank		BB04464
PZ-22	03/02/2021	12:40	6	Groundwater		BB04465

Relinquished By	Received By	Date/Time
		03/02/2021 15:07

SmarTroll ID	7586-41442-5-1	All metals and radiological bottles have pH < 2	☑
Turbidity ID	3901-20010-2-2	Cooler Temp	0.2 degrees C
Sample Event	1310	Thermometer ID	5408-27568-2-2
		pH Strip ID	8206-45803-10-7

Bottles/Pre-Preserved Bottles are provided by the GTL

Chain of Custody
Groundwater
APC General Testing Laboratory

☑ Field Complete ☐ Outside Lab
☑ Lab Complete

Lab ETA: 03/04/2021 09:00

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Site Representative	John Pate	Requested By	Greg Dyer
Collector	TJ Daugherty	Location	Gorgas Gypsum

Bottles

1	Metals	500 mL	3	Hg	250 mL	5	Anions	250 mL	7	N/A	N/A
2	Diss Metals	500 mL	4	TDS	500 mL	6	Alkalinity	250 mL	8	N/A	N/A

Comments:

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-12H	03/02/2021	13:40	6	Groundwater		BB04676
MW-12V	03/03/2021	10:11	6	Groundwater		BB04677
MW-14H	03/03/2021	11:18	6	Groundwater		BB04678
PZ-17	03/03/2021	13:04	6	Groundwater		BB04679

Relinquished By	Received By	Date/Time
		03/04/2021 07:55

SmarTroll ID	7586-41443-5-2	All metals and radiological bottles have pH < 2	☑
Turbidity ID	3901-20009-2-1	Cooler Temp	0.0 degrees C
Sample Event	1310	Thermometer ID	5408-27568-2-2
		pH Strip ID	8206-45803-10-7

Bottles/Pre-Preserved Bottles are provided by the GTL

Chain of Custody
Groundwater
APC General Testing Laboratory

☑ Field Complete ☐ Outside Lab
☑ Lab Complete

Lab ETA

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Site Representative	John Pate	Requested By	Greg Dyer
Collector	Dallas Gentry	Location	Gorgas Gypsum

Bottles													
	1	Metals	500 mL	3	Hg	250 mL	5	Anions	250 mL	7	N/A	N/A
	2	Dissolved Meta	500 mL	4	TDS	500 mL	6	Alkalinity	250 mL	8	N/A	N/A

Comments

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-3V	03/03/2021	09:00	6	Groundwater		BB04671
MW-4	03/03/2021	10:19	6	Groundwater		BB04672
MW-4V	03/03/2021	11:36	6	Groundwater		BB04673
PZ-18	03/03/2021	12:45	6	Groundwater		BB04674
EB-1	03/03/2021	13:20	4	Equipment Blank		BB04675

Relinquished By	Received By	Date/Time
Dallas Gentry	Lauren Mayo	03/04/2021 07:56

SmarTroll ID	7586-41442-5-1	All metals and radiological bottles have pH < 2	☑
Turbidity ID	3901-20010-2-2	Cooler Temp	1.0 degrees C
Sample Event	1310	Thermometer ID	5408-27568-2-2
		pH Strip ID	8206-45803-10-7

Bottles/Pre-Preserved Bottles are provided by the GTL

Chain of Custody
Groundwater
APC General Testing Laboratory

☑ Field Complete ☑ Outside Lab
☑ Lab Complete

Lab ETA

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Site Representative	John Pate	Requested By	Greg Dyer
Collector	TJ Daugherty	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 collected @ MW-11H

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-8V	03/01/2021	11:38	1	Groundwater		BB04481
MW-8	03/01/2021	13:05	1	Groundwater		BB04482
FB-2	03/01/2021	13:45	1	Field Blank		BB04483
MW-13H	03/02/2021	08:45	1	Groundwater		BB04484
MW-13H Dup	03/02/2021	08:45	1	Sample Duplicate		BB04485
MW-11H	03/02/2021	09:54	3	Groundwater		BB04486
MW-9H	03/02/2021	11:20	1	Groundwater		BB04487

Relinquished By	Received By	Date/Time
		03/02/2021 13:34
		03/02/2021 15:07

SmarTroll ID	7586-41443-5-2	All metals and radiological bottles have pH < 2	☑
Turbidity ID	3901-20009-2-1	Cooler Temp	N/A
Sample Event	1310	Thermometer ID	N/A
		pH Strip ID	8206-45803-10-7

Bottles/Pre-Preserved Bottles are provided by the GTL

Chain of Custody
Groundwater
APC General Testing Laboratory

☑ Field Complete ☑ Lab Complete ☑ Outside Lab

Lab ETA

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Site Representative	John Pate	Requested By	Greg Dyer
Collector	Dallas Gentry	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
MW-3	03/01/2021	10:33	1	Groundwater		BB04473
MW-9V	03/01/2021	12:32	1	Groundwater		BB04474
PZ-19	03/02/2021	08:49	3	Groundwater		BB04475
PZ-20	03/02/2021	09:53	1	Groundwater		BB04476
PZ-20 dup	03/02/2021	09:53	1	Sample Duplicate		BB04477
PZ-21	03/02/2021	11:32	1	Groundwater		BB04478
FB-1	03/02/2021	12:15	1	Field Blank		BB04479
PZ-22	03/02/2021	12:40	1	Groundwater		BB04480

Relinquished By	Received By	Date/Time
		03/02/2021 15:08

SmarTroll ID	7586-41442-5-1	All metals and radiological bottles have pH < 2	☑
Turbidity ID	3901-20010-2-2	Cooler Temp	N/A
Sample Event	1310	Thermometer ID	N/A
		pH Strip ID	8206-45803-10-7

Bottles/Pre-Preserved Bottles are provided by the GTL

Chain of Custody
Groundwater
APC General Testing Laboratory

☑ Field Complete ☑ Outside Lab
☑ Lab Complete

Lab ETA

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Site Representative	John Pate	Requested By	Greg Dyer
Collector	Dallas Gentry	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
MW-3V	03/03/2021	09:00	1	Groundwater		BB04680
MW-4	03/03/2021	10:19	1	Groundwater		BB04681
MW-4V	03/03/2021	11:36	1	Groundwater		BB04682
PZ-18	03/03/2021	12:45	1	Groundwater		BB04683
EB-1	03/03/2021	13:20	1	Equipment Blank		BB04684

Relinquished By	Received By	Date/Time
Dallas Gentry	Lauren Mayo	03/04/2021 07:56

SmarTroll ID	7586-41442-5-1	All metals and radiological bottles have pH < 2	☑
Turbidity ID	3901-20010-2-2	Cooler Temp	N/A
Sample Event	1310	Thermometer ID	N/A
		pH Strip ID	8206-45803-10-7

Bottles/Pre-Preserved Bottles are provided by the GTL

Chain of Custody
Groundwater
APC General Testing Laboratory

☑ Field Complete ☑ Lab Complete ☑ Outside Lab

Lab ETA: 03/04/2021 09:00

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Site Representative	John Pate	Requested By	Greg Dyer
Collector	TJ Daugherty	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: Correcting bottle count to 1. LBM 3/4/2021

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-12H	03/02/2021	13:40	1	Groundwater		BB04685
MW-12V	03/03/2021	10:11	1	Groundwater		BB04686
MW-14H	03/03/2021	11:18	1	Groundwater		BB04687
PZ-17	03/03/2021	13:04	1	Groundwater		BB04688

Relinquished By	Received By	Date/Time
		03/04/2021 07:55

SmarTroll ID	7586-41443-5-2	All metals and radiological bottles have pH < 2	☑
Turbidity ID	3901-20009-2-1	Cooler Temp	N/A
Sample Event	1310	Thermometer ID	N/A
		pH Strip ID	8206-45803-10-7

Bottles/Pre-Preserved Bottles are provided by the GTL

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

April 09, 2021

Laura Midkiff
Alabama Power
744 Highway 87
GSC #8
Calera, AL 35040

RE: Project: GORGAS GYPSUM WMWGORG_1310
Pace Project No.: 92526854

Dear Laura Midkiff:

Enclosed are the analytical results for sample(s) received by the laboratory on March 09, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Greensburg

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

Sincerely,

Kevin Herring
kevin.herring@pacelabs.com
1(704)875-9092
HORIZON Database Administrator

Enclosures

cc: Brooke Caton, Alabama Power
Renee Jernigan, Alabama Power

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

CERTIFICATIONS

Project: GORGAS GYPSUM WMWGORG_1310
Pace Project No.: 92526854

Pace Analytical Services Pennsylvania
1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
Delaware Certification
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Florida: Cert E871149 SEKS WET
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA180012
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: 2017020
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification #: 9991
Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572018-1
New Hampshire/TNI Certification #: 297617
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Ohio EPA Rad Approval: #41249
Oregon/TNI Certification #: PA200002-010
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: 02867
Texas/TNI Certification #: T104704188-17-3
Utah/TNI Certification #: PA014572017-9
USDA Soil Permit #: P330-17-00091
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 9526
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Approve List for Rad
Wyoming Certification #: 8TMS-L

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

SAMPLE SUMMARY

Project: GORGAS GYPSUM WMWGORG_1310
Pace Project No.: 92526854

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92526854001	BB04473 MW-3	Water	03/01/21 10:33	03/09/21 11:15
92526854002	BB04474 MW-9V	Water	03/01/21 12:32	03/09/21 11:15
92526854003	BB04475 PZ-19	Water	03/02/21 08:49	03/09/21 11:15
92526854004	BB04475 PZ-19 MS	Water	03/02/21 08:49	03/09/21 11:15
92526854005	BB04475 PZ-19 MSD	Water	03/02/21 08:49	03/09/21 11:15
92526854006	BB04476 PZ-20	Water	03/02/21 09:53	03/09/21 11:15
92526854007	BB04477 PZ-20 DUP	Water	03/02/21 09:53	03/09/21 11:15
92526854008	BB04478 PZ-21	Water	03/02/21 11:32	03/09/21 11:15
92526854009	BB04479 FB-1	Water	03/02/21 12:15	03/09/21 11:15
92526854010	BB04480 PZ-22	Water	03/02/21 12:40	03/09/21 11:15
92526854011	BB04481 MW-8V	Water	03/01/21 11:38	03/09/21 11:15
92526854012	BB04482 MW-8	Water	03/01/21 13:05	03/09/21 11:15
92526854013	BB04483 FB-2	Water	03/01/21 13:45	03/09/21 11:15
92526854014	BB04484 MW-13H	Water	03/02/21 08:45	03/09/21 11:15
92526854015	BB04485 MW-13H DUP	Water	03/02/21 08:45	03/09/21 11:15
92526854016	BB04486 MW-11H	Water	03/02/21 09:54	03/09/21 11:15
92526854017	BB04486 MW-11H MS	Water	03/02/21 09:54	03/09/21 11:15
92526854018	BB04486 MW-11H MSD	Water	03/02/21 09:54	03/09/21 11:15
92526854019	BB04487 MW-9H	Water	03/02/21 11:20	03/09/21 11:15
92526854020	BB04680 MW-3V	Water	03/03/21 09:00	03/09/21 11:15
92526854021	BB04681 MW-4	Water	03/03/21 10:19	03/09/21 11:15
92526854022	BB04682 MW-4V	Water	03/03/21 11:36	03/09/21 11:15
92526854023	BB04683 PZ-18	Water	03/03/21 12:45	03/09/21 11:15
92526854024	BB04684 EB-1	Water	03/03/21 13:20	03/09/21 11:15
92526854025	BB04685 MW-12H	Water	03/02/21 13:40	03/09/21 11:15
92526854026	BB04686 MW-12V	Water	03/03/21 10:11	03/09/21 11:15
92526854027	BB04687 MW-14H	Water	03/03/21 11:18	03/09/21 11:15
92526854028	BB04688 PZ-17	Water	03/03/21 13:04	03/09/21 11:15

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9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

SAMPLE ANALYTE COUNT

Project: GORGAS GYPSUM WMWGORG_1310
Pace Project No.: 92526854

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92526854001	**BB04473 MW-3**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92526854002	**BB04474 MW-9V**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92526854003	**BB04475 PZ-19**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92526854004	**BB04475 PZ-19 MS**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
92526854005	**BB04475 PZ-19 MSD**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
92526854006	**BB04476 PZ-20**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92526854007	**BB04477 PZ-20 DUP**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92526854008	**BB04478 PZ-21**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92526854009	**BB04479 FB-1**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92526854010	**BB04480 PZ-22**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92526854011	**BB04481 MW-8V**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92526854012	**BB04482 MW-8**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92526854013	**BB04483 FB-2**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA

REPORT OF LABORATORY ANALYSIS

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Huntersville, NC 28078
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SAMPLE ANALYTE COUNT

Project: GORGAS GYPSUM WMWGORG_1310
Pace Project No.: 92526854

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92526854014	**BB04484 MW-13H**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92526854015	**BB04485 MW-13H DUP**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92526854016	**BB04486 MW-11H**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92526854017	**BB04486 MW-11H MS**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
92526854018	**BB04486 MW-11H MSD**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
92526854019	**BB04487 MW-9H**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92526854020	**BB04680 MW-3V**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92526854021	**BB04681 MW-4**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92526854022	**BB04682 MW-4V**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92526854023	**BB04683 PZ-18**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92526854024	**BB04684 EB-1**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92526854025	**BB04685 MW-12H**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92526854026	**BB04686 MW-12V**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA

REPORT OF LABORATORY ANALYSIS

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Huntersville, NC 28078
(704)875-9092

SAMPLE ANALYTE COUNT

Project: GORGAS GYPSUM WMWGORG_1310
Pace Project No.: 92526854

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92526854027	**BB04687 MW-14H**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92526854028	**BB04688 PZ-17**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA

PASI-PA = Pace Analytical Services - Greensburg

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9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

PROJECT NARRATIVE

Project: GORGAS GYPSUM WMWGORG_1310
Pace Project No.: 92526854

Method: **EPA 9315**
Description: 9315 Total Radium
Client: Alabama Power
Date: April 09, 2021

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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9800 Kincey Ave. Suite 100
Huntersville, NC 28078
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PROJECT NARRATIVE

Project: GORGAS GYPSUM WMWGORG_1310
Pace Project No.: 92526854

Method: **EPA 9320**
Description: 9320 Radium 228
Client: Alabama Power
Date: April 09, 2021

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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9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

PROJECT NARRATIVE

Project: GORGAS GYPSUM WMWGORG_1310
Pace Project No.: 92526854

Method: **Total Radium Calculation**
Description: Total Radium 228+226
Client: Alabama Power
Date: April 09, 2021

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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9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: GORGAS GYPSUM WMWGORG_1310
Pace Project No.: 92526854

Sample: BB04473 MW-3 **Lab ID: 92526854001** Collected: 03/01/21 10:33 Received: 03/09/21 11:15 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	**0.0714U ± 0.280 (0.678) C:101% T:NA**	pCi/L	04/09/21 07:34	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.499U ± 0.383 (0.755) C:67% T:92%**	pCi/L	04/06/21 11:29	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.570U ± 0.663 (1.43)**	pCi/L	04/09/21 12:14	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: GORGAS GYPSUM WMWGORG_1310
Pace Project No.: 92526854

Sample: BB04474 MW-9V **Lab ID: 92526854002** Collected: 03/01/21 12:32 Received: 03/09/21 11:15 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	**0.122U ± 0.185 (0.405) C:97% T:NA**	pCi/L	04/09/21 07:35	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.564U ± 0.380 (0.718) C:67% T:93%**	pCi/L	04/06/21 11:29	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.686U ± 0.565 (1.12)**	pCi/L	04/09/21 12:14	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: GORGAS GYPSUM WMWGORG_1310
Pace Project No.: 92526854

Sample: BB04475 PZ-19 **Lab ID: 92526854003** Collected: 03/02/21 08:49 Received: 03/09/21 11:15 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	**0.0180U ± 0.220 (0.558) C:94% T:NA**	pCi/L	04/09/21 07:35	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.168U ± 0.323 (0.710) C:66% T:89%**	pCi/L	04/06/21 11:29	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.186U ± 0.543 (1.27)**	pCi/L	04/09/21 12:14	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: GORGAS GYPSUM WMWGORG_1310
Pace Project No.: 92526854

Sample: BB04475 PZ-19 MS **Lab ID: 92526854004** Collected: 03/02/21 08:49 Received: 03/09/21 11:15 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**94.88 %REC ± NA (NA) C:NA T:NA**	pCi/L	04/09/21 07:35	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**102.55 %REC ± NA (NA) C:NA T:NA**	pCi/L	04/06/21 11:29	15262-20-1	

REPORT OF LABORATORY ANALYSIS

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(704)875-9092

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: GORGAS GYPSUM WMWGORG_1310
Pace Project No.: 92526854

Sample: BB04475 PZ-19 MSD **Lab ID: 92526854005** Collected: 03/02/21 08:49 Received: 03/09/21 11:15 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	**111.73 %REC 16.32RPD ± NA (NA) C:NA T:NA**	pCi/L	04/09/21 07:35	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**122.74 %REC 17.93 RPD ± NA (NA) C:NA T:NA**	pCi/L	04/06/21 11:29	15262-20-1	

REPORT OF LABORATORY ANALYSIS

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(704)875-9092

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: GORGAS GYPSUM WMWGORG_1310
Pace Project No.: 92526854

Sample: BB04476 PZ-20 **Lab ID: 92526854006** Collected: 03/02/21 09:53 Received: 03/09/21 11:15 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	**0.0616U ± 0.313 (0.759) C:93% T:NA**	pCi/L	04/09/21 07:35	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.458U ± 0.433 (0.885) C:73% T:72%**	pCi/L	04/06/21 11:29	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.520U ± 0.746 (1.64)**	pCi/L	04/09/21 12:14	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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(704)875-9092

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: GORGAS GYPSUM WMWGORG_1310
Pace Project No.: 92526854

Sample: BB04477 PZ-20 DUP **Lab ID: 92526854007** Collected: 03/02/21 09:53 Received: 03/09/21 11:15 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	**0.355U ± 0.323 (0.647) C:93% T:NA**	pCi/L	04/09/21 07:39	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.622U ± 0.377 (0.703) C:75% T:90%**	pCi/L	04/06/21 11:30	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.977U ± 0.700 (1.35)**	pCi/L	04/09/21 12:14	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: GORGAS GYPSUM WMWGORG_1310
Pace Project No.: 92526854

Sample: BB04478 PZ-21 **Lab ID: 92526854008** Collected: 03/02/21 11:32 Received: 03/09/21 11:15 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	**0.325U ± 0.275 (0.530) C:98% T:NA**	pCi/L	04/09/21 07:39	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.451U ± 0.335 (0.652) C:70% T:94%**	pCi/L	04/06/21 11:30	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.776U ± 0.610 (1.18)**	pCi/L	04/09/21 12:14	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: GORGAS GYPSUM WMWGORG_1310
Pace Project No.: 92526854

Sample: BB04479 FB-1 **Lab ID: 92526854009** Collected: 03/02/21 12:15 Received: 03/09/21 11:15 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	**0.178U ± 0.362 (0.834) C:99% T:NA**	pCi/L	04/09/21 07:40	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.904 ± 0.411 (0.684) C:71% T:94%**	pCi/L	04/06/21 11:30	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.08U ± 0.773 (1.52)**	pCi/L	04/09/21 12:14	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: GORGAS GYPSUM WMWGORG_1310
Pace Project No.: 92526854

Sample: BB04480 PZ-22 **Lab ID: 92526854010** Collected: 03/02/21 12:40 Received: 03/09/21 11:15 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	**0.168U ± 0.260 (0.580) C:94% T:NA**	pCi/L	04/09/21 07:40	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.439U ± 0.375 (0.758) C:70% T:93%**	pCi/L	04/06/21 11:30	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.607U ± 0.635 (1.34)**	pCi/L	04/09/21 12:14	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: GORGAS GYPSUM WMWGORG_1310
Pace Project No.: 92526854

Sample: BB04481 MW-8V **Lab ID: 92526854011** Collected: 03/01/21 11:38 Received: 03/09/21 11:15 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	**0.493U ± 0.316 (0.551) C:94% T:NA**	pCi/L	04/09/21 07:40	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**1.00 ± 0.512 (0.915) C:67% T:84%**	pCi/L	04/06/21 11:30	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.49 ± 0.828 (1.47)**	pCi/L	04/09/21 12:14	7440-14-4	

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Huntersville, NC 28078
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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: GORGAS GYPSUM WMWGORG_1310
Pace Project No.: 92526854

Sample: BB04482 MW-8 **Lab ID: 92526854012** Collected: 03/01/21 13:05 Received: 03/09/21 11:15 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	**0.106U ± 0.236 (0.552) C:98% T:NA**	pCi/L	04/09/21 07:36	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.796 ± 0.427 (0.764) C:70% T:88%**	pCi/L	04/06/21 11:30	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.902U ± 0.663 (1.32)**	pCi/L	04/09/21 12:14	7440-14-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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(704)875-9092

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: GORGAS GYPSUM WMWGORG_1310
Pace Project No.: 92526854

Sample: BB04483 FB-2 **Lab ID: 92526854013** Collected: 03/01/21 13:45 Received: 03/09/21 11:15 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.184U ± 0.282 (0.630) C:98% T:NA**	pCi/L	04/09/21 07:38	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.693 ± 0.375 (0.660) C:71% T:87%**	pCi/L	04/06/21 11:30	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.877U ± 0.657 (1.29)**	pCi/L	04/09/21 12:14	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: GORGAS GYPSUM WMWGORG_1310
Pace Project No.: 92526854

Sample: BB04484 MW-13H **Lab ID: 92526854014** Collected: 03/02/21 08:45 Received: 03/09/21 11:15 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	**0.165U ± 0.241 (0.531) C:95% T:NA**	pCi/L	04/09/21 07:38	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.521U ± 0.377 (0.727) C:69% T:83%**	pCi/L	04/06/21 11:30	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.686U ± 0.618 (1.26)**	pCi/L	04/09/21 12:14	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: GORGAS GYPSUM WMWGORG_1310
Pace Project No.: 92526854

Sample: BB04485 MW-13H DUP **Lab ID: 92526854015** Collected: 03/02/21 08:45 Received: 03/09/21 11:15 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	**0.179U ± 0.225 (0.479) C:94% T:NA**	pCi/L	04/09/21 07:38	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.437U ± 0.365 (0.723) C:67% T:86%**	pCi/L	04/06/21 11:30	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.616U ± 0.590 (1.20)**	pCi/L	04/09/21 12:14	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: GORGAS GYPSUM WMWGORG_1310
Pace Project No.: 92526854

Sample: BB04486 MW-11H **Lab ID: 92526854016** Collected: 03/02/21 09:54 Received: 03/09/21 11:15 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	**0.0970U ± 0.141 (0.296) C:95% T:NA**	pCi/L	04/09/21 07:38	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.211U ± 0.329 (0.712) C:67% T:94%**	pCi/L	04/06/21 11:30	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.308U ± 0.470 (1.01)**	pCi/L	04/09/21 12:14	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: GORGAS GYPSUM WMWGORG_1310
Pace Project No.: 92526854

Sample: BB04486 MW-11H MS **Lab ID: 92526854017** Collected: 03/02/21 09:54 Received: 03/09/21 11:15 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**93.85 %REC ± NA (NA) C:NA T:NA**	pCi/L	04/09/21 07:40	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**101.33 %REC ± NA (NA) C:NA T:NA**	pCi/L	04/06/21 11:30	15262-20-1	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: GORGAS GYPSUM WMWGORG_1310
Pace Project No.: 92526854

Sample: BB04486 MW-11H MSD **Lab ID: 92526854018** Collected: 03/02/21 09:54 Received: 03/09/21 11:15 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**98.60 %REC 4.93RPD ± NA (NA) C:NA T:NA**	pCi/L	04/09/21 07:40	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**84.32 %REC 18.32 RPD ± NA (NA) C:NA T:NA**	pCi/L	04/06/21 11:30	15262-20-1	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: GORGAS GYPSUM WMWGORG_1310
Pace Project No.: 92526854

Sample: BB04487 MW-9H **Lab ID: 92526854019** Collected: 03/02/21 11:20 Received: 03/09/21 11:15 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	**0.263U ± 0.308 (0.660) C:98% T:NA**	pCi/L	04/09/21 07:40	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.607U ± 0.416 (0.795) C:69% T:84%**	pCi/L	04/06/21 11:31	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.870U ± 0.724 (1.46)**	pCi/L	04/09/21 12:14	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: GORGAS GYPSUM WMWGORG_1310
Pace Project No.: 92526854

Sample: BB04680 MW-3V **Lab ID: 92526854020** Collected: 03/03/21 09:00 Received: 03/09/21 11:15 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	**0.369U ± 0.341 (0.696) C:97% T:NA**	pCi/L	04/09/21 07:41	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.740 ± 0.404 (0.712) C:72% T:82%**	pCi/L	04/06/21 11:31	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.11U ± 0.745 (1.41)**	pCi/L	04/09/21 12:14	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: GORGAS GYPSUM WMWGORG_1310
Pace Project No.: 92526854

Sample: BB04681 MW-4 **Lab ID: 92526854021** Collected: 03/03/21 10:19 Received: 03/09/21 11:15 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	**0.308U ± 0.271 (0.525) C:96% T:NA**	pCi/L	04/09/21 07:43	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.528U ± 0.383 (0.745) C:66% T:96%**	pCi/L	04/06/21 14:34	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.836U ± 0.654 (1.27)**	pCi/L	04/09/21 12:14	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: GORGAS GYPSUM WMWGORG_1310
Pace Project No.: 92526854

Sample: BB04682 MW-4V **Lab ID: 92526854022** Collected: 03/03/21 11:36 Received: 03/09/21 11:15 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	**0.120U ± 0.233 (0.538) C:94% T:NA**	pCi/L	04/09/21 07:43	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.205U ± 0.333 (0.723) C:68% T:95%**	pCi/L	04/06/21 14:34	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.325U ± 0.566 (1.26)**	pCi/L	04/09/21 12:14	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: GORGAS GYPSUM WMWGORG_1310
Pace Project No.: 92526854

Sample: BB04683 PZ-18 **Lab ID: 92526854023** Collected: 03/03/21 12:45 Received: 03/09/21 11:15 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	**0.312U ± 0.218 (0.329) C:93% T:NA**	pCi/L	04/09/21 08:02	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.350U ± 0.342 (0.699) C:71% T:87%**	pCi/L	04/06/21 14:34	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.662U ± 0.560 (1.03)**	pCi/L	04/09/21 12:14	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: GORGAS GYPSUM WMWGORG_1310
Pace Project No.: 92526854

Sample: BB04684 EB-1 **Lab ID: 92526854024** Collected: 03/03/21 13:20 Received: 03/09/21 11:15 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	**-0.0578U ± 0.107 (0.367) C:98% T:NA**	pCi/L	04/09/21 08:02	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.324U ± 0.386 (0.813) C:69% T:91%**	pCi/L	04/06/21 14:34	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.324U ± 0.493 (1.18)**	pCi/L	04/09/21 12:14	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: GORGAS GYPSUM WMWGORG_1310
Pace Project No.: 92526854

Sample: BB04685 MW-12H **Lab ID: 92526854025** Collected: 03/02/21 13:40 Received: 03/09/21 11:15 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	**0.363 ± 0.234 (0.358) C:95% T:NA**	pCi/L	04/09/21 08:02	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**1.82 ± 0.621 (0.861) C:69% T:81%**	pCi/L	04/06/21 14:34	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**2.18 ± 0.855 (1.22)**	pCi/L	04/09/21 12:17	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: GORGAS GYPSUM WMWGORG_1310
Pace Project No.: 92526854

Sample: BB04686 MW-12V **Lab ID: 92526854026** Collected: 03/03/21 10:11 Received: 03/09/21 11:15 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	**0.388 ± 0.253 (0.384) C:94% T:NA**	pCi/L	04/09/21 08:02	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**-0.0584U ± 0.347 (0.818) C:69% T:93%**	pCi/L	04/06/21 14:34	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.388U ± 0.600 (1.20)**	pCi/L	04/09/21 12:17	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: GORGAS GYPSUM WMWGORG_1310
Pace Project No.: 92526854

Sample: BB04687 MW-14H **Lab ID: 92526854027** Collected: 03/03/21 11:18 Received: 03/09/21 11:15 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	**0.0466U ± 0.136 (0.337) C:96% T:NA**	pCi/L	04/09/21 08:02	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.138U ± 0.369 (0.826) C:66% T:90%**	pCi/L	04/06/21 14:35	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.185U ± 0.505 (1.16)**	pCi/L	04/09/21 12:17	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: GORGAS GYPSUM WMWGORG_1310
Pace Project No.: 92526854

Sample: BB04688 PZ-17 **Lab ID: 92526854028** Collected: 03/03/21 13:04 Received: 03/09/21 11:15 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	**0.0581U ± 0.157 (0.382) C:98% T:NA**	pCi/L	04/09/21 08:02	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.459U ± 0.352 (0.689) C:68% T:95%**	pCi/L	04/06/21 14:35	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.517U ± 0.509 (1.07)**	pCi/L	04/09/21 12:17	7440-14-4	

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QUALITY CONTROL - RADIOCHEMISTRY

Project: GORGAS GYPSUM WMWGORG_1310
Pace Project No.: 92526854

QC Batch: 439279
QC Batch Method: EPA 9315
Analysis Method: EPA 9315
Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92526854001, 92526854002, 92526854003, 92526854004, 92526854005, 92526854006, 92526854007, 92526854008, 92526854009, 92526854010, 92526854011, 92526854012, 92526854013, 92526854014, 92526854015, 92526854016, 92526854017, 92526854018, 92526854019, 92526854020

METHOD BLANK: 2120833
Matrix: Water
Associated Lab Samples: 92526854001, 92526854002, 92526854003, 92526854004, 92526854005, 92526854006, 92526854007, 92526854008, 92526854009, 92526854010, 92526854011, 92526854012, 92526854013, 92526854014, 92526854015, 92526854016, 92526854017, 92526854018, 92526854019, 92526854020

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.435 ± 0.369 (0.741) C:96% T:NA	pCi/L	04/09/21 07:34	

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QUALITY CONTROL - RADIOCHEMISTRY

Project: GORGAS GYPSUM WMWGORG_1310
Pace Project No.: 92526854

QC Batch: 439280 Analysis Method: EPA 9315
QC Batch Method: EPA 9315 Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92526854021, 92526854022, 92526854023, 92526854024, 92526854025, 92526854026, 92526854027, 92526854028

METHOD BLANK: 2120834 Matrix: Water
Associated Lab Samples: 92526854021, 92526854022, 92526854023, 92526854024, 92526854025, 92526854026, 92526854027, 92526854028

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.00882 ± 0.213 (0.547) C:95% T:NA	pCi/L	04/09/21 07:43	

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QUALITY CONTROL - RADIOCHEMISTRY

Project: GORGAS GYPSUM WMWGORG_1310
Pace Project No.: 92526854

QC Batch: 439308 Analysis Method: EPA 9320
QC Batch Method: EPA 9320 Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92526854021, 92526854022, 92526854023, 92526854024, 92526854025, 92526854026, 92526854027, 92526854028

METHOD BLANK: 2120884 Matrix: Water
Associated Lab Samples: 92526854021, 92526854022, 92526854023, 92526854024, 92526854025, 92526854026, 92526854027, 92526854028

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.606 ± 0.355 (0.651) C:71% T:99%	pCi/L	04/06/21 14:41	

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QUALITY CONTROL - RADIOCHEMISTRY

Project: GORGAS GYPSUM WMWGORG_1310
Pace Project No.: 92526854

QC Batch: 439306 Analysis Method: EPA 9320
QC Batch Method: EPA 9320 Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples: 92526854001, 92526854002, 92526854003, 92526854004, 92526854005, 92526854006, 92526854007, 92526854008, 92526854009, 92526854010, 92526854011, 92526854012, 92526854013, 92526854014, 92526854015, 92526854016, 92526854017, 92526854018, 92526854019, 92526854020

METHOD BLANK: 2120881 Matrix: Water

Associated Lab Samples: 92526854001, 92526854002, 92526854003, 92526854004, 92526854005, 92526854006, 92526854007, 92526854008, 92526854009, 92526854010, 92526854011, 92526854012, 92526854013, 92526854014, 92526854015, 92526854016, 92526854017, 92526854018, 92526854019, 92526854020

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.245 ± 0.333 (0.712) C:68% T:90%	pCi/L	04/06/21 11:33	

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QUALIFIERS

Project: GORGAS GYPSUM WMWGORG_1310
Pace Project No.: 92526854

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

A separate vial preserved to a pH of 4-5 is recommended in SW846 Chapter 4 for the analysis of Acrolein and Acrylonitrile by EPA Method 8260.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Act - Activity

Unc - Uncertainty: SDWA = 1.96 sigma count uncertainty, all other matrices = Expanded Uncertainty (95% confidence interval). Gamma Spec = Expanded Uncertainty (95.4% Confidence Interval)

(MDC) - Minimum Detectable Concentration

Trac - Tracer Recovery (%)

Carr - Carrier Recovery (%)

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: GORGAS GYPSUM WMWGORG_1310
Pace Project No.: 92526854

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92526854001	**BB04473 MW-3**	EPA 9315	439279		
92526854002	**BB04474 MW-9V**	EPA 9315	439279		
92526854003	**BB04475 PZ-19**	EPA 9315	439279		
92526854004	**BB04475 PZ-19 MS**	EPA 9315	439279		
92526854005	**BB04475 PZ-19 MSD**	EPA 9315	439279		
92526854006	**BB04476 PZ-20**	EPA 9315	439279		
92526854007	**BB04477 PZ-20 DUP**	EPA 9315	439279		
92526854008	**BB04478 PZ-21**	EPA 9315	439279		
92526854009	**BB04479 FB-1**	EPA 9315	439279		
92526854010	**BB04480 PZ-22**	EPA 9315	439279		
92526854011	**BB04481 MW-8V**	EPA 9315	439279		
92526854012	**BB04482 MW-8**	EPA 9315	439279		
92526854013	**BB04483 FB-2**	EPA 9315	439279		
92526854014	**BB04484 MW-13H**	EPA 9315	439279		
92526854015	**BB04485 MW-13H DUP**	EPA 9315	439279		
92526854016	**BB04486 MW-11H**	EPA 9315	439279		
92526854017	**BB04486 MW-11H MS**	EPA 9315	439279		
92526854018	**BB04486 MW-11H MSD**	EPA 9315	439279		
92526854019	**BB04487 MW-9H**	EPA 9315	439279		
92526854020	**BB04680 MW-3V**	EPA 9315	439279		
92526854021	**BB04681 MW-4**	EPA 9315	439280		
92526854022	**BB04682 MW-4V**	EPA 9315	439280		
92526854023	**BB04683 PZ-18**	EPA 9315	439280		
92526854024	**BB04684 EB-1**	EPA 9315	439280		
92526854025	**BB04685 MW-12H**	EPA 9315	439280		
92526854026	**BB04686 MW-12V**	EPA 9315	439280		
92526854027	**BB04687 MW-14H**	EPA 9315	439280		
92526854028	**BB04688 PZ-17**	EPA 9315	439280		
92526854001	**BB04473 MW-3**	EPA 9320	439306		
92526854002	**BB04474 MW-9V**	EPA 9320	439306		
92526854003	**BB04475 PZ-19**	EPA 9320	439306		
92526854004	**BB04475 PZ-19 MS**	EPA 9320	439306		
92526854005	**BB04475 PZ-19 MSD**	EPA 9320	439306		
92526854006	**BB04476 PZ-20**	EPA 9320	439306		
92526854007	**BB04477 PZ-20 DUP**	EPA 9320	439306		
92526854008	**BB04478 PZ-21**	EPA 9320	439306		
92526854009	**BB04479 FB-1**	EPA 9320	439306		
92526854010	**BB04480 PZ-22**	EPA 9320	439306		
92526854011	**BB04481 MW-8V**	EPA 9320	439306		
92526854012	**BB04482 MW-8**	EPA 9320	439306		
92526854013	**BB04483 FB-2**	EPA 9320	439306		
92526854014	**BB04484 MW-13H**	EPA 9320	439306		
92526854015	**BB04485 MW-13H DUP**	EPA 9320	439306		
92526854016	**BB04486 MW-11H**	EPA 9320	439306		
92526854017	**BB04486 MW-11H MS**	EPA 9320	439306		
92526854018	**BB04486 MW-11H MSD**	EPA 9320	439306		
92526854019	**BB04487 MW-9H**	EPA 9320	439306		
92526854020	**BB04680 MW-3V**	EPA 9320	439306		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: GORGAS GYPSUM WMWGORG_1310
Pace Project No.: 92526854

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92526854021	**BB04681 MW-4**	EPA 9320	439308		
92526854022	**BB04682 MW-4V**	EPA 9320	439308		
92526854023	**BB04683 PZ-18**	EPA 9320	439308		
92526854024	**BB04684 EB-1**	EPA 9320	439308		
92526854025	**BB04685 MW-12H**	EPA 9320	439308		
92526854026	**BB04686 MW-12V**	EPA 9320	439308		
92526854027	**BB04687 MW-14H**	EPA 9320	439308		
92526854028	**BB04688 PZ-17**	EPA 9320	439308		
92526854001	**BB04473 MW-3**	Total Radium Calculation	442654		
92526854002	**BB04474 MW-9V**	Total Radium Calculation	442654		
92526854003	**BB04475 PZ-19**	Total Radium Calculation	442654		
92526854006	**BB04476 PZ-20**	Total Radium Calculation	442654		
92526854007	**BB04477 PZ-20 DUP**	Total Radium Calculation	442654		
92526854008	**BB04478 PZ-21**	Total Radium Calculation	442654		
92526854009	**BB04479 FB-1**	Total Radium Calculation	442654		
92526854010	**BB04480 PZ-22**	Total Radium Calculation	442654		
92526854011	**BB04481 MW-8V**	Total Radium Calculation	442654		
92526854012	**BB04482 MW-8**	Total Radium Calculation	442654		
92526854013	**BB04483 FB-2**	Total Radium Calculation	442654		
92526854014	**BB04484 MW-13H**	Total Radium Calculation	442654		
92526854015	**BB04485 MW-13H DUP**	Total Radium Calculation	442654		
92526854016	**BB04486 MW-11H**	Total Radium Calculation	442654		
92526854019	**BB04487 MW-9H**	Total Radium Calculation	442654		
92526854020	**BB04680 MW-3V**	Total Radium Calculation	442654		
92526854021	**BB04681 MW-4**	Total Radium Calculation	442654		
92526854022	**BB04682 MW-4V**	Total Radium Calculation	442654		
92526854023	**BB04683 PZ-18**	Total Radium Calculation	442654		
92526854024	**BB04684 EB-1**	Total Radium Calculation	442654		
92526854025	**BB04685 MW-12H**	Total Radium Calculation	442656		
92526854026	**BB04686 MW-12V**	Total Radium Calculation	442656		
92526854027	**BB04687 MW-14H**	Total Radium Calculation	442656		
92526854028	**BB04688 PZ-17**	Total Radium Calculation	442656		

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page : 1 Of 4

Section A — Required Client Information:

Company:	Alabama Power Company
Address:	744 Highway 87 GSC Bldg #8 Calera, AL 35040
Email To:	lbmidkif@southernco.com
Phone:	205-664-6197 Fax
Requested Due Date:	28 days

Section B — Required Project Information:

Report To:	Laura Midkiff
Copy To:	Brooke Caton & Renee Jernigan
Purchase Order #:	APC57570-0001
Project Name:	Gorgas Gypsum
Project Number:	WMWGORG_1310

Section C — Invoice Information:

Attention:	Laura Midkiff
Company Name:	Alabama Power Co.
Address:	744 Highway 87 GSC Bldg #8
Pace Quote:	CCR
Pace Project Manager:	Kevin Herring
Pace Profile #:	

Regulatory Agency: State / Location: AL

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)		MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	Requested Analysis Filtered (Y/N): EPA 9315	EPA 9320	Total Radium Sum	Matrix Spike/Matrix Spike D	Residual Chlorine (Y/N)
1	BB04473	MW-3	GW	G			3/1/2021	10:33		1			X							X	X	X		
2	BB04474	MW-9V	GW	G			3/1/2021	12:32		1			X							X	X	X		
3	BB04475	PZ-19	GW	G			3/2/2021	8:49		3			X							X	X	X	X	
4	BB04476	PZ-20	GW	G			3/2/2021	9:53		1			X							X	X	X		
5	BB04477	PZ-20 DUP	GW	G			3/2/2021	9:53		1			X							X	X	X		
6	BB04478	PZ-21	GW	G			3/2/2021	11:32		1			X							X	X	X		
7	BB04479	FB-1	GW	G			3/2/2021	12:15		1			X							X	X	X		
8	BB04480	PZ-22	GW	G			3/2/2021	12:40		1			X							X	X	X		
9																								
10																								
11																								
12																								

MATRIX CODE: Drinking Water DW; Water WT; Waste Water WW; Product P; Soil/Solid SL; Oil OL; Wipe WP; Air AR; Other OT; Tissue TS

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	Laura Midkiff/ APC GTL	3/4/2021	13:25		3/9/21	1145	-	N	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# : 92526854

92526854

CHAIN-OF-CUSTODY / Analytical Request Document

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Page : 2 Of 4

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	Alabama Power Company	Report To:	Laura Midkiff	Attention:	Laura Midkiff
Address:	744 Highway 87 GSC Bldg #8 Calera, AL 35040	Copy To:	Brooke Caton & Renee Jernigan	Company Name:	Alabama Power Co.
				Address:	744 Highway 87 GSC Bldg #8
Email To:	lbmidkif@southernco.com	Purchase Order #:	APC57570-0001	Pace Quote:	CCR
Phone:	205-664-6197 Fax:	Project Name:	Gorgas Gypsum	Pace Project Manager:	Kevin Herring
Requested Due Date:	28 days	Project Number:	WMWGORG 1310	Pace Profile #:	

Regulatory Agency

State / Location: AL

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)		MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	EPA 9315	EPA 8320	Total Radium Sum	Matrix Spike/Matrix Spike D	Residual Chlorine (Y/N)
1	BB04481	MW-8V	GW	G			3/1/2021	11:38		1			X							X	X	X		
2	BB04482	MW-8	GW	G			3/1/2021	13:05		1			X							X	X	X		
3	BB04483	FB-2	GW	G			3/1/2021	13:45		1			X							X	X	X		
4	BB04484	MW-13H	GW	G			3/2/2021	8:45		1			X							X	X	X		
5	BB04485	MW-13H DUP	GW	G			3/2/2021	8:45		1			X							X	X	X		
6	BB04486	MW-11H	GW	G			3/2/2021	9:54		3			X							X	X	X	X	
7	BB04487	MW-9H	GW	G			3/2/2021	11:20		1			X							X	X	X		
8																								
9																								
10																								
11																								
12																								

MATRIX CODE: Drinking Water DW; Water WT; Waste Water WW; Product P; Soil/Solid SL; Oil OL; Wipe WP; Air AR; Other OT; Tissue TS

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	Laura Midkiff/ APC GTL	3/4/2021	13:25		3/9/21	1115	-	N	Y	Y

TEMP in C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER:

SIGNATURE of SAMPLER: DATE Signed:

CHAIN-OF-CUSTODY / Analytical Request Document

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Page : 3 Of 4

Section A — Required Client Information:

Company:	Alabama Power Company
Address:	744 Highway 87 GSC Bldg #8
	Calera, AL 35040
Email To:	lbmidkif@southernco.com
Phone:	205-664-6197 Fax:
Requested Due Date:	28 days

Section B — Required Project Information:

Report To:	Laura Midkiff
Copy To:	Brooke Caton & Renee Jernigan
Purchase Order #:	APC57570-0001
Project Name:	Gorgas Gypsum
Project Number:	WMWGORG 1310

Section C — Invoice Information:

Attention:	Laura Midkiff
Company Name:	Alabama Power Co.
Address:	744 Highway 87 GSC Bldg #8
Pace Quote:	CCR
Pace Project Manager:	Kevin Herring
Pace Profile #:	

Regulatory Agency:

State / Location: AL

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)		MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	EPA 9315	EPA 9320	Total Radium Sum	Matrix Spike/Matrix Spike D	Residual Chlorine (Y/N)
1	BB04680	MW-3V	GW	G			3/3/2021	9:00		1			X							X	X	X		
2	BB04681	MW-4	GW	G			3/3/2021	10:19		1			X							X	X	X		
3	BB04682	MW-4V	GW	G			3/3/2021	11:36		1			X							X	X	X		
4	BB04683	PZ-18	GW	G			3/3/2021	12:45		1			X							X	X	X		
5	BB04684	EB-1	GW	G			3/3/2021	13:20		1			X							X	X	X		
6																								
7																								
8																								
9																								
10																								
11																								
12																								

Matrix codes: Drinking Water DW; Water WT; Waste Water WW; Product P; Soil/Solid SL; Oil OL; Wipe WP; Air AR; Other OT; Tissue TS

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	Laura Midkiff/ APC GTL	3/4/2021	13:25		3/9/21	MS	-	N	Y	Y

TEMP In C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER:

SIGNATURE of SAMPLER: DATE Signed:

CHAIN-OF-CUSTODY / Analytical Request Document

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Page : 4 Of 4

Section A — Required Client Information:

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Regulatory Agency:

State / Location: AL

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)		MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	Requested Analysis Filtered (Y/N): EPA 9315	EPA 9320	Total Radium Sum	Matrix Spike/Matrix Spike Dup	Residual Chlorine (Y/N)
1	BB04685	MW-12H	GW	G			3/2/2021	13:40		1			X							X	X	X		
2	BB04686	MW-12V	GW	G			3/3/2021	10:11		1			X							X	X	X		
3	BB04687	MW-14H	GW	G			3/3/2021	11:18		1			X							X	X	X		
4	BB04688	PZ-17	GW	G			3/3/2021	13:04		1			X							X	X	X		
5																								
6																								
7																								
8																								
9																								
10																								
11																								
12																								

MATRIX CODE: Drinking Water DW; Water WT; Waste Water WW; Product P; Soil/Solid SL; Oil OL; Wipe WP; Air AR; Other OT; Tissue TS

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	Laura Midkiff/ APC GTL	3/4/2021	13:25		3/4/21	1115	- 1C 4 4

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)

Quality Control Sample Performance Assessment

Pace Analytical
www.pacelabs.com

Test:	Ra-226
Analyst:	LAL
Date:	3/19/2021
Worklist:	59389
Matrix:	DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2120833
MB concentration:	0.435
M/B Counting Uncertainty:	0.363
MB MDC:	0.741
MB Numerical Performance Indicator:	2.35
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	N
	LCS59389	LCSD59389
Count Date:	4/9/2021	
Spike I.D.:	19-033	
Decay Corrected Spike Concentration (pCi/mL):	24.039	
Volume Used (mL):	0.10	
Aliquot Volume (L, g, F):	0.210	
Target Conc. (pCi/L, g, F):	11.473	
Uncertainty (Calculated):	0.138	
Result (pCi/L, g, F):	11.871	
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	1.146	
Numerical Performance Indicator:	0.68	
Percent Recovery:	103.47%	
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:	3/2/2021	3/2/2021
Sample I.D.	92526854003	92526854016
Sample MS I.D.	92526854004	92526854017
Sample MSD I.D.	92526854005	92526854018
Spike I.D.:	19-033	19-033
MS/MSD Decay Corrected Spike Concentration (pCi/mL):	24.040	24.040
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):	0.213	0.211
MS Target Conc.(pCi/L, g, F):	22.559	22.813
MSD Aliquot (L, g, F):	0.208	0.211
MSD Target Conc. (pCi/L, g, F):	23.154	22.809
MS Spike Uncertainty (calculated):	0.271	0.274
MSD Spike Uncertainty (calculated):	0.278	0.274
Sample Result:	0.018	0.097
Sample Result Counting Uncertainty (pCi/L, g, F):	0.220	0.140
Sample Matrix Spike Result:	21.421	21.507
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):	1.519	1.516
Sample Matrix Spike Duplicate Result:	25.889	22.586
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):	1.676	1.584
MS Numerical Performance Indicator:	-1.453	-1.778
MSD Numerical Performance Indicator:	3.109	-0.389
MS Percent Recovery:	94.88%	93.85%
MSD Percent Recovery:	111.73%	98.60%
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.:		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 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.	92526854003	92526854016
Sample MS I.D.	92526854004	92526854017
Sample MSD I.D.	92526854005	92526854018
Sample Matrix Spike Result:	21.421	21.507
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):	1.519	1.516
Sample Matrix Spike Duplicate Result:	25.889	22.586
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):	1.676	1.584
Duplicate Numerical Performance Indicator:	-3.871	-0.965
(Based on the Percent Recoveries) MS/ MSD Duplicate RPD:	16.32%	4.93%
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:

QA 4/9/21

LAM 4/9/21

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

Test:	Ra-226
Analyst:	LAL
Date:	3/19/2021
Worklist:	59390
Matrix:	DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2120834
MB concentration:	0.009
M/B Counting Uncertainty:	0.213
MB MDC:	0.547
MB Numerical Performance Indicator:	0.08
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	N
	LCS59390	LCSD59390
Count Date:	4/9/2021	
Spike I.D.:	19-033	
Decay Corrected Spike Concentration (pCi/mL):	24.039	
Volume Used (mL):	0.10	
Aliquot Volume (L, g, F):	0.217	
Target Conc. (pCi/L, g, F):	11.065	
Uncertainty (Calculated):	0.133	
Result (pCi/L, g, F):	10.275	
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	1.121	
Numerical Performance Indicator:	-1.37	
Percent Recovery:	92.86%	
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:	2/22/2021	3/8/2021
Sample I.D.	92527335003	92527915001
Sample MS I.D.	92527335004	92527915002
Sample MSD I.D.	92527335005	92527915003
Spike I.D.:	19-033	19-033
MS/MSD Decay Corrected Spike Concentration (pCi/mL):	24.040	24.040
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):	0.206	0.210
MS Target Conc.(pCi/L, g, F):	23.367	22.844
MSD Aliquot (L, g, F):	0.212	0.213
MSD Target Conc. (pCi/L, g, F):	22.686	22.568
MS Spike Uncertainty (calculated):	0.280	0.274
MSD Spike Uncertainty (calculated):	0.272	0.271
Sample Result:	0.112	0.120
Sample Result Counting Uncertainty (pCi/L, g, F):	0.168	0.189
Sample Matrix Spike Result:	24.772	21.941
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):	1.663	1.563
Sample Matrix Spike Duplicate Result:	22.181	24.134
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):	1.513	1.655
MS Numerical Performance Indicator:	1.495	-1.255
MSD Numerical Performance Indicator:	-0.782	1.679
MS Percent Recovery:	105.53%	95.52%
MSD Percent Recovery:	97.28%	106.41%
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.:		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 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.	92527335003	92527915001
Sample MS I.D.	92527335004	92527915002
Sample MSD I.D.	92527335005	92527915003
Sample Matrix Spike Result:	24.772	21.941
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):	1.663	1.563
Sample Matrix Spike Duplicate Result:	22.181	24.134
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):	1.513	1.655
Duplicate Numerical Performance Indicator:	2.259	-1.888
(Based on the Percent Recoveries) MS/ MSD Duplicate RPD:	8.14%	10.78%
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:

JLL 4/9/21

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

Test:	Ra-228
Analyst:	VAL
Date:	3/31/2021
Worklist:	59402
Matrix:	WT

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2120881
MB concentration:	0.245
M/B 2 Sigma CSU:	0.333
MB MDC:	0.712
MB Numerical Performance Indicator:	1.44
MB Status vs Numerical Indicator:	Pass
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	N
	LCS59402	LCSD59402
Count Date:	4/6/2021	
Spike I.D.:	21-003	
Decay Corrected Spike Concentration (pCi/mL):	38.180	
Volume Used (mL):	0.10	
Aliquot Volume (L, g, F):	0.808	
Target Conc. (pCi/L, g, F):	4.727	
Uncertainty (Calculated):	0.232	
Result (pCi/L, g, F):	4.611	
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	1.061	
Numerical Performance Indicator:	-0.21	
Percent Recovery:	97.54%	
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:	3/2/2021	3/2/2021
Sample I.D.	92526854003	92526854016
Sample MS I.D.	92526854004	92526854017
Sample MSD I.D.	92526854005	92526854018
Spike I.D.:	21-003	21-003
MS/MSD Decay Corrected Spike Concentration (pCi/mL):	38.625	38.625
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	0.801
MS Target Conc.(pCi/L, g, F):	9.538	9.641
MSD Aliquot (L, g, F):	0.809	0.821
MSD Target Conc. (pCi/L, g, F):	9.543	9.413
MS Spike Uncertainty (calculated):	0.467	0.472
MSD Spike Uncertainty (calculated):	0.468	0.461
Sample Result:	0.168	0.211
Sample Result 2 Sigma CSU (pCi/L, g, F):	0.323	0.329
Sample Matrix Spike Result:	9.949	9.980
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):	1.978	2.009
Sample Matrix Spike Duplicate Result:	11.881	8.148
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):	2.358	1.662
MS Numerical Performance Indicator:	0.231	0.120
MSD Numerical Performance Indicator:	1.754	-1.647
MS Percent Recovery:	102.55%	101.33%
MSD Percent Recovery:	122.74%	84.32%
MS Status vs Numerical Indicator:	Pass	Pass
MSD Status vs Numerical Indicator:	Pass	Pass
MS Status vs Recovery:	Pass	Pass
MSD Status vs Recovery:	Pass	Pass
MS/MSD Upper % Recovery Limits:	135%	135%
MS/MSD Lower % Recovery Limits:	60%	60%

Duplicate Sample Assessment		
Sample I.D.:		Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.		
Sample Result (pCi/L, g, F):		
Sample Result 2 Sigma CSU (pCi/L, g, F):		
Sample Duplicate Result (pCi/L, g, F):		
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):		
Are sample and/or duplicate results below RL?	See Below ##	
Duplicate Numerical Performance Indicator:		
Duplicate RPD:		
Duplicate Status vs Numerical Indicator:		
Duplicate Status vs RPD:		
% RPD Limit:		

Matrix Spike/Matrix Spike Duplicate Sample Assessment		
Sample I.D.	92526854003	92526854016
Sample MS I.D.	92526854004	92526854017
Sample MSD I.D.	92526854005	92526854018
Sample Matrix Spike Result:	9.949	9.980
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):	1.978	2.009
Sample Matrix Spike Duplicate Result:	11.881	8.148
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):	2.358	1.662
Duplicate Numerical Performance Indicator:	-1.230	1.377
(Based on the Percent Recoveries) MS/ MSD Duplicate RPD:	17.93%	18.32%
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:

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

Test:	Ra-228
Analyst:	VAL
Date:	3/31/2021
Worklist:	59403
Matrix:	WT

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2120884
MB concentration:	0.606
M/B 2 Sigma CSU:	0.355
MB MDC:	0.651
MB Numerical Performance Indicator:	3.34
MB Status vs Numerical Indicator:	Fail*
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	N
	LCS59403	LCSD59403
Count Date:	4/6/2021	
Spike I.D.:	21-003	
Decay Corrected Spike Concentration (pCi/mL):	38.178	
Volume Used (mL):	0.10	
Aliquot Volume (L, g, F):	0.809	
Target Conc. (pCi/L, g, F):	4.716	
Uncertainty (Calculated):	0.231	
Result (pCi/L, g, F):	3.649	
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	0.903	
Numerical Performance Indicator:	-2.24	
Percent Recovery:	77.38%	
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:	2/22/2021	3/8/2021
Sample I.D.	92527335002	92527915001
Sample MS I.D.	92527335004	92527915002
Sample MSD I.D.	92527335005	92527915003
Spike I.D.:	21-003	21-003
MS/MSD Decay Corrected Spike Concentration (pCi/mL):	38.726	38.726
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):	0.818	0.802
MS Target Conc.(pCi/L, g, F):	9.473	9.653
MSD Aliquot (L, g, F):	0.815	0.811
MSD Target Conc. (pCi/L, g, F):	9.503	9.546
MS Spike Uncertainty (calculated):	0.464	0.473
MSD Spike Uncertainty (calculated):	0.466	0.468
Sample Result:	0.644	0.448
Sample Result 2 Sigma CSU (pCi/L, g, F):	0.430	0.386
Sample Matrix Spike Result:	8.624	8.096
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):	1.758	1.655
Sample Matrix Spike Duplicate Result:	7.188	8.441
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):	1.484	1.697
MS Numerical Performance Indicator:	-1.567	-2.228
MSD Numerical Performance Indicator:	-3.593	-1.689
MS Percent Recovery:	84.24%	79.23%
MSD Percent Recovery:	68.87%	83.73%
MS Status vs Numerical Indicator:	Pass	Warning
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		
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.	92527335002	92527915001
Sample MS I.D.	92527335004	92527915002
Sample MSD I.D.	92527335005	92527915003
Sample Matrix Spike Result:	8.624	8.096
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):	1.758	1.655
Sample Matrix Spike Duplicate Result:	7.188	8.441
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):	1.484	1.697
Duplicate Numerical Performance Indicator:	1.223	-0.285
(Based on the Percent Recoveries) MS/ MSD Duplicate RPD:	20.08%	5.52%
MS/ MSD Duplicate Status vs Numerical Indicator:	Pass	Pass
MS/ MSD Duplicate Status vs RPD:	Pass	Pass
% RPD Limit:	36%	36%

Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

Comments:

~~*If the lowest activity sample in this batch is greater than ten times the blank value, the blank is acceptable; otherwise this batch must be re-prepped.~~

MB activity < MDC - Pass

QA 4/7/21

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

2021 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
205-664-6001

Analytical Report

Alabama Power

Sample Group : WMWGORPU_1308

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 : Laura Midkiff
lbmidkif@southernco.com
(205) 664-6197

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

March 24, 2021

Dear Dustin Brooks,

Enclosed are the analytical results for sample(s) received by the laboratory on February 23, 2021.
All results reported herein conform to the laboratory's most current Quality Assurance Manual. Results marked with an asterisk conform to the most current applicable TNI/NELAC requirements. Exceptions will be noted in the body of the report.

Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2021

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

Sincerely,

Quality Control: Laura Midkiff

Digitally signed by Laura Midkiff
DN: cn=Laura Midkiff, o=Alabama Power Company, ou=Environmental Affairs, email=lbmidkif@southernco.com, c=US
Date: 2021.03.24 13:11:22 -05'00'

Supervision: T. Durant Maske

Digitally signed by T. Durant Maske
DN: cn=T. Durant Maske, o=Alabama Power Company, ou=Environmental Affairs, email=tdmaske@southernco.com, c=US
Date: 2021.03.25 14:30:30 -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_1308

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
BB03928	693672	WMWGORPU_1308
BB03929	693672	WMWGORPU_1308
BB03930	693672	WMWGORPU_1308
BB03931	693672	WMWGORPU_1308
BB03932	693672	WMWGORPU_1308
BB03933	693672	WMWGORPU_1308
BB03934	693672	WMWGORPU_1308

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

General Quality Control Procedures:

- Prior to sample analysis, an initial calibration verification (ICV) was analyzed, and all criteria were met.
- Following the ICV, an initial calibration blank (ICB) was analyzed and was below the limit of quantitation for all requested analytes.
- All continued calibration verification (CCV) were within the acceptance criteria for the requested analytes.
- All continued calibration blanks (CCB) were below the limit of quantitation for the requested analytes.
- A preparation method blank and laboratory control sample were digested and analyzed with the samples in each digestion batch.
- All laboratory control sample criteria were met.
- The method blank associated with each digestion batch passed all acceptance criteria for all requested analytes.
- All calibration curve requirements were within acceptance criteria.
- All sample internal standard criteria were met.
- The spectral interference check associated with EPA 200.7 was analyzed and all acceptance criteria were met.

- It is noted that the QC summary page typically provides the QC results from the original batch analytical sequence. If dilutions were subsequently performed to bring sample concentrations within the calibration range, any additional QC data from the dilution analyses may need to be obtained from the laboratory. Any qualifications applied to original analyses or dilution re-analyses are based upon QC data available at the time of review.

Matrix Specific Quality Control Procedures:

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

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

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

Sample ID	Analyte	Dilution factor
BB03928	Calcium, Magnesium	20.3
BB03929	Calcium, Magnesium	20.3
BB03930	Calcium, Magnesium	20.3
BB03931	Calcium, Magnesium, Sodium	50.75
BB03933	Calcium, Magnesium	20.3

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_1308

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
BB03928	693642	WMWGORPU_1308
BB03929	693642	WMWGORPU_1308
BB03930	693642	WMWGORPU_1308
BB03931	693642	WMWGORPU_1308
BB03933	693642	WMWGORPU_1308

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

General Quality Control Procedures:

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

Matrix Specific Quality Control Procedures:

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

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

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

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

Case Narrative

Alabama Power

Total Metals ICPMS

Gorgas Pooled Upgradient

WMWGORPU_1308

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
BB03928	693232	WMWGORPU_1308
BB03929	693232	WMWGORPU_1308
BB03930	693232	WMWGORPU_1308
BB03931	693232	WMWGORPU_1308
BB03932	693232	WMWGORPU_1308
BB03933	693232	WMWGORPU_1308
BB03934	693232	WMWGORPU_1308

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.

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
BB03928	Manganese	10.15
BB03929	Manganese	10.15
BB03930	Manganese	5.075
BB03931	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_1308

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
BB03928	693188	WMWGORPU_1308
BB03929	693188	WMWGORPU_1308
BB03930	693188	WMWGORPU_1308
BB03931	693188	WMWGORPU_1308
BB03933	693188	WMWGORPU_1308

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.

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	Analyte	Dilution
BB03928	Manganese	10.15
BB03929	Manganese	10.15
BB03930	Manganese	5.075
BB03931	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_1308

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
BB03928	693427	WMWGORPU_1308
BB03929	693427	WMWGORPU_1308
BB03930	693427	WMWGORPU_1308
BB03931	693427	WMWGORPU_1308
BB03932	693427	WMWGORPU_1308
BB03933	693427	WMWGORPU_1308
BB03934	693427	WMWGORPU_1308

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

General Quality Control Procedures:

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

Matrix Specific Quality Control Procedures:

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

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

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

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

Case Narrative

Alabama Power

TDS

Gorgas Pooled Upgradient

WMWGORPU_1308

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
BB03928	692991	WMWGORPU_1308
BB03929	692991	WMWGORPU_1308
BB03930	692991	WMWGORPU_1308
BB03931	692991	WMWGORPU_1308
BB03932	692991	WMWGORPU_1308
BB03933	692991	WMWGORPU_1308
BB03934	692991	WMWGORPU_1308

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

General Quality Control Procedures:

- A Method Blank was analyzed with each batch. All criteria were met.
- All final weights of samples, standards, and blanks agreed within 0.5mg of the previous weight.
- A sample duplicate was analyzed with each batch. RPD/2 was less than 5%.
- A laboratory control sample was analyzed with each batch. All criteria were met.
- Samples were between 2.5mg and 200mg residue.
- All samples with residue <2.5mg had the maximum volume of 150mL filtered. Affected samples are as follows:
    - BB03932
    - BB03934

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

Case Narrative

Alabama Power

Anions

Gorgas Pooled Upgradient

WMWGORPU_1308

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
BB03928	693007, 693045, & 692856	WMWGORPU_1308
BB03929	693007, 693045, & 692856	WMWGORPU_1308
BB03930	693007, 693045, & 692856	WMWGORPU_1308
BB03931	693007, 693045, & 692856	WMWGORPU_1308
BB03932	693007, 693045, & 692856	WMWGORPU_1308
BB03933	693007, 693045, & 692856	WMWGORPU_1308
BB03934	693007, 693045, & 692856	WMWGORPU_1308

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 half the limit of quantitation for the requested analyte.
- It is noted that the QC summary page typically provides the QC results from the original batch analytical sequence. If dilutions were subsequently performed to bring sample concentrations within the calibration range, any additional QC data from the dilution analyses may need to be obtained from the laboratory. Any qualifications applied to original analyses or dilution re-analyses are based upon QC data available at the time of review.

Matrix Specific Quality Control Procedures:

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

- A matrix spike was analyzed with each batch. Acceptance criteria for accuracy were met.
- A sample duplicate was analyzed with each batch. Acceptance criteria for precision were met.

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
BB03928	Sulfate	50
BB03929	Sulfate	50
BB03930	Sulfate	40
BB03931	Sulfate	80
BB03933	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

Alkalinity

Gorgas Pooled Upgradient

WMWGORPU_1308

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
BB03928	693348, 693349	WMWGORPU_1308
BB03929	693348, 693349	WMWGORPU_1308
BB03930	693348, 693349	WMWGORPU_1308
BB03931	693348, 693349	WMWGORPU_1308
BB03933	693348, 693349	WMWGORPU_1308

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

General Quality Control Procedures:

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

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Pooled Upgradient - MW-1

Location Code: WMWGORPU
Collected: 2/22/21 10:47
Customer ID:
Submittal Date: 2/23/21 09:37

Laboratory ID Number: BB03928

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	3/11/21 14:53	3/12/21 14:31		1.015	0.0307	mg/L	0.030000	0.1015	J
* Calcium, Total	3/11/21 14:53	3/12/21 15:37		20.3	151	mg/L	1.4007	8.12	
* Iron, Total	3/11/21 14:53	3/12/21 14:31		1.015	0.0280	mg/L	0.008120	0.0406	J
* Lithium, Total	3/11/21 14:53	3/12/21 14:31		1.015	0.0301	mg/L	0.007105	0.01999956	
* Magnesium, Total	3/11/21 14:53	3/12/21 15:37		20.3	279	mg/L	0.4263	8.12	
* Sodium, Total	3/11/21 14:53	3/12/21 14:31		1.015	38.5	mg/L	0.02030	0.406	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Iron, Dissolved	3/11/21 11:00	3/12/21 11:03		1.015	Not Detected	mg/L	0.008120	0.0406	U
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	2/23/21 13:40	2/25/21 11:05		1.015	Not Detected	mg/L	0.000507	0.001015	U
* Arsenic, Total	2/23/21 13:40	2/25/21 11:05		1.015	0.000403	mg/L	0.000068	0.000203	
* Barium, Total	2/23/21 13:40	2/25/21 11:05		1.015	0.0107	mg/L	0.000101	0.000203	
* Beryllium, Total	2/23/21 13:40	2/25/21 11:05		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	2/23/21 13:40	2/25/21 11:05		1.015	0.00184	mg/L	0.000068	0.000203	
* Chromium, Total	2/23/21 13:40	2/25/21 11:05		1.015	0.000382	mg/L	0.000203	0.001015	J
* Cobalt, Total	2/23/21 13:40	2/25/21 11:05		1.015	0.0657	mg/L	0.000068	0.000203	
* Lead, Total	2/23/21 13:40	2/25/21 11:05		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Molybdenum, Total	2/23/21 13:40	2/25/21 11:05		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Potassium, Total	2/23/21 13:40	2/25/21 11:05		1.015	7.22	mg/L	0.169505	0.5075	
* Manganese, Total	2/23/21 13:40	2/26/21 15:37		10.15	9.75	mg/L	0.000680	0.00203	
* Selenium, Total	2/23/21 13:40	2/25/21 11:05		1.015	0.00241	mg/L	0.000507	0.001015	
* Thallium, Total	2/23/21 13:40	2/25/21 11:05		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Manganese, Dissolved	2/23/21 14:25	2/26/21 15:19		10.15	9.75	mg/L	0.000680	0.00203	
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	3/8/21 11:16	3/9/21 11:47		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2320 B	***Analyst: JAG***								
Alkalinity, Total as CaCO3	3/3/21 10:35	3/3/21 11:07		1	22.6	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: TJW***								
* Solids, Dissolved	2/25/21 10:55	3/2/21 09:30		1	2230	mg/L		125	

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

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 3/23/21

Reported: 3/24/2021
Version: 3.2
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: 2/22/21 10:47
Customer ID:
Submittal Date: 2/23/21 09:37

Laboratory ID Number: BB03928

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 4500CO2 D	***Analyst: JAG***								
Bicarbonate Alkalinity, (calc.)	3/3/21 10:35	3/3/21 11:07		1	22.6	mg/L			
Carbonate Alkalinity, (calc.)	3/3/21 10:35	3/3/21 11:07		1	0.00	mg/L			
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	2/25/21 10:30	2/25/21 10:30		1	2.16	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	2/25/21 15:08	2/25/21 15:08		1	0.0820	mg/L	0.06	0.1	J
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	2/23/21 15:13	2/23/21 15:13		50	1400	mg/L	25.00	50	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	2/22/21 10:44	2/22/21 10:44			2369.76	uS/cm			FA
pH	2/22/21 10:44	2/22/21 10:44			5.06	SU			FA
Temperature	2/22/21 10:44	2/22/21 10:44			19.04	C			FA
Turbidity	2/22/21 10:44	2/22/21 10:44			0.4	NTU			FA

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

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 3/23/21

Reported: 3/24/2021
Version: 3.2
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: 2/22/21 10:47
Customer ID:
Delivery Date: 2/23/21 09:37

Description: Gorgas Pooled Upgradient - MW-1

Laboratory ID Number: BB03928

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB03933	Iron, Dissolved	mg/L	-0.0000794	0.0176	0.2	0.197	0.200	0.205	0.170 to 0.230	98.5	70.0 to 130	1.51	20.0
BB03934	Arsenic, Total	mg/L	0.0000056	0.000147	0.10	0.105	0.104	0.105	0.0850 to 0.115	105	70.0 to 130	0.957	20.0
BB03934	Barium, Total	mg/L	0.0000266	0.000200	0.10	0.0985	0.102	0.0996	0.0850 to 0.115	98.5	70.0 to 130	3.49	20.0
BB03934	Beryllium, Total	mg/L	0.0000157	0.000880	0.10	0.0921	0.0961	0.0977	0.0850 to 0.115	92.1	70.0 to 130	4.25	20.0
BB03934	Sodium, Total	mg/L	0.00835	0.0440	5.00	5.04	4.98	5.24	4.25 to 5.75	101	70.0 to 130	1.20	20.0
BB03934	Boron, Total	mg/L	-0.00165	0.0650	1.00	1.00	1.00	1.02	0.850 to 1.15	100	70.0 to 130	0.00	20.0
BB03934	Cadmium, Total	mg/L	0.0000032	0.000147	0.10	0.0999	0.0977	0.101	0.0850 to 0.115	99.9	70.0 to 130	2.23	20.0
BB03934	Lithium, Total	mg/L	-0.0000744	0.0154	0.20	0.202	0.200	0.210	0.170 to 0.230	101	70.0 to 130	0.995	20.0
BB03934	Manganese, Total	mg/L	0.0000409	0.000147	0.10	0.0998	0.102	0.101	0.0850 to 0.115	99.7	70.0 to 130	2.18	20.0
BB03934	Antimony, Total	mg/L	0.000234	0.00100	0.10	0.0937	0.0965	0.0942	0.0850 to 0.115	93.7	70.0 to 130	2.94	20.0
BB03933	Manganese, Dissolved	mg/L	0.0000275	0.000147	0.10	0.100	0.0992	0.102	0.0850 to 0.115	99.7	70.0 to 130	0.803	20.0
BB03934	Calcium, Total	mg/L	0.000993	0.152	5.00	5.03	5.02	4.98	4.25 to 5.75	101	70.0 to 130	0.199	20.0
BB03934	Cobalt, Total	mg/L	-0.0000680	0.000147	0.10	0.103	0.103	0.104	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BB03934	Iron, Total	mg/L	0.000896	0.0176	0.2	0.202	0.202	0.201	0.170 to 0.230	101	70.0 to 130	0.00	20.0
BB03934	Potassium, Total	mg/L	-0.000271	0.367	10.0	10.1	9.95	10.1	8.50 to 11.5	101	70.0 to 130	1.50	20.0
BB03934	Thallium, Total	mg/L	-0.0000628	0.000147	0.10	0.108	0.104	0.104	0.0850 to 0.115	108	70.0 to 130	3.77	20.0
BB03934	Mercury, Total by CVAA	mg/L	0.000103	0.000500	0.004	0.00427	0.00420	0.00414	0.00340 to 0.00460	107	70.0 to 130	1.65	20.0
BB03934	Magnesium, Total	mg/L	-0.000195	0.0462	5.00	5.07	5.04	5.12	4.25 to 5.75	101	70.0 to 130	0.593	20.0
BB03934	Lead, Total	mg/L	0.0000041	0.000147	0.10	0.113	0.109	0.109	0.0850 to 0.115	113	70.0 to 130	3.60	20.0
BB03934	Selenium, Total	mg/L	0.0000614	0.00100	0.10	0.0984	0.0971	0.101	0.0850 to 0.115	98.4	70.0 to 130	1.33	20.0
BB03934	Chromium, Total	mg/L	-0.000107	0.000440	0.10	0.102	0.104	0.104	0.0850 to 0.115	102	70.0 to 130	1.94	20.0
BB03934	Molybdenum, Total	mg/L	-0.0000018	0.000147	0.10	0.0968	0.0945	0.0970	0.0850 to 0.115	96.8	70.0 to 130	2.40	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 3/23/21

Reported: 3/24/2021
Version: 3.2
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: 2/22/21 10:47
Customer ID:
Delivery Date: 2/23/21 09:37

Description: Gorgas Pooled Upgradient - MW-1

Laboratory ID Number: BB03928

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB03933	Alkalinity, Total as CaCO3	mg/L					186	52.0	45.0 to 55.0			2.13	10.0
BB03934	Chloride	mg/L	-0.0953	0.500	10.0	10.5	-0.0804	10.1	9.00 to 11.0	105	80.0 to 120	0.00	20.0
BB03933	Solids, Dissolved	mg/L	-1.00	25.0			3230	51.0	40.0 to 60.0			0.623	5.00
BB03934	Fluoride	mg/L	0.0288	0.0500	2.50	2.50	0.0282	2.60	2.25 to 2.75	100	80.0 to 120	0.00	20.0
BB03934	Sulfate	mg/L	-0.466	0.500	20.0	19.6	-0.457	19.8	18.0 to 22.0	98.0	80.0 to 120	0.00	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 3/23/21

Reported: 3/24/2021
Version: 3.2
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: 2/22/21 10:47
Customer ID:
Submittal Date: 2/23/21 09:37

Laboratory ID Number: BB03929

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	3/11/21 14:53	3/12/21 14:34		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	3/11/21 14:53	3/12/21 15:40		20.3	152	mg/L	1.4007	8.12	
* Iron, Total	3/11/21 14:53	3/12/21 14:34		1.015	0.0357	mg/L	0.008120	0.0406	J
* Lithium, Total	3/11/21 14:53	3/12/21 14:34		1.015	0.0308	mg/L	0.007105	0.01999956	
* Magnesium, Total	3/11/21 14:53	3/12/21 15:40		20.3	280	mg/L	0.4263	8.12	
* Sodium, Total	3/11/21 14:53	3/12/21 14:34		1.015	38.0	mg/L	0.02030	0.406	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Iron, Dissolved	3/11/21 11:00	3/12/21 11:07		1.015	Not Detected	mg/L	0.008120	0.0406	U
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	2/23/21 13:40	2/25/21 11:07		1.015	Not Detected	mg/L	0.000507	0.001015	U
* Arsenic, Total	2/23/21 13:40	2/25/21 11:07		1.015	0.000462	mg/L	0.000068	0.000203	
* Barium, Total	2/23/21 13:40	2/25/21 11:07		1.015	0.0106	mg/L	0.000101	0.000203	
* Beryllium, Total	2/23/21 13:40	2/25/21 11:07		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	2/23/21 13:40	2/25/21 11:07		1.015	0.00174	mg/L	0.000068	0.000203	
* Chromium, Total	2/23/21 13:40	2/25/21 11:07		1.015	0.000321	mg/L	0.000203	0.001015	J
* Cobalt, Total	2/23/21 13:40	2/25/21 11:07		1.015	0.0636	mg/L	0.000068	0.000203	
* Lead, Total	2/23/21 13:40	2/25/21 11:07		1.015	0.0000725	mg/L	0.000068	0.000203	J
* Molybdenum, Total	2/23/21 13:40	2/25/21 11:07		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Potassium, Total	2/23/21 13:40	2/25/21 11:07		1.015	7.15	mg/L	0.169505	0.5075	
* Manganese, Total	2/23/21 13:40	2/26/21 15:40		10.15	9.88	mg/L	0.000680	0.00203	
* Selenium, Total	2/23/21 13:40	2/25/21 11:07		1.015	0.00250	mg/L	0.000507	0.001015	
* Thallium, Total	2/23/21 13:40	2/25/21 11:07		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Manganese, Dissolved	2/23/21 14:25	2/26/21 15:22		10.15	9.81	mg/L	0.000680	0.00203	
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	3/8/21 11:16	3/9/21 11:50		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2320 B	***Analyst: JAG***								
Alkalinity, Total as CaCO3	3/3/21 10:35	3/3/21 11:07		1	28.4	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: TJW***								
* Solids, Dissolved	2/25/21 10:55	3/2/21 09:30		1	2220	mg/L		125	

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

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 3/23/21

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: 2/22/21 10:47
Customer ID:
Submittal Date: 2/23/21 09:37

Laboratory ID Number: BB03929

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 4500CO2 D	***Analyst: JAG***								
Bicarbonate Alkalinity, (calc.)	3/3/21 10:35	3/3/21 11:07		1	28.4	mg/L			
Carbonate Alkalinity, (calc.)	3/3/21 10:35	3/3/21 11:07		1	0.00	mg/L			
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	2/25/21 10:31	2/25/21 10:31		1	2.17	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	2/25/21 15:09	2/25/21 15:09		1	0.0774	mg/L	0.06	0.1	J
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	2/23/21 15:14	2/23/21 15:14		50	1400	mg/L	25.00	50	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	2/22/21 10:44	2/22/21 10:44			2369.76	uS/cm			FA
pH	2/22/21 10:44	2/22/21 10:44			5.06	SU			FA
Temperature	2/22/21 10:44	2/22/21 10:44			19.04	C			FA
Turbidity	2/22/21 10:44	2/22/21 10:44			0.4	NTU			FA

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

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 3/23/21

Reported: 3/24/2021
Version: 3.2
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: 2/22/21 10:47
Customer ID:
Delivery Date: 2/23/21 09:37

Description: Gorgas Pooled Upgradient - MW-1 DUP

Laboratory ID Number: BB03929

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB03933	Iron, Dissolved	mg/L	-0.0000794	0.0176	0.2	0.197	0.200	0.205	0.170 to 0.230	98.5	70.0 to 130	1.51	20.0
BB03934	Arsenic, Total	mg/L	0.0000056	0.000147	0.10	0.105	0.104	0.105	0.0850 to 0.115	105	70.0 to 130	0.957	20.0
BB03934	Barium, Total	mg/L	0.0000266	0.000200	0.10	0.0985	0.102	0.0996	0.0850 to 0.115	98.5	70.0 to 130	3.49	20.0
BB03934	Beryllium, Total	mg/L	0.0000157	0.000880	0.10	0.0921	0.0961	0.0977	0.0850 to 0.115	92.1	70.0 to 130	4.25	20.0
BB03934	Sodium, Total	mg/L	0.00835	0.0440	5.00	5.04	4.98	5.24	4.25 to 5.75	101	70.0 to 130	1.20	20.0
BB03934	Mercury, Total by CVAA	mg/L	0.000103	0.000500	0.004	0.00427	0.00420	0.00414	0.00340 to 0.00460	107	70.0 to 130	1.65	20.0
BB03934	Magnesium, Total	mg/L	-0.000195	0.0462	5.00	5.07	5.04	5.12	4.25 to 5.75	101	70.0 to 130	0.593	20.0
BB03934	Lead, Total	mg/L	0.0000041	0.000147	0.10	0.113	0.109	0.109	0.0850 to 0.115	113	70.0 to 130	3.60	20.0
BB03934	Selenium, Total	mg/L	0.0000614	0.00100	0.10	0.0984	0.0971	0.101	0.0850 to 0.115	98.4	70.0 to 130	1.33	20.0
BB03933	Manganese, Dissolved	mg/L	0.0000275	0.000147	0.10	0.100	0.0992	0.102	0.0850 to 0.115	99.7	70.0 to 130	0.803	20.0
BB03934	Calcium, Total	mg/L	0.000993	0.152	5.00	5.03	5.02	4.98	4.25 to 5.75	101	70.0 to 130	0.199	20.0
BB03934	Cobalt, Total	mg/L	-0.0000680	0.000147	0.10	0.103	0.103	0.104	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BB03934	Iron, Total	mg/L	0.000896	0.0176	0.2	0.202	0.202	0.201	0.170 to 0.230	101	70.0 to 130	0.00	20.0
BB03934	Potassium, Total	mg/L	-0.000271	0.367	10.0	10.1	9.95	10.1	8.50 to 11.5	101	70.0 to 130	1.50	20.0
BB03934	Thallium, Total	mg/L	-0.0000628	0.000147	0.10	0.108	0.104	0.104	0.0850 to 0.115	108	70.0 to 130	3.77	20.0
BB03934	Boron, Total	mg/L	-0.00165	0.0650	1.00	1.00	1.00	1.02	0.850 to 1.15	100	70.0 to 130	0.00	20.0
BB03934	Cadmium, Total	mg/L	0.0000032	0.000147	0.10	0.0999	0.0977	0.101	0.0850 to 0.115	99.9	70.0 to 130	2.23	20.0
BB03934	Lithium, Total	mg/L	-0.0000744	0.0154	0.20	0.202	0.200	0.210	0.170 to 0.230	101	70.0 to 130	0.995	20.0
BB03934	Manganese, Total	mg/L	0.0000409	0.000147	0.10	0.0998	0.102	0.101	0.0850 to 0.115	99.7	70.0 to 130	2.18	20.0
BB03934	Antimony, Total	mg/L	0.000234	0.00100	0.10	0.0937	0.0965	0.0942	0.0850 to 0.115	93.7	70.0 to 130	2.94	20.0
BB03934	Chromium, Total	mg/L	-0.000107	0.000440	0.10	0.102	0.104	0.104	0.0850 to 0.115	102	70.0 to 130	1.94	20.0
BB03934	Molybdenum, Total	mg/L	-0.0000018	0.000147	0.10	0.0968	0.0945	0.0970	0.0850 to 0.115	96.8	70.0 to 130	2.40	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 3/23/21

Reported: 3/24/2021
Version: 3.2
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: 2/22/21 10:47
Customer ID:
Delivery Date: 2/23/21 09:37

Description: Gorgas Pooled Upgradient - MW-1 DUP

Laboratory ID Number: BB03929

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB03933	Alkalinity, Total as CaCO3	mg/L					186	52.0	45.0 to 55.0			2.13	10.0
BB03934	Chloride	mg/L	-0.0953	0.500	10.0	10.5	-0.0804	10.1	9.00 to 11.0	105	80.0 to 120	0.00	20.0
BB03933	Solids, Dissolved	mg/L	-1.00	25.0			3230	51.0	40.0 to 60.0			0.623	5.00
BB03934	Fluoride	mg/L	0.0288	0.0500	2.50	2.50	0.0282	2.60	2.25 to 2.75	100	80.0 to 120	0.00	20.0
BB03934	Sulfate	mg/L	-0.466	0.500	20.0	19.6	-0.457	19.8	18.0 to 22.0	98.0	80.0 to 120	0.00	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 3/23/21

Reported: 3/24/2021
Version: 3.2
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: 2/22/21 11:47
Customer ID:
Submittal Date: 2/23/21 09:37

Laboratory ID Number: BB03930

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	3/11/21 14:53	3/12/21 14:37		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	3/11/21 14:53	3/12/21 15:44		20.3	178	mg/L	1.4007	8.12	
* Iron, Total	3/11/21 14:53	3/12/21 14:37		1.015	1.20	mg/L	0.008120	0.0406	
* Lithium, Total	3/11/21 14:53	3/12/21 14:37		1.015	0.0625	mg/L	0.007105	0.01999956	
* Magnesium, Total	3/11/21 14:53	3/12/21 15:44		20.3	193	mg/L	0.4263	8.12	
* Sodium, Total	3/11/21 14:53	3/12/21 14:37		1.015	24.0	mg/L	0.02030	0.406	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Iron, Dissolved	3/11/21 11:00	3/12/21 11:10		1.015	0.924	mg/L	0.008120	0.0406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	2/23/21 13:40	2/25/21 11:10		1.015	Not Detected	mg/L	0.000507	0.001015	U
* Arsenic, Total	2/23/21 13:40	2/25/21 11:10		1.015	0.000295	mg/L	0.000068	0.000203	
* Barium, Total	2/23/21 13:40	2/25/21 11:10		1.015	0.0132	mg/L	0.000101	0.000203	
* Beryllium, Total	2/23/21 13:40	2/25/21 11:10		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	2/23/21 13:40	2/25/21 11:10		1.015	0.0000896	mg/L	0.000068	0.000203	J
* Chromium, Total	2/23/21 13:40	2/25/21 11:10		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	2/23/21 13:40	2/25/21 11:10		1.015	0.0161	mg/L	0.000068	0.000203	
* Lead, Total	2/23/21 13:40	2/25/21 11:10		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Molybdenum, Total	2/23/21 13:40	2/25/21 11:10		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Potassium, Total	2/23/21 13:40	2/25/21 11:10		1.015	6.21	mg/L	0.169505	0.5075	
* Manganese, Total	2/23/21 13:40	2/26/21 15:44		5.075	3.54	mg/L	0.000340	0.001015	
* Selenium, Total	2/23/21 13:40	2/25/21 11:10		1.015	Not Detected	mg/L	0.000507	0.001015	U
* Thallium, Total	2/23/21 13:40	2/25/21 11:10		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Manganese, Dissolved	2/23/21 14:25	2/26/21 15:26		5.075	3.49	mg/L	0.000340	0.001015	
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	3/8/21 11:16	3/9/21 11:52		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2320 B	***Analyst: JAG***								
Alkalinity, Total as CaCO3	3/3/21 10:35	3/3/21 11:07		1	358	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: TJW***								
* Solids, Dissolved	2/25/21 10:55	3/2/21 09:30		1	1620	mg/L		100	

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

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 3/23/21

Reported: 3/24/2021
Version: 3.2
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: 2/22/21 11:47
Customer ID:
Submittal Date: 2/23/21 09:37

Laboratory ID Number: BB03930

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 4500CO2 D	***Analyst: JAG***								
Bicarbonate Alkalinity, (calc.)	3/3/21 10:35	3/3/21 11:07		1	358	mg/L			
Carbonate Alkalinity, (calc.)	3/3/21 10:35	3/3/21 11:07		1	0.07	mg/L			
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	2/25/21 10:32	2/25/21 10:32		1	1.72	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	2/25/21 15:11	2/25/21 15:11		1	0.209	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	2/23/21 15:15	2/23/21 15:15		40	864	mg/L	20.00	40	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	2/22/21 11:44	2/22/21 11:44			1939.81	uS/cm			FA
pH	2/22/21 11:44	2/22/21 11:44			6.10	SU			FA
Temperature	2/22/21 11:44	2/22/21 11:44			18.70	C			FA
Turbidity	2/22/21 11:44	2/22/21 11:44			1.49	NTU			FA

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

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 3/23/21

Reported: 3/24/2021
Version: 3.2
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: 2/22/21 11:47
Customer ID:
Delivery Date: 2/23/21 09:37

Description: Gorgas Pooled Upgradient - MW-2

Laboratory ID Number: BB03930

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB03933	Iron, Dissolved	mg/L	-0.0000794	0.0176	0.2	0.197	0.200	0.205	0.170 to 0.230	98.5	70.0 to 130	1.51	20.0
BB03934	Arsenic, Total	mg/L	0.0000056	0.000147	0.10	0.105	0.104	0.105	0.0850 to 0.115	105	70.0 to 130	0.957	20.0
BB03934	Barium, Total	mg/L	0.0000266	0.000200	0.10	0.0985	0.102	0.0996	0.0850 to 0.115	98.5	70.0 to 130	3.49	20.0
BB03934	Beryllium, Total	mg/L	0.0000157	0.000880	0.10	0.0921	0.0961	0.0977	0.0850 to 0.115	92.1	70.0 to 130	4.25	20.0
BB03934	Sodium, Total	mg/L	0.00835	0.0440	5.00	5.04	4.98	5.24	4.25 to 5.75	101	70.0 to 130	1.20	20.0
BB03934	Mercury, Total by CVAA	mg/L	0.000103	0.000500	0.004	0.00427	0.00420	0.00414	0.00340 to 0.00460	107	70.0 to 130	1.65	20.0
BB03934	Magnesium, Total	mg/L	-0.000195	0.0462	5.00	5.07	5.04	5.12	4.25 to 5.75	101	70.0 to 130	0.593	20.0
BB03934	Lead, Total	mg/L	0.0000041	0.000147	0.10	0.113	0.109	0.109	0.0850 to 0.115	113	70.0 to 130	3.60	20.0
BB03934	Selenium, Total	mg/L	0.0000614	0.00100	0.10	0.0984	0.0971	0.101	0.0850 to 0.115	98.4	70.0 to 130	1.33	20.0
BB03934	Boron, Total	mg/L	-0.00165	0.0650	1.00	1.00	1.00	1.02	0.850 to 1.15	100	70.0 to 130	0.00	20.0
BB03934	Cadmium, Total	mg/L	0.0000032	0.000147	0.10	0.0999	0.0977	0.101	0.0850 to 0.115	99.9	70.0 to 130	2.23	20.0
BB03934	Lithium, Total	mg/L	-0.0000744	0.0154	0.20	0.202	0.200	0.210	0.170 to 0.230	101	70.0 to 130	0.995	20.0
BB03934	Manganese, Total	mg/L	0.0000409	0.000147	0.10	0.0998	0.102	0.101	0.0850 to 0.115	99.7	70.0 to 130	2.18	20.0
BB03934	Antimony, Total	mg/L	0.000234	0.00100	0.10	0.0937	0.0965	0.0942	0.0850 to 0.115	93.7	70.0 to 130	2.94	20.0
BB03933	Manganese, Dissolved	mg/L	0.0000275	0.000147	0.10	0.100	0.0992	0.102	0.0850 to 0.115	99.7	70.0 to 130	0.803	20.0
BB03934	Calcium, Total	mg/L	0.000993	0.152	5.00	5.03	5.02	4.98	4.25 to 5.75	101	70.0 to 130	0.199	20.0
BB03934	Cobalt, Total	mg/L	-0.0000680	0.000147	0.10	0.103	0.103	0.104	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BB03934	Iron, Total	mg/L	0.000896	0.0176	0.2	0.202	0.202	0.201	0.170 to 0.230	101	70.0 to 130	0.00	20.0
BB03934	Potassium, Total	mg/L	-0.000271	0.367	10.0	10.1	9.95	10.1	8.50 to 11.5	101	70.0 to 130	1.50	20.0
BB03934	Thallium, Total	mg/L	-0.0000628	0.000147	0.10	0.108	0.104	0.104	0.0850 to 0.115	108	70.0 to 130	3.77	20.0
BB03934	Chromium, Total	mg/L	-0.000107	0.000440	0.10	0.102	0.104	0.104	0.0850 to 0.115	102	70.0 to 130	1.94	20.0
BB03934	Molybdenum, Total	mg/L	-0.0000018	0.000147	0.10	0.0968	0.0945	0.0970	0.0850 to 0.115	96.8	70.0 to 130	2.40	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 3/23/21

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

Alabama Power

Batch QC Summary

Customer Account: WMWGORPU
Sample Date: 2/22/21 11:47
Customer ID:
Delivery Date: 2/23/21 09:37

Description: Gorgas Pooled Upgradient - MW-2

Laboratory ID Number: BB03930

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB03933	Alkalinity, Total as CaCO3	mg/L					186	52.0	45.0 to 55.0			2.13	10.0
BB03934	Chloride	mg/L	-0.0953	0.500	10.0	10.5	-0.0804	10.1	9.00 to 11.0	105	80.0 to 120	0.00	20.0
BB03933	Solids, Dissolved	mg/L	-1.00	25.0			3230	51.0	40.0 to 60.0			0.623	5.00
BB03934	Fluoride	mg/L	0.0288	0.0500	2.50	2.50	0.0282	2.60	2.25 to 2.75	100	80.0 to 120	0.00	20.0
BB03934	Sulfate	mg/L	-0.466	0.500	20.0	19.6	-0.457	19.8	18.0 to 22.0	98.0	80.0 to 120	0.00	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 3/23/21

Reported: 3/24/2021
Version: 3.2
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: 2/22/21 12:52
Customer ID:
Submittal Date: 2/23/21 09:37

Laboratory ID Number: BB03931

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	3/11/21 14:53	3/12/21 14:41		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	3/11/21 14:53	3/12/21 15:47		50.75	312	mg/L	3.50175	20.3	
* Iron, Total	3/11/21 14:53	3/12/21 14:41		1.015	0.224	mg/L	0.008120	0.0406	
* Lithium, Total	3/11/21 14:53	3/12/21 14:41		1.015	0.126	mg/L	0.007105	0.01999956	
* Magnesium, Total	3/11/21 14:53	3/12/21 15:47		50.75	618	mg/L	1.06575	20.3	
* Sodium, Total	3/11/21 14:53	3/12/21 15:47		50.75	58.7	mg/L	1.0150	20.3	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Iron, Dissolved	3/11/21 11:00	3/12/21 11:14		1.015	Not Detected	mg/L	0.008120	0.0406	U
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	2/23/21 13:40	2/25/21 11:13		1.015	Not Detected	mg/L	0.000507	0.001015	U
* Arsenic, Total	2/23/21 13:40	2/25/21 11:13		1.015	0.000789	mg/L	0.000068	0.000203	
* Barium, Total	2/23/21 13:40	2/25/21 11:13		1.015	0.00981	mg/L	0.000101	0.000203	
* Beryllium, Total	2/23/21 13:40	2/25/21 11:13		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	2/23/21 13:40	2/25/21 11:13		1.015	0.00536	mg/L	0.000068	0.000203	
* Chromium, Total	2/23/21 13:40	2/25/21 11:13		1.015	0.000350	mg/L	0.000203	0.001015	J
* Cobalt, Total	2/23/21 13:40	2/25/21 11:13		1.015	0.0515	mg/L	0.000068	0.000203	
* Lead, Total	2/23/21 13:40	2/25/21 11:13		1.015	0.0000880	mg/L	0.000068	0.000203	J
* Molybdenum, Total	2/23/21 13:40	2/25/21 11:13		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Potassium, Total	2/23/21 13:40	2/25/21 11:13		1.015	8.01	mg/L	0.169505	0.5075	
* Manganese, Total	2/23/21 13:40	2/26/21 15:47		5.075	3.26	mg/L	0.000340	0.001015	
* Selenium, Total	2/23/21 13:40	2/25/21 11:13		1.015	0.0181	mg/L	0.000507	0.001015	
* Thallium, Total	2/23/21 13:40	2/25/21 11:13		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Manganese, Dissolved	2/23/21 14:25	2/26/21 15:29		5.075	3.09	mg/L	0.000340	0.001015	
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	3/8/21 11:16	3/9/21 11:55		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2320 B	***Analyst: JAG***								
Alkalinity, Total as CaCO3	3/3/21 10:35	3/3/21 11:07		1	58.7	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: TJW***								
* Solids, Dissolved	2/25/21 10:55	3/2/21 09:30		1	4670	mg/L		250	

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

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 3/23/21

Reported: 3/24/2021
Version: 3.2
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: 2/22/21 12:52
Customer ID:
Submittal Date: 2/23/21 09:37

Laboratory ID Number: BB03931

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 4500CO2 D	***Analyst: JAG***								
Bicarbonate Alkalinity, (calc.)	3/3/21 10:35	3/3/21 11:07		1	58.7	mg/L			
Carbonate Alkalinity, (calc.)	3/3/21 10:35	3/3/21 11:07		1	0.00	mg/L			
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	2/25/21 10:34	2/25/21 10:34		1	2.22	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	2/25/21 15:12	2/25/21 15:12		1	0.246	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	2/23/21 15:16	2/23/21 15:16		80	3040	mg/L	40.00	80	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	2/22/21 12:49	2/22/21 12:49			4417.53	uS/cm			FA
pH	2/22/21 12:49	2/22/21 12:49			5.59	SU			FA
Temperature	2/22/21 12:49	2/22/21 12:49			19.81	C			FA
Turbidity	2/22/21 12:49	2/22/21 12:49			2.88	NTU			FA

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

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 3/23/21

Reported: 3/24/2021
Version: 3.2
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: 2/22/21 12:52
Customer ID:
Delivery Date: 2/23/21 09:37

Description: Gorgas Pooled Upgradient - MW-3

Laboratory ID Number: BB03931

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB03933	Iron, Dissolved	mg/L	-0.0000794	0.0176	0.2	0.197	0.200	0.205	0.170 to 0.230	98.5	70.0 to 130	1.51	20.0
BB03934	Arsenic, Total	mg/L	0.0000056	0.000147	0.10	0.105	0.104	0.105	0.0850 to 0.115	105	70.0 to 130	0.957	20.0
BB03934	Mercury, Total by CVAA	mg/L	0.000103	0.000500	0.004	0.00427	0.00420	0.00414	0.00340 to 0.00460	107	70.0 to 130	1.65	20.0
BB03934	Magnesium, Total	mg/L	-0.000195	0.0462	5.00	5.07	5.04	5.12	4.25 to 5.75	101	70.0 to 130	0.593	20.0
BB03934	Lead, Total	mg/L	0.0000041	0.000147	0.10	0.113	0.109	0.109	0.0850 to 0.115	113	70.0 to 130	3.60	20.0
BB03934	Selenium, Total	mg/L	0.0000614	0.00100	0.10	0.0984	0.0971	0.101	0.0850 to 0.115	98.4	70.0 to 130	1.33	20.0
BB03934	Barium, Total	mg/L	0.0000266	0.000200	0.10	0.0985	0.102	0.0996	0.0850 to 0.115	98.5	70.0 to 130	3.49	20.0
BB03934	Beryllium, Total	mg/L	0.0000157	0.000880	0.10	0.0921	0.0961	0.0977	0.0850 to 0.115	92.1	70.0 to 130	4.25	20.0
BB03934	Sodium, Total	mg/L	0.00835	0.0440	5.00	5.04	4.98	5.24	4.25 to 5.75	101	70.0 to 130	1.20	20.0
BB03934	Boron, Total	mg/L	-0.00165	0.0650	1.00	1.00	1.00	1.02	0.850 to 1.15	100	70.0 to 130	0.00	20.0
BB03934	Cadmium, Total	mg/L	0.0000032	0.000147	0.10	0.0999	0.0977	0.101	0.0850 to 0.115	99.9	70.0 to 130	2.23	20.0
BB03934	Lithium, Total	mg/L	-0.0000744	0.0154	0.20	0.202	0.200	0.210	0.170 to 0.230	101	70.0 to 130	0.995	20.0
BB03934	Manganese, Total	mg/L	0.0000409	0.000147	0.10	0.0998	0.102	0.101	0.0850 to 0.115	99.7	70.0 to 130	2.18	20.0
BB03934	Antimony, Total	mg/L	0.000234	0.00100	0.10	0.0937	0.0965	0.0942	0.0850 to 0.115	93.7	70.0 to 130	2.94	20.0
BB03933	Manganese, Dissolved	mg/L	0.0000275	0.000147	0.10	0.100	0.0992	0.102	0.0850 to 0.115	99.7	70.0 to 130	0.803	20.0
BB03934	Calcium, Total	mg/L	0.000993	0.152	5.00	5.03	5.02	4.98	4.25 to 5.75	101	70.0 to 130	0.199	20.0
BB03934	Cobalt, Total	mg/L	-0.0000680	0.000147	0.10	0.103	0.103	0.104	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BB03934	Iron, Total	mg/L	0.000896	0.0176	0.2	0.202	0.202	0.201	0.170 to 0.230	101	70.0 to 130	0.00	20.0
BB03934	Potassium, Total	mg/L	-0.000271	0.367	10.0	10.1	9.95	10.1	8.50 to 11.5	101	70.0 to 130	1.50	20.0
BB03934	Thallium, Total	mg/L	-0.0000628	0.000147	0.10	0.108	0.104	0.104	0.0850 to 0.115	108	70.0 to 130	3.77	20.0
BB03934	Chromium, Total	mg/L	-0.000107	0.000440	0.10	0.102	0.104	0.104	0.0850 to 0.115	102	70.0 to 130	1.94	20.0
BB03934	Molybdenum, Total	mg/L	-0.0000018	0.000147	0.10	0.0968	0.0945	0.0970	0.0850 to 0.115	96.8	70.0 to 130	2.40	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 3/23/21

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

Alabama Power

Batch QC Summary

Customer Account: WMWGORPU
Sample Date: 2/22/21 12:52
Customer ID:
Delivery Date: 2/23/21 09:37

Description: Gorgas Pooled Upgradient - MW-3

Laboratory ID Number: BB03931

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB03933	Alkalinity, Total as CaCO3	mg/L					186	52.0	45.0 to 55.0			2.13	10.0
BB03934	Chloride	mg/L	-0.0953	0.500	10.0	10.5	-0.0804	10.1	9.00 to 11.0	105	80.0 to 120	0.00	20.0
BB03933	Solids, Dissolved	mg/L	-1.00	25.0			3230	51.0	40.0 to 60.0			0.623	5.00
BB03934	Fluoride	mg/L	0.0288	0.0500	2.50	2.50	0.0282	2.60	2.25 to 2.75	100	80.0 to 120	0.00	20.0
BB03934	Sulfate	mg/L	-0.466	0.500	20.0	19.6	-0.457	19.8	18.0 to 22.0	98.0	80.0 to 120	0.00	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 3/23/21

Reported: 3/24/2021
Version: 3.2
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: 2/22/21 13:20
Customer ID:
Submittal Date: 2/23/21 09:37

Laboratory ID Number: BB03932

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	3/11/21 14:53	3/12/21 14:44		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	3/11/21 14:53	3/12/21 14:44		1.015	Not Detected	mg/L	0.070035	0.406	U
* Iron, Total	3/11/21 14:53	3/12/21 14:44		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Total	3/11/21 14:53	3/12/21 14:44		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	3/11/21 14:53	3/12/21 14:44		1.015	Not Detected	mg/L	0.021315	0.406	U
* Sodium, Total	3/11/21 14:53	3/12/21 14:44		1.015	Not Detected	mg/L	0.02030	0.406	U
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	2/23/21 13:40	2/25/21 11:15		1.015	Not Detected	mg/L	0.000507	0.001015	U
* Arsenic, Total	2/23/21 13:40	2/25/21 11:15		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Barium, Total	2/23/21 13:40	2/25/21 11:15		1.015	Not Detected	mg/L	0.000101	0.000203	U
* Beryllium, Total	2/23/21 13:40	2/25/21 11:15		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	2/23/21 13:40	2/25/21 11:15		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	2/23/21 13:40	2/25/21 11:15		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	2/23/21 13:40	2/25/21 11:15		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	2/23/21 13:40	2/25/21 11:15		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Molybdenum, Total	2/23/21 13:40	2/25/21 11:15		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	2/23/21 13:40	2/25/21 11:15		1.015	0.0000796	mg/L	0.000068	0.000203	J
* Potassium, Total	2/23/21 13:40	2/25/21 11:15		1.015	Not Detected	mg/L	0.169505	0.5075	U
* Selenium, Total	2/23/21 13:40	2/25/21 11:15		1.015	Not Detected	mg/L	0.000507	0.001015	U
* Thallium, Total	2/23/21 13:40	2/25/21 11:15		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	3/8/21 11:16	3/9/21 11:57		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2540C	***Analyst: TJW***								
* Solids, Dissolved	2/25/21 10:55	3/2/21 09:30		1	Not Detected	mg/L		25	U
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	2/25/21 10:35	2/25/21 10:35		1	Not Detected	mg/L	0.50	1	U
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	2/25/21 15:13	2/25/21 15:13		1	Not Detected	mg/L	0.06	0.1	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	2/23/21 15:17	2/23/21 15:17		1	Not Detected	mg/L	0.50	1	U

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

Comments:

Reported: 3/24/2021
Version: 3.2
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: 2/22/21 13:20
Customer ID:
Delivery Date: 2/23/21 09:37

Description: Gorgas Pooled Upgradient Field Blank-1

Laboratory ID Number: BB03932

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB03934	Arsenic, Total	mg/L	0.0000056	0.000147	0.10	0.105	0.104	0.105	0.0850 to 0.115	105	70.0 to 130	0.957	20.0
BB03934	Barium, Total	mg/L	0.0000266	0.000200	0.10	0.0985	0.102	0.0996	0.0850 to 0.115	98.5	70.0 to 130	3.49	20.0
BB03934	Beryllium, Total	mg/L	0.0000157	0.000880	0.10	0.0921	0.0961	0.0977	0.0850 to 0.115	92.1	70.0 to 130	4.25	20.0
BB03934	Sodium, Total	mg/L	0.00835	0.0440	5.00	5.04	4.98	5.24	4.25 to 5.75	101	70.0 to 130	1.20	20.0
BB03934	Mercury, Total by CVAA	mg/L	0.000103	0.000500	0.004	0.00427	0.00420	0.00414	0.00340 to 0.00460	107	70.0 to 130	1.65	20.0
BB03934	Magnesium, Total	mg/L	-0.000195	0.0462	5.00	5.07	5.04	5.12	4.25 to 5.75	101	70.0 to 130	0.593	20.0
BB03934	Lead, Total	mg/L	0.0000041	0.000147	0.10	0.113	0.109	0.109	0.0850 to 0.115	113	70.0 to 130	3.60	20.0
BB03934	Selenium, Total	mg/L	0.0000614	0.00100	0.10	0.0984	0.0971	0.101	0.0850 to 0.115	98.4	70.0 to 130	1.33	20.0
BB03934	Calcium, Total	mg/L	0.000993	0.152	5.00	5.03	5.02	4.98	4.25 to 5.75	101	70.0 to 130	0.199	20.0
BB03934	Cobalt, Total	mg/L	-0.0000680	0.000147	0.10	0.103	0.103	0.104	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BB03934	Iron, Total	mg/L	0.000896	0.0176	0.2	0.202	0.202	0.201	0.170 to 0.230	101	70.0 to 130	0.00	20.0
BB03934	Potassium, Total	mg/L	-0.000271	0.367	10.0	10.1	9.95	10.1	8.50 to 11.5	101	70.0 to 130	1.50	20.0
BB03934	Thallium, Total	mg/L	-0.0000628	0.000147	0.10	0.108	0.104	0.104	0.0850 to 0.115	108	70.0 to 130	3.77	20.0
BB03934	Boron, Total	mg/L	-0.00165	0.0650	1.00	1.00	1.00	1.02	0.850 to 1.15	100	70.0 to 130	0.00	20.0
BB03934	Cadmium, Total	mg/L	0.0000032	0.000147	0.10	0.0999	0.0977	0.101	0.0850 to 0.115	99.9	70.0 to 130	2.23	20.0
BB03934	Lithium, Total	mg/L	-0.0000744	0.0154	0.20	0.202	0.200	0.210	0.170 to 0.230	101	70.0 to 130	0.995	20.0
BB03934	Manganese, Total	mg/L	0.0000409	0.000147	0.10	0.0998	0.102	0.101	0.0850 to 0.115	99.7	70.0 to 130	2.18	20.0
BB03934	Antimony, Total	mg/L	0.000234	0.00100	0.10	0.0937	0.0965	0.0942	0.0850 to 0.115	93.7	70.0 to 130	2.94	20.0
BB03934	Chromium, Total	mg/L	-0.000107	0.000440	0.10	0.102	0.104	0.104	0.0850 to 0.115	102	70.0 to 130	1.94	20.0
BB03934	Molybdenum, Total	mg/L	-0.0000018	0.000147	0.10	0.0968	0.0945	0.0970	0.0850 to 0.115	96.8	70.0 to 130	2.40	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: 2/22/21 13:20
Customer ID:
Delivery Date: 2/23/21 09:37

Description: Gorgas Pooled Upgradient Field Blank-1

Laboratory ID Number: BB03932

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB03934	Chloride	mg/L	-0.0953	0.500	10.0	10.5	-0.0804	10.1	9.00 to 11.0	105	80.0 to 120	0.00	20.0
BB03933	Solids, Dissolved	mg/L	-1.00	25.0			3230	51.0	40.0 to 60.0			0.623	5.00
BB03934	Fluoride	mg/L	0.0288	0.0500	2.50	2.50	0.0282	2.60	2.25 to 2.75	100	80.0 to 120	0.00	20.0
BB03934	Sulfate	mg/L	-0.466	0.500	20.0	19.6	-0.457	19.8	18.0 to 22.0	98.0	80.0 to 120	0.00	20.0

Comments:

Reported: 3/24/2021
Version: 3.2
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: 2/22/21 14:07
Customer ID:
Submittal Date: 2/23/21 09:37

Laboratory ID Number: BB03933

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	3/11/21 14:53	3/12/21 14:47		1.015	0.0397	mg/L	0.030000	0.1015	J
* Calcium, Total	3/11/21 14:53	3/12/21 15:50		20.3	271	mg/L	1.4007	8.12	
* Iron, Total	3/11/21 14:53	3/12/21 14:47		1.015	0.0362	mg/L	0.008120	0.0406	J
* Lithium, Total	3/11/21 14:53	3/12/21 14:47		1.015	0.0558	mg/L	0.007105	0.01999956	
* Magnesium, Total	3/11/21 14:53	3/12/21 15:50		20.3	436	mg/L	0.4263	8.12	
* Sodium, Total	3/11/21 14:53	3/12/21 14:47		1.015	39.8	mg/L	0.02030	0.406	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Iron, Dissolved	3/11/21 11:00	3/12/21 11:17		1.015	Not Detected	mg/L	0.008120	0.0406	U
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	2/23/21 13:40	2/25/21 11:18		1.015	Not Detected	mg/L	0.000507	0.001015	U
* Arsenic, Total	2/23/21 13:40	2/25/21 11:18		1.015	0.000125	mg/L	0.000068	0.000203	J
* Barium, Total	2/23/21 13:40	2/25/21 11:18		1.015	0.0111	mg/L	0.000101	0.000203	
* Beryllium, Total	2/23/21 13:40	2/25/21 11:18		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	2/23/21 13:40	2/25/21 11:18		1.015	0.0000896	mg/L	0.000068	0.000203	J
* Chromium, Total	2/23/21 13:40	2/25/21 11:18		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	2/23/21 13:40	2/25/21 11:18		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	2/23/21 13:40	2/25/21 11:18		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Molybdenum, Total	2/23/21 13:40	2/25/21 11:18		1.015	0.000131	mg/L	0.000068	0.000203	J
* Potassium, Total	2/23/21 13:40	2/25/21 11:18		1.015	7.90	mg/L	0.169505	0.5075	
* Manganese, Total	2/23/21 13:40	2/25/21 11:18		1.015	0.000987	mg/L	0.000068	0.000203	
* Selenium, Total	2/23/21 13:40	2/25/21 11:18		1.015	0.00222	mg/L	0.000507	0.001015	
* Thallium, Total	2/23/21 13:40	2/25/21 11:18		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Manganese, Dissolved	2/23/21 14:25	2/25/21 10:44		1.015	0.000282	mg/L	0.000068	0.000203	
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	3/8/21 11:16	3/9/21 11:59		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2320 B	***Analyst: JAG***								
Alkalinity, Total as CaCO3	3/3/21 10:35	3/3/21 11:07		1	190	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: TJW***								
* Solids, Dissolved	2/25/21 10:55	3/2/21 09:30		1	3190	mg/L		166.7	

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

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 3/23/21

Reported: 3/24/2021
Version: 3.2
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: 2/22/21 14:07
Customer ID:
Submittal Date: 2/23/21 09:37

Laboratory ID Number: BB03933

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 4500CO2 D	***Analyst: JAG***								
Bicarbonate Alkalinity, (calc.)	3/3/21 10:35	3/3/21 11:07		1	190	mg/L			
Carbonate Alkalinity, (calc.)	3/3/21 10:35	3/3/21 11:07		1	0.05	mg/L			
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	2/25/21 10:36	2/25/21 10:36		1	1.52	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	2/25/21 15:14	2/25/21 15:14		1	0.357	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	2/23/21 15:18	2/23/21 15:18		80	2040	mg/L	40.00	80	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	2/22/21 14:04	2/22/21 14:04			3340.97	uS/cm			FA
pH	2/22/21 14:04	2/22/21 14:04			6.19	SU			FA
Temperature	2/22/21 14:04	2/22/21 14:04			19.93	C			FA
Turbidity	2/22/21 14:04	2/22/21 14:04			0.75	NTU			FA

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

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 3/23/21

Reported: 3/24/2021
Version: 3.2
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: 2/22/21 14:07
Customer ID:
Delivery Date: 2/23/21 09:37

Description: Gorgas Pooled Upgradient - MW-4

Laboratory ID Number: BB03933

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB03934	Arsenic, Total	mg/L	0.0000056	0.000147	0.10	0.105	0.104	0.105	0.0850 to 0.115	105	70.0 to 130	0.957	20.0
BB03933	Iron, Dissolved	mg/L	-0.0000794	0.0176	0.2	0.197	0.200	0.205	0.170 to 0.230	98.5	70.0 to 130	1.51	20.0
BB03934	Barium, Total	mg/L	0.0000266	0.000200	0.10	0.0985	0.102	0.0996	0.0850 to 0.115	98.5	70.0 to 130	3.49	20.0
BB03934	Beryllium, Total	mg/L	0.0000157	0.000880	0.10	0.0921	0.0961	0.0977	0.0850 to 0.115	92.1	70.0 to 130	4.25	20.0
BB03934	Sodium, Total	mg/L	0.00835	0.0440	5.00	5.04	4.98	5.24	4.25 to 5.75	101	70.0 to 130	1.20	20.0
BB03934	Mercury, Total by CVAA	mg/L	0.000103	0.000500	0.004	0.00427	0.00420	0.00414	0.00340 to 0.00460	107	70.0 to 130	1.65	20.0
BB03934	Magnesium, Total	mg/L	-0.000195	0.0462	5.00	5.07	5.04	5.12	4.25 to 5.75	101	70.0 to 130	0.593	20.0
BB03934	Lead, Total	mg/L	0.0000041	0.000147	0.10	0.113	0.109	0.109	0.0850 to 0.115	113	70.0 to 130	3.60	20.0
BB03934	Selenium, Total	mg/L	0.0000614	0.00100	0.10	0.0984	0.0971	0.101	0.0850 to 0.115	98.4	70.0 to 130	1.33	20.0
BB03933	Manganese, Dissolved	mg/L	0.0000275	0.000147	0.10	0.100	0.0992	0.102	0.0850 to 0.115	99.7	70.0 to 130	0.803	20.0
BB03934	Calcium, Total	mg/L	0.000993	0.152	5.00	5.03	5.02	4.98	4.25 to 5.75	101	70.0 to 130	0.199	20.0
BB03934	Cobalt, Total	mg/L	-0.0000680	0.000147	0.10	0.103	0.103	0.104	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BB03934	Iron, Total	mg/L	0.000896	0.0176	0.2	0.202	0.202	0.201	0.170 to 0.230	101	70.0 to 130	0.00	20.0
BB03934	Potassium, Total	mg/L	-0.000271	0.367	10.0	10.1	9.95	10.1	8.50 to 11.5	101	70.0 to 130	1.50	20.0
BB03934	Thallium, Total	mg/L	-0.0000628	0.000147	0.10	0.108	0.104	0.104	0.0850 to 0.115	108	70.0 to 130	3.77	20.0
BB03934	Boron, Total	mg/L	-0.00165	0.0650	1.00	1.00	1.00	1.02	0.850 to 1.15	100	70.0 to 130	0.00	20.0
BB03934	Cadmium, Total	mg/L	0.0000032	0.000147	0.10	0.0999	0.0977	0.101	0.0850 to 0.115	99.9	70.0 to 130	2.23	20.0
BB03934	Lithium, Total	mg/L	-0.0000744	0.0154	0.20	0.202	0.200	0.210	0.170 to 0.230	101	70.0 to 130	0.995	20.0
BB03934	Manganese, Total	mg/L	0.0000409	0.000147	0.10	0.0998	0.102	0.101	0.0850 to 0.115	99.7	70.0 to 130	2.18	20.0
BB03934	Antimony, Total	mg/L	0.000234	0.00100	0.10	0.0937	0.0965	0.0942	0.0850 to 0.115	93.7	70.0 to 130	2.94	20.0
BB03934	Chromium, Total	mg/L	-0.000107	0.000440	0.10	0.102	0.104	0.104	0.0850 to 0.115	102	70.0 to 130	1.94	20.0
BB03934	Molybdenum, Total	mg/L	-0.0000018	0.000147	0.10	0.0968	0.0945	0.0970	0.0850 to 0.115	96.8	70.0 to 130	2.40	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 3/23/21

Reported: 3/24/2021
Version: 3.2
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: 2/22/21 14:07
Customer ID:
Delivery Date: 2/23/21 09:37

Description: Gorgas Pooled Upgradient - MW-4

Laboratory ID Number: BB03933

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB03934	Chloride	mg/L	-0.0953	0.500	10.0	10.5	-0.0804	10.1	9.00 to 11.0	105	80.0 to 120	0.00	20.0
BB03933	Alkalinity, Total as CaCO3	mg/L					186	52.0	45.0 to 55.0			2.13	10.0
BB03933	Solids, Dissolved	mg/L	-1.00	25.0			3230	51.0	40.0 to 60.0			0.623	5.00
BB03934	Fluoride	mg/L	0.0288	0.0500	2.50	2.50	0.0282	2.60	2.25 to 2.75	100	80.0 to 120	0.00	20.0
BB03934	Sulfate	mg/L	-0.466	0.500	20.0	19.6	-0.457	19.8	18.0 to 22.0	98.0	80.0 to 120	0.00	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 3/23/21

Reported: 3/24/2021
Version: 3.2
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: 2/22/21 14:30
Customer ID:
Submittal Date: 2/23/21 09:37

Laboratory ID Number: BB03934

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	3/11/21 14:53	3/12/21 14:51		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	3/11/21 14:53	3/12/21 14:51		1.015	Not Detected	mg/L	0.070035	0.406	U
* Iron, Total	3/11/21 14:53	3/12/21 14:51		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Total	3/11/21 14:53	3/12/21 14:51		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	3/11/21 14:53	3/12/21 14:51		1.015	0.0263	mg/L	0.021315	0.406	J
* Sodium, Total	3/11/21 14:53	3/12/21 14:51		1.015	Not Detected	mg/L	0.02030	0.406	U
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	2/23/21 13:40	2/25/21 11:21		1.015	Not Detected	mg/L	0.000507	0.001015	U
* Arsenic, Total	2/23/21 13:40	2/25/21 11:21		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Barium, Total	2/23/21 13:40	2/25/21 11:21		1.015	Not Detected	mg/L	0.000101	0.000203	U
* Beryllium, Total	2/23/21 13:40	2/25/21 11:21		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	2/23/21 13:40	2/25/21 11:21		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	2/23/21 13:40	2/25/21 11:21		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	2/23/21 13:40	2/25/21 11:21		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	2/23/21 13:40	2/25/21 11:21		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Molybdenum, Total	2/23/21 13:40	2/25/21 11:21		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	2/23/21 13:40	2/25/21 11:21		1.015	0.0000749	mg/L	0.000068	0.000203	J
* Potassium, Total	2/23/21 13:40	2/25/21 11:21		1.015	Not Detected	mg/L	0.169505	0.5075	U
* Selenium, Total	2/23/21 13:40	2/25/21 11:21		1.015	Not Detected	mg/L	0.000507	0.001015	U
* Thallium, Total	2/23/21 13:40	2/25/21 11:21		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	3/8/21 11:16	3/9/21 12:02		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2540C	***Analyst: TJW***								
* Solids, Dissolved	2/25/21 10:55	3/2/21 09:30		1	Not Detected	mg/L		25	U
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	2/25/21 10:37	2/25/21 10:37		1	Not Detected	mg/L	0.50	1	U
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	2/25/21 15:15	2/25/21 15:15		1	Not Detected	mg/L	0.06	0.1	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	2/23/21 15:20	2/23/21 15:20		1	Not Detected	mg/L	0.50	1	U

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

Comments:

Reported: 3/24/2021
Version: 3.2
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: 2/22/21 14:30
Customer ID:
Delivery Date: 2/23/21 09:37

Description:Gorgas Pooled Upgradient Equipment Blank-1

Laboratory ID Number: BB03934

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB03934	Chromium, Total	mg/L	-0.000107	0.000440	0.10	0.102	0.104	0.104	0.0850 to 0.115	102	70.0 to 130	1.94	20.0
BB03934	Molybdenum, Total	mg/L	-0.0000018	0.000147	0.10	0.0968	0.0945	0.0970	0.0850 to 0.115	96.8	70.0 to 130	2.40	20.0
BB03934	Calcium, Total	mg/L	0.000993	0.152	5.00	5.03	5.02	4.98	4.25 to 5.75	101	70.0 to 130	0.199	20.0
BB03934	Cobalt, Total	mg/L	-0.0000680	0.000147	0.10	0.103	0.103	0.104	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BB03934	Iron, Total	mg/L	0.000896	0.0176	0.2	0.202	0.202	0.201	0.170 to 0.230	101	70.0 to 130	0.00	20.0
BB03934	Potassium, Total	mg/L	-0.000271	0.367	10.0	10.1	9.95	10.1	8.50 to 11.5	101	70.0 to 130	1.50	20.0
BB03934	Thallium, Total	mg/L	-0.0000628	0.000147	0.10	0.108	0.104	0.104	0.0850 to 0.115	108	70.0 to 130	3.77	20.0
BB03934	Boron, Total	mg/L	-0.00165	0.0650	1.00	1.00	1.00	1.02	0.850 to 1.15	100	70.0 to 130	0.00	20.0
BB03934	Cadmium, Total	mg/L	0.0000032	0.000147	0.10	0.0999	0.0977	0.101	0.0850 to 0.115	99.9	70.0 to 130	2.23	20.0
BB03934	Lithium, Total	mg/L	-0.0000744	0.0154	0.20	0.202	0.200	0.210	0.170 to 0.230	101	70.0 to 130	0.995	20.0
BB03934	Manganese, Total	mg/L	0.0000409	0.000147	0.10	0.0998	0.102	0.101	0.0850 to 0.115	99.7	70.0 to 130	2.18	20.0
BB03934	Antimony, Total	mg/L	0.000234	0.00100	0.10	0.0937	0.0965	0.0942	0.0850 to 0.115	93.7	70.0 to 130	2.94	20.0
BB03934	Mercury, Total by CVAA	mg/L	0.000103	0.000500	0.004	0.00427	0.00420	0.00414	0.00340 to 0.00460	107	70.0 to 130	1.65	20.0
BB03934	Magnesium, Total	mg/L	-0.000195	0.0462	5.00	5.07	5.04	5.12	4.25 to 5.75	101	70.0 to 130	0.593	20.0
BB03934	Lead, Total	mg/L	0.0000041	0.000147	0.10	0.113	0.109	0.109	0.0850 to 0.115	113	70.0 to 130	3.60	20.0
BB03934	Selenium, Total	mg/L	0.0000614	0.00100	0.10	0.0984	0.0971	0.101	0.0850 to 0.115	98.4	70.0 to 130	1.33	20.0
BB03934	Barium, Total	mg/L	0.0000266	0.000200	0.10	0.0985	0.102	0.0996	0.0850 to 0.115	98.5	70.0 to 130	3.49	20.0
BB03934	Beryllium, Total	mg/L	0.0000157	0.000880	0.10	0.0921	0.0961	0.0977	0.0850 to 0.115	92.1	70.0 to 130	4.25	20.0
BB03934	Sodium, Total	mg/L	0.00835	0.0440	5.00	5.04	4.98	5.24	4.25 to 5.75	101	70.0 to 130	1.20	20.0
BB03934	Arsenic, Total	mg/L	0.0000056	0.000147	0.10	0.105	0.104	0.105	0.0850 to 0.115	105	70.0 to 130	0.957	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: 2/22/21 14:30
Customer ID:
Delivery Date: 2/23/21 09:37

Description: Gorgas Pooled Upgradient Equipment Blank-1

Laboratory ID Number: BB03934

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB03934	Chloride	mg/L	-0.0953	0.500	10.0	10.5	-0.0804	10.1	9.00 to 11.0	105	80.0 to 120	0.00	20.0
BB03933	Solids, Dissolved	mg/L	-1.00	25.0			3230	51.0	40.0 to 60.0			0.623	5.00
BB03934	Fluoride	mg/L	0.0288	0.0500	2.50	2.50	0.0282	2.60	2.25 to 2.75	100	80.0 to 120	0.00	20.0
BB03934	Sulfate	mg/L	-0.466	0.500	20.0	19.6	-0.457	19.8	18.0 to 22.0	98.0	80.0 to 120	0.00	20.0

Comments:

Reported: 3/24/2021
Version: 3.2
COA_CCR

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

Definitions

Alabama Power

Abbreviation	Description
DF	Dilution Factor
LCS	Lab Control Sample
LFM	Lab Fortified Matrix
MB	Method Blank
MDL	Method Detection Limit; minimum concentration of an analyte that can be determined with 99% confidence that the concentration is greater than zero.
MS	Matrix Spike
MSD	Matrix Spike Duplicate
Prec	Precision (% RPD)
Q	Qualifier; comment used to note deviations or additional information associated with analytical results.
QC	Quality Control
Rec	Recovery of Matrix Spike
RL	Reporting Limit; lowest concentration at which an analyte can be quantitatively measured.
Vio Spec	Violation Specification; regulatory limit which has been exceeded by the sample analyzed.

Qualifier	Description
FA	Field results were reviewed by the Water Field Group.
J	Reported value is an estimate because concentration is less than reporting limit.
U	Compound was analyzed, but not detected.

Chain of Custody Groundwater

APC General Testing Laboratory

☑ Field Complete ☐ Outside Lab

☑ Lab Complete

Lab ETA

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Site Representative	John Pate	Requested By	Greg Dyer
Collector	TJ Daugherty	Location	Gorgas Pooled Upgradient

Bottles

1	Metals	500 mL	3	Hg	250 mL	5	Anions	250 mL	7	N/A	N/A
2	Diss Metals	500 mL	4	TDS	500 mL	6	Alkalinity	250 mL	8	N/A	N/A

Comments: Resigned COC due to upload error. LBM 2/23/21

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-1	02/22/2021	10:47	6	Groundwater		BB03928
MW-1 DUP	02/22/2021	10:47	6	Sample Duplicate		BB03929
MW-2	02/22/2021	11:47	6	Groundwater		BB03930
MW-3	02/22/2021	12:52	6	Groundwater		BB03931
FB-1	02/22/2021	13:20	4	Field Blank		BB03932
MW-4	02/22/2021	14:07	6	Groundwater		BB03933
EB-1	02/22/2021	14:30	4	Equipment Blank		BB03934

Relinquished By	Received By	Date/Time
	Laura Midkiff Digitally signed by Laura Midkiff DN: cn=Laura Midkiff, o=Alabama Power Company, ou=Environmental Affairs, email=lbmidkif@southernco.com, c=US Date: 2021.02.23 12:16:49 -06'00'	02/23/2021 08:33

SmarTroll ID	7586-41443-5-2	All metals and radiological bottles have pH < 2	☑
Turbidity ID	3901-20009-2-1	Cooler Temp	0.1 degrees C
Sample Event	1308	Thermometer ID	5408-27568-2-2
		pH Strip ID	8206-45803-10-7

Bottles/Pre-Preserved Bottles are provided by the GTL

Chain of Custody
Groundwater
APC General Testing Laboratory

✔ Field Complete ✔ Outside Lab
✔ Lab Complete

Lab ETA

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Site Representative	John Pate	Requested By	Greg Dyer
Collector	TJ Daugherty	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 collected @ MW-2
Resigned COC due to upload error. LBM 2/23/21

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-1	02/22/2021	10:47	1	Groundwater		BB03935
MW-1 DUP	02/22/2021	10:47	1	Sample Duplicate		BB03936
MW-2	02/22/2021	11:47	3	Groundwater		BB03937
MW-3	02/22/2021	12:52	1	Groundwater		BB03938
FB-1	02/22/2021	13:20	1	Field Blank		BB03939
MW-4	02/22/2021	14:07	1	Groundwater		BB03940
EB-1	02/22/2021	14:30	1	Equipment Blank		BB03941

Relinquished By	Received By	Date/Time
	Laura Midkiff Digitally signed by Laura Midkiff DN: cn=Laura Midkiff, o=Alabama Power Company, ou=Environmental Affairs, email=lbmidkif@southernco.com, c=US Date: 2021.02.23 12:20:33 -06'00'	02/23/2021 08:33

SmarTroll ID	7586-41443-5-2
Turbidity ID	3901-20009-2-1
Sample Event	1308

All metals and radiological bottles have pH < 2 ✔

Cooler Temp	N/A
Thermometer ID	N/A
pH Strip ID	8206-45803-10-7

Bottles/Pre-Preserved Bottles are provided by the GTL

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

April 09, 2021

Laura Midkiff
Alabama Power
744 Highway 87
GSC #8
Calera, AL 35040

RE: Project: GORGAS POOLED UPGRADIENT 1308
Pace Project No.: 92527335

Dear Laura Midkiff:

Enclosed are the analytical results for sample(s) received by the laboratory on March 11, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Greensburg

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

Sincerely,

Kevin Herring
kevin.herring@pacelabs.com
1(704)875-9092
HORIZON Database Administrator

Enclosures

cc: Brooke Caton, Alabama Power
Renee Jernigan, Alabama Power

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CERTIFICATIONS

Project: GORGAS POOLED UPGRADIENT 1308
Pace Project No.: 92527335

Pace Analytical Services Pennsylvania
1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
Delaware Certification
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Florida: Cert E871149 SEKS WET
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA180012
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: 2017020
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification #: 9991
Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572018-1
New Hampshire/TNI Certification #: 297617
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Ohio EPA Rad Approval: #41249
Oregon/TNI Certification #: PA200002-010
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: 02867
Texas/TNI Certification #: T104704188-17-3
Utah/TNI Certification #: PA014572017-9
USDA Soil Permit #: P330-17-00091
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 9526
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Approve List for Rad
Wyoming Certification #: 8TMS-L

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SAMPLE SUMMARY

Project: GORGAS POOLED UPGRADIENT 1308
Pace Project No.: 92527335

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92527335001	**BB03935 MW-1**	Water	02/22/21 10:47	03/11/21 10:00
92527335002	**BB03936 MW-1 DUP**	Water	02/22/21 10:47	03/11/21 10:00
92527335003	**BB03937 MW-2**	Water	02/22/21 11:47	03/11/21 10:00
92527335004	**BB03937 MW-2 MS**	Water	02/22/21 11:47	03/11/21 10:00
92527335005	**BB03937 MW-2 MSD**	Water	02/22/21 11:47	03/11/21 10:00
92527335006	**BB03938 MW-3**	Water	02/22/21 12:52	03/11/21 10:00
92527335007	**BB03939 FB-1**	Water	02/22/21 13:20	03/11/21 10:00
92527335008	**BB03940 MW-4**	Water	02/22/21 14:07	03/11/21 10:00
92527335009	**BB03941 EB-1**	Water	02/22/21 14:30	03/11/21 10:00

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: GORGAS POOLED UPGRADIENT 1308
Pace Project No.: 92527335

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92527335001	**BB03935 MW-1**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92527335002	**BB03936 MW-1 DUP**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92527335003	**BB03937 MW-2**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92527335004	**BB03937 MW-2 MS**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
92527335005	**BB03937 MW-2 MSD**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
92527335006	**BB03938 MW-3**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92527335007	**BB03939 FB-1**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92527335008	**BB03940 MW-4**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92527335009	**BB03941 EB-1**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA

PASI-PA = Pace Analytical Services - Greensburg

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Huntersville, NC 28078
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PROJECT NARRATIVE

Project: GORGAS POOLED UPGRADIENT 1308
Pace Project No.: 92527335

Method: **EPA 9315**
Description: 9315 Total Radium
Client: Alabama Power
Date: April 09, 2021

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:

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9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

PROJECT NARRATIVE

Project: GORGAS POOLED UPGRADIENT 1308
Pace Project No.: 92527335

Method: **EPA 9320**
Description: 9320 Radium 228
Client: Alabama Power
Date: April 09, 2021

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:

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Huntersville, NC 28078
(704)875-9092

PROJECT NARRATIVE

Project: GORGAS POOLED UPGRADIENT 1308
Pace Project No.: 92527335

Method: **Total Radium Calculation**
Description: Total Radium 228+226
Client: Alabama Power
Date: April 09, 2021

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.

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Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: GORGAS POOLED UPGRADIENT 1308
Pace Project No.: 92527335

Sample: BB03935 MW-1 **Lab ID: 92527335001** Collected: 02/22/21 10:47 Received: 03/11/21 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	**0.0302U ± 0.206 (0.521) C:98% T:NA**	pCi/L	04/09/21 08:02	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.647U ± 0.418 (0.790) C:67% T:90%**	pCi/L	04/06/21 14:35	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.677U ± 0.624 (1.31)**	pCi/L	04/09/21 12:17	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: GORGAS POOLED UPGRADIENT 1308
Pace Project No.: 92527335

Sample: BB03936 MW-1 DUP **Lab ID: 92527335002** Collected: 02/22/21 10:47 Received: 03/11/21 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	**0.164U ± 0.185 (0.367) C:99% T:NA**	pCi/L	04/09/21 08:02	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.644U ± 0.430 (0.825) C:68% T:91%**	pCi/L	04/06/21 14:35	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.808U ± 0.615 (1.19)**	pCi/L	04/09/21 12:17	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: GORGAS POOLED UPGRADIENT 1308
Pace Project No.: 92527335

Sample: BB03937 MW-2 **Lab ID: 92527335003** Collected: 02/22/21 11:47 Received: 03/11/21 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	**0.112U ± 0.169 (0.366) C:96% T:NA**	pCi/L	04/09/21 08:02	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.322U ± 0.424 (0.906) C:68% T:87%**	pCi/L	04/06/21 14:35	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.434U ± 0.593 (1.27)**	pCi/L	04/09/21 12:17	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: GORGAS POOLED UPGRADIENT 1308
Pace Project No.: 92527335

Sample: BB03937 MW-2 MS **Lab ID: 92527335004** Collected: 02/22/21 11:47 Received: 03/11/21 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	**105.53 %REC ± NA (NA) C:NA T:NA**	pCi/L	04/09/21 08:02	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**84.24 %REC ± NA (NA) C:NA T:NA**	pCi/L	04/06/21 14:35	15262-20-1	

REPORT OF LABORATORY ANALYSIS

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Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: GORGAS POOLED UPGRADIENT 1308
Pace Project No.: 92527335

Sample: BB03937 MW-2 MSD **Lab ID: 92527335005** Collected: 02/22/21 11:47 Received: 03/11/21 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	**97.28 %REC 8.14RPD ± NA (NA) C:NA T:NA**	pCi/L	04/09/21 08:22	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**68.87 %REC 20.08 RPD ± NA (NA) C:NA T:NA**	pCi/L	04/06/21 14:35	15262-20-1	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: GORGAS POOLED UPGRADIENT 1308
Pace Project No.: 92527335

Sample: BB03938 MW-3 **Lab ID: 92527335006** Collected: 02/22/21 12:52 Received: 03/11/21 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	**0.265U ± 0.268 (0.542) C:97% T:NA**	pCi/L	04/09/21 09:32	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.207U ± 0.313 (0.675) C:67% T:96%**	pCi/L	04/06/21 14:35	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.472U ± 0.581 (1.22)**	pCi/L	04/09/21 12:17	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: GORGAS POOLED UPGRADIENT 1308
Pace Project No.: 92527335

Sample: BB03939 FB-1 **Lab ID: 92527335007** Collected: 02/22/21 13:20 Received: 03/11/21 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	**0.237U ± 0.227 (0.439) C:95% T:NA**	pCi/L	04/09/21 09:00	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.463U ± 0.348 (0.674) C:72% T:85%**	pCi/L	04/06/21 14:35	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.700U ± 0.575 (1.11)**	pCi/L	04/09/21 12:17	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: GORGAS POOLED UPGRADIENT 1308
Pace Project No.: 92527335

Sample: BB03940 MW-4 **Lab ID: 92527335008** Collected: 02/22/21 14:07 Received: 03/11/21 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	**-0.0669U ± 0.194 (0.548) C:100% T:NA**	pCi/L	04/09/21 09:49	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**-0.133U ± 0.283 (0.693) C:68% T:100%**	pCi/L	04/06/21 14:35	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.000U ± 0.477 (1.24)**	pCi/L	04/09/21 12:17	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: GORGAS POOLED UPGRADIENT 1308
Pace Project No.: 92527335

Sample: BB03941 EB-1 **Lab ID: 92527335009** Collected: 02/22/21 14:30 Received: 03/11/21 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	**-0.157U ± 0.204 (0.629) C:95% T:NA**	pCi/L	04/09/21 09:14	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**-0.00426U ± 0.328 (0.765) C:68% T:95%**	pCi/L	04/06/21 14:35	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.000U ± 0.532 (1.39)**	pCi/L	04/09/21 12:17	7440-14-4	

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QUALITY CONTROL - RADIOCHEMISTRY

Project: GORGAS POOLED UPGRADIENT 1308
Pace Project No.: 92527335

QC Batch: 439280 Analysis Method: EPA 9315
QC Batch Method: EPA 9315 Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92527335001, 92527335002, 92527335003, 92527335004, 92527335005, 92527335006, 92527335007, 92527335008, 92527335009

METHOD BLANK: 2120834 Matrix: Water
Associated Lab Samples: 92527335001, 92527335002, 92527335003, 92527335004, 92527335005, 92527335006, 92527335007, 92527335008, 92527335009

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.00882 ± 0.213 (0.547) C:95% T:NA	pCi/L	04/09/21 07:43	

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: GORGAS POOLED UPGRADIENT 1308
Pace Project No.: 92527335

QC Batch: 439308
QC Batch Method: EPA 9320
Analysis Method: EPA 9320
Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92527335001, 92527335002, 92527335003, 92527335004, 92527335005, 92527335006, 92527335007, 92527335008, 92527335009

METHOD BLANK: 2120884 Matrix: Water
Associated Lab Samples: 92527335001, 92527335002, 92527335003, 92527335004, 92527335005, 92527335006, 92527335007, 92527335008, 92527335009

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.606 ± 0.355 (0.651) C:71% T:99%	pCi/L	04/06/21 14:41	

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

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QUALIFIERS

Project: GORGAS POOLED UPGRADIENT 1308
Pace Project No.: 92527335

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

A separate vial preserved to a pH of 4-5 is recommended in SW846 Chapter 4 for the analysis of Acrolein and Acrylonitrile by EPA Method 8260.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Act - Activity

Unc - Uncertainty: SDWA = 1.96 sigma count uncertainty, all other matrices = Expanded Uncertainty (95% confidence interval). Gamma Spec = Expanded Uncertainty (95.4% Confidence Interval)

(MDC) - Minimum Detectable Concentration

Trac - Tracer Recovery (%)

Carr - Carrier Recovery (%)

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

Pace Analytical Services, LLC
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Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: GORGAS POOLED UPGRADIENT 1308
Pace Project No.: 92527335

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92527335001	**BB03935 MW-1**	EPA 9315	439280		
92527335002	**BB03936 MW-1 DUP**	EPA 9315	439280		
92527335003	**BB03937 MW-2**	EPA 9315	439280		
92527335004	**BB03937 MW-2 MS**	EPA 9315	439280		
92527335005	**BB03937 MW-2 MSD**	EPA 9315	439280		
92527335006	**BB03938 MW-3**	EPA 9315	439280		
92527335007	**BB03939 FB-1**	EPA 9315	439280		
92527335008	**BB03940 MW-4**	EPA 9315	439280		
92527335009	**BB03941 EB-1**	EPA 9315	439280		
92527335001	**BB03935 MW-1**	EPA 9320	439308		
92527335002	**BB03936 MW-1 DUP**	EPA 9320	439308		
92527335003	**BB03937 MW-2**	EPA 9320	439308		
92527335004	**BB03937 MW-2 MS**	EPA 9320	439308		
92527335005	**BB03937 MW-2 MSD**	EPA 9320	439308		
92527335006	**BB03938 MW-3**	EPA 9320	439308		
92527335007	**BB03939 FB-1**	EPA 9320	439308		
92527335008	**BB03940 MW-4**	EPA 9320	439308		
92527335009	**BB03941 EB-1**	EPA 9320	439308		
92527335001	**BB03935 MW-1**	Total Radium Calculation	442656		
92527335002	**BB03936 MW-1 DUP**	Total Radium Calculation	442656		
92527335003	**BB03937 MW-2**	Total Radium Calculation	442656		
92527335006	**BB03938 MW-3**	Total Radium Calculation	442656		
92527335007	**BB03939 FB-1**	Total Radium Calculation	442656		
92527335008	**BB03940 MW-4**	Total Radium Calculation	442656		
92527335009	**BB03941 EB-1**	Total Radium Calculation	442656		

WO# : 92527335

CHAIN-OF-CUSTODY / Analytical R

The Chain-of-Custody is a LEGAL DOCUMENT. All rele

92527335

Page : 1 Of 1

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	Alabama Power Company	Report To:	Laura Midkiff	Attention:	Laura Midkiff
Address:	744 Highway 87 GSC Bldg #8 Calera, AL 35040	Copy To:	Brooke Caton & Renee Jernigan	Company Name:	Alabama Power Co.
				Address:	744 Highway 87 GSC Bldg #8
Email To:	lbmidkif@southernco.com	Purchase Order #:	APC57570-0001	Pace Quote:	CCR
Phone:	205-664-6197 Fax:	Project Name:	Gorgas Pooled Upgradient	Pace Project Manager:	Kevin Herring
Requested Due Date:	28 days	Project Number:	WMWGORPU_1308	Pace Profile #:	

Regulatory Agency

State / Location: AL

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)		MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	EPA 9315	EPA 9320	Total Radium Sum	Matrix Spike/Matrix Spike Du	Residual Chlorine (Y/N)
1	BB03935	MW-1	GW	G			2/22/2021	10:47		1			X						X	X	X		
2	BB03936	MW-1 DUP	GW	G			2/22/2021	10:47		1			X						X	X	X		
3	BB03937	MW-2	GW	G			2/22/2021	11:47		3			X						X	X	X	X	
4	BB03938	MW-3	GW	G			2/22/2021	12:52		1			X						X	X	X		
5	BB03939	FB-1	GW	G			2/22/2021	13:20		1			X						X	X	X		
6	BB03940	MW-4	GW	G			2/22/2021	14:07		1			X						X	X	X		
7	BB03941	EB-1	GW	G			2/22/2021	14:30		1			X						X	X	X		
8																								
9																								
10																								
11																								
12																								

MATRIX CODE: Drinking Water DW; Water WT; Waste Water WW; Product P; Soil/Solid SL; Oil OL; Wipe WP; Air AR; Other OT; Tissue TS

Requested Analysis Filtered (Y/N)

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	Laura Midkiff/ APC GTL	2/23/2021	11:38		3/11/21	1000	NA	N	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:					

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

Test:	Ra-226
Analyst:	LAL
Date:	3/19/2021
Worklist:	59390
Matrix:	DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2120834
MB concentration:	0.009
M/B Counting Uncertainty:	0.213
MB MDC:	0.547
MB Numerical Performance Indicator:	0.08
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	N
	LCS59390	LCSD59390
Count Date:	4/9/2021	
Spike I.D.:	19-033	
Decay Corrected Spike Concentration (pCi/mL):	24.039	
Volume Used (mL):	0.10	
Aliquot Volume (L, g, F):	0.217	
Target Conc. (pCi/L, g, F):	11.065	
Uncertainty (Calculated):	0.133	
Result (pCi/L, g, F):	10.275	
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	1.121	
Numerical Performance Indicator:	-1.37	
Percent Recovery:	92.86%	
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:	2/22/2021	3/8/2021
Sample I.D.	92527335003	92527915001
Sample MS I.D.	92527335004	92527915002
Sample MSD I.D.	92527335005	92527915003
Spike I.D.:	19-033	19-033
MS/MSD Decay Corrected Spike Concentration (pCi/mL):	24.040	24.040
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):	0.206	0.210
MS Target Conc.(pCi/L, g, F):	23.367	22.844
MSD Aliquot (L, g, F):	0.212	0.213
MSD Target Conc. (pCi/L, g, F):	22.686	22.568
MS Spike Uncertainty (calculated):	0.280	0.274
MSD Spike Uncertainty (calculated):	0.272	0.271
Sample Result:	0.112	0.120
Sample Result Counting Uncertainty (pCi/L, g, F):	0.168	0.189
Sample Matrix Spike Result:	24.772	21.941
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):	1.663	1.563
Sample Matrix Spike Duplicate Result:	22.181	24.134
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):	1.513	1.655
MS Numerical Performance Indicator:	1.495	-1.255
MSD Numerical Performance Indicator:	-0.782	1.679
MS Percent Recovery:	105.53%	95.52%
MSD Percent Recovery:	97.28%	106.41%
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.:		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 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.	92527335003	92527915001
Sample MS I.D.	92527335004	92527915002
Sample MSD I.D.	92527335005	92527915003
Sample Matrix Spike Result:	24.772	21.941
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):	1.663	1.563
Sample Matrix Spike Duplicate Result:	22.181	24.134
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):	1.513	1.655
Duplicate Numerical Performance Indicator:	2.259	-1.888
(Based on the Percent Recoveries) MS/ MSD Duplicate RPD:	8.14%	10.78%
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:

JLL 4/9/21

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

Test: Ra-228
Analyst: VAL
Date: 3/31/2021
Worklist: 59403
Matrix: WT

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2120884
MB concentration:	0.606
M/B 2 Sigma CSU:	0.355
MB MDC:	0.651
MB Numerical Performance Indicator:	3.34
MB Status vs Numerical Indicator:	Fail*
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	N
	LCS59403	LCSD59403
Count Date:	4/6/2021	
Spike I.D.:	21-003	
Decay Corrected Spike Concentration (pCi/mL):	38.178	
Volume Used (mL):	0.10	
Aliquot Volume (L, g, F):	0.809	
Target Conc. (pCi/L, g, F):	4.716	
Uncertainty (Calculated):	0.231	
Result (pCi/L, g, F):	3.649	
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	0.903	
Numerical Performance Indicator:	-2.24	
Percent Recovery:	77.38%	
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:	2/22/2021	3/8/2021
Sample I.D.	92527335002	92527915001
Sample MS I.D.	92527335004	92527915002
Sample MSD I.D.	92527335005	92527915003
Spike I.D.:	21-003	21-003
MS/MSD Decay Corrected Spike Concentration (pCi/mL):	38.726	38.726
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):	0.818	0.802
MS Target Conc.(pCi/L, g, F):	9.473	9.653
MSD Aliquot (L, g, F):	0.815	0.811
MSD Target Conc. (pCi/L, g, F):	9.503	9.546
MS Spike Uncertainty (calculated):	0.464	0.473
MSD Spike Uncertainty (calculated):	0.466	0.468
Sample Result:	0.644	0.448
Sample Result 2 Sigma CSU (pCi/L, g, F):	0.430	0.386
Sample Matrix Spike Result:	8.624	8.096
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):	1.758	1.655
Sample Matrix Spike Duplicate Result:	7.188	8.441
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):	1.484	1.697
MS Numerical Performance Indicator:	-1.567	-2.228
MSD Numerical Performance Indicator:	-3.593	-1.689
MS Percent Recovery:	84.24%	79.23%
MSD Percent Recovery:	68.87%	83.73%
MS Status vs Numerical Indicator:	Pass	Warning
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		
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.	92527335002	92527915001
Sample MS I.D.	92527335004	92527915002
Sample MSD I.D.	92527335005	92527915003
Sample Matrix Spike Result:	8.624	8.096
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):	1.758	1.655
Sample Matrix Spike Duplicate Result:	7.188	8.441
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):	1.484	1.697
Duplicate Numerical Performance Indicator:	1.223	-0.285
(Based on the Percent Recoveries) MS/ MSD Duplicate RPD:	20.08%	5.52%
MS/ MSD Duplicate Status vs Numerical Indicator:	Pass	Pass
MS/ MSD Duplicate Status vs RPD:	Pass	Pass
% RPD Limit:	36%	36%

Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

Comments:

~~*If the lowest activity sample in this batch is greater than ten times the blank value, the blank is acceptable; otherwise this batch must be re-prepped.~~

MB activity < MDC - Pass

QA 4/7/21

Alabama Power Company
Plant Gorgas Gypsum Pond

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-GSA-MW-3	3/1/2021 9:34	Conductivity	4348.1	uS/cm
GS-GSA-MW-3	3/1/2021 9:34	DO	0.26	mg/L
GS-GSA-MW-3	3/1/2021 9:34	Depth to Water Detail	107.61	ft
GS-GSA-MW-3	3/1/2021 9:34	Oxidation Reduction Potention	7.05	mv
GS-GSA-MW-3	3/1/2021 9:34	pH	5.71	SU
GS-GSA-MW-3	3/1/2021 9:34	Temperature	19.95	C
GS-GSA-MW-3	3/1/2021 9:34	Turbidity	36.3	NTU
GS-GSA-MW-3	3/1/2021 9:39	Conductivity	4345.19	uS/cm
GS-GSA-MW-3	3/1/2021 9:39	DO	0.21	mg/L
GS-GSA-MW-3	3/1/2021 9:39	Depth to Water Detail	107.61	ft
GS-GSA-MW-3	3/1/2021 9:39	Oxidation Reduction Potention	1.93	mv
GS-GSA-MW-3	3/1/2021 9:39	pH	5.74	SU
GS-GSA-MW-3	3/1/2021 9:39	Temperature	19.89	C
GS-GSA-MW-3	3/1/2021 9:39	Turbidity	28.1	NTU
GS-GSA-MW-3	3/1/2021 9:44	Conductivity	4333.8	uS/cm
GS-GSA-MW-3	3/1/2021 9:44	DO	0.19	mg/L
GS-GSA-MW-3	3/1/2021 9:44	Depth to Water Detail	107.61	ft
GS-GSA-MW-3	3/1/2021 9:44	Oxidation Reduction Potention	-0.48	mv
GS-GSA-MW-3	3/1/2021 9:44	pH	5.75	SU
GS-GSA-MW-3	3/1/2021 9:44	Temperature	19.85	C
GS-GSA-MW-3	3/1/2021 9:44	Turbidity	25.8	NTU
GS-GSA-MW-3	3/1/2021 9:49	Conductivity	4323.75	uS/cm
GS-GSA-MW-3	3/1/2021 9:49	DO	0.18	mg/L
GS-GSA-MW-3	3/1/2021 9:49	Depth to Water Detail	107.61	ft
GS-GSA-MW-3	3/1/2021 9:49	Oxidation Reduction Potention	-3.26	mv
GS-GSA-MW-3	3/1/2021 9:49	pH	5.77	SU
GS-GSA-MW-3	3/1/2021 9:49	Temperature	19.81	C
GS-GSA-MW-3	3/1/2021 9:49	Turbidity	21.7	NTU
GS-GSA-MW-3	3/1/2021 9:54	Conductivity	4328.55	uS/cm
GS-GSA-MW-3	3/1/2021 9:54	DO	0.17	mg/L
GS-GSA-MW-3	3/1/2021 9:54	Depth to Water Detail	107.61	ft
GS-GSA-MW-3	3/1/2021 9:54	Oxidation Reduction Potention	-3.25	mv
GS-GSA-MW-3	3/1/2021 9:54	pH	5.78	SU
GS-GSA-MW-3	3/1/2021 9:54	Temperature	19.76	C
GS-GSA-MW-3	3/1/2021 9:54	Turbidity	19.6	NTU
GS-GSA-MW-3	3/1/2021 9:59	Conductivity	4337.82	uS/cm
GS-GSA-MW-3	3/1/2021 9:59	DO	0.17	mg/L
GS-GSA-MW-3	3/1/2021 9:59	Depth to Water Detail	107.61	ft
GS-GSA-MW-3	3/1/2021 9:59	Oxidation Reduction Potention	-4.55	mv
GS-GSA-MW-3	3/1/2021 9:59	pH	5.79	SU
GS-GSA-MW-3	3/1/2021 9:59	Temperature	19.68	C
GS-GSA-MW-3	3/1/2021 9:59	Turbidity	18.6	NTU
GS-GSA-MW-3	3/1/2021 10:04	Conductivity	4323.45	uS/cm
GS-GSA-MW-3	3/1/2021 10:04	DO	0.17	mg/L

Alabama Power Company
Plant Gorgas Gypsum Pond

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-GSA-MW-3	3/1/2021 10:04	Depth to Water Detail	107.61	ft
GS-GSA-MW-3	3/1/2021 10:04	Oxidation Reduction Potention	-3.61	mv
GS-GSA-MW-3	3/1/2021 10:04	pH	5.79	SU
GS-GSA-MW-3	3/1/2021 10:04	Temperature	19.77	C
GS-GSA-MW-3	3/1/2021 10:04	Turbidity	16.8	NTU
GS-GSA-MW-3	3/1/2021 10:09	Conductivity	4319.85	uS/cm
GS-GSA-MW-3	3/1/2021 10:09	DO	0.16	mg/L
GS-GSA-MW-3	3/1/2021 10:09	Depth to Water Detail	107.61	ft
GS-GSA-MW-3	3/1/2021 10:09	Oxidation Reduction Potention	-3.83	mv
GS-GSA-MW-3	3/1/2021 10:09	pH	5.8	SU
GS-GSA-MW-3	3/1/2021 10:09	Temperature	19.81	C
GS-GSA-MW-3	3/1/2021 10:09	Turbidity	16	NTU
GS-GSA-MW-3	3/1/2021 10:14	Conductivity	4328.56	uS/cm
GS-GSA-MW-3	3/1/2021 10:14	DO	0.16	mg/L
GS-GSA-MW-3	3/1/2021 10:14	Depth to Water Detail	107.61	ft
GS-GSA-MW-3	3/1/2021 10:14	Oxidation Reduction Potention	-4.38	mv
GS-GSA-MW-3	3/1/2021 10:14	pH	5.8	SU
GS-GSA-MW-3	3/1/2021 10:14	Temperature	19.8	C
GS-GSA-MW-3	3/1/2021 10:14	Turbidity	13.1	NTU
GS-GSA-MW-3	3/1/2021 10:19	Conductivity	4388.03	uS/cm
GS-GSA-MW-3	3/1/2021 10:19	DO	0.16	mg/L
GS-GSA-MW-3	3/1/2021 10:19	Depth to Water Detail	107.61	ft
GS-GSA-MW-3	3/1/2021 10:19	Oxidation Reduction Potention	-3.22	mv
GS-GSA-MW-3	3/1/2021 10:19	pH	5.81	SU
GS-GSA-MW-3	3/1/2021 10:19	Temperature	19.81	C
GS-GSA-MW-3	3/1/2021 10:19	Turbidity	10.1	NTU
GS-GSA-MW-3	3/1/2021 10:24	Conductivity	4370.23	uS/cm
GS-GSA-MW-3	3/1/2021 10:24	DO	0.16	mg/L
GS-GSA-MW-3	3/1/2021 10:24	Depth to Water Detail	107.61	ft
GS-GSA-MW-3	3/1/2021 10:24	Oxidation Reduction Potention	-3.68	mv
GS-GSA-MW-3	3/1/2021 10:24	pH	5.81	SU
GS-GSA-MW-3	3/1/2021 10:24	Temperature	19.84	C
GS-GSA-MW-3	3/1/2021 10:24	Turbidity	8.45	NTU
GS-GSA-MW-3	3/1/2021 10:29	Conductivity	4367.28	uS/cm
GS-GSA-MW-3	3/1/2021 10:29	DO	0.16	mg/L
GS-GSA-MW-3	3/1/2021 10:29	Depth to Water Detail	107.61	ft
GS-GSA-MW-3	3/1/2021 10:29	Oxidation Reduction Potention	-3.94	mv
GS-GSA-MW-3	3/1/2021 10:29	pH	5.82	SU
GS-GSA-MW-3	3/1/2021 10:29	Temperature	19.84	C
GS-GSA-MW-3	3/1/2021 10:29	Turbidity	7	NTU

Alabama Power Company
Plant Gorgas Gypsum Pond

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-GSA-MW-3V	3/3/2021 8:31	Conductivity	3770.8	uS/cm
GS-GSA-MW-3V	3/3/2021 8:31	DO	3.34	mg/L
GS-GSA-MW-3V	3/3/2021 8:31	Depth to Water Detail	123.71	ft
GS-GSA-MW-3V	3/3/2021 8:31	Oxidation Reduction Potention	-91.31	mv
GS-GSA-MW-3V	3/3/2021 8:31	pH	6.37	SU
GS-GSA-MW-3V	3/3/2021 8:31	Temperature	17.85	C
GS-GSA-MW-3V	3/3/2021 8:31	Turbidity	3.82	NTU
GS-GSA-MW-3V	3/3/2021 8:36	Conductivity	3880.47	uS/cm
GS-GSA-MW-3V	3/3/2021 8:36	DO	1.02	mg/L
GS-GSA-MW-3V	3/3/2021 8:36	Depth to Water Detail	124.02	ft
GS-GSA-MW-3V	3/3/2021 8:36	Oxidation Reduction Potention	-68.84	mv
GS-GSA-MW-3V	3/3/2021 8:36	pH	6	SU
GS-GSA-MW-3V	3/3/2021 8:36	Temperature	17.97	C
GS-GSA-MW-3V	3/3/2021 8:36	Turbidity	5.89	NTU
GS-GSA-MW-3V	3/3/2021 8:41	Conductivity	3789.8	uS/cm
GS-GSA-MW-3V	3/3/2021 8:41	DO	0.87	mg/L
GS-GSA-MW-3V	3/3/2021 8:41	Depth to Water Detail	124.3	ft
GS-GSA-MW-3V	3/3/2021 8:41	Oxidation Reduction Potention	-50.08	mv
GS-GSA-MW-3V	3/3/2021 8:41	pH	5.87	SU
GS-GSA-MW-3V	3/3/2021 8:41	Temperature	17.66	C
GS-GSA-MW-3V	3/3/2021 8:41	Turbidity	3.09	NTU
GS-GSA-MW-3V	3/3/2021 8:46	Conductivity	3731.44	uS/cm
GS-GSA-MW-3V	3/3/2021 8:46	DO	0.75	mg/L
GS-GSA-MW-3V	3/3/2021 8:46	Depth to Water Detail	124.48	ft
GS-GSA-MW-3V	3/3/2021 8:46	Oxidation Reduction Potention	-38.02	mv
GS-GSA-MW-3V	3/3/2021 8:46	pH	5.8	SU
GS-GSA-MW-3V	3/3/2021 8:46	Temperature	18.29	C
GS-GSA-MW-3V	3/3/2021 8:46	Turbidity	2.15	NTU
GS-GSA-MW-3V	3/3/2021 8:51	Conductivity	3695.54	uS/cm
GS-GSA-MW-3V	3/3/2021 8:51	DO	0.75	mg/L
GS-GSA-MW-3V	3/3/2021 8:51	Depth to Water Detail	124.63	ft
GS-GSA-MW-3V	3/3/2021 8:51	Oxidation Reduction Potention	-28.49	mv
GS-GSA-MW-3V	3/3/2021 8:51	pH	5.77	SU
GS-GSA-MW-3V	3/3/2021 8:51	Temperature	18.13	C
GS-GSA-MW-3V	3/3/2021 8:51	Turbidity	2.11	NTU
GS-GSA-MW-3V	3/3/2021 8:56	Conductivity	3659.81	uS/cm
GS-GSA-MW-3V	3/3/2021 8:56	DO	0.73	mg/L
GS-GSA-MW-3V	3/3/2021 8:56	Depth to Water Detail	124.69	ft
GS-GSA-MW-3V	3/3/2021 8:56	Oxidation Reduction Potention	-23.77	mv
GS-GSA-MW-3V	3/3/2021 8:56	pH	5.76	SU
GS-GSA-MW-3V	3/3/2021 8:56	Temperature	18.24	C
GS-GSA-MW-3V	3/3/2021 8:56	Turbidity	1.61	NTU

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-GSA-MW-4	3/3/2021 10:00	Conductivity	1242.32	uS/cm
GS-GSA-MW-4	3/3/2021 10:00	DO	0.25	mg/L
GS-GSA-MW-4	3/3/2021 10:00	Depth to Water Detail	88.9	ft
GS-GSA-MW-4	3/3/2021 10:00	Oxidation Reduction Potention	285.15	mv
GS-GSA-MW-4	3/3/2021 10:00	pH	3.73	SU
GS-GSA-MW-4	3/3/2021 10:00	Temperature	20.04	C
GS-GSA-MW-4	3/3/2021 10:00	Turbidity	3.41	NTU
GS-GSA-MW-4	3/3/2021 10:05	Conductivity	1242.56	uS/cm
GS-GSA-MW-4	3/3/2021 10:05	DO	0.21	mg/L
GS-GSA-MW-4	3/3/2021 10:05	Depth to Water Detail	88.9	ft
GS-GSA-MW-4	3/3/2021 10:05	Oxidation Reduction Potention	285.32	mv
GS-GSA-MW-4	3/3/2021 10:05	pH	3.73	SU
GS-GSA-MW-4	3/3/2021 10:05	Temperature	19.9	C
GS-GSA-MW-4	3/3/2021 10:05	Turbidity	4.87	NTU
GS-GSA-MW-4	3/3/2021 10:10	Conductivity	1239.71	uS/cm
GS-GSA-MW-4	3/3/2021 10:10	DO	0.18	mg/L
GS-GSA-MW-4	3/3/2021 10:10	Depth to Water Detail	88.9	ft
GS-GSA-MW-4	3/3/2021 10:10	Oxidation Reduction Potention	284.75	mv
GS-GSA-MW-4	3/3/2021 10:10	pH	3.75	SU
GS-GSA-MW-4	3/3/2021 10:10	Temperature	19.93	C
GS-GSA-MW-4	3/3/2021 10:10	Turbidity	4.77	NTU
GS-GSA-MW-4	3/3/2021 10:15	Conductivity	1240.42	uS/cm
GS-GSA-MW-4	3/3/2021 10:15	DO	0.17	mg/L
GS-GSA-MW-4	3/3/2021 10:15	Depth to Water Detail	88.9	ft
GS-GSA-MW-4	3/3/2021 10:15	Oxidation Reduction Potention	285.47	mv
GS-GSA-MW-4	3/3/2021 10:15	pH	3.76	SU
GS-GSA-MW-4	3/3/2021 10:15	Temperature	19.97	C
GS-GSA-MW-4	3/3/2021 10:15	Turbidity	4.1	NTU

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-GSA-MW-4V	3/3/2021 10:53	Conductivity	1542.38	uS/cm
GS-GSA-MW-4V	3/3/2021 10:53	DO	0.38	mg/L
GS-GSA-MW-4V	3/3/2021 10:53	Depth to Water Detail	114.7	ft
GS-GSA-MW-4V	3/3/2021 10:53	Oxidation Reduction Potention	6.67	mv
GS-GSA-MW-4V	3/3/2021 10:53	pH	5.69	SU
GS-GSA-MW-4V	3/3/2021 10:53	Temperature	19.28	C
GS-GSA-MW-4V	3/3/2021 10:53	Turbidity	9.39	NTU
GS-GSA-MW-4V	3/3/2021 10:58	Conductivity	1536.83	uS/cm
GS-GSA-MW-4V	3/3/2021 10:58	DO	0.24	mg/L
GS-GSA-MW-4V	3/3/2021 10:58	Depth to Water Detail	114.88	ft
GS-GSA-MW-4V	3/3/2021 10:58	Oxidation Reduction Potention	10	mv
GS-GSA-MW-4V	3/3/2021 10:58	pH	5.73	SU
GS-GSA-MW-4V	3/3/2021 10:58	Temperature	19.06	C
GS-GSA-MW-4V	3/3/2021 10:58	Turbidity	11.2	NTU
GS-GSA-MW-4V	3/3/2021 11:03	Conductivity	1524.63	uS/cm
GS-GSA-MW-4V	3/3/2021 11:03	DO	0.22	mg/L
GS-GSA-MW-4V	3/3/2021 11:03	Depth to Water Detail	114.97	ft
GS-GSA-MW-4V	3/3/2021 11:03	Oxidation Reduction Potention	12.33	mv
GS-GSA-MW-4V	3/3/2021 11:03	pH	5.73	SU
GS-GSA-MW-4V	3/3/2021 11:03	Temperature	19.02	C
GS-GSA-MW-4V	3/3/2021 11:03	Turbidity	25.5	NTU
GS-GSA-MW-4V	3/3/2021 11:08	Conductivity	1522.24	uS/cm
GS-GSA-MW-4V	3/3/2021 11:08	DO	0.2	mg/L
GS-GSA-MW-4V	3/3/2021 11:08	Depth to Water Detail	115.04	ft
GS-GSA-MW-4V	3/3/2021 11:08	Oxidation Reduction Potention	16.14	mv
GS-GSA-MW-4V	3/3/2021 11:08	pH	5.71	SU
GS-GSA-MW-4V	3/3/2021 11:08	Temperature	19.05	C
GS-GSA-MW-4V	3/3/2021 11:08	Turbidity	21.1	NTU
GS-GSA-MW-4V	3/3/2021 11:13	Conductivity	1503.94	uS/cm
GS-GSA-MW-4V	3/3/2021 11:13	DO	0.2	mg/L
GS-GSA-MW-4V	3/3/2021 11:13	Depth to Water Detail	115.11	ft
GS-GSA-MW-4V	3/3/2021 11:13	Oxidation Reduction Potention	21.62	mv
GS-GSA-MW-4V	3/3/2021 11:13	pH	5.69	SU
GS-GSA-MW-4V	3/3/2021 11:13	Temperature	19.12	C
GS-GSA-MW-4V	3/3/2021 11:13	Turbidity	12.3	NTU
GS-GSA-MW-4V	3/3/2021 11:18	Conductivity	1552.07	uS/cm
GS-GSA-MW-4V	3/3/2021 11:18	DO	0.19	mg/L
GS-GSA-MW-4V	3/3/2021 11:18	Depth to Water Detail	115.13	ft
GS-GSA-MW-4V	3/3/2021 11:18	Oxidation Reduction Potention	24.4	mv
GS-GSA-MW-4V	3/3/2021 11:18	pH	5.69	SU
GS-GSA-MW-4V	3/3/2021 11:18	Temperature	19.12	C
GS-GSA-MW-4V	3/3/2021 11:18	Turbidity	12	NTU
GS-GSA-MW-4V	3/3/2021 11:23	Conductivity	1554.47	uS/cm
GS-GSA-MW-4V	3/3/2021 11:23	DO	0.2	mg/L

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-GSA-MW-4V	3/3/2021 11:23	Depth to Water Detail	115.13	ft
GS-GSA-MW-4V	3/3/2021 11:23	Oxidation Reduction Potention	25.37	mv
GS-GSA-MW-4V	3/3/2021 11:23	pH	5.71	SU
GS-GSA-MW-4V	3/3/2021 11:23	Temperature	18.99	C
GS-GSA-MW-4V	3/3/2021 11:23	Turbidity	8.27	NTU
GS-GSA-MW-4V	3/3/2021 11:28	Conductivity	1554.43	uS/cm
GS-GSA-MW-4V	3/3/2021 11:28	DO	0.19	mg/L
GS-GSA-MW-4V	3/3/2021 11:28	Depth to Water Detail	115.13	ft
GS-GSA-MW-4V	3/3/2021 11:28	Oxidation Reduction Potention	25.29	mv
GS-GSA-MW-4V	3/3/2021 11:28	pH	5.74	SU
GS-GSA-MW-4V	3/3/2021 11:28	Temperature	19.17	C
GS-GSA-MW-4V	3/3/2021 11:28	Turbidity	6.52	NTU
GS-GSA-MW-4V	3/3/2021 11:33	Conductivity	1554.01	uS/cm
GS-GSA-MW-4V	3/3/2021 11:33	DO	0.19	mg/L
GS-GSA-MW-4V	3/3/2021 11:33	Depth to Water Detail	115.13	ft
GS-GSA-MW-4V	3/3/2021 11:33	Oxidation Reduction Potention	25.55	mv
GS-GSA-MW-4V	3/3/2021 11:33	pH	5.75	SU
GS-GSA-MW-4V	3/3/2021 11:33	Temperature	19.19	C
GS-GSA-MW-4V	3/3/2021 11:33	Turbidity	4.82	NTU

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-GSA-MW-9V	3/1/2021 11:23	Conductivity	3379.58	uS/cm
GS-GSA-MW-9V	3/1/2021 11:23	DO	0.11	mg/L
GS-GSA-MW-9V	3/1/2021 11:23	Depth to Water Detail	47.61	ft
GS-GSA-MW-9V	3/1/2021 11:23	Oxidation Reduction Potention	-112.26	mv
GS-GSA-MW-9V	3/1/2021 11:23	pH	6.9	SU
GS-GSA-MW-9V	3/1/2021 11:23	Temperature	19.79	C
GS-GSA-MW-9V	3/1/2021 11:23	Turbidity	1.76	NTU
GS-GSA-MW-9V	3/1/2021 11:28	Conductivity	3342.5	uS/cm
GS-GSA-MW-9V	3/1/2021 11:28	DO	0.16	mg/L
GS-GSA-MW-9V	3/1/2021 11:28	Depth to Water Detail	48.59	ft
GS-GSA-MW-9V	3/1/2021 11:28	Oxidation Reduction Potention	-119.45	mv
GS-GSA-MW-9V	3/1/2021 11:28	pH	6.89	SU
GS-GSA-MW-9V	3/1/2021 11:28	Temperature	19.7	C
GS-GSA-MW-9V	3/1/2021 11:28	Turbidity	1.62	NTU
GS-GSA-MW-9V	3/1/2021 11:33	Conductivity	3371.08	uS/cm
GS-GSA-MW-9V	3/1/2021 11:33	DO	0.09	mg/L
GS-GSA-MW-9V	3/1/2021 11:33	Depth to Water Detail	50.72	ft
GS-GSA-MW-9V	3/1/2021 11:33	Oxidation Reduction Potention	-122.93	mv
GS-GSA-MW-9V	3/1/2021 11:33	pH	6.89	SU
GS-GSA-MW-9V	3/1/2021 11:33	Temperature	19.81	C
GS-GSA-MW-9V	3/1/2021 11:33	Turbidity	1.61	NTU
GS-GSA-MW-9V	3/1/2021 11:38	Conductivity	3365.2	uS/cm
GS-GSA-MW-9V	3/1/2021 11:38	DO	0.09	mg/L
GS-GSA-MW-9V	3/1/2021 11:38	Depth to Water Detail	52.71	ft
GS-GSA-MW-9V	3/1/2021 11:38	Oxidation Reduction Potention	-125.47	mv
GS-GSA-MW-9V	3/1/2021 11:38	pH	6.88	SU
GS-GSA-MW-9V	3/1/2021 11:38	Temperature	19.79	C
GS-GSA-MW-9V	3/1/2021 11:38	Turbidity	1.34	NTU
GS-GSA-MW-9V	3/1/2021 11:43	Conductivity	3386.46	uS/cm
GS-GSA-MW-9V	3/1/2021 11:43	DO	0.09	mg/L
GS-GSA-MW-9V	3/1/2021 11:43	Depth to Water Detail	54.69	ft
GS-GSA-MW-9V	3/1/2021 11:43	Oxidation Reduction Potention	-127.15	mv
GS-GSA-MW-9V	3/1/2021 11:43	pH	6.88	SU
GS-GSA-MW-9V	3/1/2021 11:43	Temperature	19.8	C
GS-GSA-MW-9V	3/1/2021 11:43	Turbidity	1.3	NTU
GS-GSA-MW-9V	3/1/2021 11:48	Conductivity	3381.47	uS/cm
GS-GSA-MW-9V	3/1/2021 11:48	DO	0.09	mg/L
GS-GSA-MW-9V	3/1/2021 11:48	Depth to Water Detail	57	ft
GS-GSA-MW-9V	3/1/2021 11:48	Oxidation Reduction Potention	-127.86	mv
GS-GSA-MW-9V	3/1/2021 11:48	pH	6.88	SU
GS-GSA-MW-9V	3/1/2021 11:48	Temperature	19.78	C
GS-GSA-MW-9V	3/1/2021 11:48	Turbidity	1.22	NTU
GS-GSA-MW-9V	3/1/2021 11:53	Conductivity	3383.45	uS/cm
GS-GSA-MW-9V	3/1/2021 11:53	DO	0.09	mg/L

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-GSA-MW-9V	3/1/2021 11:53	Depth to Water Detail	58.96	ft
GS-GSA-MW-9V	3/1/2021 11:53	Oxidation Reduction Potention	-128.79	mv
GS-GSA-MW-9V	3/1/2021 11:53	pH	6.88	SU
GS-GSA-MW-9V	3/1/2021 11:53	Temperature	19.78	C
GS-GSA-MW-9V	3/1/2021 11:53	Turbidity	1.33	NTU
GS-GSA-MW-9V	3/1/2021 11:58	Conductivity	3425.66	uS/cm
GS-GSA-MW-9V	3/1/2021 11:58	DO	0.09	mg/L
GS-GSA-MW-9V	3/1/2021 11:58	Depth to Water Detail	60.42	ft
GS-GSA-MW-9V	3/1/2021 11:58	Oxidation Reduction Potention	-129.03	mv
GS-GSA-MW-9V	3/1/2021 11:58	pH	6.88	SU
GS-GSA-MW-9V	3/1/2021 11:58	Temperature	19.66	C
GS-GSA-MW-9V	3/1/2021 11:58	Turbidity	2.97	NTU
GS-GSA-MW-9V	3/1/2021 12:03	Conductivity	3398.26	uS/cm
GS-GSA-MW-9V	3/1/2021 12:03	DO	0.09	mg/L
GS-GSA-MW-9V	3/1/2021 12:03	Depth to Water Detail	61.75	ft
GS-GSA-MW-9V	3/1/2021 12:03	Oxidation Reduction Potention	-129.34	mv
GS-GSA-MW-9V	3/1/2021 12:03	pH	6.87	SU
GS-GSA-MW-9V	3/1/2021 12:03	Temperature	19.59	C
GS-GSA-MW-9V	3/1/2021 12:03	Turbidity	1.15	NTU
GS-GSA-MW-9V	3/1/2021 12:08	Conductivity	3379.96	uS/cm
GS-GSA-MW-9V	3/1/2021 12:08	DO	0.09	mg/L
GS-GSA-MW-9V	3/1/2021 12:08	Depth to Water Detail	63.57	ft
GS-GSA-MW-9V	3/1/2021 12:08	Oxidation Reduction Potention	-129.68	mv
GS-GSA-MW-9V	3/1/2021 12:08	pH	6.87	SU
GS-GSA-MW-9V	3/1/2021 12:08	Temperature	19.63	C
GS-GSA-MW-9V	3/1/2021 12:08	Turbidity	1.11	NTU
GS-GSA-MW-9V	3/1/2021 12:13	Conductivity	3433.02	uS/cm
GS-GSA-MW-9V	3/1/2021 12:13	DO	0.16	mg/L
GS-GSA-MW-9V	3/1/2021 12:13	Depth to Water Detail	63.77	ft
GS-GSA-MW-9V	3/1/2021 12:13	Oxidation Reduction Potention	-130.29	mv
GS-GSA-MW-9V	3/1/2021 12:13	pH	6.88	SU
GS-GSA-MW-9V	3/1/2021 12:13	Temperature	18.74	C
GS-GSA-MW-9V	3/1/2021 12:13	Turbidity	0.76	NTU
GS-GSA-MW-9V	3/1/2021 12:18	Conductivity	3461.16	uS/cm
GS-GSA-MW-9V	3/1/2021 12:18	DO	0.2	mg/L
GS-GSA-MW-9V	3/1/2021 12:18	Depth to Water Detail	63.77	ft
GS-GSA-MW-9V	3/1/2021 12:18	Oxidation Reduction Potention	-115.82	mv
GS-GSA-MW-9V	3/1/2021 12:18	pH	6.85	SU
GS-GSA-MW-9V	3/1/2021 12:18	Temperature	18.72	C
GS-GSA-MW-9V	3/1/2021 12:18	Turbidity	0.72	NTU
GS-GSA-MW-9V	3/1/2021 12:23	Conductivity	3468.97	uS/cm
GS-GSA-MW-9V	3/1/2021 12:23	DO	0.22	mg/L
GS-GSA-MW-9V	3/1/2021 12:23	Depth to Water Detail	63.77	ft
GS-GSA-MW-9V	3/1/2021 12:23	Oxidation Reduction Potention	-106.04	mv

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-GSA-MW-9V	3/1/2021 12:23	pH	6.84	SU
GS-GSA-MW-9V	3/1/2021 12:23	Temperature	18.9	C
GS-GSA-MW-9V	3/1/2021 12:23	Turbidity	0.91	NTU
GS-GSA-MW-9V	3/1/2021 12:28	Conductivity	3469.67	uS/cm
GS-GSA-MW-9V	3/1/2021 12:28	DO	0.22	mg/L
GS-GSA-MW-9V	3/1/2021 12:28	Depth to Water Detail	63.77	ft
GS-GSA-MW-9V	3/1/2021 12:28	Oxidation Reduction Potention	-100.36	mv
GS-GSA-MW-9V	3/1/2021 12:28	pH	6.84	SU
GS-GSA-MW-9V	3/1/2021 12:28	Temperature	18.97	C
GS-GSA-MW-9V	3/1/2021 12:28	Turbidity	0.76	NTU

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-GSA-PZ-18	3/3/2021 12:21	Conductivity	1109.61	uS/cm
GS-GSA-PZ-18	3/3/2021 12:21	DO	0.82	mg/L
GS-GSA-PZ-18	3/3/2021 12:21	Depth to Water Detail	60.92	ft
GS-GSA-PZ-18	3/3/2021 12:21	Oxidation Reduction Potention	223.9	mv
GS-GSA-PZ-18	3/3/2021 12:21	pH	3.89	SU
GS-GSA-PZ-18	3/3/2021 12:21	Temperature	17.79	C
GS-GSA-PZ-18	3/3/2021 12:21	Turbidity	1.36	NTU
GS-GSA-PZ-18	3/3/2021 12:26	Conductivity	1098.04	uS/cm
GS-GSA-PZ-18	3/3/2021 12:26	DO	0.58	mg/L
GS-GSA-PZ-18	3/3/2021 12:26	Depth to Water Detail	61.14	ft
GS-GSA-PZ-18	3/3/2021 12:26	Oxidation Reduction Potention	225.59	mv
GS-GSA-PZ-18	3/3/2021 12:26	pH	3.88	SU
GS-GSA-PZ-18	3/3/2021 12:26	Temperature	17.68	C
GS-GSA-PZ-18	3/3/2021 12:26	Turbidity	1.13	NTU
GS-GSA-PZ-18	3/3/2021 12:31	Conductivity	1097.53	uS/cm
GS-GSA-PZ-18	3/3/2021 12:31	DO	0.49	mg/L
GS-GSA-PZ-18	3/3/2021 12:31	Depth to Water Detail	61.3	ft
GS-GSA-PZ-18	3/3/2021 12:31	Oxidation Reduction Potention	225.1	mv
GS-GSA-PZ-18	3/3/2021 12:31	pH	3.87	SU
GS-GSA-PZ-18	3/3/2021 12:31	Temperature	17.74	C
GS-GSA-PZ-18	3/3/2021 12:31	Turbidity	1.16	NTU
GS-GSA-PZ-18	3/3/2021 12:36	Conductivity	1092.45	uS/cm
GS-GSA-PZ-18	3/3/2021 12:36	DO	0.4	mg/L
GS-GSA-PZ-18	3/3/2021 12:36	Depth to Water Detail	61.44	ft
GS-GSA-PZ-18	3/3/2021 12:36	Oxidation Reduction Potention	224.22	mv
GS-GSA-PZ-18	3/3/2021 12:36	pH	3.86	SU
GS-GSA-PZ-18	3/3/2021 12:36	Temperature	17.71	C
GS-GSA-PZ-18	3/3/2021 12:36	Turbidity	1.02	NTU
GS-GSA-PZ-18	3/3/2021 12:41	Conductivity	1091.6	uS/cm
GS-GSA-PZ-18	3/3/2021 12:41	DO	0.35	mg/L
GS-GSA-PZ-18	3/3/2021 12:41	Depth to Water Detail	61.51	ft
GS-GSA-PZ-18	3/3/2021 12:41	Oxidation Reduction Potention	241.88	mv
GS-GSA-PZ-18	3/3/2021 12:41	pH	3.83	SU
GS-GSA-PZ-18	3/3/2021 12:41	Temperature	17.72	C
GS-GSA-PZ-18	3/3/2021 12:41	Turbidity	1	NTU

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-GSA-PZ-19	3/2/2021 8:15	Conductivity	1800.46	uS/cm
GS-GSA-PZ-19	3/2/2021 8:15	DO	0.22	mg/L
GS-GSA-PZ-19	3/2/2021 8:15	Depth to Water Detail	124.1	ft
GS-GSA-PZ-19	3/2/2021 8:15	Oxidation Reduction Potention	-25.33	mv
GS-GSA-PZ-19	3/2/2021 8:15	pH	6.53	SU
GS-GSA-PZ-19	3/2/2021 8:15	Temperature	17.05	C
GS-GSA-PZ-19	3/2/2021 8:15	Turbidity	8.41	NTU
GS-GSA-PZ-19	3/2/2021 8:20	Conductivity	1493.55	uS/cm
GS-GSA-PZ-19	3/2/2021 8:20	DO	0.18	mg/L
GS-GSA-PZ-19	3/2/2021 8:20	Depth to Water Detail	124.68	ft
GS-GSA-PZ-19	3/2/2021 8:20	Oxidation Reduction Potention	-50.14	mv
GS-GSA-PZ-19	3/2/2021 8:20	pH	6.47	SU
GS-GSA-PZ-19	3/2/2021 8:20	Temperature	17.15	C
GS-GSA-PZ-19	3/2/2021 8:20	Turbidity	5.82	NTU
GS-GSA-PZ-19	3/2/2021 8:25	Conductivity	1374.71	uS/cm
GS-GSA-PZ-19	3/2/2021 8:25	DO	0.18	mg/L
GS-GSA-PZ-19	3/2/2021 8:25	Depth to Water Detail	125.06	ft
GS-GSA-PZ-19	3/2/2021 8:25	Oxidation Reduction Potention	-56.3	mv
GS-GSA-PZ-19	3/2/2021 8:25	pH	6.45	SU
GS-GSA-PZ-19	3/2/2021 8:25	Temperature	17.14	C
GS-GSA-PZ-19	3/2/2021 8:25	Turbidity	7.12	NTU
GS-GSA-PZ-19	3/2/2021 8:30	Conductivity	1325.21	uS/cm
GS-GSA-PZ-19	3/2/2021 8:30	DO	0.17	mg/L
GS-GSA-PZ-19	3/2/2021 8:30	Depth to Water Detail	125.3	ft
GS-GSA-PZ-19	3/2/2021 8:30	Oxidation Reduction Potention	-56.48	mv
GS-GSA-PZ-19	3/2/2021 8:30	pH	6.45	SU
GS-GSA-PZ-19	3/2/2021 8:30	Temperature	17.12	C
GS-GSA-PZ-19	3/2/2021 8:30	Turbidity	5.23	NTU
GS-GSA-PZ-19	3/2/2021 8:35	Conductivity	1278.37	uS/cm
GS-GSA-PZ-19	3/2/2021 8:35	DO	0.18	mg/L
GS-GSA-PZ-19	3/2/2021 8:35	Depth to Water Detail	125.39	ft
GS-GSA-PZ-19	3/2/2021 8:35	Oxidation Reduction Potention	-55.73	mv
GS-GSA-PZ-19	3/2/2021 8:35	pH	6.45	SU
GS-GSA-PZ-19	3/2/2021 8:35	Temperature	17.08	C
GS-GSA-PZ-19	3/2/2021 8:35	Turbidity	4.11	NTU
GS-GSA-PZ-19	3/2/2021 8:40	Conductivity	1260.69	uS/cm
GS-GSA-PZ-19	3/2/2021 8:40	DO	0.18	mg/L
GS-GSA-PZ-19	3/2/2021 8:40	Depth to Water Detail	125.56	ft
GS-GSA-PZ-19	3/2/2021 8:40	Oxidation Reduction Potention	-54.15	mv
GS-GSA-PZ-19	3/2/2021 8:40	pH	6.46	SU
GS-GSA-PZ-19	3/2/2021 8:40	Temperature	17.13	C
GS-GSA-PZ-19	3/2/2021 8:40	Turbidity	2.67	NTU
GS-GSA-PZ-19	3/2/2021 8:45	Conductivity	1254.57	uS/cm
GS-GSA-PZ-19	3/2/2021 8:45	DO	0.17	mg/L

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-GSA-PZ-19	3/2/2021 8:45	Depth to Water Detail	125.65	ft
GS-GSA-PZ-19	3/2/2021 8:45	Oxidation Reduction Potention	-53.38	mv
GS-GSA-PZ-19	3/2/2021 8:45	pH	6.46	SU
GS-GSA-PZ-19	3/2/2021 8:45	Temperature	17.14	C
GS-GSA-PZ-19	3/2/2021 8:45	Turbidity	1.62	NTU

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-GSA-PZ-20	3/2/2021 9:35	Conductivity	1198.51	uS/cm
GS-GSA-PZ-20	3/2/2021 9:35	DO	0.37	mg/L
GS-GSA-PZ-20	3/2/2021 9:35	Depth to Water Detail	116.65	ft
GS-GSA-PZ-20	3/2/2021 9:35	Oxidation Reduction Potention	-24.57	mv
GS-GSA-PZ-20	3/2/2021 9:35	pH	6.2	SU
GS-GSA-PZ-20	3/2/2021 9:35	Temperature	16.89	C
GS-GSA-PZ-20	3/2/2021 9:35	Turbidity	11.9	NTU
GS-GSA-PZ-20	3/2/2021 9:40	Conductivity	1204.38	uS/cm
GS-GSA-PZ-20	3/2/2021 9:40	DO	0.3	mg/L
GS-GSA-PZ-20	3/2/2021 9:40	Depth to Water Detail	116.65	ft
GS-GSA-PZ-20	3/2/2021 9:40	Oxidation Reduction Potention	-22.62	mv
GS-GSA-PZ-20	3/2/2021 9:40	pH	6.2	SU
GS-GSA-PZ-20	3/2/2021 9:40	Temperature	17.19	C
GS-GSA-PZ-20	3/2/2021 9:40	Turbidity	6.63	NTU
GS-GSA-PZ-20	3/2/2021 9:45	Conductivity	1197.84	uS/cm
GS-GSA-PZ-20	3/2/2021 9:45	DO	0.25	mg/L
GS-GSA-PZ-20	3/2/2021 9:45	Depth to Water Detail	116.65	ft
GS-GSA-PZ-20	3/2/2021 9:45	Oxidation Reduction Potention	-21.62	mv
GS-GSA-PZ-20	3/2/2021 9:45	pH	6.22	SU
GS-GSA-PZ-20	3/2/2021 9:45	Temperature	17.17	C
GS-GSA-PZ-20	3/2/2021 9:45	Turbidity	5.12	NTU
GS-GSA-PZ-20	3/2/2021 9:50	Conductivity	1189.19	uS/cm
GS-GSA-PZ-20	3/2/2021 9:50	DO	0.25	mg/L
GS-GSA-PZ-20	3/2/2021 9:50	Depth to Water Detail	116.65	ft
GS-GSA-PZ-20	3/2/2021 9:50	Oxidation Reduction Potention	-20.4	mv
GS-GSA-PZ-20	3/2/2021 9:50	pH	6.23	SU
GS-GSA-PZ-20	3/2/2021 9:50	Temperature	17.07	C
GS-GSA-PZ-20	3/2/2021 9:50	Turbidity	3.39	NTU

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-GSA-PZ-21	3/2/2021 10:59	Conductivity	781.3	uS/cm
GS-GSA-PZ-21	3/2/2021 10:59	DO	0.62	mg/L
GS-GSA-PZ-21	3/2/2021 10:59	Depth to Water Detail	85.5	ft
GS-GSA-PZ-21	3/2/2021 10:59	Oxidation Reduction Potention	-83.24	mv
GS-GSA-PZ-21	3/2/2021 10:59	pH	6.89	SU
GS-GSA-PZ-21	3/2/2021 10:59	Temperature	15.91	C
GS-GSA-PZ-21	3/2/2021 10:59	Turbidity	2.23	NTU
GS-GSA-PZ-21	3/2/2021 11:04	Conductivity	779.32	uS/cm
GS-GSA-PZ-21	3/2/2021 11:04	DO	0.46	mg/L
GS-GSA-PZ-21	3/2/2021 11:04	Depth to Water Detail	86.05	ft
GS-GSA-PZ-21	3/2/2021 11:04	Oxidation Reduction Potention	-82.38	mv
GS-GSA-PZ-21	3/2/2021 11:04	pH	6.88	SU
GS-GSA-PZ-21	3/2/2021 11:04	Temperature	15.99	C
GS-GSA-PZ-21	3/2/2021 11:04	Turbidity	0.96	NTU
GS-GSA-PZ-21	3/2/2021 11:09	Conductivity	781.67	uS/cm
GS-GSA-PZ-21	3/2/2021 11:09	DO	0.41	mg/L
GS-GSA-PZ-21	3/2/2021 11:09	Depth to Water Detail	86.55	ft
GS-GSA-PZ-21	3/2/2021 11:09	Oxidation Reduction Potention	-82.59	mv
GS-GSA-PZ-21	3/2/2021 11:09	pH	6.88	SU
GS-GSA-PZ-21	3/2/2021 11:09	Temperature	16.52	C
GS-GSA-PZ-21	3/2/2021 11:09	Turbidity	0.9	NTU
GS-GSA-PZ-21	3/2/2021 11:14	Conductivity	782.08	uS/cm
GS-GSA-PZ-21	3/2/2021 11:14	DO	0.39	mg/L
GS-GSA-PZ-21	3/2/2021 11:14	Depth to Water Detail	86.96	ft
GS-GSA-PZ-21	3/2/2021 11:14	Oxidation Reduction Potention	-81.44	mv
GS-GSA-PZ-21	3/2/2021 11:14	pH	6.88	SU
GS-GSA-PZ-21	3/2/2021 11:14	Temperature	16.27	C
GS-GSA-PZ-21	3/2/2021 11:14	Turbidity	0.83	NTU
GS-GSA-PZ-21	3/2/2021 11:19	Conductivity	782.76	uS/cm
GS-GSA-PZ-21	3/2/2021 11:19	DO	0.37	mg/L
GS-GSA-PZ-21	3/2/2021 11:19	Depth to Water Detail	87.16	ft
GS-GSA-PZ-21	3/2/2021 11:19	Oxidation Reduction Potention	-81.35	mv
GS-GSA-PZ-21	3/2/2021 11:19	pH	6.88	SU
GS-GSA-PZ-21	3/2/2021 11:19	Temperature	16.12	C
GS-GSA-PZ-21	3/2/2021 11:19	Turbidity	0.84	NTU
GS-GSA-PZ-21	3/2/2021 11:24	Conductivity	783.25	uS/cm
GS-GSA-PZ-21	3/2/2021 11:24	DO	0.36	mg/L
GS-GSA-PZ-21	3/2/2021 11:24	Depth to Water Detail	87.39	ft
GS-GSA-PZ-21	3/2/2021 11:24	Oxidation Reduction Potention	-80.16	mv
GS-GSA-PZ-21	3/2/2021 11:24	pH	6.87	SU
GS-GSA-PZ-21	3/2/2021 11:24	Temperature	16.17	C
GS-GSA-PZ-21	3/2/2021 11:24	Turbidity	0.9	NTU
GS-GSA-PZ-21	3/2/2021 11:29	Conductivity	784.3	uS/cm
GS-GSA-PZ-21	3/2/2021 11:29	DO	0.36	mg/L

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-GSA-PZ-21	3/2/2021 11:29	Depth to Water Detail	87.44	ft
GS-GSA-PZ-21	3/2/2021 11:29	Oxidation Reduction Potention	-80.18	mv
GS-GSA-PZ-21	3/2/2021 11:29	pH	6.87	SU
GS-GSA-PZ-21	3/2/2021 11:29	Temperature	16.25	C
GS-GSA-PZ-21	3/2/2021 11:29	Turbidity	1.01	NTU

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-GSA-PZ-22	3/2/2021 12:22	Conductivity	921.79	uS/cm
GS-GSA-PZ-22	3/2/2021 12:22	DO	0.36	mg/L
GS-GSA-PZ-22	3/2/2021 12:22	Depth to Water Detail	51.88	ft
GS-GSA-PZ-22	3/2/2021 12:22	Oxidation Reduction Potention	-64.22	mv
GS-GSA-PZ-22	3/2/2021 12:22	pH	6.33	SU
GS-GSA-PZ-22	3/2/2021 12:22	Temperature	16.13	C
GS-GSA-PZ-22	3/2/2021 12:22	Turbidity	2.28	NTU
GS-GSA-PZ-22	3/2/2021 12:27	Conductivity	924.74	uS/cm
GS-GSA-PZ-22	3/2/2021 12:27	DO	0.27	mg/L
GS-GSA-PZ-22	3/2/2021 12:27	Depth to Water Detail	51.91	ft
GS-GSA-PZ-22	3/2/2021 12:27	Oxidation Reduction Potention	-58.66	mv
GS-GSA-PZ-22	3/2/2021 12:27	pH	6.28	SU
GS-GSA-PZ-22	3/2/2021 12:27	Temperature	16.2	C
GS-GSA-PZ-22	3/2/2021 12:27	Turbidity	0.85	NTU
GS-GSA-PZ-22	3/2/2021 12:32	Conductivity	928.18	uS/cm
GS-GSA-PZ-22	3/2/2021 12:32	DO	0.24	mg/L
GS-GSA-PZ-22	3/2/2021 12:32	Depth to Water Detail	51.93	ft
GS-GSA-PZ-22	3/2/2021 12:32	Oxidation Reduction Potention	-56.9	mv
GS-GSA-PZ-22	3/2/2021 12:32	pH	6.26	SU
GS-GSA-PZ-22	3/2/2021 12:32	Temperature	16.17	C
GS-GSA-PZ-22	3/2/2021 12:32	Turbidity	0.7	NTU
GS-GSA-PZ-22	3/2/2021 12:37	Conductivity	931.01	uS/cm
GS-GSA-PZ-22	3/2/2021 12:37	DO	0.23	mg/L
GS-GSA-PZ-22	3/2/2021 12:37	Depth to Water Detail	51.93	ft
GS-GSA-PZ-22	3/2/2021 12:37	Oxidation Reduction Potention	-55.79	mv
GS-GSA-PZ-22	3/2/2021 12:37	pH	6.24	SU
GS-GSA-PZ-22	3/2/2021 12:37	Temperature	16.15	C
GS-GSA-PZ-22	3/2/2021 12:37	Turbidity	0.68	NTU

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-GSA-MW-8V	3/1/2021 10:49	Conductivity	1798.04	uS/cm
GS-GSA-MW-8V	3/1/2021 10:49	DO	0.71	mg/L
GS-GSA-MW-8V	3/1/2021 10:49	Depth to Water Detail	88.22	ft
GS-GSA-MW-8V	3/1/2021 10:49	Oxidation Reduction Potention	-170.59	mv
GS-GSA-MW-8V	3/1/2021 10:49	pH	7.66	SU
GS-GSA-MW-8V	3/1/2021 10:49	Temperature	20	C
GS-GSA-MW-8V	3/1/2021 10:49	Turbidity	0.7	NTU
GS-GSA-MW-8V	3/1/2021 10:54	Conductivity	1797.24	uS/cm
GS-GSA-MW-8V	3/1/2021 10:54	DO	0.72	mg/L
GS-GSA-MW-8V	3/1/2021 10:54	Depth to Water Detail	88.74	ft
GS-GSA-MW-8V	3/1/2021 10:54	Oxidation Reduction Potention	-172.45	mv
GS-GSA-MW-8V	3/1/2021 10:54	pH	7.67	SU
GS-GSA-MW-8V	3/1/2021 10:54	Temperature	20.05	C
GS-GSA-MW-8V	3/1/2021 10:54	Turbidity	0.4	NTU
GS-GSA-MW-8V	3/1/2021 10:59	Conductivity	1796.56	uS/cm
GS-GSA-MW-8V	3/1/2021 10:59	DO	0.7	mg/L
GS-GSA-MW-8V	3/1/2021 10:59	Depth to Water Detail	88.83	ft
GS-GSA-MW-8V	3/1/2021 10:59	Oxidation Reduction Potention	-174.9	mv
GS-GSA-MW-8V	3/1/2021 10:59	pH	7.67	SU
GS-GSA-MW-8V	3/1/2021 10:59	Temperature	20.08	C
GS-GSA-MW-8V	3/1/2021 10:59	Turbidity	0.32	NTU
GS-GSA-MW-8V	3/1/2021 11:04	Conductivity	1794.7	uS/cm
GS-GSA-MW-8V	3/1/2021 11:04	DO	0.73	mg/L
GS-GSA-MW-8V	3/1/2021 11:04	Depth to Water Detail	88.93	ft
GS-GSA-MW-8V	3/1/2021 11:04	Oxidation Reduction Potention	-177.58	mv
GS-GSA-MW-8V	3/1/2021 11:04	pH	7.67	SU
GS-GSA-MW-8V	3/1/2021 11:04	Temperature	19.89	C
GS-GSA-MW-8V	3/1/2021 11:04	Turbidity	0.55	NTU
GS-GSA-MW-8V	3/1/2021 11:09	Conductivity	1799.68	uS/cm
GS-GSA-MW-8V	3/1/2021 11:09	DO	0.72	mg/L
GS-GSA-MW-8V	3/1/2021 11:09	Depth to Water Detail	89.51	ft
GS-GSA-MW-8V	3/1/2021 11:09	Oxidation Reduction Potention	-180.24	mv
GS-GSA-MW-8V	3/1/2021 11:09	pH	7.67	SU
GS-GSA-MW-8V	3/1/2021 11:09	Temperature	19.9	C
GS-GSA-MW-8V	3/1/2021 11:09	Turbidity	0.44	NTU
GS-GSA-MW-8V	3/1/2021 11:14	Conductivity	1799.97	uS/cm
GS-GSA-MW-8V	3/1/2021 11:14	DO	0.72	mg/L
GS-GSA-MW-8V	3/1/2021 11:14	Depth to Water Detail	89.72	ft
GS-GSA-MW-8V	3/1/2021 11:14	Oxidation Reduction Potention	-182.17	mv
GS-GSA-MW-8V	3/1/2021 11:14	pH	7.67	SU
GS-GSA-MW-8V	3/1/2021 11:14	Temperature	19.91	C
GS-GSA-MW-8V	3/1/2021 11:14	Turbidity	0.38	NTU
GS-GSA-MW-8V	3/1/2021 11:19	Conductivity	1803.25	uS/cm
GS-GSA-MW-8V	3/1/2021 11:19	DO	0.71	mg/L

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-GSA-MW-8V	3/1/2021 11:19	Depth to Water Detail	90.04	ft
GS-GSA-MW-8V	3/1/2021 11:19	Oxidation Reduction Potention	-182.86	mv
GS-GSA-MW-8V	3/1/2021 11:19	pH	7.66	SU
GS-GSA-MW-8V	3/1/2021 11:19	Temperature	19.98	C
GS-GSA-MW-8V	3/1/2021 11:19	Turbidity	0.75	NTU
GS-GSA-MW-8V	3/1/2021 11:24	Conductivity	1805	uS/cm
GS-GSA-MW-8V	3/1/2021 11:24	DO	0.72	mg/L
GS-GSA-MW-8V	3/1/2021 11:24	Depth to Water Detail	90.05	ft
GS-GSA-MW-8V	3/1/2021 11:24	Oxidation Reduction Potention	-184.5	mv
GS-GSA-MW-8V	3/1/2021 11:24	pH	7.66	SU
GS-GSA-MW-8V	3/1/2021 11:24	Temperature	20	C
GS-GSA-MW-8V	3/1/2021 11:24	Turbidity	0.53	NTU
GS-GSA-MW-8V	3/1/2021 11:29	Conductivity	1805.87	uS/cm
GS-GSA-MW-8V	3/1/2021 11:29	DO	0.7	mg/L
GS-GSA-MW-8V	3/1/2021 11:29	Depth to Water Detail	90.19	ft
GS-GSA-MW-8V	3/1/2021 11:29	Oxidation Reduction Potention	-186.46	mv
GS-GSA-MW-8V	3/1/2021 11:29	pH	7.67	SU
GS-GSA-MW-8V	3/1/2021 11:29	Temperature	20.04	C
GS-GSA-MW-8V	3/1/2021 11:29	Turbidity	0.36	NTU
GS-GSA-MW-8V	3/1/2021 11:34	Conductivity	1803.28	uS/cm
GS-GSA-MW-8V	3/1/2021 11:34	DO	0.7	mg/L
GS-GSA-MW-8V	3/1/2021 11:34	Depth to Water Detail	90.26	ft
GS-GSA-MW-8V	3/1/2021 11:34	Oxidation Reduction Potention	-188.35	mv
GS-GSA-MW-8V	3/1/2021 11:34	pH	7.67	SU
GS-GSA-MW-8V	3/1/2021 11:34	Temperature	19.91	C
GS-GSA-MW-8V	3/1/2021 11:34	Turbidity	0.73	NTU

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-GSA-MW-8	3/1/2021 12:46	Conductivity	3381.44	uS/cm
GS-GSA-MW-8	3/1/2021 12:46	DO	0.7	mg/L
GS-GSA-MW-8	3/1/2021 12:46	Depth to Water Detail	78.11	ft
GS-GSA-MW-8	3/1/2021 12:46	Oxidation Reduction Potention	-68.18	mv
GS-GSA-MW-8	3/1/2021 12:46	pH	6.44	SU
GS-GSA-MW-8	3/1/2021 12:46	Temperature	19.1	C
GS-GSA-MW-8	3/1/2021 12:46	Turbidity	1.42	NTU
GS-GSA-MW-8	3/1/2021 12:51	Conductivity	3384.96	uS/cm
GS-GSA-MW-8	3/1/2021 12:51	DO	0.56	mg/L
GS-GSA-MW-8	3/1/2021 12:51	Depth to Water Detail	78.21	ft
GS-GSA-MW-8	3/1/2021 12:51	Oxidation Reduction Potention	-68.36	mv
GS-GSA-MW-8	3/1/2021 12:51	pH	6.46	SU
GS-GSA-MW-8	3/1/2021 12:51	Temperature	19.1	C
GS-GSA-MW-8	3/1/2021 12:51	Turbidity	1.88	NTU
GS-GSA-MW-8	3/1/2021 12:56	Conductivity	3386.67	uS/cm
GS-GSA-MW-8	3/1/2021 12:56	DO	0.5	mg/L
GS-GSA-MW-8	3/1/2021 12:56	Depth to Water Detail	78.26	ft
GS-GSA-MW-8	3/1/2021 12:56	Oxidation Reduction Potention	-68.96	mv
GS-GSA-MW-8	3/1/2021 12:56	pH	6.47	SU
GS-GSA-MW-8	3/1/2021 12:56	Temperature	18.98	C
GS-GSA-MW-8	3/1/2021 12:56	Turbidity	2.38	NTU
GS-GSA-MW-8	3/1/2021 13:01	Conductivity	3406.62	uS/cm
GS-GSA-MW-8	3/1/2021 13:01	DO	0.48	mg/L
GS-GSA-MW-8	3/1/2021 13:01	Depth to Water Detail	78.28	ft
GS-GSA-MW-8	3/1/2021 13:01	Oxidation Reduction Potention	-70.73	mv
GS-GSA-MW-8	3/1/2021 13:01	pH	6.48	SU
GS-GSA-MW-8	3/1/2021 13:01	Temperature	18.89	C
GS-GSA-MW-8	3/1/2021 13:01	Turbidity	2.81	NTU

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-GSA-MW-13H	3/2/2021 8:27	Conductivity	1721.5	uS/cm
GS-GSA-MW-13H	3/2/2021 8:27	DO	0.22	mg/L
GS-GSA-MW-13H	3/2/2021 8:27	Depth to Water Detail	9.23	ft
GS-GSA-MW-13H	3/2/2021 8:27	Oxidation Reduction Potention	-42.33	mv
GS-GSA-MW-13H	3/2/2021 8:27	pH	5.79	SU
GS-GSA-MW-13H	3/2/2021 8:27	Temperature	18.16	C
GS-GSA-MW-13H	3/2/2021 8:27	Turbidity	6.12	NTU
GS-GSA-MW-13H	3/2/2021 8:32	Conductivity	1730.19	uS/cm
GS-GSA-MW-13H	3/2/2021 8:32	DO	0.19	mg/L
GS-GSA-MW-13H	3/2/2021 8:32	Depth to Water Detail	9.27	ft
GS-GSA-MW-13H	3/2/2021 8:32	Oxidation Reduction Potention	-44.65	mv
GS-GSA-MW-13H	3/2/2021 8:32	pH	5.85	SU
GS-GSA-MW-13H	3/2/2021 8:32	Temperature	18.24	C
GS-GSA-MW-13H	3/2/2021 8:32	Turbidity	4.35	NTU
GS-GSA-MW-13H	3/2/2021 8:37	Conductivity	1745.26	uS/cm
GS-GSA-MW-13H	3/2/2021 8:37	DO	0.18	mg/L
GS-GSA-MW-13H	3/2/2021 8:37	Depth to Water Detail	9.27	ft
GS-GSA-MW-13H	3/2/2021 8:37	Oxidation Reduction Potention	-42.37	mv
GS-GSA-MW-13H	3/2/2021 8:37	pH	5.85	SU
GS-GSA-MW-13H	3/2/2021 8:37	Temperature	18.2	C
GS-GSA-MW-13H	3/2/2021 8:37	Turbidity	2.44	NTU
GS-GSA-MW-13H	3/2/2021 8:42	Conductivity	1763.47	uS/cm
GS-GSA-MW-13H	3/2/2021 8:42	DO	0.18	mg/L
GS-GSA-MW-13H	3/2/2021 8:42	Depth to Water Detail	9.27	ft
GS-GSA-MW-13H	3/2/2021 8:42	Oxidation Reduction Potention	-37.7	mv
GS-GSA-MW-13H	3/2/2021 8:42	pH	5.85	SU
GS-GSA-MW-13H	3/2/2021 8:42	Temperature	18.25	C
GS-GSA-MW-13H	3/2/2021 8:42	Turbidity	2.02	NTU

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-GSA-MW-11H	3/2/2021 9:35	Conductivity	1601.39	uS/cm
GS-GSA-MW-11H	3/2/2021 9:35	DO	0.22	mg/L
GS-GSA-MW-11H	3/2/2021 9:35	Depth to Water Detail	7.93	ft
GS-GSA-MW-11H	3/2/2021 9:35	Oxidation Reduction Potention	45.36	mv
GS-GSA-MW-11H	3/2/2021 9:35	pH	5.82	SU
GS-GSA-MW-11H	3/2/2021 9:35	Temperature	18.07	C
GS-GSA-MW-11H	3/2/2021 9:35	Turbidity	8.41	NTU
GS-GSA-MW-11H	3/2/2021 9:40	Conductivity	1597.58	uS/cm
GS-GSA-MW-11H	3/2/2021 9:40	DO	0.21	mg/L
GS-GSA-MW-11H	3/2/2021 9:40	Depth to Water Detail	8.33	ft
GS-GSA-MW-11H	3/2/2021 9:40	Oxidation Reduction Potention	45.95	mv
GS-GSA-MW-11H	3/2/2021 9:40	pH	5.86	SU
GS-GSA-MW-11H	3/2/2021 9:40	Temperature	18.11	C
GS-GSA-MW-11H	3/2/2021 9:40	Turbidity	7.49	NTU
GS-GSA-MW-11H	3/2/2021 9:45	Conductivity	1587.25	uS/cm
GS-GSA-MW-11H	3/2/2021 9:45	DO	0.22	mg/L
GS-GSA-MW-11H	3/2/2021 9:45	Depth to Water Detail	8.41	ft
GS-GSA-MW-11H	3/2/2021 9:45	Oxidation Reduction Potention	47.79	mv
GS-GSA-MW-11H	3/2/2021 9:45	pH	5.88	SU
GS-GSA-MW-11H	3/2/2021 9:45	Temperature	18.19	C
GS-GSA-MW-11H	3/2/2021 9:45	Turbidity	7.56	NTU
GS-GSA-MW-11H	3/2/2021 9:50	Conductivity	1580.42	uS/cm
GS-GSA-MW-11H	3/2/2021 9:50	DO	0.23	mg/L
GS-GSA-MW-11H	3/2/2021 9:50	Depth to Water Detail	8.42	ft
GS-GSA-MW-11H	3/2/2021 9:50	Oxidation Reduction Potention	45.94	mv
GS-GSA-MW-11H	3/2/2021 9:50	pH	5.89	SU
GS-GSA-MW-11H	3/2/2021 9:50	Temperature	18.32	C
GS-GSA-MW-11H	3/2/2021 9:50	Turbidity	6.15	NTU

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-GSA-MW-9H	3/2/2021 10:46	Conductivity	3133.2	uS/cm
GS-GSA-MW-9H	3/2/2021 10:46	DO	0.25	mg/L
GS-GSA-MW-9H	3/2/2021 10:46	Depth to Water Detail	46.64	ft
GS-GSA-MW-9H	3/2/2021 10:46	Oxidation Reduction Potention	120.74	mv
GS-GSA-MW-9H	3/2/2021 10:46	pH	5.04	SU
GS-GSA-MW-9H	3/2/2021 10:46	Temperature	19.25	C
GS-GSA-MW-9H	3/2/2021 10:46	Turbidity	38.4	NTU
GS-GSA-MW-9H	3/2/2021 10:51	Conductivity	3153.24	uS/cm
GS-GSA-MW-9H	3/2/2021 10:51	DO	0.23	mg/L
GS-GSA-MW-9H	3/2/2021 10:51	Depth to Water Detail	47.16	ft
GS-GSA-MW-9H	3/2/2021 10:51	Oxidation Reduction Potention	119.36	mv
GS-GSA-MW-9H	3/2/2021 10:51	pH	5.17	SU
GS-GSA-MW-9H	3/2/2021 10:51	Temperature	19.07	C
GS-GSA-MW-9H	3/2/2021 10:51	Turbidity	19.4	NTU
GS-GSA-MW-9H	3/2/2021 10:56	Conductivity	3160.48	uS/cm
GS-GSA-MW-9H	3/2/2021 10:56	DO	0.22	mg/L
GS-GSA-MW-9H	3/2/2021 10:56	Depth to Water Detail	47.64	ft
GS-GSA-MW-9H	3/2/2021 10:56	Oxidation Reduction Potention	117.36	mv
GS-GSA-MW-9H	3/2/2021 10:56	pH	5.22	SU
GS-GSA-MW-9H	3/2/2021 10:56	Temperature	19.2	C
GS-GSA-MW-9H	3/2/2021 10:56	Turbidity	11.69	NTU
GS-GSA-MW-9H	3/2/2021 11:01	Conductivity	3162.15	uS/cm
GS-GSA-MW-9H	3/2/2021 11:01	DO	0.22	mg/L
GS-GSA-MW-9H	3/2/2021 11:01	Depth to Water Detail	47.83	ft
GS-GSA-MW-9H	3/2/2021 11:01	Oxidation Reduction Potention	116.64	mv
GS-GSA-MW-9H	3/2/2021 11:01	pH	5.25	SU
GS-GSA-MW-9H	3/2/2021 11:01	Temperature	19.33	C
GS-GSA-MW-9H	3/2/2021 11:01	Turbidity	8.94	NTU
GS-GSA-MW-9H	3/2/2021 11:06	Conductivity	3162.3	uS/cm
GS-GSA-MW-9H	3/2/2021 11:06	DO	0.21	mg/L
GS-GSA-MW-9H	3/2/2021 11:06	Depth to Water Detail	48.04	ft
GS-GSA-MW-9H	3/2/2021 11:06	Oxidation Reduction Potention	116.29	mv
GS-GSA-MW-9H	3/2/2021 11:06	pH	5.27	SU
GS-GSA-MW-9H	3/2/2021 11:06	Temperature	19.36	C
GS-GSA-MW-9H	3/2/2021 11:06	Turbidity	7.03	NTU
GS-GSA-MW-9H	3/2/2021 11:11	Conductivity	3165.92	uS/cm
GS-GSA-MW-9H	3/2/2021 11:11	DO	0.21	mg/L
GS-GSA-MW-9H	3/2/2021 11:11	Depth to Water Detail	48.23	ft
GS-GSA-MW-9H	3/2/2021 11:11	Oxidation Reduction Potention	117.09	mv
GS-GSA-MW-9H	3/2/2021 11:11	pH	5.28	SU
GS-GSA-MW-9H	3/2/2021 11:11	Temperature	19.48	C
GS-GSA-MW-9H	3/2/2021 11:11	Turbidity	5.67	NTU
GS-GSA-MW-9H	3/2/2021 11:16	Conductivity	3165.41	uS/cm
GS-GSA-MW-9H	3/2/2021 11:16	DO	0.21	mg/L

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-GSA-MW-9H	3/2/2021 11:16	Depth to Water Detail	48.31	ft
GS-GSA-MW-9H	3/2/2021 11:16	Oxidation Reduction Potention	117.15	mv
GS-GSA-MW-9H	3/2/2021 11:16	pH	5.29	SU
GS-GSA-MW-9H	3/2/2021 11:16	Temperature	19.43	C
GS-GSA-MW-9H	3/2/2021 11:16	Turbidity	4.91	NTU

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-GSA-MW-12H	3/2/2021 12:39	Conductivity	1674.55	uS/cm
GS-GSA-MW-12H	3/2/2021 12:39	DO	0.22	mg/L
GS-GSA-MW-12H	3/2/2021 12:39	Depth to Water Detail	59.04	ft
GS-GSA-MW-12H	3/2/2021 12:39	Oxidation Reduction Potention	322.49	mv
GS-GSA-MW-12H	3/2/2021 12:39	pH	4.31	SU
GS-GSA-MW-12H	3/2/2021 12:39	Temperature	18.69	C
GS-GSA-MW-12H	3/2/2021 12:39	Turbidity	84.7	NTU
GS-GSA-MW-12H	3/2/2021 12:44	Conductivity	1660.52	uS/cm
GS-GSA-MW-12H	3/2/2021 12:44	DO	0.25	mg/L
GS-GSA-MW-12H	3/2/2021 12:44	Depth to Water Detail	59.11	ft
GS-GSA-MW-12H	3/2/2021 12:44	Oxidation Reduction Potention	324.57	mv
GS-GSA-MW-12H	3/2/2021 12:44	pH	4.29	SU
GS-GSA-MW-12H	3/2/2021 12:44	Temperature	18.74	C
GS-GSA-MW-12H	3/2/2021 12:44	Turbidity	77.6	NTU
GS-GSA-MW-12H	3/2/2021 12:49	Conductivity	1647.54	uS/cm
GS-GSA-MW-12H	3/2/2021 12:49	DO	0.24	mg/L
GS-GSA-MW-12H	3/2/2021 12:49	Depth to Water Detail	59.11	ft
GS-GSA-MW-12H	3/2/2021 12:49	Oxidation Reduction Potention	331.59	mv
GS-GSA-MW-12H	3/2/2021 12:49	pH	4.24	SU
GS-GSA-MW-12H	3/2/2021 12:49	Temperature	18.69	C
GS-GSA-MW-12H	3/2/2021 12:49	Turbidity	46.8	NTU
GS-GSA-MW-12H	3/2/2021 12:54	Conductivity	1644.48	uS/cm
GS-GSA-MW-12H	3/2/2021 12:54	DO	0.26	mg/L
GS-GSA-MW-12H	3/2/2021 12:54	Depth to Water Detail	59.11	ft
GS-GSA-MW-12H	3/2/2021 12:54	Oxidation Reduction Potention	335.04	mv
GS-GSA-MW-12H	3/2/2021 12:54	pH	4.22	SU
GS-GSA-MW-12H	3/2/2021 12:54	Temperature	18.69	C
GS-GSA-MW-12H	3/2/2021 12:54	Turbidity	26.6	NTU
GS-GSA-MW-12H	3/2/2021 12:59	Conductivity	1633.79	uS/cm
GS-GSA-MW-12H	3/2/2021 12:59	DO	0.23	mg/L
GS-GSA-MW-12H	3/2/2021 12:59	Depth to Water Detail	59.11	ft
GS-GSA-MW-12H	3/2/2021 12:59	Oxidation Reduction Potention	339.2	mv
GS-GSA-MW-12H	3/2/2021 12:59	pH	4.2	SU
GS-GSA-MW-12H	3/2/2021 12:59	Temperature	18.71	C
GS-GSA-MW-12H	3/2/2021 12:59	Turbidity	16.8	NTU
GS-GSA-MW-12H	3/2/2021 13:04	Conductivity	1634.08	uS/cm
GS-GSA-MW-12H	3/2/2021 13:04	DO	0.23	mg/L
GS-GSA-MW-12H	3/2/2021 13:04	Depth to Water Detail	59.11	ft
GS-GSA-MW-12H	3/2/2021 13:04	Oxidation Reduction Potention	343.51	mv
GS-GSA-MW-12H	3/2/2021 13:04	pH	4.17	SU
GS-GSA-MW-12H	3/2/2021 13:04	Temperature	18.77	C
GS-GSA-MW-12H	3/2/2021 13:04	Turbidity	20.8	NTU
GS-GSA-MW-12H	3/2/2021 13:09	Conductivity	1632.99	uS/cm
GS-GSA-MW-12H	3/2/2021 13:09	DO	0.23	mg/L

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-GSA-MW-12H	3/2/2021 13:09	Depth to Water Detail	59.11	ft
GS-GSA-MW-12H	3/2/2021 13:09	Oxidation Reduction Potention	345.97	mv
GS-GSA-MW-12H	3/2/2021 13:09	pH	4.16	SU
GS-GSA-MW-12H	3/2/2021 13:09	Temperature	18.72	C
GS-GSA-MW-12H	3/2/2021 13:09	Turbidity	23.7	NTU
GS-GSA-MW-12H	3/2/2021 13:14	Conductivity	1630.27	uS/cm
GS-GSA-MW-12H	3/2/2021 13:14	DO	0.23	mg/L
GS-GSA-MW-12H	3/2/2021 13:14	Depth to Water Detail	59.11	ft
GS-GSA-MW-12H	3/2/2021 13:14	Oxidation Reduction Potention	347.94	mv
GS-GSA-MW-12H	3/2/2021 13:14	pH	4.15	SU
GS-GSA-MW-12H	3/2/2021 13:14	Temperature	18.73	C
GS-GSA-MW-12H	3/2/2021 13:14	Turbidity	15.3	NTU
GS-GSA-MW-12H	3/2/2021 13:19	Conductivity	1627.3	uS/cm
GS-GSA-MW-12H	3/2/2021 13:19	DO	0.22	mg/L
GS-GSA-MW-12H	3/2/2021 13:19	Depth to Water Detail	59.11	ft
GS-GSA-MW-12H	3/2/2021 13:19	Oxidation Reduction Potention	350.33	mv
GS-GSA-MW-12H	3/2/2021 13:19	pH	4.14	SU
GS-GSA-MW-12H	3/2/2021 13:19	Temperature	18.75	C
GS-GSA-MW-12H	3/2/2021 13:19	Turbidity	21.5	NTU
GS-GSA-MW-12H	3/2/2021 13:24	Conductivity	1628.36	uS/cm
GS-GSA-MW-12H	3/2/2021 13:24	DO	0.23	mg/L
GS-GSA-MW-12H	3/2/2021 13:24	Depth to Water Detail	59.11	ft
GS-GSA-MW-12H	3/2/2021 13:24	Oxidation Reduction Potention	351.28	mv
GS-GSA-MW-12H	3/2/2021 13:24	pH	4.13	SU
GS-GSA-MW-12H	3/2/2021 13:24	Temperature	18.78	C
GS-GSA-MW-12H	3/2/2021 13:24	Turbidity	17.9	NTU
GS-GSA-MW-12H	3/2/2021 13:29	Conductivity	1628.59	uS/cm
GS-GSA-MW-12H	3/2/2021 13:29	DO	0.23	mg/L
GS-GSA-MW-12H	3/2/2021 13:29	Depth to Water Detail	59.11	ft
GS-GSA-MW-12H	3/2/2021 13:29	Oxidation Reduction Potention	353.03	mv
GS-GSA-MW-12H	3/2/2021 13:29	pH	4.12	SU
GS-GSA-MW-12H	3/2/2021 13:29	Temperature	18.77	C
GS-GSA-MW-12H	3/2/2021 13:29	Turbidity	44	NTU
GS-GSA-MW-12H	3/2/2021 13:34	Conductivity	1626.81	uS/cm
GS-GSA-MW-12H	3/2/2021 13:34	DO	0.22	mg/L
GS-GSA-MW-12H	3/2/2021 13:34	Depth to Water Detail	59.11	ft
GS-GSA-MW-12H	3/2/2021 13:34	Oxidation Reduction Potention	354.07	mv
GS-GSA-MW-12H	3/2/2021 13:34	pH	4.12	SU
GS-GSA-MW-12H	3/2/2021 13:34	Temperature	18.81	C
GS-GSA-MW-12H	3/2/2021 13:34	Turbidity	12.7	NTU
GS-GSA-MW-12H	3/2/2021 13:39	Conductivity	1626.15	uS/cm
GS-GSA-MW-12H	3/2/2021 13:39	DO	0.22	mg/L
GS-GSA-MW-12H	3/2/2021 13:39	Depth to Water Detail	59.11	ft
GS-GSA-MW-12H	3/2/2021 13:39	Oxidation Reduction Potention	355.25	mv

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-GSA-MW-12H	3/2/2021 13:39	pH	4.11	SU
GS-GSA-MW-12H	3/2/2021 13:39	Temperature	18.83	C
GS-GSA-MW-12H	3/2/2021 13:39	Turbidity	8.58	NTU

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-GSA-MW-12V	3/3/2021 9:52	Conductivity	4259.35	uS/cm
GS-GSA-MW-12V	3/3/2021 9:52	DO	0.13	mg/L
GS-GSA-MW-12V	3/3/2021 9:52	Depth to Water Detail	61.56	ft
GS-GSA-MW-12V	3/3/2021 9:52	Oxidation Reduction Potention	-67.33	mv
GS-GSA-MW-12V	3/3/2021 9:52	pH	6.13	SU
GS-GSA-MW-12V	3/3/2021 9:52	Temperature	18.77	C
GS-GSA-MW-12V	3/3/2021 9:52	Turbidity	0.49	NTU
GS-GSA-MW-12V	3/3/2021 9:57	Conductivity	4164.46	uS/cm
GS-GSA-MW-12V	3/3/2021 9:57	DO	0.13	mg/L
GS-GSA-MW-12V	3/3/2021 9:57	Depth to Water Detail	61.62	ft
GS-GSA-MW-12V	3/3/2021 9:57	Oxidation Reduction Potention	-61.25	mv
GS-GSA-MW-12V	3/3/2021 9:57	pH	6.11	SU
GS-GSA-MW-12V	3/3/2021 9:57	Temperature	18.73	C
GS-GSA-MW-12V	3/3/2021 9:57	Turbidity	0.6	NTU
GS-GSA-MW-12V	3/3/2021 10:02	Conductivity	4100.48	uS/cm
GS-GSA-MW-12V	3/3/2021 10:02	DO	0.13	mg/L
GS-GSA-MW-12V	3/3/2021 10:02	Depth to Water Detail	61.65	ft
GS-GSA-MW-12V	3/3/2021 10:02	Oxidation Reduction Potention	-58.41	mv
GS-GSA-MW-12V	3/3/2021 10:02	pH	6.11	SU
GS-GSA-MW-12V	3/3/2021 10:02	Temperature	18.76	C
GS-GSA-MW-12V	3/3/2021 10:02	Turbidity	0.23	NTU
GS-GSA-MW-12V	3/3/2021 10:07	Conductivity	4064.6	uS/cm
GS-GSA-MW-12V	3/3/2021 10:07	DO	0.13	mg/L
GS-GSA-MW-12V	3/3/2021 10:07	Depth to Water Detail	61.73	ft
GS-GSA-MW-12V	3/3/2021 10:07	Oxidation Reduction Potention	-55.65	mv
GS-GSA-MW-12V	3/3/2021 10:07	pH	6.11	SU
GS-GSA-MW-12V	3/3/2021 10:07	Temperature	18.8	C
GS-GSA-MW-12V	3/3/2021 10:07	Turbidity	0.14	NTU

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-GSA-MW-14H	3/3/2021 10:55	Conductivity	1521.55	uS/cm
GS-GSA-MW-14H	3/3/2021 10:55	DO	0.19	mg/L
GS-GSA-MW-14H	3/3/2021 10:55	Depth to Water Detail	18.48	ft
GS-GSA-MW-14H	3/3/2021 10:55	Oxidation Reduction Potention	306.54	mv
GS-GSA-MW-14H	3/3/2021 10:55	pH	3.91	SU
GS-GSA-MW-14H	3/3/2021 10:55	Temperature	19.23	C
GS-GSA-MW-14H	3/3/2021 10:55	Turbidity	12.9	NTU
GS-GSA-MW-14H	3/3/2021 11:00	Conductivity	1522.93	uS/cm
GS-GSA-MW-14H	3/3/2021 11:00	DO	0.19	mg/L
GS-GSA-MW-14H	3/3/2021 11:00	Depth to Water Detail	18.54	ft
GS-GSA-MW-14H	3/3/2021 11:00	Oxidation Reduction Potention	306.29	mv
GS-GSA-MW-14H	3/3/2021 11:00	pH	3.96	SU
GS-GSA-MW-14H	3/3/2021 11:00	Temperature	19.32	C
GS-GSA-MW-14H	3/3/2021 11:00	Turbidity	9.95	NTU
GS-GSA-MW-14H	3/3/2021 11:05	Conductivity	1523.99	uS/cm
GS-GSA-MW-14H	3/3/2021 11:05	DO	0.19	mg/L
GS-GSA-MW-14H	3/3/2021 11:05	Depth to Water Detail	18.56	ft
GS-GSA-MW-14H	3/3/2021 11:05	Oxidation Reduction Potention	304.99	mv
GS-GSA-MW-14H	3/3/2021 11:05	pH	3.99	SU
GS-GSA-MW-14H	3/3/2021 11:05	Temperature	19.27	C
GS-GSA-MW-14H	3/3/2021 11:05	Turbidity	6.73	NTU
GS-GSA-MW-14H	3/3/2021 11:10	Conductivity	1525.68	uS/cm
GS-GSA-MW-14H	3/3/2021 11:10	DO	0.19	mg/L
GS-GSA-MW-14H	3/3/2021 11:10	Depth to Water Detail	18.56	ft
GS-GSA-MW-14H	3/3/2021 11:10	Oxidation Reduction Potention	304.23	mv
GS-GSA-MW-14H	3/3/2021 11:10	pH	4.01	SU
GS-GSA-MW-14H	3/3/2021 11:10	Temperature	19.31	C
GS-GSA-MW-14H	3/3/2021 11:10	Turbidity	5.88	NTU
GS-GSA-MW-14H	3/3/2021 11:15	Conductivity	1523.96	uS/cm
GS-GSA-MW-14H	3/3/2021 11:15	DO	0.19	mg/L
GS-GSA-MW-14H	3/3/2021 11:15	Depth to Water Detail	18.56	ft
GS-GSA-MW-14H	3/3/2021 11:15	Oxidation Reduction Potention	303.69	mv
GS-GSA-MW-14H	3/3/2021 11:15	pH	4.02	SU
GS-GSA-MW-14H	3/3/2021 11:15	Temperature	19.3	C
GS-GSA-MW-14H	3/3/2021 11:15	Turbidity	4.35	NTU

Alabama Power Company
Plant Gorgas Gypsum Pond

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-GSA-PZ-17	3/3/2021 12:20	Conductivity	1085.79	uS/cm
GS-GSA-PZ-17	3/3/2021 12:20	DO	0.68	mg/L
GS-GSA-PZ-17	3/3/2021 12:20	Depth to Water Detail	45.84	ft
GS-GSA-PZ-17	3/3/2021 12:20	Oxidation Reduction Potention	216.54	mv
GS-GSA-PZ-17	3/3/2021 12:20	pH	4.09	SU
GS-GSA-PZ-17	3/3/2021 12:20	Temperature	19.16	C
GS-GSA-PZ-17	3/3/2021 12:20	Turbidity	2.12	NTU
GS-GSA-PZ-17	3/3/2021 12:25	Conductivity	974.74	uS/cm
GS-GSA-PZ-17	3/3/2021 12:25	DO	0.63	mg/L
GS-GSA-PZ-17	3/3/2021 12:25	Depth to Water Detail	45.85	ft
GS-GSA-PZ-17	3/3/2021 12:25	Oxidation Reduction Potention	334.29	mv
GS-GSA-PZ-17	3/3/2021 12:25	pH	3.73	SU
GS-GSA-PZ-17	3/3/2021 12:25	Temperature	19.33	C
GS-GSA-PZ-17	3/3/2021 12:25	Turbidity	1.02	NTU
GS-GSA-PZ-17	3/3/2021 12:30	Conductivity	932.09	uS/cm
GS-GSA-PZ-17	3/3/2021 12:30	DO	0.53	mg/L
GS-GSA-PZ-17	3/3/2021 12:30	Depth to Water Detail	45.86	ft
GS-GSA-PZ-17	3/3/2021 12:30	Oxidation Reduction Potention	364.27	mv
GS-GSA-PZ-17	3/3/2021 12:30	pH	3.63	SU
GS-GSA-PZ-17	3/3/2021 12:30	Temperature	19.24	C
GS-GSA-PZ-17	3/3/2021 12:30	Turbidity	0.99	NTU
GS-GSA-PZ-17	3/3/2021 12:35	Conductivity	859.84	uS/cm
GS-GSA-PZ-17	3/3/2021 12:35	DO	0.54	mg/L
GS-GSA-PZ-17	3/3/2021 12:35	Depth to Water Detail	45.86	ft
GS-GSA-PZ-17	3/3/2021 12:35	Oxidation Reduction Potention	339.11	mv
GS-GSA-PZ-17	3/3/2021 12:35	pH	3.75	SU
GS-GSA-PZ-17	3/3/2021 12:35	Temperature	19.23	C
GS-GSA-PZ-17	3/3/2021 12:35	Turbidity	0.84	NTU
GS-GSA-PZ-17	3/3/2021 12:40	Conductivity	792.07	uS/cm
GS-GSA-PZ-17	3/3/2021 12:40	DO	0.49	mg/L
GS-GSA-PZ-17	3/3/2021 12:40	Depth to Water Detail	45.87	ft
GS-GSA-PZ-17	3/3/2021 12:40	Oxidation Reduction Potention	325.48	mv
GS-GSA-PZ-17	3/3/2021 12:40	pH	3.9	SU
GS-GSA-PZ-17	3/3/2021 12:40	Temperature	19.36	C
GS-GSA-PZ-17	3/3/2021 12:40	Turbidity	0.76	NTU
GS-GSA-PZ-17	3/3/2021 12:45	Conductivity	745.87	uS/cm
GS-GSA-PZ-17	3/3/2021 12:45	DO	0.47	mg/L
GS-GSA-PZ-17	3/3/2021 12:45	Depth to Water Detail	45.87	ft
GS-GSA-PZ-17	3/3/2021 12:45	Oxidation Reduction Potention	311.29	mv
GS-GSA-PZ-17	3/3/2021 12:45	pH	4.03	SU
GS-GSA-PZ-17	3/3/2021 12:45	Temperature	19.42	C
GS-GSA-PZ-17	3/3/2021 12:45	Turbidity	0.29	NTU
GS-GSA-PZ-17	3/3/2021 12:50	Conductivity	714.98	uS/cm
GS-GSA-PZ-17	3/3/2021 12:50	DO	0.42	mg/L

Alabama Power Company
Plant Gorgas Gypsum Pond

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-GSA-PZ-17	3/3/2021 12:50	Depth to Water Detail	45.88	ft
GS-GSA-PZ-17	3/3/2021 12:50	Oxidation Reduction Potention	304.75	mv
GS-GSA-PZ-17	3/3/2021 12:50	pH	4.12	SU
GS-GSA-PZ-17	3/3/2021 12:50	Temperature	19.52	C
GS-GSA-PZ-17	3/3/2021 12:50	Turbidity	0.26	NTU
GS-GSA-PZ-17	3/3/2021 12:55	Conductivity	697.02	uS/cm
GS-GSA-PZ-17	3/3/2021 12:55	DO	0.42	mg/L
GS-GSA-PZ-17	3/3/2021 12:55	Depth to Water Detail	45.89	ft
GS-GSA-PZ-17	3/3/2021 12:55	Oxidation Reduction Potention	298.73	mv
GS-GSA-PZ-17	3/3/2021 12:55	pH	4.19	SU
GS-GSA-PZ-17	3/3/2021 12:55	Temperature	19.49	C
GS-GSA-PZ-17	3/3/2021 12:55	Turbidity	0.21	NTU
GS-GSA-PZ-17	3/3/2021 13:00	Conductivity	691.26	uS/cm
GS-GSA-PZ-17	3/3/2021 13:00	DO	0.41	mg/L
GS-GSA-PZ-17	3/3/2021 13:00	Depth to Water Detail	45.89	ft
GS-GSA-PZ-17	3/3/2021 13:00	Oxidation Reduction Potention	297.58	mv
GS-GSA-PZ-17	3/3/2021 13:00	pH	4.21	SU
GS-GSA-PZ-17	3/3/2021 13:00	Temperature	19.35	C
GS-GSA-PZ-17	3/3/2021 13:00	Turbidity	0.26	NTU

Alabama Power Company
Plant Gorgas Gypsum Pond

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
MW-1	2/22/2021 10:24	Conductivity	2346.35	uS/cm
MW-1	2/22/2021 10:24	DO	1.16	mg/L
MW-1	2/22/2021 10:24	Depth to Water Detail	92.76	ft
MW-1	2/22/2021 10:24	Oxidation Reduction Potention	154.15	mv
MW-1	2/22/2021 10:24	pH	5.01	SU
MW-1	2/22/2021 10:24	Temperature	18.91	C
MW-1	2/22/2021 10:24	Turbidity	1.02	NTU
MW-1	2/22/2021 10:29	Conductivity	2363.24	uS/cm
MW-1	2/22/2021 10:29	DO	1.09	mg/L
MW-1	2/22/2021 10:29	Depth to Water Detail	92.96	ft
MW-1	2/22/2021 10:29	Oxidation Reduction Potention	167.13	mv
MW-1	2/22/2021 10:29	pH	5.02	SU
MW-1	2/22/2021 10:29	Temperature	18.92	C
MW-1	2/22/2021 10:29	Turbidity	0.51	NTU
MW-1	2/22/2021 10:34	Conductivity	2365.14	uS/cm
MW-1	2/22/2021 10:34	DO	0.89	mg/L
MW-1	2/22/2021 10:34	Depth to Water Detail	93.06	ft
MW-1	2/22/2021 10:34	Oxidation Reduction Potention	182.76	mv
MW-1	2/22/2021 10:34	pH	5.04	SU
MW-1	2/22/2021 10:34	Temperature	18.94	C
MW-1	2/22/2021 10:34	Turbidity	0.46	NTU
MW-1	2/22/2021 10:39	Conductivity	2365.94	uS/cm
MW-1	2/22/2021 10:39	DO	0.83	mg/L
MW-1	2/22/2021 10:39	Depth to Water Detail	93.06	ft
MW-1	2/22/2021 10:39	Oxidation Reduction Potention	191.62	mv
MW-1	2/22/2021 10:39	pH	5.06	SU
MW-1	2/22/2021 10:39	Temperature	18.96	C
MW-1	2/22/2021 10:39	Turbidity	0.28	NTU
MW-1	2/22/2021 10:44	Conductivity	2369.76	uS/cm
MW-1	2/22/2021 10:44	DO	0.81	mg/L
MW-1	2/22/2021 10:44	Depth to Water Detail	93.06	ft
MW-1	2/22/2021 10:44	Oxidation Reduction Potention	201.77	mv
MW-1	2/22/2021 10:44	pH	5.06	SU
MW-1	2/22/2021 10:44	Temperature	19.04	C
MW-1	2/22/2021 10:44	Turbidity	0.4	NTU

Alabama Power Company
Plant Gorgas Gypsum Pond

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
MW-2	2/22/2021 11:29	Conductivity	1939.56	uS/cm
MW-2	2/22/2021 11:29	DO	0.19	mg/L
MW-2	2/22/2021 11:29	Depth to Water Detail	83.67	ft
MW-2	2/22/2021 11:29	Oxidation Reduction Potention	103.6	mv
MW-2	2/22/2021 11:29	pH	5.96	SU
MW-2	2/22/2021 11:29	Temperature	18.62	C
MW-2	2/22/2021 11:29	Turbidity	7.81	NTU
MW-2	2/22/2021 11:34	Conductivity	1939.67	uS/cm
MW-2	2/22/2021 11:34	DO	0.17	mg/L
MW-2	2/22/2021 11:34	Depth to Water Detail	83.67	ft
MW-2	2/22/2021 11:34	Oxidation Reduction Potention	89.47	mv
MW-2	2/22/2021 11:34	pH	5.99	SU
MW-2	2/22/2021 11:34	Temperature	18.76	C
MW-2	2/22/2021 11:34	Turbidity	2.96	NTU
MW-2	2/22/2021 11:39	Conductivity	1941.57	uS/cm
MW-2	2/22/2021 11:39	DO	0.17	mg/L
MW-2	2/22/2021 11:39	Depth to Water Detail	83.67	ft
MW-2	2/22/2021 11:39	Oxidation Reduction Potention	82.21	mv
MW-2	2/22/2021 11:39	pH	6.05	SU
MW-2	2/22/2021 11:39	Temperature	18.71	C
MW-2	2/22/2021 11:39	Turbidity	2.02	NTU
MW-2	2/22/2021 11:44	Conductivity	1939.81	uS/cm
MW-2	2/22/2021 11:44	DO	0.17	mg/L
MW-2	2/22/2021 11:44	Depth to Water Detail	83.67	ft
MW-2	2/22/2021 11:44	Oxidation Reduction Potention	86.94	mv
MW-2	2/22/2021 11:44	pH	6.1	SU
MW-2	2/22/2021 11:44	Temperature	18.7	C
MW-2	2/22/2021 11:44	Turbidity	1.49	NTU

Alabama Power Company
Plant Gorgas Gypsum Pond

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
MW-3	2/22/2021 12:29	Conductivity	3231.87	uS/cm
MW-3	2/22/2021 12:29	DO	7.83	mg/L
MW-3	2/22/2021 12:29	Depth to Water Detail	106.14	ft
MW-3	2/22/2021 12:29	Oxidation Reduction Potention	152.47	mv
MW-3	2/22/2021 12:29	pH	5	SU
MW-3	2/22/2021 12:29	Temperature	19.62	C
MW-3	2/22/2021 12:29	Turbidity	3.46	NTU
MW-3	2/22/2021 12:34	Conductivity	4206.45	uS/cm
MW-3	2/22/2021 12:34	DO	7.2	mg/L
MW-3	2/22/2021 12:34	Depth to Water Detail	106.16	ft
MW-3	2/22/2021 12:34	Oxidation Reduction Potention	158.51	mv
MW-3	2/22/2021 12:34	pH	5.35	SU
MW-3	2/22/2021 12:34	Temperature	19.66	C
MW-3	2/22/2021 12:34	Turbidity	8.06	NTU
MW-3	2/22/2021 12:39	Conductivity	4437.9	uS/cm
MW-3	2/22/2021 12:39	DO	7.05	mg/L
MW-3	2/22/2021 12:39	Depth to Water Detail	106.21	ft
MW-3	2/22/2021 12:39	Oxidation Reduction Potention	158.91	mv
MW-3	2/22/2021 12:39	pH	5.52	SU
MW-3	2/22/2021 12:39	Temperature	19.94	C
MW-3	2/22/2021 12:39	Turbidity	6.8	NTU
MW-3	2/22/2021 12:44	Conductivity	4450.29	uS/cm
MW-3	2/22/2021 12:44	DO	6.95	mg/L
MW-3	2/22/2021 12:44	Depth to Water Detail	106.23	ft
MW-3	2/22/2021 12:44	Oxidation Reduction Potention	160.86	mv
MW-3	2/22/2021 12:44	pH	5.56	SU
MW-3	2/22/2021 12:44	Temperature	19.61	C
MW-3	2/22/2021 12:44	Turbidity	6.17	NTU
MW-3	2/22/2021 12:49	Conductivity	4417.53	uS/cm
MW-3	2/22/2021 12:49	DO	6.92	mg/L
MW-3	2/22/2021 12:49	Depth to Water Detail	106.24	ft
MW-3	2/22/2021 12:49	Oxidation Reduction Potention	163.37	mv
MW-3	2/22/2021 12:49	pH	5.59	SU
MW-3	2/22/2021 12:49	Temperature	19.81	C
MW-3	2/22/2021 12:49	Turbidity	2.88	NTU

Alabama Power Company
Plant Gorgas Gypsum Pond

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
MW-4	2/22/2021 13:39	Conductivity	3379.93	uS/cm
MW-4	2/22/2021 13:39	DO	1.76	mg/L
MW-4	2/22/2021 13:39	Depth to Water Detail	115.84	ft
MW-4	2/22/2021 13:39	Oxidation Reduction Potention	153.42	mv
MW-4	2/22/2021 13:39	pH	6.06	SU
MW-4	2/22/2021 13:39	Temperature	19.91	C
MW-4	2/22/2021 13:39	Turbidity	5.31	NTU
MW-4	2/22/2021 13:44	Conductivity	3358.45	uS/cm
MW-4	2/22/2021 13:44	DO	2.41	mg/L
MW-4	2/22/2021 13:44	Depth to Water Detail	115.84	ft
MW-4	2/22/2021 13:44	Oxidation Reduction Potention	150.01	mv
MW-4	2/22/2021 13:44	pH	6.09	SU
MW-4	2/22/2021 13:44	Temperature	19.85	C
MW-4	2/22/2021 13:44	Turbidity	2.84	NTU
MW-4	2/22/2021 13:49	Conductivity	3349.61	uS/cm
MW-4	2/22/2021 13:49	DO	3.14	mg/L
MW-4	2/22/2021 13:49	Depth to Water Detail	115.84	ft
MW-4	2/22/2021 13:49	Oxidation Reduction Potention	149.42	mv
MW-4	2/22/2021 13:49	pH	6.13	SU
MW-4	2/22/2021 13:49	Temperature	19.9	C
MW-4	2/22/2021 13:49	Turbidity	1.83	NTU
MW-4	2/22/2021 13:54	Conductivity	3344.62	uS/cm
MW-4	2/22/2021 13:54	DO	3.37	mg/L
MW-4	2/22/2021 13:54	Depth to Water Detail	115.84	ft
MW-4	2/22/2021 13:54	Oxidation Reduction Potention	149.86	mv
MW-4	2/22/2021 13:54	pH	6.16	SU
MW-4	2/22/2021 13:54	Temperature	19.96	C
MW-4	2/22/2021 13:54	Turbidity	1.29	NTU
MW-4	2/22/2021 13:59	Conductivity	3341.45	uS/cm
MW-4	2/22/2021 13:59	DO	3.52	mg/L
MW-4	2/22/2021 13:59	Depth to Water Detail	115.84	ft
MW-4	2/22/2021 13:59	Oxidation Reduction Potention	151.68	mv
MW-4	2/22/2021 13:59	pH	6.18	SU
MW-4	2/22/2021 13:59	Temperature	19.91	C
MW-4	2/22/2021 13:59	Turbidity	1.46	NTU
MW-4	2/22/2021 14:04	Conductivity	3340.97	uS/cm
MW-4	2/22/2021 14:04	DO	3.59	mg/L
MW-4	2/22/2021 14:04	Depth to Water Detail	115.84	ft
MW-4	2/22/2021 14:04	Oxidation Reduction Potention	151.86	mv
MW-4	2/22/2021 14:04	pH	6.19	SU
MW-4	2/22/2021 14:04	Temperature	19.93	C
MW-4	2/22/2021 14:04	Turbidity	0.75	NTU

2nd
Semi-Annual
Monitoring Event

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

2021 Compliance Event 2

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

Heavy truck traffic was present when pumping and sampling next well PZ-17.

Field quality control procedures were performed as follows:

- Blanks and Sample Duplicates were collected as described in the SAP.
    - Field Blank 2 (FB-2) had a result above the reporting limit (RL) for Manganese.

- 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
205-664-6001

Analytical Report

Alabama Power

Sample Group : WMWGORG_1329

Project/Site : Gorgas Gypsum
Parrish, AL 35580

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

Attention : Dustin Brooks & Greg Dyer

Released By : Laura Midkiff
lbmidkif@southernco.com
(205) 664-6197

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

August 17, 2021

Dear Dustin Brooks,

Enclosed are the analytical results for sample(s) received by the laboratory between July 14, 2021 and July 15, 2021. All results reported herein conform to the laboratory's most current Quality Assurance Manual. Results marked with an asterisk conform to the most current applicable TNI/NELAC requirements. Exceptions will be noted in the body of the report.

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

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

Sincerely,

Quality Control: Laura Midkiff
Digitally signed by Laura Midkiff
DN: cn=Laura Midkiff, o=Alabama Power Company, ou=Environmental Affairs, email=lbmidkif@southernco.com, c=US
Date: 2021.08.17 16:54:54 -05'00'

Supervision: T. Durant Maske
Digitally signed by T. Durant Maske
DN: cn=T. Durant Maske, o=Alabama Power Company, ou=Environmental Affairs, email=tdmaske@southernco.com, c=US
Date: 2021.08.18 08:09:49 -05'00'

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

Case Narrative

Alabama Power

Total Metals ICP

Gorgas Gypsum

WMWGORG_1329

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
BB12695	703441	WMWGORG_1329
BB12696	703441	WMWGORG_1329
BB12762	703441	WMWGORG_1329
BB12763	703441	WMWGORG_1329
BB12764	703441	WMWGORG_1329
BB12765	703441	WMWGORG_1329
BB12766	703441	WMWGORG_1329
BB12767	703441	WMWGORG_1329
BB12768	703441	WMWGORG_1329
BB12769	703441	WMWGORG_1329
BB12770	703442	WMWGORG_1329
BB12771	703442	WMWGORG_1329
BB12772	703442	WMWGORG_1329
BB12773	703442	WMWGORG_1329
BB12835	703442	WMWGORG_1329
BB12836	703442	WMWGORG_1329
BB12837	703442	WMWGORG_1329
BB12838	703442	WMWGORG_1329
BB12839	703442	WMWGORG_1329
BB12840	703442	WMWGORG_1329
BB12841	703443	WMWGORG_1329
BB12842	703443	WMWGORG_1329
BB12843	703443	WMWGORG_1329
BB12844	703443	WMWGORG_1329

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

General Quality Control Procedures:

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

Matrix Specific Quality Control Procedures:

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

- A matrix spike and matrix spike duplicate were digested and analyzed with each ICP batch. All acceptance criteria for accuracy were met, except for the following:
    - BB12769 Sodium MS/MSD spike level was less than 30% of the sample concentration.
    - BB12840 Calcium, Iron, and Magnesium 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
BB12695	Iron, Magnesium, Sodium	10.15
BB12695	Calcium	101.5
BB12696	Sodium	101.5
BB12762	Calcium, Iron, Magnesium	10.15
BB12763	Calcium, Iron, Magnesium	10.15
BB12764	Calcium, Iron, Magnesium	10.15
BB12765	Calcium, Iron, Magnesium	10.15
BB12767	Calcium, Iron, Magnesium	10.15
BB12768	Calcium, Iron, Magnesium	10.15
BB12769	Sodium	10.15
BB12770	Calcium	10.15
BB12770	Iron	101.5
BB12771	Calcium, Iron, Magnesium, Sodium	10.15
BB12772	Calcium, Magnesium, Sodium	10.15
BB12835	Magnesium	10.15
BB12835	Calcium, Sodium	101.5
BB12836	Boron, Calcium, Iron, Magnesium, Sodium	10.15
BB12837	Calcium, Iron, Magnesium	10.15
BB12838	Calcium, Iron, Magnesium	10.15
BB12838	Sodium	101.5
BB12839	Calcium, Magnesium, Sodium	10.15
BB12840	Calcium, Iron, Magnesium, Sodium	10.15
BB12841	Calcium, Iron, Magnesium, Sodium	10.15
BB12842	Magnesium	10.15
BB12842	Calcium, Iron, Sodium	101.5
BB12843	Iron, Magnesium	10.15
BB12843	Calcium, Sodium	101.5

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

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

Case Narrative

Alabama Power

Dissolved Metals ICP

Gorgas Gypsum

WMWGORG_1329

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
BB12695	703500	WMWGORG_1329
BB12696	703500	WMWGORG_1329
BB12762	703500	WMWGORG_1329
BB12763	703500	WMWGORG_1329
BB12764	703500	WMWGORG_1329
BB12765	703500	WMWGORG_1329
BB12767	703500	WMWGORG_1329
BB12768	703500	WMWGORG_1329
BB12769	703500	WMWGORG_1329
BB12770	703500	WMWGORG_1329
BB12771	703501	WMWGORG_1329
BB12772	703501	WMWGORG_1329
BB12835	703501	WMWGORG_1329
BB12836	703501	WMWGORG_1329
BB12837	703501	WMWGORG_1329
BB12838	703501	WMWGORG_1329
BB12839	703501	WMWGORG_1329
BB12840	703501	WMWGORG_1329
BB12841	703501	WMWGORG_1329
BB12842	703501	WMWGORG_1329
BB12843	703502	WMWGORG_1329

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

General Quality Control Procedures:

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

Matrix Specific Quality Control Procedures:

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

- A matrix spike and matrix spike duplicate were analyzed with each ICP batch. All acceptance criteria for accuracy were met, except for the following:
    - BB12770, BB12842, and BB12843 Iron 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
BB12695	Iron	10.15
BB12762	Iron	10.15
BB12763	Iron	10.15
BB12764	Iron	10.15
BB12765	Iron	10.15
BB12767	Iron	10.15
BB12768	Iron	10.15
BB12770	Iron	101.5
BB12771	Iron	10.15
BB12836	Iron	10.15
BB12838	Iron	10.15
BB12840	Iron	10.15
BB12841	Iron	10.15
BB12842	Iron	101.5
BB12843	Iron	10.15

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

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

Case Narrative

Alabama Power

Total Metals ICPMS

Gorgas Gypsum

WMWGORG_1329

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
BB12695	703552	WMWGORG_1329
BB12696	703552	WMWGORG_1329
BB12762	703552	WMWGORG_1329
BB12763	703552	WMWGORG_1329
BB12764	703552	WMWGORG_1329
BB12765	703552	WMWGORG_1329
BB12766	703552	WMWGORG_1329
BB12767	703552	WMWGORG_1329
BB12768	703552	WMWGORG_1329
BB12769	703552	WMWGORG_1329
BB12770	703553	WMWGORG_1329
BB12771	703553	WMWGORG_1329
BB12772	703553	WMWGORG_1329
BB12773	703553	WMWGORG_1329
BB12835	703553	WMWGORG_1329
BB12836	703553	WMWGORG_1329
BB12837	703553	WMWGORG_1329
BB12838	703553	WMWGORG_1329
BB12839	703553	WMWGORG_1329
BB12840	703553	WMWGORG_1329
BB12841	703554	WMWGORG_1329
BB12842	703554	WMWGORG_1329
BB12843	703554	WMWGORG_1329
BB12844	703554	WMWGORG_1329

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.

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:
    - BB12769 and BB12840 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
BB12695	Manganese	92.365
BB12762	Manganese	5.075
BB12763	Manganese	10.15
BB12764	Manganese	10.15
BB12765	Manganese	10.15
BB12767	Manganese	92.365
BB12768	Manganese	5.075
BB12769	Manganese	5.075
BB12770	Manganese	5.075
BB12771	Manganese	5.075
BB12835	Manganese	5.075
BB12836	Manganese	92.365
BB12837	Manganese	92.365
BB12838	Manganese	92.365
BB12839	Manganese	5.075
BB12840	Manganese	92.365
BB12841	Manganese	92.365
BB12842	Manganese	92.365
BB12843	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_1329

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
BB12695	703507	WMWGORG_1329
BB12696	703507	WMWGORG_1329
BB12762	703507	WMWGORG_1329
BB12763	703507	WMWGORG_1329
BB12764	703507	WMWGORG_1329
BB12765	703507	WMWGORG_1329
BB12767	703507	WMWGORG_1329
BB12768	703507	WMWGORG_1329
BB12769	703507	WMWGORG_1329
BB12770	703507	WMWGORG_1329
BB12771	703508	WMWGORG_1329
BB12772	703508	WMWGORG_1329
BB12835	703508	WMWGORG_1329
BB12836	703508	WMWGORG_1329
BB12837	703508	WMWGORG_1329
BB12838	703508	WMWGORG_1329
BB12839	703508	WMWGORG_1329
BB12840	703508	WMWGORG_1329
BB12841	703508	WMWGORG_1329
BB12842	703508	WMWGORG_1329
BB12843	703509	WMWGORG_1329

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.

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:
    - BB12770, BB12842, and BB12843 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
BB12695	Manganese	92.365
BB12762	Manganese	5.075
BB12763	Manganese	10.15
BB12764	Manganese	10.15
BB12765	Manganese	10.15
BB12767	Manganese	92.365
BB12768	Manganese	5.075
BB12769	Manganese	5.075
BB12770	Manganese	5.075
BB12771	Manganese	5.075
BB12835	Manganese	5.075
BB12836	Manganese	92.365
BB12837	Manganese	92.365
BB12838	Manganese	92.365
BB12839	Manganese	5.075
BB12840	Manganese	92.365
BB12841	Manganese	92.365
BB12842	Manganese	92.365
BB12843	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_1329

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
BB12695	702845	WMWGORG_1329
BB12696	702845	WMWGORG_1329
BB12762	702845	WMWGORG_1329
BB12763	702845	WMWGORG_1329
BB12764	702845	WMWGORG_1329
BB12765	702845	WMWGORG_1329
BB12766	702845	WMWGORG_1329
BB12767	702845	WMWGORG_1329
BB12768	702845	WMWGORG_1329
BB12769	702845	WMWGORG_1329
BB12770	702846	WMWGORG_1329
BB12771	702846	WMWGORG_1329
BB12772	702846	WMWGORG_1329
BB12773	702846	WMWGORG_1329
BB12835	702846	WMWGORG_1329
BB12836	702846	WMWGORG_1329
BB12837	702846	WMWGORG_1329
BB12838	702846	WMWGORG_1329
BB12839	702846	WMWGORG_1329
BB12840	702846	WMWGORG_1329
BB12841	702847	WMWGORG_1329
BB12842	702847	WMWGORG_1329
BB12843	702847	WMWGORG_1329
BB12844	702847	WMWGORG_1329

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

General Quality Control Procedures:

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

Matrix Specific Quality Control Procedures:

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

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

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

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

Case Narrative

Alabama Power

TDS

Gorgas Gypsum

WMWGORG_1329

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
BB12695	702875	WMWGORG_1329
BB12696	702875	WMWGORG_1329
BB12762	702875	WMWGORG_1329
BB12763	702875	WMWGORG_1329
BB12764	702876	WMWGORG_1329
BB12765	702876	WMWGORG_1329
BB12766	702876	WMWGORG_1329
BB12767	702876	WMWGORG_1329
BB12768	702876	WMWGORG_1329
BB12769	702876	WMWGORG_1329
BB12770	702876	WMWGORG_1329
BB12771	702876	WMWGORG_1329
BB12772	702876	WMWGORG_1329
BB12773	702876	WMWGORG_1329
BB12835	702875	WMWGORG_1329
BB12836	702875	WMWGORG_1329
BB12837	702969	WMWGORG_1329
BB12838	702969	WMWGORG_1329
BB12839	702969	WMWGORG_1329
BB12840	702969	WMWGORG_1329
BB12841	702969	WMWGORG_1329
BB12842	702969	WMWGORG_1329
BB12843	702969	WMWGORG_1329
BB12844	702969	WMWGORG_1329

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

General Quality Control Procedures:

- A Method Blank was analyzed with each batch. All criteria were met.
- All final weights of samples, standards, and blanks agreed within 0.5mg of the previous weight.
- A sample duplicate was analyzed with each batch. RPD/2 was less than 5%.
- A laboratory control sample was analyzed with each batch. All criteria were met.
- Samples were between 2.5mg and 200mg residue.
- All samples with residue <2.5mg had the maximum volume of 150mL filtered. Affected samples are as follows:
    - BB12766
    - BB12773
    - BB12844

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

Case Narrative

Alabama Power

Anions

Gorgas Gypsum

WMWGORG_1329

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
BB12695	703254, 702965, 703369	WMWGORG_1329
BB12696	703254, 702965, 703369	WMWGORG_1329
BB12762	703254, 702966, 703369	WMWGORG_1329
BB12763	703254, 702966, 703369	WMWGORG_1329
BB12764	703254, 702966, 703369	WMWGORG_1329
BB12765	703254, 702966, 703369	WMWGORG_1329
BB12766	703254, 702966, 703369	WMWGORG_1329
BB12767	703254, 702966, 703369	WMWGORG_1329
BB12768	703254, 702967, 703369	WMWGORG_1329
BB12769	703254, 702967, 703369	WMWGORG_1329
BB12770	703255, 702967, 703370	WMWGORG_1329
BB12771	703255, 702967, 703370	WMWGORG_1329
BB12772	703255, 702967, 703370	WMWGORG_1329
BB12773	703255, 702967, 703370	WMWGORG_1329
BB12835	703255, 703257, 703370	WMWGORG_1329
BB12836	703255, 703257, 703370	WMWGORG_1329
BB12837	703255, 703257, 703370	WMWGORG_1329
BB12838	703255, 703257, 703370	WMWGORG_1329
BB12839	703255, 703257, 703370	WMWGORG_1329
BB12840	703255, 703257, 703370	WMWGORG_1329
BB12841	703256, 703257, 703371	WMWGORG_1329
BB12842	703256, 703257, 703371	WMWGORG_1329
BB12843	703256, 703257, 703371	WMWGORG_1329
BB12844	703256, 703257, 703371	WMWGORG_1329

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

General Quality Control Procedures:

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

Matrix Specific Quality Control Procedures:

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

- A matrix spike was analyzed with each batch. Acceptance criteria for accuracy were met, except for the following:
    - BB12767 Fluoride MS recovery was outside of the specification limit due to potential matrix interference.
- A sample duplicate was analyzed with each batch. 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
BB12695	Chloride & Sulfate	16 & 80
BB12696	Sulfate	16
BB12762	Sulfate	32
BB12763	Sulfate	40
BB12764	Sulfate	40
BB12765	Sulfate	40
BB12767	Chloride & Sulfate	16 & 40
BB12768	Chloride & Sulfate	16 & 40
BB12770	Sulfate	25
BB12771	Sulfate	32
BB12772	Sulfate	20
BB12835	Chloride & Sulfate	10 & 50
BB12836	Chloride & Sulfate	10 & 50
BB12837	Sulfate	40
BB12838	Chloride & Sulfate	16 & 80
BB12839	Sulfate	40
BB12840	Sulfate	50
BB12841	Sulfate	40
BB12842	Chloride & Sulfate	40 & 160
BB12843	Chloride & Sulfate	40 & 100

8. The raw data results are shown with dilution factors included.
9. Samples BB12762, BB12763, and BB12767 Fluoride results are qualified due to potential matrix interference.

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

Case Narrative

Alabama Power

Alkalinity

Gorgas Gypsum

WMWGORG_1329

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
BB12695	703277 & 703278	WMWGORG_1329
BB12696	703277 & 703278	WMWGORG_1329
BB12762	703277 & 703278	WMWGORG_1329
BB12763	703277 & 703278	WMWGORG_1329
BB12764	703277 & 703278	WMWGORG_1329
BB12765	703277 & 703278	WMWGORG_1329
BB12767	703277 & 703278	WMWGORG_1329
BB12768	703277 & 703278	WMWGORG_1329
BB12769	703277 & 703278	WMWGORG_1329
BB12770	703277 & 703278	WMWGORG_1329
BB12771	703277 & 703278	WMWGORG_1329
BB12772	703277 & 703278	WMWGORG_1329
BB12835	703277 & 703278	WMWGORG_1329
BB12836	703277 & 703278	WMWGORG_1329
BB12837	703277 & 703278	WMWGORG_1329
BB12838	703277 & 703278	WMWGORG_1329
BB12839	703277 & 703278	WMWGORG_1329
BB12840	703277 & 703278	WMWGORG_1329
BB12841	703277 & 703278	WMWGORG_1329
BB12842	703277 & 703278	WMWGORG_1329
BB12843	703275 & 703276	WMWGORG_1329

4. All of the above samples were analyzed by Standard Method 2320B, except for the following:
    - Samples BB12762-65, BB12767, and BB12837 were not performed for Alkalinity due to the initial pH readings were below the titration end point of 4.5 SU.
5. All samples were analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

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

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Gypsum - MW-8

Location Code: WMWGORG
Collected: 7/14/21 10:52
Customer ID:
Submittal Date: 7/14/21 16:11

Laboratory ID Number: BB12695

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	7/21/21 12:22	7/22/21 16:52		1.015	2.07	mg/L	0.030000	0.1015	
* Calcium, Total	7/21/21 12:22	7/23/21 12:19		101.5	444	mg/L	7.0035	40.6	
* Iron, Total	7/21/21 12:22	7/23/21 11:45		10.15	16.5	mg/L	0.08120	0.406	
* Lithium, Total	7/21/21 12:22	7/22/21 16:52		1.015	0.213	mg/L	0.007105	0.01999956	
* Magnesium, Total	7/21/21 12:22	7/23/21 11:45		10.15	290	mg/L	0.21315	4.06	
* Sodium, Total	7/21/21 12:22	7/23/21 11:45		10.15	183	mg/L	0.3045	4.06	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Iron, Dissolved	7/27/21 09:49	7/27/21 13:47		10.15	15.7	mg/L	0.08120	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	7/16/21 07:47	7/16/21 16:44		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Arsenic, Total	7/16/21 07:47	7/16/21 16:44		1.015	0.000238	mg/L	0.000068	0.000203	
* Barium, Total	7/16/21 07:47	7/16/21 16:44		1.015	0.0232	mg/L	0.000102	0.000203	
* Beryllium, Total	7/16/21 07:47	7/16/21 16:44		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	7/16/21 07:47	7/16/21 16:44		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	7/16/21 07:47	7/16/21 16:44		1.015	0.000302	mg/L	0.000203	0.001015	J
* Cobalt, Total	7/16/21 07:47	7/16/21 16:44		1.015	0.000262	mg/L	0.000068	0.000203	
* Lead, Total	7/16/21 07:47	7/16/21 16:44		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Molybdenum, Total	7/16/21 07:47	7/16/21 16:44		1.015	0.000151	mg/L	0.000068	0.000203	J
* Potassium, Total	7/16/21 07:47	7/16/21 16:44		1.015	7.68	mg/L	0.169505	0.5075	
* Manganese, Total	7/16/21 07:47	7/22/21 13:12		92.365	16.2	mg/L	0.006188	0.018473	
* Selenium, Total	7/16/21 07:47	7/16/21 16:44		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	7/16/21 07:47	7/16/21 16:44		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Manganese, Dissolved	7/16/21 13:03	7/22/21 11:14		92.365	15.9	mg/L	0.006188	0.018473	
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	7/16/21 08:25	7/16/21 11:54		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2320 B	***Analyst: JAG***								
Alkalinity, Total as CaCO3	7/22/21 08:56	7/22/21 10:25		1	523	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	7/16/21 13:57	7/19/21 13:55		1	3150	mg/L		208.3	

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

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 8/17/21

Reported: 8/17/2021
Version: 3.3
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: 7/14/21 10:52
Customer ID:
Submittal Date: 7/14/21 16:11

Laboratory ID Number: BB12695

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 4500CO2 D	***Analyst: JAG***								
Bicarbonate Alkalinity, (calc.)	7/22/21 08:56	7/22/21 10:25		1	522	mg/L			
Carbonate Alkalinity, (calc.)	7/22/21 08:56	7/22/21 10:25		1	0.59	mg/L			
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	7/20/21 13:53	7/20/21 13:53		16	129	mg/L	8.00	16	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	7/15/21 10:36	7/15/21 10:36		1	0.221	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	7/23/21 09:59	7/23/21 09:59		80	1700	mg/L	40.00	80	
Analytical Method: Field Measurements	***Analyst: AWG***								
Conductivity	7/14/21 10:48	7/14/21 10:48			3379.55	uS/cm			FA
pH	7/14/21 10:48	7/14/21 10:48			6.88	SU			FA
Temperature	7/14/21 10:48	7/14/21 10:48			21.96	C			FA
Turbidity	7/14/21 10:48	7/14/21 10:48			3.46	NTU			FA

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

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 8/17/21

Reported: 8/17/2021
Version: 3.3
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: 7/14/21 10:52
Customer ID:
Delivery Date: 7/14/21 16:11

Description: Gorgas Gypsum - MW-8

Laboratory ID Number: BB12695

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB12769	Iron, Total	mg/L	2.630E-05	0.0176	0.2	3.79	3.79	0.201	0.170 to 0.230	75.0	70.0 to 130	0.00	20.0
BB12769	Mercury, Total by CVAA	mg/L	-0.00003	0.000500	0.004	0.00356	0.00355	0.00371	0.00340 to 0.00460	89.0	70.0 to 130	0.281	20.0
BB12770	Iron, Dissolved	mg/L	-0.000219	0.0176	0.2	48.3	48.5	0.197	0.170 to 0.230	-700	70.0 to 130	0.413	20.0
BB12769	Lead, Total	mg/L	0.000003	0.000147	0.100	0.108	0.107	0.112	0.0850 to 0.115	108	70.0 to 130	0.930	20.0
BB12769	Sodium, Total	mg/L	0.00119	0.0660	5.00	102	101	4.98	4.25 to 5.75	50.0	70.0 to 130	0.985	20.0
BB12769	Antimony, Total	mg/L	0.0000969	0.00100	0.100	0.0983	0.0948	0.0941	0.0850 to 0.115	98.3	70.0 to 130	3.63	20.0
BB12769	Chromium, Total	mg/L	0.0000042	0.000440	0.100	0.0984	0.0973	0.0981	0.0850 to 0.115	98.1	70.0 to 130	1.12	20.0
BB12770	Manganese, Dissolved	mg/L	0.0000584	0.000147	0.100	2.27	2.37	0.102	0.0850 to 0.115	10.0	70.0 to 130	4.31	20.0
BB12769	Selenium, Total	mg/L	-0.0000842	0.00100	0.100	0.107	0.106	0.104	0.0850 to 0.115	107	70.0 to 130	0.939	20.0
BB12769	Arsenic, Total	mg/L	0.000029	0.000147	0.100	0.110	0.109	0.105	0.0850 to 0.115	107	70.0 to 130	0.913	20.0
BB12769	Thallium, Total	mg/L	-0.000125	0.000147	0.100	0.112	0.111	0.111	0.0850 to 0.115	112	70.0 to 130	0.897	20.0
BB12769	Calcium, Total	mg/L	0.00896	0.152	5.00	41.2	41.2	5.05	4.25 to 5.75	72.0	70.0 to 130	0.00	20.0
BB12769	Potassium, Total	mg/L	-0.00182	0.367	10.0	13.1	13.0	10.5	8.50 to 11.5	104	70.0 to 130	0.766	20.0
BB12769	Cadmium, Total	mg/L	0.00000	0.000147	0.100	0.0969	0.0970	0.0995	0.0850 to 0.115	96.9	70.0 to 130	0.103	20.0
BB12769	Boron, Total	mg/L	0.000567	0.0650	1.00	1.02	1.02	0.995	0.850 to 1.15	102	70.0 to 130	0.00	20.0
BB12769	Barium, Total	mg/L	-0.0000459	0.000200	0.100	0.245	0.229	0.0970	0.0850 to 0.115	100	70.0 to 130	6.75	20.0
BB12769	Lithium, Total	mg/L	-8.650E-05	0.0154	0.200	0.244	0.244	0.199	0.170 to 0.230	113	70.0 to 130	0.00	20.0
BB12769	Beryllium, Total	mg/L	0.000106	0.000880	0.100	0.0997	0.0998	0.0993	0.0850 to 0.115	99.7	70.0 to 130	0.100	20.0
BB12769	Molybdenum, Total	mg/L	0.0000076	0.000147	0.100	0.106	0.105	0.101	0.0850 to 0.115	102	70.0 to 130	0.948	20.0
BB12769	Manganese, Total	mg/L	0.0000105	0.000147	0.100	1.96	1.92	0.102	0.0850 to 0.115	180	70.0 to 130	2.06	20.0
BB12769	Magnesium, Total	mg/L	-0.00929	0.0462	5.00	40.2	39.8	5.01	4.25 to 5.75	82.0	70.0 to 130	1.00	20.0
BB12769	Cobalt, Total	mg/L	-0.0000667	0.000147	0.100	0.0981	0.0967	0.0969	0.0850 to 0.115	96.2	70.0 to 130	1.44	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 8/17/21

Reported: 8/17/2021
Version: 3.3
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: 7/14/21 10:52
Customer ID:
Delivery Date: 7/14/21 16:11

Description: Gorgas Gypsum - MW-8

Laboratory ID Number: BB12695

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB12842	Alkalinity, Total as CaCO3	mg/L					145	53.0	45.0 to 55.0			0.692	10.0
BB12769	Sulfate	mg/L	-0.446	1.00	20.0	42.1	23.7	18.2	18.0 to 22.0	88.5	80.0 to 120	2.91	20.0
BB12769	Chloride	mg/L	-0.131	1.00	10.0	23.0	12.8	9.90	9.00 to 11.0	99.0	80.0 to 120	2.32	20.0
BB12763	Solids, Dissolved	mg/L	-2.00	25.0			1570	44.0	40.0 to 60.0			0.641	5.00
BB12696	Fluoride	mg/L	0.00742	0.100	2.50	3.08	0.318	2.59	2.25 to 2.75	110	80.0 to 120	6.39	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 8/17/21

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: 7/14/21 13:10
Customer ID:
Submittal Date: 7/14/21 16:11

Laboratory ID Number: BB12696

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	7/21/21 12:22	7/22/21 16:56		1.015	0.147	mg/L	0.030000	0.1015	
* Calcium, Total	7/21/21 12:22	7/22/21 16:56		1.015	29.0	mg/L	0.070035	0.406	
* Iron, Total	7/21/21 12:22	7/22/21 16:56		1.015	0.0270	mg/L	0.008120	0.0406	J
* Lithium, Total	7/21/21 12:22	7/22/21 16:56		1.015	0.286	mg/L	0.007105	0.01999956	
* Magnesium, Total	7/21/21 12:22	7/22/21 16:56		1.015	11.8	mg/L	0.021315	0.406	
* Sodium, Total	7/21/21 12:22	7/23/21 12:23		101.5	376	mg/L	3.045	40.6	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Iron, Dissolved	7/27/21 09:49	7/27/21 11:47		1.015	0.0817	mg/L	0.008120	0.0406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	7/16/21 07:47	7/16/21 16:47		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Arsenic, Total	7/16/21 07:47	7/16/21 16:47		1.015	0.00692	mg/L	0.000068	0.000203	
* Barium, Total	7/16/21 07:47	7/16/21 16:47		1.015	0.148	mg/L	0.000102	0.000203	
* Beryllium, Total	7/16/21 07:47	7/16/21 16:47		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	7/16/21 07:47	7/16/21 16:47		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	7/16/21 07:47	7/16/21 16:47		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	7/16/21 07:47	7/16/21 16:47		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	7/16/21 07:47	7/16/21 16:47		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Molybdenum, Total	7/16/21 07:47	7/16/21 16:47		1.015	0.000258	mg/L	0.000068	0.000203	
* Potassium, Total	7/16/21 07:47	7/16/21 16:47		1.015	3.94	mg/L	0.169505	0.5075	
* Manganese, Total	7/16/21 07:47	7/16/21 16:47		1.015	0.121	mg/L	0.000068	0.000203	
* Selenium, Total	7/16/21 07:47	7/16/21 16:47		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	7/16/21 07:47	7/16/21 16:47		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Manganese, Dissolved	7/16/21 13:03	7/16/21 19:41		1.015	0.122	mg/L	0.000068	0.000203	
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	7/16/21 08:25	7/16/21 11:57		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2320 B	***Analyst: JAG***								
Alkalinity, Total as CaCO3	7/22/21 08:56	7/22/21 10:25		1	787	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	7/16/21 13:57	7/19/21 13:55		1	1060	mg/L		75.8	

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

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 8/17/21

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: 7/14/21 13:10
Customer ID:
Submittal Date: 7/14/21 16:11

Laboratory ID Number: BB12696

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 4500CO2 D	***Analyst: JAG***								
Bicarbonate Alkalinity, (calc.)	7/22/21 08:56	7/22/21 10:25		1	780	mg/L			
Carbonate Alkalinity, (calc.)	7/22/21 08:56	7/22/21 10:25		1	7.16	mg/L			
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	7/20/21 13:42	7/20/21 13:42		1	16.7	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	7/15/21 10:37	7/15/21 10:37		1	0.339	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	7/23/21 10:00	7/23/21 10:00		16	196	mg/L	8.00	16	
Analytical Method: Field Measurements	***Analyst: AWG***								
Conductivity	7/14/21 13:04	7/14/21 13:04			1623.10	uS/cm			FA
pH	7/14/21 13:04	7/14/21 13:04			7.97	SU			FA
Temperature	7/14/21 13:04	7/14/21 13:04			25.62	C			FA
Turbidity	7/14/21 13:04	7/14/21 13:04			0.92	NTU			FA

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

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 8/17/21

Reported: 8/17/2021
Version: 3.3
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: 7/14/21 13:10
Customer ID:
Delivery Date: 7/14/21 16:11

Description: Gorgas Gypsum - MW-8V

Laboratory ID Number: BB12696

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB12769	Iron, Total	mg/L	2.630E-05	0.0176	0.2	3.79	3.79	0.201	0.170 to 0.230	75.0	70.0 to 130	0.00	20.0
BB12769	Lead, Total	mg/L	0.000003	0.000147	0.100	0.108	0.107	0.112	0.0850 to 0.115	108	70.0 to 130	0.930	20.0
BB12769	Mercury, Total by CVAA	mg/L	-0.00003	0.000500	0.004	0.00356	0.00355	0.00371	0.00340 to 0.00460	89.0	70.0 to 130	0.281	20.0
BB12770	Iron, Dissolved	mg/L	-0.000219	0.0176	0.2	48.3	48.5	0.197	0.170 to 0.230	-700	70.0 to 130	0.413	20.0
BB12770	Manganese, Dissolved	mg/L	0.0000584	0.000147	0.100	2.27	2.37	0.102	0.0850 to 0.115	10.0	70.0 to 130	4.31	20.0
BB12769	Selenium, Total	mg/L	-0.0000842	0.00100	0.100	0.107	0.106	0.104	0.0850 to 0.115	107	70.0 to 130	0.939	20.0
BB12769	Arsenic, Total	mg/L	0.000029	0.000147	0.100	0.110	0.109	0.105	0.0850 to 0.115	107	70.0 to 130	0.913	20.0
BB12769	Sodium, Total	mg/L	0.00119	0.0660	5.00	102	101	4.98	4.25 to 5.75	50.0	70.0 to 130	0.985	20.0
BB12769	Antimony, Total	mg/L	0.0000969	0.00100	0.100	0.0983	0.0948	0.0941	0.0850 to 0.115	98.3	70.0 to 130	3.63	20.0
BB12769	Chromium, Total	mg/L	0.0000042	0.000440	0.100	0.0984	0.0973	0.0981	0.0850 to 0.115	98.1	70.0 to 130	1.12	20.0
BB12769	Thallium, Total	mg/L	-0.000125	0.000147	0.100	0.112	0.111	0.111	0.0850 to 0.115	112	70.0 to 130	0.897	20.0
BB12769	Calcium, Total	mg/L	0.00896	0.152	5.00	41.2	41.2	5.05	4.25 to 5.75	72.0	70.0 to 130	0.00	20.0
BB12769	Potassium, Total	mg/L	-0.00182	0.367	10.0	13.1	13.0	10.5	8.50 to 11.5	104	70.0 to 130	0.766	20.0
BB12769	Cadmium, Total	mg/L	0.00000	0.000147	0.100	0.0969	0.0970	0.0995	0.0850 to 0.115	96.9	70.0 to 130	0.103	20.0
BB12769	Boron, Total	mg/L	0.000567	0.0650	1.00	1.02	1.02	0.995	0.850 to 1.15	102	70.0 to 130	0.00	20.0
BB12769	Barium, Total	mg/L	-0.0000459	0.000200	0.100	0.245	0.229	0.0970	0.0850 to 0.115	100	70.0 to 130	6.75	20.0
BB12769	Lithium, Total	mg/L	-8.650E-05	0.0154	0.200	0.244	0.244	0.199	0.170 to 0.230	113	70.0 to 130	0.00	20.0
BB12769	Beryllium, Total	mg/L	0.000106	0.000880	0.100	0.0997	0.0998	0.0993	0.0850 to 0.115	99.7	70.0 to 130	0.100	20.0
BB12769	Molybdenum, Total	mg/L	0.0000076	0.000147	0.100	0.106	0.105	0.101	0.0850 to 0.115	102	70.0 to 130	0.948	20.0
BB12769	Manganese, Total	mg/L	0.0000105	0.000147	0.100	1.96	1.92	0.102	0.0850 to 0.115	180	70.0 to 130	2.06	20.0
BB12769	Magnesium, Total	mg/L	-0.00929	0.0462	5.00	40.2	39.8	5.01	4.25 to 5.75	82.0	70.0 to 130	1.00	20.0
BB12769	Cobalt, Total	mg/L	-0.0000667	0.000147	0.100	0.0981	0.0967	0.0969	0.0850 to 0.115	96.2	70.0 to 130	1.44	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 8/17/21

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

Alabama Power

Batch QC Summary

Customer Account: WMWGORG
Sample Date: 7/14/21 13:10
Customer ID:
Delivery Date: 7/14/21 16:11

Description: Gorgas Gypsum - MW-8V

Laboratory ID Number: BB12696

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB12769	Chloride	mg/L	-0.131	1.00	10.0	23.0	12.8	9.90	9.00 to 11.0	99.0	80.0 to 120	2.32	20.0
BB12763	Solids, Dissolved	mg/L	-2.00	25.0			1570	44.0	40.0 to 60.0			0.641	5.00
BB12696	Fluoride	mg/L	0.00742	0.100	2.50	3.08	0.318	2.59	2.25 to 2.75	110	80.0 to 120	6.39	20.0
BB12842	Alkalinity, Total as CaCO3	mg/L					145	53.0	45.0 to 55.0			0.692	10.0
BB12769	Sulfate	mg/L	-0.446	1.00	20.0	42.1	23.7	18.2	18.0 to 22.0	88.5	80.0 to 120	2.91	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 8/17/21

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: 7/13/21 11:22
Customer ID:
Submittal Date: 7/15/21 10:32

Laboratory ID Number: BB12762

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	7/21/21 12:22	7/22/21 16:59		1.015	0.0557	mg/L	0.030000	0.1015	J
* Calcium, Total	7/21/21 12:22	7/23/21 11:49		10.15	109	mg/L	0.70035	4.06	
* Iron, Total	7/21/21 12:22	7/23/21 11:49		10.15	13.1	mg/L	0.08120	0.406	
* Lithium, Total	7/21/21 12:22	7/22/21 16:59		1.015	0.444	mg/L	0.007105	0.01999956	
* Magnesium, Total	7/21/21 12:22	7/23/21 11:49		10.15	71.2	mg/L	0.21315	4.06	
* Sodium, Total	7/21/21 12:22	7/22/21 16:59		1.015	16.1	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Iron, Dissolved	7/27/21 09:49	7/27/21 13:50		10.15	12.7	mg/L	0.08120	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	7/16/21 07:47	7/16/21 16:51		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Arsenic, Total	7/16/21 07:47	7/16/21 16:51		1.015	0.00611	mg/L	0.000068	0.000203	
* Barium, Total	7/16/21 07:47	7/16/21 16:51		1.015	0.0101	mg/L	0.000102	0.000203	
* Beryllium, Total	7/16/21 07:47	7/16/21 16:51		1.015	0.00776	mg/L	0.000406	0.001015	
* Cadmium, Total	7/16/21 07:47	7/16/21 16:51		1.015	0.000354	mg/L	0.000068	0.000203	
* Chromium, Total	7/16/21 07:47	7/16/21 16:51		1.015	0.00215	mg/L	0.000203	0.001015	
* Cobalt, Total	7/16/21 07:47	7/16/21 16:51		1.015	0.121	mg/L	0.000068	0.000203	
* Lead, Total	7/16/21 07:47	7/16/21 16:51		1.015	0.000624	mg/L	0.000068	0.000203	
* Molybdenum, Total	7/16/21 07:47	7/16/21 16:51		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Potassium, Total	7/16/21 07:47	7/16/21 16:51		1.015	3.19	mg/L	0.169505	0.5075	
* Manganese, Total	7/16/21 07:47	7/22/21 13:15		5.075	4.28	mg/L	0.000340	0.001015	
* Selenium, Total	7/16/21 07:47	7/16/21 16:51		1.015	0.00621	mg/L	0.000508	0.001015	
* Thallium, Total	7/16/21 07:47	7/16/21 16:51		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Manganese, Dissolved	7/16/21 13:03	7/22/21 11:17		5.075	4.41	mg/L	0.000340	0.001015	
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	7/16/21 08:25	7/16/21 11:59		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	7/16/21 13:57	7/19/21 13:55		1	1060	mg/L		50	
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	7/20/21 13:44	7/20/21 13:44		1	2.01	mg/L	0.50	1	

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

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified. Fluoride result is qualified due to potential matrix interference. Alkalinity could not be performed due to the initial pH reading was below the titration end point of 4.5 SU. LBM 8/17/21

Reported: 8/17/2021
Version: 3.3
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: 7/13/21 11:22
Customer ID:
Submittal Date: 7/15/21 10:32

Laboratory ID Number: BB12762

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	7/15/21 13:58	7/15/21 13:58		1	Not Detected	mg/L	0.06	0.1	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	7/23/21 10:01	7/23/21 10:01		32	675	mg/L	16.00	32	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	7/13/21 11:19	7/13/21 11:19			1210.43	uS/cm			FA
pH	7/13/21 11:19	7/13/21 11:19			3.94	SU			FA
Temperature	7/13/21 11:19	7/13/21 11:19			21.31	C			FA
Turbidity	7/13/21 11:19	7/13/21 11:19			0.1	NTU			FA

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

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified. Fluoride result is qualified due to potential matrix interference. Alkalinity could not be performed due to the initial pH reading was below the titration end point of 4.5 SU. LBM 8/17/21

Reported: 8/17/2021
Version: 3.3
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: 7/13/21 11:22
Customer ID:
Delivery Date: 7/15/21 10:32

Description: Gorgas Gypsum - PZ-18

Laboratory ID Number: BB12762

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB12769	Iron, Total	mg/L	2.630E-05	0.0176	0.2	3.79	3.79	0.201	0.170 to 0.230	75.0	70.0 to 130	0.00	20.0
BB12770	Manganese, Dissolved	mg/L	0.0000584	0.000147	0.100	2.27	2.37	0.102	0.0850 to 0.115	10.0	70.0 to 130	4.31	20.0
BB12769	Selenium, Total	mg/L	-0.0000842	0.00100	0.100	0.107	0.106	0.104	0.0850 to 0.115	107	70.0 to 130	0.939	20.0
BB12769	Arsenic, Total	mg/L	0.000029	0.000147	0.100	0.110	0.109	0.105	0.0850 to 0.115	107	70.0 to 130	0.913	20.0
BB12769	Sodium, Total	mg/L	0.00119	0.0660	5.00	102	101	4.98	4.25 to 5.75	50.0	70.0 to 130	0.985	20.0
BB12769	Antimony, Total	mg/L	0.0000969	0.00100	0.100	0.0983	0.0948	0.0941	0.0850 to 0.115	98.3	70.0 to 130	3.63	20.0
BB12769	Chromium, Total	mg/L	0.0000042	0.000440	0.100	0.0984	0.0973	0.0981	0.0850 to 0.115	98.1	70.0 to 130	1.12	20.0
BB12769	Mercury, Total by CVAA	mg/L	-0.00003	0.000500	0.004	0.00356	0.00355	0.00371	0.00340 to 0.00460	89.0	70.0 to 130	0.281	20.0
BB12770	Iron, Dissolved	mg/L	-0.000219	0.0176	0.2	48.3	48.5	0.197	0.170 to 0.230	-700	70.0 to 130	0.413	20.0
BB12769	Manganese, Total	mg/L	0.0000105	0.000147	0.100	1.96	1.92	0.102	0.0850 to 0.115	180	70.0 to 130	2.06	20.0
BB12769	Magnesium, Total	mg/L	-0.00929	0.0462	5.00	40.2	39.8	5.01	4.25 to 5.75	82.0	70.0 to 130	1.00	20.0
BB12769	Cobalt, Total	mg/L	-0.0000667	0.000147	0.100	0.0981	0.0967	0.0969	0.0850 to 0.115	96.2	70.0 to 130	1.44	20.0
BB12769	Thallium, Total	mg/L	-0.000125	0.000147	0.100	0.112	0.111	0.111	0.0850 to 0.115	112	70.0 to 130	0.897	20.0
BB12769	Calcium, Total	mg/L	0.00896	0.152	5.00	41.2	41.2	5.05	4.25 to 5.75	72.0	70.0 to 130	0.00	20.0
BB12769	Lead, Total	mg/L	0.000003	0.000147	0.100	0.108	0.107	0.112	0.0850 to 0.115	108	70.0 to 130	0.930	20.0
BB12769	Potassium, Total	mg/L	-0.00182	0.367	10.0	13.1	13.0	10.5	8.50 to 11.5	104	70.0 to 130	0.766	20.0
BB12769	Cadmium, Total	mg/L	0.00000	0.000147	0.100	0.0969	0.0970	0.0995	0.0850 to 0.115	96.9	70.0 to 130	0.103	20.0
BB12769	Boron, Total	mg/L	0.000567	0.0650	1.00	1.02	1.02	0.995	0.850 to 1.15	102	70.0 to 130	0.00	20.0
BB12769	Barium, Total	mg/L	-0.0000459	0.000200	0.100	0.245	0.229	0.0970	0.0850 to 0.115	100	70.0 to 130	6.75	20.0
BB12769	Lithium, Total	mg/L	-8.650E-05	0.0154	0.200	0.244	0.244	0.199	0.170 to 0.230	113	70.0 to 130	0.00	20.0
BB12769	Beryllium, Total	mg/L	0.000106	0.000880	0.100	0.0997	0.0998	0.0993	0.0850 to 0.115	99.7	70.0 to 130	0.100	20.0
BB12769	Molybdenum, Total	mg/L	0.0000076	0.000147	0.100	0.106	0.105	0.101	0.0850 to 0.115	102	70.0 to 130	0.948	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified. Fluoride result is qualified due to potential matrix interference. Alkalinity could not be performed due to the initial pH reading was below the titration end point of 4.5 SU. LBM 8/17/21

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

Alabama Power

Batch QC Summary

Customer Account: WMWGORG
Sample Date: 7/13/21 11:22
Customer ID:
Delivery Date: 7/15/21 10:32

Description: Gorgas Gypsum - PZ-18

Laboratory ID Number: BB12762

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB12769	Chloride	mg/L	-0.131	1.00	10.0	23.0	12.8	9.90	9.00 to 11.0	99.0	80.0 to 120	2.32	20.0
BB12763	Solids, Dissolved	mg/L	-2.00	25.0			1570	44.0	40.0 to 60.0			0.641	5.00
BB12769	Sulfate	mg/L	-0.446	1.00	20.0	42.1	23.7	18.2	18.0 to 22.0	88.5	80.0 to 120	2.91	20.0
BB12767	Fluoride	mg/L	-0.00758	0.100	2.50	0.394	-0.00837	2.42	2.25 to 2.75	15.8	80.0 to 120	0.00	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified. Fluoride result is qualified due to potential matrix interference. Alkalinity could not be performed due to the initial pH reading was below the titration end point of 4.5 SU. LBM 8/17/21

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: 7/13/21 12:40
Customer ID:
Submittal Date: 7/15/21 10:33

Laboratory ID Number: BB12763

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	7/21/21 12:22	7/22/21 17:03		1.015	0.111	mg/L	0.030000	0.1015	
* Calcium, Total	7/21/21 12:22	7/23/21 11:52		10.15	165	mg/L	0.70035	4.06	
* Iron, Total	7/21/21 12:22	7/23/21 11:52		10.15	29.2	mg/L	0.08120	0.406	
* Lithium, Total	7/21/21 12:22	7/22/21 17:03		1.015	1.15	mg/L	0.007105	0.01999956	
* Magnesium, Total	7/21/21 12:22	7/23/21 11:52		10.15	112	mg/L	0.21315	4.06	
* Sodium, Total	7/21/21 12:22	7/22/21 17:03		1.015	18.1	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Iron, Dissolved	7/27/21 09:49	7/27/21 13:54		10.15	27.3	mg/L	0.08120	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	7/16/21 07:47	7/16/21 16:54		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Arsenic, Total	7/16/21 07:47	7/16/21 16:54		1.015	0.00435	mg/L	0.000068	0.000203	
* Barium, Total	7/16/21 07:47	7/16/21 16:54		1.015	0.0144	mg/L	0.000102	0.000203	
* Beryllium, Total	7/16/21 07:47	7/16/21 16:54		1.015	0.0120	mg/L	0.000406	0.001015	
* Cadmium, Total	7/16/21 07:47	7/16/21 16:54		1.015	0.00231	mg/L	0.000068	0.000203	
* Chromium, Total	7/16/21 07:47	7/16/21 16:54		1.015	0.00200	mg/L	0.000203	0.001015	
* Cobalt, Total	7/16/21 07:47	7/16/21 16:54		1.015	0.310	mg/L	0.000068	0.000203	
* Lead, Total	7/16/21 07:47	7/16/21 16:54		1.015	0.00473	mg/L	0.000068	0.000203	
* Molybdenum, Total	7/16/21 07:47	7/16/21 16:54		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Potassium, Total	7/16/21 07:47	7/16/21 16:54		1.015	5.07	mg/L	0.169505	0.5075	
* Manganese, Total	7/16/21 07:47	7/22/21 13:19		10.15	9.64	mg/L	0.000680	0.00203	
* Selenium, Total	7/16/21 07:47	7/16/21 16:54		1.015	0.0121	mg/L	0.000508	0.001015	
* Thallium, Total	7/16/21 07:47	7/16/21 16:54		1.015	0.0000793	mg/L	0.000068	0.000203	J
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Manganese, Dissolved	7/16/21 13:03	7/22/21 11:21		10.15	9.67	mg/L	0.000680	0.00203	
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	7/16/21 08:25	7/16/21 12:02		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	7/16/21 13:57	7/19/21 13:55		1	1550	mg/L		100	
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	7/20/21 13:45	7/20/21 13:45		1	1.39	mg/L	0.50	1	

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

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified. Fluoride result is qualified due to potential matrix interference. Alkalinity could not be performed due to the initial pH reading was below the titration end point of 4.5 SU. LBM 8/17/21

Reported: 8/17/2021
Version: 3.3
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: 7/13/21 12:40
Customer ID:
Submittal Date: 7/15/21 10:33

Laboratory ID Number: BB12763

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	7/15/21 13:59	7/15/21 13:59		1	Not Detected	mg/L	0.06	0.1	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	7/23/21 10:02	7/23/21 10:02		40	1010	mg/L	20.00	40	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	7/13/21 12:36	7/13/21 12:36			1566.83	uS/cm			FA
pH	7/13/21 12:36	7/13/21 12:36			4.36	SU			FA
Temperature	7/13/21 12:36	7/13/21 12:36			22.56	C			FA
Turbidity	7/13/21 12:36	7/13/21 12:36			0.59	NTU			FA

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

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified. Fluoride result is qualified due to potential matrix interference. Alkalinity could not be performed due to the initial pH reading was below the titration end point of 4.5 SU. LBM 8/17/21

Reported: 8/17/2021
Version: 3.3
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: 7/13/21 12:40
Customer ID:
Delivery Date: 7/15/21 10:33

Description: Gorgas Gypsum - PZ-17

Laboratory ID Number: BB12763

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB12769	Mercury, Total by CVAA	mg/L	-0.00003	0.000500	0.004	0.00356	0.00355	0.00371	0.00340 to 0.00460	89.0	70.0 to 130	0.281	20.0
BB12770	Iron, Dissolved	mg/L	-0.000219	0.0176	0.2	48.3	48.5	0.197	0.170 to 0.230	-700	70.0 to 130	0.413	20.0
BB12769	Lead, Total	mg/L	0.000003	0.000147	0.100	0.108	0.107	0.112	0.0850 to 0.115	108	70.0 to 130	0.930	20.0
BB12769	Iron, Total	mg/L	2.630E-05	0.0176	0.2	3.79	3.79	0.201	0.170 to 0.230	75.0	70.0 to 130	0.00	20.0
BB12770	Manganese, Dissolved	mg/L	0.0000584	0.000147	0.100	2.27	2.37	0.102	0.0850 to 0.115	10.0	70.0 to 130	4.31	20.0
BB12769	Selenium, Total	mg/L	-0.0000842	0.00100	0.100	0.107	0.106	0.104	0.0850 to 0.115	107	70.0 to 130	0.939	20.0
BB12769	Arsenic, Total	mg/L	0.000029	0.000147	0.100	0.110	0.109	0.105	0.0850 to 0.115	107	70.0 to 130	0.913	20.0
BB12769	Sodium, Total	mg/L	0.00119	0.0660	5.00	102	101	4.98	4.25 to 5.75	50.0	70.0 to 130	0.985	20.0
BB12769	Antimony, Total	mg/L	0.0000969	0.00100	0.100	0.0983	0.0948	0.0941	0.0850 to 0.115	98.3	70.0 to 130	3.63	20.0
BB12769	Chromium, Total	mg/L	0.0000042	0.000440	0.100	0.0984	0.0973	0.0981	0.0850 to 0.115	98.1	70.0 to 130	1.12	20.0
BB12769	Thallium, Total	mg/L	-0.000125	0.000147	0.100	0.112	0.111	0.111	0.0850 to 0.115	112	70.0 to 130	0.897	20.0
BB12769	Calcium, Total	mg/L	0.00896	0.152	5.00	41.2	41.2	5.05	4.25 to 5.75	72.0	70.0 to 130	0.00	20.0
BB12769	Manganese, Total	mg/L	0.0000105	0.000147	0.100	1.96	1.92	0.102	0.0850 to 0.115	180	70.0 to 130	2.06	20.0
BB12769	Magnesium, Total	mg/L	-0.00929	0.0462	5.00	40.2	39.8	5.01	4.25 to 5.75	82.0	70.0 to 130	1.00	20.0
BB12769	Cobalt, Total	mg/L	-0.0000667	0.000147	0.100	0.0981	0.0967	0.0969	0.0850 to 0.115	96.2	70.0 to 130	1.44	20.0
BB12769	Potassium, Total	mg/L	-0.00182	0.367	10.0	13.1	13.0	10.5	8.50 to 11.5	104	70.0 to 130	0.766	20.0
BB12769	Cadmium, Total	mg/L	0.00000	0.000147	0.100	0.0969	0.0970	0.0995	0.0850 to 0.115	96.9	70.0 to 130	0.103	20.0
BB12769	Boron, Total	mg/L	0.000567	0.0650	1.00	1.02	1.02	0.995	0.850 to 1.15	102	70.0 to 130	0.00	20.0
BB12769	Barium, Total	mg/L	-0.0000459	0.000200	0.100	0.245	0.229	0.0970	0.0850 to 0.115	100	70.0 to 130	6.75	20.0
BB12769	Lithium, Total	mg/L	-8.650E-05	0.0154	0.200	0.244	0.244	0.199	0.170 to 0.230	113	70.0 to 130	0.00	20.0
BB12769	Beryllium, Total	mg/L	0.000106	0.000880	0.100	0.0997	0.0998	0.0993	0.0850 to 0.115	99.7	70.0 to 130	0.100	20.0
BB12769	Molybdenum, Total	mg/L	0.0000076	0.000147	0.100	0.106	0.105	0.101	0.0850 to 0.115	102	70.0 to 130	0.948	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified. Fluoride result is qualified due to potential matrix interference. Alkalinity could not be performed due to the initial pH reading was below the titration end point of 4.5 SU. LBM 8/17/21

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

Alabama Power

Batch QC Summary

Customer Account: WMWGORG
Sample Date: 7/13/21 12:40
Customer ID:
Delivery Date: 7/15/21 10:33

Description: Gorgas Gypsum - PZ-17

Laboratory ID Number: BB12763

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB12769	Sulfate	mg/L	-0.446	1.00	20.0	42.1	23.7	18.2	18.0 to 22.0	88.5	80.0 to 120	2.91	20.0
BB12767	Fluoride	mg/L	-0.00758	0.100	2.50	0.394	-0.00837	2.42	2.25 to 2.75	15.8	80.0 to 120	0.00	20.0
BB12769	Chloride	mg/L	-0.131	1.00	10.0	23.0	12.8	9.90	9.00 to 11.0	99.0	80.0 to 120	2.32	20.0
BB12763	Solids, Dissolved	mg/L	-2.00	25.0			1570	44.0	40.0 to 60.0			0.641	5.00

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified. Fluoride result is qualified due to potential matrix interference. Alkalinity could not be performed due to the initial pH reading was below the titration end point of 4.5 SU. LBM 8/17/21

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: 7/13/21 13:51
Customer ID:
Submittal Date: 7/15/21 10:33

Laboratory ID Number: BB12764

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	7/21/21 12:22	7/22/21 17:06		1.015	0.139	mg/L	0.030000	0.1015	
* Calcium, Total	7/21/21 12:22	7/23/21 11:56		10.15	135	mg/L	0.70035	4.06	
* Iron, Total	7/21/21 12:22	7/23/21 11:56		10.15	12.3	mg/L	0.08120	0.406	
* Lithium, Total	7/21/21 12:22	7/22/21 17:06		1.015	0.514	mg/L	0.007105	0.01999956	
* Magnesium, Total	7/21/21 12:22	7/23/21 11:56		10.15	97.9	mg/L	0.21315	4.06	
* Sodium, Total	7/21/21 12:22	7/22/21 17:06		1.015	18.2	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Iron, Dissolved	7/27/21 09:49	7/27/21 13:57		10.15	11.4	mg/L	0.08120	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	7/16/21 07:47	7/16/21 16:58		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Arsenic, Total	7/16/21 07:47	7/16/21 16:58		1.015	0.00172	mg/L	0.000068	0.000203	
* Barium, Total	7/16/21 07:47	7/16/21 16:58		1.015	0.0102	mg/L	0.000102	0.000203	
* Beryllium, Total	7/16/21 07:47	7/16/21 16:58		1.015	0.00883	mg/L	0.000406	0.001015	
* Cadmium, Total	7/16/21 07:47	7/16/21 16:58		1.015	0.00157	mg/L	0.000068	0.000203	
* Chromium, Total	7/16/21 07:47	7/16/21 16:58		1.015	0.000500	mg/L	0.000203	0.001015	J
* Cobalt, Total	7/16/21 07:47	7/16/21 16:58		1.015	0.193	mg/L	0.000068	0.000203	
* Lead, Total	7/16/21 07:47	7/16/21 16:58		1.015	0.000960	mg/L	0.000068	0.000203	
* Molybdenum, Total	7/16/21 07:47	7/16/21 16:58		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Potassium, Total	7/16/21 07:47	7/16/21 16:58		1.015	3.60	mg/L	0.169505	0.5075	
* Manganese, Total	7/16/21 07:47	7/22/21 13:22		10.15	9.01	mg/L	0.000680	0.00203	
* Selenium, Total	7/16/21 07:47	7/16/21 16:58		1.015	0.00607	mg/L	0.000508	0.001015	
* Thallium, Total	7/16/21 07:47	7/16/21 16:58		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Manganese, Dissolved	7/16/21 13:03	7/22/21 11:24		10.15	8.95	mg/L	0.000680	0.00203	
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	7/16/21 08:25	7/16/21 12:04		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	7/16/21 13:57	7/19/21 13:55		1	1180	mg/L		75.8	
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	7/20/21 13:46	7/20/21 13:46		1	2.41	mg/L	0.50	1	

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

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified. Alkalinity could not be performed due to the initial pH reading was below the titration end point of 4.5 SU. LBM 8/17/21

Reported: 8/17/2021
Version: 3.3
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: 7/13/21 13:51
Customer ID:
Submittal Date: 7/15/21 10:33

Laboratory ID Number: BB12764

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	7/15/21 14:00	7/15/21 14:00		1	Not Detected	mg/L	0.06	0.1	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	7/23/21 10:03	7/23/21 10:03		40	787	mg/L	20.00	40	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	7/13/21 13:48	7/13/21 13:48			1415.34	uS/cm			FA
pH	7/13/21 13:48	7/13/21 13:48			3.80	SU			FA
Temperature	7/13/21 13:48	7/13/21 13:48			20.14	C			FA
Turbidity	7/13/21 13:48	7/13/21 13:48			3.28	NTU			FA

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

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified. Alkalinity could not be performed due to the initial pH reading was below the titration end point of 4.5 SU. LBM 8/17/21

Reported: 8/17/2021
Version: 3.3
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: 7/13/21 13:51
Customer ID:
Delivery Date: 7/15/21 10:33

Description: Gorgas Gypsum - MW-14H

Laboratory ID Number: BB12764

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB12769	Iron, Total	mg/L	2.630E-05	0.0176	0.2	3.79	3.79	0.201	0.170 to 0.230	75.0	70.0 to 130	0.00	20.0
BB12769	Sodium, Total	mg/L	0.00119	0.0660	5.00	102	101	4.98	4.25 to 5.75	50.0	70.0 to 130	0.985	20.0
BB12769	Antimony, Total	mg/L	0.0000969	0.00100	0.100	0.0983	0.0948	0.0941	0.0850 to 0.115	98.3	70.0 to 130	3.63	20.0
BB12769	Chromium, Total	mg/L	0.0000042	0.000440	0.100	0.0984	0.0973	0.0981	0.0850 to 0.115	98.1	70.0 to 130	1.12	20.0
BB12769	Lead, Total	mg/L	0.000003	0.000147	0.100	0.108	0.107	0.112	0.0850 to 0.115	108	70.0 to 130	0.930	20.0
BB12770	Manganese, Dissolved	mg/L	0.0000584	0.000147	0.100	2.27	2.37	0.102	0.0850 to 0.115	10.0	70.0 to 130	4.31	20.0
BB12769	Selenium, Total	mg/L	-0.0000842	0.00100	0.100	0.107	0.106	0.104	0.0850 to 0.115	107	70.0 to 130	0.939	20.0
BB12769	Arsenic, Total	mg/L	0.000029	0.000147	0.100	0.110	0.109	0.105	0.0850 to 0.115	107	70.0 to 130	0.913	20.0
BB12769	Manganese, Total	mg/L	0.0000105	0.000147	0.100	1.96	1.92	0.102	0.0850 to 0.115	180	70.0 to 130	2.06	20.0
BB12769	Magnesium, Total	mg/L	-0.00929	0.0462	5.00	40.2	39.8	5.01	4.25 to 5.75	82.0	70.0 to 130	1.00	20.0
BB12769	Cobalt, Total	mg/L	-0.0000667	0.000147	0.100	0.0981	0.0967	0.0969	0.0850 to 0.115	96.2	70.0 to 130	1.44	20.0
BB12769	Mercury, Total by CVAA	mg/L	-0.00003	0.000500	0.004	0.00356	0.00355	0.00371	0.00340 to 0.00460	89.0	70.0 to 130	0.281	20.0
BB12770	Iron, Dissolved	mg/L	-0.000219	0.0176	0.2	48.3	48.5	0.197	0.170 to 0.230	-700	70.0 to 130	0.413	20.0
BB12769	Thallium, Total	mg/L	-0.000125	0.000147	0.100	0.112	0.111	0.111	0.0850 to 0.115	112	70.0 to 130	0.897	20.0
BB12769	Calcium, Total	mg/L	0.00896	0.152	5.00	41.2	41.2	5.05	4.25 to 5.75	72.0	70.0 to 130	0.00	20.0
BB12769	Potassium, Total	mg/L	-0.00182	0.367	10.0	13.1	13.0	10.5	8.50 to 11.5	104	70.0 to 130	0.766	20.0
BB12769	Cadmium, Total	mg/L	0.00000	0.000147	0.100	0.0969	0.0970	0.0995	0.0850 to 0.115	96.9	70.0 to 130	0.103	20.0
BB12769	Boron, Total	mg/L	0.000567	0.0650	1.00	1.02	1.02	0.995	0.850 to 1.15	102	70.0 to 130	0.00	20.0
BB12769	Barium, Total	mg/L	-0.0000459	0.000200	0.100	0.245	0.229	0.0970	0.0850 to 0.115	100	70.0 to 130	6.75	20.0
BB12769	Lithium, Total	mg/L	-8.650E-05	0.0154	0.200	0.244	0.244	0.199	0.170 to 0.230	113	70.0 to 130	0.00	20.0
BB12769	Beryllium, Total	mg/L	0.000106	0.000880	0.100	0.0997	0.0998	0.0993	0.0850 to 0.115	99.7	70.0 to 130	0.100	20.0
BB12769	Molybdenum, Total	mg/L	0.0000076	0.000147	0.100	0.106	0.105	0.101	0.0850 to 0.115	102	70.0 to 130	0.948	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified. Alkalinity could not be performed due to the initial pH reading was below the titration end point of 4.5 SU. LBM 8/17/21

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

Alabama Power

Batch QC Summary

Customer Account: WMWGORG
Sample Date: 7/13/21 13:51
Customer ID:
Delivery Date: 7/15/21 10:33

Description: Gorgas Gypsum - MW-14H

Laboratory ID Number: BB12764

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB12772	Solids, Dissolved	mg/L	-2.00	25.0			945	44.0	40.0 to 60.0			0.00	5.00
BB12769	Chloride	mg/L	-0.131	1.00	10.0	23.0	12.8	9.90	9.00 to 11.0	99.0	80.0 to 120	2.32	20.0
BB12769	Sulfate	mg/L	-0.446	1.00	20.0	42.1	23.7	18.2	18.0 to 22.0	88.5	80.0 to 120	2.91	20.0
BB12767	Fluoride	mg/L	-0.00758	0.100	2.50	0.394	-0.00837	2.42	2.25 to 2.75	15.8	80.0 to 120	0.00	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified. Alkalinity could not be performed due to the initial pH reading was below the titration end point of 4.5 SU. LBM 8/17/21

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: 7/13/21 13:51
Customer ID:
Submittal Date: 7/15/21 10:33

Laboratory ID Number: BB12765

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	7/21/21 12:22	7/22/21 17:09		1.015	0.139	mg/L	0.030000	0.1015	
* Calcium, Total	7/21/21 12:22	7/23/21 11:59		10.15	131	mg/L	0.70035	4.06	
* Iron, Total	7/21/21 12:22	7/23/21 11:59		10.15	12.1	mg/L	0.08120	0.406	
* Lithium, Total	7/21/21 12:22	7/22/21 17:09		1.015	0.518	mg/L	0.007105	0.01999956	
* Magnesium, Total	7/21/21 12:22	7/23/21 11:59		10.15	95.1	mg/L	0.21315	4.06	
* Sodium, Total	7/21/21 12:22	7/22/21 17:09		1.015	18.3	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Iron, Dissolved	7/27/21 09:49	7/27/21 14:00		10.15	11.5	mg/L	0.08120	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	7/16/21 07:47	7/16/21 17:01		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Arsenic, Total	7/16/21 07:47	7/16/21 17:01		1.015	0.00191	mg/L	0.000068	0.000203	
* Barium, Total	7/16/21 07:47	7/16/21 17:01		1.015	0.0117	mg/L	0.000102	0.000203	
* Beryllium, Total	7/16/21 07:47	7/16/21 17:01		1.015	0.00888	mg/L	0.000406	0.001015	
* Cadmium, Total	7/16/21 07:47	7/16/21 17:01		1.015	0.00142	mg/L	0.000068	0.000203	
* Chromium, Total	7/16/21 07:47	7/16/21 17:01		1.015	0.000534	mg/L	0.000203	0.001015	J
* Cobalt, Total	7/16/21 07:47	7/16/21 17:01		1.015	0.207	mg/L	0.000068	0.000203	
* Lead, Total	7/16/21 07:47	7/16/21 17:01		1.015	0.000950	mg/L	0.000068	0.000203	
* Molybdenum, Total	7/16/21 07:47	7/16/21 17:01		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Potassium, Total	7/16/21 07:47	7/16/21 17:01		1.015	3.95	mg/L	0.169505	0.5075	
* Manganese, Total	7/16/21 07:47	7/22/21 13:26		10.15	8.92	mg/L	0.000680	0.00203	
* Selenium, Total	7/16/21 07:47	7/16/21 17:01		1.015	0.00628	mg/L	0.000508	0.001015	
* Thallium, Total	7/16/21 07:47	7/16/21 17:01		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Manganese, Dissolved	7/16/21 13:03	7/22/21 11:28		10.15	8.87	mg/L	0.000680	0.00203	
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	7/16/21 08:25	7/16/21 12:06		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	7/16/21 13:57	7/19/21 13:55		1	1210	mg/L		75.8	
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	7/20/21 13:47	7/20/21 13:47		1	2.42	mg/L	0.50	1	

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

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified. Alkalinity could not be performed due to the initial pH reading was below the titration end point of 4.5 SU. LBM 8/17/21

Reported: 8/17/2021
Version: 3.3
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: 7/13/21 13:51
Customer ID:
Submittal Date: 7/15/21 10:33

Laboratory ID Number: BB12765

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	7/15/21 14:02	7/15/21 14:02		1	Not Detected	mg/L	0.06	0.1	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	7/23/21 10:05	7/23/21 10:05		40	748	mg/L	20.00	40	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	7/13/21 13:48	7/13/21 13:48			1415.34	uS/cm			FA
pH	7/13/21 13:48	7/13/21 13:48			3.80	SU			FA
Temperature	7/13/21 13:48	7/13/21 13:48			20.14	C			FA
Turbidity	7/13/21 13:48	7/13/21 13:48			3.28	NTU			FA

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

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified. Alkalinity could not be performed due to the initial pH reading was below the titration end point of 4.5 SU. LBM 8/17/21

Reported: 8/17/2021
Version: 3.3
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: 7/13/21 13:51
Customer ID:
Delivery Date: 7/15/21 10:33

Description: Gorgas Gypsum - MW-14H DUP

Laboratory ID Number: BB12765

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB12769	Iron, Total	mg/L	2.630E-05	0.0176	0.2	3.79	3.79	0.201	0.170 to 0.230	75.0	70.0 to 130	0.00	20.0
BB12769	Lead, Total	mg/L	0.000003	0.000147	0.100	0.108	0.107	0.112	0.0850 to 0.115	108	70.0 to 130	0.930	20.0
BB12769	Thallium, Total	mg/L	-0.000125	0.000147	0.100	0.112	0.111	0.111	0.0850 to 0.115	112	70.0 to 130	0.897	20.0
BB12769	Calcium, Total	mg/L	0.00896	0.152	5.00	41.2	41.2	5.05	4.25 to 5.75	72.0	70.0 to 130	0.00	20.0
BB12769	Mercury, Total by CVAA	mg/L	-0.00003	0.000500	0.004	0.00356	0.00355	0.00371	0.00340 to 0.00460	89.0	70.0 to 130	0.281	20.0
BB12770	Iron, Dissolved	mg/L	-0.000219	0.0176	0.2	48.3	48.5	0.197	0.170 to 0.230	-700	70.0 to 130	0.413	20.0
BB12769	Sodium, Total	mg/L	0.00119	0.0660	5.00	102	101	4.98	4.25 to 5.75	50.0	70.0 to 130	0.985	20.0
BB12769	Antimony, Total	mg/L	0.0000969	0.00100	0.100	0.0983	0.0948	0.0941	0.0850 to 0.115	98.3	70.0 to 130	3.63	20.0
BB12769	Chromium, Total	mg/L	0.0000042	0.000440	0.100	0.0984	0.0973	0.0981	0.0850 to 0.115	98.1	70.0 to 130	1.12	20.0
BB12769	Potassium, Total	mg/L	-0.00182	0.367	10.0	13.1	13.0	10.5	8.50 to 11.5	104	70.0 to 130	0.766	20.0
BB12769	Cadmium, Total	mg/L	0.00000	0.000147	0.100	0.0969	0.0970	0.0995	0.0850 to 0.115	96.9	70.0 to 130	0.103	20.0
BB12769	Boron, Total	mg/L	0.000567	0.0650	1.00	1.02	1.02	0.995	0.850 to 1.15	102	70.0 to 130	0.00	20.0
BB12769	Barium, Total	mg/L	-0.0000459	0.000200	0.100	0.245	0.229	0.0970	0.0850 to 0.115	100	70.0 to 130	6.75	20.0
BB12769	Lithium, Total	mg/L	-8.650E-05	0.0154	0.200	0.244	0.244	0.199	0.170 to 0.230	113	70.0 to 130	0.00	20.0
BB12769	Beryllium, Total	mg/L	0.000106	0.000880	0.100	0.0997	0.0998	0.0993	0.0850 to 0.115	99.7	70.0 to 130	0.100	20.0
BB12769	Molybdenum, Total	mg/L	0.0000076	0.000147	0.100	0.106	0.105	0.101	0.0850 to 0.115	102	70.0 to 130	0.948	20.0
BB12769	Manganese, Total	mg/L	0.0000105	0.000147	0.100	1.96	1.92	0.102	0.0850 to 0.115	180	70.0 to 130	2.06	20.0
BB12769	Magnesium, Total	mg/L	-0.00929	0.0462	5.00	40.2	39.8	5.01	4.25 to 5.75	82.0	70.0 to 130	1.00	20.0
BB12769	Cobalt, Total	mg/L	-0.0000667	0.000147	0.100	0.0981	0.0967	0.0969	0.0850 to 0.115	96.2	70.0 to 130	1.44	20.0
BB12770	Manganese, Dissolved	mg/L	0.0000584	0.000147	0.100	2.27	2.37	0.102	0.0850 to 0.115	10.0	70.0 to 130	4.31	20.0
BB12769	Selenium, Total	mg/L	-0.0000842	0.00100	0.100	0.107	0.106	0.104	0.0850 to 0.115	107	70.0 to 130	0.939	20.0
BB12769	Arsenic, Total	mg/L	0.000029	0.000147	0.100	0.110	0.109	0.105	0.0850 to 0.115	107	70.0 to 130	0.913	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified. Alkalinity could not be performed due to the initial pH reading was below the titration end point of 4.5 SU. LBM 8/17/21

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

Alabama Power

Batch QC Summary

Customer Account: WMWGORG
Sample Date: 7/13/21 13:51
Customer ID:
Delivery Date: 7/15/21 10:33

Description: Gorgas Gypsum - MW-14H DUP

Laboratory ID Number: BB12765

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB12772	Solids, Dissolved	mg/L	-2.00	25.0			945	44.0	40.0 to 60.0			0.00	5.00
BB12769	Chloride	mg/L	-0.131	1.00	10.0	23.0	12.8	9.90	9.00 to 11.0	99.0	80.0 to 120	2.32	20.0
BB12769	Sulfate	mg/L	-0.446	1.00	20.0	42.1	23.7	18.2	18.0 to 22.0	88.5	80.0 to 120	2.91	20.0
BB12767	Fluoride	mg/L	-0.00758	0.100	2.50	0.394	-0.00837	2.42	2.25 to 2.75	15.8	80.0 to 120	0.00	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified. Alkalinity could not be performed due to the initial pH reading was below the titration end point of 4.5 SU. LBM 8/17/21

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: 7/13/21 14:35
Customer ID:
Submittal Date: 7/15/21 10:33

Laboratory ID Number: BB12766

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	7/21/21 12:22	7/22/21 17:13		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	7/21/21 12:22	7/22/21 17:13		1.015	Not Detected	mg/L	0.070035	0.406	U
* Iron, Total	7/21/21 12:22	7/22/21 17:13		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Total	7/21/21 12:22	7/22/21 17:13		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	7/21/21 12:22	7/22/21 17:13		1.015	Not Detected	mg/L	0.021315	0.406	U
* Sodium, Total	7/21/21 12:22	7/22/21 17:13		1.015	Not Detected	mg/L	0.03045	0.406	U
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	7/16/21 07:47	7/16/21 17:05		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Arsenic, Total	7/16/21 07:47	7/16/21 17:05		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Barium, Total	7/16/21 07:47	7/16/21 17:05		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Beryllium, Total	7/16/21 07:47	7/16/21 17:05		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	7/16/21 07:47	7/16/21 17:05		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	7/16/21 07:47	7/16/21 17:05		1.015	0.000244	mg/L	0.000203	0.001015	J
* Cobalt, Total	7/16/21 07:47	7/16/21 17:05		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	7/16/21 07:47	7/16/21 17:05		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Molybdenum, Total	7/16/21 07:47	7/16/21 17:05		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	7/16/21 07:47	7/16/21 17:05		1.015	0.000184	mg/L	0.000068	0.000203	J
* Potassium, Total	7/16/21 07:47	7/16/21 17:05		1.015	Not Detected	mg/L	0.169505	0.5075	U
* Selenium, Total	7/16/21 07:47	7/16/21 17:05		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	7/16/21 07:47	7/16/21 17:05		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	7/16/21 08:25	7/16/21 12:09		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	7/16/21 13:57	7/19/21 13:55		1	Not Detected	mg/L		25	U
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	7/20/21 13:48	7/20/21 13:48		1	Not Detected	mg/L	0.50	1	U
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	7/15/21 14:03	7/15/21 14:03		1	Not Detected	mg/L	0.06	0.1	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	7/23/21 10:06	7/23/21 10:06		1	0.729	mg/L	0.50	1	J

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORGFB
Sample Date: 7/13/21 14:35
Customer ID:
Delivery Date: 7/15/21 10:33

Description: Gorgas Gypsum Field Blank-1

Laboratory ID Number: BB12766

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB12769	Mercury, Total by CVAA	mg/L	-0.00003	0.000500	0.004	0.00356	0.00355	0.00371	0.00340 to 0.00460	89.0	70.0 to 130	0.281	20.0
BB12769	Selenium, Total	mg/L	-0.0000842	0.00100	0.100	0.107	0.106	0.104	0.0850 to 0.115	107	70.0 to 130	0.939	20.0
BB12769	Arsenic, Total	mg/L	0.000029	0.000147	0.100	0.110	0.109	0.105	0.0850 to 0.115	107	70.0 to 130	0.913	20.0
BB12769	Iron, Total	mg/L	2.630E-05	0.0176	0.2	3.79	3.79	0.201	0.170 to 0.230	75.0	70.0 to 130	0.00	20.0
BB12769	Manganese, Total	mg/L	0.0000105	0.000147	0.100	1.96	1.92	0.102	0.0850 to 0.115	180	70.0 to 130	2.06	20.0
BB12769	Magnesium, Total	mg/L	-0.00929	0.0462	5.00	40.2	39.8	5.01	4.25 to 5.75	82.0	70.0 to 130	1.00	20.0
BB12769	Cobalt, Total	mg/L	-0.0000667	0.000147	0.100	0.0981	0.0967	0.0969	0.0850 to 0.115	96.2	70.0 to 130	1.44	20.0
BB12769	Sodium, Total	mg/L	0.00119	0.0660	5.00	102	101	4.98	4.25 to 5.75	50.0	70.0 to 130	0.985	20.0
BB12769	Antimony, Total	mg/L	0.0000969	0.00100	0.100	0.0983	0.0948	0.0941	0.0850 to 0.115	98.3	70.0 to 130	3.63	20.0
BB12769	Chromium, Total	mg/L	0.0000042	0.000440	0.100	0.0984	0.0973	0.0981	0.0850 to 0.115	98.1	70.0 to 130	1.12	20.0
BB12769	Lead, Total	mg/L	0.000003	0.000147	0.100	0.108	0.107	0.112	0.0850 to 0.115	108	70.0 to 130	0.930	20.0
BB12769	Thallium, Total	mg/L	-0.000125	0.000147	0.100	0.112	0.111	0.111	0.0850 to 0.115	112	70.0 to 130	0.897	20.0
BB12769	Calcium, Total	mg/L	0.00896	0.152	5.00	41.2	41.2	5.05	4.25 to 5.75	72.0	70.0 to 130	0.00	20.0
BB12769	Potassium, Total	mg/L	-0.00182	0.367	10.0	13.1	13.0	10.5	8.50 to 11.5	104	70.0 to 130	0.766	20.0
BB12769	Cadmium, Total	mg/L	0.00000	0.000147	0.100	0.0969	0.0970	0.0995	0.0850 to 0.115	96.9	70.0 to 130	0.103	20.0
BB12769	Boron, Total	mg/L	0.000567	0.0650	1.00	1.02	1.02	0.995	0.850 to 1.15	102	70.0 to 130	0.00	20.0
BB12769	Barium, Total	mg/L	-0.0000459	0.000200	0.100	0.245	0.229	0.0970	0.0850 to 0.115	100	70.0 to 130	6.75	20.0
BB12769	Lithium, Total	mg/L	-8.650E-05	0.0154	0.200	0.244	0.244	0.199	0.170 to 0.230	113	70.0 to 130	0.00	20.0
BB12769	Beryllium, Total	mg/L	0.000106	0.000880	0.100	0.0997	0.0998	0.0993	0.0850 to 0.115	99.7	70.0 to 130	0.100	20.0
BB12769	Molybdenum, Total	mg/L	0.0000076	0.000147	0.100	0.106	0.105	0.101	0.0850 to 0.115	102	70.0 to 130	0.948	20.0

Comments:

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

Alabama Power

Batch QC Summary

Customer Account: WMWGORGFB
Sample Date: 7/13/21 14:35
Customer ID:
Delivery Date: 7/15/21 10:33

Description: Gorgas Gypsum Field Blank-1

Laboratory ID Number: BB12766

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB12772	Solids, Dissolved	mg/L	-2.00	25.0			945	44.0	40.0 to 60.0			0.00	5.00
BB12769	Chloride	mg/L	-0.131	1.00	10.0	23.0	12.8	9.90	9.00 to 11.0	99.0	80.0 to 120	2.32	20.0
BB12769	Sulfate	mg/L	-0.446	1.00	20.0	42.1	23.7	18.2	18.0 to 22.0	88.5	80.0 to 120	2.91	20.0
BB12767	Fluoride	mg/L	-0.00758	0.100	2.50	0.394	-0.00837	2.42	2.25 to 2.75	15.8	80.0 to 120	0.00	20.0

Comments:

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Gypsum - MW-4

Location Code: WMWGORG
Collected: 7/14/21 08:38
Customer ID:
Submittal Date: 7/15/21 10:33

Laboratory ID Number: BB12767

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	7/21/21 12:22	7/22/21 17:16		1.015	4.78	mg/L	0.030000	0.1015	
* Calcium, Total	7/21/21 12:22	7/23/21 12:02		10.15	130	mg/L	0.70035	4.06	
* Iron, Total	7/21/21 12:22	7/23/21 12:02		10.15	14.8	mg/L	0.08120	0.406	
* Lithium, Total	7/21/21 12:22	7/22/21 17:16		1.015	0.487	mg/L	0.007105	0.01999956	
* Magnesium, Total	7/21/21 12:22	7/23/21 12:02		10.15	117	mg/L	0.21315	4.06	
* Sodium, Total	7/21/21 12:22	7/22/21 17:16		1.015	20.6	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Iron, Dissolved	7/27/21 09:49	7/27/21 14:04		10.15	14.1	mg/L	0.08120	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	7/16/21 07:47	7/16/21 17:09		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Arsenic, Total	7/16/21 07:47	7/16/21 17:09		1.015	0.00174	mg/L	0.000068	0.000203	
* Barium, Total	7/16/21 07:47	7/16/21 17:09		1.015	0.0115	mg/L	0.000102	0.000203	
* Beryllium, Total	7/16/21 07:47	7/16/21 17:09		1.015	0.00577	mg/L	0.000406	0.001015	
* Cadmium, Total	7/16/21 07:47	7/16/21 17:09		1.015	0.00246	mg/L	0.000068	0.000203	
* Chromium, Total	7/16/21 07:47	7/16/21 17:09		1.015	0.000701	mg/L	0.000203	0.001015	J
* Cobalt, Total	7/16/21 07:47	7/16/21 17:09		1.015	0.296	mg/L	0.000068	0.000203	
* Lead, Total	7/16/21 07:47	7/16/21 17:09		1.015	0.000792	mg/L	0.000068	0.000203	
* Molybdenum, Total	7/16/21 07:47	7/16/21 17:09		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Potassium, Total	7/16/21 07:47	7/16/21 17:09		1.015	4.73	mg/L	0.169505	0.5075	
* Manganese, Total	7/16/21 07:47	7/22/21 13:29		92.365	14.1	mg/L	0.006188	0.018473	
* Selenium, Total	7/16/21 07:47	7/16/21 17:09		1.015	0.00563	mg/L	0.000508	0.001015	
* Thallium, Total	7/16/21 07:47	7/16/21 17:09		1.015	0.0000868	mg/L	0.000068	0.000203	J
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Manganese, Dissolved	7/16/21 13:03	7/22/21 11:31		92.365	14.4	mg/L	0.006188	0.018473	
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	7/16/21 08:25	7/16/21 12:11		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	7/16/21 13:57	7/19/21 13:55		1	1300	mg/L		75.8	
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	7/20/21 13:57	7/20/21 13:57		16	102	mg/L	8.00	16	

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

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified. Matrix Spike recovery failed for Fluoride due to potential matrix interference. Alkalinity could not be performed due to the initial pH reading was below the titration end point of 4.5 SU. LBM 8/17/21

Reported: 8/17/2021
Version: 3.3
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: 7/14/21 08:38
Customer ID:
Submittal Date: 7/15/21 10:33

Laboratory ID Number: BB12767

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	7/15/21 14:04	7/15/21 14:04		1	Not Detected	mg/L	0.06	0.1	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	7/23/21 10:07	7/23/21 10:07		40	752	mg/L	20.00	40	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	7/14/21 08:35	7/14/21 08:35			1593.62	uS/cm			FA
pH	7/14/21 08:35	7/14/21 08:35			3.74	SU			FA
Temperature	7/14/21 08:35	7/14/21 08:35			20.73	C			FA
Turbidity	7/14/21 08:35	7/14/21 08:35			0.61	NTU			FA

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

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified. Matrix Spike recovery failed for Fluoride due to potential matrix interference. Alkalinity could not be performed due to the initial pH reading was below the titration end point of 4.5 SU. LBM 8/17/21

Reported: 8/17/2021
Version: 3.3
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: 7/14/21 08:38
Customer ID:
Delivery Date: 7/15/21 10:33

Description: Gorgas Gypsum - MW-4

Laboratory ID Number: BB12767

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB12769	Iron, Total	mg/L	2.630E-05	0.0176	0.2	3.79	3.79	0.201	0.170 to 0.230	75.0	70.0 to 130	0.00	20.0
BB12769	Lead, Total	mg/L	0.000003	0.000147	0.100	0.108	0.107	0.112	0.0850 to 0.115	108	70.0 to 130	0.930	20.0
BB12769	Sodium, Total	mg/L	0.00119	0.0660	5.00	102	101	4.98	4.25 to 5.75	50.0	70.0 to 130	0.985	20.0
BB12769	Antimony, Total	mg/L	0.0000969	0.00100	0.100	0.0983	0.0948	0.0941	0.0850 to 0.115	98.3	70.0 to 130	3.63	20.0
BB12769	Chromium, Total	mg/L	0.0000042	0.000440	0.100	0.0984	0.0973	0.0981	0.0850 to 0.115	98.1	70.0 to 130	1.12	20.0
BB12769	Manganese, Total	mg/L	0.0000105	0.000147	0.100	1.96	1.92	0.102	0.0850 to 0.115	180	70.0 to 130	2.06	20.0
BB12769	Magnesium, Total	mg/L	-0.00929	0.0462	5.00	40.2	39.8	5.01	4.25 to 5.75	82.0	70.0 to 130	1.00	20.0
BB12769	Cobalt, Total	mg/L	-0.0000667	0.000147	0.100	0.0981	0.0967	0.0969	0.0850 to 0.115	96.2	70.0 to 130	1.44	20.0
BB12770	Manganese, Dissolved	mg/L	0.0000584	0.000147	0.100	2.27	2.37	0.102	0.0850 to 0.115	10.0	70.0 to 130	4.31	20.0
BB12769	Selenium, Total	mg/L	-0.0000842	0.00100	0.100	0.107	0.106	0.104	0.0850 to 0.115	107	70.0 to 130	0.939	20.0
BB12769	Arsenic, Total	mg/L	0.000029	0.000147	0.100	0.110	0.109	0.105	0.0850 to 0.115	107	70.0 to 130	0.913	20.0
BB12769	Potassium, Total	mg/L	-0.00182	0.367	10.0	13.1	13.0	10.5	8.50 to 11.5	104	70.0 to 130	0.766	20.0
BB12769	Cadmium, Total	mg/L	0.00000	0.000147	0.100	0.0969	0.0970	0.0995	0.0850 to 0.115	96.9	70.0 to 130	0.103	20.0
BB12769	Boron, Total	mg/L	0.000567	0.0650	1.00	1.02	1.02	0.995	0.850 to 1.15	102	70.0 to 130	0.00	20.0
BB12769	Barium, Total	mg/L	-0.0000459	0.000200	0.100	0.245	0.229	0.0970	0.0850 to 0.115	100	70.0 to 130	6.75	20.0
BB12769	Lithium, Total	mg/L	-8.650E-05	0.0154	0.200	0.244	0.244	0.199	0.170 to 0.230	113	70.0 to 130	0.00	20.0
BB12769	Beryllium, Total	mg/L	0.000106	0.000880	0.100	0.0997	0.0998	0.0993	0.0850 to 0.115	99.7	70.0 to 130	0.100	20.0
BB12769	Molybdenum, Total	mg/L	0.0000076	0.000147	0.100	0.106	0.105	0.101	0.0850 to 0.115	102	70.0 to 130	0.948	20.0
BB12769	Mercury, Total by CVAA	mg/L	-0.00003	0.000500	0.004	0.00356	0.00355	0.00371	0.00340 to 0.00460	89.0	70.0 to 130	0.281	20.0
BB12770	Iron, Dissolved	mg/L	-0.000219	0.0176	0.2	48.3	48.5	0.197	0.170 to 0.230	-700	70.0 to 130	0.413	20.0
BB12769	Thallium, Total	mg/L	-0.000125	0.000147	0.100	0.112	0.111	0.111	0.0850 to 0.115	112	70.0 to 130	0.897	20.0
BB12769	Calcium, Total	mg/L	0.00896	0.152	5.00	41.2	41.2	5.05	4.25 to 5.75	72.0	70.0 to 130	0.00	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified. Matrix Spike recovery failed for Fluoride due to potential matrix interference. Alkalinity could not be performed due to the initial pH reading was below the titration end point of 4.5 SU. LBM 8/17/21

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

Alabama Power

Batch QC Summary

Customer Account: WMWGORG
Sample Date: 7/14/21 08:38
Customer ID:
Delivery Date: 7/15/21 10:33

Description: Gorgas Gypsum - MW-4

Laboratory ID Number: BB12767

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB12772	Solids, Dissolved	mg/L	-2.00	25.0			945	44.0	40.0 to 60.0			0.00	5.00
BB12769	Chloride	mg/L	-0.131	1.00	10.0	23.0	12.8	9.90	9.00 to 11.0	99.0	80.0 to 120	2.32	20.0
BB12769	Sulfate	mg/L	-0.446	1.00	20.0	42.1	23.7	18.2	18.0 to 22.0	88.5	80.0 to 120	2.91	20.0
BB12767	Fluoride	mg/L	-0.00758	0.100	2.50	0.394	-0.00837	2.42	2.25 to 2.75	15.8	80.0 to 120	0.00	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified. Matrix Spike recovery failed for Fluoride due to potential matrix interference. Alkalinity could not be performed due to the initial pH reading was below the titration end point of 4.5 SU. LBM 8/17/21

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: 7/14/21 10:04
Customer ID:
Submittal Date: 7/15/21 10:33

Laboratory ID Number: BB12768

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	7/21/21 12:22	7/22/21 17:19		1.015	3.68	mg/L	0.030000	0.1015	
* Calcium, Total	7/21/21 12:22	7/23/21 12:06		10.15	162	mg/L	0.70035	4.06	
* Iron, Total	7/21/21 12:22	7/23/21 12:06		10.15	39.5	mg/L	0.08120	0.406	
* Lithium, Total	7/21/21 12:22	7/22/21 17:19		1.015	0.337	mg/L	0.007105	0.01999956	
* Magnesium, Total	7/21/21 12:22	7/23/21 12:06		10.15	111	mg/L	0.21315	4.06	
* Sodium, Total	7/21/21 12:22	7/22/21 17:19		1.015	29.4	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Iron, Dissolved	7/27/21 09:49	7/27/21 14:07		10.15	37.3	mg/L	0.08120	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	7/16/21 07:47	7/16/21 17:12		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Arsenic, Total	7/16/21 07:47	7/16/21 17:12		1.015	0.00118	mg/L	0.000068	0.000203	
* Barium, Total	7/16/21 07:47	7/16/21 17:12		1.015	0.0100	mg/L	0.000102	0.000203	
* Beryllium, Total	7/16/21 07:47	7/16/21 17:12		1.015	0.00381	mg/L	0.000406	0.001015	
* Cadmium, Total	7/16/21 07:47	7/16/21 17:12		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	7/16/21 07:47	7/16/21 17:12		1.015	0.000266	mg/L	0.000203	0.001015	J
* Cobalt, Total	7/16/21 07:47	7/16/21 17:12		1.015	0.120	mg/L	0.000068	0.000203	
* Lead, Total	7/16/21 07:47	7/16/21 17:12		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Molybdenum, Total	7/16/21 07:47	7/16/21 17:12		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Potassium, Total	7/16/21 07:47	7/16/21 17:12		1.015	4.45	mg/L	0.169505	0.5075	
* Manganese, Total	7/16/21 07:47	7/22/21 13:33		5.075	5.03	mg/L	0.000340	0.001015	
* Selenium, Total	7/16/21 07:47	7/16/21 17:12		1.015	0.000952	mg/L	0.000508	0.001015	J
* Thallium, Total	7/16/21 07:47	7/16/21 17:12		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Manganese, Dissolved	7/16/21 13:03	7/22/21 11:35		5.075	5.19	mg/L	0.000340	0.001015	
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	7/16/21 08:25	7/16/21 12:13		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2320 B	***Analyst: JAG***								
Alkalinity, Total as CaCO3	7/22/21 08:56	7/22/21 10:25		1	40.7	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	7/16/21 13:57	7/19/21 13:55		1	1340	mg/L		75.8	

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

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 8/17/21

Reported: 8/17/2021
Version: 3.3
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: 7/14/21 10:04
Customer ID:
Submittal Date: 7/15/21 10:33

Laboratory ID Number: BB12768

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 4500CO2 D	***Analyst: JAG***								
Bicarbonate Alkalinity, (calc.)	7/22/21 08:56	7/22/21 10:25		1	40.7	mg/L			
Carbonate Alkalinity, (calc.)	7/22/21 08:56	7/22/21 10:25		1	0.00	mg/L			
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	7/20/21 13:58	7/20/21 13:58		16	68.4	mg/L	8.00	16	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	7/15/21 14:16	7/15/21 14:16		1	0.276	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	7/23/21 10:08	7/23/21 10:08		40	797	mg/L	20.00	40	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	7/14/21 10:00	7/14/21 10:00			1558.26	uS/cm			FA
pH	7/14/21 10:00	7/14/21 10:00			5.75	SU			FA
Temperature	7/14/21 10:00	7/14/21 10:00			20.76	C			FA
Turbidity	7/14/21 10:00	7/14/21 10:00			7.93	NTU			FA

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

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 8/17/21

Reported: 8/17/2021
Version: 3.3
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: 7/14/21 10:04
Customer ID:
Delivery Date: 7/15/21 10:33

Description: Gorgas Gypsum - MW-4V

Laboratory ID Number: BB12768

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB12769	Mercury, Total by CVAA	mg/L	-0.00003	0.000500	0.004	0.00356	0.00355	0.00371	0.00340 to 0.00460	89.0	70.0 to 130	0.281	20.0
BB12770	Iron, Dissolved	mg/L	-0.000219	0.0176	0.2	48.3	48.5	0.197	0.170 to 0.230	-700	70.0 to 130	0.413	20.0
BB12769	Iron, Total	mg/L	2.630E-05	0.0176	0.2	3.79	3.79	0.201	0.170 to 0.230	75.0	70.0 to 130	0.00	20.0
BB12769	Lead, Total	mg/L	0.000003	0.000147	0.100	0.108	0.107	0.112	0.0850 to 0.115	108	70.0 to 130	0.930	20.0
BB12770	Manganese, Dissolved	mg/L	0.0000584	0.000147	0.100	2.27	2.37	0.102	0.0850 to 0.115	10.0	70.0 to 130	4.31	20.0
BB12769	Selenium, Total	mg/L	-0.0000842	0.00100	0.100	0.107	0.106	0.104	0.0850 to 0.115	107	70.0 to 130	0.939	20.0
BB12769	Arsenic, Total	mg/L	0.000029	0.000147	0.100	0.110	0.109	0.105	0.0850 to 0.115	107	70.0 to 130	0.913	20.0
BB12769	Sodium, Total	mg/L	0.00119	0.0660	5.00	102	101	4.98	4.25 to 5.75	50.0	70.0 to 130	0.985	20.0
BB12769	Antimony, Total	mg/L	0.0000969	0.00100	0.100	0.0983	0.0948	0.0941	0.0850 to 0.115	98.3	70.0 to 130	3.63	20.0
BB12769	Chromium, Total	mg/L	0.0000042	0.000440	0.100	0.0984	0.0973	0.0981	0.0850 to 0.115	98.1	70.0 to 130	1.12	20.0
BB12769	Potassium, Total	mg/L	-0.00182	0.367	10.0	13.1	13.0	10.5	8.50 to 11.5	104	70.0 to 130	0.766	20.0
BB12769	Cadmium, Total	mg/L	0.00000	0.000147	0.100	0.0969	0.0970	0.0995	0.0850 to 0.115	96.9	70.0 to 130	0.103	20.0
BB12769	Boron, Total	mg/L	0.000567	0.0650	1.00	1.02	1.02	0.995	0.850 to 1.15	102	70.0 to 130	0.00	20.0
BB12769	Barium, Total	mg/L	-0.0000459	0.000200	0.100	0.245	0.229	0.0970	0.0850 to 0.115	100	70.0 to 130	6.75	20.0
BB12769	Lithium, Total	mg/L	-8.650E-05	0.0154	0.200	0.244	0.244	0.199	0.170 to 0.230	113	70.0 to 130	0.00	20.0
BB12769	Beryllium, Total	mg/L	0.000106	0.000880	0.100	0.0997	0.0998	0.0993	0.0850 to 0.115	99.7	70.0 to 130	0.100	20.0
BB12769	Molybdenum, Total	mg/L	0.0000076	0.000147	0.100	0.106	0.105	0.101	0.0850 to 0.115	102	70.0 to 130	0.948	20.0
BB12769	Thallium, Total	mg/L	-0.000125	0.000147	0.100	0.112	0.111	0.111	0.0850 to 0.115	112	70.0 to 130	0.897	20.0
BB12769	Calcium, Total	mg/L	0.00896	0.152	5.00	41.2	41.2	5.05	4.25 to 5.75	72.0	70.0 to 130	0.00	20.0
BB12769	Manganese, Total	mg/L	0.0000105	0.000147	0.100	1.96	1.92	0.102	0.0850 to 0.115	180	70.0 to 130	2.06	20.0
BB12769	Magnesium, Total	mg/L	-0.00929	0.0462	5.00	40.2	39.8	5.01	4.25 to 5.75	82.0	70.0 to 130	1.00	20.0
BB12769	Cobalt, Total	mg/L	-0.0000667	0.000147	0.100	0.0981	0.0967	0.0969	0.0850 to 0.115	96.2	70.0 to 130	1.44	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 8/17/21

Reported: 8/17/2021
Version: 3.3
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: 7/14/21 10:04
Customer ID:
Delivery Date: 7/15/21 10:33

Description: Gorgas Gypsum - MW-4V

Laboratory ID Number: BB12768

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB12769	Chloride	mg/L	-0.131	1.00	10.0	23.0	12.8	9.90	9.00 to 11.0	99.0	80.0 to 120	2.32	20.0
BB12772	Solids, Dissolved	mg/L	-2.00	25.0			945	44.0	40.0 to 60.0			0.00	5.00
BB12773	Fluoride	mg/L	0.0173	0.100	2.50	2.42	0.00828	2.57	2.25 to 2.75	96.8	80.0 to 120	0.00	20.0
BB12842	Alkalinity, Total as CaCO3	mg/L					145	53.0	45.0 to 55.0			0.692	10.0
BB12769	Sulfate	mg/L	-0.446	1.00	20.0	42.1	23.7	18.2	18.0 to 22.0	88.5	80.0 to 120	2.91	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 8/17/21

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: 7/14/21 11:33
Customer ID:
Submittal Date: 7/15/21 10:33

Laboratory ID Number: BB12769

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	7/21/21 12:22	7/22/21 17:23		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	7/21/21 12:22	7/22/21 17:23		1.015	37.6	mg/L	0.070035	0.406	
* Iron, Total	7/21/21 12:22	7/22/21 17:23		1.015	3.64	mg/L	0.008120	0.0406	
* Lithium, Total	7/21/21 12:22	7/22/21 17:23		1.015	0.0174	mg/L	0.007105	0.01999956	J
* Magnesium, Total	7/21/21 12:22	7/22/21 17:23		1.015	36.1	mg/L	0.021315	0.406	
* Sodium, Total	7/21/21 12:22	7/23/21 12:09		10.15	99.5	mg/L	0.3045	4.06	RA
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Iron, Dissolved	7/27/21 09:49	7/27/21 12:10		1.015	3.42	mg/L	0.008120	0.0406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	7/16/21 07:47	7/16/21 17:16		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Arsenic, Total	7/16/21 07:47	7/16/21 17:16		1.015	0.00265	mg/L	0.000068	0.000203	
* Barium, Total	7/16/21 07:47	7/16/21 17:16		1.015	0.145	mg/L	0.000102	0.000203	
* Beryllium, Total	7/16/21 07:47	7/16/21 17:16		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	7/16/21 07:47	7/16/21 17:16		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	7/16/21 07:47	7/16/21 17:16		1.015	0.000283	mg/L	0.000203	0.001015	J
* Cobalt, Total	7/16/21 07:47	7/16/21 17:16		1.015	0.00190	mg/L	0.000068	0.000203	
* Lead, Total	7/16/21 07:47	7/16/21 17:16		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Molybdenum, Total	7/16/21 07:47	7/16/21 17:16		1.015	0.00353	mg/L	0.000068	0.000203	
* Potassium, Total	7/16/21 07:47	7/16/21 17:16		1.015	2.75	mg/L	0.169505	0.5075	
* Manganese, Total	7/16/21 07:47	7/22/21 13:37		5.075	1.78	mg/L	0.000340	0.001015	RA
* Selenium, Total	7/16/21 07:47	7/16/21 17:16		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	7/16/21 07:47	7/16/21 17:16		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Manganese, Dissolved	7/16/21 13:03	7/22/21 11:39		5.075	1.78	mg/L	0.000340	0.001015	
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	7/16/21 08:25	7/16/21 12:16		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2320 B	***Analyst: JAG***								
Alkalinity, Total as CaCO3	7/22/21 08:56	7/22/21 10:25		1	374	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	7/16/21 13:57	7/19/21 13:55		1	455	mg/L		25	

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

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 8/17/21

Reported: 8/17/2021
Version: 3.3
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: 7/14/21 11:33
Customer ID:
Submittal Date: 7/15/21 10:33

Laboratory ID Number: BB12769

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 4500CO2 D	***Analyst: JAG***								
Bicarbonate Alkalinity, (calc.)	7/22/21 08:56	7/22/21 10:25		1	374	mg/L			
Carbonate Alkalinity, (calc.)	7/22/21 08:56	7/22/21 10:25		1	0.36	mg/L			
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	7/20/21 13:52	7/20/21 13:52		1	13.1	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	7/15/21 14:17	7/15/21 14:17		1	0.331	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	7/23/21 10:09	7/23/21 10:09		1	24.4	mg/L	0.50	1	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	7/14/21 11:30	7/14/21 11:30			761.91	uS/cm			FA
pH	7/14/21 11:30	7/14/21 11:30			6.67	SU			FA
Temperature	7/14/21 11:30	7/14/21 11:30			19.73	C			FA
Turbidity	7/14/21 11:30	7/14/21 11:30			1.66	NTU			FA

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

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 8/17/21

Reported: 8/17/2021
Version: 3.3
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: 7/14/21 11:33
Customer ID:
Delivery Date: 7/15/21 10:33

Description: Gorgas Gypsum - PZ-21

Laboratory ID Number: BB12769

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB12769	Iron, Total	mg/L	2.630E-05	0.0176	0.2	3.79	3.79	0.201	0.170 to 0.230	75.0	70.0 to 130	0.00	20.0
BB12769	Mercury, Total by CVAA	mg/L	-0.00003	0.000500	0.004	0.00356	0.00355	0.00371	0.00340 to 0.00460	89.0	70.0 to 130	0.281	20.0
BB12770	Iron, Dissolved	mg/L	-0.000219	0.0176	0.2	48.3	48.5	0.197	0.170 to 0.230	-700	70.0 to 130	0.413	20.0
BB12769	Lead, Total	mg/L	0.000003	0.000147	0.100	0.108	0.107	0.112	0.0850 to 0.115	108	70.0 to 130	0.930	20.0
BB12769	Manganese, Total	mg/L	0.0000105	0.000147	0.100	1.96	1.92	0.102	0.0850 to 0.115	180	70.0 to 130	2.06	20.0
BB12769	Magnesium, Total	mg/L	-0.00929	0.0462	5.00	40.2	39.8	5.01	4.25 to 5.75	82.0	70.0 to 130	1.00	20.0
BB12769	Cobalt, Total	mg/L	-0.0000667	0.000147	0.100	0.0981	0.0967	0.0969	0.0850 to 0.115	96.2	70.0 to 130	1.44	20.0
BB12770	Manganese, Dissolved	mg/L	0.0000584	0.000147	0.100	2.27	2.37	0.102	0.0850 to 0.115	10.0	70.0 to 130	4.31	20.0
BB12769	Selenium, Total	mg/L	-0.0000842	0.00100	0.100	0.107	0.106	0.104	0.0850 to 0.115	107	70.0 to 130	0.939	20.0
BB12769	Arsenic, Total	mg/L	0.000029	0.000147	0.100	0.110	0.109	0.105	0.0850 to 0.115	107	70.0 to 130	0.913	20.0
BB12769	Sodium, Total	mg/L	0.00119	0.0660	5.00	102	101	4.98	4.25 to 5.75	50.0	70.0 to 130	0.985	20.0
BB12769	Antimony, Total	mg/L	0.0000969	0.00100	0.100	0.0983	0.0948	0.0941	0.0850 to 0.115	98.3	70.0 to 130	3.63	20.0
BB12769	Chromium, Total	mg/L	0.0000042	0.000440	0.100	0.0984	0.0973	0.0981	0.0850 to 0.115	98.1	70.0 to 130	1.12	20.0
BB12769	Potassium, Total	mg/L	-0.00182	0.367	10.0	13.1	13.0	10.5	8.50 to 11.5	104	70.0 to 130	0.766	20.0
BB12769	Cadmium, Total	mg/L	0.00000	0.000147	0.100	0.0969	0.0970	0.0995	0.0850 to 0.115	96.9	70.0 to 130	0.103	20.0
BB12769	Boron, Total	mg/L	0.000567	0.0650	1.00	1.02	1.02	0.995	0.850 to 1.15	102	70.0 to 130	0.00	20.0
BB12769	Barium, Total	mg/L	-0.0000459	0.000200	0.100	0.245	0.229	0.0970	0.0850 to 0.115	100	70.0 to 130	6.75	20.0
BB12769	Lithium, Total	mg/L	-8.650E-05	0.0154	0.200	0.244	0.244	0.199	0.170 to 0.230	113	70.0 to 130	0.00	20.0
BB12769	Beryllium, Total	mg/L	0.000106	0.000880	0.100	0.0997	0.0998	0.0993	0.0850 to 0.115	99.7	70.0 to 130	0.100	20.0
BB12769	Molybdenum, Total	mg/L	0.0000076	0.000147	0.100	0.106	0.105	0.101	0.0850 to 0.115	102	70.0 to 130	0.948	20.0
BB12769	Thallium, Total	mg/L	-0.000125	0.000147	0.100	0.112	0.111	0.111	0.0850 to 0.115	112	70.0 to 130	0.897	20.0
BB12769	Calcium, Total	mg/L	0.00896	0.152	5.00	41.2	41.2	5.05	4.25 to 5.75	72.0	70.0 to 130	0.00	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 8/17/21

Reported: 8/17/2021
Version: 3.3
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: 7/14/21 11:33
Customer ID:
Delivery Date: 7/15/21 10:33

Description: Gorgas Gypsum - PZ-21

Laboratory ID Number: BB12769

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB12769	Chloride	mg/L	-0.131	1.00	10.0	23.0	12.8	9.90	9.00 to 11.0	99.0	80.0 to 120	2.32	20.0
BB12842	Alkalinity, Total as CaCO3	mg/L					145	53.0	45.0 to 55.0			0.692	10.0
BB12769	Sulfate	mg/L	-0.446	1.00	20.0	42.1	23.7	18.2	18.0 to 22.0	88.5	80.0 to 120	2.91	20.0
BB12772	Solids, Dissolved	mg/L	-2.00	25.0			945	44.0	40.0 to 60.0			0.00	5.00
BB12773	Fluoride	mg/L	0.0173	0.100	2.50	2.42	0.00828	2.57	2.25 to 2.75	96.8	80.0 to 120	0.00	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 8/17/21

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: 7/14/21 12:36
Customer ID:
Submittal Date: 7/15/21 10:33

Laboratory ID Number: BB12770

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	7/21/21 12:22	7/22/21 17:46		1.015	0.0841	mg/L	0.030000	0.1015	J
* Calcium, Total	7/21/21 12:22	7/23/21 12:38		10.15	74.4	mg/L	0.70035	4.06	
* Iron, Total	7/21/21 12:22	7/23/21 13:22		101.5	50.0	mg/L	0.8120	4.06	
* Lithium, Total	7/21/21 12:22	7/22/21 17:46		1.015	0.0683	mg/L	0.007105	0.01999956	
* Magnesium, Total	7/21/21 12:22	7/22/21 17:46		1.015	39.9	mg/L	0.021315	0.406	
* Sodium, Total	7/21/21 12:22	7/22/21 17:46		1.015	39.6	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Iron, Dissolved	7/27/21 09:49	7/27/21 15:14		101.5	49.7	mg/L	0.8120	4.06	RA
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	7/16/21 07:47	7/16/21 17:37		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Arsenic, Total	7/16/21 07:47	7/16/21 17:37		1.015	0.0429	mg/L	0.000068	0.000203	
* Barium, Total	7/16/21 07:47	7/16/21 17:37		1.015	0.0190	mg/L	0.000102	0.000203	
* Beryllium, Total	7/16/21 07:47	7/16/21 17:37		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	7/16/21 07:47	7/16/21 17:37		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	7/16/21 07:47	7/16/21 17:37		1.015	0.000219	mg/L	0.000203	0.001015	J
* Cobalt, Total	7/16/21 07:47	7/16/21 17:37		1.015	0.00141	mg/L	0.000068	0.000203	
* Lead, Total	7/16/21 07:47	7/16/21 17:37		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Molybdenum, Total	7/16/21 07:47	7/16/21 17:37		1.015	0.00155	mg/L	0.000068	0.000203	
* Potassium, Total	7/16/21 07:47	7/16/21 17:37		1.015	6.86	mg/L	0.169505	0.5075	
* Manganese, Total	7/16/21 07:47	7/22/21 13:51		5.075	2.25	mg/L	0.000340	0.001015	
* Selenium, Total	7/16/21 07:47	7/16/21 17:37		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	7/16/21 07:47	7/16/21 17:37		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Manganese, Dissolved	7/16/21 13:03	7/22/21 11:42		5.075	2.26	mg/L	0.000340	0.001015	RA
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	7/16/21 08:25	7/16/21 12:32		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2320 B	***Analyst: JAG***								
Alkalinity, Total as CaCO3	7/22/21 08:56	7/22/21 10:25		1	94.2	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	7/16/21 13:57	7/19/21 13:55		1	664	mg/L		50	

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

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 8/17/21

Reported: 8/17/2021
Version: 3.3
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: 7/14/21 12:36
Customer ID:
Submittal Date: 7/15/21 10:33

Laboratory ID Number: BB12770

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 4500CO2 D	***Analyst: JAG***								
Bicarbonate Alkalinity, (calc.)	7/22/21 08:56	7/22/21 10:25		1	94.2	mg/L			
Carbonate Alkalinity, (calc.)	7/22/21 08:56	7/22/21 10:25		1	0.02	mg/L			
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	7/20/21 14:26	7/20/21 14:26		1	5.68	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	7/15/21 14:18	7/15/21 14:18		1	0.145	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	7/23/21 12:10	7/23/21 12:10		25	385	mg/L	12.50	25	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	7/14/21 12:33	7/14/21 12:33			763.21	uS/cm			FA
pH	7/14/21 12:33	7/14/21 12:33			6.10	SU			FA
Temperature	7/14/21 12:33	7/14/21 12:33			19.93	C			FA
Turbidity	7/14/21 12:33	7/14/21 12:33			1.96	NTU			FA

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

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 8/17/21

Reported: 8/17/2021
Version: 3.3
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: 7/14/21 12:36
Customer ID:
Delivery Date: 7/15/21 10:33

Description: Gorgas Gypsum - PZ-22

Laboratory ID Number: BB12770

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB12840	Potassium, Total	mg/L	-0.00182	0.367	10.0	16.2	16.2	10.5	8.50 to 11.5	99.5	70.0 to 130	0.00	20.0
BB12770	Iron, Dissolved	mg/L	-0.000219	0.0176	0.2	48.3	48.5	0.197	0.170 to 0.230	-700	70.0 to 130	0.413	20.0
BB12840	Magnesium, Total	mg/L	-0.0101	0.0462	5.00	111	110	5.03	4.25 to 5.75	60.0	70.0 to 130	0.905	20.0
BB12840	Cobalt, Total	mg/L	-0.0000667	0.000147	0.100	0.204	0.206	0.0969	0.0850 to 0.115	88.0	70.0 to 130	0.976	20.0
BB12840	Boron, Total	mg/L	0.000722	0.0650	1.00	1.24	1.25	0.989	0.850 to 1.15	101	70.0 to 130	0.803	20.0
BB12840	Selenium, Total	mg/L	-0.0000842	0.00100	0.100	0.104	0.105	0.104	0.0850 to 0.115	104	70.0 to 130	0.957	20.0
BB12840	Lead, Total	mg/L	0.000003	0.000147	0.100	0.108	0.109	0.112	0.0850 to 0.115	108	70.0 to 130	0.922	20.0
BB12840	Thallium, Total	mg/L	-0.000125	0.000147	0.100	0.107	0.112	0.111	0.0850 to 0.115	107	70.0 to 130	4.57	20.0
BB12840	Iron, Total	mg/L	-0.000370	0.0176	0.2	38.9	38.7	0.200	0.170 to 0.230	-250	70.0 to 130	0.515	20.0
BB12840	Manganese, Total	mg/L	0.0000105	0.000147	0.100	14.3	15.5	0.102	0.0850 to 0.115	500	70.0 to 130	8.05	20.0
BB12840	Beryllium, Total	mg/L	0.000106	0.000880	0.100	0.0964	0.0963	0.0993	0.0850 to 0.115	96.4	70.0 to 130	0.104	20.0
BB12840	Lithium, Total	mg/L	-0.000105	0.0154	0.200	0.290	0.294	0.198	0.170 to 0.230	119	70.0 to 130	1.37	20.0
BB12840	Chromium, Total	mg/L	0.0000042	0.000440	0.100	0.0949	0.0972	0.0981	0.0850 to 0.115	94.6	70.0 to 130	2.39	20.0
BB12840	Cadmium, Total	mg/L	0.00000	0.000147	0.100	0.0963	0.0956	0.0995	0.0850 to 0.115	96.3	70.0 to 130	0.730	20.0
BB12840	Sodium, Total	mg/L	0.00104	0.0660	5.00	56.3	56.8	4.98	4.25 to 5.75	80.0	70.0 to 130	0.884	20.0
BB12840	Barium, Total	mg/L	-0.0000459	0.000200	0.100	0.120	0.122	0.0970	0.0850 to 0.115	98.3	70.0 to 130	1.65	20.0
BB12840	Antimony, Total	mg/L	0.0000969	0.00100	0.100	0.0958	0.0983	0.0941	0.0850 to 0.115	95.8	70.0 to 130	2.58	20.0
BB12840	Mercury, Total by CVAA	mg/L	-0.00003	0.000500	0.004	0.00371	0.00363	0.00372	0.00340 to 0.00460	92.8	70.0 to 130	2.18	20.0
BB12770	Manganese, Dissolved	mg/L	0.0000584	0.000147	0.100	2.27	2.37	0.102	0.0850 to 0.115	10.0	70.0 to 130	4.31	20.0
BB12840	Molybdenum, Total	mg/L	0.0000076	0.000147	0.100	0.103	0.100	0.101	0.0850 to 0.115	102	70.0 to 130	2.96	20.0
BB12840	Arsenic, Total	mg/L	0.000029	0.000147	0.100	0.208	0.209	0.105	0.0850 to 0.115	104	70.0 to 130	0.480	20.0
BB12840	Calcium, Total	mg/L	0.00542	0.152	5.00	180	180	5.04	4.25 to 5.75	20.0	70.0 to 130	0.00	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 8/17/21

Reported: 8/17/2021
Version: 3.3
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: 7/14/21 12:36
Customer ID:
Delivery Date: 7/15/21 10:33

Description: Gorgas Gypsum - PZ-22

Laboratory ID Number: BB12770

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB12842	Alkalinity, Total as CaCO3	mg/L					145	53.0	45.0 to 55.0			0.692	10.0
BB12840	Sulfate	mg/L	-0.357	1.00	1000	1920	835	19.5	18.0 to 22.0	106	80.0 to 120	2.60	20.0
BB12772	Solids, Dissolved	mg/L	-2.00	25.0			945	44.0	40.0 to 60.0			0.00	5.00
BB12773	Fluoride	mg/L	0.0173	0.100	2.50	2.42	0.00828	2.57	2.25 to 2.75	96.8	80.0 to 120	0.00	20.0
BB12840	Chloride	mg/L	-0.122	1.00	10.0	21.6	11.6	9.96	9.00 to 11.0	101	80.0 to 120	0.866	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 8/17/21

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: 7/14/21 14:05
Customer ID:
Submittal Date: 7/15/21 10:33

Laboratory ID Number: BB12771

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	7/21/21 12:22	7/22/21 17:50		1.015	0.118	mg/L	0.030000	0.1015	
* Calcium, Total	7/21/21 12:22	7/23/21 12:42		10.15	132	mg/L	0.70035	4.06	
* Iron, Total	7/21/21 12:22	7/23/21 12:42		10.15	37.7	mg/L	0.08120	0.406	
* Lithium, Total	7/21/21 12:22	7/22/21 17:50		1.015	0.212	mg/L	0.007105	0.01999956	
* Magnesium, Total	7/21/21 12:22	7/23/21 12:42		10.15	68.7	mg/L	0.21315	4.06	
* Sodium, Total	7/21/21 12:22	7/23/21 12:42		10.15	104	mg/L	0.3045	4.06	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Iron, Dissolved	7/27/21 09:49	7/27/21 14:28		10.15	34.4	mg/L	0.08120	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	7/16/21 07:47	7/16/21 17:40		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Arsenic, Total	7/16/21 07:47	7/16/21 17:40		1.015	0.00136	mg/L	0.000068	0.000203	
* Barium, Total	7/16/21 07:47	7/16/21 17:40		1.015	0.0180	mg/L	0.000102	0.000203	
* Beryllium, Total	7/16/21 07:47	7/16/21 17:40		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	7/16/21 07:47	7/16/21 17:40		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	7/16/21 07:47	7/16/21 17:40		1.015	0.000297	mg/L	0.000203	0.001015	J
* Cobalt, Total	7/16/21 07:47	7/16/21 17:40		1.015	0.0218	mg/L	0.000068	0.000203	
* Lead, Total	7/16/21 07:47	7/16/21 17:40		1.015	0.000255	mg/L	0.000068	0.000203	
* Molybdenum, Total	7/16/21 07:47	7/16/21 17:40		1.015	0.000102	mg/L	0.000068	0.000203	J
* Potassium, Total	7/16/21 07:47	7/16/21 17:40		1.015	15.1	mg/L	0.169505	0.5075	
* Manganese, Total	7/16/21 07:47	7/22/21 13:54		5.075	2.01	mg/L	0.000340	0.001015	
* Selenium, Total	7/16/21 07:47	7/16/21 17:40		1.015	0.00283	mg/L	0.000508	0.001015	
* Thallium, Total	7/16/21 07:47	7/16/21 17:40		1.015	0.000386	mg/L	0.000068	0.000203	
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Manganese, Dissolved	7/16/21 13:03	7/22/21 11:56		5.075	1.88	mg/L	0.000340	0.001015	
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	7/16/21 08:25	7/16/21 12:35		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2320 B	***Analyst: JAG***								
Alkalinity, Total as CaCO3	7/22/21 08:56	7/22/21 10:25		1	123	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	7/16/21 13:57	7/19/21 13:55		1	1170	mg/L		75.8	

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

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 8/17/21

Reported: 8/17/2021
Version: 3.3
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: 7/14/21 14:05
Customer ID:
Submittal Date: 7/15/21 10:33

Laboratory ID Number: BB12771

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 4500CO2 D	***Analyst: JAG***								
Bicarbonate Alkalinity, (calc.)	7/22/21 08:56	7/22/21 10:25		1	123	mg/L			
Carbonate Alkalinity, (calc.)	7/22/21 08:56	7/22/21 10:25		1	0.02	mg/L			
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	7/20/21 14:27	7/20/21 14:27		1	19.7	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	7/15/21 14:19	7/15/21 14:19		1	0.141	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	7/23/21 12:11	7/23/21 12:11		32	711	mg/L	16.00	32	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	7/14/21 14:02	7/14/21 14:02			1616.94	uS/cm			FA
pH	7/14/21 14:02	7/14/21 14:02			5.90	SU			FA
Temperature	7/14/21 14:02	7/14/21 14:02			19.36	C			FA
Turbidity	7/14/21 14:02	7/14/21 14:02			1.16	NTU			FA

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

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 8/17/21

Reported: 8/17/2021
Version: 3.3
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: 7/14/21 14:05
Customer ID:
Delivery Date: 7/15/21 10:33

Description: Gorgas Gypsum - PZ-20

Laboratory ID Number: BB12771

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB12840	Potassium, Total	mg/L	-0.00182	0.367	10.0	16.2	16.2	10.5	8.50 to 11.5	99.5	70.0 to 130	0.00	20.0
BB12840	Magnesium, Total	mg/L	-0.0101	0.0462	5.00	111	110	5.03	4.25 to 5.75	60.0	70.0 to 130	0.905	20.0
BB12842	Iron, Dissolved	mg/L	-0.000685	0.0176	0.2	245	253	0.196	0.170 to 0.230	1000	70.0 to 130	3.21	20.0
BB12840	Cobalt, Total	mg/L	-0.0000667	0.000147	0.100	0.204	0.206	0.0969	0.0850 to 0.115	88.0	70.0 to 130	0.976	20.0
BB12840	Boron, Total	mg/L	0.000722	0.0650	1.00	1.24	1.25	0.989	0.850 to 1.15	101	70.0 to 130	0.803	20.0
BB12840	Selenium, Total	mg/L	-0.0000842	0.00100	0.100	0.104	0.105	0.104	0.0850 to 0.115	104	70.0 to 130	0.957	20.0
BB12840	Molybdenum, Total	mg/L	0.0000076	0.000147	0.100	0.103	0.100	0.101	0.0850 to 0.115	102	70.0 to 130	2.96	20.0
BB12840	Arsenic, Total	mg/L	0.000029	0.000147	0.100	0.208	0.209	0.105	0.0850 to 0.115	104	70.0 to 130	0.480	20.0
BB12840	Calcium, Total	mg/L	0.00542	0.152	5.00	180	180	5.04	4.25 to 5.75	20.0	70.0 to 130	0.00	20.0
BB12840	Iron, Total	mg/L	-0.000370	0.0176	0.2	38.9	38.7	0.200	0.170 to 0.230	-250	70.0 to 130	0.515	20.0
BB12840	Manganese, Total	mg/L	0.0000105	0.000147	0.100	14.3	15.5	0.102	0.0850 to 0.115	500	70.0 to 130	8.05	20.0
BB12840	Beryllium, Total	mg/L	0.000106	0.000880	0.100	0.0964	0.0963	0.0993	0.0850 to 0.115	96.4	70.0 to 130	0.104	20.0
BB12840	Lithium, Total	mg/L	-0.000105	0.0154	0.200	0.290	0.294	0.198	0.170 to 0.230	119	70.0 to 130	1.37	20.0
BB12840	Chromium, Total	mg/L	0.0000042	0.000440	0.100	0.0949	0.0972	0.0981	0.0850 to 0.115	94.6	70.0 to 130	2.39	20.0
BB12840	Cadmium, Total	mg/L	0.00000	0.000147	0.100	0.0963	0.0956	0.0995	0.0850 to 0.115	96.3	70.0 to 130	0.730	20.0
BB12840	Sodium, Total	mg/L	0.00104	0.0660	5.00	56.3	56.8	4.98	4.25 to 5.75	80.0	70.0 to 130	0.884	20.0
BB12840	Barium, Total	mg/L	-0.0000459	0.000200	0.100	0.120	0.122	0.0970	0.0850 to 0.115	98.3	70.0 to 130	1.65	20.0
BB12840	Antimony, Total	mg/L	0.0000969	0.00100	0.100	0.0958	0.0983	0.0941	0.0850 to 0.115	95.8	70.0 to 130	2.58	20.0
BB12840	Mercury, Total by CVAA	mg/L	-0.00003	0.000500	0.004	0.00371	0.00363	0.00372	0.00340 to 0.00460	92.8	70.0 to 130	2.18	20.0
BB12840	Lead, Total	mg/L	0.000003	0.000147	0.100	0.108	0.109	0.112	0.0850 to 0.115	108	70.0 to 130	0.922	20.0
BB12842	Manganese, Dissolved	mg/L	0.0000584	0.000147	0.100	27.8	28.6	0.102	0.0850 to 0.115	-1000	70.0 to 130	2.84	20.0
BB12840	Thallium, Total	mg/L	-0.000125	0.000147	0.100	0.107	0.112	0.111	0.0850 to 0.115	107	70.0 to 130	4.57	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 8/17/21

Reported: 8/17/2021
Version: 3.3
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: 7/14/21 14:05
Customer ID:
Delivery Date: 7/15/21 10:33

Description: Gorgas Gypsum - PZ-20

Laboratory ID Number: BB12771

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB12840	Sulfate	mg/L	-0.357	1.00	1000	1920	835	19.5	18.0 to 22.0	106	80.0 to 120	2.60	20.0
BB12772	Solids, Dissolved	mg/L	-2.00	25.0			945	44.0	40.0 to 60.0			0.00	5.00
BB12773	Fluoride	mg/L	0.0173	0.100	2.50	2.42	0.00828	2.57	2.25 to 2.75	96.8	80.0 to 120	0.00	20.0
BB12842	Alkalinity, Total as CaCO3	mg/L					145	53.0	45.0 to 55.0			0.692	10.0
BB12840	Chloride	mg/L	-0.122	1.00	10.0	21.6	11.6	9.96	9.00 to 11.0	101	80.0 to 120	0.866	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 8/17/21

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: 7/14/21 15:32
Customer ID:
Submittal Date: 7/15/21 10:33

Laboratory ID Number: BB12772

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	7/21/21 12:22	7/22/21 17:53		1.015	0.0597	mg/L	0.030000	0.1015	J
* Calcium, Total	7/21/21 12:22	7/23/21 12:45		10.15	122	mg/L	0.70035	4.06	
* Iron, Total	7/21/21 12:22	7/22/21 17:53		1.015	3.13	mg/L	0.008120	0.0406	
* Lithium, Total	7/21/21 12:22	7/22/21 17:53		1.015	0.0994	mg/L	0.007105	0.01999956	
* Magnesium, Total	7/21/21 12:22	7/23/21 12:45		10.15	54.3	mg/L	0.21315	4.06	
* Sodium, Total	7/21/21 12:22	7/23/21 12:45		10.15	143	mg/L	0.3045	4.06	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Iron, Dissolved	7/27/21 09:49	7/27/21 12:41		1.015	3.04	mg/L	0.008120	0.0406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	7/16/21 07:47	7/16/21 17:44		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Arsenic, Total	7/16/21 07:47	7/16/21 17:44		1.015	0.00175	mg/L	0.000068	0.000203	
* Barium, Total	7/16/21 07:47	7/16/21 17:44		1.015	0.0401	mg/L	0.000102	0.000203	
* Beryllium, Total	7/16/21 07:47	7/16/21 17:44		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	7/16/21 07:47	7/16/21 17:44		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	7/16/21 07:47	7/16/21 17:44		1.015	0.000219	mg/L	0.000203	0.001015	J
* Cobalt, Total	7/16/21 07:47	7/16/21 17:44		1.015	0.00100	mg/L	0.000068	0.000203	
* Lead, Total	7/16/21 07:47	7/16/21 17:44		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Molybdenum, Total	7/16/21 07:47	7/16/21 17:44		1.015	0.000842	mg/L	0.000068	0.000203	
* Potassium, Total	7/16/21 07:47	7/16/21 17:44		1.015	5.36	mg/L	0.169505	0.5075	
* Manganese, Total	7/16/21 07:47	7/16/21 17:44		1.015	0.988	mg/L	0.000068	0.000203	
* Selenium, Total	7/16/21 07:47	7/16/21 17:44		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	7/16/21 07:47	7/16/21 17:44		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Manganese, Dissolved	7/16/21 13:03	7/16/21 20:34		1.015	1.00	mg/L	0.000068	0.000203	
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	7/16/21 08:25	7/16/21 12:37		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2320 B	***Analyst: JAG***								
Alkalinity, Total as CaCO3	7/22/21 08:56	7/22/21 10:25		1	450	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	7/16/21 13:57	7/19/21 13:55		1	945	mg/L		75.8	

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

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 8/17/21

Reported: 8/17/2021
Version: 3.3
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: 7/14/21 15:32
Customer ID:
Submittal Date: 7/15/21 10:33

Laboratory ID Number: BB12772

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 4500CO2 D	***Analyst: JAG***								
Bicarbonate Alkalinity, (calc.)	7/22/21 08:56	7/22/21 10:25		1	450	mg/L			
Carbonate Alkalinity, (calc.)	7/22/21 08:56	7/22/21 10:25		1	0.17	mg/L			
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	7/20/21 14:28	7/20/21 14:28		1	14.3	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	7/15/21 14:21	7/15/21 14:21		1	0.208	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	7/23/21 12:12	7/23/21 12:12		20	369	mg/L	10.00	20	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	7/14/21 15:28	7/14/21 15:28			1340.89	uS/cm			FA
pH	7/14/21 15:28	7/14/21 15:28			6.57	SU			FA
Temperature	7/14/21 15:28	7/14/21 15:28			19.09	C			FA
Turbidity	7/14/21 15:28	7/14/21 15:28			2.81	NTU			FA

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

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 8/17/21

Reported: 8/17/2021
Version: 3.3
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: 7/14/21 15:32
Customer ID:
Delivery Date: 7/15/21 10:33

Description: Gorgas Gypsum - PZ-19

Laboratory ID Number: BB12772

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB12840	Potassium, Total	mg/L	-0.00182	0.367	10.0	16.2	16.2	10.5	8.50 to 11.5	99.5	70.0 to 130	0.00	20.0
BB12840	Magnesium, Total	mg/L	-0.0101	0.0462	5.00	111	110	5.03	4.25 to 5.75	60.0	70.0 to 130	0.905	20.0
BB12840	Selenium, Total	mg/L	-0.0000842	0.00100	0.100	0.104	0.105	0.104	0.0850 to 0.115	104	70.0 to 130	0.957	20.0
BB12842	Iron, Dissolved	mg/L	-0.000685	0.0176	0.2	245	253	0.196	0.170 to 0.230	1000	70.0 to 130	3.21	20.0
BB12840	Cobalt, Total	mg/L	-0.0000667	0.000147	0.100	0.204	0.206	0.0969	0.0850 to 0.115	88.0	70.0 to 130	0.976	20.0
BB12840	Boron, Total	mg/L	0.000722	0.0650	1.00	1.24	1.25	0.989	0.850 to 1.15	101	70.0 to 130	0.803	20.0
BB12840	Molybdenum, Total	mg/L	0.0000076	0.000147	0.100	0.103	0.100	0.101	0.0850 to 0.115	102	70.0 to 130	2.96	20.0
BB12840	Arsenic, Total	mg/L	0.000029	0.000147	0.100	0.208	0.209	0.105	0.0850 to 0.115	104	70.0 to 130	0.480	20.0
BB12840	Calcium, Total	mg/L	0.00542	0.152	5.00	180	180	5.04	4.25 to 5.75	20.0	70.0 to 130	0.00	20.0
BB12840	Iron, Total	mg/L	-0.000370	0.0176	0.2	38.9	38.7	0.200	0.170 to 0.230	-250	70.0 to 130	0.515	20.0
BB12840	Manganese, Total	mg/L	0.0000105	0.000147	0.100	14.3	15.5	0.102	0.0850 to 0.115	500	70.0 to 130	8.05	20.0
BB12840	Beryllium, Total	mg/L	0.000106	0.000880	0.100	0.0964	0.0963	0.0993	0.0850 to 0.115	96.4	70.0 to 130	0.104	20.0
BB12840	Lead, Total	mg/L	0.000003	0.000147	0.100	0.108	0.109	0.112	0.0850 to 0.115	108	70.0 to 130	0.922	20.0
BB12842	Manganese, Dissolved	mg/L	0.0000584	0.000147	0.100	27.8	28.6	0.102	0.0850 to 0.115	-1000	70.0 to 130	2.84	20.0
BB12840	Thallium, Total	mg/L	-0.000125	0.000147	0.100	0.107	0.112	0.111	0.0850 to 0.115	107	70.0 to 130	4.57	20.0
BB12840	Lithium, Total	mg/L	-0.000105	0.0154	0.200	0.290	0.294	0.198	0.170 to 0.230	119	70.0 to 130	1.37	20.0
BB12840	Chromium, Total	mg/L	0.0000042	0.000440	0.100	0.0949	0.0972	0.0981	0.0850 to 0.115	94.6	70.0 to 130	2.39	20.0
BB12840	Cadmium, Total	mg/L	0.00000	0.000147	0.100	0.0963	0.0956	0.0995	0.0850 to 0.115	96.3	70.0 to 130	0.730	20.0
BB12840	Sodium, Total	mg/L	0.00104	0.0660	5.00	56.3	56.8	4.98	4.25 to 5.75	80.0	70.0 to 130	0.884	20.0
BB12840	Barium, Total	mg/L	-0.0000459	0.000200	0.100	0.120	0.122	0.0970	0.0850 to 0.115	98.3	70.0 to 130	1.65	20.0
BB12840	Antimony, Total	mg/L	0.0000969	0.00100	0.100	0.0958	0.0983	0.0941	0.0850 to 0.115	95.8	70.0 to 130	2.58	20.0
BB12840	Mercury, Total by CVAA	mg/L	-0.00003	0.000500	0.004	0.00371	0.00363	0.00372	0.00340 to 0.00460	92.8	70.0 to 130	2.18	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 8/17/21

Reported: 8/17/2021
Version: 3.3
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: 7/14/21 15:32
Customer ID:
Delivery Date: 7/15/21 10:33

Description: Gorgas Gypsum - PZ-19

Laboratory ID Number: BB12772

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB12772	Solids, Dissolved	mg/L	-2.00	25.0			945	44.0	40.0 to 60.0			0.00	5.00
BB12773	Fluoride	mg/L	0.0173	0.100	2.50	2.42	0.00828	2.57	2.25 to 2.75	96.8	80.0 to 120	0.00	20.0
BB12840	Chloride	mg/L	-0.122	1.00	10.0	21.6	11.6	9.96	9.00 to 11.0	101	80.0 to 120	0.866	20.0
BB12842	Alkalinity, Total as CaCO3	mg/L					145	53.0	45.0 to 55.0			0.692	10.0
BB12840	Sulfate	mg/L	-0.357	1.00	1000	1920	835	19.5	18.0 to 22.0	106	80.0 to 120	2.60	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 8/17/21

Reported: 8/17/2021
Version: 3.3
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: 7/14/21 16:15
Customer ID:
Submittal Date: 7/15/21 10:33

Laboratory ID Number: BB12773

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	7/21/21 12:22	7/22/21 17:57		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	7/21/21 12:22	7/22/21 17:57		1.015	Not Detected	mg/L	0.070035	0.406	U
* Iron, Total	7/21/21 12:22	7/22/21 17:57		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Total	7/21/21 12:22	7/22/21 17:57		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	7/21/21 12:22	7/22/21 17:57		1.015	Not Detected	mg/L	0.021315	0.406	U
* Sodium, Total	7/21/21 12:22	7/22/21 17:57		1.015	Not Detected	mg/L	0.03045	0.406	U
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	7/16/21 07:47	7/16/21 17:48		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Arsenic, Total	7/16/21 07:47	7/16/21 17:48		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Barium, Total	7/16/21 07:47	7/16/21 17:48		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Beryllium, Total	7/16/21 07:47	7/16/21 17:48		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	7/16/21 07:47	7/16/21 17:48		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	7/16/21 07:47	7/16/21 17:48		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	7/16/21 07:47	7/16/21 17:48		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	7/16/21 07:47	7/16/21 17:48		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Molybdenum, Total	7/16/21 07:47	7/16/21 17:48		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	7/16/21 07:47	7/16/21 17:48		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Potassium, Total	7/16/21 07:47	7/16/21 17:48		1.015	Not Detected	mg/L	0.169505	0.5075	U
* Selenium, Total	7/16/21 07:47	7/16/21 17:48		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	7/16/21 07:47	7/16/21 17:48		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	7/16/21 08:25	7/16/21 12:39		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	7/16/21 13:57	7/19/21 13:55		1	Not Detected	mg/L		25	U
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	7/20/21 14:29	7/20/21 14:29		1	Not Detected	mg/L	0.50	1	U
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	7/15/21 14:22	7/15/21 14:22		1	Not Detected	mg/L	0.06	0.1	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	7/23/21 12:14	7/23/21 12:14		1	Not Detected	mg/L	0.50	1	U

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

Comments:

Reported: 8/17/2021
Version: 3.3
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: 7/14/21 16:15
Customer ID:
Delivery Date: 7/15/21 10:33

Description: Gorgas Gypsum Equipment Blank-1

Laboratory ID Number: BB12773

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB12840	Cobalt, Total	mg/L	-0.0000667	0.000147	0.100	0.204	0.206	0.0969	0.0850 to 0.115	88.0	70.0 to 130	0.976	20.0
BB12840	Boron, Total	mg/L	0.000722	0.0650	1.00	1.24	1.25	0.989	0.850 to 1.15	101	70.0 to 130	0.803	20.0
BB12840	Selenium, Total	mg/L	-0.0000842	0.00100	0.100	0.104	0.105	0.104	0.0850 to 0.115	104	70.0 to 130	0.957	20.0
BB12840	Potassium, Total	mg/L	-0.00182	0.367	10.0	16.2	16.2	10.5	8.50 to 11.5	99.5	70.0 to 130	0.00	20.0
BB12840	Magnesium, Total	mg/L	-0.0101	0.0462	5.00	111	110	5.03	4.25 to 5.75	60.0	70.0 to 130	0.905	20.0
BB12840	Lead, Total	mg/L	0.000003	0.000147	0.100	0.108	0.109	0.112	0.0850 to 0.115	108	70.0 to 130	0.922	20.0
BB12840	Thallium, Total	mg/L	-0.000125	0.000147	0.100	0.107	0.112	0.111	0.0850 to 0.115	107	70.0 to 130	4.57	20.0
BB12840	Molybdenum, Total	mg/L	0.0000076	0.000147	0.100	0.103	0.100	0.101	0.0850 to 0.115	102	70.0 to 130	2.96	20.0
BB12840	Arsenic, Total	mg/L	0.000029	0.000147	0.100	0.208	0.209	0.105	0.0850 to 0.115	104	70.0 to 130	0.480	20.0
BB12840	Calcium, Total	mg/L	0.00542	0.152	5.00	180	180	5.04	4.25 to 5.75	20.0	70.0 to 130	0.00	20.0
BB12840	Iron, Total	mg/L	-0.000370	0.0176	0.2	38.9	38.7	0.200	0.170 to 0.230	-250	70.0 to 130	0.515	20.0
BB12840	Manganese, Total	mg/L	0.0000105	0.000147	0.100	14.3	15.5	0.102	0.0850 to 0.115	500	70.0 to 130	8.05	20.0
BB12840	Beryllium, Total	mg/L	0.000106	0.000880	0.100	0.0964	0.0963	0.0993	0.0850 to 0.115	96.4	70.0 to 130	0.104	20.0
BB12840	Lithium, Total	mg/L	-0.000105	0.0154	0.200	0.290	0.294	0.198	0.170 to 0.230	119	70.0 to 130	1.37	20.0
BB12840	Chromium, Total	mg/L	0.0000042	0.000440	0.100	0.0949	0.0972	0.0981	0.0850 to 0.115	94.6	70.0 to 130	2.39	20.0
BB12840	Cadmium, Total	mg/L	0.00000	0.000147	0.100	0.0963	0.0956	0.0995	0.0850 to 0.115	96.3	70.0 to 130	0.730	20.0
BB12840	Sodium, Total	mg/L	0.00104	0.0660	5.00	56.3	56.8	4.98	4.25 to 5.75	80.0	70.0 to 130	0.884	20.0
BB12840	Barium, Total	mg/L	-0.0000459	0.000200	0.100	0.120	0.122	0.0970	0.0850 to 0.115	98.3	70.0 to 130	1.65	20.0
BB12840	Antimony, Total	mg/L	0.0000969	0.00100	0.100	0.0958	0.0983	0.0941	0.0850 to 0.115	95.8	70.0 to 130	2.58	20.0
BB12840	Mercury, Total by CVAA	mg/L	-0.00003	0.000500	0.004	0.00371	0.00363	0.00372	0.00340 to 0.00460	92.8	70.0 to 130	2.18	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: 7/14/21 16:15
Customer ID:
Delivery Date: 7/15/21 10:33

Description: Gorgas Gypsum Equipment Blank-1

Laboratory ID Number: BB12773

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB12772	Solids, Dissolved	mg/L	-2.00	25.0			945	44.0	40.0 to 60.0			0.00	5.00
BB12773	Fluoride	mg/L	0.0173	0.100	2.50	2.42	0.00828	2.57	2.25 to 2.75	96.8	80.0 to 120	0.00	20.0
BB12840	Chloride	mg/L	-0.122	1.00	10.0	21.6	11.6	9.96	9.00 to 11.0	101	80.0 to 120	0.866	20.0
BB12840	Sulfate	mg/L	-0.357	1.00	1000	1920	835	19.5	18.0 to 22.0	106	80.0 to 120	2.60	20.0

Comments:

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Gypsum - MW-9V

Location Code: WMWGORG
Collected: 7/13/21 11:50
Customer ID:
Submittal Date: 7/15/21 15:13

Laboratory ID Number: BB12835

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	7/21/21 12:22	7/22/21 18:00		1.015	0.125	mg/L	0.030000	0.1015	
* Calcium, Total	7/21/21 12:22	7/23/21 13:26		101.5	408	mg/L	7.0035	40.6	
* Iron, Total	7/21/21 12:22	7/22/21 18:00		1.015	1.55	mg/L	0.008120	0.0406	
* Lithium, Total	7/21/21 12:22	7/22/21 18:00		1.015	0.408	mg/L	0.007105	0.01999956	
* Magnesium, Total	7/21/21 12:22	7/23/21 12:48		10.15	168	mg/L	0.21315	4.06	
* Sodium, Total	7/21/21 12:22	7/23/21 13:26		101.5	293	mg/L	3.045	40.6	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Iron, Dissolved	7/27/21 09:49	7/27/21 12:44		1.015	1.48	mg/L	0.008120	0.0406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	7/16/21 07:47	7/16/21 17:51		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Arsenic, Total	7/16/21 07:47	7/16/21 17:51		1.015	0.00168	mg/L	0.000068	0.000203	
* Barium, Total	7/16/21 07:47	7/16/21 17:51		1.015	0.0130	mg/L	0.000102	0.000203	
* Beryllium, Total	7/16/21 07:47	7/16/21 17:51		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	7/16/21 07:47	7/16/21 17:51		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	7/16/21 07:47	7/16/21 17:51		1.015	0.000304	mg/L	0.000203	0.001015	J
* Cobalt, Total	7/16/21 07:47	7/16/21 17:51		1.015	0.000774	mg/L	0.000068	0.000203	
* Lead, Total	7/16/21 07:47	7/16/21 17:51		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Molybdenum, Total	7/16/21 07:47	7/16/21 17:51		1.015	0.000562	mg/L	0.000068	0.000203	
* Potassium, Total	7/16/21 07:47	7/16/21 17:51		1.015	7.64	mg/L	0.169505	0.5075	
* Manganese, Total	7/16/21 07:47	7/22/21 14:09		5.075	1.56	mg/L	0.000340	0.001015	
* Selenium, Total	7/16/21 07:47	7/16/21 17:51		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	7/16/21 07:47	7/16/21 17:51		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Manganese, Dissolved	7/16/21 13:03	7/22/21 12:11		5.075	1.50	mg/L	0.000340	0.001015	
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	7/16/21 08:25	7/16/21 12:42		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2320 B	***Analyst: JAG***								
Alkalinity, Total as CaCO3	7/22/21 08:56	7/22/21 10:25		1	314	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	7/16/21 13:57	7/19/21 13:55		1	2870	mg/L		178.6	

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

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 8/17/21

Reported: 8/17/2021
Version: 3.3
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: 7/13/21 11:50
Customer ID:
Submittal Date: 7/15/21 15:13

Laboratory ID Number: BB12835

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 4500CO2 D	***Analyst: JAG***								
Bicarbonate Alkalinity, (calc.)	7/22/21 08:56	7/22/21 10:25		1	314	mg/L			
Carbonate Alkalinity, (calc.)	7/22/21 08:56	7/22/21 10:25		1	0.32	mg/L			
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	7/20/21 14:40	7/20/21 14:40		10	62.0	mg/L	5.00	10	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	7/20/21 15:46	7/20/21 15:46		1	0.211	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	7/23/21 12:15	7/23/21 12:15		50	1820	mg/L	25.00	50	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	7/13/21 11:47	7/13/21 11:47			3329.27	uS/cm			FA
pH	7/13/21 11:47	7/13/21 11:47			6.92	SU			FA
Temperature	7/13/21 11:47	7/13/21 11:47			23.27	C			FA
Turbidity	7/13/21 11:47	7/13/21 11:47			0.44	NTU			FA

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

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 8/17/21

Reported: 8/17/2021
Version: 3.3
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: 7/13/21 11:50
Customer ID:
Delivery Date: 7/15/21 15:13

Description: Gorgas Gypsum - MW-9V

Laboratory ID Number: BB12835

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB12840	Selenium, Total	mg/L	-0.0000842	0.00100	0.100	0.104	0.105	0.104	0.0850 to 0.115	104	70.0 to 130	0.957	20.0
BB12840	Potassium, Total	mg/L	-0.00182	0.367	10.0	16.2	16.2	10.5	8.50 to 11.5	99.5	70.0 to 130	0.00	20.0
BB12840	Magnesium, Total	mg/L	-0.0101	0.0462	5.00	111	110	5.03	4.25 to 5.75	60.0	70.0 to 130	0.905	20.0
BB12840	Lithium, Total	mg/L	-0.000105	0.0154	0.200	0.290	0.294	0.198	0.170 to 0.230	119	70.0 to 130	1.37	20.0
BB12840	Chromium, Total	mg/L	0.0000042	0.000440	0.100	0.0949	0.0972	0.0981	0.0850 to 0.115	94.6	70.0 to 130	2.39	20.0
BB12840	Cadmium, Total	mg/L	0.00000	0.000147	0.100	0.0963	0.0956	0.0995	0.0850 to 0.115	96.3	70.0 to 130	0.730	20.0
BB12840	Sodium, Total	mg/L	0.00104	0.0660	5.00	56.3	56.8	4.98	4.25 to 5.75	80.0	70.0 to 130	0.884	20.0
BB12840	Barium, Total	mg/L	-0.0000459	0.000200	0.100	0.120	0.122	0.0970	0.0850 to 0.115	98.3	70.0 to 130	1.65	20.0
BB12840	Antimony, Total	mg/L	0.0000969	0.00100	0.100	0.0958	0.0983	0.0941	0.0850 to 0.115	95.8	70.0 to 130	2.58	20.0
BB12840	Mercury, Total by CVAA	mg/L	-0.00003	0.000500	0.004	0.00371	0.00363	0.00372	0.00340 to 0.00460	92.8	70.0 to 130	2.18	20.0
BB12842	Iron, Dissolved	mg/L	-0.000685	0.0176	0.2	245	253	0.196	0.170 to 0.230	1000	70.0 to 130	3.21	20.0
BB12840	Cobalt, Total	mg/L	-0.0000667	0.000147	0.100	0.204	0.206	0.0969	0.0850 to 0.115	88.0	70.0 to 130	0.976	20.0
BB12840	Boron, Total	mg/L	0.000722	0.0650	1.00	1.24	1.25	0.989	0.850 to 1.15	101	70.0 to 130	0.803	20.0
BB12840	Molybdenum, Total	mg/L	0.0000076	0.000147	0.100	0.103	0.100	0.101	0.0850 to 0.115	102	70.0 to 130	2.96	20.0
BB12840	Arsenic, Total	mg/L	0.000029	0.000147	0.100	0.208	0.209	0.105	0.0850 to 0.115	104	70.0 to 130	0.480	20.0
BB12840	Calcium, Total	mg/L	0.00542	0.152	5.00	180	180	5.04	4.25 to 5.75	20.0	70.0 to 130	0.00	20.0
BB12840	Iron, Total	mg/L	-0.000370	0.0176	0.2	38.9	38.7	0.200	0.170 to 0.230	-250	70.0 to 130	0.515	20.0
BB12840	Manganese, Total	mg/L	0.0000105	0.000147	0.100	14.3	15.5	0.102	0.0850 to 0.115	500	70.0 to 130	8.05	20.0
BB12840	Beryllium, Total	mg/L	0.000106	0.000880	0.100	0.0964	0.0963	0.0993	0.0850 to 0.115	96.4	70.0 to 130	0.104	20.0
BB12840	Lead, Total	mg/L	0.000003	0.000147	0.100	0.108	0.109	0.112	0.0850 to 0.115	108	70.0 to 130	0.922	20.0
BB12842	Manganese, Dissolved	mg/L	0.0000584	0.000147	0.100	27.8	28.6	0.102	0.0850 to 0.115	-1000	70.0 to 130	2.84	20.0
BB12840	Thallium, Total	mg/L	-0.000125	0.000147	0.100	0.107	0.112	0.111	0.0850 to 0.115	107	70.0 to 130	4.57	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 8/17/21

Reported: 8/17/2021
Version: 3.3
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: 7/13/21 11:50
Customer ID:
Delivery Date: 7/15/21 15:13

Description: Gorgas Gypsum - MW-9V

Laboratory ID Number: BB12835

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB12842	Alkalinity, Total as CaCO3	mg/L					145	53.0	45.0 to 55.0			0.692	10.0
BB12844	Fluoride	mg/L	0.0319	0.100	2.50	2.37	0.0226	2.53	2.25 to 2.75	94.8	80.0 to 120	0.00	20.0
BB12840	Sulfate	mg/L	-0.357	1.00	1000	1920	835	19.5	18.0 to 22.0	106	80.0 to 120	2.60	20.0
BB12840	Chloride	mg/L	-0.122	1.00	10.0	21.6	11.6	9.96	9.00 to 11.0	101	80.0 to 120	0.866	20.0
BB12763	Solids, Dissolved	mg/L	-2.00	25.0			1570	44.0	40.0 to 60.0			0.641	5.00

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 8/17/21

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: 7/13/21 13:45
Customer ID:
Submittal Date: 7/15/21 15:13

Laboratory ID Number: BB12836

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	7/21/21 12:22	7/23/21 12:52		10.15	5.84	mg/L	0.300004	1.015	
* Calcium, Total	7/21/21 12:22	7/23/21 12:52		10.15	312	mg/L	0.70035	4.06	
* Iron, Total	7/21/21 12:22	7/23/21 12:52		10.15	19.2	mg/L	0.08120	0.406	
* Lithium, Total	7/21/21 12:22	7/22/21 18:03		1.015	0.166	mg/L	0.007105	0.01999956	
* Magnesium, Total	7/21/21 12:22	7/23/21 12:52		10.15	214	mg/L	0.21315	4.06	
* Sodium, Total	7/21/21 12:22	7/23/21 12:52		10.15	139	mg/L	0.3045	4.06	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Iron, Dissolved	7/27/21 09:49	7/27/21 14:31		10.15	18.3	mg/L	0.08120	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	7/16/21 07:47	7/16/21 17:55		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Arsenic, Total	7/16/21 07:47	7/16/21 17:55		1.015	0.00113	mg/L	0.000068	0.000203	
* Barium, Total	7/16/21 07:47	7/16/21 17:55		1.015	0.0141	mg/L	0.000102	0.000203	
* Beryllium, Total	7/16/21 07:47	7/16/21 17:55		1.015	0.000731	mg/L	0.000406	0.001015	J
* Cadmium, Total	7/16/21 07:47	7/16/21 17:55		1.015	0.000281	mg/L	0.000068	0.000203	
* Chromium, Total	7/16/21 07:47	7/16/21 17:55		1.015	0.000264	mg/L	0.000203	0.001015	J
* Cobalt, Total	7/16/21 07:47	7/16/21 17:55		1.015	0.141	mg/L	0.000068	0.000203	
* Lead, Total	7/16/21 07:47	7/16/21 17:55		1.015	0.000155	mg/L	0.000068	0.000203	J
* Molybdenum, Total	7/16/21 07:47	7/16/21 17:55		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Potassium, Total	7/16/21 07:47	7/16/21 17:55		1.015	7.65	mg/L	0.169505	0.5075	
* Manganese, Total	7/16/21 07:47	7/22/21 14:12		92.365	20.1	mg/L	0.006188	0.018473	
* Selenium, Total	7/16/21 07:47	7/16/21 17:55		1.015	0.00141	mg/L	0.000508	0.001015	
* Thallium, Total	7/16/21 07:47	7/16/21 17:55		1.015	0.000131	mg/L	0.000068	0.000203	J
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Manganese, Dissolved	7/16/21 13:03	7/22/21 12:14		92.365	21.0	mg/L	0.006188	0.018473	
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	7/16/21 08:25	7/16/21 12:44		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2320 B	***Analyst: JAG***								
Alkalinity, Total as CaCO3	7/22/21 08:56	7/22/21 10:25		1	43.4	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	7/16/21 13:57	7/19/21 13:55		1	2640	mg/L		147.1	

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

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 8/17/21

Reported: 8/17/2021
Version: 3.3
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: 7/13/21 13:45
Customer ID:
Submittal Date: 7/15/21 15:13

Laboratory ID Number: BB12836

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 4500CO2 D	***Analyst: JAG***								
Bicarbonate Alkalinity, (calc.)	7/22/21 08:56	7/22/21 10:25		1	43.4	mg/L			
Carbonate Alkalinity, (calc.)	7/22/21 08:56	7/22/21 10:25		1	0.00	mg/L			
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	7/20/21 14:42	7/20/21 14:42		10	78.6	mg/L	5.00	10	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	7/20/21 15:48	7/20/21 15:48		1	0.182	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	7/23/21 12:16	7/23/21 12:16		50	1750	mg/L	25.00	50	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	7/13/21 13:39	7/13/21 13:39			2859.50	uS/cm			FA
pH	7/13/21 13:39	7/13/21 13:39			5.13	SU			FA
Temperature	7/13/21 13:39	7/13/21 13:39			21.56	C			FA
Turbidity	7/13/21 13:39	7/13/21 13:39			1.41	NTU			FA

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

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 8/17/21

Reported: 8/17/2021
Version: 3.3
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: 7/13/21 13:45
Customer ID:
Delivery Date: 7/15/21 15:13

Description: Gorgas Gypsum - MW-9H

Laboratory ID Number: BB12836

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB12842	Iron, Dissolved	mg/L	-0.000685	0.0176	0.2	245	253	0.196	0.170 to 0.230	1000	70.0 to 130	3.21	20.0
BB12840	Cobalt, Total	mg/L	-0.0000667	0.000147	0.100	0.204	0.206	0.0969	0.0850 to 0.115	88.0	70.0 to 130	0.976	20.0
BB12840	Boron, Total	mg/L	0.000722	0.0650	1.00	1.24	1.25	0.989	0.850 to 1.15	101	70.0 to 130	0.803	20.0
BB12840	Selenium, Total	mg/L	-0.0000842	0.00100	0.100	0.104	0.105	0.104	0.0850 to 0.115	104	70.0 to 130	0.957	20.0
BB12840	Iron, Total	mg/L	-0.000370	0.0176	0.2	38.9	38.7	0.200	0.170 to 0.230	-250	70.0 to 130	0.515	20.0
BB12840	Manganese, Total	mg/L	0.0000105	0.000147	0.100	14.3	15.5	0.102	0.0850 to 0.115	500	70.0 to 130	8.05	20.0
BB12840	Beryllium, Total	mg/L	0.000106	0.000880	0.100	0.0964	0.0963	0.0993	0.0850 to 0.115	96.4	70.0 to 130	0.104	20.0
BB12840	Lead, Total	mg/L	0.000003	0.000147	0.100	0.108	0.109	0.112	0.0850 to 0.115	108	70.0 to 130	0.922	20.0
BB12842	Manganese, Dissolved	mg/L	0.0000584	0.000147	0.100	27.8	28.6	0.102	0.0850 to 0.115	-1000	70.0 to 130	2.84	20.0
BB12840	Thallium, Total	mg/L	-0.000125	0.000147	0.100	0.107	0.112	0.111	0.0850 to 0.115	107	70.0 to 130	4.57	20.0
BB12840	Molybdenum, Total	mg/L	0.0000076	0.000147	0.100	0.103	0.100	0.101	0.0850 to 0.115	102	70.0 to 130	2.96	20.0
BB12840	Arsenic, Total	mg/L	0.000029	0.000147	0.100	0.208	0.209	0.105	0.0850 to 0.115	104	70.0 to 130	0.480	20.0
BB12840	Calcium, Total	mg/L	0.00542	0.152	5.00	180	180	5.04	4.25 to 5.75	20.0	70.0 to 130	0.00	20.0
BB12840	Potassium, Total	mg/L	-0.00182	0.367	10.0	16.2	16.2	10.5	8.50 to 11.5	99.5	70.0 to 130	0.00	20.0
BB12840	Magnesium, Total	mg/L	-0.0101	0.0462	5.00	111	110	5.03	4.25 to 5.75	60.0	70.0 to 130	0.905	20.0
BB12840	Lithium, Total	mg/L	-0.000105	0.0154	0.200	0.290	0.294	0.198	0.170 to 0.230	119	70.0 to 130	1.37	20.0
BB12840	Chromium, Total	mg/L	0.0000042	0.000440	0.100	0.0949	0.0972	0.0981	0.0850 to 0.115	94.6	70.0 to 130	2.39	20.0
BB12840	Cadmium, Total	mg/L	0.00000	0.000147	0.100	0.0963	0.0956	0.0995	0.0850 to 0.115	96.3	70.0 to 130	0.730	20.0
BB12840	Sodium, Total	mg/L	0.00104	0.0660	5.00	56.3	56.8	4.98	4.25 to 5.75	80.0	70.0 to 130	0.884	20.0
BB12840	Barium, Total	mg/L	-0.0000459	0.000200	0.100	0.120	0.122	0.0970	0.0850 to 0.115	98.3	70.0 to 130	1.65	20.0
BB12840	Antimony, Total	mg/L	0.0000969	0.00100	0.100	0.0958	0.0983	0.0941	0.0850 to 0.115	95.8	70.0 to 130	2.58	20.0
BB12840	Mercury, Total by CVAA	mg/L	-0.00003	0.000500	0.004	0.00371	0.00363	0.00372	0.00340 to 0.00460	92.8	70.0 to 130	2.18	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 8/17/21

Reported: 8/17/2021
Version: 3.3
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: 7/13/21 13:45
Customer ID:
Delivery Date: 7/15/21 15:13

Description: Gorgas Gypsum - MW-9H

Laboratory ID Number: BB12836

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB12840	Sulfate	mg/L	-0.357	1.00	1000	1920	835	19.5	18.0 to 22.0	106	80.0 to 120	2.60	20.0
BB12842	Alkalinity, Total as CaCO3	mg/L					145	53.0	45.0 to 55.0			0.692	10.0
BB12844	Fluoride	mg/L	0.0319	0.100	2.50	2.37	0.0226	2.53	2.25 to 2.75	94.8	80.0 to 120	0.00	20.0
BB12840	Chloride	mg/L	-0.122	1.00	10.0	21.6	11.6	9.96	9.00 to 11.0	101	80.0 to 120	0.866	20.0
BB12763	Solids, Dissolved	mg/L	-2.00	25.0			1570	44.0	40.0 to 60.0			0.641	5.00

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 8/17/21

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: 7/14/21 09:35
Customer ID:
Submittal Date: 7/15/21 15:13

Laboratory ID Number: BB12837

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	7/21/21 12:22	7/22/21 18:07		1.015	0.0742	mg/L	0.030000	0.1015	J
* Calcium, Total	7/21/21 12:22	7/23/21 12:55		10.15	124	mg/L	0.70035	4.06	
* Iron, Total	7/21/21 12:22	7/23/21 12:55		10.15	5.21	mg/L	0.08120	0.406	
* Lithium, Total	7/21/21 12:22	7/22/21 18:07		1.015	0.454	mg/L	0.007105	0.01999956	
* Magnesium, Total	7/21/21 12:22	7/23/21 12:55		10.15	124	mg/L	0.21315	4.06	
* Sodium, Total	7/21/21 12:22	7/22/21 18:07		1.015	27.2	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Iron, Dissolved	7/27/21 09:49	7/27/21 12:51		1.015	4.02	mg/L	0.008120	0.0406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	7/16/21 07:47	7/16/21 17:58		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Arsenic, Total	7/16/21 07:47	7/16/21 17:58		1.015	0.00161	mg/L	0.000068	0.000203	
* Barium, Total	7/16/21 07:47	7/16/21 17:58		1.015	0.0130	mg/L	0.000102	0.000203	
* Beryllium, Total	7/16/21 07:47	7/16/21 17:58		1.015	0.00755	mg/L	0.000406	0.001015	
* Cadmium, Total	7/16/21 07:47	7/16/21 17:58		1.015	0.00301	mg/L	0.000068	0.000203	
* Chromium, Total	7/16/21 07:47	7/16/21 17:58		1.015	0.000592	mg/L	0.000203	0.001015	J
* Cobalt, Total	7/16/21 07:47	7/16/21 17:58		1.015	0.299	mg/L	0.000068	0.000203	
* Lead, Total	7/16/21 07:47	7/16/21 17:58		1.015	0.00557	mg/L	0.000068	0.000203	
* Molybdenum, Total	7/16/21 07:47	7/16/21 17:58		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Potassium, Total	7/16/21 07:47	7/16/21 17:58		1.015	5.06	mg/L	0.169505	0.5075	
* Manganese, Total	7/16/21 07:47	7/22/21 14:16		92.365	14.4	mg/L	0.006188	0.018473	
* Selenium, Total	7/16/21 07:47	7/16/21 17:58		1.015	0.00441	mg/L	0.000508	0.001015	
* Thallium, Total	7/16/21 07:47	7/16/21 17:58		1.015	0.000343	mg/L	0.000068	0.000203	
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Manganese, Dissolved	7/16/21 13:03	7/22/21 12:18		92.365	14.2	mg/L	0.006188	0.018473	
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	7/16/21 08:25	7/16/21 12:46		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	7/20/21 11:25	7/21/21 13:40		1	1330	mg/L		75.8	
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	7/20/21 14:33	7/20/21 14:33		1	1.69	mg/L	0.50	1	

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

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified. Alkalinity could not be performed due to the initial pH reading was below the titration end point of 4.5 SU. LBM 8/17/21

Reported: 8/17/2021
Version: 3.3
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: 7/14/21 09:35
Customer ID:
Submittal Date: 7/15/21 15:13

Laboratory ID Number: BB12837

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	7/20/21 15:49	7/20/21 15:49		1	Not Detected	mg/L	0.06	0.1	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	7/23/21 12:17	7/23/21 12:17		40	878	mg/L	20.00	40	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	7/14/21 09:34	7/14/21 09:34			1510.80	uS/cm			FA
pH	7/14/21 09:34	7/14/21 09:34			4.04	SU			FA
Temperature	7/14/21 09:34	7/14/21 09:34			19.90	C			FA
Turbidity	7/14/21 09:34	7/14/21 09:34			9.65	NTU			FA

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

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified. Alkalinity could not be performed due to the initial pH reading was below the titration end point of 4.5 SU. LBM 8/17/21

Reported: 8/17/2021
Version: 3.3
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: 7/14/21 09:35
Customer ID:
Delivery Date: 7/15/21 15:13

Description: Gorgas Gypsum - MW-12H

Laboratory ID Number: BB12837

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB12840	Potassium, Total	mg/L	-0.00182	0.367	10.0	16.2	16.2	10.5	8.50 to 11.5	99.5	70.0 to 130	0.00	20.0
BB12840	Magnesium, Total	mg/L	-0.0101	0.0462	5.00	111	110	5.03	4.25 to 5.75	60.0	70.0 to 130	0.905	20.0
BB12842	Iron, Dissolved	mg/L	-0.000685	0.0176	0.2	245	253	0.196	0.170 to 0.230	1000	70.0 to 130	3.21	20.0
BB12840	Cobalt, Total	mg/L	-0.0000667	0.000147	0.100	0.204	0.206	0.0969	0.0850 to 0.115	88.0	70.0 to 130	0.976	20.0
BB12840	Boron, Total	mg/L	0.000722	0.0650	1.00	1.24	1.25	0.989	0.850 to 1.15	101	70.0 to 130	0.803	20.0
BB12840	Selenium, Total	mg/L	-0.0000842	0.00100	0.100	0.104	0.105	0.104	0.0850 to 0.115	104	70.0 to 130	0.957	20.0
BB12840	Molybdenum, Total	mg/L	0.0000076	0.000147	0.100	0.103	0.100	0.101	0.0850 to 0.115	102	70.0 to 130	2.96	20.0
BB12840	Arsenic, Total	mg/L	0.000029	0.000147	0.100	0.208	0.209	0.105	0.0850 to 0.115	104	70.0 to 130	0.480	20.0
BB12840	Calcium, Total	mg/L	0.00542	0.152	5.00	180	180	5.04	4.25 to 5.75	20.0	70.0 to 130	0.00	20.0
BB12840	Lead, Total	mg/L	0.000003	0.000147	0.100	0.108	0.109	0.112	0.0850 to 0.115	108	70.0 to 130	0.922	20.0
BB12842	Manganese, Dissolved	mg/L	0.0000584	0.000147	0.100	27.8	28.6	0.102	0.0850 to 0.115	-1000	70.0 to 130	2.84	20.0
BB12840	Thallium, Total	mg/L	-0.000125	0.000147	0.100	0.107	0.112	0.111	0.0850 to 0.115	107	70.0 to 130	4.57	20.0
BB12840	Iron, Total	mg/L	-0.000370	0.0176	0.2	38.9	38.7	0.200	0.170 to 0.230	-250	70.0 to 130	0.515	20.0
BB12840	Manganese, Total	mg/L	0.0000105	0.000147	0.100	14.3	15.5	0.102	0.0850 to 0.115	500	70.0 to 130	8.05	20.0
BB12840	Beryllium, Total	mg/L	0.000106	0.000880	0.100	0.0964	0.0963	0.0993	0.0850 to 0.115	96.4	70.0 to 130	0.104	20.0
BB12840	Lithium, Total	mg/L	-0.000105	0.0154	0.200	0.290	0.294	0.198	0.170 to 0.230	119	70.0 to 130	1.37	20.0
BB12840	Chromium, Total	mg/L	0.0000042	0.000440	0.100	0.0949	0.0972	0.0981	0.0850 to 0.115	94.6	70.0 to 130	2.39	20.0
BB12840	Cadmium, Total	mg/L	0.00000	0.000147	0.100	0.0963	0.0956	0.0995	0.0850 to 0.115	96.3	70.0 to 130	0.730	20.0
BB12840	Sodium, Total	mg/L	0.00104	0.0660	5.00	56.3	56.8	4.98	4.25 to 5.75	80.0	70.0 to 130	0.884	20.0
BB12840	Barium, Total	mg/L	-0.0000459	0.000200	0.100	0.120	0.122	0.0970	0.0850 to 0.115	98.3	70.0 to 130	1.65	20.0
BB12840	Antimony, Total	mg/L	0.0000969	0.00100	0.100	0.0958	0.0983	0.0941	0.0850 to 0.115	95.8	70.0 to 130	2.58	20.0
BB12840	Mercury, Total by CVAA	mg/L	-0.00003	0.000500	0.004	0.00371	0.00363	0.00372	0.00340 to 0.00460	92.8	70.0 to 130	2.18	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified. Alkalinity could not be performed due to the initial pH reading was below the titration end point of 4.5 SU. LBM 8/17/21

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

Alabama Power

Batch QC Summary

Customer Account: WMWGORG
Sample Date: 7/14/21 09:35
Customer ID:
Delivery Date: 7/15/21 15:13

Description: Gorgas Gypsum - MW-12H

Laboratory ID Number: BB12837

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB12840	Chloride	mg/L	-0.122	1.00	10.0	21.6	11.6	9.96	9.00 to 11.0	101	80.0 to 120	0.866	20.0
BB12844	Fluoride	mg/L	0.0319	0.100	2.50	2.37	0.0226	2.53	2.25 to 2.75	94.8	80.0 to 120	0.00	20.0
BB12840	Sulfate	mg/L	-0.357	1.00	1000	1920	835	19.5	18.0 to 22.0	106	80.0 to 120	2.60	20.0
BB12841	Solids, Dissolved	mg/L	1.00	25.0			1400	50.0	40.0 to 60.0			0.00	5.00

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified. Alkalinity could not be performed due to the initial pH reading was below the titration end point of 4.5 SU. LBM 8/17/21

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: 7/14/21 10:45
Customer ID:
Submittal Date: 7/15/21 15:13

Laboratory ID Number: BB12838

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	7/21/21 12:22	7/22/21 18:10		1.015	1.55	mg/L	0.030000	0.1015	
* Calcium, Total	7/21/21 12:22	7/23/21 12:59		10.15	338	mg/L	0.70035	4.06	
* Iron, Total	7/21/21 12:22	7/23/21 12:59		10.15	34.2	mg/L	0.08120	0.406	
* Lithium, Total	7/21/21 12:22	7/22/21 18:10		1.015	0.374	mg/L	0.007105	0.01999956	
* Magnesium, Total	7/21/21 12:22	7/23/21 12:59		10.15	210	mg/L	0.21315	4.06	
* Sodium, Total	7/21/21 12:22	7/23/21 13:29		101.5	365	mg/L	3.045	40.6	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Iron, Dissolved	7/27/21 09:49	7/27/21 14:34		10.15	33.0	mg/L	0.08120	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	7/16/21 07:47	7/16/21 18:02		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Arsenic, Total	7/16/21 07:47	7/16/21 18:02		1.015	0.000475	mg/L	0.000068	0.000203	
* Barium, Total	7/16/21 07:47	7/16/21 18:02		1.015	0.0116	mg/L	0.000102	0.000203	
* Beryllium, Total	7/16/21 07:47	7/16/21 18:02		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	7/16/21 07:47	7/16/21 18:02		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	7/16/21 07:47	7/16/21 18:02		1.015	0.000252	mg/L	0.000203	0.001015	J
* Cobalt, Total	7/16/21 07:47	7/16/21 18:02		1.015	0.000178	mg/L	0.000068	0.000203	J
* Lead, Total	7/16/21 07:47	7/16/21 18:02		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Molybdenum, Total	7/16/21 07:47	7/16/21 18:02		1.015	0.00203	mg/L	0.000068	0.000203	
* Potassium, Total	7/16/21 07:47	7/16/21 18:02		1.015	7.57	mg/L	0.169505	0.5075	
* Manganese, Total	7/16/21 07:47	7/22/21 14:19		92.365	22.6	mg/L	0.006188	0.018473	
* Selenium, Total	7/16/21 07:47	7/16/21 18:02		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	7/16/21 07:47	7/16/21 18:02		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Manganese, Dissolved	7/16/21 13:03	7/22/21 12:22		92.365	23.0	mg/L	0.006188	0.018473	
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	7/16/21 08:25	7/16/21 12:49		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2320 B	***Analyst: JAG***								
Alkalinity, Total as CaCO3	7/22/21 08:56	7/22/21 10:25		1	283	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	7/20/21 11:25	7/21/21 13:40		1	3360	mg/L		208.3	

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

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 8/17/21

Reported: 8/17/2021
Version: 3.3
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: 7/14/21 10:45
Customer ID:
Submittal Date: 7/15/21 15:13

Laboratory ID Number: BB12838

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 4500CO2 D	***Analyst: JAG***								
Bicarbonate Alkalinity, (calc.)	7/22/21 08:56	7/22/21 10:25		1	283	mg/L			
Carbonate Alkalinity, (calc.)	7/22/21 08:56	7/22/21 10:25		1	0.08	mg/L			
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	7/20/21 14:43	7/20/21 14:43		16	189	mg/L	8.00	16	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	7/20/21 15:50	7/20/21 15:50		1	0.335	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	7/23/21 12:19	7/23/21 12:19		80	2000	mg/L	40.00	80	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	7/14/21 10:41	7/14/21 10:41			3992.61	uS/cm			FA
pH	7/14/21 10:41	7/14/21 10:41			6.21	SU			FA
Temperature	7/14/21 10:41	7/14/21 10:41			20.08	C			FA
Turbidity	7/14/21 10:41	7/14/21 10:41			0.11	NTU			FA

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

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 8/17/21

Reported: 8/17/2021
Version: 3.3
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: 7/14/21 10:45
Customer ID:
Delivery Date: 7/15/21 15:13

Description: Gorgas Gypsum - MW-12V

Laboratory ID Number: BB12838

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB12840	Selenium, Total	mg/L	-0.0000842	0.00100	0.100	0.104	0.105	0.104	0.0850 to 0.115	104	70.0 to 130	0.957	20.0
BB12842	Iron, Dissolved	mg/L	-0.000685	0.0176	0.2	245	253	0.196	0.170 to 0.230	1000	70.0 to 130	3.21	20.0
BB12840	Cobalt, Total	mg/L	-0.0000667	0.000147	0.100	0.204	0.206	0.0969	0.0850 to 0.115	88.0	70.0 to 130	0.976	20.0
BB12840	Boron, Total	mg/L	0.000722	0.0650	1.00	1.24	1.25	0.989	0.850 to 1.15	101	70.0 to 130	0.803	20.0
BB12840	Iron, Total	mg/L	-0.000370	0.0176	0.2	38.9	38.7	0.200	0.170 to 0.230	-250	70.0 to 130	0.515	20.0
BB12840	Manganese, Total	mg/L	0.0000105	0.000147	0.100	14.3	15.5	0.102	0.0850 to 0.115	500	70.0 to 130	8.05	20.0
BB12840	Beryllium, Total	mg/L	0.000106	0.000880	0.100	0.0964	0.0963	0.0993	0.0850 to 0.115	96.4	70.0 to 130	0.104	20.0
BB12840	Potassium, Total	mg/L	-0.00182	0.367	10.0	16.2	16.2	10.5	8.50 to 11.5	99.5	70.0 to 130	0.00	20.0
BB12840	Magnesium, Total	mg/L	-0.0101	0.0462	5.00	111	110	5.03	4.25 to 5.75	60.0	70.0 to 130	0.905	20.0
BB12840	Molybdenum, Total	mg/L	0.0000076	0.000147	0.100	0.103	0.100	0.101	0.0850 to 0.115	102	70.0 to 130	2.96	20.0
BB12840	Arsenic, Total	mg/L	0.000029	0.000147	0.100	0.208	0.209	0.105	0.0850 to 0.115	104	70.0 to 130	0.480	20.0
BB12840	Calcium, Total	mg/L	0.00542	0.152	5.00	180	180	5.04	4.25 to 5.75	20.0	70.0 to 130	0.00	20.0
BB12840	Lithium, Total	mg/L	-0.000105	0.0154	0.200	0.290	0.294	0.198	0.170 to 0.230	119	70.0 to 130	1.37	20.0
BB12840	Chromium, Total	mg/L	0.0000042	0.000440	0.100	0.0949	0.0972	0.0981	0.0850 to 0.115	94.6	70.0 to 130	2.39	20.0
BB12840	Cadmium, Total	mg/L	0.00000	0.000147	0.100	0.0963	0.0956	0.0995	0.0850 to 0.115	96.3	70.0 to 130	0.730	20.0
BB12840	Sodium, Total	mg/L	0.00104	0.0660	5.00	56.3	56.8	4.98	4.25 to 5.75	80.0	70.0 to 130	0.884	20.0
BB12840	Barium, Total	mg/L	-0.0000459	0.000200	0.100	0.120	0.122	0.0970	0.0850 to 0.115	98.3	70.0 to 130	1.65	20.0
BB12840	Antimony, Total	mg/L	0.0000969	0.00100	0.100	0.0958	0.0983	0.0941	0.0850 to 0.115	95.8	70.0 to 130	2.58	20.0
BB12840	Mercury, Total by CVAA	mg/L	-0.00003	0.000500	0.004	0.00371	0.00363	0.00372	0.00340 to 0.00460	92.8	70.0 to 130	2.18	20.0
BB12840	Lead, Total	mg/L	0.000003	0.000147	0.100	0.108	0.109	0.112	0.0850 to 0.115	108	70.0 to 130	0.922	20.0
BB12842	Manganese, Dissolved	mg/L	0.0000584	0.000147	0.100	27.8	28.6	0.102	0.0850 to 0.115	-1000	70.0 to 130	2.84	20.0
BB12840	Thallium, Total	mg/L	-0.000125	0.000147	0.100	0.107	0.112	0.111	0.0850 to 0.115	107	70.0 to 130	4.57	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 8/17/21

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

Alabama Power

Batch QC Summary

Customer Account: WMWGORG
Sample Date: 7/14/21 10:45
Customer ID:
Delivery Date: 7/15/21 15:13

Description: Gorgas Gypsum - MW-12V

Laboratory ID Number: BB12838

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB12842	Alkalinity, Total as CaCO3	mg/L					145	53.0	45.0 to 55.0			0.692	10.0
BB12840	Sulfate	mg/L	-0.357	1.00	1000	1920	835	19.5	18.0 to 22.0	106	80.0 to 120	2.60	20.0
BB12841	Solids, Dissolved	mg/L	1.00	25.0			1400	50.0	40.0 to 60.0			0.00	5.00
BB12840	Chloride	mg/L	-0.122	1.00	10.0	21.6	11.6	9.96	9.00 to 11.0	101	80.0 to 120	0.866	20.0
BB12844	Fluoride	mg/L	0.0319	0.100	2.50	2.37	0.0226	2.53	2.25 to 2.75	94.8	80.0 to 120	0.00	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 8/17/21

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: 7/14/21 11:47
Customer ID:
Submittal Date: 7/15/21 15:13

Laboratory ID Number: BB12839

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	7/21/21 12:22	7/22/21 18:13		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	7/21/21 12:22	7/23/21 13:02		10.15	133	mg/L	0.70035	4.06	
* Iron, Total	7/21/21 12:22	7/22/21 18:13		1.015	1.61	mg/L	0.008120	0.0406	
* Lithium, Total	7/21/21 12:22	7/22/21 18:13		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	7/21/21 12:22	7/23/21 13:02		10.15	118	mg/L	0.21315	4.06	
* Sodium, Total	7/21/21 12:22	7/23/21 13:02		10.15	43.0	mg/L	0.3045	4.06	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Iron, Dissolved	7/27/21 09:49	7/27/21 12:58		1.015	1.42	mg/L	0.008120	0.0406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	7/16/21 07:47	7/16/21 18:05		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Arsenic, Total	7/16/21 07:47	7/16/21 18:05		1.015	0.000406	mg/L	0.000068	0.000203	
* Barium, Total	7/16/21 07:47	7/16/21 18:05		1.015	0.0127	mg/L	0.000102	0.000203	
* Beryllium, Total	7/16/21 07:47	7/16/21 18:05		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	7/16/21 07:47	7/16/21 18:05		1.015	0.000285	mg/L	0.000068	0.000203	
* Chromium, Total	7/16/21 07:47	7/16/21 18:05		1.015	0.000340	mg/L	0.000203	0.001015	J
* Cobalt, Total	7/16/21 07:47	7/16/21 18:05		1.015	0.00475	mg/L	0.000068	0.000203	
* Lead, Total	7/16/21 07:47	7/16/21 18:05		1.015	0.000140	mg/L	0.000068	0.000203	J
* Molybdenum, Total	7/16/21 07:47	7/16/21 18:05		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Potassium, Total	7/16/21 07:47	7/16/21 18:05		1.015	0.987	mg/L	0.169505	0.5075	
* Manganese, Total	7/16/21 07:47	7/22/21 14:23		5.075	1.96	mg/L	0.000340	0.001015	
* Selenium, Total	7/16/21 07:47	7/16/21 18:05		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	7/16/21 07:47	7/16/21 18:05		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Manganese, Dissolved	7/16/21 13:03	7/22/21 12:25		5.075	1.95	mg/L	0.000340	0.001015	
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	7/16/21 08:25	7/16/21 12:51		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2320 B	***Analyst: JAG***								
Alkalinity, Total as CaCO3	7/22/21 08:56	7/22/21 10:25		1	63.4	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	7/20/21 11:25	7/21/21 13:40		1	1190	mg/L		75.8	

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

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 8/17/21

Reported: 8/17/2021
Version: 3.3
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: 7/14/21 11:47
Customer ID:
Submittal Date: 7/15/21 15:13

Laboratory ID Number: BB12839

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 4500CO2 D	***Analyst: JAG***								
Bicarbonate Alkalinity, (calc.)	7/22/21 08:56	7/22/21 10:25		1	63.4	mg/L			
Carbonate Alkalinity, (calc.)	7/22/21 08:56	7/22/21 10:25		1	0.01	mg/L			
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	7/20/21 14:36	7/20/21 14:36		1	4.70	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	7/20/21 15:51	7/20/21 15:51		1	0.0848	mg/L	0.06	0.1	J
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	7/23/21 12:20	7/23/21 12:20		40	747	mg/L	20.00	40	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	7/14/21 11:43	7/14/21 11:43			1436.6	uS/cm			FA
pH	7/14/21 11:43	7/14/21 11:43			5.72	SU			FA
Temperature	7/14/21 11:43	7/14/21 11:43			20.12	C			FA
Turbidity	7/14/21 11:43	7/14/21 11:43			5.58	NTU			FA

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

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 8/17/21

Reported: 8/17/2021
Version: 3.3
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: 7/14/21 11:47
Customer ID:
Delivery Date: 7/15/21 15:13

Description: Gorgas Gypsum - MW-11H

Laboratory ID Number: BB12839

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB12840	Molybdenum, Total	mg/L	0.0000076	0.000147	0.100	0.103	0.100	0.101	0.0850 to 0.115	102	70.0 to 130	2.96	20.0
BB12840	Arsenic, Total	mg/L	0.000029	0.000147	0.100	0.208	0.209	0.105	0.0850 to 0.115	104	70.0 to 130	0.480	20.0
BB12840	Calcium, Total	mg/L	0.00542	0.152	5.00	180	180	5.04	4.25 to 5.75	20.0	70.0 to 130	0.00	20.0
BB12840	Potassium, Total	mg/L	-0.00182	0.367	10.0	16.2	16.2	10.5	8.50 to 11.5	99.5	70.0 to 130	0.00	20.0
BB12840	Magnesium, Total	mg/L	-0.0101	0.0462	5.00	111	110	5.03	4.25 to 5.75	60.0	70.0 to 130	0.905	20.0
BB12842	Iron, Dissolved	mg/L	-0.000685	0.0176	0.2	245	253	0.196	0.170 to 0.230	1000	70.0 to 130	3.21	20.0
BB12840	Cobalt, Total	mg/L	-0.0000667	0.000147	0.100	0.204	0.206	0.0969	0.0850 to 0.115	88.0	70.0 to 130	0.976	20.0
BB12840	Boron, Total	mg/L	0.000722	0.0650	1.00	1.24	1.25	0.989	0.850 to 1.15	101	70.0 to 130	0.803	20.0
BB12840	Selenium, Total	mg/L	-0.0000842	0.00100	0.100	0.104	0.105	0.104	0.0850 to 0.115	104	70.0 to 130	0.957	20.0
BB12840	Lead, Total	mg/L	0.000003	0.000147	0.100	0.108	0.109	0.112	0.0850 to 0.115	108	70.0 to 130	0.922	20.0
BB12842	Manganese, Dissolved	mg/L	0.0000584	0.000147	0.100	27.8	28.6	0.102	0.0850 to 0.115	-1000	70.0 to 130	2.84	20.0
BB12840	Thallium, Total	mg/L	-0.000125	0.000147	0.100	0.107	0.112	0.111	0.0850 to 0.115	107	70.0 to 130	4.57	20.0
BB12840	Iron, Total	mg/L	-0.000370	0.0176	0.2	38.9	38.7	0.200	0.170 to 0.230	-250	70.0 to 130	0.515	20.0
BB12840	Manganese, Total	mg/L	0.0000105	0.000147	0.100	14.3	15.5	0.102	0.0850 to 0.115	500	70.0 to 130	8.05	20.0
BB12840	Beryllium, Total	mg/L	0.000106	0.000880	0.100	0.0964	0.0963	0.0993	0.0850 to 0.115	96.4	70.0 to 130	0.104	20.0
BB12840	Lithium, Total	mg/L	-0.000105	0.0154	0.200	0.290	0.294	0.198	0.170 to 0.230	119	70.0 to 130	1.37	20.0
BB12840	Chromium, Total	mg/L	0.0000042	0.000440	0.100	0.0949	0.0972	0.0981	0.0850 to 0.115	94.6	70.0 to 130	2.39	20.0
BB12840	Cadmium, Total	mg/L	0.00000	0.000147	0.100	0.0963	0.0956	0.0995	0.0850 to 0.115	96.3	70.0 to 130	0.730	20.0
BB12840	Sodium, Total	mg/L	0.00104	0.0660	5.00	56.3	56.8	4.98	4.25 to 5.75	80.0	70.0 to 130	0.884	20.0
BB12840	Barium, Total	mg/L	-0.0000459	0.000200	0.100	0.120	0.122	0.0970	0.0850 to 0.115	98.3	70.0 to 130	1.65	20.0
BB12840	Antimony, Total	mg/L	0.0000969	0.00100	0.100	0.0958	0.0983	0.0941	0.0850 to 0.115	95.8	70.0 to 130	2.58	20.0
BB12840	Mercury, Total by CVAA	mg/L	-0.00003	0.000500	0.004	0.00371	0.00363	0.00372	0.00340 to 0.00460	92.8	70.0 to 130	2.18	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 8/17/21

Reported: 8/17/2021
Version: 3.3
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: 7/14/21 11:47
Customer ID:
Delivery Date: 7/15/21 15:13

Description: Gorgas Gypsum - MW-11H

Laboratory ID Number: BB12839

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB12842	Alkalinity, Total as CaCO3	mg/L					145	53.0	45.0 to 55.0			0.692	10.0
BB12844	Fluoride	mg/L	0.0319	0.100	2.50	2.37	0.0226	2.53	2.25 to 2.75	94.8	80.0 to 120	0.00	20.0
BB12840	Sulfate	mg/L	-0.357	1.00	1000	1920	835	19.5	18.0 to 22.0	106	80.0 to 120	2.60	20.0
BB12841	Solids, Dissolved	mg/L	1.00	25.0			1400	50.0	40.0 to 60.0			0.00	5.00
BB12840	Chloride	mg/L	-0.122	1.00	10.0	21.6	11.6	9.96	9.00 to 11.0	101	80.0 to 120	0.866	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 8/17/21

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: 7/14/21 12:58
Customer ID:
Submittal Date: 7/15/21 15:13

Laboratory ID Number: BB12840

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	7/21/21 12:22	7/22/21 18:17		1.015	0.229	mg/L	0.030000	0.1015	
* Calcium, Total	7/21/21 12:22	7/23/21 13:05		10.15	179	mg/L	0.70035	4.06	RA
* Iron, Total	7/21/21 12:22	7/23/21 13:05		10.15	39.4	mg/L	0.08120	0.406	RA
* Lithium, Total	7/21/21 12:22	7/22/21 18:17		1.015	0.0524	mg/L	0.007105	0.01999956	
* Magnesium, Total	7/21/21 12:22	7/23/21 13:05		10.15	108	mg/L	0.21315	4.06	RA
* Sodium, Total	7/21/21 12:22	7/23/21 13:05		10.15	52.3	mg/L	0.3045	4.06	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Iron, Dissolved	7/27/21 09:49	7/27/21 14:40		10.15	36.8	mg/L	0.08120	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	7/16/21 07:47	7/16/21 18:09		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Arsenic, Total	7/16/21 07:47	7/16/21 18:09		1.015	0.104	mg/L	0.000068	0.000203	
* Barium, Total	7/16/21 07:47	7/16/21 18:09		1.015	0.0217	mg/L	0.000102	0.000203	
* Beryllium, Total	7/16/21 07:47	7/16/21 18:09		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	7/16/21 07:47	7/16/21 18:09		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	7/16/21 07:47	7/16/21 18:09		1.015	0.000322	mg/L	0.000203	0.001015	J
* Cobalt, Total	7/16/21 07:47	7/16/21 18:09		1.015	0.116	mg/L	0.000068	0.000203	
* Lead, Total	7/16/21 07:47	7/16/21 18:09		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Molybdenum, Total	7/16/21 07:47	7/16/21 18:09		1.015	0.000500	mg/L	0.000068	0.000203	
* Potassium, Total	7/16/21 07:47	7/16/21 18:09		1.015	6.25	mg/L	0.169505	0.5075	
* Manganese, Total	7/16/21 07:47	7/22/21 14:27		92.365	13.8	mg/L	0.006188	0.018473	RA
* Selenium, Total	7/16/21 07:47	7/16/21 18:09		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	7/16/21 07:47	7/16/21 18:09		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Manganese, Dissolved	7/16/21 13:03	7/22/21 12:29		92.365	14.8	mg/L	0.006188	0.018473	
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	7/16/21 08:25	7/16/21 12:54		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2320 B	***Analyst: JAG***								
Alkalinity, Total as CaCO3	7/22/21 08:56	7/22/21 10:25		1	112	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	7/20/21 11:25	7/21/21 13:40		1	1300	mg/L		100	

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

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 8/17/21

Reported: 8/17/2021
Version: 3.3
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: 7/14/21 12:58
Customer ID:
Submittal Date: 7/15/21 15:13

Laboratory ID Number: BB12840

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 4500CO2 D	***Analyst: JAG***								
Bicarbonate Alkalinity, (calc.)	7/22/21 08:56	7/22/21 10:25		1	112	mg/L			
Carbonate Alkalinity, (calc.)	7/22/21 08:56	7/22/21 10:25		1	0.01	mg/L			
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	7/20/21 14:37	7/20/21 14:37		1	11.5	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	7/20/21 15:52	7/20/21 15:52		1	0.196	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	7/23/21 12:21	7/23/21 12:21		50	857	mg/L	25.00	50	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	7/14/21 12:54	7/14/21 12:54			1516.23	uS/cm			FA
pH	7/14/21 12:54	7/14/21 12:54			5.55	SU			FA
Temperature	7/14/21 12:54	7/14/21 12:54			20.12	C			FA
Turbidity	7/14/21 12:54	7/14/21 12:54			7.86	NTU			FA

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

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 8/17/21

Reported: 8/17/2021
Version: 3.3
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: 7/14/21 12:58
Customer ID:
Delivery Date: 7/15/21 15:13

Description: Gorgas Gypsum - MW-13H

Laboratory ID Number: BB12840

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB12840	Potassium, Total	mg/L	-0.00182	0.367	10.0	16.2	16.2	10.5	8.50 to 11.5	99.5	70.0 to 130	0.00	20.0
BB12840	Magnesium, Total	mg/L	-0.0101	0.0462	5.00	111	110	5.03	4.25 to 5.75	60.0	70.0 to 130	0.905	20.0
BB12840	Selenium, Total	mg/L	-0.0000842	0.00100	0.100	0.104	0.105	0.104	0.0850 to 0.115	104	70.0 to 130	0.957	20.0
BB12840	Molybdenum, Total	mg/L	0.0000076	0.000147	0.100	0.103	0.100	0.101	0.0850 to 0.115	102	70.0 to 130	2.96	20.0
BB12840	Arsenic, Total	mg/L	0.000029	0.000147	0.100	0.208	0.209	0.105	0.0850 to 0.115	104	70.0 to 130	0.480	20.0
BB12840	Calcium, Total	mg/L	0.00542	0.152	5.00	180	180	5.04	4.25 to 5.75	20.0	70.0 to 130	0.00	20.0
BB12840	Lead, Total	mg/L	0.000003	0.000147	0.100	0.108	0.109	0.112	0.0850 to 0.115	108	70.0 to 130	0.922	20.0
BB12842	Manganese, Dissolved	mg/L	0.0000584	0.000147	0.100	27.8	28.6	0.102	0.0850 to 0.115	-1000	70.0 to 130	2.84	20.0
BB12840	Thallium, Total	mg/L	-0.000125	0.000147	0.100	0.107	0.112	0.111	0.0850 to 0.115	107	70.0 to 130	4.57	20.0
BB12842	Iron, Dissolved	mg/L	-0.000685	0.0176	0.2	245	253	0.196	0.170 to 0.230	1000	70.0 to 130	3.21	20.0
BB12840	Cobalt, Total	mg/L	-0.0000667	0.000147	0.100	0.204	0.206	0.0969	0.0850 to 0.115	88.0	70.0 to 130	0.976	20.0
BB12840	Boron, Total	mg/L	0.000722	0.0650	1.00	1.24	1.25	0.989	0.850 to 1.15	101	70.0 to 130	0.803	20.0
BB12840	Iron, Total	mg/L	-0.000370	0.0176	0.2	38.9	38.7	0.200	0.170 to 0.230	-250	70.0 to 130	0.515	20.0
BB12840	Manganese, Total	mg/L	0.0000105	0.000147	0.100	14.3	15.5	0.102	0.0850 to 0.115	500	70.0 to 130	8.05	20.0
BB12840	Beryllium, Total	mg/L	0.000106	0.000880	0.100	0.0964	0.0963	0.0993	0.0850 to 0.115	96.4	70.0 to 130	0.104	20.0
BB12840	Lithium, Total	mg/L	-0.000105	0.0154	0.200	0.290	0.294	0.198	0.170 to 0.230	119	70.0 to 130	1.37	20.0
BB12840	Chromium, Total	mg/L	0.0000042	0.000440	0.100	0.0949	0.0972	0.0981	0.0850 to 0.115	94.6	70.0 to 130	2.39	20.0
BB12840	Cadmium, Total	mg/L	0.00000	0.000147	0.100	0.0963	0.0956	0.0995	0.0850 to 0.115	96.3	70.0 to 130	0.730	20.0
BB12840	Sodium, Total	mg/L	0.00104	0.0660	5.00	56.3	56.8	4.98	4.25 to 5.75	80.0	70.0 to 130	0.884	20.0
BB12840	Barium, Total	mg/L	-0.0000459	0.000200	0.100	0.120	0.122	0.0970	0.0850 to 0.115	98.3	70.0 to 130	1.65	20.0
BB12840	Antimony, Total	mg/L	0.0000969	0.00100	0.100	0.0958	0.0983	0.0941	0.0850 to 0.115	95.8	70.0 to 130	2.58	20.0
BB12840	Mercury, Total by CVAA	mg/L	-0.00003	0.000500	0.004	0.00371	0.00363	0.00372	0.00340 to 0.00460	92.8	70.0 to 130	2.18	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 8/17/21

Reported: 8/17/2021
Version: 3.3
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: 7/14/21 12:58
Customer ID:
Delivery Date: 7/15/21 15:13

Description: Gorgas Gypsum - MW-13H

Laboratory ID Number: BB12840

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB12842	Alkalinity, Total as CaCO3	mg/L					145	53.0	45.0 to 55.0			0.692	10.0
BB12844	Fluoride	mg/L	0.0319	0.100	2.50	2.37	0.0226	2.53	2.25 to 2.75	94.8	80.0 to 120	0.00	20.0
BB12840	Chloride	mg/L	-0.122	1.00	10.0	21.6	11.6	9.96	9.00 to 11.0	101	80.0 to 120	0.866	20.0
BB12840	Sulfate	mg/L	-0.357	1.00	1000	1920	835	19.5	18.0 to 22.0	106	80.0 to 120	2.60	20.0
BB12841	Solids, Dissolved	mg/L	1.00	25.0			1400	50.0	40.0 to 60.0			0.00	5.00

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 8/17/21

Reported: 8/17/2021
Version: 3.3
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: 7/14/21 12:58
Customer ID:
Submittal Date: 7/15/21 15:13

Laboratory ID Number: BB12841

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	7/21/21 12:22	7/22/21 18:34		1.015	0.229	mg/L	0.030000	0.1015	
* Calcium, Total	7/21/21 12:22	7/23/21 13:32		10.15	172	mg/L	0.70035	4.06	
* Iron, Total	7/21/21 12:22	7/23/21 13:32		10.15	38.1	mg/L	0.08120	0.406	
* Lithium, Total	7/21/21 12:22	7/22/21 18:34		1.015	0.0524	mg/L	0.007105	0.01999956	
* Magnesium, Total	7/21/21 12:22	7/23/21 13:32		10.15	104	mg/L	0.21315	4.06	
* Sodium, Total	7/21/21 12:22	7/23/21 13:32		10.15	50.4	mg/L	0.3045	4.06	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Iron, Dissolved	7/27/21 09:49	7/27/21 14:44		10.15	37.4	mg/L	0.08120	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	7/16/21 07:47	7/16/21 18:37		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Arsenic, Total	7/16/21 07:47	7/16/21 18:37		1.015	0.103	mg/L	0.000068	0.000203	
* Barium, Total	7/16/21 07:47	7/16/21 18:37		1.015	0.0224	mg/L	0.000102	0.000203	
* Beryllium, Total	7/16/21 07:47	7/16/21 18:37		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	7/16/21 07:47	7/16/21 18:37		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	7/16/21 07:47	7/16/21 18:37		1.015	0.000326	mg/L	0.000203	0.001015	J
* Cobalt, Total	7/16/21 07:47	7/16/21 18:37		1.015	0.119	mg/L	0.000068	0.000203	
* Lead, Total	7/16/21 07:47	7/16/21 18:37		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Molybdenum, Total	7/16/21 07:47	7/16/21 18:37		1.015	0.000389	mg/L	0.000068	0.000203	
* Potassium, Total	7/16/21 07:47	7/16/21 18:37		1.015	6.33	mg/L	0.169505	0.5075	
* Manganese, Total	7/16/21 07:47	7/22/21 14:41		92.365	15.9	mg/L	0.006188	0.018473	
* Selenium, Total	7/16/21 07:47	7/16/21 18:37		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	7/16/21 07:47	7/16/21 18:37		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Manganese, Dissolved	7/16/21 13:03	7/22/21 12:32		92.365	16.4	mg/L	0.006188	0.018473	
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	7/16/21 15:13	7/16/21 19:06		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2320 B	***Analyst: JAG***								
Alkalinity, Total as CaCO3	7/22/21 08:56	7/22/21 10:25		1	111	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	7/20/21 11:25	7/21/21 13:40		1	1400	mg/L		100	

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

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 8/17/21

Reported: 8/17/2021
Version: 3.3
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: 7/14/21 12:58
Customer ID:
Submittal Date: 7/15/21 15:13

Laboratory ID Number: BB12841

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 4500CO2 D	***Analyst: JAG***								
Bicarbonate Alkalinity, (calc.)	7/22/21 08:56	7/22/21 10:25		1	111	mg/L			
Carbonate Alkalinity, (calc.)	7/22/21 08:56	7/22/21 10:25		1	0.01	mg/L			
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	7/20/21 14:52	7/20/21 14:52		1	11.4	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	7/20/21 15:54	7/20/21 15:54		1	0.187	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	7/23/21 12:33	7/23/21 12:33		40	880	mg/L	20.00	40	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	7/14/21 12:54	7/14/21 12:54			1516.23	uS/cm			FA
pH	7/14/21 12:54	7/14/21 12:54			5.55	SU			FA
Temperature	7/14/21 12:54	7/14/21 12:54			20.12	C			FA
Turbidity	7/14/21 12:54	7/14/21 12:54			7.86	NTU			FA

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

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 8/17/21

Reported: 8/17/2021
Version: 3.3
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: 7/14/21 12:58
Customer ID:
Delivery Date: 7/15/21 15:13

Description: Gorgas Gypsum - MW-13H DUP

Laboratory ID Number: BB12841

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB12844	Mercury, Total by CVAA	mg/L	3.000E-05	0.000500	0.004	0.00394	0.00382	0.00396	0.00340 to 0.00460	98.5	70.0 to 130	3.09	20.0
BB12844	Cadmium, Total	mg/L	0.00000	0.000147	0.100	0.0955	0.0960	0.0988	0.0850 to 0.115	95.5	70.0 to 130	0.522	20.0
BB12844	Selenium, Total	mg/L	-0.0000394	0.00100	0.100	0.104	0.107	0.109	0.0850 to 0.115	104	70.0 to 130	2.84	20.0
BB12844	Antimony, Total	mg/L	0.000134	0.00100	0.100	0.0931	0.0926	0.0941	0.0850 to 0.115	93.1	70.0 to 130	0.539	20.0
BB12842	Iron, Dissolved	mg/L	-0.000685	0.0176	0.2	245	253	0.196	0.170 to 0.230	1000	70.0 to 130	3.21	20.0
BB12844	Calcium, Total	mg/L	0.00542	0.152	5.00	5.00	5.04	5.04	4.25 to 5.75	100	70.0 to 130	0.797	20.0
BB12844	Boron, Total	mg/L	0.000722	0.0650	1.00	0.977	0.991	0.989	0.850 to 1.15	97.7	70.0 to 130	1.42	20.0
BB12844	Iron, Total	mg/L	-0.000370	0.0176	0.2	0.198	0.200	0.200	0.170 to 0.230	99.0	70.0 to 130	1.01	20.0
BB12844	Thallium, Total	mg/L	-0.000124	0.000147	0.100	0.115	0.112	0.111	0.0850 to 0.115	115	70.0 to 130	2.64	20.0
BB12844	Cobalt, Total	mg/L	-0.0000697	0.000147	0.100	0.0948	0.0981	0.0975	0.0850 to 0.115	94.8	70.0 to 130	3.42	20.0
BB12844	Magnesium, Total	mg/L	-0.0101	0.0462	5.00	4.97	5.00	5.03	4.25 to 5.75	99.4	70.0 to 130	0.602	20.0
BB12844	Beryllium, Total	mg/L	0.0000394	0.000880	0.100	0.101	0.100	0.100	0.0850 to 0.115	101	70.0 to 130	0.995	20.0
BB12844	Manganese, Total	mg/L	0.000112	0.000147	0.100	0.101	0.105	0.104	0.0850 to 0.115	101	70.0 to 130	3.88	20.0
BB12844	Sodium, Total	mg/L	0.00104	0.0660	5.00	4.92	4.96	4.98	4.25 to 5.75	98.4	70.0 to 130	0.810	20.0
BB12842	Manganese, Dissolved	mg/L	0.0000584	0.000147	0.100	27.8	28.6	0.102	0.0850 to 0.115	-1000	70.0 to 130	2.84	20.0
BB12844	Potassium, Total	mg/L	0.0110	0.367	10.0	10.2	10.6	10.5	8.50 to 11.5	102	70.0 to 130	3.85	20.0
BB12844	Chromium, Total	mg/L	-0.0000653	0.000440	0.100	0.0970	0.101	0.0992	0.0850 to 0.115	97.0	70.0 to 130	4.04	20.0
BB12844	Molybdenum, Total	mg/L	0.0000059	0.000147	0.100	0.101	0.102	0.104	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BB12844	Arsenic, Total	mg/L	0.0000478	0.000147	0.100	0.106	0.106	0.109	0.0850 to 0.115	106	70.0 to 130	0.00	20.0
BB12844	Lithium, Total	mg/L	-0.000105	0.0154	0.200	0.195	0.197	0.198	0.170 to 0.230	97.5	70.0 to 130	1.02	20.0
BB12844	Barium, Total	mg/L	0.0000045	0.000200	0.100	0.101	0.0976	0.100	0.0850 to 0.115	101	70.0 to 130	3.42	20.0
BB12844	Lead, Total	mg/L	0.0000012	0.000147	0.100	0.110	0.107	0.111	0.0850 to 0.115	110	70.0 to 130	2.76	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 8/17/21

Reported: 8/17/2021
Version: 3.3
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: 7/14/21 12:58
Customer ID:
Delivery Date: 7/15/21 15:13

Description: Gorgas Gypsum - MW-13H DUP

Laboratory ID Number: BB12841

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB12841	Solids, Dissolved	mg/L	1.00	25.0			1400	50.0	40.0 to 60.0			0.00	5.00
BB12842	Alkalinity, Total as CaCO3	mg/L					145	53.0	45.0 to 55.0			0.692	10.0
BB12844	Fluoride	mg/L	0.0319	0.100	2.50	2.37	0.0226	2.53	2.25 to 2.75	94.8	80.0 to 120	0.00	20.0
BB12844	Chloride	mg/L	-0.0784	1.00	10.0	9.92	0.162	9.99	9.00 to 11.0	99.2	80.0 to 120	0.00	20.0
BB12844	Sulfate	mg/L	-0.423	1.00	20.0	19.1	-0.314	19.2	18.0 to 22.0	95.5	80.0 to 120	0.00	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 8/17/21

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: 7/14/21 14:55
Customer ID:
Submittal Date: 7/15/21 15:13

Laboratory ID Number: BB12842

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	7/21/21 12:22	7/22/21 18:37		1.015	1.47	mg/L	0.030000	0.1015	
* Calcium, Total	7/21/21 12:22	7/23/21 13:43		101.5	533	mg/L	7.0035	40.6	
* Iron, Total	7/21/21 12:22	7/23/21 13:43		101.5	245	mg/L	0.8120	4.06	
* Lithium, Total	7/21/21 12:22	7/22/21 18:37		1.015	0.485	mg/L	0.007105	0.01999956	
* Magnesium, Total	7/21/21 12:22	7/23/21 13:36		10.15	330	mg/L	0.21315	4.06	
* Sodium, Total	7/21/21 12:22	7/23/21 13:43		101.5	244	mg/L	3.045	40.6	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Iron, Dissolved	7/27/21 09:49	7/27/21 14:47		101.5	243	mg/L	0.8120	4.06	RA
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	7/16/21 07:47	7/16/21 18:41		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Arsenic, Total	7/16/21 07:47	7/16/21 18:41		1.015	0.000572	mg/L	0.000068	0.000203	
* Barium, Total	7/16/21 07:47	7/16/21 18:41		1.015	0.0136	mg/L	0.000102	0.000203	
* Beryllium, Total	7/16/21 07:47	7/16/21 18:41		1.015	0.00175	mg/L	0.000406	0.001015	
* Cadmium, Total	7/16/21 07:47	7/16/21 18:41		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	7/16/21 07:47	7/16/21 18:41		1.015	0.000392	mg/L	0.000203	0.001015	J
* Cobalt, Total	7/16/21 07:47	7/16/21 18:41		1.015	0.0555	mg/L	0.000068	0.000203	
* Lead, Total	7/16/21 07:47	7/16/21 18:41		1.015	0.000180	mg/L	0.000068	0.000203	J
* Molybdenum, Total	7/16/21 07:47	7/16/21 18:41		1.015	0.000264	mg/L	0.000068	0.000203	
* Potassium, Total	7/16/21 07:47	7/16/21 18:41		1.015	11.5	mg/L	0.169505	0.5075	
* Manganese, Total	7/16/21 07:47	7/22/21 14:45		92.365	31.7	mg/L	0.006188	0.018473	
* Selenium, Total	7/16/21 07:47	7/16/21 18:41		1.015	0.00151	mg/L	0.000508	0.001015	
* Thallium, Total	7/16/21 07:47	7/16/21 18:41		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Manganese, Dissolved	7/16/21 13:03	7/22/21 12:36		92.365	28.8	mg/L	0.006188	0.018473	RA
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	7/16/21 15:13	7/16/21 19:10		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2320 B	***Analyst: JAG***								
Alkalinity, Total as CaCO3	7/22/21 08:56	7/22/21 10:25		1	144	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	7/20/21 11:25	7/21/21 13:40		1	4920	mg/L		250	

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

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 8/17/21

Reported: 8/17/2021
Version: 3.3
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: 7/14/21 14:55
Customer ID:
Submittal Date: 7/15/21 15:13

Laboratory ID Number: BB12842

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 4500CO2 D	***Analyst: JAG***								
Bicarbonate Alkalinity, (calc.)	7/22/21 08:56	7/22/21 10:25		1	144	mg/L			
Carbonate Alkalinity, (calc.)	7/22/21 08:56	7/22/21 10:25		1	0.02	mg/L			
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	7/20/21 15:00	7/20/21 15:00		40	207	mg/L	20.00	40	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	7/20/21 15:55	7/20/21 15:55		1	0.556	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	7/23/21 12:34	7/23/21 12:34		160	2880	mg/L	80.00	160	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	7/14/21 14:54	7/14/21 14:54			4654.35	uS/cm			FA
pH	7/14/21 14:54	7/14/21 14:54			5.93	SU			FA
Temperature	7/14/21 14:54	7/14/21 14:54			21.53	C			FA
Turbidity	7/14/21 14:54	7/14/21 14:54			8.6	NTU			FA

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

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 8/17/21

Reported: 8/17/2021
Version: 3.3
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: 7/14/21 14:55
Customer ID:
Delivery Date: 7/15/21 15:13

Description: Gorgas Gypsum - MW-3

Laboratory ID Number: BB12842

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB12844	Magnesium, Total	mg/L	-0.0101	0.0462	5.00	4.97	5.00	5.03	4.25 to 5.75	99.4	70.0 to 130	0.602	20.0
BB12844	Antimony, Total	mg/L	0.000134	0.00100	0.100	0.0931	0.0926	0.0941	0.0850 to 0.115	93.1	70.0 to 130	0.539	20.0
BB12842	Iron, Dissolved	mg/L	-0.000685	0.0176	0.2	245	253	0.196	0.170 to 0.230	1000	70.0 to 130	3.21	20.0
BB12844	Calcium, Total	mg/L	0.00542	0.152	5.00	5.00	5.04	5.04	4.25 to 5.75	100	70.0 to 130	0.797	20.0
BB12844	Boron, Total	mg/L	0.000722	0.0650	1.00	0.977	0.991	0.989	0.850 to 1.15	97.7	70.0 to 130	1.42	20.0
BB12844	Iron, Total	mg/L	-0.000370	0.0176	0.2	0.198	0.200	0.200	0.170 to 0.230	99.0	70.0 to 130	1.01	20.0
BB12844	Thallium, Total	mg/L	-0.000124	0.000147	0.100	0.115	0.112	0.111	0.0850 to 0.115	115	70.0 to 130	2.64	20.0
BB12844	Cobalt, Total	mg/L	-0.0000697	0.000147	0.100	0.0948	0.0981	0.0975	0.0850 to 0.115	94.8	70.0 to 130	3.42	20.0
BB12844	Lithium, Total	mg/L	-0.000105	0.0154	0.200	0.195	0.197	0.198	0.170 to 0.230	97.5	70.0 to 130	1.02	20.0
BB12844	Barium, Total	mg/L	0.0000045	0.000200	0.100	0.101	0.0976	0.100	0.0850 to 0.115	101	70.0 to 130	3.42	20.0
BB12844	Lead, Total	mg/L	0.0000012	0.000147	0.100	0.110	0.107	0.111	0.0850 to 0.115	110	70.0 to 130	2.76	20.0
BB12844	Chromium, Total	mg/L	-0.0000653	0.000440	0.100	0.0970	0.101	0.0992	0.0850 to 0.115	97.0	70.0 to 130	4.04	20.0
BB12844	Molybdenum, Total	mg/L	0.0000059	0.000147	0.100	0.101	0.102	0.104	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BB12844	Arsenic, Total	mg/L	0.0000478	0.000147	0.100	0.106	0.106	0.109	0.0850 to 0.115	106	70.0 to 130	0.00	20.0
BB12844	Beryllium, Total	mg/L	0.0000394	0.000880	0.100	0.101	0.100	0.100	0.0850 to 0.115	101	70.0 to 130	0.995	20.0
BB12844	Manganese, Total	mg/L	0.000112	0.000147	0.100	0.101	0.105	0.104	0.0850 to 0.115	101	70.0 to 130	3.88	20.0
BB12844	Sodium, Total	mg/L	0.00104	0.0660	5.00	4.92	4.96	4.98	4.25 to 5.75	98.4	70.0 to 130	0.810	20.0
BB12842	Manganese, Dissolved	mg/L	0.0000584	0.000147	0.100	27.8	28.6	0.102	0.0850 to 0.115	-1000	70.0 to 130	2.84	20.0
BB12844	Potassium, Total	mg/L	0.0110	0.367	10.0	10.2	10.6	10.5	8.50 to 11.5	102	70.0 to 130	3.85	20.0
BB12844	Mercury, Total by CVAA	mg/L	3.000E-05	0.000500	0.004	0.00394	0.00382	0.00396	0.00340 to 0.00460	98.5	70.0 to 130	3.09	20.0
BB12844	Cadmium, Total	mg/L	0.00000	0.000147	0.100	0.0955	0.0960	0.0988	0.0850 to 0.115	95.5	70.0 to 130	0.522	20.0
BB12844	Selenium, Total	mg/L	-0.0000394	0.00100	0.100	0.104	0.107	0.109	0.0850 to 0.115	104	70.0 to 130	2.84	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 8/17/21

Reported: 8/17/2021
Version: 3.3
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: 7/14/21 14:55
Customer ID:
Delivery Date: 7/15/21 15:13

Description: Gorgas Gypsum - MW-3

Laboratory ID Number: BB12842

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB12842	Alkalinity, Total as CaCO3	mg/L					145	53.0	45.0 to 55.0			0.692	10.0
BB12841	Solids, Dissolved	mg/L	1.00	25.0			1400	50.0	40.0 to 60.0			0.00	5.00
BB12844	Sulfate	mg/L	-0.423	1.00	20.0	19.1	-0.314	19.2	18.0 to 22.0	95.5	80.0 to 120	0.00	20.0
BB12844	Fluoride	mg/L	0.0319	0.100	2.50	2.37	0.0226	2.53	2.25 to 2.75	94.8	80.0 to 120	0.00	20.0
BB12844	Chloride	mg/L	-0.0784	1.00	10.0	9.92	0.162	9.99	9.00 to 11.0	99.2	80.0 to 120	0.00	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 8/17/21

Reported: 8/17/2021
Version: 3.3
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: 7/15/21 10:50
Customer ID:
Submittal Date: 7/15/21 15:13

Laboratory ID Number: BB12843

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	7/21/21 12:22	7/22/21 18:41		1.015	3.04	mg/L	0.030000	0.1015	
* Calcium, Total	7/21/21 12:22	7/23/21 13:46		101.5	453	mg/L	7.0035	40.6	
* Iron, Total	7/21/21 12:22	7/23/21 13:39		10.15	33.6	mg/L	0.08120	0.406	
* Lithium, Total	7/21/21 12:22	7/22/21 18:41		1.015	0.441	mg/L	0.007105	0.01999956	
* Magnesium, Total	7/21/21 12:22	7/23/21 13:39		10.15	240	mg/L	0.21315	4.06	
* Sodium, Total	7/21/21 12:22	7/23/21 13:46		101.5	225	mg/L	3.045	40.6	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Iron, Dissolved	7/27/21 09:49	7/27/21 14:57		10.15	32.2	mg/L	0.08120	0.406	RA
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	7/16/21 07:47	7/16/21 18:44		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Arsenic, Total	7/16/21 07:47	7/16/21 18:44		1.015	0.000285	mg/L	0.000068	0.000203	
* Barium, Total	7/16/21 07:47	7/16/21 18:44		1.015	0.0157	mg/L	0.000102	0.000203	
* Beryllium, Total	7/16/21 07:47	7/16/21 18:44		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	7/16/21 07:47	7/16/21 18:44		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	7/16/21 07:47	7/16/21 18:44		1.015	0.000270	mg/L	0.000203	0.001015	J
* Cobalt, Total	7/16/21 07:47	7/16/21 18:44		1.015	0.0121	mg/L	0.000068	0.000203	
* Lead, Total	7/16/21 07:47	7/16/21 18:44		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Molybdenum, Total	7/16/21 07:47	7/16/21 18:44		1.015	0.0000872	mg/L	0.000068	0.000203	J
* Potassium, Total	7/16/21 07:47	7/16/21 18:44		1.015	7.30	mg/L	0.169505	0.5075	
* Manganese, Total	7/16/21 07:47	7/22/21 14:48		92.365	13.4	mg/L	0.006188	0.018473	
* Selenium, Total	7/16/21 07:47	7/16/21 18:44		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	7/16/21 07:47	7/16/21 18:44		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Manganese, Dissolved	7/16/21 13:03	7/22/21 12:50		92.365	14.6	mg/L	0.006188	0.018473	RA
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	7/16/21 15:13	7/16/21 19:14		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2320 B	***Analyst: JAG***								
Alkalinity, Total as CaCO3	7/22/21 10:28	7/22/21 10:35		1	176	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	7/20/21 11:25	7/21/21 13:40		1	3430	mg/L		208.3	

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

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 8/17/21

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: 7/15/21 10:50
Customer ID:
Submittal Date: 7/15/21 15:13

Laboratory ID Number: BB12843

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 4500CO2 D	***Analyst: JAG***								
Bicarbonate Alkalinity, (calc.)	7/22/21 10:28	7/22/21 10:35		1	176	mg/L			
Carbonate Alkalinity, (calc.)	7/22/21 10:28	7/22/21 10:35		1	0.04	mg/L			
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	7/20/21 15:01	7/20/21 15:01		40	294	mg/L	20.00	40	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	7/20/21 15:56	7/20/21 15:56		1	0.493	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	7/23/21 12:35	7/23/21 12:35		100	1960	mg/L	50.00	100	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	7/15/21 10:46	7/15/21 10:46			3715.75	uS/cm			FA
pH	7/15/21 10:46	7/15/21 10:46			5.92	SU			FA
Temperature	7/15/21 10:46	7/15/21 10:46			26.45	C			FA
Turbidity	7/15/21 10:46	7/15/21 10:46			0.84	NTU			FA

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

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 8/17/21

Reported: 8/17/2021
Version: 3.3
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: 7/15/21 10:50
Customer ID:
Delivery Date: 7/15/21 15:13

Description: Gorgas Gypsum - MW-3V

Laboratory ID Number: BB12843

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB12844	Magnesium, Total	mg/L	-0.0101	0.0462	5.00	4.97	5.00	5.03	4.25 to 5.75	99.4	70.0 to 130	0.602	20.0
BB12844	Chromium, Total	mg/L	-0.0000653	0.000440	0.100	0.0970	0.101	0.0992	0.0850 to 0.115	97.0	70.0 to 130	4.04	20.0
BB12844	Molybdenum, Total	mg/L	0.0000059	0.000147	0.100	0.101	0.102	0.104	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BB12844	Arsenic, Total	mg/L	0.0000478	0.000147	0.100	0.106	0.106	0.109	0.0850 to 0.115	106	70.0 to 130	0.00	20.0
BB12843	Iron, Dissolved	mg/L	-0.000685	0.0176	0.2	32.8	32.7	0.196	0.170 to 0.230	300	70.0 to 130	0.305	20.0
BB12844	Calcium, Total	mg/L	0.00542	0.152	5.00	5.00	5.04	5.04	4.25 to 5.75	100	70.0 to 130	0.797	20.0
BB12844	Boron, Total	mg/L	0.000722	0.0650	1.00	0.977	0.991	0.989	0.850 to 1.15	97.7	70.0 to 130	1.42	20.0
BB12844	Antimony, Total	mg/L	0.000134	0.00100	0.100	0.0931	0.0926	0.0941	0.0850 to 0.115	93.1	70.0 to 130	0.539	20.0
BB12844	Lithium, Total	mg/L	-0.000105	0.0154	0.200	0.195	0.197	0.198	0.170 to 0.230	97.5	70.0 to 130	1.02	20.0
BB12844	Barium, Total	mg/L	0.0000045	0.000200	0.100	0.101	0.0976	0.100	0.0850 to 0.115	101	70.0 to 130	3.42	20.0
BB12844	Lead, Total	mg/L	0.0000012	0.000147	0.100	0.110	0.107	0.111	0.0850 to 0.115	110	70.0 to 130	2.76	20.0
BB12844	Beryllium, Total	mg/L	0.0000394	0.000880	0.100	0.101	0.100	0.100	0.0850 to 0.115	101	70.0 to 130	0.995	20.0
BB12844	Manganese, Total	mg/L	0.000112	0.000147	0.100	0.101	0.105	0.104	0.0850 to 0.115	101	70.0 to 130	3.88	20.0
BB12844	Sodium, Total	mg/L	0.00104	0.0660	5.00	4.92	4.96	4.98	4.25 to 5.75	98.4	70.0 to 130	0.810	20.0
BB12844	Potassium, Total	mg/L	0.0110	0.367	10.0	10.2	10.6	10.5	8.50 to 11.5	102	70.0 to 130	3.85	20.0
BB12843	Manganese, Dissolved	mg/L	0.0000922	0.000147	0.100	14.5	13.4	0.104	0.0850 to 0.115	-100	70.0 to 130	7.89	20.0
BB12844	Iron, Total	mg/L	-0.000370	0.0176	0.2	0.198	0.200	0.200	0.170 to 0.230	99.0	70.0 to 130	1.01	20.0
BB12844	Thallium, Total	mg/L	-0.000124	0.000147	0.100	0.115	0.112	0.111	0.0850 to 0.115	115	70.0 to 130	2.64	20.0
BB12844	Cobalt, Total	mg/L	-0.0000697	0.000147	0.100	0.0948	0.0981	0.0975	0.0850 to 0.115	94.8	70.0 to 130	3.42	20.0
BB12844	Mercury, Total by CVAA	mg/L	3.000E-05	0.000500	0.004	0.00394	0.00382	0.00396	0.00340 to 0.00460	98.5	70.0 to 130	3.09	20.0
BB12844	Cadmium, Total	mg/L	0.00000	0.000147	0.100	0.0955	0.0960	0.0988	0.0850 to 0.115	95.5	70.0 to 130	0.522	20.0
BB12844	Selenium, Total	mg/L	-0.0000394	0.00100	0.100	0.104	0.107	0.109	0.0850 to 0.115	104	70.0 to 130	2.84	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 8/17/21

Reported: 8/17/2021
Version: 3.3
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: 7/15/21 10:50
Customer ID:
Delivery Date: 7/15/21 15:13

Description: Gorgas Gypsum - MW-3V

Laboratory ID Number: BB12843

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB12843	Alkalinity, Total as CaCO3	mg/L					178	53.0	45.0 to 55.0			1.13	10.0
BB12841	Solids, Dissolved	mg/L	1.00	25.0			1400	50.0	40.0 to 60.0			0.00	5.00
BB12844	Sulfate	mg/L	-0.423	1.00	20.0	19.1	-0.314	19.2	18.0 to 22.0	95.5	80.0 to 120	0.00	20.0
BB12844	Fluoride	mg/L	0.0319	0.100	2.50	2.37	0.0226	2.53	2.25 to 2.75	94.8	80.0 to 120	0.00	20.0
BB12844	Chloride	mg/L	-0.0784	1.00	10.0	9.92	0.162	9.99	9.00 to 11.0	99.2	80.0 to 120	0.00	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 8/17/21

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: 7/15/21 12:05
Customer ID:
Submittal Date: 7/15/21 15:13

Laboratory ID Number: BB12844

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	7/21/21 12:22	7/22/21 18:44		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	7/21/21 12:22	7/22/21 18:44		1.015	Not Detected	mg/L	0.070035	0.406	U
* Iron, Total	7/21/21 12:22	7/22/21 18:44		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Total	7/21/21 12:22	7/22/21 18:44		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	7/21/21 12:22	7/22/21 18:44		1.015	Not Detected	mg/L	0.021315	0.406	U
* Sodium, Total	7/21/21 12:22	7/22/21 18:44		1.015	Not Detected	mg/L	0.03045	0.406	U
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	7/16/21 07:47	7/16/21 18:48		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Arsenic, Total	7/16/21 07:47	7/16/21 18:48		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Barium, Total	7/16/21 07:47	7/16/21 18:48		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Beryllium, Total	7/16/21 07:47	7/16/21 18:48		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	7/16/21 07:47	7/16/21 18:48		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	7/16/21 07:47	7/16/21 18:48		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	7/16/21 07:47	7/16/21 18:48		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	7/16/21 07:47	7/16/21 18:48		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Molybdenum, Total	7/16/21 07:47	7/16/21 18:48		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	7/16/21 07:47	7/16/21 18:48		1.015	0.000247	mg/L	0.000068	0.000203	
* Potassium, Total	7/16/21 07:47	7/16/21 18:48		1.015	Not Detected	mg/L	0.169505	0.5075	U
* Selenium, Total	7/16/21 07:47	7/16/21 18:48		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	7/16/21 07:47	7/16/21 18:48		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	7/16/21 15:13	7/16/21 19:18		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	7/20/21 11:25	7/21/21 13:40		1	Not Detected	mg/L		25	U
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	7/20/21 14:56	7/20/21 14:56		1	Not Detected	mg/L	0.50	1	U
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	7/20/21 15:57	7/20/21 15:57		1	Not Detected	mg/L	0.06	0.1	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	7/23/21 12:36	7/23/21 12:36		1	Not Detected	mg/L	0.50	1	U

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

Comments:

Reported: 8/17/2021
Version: 3.3
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: 7/15/21 12:05
Customer ID:
Delivery Date: 7/15/21 15:13

Description: Gorgas Gypsum Field Blank-2

Laboratory ID Number: BB12844

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB12844	Antimony, Total	mg/L	0.000134	0.00100	0.100	0.0931	0.0926	0.0941	0.0850 to 0.115	93.1	70.0 to 130	0.539	20.0
BB12844	Magnesium, Total	mg/L	-0.0101	0.0462	5.00	4.97	5.00	5.03	4.25 to 5.75	99.4	70.0 to 130	0.602	20.0
BB12844	Mercury, Total by CVAA	mg/L	3.000E-05	0.000500	0.004	0.00394	0.00382	0.00396	0.00340 to 0.00460	98.5	70.0 to 130	3.09	20.0
BB12844	Cadmium, Total	mg/L	0.00000	0.000147	0.100	0.0955	0.0960	0.0988	0.0850 to 0.115	95.5	70.0 to 130	0.522	20.0
BB12844	Selenium, Total	mg/L	-0.0000394	0.00100	0.100	0.104	0.107	0.109	0.0850 to 0.115	104	70.0 to 130	2.84	20.0
BB12844	Chromium, Total	mg/L	-0.0000653	0.000440	0.100	0.0970	0.101	0.0992	0.0850 to 0.115	97.0	70.0 to 130	4.04	20.0
BB12844	Molybdenum, Total	mg/L	0.0000059	0.000147	0.100	0.101	0.102	0.104	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BB12844	Arsenic, Total	mg/L	0.0000478	0.000147	0.100	0.106	0.106	0.109	0.0850 to 0.115	106	70.0 to 130	0.00	20.0
BB12844	Lithium, Total	mg/L	-0.000105	0.0154	0.200	0.195	0.197	0.198	0.170 to 0.230	97.5	70.0 to 130	1.02	20.0
BB12844	Barium, Total	mg/L	0.0000045	0.000200	0.100	0.101	0.0976	0.100	0.0850 to 0.115	101	70.0 to 130	3.42	20.0
BB12844	Lead, Total	mg/L	0.0000012	0.000147	0.100	0.110	0.107	0.111	0.0850 to 0.115	110	70.0 to 130	2.76	20.0
BB12844	Iron, Total	mg/L	-0.000370	0.0176	0.2	0.198	0.200	0.200	0.170 to 0.230	99.0	70.0 to 130	1.01	20.0
BB12844	Thallium, Total	mg/L	-0.000124	0.000147	0.100	0.115	0.112	0.111	0.0850 to 0.115	115	70.0 to 130	2.64	20.0
BB12844	Cobalt, Total	mg/L	-0.0000697	0.000147	0.100	0.0948	0.0981	0.0975	0.0850 to 0.115	94.8	70.0 to 130	3.42	20.0
BB12844	Beryllium, Total	mg/L	0.0000394	0.000880	0.100	0.101	0.100	0.100	0.0850 to 0.115	101	70.0 to 130	0.995	20.0
BB12844	Manganese, Total	mg/L	0.000112	0.000147	0.100	0.101	0.105	0.104	0.0850 to 0.115	101	70.0 to 130	3.88	20.0
BB12844	Sodium, Total	mg/L	0.00104	0.0660	5.00	4.92	4.96	4.98	4.25 to 5.75	98.4	70.0 to 130	0.810	20.0
BB12844	Potassium, Total	mg/L	0.0110	0.367	10.0	10.2	10.6	10.5	8.50 to 11.5	102	70.0 to 130	3.85	20.0
BB12844	Calcium, Total	mg/L	0.00542	0.152	5.00	5.00	5.04	5.04	4.25 to 5.75	100	70.0 to 130	0.797	20.0
BB12844	Boron, Total	mg/L	0.000722	0.0650	1.00	0.977	0.991	0.989	0.850 to 1.15	97.7	70.0 to 130	1.42	20.0

Comments:

Reported: 8/17/2021
Version: 3.3
COA_CCR

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

Alabama Power

Batch QC Summary

Customer Account: WMWGORGFB
Sample Date: 7/15/21 12:05
Customer ID:
Delivery Date: 7/15/21 15:13

Description: Gorgas Gypsum Field Blank-2

Laboratory ID Number: BB12844

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB12841	Solids, Dissolved	mg/L	1.00	25.0			1400	50.0	40.0 to 60.0			0.00	5.00
BB12844	Fluoride	mg/L	0.0319	0.100	2.50	2.37	0.0226	2.53	2.25 to 2.75	94.8	80.0 to 120	0.00	20.0
BB12844	Chloride	mg/L	-0.0784	1.00	10.0	9.92	0.162	9.99	9.00 to 11.0	99.2	80.0 to 120	0.00	20.0
BB12844	Sulfate	mg/L	-0.423	1.00	20.0	19.1	-0.314	19.2	18.0 to 22.0	95.5	80.0 to 120	0.00	20.0

Comments:

Reported: 8/17/2021
Version: 3.3
COA_CCR

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

Definitions

Alabama Power

Abbreviation	Description
DF	Dilution Factor
LCS	Lab Control Sample
LFM	Lab Fortified Matrix
MB	Method Blank
MDL	Method Detection Limit; minimum concentration of an analyte that can be determined with 99% confidence that the concentration is greater than zero.
MS	Matrix Spike
MSD	Matrix Spike Duplicate
Prec	Precision (% RPD)
Q	Qualifier; comment used to note deviations or additional information associated with analytical results.
QC	Quality Control
Rec	Recovery of Matrix Spike
RL	Reporting Limit; lowest concentration at which an analyte can be quantitatively measured.
Vio Spec	Violation Specification; regulatory limit which has been exceeded by the sample analyzed.

Qualifier	Description
FA	Field results were reviewed by the Water Field Group. Refer to APC Field Case Narrative.
J	Reported value is an estimate because concentration is less than reporting limit.
RA	Matrix spike is invalid due to sample concentration.
U	Compound was analyzed, but not detected.

Chain of Custody
Groundwater
APC General Testing Laboratory

☑ Field Complete ☐ Outside Lab
☑ Lab Complete

Lab ETA

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Site Representative	John Pate	Requested By	Greg Dyer
Collector	Anthony Goggins	Location	Gorgas Gypsum

Bottles												
	1	Metals	500 mL	3	Hg	250 mL	5	Anions	250 mL	7	N/A	N/A
	2	Dis Metals	500 mL	4	TDS	500 mL	6	Alkalinity	250 mL	8	N/A	N/A

Comments

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-8	07/14/2021	10:52	6	Groundwater		BB12695
MW-8V	07/14/2021	13:10	6	Groundwater		BB12696

Relinquished By	Received By	Date/Time
		07/14/2021 15:35

SmarTroll ID	7586-41445-5-4	All metals and radiological bottles have pH < 2	☑
Turbidity ID	4677-23343-4-2	Cooler Temp	3.9 degrees C
Sample Event	1329	Thermometer ID	5408-27568-2-2
		pH Strip ID	8206-45805-10-9

Bottles/Pre-Preserved Bottles are provided by the GTL

Chain of Custody
Groundwater
APC General Testing Laboratory

☑ Field Complete ☐ Outside Lab
☑ Lab Complete

Lab ETA

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Site Representative	John Pate	Requested By	Greg Dyer
Collector	Dallas Gentry	Location	Gorgas Gypsum

Bottles												
	1	Metals	500 mL	3	Hg	250 mL	5	Anions	250 mL	7	N/A	N/A
	2	Dissolved Meta	500 mL	4	TDS	500 mL	6	Alkalinity	250 mL	8	N/A	N/A

Comments

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
PZ-18	07/13/2021	11:22	6	Groundwater		BB12762
PZ-17	07/13/2021	12:40	6	Groundwater		BB12763
MW-14H	07/13/2021	13:51	6	Groundwater		BB12764
MW-14H dup	07/13/2021	13:51	6	Sample Duplicate		BB12765
FB-1	07/13/2021	14:35	4	Field Blank		BB12766
MW-4	07/14/2021	08:38	6	Groundwater		BB12767
MW-4V	07/14/2021	10:04	6	Groundwater		BB12768
PZ-21	07/14/2021	11:33	6	Groundwater		BB12769
PZ-22	07/14/2021	12:36	6	Groundwater		BB12770
PZ-20	07/14/2021	14:05	6	Groundwater		BB12771
PZ-19	07/14/2021	15:32	6	Groundwater		BB12772
EB-1	07/14/2021	16:15	4	Equipment Blank		BB12773

Relinquished By	Received By	Date/Time
Dallas Gentry	Laura Mayfield	07/15/2021 08:45

SmarTroll ID	7586-41442-5-1	All metals and radiological bottles have pH < 2	☑
Turbidity ID	3901-20010-2-2	Cooler Temp	0.0 degrees C
Sample Event	1329	Thermometer ID	5408-27568-2-2
		pH Strip ID	8206-45805-10-9

Bottles/Pre-Preserved Bottles are provided by the GTL

Chain of Custody
Groundwater
APC General Testing Laboratory

☑ Field Complete ☐ Outside Lab
☑ Lab Complete

Lab ETA

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Site Representative	John Pate	Requested By	Greg Dyer
Collector	TJ Daugherty	Location	Gorgas Gypsum

Bottles

1	Metals	500 mL	3	Hg	250 mL	5	Anions	250 mL	7	N/A	N/A
2	Diss Metals	500 mL	4	TDS	500 mL	6	Alkalinity	250 mL	8	N/A	N/A

Comments: Correcting date for MW-3 to 7/14/21. LBM 7/15/21

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-9V	07/13/2021	11:50	6	Groundwater		BB12835
MW-9H	07/13/2021	13:45	6	Groundwater		BB12836
MW-12H	07/14/2021	09:35	6	Groundwater		BB12837
MW-12V	07/14/2021	10:45	6	Groundwater		BB12838
MW-11H	07/14/2021	11:47	6	Groundwater		BB12839
MW-13H	07/14/2021	12:58	6	Groundwater		BB12840
MW-13H Dup	07/14/2021	12:58	6	Sample Duplicate		BB12841
MW-3	07/14/2021	14:55	6	Groundwater		BB12842
MW-3V	07/15/2021	10:50	6	Groundwater		BB12843
FB-2	07/15/2021	12:05	4	Field Blank		BB12844

Relinquished By	Received By	Date/Time
		07/15/2021 14:31

SmarTroll ID	7586-41443-5-2
Turbidity ID	3901-20009-2-1
Sample Event	1329

All metals and radiological bottles have pH < 2 ☑

Cooler Temp	0.2 degrees C
Thermometer ID	5408-27568-2-2
pH Strip ID	8206-45805-10-9

Bottles/Pre-Preserved Bottles are provided by the GTL

Chain of Custody
Groundwater
APC General Testing Laboratory

☑ Field Complete ☑ Lab Complete ☑ Outside Lab

Lab ETA

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Site Representative	John Pate	Requested By	Greg Dyer
Collector	Anthony Goggins	Location	Gorgas Gypsum

Bottles								
1	Radium	1 L	3 N/A	N/A	5 N/A	N/A	7 N/A	N/A
2	Boron-11	1 L	4 N/A	N/A	6 N/A	N/A	8 N/A	N/A

Comments: Boron 11 collected at MW-8

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-8	07/14/2021	10:52	2	Groundwater		BB12697
MW-8V	07/14/2021	13:10	1	Groundwater		BB12698

Relinquished By	Received By	Date/Time
		07/14/2021 15:35

SmarTroll ID	7586-41445-5-4	All metals and radiological bottles have pH < 2	☑
Turbidity ID	4677-23343-4-2	Cooler Temp	N/A
Sample Event	1329	Thermometer ID	N/A
		pH Strip ID	8206-45805-10-9

Bottles/Pre-Preserved Bottles are provided by the GTL

Chain of Custody
Groundwater
APC General Testing Laboratory

☑ Field Complete ☑ Lab Complete ☑ Outside Lab

Lab ETA

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Site Representative	John Pate	Requested By	Greg Dyer
Collector	Dallas Gentry	Location	Gorgas Gypsum

Bottles												
1	Radium	1 L	3	N/A	N/A	5	N/A	N/A	7	N/A	N/A
2	Boron-11	1 L	4	N/A	N/A	6	N/A	N/A	8	N/A	N/A

Comments: Boron-11 collected at MW-14H, MW-4, and MW-4V. Radium MS/MSD collected at PZ-19. Boron-11 was also collected for EB-1. LBM 7/15/2021

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
PZ-18	07/13/2021	11:22	1	Groundwater		BB12774
PZ-17	07/13/2021	12:40	1	Groundwater		BB12775
MW-14H	07/13/2021	13:51	2	Groundwater		BB12776
MW-14H dup	07/13/2021	13:51	2	Sample Duplicate		BB12777
FB-1	07/13/2021	14:35	1	Field Blank		BB12778
MW-4	07/14/2021	08:38	2	Groundwater		BB12779
MW-4V	07/14/2021	10:04	2	Groundwater		BB12780
PZ-21	07/14/2021	11:33	1	Groundwater		BB12781
PZ-22	07/14/2021	12:36	1	Groundwater		BB12782
PZ-20	07/14/2021	14:05	1	Groundwater		BB12783
PZ-19	07/14/2021	15:32	3	Groundwater		BB12784
EB-1	07/14/2021	16:15	2	Equipment Blank		BB12785

Relinquished By	Received By	Date/Time
Dallas Gentry	Laura McVay	07/15/2021 08:44

SmarTroll ID	7586-41442-5-1	All metals and radiological bottles have pH < 2	☑
Turbidity ID	3901-20010-2-2	Cooler Temp	0.0 degrees C
Sample Event	1329	Thermometer ID	5408-27568-2-2
		pH Strip ID	8206-45805-10-9

Bottles/Pre-Preserved Bottles are provided by the GTL

Chain of Custody
Groundwater
APC General Testing Laboratory

☑ Field Complete ☑ Outside Lab
☑ Lab Complete

Lab ETA

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Site Representative	John Pate	Requested By	Greg Dyer
Collector	TJ Daugherty	Location	Gorgas Gypsum

Bottles

1	Radium	1 L	3	N/A	N/A	5	N/A	N/A	7	N/A	N/A
2	Boron-11	1 L	4	N/A	N/A	6	N/A	N/A	8	N/A	N/A

Comments: Rad MS/MSD @ MW-11H. Boron-11 collected at MW-9H, MW-12H, MW-3, MW-3V, & FB-2.
Correcting date for MW-3 to 7/14/21. LBM 7/15/21

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-9V	07/13/2021	11:50	1	Groundwater		BB12845
MW-9H	07/13/2021	13:45	2	Groundwater		BB12846
MW-12H	07/14/2021	09:35	2	Groundwater		BB12847
MW-12V	07/14/2021	10:45	1	Groundwater		BB12848
MW-11H	07/14/2021	11:47	3	Groundwater		BB12849
MW-13H	07/14/2021	12:58	1	Groundwater		BB12850
MW-13H Dup	07/14/2021	12:58	1	Sample Duplicate		BB12851
MW-3	07/14/2021	14:55	2	Groundwater		BB12852
MW-3V	07/15/2021	10:50	2	Groundwater		BB12853
FB-2	07/15/2021	12:05	2	Field Blank		BB12854

Relinquished By	Received By	Date/Time
		07/15/2021 14:35

SmarTroll ID	7586-41443-5-2
Turbidity ID	3901-20009-2-1
Sample Event	1329

All metals and radiological bottles have pH < 2 ☑

Cooler Temp	0.2 degrees C
Thermometer ID	5408-27568-2-2
pH Strip ID	8206-45805-10-9

Bottles/Pre-Preserved Bottles are provided by the GTL

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

August 30, 2021

Laura Midkiff
Alabama Power
744 Highway 87
GSC #8
Calera, AL 35040

RE: Project: GORGAS GYPSUM WMWGORG_1329
Pace Project No.: 92550955

Dear Laura Midkiff:

Enclosed are the analytical results for sample(s) received by the laboratory on July 21, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Greensburg

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

Sincerely,

Kevin Herring
kevin.herring@pacelabs.com
1(704)875-9092
HORIZON Database Administrator

Enclosures

cc: Brooke Caton, Alabama Power
Renee Jernigan, Alabama Power

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

CERTIFICATIONS

Project: GORGAS GYPSUM WMWGORG_1329
Pace Project No.: 92550955

Pace Analytical Services Pennsylvania
1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
Delaware Certification
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Florida: Cert E871149 SEKS WET
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA180012
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: 2017020
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification #: 9991
Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572018-1
New Hampshire/TNI Certification #: 297617
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Ohio EPA Rad Approval: #41249
Oregon/TNI Certification #: PA200002-010
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: 02867
Texas/TNI Certification #: T104704188-17-3
Utah/TNI Certification #: PA014572017-9
USDA Soil Permit #: P330-17-00091
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 9526
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Approve List for Rad
Wyoming Certification #: 8TMS-L

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

SAMPLE SUMMARY

Project: GORGAS GYPSUM WMWGORG_1329
Pace Project No.: 92550955

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92550955001	**BB12697 MW-8**	Water	07/14/21 10:52	07/21/21 09:50
92550955002	**BB12698 MW-8V**	Water	07/14/21 13:10	07/21/21 09:50
92550955003	**BB12774 PZ-18**	Water	07/13/21 11:22	07/21/21 09:50
92550955004	**BB12775 PZ-17**	Water	07/13/21 12:40	07/21/21 09:50
92550955005	**BB12776 MW-14H**	Water	07/13/21 13:51	07/21/21 09:50
92550955006	**BB12777 MW-14H DUP**	Water	07/13/21 13:51	07/21/21 09:50
92550955007	**BB12778 FB-1**	Water	07/13/21 14:35	07/21/21 09:50
92550955008	**BB12779 MW-4**	Water	07/14/21 08:38	07/21/21 09:50
92550955009	**BB12780 MW-4V**	Water	07/14/21 10:04	07/21/21 09:50
92550955010	**BB12781 PZ-21**	Water	07/14/21 11:33	07/21/21 09:50
92550955011	**BB12782 PZ-22**	Water	07/14/21 12:36	07/21/21 09:50
92550955012	**BB12783 PZ-20**	Water	07/14/21 14:05	07/21/21 09:50
92550955013	**BB12784 PZ-19**	Water	07/14/21 15:32	07/21/21 09:50
92550955014	**BB12784 PZ-19 MS**	Water	07/14/21 15:32	07/21/21 09:50
92550955015	**BB12784 PZ-19 MSD**	Water	07/14/21 15:32	07/21/21 09:50
92550955016	**BB12785 EB-1**	Water	07/14/21 16:15	07/21/21 09:50
92550955017	**BB12845 MW-9V**	Water	07/13/21 11:50	07/21/21 09:50
92550955018	**BB12846 MW-9H**	Water	07/13/21 13:45	07/21/21 09:50
92550955019	**BB12847 MW-12H**	Water	07/14/21 09:35	07/21/21 09:50
92550955020	**BB12848 MW-12V**	Water	07/14/21 10:45	07/21/21 09:50
92550955021	**BB12849 MW-11H**	Water	07/14/21 11:47	07/21/21 09:50
92550955022	**BB12849 MW-11H MS**	Water	07/14/21 11:47	07/21/21 09:50
92550955023	**BB12849 MW-11H MSD**	Water	07/14/21 11:47	07/21/21 09:50
92550955024	**BB12850 MW-13H**	Water	07/14/21 12:58	07/21/21 09:50
92550955025	**BB12851 MW-13H DUP**	Water	07/14/21 12:58	07/21/21 09:50
92550955026	**BB12852 MW-3**	Water	07/14/21 14:55	07/21/21 09:50
92550955027	**BB12853 MW-3V**	Water	07/15/21 10:50	07/21/21 09:50
92550955028	**BB12854 FB-2**	Water	07/15/21 12:05	07/21/21 09:50

REPORT OF LABORATORY ANALYSIS

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Huntersville, NC 28078
(704)875-9092

SAMPLE ANALYTE COUNT

Project: GORGAS GYPSUM WMWGORG_1329
Pace Project No.: 92550955

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92550955001	**BB12697 MW-8**	EPA 9315	CLA	1	PASI-PA
		EPA 9320	JC2	1	PASI-PA
		Total Radium Calculation	RMK	1	PASI-PA
92550955002	**BB12698 MW-8V**	EPA 9315	CLA	1	PASI-PA
		EPA 9320	JC2	1	PASI-PA
		Total Radium Calculation	RMK	1	PASI-PA
92550955003	**BB12774 PZ-18**	EPA 9315	CLA	1	PASI-PA
		EPA 9320	JC2	1	PASI-PA
		Total Radium Calculation	RMK	1	PASI-PA
92550955004	**BB12775 PZ-17**	EPA 9315	CLA	1	PASI-PA
		EPA 9320	JC2	1	PASI-PA
		Total Radium Calculation	RMK	1	PASI-PA
92550955005	**BB12776 MW-14H**	EPA 9315	CLA	1	PASI-PA
		EPA 9320	JC2	1	PASI-PA
		Total Radium Calculation	RMK	1	PASI-PA
92550955006	**BB12777 MW-14H DUP**	EPA 9315	CLA	1	PASI-PA
		EPA 9320	JC2	1	PASI-PA
		Total Radium Calculation	RMK	1	PASI-PA
92550955007	**BB12778 FB-1**	EPA 9315	CLA	1	PASI-PA
		EPA 9320	JC2	1	PASI-PA
		Total Radium Calculation	RMK	1	PASI-PA
92550955008	**BB12779 MW-4**	EPA 9315	CLA	1	PASI-PA
		EPA 9320	JC2	1	PASI-PA
		Total Radium Calculation	RMK	1	PASI-PA
92550955009	**BB12780 MW-4V**	EPA 9315	CLA	1	PASI-PA
		EPA 9320	JC2	1	PASI-PA
		Total Radium Calculation	RMK	1	PASI-PA
92550955010	**BB12781 PZ-21**	EPA 9315	CLA	1	PASI-PA
		EPA 9320	JC2	1	PASI-PA
		Total Radium Calculation	RMK	1	PASI-PA
92550955011	**BB12782 PZ-22**	EPA 9315	CLA	1	PASI-PA
		EPA 9320	JC2	1	PASI-PA
		Total Radium Calculation	RMK	1	PASI-PA
92550955012	**BB12783 PZ-20**	EPA 9315	CLA	1	PASI-PA
		EPA 9320	JC2	1	PASI-PA
		Total Radium Calculation	RMK	1	PASI-PA
92550955013	**BB12784 PZ-19**	EPA 9315	CLA	1	PASI-PA

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Huntersville, NC 28078
(704)875-9092

SAMPLE ANALYTE COUNT

Project: GORGAS GYPSUM WMWGORG_1329
Pace Project No.: 92550955

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 9320	JC2	1	PASI-PA
		Total Radium Calculation	RMK	1	PASI-PA
92550955014	**BB12784 PZ-19 MS**	EPA 9315	CLA	1	PASI-PA
		EPA 9320	JC2	1	PASI-PA
92550955015	**BB12784 PZ-19 MSD**	EPA 9315	CLA	1	PASI-PA
		EPA 9320	JC2	1	PASI-PA
92550955016	**BB12785 EB-1**	EPA 9315	CLA	1	PASI-PA
		EPA 9320	JC2	1	PASI-PA
		Total Radium Calculation	RMK	1	PASI-PA
92550955017	**BB12845 MW-9V**	EPA 9315	CLA	1	PASI-PA
		EPA 9320	JC2	1	PASI-PA
		Total Radium Calculation	RMK	1	PASI-PA
92550955018	**BB12846 MW-9H**	EPA 9315	CLA	1	PASI-PA
		EPA 9320	JC2	1	PASI-PA
		Total Radium Calculation	RMK	1	PASI-PA
92550955019	**BB12847 MW-12H**	EPA 9315	CLA	1	PASI-PA
		EPA 9320	JC2	1	PASI-PA
		Total Radium Calculation	RMK	1	PASI-PA
92550955020	**BB12848 MW-12V**	EPA 9315	CLA	1	PASI-PA
		EPA 9320	JC2	1	PASI-PA
		Total Radium Calculation	RMK	1	PASI-PA
92550955021	**BB12849 MW-11H**	EPA 9315	CLA	1	PASI-PA
		EPA 9320	JC2	1	PASI-PA
		Total Radium Calculation	RMK	1	PASI-PA
92550955022	**BB12849 MW-11H MS**	EPA 9315	CLA	1	PASI-PA
		EPA 9320	JC2	1	PASI-PA
92550955023	**BB12849 MW-11H MSD**	EPA 9315	CLA	1	PASI-PA
		EPA 9320	JC2	1	PASI-PA
92550955024	**BB12850 MW-13H**	EPA 9315	CLA	1	PASI-PA
		EPA 9320	JC2	1	PASI-PA
		Total Radium Calculation	RMK	1	PASI-PA
92550955025	**BB12851 MW-13H DUP**	EPA 9315	CLA	1	PASI-PA
		EPA 9320	JC2	1	PASI-PA
		Total Radium Calculation	RMK	1	PASI-PA
92550955026	**BB12852 MW-3**	EPA 9315	CLA	1	PASI-PA
		EPA 9320	JC2	1	PASI-PA
		Total Radium Calculation	RMK	1	PASI-PA

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

SAMPLE ANALYTE COUNT

Project: GORGAS GYPSUM WMWGORG_1329
Pace Project No.: 92550955

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92550955027	**BB12853 MW-3V**	EPA 9315	CLA	1	PASI-PA
		EPA 9320	JC2	1	PASI-PA
		Total Radium Calculation	RMK	1	PASI-PA
92550955028	**BB12854 FB-2**	EPA 9315	CLA	1	PASI-PA
		EPA 9320	JC2	1	PASI-PA
		Total Radium Calculation	RMK	1	PASI-PA

PASI-PA = Pace Analytical Services - Greensburg

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9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

PROJECT NARRATIVE

Project: GORGAS GYPSUM WMWGORG_1329
Pace Project No.: 92550955

Method: **EPA 9315**
Description: 9315 Total Radium
Client: Alabama Power
Date: August 30, 2021

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
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

PROJECT NARRATIVE

Project: GORGAS GYPSUM WMWGORG_1329
Pace Project No.: 92550955

Method: **EPA 9320**
Description: 9320 Radium 228
Client: Alabama Power
Date: August 30, 2021

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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9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

PROJECT NARRATIVE

Project: GORGAS GYPSUM WMWGORG_1329
Pace Project No.: 92550955

Method: **Total Radium Calculation**
Description: Total Radium 228+226
Client: Alabama Power
Date: August 30, 2021

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.

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: GORGAS GYPSUM WMWGORG_1329
Pace Project No.: 92550955

Sample: BB12697 MW-8 **Lab ID: 92550955001** Collected: 07/14/21 10:52 Received: 07/21/21 09:50 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.243U ± 0.232 (0.432) C:85% T:NA**	pCi/L	08/24/21 08:41	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.989 ± 0.497 (0.866) C:66% T:81%**	pCi/L	08/03/21 11:28	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.23U ± 0.729 (1.30)**	pCi/L	08/24/21 16:49	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: GORGAS GYPSUM WMWGORG_1329
Pace Project No.: 92550955

Sample: BB12698 MW-8V **Lab ID: 92550955002** Collected: 07/14/21 13:10 Received: 07/21/21 09:50 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	**0.404U ± 0.269 (0.425) C:95% T:NA**	pCi/L	08/24/21 08:41	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**1.45 ± 0.554 (0.810) C:64% T:86%**	pCi/L	08/03/21 11:28	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.85 ± 0.823 (1.24)**	pCi/L	08/24/21 16:49	7440-14-4	

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Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: GORGAS GYPSUM WMWGORG_1329
Pace Project No.: 92550955

Sample: BB12774 PZ-18 **Lab ID: 92550955003** Collected: 07/13/21 11:22 Received: 07/21/21 09:50 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	**0.365U ± 0.270 (0.444) C:83% T:NA**	pCi/L	08/24/21 08:41	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.873U ± 0.483 (0.874) C:66% T:82%**	pCi/L	08/03/21 11:28	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.24U ± 0.753 (1.32)**	pCi/L	08/24/21 16:49	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: GORGAS GYPSUM WMWGORG_1329
Pace Project No.: 92550955

Sample: BB12775 PZ-17 **Lab ID: 92550955004** Collected: 07/13/21 12:40 Received: 07/21/21 09:50 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.204U ± 0.237 (0.482) C:78% T:NA**	pCi/L	08/24/21 08:41	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**1.07 ± 0.529 (0.924) C:61% T:89%**	pCi/L	08/03/21 11:28	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.27U ± 0.766 (1.41)**	pCi/L	08/24/21 16:49	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: GORGAS GYPSUM WMWGORG_1329
Pace Project No.: 92550955

Sample: BB12776 MW-14H **Lab ID: 92550955005** Collected: 07/13/21 13:51 Received: 07/21/21 09:50 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	**0.000325U ± 0.210 (0.565) C:78% T:NA**	pCi/L	08/24/21 08:41	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**1.06 ± 0.499 (0.845) C:67% T:86%**	pCi/L	08/03/21 11:28	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.06U ± 0.709 (1.41)**	pCi/L	08/24/21 16:56	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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Huntersville, NC 28078
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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: GORGAS GYPSUM WMWGORG_1329
Pace Project No.: 92550955

Sample: BB12777 MW-14H DUP **Lab ID: 92550955006** Collected: 07/13/21 13:51 Received: 07/21/21 09:50 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 ± 0.222 (0.417) C:88% T:NA**	pCi/L	08/24/21 08:41	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.350U ± 0.387 (0.810) C:68% T:86%**	pCi/L	08/03/21 11:28	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.576U ± 0.609 (1.23)**	pCi/L	08/24/21 16:56	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: GORGAS GYPSUM WMWGORG_1329
Pace Project No.: 92550955

Sample: BB12778 FB-1 **Lab ID: 92550955007** Collected: 07/13/21 14:35 Received: 07/21/21 09:50 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 ± 0.204 (0.438) C:77% T:NA**	pCi/L	08/24/21 08:41	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.432U ± 0.454 (0.944) C:64% T:83%**	pCi/L	08/03/21 11:28	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.573U ± 0.658 (1.38)**	pCi/L	08/24/21 16:56	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: GORGAS GYPSUM WMWGORG_1329
Pace Project No.: 92550955

Sample: BB12779 MW-4 **Lab ID: 92550955008** Collected: 07/14/21 08:38 Received: 07/21/21 09:50 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	**0.577 ± 0.307 (0.412) C:91% T:NA**	pCi/L	08/24/21 08:42	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**1.00 ± 0.419 (0.648) C:64% T:97%**	pCi/L	08/03/21 11:29	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.58 ± 0.726 (1.06)**	pCi/L	08/24/21 16:56	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: GORGAS GYPSUM WMWGORG_1329
Pace Project No.: 92550955

Sample: BB12780 MW-4V **Lab ID: 92550955009** Collected: 07/14/21 10:04 Received: 07/21/21 09:50 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	**0.0368U ± 0.201 (0.515) C:82% T:NA**	pCi/L	08/24/21 08:42	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.880 ± 0.462 (0.803) C:64% T:81%**	pCi/L	08/03/21 11:29	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.917U ± 0.663 (1.32)**	pCi/L	08/24/21 16:56	7440-14-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: GORGAS GYPSUM WMWGORG_1329
Pace Project No.: 92550955

Sample: BB12781 PZ-21 **Lab ID: 92550955010** Collected: 07/14/21 11:33 Received: 07/21/21 09:50 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	**0.416U ± 0.316 (0.558) C:81% T:NA**	pCi/L	08/24/21 07:29	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.878 ± 0.415 (0.690) C:64% T:96%**	pCi/L	08/03/21 11:29	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.29 ± 0.731 (1.25)**	pCi/L	08/24/21 16:56	7440-14-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: GORGAS GYPSUM WMWGORG_1329
Pace Project No.: 92550955

Sample: BB12782 PZ-22 **Lab ID: 92550955011** Collected: 07/14/21 12:36 Received: 07/21/21 09:50 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	**-0.0419U ± 0.290 (0.769) C:82% T:NA**	pCi/L	08/24/21 07:29	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.806U ± 0.475 (0.885) C:64% T:88%**	pCi/L	08/03/21 11:29	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.806U ± 0.765 (1.65)**	pCi/L	08/24/21 16:56	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: GORGAS GYPSUM WMWGORG_1329
Pace Project No.: 92550955

Sample: BB12783 PZ-20 **Lab ID: 92550955012** Collected: 07/14/21 14:05 Received: 07/21/21 09:50 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	**0.220U ± 0.349 (0.777) C:60% T:NA**	pCi/L	08/24/21 07:29	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.127U ± 0.427 (0.958) C:67% T:87%**	pCi/L	08/03/21 11:29	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.347U ± 0.776 (1.74)**	pCi/L	08/24/21 16:56	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: GORGAS GYPSUM WMWGORG_1329
Pace Project No.: 92550955

Sample: BB12784 PZ-19 **Lab ID: 92550955013** Collected: 07/14/21 15:32 Received: 07/21/21 09:50 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	**0.169U ± 0.299 (0.679) C:76% T:NA**	pCi/L	08/24/21 07:30	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.575U ± 0.431 (0.840) C:63% T:82%**	pCi/L	08/03/21 11:29	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.744U ± 0.730 (1.52)**	pCi/L	08/24/21 16:56	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: GORGAS GYPSUM WMWGORG_1329
Pace Project No.: 92550955

Sample: BB12784 PZ-19 MS **Lab ID: 92550955014** Collected: 07/14/21 15:32 Received: 07/21/21 09:50 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	**109.51 %REC ± NA (NA) C:NA T:NA**	pCi/L	08/24/21 07:30	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**103.47 %REC ± NA (NA) C:NA T:NA**	pCi/L	08/03/21 11:29	15262-20-1	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: GORGAS GYPSUM WMWGORG_1329
Pace Project No.: 92550955

Sample: BB12784 PZ-19 MSD **Lab ID: 92550955015** Collected: 07/14/21 15:32 Received: 07/21/21 09:50 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**98.59 %REC 10.49RPD ± NA (NA) C:NA T:NA**	pCi/L	08/24/21 07:30	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**82.02 %REC 23.13 RPD ± NA (NA) C:NA T:NA**	pCi/L	08/03/21 11:29	15262-20-1	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: GORGAS GYPSUM WMWGORG_1329
Pace Project No.: 92550955

Sample: BB12785 EB-1 **Lab ID: 92550955016** Collected: 07/14/21 16:15 Received: 07/21/21 09:50 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	**0.125U ± 0.221 (0.499) C:72% T:NA**	pCi/L	08/24/21 07:30	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.211U ± 0.426 (0.938) C:63% T:81%**	pCi/L	08/03/21 11:30	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.336U ± 0.647 (1.44)**	pCi/L	08/24/21 16:56	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: GORGAS GYPSUM WMWGORG_1329
Pace Project No.: 92550955

Sample: BB12845 MW-9V **Lab ID: 92550955017** Collected: 07/13/21 11:50 Received: 07/21/21 09:50 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	**-0.0436U ± 0.187 (0.537) C:84% T:NA**	pCi/L	08/24/21 07:30	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.194U ± 0.401 (0.885) C:62% T:88%**	pCi/L	08/03/21 11:30	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.194U ± 0.588 (1.42)**	pCi/L	08/24/21 16:56	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: GORGAS GYPSUM WMWGORG_1329
Pace Project No.: 92550955

Sample: BB12846 MW-9H **Lab ID: 92550955018** Collected: 07/13/21 13:45 Received: 07/21/21 09:50 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	**0.160U ± 0.234 (0.509) C:82% T:NA**	pCi/L	08/24/21 07:30	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.717 ± 0.386 (0.684) C:70% T:91%**	pCi/L	08/03/21 11:30	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.877U ± 0.620 (1.19)**	pCi/L	08/24/21 16:56	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: GORGAS GYPSUM WMWGORG_1329
Pace Project No.: 92550955

Sample: BB12847 MW-12H **Lab ID: 92550955019** Collected: 07/14/21 09:35 Received: 07/21/21 09:50 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	**0.289U ± 0.290 (0.562) C:72% T:NA**	pCi/L	08/24/21 07:13	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**1.13 ± 0.499 (0.837) C:69% T:88%**	pCi/L	08/03/21 11:30	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.42 ± 0.789 (1.40)**	pCi/L	08/24/21 16:56	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: GORGAS GYPSUM WMWGORG_1329
Pace Project No.: 92550955

Sample: BB12848 MW-12V **Lab ID: 92550955020** Collected: 07/14/21 10:45 Received: 07/21/21 09:50 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	**-0.0991U ± 0.148 (0.519) C:77% T:NA**	pCi/L	08/24/21 07:14	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.657U ± 0.368 (0.659) C:71% T:93%**	pCi/L	08/03/21 11:30	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.657U ± 0.516 (1.18)**	pCi/L	08/24/21 16:56	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: GORGAS GYPSUM WMWGORG_1329
Pace Project No.: 92550955

Sample: BB12849 MW-11H **Lab ID: 92550955021** Collected: 07/14/21 11:47 Received: 07/21/21 09:50 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	**0.398 ± 0.260 (0.395) C:90% T:NA**	pCi/L	08/24/21 07:03	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**-0.00182U ± 0.326 (0.762) C:67% T:88%**	pCi/L	08/03/21 14:35	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.398U ± 0.586 (1.16)**	pCi/L	08/24/21 16:56	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: GORGAS GYPSUM WMWGORG_1329
Pace Project No.: 92550955

Sample: BB12849 MW-11H MS **Lab ID: 92550955022** Collected: 07/14/21 11:47 Received: 07/21/21 09:50 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	**99.78 %REC ± NA (NA) C:NA T:NA**	pCi/L	08/24/21 07:03	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**105.02 %REC ± NA (NA) C:NA T:NA**	pCi/L	08/03/21 14:36	15262-20-1	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: GORGAS GYPSUM WMWGORG_1329
Pace Project No.: 92550955

Sample: BB12849 MW-11H MSD **Lab ID: 92550955023** Collected: 07/14/21 11:47 Received: 07/21/21 09:50 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**100.31 %REC 0.53RPD ± NA (NA) C:NA T:NA**	pCi/L	08/24/21 07:03	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**111.51 %REC 5.99 RPD ± NA (NA) C:NA T:NA**	pCi/L	08/03/21 14:36	15262-20-1	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: GORGAS GYPSUM WMWGORG_1329
Pace Project No.: 92550955

Sample: BB12850 MW-13H **Lab ID: 92550955024** Collected: 07/14/21 12:58 Received: 07/21/21 09:50 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	**0.216U ± 0.226 (0.441) C:88% T:NA**	pCi/L	08/24/21 07:03	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.610U ± 0.429 (0.832) C:65% T:89%**	pCi/L	08/03/21 14:36	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.826U ± 0.655 (1.27)**	pCi/L	08/24/21 16:56	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: GORGAS GYPSUM WMWGORG_1329
Pace Project No.: 92550955

Sample: BB12851 MW-13H DUP **Lab ID: 92550955025** Collected: 07/14/21 12:58 Received: 07/21/21 09:50 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	**0.492U ± 0.320 (0.535) C:84% T:NA**	pCi/L	08/24/21 07:03	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.741U ± 0.414 (0.748) C:72% T:90%**	pCi/L	08/03/21 14:36	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.23U ± 0.734 (1.28)**	pCi/L	08/24/21 16:54	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: GORGAS GYPSUM WMWGORG_1329
Pace Project No.: 92550955

Sample: BB12852 MW-3 **Lab ID: 92550955026** Collected: 07/14/21 14:55 Received: 07/21/21 09:50 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	**0.0145U ± 0.173 (0.474) C:72% T:NA**	pCi/L	08/24/21 07:03	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.653 ± 0.355 (0.637) C:77% T:94%**	pCi/L	08/03/21 14:36	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.668U ± 0.528 (1.11)**	pCi/L	08/24/21 16:54	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: GORGAS GYPSUM WMWGORG_1329
Pace Project No.: 92550955

Sample: BB12853 MW-3V **Lab ID: 92550955027** Collected: 07/15/21 10:50 Received: 07/21/21 09:50 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	**-0.0498U ± 0.131 (0.432) C:81% T:NA**	pCi/L	08/24/21 07:04	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.362U ± 0.380 (0.791) C:70% T:88%**	pCi/L	08/03/21 14:37	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.362U ± 0.511 (1.22)**	pCi/L	08/24/21 16:54	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: GORGAS GYPSUM WMWGORG_1329
Pace Project No.: 92550955

Sample: BB12854 FB-2 **Lab ID: 92550955028** Collected: 07/15/21 12:05 Received: 07/21/21 09:50 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	**0.0689U ± 0.169 (0.407) C:91% T:NA**	pCi/L	08/24/21 07:04	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.240U ± 0.334 (0.714) C:67% T:83%**	pCi/L	08/03/21 14:37	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.309U ± 0.503 (1.12)**	pCi/L	08/24/21 16:54	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL - RADIOCHEMISTRY

Project: GORGAS GYPSUM WMWGORG_1329
Pace Project No.: 92550955

QC Batch: 457855
QC Batch Method: EPA 9315
Analysis Method: EPA 9315
Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92550955001, 92550955002, 92550955003, 92550955004, 92550955005, 92550955006, 92550955007, 92550955008, 92550955009, 92550955010, 92550955011, 92550955012, 92550955013, 92550955014, 92550955015, 92550955016, 92550955017, 92550955018, 92550955019, 92550955020

METHOD BLANK: 2210347
Matrix: Water
Associated Lab Samples: 92550955001, 92550955002, 92550955003, 92550955004, 92550955005, 92550955006, 92550955007, 92550955008, 92550955009, 92550955010, 92550955011, 92550955012, 92550955013, 92550955014, 92550955015, 92550955016, 92550955017, 92550955018, 92550955019, 92550955020

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.180 ± 0.196 (0.384) C:93% T:NA	pCi/L	08/24/21 07:35	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL - RADIOCHEMISTRY

Project: GORGAS GYPSUM WMWGORG_1329
Pace Project No.: 92550955

QC Batch: 457854
QC Batch Method: EPA 9320
Analysis Method: EPA 9320
Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92550955001, 92550955002, 92550955003, 92550955004, 92550955005, 92550955006, 92550955007, 92550955008, 92550955009, 92550955010, 92550955011, 92550955012, 92550955013, 92550955014, 92550955015, 92550955016, 92550955017, 92550955018, 92550955019, 92550955020

METHOD BLANK: 2210346
Matrix: Water
Associated Lab Samples: 92550955001, 92550955002, 92550955003, 92550955004, 92550955005, 92550955006, 92550955007, 92550955008, 92550955009, 92550955010, 92550955011, 92550955012, 92550955013, 92550955014, 92550955015, 92550955016, 92550955017, 92550955018, 92550955019, 92550955020

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.696 ± 0.402 (0.740) C:71% T:90%	pCi/L	08/03/21 11:30	

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
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL - RADIOCHEMISTRY

Project: GORGAS GYPSUM WMWGORG_1329
Pace Project No.: 92550955

QC Batch: 457856
QC Batch Method: EPA 9320
Analysis Method: EPA 9320
Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92550955021, 92550955022, 92550955023, 92550955024, 92550955025, 92550955026, 92550955027, 92550955028

METHOD BLANK: 2210350
Matrix: Water
Associated Lab Samples: 92550955021, 92550955022, 92550955023, 92550955024, 92550955025, 92550955026, 92550955027, 92550955028

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.186 ± 0.369 (0.813) C:71% T:80%	pCi/L	08/03/21 14:39	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL - RADIOCHEMISTRY

Project: GORGAS GYPSUM WMWGORG_1329
Pace Project No.: 92550955

QC Batch: 457857
QC Batch Method: EPA 9315
Analysis Method: EPA 9315
Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92550955021, 92550955022, 92550955023, 92550955024, 92550955025, 92550955026, 92550955027, 92550955028

METHOD BLANK: 2210352
Matrix: Water
Associated Lab Samples: 92550955021, 92550955022, 92550955023, 92550955024, 92550955025, 92550955026, 92550955027, 92550955028

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.0484 ± 0.255 (0.638) C:80% T:NA	pCi/L	08/24/21 07:03	

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
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALIFIERS

Project: GORGAS GYPSUM WMWGORG_1329
Pace Project No.: 92550955

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

A separate vial preserved to a pH of 4-5 is recommended in SW846 Chapter 4 for the analysis of Acrolein and Acrylonitrile by EPA Method 8260.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Act - Activity

Unc - Uncertainty: SDWA = 1.96 sigma count uncertainty, all other matrices = Expanded Uncertainty (95% confidence interval). Gamma Spec = Expanded Uncertainty (95.4% Confidence Interval)

(MDC) - Minimum Detectable Concentration

Trac - Tracer Recovery (%)

Carr - Carrier Recovery (%)

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: GORGAS GYPSUM WMWGORG_1329
Pace Project No.: 92550955

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92550955001	BB12697 MW-8	EPA 9315	457855		
92550955002	BB12698 MW-8V	EPA 9315	457855		
92550955003	BB12774 PZ-18	EPA 9315	457855		
92550955004	BB12775 PZ-17	EPA 9315	457855		
92550955005	BB12776 MW-14H	EPA 9315	457855		
92550955006	BB12777 MW-14H DUP	EPA 9315	457855		
92550955007	BB12778 FB-1	EPA 9315	457855		
92550955008	BB12779 MW-4	EPA 9315	457855		
92550955009	BB12780 MW-4V	EPA 9315	457855		
92550955010	BB12781 PZ-21	EPA 9315	457855		
92550955011	BB12782 PZ-22	EPA 9315	457855		
92550955012	BB12783 PZ-20	EPA 9315	457855		
92550955013	BB12784 PZ-19	EPA 9315	457855		
92550955014	BB12784 PZ-19 MS	EPA 9315	457855		
92550955015	BB12784 PZ-19 MSD	EPA 9315	457855		
92550955016	BB12785 EB-1	EPA 9315	457855		
92550955017	BB12845 MW-9V	EPA 9315	457855		
92550955018	BB12846 MW-9H	EPA 9315	457855		
92550955019	BB12847 MW-12H	EPA 9315	457855		
92550955020	BB12848 MW-12V	EPA 9315	457855		
92550955021	BB12849 MW-11H	EPA 9315	457857		
92550955022	BB12849 MW-11H MS	EPA 9315	457857		
92550955023	BB12849 MW-11H MSD	EPA 9315	457857		
92550955024	BB12850 MW-13H	EPA 9315	457857		
92550955025	BB12851 MW-13H DUP	EPA 9315	457857		
92550955026	BB12852 MW-3	EPA 9315	457857		
92550955027	BB12853 MW-3V	EPA 9315	457857		
92550955028	BB12854 FB-2	EPA 9315	457857		
92550955001	BB12697 MW-8	EPA 9320	457854		
92550955002	BB12698 MW-8V	EPA 9320	457854		
92550955003	BB12774 PZ-18	EPA 9320	457854		
92550955004	BB12775 PZ-17	EPA 9320	457854		
92550955005	BB12776 MW-14H	EPA 9320	457854		
92550955006	BB12777 MW-14H DUP	EPA 9320	457854		
92550955007	BB12778 FB-1	EPA 9320	457854		
92550955008	BB12779 MW-4	EPA 9320	457854		
92550955009	BB12780 MW-4V	EPA 9320	457854		
92550955010	BB12781 PZ-21	EPA 9320	457854		
92550955011	BB12782 PZ-22	EPA 9320	457854		
92550955012	BB12783 PZ-20	EPA 9320	457854		
92550955013	BB12784 PZ-19	EPA 9320	457854		
92550955014	BB12784 PZ-19 MS	EPA 9320	457854		
92550955015	BB12784 PZ-19 MSD	EPA 9320	457854		
92550955016	BB12785 EB-1	EPA 9320	457854		
92550955017	BB12845 MW-9V	EPA 9320	457854		
92550955018	BB12846 MW-9H	EPA 9320	457854		
92550955019	BB12847 MW-12H	EPA 9320	457854		
92550955020	BB12848 MW-12V	EPA 9320	457854		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: GORGAS GYPSUM WMWGORG_1329
Pace Project No.: 92550955

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92550955021	**BB12849 MW-11H**	EPA 9320	457856		
92550955022	**BB12849 MW-11H MS**	EPA 9320	457856		
92550955023	**BB12849 MW-11H MSD**	EPA 9320	457856		
92550955024	**BB12850 MW-13H**	EPA 9320	457856		
92550955025	**BB12851 MW-13H DUP**	EPA 9320	457856		
92550955026	**BB12852 MW-3**	EPA 9320	457856		
92550955027	**BB12853 MW-3V**	EPA 9320	457856		
92550955028	**BB12854 FB-2**	EPA 9320	457856		
92550955001	**BB12697 MW-8**	Total Radium Calculation	461522		
92550955002	**BB12698 MW-8V**	Total Radium Calculation	461522		
92550955003	**BB12774 PZ-18**	Total Radium Calculation	461522		
92550955004	**BB12775 PZ-17**	Total Radium Calculation	461522		
92550955005	**BB12776 MW-14H**	Total Radium Calculation	461523		
92550955006	**BB12777 MW-14H DUP**	Total Radium Calculation	461523		
92550955007	**BB12778 FB-1**	Total Radium Calculation	461523		
92550955008	**BB12779 MW-4**	Total Radium Calculation	461523		
92550955009	**BB12780 MW-4V**	Total Radium Calculation	461523		
92550955010	**BB12781 PZ-21**	Total Radium Calculation	461523		
92550955011	**BB12782 PZ-22**	Total Radium Calculation	461523		
92550955012	**BB12783 PZ-20**	Total Radium Calculation	461523		
92550955013	**BB12784 PZ-19**	Total Radium Calculation	461523		
92550955016	**BB12785 EB-1**	Total Radium Calculation	461523		
92550955017	**BB12845 MW-9V**	Total Radium Calculation	461523		
92550955018	**BB12846 MW-9H**	Total Radium Calculation	461523		
92550955019	**BB12847 MW-12H**	Total Radium Calculation	461523		
92550955020	**BB12848 MW-12V**	Total Radium Calculation	461523		
92550955021	**BB12849 MW-11H**	Total Radium Calculation	461523		
92550955024	**BB12850 MW-13H**	Total Radium Calculation	461523		
92550955025	**BB12851 MW-13H DUP**	Total Radium Calculation	461524		
92550955026	**BB12852 MW-3**	Total Radium Calculation	461524		
92550955027	**BB12853 MW-3V**	Total Radium Calculation	461524		
92550955028	**BB12854 FB-2**	Total Radium Calculation	461524		

REPORT OF LABORATORY ANALYSIS

Pace Analytical

Client Name: Alabama Power Company Pro

WO# : 92550955

92550955

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

Tracking #: 5140 3411 6240

Custody Seal on Cooler/Box Present: ☑ yes ☐ no Seals intact: ☑ yes ☐ no

Thermometer Used ____ Type of Ice: Wet Blue (None)

Cooler Temperature Observed Temp ____ °C Correction Factor: ____ °C Final Temp: ____ °C

Temp should be above freezing to 6°C

Comments:	Yes	No	N/A	pH paper Lot# 10D3801 / Date and Initials of person examining contents: 7-21-21 JA
Chain of Custody Present:	✓			1.
Chain of Custody Filled Out:	✓			2.
Chain of Custody Relinquished:	✓			3.
Sampler Name & Signature on COC:		✓		4.
Sample Labels match COC: -Includes date/time/ID Matrix: WT		✓		5. MW12V-Time unreadable
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: -Pace Containers Used:	✓ ✓			10.
Containers Intact:	✓			11.
Orthophosphate field filtered			✓	12.
Hex Cr Aqueous sample field filtered			✓	13.
Organic Samples checked for dechlorination:			✓	14.
Filtered volume received for Dissolved tests			✓	15.
All containers have been checked for preservation. exceptions: VOA, coliform, TOC, O&G, Phenolics, Radon, Non-aqueous matrix	✓			16. pH<2
All containers meet method preservation requirements.	✓			Initial when completed JA / Date/time of preservation / Lot # of added preservative
Headspace in VOA Vials (>6mm):			✓	17.
Trip Blank Present:			✓	18.
Trip Blank Custody Seals Present			✓	
Rad Samples Screened < 0.5 mrem/hr	✓			Initial when completed: JA / Date: 7-21-21 / Survey Meter SN: 1563

Client Notification/ Resolution:

Person Contacted: ____ Date/Time: ____ Contacted By: ____

Comments/ Resolution: ____

☐ **A check in this box indicates that additional information has been stored in ereports.**

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

*PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page : 1 Of 3

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	Alabama Power Company	Report To:	Laura Midkiff	Attention:	Laura Midkiff
Address:	744 Highway 87 GSC Bldg #8	Copy To:	Brooke Caton & Renee Jernigan	Company Name:	Alabama Power Co.
	Calera, AL 35040			Address:	744 Highway 87 GSC Bldg #8
Email To:	lbmidkif@southernco.com	Purchase Order #:	APC10700668	Pace Quote:	CCR
Phone:	205-664-6197 Fax:	Project Name:	Plant Gorgas Gypsum	Pace Project Manager:	Kevin.Herring@pacelabs.com
Requested Due Date:	28 days	Project Number:	WMWGORG 1329	Pace Profile #:	13805

Regulatory Agency

State / Location: AL

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)		MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	EPA 9315	EPA 9320	Total Radium Sum	Matrix Spike/Matrix Spike D	Residual Chlorine (Y/N)	
1	BB12697	MW-8	GW	G			7/14/2021	10:52		1			X						X	X	X			001
2	BB12698	MW-8V	GW	G			7/14/2021	13:10		1			X						X	X	X			002
3																								
4																								
5																								
6																								
7																								
8																								
9																								
10																								
11																								
12																								

MATRIX CODE: Drinking Water DW; Water WT; Waste Water WW; Product P; Soil/Solid SL; Oil OL; Wipe WP; Air AR; Other OT; Tissue TS

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	Laura Midkiff/ APC GTL	7/16/2021	12:15		7-21-21	9:50	-	N	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:					

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page : 2 Of 3

Section A — Required Client Information:

Company:	Alabama Power Company
Address:	744 Highway 87 GSC Bldg #8 Calera, AL 35040
Email To:	lbmidkif@southernco.com
Phone:	205-664-6197 Fax
Requested Due Date:	28 days

Section B — Required Project Information:

Report To:	Laura Midkiff
Copy To:	Brooke Caton & Renee Jernigan
Purchase Order #:	APC10700668
Project Name:	Plant Gorgas Gypsum
Project Number:	WMWGORG_1329

Section C — Invoice Information:

Attention:	Laura Midkiff
Company Name:	Alabama Power Co.
Address:	744 Highway 87 GSC Bldg #8
Pace Quote:	CCR
Pace Project Manager:	Kevin.Herring@pacelabs.com
Pace Profile #:	13805

Regulatory Agency

State / Location: AL

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)		MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	EPA 9315	EPA 9320	Total Radium Sum	Matrix Spike/Matrix Spike Dup	Residual Chlorine (Y/N)	
1	BB12774	PZ-18	GW	G			7/13/2021	11:22		1			X							X	X	X			003
2	BB12775	PZ-17	GW	G			7/13/2021	12:40		1			X							X	X	X			004
3	BB12776	MW-14H	GW	G			7/13/2021	13:51		1			X							X	X	X			005
4	BB12777	MW-14H DUP	GW	G			7/13/2021	13:51		1			X							X	X	X			006
5	BB12778	FB-1	GW	G			7/13/2021	14:35		1			X							X	X	X			007
6	BB12779	MW-4	GW	G			7/14/2021	8:38		1			X							X	X	X			008
7	BB12780	MW-4V	GW	G			7/14/2021	10:04		1			X							X	X	X			009
8	BB12781	PZ-21	GW	G			7/14/2021	11:33		1			X							X	X	X			010
9	BB12782	PZ-22	GW	G			7/14/2021	12:36		1			X							X	X	X			011
10	BB12783	PZ-20	GW	G			7/14/2021	14:05		1			X							X	X	X			012
11	BB12784	PZ-19	GW	G			7/14/2021	15:32		3			X							X	X	X	X		013
12	BB12785	EB-1	GW	G			7/14/2021	16:15		1			X							X	X	X			014

MATRIX CODE: Drinking Water DW; Water WT; Waste Water WW; Product P; Soil/Solid SL; Oil OL; Wipe WP; Air AR; Other OT; Tissue TS

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS: TEMP In C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
	Laura Midkiff/ APC GTL	7/16/2021	12:15		7-21-21	9:50	-	N	Y	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER:

SIGNATURE of SAMPLER: DATE Signed:

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page : 3 Of 3

Section A — Required Client Information:

Company:	Alabama Power Company
Address:	744 Highway 87 GSC Bldg #8 Calera, AL 35040
Email To:	lbmidkif@southernco.com
Phone:	205-664-6197 Fax
Requested Due Date:	28 days

Section B — Required Project Information:

Report To:	Laura Midkiff
Copy To:	Brooke Caton & Renee Jernigan
Purchase Order #:	APC10700668
Project Name:	Plant Gorgas Gypsum
Project Number:	WMWGORG 1329

Section C — Invoice Information:

Attention:	Laura Midkiff
Company Name:	Alabama Power Co.
Address:	744 Highway 87 GSC Bldg #8
Pace Quote:	CCR
Pace Project Manager:	Kevin.Herring@pacelabs.com
Pace Profile #:	13805

Regulatory Agency

State / Location: AL

SAMPLE ID — One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique

MATRIX CODE: Drinking Water DW; Water WT; Waste Water WW; Product P; Soil/Solid SL; Oil OL; Wipe WP; Air AR; Other OT; Tissue TS

ITEM #	SAMPLE ID		MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Y/N	Analyses Test: EPA 9315	EPA 9320	Total Radium Sum	Matrix Spike/Matrix Spike D	Residual Chlorine (Y/N)
1	BB12845	MW-9V	GW	G			7/13/2021	11:50	12	1			X							X	X	X		015
2	BB12846	MW-9H	GW	G			7/13/2021	13:45		1			X							X	X	X		016
3	BB12847	MW-12H	GW	G			7/14/2021	9:35		1			X							X	X	X		017
4	BB12848	MW-12V	GW	G			7/14/2021	10:45		1			X							X	X	X		018
5	BB12849	MW-11H	GW	G			7/14/2021	11:47		1			X							X	X	X	X	019
6	BB12850	MW-13H	GW	G			7/14/2021	12:58		1			X							X	X	X		020
7	BB12851	MW-13H DUP	GW	G			7/14/2021	12:58		1			X							X	X	X		021
8	BB12852	MW-3	GW	G			7/14/2021	14:55		1			X							X	X	X		022
9	BB12853	MW-3V	GW	G			7/15/2021	10:50		1			X							X	X	X		023
10	BB12854	FB-2	GW	G			7/15/2021	12:05		1			X							X	X	X		024
11																								
12																								

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
	Laura Midkiff/ APC GTL	7/16/2021	12:15	[signature]	7-21-21	9:50

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER:

SIGNATURE of SAMPLER: DATE Signed:

SAMPLE CONDITIONS			
—	N	Y	Y

TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

Quality Control Sample Performance Assessment

Pace Analytical™
www.pacelabs.com

Test:	Ra-226
Analyst:	CLA
Date:	8/2/2021
Worklist:	61830
Matrix:	DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2210347
MB concentration:	0.180
M/B Counting Uncertainty:	0.194
MB MDC:	0.384
MB Numerical Performance Indicator:	1.82
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS61830	LCSD61830
Count Date:	8/24/2021	8/24/2021
Spike I.D.:	19-033	19-033
Decay Corrected Spike Concentration (pCi/mL):	24.035	24.035
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.207	0.205
Target Conc. (pCi/L, g, F):	11.596	11.736
Uncertainty (Calculated):	0.139	0.141
Result (pCi/L, g, F):	11.061	13.864
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	1.142	1.294
Numerical Performance Indicator:	-0.91	3.20
Percent Recovery:	95.39%	118.13%
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:	7/14/2021	
Sample I.D.	92550955013	
Sample MS I.D.	92550955014	
Sample MSD I.D.	92550955015	
Spike I.D.:	19-033	
MS/MSD Decay Corrected Spike Concentration (pCi/mL):	24.036	
Spike Volume Used in MS (mL):	0.20	
Spike Volume Used in MSD (mL):	0.20	
MS Aliquot (L, g, F):	0.206	
MS Target Conc.(pCi/L, g, F):	23.358	
MSD Aliquot (L, g, F):	0.202	
MSD Target Conc. (pCi/L, g, F):	23.804	
MS Spike Uncertainty (calculated):	0.280	
MSD Spike Uncertainty (calculated):	0.286	
Sample Result:	0.169	
Sample Result Counting Uncertainty (pCi/L, g, F):	0.298	
Sample Matrix Spike Result:	25.749	
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):	1.867	
Sample Matrix Spike Duplicate Result:	23.637	
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):	1.806	
MS Numerical Performance Indicator:	2.279	
MSD Numerical Performance Indicator:	-0.355	
MS Percent Recovery:	109.51%	
MSD Percent Recovery:	98.59%	
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.:	LCS61830	
Duplicate Sample I.D.	LCSD61830	
Sample Result (pCi/L, g, F):	11.061	
Sample Result Counting Uncertainty (pCi/L, g, F):	1.142	
Sample Duplicate Result (pCi/L, g, F):	13.864	
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	1.294	
Are sample and/or duplicate results below RL?	NO	
Duplicate Numerical Performance Indicator:	-3.184	
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	21.30%	
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.	92550955013	
Sample MS I.D.	92550955014	
Sample MSD I.D.	92550955015	
Sample Matrix Spike Result:	25.749	
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):	1.867	
Sample Matrix Spike Duplicate Result:	23.637	
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):	1.806	
Duplicate Numerical Performance Indicator:	1.594	
(Based on the Percent Recoveries) MS/ MSD Duplicate RPD:	10.49%	
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:

CMT 8/24/21

LAM 8/24/21

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

Test:	Ra-228
Analyst:	JC2
Date:	7/29/2021
Worklist:	61829
Matrix:	WT

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2210346
MB concentration:	0.696
M/B 2 Sigma CSU:	0.402
MB MDC:	0.740
MB Numerical Performance Indicator:	3.39
MB Status vs Numerical Indicator:	Fail*
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	N
	LCS61829	LCSD61829
Count Date:	8/3/2021	
Spike I.D.:	21-003	
Decay Corrected Spike Concentration (pCi/mL):	36.709	
Volume Used (mL):	0.10	
Aliquot Volume (L, g, F):	0.817	
Target Conc. (pCi/L, g, F):	4.493	
Uncertainty (Calculated):	0.220	
Result (pCi/L, g, F):	5.090	
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	1.132	
Numerical Performance Indicator:	1.01	
Percent Recovery:	113.28%	
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:	7/14/2021	
Sample I.D.	92550955013	
Sample MS I.D.	92550955014	
Sample MSD I.D.	92550955015	
Spike I.D.:	21-003	
MS/MSD Decay Corrected Spike Concentration (pCi/mL):	36.950	
Spike Volume Used in MS (mL):	0.20	
Spike Volume Used in MSD (mL):	0.20	
MS Aliquot (L, g, F):	0.812	
MS Target Conc.(pCi/L, g, F):	9.103	
MSD Aliquot (L, g, F):	0.808	
MSD Target Conc. (pCi/L, g, F):	9.144	
MS Spike Uncertainty (calculated):	0.446	
MSD Spike Uncertainty (calculated):	0.448	
Sample Result:	0.575	
Sample Result 2 Sigma CSU (pCi/L, g, F):	0.431	
Sample Matrix Spike Result:	9.994	
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):	2.016	
Sample Matrix Spike Duplicate Result:	8.075	
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):	1.644	
MS Numerical Performance Indicator:	0.294	
MSD Numerical Performance Indicator:	-1.833	
MS Percent Recovery:	103.47%	
MSD Percent Recovery:	82.02%	
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.	92550955013	
Sample MS I.D.	92550955014	
Sample MSD I.D.	92550955015	
Sample Matrix Spike Result:	9.994	
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):	2.016	
Sample Matrix Spike Duplicate Result:	8.075	
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):	1.644	
Duplicate Numerical Performance Indicator:	1.446	
(Based on the Percent Recoveries) MS/ MSD Duplicate RPD:	23.13%	
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:

*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.

JM 8/4/21

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

Test:	Ra-228
Analyst:	JC2
Date:	7/30/2021
Worklist:	61831
Matrix:	WT

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2210350
MB concentration:	0.186
M/B 2 Sigma CSU:	0.369
MB MDC:	0.813
MB Numerical Performance Indicator:	0.99
MB Status vs Numerical Indicator:	Pass
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	N
	LCS61831	LCSD61831
Count Date:	8/3/2021	
Spike I.D.:	21-003	
Decay Corrected Spike Concentration (pCi/mL):	36.708	
Volume Used (mL):	0.10	
Aliquot Volume (L, g, F):	0.810	
Target Conc. (pCi/L, g, F):	4.534	
Uncertainty (Calculated):	0.222	
Result (pCi/L, g, F):	4.013	
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	0.972	
Numerical Performance Indicator:	-1.03	
Percent Recovery:	88.50%	
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:	7/14/2021	7/12/2021
Sample I.D.	92550955021	92549918003
Sample MS I.D.	92550955022	92549918004
Sample MSD I.D.	92550955023	92549918005
Spike I.D.:	21-003	21-003
MS/MSD Decay Corrected Spike Concentration (pCi/mL):	36.952	36.952
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):	0.806	0.812
MS Target Conc.(pCi/L, g, F):	9.165	9.099
MSD Aliquot (L, g, F):	0.810	0.809
MSD Target Conc. (pCi/L, g, F):	9.123	9.137
MS Spike Uncertainty (calculated):	0.449	0.446
MSD Spike Uncertainty (calculated):	0.447	0.448
Sample Result:	-0.002	-0.004
Sample Result 2 Sigma CSU (pCi/L, g, F):	0.326	0.356
Sample Matrix Spike Result:	9.623	9.474
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):	1.948	1.878
Sample Matrix Spike Duplicate Result:	10.171	9.866
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):	2.026	1.960
MS Numerical Performance Indicator:	0.446	0.379
MSD Numerical Performance Indicator:	0.980	0.703
MS Percent Recovery:	105.02%	104.17%
MSD Percent Recovery:	111.51%	108.02%
MS Status vs Numerical Indicator:	Pass	Pass
MSD Status vs Numerical Indicator:	Pass	Pass
MS Status vs Recovery:	Pass	Pass
MSD Status vs Recovery:	Pass	Pass
MS/MSD Upper % Recovery Limits:	135%	135%
MS/MSD Lower % Recovery Limits:	60%	60%

Duplicate Sample Assessment		
Sample I.D.:		Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.		
Sample Result (pCi/L, g, F):		
Sample Result 2 Sigma CSU (pCi/L, g, F):		
Sample Duplicate Result (pCi/L, g, F):		
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):		
Are sample and/or duplicate results below RL?	See Below ##	
Duplicate Numerical Performance Indicator:		
Duplicate RPD:		
Duplicate Status vs Numerical Indicator:		
Duplicate Status vs RPD:		
% RPD Limit:		

Matrix Spike/Matrix Spike Duplicate Sample Assessment		
Sample I.D.	92550955021	92549918003
Sample MS I.D.	92550955022	92549918004
Sample MSD I.D.	92550955023	92549918005
Sample Matrix Spike Result:	9.623	9.474
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):	1.948	1.878
Sample Matrix Spike Duplicate Result:	10.171	9.866
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):	2.026	1.960
Duplicate Numerical Performance Indicator:	-0.382	-0.283
(Based on the Percent Recoveries) MS/ MSD Duplicate RPD:	5.99%	3.63%
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:

8/4/21

OM 8/4/21

Quality Control Sample Performance Assessment

Pace Analytical™
www.pacelabs.com

Test:	Ra-226
Analyst:	CLA
Date:	8/2/2021
Worklist:	61832
Matrix:	DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2210352
MB concentration:	0.048
M/B Counting Uncertainty:	0.255
MB MDC:	0.638
MB Numerical Performance Indicator:	0.37
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	N
	LCS61832	LCSD61832
Count Date:	8/24/2021	
Spike I.D.:	19-033	
Decay Corrected Spike Concentration (pCi/mL):	24.035	
Volume Used (mL):	0.10	
Aliquot Volume (L, g, F):	0.204	
Target Conc. (pCi/L, g, F):	11.766	
Uncertainty (Calculated):	0.141	
Result (pCi/L, g, F):	12.529	
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	1.194	
Numerical Performance Indicator:	1.24	
Percent Recovery:	106.49%	
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:	7/14/2021	
Sample I.D.	92550955021	
Sample MS I.D.	92550955022	
Sample MSD I.D.	92550955023	
Spike I.D.:	19-033	
MS/MSD Decay Corrected Spike Concentration (pCi/mL):	24.036	
Spike Volume Used in MS (mL):	0.20	
Spike Volume Used in MSD (mL):	0.20	
MS Aliquot (L, g, F):	0.201	
MS Target Conc.(pCi/L, g, F):	23.948	
MSD Aliquot (L, g, F):	0.208	
MSD Target Conc. (pCi/L, g, F):	23.111	
MS Spike Uncertainty (calculated):	0.287	
MSD Spike Uncertainty (calculated):	0.277	
Sample Result:	0.398	
Sample Result Counting Uncertainty (pCi/L, g, F):	0.253	
Sample Matrix Spike Result:	24.293	
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):	1.840	
Sample Matrix Spike Duplicate Result:	23.580	
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):	1.660	
MS Numerical Performance Indicator:	-0.056	
MSD Numerical Performance Indicator:	0.081	
MS Percent Recovery:	99.78%	
MSD Percent Recovery:	100.31%	
MS Status vs Numerical Indicator:	N/A	
MSD Status vs Numerical Indicator:	N/A	
MS Status vs Recovery:	Pass	
MSD Status vs Recovery:	Pass	
MS/MSD Upper % Recovery Limits:	125%	
MS/MSD Lower % Recovery Limits:	75%	

Duplicate Sample Assessment		
Sample I.D.:		
Duplicate Sample I.D.		
Sample Result (pCi/L, g, F):		
Sample Result Counting Uncertainty (pCi/L, g, F):		
Sample Duplicate Result (pCi/L, g, F):		
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):		
Are sample and/or duplicate results below RL?	See Below ##	
Duplicate Numerical Performance Indicator:		
Duplicate RPD:		
Duplicate Status vs Numerical Indicator:		
Duplicate Status vs RPD:		
% RPD Limit:		

Matrix Spike/Matrix Spike Duplicate Sample Assessment		
Sample I.D.	92550955021	
Sample MS I.D.	92550955022	
Sample MSD I.D.	92550955023	
Sample Matrix Spike Result:	24.293	
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):	1.840	
Sample Matrix Spike Duplicate Result:	23.580	
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):	1.660	
Duplicate Numerical Performance Indicator:	0.564	
(Based on the Percent Recoveries) MS/ MSD Duplicate RPD:	0.53%	
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:

LAM 8/24/21

CMT 8/24/21

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

Analytical Report

Alabama Power

Sample Group : WMWGORPU_1328

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 : Laura Midkiff
lbmidkif@southernco.com
(205) 664-6197

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

August 04, 2021

Dear Dustin Brooks,

Enclosed are the analytical results for sample(s) received by the laboratory on July 13, 2021.
All results reported herein conform to the laboratory's most current Quality Assurance Manual. Results marked with an asterisk conform to the most current applicable TNI/NELAC requirements. Exceptions will be noted in the body of the report.

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

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

Sincerely,

Quality Control: Laura Midkiff
Digitally signed by Laura Midkiff
DN: cn=Laura Midkiff, o=Alabama Power Company, ou=Environmental Affairs, email=lbmidkif@southernco.com, c=US
Date: 2021.08.04 10:24:40 -05'00'

Supervision: T. Durant Maske
Digitally signed by T. Durant Maske
DN: cn=T. Durant Maske, o=Alabama Power Company, ou=Environmental Affairs, email=tdmaske@southernco.com, c=US
Date: 2021.08.06 18:29:15 -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_1328

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
BB12485	703422	WMWGORPU_1328
BB12486	703422	WMWGORPU_1328
BB12487	703422	WMWGORPU_1328
BB12488	703422	WMWGORPU_1328
BB12489	703422	WMWGORPU_1328
BB12490	703422	WMWGORPU_1328
BB12491	703422	WMWGORPU_1328

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

General Quality Control Procedures:

- Prior to sample analysis, an initial calibration verification (ICV) was analyzed, and all criteria were met.
- Following the ICV, an initial calibration blank (ICB) was analyzed and was below the limit of quantitation for all requested analytes.
- All continued calibration verification (CCV) were within the acceptance criteria for the requested analytes.
- All continued calibration blanks (CCB) were below the limit of quantitation for the requested analytes.
- A preparation method blank and laboratory control sample were digested and analyzed with the samples in each digestion batch.
- All laboratory control sample criteria were met.
- The method blank associated with each digestion batch passed all acceptance criteria for all requested analytes.
- All calibration curve requirements were within acceptance criteria.
- All sample internal standard criteria were met.
- The spectral interference check associated with EPA 200.7 was analyzed and all acceptance criteria were met.

- It is noted that the QC summary page typically provides the QC results from the original batch analytical sequence. If dilutions were subsequently performed to bring sample concentrations within the calibration range, any additional QC data from the dilution analyses may need to be obtained from the laboratory. Any qualifications applied to original analyses or dilution re-analyses are based upon QC data available at the time of review.

Matrix Specific Quality Control Procedures:

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

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

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

Sample ID	Analyte	Dilution Factor
BB12485	Calcium & Magnesium	10.15
BB12486	Calcium & Magnesium	10.15
BB12487	Calcium & Magnesium	10.15
BB12488	Calcium & Sodium	10.15
BB12489	Calcium	10.15
BB12488	Magnesium	101.5
BB12489	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_1328

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
BB12485	703488	WMWGORPU_1328
BB12486	703488	WMWGORPU_1328
BB12487	703488	WMWGORPU_1328
BB12488	703488	WMWGORPU_1328
BB12489	703488	WMWGORPU_1328

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

General Quality Control Procedures:

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

Matrix Specific Quality Control Procedures:

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

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

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

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

Case Narrative

Alabama Power

Total Metals ICPMS

Gorgas Pooled Upgradient

WMWGORPU_1328

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
BB12485	703415	WMWGORPU_1328
BB12486	703415	WMWGORPU_1328
BB12487	703415	WMWGORPU_1328
BB12488	703415	WMWGORPU_1328
BB12489	703415	WMWGORPU_1328
BB12490	703415	WMWGORPU_1328
BB12491	703415	WMWGORPU_1328

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.

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
BB12485	Manganese	10.15
BB12486	Manganese	10.15
BB12487	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_1328

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
BB12485	703029	WMWGORPU_1328
BB12486	703029	WMWGORPU_1328
BB12487	703029	WMWGORPU_1328
BB12488	703029	WMWGORPU_1328
BB12489	703029	WMWGORPU_1328

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.

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
BB12485	Manganese	10.15
BB12486	Manganese	10.15
BB12487	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_1328

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
BB12485	702684	WMWGORPU_1328
BB12486	702684	WMWGORPU_1328
BB12487	702684	WMWGORPU_1328
BB12488	702684	WMWGORPU_1328
BB12489	702684	WMWGORPU_1328
BB12490	702684	WMWGORPU_1328
BB12491	702684	WMWGORPU_1328

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

General Quality Control Procedures:

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

Matrix Specific Quality Control Procedures:

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

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

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

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

Case Narrative

Alabama Power

TDS

Gorgas Pooled Upgradient

WMWGORPU_1328

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
BB12485	702701	WMWGORPU_1328
BB12486	702701	WMWGORPU_1328
BB12487	702701	WMWGORPU_1328
BB12488	702701	WMWGORPU_1328
BB12489	702701	WMWGORPU_1328
BB12490	702701	WMWGORPU_1328
BB12491	702701	WMWGORPU_1328

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

General Quality Control Procedures:

- A Method Blank was analyzed with each batch. All criteria were met.
- All final weights of samples, standards, and blanks agreed within 0.5mg of the previous weight.
- A sample duplicate was analyzed with each batch. RPD/2 was less than 5%.
- A laboratory control sample was analyzed with each batch. All criteria were met.
- Samples were between 2.5mg and 200mg residue.
- All samples with residue <2.5mg had the maximum volume of 150mL filtered. Affected samples are as follows:
    - BB12490
    - BB12491

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

Case Narrative

Alabama Power

Anions

Gorgas Pooled Upgradient

WMWGORPU_1328

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
BB12485	702708, 702964, 702707	WMWGORPU_1328
BB12486	702708, 702964, 702707	WMWGORPU_1328
BB12487	702708, 702964, 702707	WMWGORPU_1328
BB12488	702708, 702964, 702707	WMWGORPU_1328
BB12489	702708, 702964, 702707	WMWGORPU_1328
BB12490	702708, 702964, 702707	WMWGORPU_1328
BB12491	702708, 702964, 702707	WMWGORPU_1328

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

General Quality Control Procedures:

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

Matrix Specific Quality Control Procedures:

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

- A matrix spike was analyzed with each batch. Acceptance criteria for accuracy were met.
- A sample duplicate was analyzed with each batch. Acceptance criteria for precision were met.

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
BB12485	Sulfate	50
BB12486	Sulfate	50
BB12487	Sulfate	32
BB12488	Sulfate	100
BB12489	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

Alkalinity

Gorgas Pooled Upgradient

WMWGORPU_1328

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
BB12485	703193 & 703194	WMWGORPU_1328
BB12486	703193 & 703194	WMWGORPU_1328
BB12487	703193 & 703194	WMWGORPU_1328
BB12488	703193 & 703194	WMWGORPU_1328
BB12489	703193 & 703194	WMWGORPU_1328

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

General Quality Control Procedures:

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

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Pooled Upgradient - MW-1

Location Code: WMWGORPU
Collected: 7/12/21 10:45
Customer ID:
Submittal Date: 7/13/21 09:15

Laboratory ID Number: BB12485

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	7/21/21 12:22	7/22/21 16:15		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	7/21/21 12:22	7/23/21 11:15		10.15	149	mg/L	0.70035	4.06	
* Iron, Total	7/21/21 12:22	7/22/21 16:15		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Total	7/21/21 12:22	7/22/21 16:15		1.015	0.0266	mg/L	0.007105	0.01999956	
* Magnesium, Total	7/21/21 12:22	7/23/21 11:15		10.15	283	mg/L	0.21315	4.06	
* Sodium, Total	7/21/21 12:22	7/22/21 16:15		1.015	38.4	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Iron, Dissolved	7/27/21 09:49	7/27/21 10:57		1.015	Not Detected	mg/L	0.008120	0.0406	U
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	7/15/21 15:15	7/16/21 15:18		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Arsenic, Total	7/15/21 15:15	7/16/21 15:18		1.015	0.000363	mg/L	0.000068	0.000203	
* Barium, Total	7/15/21 15:15	7/16/21 15:18		1.015	0.00991	mg/L	0.000102	0.000203	
* Beryllium, Total	7/15/21 15:15	7/16/21 15:18		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	7/15/21 15:15	7/16/21 15:18		1.015	0.00193	mg/L	0.000068	0.000203	
* Chromium, Total	7/15/21 15:15	7/16/21 15:18		1.015	0.000487	mg/L	0.000203	0.001015	J
* Cobalt, Total	7/15/21 15:15	7/16/21 15:18		1.015	0.0556	mg/L	0.000068	0.000203	
* Lead, Total	7/15/21 15:15	7/16/21 15:18		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Molybdenum, Total	7/15/21 15:15	7/16/21 15:18		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Potassium, Total	7/15/21 15:15	7/16/21 15:18		1.015	7.30	mg/L	0.169505	0.5075	
* Manganese, Total	7/15/21 15:15	7/22/21 10:52		10.15	10.2	mg/L	0.000680	0.00203	
* Selenium, Total	7/15/21 15:15	7/16/21 15:18		1.015	0.00280	mg/L	0.000508	0.001015	
* Thallium, Total	7/15/21 15:15	7/16/21 15:18		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: ABB***								
* Manganese, Dissolved	7/16/21 08:37	7/20/21 14:17		10.15	10.7	mg/L	0.000680	0.00203	
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	7/14/21 10:02	7/14/21 13:43		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2320 B	***Analyst: JAG***								
Alkalinity, Total as CaCO3	7/21/21 09:10	7/21/21 09:40		1	22.0	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	7/14/21 12:18	7/15/21 13:41		1	2210	mg/L		125	

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

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 8/2/2021

Reported: 8/4/2021
Version: 3.3
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: 7/12/21 10:45
Customer ID:
Submittal Date: 7/13/21 09:15

Laboratory ID Number: BB12485

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 4500CO2 D	***Analyst: JAG***								
Bicarbonate Alkalinity, (calc.)	7/21/21 09:10	7/21/21 09:40		1	22.0	mg/L			
Carbonate Alkalinity, (calc.)	7/21/21 09:10	7/21/21 09:40		1	0.00	mg/L			
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	7/14/21 11:57	7/14/21 11:57		1	2.19	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	7/15/21 10:17	7/15/21 10:17		1	0.125	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	7/14/21 10:33	7/14/21 10:33		50	1560	mg/L	25.00	50	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	7/12/21 10:41	7/12/21 10:41			2271.93	uS/cm			FA
pH	7/12/21 10:41	7/12/21 10:41			5.13	SU			FA
Temperature	7/12/21 10:41	7/12/21 10:41			19.83	C			FA
Turbidity	7/12/21 10:41	7/12/21 10:41			0.22	NTU			FA

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

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 8/2/2021

Reported: 8/4/2021
Version: 3.3
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: 7/12/21 10:45
Customer ID:
Delivery Date: 7/13/21 09:15

Description: Gorgas Pooled Upgradient - MW-1

Laboratory ID Number: BB12485

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB12491	Molybdenum, Total	mg/L	0.0000261	0.000147	0.100	0.0984	0.103	0.100	0.0850 to 0.115	98.4	70.0 to 130	4.57	20.0
BB12491	Mercury, Total by CVAA	mg/L	5.390E-05	0.000500	0.004	0.00402	0.00398	0.00396	0.00340 to 0.00460	100	70.0 to 130	1.00	20.0
BB12491	Beryllium, Total	mg/L	0.0000533	0.000880	0.100	0.103	0.102	0.101	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BB12491	Sodium, Total	mg/L	0.00119	0.0660	5.00	4.95	4.92	4.98	4.25 to 5.75	99.0	70.0 to 130	0.608	20.0
BB12491	Cobalt, Total	mg/L	-0.0000691	0.000147	0.100	0.0949	0.0984	0.0969	0.0850 to 0.115	94.9	70.0 to 130	3.62	20.0
BB12491	Manganese, Total	mg/L	-0.000003	0.000147	0.100	0.101	0.104	0.103	0.0850 to 0.115	101	70.0 to 130	2.93	20.0
BB12491	Lithium, Total	mg/L	-8.650E-05	0.0154	0.200	0.197	0.195	0.199	0.170 to 0.230	98.5	70.0 to 130	1.02	20.0
BB12491	Lead, Total	mg/L	0.0000018	0.000147	0.100	0.113	0.113	0.107	0.0850 to 0.115	113	70.0 to 130	0.00	20.0
BB12491	Boron, Total	mg/L	0.000567	0.0650	1.00	0.980	0.977	0.995	0.850 to 1.15	98.0	70.0 to 130	0.307	20.0
BB12491	Cadmium, Total	mg/L	0.00000	0.000147	0.100	0.0930	0.0983	0.0943	0.0850 to 0.115	93.0	70.0 to 130	5.54	20.0
BB12491	Selenium, Total	mg/L	-0.0000651	0.00100	0.100	0.102	0.105	0.104	0.0850 to 0.115	102	70.0 to 130	2.90	20.0
BB12489	Iron, Dissolved	mg/L	-0.000219	0.0176	0.2	0.193	0.189	0.197	0.170 to 0.230	96.5	70.0 to 130	2.09	20.0
BB12491	Barium, Total	mg/L	-0.0000459	0.000200	0.100	0.101	0.104	0.0999	0.0850 to 0.115	101	70.0 to 130	2.93	20.0
BB12491	Calcium, Total	mg/L	0.00896	0.152	5.00	5.03	5.02	5.05	4.25 to 5.75	101	70.0 to 130	0.199	20.0
BB12491	Iron, Total	mg/L	2.630E-05	0.0176	0.2	0.199	0.198	0.201	0.170 to 0.230	99.5	70.0 to 130	0.504	20.0
BB12491	Potassium, Total	mg/L	0.00426	0.367	10.0	9.90	10.2	10.2	8.50 to 11.5	99.0	70.0 to 130	2.99	20.0
BB12491	Magnesium, Total	mg/L	-0.00929	0.0462	5.00	5.00	5.00	5.01	4.25 to 5.75	100	70.0 to 130	0.00	20.0
BB12491	Chromium, Total	mg/L	0.0000775	0.000440	0.100	0.0977	0.101	0.0999	0.0850 to 0.115	97.7	70.0 to 130	3.32	20.0
BB12491	Thallium, Total	mg/L	-0.000124	0.000147	0.100	0.115	0.115	0.112	0.0850 to 0.115	115	70.0 to 130	0.00	20.0
BB12491	Arsenic, Total	mg/L	0.0000344	0.000147	0.100	0.107	0.104	0.105	0.0850 to 0.115	107	70.0 to 130	2.84	20.0
BB12491	Antimony, Total	mg/L	0.000134	0.00100	0.100	0.0966	0.0989	0.0960	0.0850 to 0.115	96.6	70.0 to 130	2.35	20.0
BB12489	Manganese, Dissolved	mg/L	-0.0000252	0.000147	0.100	0.0976	0.100	0.0996	0.0850 to 0.115	97.4	70.0 to 130	2.43	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 8/2/2021

Reported: 8/4/2021
Version: 3.3
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: 7/12/21 10:45
Customer ID:
Delivery Date: 7/13/21 09:15

Description: Gorgas Pooled Upgradient - MW-1

Laboratory ID Number: BB12485

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB12491	Fluoride	mg/L	0.0195	0.100	2.50	2.58	0.0245	2.55	2.25 to 2.75	103	80.0 to 120	0.00	20.0
BB12491	Sulfate	mg/L	-0.557	1.00	20.0	20.0	-0.380	19.4	18.0 to 22.0	100	80.0 to 120	0.00	20.0
BB12491	Chloride	mg/L	-0.0691	1.00	10.0	11.3	0.232	10.0	9.00 to 11.0	113	80.0 to 120	0.00	20.0
BB12489	Alkalinity, Total as CaCO3	mg/L					192	53.9	45.0 to 55.0			1.04	10.0
BB12489	Solids, Dissolved	mg/L	-4.00	25.0			3040	47.0	40.0 to 60.0			0.662	5.00

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 8/2/2021

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: 7/12/21 10:45
Customer ID:
Submittal Date: 7/13/21 09:15

Laboratory ID Number: BB12486

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	7/21/21 12:22	7/22/21 16:19		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	7/21/21 12:22	7/23/21 11:18		10.15	152	mg/L	0.70035	4.06	
* Iron, Total	7/21/21 12:22	7/22/21 16:19		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Total	7/21/21 12:22	7/22/21 16:19		1.015	0.0267	mg/L	0.007105	0.01999956	
* Magnesium, Total	7/21/21 12:22	7/23/21 11:18		10.15	290	mg/L	0.21315	4.06	
* Sodium, Total	7/21/21 12:22	7/22/21 16:19		1.015	38.6	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Iron, Dissolved	7/27/21 09:49	7/27/21 11:01		1.015	Not Detected	mg/L	0.008120	0.0406	U
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	7/15/21 15:15	7/16/21 15:22		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Arsenic, Total	7/15/21 15:15	7/16/21 15:22		1.015	0.000300	mg/L	0.000068	0.000203	
* Barium, Total	7/15/21 15:15	7/16/21 15:22		1.015	0.00984	mg/L	0.000102	0.000203	
* Beryllium, Total	7/15/21 15:15	7/16/21 15:22		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	7/15/21 15:15	7/16/21 15:22		1.015	0.00185	mg/L	0.000068	0.000203	
* Chromium, Total	7/15/21 15:15	7/16/21 15:22		1.015	0.000389	mg/L	0.000203	0.001015	J
* Cobalt, Total	7/15/21 15:15	7/16/21 15:22		1.015	0.0549	mg/L	0.000068	0.000203	
* Lead, Total	7/15/21 15:15	7/16/21 15:22		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Molybdenum, Total	7/15/21 15:15	7/16/21 15:22		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Potassium, Total	7/15/21 15:15	7/16/21 15:22		1.015	7.25	mg/L	0.169505	0.5075	
* Manganese, Total	7/15/21 15:15	7/22/21 10:55		10.15	10.1	mg/L	0.000680	0.00203	
* Selenium, Total	7/15/21 15:15	7/16/21 15:22		1.015	0.00245	mg/L	0.000508	0.001015	
* Thallium, Total	7/15/21 15:15	7/16/21 15:22		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: ABB***								
* Manganese, Dissolved	7/16/21 08:37	7/20/21 14:20		10.15	9.90	mg/L	0.000680	0.00203	
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	7/14/21 10:02	7/14/21 13:46		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2320 B	***Analyst: JAG***								
Alkalinity, Total as CaCO3	7/21/21 09:10	7/21/21 09:40		1	24.2	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	7/14/21 12:18	7/15/21 13:41		1	2210	mg/L		125	

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

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 8/2/2021

Reported: 8/4/2021
Version: 3.3
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: 7/12/21 10:45
Customer ID:
Submittal Date: 7/13/21 09:15

Laboratory ID Number: BB12486

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 4500CO2 D	***Analyst: JAG***								
Bicarbonate Alkalinity, (calc.)	7/21/21 09:10	7/21/21 09:40		1	24.2	mg/L			
Carbonate Alkalinity, (calc.)	7/21/21 09:10	7/21/21 09:40		1	0.00	mg/L			
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	7/14/21 11:58	7/14/21 11:58		1	2.25	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	7/15/21 10:18	7/15/21 10:18		1	0.112	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	7/14/21 10:34	7/14/21 10:34		50	1500	mg/L	25.00	50	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	7/12/21 10:41	7/12/21 10:41			2271.93	uS/cm			FA
pH	7/12/21 10:41	7/12/21 10:41			5.13	SU			FA
Temperature	7/12/21 10:41	7/12/21 10:41			19.83	C			FA
Turbidity	7/12/21 10:41	7/12/21 10:41			0.22	NTU			FA

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

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 8/2/2021

Reported: 8/4/2021
Version: 3.3
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: 7/12/21 10:45
Customer ID:
Delivery Date: 7/13/21 09:15

Description: Gorgas Pooled Upgradient - MW-1 DUP

Laboratory ID Number: BB12486

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB12491	Molybdenum, Total	mg/L	0.0000261	0.000147	0.100	0.0984	0.103	0.100	0.0850 to 0.115	98.4	70.0 to 130	4.57	20.0
BB12491	Mercury, Total by CVAA	mg/L	5.390E-05	0.000500	0.004	0.00402	0.00398	0.00396	0.00340 to 0.00460	100	70.0 to 130	1.00	20.0
BB12491	Beryllium, Total	mg/L	0.0000533	0.000880	0.100	0.103	0.102	0.101	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BB12491	Sodium, Total	mg/L	0.00119	0.0660	5.00	4.95	4.92	4.98	4.25 to 5.75	99.0	70.0 to 130	0.608	20.0
BB12491	Lithium, Total	mg/L	-8.650E-05	0.0154	0.200	0.197	0.195	0.199	0.170 to 0.230	98.5	70.0 to 130	1.02	20.0
BB12491	Lead, Total	mg/L	0.0000018	0.000147	0.100	0.113	0.113	0.107	0.0850 to 0.115	113	70.0 to 130	0.00	20.0
BB12491	Cobalt, Total	mg/L	-0.0000691	0.000147	0.100	0.0949	0.0984	0.0969	0.0850 to 0.115	94.9	70.0 to 130	3.62	20.0
BB12491	Manganese, Total	mg/L	-0.000003	0.000147	0.100	0.101	0.104	0.103	0.0850 to 0.115	101	70.0 to 130	2.93	20.0
BB12491	Iron, Total	mg/L	2.630E-05	0.0176	0.2	0.199	0.198	0.201	0.170 to 0.230	99.5	70.0 to 130	0.504	20.0
BB12491	Potassium, Total	mg/L	0.00426	0.367	10.0	9.90	10.2	10.2	8.50 to 11.5	99.0	70.0 to 130	2.99	20.0
BB12491	Boron, Total	mg/L	0.000567	0.0650	1.00	0.980	0.977	0.995	0.850 to 1.15	98.0	70.0 to 130	0.307	20.0
BB12491	Cadmium, Total	mg/L	0.00000	0.000147	0.100	0.0930	0.0983	0.0943	0.0850 to 0.115	93.0	70.0 to 130	5.54	20.0
BB12491	Magnesium, Total	mg/L	-0.00929	0.0462	5.00	5.00	5.00	5.01	4.25 to 5.75	100	70.0 to 130	0.00	20.0
BB12491	Chromium, Total	mg/L	0.0000775	0.000440	0.100	0.0977	0.101	0.0999	0.0850 to 0.115	97.7	70.0 to 130	3.32	20.0
BB12491	Thallium, Total	mg/L	-0.000124	0.000147	0.100	0.115	0.115	0.112	0.0850 to 0.115	115	70.0 to 130	0.00	20.0
BB12491	Arsenic, Total	mg/L	0.0000344	0.000147	0.100	0.107	0.104	0.105	0.0850 to 0.115	107	70.0 to 130	2.84	20.0
BB12491	Antimony, Total	mg/L	0.000134	0.00100	0.100	0.0966	0.0989	0.0960	0.0850 to 0.115	96.6	70.0 to 130	2.35	20.0
BB12489	Manganese, Dissolved	mg/L	-0.0000252	0.000147	0.100	0.0976	0.100	0.0996	0.0850 to 0.115	97.4	70.0 to 130	2.43	20.0
BB12491	Selenium, Total	mg/L	-0.0000651	0.00100	0.100	0.102	0.105	0.104	0.0850 to 0.115	102	70.0 to 130	2.90	20.0
BB12489	Iron, Dissolved	mg/L	-0.000219	0.0176	0.2	0.193	0.189	0.197	0.170 to 0.230	96.5	70.0 to 130	2.09	20.0
BB12491	Barium, Total	mg/L	-0.0000459	0.000200	0.100	0.101	0.104	0.0999	0.0850 to 0.115	101	70.0 to 130	2.93	20.0
BB12491	Calcium, Total	mg/L	0.00896	0.152	5.00	5.03	5.02	5.05	4.25 to 5.75	101	70.0 to 130	0.199	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 8/2/2021

Reported: 8/4/2021
Version: 3.3
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: 7/12/21 10:45
Customer ID:
Delivery Date: 7/13/21 09:15

Description: Gorgas Pooled Upgradient - MW-1 DUP

Laboratory ID Number: BB12486

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB12489	Solids, Dissolved	mg/L	-4.00	25.0			3040	47.0	40.0 to 60.0			0.662	5.00
BB12491	Fluoride	mg/L	0.0195	0.100	2.50	2.58	0.0245	2.55	2.25 to 2.75	103	80.0 to 120	0.00	20.0
BB12491	Sulfate	mg/L	-0.557	1.00	20.0	20.0	-0.380	19.4	18.0 to 22.0	100	80.0 to 120	0.00	20.0
BB12491	Chloride	mg/L	-0.0691	1.00	10.0	11.3	0.232	10.0	9.00 to 11.0	113	80.0 to 120	0.00	20.0
BB12489	Alkalinity, Total as CaCO3	mg/L					192	53.9	45.0 to 55.0			1.04	10.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 8/2/2021

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: 7/12/21 11:48
Customer ID:
Submittal Date: 7/13/21 09:15

Laboratory ID Number: BB12487

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	7/21/21 12:22	7/22/21 16:22		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	7/21/21 12:22	7/23/21 11:22		10.15	159	mg/L	0.70035	4.06	
* Iron, Total	7/21/21 12:22	7/22/21 16:22		1.015	1.34	mg/L	0.008120	0.0406	
* Lithium, Total	7/21/21 12:22	7/22/21 16:22		1.015	0.0495	mg/L	0.007105	0.01999956	
* Magnesium, Total	7/21/21 12:22	7/23/21 11:22		10.15	174	mg/L	0.21315	4.06	
* Sodium, Total	7/21/21 12:22	7/22/21 16:22		1.015	20.9	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Iron, Dissolved	7/27/21 09:49	7/27/21 11:04		1.015	1.15	mg/L	0.008120	0.0406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	7/15/21 15:15	7/16/21 15:25		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Arsenic, Total	7/15/21 15:15	7/16/21 15:25		1.015	0.000364	mg/L	0.000068	0.000203	
* Barium, Total	7/15/21 15:15	7/16/21 15:25		1.015	0.0130	mg/L	0.000102	0.000203	
* Beryllium, Total	7/15/21 15:15	7/16/21 15:25		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	7/15/21 15:15	7/16/21 15:25		1.015	0.0000827	mg/L	0.000068	0.000203	J
* Chromium, Total	7/15/21 15:15	7/16/21 15:25		1.015	0.000251	mg/L	0.000203	0.001015	J
* Cobalt, Total	7/15/21 15:15	7/16/21 15:25		1.015	0.0155	mg/L	0.000068	0.000203	
* Lead, Total	7/15/21 15:15	7/16/21 15:25		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Molybdenum, Total	7/15/21 15:15	7/16/21 15:25		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Potassium, Total	7/15/21 15:15	7/16/21 15:25		1.015	5.86	mg/L	0.169505	0.5075	
* Manganese, Total	7/15/21 15:15	7/22/21 10:59		5.075	4.80	mg/L	0.000340	0.001015	
* Selenium, Total	7/15/21 15:15	7/16/21 15:25		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	7/15/21 15:15	7/16/21 15:25		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: ABB***								
* Manganese, Dissolved	7/16/21 08:37	7/20/21 14:24		10.15	4.49	mg/L	0.000680	0.00203	
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	7/14/21 10:02	7/14/21 13:48		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2320 B	***Analyst: JAG***								
Alkalinity, Total as CaCO3	7/21/21 09:10	7/21/21 09:40		1	346	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	7/14/21 12:18	7/15/21 13:41		1	1390	mg/L		75.8	

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

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 8/2/2021

Reported: 8/4/2021
Version: 3.3
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: 7/12/21 11:48
Customer ID:
Submittal Date: 7/13/21 09:15

Laboratory ID Number: BB12487

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 4500CO2 D	***Analyst: JAG***								
Bicarbonate Alkalinity, (calc.)	7/21/21 09:10	7/21/21 09:40		1	346	mg/L			
Carbonate Alkalinity, (calc.)	7/21/21 09:10	7/21/21 09:40		1	0.07	mg/L			
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	7/14/21 11:59	7/14/21 11:59		1	2.36	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	7/15/21 10:19	7/15/21 10:19		1	0.196	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	7/14/21 10:36	7/14/21 10:36		32	763	mg/L	16.00	32	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	7/12/21 11:45	7/12/21 11:45			1676.05	uS/cm			FA
pH	7/12/21 11:45	7/12/21 11:45			6.16	SU			FA
Temperature	7/12/21 11:45	7/12/21 11:45			19.38	C			FA
Turbidity	7/12/21 11:45	7/12/21 11:45			1.43	NTU			FA

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

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 8/2/2021

Reported: 8/4/2021
Version: 3.3
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: 7/12/21 11:48
Customer ID:
Delivery Date: 7/13/21 09:15

Description: Gorgas Pooled Upgradient - MW-2

Laboratory ID Number: BB12487

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB12491	Lithium, Total	mg/L	-8.650E-05	0.0154	0.200	0.197	0.195	0.199	0.170 to 0.230	98.5	70.0 to 130	1.02	20.0
BB12491	Lead, Total	mg/L	0.0000018	0.000147	0.100	0.113	0.113	0.107	0.0850 to 0.115	113	70.0 to 130	0.00	20.0
BB12491	Molybdenum, Total	mg/L	0.0000261	0.000147	0.100	0.0984	0.103	0.100	0.0850 to 0.115	98.4	70.0 to 130	4.57	20.0
BB12491	Mercury, Total by CVAA	mg/L	5.390E-05	0.000500	0.004	0.00402	0.00398	0.00396	0.00340 to 0.00460	100	70.0 to 130	1.00	20.0
BB12491	Beryllium, Total	mg/L	0.0000533	0.000880	0.100	0.103	0.102	0.101	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BB12491	Sodium, Total	mg/L	0.00119	0.0660	5.00	4.95	4.92	4.98	4.25 to 5.75	99.0	70.0 to 130	0.608	20.0
BB12491	Iron, Total	mg/L	2.630E-05	0.0176	0.2	0.199	0.198	0.201	0.170 to 0.230	99.5	70.0 to 130	0.504	20.0
BB12491	Potassium, Total	mg/L	0.00426	0.367	10.0	9.90	10.2	10.2	8.50 to 11.5	99.0	70.0 to 130	2.99	20.0
BB12491	Boron, Total	mg/L	0.000567	0.0650	1.00	0.980	0.977	0.995	0.850 to 1.15	98.0	70.0 to 130	0.307	20.0
BB12491	Cadmium, Total	mg/L	0.00000	0.000147	0.100	0.0930	0.0983	0.0943	0.0850 to 0.115	93.0	70.0 to 130	5.54	20.0
BB12491	Cobalt, Total	mg/L	-0.0000691	0.000147	0.100	0.0949	0.0984	0.0969	0.0850 to 0.115	94.9	70.0 to 130	3.62	20.0
BB12491	Manganese, Total	mg/L	-0.000003	0.000147	0.100	0.101	0.104	0.103	0.0850 to 0.115	101	70.0 to 130	2.93	20.0
BB12491	Selenium, Total	mg/L	-0.0000651	0.00100	0.100	0.102	0.105	0.104	0.0850 to 0.115	102	70.0 to 130	2.90	20.0
BB12489	Iron, Dissolved	mg/L	-0.000219	0.0176	0.2	0.193	0.189	0.197	0.170 to 0.230	96.5	70.0 to 130	2.09	20.0
BB12491	Barium, Total	mg/L	-0.0000459	0.000200	0.100	0.101	0.104	0.0999	0.0850 to 0.115	101	70.0 to 130	2.93	20.0
BB12491	Calcium, Total	mg/L	0.00896	0.152	5.00	5.03	5.02	5.05	4.25 to 5.75	101	70.0 to 130	0.199	20.0
BB12491	Magnesium, Total	mg/L	-0.00929	0.0462	5.00	5.00	5.00	5.01	4.25 to 5.75	100	70.0 to 130	0.00	20.0
BB12491	Chromium, Total	mg/L	0.0000775	0.000440	0.100	0.0977	0.101	0.0999	0.0850 to 0.115	97.7	70.0 to 130	3.32	20.0
BB12491	Thallium, Total	mg/L	-0.000124	0.000147	0.100	0.115	0.115	0.112	0.0850 to 0.115	115	70.0 to 130	0.00	20.0
BB12491	Arsenic, Total	mg/L	0.0000344	0.000147	0.100	0.107	0.104	0.105	0.0850 to 0.115	107	70.0 to 130	2.84	20.0
BB12491	Antimony, Total	mg/L	0.000134	0.00100	0.100	0.0966	0.0989	0.0960	0.0850 to 0.115	96.6	70.0 to 130	2.35	20.0
BB12489	Manganese, Dissolved	mg/L	-0.0000252	0.000147	0.100	0.0976	0.100	0.0996	0.0850 to 0.115	97.4	70.0 to 130	2.43	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 8/2/2021

Reported: 8/4/2021
Version: 3.3
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: 7/12/21 11:48
Customer ID:
Delivery Date: 7/13/21 09:15

Description: Gorgas Pooled Upgradient - MW-2

Laboratory ID Number: BB12487

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB12489	Solids, Dissolved	mg/L	-4.00	25.0			3040	47.0	40.0 to 60.0			0.662	5.00
BB12491	Fluoride	mg/L	0.0195	0.100	2.50	2.58	0.0245	2.55	2.25 to 2.75	103	80.0 to 120	0.00	20.0
BB12491	Sulfate	mg/L	-0.557	1.00	20.0	20.0	-0.380	19.4	18.0 to 22.0	100	80.0 to 120	0.00	20.0
BB12491	Chloride	mg/L	-0.0691	1.00	10.0	11.3	0.232	10.0	9.00 to 11.0	113	80.0 to 120	0.00	20.0
BB12489	Alkalinity, Total as CaCO3	mg/L					192	53.9	45.0 to 55.0			1.04	10.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 8/2/2021

Reported: 8/4/2021
Version: 3.3
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: 7/12/21 12:53
Customer ID:
Submittal Date: 7/13/21 09:15

Laboratory ID Number: BB12488

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	7/21/21 12:22	7/22/21 16:25		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	7/21/21 12:22	7/23/21 11:25		10.15	252	mg/L	0.70035	4.06	
* Iron, Total	7/21/21 12:22	7/22/21 16:25		1.015	0.269	mg/L	0.008120	0.0406	
* Lithium, Total	7/21/21 12:22	7/22/21 16:25		1.015	0.0808	mg/L	0.007105	0.01999956	
* Magnesium, Total	7/21/21 12:22	7/23/21 11:32		101.5	471	mg/L	2.1315	40.6	
* Sodium, Total	7/21/21 12:22	7/23/21 11:25		10.15	42.5	mg/L	0.3045	4.06	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Iron, Dissolved	7/27/21 09:49	7/27/21 11:08		1.015	0.104	mg/L	0.008120	0.0406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	7/15/21 15:15	7/16/21 15:29		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Arsenic, Total	7/15/21 15:15	7/16/21 15:29		1.015	0.000376	mg/L	0.000068	0.000203	
* Barium, Total	7/15/21 15:15	7/16/21 15:29		1.015	0.00857	mg/L	0.000102	0.000203	
* Beryllium, Total	7/15/21 15:15	7/16/21 15:29		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	7/15/21 15:15	7/16/21 15:29		1.015	0.000937	mg/L	0.000068	0.000203	
* Chromium, Total	7/15/21 15:15	7/16/21 15:29		1.015	0.000307	mg/L	0.000203	0.001015	J
* Cobalt, Total	7/15/21 15:15	7/16/21 15:29		1.015	0.00567	mg/L	0.000068	0.000203	
* Lead, Total	7/15/21 15:15	7/16/21 15:29		1.015	0.0000842	mg/L	0.000068	0.000203	J
* Molybdenum, Total	7/15/21 15:15	7/16/21 15:29		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Potassium, Total	7/15/21 15:15	7/16/21 15:29		1.015	6.90	mg/L	0.169505	0.5075	
* Manganese, Total	7/15/21 15:15	7/16/21 15:29		1.015	0.160	mg/L	0.000068	0.000203	
* Selenium, Total	7/15/21 15:15	7/16/21 15:29		1.015	0.0133	mg/L	0.000508	0.001015	
* Thallium, Total	7/15/21 15:15	7/16/21 15:29		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: ABB***								
* Manganese, Dissolved	7/16/21 08:37	7/16/21 14:45		1.015	0.374	mg/L	0.000068	0.000203	
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	7/14/21 10:02	7/14/21 13:50		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2320 B	***Analyst: JAG***								
Alkalinity, Total as CaCO3	7/21/21 09:10	7/21/21 09:40		1	49.4	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	7/14/21 12:18	7/15/21 13:41		1	3510	mg/L		178.6	

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

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 8/2/2021

Reported: 8/4/2021
Version: 3.3
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: 7/12/21 12:53
Customer ID:
Submittal Date: 7/13/21 09:15

Laboratory ID Number: BB12488

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 4500CO2 D	***Analyst: JAG***								
Bicarbonate Alkalinity, (calc.)	7/21/21 09:10	7/21/21 09:40		1	49.4	mg/L			
Carbonate Alkalinity, (calc.)	7/21/21 09:10	7/21/21 09:40		1	0.00	mg/L			
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	7/14/21 12:01	7/14/21 12:01		1	2.13	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	7/15/21 10:20	7/15/21 10:20		1	0.287	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	7/14/21 10:37	7/14/21 10:37		100	2380	mg/L	50.00	100	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	7/12/21 12:49	7/12/21 12:49			3288.64	uS/cm			FA
pH	7/12/21 12:49	7/12/21 12:49			5.86	SU			FA
Temperature	7/12/21 12:49	7/12/21 12:49			25.58	C			FA
Turbidity	7/12/21 12:49	7/12/21 12:49			1.31	NTU			FA

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

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 8/2/2021

Reported: 8/4/2021
Version: 3.3
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: 7/12/21 12:53
Customer ID:
Delivery Date: 7/13/21 09:15

Description: Gorgas Pooled Upgradient - MW-3

Laboratory ID Number: BB12488

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB12491	Lithium, Total	mg/L	-8.650E-05	0.0154	0.200	0.197	0.195	0.199	0.170 to 0.230	98.5	70.0 to 130	1.02	20.0
BB12491	Lead, Total	mg/L	0.0000018	0.000147	0.100	0.113	0.113	0.107	0.0850 to 0.115	113	70.0 to 130	0.00	20.0
BB12491	Molybdenum, Total	mg/L	0.0000261	0.000147	0.100	0.0984	0.103	0.100	0.0850 to 0.115	98.4	70.0 to 130	4.57	20.0
BB12491	Mercury, Total by CVAA	mg/L	5.390E-05	0.000500	0.004	0.00402	0.00398	0.00396	0.00340 to 0.00460	100	70.0 to 130	1.00	20.0
BB12491	Beryllium, Total	mg/L	0.0000533	0.000880	0.100	0.103	0.102	0.101	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BB12491	Sodium, Total	mg/L	0.00119	0.0660	5.00	4.95	4.92	4.98	4.25 to 5.75	99.0	70.0 to 130	0.608	20.0
BB12491	Cobalt, Total	mg/L	-0.0000691	0.000147	0.100	0.0949	0.0984	0.0969	0.0850 to 0.115	94.9	70.0 to 130	3.62	20.0
BB12491	Manganese, Total	mg/L	-0.000003	0.000147	0.100	0.101	0.104	0.103	0.0850 to 0.115	101	70.0 to 130	2.93	20.0
BB12491	Iron, Total	mg/L	2.630E-05	0.0176	0.2	0.199	0.198	0.201	0.170 to 0.230	99.5	70.0 to 130	0.504	20.0
BB12491	Potassium, Total	mg/L	0.00426	0.367	10.0	9.90	10.2	10.2	8.50 to 11.5	99.0	70.0 to 130	2.99	20.0
BB12491	Boron, Total	mg/L	0.000567	0.0650	1.00	0.980	0.977	0.995	0.850 to 1.15	98.0	70.0 to 130	0.307	20.0
BB12491	Cadmium, Total	mg/L	0.00000	0.000147	0.100	0.0930	0.0983	0.0943	0.0850 to 0.115	93.0	70.0 to 130	5.54	20.0
BB12491	Selenium, Total	mg/L	-0.0000651	0.00100	0.100	0.102	0.105	0.104	0.0850 to 0.115	102	70.0 to 130	2.90	20.0
BB12489	Iron, Dissolved	mg/L	-0.000219	0.0176	0.2	0.193	0.189	0.197	0.170 to 0.230	96.5	70.0 to 130	2.09	20.0
BB12491	Barium, Total	mg/L	-0.0000459	0.000200	0.100	0.101	0.104	0.0999	0.0850 to 0.115	101	70.0 to 130	2.93	20.0
BB12491	Calcium, Total	mg/L	0.00896	0.152	5.00	5.03	5.02	5.05	4.25 to 5.75	101	70.0 to 130	0.199	20.0
BB12491	Magnesium, Total	mg/L	-0.00929	0.0462	5.00	5.00	5.00	5.01	4.25 to 5.75	100	70.0 to 130	0.00	20.0
BB12491	Chromium, Total	mg/L	0.0000775	0.000440	0.100	0.0977	0.101	0.0999	0.0850 to 0.115	97.7	70.0 to 130	3.32	20.0
BB12491	Thallium, Total	mg/L	-0.000124	0.000147	0.100	0.115	0.115	0.112	0.0850 to 0.115	115	70.0 to 130	0.00	20.0
BB12491	Arsenic, Total	mg/L	0.0000344	0.000147	0.100	0.107	0.104	0.105	0.0850 to 0.115	107	70.0 to 130	2.84	20.0
BB12491	Antimony, Total	mg/L	0.000134	0.00100	0.100	0.0966	0.0989	0.0960	0.0850 to 0.115	96.6	70.0 to 130	2.35	20.0
BB12489	Manganese, Dissolved	mg/L	-0.0000252	0.000147	0.100	0.0976	0.100	0.0996	0.0850 to 0.115	97.4	70.0 to 130	2.43	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 8/2/2021

Reported: 8/4/2021
Version: 3.3
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: 7/12/21 12:53
Customer ID:
Delivery Date: 7/13/21 09:15

Description: Gorgas Pooled Upgradient - MW-3

Laboratory ID Number: BB12488

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB12491	Fluoride	mg/L	0.0195	0.100	2.50	2.58	0.0245	2.55	2.25 to 2.75	103	80.0 to 120	0.00	20.0
BB12489	Alkalinity, Total as CaCO3	mg/L					192	53.9	45.0 to 55.0			1.04	10.0
BB12489	Solids, Dissolved	mg/L	-4.00	25.0			3040	47.0	40.0 to 60.0			0.662	5.00
BB12491	Sulfate	mg/L	-0.557	1.00	20.0	20.0	-0.380	19.4	18.0 to 22.0	100	80.0 to 120	0.00	20.0
BB12491	Chloride	mg/L	-0.0691	1.00	10.0	11.3	0.232	10.0	9.00 to 11.0	113	80.0 to 120	0.00	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 8/2/2021

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: 7/12/21 14:35
Customer ID:
Submittal Date: 7/13/21 09:15

Laboratory ID Number: BB12489

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	7/21/21 12:22	7/22/21 16:29		1.015	0.0411	mg/L	0.030000	0.1015	J
* Calcium, Total	7/21/21 12:22	7/23/21 11:29		10.15	242	mg/L	0.70035	4.06	
* Iron, Total	7/21/21 12:22	7/22/21 16:29		1.015	0.0132	mg/L	0.008120	0.0406	J
* Lithium, Total	7/21/21 12:22	7/22/21 16:29		1.015	0.0533	mg/L	0.007105	0.01999956	
* Magnesium, Total	7/21/21 12:22	7/23/21 11:35		101.5	389	mg/L	2.1315	40.6	
* Sodium, Total	7/21/21 12:22	7/22/21 16:29		1.015	36.6	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Iron, Dissolved	7/27/21 09:49	7/27/21 11:11		1.015	Not Detected	mg/L	0.008120	0.0406	U
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	7/15/21 15:15	7/16/21 15:32		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Arsenic, Total	7/15/21 15:15	7/16/21 15:32		1.015	0.000116	mg/L	0.000068	0.000203	J
* Barium, Total	7/15/21 15:15	7/16/21 15:32		1.015	0.0108	mg/L	0.000102	0.000203	
* Beryllium, Total	7/15/21 15:15	7/16/21 15:32		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	7/15/21 15:15	7/16/21 15:32		1.015	0.0000819	mg/L	0.000068	0.000203	J
* Chromium, Total	7/15/21 15:15	7/16/21 15:32		1.015	0.000302	mg/L	0.000203	0.001015	J
* Cobalt, Total	7/15/21 15:15	7/16/21 15:32		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	7/15/21 15:15	7/16/21 15:32		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Molybdenum, Total	7/15/21 15:15	7/16/21 15:32		1.015	0.000138	mg/L	0.000068	0.000203	J
* Potassium, Total	7/15/21 15:15	7/16/21 15:32		1.015	7.65	mg/L	0.169505	0.5075	
* Manganese, Total	7/15/21 15:15	7/16/21 15:32		1.015	0.000607	mg/L	0.000068	0.000203	
* Selenium, Total	7/15/21 15:15	7/16/21 15:32		1.015	0.00155	mg/L	0.000508	0.001015	
* Thallium, Total	7/15/21 15:15	7/16/21 15:32		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: ABB***								
* Manganese, Dissolved	7/16/21 08:37	7/16/21 14:49		1.015	0.000225	mg/L	0.000068	0.000203	
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	7/14/21 10:02	7/14/21 13:53		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2320 B	***Analyst: JAG***								
Alkalinity, Total as CaCO3	7/21/21 09:10	7/21/21 09:40		1	194	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	7/14/21 12:18	7/15/21 13:41		1	3000	mg/L		147.1	

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

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 8/2/2021

Reported: 8/4/2021
Version: 3.3
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: 7/12/21 14:35
Customer ID:
Submittal Date: 7/13/21 09:15

Laboratory ID Number: BB12489

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 4500CO2 D	***Analyst: JAG***								
Bicarbonate Alkalinity, (calc.)	7/21/21 09:10	7/21/21 09:40		1	194	mg/L			
Carbonate Alkalinity, (calc.)	7/21/21 09:10	7/21/21 09:40		1	0.06	mg/L			
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	7/14/21 12:02	7/14/21 12:02		1	1.56	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	7/15/21 10:22	7/15/21 10:22		1	0.350	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	7/14/21 10:38	7/14/21 10:38		100	1930	mg/L	50.00	100	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	7/12/21 14:31	7/12/21 14:31			2977.13	uS/cm			FA
pH	7/12/21 14:31	7/12/21 14:31			6.06	SU			FA
Temperature	7/12/21 14:31	7/12/21 14:31			21.22	C			FA
Turbidity	7/12/21 14:31	7/12/21 14:31			0.66	NTU			FA

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

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 8/2/2021

Reported: 8/4/2021
Version: 3.3
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: 7/12/21 14:35
Customer ID:
Delivery Date: 7/13/21 09:15

Description: Gorgas Pooled Upgradient - MW-4

Laboratory ID Number: BB12489

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB12491	Molybdenum, Total	mg/L	0.0000261	0.000147	0.100	0.0984	0.103	0.100	0.0850 to 0.115	98.4	70.0 to 130	4.57	20.0
BB12491	Mercury, Total by CVAA	mg/L	5.390E-05	0.000500	0.004	0.00402	0.00398	0.00396	0.00340 to 0.00460	100	70.0 to 130	1.00	20.0
BB12491	Beryllium, Total	mg/L	0.0000533	0.000880	0.100	0.103	0.102	0.101	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BB12491	Sodium, Total	mg/L	0.00119	0.0660	5.00	4.95	4.92	4.98	4.25 to 5.75	99.0	70.0 to 130	0.608	20.0
BB12491	Iron, Total	mg/L	2.630E-05	0.0176	0.2	0.199	0.198	0.201	0.170 to 0.230	99.5	70.0 to 130	0.504	20.0
BB12491	Potassium, Total	mg/L	0.00426	0.367	10.0	9.90	10.2	10.2	8.50 to 11.5	99.0	70.0 to 130	2.99	20.0
BB12491	Cobalt, Total	mg/L	-0.0000691	0.000147	0.100	0.0949	0.0984	0.0969	0.0850 to 0.115	94.9	70.0 to 130	3.62	20.0
BB12491	Manganese, Total	mg/L	-0.000003	0.000147	0.100	0.101	0.104	0.103	0.0850 to 0.115	101	70.0 to 130	2.93	20.0
BB12491	Selenium, Total	mg/L	-0.0000651	0.00100	0.100	0.102	0.105	0.104	0.0850 to 0.115	102	70.0 to 130	2.90	20.0
BB12489	Iron, Dissolved	mg/L	-0.000219	0.0176	0.2	0.193	0.189	0.197	0.170 to 0.230	96.5	70.0 to 130	2.09	20.0
BB12491	Barium, Total	mg/L	-0.0000459	0.000200	0.100	0.101	0.104	0.0999	0.0850 to 0.115	101	70.0 to 130	2.93	20.0
BB12491	Calcium, Total	mg/L	0.00896	0.152	5.00	5.03	5.02	5.05	4.25 to 5.75	101	70.0 to 130	0.199	20.0
BB12491	Magnesium, Total	mg/L	-0.00929	0.0462	5.00	5.00	5.00	5.01	4.25 to 5.75	100	70.0 to 130	0.00	20.0
BB12491	Chromium, Total	mg/L	0.0000775	0.000440	0.100	0.0977	0.101	0.0999	0.0850 to 0.115	97.7	70.0 to 130	3.32	20.0
BB12491	Thallium, Total	mg/L	-0.000124	0.000147	0.100	0.115	0.115	0.112	0.0850 to 0.115	115	70.0 to 130	0.00	20.0
BB12491	Arsenic, Total	mg/L	0.0000344	0.000147	0.100	0.107	0.104	0.105	0.0850 to 0.115	107	70.0 to 130	2.84	20.0
BB12491	Antimony, Total	mg/L	0.000134	0.00100	0.100	0.0966	0.0989	0.0960	0.0850 to 0.115	96.6	70.0 to 130	2.35	20.0
BB12489	Manganese, Dissolved	mg/L	-0.0000252	0.000147	0.100	0.0976	0.100	0.0996	0.0850 to 0.115	97.4	70.0 to 130	2.43	20.0
BB12491	Lithium, Total	mg/L	-8.650E-05	0.0154	0.200	0.197	0.195	0.199	0.170 to 0.230	98.5	70.0 to 130	1.02	20.0
BB12491	Lead, Total	mg/L	0.0000018	0.000147	0.100	0.113	0.113	0.107	0.0850 to 0.115	113	70.0 to 130	0.00	20.0
BB12491	Boron, Total	mg/L	0.000567	0.0650	1.00	0.980	0.977	0.995	0.850 to 1.15	98.0	70.0 to 130	0.307	20.0
BB12491	Cadmium, Total	mg/L	0.00000	0.000147	0.100	0.0930	0.0983	0.0943	0.0850 to 0.115	93.0	70.0 to 130	5.54	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 8/2/2021

Reported: 8/4/2021
Version: 3.3
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: 7/12/21 14:35
Customer ID:
Delivery Date: 7/13/21 09:15

Description: Gorgas Pooled Upgradient - MW-4

Laboratory ID Number: BB12489

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB12489	Solids, Dissolved	mg/L	-4.00	25.0			3040	47.0	40.0 to 60.0			0.662	5.00
BB12491	Fluoride	mg/L	0.0195	0.100	2.50	2.58	0.0245	2.55	2.25 to 2.75	103	80.0 to 120	0.00	20.0
BB12491	Sulfate	mg/L	-0.557	1.00	20.0	20.0	-0.380	19.4	18.0 to 22.0	100	80.0 to 120	0.00	20.0
BB12491	Chloride	mg/L	-0.0691	1.00	10.0	11.3	0.232	10.0	9.00 to 11.0	113	80.0 to 120	0.00	20.0
BB12489	Alkalinity, Total as CaCO3	mg/L					192	53.9	45.0 to 55.0			1.04	10.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 8/2/2021

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: 7/12/21 15:00
Customer ID:
Submittal Date: 7/13/21 09:15

Laboratory ID Number: BB12490

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	7/21/21 12:22	7/22/21 16:32		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	7/21/21 12:22	7/22/21 16:32		1.015	Not Detected	mg/L	0.070035	0.406	U
* Iron, Total	7/21/21 12:22	7/22/21 16:32		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Total	7/21/21 12:22	7/22/21 16:32		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	7/21/21 12:22	7/22/21 16:32		1.015	Not Detected	mg/L	0.021315	0.406	U
* Sodium, Total	7/21/21 12:22	7/22/21 16:32		1.015	Not Detected	mg/L	0.03045	0.406	U
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	7/15/21 15:15	7/16/21 15:36		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Arsenic, Total	7/15/21 15:15	7/16/21 15:36		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Barium, Total	7/15/21 15:15	7/16/21 15:36		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Beryllium, Total	7/15/21 15:15	7/16/21 15:36		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	7/15/21 15:15	7/16/21 15:36		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	7/15/21 15:15	7/16/21 15:36		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	7/15/21 15:15	7/16/21 15:36		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	7/15/21 15:15	7/16/21 15:36		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Molybdenum, Total	7/15/21 15:15	7/16/21 15:36		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	7/15/21 15:15	7/16/21 15:36		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Potassium, Total	7/15/21 15:15	7/16/21 15:36		1.015	Not Detected	mg/L	0.169505	0.5075	U
* Selenium, Total	7/15/21 15:15	7/16/21 15:36		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	7/15/21 15:15	7/16/21 15:36		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	7/14/21 10:02	7/14/21 13:55		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	7/14/21 12:18	7/15/21 13:41		1	Not Detected	mg/L		25	U
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	7/14/21 12:03	7/14/21 12:03		1	Not Detected	mg/L	0.50	1	U
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	7/15/21 10:23	7/15/21 10:23		1	Not Detected	mg/L	0.06	0.1	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	7/14/21 10:39	7/14/21 10:39		1	Not Detected	mg/L	0.50	1	U

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

Comments:

Reported: 8/4/2021
Version: 3.3
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: 7/12/21 15:00
Customer ID:
Delivery Date: 7/13/21 09:15

Description:Gorgas Pooled Upgradient Equipment Blank-1

Laboratory ID Number: BB12490

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB12491	Lithium, Total	mg/L	-8.650E-05	0.0154	0.200	0.197	0.195	0.199	0.170 to 0.230	98.5	70.0 to 130	1.02	20.0
BB12491	Lead, Total	mg/L	0.0000018	0.000147	0.100	0.113	0.113	0.107	0.0850 to 0.115	113	70.0 to 130	0.00	20.0
BB12491	Beryllium, Total	mg/L	0.0000533	0.000880	0.100	0.103	0.102	0.101	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BB12491	Sodium, Total	mg/L	0.00119	0.0660	5.00	4.95	4.92	4.98	4.25 to 5.75	99.0	70.0 to 130	0.608	20.0
BB12491	Selenium, Total	mg/L	-0.0000651	0.00100	0.100	0.102	0.105	0.104	0.0850 to 0.115	102	70.0 to 130	2.90	20.0
BB12491	Barium, Total	mg/L	-0.0000459	0.000200	0.100	0.101	0.104	0.0999	0.0850 to 0.115	101	70.0 to 130	2.93	20.0
BB12491	Calcium, Total	mg/L	0.00896	0.152	5.00	5.03	5.02	5.05	4.25 to 5.75	101	70.0 to 130	0.199	20.0
BB12491	Cobalt, Total	mg/L	-0.0000691	0.000147	0.100	0.0949	0.0984	0.0969	0.0850 to 0.115	94.9	70.0 to 130	3.62	20.0
BB12491	Manganese, Total	mg/L	-0.000003	0.000147	0.100	0.101	0.104	0.103	0.0850 to 0.115	101	70.0 to 130	2.93	20.0
BB12491	Boron, Total	mg/L	0.000567	0.0650	1.00	0.980	0.977	0.995	0.850 to 1.15	98.0	70.0 to 130	0.307	20.0
BB12491	Cadmium, Total	mg/L	0.00000	0.000147	0.100	0.0930	0.0983	0.0943	0.0850 to 0.115	93.0	70.0 to 130	5.54	20.0
BB12491	Molybdenum, Total	mg/L	0.0000261	0.000147	0.100	0.0984	0.103	0.100	0.0850 to 0.115	98.4	70.0 to 130	4.57	20.0
BB12491	Mercury, Total by CVAA	mg/L	5.390E-05	0.000500	0.004	0.00402	0.00398	0.00396	0.00340 to 0.00460	100	70.0 to 130	1.00	20.0
BB12491	Iron, Total	mg/L	2.630E-05	0.0176	0.2	0.199	0.198	0.201	0.170 to 0.230	99.5	70.0 to 130	0.504	20.0
BB12491	Potassium, Total	mg/L	0.00426	0.367	10.0	9.90	10.2	10.2	8.50 to 11.5	99.0	70.0 to 130	2.99	20.0
BB12491	Magnesium, Total	mg/L	-0.00929	0.0462	5.00	5.00	5.00	5.01	4.25 to 5.75	100	70.0 to 130	0.00	20.0
BB12491	Chromium, Total	mg/L	0.0000775	0.000440	0.100	0.0977	0.101	0.0999	0.0850 to 0.115	97.7	70.0 to 130	3.32	20.0
BB12491	Thallium, Total	mg/L	-0.000124	0.000147	0.100	0.115	0.115	0.112	0.0850 to 0.115	115	70.0 to 130	0.00	20.0
BB12491	Arsenic, Total	mg/L	0.0000344	0.000147	0.100	0.107	0.104	0.105	0.0850 to 0.115	107	70.0 to 130	2.84	20.0
BB12491	Antimony, Total	mg/L	0.000134	0.00100	0.100	0.0966	0.0989	0.0960	0.0850 to 0.115	96.6	70.0 to 130	2.35	20.0

Comments:

Reported: 8/4/2021
Version: 3.3
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: 7/12/21 15:00
Customer ID:
Delivery Date: 7/13/21 09:15

Description: Gorgas Pooled Upgradient Equipment Blank-1

Laboratory ID Number: BB12490

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB12491	Fluoride	mg/L	0.0195	0.100	2.50	2.58	0.0245	2.55	2.25 to 2.75	103	80.0 to 120	0.00	20.0
BB12489	Solids, Dissolved	mg/L	-4.00	25.0			3040	47.0	40.0 to 60.0			0.662	5.00
BB12491	Sulfate	mg/L	-0.557	1.00	20.0	20.0	-0.380	19.4	18.0 to 22.0	100	80.0 to 120	0.00	20.0
BB12491	Chloride	mg/L	-0.0691	1.00	10.0	11.3	0.232	10.0	9.00 to 11.0	113	80.0 to 120	0.00	20.0

Comments:

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Pooled Upgradient Field Blank-1

Location Code: WMWGORPUFB
Collected: 7/12/21 15:10
Customer ID:
Submittal Date: 7/13/21 09:15

Laboratory ID Number: BB12491

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	7/21/21 12:22	7/22/21 16:36		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	7/21/21 12:22	7/22/21 16:36		1.015	Not Detected	mg/L	0.070035	0.406	U
* Iron, Total	7/21/21 12:22	7/22/21 16:36		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Total	7/21/21 12:22	7/22/21 16:36		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	7/21/21 12:22	7/22/21 16:36		1.015	Not Detected	mg/L	0.021315	0.406	U
* Sodium, Total	7/21/21 12:22	7/22/21 16:36		1.015	Not Detected	mg/L	0.03045	0.406	U
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	7/15/21 15:15	7/16/21 15:40		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Arsenic, Total	7/15/21 15:15	7/16/21 15:40		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Barium, Total	7/15/21 15:15	7/16/21 15:40		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Beryllium, Total	7/15/21 15:15	7/16/21 15:40		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	7/15/21 15:15	7/16/21 15:40		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	7/15/21 15:15	7/16/21 15:40		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	7/15/21 15:15	7/16/21 15:40		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	7/15/21 15:15	7/16/21 15:40		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Molybdenum, Total	7/15/21 15:15	7/16/21 15:40		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	7/15/21 15:15	7/16/21 15:40		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Potassium, Total	7/15/21 15:15	7/16/21 15:40		1.015	Not Detected	mg/L	0.169505	0.5075	U
* Selenium, Total	7/15/21 15:15	7/16/21 15:40		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	7/15/21 15:15	7/16/21 15:40		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	7/14/21 10:02	7/14/21 13:57		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	7/14/21 12:18	7/15/21 13:41		1	Not Detected	mg/L		25	U
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	7/14/21 12:04	7/14/21 12:04		1	Not Detected	mg/L	0.50	1	U
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	7/15/21 10:24	7/15/21 10:24		1	Not Detected	mg/L	0.06	0.1	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	7/14/21 10:41	7/14/21 10:41		1	Not Detected	mg/L	0.50	1	U

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

Comments:

Reported: 8/4/2021
Version: 3.3
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: 7/12/21 15:10
Customer ID:
Delivery Date: 7/13/21 09:15

Description: Gorgas Pooled Upgradient Field Blank-1

Laboratory ID Number: BB12491

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB12491	Molybdenum, Total	mg/L	0.0000261	0.000147	0.100	0.0984	0.103	0.100	0.0850 to 0.115	98.4	70.0 to 130	4.57	20.0
BB12491	Mercury, Total by CVAA	mg/L	5.390E-05	0.000500	0.004	0.00402	0.00398	0.00396	0.00340 to 0.00460	100	70.0 to 130	1.00	20.0
BB12491	Lithium, Total	mg/L	-8.650E-05	0.0154	0.200	0.197	0.195	0.199	0.170 to 0.230	98.5	70.0 to 130	1.02	20.0
BB12491	Lead, Total	mg/L	0.0000018	0.000147	0.100	0.113	0.113	0.107	0.0850 to 0.115	113	70.0 to 130	0.00	20.0
BB12491	Cobalt, Total	mg/L	-0.0000691	0.000147	0.100	0.0949	0.0984	0.0969	0.0850 to 0.115	94.9	70.0 to 130	3.62	20.0
BB12491	Manganese, Total	mg/L	-0.000003	0.000147	0.100	0.101	0.104	0.103	0.0850 to 0.115	101	70.0 to 130	2.93	20.0
BB12491	Boron, Total	mg/L	0.000567	0.0650	1.00	0.980	0.977	0.995	0.850 to 1.15	98.0	70.0 to 130	0.307	20.0
BB12491	Cadmium, Total	mg/L	0.00000	0.000147	0.100	0.0930	0.0983	0.0943	0.0850 to 0.115	93.0	70.0 to 130	5.54	20.0
BB12491	Beryllium, Total	mg/L	0.0000533	0.000880	0.100	0.103	0.102	0.101	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BB12491	Sodium, Total	mg/L	0.00119	0.0660	5.00	4.95	4.92	4.98	4.25 to 5.75	99.0	70.0 to 130	0.608	20.0
BB12491	Iron, Total	mg/L	2.630E-05	0.0176	0.2	0.199	0.198	0.201	0.170 to 0.230	99.5	70.0 to 130	0.504	20.0
BB12491	Potassium, Total	mg/L	0.00426	0.367	10.0	9.90	10.2	10.2	8.50 to 11.5	99.0	70.0 to 130	2.99	20.0
BB12491	Selenium, Total	mg/L	-0.0000651	0.00100	0.100	0.102	0.105	0.104	0.0850 to 0.115	102	70.0 to 130	2.90	20.0
BB12491	Barium, Total	mg/L	-0.0000459	0.000200	0.100	0.101	0.104	0.0999	0.0850 to 0.115	101	70.0 to 130	2.93	20.0
BB12491	Calcium, Total	mg/L	0.00896	0.152	5.00	5.03	5.02	5.05	4.25 to 5.75	101	70.0 to 130	0.199	20.0
BB12491	Magnesium, Total	mg/L	-0.00929	0.0462	5.00	5.00	5.00	5.01	4.25 to 5.75	100	70.0 to 130	0.00	20.0
BB12491	Chromium, Total	mg/L	0.0000775	0.000440	0.100	0.0977	0.101	0.0999	0.0850 to 0.115	97.7	70.0 to 130	3.32	20.0
BB12491	Thallium, Total	mg/L	-0.000124	0.000147	0.100	0.115	0.115	0.112	0.0850 to 0.115	115	70.0 to 130	0.00	20.0
BB12491	Arsenic, Total	mg/L	0.0000344	0.000147	0.100	0.107	0.104	0.105	0.0850 to 0.115	107	70.0 to 130	2.84	20.0
BB12491	Antimony, Total	mg/L	0.000134	0.00100	0.100	0.0966	0.0989	0.0960	0.0850 to 0.115	96.6	70.0 to 130	2.35	20.0

Comments:

Reported: 8/4/2021
Version: 3.3
COA_CCR

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

Alabama Power

Batch QC Summary

Customer Account: WMWGORPUFB
Sample Date: 7/12/21 15:10
Customer ID:
Delivery Date: 7/13/21 09:15

Description: Gorgas Pooled Upgradient Field Blank-1

Laboratory ID Number: BB12491

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB12489	Solids, Dissolved	mg/L	-4.00	25.0			3040	47.0	40.0 to 60.0			0.662	5.00
BB12491	Sulfate	mg/L	-0.557	1.00	20.0	20.0	-0.380	19.4	18.0 to 22.0	100	80.0 to 120	0.00	20.0
BB12491	Chloride	mg/L	-0.0691	1.00	10.0	11.3	0.232	10.0	9.00 to 11.0	113	80.0 to 120	0.00	20.0
BB12491	Fluoride	mg/L	0.0195	0.100	2.50	2.58	0.0245	2.55	2.25 to 2.75	103	80.0 to 120	0.00	20.0

Comments:

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

Definitions

Alabama Power

Abbreviation	Description
DF	Dilution Factor
LCS	Lab Control Sample
LFM	Lab Fortified Matrix
MB	Method Blank
MDL	Method Detection Limit; minimum concentration of an analyte that can be determined with 99% confidence that the concentration is greater than zero.
MS	Matrix Spike
MSD	Matrix Spike Duplicate
Prec	Precision (% RPD)
Q	Qualifier; comment used to note deviations or additional information associated with analytical results.
QC	Quality Control
Rec	Recovery of Matrix Spike
RL	Reporting Limit; lowest concentration at which an analyte can be quantitatively measured.
Vio Spec	Violation Specification; regulatory limit which has been exceeded by the sample analyzed.

Qualifier	Description
FA	Field results were reviewed by the Water Field Group. Refer to APC Field Case Narrative.
J	Reported value is an estimate because concentration is less than reporting limit.
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
Site Representative	John Pate	Requested By	Greg Dyer
Collector	TJ Daugherty	Location	Gorgas Pooled Upgradient

Bottles

1	Metals	500 mL	3	Hg	250 mL	5	Anions	250 mL	7	N/A	N/A
2	Diss Metals	500 mL	4	TDS	500 mL	6	Alkalinity	250 mL	8	N/A	N/A

Comments

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-1	07/12/2021	10:45	6	Groundwater		BB12485
MW-1 Dup	07/12/2021	10:45	6	Sample Duplicate		BB12486
MW-2	07/12/2021	11:48	6	Groundwater		BB12487
MW-3	07/12/2021	12:53	6	Groundwater		BB12488
MW-4	07/12/2021	14:35	6	Groundwater		BB12489
EB-1	07/12/2021	15:00	4	Equipment Blank		BB12490
FB-1	07/12/2021	15:10	4	Field Blank		BB12491

Relinquished By	Received By	Date/Time
		07/13/2021 08:33

SmarTroll ID	7586-41443-5-2	All metals and radiological bottles have pH < 2	☑
Turbidity ID	3901-20009-2-1	Cooler Temp	0.2 degrees C
Sample Event	1328	Thermometer ID	5408-27568-2-2
		pH Strip ID	8206-45805-10-9

Bottles/Pre-Preserved Bottles are provided by the GTL

Chain of Custody
Groundwater
APC General Testing Laboratory

☑ Field Complete ☑ Outside Lab
☑ Lab Complete

Lab ETA

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Site Representative	John Pate	Requested By	Greg Dyer
Collector	TJ Daugherty	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 collected @ MW-2

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-1	07/12/2021	10:45	1	Groundwater		BB12492
MW-1 Dup	07/12/2021	10:45	1	Sample Duplicate		BB12493
MW-2	07/12/2021	11:48	3	Groundwater		BB12494
MW-3	07/12/2021	12:53	1	Groundwater		BB12495
MW-4	07/12/2021	14:35	1	Groundwater		BB12496
EB-1	07/12/2021	15:00	1	Equipment Blank		BB12497
FB-1	07/12/2021	15:10	1	Field Blank		BB12498

Relinquished By	Received By	Date/Time
		07/13/2021 08:33

SmarTroll ID	7586-41443-5-2	All metals and radiological bottles have pH < 2	☑
Turbidity ID	3901-20009-2-1	Cooler Temp	N/A
Sample Event	1328	Thermometer ID	N/A
		pH Strip ID	8206-45805-10-9

Bottles/Pre-Preserved Bottles are provided by the GTL

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

August 19, 2021

Laura Midkiff
Alabama Power
744 Highway 87
GSC #8
Calera, AL 35040

RE: Project: GORGAS POOLED WMWGORPU_1328
Pace Project No.: 92549918

Dear Laura Midkiff:

Enclosed are the analytical results for sample(s) received by the laboratory on July 15, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Greensburg

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

Sincerely,

Kevin Herring
kevin.herring@pacelabs.com
1(704)875-9092
HORIZON Database Administrator

Enclosures

cc: Brooke Caton, Alabama Power
Renee Jernigan, Alabama Power

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9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

CERTIFICATIONS

Project: GORGAS POOLED WMWGORPU_1328
Pace Project No.: 92549918

Pace Analytical Services Pennsylvania
1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
Delaware Certification
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Florida: Cert E871149 SEKS WET
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA180012
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: 2017020
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification #: 9991
Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572018-1
New Hampshire/TNI Certification #: 297617
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Ohio EPA Rad Approval: #41249
Oregon/TNI Certification #: PA200002-010
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: 02867
Texas/TNI Certification #: T104704188-17-3
Utah/TNI Certification #: PA014572017-9
USDA Soil Permit #: P330-17-00091
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 9526
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Approve List for Rad
Wyoming Certification #: 8TMS-L

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(704)875-9092

SAMPLE SUMMARY

Project: GORGAS POOLED WMWGORPU_1328
Pace Project No.: 92549918

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92549918001	**BB12492 MW-1**	Water	07/12/21 10:45	07/15/21 09:20
92549918002	**BB12493 MW-1 DUP**	Water	07/12/21 10:45	07/15/21 09:20
92549918003	**BB12494 MW-2**	Water	07/12/21 11:48	07/15/21 09:20
92549918004	**BB12494 MW-2 MS**	Water	07/12/21 11:48	07/15/21 09:20
92549918005	**BB12494 MW-2 MSD**	Water	07/12/21 11:48	07/15/21 09:20
92549918006	**BB12495 MW-3**	Water	07/12/21 12:53	07/15/21 09:20
92549918007	**BB12496 MW-4**	Water	07/12/21 14:35	07/15/21 09:20
92549918008	**BB12497 EB-1**	Water	07/12/21 15:00	07/15/21 09:20
92549918009	**BB12498 FB-1**	Water	07/12/21 15:10	07/15/21 09:20

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SAMPLE ANALYTE COUNT

Project: GORGAS POOLED WMWGORPU_1328
Pace Project No.: 92549918

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92549918001	**BB12492 MW-1**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	JC2	1	PASI-PA
		Total Radium Calculation	RMK	1	PASI-PA
92549918002	**BB12493 MW-1 DUP**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	JC2	1	PASI-PA
		Total Radium Calculation	RMK	1	PASI-PA
92549918003	**BB12494 MW-2**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	JC2	1	PASI-PA
		Total Radium Calculation	RMK	1	PASI-PA
92549918004	**BB12494 MW-2 MS**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	JC2	1	PASI-PA
92549918005	**BB12494 MW-2 MSD**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	JC2	1	PASI-PA
92549918006	**BB12495 MW-3**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	JC2	1	PASI-PA
		Total Radium Calculation	RMK	1	PASI-PA
92549918007	**BB12496 MW-4**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	JC2	1	PASI-PA
		Total Radium Calculation	RMK	1	PASI-PA
92549918008	**BB12497 EB-1**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	JC2	1	PASI-PA
		Total Radium Calculation	RMK	1	PASI-PA
92549918009	**BB12498 FB-1**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	JC2	1	PASI-PA
		Total Radium Calculation	RMK	1	PASI-PA

PASI-PA = Pace Analytical Services - Greensburg

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Huntersville, NC 28078
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PROJECT NARRATIVE

Project: GORGAS POOLED WMWGORPU_1328
Pace Project No.: 92549918

Method: **EPA 9315**
Description: 9315 Total Radium
Client: Alabama Power
Date: August 19, 2021

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:

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9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

PROJECT NARRATIVE

Project: GORGAS POOLED WMWGORPU_1328
Pace Project No.: 92549918

Method: **EPA 9320**
Description: 9320 Radium 228
Client: Alabama Power
Date: August 19, 2021

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:

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(704)875-9092

PROJECT NARRATIVE

Project: GORGAS POOLED WMWGORPU_1328
Pace Project No.: 92549918

Method: **Total Radium Calculation**
Description: Total Radium 228+226
Client: Alabama Power
Date: August 19, 2021

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.

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9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: GORGAS POOLED WMWGORPU_1328
Pace Project No.: 92549918

Sample: BB12492 MW-1 **Lab ID: 92549918001** Collected: 07/12/21 10:45 Received: 07/15/21 09:20 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	**0.112U ± 0.166 (0.354) C:89% T:NA**	pCi/L	08/13/21 08:32	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.364U ± 0.366 (0.751) C:66% T:83%**	pCi/L	08/03/21 14:37	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.476U ± 0.532 (1.11)**	pCi/L	08/16/21 16:15	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: GORGAS POOLED WMWGORPU_1328
Pace Project No.: 92549918

Sample: BB12493 MW-1 DUP **Lab ID: 92549918002** Collected: 07/12/21 10:45 Received: 07/15/21 09:20 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	**-0.0928U ± 0.150 (0.490) C:90% T:NA**	pCi/L	08/13/21 08:32	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.767 ± 0.411 (0.721) C:68% T:85%**	pCi/L	08/03/21 14:37	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.767U ± 0.561 (1.21)**	pCi/L	08/16/21 16:15	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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(704)875-9092

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: GORGAS POOLED WMWGORPU_1328
Pace Project No.: 92549918

Sample: BB12494 MW-2 **Lab ID: 92549918003** Collected: 07/12/21 11:48 Received: 07/15/21 09:20 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.155U ± 0.210 (0.445) C:85% T:NA**	pCi/L	08/13/21 08:32	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**-0.00397U ± 0.356 (0.828) C:72% T:82%**	pCi/L	08/03/21 14:38	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.155U ± 0.566 (1.27)**	pCi/L	08/16/21 16:15	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: GORGAS POOLED WMWGORPU_1328
Pace Project No.: 92549918

Sample: BB12494 MW-2 MS **Lab ID: 92549918004** Collected: 07/12/21 11:48 Received: 07/15/21 09:20 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	**85.72 %REC ± NA (NA) C:NA T:NA**	pCi/L	08/13/21 08:32	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**104.17 %REC ± NA (NA) C:NA T:NA**	pCi/L	08/03/21 14:38	15262-20-1	

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(704)875-9092

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: GORGAS POOLED WMWGORPU_1328
Pace Project No.: 92549918

Sample: BB12494 MW-2 MSD **Lab ID: 92549918005** Collected: 07/12/21 11:48 Received: 07/15/21 09:20 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**87.19 %REC 1.70 RPD ± NA (NA) C:NA T:NA**	pCi/L	08/13/21 08:32	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**108.02 %REC 3.63 RPD ± NA (NA) C:NA T:NA**	pCi/L	08/03/21 14:38	15262-20-1	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: GORGAS POOLED WMWGORPU_1328
Pace Project No.: 92549918

Sample: BB12495 MW-3 **Lab ID: 92549918006** Collected: 07/12/21 12:53 Received: 07/15/21 09:20 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	**-0.000304U ± 0.176 (0.482) C:89% T:NA**	pCi/L	08/13/21 08:32	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.114U ± 0.333 (0.750) C:65% T:84%**	pCi/L	08/03/21 14:38	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.114U ± 0.509 (1.23)**	pCi/L	08/16/21 16:15	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: GORGAS POOLED WMWGORPU_1328
Pace Project No.: 92549918

Sample: BB12496 MW-4 **Lab ID: 92549918007** Collected: 07/12/21 14:35 Received: 07/15/21 09:20 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 ± 0.176 (0.390) C:95% T:NA**	pCi/L	08/13/21 08:32	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.194U ± 0.358 (0.784) C:72% T:84%**	pCi/L	08/03/21 14:38	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.301U ± 0.534 (1.17)**	pCi/L	08/16/21 16:15	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: GORGAS POOLED WMWGORPU_1328
Pace Project No.: 92549918

Sample: BB12497 EB-1 **Lab ID: 92549918008** Collected: 07/12/21 15:00 Received: 07/15/21 09:20 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	**0.0598U ± 0.171 (0.423) C:83% T:NA**	pCi/L	08/13/21 08:32	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.269U ± 0.375 (0.805) C:69% T:86%**	pCi/L	08/03/21 14:38	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.329U ± 0.546 (1.23)**	pCi/L	08/16/21 16:15	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: GORGAS POOLED WMWGORPU_1328
Pace Project No.: 92549918

Sample: BB12498 FB-1 **Lab ID: 92549918009** Collected: 07/12/21 15:10 Received: 07/15/21 09:20 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	**-0.0401U ± 0.143 (0.443) C:85% T:NA**	pCi/L	08/13/21 08:32	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.101U ± 0.314 (0.709) C:67% T:88%**	pCi/L	08/03/21 14:38	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.101U ± 0.457 (1.15)**	pCi/L	08/16/21 16:15	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL - RADIOCHEMISTRY

Project: GORGAS POOLED WMWGORPU_1328
Pace Project No.: 92549918

QC Batch: 457856
QC Batch Method: EPA 9320
Analysis Method: EPA 9320
Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92549918001, 92549918002, 92549918003, 92549918004, 92549918005, 92549918006, 92549918007, 92549918008, 92549918009

METHOD BLANK: 2210350 Matrix: Water
Associated Lab Samples: 92549918001, 92549918002, 92549918003, 92549918004, 92549918005, 92549918006, 92549918007, 92549918008, 92549918009

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.186 ± 0.369 (0.813) C:71% T:80%	pCi/L	08/03/21 14:39	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL - RADIOCHEMISTRY

Project: GORGAS POOLED WMWGORPU_1328
Pace Project No.: 92549918

QC Batch: 457316
QC Batch Method: EPA 9315
Analysis Method: EPA 9315
Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92549918001, 92549918002, 92549918003, 92549918004, 92549918005, 92549918006, 92549918007, 92549918008, 92549918009

METHOD BLANK: 2207826 Matrix: Water
Associated Lab Samples: 92549918001, 92549918002, 92549918003, 92549918004, 92549918005, 92549918006, 92549918007, 92549918008, 92549918009

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.0608 ± 0.218 (0.537) C:89% T:NA	pCi/L	08/13/21 08:32	

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: GORGAS POOLED WMWGORPU_1328
Pace Project No.: 92549918

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

A separate vial preserved to a pH of 4-5 is recommended in SW846 Chapter 4 for the analysis of Acrolein and Acrylonitrile by EPA Method 8260.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Act - Activity

Unc - Uncertainty: SDWA = 1.96 sigma count uncertainty, all other matrices = Expanded Uncertainty (95% confidence interval). Gamma Spec = Expanded Uncertainty (95.4% Confidence Interval)

(MDC) - Minimum Detectable Concentration

Trac - Tracer Recovery (%)

Carr - Carrier Recovery (%)

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: GORGAS POOLED WMWGORPU_1328
Pace Project No.: 92549918

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92549918001	**BB12492 MW-1**	EPA 9315	457316		
92549918002	**BB12493 MW-1 DUP**	EPA 9315	457316		
92549918003	**BB12494 MW-2**	EPA 9315	457316		
92549918004	**BB12494 MW-2 MS**	EPA 9315	457316		
92549918005	**BB12494 MW-2 MSD**	EPA 9315	457316		
92549918006	**BB12495 MW-3**	EPA 9315	457316		
92549918007	**BB12496 MW-4**	EPA 9315	457316		
92549918008	**BB12497 EB-1**	EPA 9315	457316		
92549918009	**BB12498 FB-1**	EPA 9315	457316		
92549918001	**BB12492 MW-1**	EPA 9320	457856		
92549918002	**BB12493 MW-1 DUP**	EPA 9320	457856		
92549918003	**BB12494 MW-2**	EPA 9320	457856		
92549918004	**BB12494 MW-2 MS**	EPA 9320	457856		
92549918005	**BB12494 MW-2 MSD**	EPA 9320	457856		
92549918006	**BB12495 MW-3**	EPA 9320	457856		
92549918007	**BB12496 MW-4**	EPA 9320	457856		
92549918008	**BB12497 EB-1**	EPA 9320	457856		
92549918009	**BB12498 FB-1**	EPA 9320	457856		
92549918001	**BB12492 MW-1**	Total Radium Calculation	460439		
92549918002	**BB12493 MW-1 DUP**	Total Radium Calculation	460439		
92549918003	**BB12494 MW-2**	Total Radium Calculation	460439		
92549918006	**BB12495 MW-3**	Total Radium Calculation	460439		
92549918007	**BB12496 MW-4**	Total Radium Calculation	460439		
92549918008	**BB12497 EB-1**	Total Radium Calculation	460439		
92549918009	**BB12498 FB-1**	Total Radium Calculation	460439		

Pittsburgh Lab Sample Condition Upon Receipt

Pace Analytical

Client Name: Alabama Power

WO# : 92549918

92549918

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

LIMS Login

Tracking #: 5140 3411 5909

Custody Seal on Cooler/Box Present: ☐ yes ☑ no Seals intact: ☐ yes ☑ no

Thermometer Used — Type of Ice: Wet Blue (None)

Cooler Temperature Observed Temp — °C Correction Factor: — °C Final Temp: — °C

Temp should be above freezing to 6°C

Comments:	Yes	No	N/A	pH paper Lot# 1003801 / Date and Initials of person examining contents: RJA 7-15-21
Chain of Custody Present:	✓			1.
Chain of Custody Filled Out:	✓			2.
Chain of Custody Relinquished:	✓			3.
Sampler Name & Signature on COC:		✓		4.
Sample Labels match COC: -Includes date/time/ID Matrix: WT	✓			5.
Samples Arrived within Hold Time:	✓			6.
Short Hold Time Analysis (<72hr remaining):		✓		7.
Rush Turn Around Time Requested:		✓		8.
Sufficient Volume:	✓			9.
Correct Containers Used:	✓			10.
-Pace Containers Used:	✓			
Containers Intact:	✓			11.
Orthophosphate field filtered			✓	12.
Hex Cr Aqueous sample field filtered			✓	13.
Organic Samples checked for dechlorination:			✓	14.
Filtered volume received for Dissolved tests			✓	15.
All containers have been checked for preservation. exceptions: VOA, coliform, TOC, O&G, Phenolics, Radon, Non-aqueous matrix	✓			16. PH<2
All containers meet method preservation requirements.	✓			Initial when completed: RJA / Date/time of preservation / Lot # of added preservative
Headspace in VOA Vials (>6mm):			✓	17.
Trip Blank Present:			✓	18.
Trip Blank Custody Seals Present			✓	
Rad Samples Screened < 0.5 mrem/hr	✓			Initial when completed: RJA / Date: / Survey Meter SN:

Client Notification/ Resolution:

Person Contacted: ___ Date/Time: ___ Contacted By: ___

Comments/ Resolution: Rcvd MS/MSD for MW-2

☐ A check in this box indicates that additional information has been stored in ereports.

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

*PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page : 1 Of 1

Section A — Required Client Information:

Company:	Alabama Power Company
Address:	744 Highway 87 GSC Bldg #8 Calera, AL 35040
Email To:	lbmidkif@southernco.com
Phone:	205-664-6197 Fax:
Requested Due Date:	28 days

Section B — Required Project Information:

Report To:	Laura Midkiff
Copy To:	Brooke Caton & Renee Jernigan
Purchase Order #:	APC10700668
Project Name:	Plant Gorgas Pooled Upgradient
Project Number:	WMWGORPU_1328

Section C — Invoice Information:

Attention:	Laura Midkiff
Company Name:	Alabama Power Co.
Address:	744 Highway 87 GSC Bldg #8
Pace Quote:	CCR
Pace Project Manager:	Kevin.Herring@pacelabs.com
Pace Profile #:	13805

Regulatory Agency:

State / Location: AL

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)		MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	EPA 9315	EPA 9320	Total Radium Sum	Matrix Spike/Matrix Spike Du	Residual Chlorine (Y/N)
1	BB12492	MW-1	GW	G			7/12/2021	10:45		1			X							X	X	X		
2	BB12493	MW-1 DUP	GW	G			7/12/2021	10:45		1			X							X	X	X		
3	BB12494	MW-2	GW	G			7/12/2021	11:48		3			X							X	X	X	X	
4	BB12495	MW-3	GW	G			7/12/2021	12:53		1			X							X	X	X		
5	BB12496	MW-4	GW	G			7/12/2021	14:35		1			X							X	X	X		
6	BB12497	EB-1	GW	G			7/12/2021	15:00		1			X							X	X	X		
7	BB12498	FB-1	GW	G			7/12/2021	15:10		1			X							X	X	X		
8																								
9																								
10																								
11																								
12																								

Matrix codes: Drinking Water DW; Water WT; Waste Water WW; Product P; Soil/Solid SL; Oil OL; Wipe WP; Air AR; Other OT; Tissue TS

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS: TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
	Laura Midkiff/ APC GTL	7/13/2021	10:15		7-15-21	0920	N/A	N	N	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER:

SIGNATURE of SAMPLER: DATE Signed:

WO#: 92549918

PM: KLH1 Due Date: 08/13/21

CLIENT: 92-AL Power

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

Test:	Ra-228
Analyst:	JC2
Date:	7/30/2021
Worklist:	61831
Matrix:	WT

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2210350
MB concentration:	0.186
M/B 2 Sigma CSU:	0.369
MB MDC:	0.813
MB Numerical Performance Indicator:	0.99
MB Status vs Numerical Indicator:	Pass
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	N
	LCS61831	LCSD61831
Count Date:	8/3/2021	
Spike I.D.:	21-003	
Decay Corrected Spike Concentration (pCi/mL):	36.708	
Volume Used (mL):	0.10	
Aliquot Volume (L, g, F):	0.810	
Target Conc. (pCi/L, g, F):	4.534	
Uncertainty (Calculated):	0.222	
Result (pCi/L, g, F):	4.013	
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	0.972	
Numerical Performance Indicator:	-1.03	
Percent Recovery:	88.50%	
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:	7/14/2021	7/12/2021
Sample I.D.	92550955021	92549918003
Sample MS I.D.	92550955022	92549918004
Sample MSD I.D.	92550955023	92549918005
Spike I.D.:	21-003	21-003
MS/MSD Decay Corrected Spike Concentration (pCi/mL):	36.952	36.952
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):	0.806	0.812
MS Target Conc.(pCi/L, g, F):	9.165	9.099
MSD Aliquot (L, g, F):	0.810	0.809
MSD Target Conc. (pCi/L, g, F):	9.123	9.137
MS Spike Uncertainty (calculated):	0.449	0.446
MSD Spike Uncertainty (calculated):	0.447	0.448
Sample Result:	-0.002	-0.004
Sample Result 2 Sigma CSU (pCi/L, g, F):	0.326	0.356
Sample Matrix Spike Result:	9.623	9.474
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):	1.948	1.878
Sample Matrix Spike Duplicate Result:	10.171	9.866
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):	2.026	1.960
MS Numerical Performance Indicator:	0.446	0.379
MSD Numerical Performance Indicator:	0.980	0.703
MS Percent Recovery:	105.02%	104.17%
MSD Percent Recovery:	111.51%	108.02%
MS Status vs Numerical Indicator:	Pass	Pass
MSD Status vs Numerical Indicator:	Pass	Pass
MS Status vs Recovery:	Pass	Pass
MSD Status vs Recovery:	Pass	Pass
MS/MSD Upper % Recovery Limits:	135%	135%
MS/MSD Lower % Recovery Limits:	60%	60%

Duplicate Sample Assessment		
Sample I.D.:		Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.		
Sample Result (pCi/L, g, F):		
Sample Result 2 Sigma CSU (pCi/L, g, F):		
Sample Duplicate Result (pCi/L, g, F):		
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):		
Are sample and/or duplicate results below RL?	See Below ##	
Duplicate Numerical Performance Indicator:		
Duplicate RPD:		
Duplicate Status vs Numerical Indicator:		
Duplicate Status vs RPD:		
% RPD Limit:		

Matrix Spike/Matrix Spike Duplicate Sample Assessment		
Sample I.D.	92550955021	92549918003
Sample MS I.D.	92550955022	92549918004
Sample MSD I.D.	92550955023	92549918005
Sample Matrix Spike Result:	9.623	9.474
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):	1.948	1.878
Sample Matrix Spike Duplicate Result:	10.171	9.866
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):	2.026	1.960
Duplicate Numerical Performance Indicator:	-0.382	-0.283
(Based on the Percent Recoveries) MS/ MSD Duplicate RPD:	5.99%	3.63%
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:

JC 8/4/21

OM 8/4/21

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

Test:	Ra-226
Analyst:	LAL
Date:	7/23/2021
Worklist:	61766
Matrix:	DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2207826
MB concentration:	0.061
M/B Counting Uncertainty:	0.218
MB MDC:	0.537
MB Numerical Performance Indicator:	0.55
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	N
	LCS61766	LCSD61766
Count Date:	8/13/2021	
Spike I.D.:	19-033	
Decay Corrected Spike Concentration (pCi/mL):	24.035	
Volume Used (mL):	0.10	
Aliquot Volume (L, g, F):	0.200	
Target Conc. (pCi/L, g, F):	12.013	
Uncertainty (Calculated):	0.144	
Result (pCi/L, g, F):	13.562	
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	1.284	
Numerical Performance Indicator:	2.35	
Percent Recovery:	112.89%	
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:		
Sample I.D.	92549918003	
Sample MS I.D.	92549918004	
Sample MSD I.D.	92549918005	
Spike I.D.:	19-033	
MS/MSD Decay Corrected Spike Concentration (pCi/mL):	25.335	
Spike Volume Used in MS (mL):	0.20	
Spike Volume Used in MSD (mL):	0.20	
MS Aliquot (L, g, F):	0.201	
MS Target Conc.(pCi/L, g, F):	25.256	
MSD Aliquot (L, g, F):	0.210	
MSD Target Conc. (pCi/L, g, F):	24.093	
MS Spike Uncertainty (calculated):	0.303	
MSD Spike Uncertainty (calculated):	0.289	
Sample Result:	0.155	
Sample Result Counting Uncertainty (pCi/L, g, F):	0.208	
Sample Matrix Spike Result:	21.803	
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):	1.637	
Sample Matrix Spike Duplicate Result:	21.161	
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):	1.655	
MS Numerical Performance Indicator:	-4.215	
MSD Numerical Performance Indicator:	-3.573	
MS Percent Recovery:	85.72%	
MSD Percent Recovery:	87.19%	
MS Status vs Numerical Indicator:	N/A	
MSD Status vs Numerical Indicator:	N/A	
MS Status vs Recovery:	Pass	
MSD Status vs Recovery:	Pass	
MS/MSD Upper % Recovery Limits:	125%	
MS/MSD Lower % Recovery Limits:	75%	

Duplicate Sample Assessment		
Sample I.D.:		
Duplicate Sample I.D.		
Sample Result (pCi/L, g, F):		
Sample Result Counting Uncertainty (pCi/L, g, F):		
Sample Duplicate Result (pCi/L, g, F):		
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):		
Are sample and/or duplicate results below RL?	See Below ##	
Duplicate Numerical Performance Indicator:		
Duplicate RPD:		
Duplicate Status vs Numerical Indicator:		
Duplicate Status vs RPD:		
% RPD Limit:		

Matrix Spike/Matrix Spike Duplicate Sample Assessment		
Sample I.D.	92549918003	
Sample MS I.D.	92549918004	
Sample MSD I.D.	92549918005	
Sample Matrix Spike Result:	21.803	
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):	1.637	
Sample Matrix Spike Duplicate Result:	21.161	
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):	1.655	
Duplicate Numerical Performance Indicator:	0.540	
(Based on the Percent Recoveries) MS/ MSD Duplicate RPD:	1.70%	
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:

8/19/21

ISOTOPE TRACER TECHNOLOGIES INC

Isotope Analyses for: Alabama Power General Test Lab

IT^2 FILE # 210277

2021-09-03

Approved by:

Orfan Shouakar-Stash, PhD
Director
Isotope Tracer Technologies Inc.
695 Rupert St. Unit B, Waterloo, ON, N2V 1Z5
Tel: 519-886-5555 | Fax: 519-886-5575
Email: orfan@it2isotopes.com
Website: www.it2isotopes.com

ISOTOPE TRACER TECHNOLOGIES INC

Client: Alabama Power General Test Lab
Address: 744 Co. Rd. 87, GSC#8
Calera, AL 35040
USA
Tel: 205-664-6197
Attn.: Laura Midkiff
E-mail: lbmidkif@southernco.com
E-mail: TBWILL@southernco.com
E-mail: RGARNER@SOUTHERNCO.COM

File Number: **210277**
Project Number: **WMWGORG_1329**

#	Sample ID	Sample Collection		Sample #	$\delta^{11}B$	Result	Repeat	Sample Size	B Concen.
		Date	Time		‰	NIST 951a			mg/L
1	BB12697 MW-8	2021-07-14	10:52	74181	X	33.6	32.7	1 x 1Litre Bottle	2.07
2	BB12776 MW-14H	2021-07-13	13:51	74182	X	11.6		1 x 1Litre Bottle	0.139
3	BB12777 MW-14H DUP	2021-07-13	13:51	74183	X	3.7		1 x 1Litre Bottle	0.139
4	BB12779 MW-4	2021-07-14	8:38	74184	X	2.8	4.0	1 x 1Litre Bottle	4.78
5	BB12780 MW-4V	2021-07-14	10:04	74185	X	-2.6		1 x 1Litre Bottle	3.68
6	BB12785 EB-1	2021-07-14	16:15	74186	X	BDL		1 x 1Litre Bottle	N.D.
7	BB12846 MW-9H	2021-07-13	13:45	74187	X	0.0	-0.1	1 x 1Litre Bottle	5.84
8	BB12847 MW-12H	2021-07-14	9:35	74188	X	8.8		1 x 1Litre Bottle	0.0742
9	BB12852 MW-3	2021-07-14	14:55	74189	X	14.4		1 x 1Litre Bottle	1.47
10	BB12853 MW-3V	2021-07-15	10:50	74190	X	25.3		1 x 1Litre Bottle	3.04
11	BB12854 FB-2	2021-07-15	12:05	74191	X	BDL		1 x 1Litre Bottle	N.D.

BDL: Below Detection Limit
Low signal, uncertainty higher than normal

^{11}B Analyses

Instrument Used:
Thermal Ionization Mass Spectrometry (TIMS), TI-Box, spectromat, Germany
Standard Used:
120 ratios are taken for each sample and the average is used to calculate the delta value.
Delta values are calculated with respect to NIST SRM951a.
A secondary standard of sea water (SB1) is ran with each carousel.
Typical Standard deviation:
+/- 2 permil

Approved by:

Orfan S-Stash

Orfan Shouakar-Stash, PhD
Director
Isotope Tracer Technologies Inc.
695 Rupert St. Unit B, Waterloo, ON, N2V 1Z5
Tel: 519-886-5555 | Fax: 519-886-5575
Email: orfan@it2isotopes.com
Website: www.it2isotopes.com

ISOTOPE TRACER TECHNOLOGIES INC

CHAIN OF CUSTODY / ANALYTICAL SERVICES REQUEST FORM

Note: all TAT Quoted material is in business days which exclude statutory holidays and weekends.

Specify date required	Service Requested	
	(regular)	
4 Weeks	(Rush)	

COMPANY NAME	Alabama Power General Test Lab
OFFICE ADDRESS	744 Co. Rd. 87, GSC#8 Calera, AL 35040
PROJECT MANAGER: Laura Midkiff	
PROJECT # WMWGORG_1329	
PHONE 205-664-6197	FAX
	PO # APC63628-0001

REPORT FORMAT/DISTRIBUTION

EMAIL __X__ FAX _______ BOTH _______
SELECT: PDF ____ DIGITAL ____ BOTH _X_
EMAIL 1 __LBMIDKIF@SOUTHERNCO.COM__
EMAIL 2 __RGARNER@ SOUTHERNCO.COM__
EMAIL 3 __TBWILL@ SOUTHERNCO.COM__

ANALYSIS REQUEST

PLEASE INDICATE FILTERED, PRESERVED OR BOTH <----- (F, P, F/P)

SUBMISSION #:
ENTERED BY:
DATE/TIME ENTERED:
BIN #:

SAMPLING INFORMATION

Date (YYYY-MM-DD)	Time (24hr) (hh:mm)	COMP	GRAB	WATER	SOIL	OTHER	SAMPLE DESCRIPTION TO APPEAR ON REPORT	NUMBER OF CONTAINERS	Boron Method (Isotopes 10 & 11)	COMMENTS	LAB ID
7/14/2021	10:52		x	x			BB12697 MW-8	1	X		

SPECIAL INSTRUCTIONS/COMMENTS	THE QUESTIONS BELOW MUST BE ANSWERED FORWATER SAMPLES (CHECK Yes OR No)	SAMPLE CONDITION
	Are any samples taken from a regulated DW System? Yes ___ No _X_ If yes, an authorized drinking water COC MUST be used for this submission. Is the water sampled intended to be potable for human consumption? Yes ___ No ___	___ FROZEN ___ COLD ___ COOLING INITIATED ___ AMBIENT

SAMPLED BY: Anthony Goggins	7/14/2021 15:35	RECEIVED BY: Laura Midkiff	7/14/2021 15:35	Observations
RELINQUISHED BY: Laura Midkiff	DATE & TIME 7/16/21 1320	RECEIVED AT LAB BY: K M	DATE & TIME Jul. 22, 2021 12:00	

1. TAT may vary dependent on complexity of analysis and lab workload at time of submission. Please contact the lab to confirm TATs.

2. Any known or suspected hazards relating to a sample must be noted on the chain of custody in comments section.

ISOTOPE TRACER TECHNOLOGIES INC

CHAIN OF CUSTODY / ANALYTICAL SERVICES REQUEST FORM

Note: all TAT Quoted material is in business days which exclude statutory holidays and weekends.

Specify date required: 4 Weeks

Service Requested: (regular) / (Rush)

COMPANY NAME	Alabama Power General Test Lab
OFFICE ADDRESS	744 Co. Rd. 87, GSC#8 Calera, AL 3S040
PROJECT MANAGER: Laura Midkiff	
PROJECT # WMWGORG_1329	
PHONE 205-664-6197	FAX
	PO # APC63628-0001

REPORT FORMAT/DISTRIBUTION

EMAIL _X_ FAX _____ BOTH _____
SELECT: PDF ____ DIGITAL ____ BOTH _X_
EMAIL 1 _LBMIDKIF@SOUTHERNCO.COM_
EMAIL 2 _RGARNER@ SOUTHERNCO.COM_
EMAIL 3 _TBWILL@ SOUTHERNCO.COM_

ANALYSIS REQUEST

PLEASE INDICATE FILTERED, PRESERVED OR BOTH <----- (F, P, F/P)

SUBMISSION #:

ENTERED BY:

DATE/TIME ENTERED:

BIN #:

SAMPLING INFORMATION

Sample Date/Time		TYPE		MATRIX															
Date (YYYY-MM-DD)	Time (24hr) (hh:mm)	COMP	GRAB	WATER	SOIL	OTHER	SAMPLE DESCRIPTION TO APPEAR ON REPORT	NUMBER OF CONTAINERS	Boron Method (Isotopes 10 & 11)										COMMENTS	LAB ID
7/13/2021	13:51		x	x			BB12776 MW-14H	x	x											
7/13/2021	13:51		x	x			BB12777 MW-14H DUP	x	x											
7/14/2021	8:38		x	x			BB12779 MW-4	x	x											
7/14/2021	10:04		x	x			BB12780 MW-4V	x	x											
7/14/2021	16:15		x	x			BB12785 EB-1	x	x											

SPECIAL INSTRUCTIONS/COMMENTS

THE QUESTIONS BELOW MUST BE ANSWERED FORWATER SAMPLES (CHECK Yes OR No)

Are any samples taken from a regulated DW System? Yes ___ No _X_
If yes, an authorized drinking water COC MUST be used for this submission.
Is the water sampled intended to be potable for human consumption? Yes ___ No ___

SAMPLE CONDITION

___ FROZEN
___ COLD
___ COOLING INITIATED
___ AMBIENT

Observations

SAMPLED BY: Dallas Gentry	7/15/2021 8:44	RECEIVED BY: Laura Midkiff	7/15/2021 8:44
RELINQUISHED BY: Laura Midkiff	DATE & TIME 7/16/21 1310	RECEIVED AT LAB BY: K. M.	DATE & TIME Jul 22, 21 12:20

1. TAT may vary dependent on complexity of analysis and lab workload at time of submission. Please contact the lab to confirm TATs.

2. Any known or suspected hazards relating to a sample must be noted on the chain of custody in comments section.

ISOTOPE TRACER TECHNOLOGIES INC

CHAIN OF CUSTODY / ANALYTICAL SERVICES REQUEST FORM

Note: all TAT Quoted material is in business days which exclude statutory holidays and weekends.

Specify date required: 4 Weeks

Service Requested: (regular) / (Rush)

COMPANY NAME	Alabama Power General Test Lab
OFFICE ADDRESS	744 Co. Rd. 87, GSC#8 Calera, AL 35040
PROJECT MANAGER: Laura Midkiff	
PROJECT # WMWGORG_1329	
PHONE 205-664-6197	FAX
	PO # APC63628-0001

REPORT FORMAT/DISTRIBUTION

EMAIL _X__ FAX _____ BOTH _____
SELECT: PDF ____ DIGITAL ____ BOTH _X_
EMAIL 1 __LBMIDKIF@SOUTHERNCO.COM__
EMAIL 2 __RGARNER@ SOUTHERNCO.COM__
EMAIL 3 __TBWILL@ SOUTHERNCO.COM__

ANALYSIS REQUEST

PLEASE INDICATE FILTERED, PRESERVED OR BOTH <----- (F, P, F/P)

SUBMISSION #:

ENTERED BY:

DATE/TIME ENTERED:

BIN #:

SAMPLING INFORMATION

Sample Date/Time		TYPE		MATRIX			SAMPLE DESCRIPTION TO APPEAR ON REPORT	NUMBER OF CONTAINERS	Boron Method (Isotopes 10 & 11)	COMMENTS	LAB ID
Date (YYYY-MM-DD)	Time (24hr) (hh:mm)	COMP	GRAB	WATER	SOIL	OTHER					
7/13/2021	13:45		x	x			BB12846 MW-9H	x	x		
7/14/2021	9:35		x	x			BB12847 MW-12H	x	x		
7/14/2021	14:55		x	x			BB12852 MW-3	x	x		
7/15/2021	10:50		x	x			BB12853 MW-3V	x	x		
7/15/2021	12:05		x	x			BB12854 FB-2	x	x		

SPECIAL INSTRUCTIONS/COMMENTS

THE QUESTIONS BELOW MUST BE ANSWERED FORWATER SAMPLES (CHECK Yes OR No)

Are any samples taken from a regulated DW System? Yes ___ No _X_
If yes, an authorized drinking water COC MUST be used for this submission.
Is the water sampled intended to be potable for human consumption? Yes ___ No ___

SAMPLE CONDITION

___ FROZEN
___ COLD
___ COOLING INITIATED
___ AMBIENT

Observations

SAMPLED BY: TJ Daugherty	7/15/2021 14:35	RECEIVED BY: Laura Midkiff	7/15/2021 14:35
RELINQUISHED BY: Laura Midkiff	DATE & TIME 7/15/21 1320	RECEIVED AT LAB BY: K. M.	DATE & TIME July 22, 21 12:00

1. TAT may vary dependent on complexity of analysis and lab workload at time of submission. Please contact the lab to confirm TATs.

2. Any known or suspected hazards relating to a sample must be noted on the chain of custody in comments section.

Water Level Record/Well Inspection

Groundwater

APC General Testing Laboratory
General Service Complex Building 8

Y

User Name: x2dfgent
PIN: 123654
Reason:

Submit

Date: 07/12/2021
Location: Gorgas Gypsum
Collector: Dallas Gentry

Weather: Cloudy 80

			In Good Condition					
Well	Time	Water Level (ft)	Locks	Bollards	Pad	Protective Casing	Name Plate	Comment
MW-1	1215	95.08	✔	✔	✔	✔	✔	
MW-2	1218	102.92	✔	✔	✔	✔	✔	
PZ-2A	1022	119.70	✔	✔	✔	✔	✔	
MW-3	1225	103.46	✔	✔	✔	✔	✔	
MW-3V	1221	123.22	✔	✔	✔	✔	✔	
MW-4	1227	89.98	✔	✔	✔	✔	✔	
MW-4V	1229	114.91	✔	✔	✔	✔	✔	
PZ-4	1239	126.71	✔	✔	✔	✔	✔	
MW-5	1230	Dry	✔	✔	✔	✔	✔	
PZ-5	1025	Dry	✔	✔	✔	✔	✔	
MW-6	1232	DRY	✔	✔	✔	✔	✔	
MW-7	1114	64.66	✔	✔	✔	✔	✔	
MW-8	1121	76.10	✔	✔	✔	✔	✔	
MW-8V	1124	86.37	✔	✔	✔	✔	✔	
MW-9	1126	Dry	✔	✔	✔	✔	✔	
MW-9H	1204	45.15	✔	✔	✔	✔	✔	
MW-9V	1208	44.92	✔	✔	✔	✔	✔	
MW-10H	1159	20.84	✔	✔	✔	✔	✔	
MW-11H	1141	6.63	✔	✔	✔	✔	✔	
MW-12H	1129	59.57	✔	✔	✔	✔	✔	
MW-12V	1133	61.52	✔	✔	✔	✔	✔	
MW-13H	1150	9.98	✔	✔	✔	✔	✔	
MW-14H	1110	18.84	✔	✔	✔	✔	✔	
MW-15H	1213	25.39	✔	✔	✔	✔	✔	
PZ-16	1208	24.38	✔	✔	✔	✔	✔	
PZ-17	1028	46.03	✔	✔	✔	✔	✔	
PZ-18	1037	61.69	✔	✔	✔	✔	✔	
PZ-19	1042	121.68	✔	✔	✔	✔	✔	
PZ-20	1049	116.08	✔	✔	✔	✔	✔	
PZ-21	1053	83.59	✔	✔	✔	✔	✔	
PZ-22	1059	52.29	✔	✔	✔	✔	✔	
MW-23VA	1117	149.67	✔	✔	✔	✔	✔	
			✔	✔	✔	✔	✔	

Alabama Power Company
Plant Gorgas Gypsum Pond

WELL ID	DESCRIPTION	TIME OF READING	VALUE	UNIT
GS-GSA-MW-4	Conductivity	7/14/2021 8:20	1636.2	uS/cm
GS-GSA-MW-4	DO	7/14/2021 8:20	0.31	mg/L
GS-GSA-MW-4	Depth to Water Detail	7/14/2021 8:20	90.13	ft
GS-GSA-MW-4	Oxidation Reduction Potention	7/14/2021 8:20	280.04	mv
GS-GSA-MW-4	pH	7/14/2021 8:20	3.73	SU
GS-GSA-MW-4	Temperature	7/14/2021 8:20	20.79	C
GS-GSA-MW-4	Turbidity	7/14/2021 8:20	1.11	NTU
GS-GSA-MW-4	Conductivity	7/14/2021 8:25	1631.78	uS/cm
GS-GSA-MW-4	DO	7/14/2021 8:25	0.23	mg/L
GS-GSA-MW-4	Depth to Water Detail	7/14/2021 8:25	90.13	ft
GS-GSA-MW-4	Oxidation Reduction Potention	7/14/2021 8:25	279.56	mv
GS-GSA-MW-4	pH	7/14/2021 8:25	3.74	SU
GS-GSA-MW-4	Temperature	7/14/2021 8:25	20.75	C
GS-GSA-MW-4	Turbidity	7/14/2021 8:25	1.28	NTU
GS-GSA-MW-4	Conductivity	7/14/2021 8:30	1584.93	uS/cm
GS-GSA-MW-4	DO	7/14/2021 8:30	0.21	mg/L
GS-GSA-MW-4	Depth to Water Detail	7/14/2021 8:30	90.13	ft
GS-GSA-MW-4	Oxidation Reduction Potention	7/14/2021 8:30	284.83	mv
GS-GSA-MW-4	pH	7/14/2021 8:30	3.73	SU
GS-GSA-MW-4	Temperature	7/14/2021 8:30	20.66	C
GS-GSA-MW-4	Turbidity	7/14/2021 8:30	1.21	NTU
GS-GSA-MW-4	Conductivity	7/14/2021 8:35	1593.62	uS/cm
GS-GSA-MW-4	DO	7/14/2021 8:35	0.2	mg/L
GS-GSA-MW-4	Depth to Water Detail	7/14/2021 8:35	90.13	ft
GS-GSA-MW-4	Oxidation Reduction Potention	7/14/2021 8:35	288.36	mv
GS-GSA-MW-4	pH	7/14/2021 8:35	3.74	SU
GS-GSA-MW-4	Temperature	7/14/2021 8:35	20.73	C
GS-GSA-MW-4	Turbidity	7/14/2021 8:35	0.61	NTU

Alabama Power Company
Plant Gorgas Gypsum Pond

WELL ID	DESCRIPTION	TIME OF READING	VALUE	UNIT
GS-GSA-MW-4V	Conductivity	7/14/2021 9:20	1606.61	uS/cm
GS-GSA-MW-4V	DO	7/14/2021 9:20	0.5	mg/L
GS-GSA-MW-4V	Depth to Water Detail	7/14/2021 9:20	116.6	ft
GS-GSA-MW-4V	Oxidation Reduction Potention	7/14/2021 9:20	-35.26	mv
GS-GSA-MW-4V	pH	7/14/2021 9:20	5.65	SU
GS-GSA-MW-4V	Temperature	7/14/2021 9:20	20.71	C
GS-GSA-MW-4V	Turbidity	7/14/2021 9:20	34.6	NTU
GS-GSA-MW-4V	Conductivity	7/14/2021 9:25	1604.47	uS/cm
GS-GSA-MW-4V	DO	7/14/2021 9:25	0.31	mg/L
GS-GSA-MW-4V	Depth to Water Detail	7/14/2021 9:25	116.95	ft
GS-GSA-MW-4V	Oxidation Reduction Potention	7/14/2021 9:25	-25.26	mv
GS-GSA-MW-4V	pH	7/14/2021 9:25	5.69	SU
GS-GSA-MW-4V	Temperature	7/14/2021 9:25	20.78	C
GS-GSA-MW-4V	Turbidity	7/14/2021 9:25	23.4	NTU
GS-GSA-MW-4V	Conductivity	7/14/2021 9:30	1587.12	uS/cm
GS-GSA-MW-4V	DO	7/14/2021 9:30	0.29	mg/L
GS-GSA-MW-4V	Depth to Water Detail	7/14/2021 9:30	117.06	ft
GS-GSA-MW-4V	Oxidation Reduction Potention	7/14/2021 9:30	-21.1	mv
GS-GSA-MW-4V	pH	7/14/2021 9:30	5.71	SU
GS-GSA-MW-4V	Temperature	7/14/2021 9:30	20.76	C
GS-GSA-MW-4V	Turbidity	7/14/2021 9:30	34.8	NTU
GS-GSA-MW-4V	Conductivity	7/14/2021 9:35	1585.7	uS/cm
GS-GSA-MW-4V	DO	7/14/2021 9:35	0.28	mg/L
GS-GSA-MW-4V	Depth to Water Detail	7/14/2021 9:35	117.08	ft
GS-GSA-MW-4V	Oxidation Reduction Potention	7/14/2021 9:35	-15.85	mv
GS-GSA-MW-4V	pH	7/14/2021 9:35	5.69	SU
GS-GSA-MW-4V	Temperature	7/14/2021 9:35	20.75	C
GS-GSA-MW-4V	Turbidity	7/14/2021 9:35	31.9	NTU
GS-GSA-MW-4V	Conductivity	7/14/2021 9:40	1560.5	uS/cm
GS-GSA-MW-4V	DO	7/14/2021 9:40	0.27	mg/L
GS-GSA-MW-4V	Depth to Water Detail	7/14/2021 9:40	117.1	ft
GS-GSA-MW-4V	Oxidation Reduction Potention	7/14/2021 9:40	-10.88	mv
GS-GSA-MW-4V	pH	7/14/2021 9:40	5.67	SU
GS-GSA-MW-4V	Temperature	7/14/2021 9:40	20.77	C
GS-GSA-MW-4V	Turbidity	7/14/2021 9:40	26.5	NTU
GS-GSA-MW-4V	Conductivity	7/14/2021 9:45	1559.14	uS/cm
GS-GSA-MW-4V	DO	7/14/2021 9:45	0.27	mg/L
GS-GSA-MW-4V	Depth to Water Detail	7/14/2021 9:45	117.11	ft
GS-GSA-MW-4V	Oxidation Reduction Potention	7/14/2021 9:45	-7.59	mv
GS-GSA-MW-4V	pH	7/14/2021 9:45	5.68	SU
GS-GSA-MW-4V	Temperature	7/14/2021 9:45	20.64	C
GS-GSA-MW-4V	Turbidity	7/14/2021 9:45	19.3	NTU
GS-GSA-MW-4V	Conductivity	7/14/2021 9:50	1558.09	uS/cm

Alabama Power Company
Plant Gorgas Gypsum Pond

WELL ID	DESCRIPTION	TIME OF READING	VALUE	UNIT
GS-GSA-MW-4V	DO	7/14/2021 9:50	0.26	mg/L
GS-GSA-MW-4V	Depth to Water Detail	7/14/2021 9:50	117.13	ft
GS-GSA-MW-4V	Oxidation Reduction Potention	7/14/2021 9:50	-6.28	mv
GS-GSA-MW-4V	pH	7/14/2021 9:50	5.71	SU
GS-GSA-MW-4V	Temperature	7/14/2021 9:50	20.71	C
GS-GSA-MW-4V	Turbidity	7/14/2021 9:50	13.9	NTU
GS-GSA-MW-4V	Conductivity	7/14/2021 9:55	1559.14	uS/cm
GS-GSA-MW-4V	DO	7/14/2021 9:55	0.26	mg/L
GS-GSA-MW-4V	Depth to Water Detail	7/14/2021 9:55	117.14	ft
GS-GSA-MW-4V	Oxidation Reduction Potention	7/14/2021 9:55	-4.42	mv
GS-GSA-MW-4V	pH	7/14/2021 9:55	5.72	SU
GS-GSA-MW-4V	Temperature	7/14/2021 9:55	20.65	C
GS-GSA-MW-4V	Turbidity	7/14/2021 9:55	11.3	NTU
GS-GSA-MW-4V	Conductivity	7/14/2021 10:00	1558.26	uS/cm
GS-GSA-MW-4V	DO	7/14/2021 10:00	0.26	mg/L
GS-GSA-MW-4V	Depth to Water Detail	7/14/2021 10:00	117.14	ft
GS-GSA-MW-4V	Oxidation Reduction Potention	7/14/2021 10:00	-3.05	mv
GS-GSA-MW-4V	pH	7/14/2021 10:00	5.75	SU
GS-GSA-MW-4V	Temperature	7/14/2021 10:00	20.76	C
GS-GSA-MW-4V	Turbidity	7/14/2021 10:00	7.93	NTU

Alabama Power Company
Plant Gorgas Gypsum Pond

WELL ID	DESCRIPTION	TIME OF READING	VALUE	UNIT
GS-GSA-MW-14H	Conductivity	7/13/2021 13:33	1419.98	uS/cm
GS-GSA-MW-14H	DO	7/13/2021 13:33	0.17	mg/L
GS-GSA-MW-14H	Depth to Water Detail	7/13/2021 13:33	19.26	ft
GS-GSA-MW-14H	Oxidation Reduction Potention	7/13/2021 13:33	295.46	mv
GS-GSA-MW-14H	pH	7/13/2021 13:33	3.74	SU
GS-GSA-MW-14H	Temperature	7/13/2021 13:33	20.09	C
GS-GSA-MW-14H	Turbidity	7/13/2021 13:33	7.78	NTU
GS-GSA-MW-14H	Conductivity	7/13/2021 13:38	1413.93	uS/cm
GS-GSA-MW-14H	DO	7/13/2021 13:38	0.14	mg/L
GS-GSA-MW-14H	Depth to Water Detail	7/13/2021 13:38	19.26	ft
GS-GSA-MW-14H	Oxidation Reduction Potention	7/13/2021 13:38	299.45	mv
GS-GSA-MW-14H	pH	7/13/2021 13:38	3.74	SU
GS-GSA-MW-14H	Temperature	7/13/2021 13:38	19.97	C
GS-GSA-MW-14H	Turbidity	7/13/2021 13:38	5.06	NTU
GS-GSA-MW-14H	Conductivity	7/13/2021 13:43	1415.46	uS/cm
GS-GSA-MW-14H	DO	7/13/2021 13:43	0.13	mg/L
GS-GSA-MW-14H	Depth to Water Detail	7/13/2021 13:43	19.26	ft
GS-GSA-MW-14H	Oxidation Reduction Potention	7/13/2021 13:43	295.97	mv
GS-GSA-MW-14H	pH	7/13/2021 13:43	3.77	SU
GS-GSA-MW-14H	Temperature	7/13/2021 13:43	20.05	C
GS-GSA-MW-14H	Turbidity	7/13/2021 13:43	2.11	NTU
GS-GSA-MW-14H	Conductivity	7/13/2021 13:48	1415.34	uS/cm
GS-GSA-MW-14H	DO	7/13/2021 13:48	0.11	mg/L
GS-GSA-MW-14H	Depth to Water Detail	7/13/2021 13:48	19.26	ft
GS-GSA-MW-14H	Oxidation Reduction Potention	7/13/2021 13:48	292.85	mv
GS-GSA-MW-14H	pH	7/13/2021 13:48	3.8	SU
GS-GSA-MW-14H	Temperature	7/13/2021 13:48	20.14	C
GS-GSA-MW-14H	Turbidity	7/13/2021 13:48	3.28	NTU

Alabama Power Company
Plant Gorgas Gypsum Pond

WELL ID	DESCRIPTION	TIME OF READING	VALUE	UNIT
GS-GSA-PZ-17	Conductivity	7/13/2021 12:21	1488.4	uS/cm
GS-GSA-PZ-17	DO	7/13/2021 12:21	1.07	mg/L
GS-GSA-PZ-17	Depth to Water Detail	7/13/2021 12:21	46.42	ft
GS-GSA-PZ-17	Oxidation Reduction Potention	7/13/2021 12:21	83.46	mv
GS-GSA-PZ-17	pH	7/13/2021 12:21	4.48	SU
GS-GSA-PZ-17	Temperature	7/13/2021 12:21	22.89	C
GS-GSA-PZ-17	Turbidity	7/13/2021 12:21	0.6	NTU
GS-GSA-PZ-17	Conductivity	7/13/2021 12:26	1513.36	uS/cm
GS-GSA-PZ-17	DO	7/13/2021 12:26	0.87	mg/L
GS-GSA-PZ-17	Depth to Water Detail	7/13/2021 12:26	46.45	ft
GS-GSA-PZ-17	Oxidation Reduction Potention	7/13/2021 12:26	78.52	mv
GS-GSA-PZ-17	pH	7/13/2021 12:26	4.46	SU
GS-GSA-PZ-17	Temperature	7/13/2021 12:26	22.65	C
GS-GSA-PZ-17	Turbidity	7/13/2021 12:26	0.57	NTU
GS-GSA-PZ-17	Conductivity	7/13/2021 12:31	1538.76	uS/cm
GS-GSA-PZ-17	DO	7/13/2021 12:31	0.75	mg/L
GS-GSA-PZ-17	Depth to Water Detail	7/13/2021 12:31	46.45	ft
GS-GSA-PZ-17	Oxidation Reduction Potention	7/13/2021 12:31	82.52	mv
GS-GSA-PZ-17	pH	7/13/2021 12:31	4.41	SU
GS-GSA-PZ-17	Temperature	7/13/2021 12:31	22.73	C
GS-GSA-PZ-17	Turbidity	7/13/2021 12:31	0.68	NTU
GS-GSA-PZ-17	Conductivity	7/13/2021 12:36	1566.83	uS/cm
GS-GSA-PZ-17	DO	7/13/2021 12:36	0.71	mg/L
GS-GSA-PZ-17	Depth to Water Detail	7/13/2021 12:36	46.46	ft
GS-GSA-PZ-17	Oxidation Reduction Potention	7/13/2021 12:36	90.63	mv
GS-GSA-PZ-17	pH	7/13/2021 12:36	4.36	SU
GS-GSA-PZ-17	Temperature	7/13/2021 12:36	22.56	C
GS-GSA-PZ-17	Turbidity	7/13/2021 12:36	0.59	NTU

Alabama Power Company
Plant Gorgas Gypsum Pond

WELL ID	DESCRIPTION	TIME OF READING	VALUE	UNIT
GS-GSA-PZ-18	Conductivity	7/13/2021 10:44	1222.02	uS/cm
GS-GSA-PZ-18	DO	7/13/2021 10:44	1.72	mg/L
GS-GSA-PZ-18	Depth to Water Detail	7/13/2021 10:44	62.61	ft
GS-GSA-PZ-18	Oxidation Reduction Potention	7/13/2021 10:44	161.45	mv
GS-GSA-PZ-18	pH	7/13/2021 10:44	3.93	SU
GS-GSA-PZ-18	Temperature	7/13/2021 10:44	21.15	C
GS-GSA-PZ-18	Turbidity	7/13/2021 10:44	0.42	NTU
GS-GSA-PZ-18	Conductivity	7/13/2021 10:49	1218.02	uS/cm
GS-GSA-PZ-18	DO	7/13/2021 10:49	1.52	mg/L
GS-GSA-PZ-18	Depth to Water Detail	7/13/2021 10:49	62.82	ft
GS-GSA-PZ-18	Oxidation Reduction Potention	7/13/2021 10:49	158.1	mv
GS-GSA-PZ-18	pH	7/13/2021 10:49	3.95	SU
GS-GSA-PZ-18	Temperature	7/13/2021 10:49	22.88	C
GS-GSA-PZ-18	Turbidity	7/13/2021 10:49	0.98	NTU
GS-GSA-PZ-18	Conductivity	7/13/2021 10:54	1219.13	uS/cm
GS-GSA-PZ-18	DO	7/13/2021 10:54	2.3	mg/L
GS-GSA-PZ-18	Depth to Water Detail	7/13/2021 10:54	62.91	ft
GS-GSA-PZ-18	Oxidation Reduction Potention	7/13/2021 10:54	164.55	mv
GS-GSA-PZ-18	pH	7/13/2021 10:54	3.95	SU
GS-GSA-PZ-18	Temperature	7/13/2021 10:54	23.36	C
GS-GSA-PZ-18	Turbidity	7/13/2021 10:54	0.51	NTU
GS-GSA-PZ-18	Conductivity	7/13/2021 10:59	1213.06	uS/cm
GS-GSA-PZ-18	DO	7/13/2021 10:59	2.08	mg/L
GS-GSA-PZ-18	Depth to Water Detail	7/13/2021 10:59	63.03	ft
GS-GSA-PZ-18	Oxidation Reduction Potention	7/13/2021 10:59	162.03	mv
GS-GSA-PZ-18	pH	7/13/2021 10:59	3.95	SU
GS-GSA-PZ-18	Temperature	7/13/2021 10:59	23.24	C
GS-GSA-PZ-18	Turbidity	7/13/2021 10:59	0.24	NTU
GS-GSA-PZ-18	Conductivity	7/13/2021 11:04	1215.23	uS/cm
GS-GSA-PZ-18	DO	7/13/2021 11:04	1.26	mg/L
GS-GSA-PZ-18	Depth to Water Detail	7/13/2021 11:04	63.11	ft
GS-GSA-PZ-18	Oxidation Reduction Potention	7/13/2021 11:04	147.8	mv
GS-GSA-PZ-18	pH	7/13/2021 11:04	3.94	SU
GS-GSA-PZ-18	Temperature	7/13/2021 11:04	21.55	C
GS-GSA-PZ-18	Turbidity	7/13/2021 11:04	0.16	NTU
GS-GSA-PZ-18	Conductivity	7/13/2021 11:09	1213.26	uS/cm
GS-GSA-PZ-18	DO	7/13/2021 11:09	1.1	mg/L
GS-GSA-PZ-18	Depth to Water Detail	7/13/2021 11:09	63.19	ft
GS-GSA-PZ-18	Oxidation Reduction Potention	7/13/2021 11:09	144.1	mv
GS-GSA-PZ-18	pH	7/13/2021 11:09	3.94	SU
GS-GSA-PZ-18	Temperature	7/13/2021 11:09	21.46	C
GS-GSA-PZ-18	Turbidity	7/13/2021 11:09	0.26	NTU
GS-GSA-PZ-18	Conductivity	7/13/2021 11:14	1213.68	uS/cm

Alabama Power Company
Plant Gorgas Gypsum Pond

WELL ID	DESCRIPTION	TIME OF READING	VALUE	UNIT
GS-GSA-PZ-18	DO	7/13/2021 11:14	1.03	mg/L
GS-GSA-PZ-18	Depth to Water Detail	7/13/2021 11:14	63.25	ft
GS-GSA-PZ-18	Oxidation Reduction Potention	7/13/2021 11:14	151.71	mv
GS-GSA-PZ-18	pH	7/13/2021 11:14	3.94	SU
GS-GSA-PZ-18	Temperature	7/13/2021 11:14	21.47	C
GS-GSA-PZ-18	Turbidity	7/13/2021 11:14	0.31	NTU
GS-GSA-PZ-18	Conductivity	7/13/2021 11:19	1210.43	uS/cm
GS-GSA-PZ-18	DO	7/13/2021 11:19	1.01	mg/L
GS-GSA-PZ-18	Depth to Water Detail	7/13/2021 11:19	63.32	ft
GS-GSA-PZ-18	Oxidation Reduction Potention	7/13/2021 11:19	159.96	mv
GS-GSA-PZ-18	pH	7/13/2021 11:19	3.94	SU
GS-GSA-PZ-18	Temperature	7/13/2021 11:19	21.31	C
GS-GSA-PZ-18	Turbidity	7/13/2021 11:19	0.1	NTU

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WELL ID	DESCRIPTION	TIME OF READING	VALUE	UNIT
GS-GSA-PZ-19	Conductivity	7/14/2021 14:48	1686.91	uS/cm
GS-GSA-PZ-19	DO	7/14/2021 14:48	0.16	mg/L
GS-GSA-PZ-19	Depth to Water Detail	7/14/2021 14:48	123.81	ft
GS-GSA-PZ-19	Oxidation Reduction Potention	7/14/2021 14:48	-2.21	mv
GS-GSA-PZ-19	pH	7/14/2021 14:48	6.59	SU
GS-GSA-PZ-19	Temperature	7/14/2021 14:48	18.84	C
GS-GSA-PZ-19	Turbidity	7/14/2021 14:48	2.96	NTU
GS-GSA-PZ-19	Conductivity	7/14/2021 14:53	1486.75	uS/cm
GS-GSA-PZ-19	DO	7/14/2021 14:53	0.15	mg/L
GS-GSA-PZ-19	Depth to Water Detail	7/14/2021 14:53	124.68	ft
GS-GSA-PZ-19	Oxidation Reduction Potention	7/14/2021 14:53	2.16	mv
GS-GSA-PZ-19	pH	7/14/2021 14:53	6.53	SU
GS-GSA-PZ-19	Temperature	7/14/2021 14:53	18.88	C
GS-GSA-PZ-19	Turbidity	7/14/2021 14:53	2.71	NTU
GS-GSA-PZ-19	Conductivity	7/14/2021 14:58	1417.34	uS/cm
GS-GSA-PZ-19	DO	7/14/2021 14:58	0.15	mg/L
GS-GSA-PZ-19	Depth to Water Detail	7/14/2021 14:58	125.18	ft
GS-GSA-PZ-19	Oxidation Reduction Potention	7/14/2021 14:58	1.82	mv
GS-GSA-PZ-19	pH	7/14/2021 14:58	6.51	SU
GS-GSA-PZ-19	Temperature	7/14/2021 14:58	18.8	C
GS-GSA-PZ-19	Turbidity	7/14/2021 14:58	2.06	NTU
GS-GSA-PZ-19	Conductivity	7/14/2021 15:03	1362.19	uS/cm
GS-GSA-PZ-19	DO	7/14/2021 15:03	0.16	mg/L
GS-GSA-PZ-19	Depth to Water Detail	7/14/2021 15:03	125.46	ft
GS-GSA-PZ-19	Oxidation Reduction Potention	7/14/2021 15:03	0.84	mv
GS-GSA-PZ-19	pH	7/14/2021 15:03	6.52	SU
GS-GSA-PZ-19	Temperature	7/14/2021 15:03	18.9	C
GS-GSA-PZ-19	Turbidity	7/14/2021 15:03	2.77	NTU
GS-GSA-PZ-19	Conductivity	7/14/2021 15:08	1348.21	uS/cm
GS-GSA-PZ-19	DO	7/14/2021 15:08	0.16	mg/L
GS-GSA-PZ-19	Depth to Water Detail	7/14/2021 15:08	125.73	ft
GS-GSA-PZ-19	Oxidation Reduction Potention	7/14/2021 15:08	-1	mv
GS-GSA-PZ-19	pH	7/14/2021 15:08	6.54	SU
GS-GSA-PZ-19	Temperature	7/14/2021 15:08	19.02	C
GS-GSA-PZ-19	Turbidity	7/14/2021 15:08	2.68	NTU
GS-GSA-PZ-19	Conductivity	7/14/2021 15:13	1326.28	uS/cm
GS-GSA-PZ-19	DO	7/14/2021 15:13	0.16	mg/L
GS-GSA-PZ-19	Depth to Water Detail	7/14/2021 15:13	125.86	ft
GS-GSA-PZ-19	Oxidation Reduction Potention	7/14/2021 15:13	-2.63	mv
GS-GSA-PZ-19	pH	7/14/2021 15:13	6.55	SU
GS-GSA-PZ-19	Temperature	7/14/2021 15:13	19.11	C
GS-GSA-PZ-19	Turbidity	7/14/2021 15:13	2.6	NTU
GS-GSA-PZ-19	Conductivity	7/14/2021 15:18	1344.18	uS/cm

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WELL ID	DESCRIPTION	TIME OF READING	VALUE	UNIT
GS-GSA-PZ-19	DO	7/14/2021 15:18	0.16	mg/L
GS-GSA-PZ-19	Depth to Water Detail	7/14/2021 15:18	126.07	ft
GS-GSA-PZ-19	Oxidation Reduction Potention	7/14/2021 15:18	-3.48	mv
GS-GSA-PZ-19	pH	7/14/2021 15:18	6.56	SU
GS-GSA-PZ-19	Temperature	7/14/2021 15:18	18.87	C
GS-GSA-PZ-19	Turbidity	7/14/2021 15:18	2.61	NTU
GS-GSA-PZ-19	Conductivity	7/14/2021 15:23	1345.23	uS/cm
GS-GSA-PZ-19	DO	7/14/2021 15:23	0.16	mg/L
GS-GSA-PZ-19	Depth to Water Detail	7/14/2021 15:23	126.19	ft
GS-GSA-PZ-19	Oxidation Reduction Potention	7/14/2021 15:23	-3.98	mv
GS-GSA-PZ-19	pH	7/14/2021 15:23	6.56	SU
GS-GSA-PZ-19	Temperature	7/14/2021 15:23	19.07	C
GS-GSA-PZ-19	Turbidity	7/14/2021 15:23	2.54	NTU
GS-GSA-PZ-19	Conductivity	7/14/2021 15:28	1340.89	uS/cm
GS-GSA-PZ-19	DO	7/14/2021 15:28	0.16	mg/L
GS-GSA-PZ-19	Depth to Water Detail	7/14/2021 15:28	126.32	ft
GS-GSA-PZ-19	Oxidation Reduction Potention	7/14/2021 15:28	-4.53	mv
GS-GSA-PZ-19	pH	7/14/2021 15:28	6.57	SU
GS-GSA-PZ-19	Temperature	7/14/2021 15:28	19.09	C
GS-GSA-PZ-19	Turbidity	7/14/2021 15:28	2.81	NTU

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WELL ID	DESCRIPTION	TIME OF READING	VALUE	UNIT
GS-GSA-PZ-20	Conductivity	7/14/2021 13:17	2317.02	uS/cm
GS-GSA-PZ-20	DO	7/14/2021 13:17	0.25	mg/L
GS-GSA-PZ-20	Depth to Water Detail	7/14/2021 13:17	116.75	ft
GS-GSA-PZ-20	Oxidation Reduction Potention	7/14/2021 13:17	345.97	mv
GS-GSA-PZ-20	pH	7/14/2021 13:17	3.56	SU
GS-GSA-PZ-20	Temperature	7/14/2021 13:17	19.17	C
GS-GSA-PZ-20	Turbidity	7/14/2021 13:17	20.6	NTU
GS-GSA-PZ-20	Conductivity	7/14/2021 13:22	2144.17	uS/cm
GS-GSA-PZ-20	DO	7/14/2021 13:22	0.22	mg/L
GS-GSA-PZ-20	Depth to Water Detail	7/14/2021 13:22	116.75	ft
GS-GSA-PZ-20	Oxidation Reduction Potention	7/14/2021 13:22	237.96	mv
GS-GSA-PZ-20	pH	7/14/2021 13:22	4.55	SU
GS-GSA-PZ-20	Temperature	7/14/2021 13:22	19.39	C
GS-GSA-PZ-20	Turbidity	7/14/2021 13:22	11.6	NTU
GS-GSA-PZ-20	Conductivity	7/14/2021 13:27	2035.72	uS/cm
GS-GSA-PZ-20	DO	7/14/2021 13:27	0.2	mg/L
GS-GSA-PZ-20	Depth to Water Detail	7/14/2021 13:27	116.75	ft
GS-GSA-PZ-20	Oxidation Reduction Potention	7/14/2021 13:27	167.34	mv
GS-GSA-PZ-20	pH	7/14/2021 13:27	5.07	SU
GS-GSA-PZ-20	Temperature	7/14/2021 13:27	19.33	C
GS-GSA-PZ-20	Turbidity	7/14/2021 13:27	5.52	NTU
GS-GSA-PZ-20	Conductivity	7/14/2021 13:32	1943.91	uS/cm
GS-GSA-PZ-20	DO	7/14/2021 13:32	0.18	mg/L
GS-GSA-PZ-20	Depth to Water Detail	7/14/2021 13:32	116.75	ft
GS-GSA-PZ-20	Oxidation Reduction Potention	7/14/2021 13:32	132.67	mv
GS-GSA-PZ-20	pH	7/14/2021 13:32	5.31	SU
GS-GSA-PZ-20	Temperature	7/14/2021 13:32	19.35	C
GS-GSA-PZ-20	Turbidity	7/14/2021 13:32	2.73	NTU
GS-GSA-PZ-20	Conductivity	7/14/2021 13:37	1863.15	uS/cm
GS-GSA-PZ-20	DO	7/14/2021 13:37	0.18	mg/L
GS-GSA-PZ-20	Depth to Water Detail	7/14/2021 13:37	116.75	ft
GS-GSA-PZ-20	Oxidation Reduction Potention	7/14/2021 13:37	108.51	mv
GS-GSA-PZ-20	pH	7/14/2021 13:37	5.49	SU
GS-GSA-PZ-20	Temperature	7/14/2021 13:37	19.32	C
GS-GSA-PZ-20	Turbidity	7/14/2021 13:37	2.23	NTU
GS-GSA-PZ-20	Conductivity	7/14/2021 13:42	1795.69	uS/cm
GS-GSA-PZ-20	DO	7/14/2021 13:42	0.17	mg/L
GS-GSA-PZ-20	Depth to Water Detail	7/14/2021 13:42	116.75	ft
GS-GSA-PZ-20	Oxidation Reduction Potention	7/14/2021 13:42	91.64	mv
GS-GSA-PZ-20	pH	7/14/2021 13:42	5.62	SU
GS-GSA-PZ-20	Temperature	7/14/2021 13:42	19.31	C
GS-GSA-PZ-20	Turbidity	7/14/2021 13:42	1.85	NTU
GS-GSA-PZ-20	Conductivity	7/14/2021 13:47	1743.71	uS/cm

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WELL ID	DESCRIPTION	TIME OF READING	VALUE	UNIT
GS-GSA-PZ-20	DO	7/14/2021 13:47	0.17	mg/L
GS-GSA-PZ-20	Depth to Water Detail	7/14/2021 13:47	116.75	ft
GS-GSA-PZ-20	Oxidation Reduction Potention	7/14/2021 13:47	79.32	mv
GS-GSA-PZ-20	pH	7/14/2021 13:47	5.71	SU
GS-GSA-PZ-20	Temperature	7/14/2021 13:47	19.37	C
GS-GSA-PZ-20	Turbidity	7/14/2021 13:47	1.48	NTU
GS-GSA-PZ-20	Conductivity	7/14/2021 13:52	1696.21	uS/cm
GS-GSA-PZ-20	DO	7/14/2021 13:52	0.16	mg/L
GS-GSA-PZ-20	Depth to Water Detail	7/14/2021 13:52	116.75	ft
GS-GSA-PZ-20	Oxidation Reduction Potention	7/14/2021 13:52	70.13	mv
GS-GSA-PZ-20	pH	7/14/2021 13:52	5.78	SU
GS-GSA-PZ-20	Temperature	7/14/2021 13:52	19.43	C
GS-GSA-PZ-20	Turbidity	7/14/2021 13:52	2.1	NTU
GS-GSA-PZ-20	Conductivity	7/14/2021 13:57	1649.31	uS/cm
GS-GSA-PZ-20	DO	7/14/2021 13:57	0.16	mg/L
GS-GSA-PZ-20	Depth to Water Detail	7/14/2021 13:57	116.75	ft
GS-GSA-PZ-20	Oxidation Reduction Potention	7/14/2021 13:57	62.4	mv
GS-GSA-PZ-20	pH	7/14/2021 13:57	5.85	SU
GS-GSA-PZ-20	Temperature	7/14/2021 13:57	19.33	C
GS-GSA-PZ-20	Turbidity	7/14/2021 13:57	1.08	NTU
GS-GSA-PZ-20	Conductivity	7/14/2021 14:02	1616.94	uS/cm
GS-GSA-PZ-20	DO	7/14/2021 14:02	0.16	mg/L
GS-GSA-PZ-20	Depth to Water Detail	7/14/2021 14:02	116.75	ft
GS-GSA-PZ-20	Oxidation Reduction Potention	7/14/2021 14:02	56.8	mv
GS-GSA-PZ-20	pH	7/14/2021 14:02	5.9	SU
GS-GSA-PZ-20	Temperature	7/14/2021 14:02	19.36	C
GS-GSA-PZ-20	Turbidity	7/14/2021 14:02	1.16	NTU

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WELL ID	DESCRIPTION	TIME OF READING	VALUE	UNIT
GS-GSA-PZ-21	Conductivity	7/14/2021 11:00	775.12	uS/cm
GS-GSA-PZ-21	DO	7/14/2021 11:00	0.37	mg/L
GS-GSA-PZ-21	Depth to Water Detail	7/14/2021 11:00	85.68	ft
GS-GSA-PZ-21	Oxidation Reduction Potention	7/14/2021 11:00	-50.35	mv
GS-GSA-PZ-21	pH	7/14/2021 11:00	6.54	SU
GS-GSA-PZ-21	Temperature	7/14/2021 11:00	20.09	C
GS-GSA-PZ-21	Turbidity	7/14/2021 11:00	2.18	NTU
GS-GSA-PZ-21	Conductivity	7/14/2021 11:05	775.2	uS/cm
GS-GSA-PZ-21	DO	7/14/2021 11:05	0.3	mg/L
GS-GSA-PZ-21	Depth to Water Detail	7/14/2021 11:05	86.2	ft
GS-GSA-PZ-21	Oxidation Reduction Potention	7/14/2021 11:05	-52.95	mv
GS-GSA-PZ-21	pH	7/14/2021 11:05	6.57	SU
GS-GSA-PZ-21	Temperature	7/14/2021 11:05	19.85	C
GS-GSA-PZ-21	Turbidity	7/14/2021 11:05	2.06	NTU
GS-GSA-PZ-21	Conductivity	7/14/2021 11:10	761.34	uS/cm
GS-GSA-PZ-21	DO	7/14/2021 11:10	0.27	mg/L
GS-GSA-PZ-21	Depth to Water Detail	7/14/2021 11:10	86.82	ft
GS-GSA-PZ-21	Oxidation Reduction Potention	7/14/2021 11:10	-54.07	mv
GS-GSA-PZ-21	pH	7/14/2021 11:10	6.58	SU
GS-GSA-PZ-21	Temperature	7/14/2021 11:10	20.34	C
GS-GSA-PZ-21	Turbidity	7/14/2021 11:10	1.45	NTU
GS-GSA-PZ-21	Conductivity	7/14/2021 11:15	759.81	uS/cm
GS-GSA-PZ-21	DO	7/14/2021 11:15	0.26	mg/L
GS-GSA-PZ-21	Depth to Water Detail	7/14/2021 11:15	86.96	ft
GS-GSA-PZ-21	Oxidation Reduction Potention	7/14/2021 11:15	-58.01	mv
GS-GSA-PZ-21	pH	7/14/2021 11:15	6.61	SU
GS-GSA-PZ-21	Temperature	7/14/2021 11:15	20	C
GS-GSA-PZ-21	Turbidity	7/14/2021 11:15	1.03	NTU
GS-GSA-PZ-21	Conductivity	7/14/2021 11:20	761.69	uS/cm
GS-GSA-PZ-21	DO	7/14/2021 11:20	0.25	mg/L
GS-GSA-PZ-21	Depth to Water Detail	7/14/2021 11:20	87.19	ft
GS-GSA-PZ-21	Oxidation Reduction Potention	7/14/2021 11:20	-63.01	mv
GS-GSA-PZ-21	pH	7/14/2021 11:20	6.63	SU
GS-GSA-PZ-21	Temperature	7/14/2021 11:20	19.91	C
GS-GSA-PZ-21	Turbidity	7/14/2021 11:20	1.23	NTU
GS-GSA-PZ-21	Conductivity	7/14/2021 11:25	761.31	uS/cm
GS-GSA-PZ-21	DO	7/14/2021 11:25	0.26	mg/L
GS-GSA-PZ-21	Depth to Water Detail	7/14/2021 11:25	87.35	ft
GS-GSA-PZ-21	Oxidation Reduction Potention	7/14/2021 11:25	-64.49	mv
GS-GSA-PZ-21	pH	7/14/2021 11:25	6.65	SU
GS-GSA-PZ-21	Temperature	7/14/2021 11:25	19.87	C
GS-GSA-PZ-21	Turbidity	7/14/2021 11:25	0.98	NTU
GS-GSA-PZ-21	Conductivity	7/14/2021 11:30	761.91	uS/cm

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WELL ID	**DESCRIPTION**	**TIME OF READING**	**VALUE**	**UNIT**
GS-GSA-PZ-21	DO	7/14/2021 11:30	0.25	mg/L
GS-GSA-PZ-21	Depth to Water Detail	7/14/2021 11:30	87.46	ft
GS-GSA-PZ-21	Oxidation Reduction Potention	7/14/2021 11:30	-65.87	mv
GS-GSA-PZ-21	pH	7/14/2021 11:30	6.67	SU
GS-GSA-PZ-21	Temperature	7/14/2021 11:30	19.73	C
GS-GSA-PZ-21	Turbidity	7/14/2021 11:30	1.66	NTU

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WELL ID	DESCRIPTION	TIME OF READING	VALUE	UNIT
GS-GSA-PZ-22	Conductivity	7/14/2021 12:13	832.98	uS/cm
GS-GSA-PZ-22	DO	7/14/2021 12:13	0.39	mg/L
GS-GSA-PZ-22	Depth to Water Detail	7/14/2021 12:13	53.66	ft
GS-GSA-PZ-22	Oxidation Reduction Potention	7/14/2021 12:13	-63.74	mv
GS-GSA-PZ-22	pH	7/14/2021 12:13	6.2	SU
GS-GSA-PZ-22	Temperature	7/14/2021 12:13	20.15	C
GS-GSA-PZ-22	Turbidity	7/14/2021 12:13	1.41	NTU
GS-GSA-PZ-22	Conductivity	7/14/2021 12:18	769.82	uS/cm
GS-GSA-PZ-22	DO	7/14/2021 12:18	0.3	mg/L
GS-GSA-PZ-22	Depth to Water Detail	7/14/2021 12:18	53.66	ft
GS-GSA-PZ-22	Oxidation Reduction Potention	7/14/2021 12:18	-61.95	mv
GS-GSA-PZ-22	pH	7/14/2021 12:18	6.11	SU
GS-GSA-PZ-22	Temperature	7/14/2021 12:18	20	C
GS-GSA-PZ-22	Turbidity	7/14/2021 12:18	1.06	NTU
GS-GSA-PZ-22	Conductivity	7/14/2021 12:23	736.27	uS/cm
GS-GSA-PZ-22	DO	7/14/2021 12:23	0.25	mg/L
GS-GSA-PZ-22	Depth to Water Detail	7/14/2021 12:23	53.66	ft
GS-GSA-PZ-22	Oxidation Reduction Potention	7/14/2021 12:23	-61.99	mv
GS-GSA-PZ-22	pH	7/14/2021 12:23	6.09	SU
GS-GSA-PZ-22	Temperature	7/14/2021 12:23	19.91	C
GS-GSA-PZ-22	Turbidity	7/14/2021 12:23	1.24	NTU
GS-GSA-PZ-22	Conductivity	7/14/2021 12:28	733.87	uS/cm
GS-GSA-PZ-22	DO	7/14/2021 12:28	0.23	mg/L
GS-GSA-PZ-22	Depth to Water Detail	7/14/2021 12:28	53.66	ft
GS-GSA-PZ-22	Oxidation Reduction Potention	7/14/2021 12:28	-63.73	mv
GS-GSA-PZ-22	pH	7/14/2021 12:28	6.11	SU
GS-GSA-PZ-22	Temperature	7/14/2021 12:28	19.58	C
GS-GSA-PZ-22	Turbidity	7/14/2021 12:28	1.2	NTU
GS-GSA-PZ-22	Conductivity	7/14/2021 12:33	763.21	uS/cm
GS-GSA-PZ-22	DO	7/14/2021 12:33	0.23	mg/L
GS-GSA-PZ-22	Depth to Water Detail	7/14/2021 12:33	53.66	ft
GS-GSA-PZ-22	Oxidation Reduction Potention	7/14/2021 12:33	-63.69	mv
GS-GSA-PZ-22	pH	7/14/2021 12:33	6.1	SU
GS-GSA-PZ-22	Temperature	7/14/2021 12:33	19.93	C
GS-GSA-PZ-22	Turbidity	7/14/2021 12:33	1.96	NTU

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WELL ID	DESCRIPTION	TIME OF READING	VALUE	UNIT
GS-GSA-MW-9V	Conductivity	7/13/2021 11:12	3333.76	uS/cm
GS-GSA-MW-9V	DO	7/13/2021 11:12	0.14	mg/L
GS-GSA-MW-9V	Depth to Water Detail	7/13/2021 11:12	55.58	ft
GS-GSA-MW-9V	Oxidation Reduction Potention	7/13/2021 11:12	-141.59	mv
GS-GSA-MW-9V	pH	7/13/2021 11:12	6.95	SU
GS-GSA-MW-9V	Temperature	7/13/2021 11:12	20.42	C
GS-GSA-MW-9V	Turbidity	7/13/2021 11:12	0.65	NTU
GS-GSA-MW-9V	Conductivity	7/13/2021 11:17	3340.5	uS/cm
GS-GSA-MW-9V	DO	7/13/2021 11:17	0.14	mg/L
GS-GSA-MW-9V	Depth to Water Detail	7/13/2021 11:17	58.31	ft
GS-GSA-MW-9V	Oxidation Reduction Potention	7/13/2021 11:17	-145.04	mv
GS-GSA-MW-9V	pH	7/13/2021 11:17	6.95	SU
GS-GSA-MW-9V	Temperature	7/13/2021 11:17	20.45	C
GS-GSA-MW-9V	Turbidity	7/13/2021 11:17	2.26	NTU
GS-GSA-MW-9V	Conductivity	7/13/2021 11:22	3350.58	uS/cm
GS-GSA-MW-9V	DO	7/13/2021 11:22	0.14	mg/L
GS-GSA-MW-9V	Depth to Water Detail	7/13/2021 11:22	60.45	ft
GS-GSA-MW-9V	Oxidation Reduction Potention	7/13/2021 11:22	-146.81	mv
GS-GSA-MW-9V	pH	7/13/2021 11:22	6.95	SU
GS-GSA-MW-9V	Temperature	7/13/2021 11:22	20.42	C
GS-GSA-MW-9V	Turbidity	7/13/2021 11:22	0.81	NTU
GS-GSA-MW-9V	Conductivity	7/13/2021 11:27	3341.08	uS/cm
GS-GSA-MW-9V	DO	7/13/2021 11:27	0.14	mg/L
GS-GSA-MW-9V	Depth to Water Detail	7/13/2021 11:27	63.72	ft
GS-GSA-MW-9V	Oxidation Reduction Potention	7/13/2021 11:27	-148.45	mv
GS-GSA-MW-9V	pH	7/13/2021 11:27	6.95	SU
GS-GSA-MW-9V	Temperature	7/13/2021 11:27	20.49	C
GS-GSA-MW-9V	Turbidity	7/13/2021 11:27	0.6	NTU
GS-GSA-MW-9V	Conductivity	7/13/2021 11:32	3319.95	uS/cm
GS-GSA-MW-9V	DO	7/13/2021 11:32	1.56	mg/L
GS-GSA-MW-9V	Depth to Water Detail	7/13/2021 11:32	63.72	ft
GS-GSA-MW-9V	Oxidation Reduction Potention	7/13/2021 11:32	-144.29	mv
GS-GSA-MW-9V	pH	7/13/2021 11:32	6.98	SU
GS-GSA-MW-9V	Temperature	7/13/2021 11:32	22.62	C
GS-GSA-MW-9V	Turbidity	7/13/2021 11:32	0.89	NTU
GS-GSA-MW-9V	Conductivity	7/13/2021 11:37	3322.22	uS/cm
GS-GSA-MW-9V	DO	7/13/2021 11:37	2.06	mg/L
GS-GSA-MW-9V	Depth to Water Detail	7/13/2021 11:37	63.72	ft
GS-GSA-MW-9V	Oxidation Reduction Potention	7/13/2021 11:37	-139.45	mv
GS-GSA-MW-9V	pH	7/13/2021 11:37	6.97	SU
GS-GSA-MW-9V	Temperature	7/13/2021 11:37	23.3	C
GS-GSA-MW-9V	Turbidity	7/13/2021 11:37	0.67	NTU
GS-GSA-MW-9V	Conductivity	7/13/2021 11:42	3336.94	uS/cm

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WELL ID	DESCRIPTION	TIME OF READING	VALUE	UNIT
GS-GSA-MW-9V	DO	7/13/2021 11:42	2.18	mg/L
GS-GSA-MW-9V	Depth to Water Detail	7/13/2021 11:42	63.72	ft
GS-GSA-MW-9V	Oxidation Reduction Potention	7/13/2021 11:42	-127.49	mv
GS-GSA-MW-9V	pH	7/13/2021 11:42	6.94	SU
GS-GSA-MW-9V	Temperature	7/13/2021 11:42	23.5	C
GS-GSA-MW-9V	Turbidity	7/13/2021 11:42	0.57	NTU
GS-GSA-MW-9V	Conductivity	7/13/2021 11:47	3329.27	uS/cm
GS-GSA-MW-9V	DO	7/13/2021 11:47	2.21	mg/L
GS-GSA-MW-9V	Depth to Water Detail	7/13/2021 11:47	63.72	ft
GS-GSA-MW-9V	Oxidation Reduction Potention	7/13/2021 11:47	-115.64	mv
GS-GSA-MW-9V	pH	7/13/2021 11:47	6.92	SU
GS-GSA-MW-9V	Temperature	7/13/2021 11:47	23.27	C
GS-GSA-MW-9V	Turbidity	7/13/2021 11:47	0.44	NTU

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WELL ID	DESCRIPTION	TIME OF READING	VALUE	UNIT
GS-GSA-MW-9H	Conductivity	7/13/2021 13:09	2785.8	uS/cm
GS-GSA-MW-9H	DO	7/13/2021 13:09	0.66	mg/L
GS-GSA-MW-9H	Depth to Water Detail	7/13/2021 13:09	47.9	ft
GS-GSA-MW-9H	Oxidation Reduction Potention	7/13/2021 13:09	96.55	mv
GS-GSA-MW-9H	pH	7/13/2021 13:09	4.46	SU
GS-GSA-MW-9H	Temperature	7/13/2021 13:09	21.73	C
GS-GSA-MW-9H	Turbidity	7/13/2021 13:09	11.9	NTU
GS-GSA-MW-9H	Conductivity	7/13/2021 13:14	2808.44	uS/cm
GS-GSA-MW-9H	DO	7/13/2021 13:14	0.46	mg/L
GS-GSA-MW-9H	Depth to Water Detail	7/13/2021 13:14	48.11	ft
GS-GSA-MW-9H	Oxidation Reduction Potention	7/13/2021 13:14	89.95	mv
GS-GSA-MW-9H	pH	7/13/2021 13:14	4.66	SU
GS-GSA-MW-9H	Temperature	7/13/2021 13:14	21.62	C
GS-GSA-MW-9H	Turbidity	7/13/2021 13:14	6.99	NTU
GS-GSA-MW-9H	Conductivity	7/13/2021 13:19	2831.11	uS/cm
GS-GSA-MW-9H	DO	7/13/2021 13:19	0.33	mg/L
GS-GSA-MW-9H	Depth to Water Detail	7/13/2021 13:19	48.36	ft
GS-GSA-MW-9H	Oxidation Reduction Potention	7/13/2021 13:19	81.07	mv
GS-GSA-MW-9H	pH	7/13/2021 13:19	4.8	SU
GS-GSA-MW-9H	Temperature	7/13/2021 13:19	21.72	C
GS-GSA-MW-9H	Turbidity	7/13/2021 13:19	4.27	NTU
GS-GSA-MW-9H	Conductivity	7/13/2021 13:24	2846.25	uS/cm
GS-GSA-MW-9H	DO	7/13/2021 13:24	0.28	mg/L
GS-GSA-MW-9H	Depth to Water Detail	7/13/2021 13:24	48.69	ft
GS-GSA-MW-9H	Oxidation Reduction Potention	7/13/2021 13:24	72.5	mv
GS-GSA-MW-9H	pH	7/13/2021 13:24	4.94	SU
GS-GSA-MW-9H	Temperature	7/13/2021 13:24	21.78	C
GS-GSA-MW-9H	Turbidity	7/13/2021 13:24	3.13	NTU
GS-GSA-MW-9H	Conductivity	7/13/2021 13:29	2860.81	uS/cm
GS-GSA-MW-9H	DO	7/13/2021 13:29	0.26	mg/L
GS-GSA-MW-9H	Depth to Water Detail	7/13/2021 13:29	49.11	ft
GS-GSA-MW-9H	Oxidation Reduction Potention	7/13/2021 13:29	67.54	mv
GS-GSA-MW-9H	pH	7/13/2021 13:29	5.03	SU
GS-GSA-MW-9H	Temperature	7/13/2021 13:29	21.5	C
GS-GSA-MW-9H	Turbidity	7/13/2021 13:29	2.23	NTU
GS-GSA-MW-9H	Conductivity	7/13/2021 13:34	2858.25	uS/cm
GS-GSA-MW-9H	DO	7/13/2021 13:34	0.25	mg/L
GS-GSA-MW-9H	Depth to Water Detail	7/13/2021 13:34	49.29	ft
GS-GSA-MW-9H	Oxidation Reduction Potention	7/13/2021 13:34	64.32	mv
GS-GSA-MW-9H	pH	7/13/2021 13:34	5.09	SU
GS-GSA-MW-9H	Temperature	7/13/2021 13:34	21.53	C
GS-GSA-MW-9H	Turbidity	7/13/2021 13:34	1.88	NTU
GS-GSA-MW-9H	Conductivity	7/13/2021 13:39	2859.5	uS/cm

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WELL ID	DESCRIPTION	TIME OF READING	VALUE	UNIT
GS-GSA-MW-9H	DO	7/13/2021 13:39	0.23	mg/L
GS-GSA-MW-9H	Depth to Water Detail	7/13/2021 13:39	49.37	ft
GS-GSA-MW-9H	Oxidation Reduction Potention	7/13/2021 13:39	61.92	mv
GS-GSA-MW-9H	pH	7/13/2021 13:39	5.13	SU
GS-GSA-MW-9H	Temperature	7/13/2021 13:39	21.56	C
GS-GSA-MW-9H	Turbidity	7/13/2021 13:39	1.41	NTU
GS-GSA-MW-12H	Conductivity	7/14/2021 9:04	1543.3	uS/cm
GS-GSA-MW-12H	DO	7/14/2021 9:04	0.25	mg/L
GS-GSA-MW-12H	Depth to Water Detail	7/14/2021 9:04	60.02	ft
GS-GSA-MW-12H	Oxidation Reduction Potention	7/14/2021 9:04	209.56	mv
GS-GSA-MW-12H	pH	7/14/2021 9:04	4.1	SU
GS-GSA-MW-12H	Temperature	7/14/2021 9:04	19.84	C
GS-GSA-MW-12H	Turbidity	7/14/2021 9:04	56.5	NTU
GS-GSA-MW-12H	Conductivity	7/14/2021 9:09	1533.54	uS/cm
GS-GSA-MW-12H	DO	7/14/2021 9:09	0.27	mg/L
GS-GSA-MW-12H	Depth to Water Detail	7/14/2021 9:09	60.02	ft
GS-GSA-MW-12H	Oxidation Reduction Potention	7/14/2021 9:09	207.47	mv
GS-GSA-MW-12H	pH	7/14/2021 9:09	4.11	SU
GS-GSA-MW-12H	Temperature	7/14/2021 9:09	20	C
GS-GSA-MW-12H	Turbidity	7/14/2021 9:09	57.1	NTU
GS-GSA-MW-12H	Conductivity	7/14/2021 9:14	1528.42	uS/cm
GS-GSA-MW-12H	DO	7/14/2021 9:14	0.28	mg/L
GS-GSA-MW-12H	Depth to Water Detail	7/14/2021 9:14	60.02	ft
GS-GSA-MW-12H	Oxidation Reduction Potention	7/14/2021 9:14	208.7	mv
GS-GSA-MW-12H	pH	7/14/2021 9:14	4.1	SU
GS-GSA-MW-12H	Temperature	7/14/2021 9:14	20.09	C
GS-GSA-MW-12H	Turbidity	7/14/2021 9:14	60.6	NTU
GS-GSA-MW-12H	Conductivity	7/14/2021 9:19	1518.32	uS/cm
GS-GSA-MW-12H	DO	7/14/2021 9:19	0.26	mg/L
GS-GSA-MW-12H	Depth to Water Detail	7/14/2021 9:19	60.02	ft
GS-GSA-MW-12H	Oxidation Reduction Potention	7/14/2021 9:19	208.84	mv
GS-GSA-MW-12H	pH	7/14/2021 9:19	4.08	SU
GS-GSA-MW-12H	Temperature	7/14/2021 9:19	20.03	C
GS-GSA-MW-12H	Turbidity	7/14/2021 9:19	50.9	NTU
GS-GSA-MW-12H	Conductivity	7/14/2021 9:24	1509.06	uS/cm
GS-GSA-MW-12H	DO	7/14/2021 9:24	0.23	mg/L
GS-GSA-MW-12H	Depth to Water Detail	7/14/2021 9:24	60.02	ft
GS-GSA-MW-12H	Oxidation Reduction Potention	7/14/2021 9:24	208.99	mv
GS-GSA-MW-12H	pH	7/14/2021 9:24	4.06	SU
GS-GSA-MW-12H	Temperature	7/14/2021 9:24	20.06	C
GS-GSA-MW-12H	Turbidity	7/14/2021 9:24	34.8	NTU
GS-GSA-MW-12H	Conductivity	7/14/2021 9:29	1511.95	uS/cm
GS-GSA-MW-12H	DO	7/14/2021 9:29	0.24	mg/L

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WELL ID	DESCRIPTION	TIME OF READING	VALUE	UNIT
GS-GSA-MW-12H	Depth to Water Detail	7/14/2021 9:29	60.02	ft
GS-GSA-MW-12H	Oxidation Reduction Potention	7/14/2021 9:29	209.71	mv
GS-GSA-MW-12H	pH	7/14/2021 9:29	4.05	SU
GS-GSA-MW-12H	Temperature	7/14/2021 9:29	19.93	C
GS-GSA-MW-12H	Turbidity	7/14/2021 9:29	14.2	NTU
GS-GSA-MW-12H	Conductivity	7/14/2021 9:34	1510.8	uS/cm
GS-GSA-MW-12H	DO	7/14/2021 9:34	0.25	mg/L
GS-GSA-MW-12H	Depth to Water Detail	7/14/2021 9:34	60.02	ft
GS-GSA-MW-12H	Oxidation Reduction Potention	7/14/2021 9:34	211.43	mv
GS-GSA-MW-12H	pH	7/14/2021 9:34	4.04	SU
GS-GSA-MW-12H	Temperature	7/14/2021 9:34	19.9	C
GS-GSA-MW-12H	Turbidity	7/14/2021 9:34	9.65	NTU
GS-GSA-MW-11H	Conductivity	7/14/2021 11:28	1465.03	uS/cm
GS-GSA-MW-11H	DO	7/14/2021 11:28	0.18	mg/L
GS-GSA-MW-11H	Depth to Water Detail	7/14/2021 11:28	7.93	ft
GS-GSA-MW-11H	Oxidation Reduction Potention	7/14/2021 11:28	41.74	mv
GS-GSA-MW-11H	pH	7/14/2021 11:28	5.67	SU
GS-GSA-MW-11H	Temperature	7/14/2021 11:28	20.09	C
GS-GSA-MW-11H	Turbidity	7/14/2021 11:28	12.8	NTU
GS-GSA-MW-11H	Conductivity	7/14/2021 11:33	1459.41	uS/cm
GS-GSA-MW-11H	DO	7/14/2021 11:33	0.17	mg/L
GS-GSA-MW-11H	Depth to Water Detail	7/14/2021 11:33	8.14	ft
GS-GSA-MW-11H	Oxidation Reduction Potention	7/14/2021 11:33	47.09	mv
GS-GSA-MW-11H	pH	7/14/2021 11:33	5.65	SU
GS-GSA-MW-11H	Temperature	7/14/2021 11:33	19.98	C
GS-GSA-MW-11H	Turbidity	7/14/2021 11:33	10.02	NTU
GS-GSA-MW-11H	Conductivity	7/14/2021 11:38	1449.23	uS/cm
GS-GSA-MW-11H	DO	7/14/2021 11:38	0.23	mg/L
GS-GSA-MW-11H	Depth to Water Detail	7/14/2021 11:38	8.22	ft
GS-GSA-MW-11H	Oxidation Reduction Potention	7/14/2021 11:38	46.82	mv
GS-GSA-MW-11H	pH	7/14/2021 11:38	5.68	SU
GS-GSA-MW-11H	Temperature	7/14/2021 11:38	20.11	C
GS-GSA-MW-11H	Turbidity	7/14/2021 11:38	6.28	NTU
GS-GSA-MW-11H	Conductivity	7/14/2021 11:43	1436.6	uS/cm
GS-GSA-MW-11H	DO	7/14/2021 11:43	0.3	mg/L
GS-GSA-MW-11H	Depth to Water Detail	7/14/2021 11:43	8.3	ft
GS-GSA-MW-11H	Oxidation Reduction Potention	7/14/2021 11:43	44.8	mv
GS-GSA-MW-11H	pH	7/14/2021 11:43	5.72	SU
GS-GSA-MW-11H	Temperature	7/14/2021 11:43	20.12	C
GS-GSA-MW-11H	Turbidity	7/14/2021 11:43	5.58	NTU

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WELL ID	DESCRIPTION	TIME OF READING	VALUE	UNIT
GS-GSA-MW-13H	Conductivity	7/14/2021 12:39	1516.13	uS/cm
GS-GSA-MW-13H	DO	7/14/2021 12:39	0.15	mg/L
GS-GSA-MW-13H	Depth to Water Detail	7/14/2021 12:39	9.98	ft
GS-GSA-MW-13H	Oxidation Reduction Potention	7/14/2021 12:39	44.12	mv
GS-GSA-MW-13H	pH	7/14/2021 12:39	5.38	SU
GS-GSA-MW-13H	Temperature	7/14/2021 12:39	20.22	C
GS-GSA-MW-13H	Turbidity	7/14/2021 12:39	12.8	NTU
GS-GSA-MW-13H	Conductivity	7/14/2021 12:44	1516.11	uS/cm
GS-GSA-MW-13H	DO	7/14/2021 12:44	0.13	mg/L
GS-GSA-MW-13H	Depth to Water Detail	7/14/2021 12:44	9.98	ft
GS-GSA-MW-13H	Oxidation Reduction Potention	7/14/2021 12:44	34.84	mv
GS-GSA-MW-13H	pH	7/14/2021 12:44	5.45	SU
GS-GSA-MW-13H	Temperature	7/14/2021 12:44	20.24	C
GS-GSA-MW-13H	Turbidity	7/14/2021 12:44	9.77	NTU
GS-GSA-MW-13H	Conductivity	7/14/2021 12:49	1515.97	uS/cm
GS-GSA-MW-13H	DO	7/14/2021 12:49	0.13	mg/L
GS-GSA-MW-13H	Depth to Water Detail	7/14/2021 12:49	9.98	ft
GS-GSA-MW-13H	Oxidation Reduction Potention	7/14/2021 12:49	25.97	mv
GS-GSA-MW-13H	pH	7/14/2021 12:49	5.47	SU
GS-GSA-MW-13H	Temperature	7/14/2021 12:49	20.09	C
GS-GSA-MW-13H	Turbidity	7/14/2021 12:49	7.64	NTU
GS-GSA-MW-13H	Conductivity	7/14/2021 12:54	1516.23	uS/cm
GS-GSA-MW-13H	DO	7/14/2021 12:54	0.13	mg/L
GS-GSA-MW-13H	Depth to Water Detail	7/14/2021 12:54	9.98	ft
GS-GSA-MW-13H	Oxidation Reduction Potention	7/14/2021 12:54	17.21	mv
GS-GSA-MW-13H	pH	7/14/2021 12:54	5.55	SU
GS-GSA-MW-13H	Temperature	7/14/2021 12:54	20.12	C
GS-GSA-MW-13H	Turbidity	7/14/2021 12:54	7.86	NTU

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WELL ID	DESCRIPTION	TIME OF READING	VALUE	UNIT
GS-GSA-MW-3	Conductivity	7/14/2021 14:29	4697.48	uS/cm
GS-GSA-MW-3	DO	7/14/2021 14:29	0.43	mg/L
GS-GSA-MW-3	Depth to Water Detail	7/14/2021 14:29	103.81	ft
GS-GSA-MW-3	Oxidation Reduction Potention	7/14/2021 14:29	16.2	mv
GS-GSA-MW-3	pH	7/14/2021 14:29	5.83	SU
GS-GSA-MW-3	Temperature	7/14/2021 14:29	21.97	C
GS-GSA-MW-3	Turbidity	7/14/2021 14:29	22	NTU
GS-GSA-MW-3	Conductivity	7/14/2021 14:34	4679.46	uS/cm
GS-GSA-MW-3	DO	7/14/2021 14:34	0.35	mg/L
GS-GSA-MW-3	Depth to Water Detail	7/14/2021 14:34	103.81	ft
GS-GSA-MW-3	Oxidation Reduction Potention	7/14/2021 14:34	6.86	mv
GS-GSA-MW-3	pH	7/14/2021 14:34	5.83	SU
GS-GSA-MW-3	Temperature	7/14/2021 14:34	21.82	C
GS-GSA-MW-3	Turbidity	7/14/2021 14:34	16.9	NTU
GS-GSA-MW-3	Conductivity	7/14/2021 14:39	4663.82	uS/cm
GS-GSA-MW-3	DO	7/14/2021 14:39	0.37	mg/L
GS-GSA-MW-3	Depth to Water Detail	7/14/2021 14:39	103.81	ft
GS-GSA-MW-3	Oxidation Reduction Potention	7/14/2021 14:39	1.42	mv
GS-GSA-MW-3	pH	7/14/2021 14:39	5.84	SU
GS-GSA-MW-3	Temperature	7/14/2021 14:39	21.61	C
GS-GSA-MW-3	Turbidity	7/14/2021 14:39	14	NTU
GS-GSA-MW-3	Conductivity	7/14/2021 14:44	4661.76	uS/cm
GS-GSA-MW-3	DO	7/14/2021 14:44	0.39	mg/L
GS-GSA-MW-3	Depth to Water Detail	7/14/2021 14:44	103.81	ft
GS-GSA-MW-3	Oxidation Reduction Potention	7/14/2021 14:44	-2.16	mv
GS-GSA-MW-3	pH	7/14/2021 14:44	5.88	SU
GS-GSA-MW-3	Temperature	7/14/2021 14:44	21.49	C
GS-GSA-MW-3	Turbidity	7/14/2021 14:44	11.79	NTU
GS-GSA-MW-3	Conductivity	7/14/2021 14:49	4651.55	uS/cm
GS-GSA-MW-3	DO	7/14/2021 14:49	0.32	mg/L
GS-GSA-MW-3	Depth to Water Detail	7/14/2021 14:49	103.81	ft
GS-GSA-MW-3	Oxidation Reduction Potention	7/14/2021 14:49	-4.4	mv
GS-GSA-MW-3	pH	7/14/2021 14:49	5.9	SU
GS-GSA-MW-3	Temperature	7/14/2021 14:49	21.5	C
GS-GSA-MW-3	Turbidity	7/14/2021 14:49	10.55	NTU
GS-GSA-MW-3	Conductivity	7/14/2021 14:54	4654.35	uS/cm
GS-GSA-MW-3	DO	7/14/2021 14:54	0.33	mg/L
GS-GSA-MW-3	Depth to Water Detail	7/14/2021 14:54	103.81	ft
GS-GSA-MW-3	Oxidation Reduction Potention	7/14/2021 14:54	-6.18	mv
GS-GSA-MW-3	pH	7/14/2021 14:54	5.93	SU
GS-GSA-MW-3	Temperature	7/14/2021 14:54	21.53	C
GS-GSA-MW-3	Turbidity	7/14/2021 14:54	8.6	NTU

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WELL ID	DESCRIPTION	TIME OF READING	VALUE	UNIT
GS-GSA-MW-3V	Conductivity	7/15/2021 10:21	3790.2	uS/cm
GS-GSA-MW-3V	DO	7/15/2021 10:21	4	mg/L
GS-GSA-MW-3V	Depth to Water Detail	7/15/2021 10:21	124.6	ft
GS-GSA-MW-3V	Oxidation Reduction Potention	7/15/2021 10:21	-73.54	mv
GS-GSA-MW-3V	pH	7/15/2021 10:21	6.37	SU
GS-GSA-MW-3V	Temperature	7/15/2021 10:21	25.96	C
GS-GSA-MW-3V	Turbidity	7/15/2021 10:21	11.86	NTU
GS-GSA-MW-3V	Conductivity	7/15/2021 10:26	3878.17	uS/cm
GS-GSA-MW-3V	DO	7/15/2021 10:26	2.88	mg/L
GS-GSA-MW-3V	Depth to Water Detail	7/15/2021 10:26	124.8	ft
GS-GSA-MW-3V	Oxidation Reduction Potention	7/15/2021 10:26	-40.63	mv
GS-GSA-MW-3V	pH	7/15/2021 10:26	6.1	SU
GS-GSA-MW-3V	Temperature	7/15/2021 10:26	25.99	C
GS-GSA-MW-3V	Turbidity	7/15/2021 10:26	10.37	NTU
GS-GSA-MW-3V	Conductivity	7/15/2021 10:31	3833.41	uS/cm
GS-GSA-MW-3V	DO	7/15/2021 10:31	2.59	mg/L
GS-GSA-MW-3V	Depth to Water Detail	7/15/2021 10:31	124.86	ft
GS-GSA-MW-3V	Oxidation Reduction Potention	7/15/2021 10:31	-23.54	mv
GS-GSA-MW-3V	pH	7/15/2021 10:31	6.01	SU
GS-GSA-MW-3V	Temperature	7/15/2021 10:31	26.15	C
GS-GSA-MW-3V	Turbidity	7/15/2021 10:31	3.03	NTU
GS-GSA-MW-3V	Conductivity	7/15/2021 10:36	3799.57	uS/cm
GS-GSA-MW-3V	DO	7/15/2021 10:36	2.46	mg/L
GS-GSA-MW-3V	Depth to Water Detail	7/15/2021 10:36	124.91	ft
GS-GSA-MW-3V	Oxidation Reduction Potention	7/15/2021 10:36	-14.15	mv
GS-GSA-MW-3V	pH	7/15/2021 10:36	5.97	SU
GS-GSA-MW-3V	Temperature	7/15/2021 10:36	26.4	C
GS-GSA-MW-3V	Turbidity	7/15/2021 10:36	2.23	NTU
GS-GSA-MW-3V	Conductivity	7/15/2021 10:41	3756.8	uS/cm
GS-GSA-MW-3V	DO	7/15/2021 10:41	2.39	mg/L
GS-GSA-MW-3V	Depth to Water Detail	7/15/2021 10:41	125.03	ft
GS-GSA-MW-3V	Oxidation Reduction Potention	7/15/2021 10:41	-9.18	mv
GS-GSA-MW-3V	pH	7/15/2021 10:41	5.94	SU
GS-GSA-MW-3V	Temperature	7/15/2021 10:41	26.43	C
GS-GSA-MW-3V	Turbidity	7/15/2021 10:41	1.31	NTU
GS-GSA-MW-3V	Conductivity	7/15/2021 10:46	3715.75	uS/cm
GS-GSA-MW-3V	DO	7/15/2021 10:46	2.44	mg/L
GS-GSA-MW-3V	Depth to Water Detail	7/15/2021 10:46	125.11	ft
GS-GSA-MW-3V	Oxidation Reduction Potention	7/15/2021 10:46	-4.91	mv
GS-GSA-MW-3V	pH	7/15/2021 10:46	5.92	SU
GS-GSA-MW-3V	Temperature	7/15/2021 10:46	26.45	C
GS-GSA-MW-3V	Turbidity	7/15/2021 10:46	0.84	NTU

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Plant Gorgas Gypsum Pond

WELL ID	DESCRIPTION	TIME OF READING	VALUE	UNIT
GS-GSA-MW-8	Conductivity	7/14/2021 10:33	3376.03	uS/cm
GS-GSA-MW-8	DO	7/14/2021 10:33	0.52	mg/L
GS-GSA-MW-8	Depth to Water Detail	7/14/2021 10:33	77.29	ft
GS-GSA-MW-8	Oxidation Reduction Potention	7/14/2021 10:33	77.21	mv
GS-GSA-MW-8	pH	7/14/2021 10:33	6.84	SU
GS-GSA-MW-8	Temperature	7/14/2021 10:33	22.32	C
GS-GSA-MW-8	Turbidity	7/14/2021 10:33	2.86	NTU
GS-GSA-MW-8	Conductivity	7/14/2021 10:38	3269.77	uS/cm
GS-GSA-MW-8	DO	7/14/2021 10:38	0.33	mg/L
GS-GSA-MW-8	Depth to Water Detail	7/14/2021 10:38	77.29	ft
GS-GSA-MW-8	Oxidation Reduction Potention	7/14/2021 10:38	52.96	mv
GS-GSA-MW-8	pH	7/14/2021 10:38	6.88	SU
GS-GSA-MW-8	Temperature	7/14/2021 10:38	22.06	C
GS-GSA-MW-8	Turbidity	7/14/2021 10:38	2.81	NTU
GS-GSA-MW-8	Conductivity	7/14/2021 10:43	3320.13	uS/cm
GS-GSA-MW-8	DO	7/14/2021 10:43	0.27	mg/L
GS-GSA-MW-8	Depth to Water Detail	7/14/2021 10:43	77.29	ft
GS-GSA-MW-8	Oxidation Reduction Potention	7/14/2021 10:43	35.75	mv
GS-GSA-MW-8	pH	7/14/2021 10:43	6.88	SU
GS-GSA-MW-8	Temperature	7/14/2021 10:43	21.99	C
GS-GSA-MW-8	Turbidity	7/14/2021 10:43	3.57	NTU
GS-GSA-MW-8	Conductivity	7/14/2021 10:48	3379.55	uS/cm
GS-GSA-MW-8	DO	7/14/2021 10:48	0.25	mg/L
GS-GSA-MW-8	Depth to Water Detail	7/14/2021 10:48	77.33	ft
GS-GSA-MW-8	Oxidation Reduction Potention	7/14/2021 10:48	21.81	mv
GS-GSA-MW-8	pH	7/14/2021 10:48	6.88	SU
GS-GSA-MW-8	Temperature	7/14/2021 10:48	21.96	C
GS-GSA-MW-8	Turbidity	7/14/2021 10:48	3.46	NTU

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Plant Gorgas Gypsum Pond

WELL ID	DESCRIPTION	TIME OF READING	VALUE	UNIT
GS-GSA-MW-8V	Conductivity	7/14/2021 11:46	1624.07	uS/cm
GS-GSA-MW-8V	DO	7/14/2021 11:46	0.44	mg/L
GS-GSA-MW-8V	Depth to Water Detail	7/14/2021 11:46	90.2	ft
GS-GSA-MW-8V	Oxidation Reduction Potention	7/14/2021 11:46	-6.02	mv
GS-GSA-MW-8V	pH	7/14/2021 11:46	7.77	SU
GS-GSA-MW-8V	Temperature	7/14/2021 11:46	22.71	C
GS-GSA-MW-8V	Turbidity	7/14/2021 11:46	1.51	NTU
GS-GSA-MW-8V	Conductivity	7/14/2021 11:51	1619.46	uS/cm
GS-GSA-MW-8V	DO	7/14/2021 11:51	0.37	mg/L
GS-GSA-MW-8V	Depth to Water Detail	7/14/2021 11:51	90.5	ft
GS-GSA-MW-8V	Oxidation Reduction Potention	7/14/2021 11:51	-31.61	mv
GS-GSA-MW-8V	pH	7/14/2021 11:51	7.8	SU
GS-GSA-MW-8V	Temperature	7/14/2021 11:51	22.64	C
GS-GSA-MW-8V	Turbidity	7/14/2021 11:51	1.05	NTU
GS-GSA-MW-8V	Conductivity	7/14/2021 11:56	1623.67	uS/cm
GS-GSA-MW-8V	DO	7/14/2021 11:56	0.36	mg/L
GS-GSA-MW-8V	Depth to Water Detail	7/14/2021 11:56	91.7	ft
GS-GSA-MW-8V	Oxidation Reduction Potention	7/14/2021 11:56	-50.02	mv
GS-GSA-MW-8V	pH	7/14/2021 11:56	7.83	SU
GS-GSA-MW-8V	Temperature	7/14/2021 11:56	22.47	C
GS-GSA-MW-8V	Turbidity	7/14/2021 11:56	1.2	NTU
GS-GSA-MW-8V	Conductivity	7/14/2021 12:01	1616.63	uS/cm
GS-GSA-MW-8V	DO	7/14/2021 12:01	0.36	mg/L
GS-GSA-MW-8V	Depth to Water Detail	7/14/2021 12:01	92.4	ft
GS-GSA-MW-8V	Oxidation Reduction Potention	7/14/2021 12:01	-78.55	mv
GS-GSA-MW-8V	pH	7/14/2021 12:01	7.81	SU
GS-GSA-MW-8V	Temperature	7/14/2021 12:01	22.44	C
GS-GSA-MW-8V	Turbidity	7/14/2021 12:01	0.82	NTU
GS-GSA-MW-8V	Conductivity	7/14/2021 12:06	1614.08	uS/cm
GS-GSA-MW-8V	DO	7/14/2021 12:06	0.36	mg/L
GS-GSA-MW-8V	Depth to Water Detail	7/14/2021 12:06	92.7	ft
GS-GSA-MW-8V	Oxidation Reduction Potention	7/14/2021 12:06	-125.33	mv
GS-GSA-MW-8V	pH	7/14/2021 12:06	7.83	SU
GS-GSA-MW-8V	Temperature	7/14/2021 12:06	22.3	C
GS-GSA-MW-8V	Turbidity	7/14/2021 12:06	1.01	NTU
GS-GSA-MW-8V	Conductivity	7/14/2021 12:14	1624.31	uS/cm
GS-GSA-MW-8V	DO	7/14/2021 12:14	0.36	mg/L
GS-GSA-MW-8V	Depth to Water Detail	7/14/2021 12:14	94.2	ft
GS-GSA-MW-8V	Oxidation Reduction Potention	7/14/2021 12:14	-196.05	mv
GS-GSA-MW-8V	pH	7/14/2021 12:14	7.89	SU
GS-GSA-MW-8V	Temperature	7/14/2021 12:14	22.62	C
GS-GSA-MW-8V	Turbidity	7/14/2021 12:14	1.1	NTU
GS-GSA-MW-8V	Conductivity	7/14/2021 12:19	1634.24	uS/cm

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WELL ID	DESCRIPTION	TIME OF READING	VALUE	UNIT
GS-GSA-MW-8V	DO	7/14/2021 12:19	0.34	mg/L
GS-GSA-MW-8V	Depth to Water Detail	7/14/2021 12:19	94.73	ft
GS-GSA-MW-8V	Oxidation Reduction Potention	7/14/2021 12:19		mv
GS-GSA-MW-8V	pH	7/14/2021 12:19		SU
GS-GSA-MW-8V	Temperature	7/14/2021 12:19	22.67	C
GS-GSA-MW-8V	Turbidity	7/14/2021 12:19	1.27	NTU
GS-GSA-MW-8V	Conductivity	7/14/2021 12:24	1640.4	uS/cm
GS-GSA-MW-8V	DO	7/14/2021 12:24	0.34	mg/L
GS-GSA-MW-8V	Depth to Water Detail	7/14/2021 12:24	95.25	ft
GS-GSA-MW-8V	Oxidation Reduction Potention	7/14/2021 12:24	-243.95	mv
GS-GSA-MW-8V	pH	7/14/2021 12:24	7.95	SU
GS-GSA-MW-8V	Temperature	7/14/2021 12:24	22.24	C
GS-GSA-MW-8V	Turbidity	7/14/2021 12:24	1.07	NTU
GS-GSA-MW-8V	Conductivity	7/14/2021 12:29	1645.6	uS/cm
GS-GSA-MW-8V	DO	7/14/2021 12:29	0.34	mg/L
GS-GSA-MW-8V	Depth to Water Detail	7/14/2021 12:29	95.9	ft
GS-GSA-MW-8V	Oxidation Reduction Potention	7/14/2021 12:29	-250.49	mv
GS-GSA-MW-8V	pH	7/14/2021 12:29	7.96	SU
GS-GSA-MW-8V	Temperature	7/14/2021 12:29	22.16	C
GS-GSA-MW-8V	Turbidity	7/14/2021 12:29	1.39	NTU
GS-GSA-MW-8V	Conductivity	7/14/2021 12:34	1653.26	uS/cm
GS-GSA-MW-8V	DO	7/14/2021 12:34	0.33	mg/L
GS-GSA-MW-8V	Depth to Water Detail	7/14/2021 12:34	96.3	ft
GS-GSA-MW-8V	Oxidation Reduction Potention	7/14/2021 12:34	-254.27	mv
GS-GSA-MW-8V	pH	7/14/2021 12:34	7.95	SU
GS-GSA-MW-8V	Temperature	7/14/2021 12:34	22.69	C
GS-GSA-MW-8V	Turbidity	7/14/2021 12:34	1.09	NTU
GS-GSA-MW-8V	Conductivity	7/14/2021 12:39	1644.54	uS/cm
GS-GSA-MW-8V	DO	7/14/2021 12:39	0.33	mg/L
GS-GSA-MW-8V	Depth to Water Detail	7/14/2021 12:39	96.8	ft
GS-GSA-MW-8V	Oxidation Reduction Potention	7/14/2021 12:39	-256.48	mv
GS-GSA-MW-8V	pH	7/14/2021 12:39	7.96	SU
GS-GSA-MW-8V	Temperature	7/14/2021 12:39	22.68	C
GS-GSA-MW-8V	Turbidity	7/14/2021 12:39	1.19	NTU
GS-GSA-MW-8V	Conductivity	7/14/2021 12:44	1638.9	uS/cm
GS-GSA-MW-8V	DO	7/14/2021 12:44	0.33	mg/L
GS-GSA-MW-8V	Depth to Water Detail	7/14/2021 12:44	97.2	ft
GS-GSA-MW-8V	Oxidation Reduction Potention	7/14/2021 12:44	-258.41	mv
GS-GSA-MW-8V	pH	7/14/2021 12:44	7.98	SU
GS-GSA-MW-8V	Temperature	7/14/2021 12:44	22.61	C
GS-GSA-MW-8V	Turbidity	7/14/2021 12:44	1.05	NTU
GS-GSA-MW-8V	Conductivity	7/14/2021 12:49	1632.76	uS/cm
GS-GSA-MW-8V	DO	7/14/2021 12:49	0.35	mg/L

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WELL ID	DESCRIPTION	TIME OF READING	VALUE	UNIT
GS-GSA-MW-8V	Depth to Water Detail	7/14/2021 12:49	97.2	ft
GS-GSA-MW-8V	Oxidation Reduction Potention	7/14/2021 12:49	-261.43	mv
GS-GSA-MW-8V	pH	7/14/2021 12:49	7.93	SU
GS-GSA-MW-8V	Temperature	7/14/2021 12:49	24.6	C
GS-GSA-MW-8V	Turbidity	7/14/2021 12:49	1.89	NTU
GS-GSA-MW-8V	Conductivity	7/14/2021 12:54	1625.69	uS/cm
GS-GSA-MW-8V	DO	7/14/2021 12:54	0.38	mg/L
GS-GSA-MW-8V	Depth to Water Detail	7/14/2021 12:54	97.2	ft
GS-GSA-MW-8V	Oxidation Reduction Potention	7/14/2021 12:54	-263.31	mv
GS-GSA-MW-8V	pH	7/14/2021 12:54	7.93	SU
GS-GSA-MW-8V	Temperature	7/14/2021 12:54	25.29	C
GS-GSA-MW-8V	Turbidity	7/14/2021 12:54	1.52	NTU
GS-GSA-MW-8V	Conductivity	7/14/2021 12:59	1634.74	uS/cm
GS-GSA-MW-8V	DO	7/14/2021 12:59	0.43	mg/L
GS-GSA-MW-8V	Depth to Water Detail	7/14/2021 12:59	96.98	ft
GS-GSA-MW-8V	Oxidation Reduction Potention	7/14/2021 12:59	-263.39	mv
GS-GSA-MW-8V	pH	7/14/2021 12:59	7.94	SU
GS-GSA-MW-8V	Temperature	7/14/2021 12:59	25.9	C
GS-GSA-MW-8V	Turbidity	7/14/2021 12:59	0.99	NTU
GS-GSA-MW-8V	Conductivity	7/14/2021 13:04	1623.1	uS/cm
GS-GSA-MW-8V	DO	7/14/2021 13:04	0.49	mg/L
GS-GSA-MW-8V	Depth to Water Detail	7/14/2021 13:04	96.81	ft
GS-GSA-MW-8V	Oxidation Reduction Potention	7/14/2021 13:04	-265.72	mv
GS-GSA-MW-8V	pH	7/14/2021 13:04	7.97	SU
GS-GSA-MW-8V	Temperature	7/14/2021 13:04	25.62	C
GS-GSA-MW-8V	Turbidity	7/14/2021 13:04	0.92	NTU

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WELL ID	DESCRIPTION	TIME OF READING	VALUE	UNIT
GS-GSA-MW-12V	Conductivity	7/14/2021 10:21	4812.94	uS/cm
GS-GSA-MW-12V	DO	7/14/2021 10:21	0.24	mg/L
GS-GSA-MW-12V	Depth to Water Detail	7/14/2021 10:21	62.92	ft
GS-GSA-MW-12V	Oxidation Reduction Potention	7/14/2021 10:21	-66.06	mv
GS-GSA-MW-12V	pH	7/14/2021 10:21	6.53	SU
GS-GSA-MW-12V	Temperature	7/14/2021 10:21	20.21	C
GS-GSA-MW-12V	Turbidity	7/14/2021 10:21	1.3	NTU
GS-GSA-MW-12V	Conductivity	7/14/2021 10:26	4329.15	uS/cm
GS-GSA-MW-12V	DO	7/14/2021 10:26	0.19	mg/L
GS-GSA-MW-12V	Depth to Water Detail	7/14/2021 10:26	62.97	ft
GS-GSA-MW-12V	Oxidation Reduction Potention	7/14/2021 10:26	-54.7	mv
GS-GSA-MW-12V	pH	7/14/2021 10:26	6.34	SU
GS-GSA-MW-12V	Temperature	7/14/2021 10:26	20.21	C
GS-GSA-MW-12V	Turbidity	7/14/2021 10:26	0.36	NTU
GS-GSA-MW-12V	Conductivity	7/14/2021 10:31	4141.76	uS/cm
GS-GSA-MW-12V	DO	7/14/2021 10:31	0.18	mg/L
GS-GSA-MW-12V	Depth to Water Detail	7/14/2021 10:31	63.11	ft
GS-GSA-MW-12V	Oxidation Reduction Potention	7/14/2021 10:31	-48.63	mv
GS-GSA-MW-12V	pH	7/14/2021 10:31	6.26	SU
GS-GSA-MW-12V	Temperature	7/14/2021 10:31	20.16	C
GS-GSA-MW-12V	Turbidity	7/14/2021 10:31	0.27	NTU
GS-GSA-MW-12V	Conductivity	7/14/2021 10:36	4003.93	uS/cm
GS-GSA-MW-12V	DO	7/14/2021 10:36	0.18	mg/L
GS-GSA-MW-12V	Depth to Water Detail	7/14/2021 10:36	63.14	ft
GS-GSA-MW-12V	Oxidation Reduction Potention	7/14/2021 10:36	-45.91	mv
GS-GSA-MW-12V	pH	7/14/2021 10:36	6.21	SU
GS-GSA-MW-12V	Temperature	7/14/2021 10:36	20.04	C
GS-GSA-MW-12V	Turbidity	7/14/2021 10:36	0.07	NTU
GS-GSA-MW-12V	Conductivity	7/14/2021 10:41	3992.61	uS/cm
GS-GSA-MW-12V	DO	7/14/2021 10:41	0.18	mg/L
GS-GSA-MW-12V	Depth to Water Detail	7/14/2021 10:41	63.16	ft
GS-GSA-MW-12V	Oxidation Reduction Potention	7/14/2021 10:41	-46.62	mv
GS-GSA-MW-12V	pH	7/14/2021 10:41	6.21	SU
GS-GSA-MW-12V	Temperature	7/14/2021 10:41	20.08	C
GS-GSA-MW-12V	Turbidity	7/14/2021 10:41	0.11	NTU

Field Data

Parameter	Value	Units
Comment	Sampled @ 1045	
Test Type	Low-Flow Test	
Test Date / Time	2021-07-12 10:16:44	
Operator Name	TJ Daugherty	
Tubing Type	PE	
Project	Gorgas Pooled Upgradient	
Initial Depth to Water	90.71	ft
Flow Cell Volume	130	ml
Final Draw Down	2.6	ft
Estimated Total Volume Pumped	12500	ml
Tubing Inner Diameter	0.25	in
Tubing Length	108	ft
Pump Type	Geotech Bladder	
Pump Volume	105	ml
Flow Rate	500	ml/min
Final Flow Rate	500	ml/min
Pump Intake From TOC	103	ft
Location Name	Gorgas Pooled Upgradient MW-1	
Well Diameter	2	in
Casing Type	PVC	
Screen Length	10	ft
Total Depth	108.13	ft
Time Offset	-05:00:00	
Top of Screen	98.13	ft
Device Model	Aqua TROLL 600	
Device SN	678330	

Data Time	PH	Q	ORP	Q	Cond	Q	DO	Q	Temp	Q	Turb	Q	DTW
7/12/2021 10:21:00 AM	5.16		125.24		2085.65		1.59		19.88		0.4		93.03
7/12/2021 10:26:00 AM	5.14		131.56		2216.54		1.20		19.84		0.38		93.18
7/12/2021 10:31:00 AM	5.14		129.67		2255.92		0.89		19.86		0.1		93.31
7/12/2021 10:36:00 AM	5.13		129.53		2263.63		0.83		19.82		0.5		93.31
7/12/2021 10:41:00 AM	5.13		128.99		2271.93		0.79		19.83		0.22		93.31

Field Data

Parameter	Value	Units
Comment	Sampled @ 1148	
Test Type	Low-Flow Test	
Test Date / Time	2021-07-12 11:25:09	
Operator Name	TJ Daugherty	
Tubing Type	PE	
Project	Gorgas Pooled Upgradient	
Initial Depth to Water	84.37	ft
Flow Cell Volume	130	ml
Final Draw Down	0.05	ft
Estimated Total Volume Pumped	10000	ml
Tubing Inner Diameter	0.25	in
Tubing Length	95	ft
Pump Type	Geotech Bladder	
Pump Volume	105	ml
Flow Rate	500	ml/min
Final Flow Rate	500	ml/min
Pump Intake From TOC	89	ft
Location Name	Gorgas Pooled Upgradient MW-2	
Well Diameter	2	in
Casing Type	PVC	
Screen Length	10	ft
Total Depth	94.25	ft
Time Offset	-05:00:00	
Top of Screen	84.25	ft
Device Model	Aqua TROLL 600	
Device SN	678330	

Data Time	PH	Q	ORP	Q	Cond	Q	DO	Q	Temp	Q	Turb	Q	DTW
7/12/2021 11:30:00 AM	6.11		80.17		1694.47		0.29		19.43		12.2		84.42
7/12/2021 11:35:00 AM	6.15		75.96		1672.37		0.16		19.42		2.61		84.42
7/12/2021 11:40:00 AM	6.16		71.05		1678.19		0.13		19.36		2.48		84.42
7/12/2021 11:45:00 AM	6.16		67.46		1676.05		0.12		19.38		1.43		84.42

Field Data

Parameter	Value	Units
Comment	Sampled @ 1253	
Test Type	Low-Flow Test	
Test Date / Time	2021-07-12 12:24:51	
Operator Name	TJ Daugherty	
Tubing Type	PE	
Project	Gorgas Pooled Upgradient	
Initial Depth to Water	104.36	ft
Flow Cell Volume	130	ml
Final Draw Down	5.84	ft
Estimated Total Volume Pumped	2500	ml
Tubing Inner Diameter	0.25	in
Tubing Length	119	ft
Pump Type	Geotech Bladder	
Pump Volume	105	ml
Flow Rate	100	ml/min
Final Flow Rate	100	ml/min
Pump Intake From TOC	114	ft
Location Name	Gorgas Pooled Upgradient MW-3	
Well Diameter	2	in
Casing Type	PVC	
Screen Length	10	ft
Total Depth	118.92	ft
Time Offset	-05:00:00	
Top of Screen	108.92	ft
Device Model	Aqua TROLL 600	
Device SN	678330	

Data Time	PH	Q	ORP	Q	Cond	Q	DO	Q	Temp	Q	Turb	Q	DTW
7/12/2021 12:29:00 PM	6.44		83.07		4025.30		8.31		25.29		1.02		109.81
7/12/2021 12:34:00 PM	5.93		95.79		3615.17		7.19		25.38		1.53		109.91
7/12/2021 12:39:00 PM	5.86		99.55		3340.75		6.78		25.50		2.25		109.99
7/12/2021 12:44:00 PM	5.86		101.49		3302.36		6.84		25.57		1.49		110.11
7/12/2021 12:49:00 PM	5.86		103.13		3288.64		6.87		25.58		1.31		110.2

Field Data

Parameter	Value	Units
Comment	Sampled @ 1435	
Test Type	Low-Flow Test	
Test Date / Time	2021-07-12 14:06:13	
Operator Name	TJ Daugherty	
Tubing Type	PE	
Project	Gorgas Pooled Upgradient	
Initial Depth to Water	116.33	ft
Flow Cell Volume	130	ml
Final Draw Down	0.03	ft
Estimated Total Volume Pumped	10000	ml
Tubing Inner Diameter	0.25	in
Tubing Length	129	ft
Pump Type	Geotech Bladder	
Pump Volume	105	ml
Flow Rate	400	ml/min
Final Flow Rate	400	ml/min
Pump Intake From TOC	124	ft
Location Name	Gorgas Pooled Upgradient MW-4	
Well Diameter	2	in
Casing Type	PVC	
Screen Length	10	ft
Total Depth	128.75	ft
Time Offset	-05:00:00	
Top of Screen	118.75	ft
Device Model	Aqua TROLL 600	
Device SN	678330	

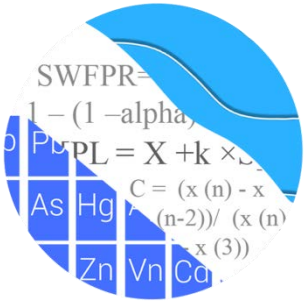
Data Time	PH	Q	ORP	Q	Cond	Q	DO	Q	Temp	Q	Turb	Q	DTW
7/12/2021 2:11:00 PM	5.97		122.05		3017.04		1.87		21.48		3.16		116.36
7/12/2021 2:16:00 PM	5.96		119.22		2996.30		1.97		20.91		2.43		116.36
7/12/2021 2:21:00 PM	5.99		118.37		2987.14		2.20		20.79		1.87		116.36
7/12/2021 2:26:00 PM	6.04		116.26		2984.85		2.28		21.19		0.85		116.36
7/12/2021 2:31:00 PM	6.06		114.08		2977.13		2.28		21.22		0.66		116.36

Appendix D

1st
Semi-Annual
Monitoring Event

GROUNDWATER STATS CONSULTING

May 26, 2021



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

Re: Plant Gorgas Gypsum Pond
1st Semi-Annual Analysis – February/March 2021

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 2021 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 from Electric Utilities (CCR Rule, 2015) as well as with the United States Environmental Protection Agency (USEPA) Unified Guidance (2009).

Sampling began at 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-9H, GS-GSA-MW-11H, GS-GSA-MW-8V, GS-GSA-MW-12H, GS-GSA-MW-13H, GS-GSA-MW-9V, GS-GSA-MW-12V, and GS-GSA-MW-14H
- **Piezometers:** GS-GSA-PZ-17, GS-GSA-PZ-18, GS-GSA-PZ-19, GS-GSA-PZ-20, GS-GSA-PZ-21, and GS-GSA-PZ-22

Note that delineation wells did not require statistics; therefore, they were plotted only on time series and box plots. Data were sent electronically to Groundwater Stats Consulting, and the statistical analysis was prepared according to the Statistical Analysis Plan approved by Dr. Kirk Cameron, PhD Statistician with MacStat Consulting, primary author of the USEPA Unified Guidance, and Senior Advisor to Groundwater Stats Consulting. The analysis was reviewed by Kristina Rayner, Founder and Groundwater Statistician for Groundwater Stats Consulting.

The CCR program consists of the following constituents:

> **Appendix III** (Detection Monitoring) - boron, calcium, chloride, fluoride, pH, sulfate, and TDS
> **Appendix IV** (Assessment Monitoring) - antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, combined radium 226 + 228, fluoride, lead, lithium, mercury, molybdenum, selenium, and thallium

Note that when there are no detections present in downgradient wells for a given constituent, statistical analyses are not required. A list of Appendix IV downgradient well/constituent pairs with 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): 8
- # Background Samples (Interwell): 91
- # 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.

- No statistical analyses are required on wells and analytes containing 100% non-detects (USEPA Unified Guidance, 2009, Chapter 6).
- When data contain <15% non-detects in background, simple substitution of one-half the reporting limit is utilized in the statistical analysis. The reporting limit utilized for non-detects is the most recent practical quantification limit (PQL) as reported by the laboratory.
- When data contain between 15-50% non-detects, the Kaplan-Meier non-detect adjustment is applied to the background data. This technique adjusts the mean and standard deviation of the historical concentrations to account for concentrations below the reporting limit.
- Nonparametric prediction limits are used on data containing greater than 50% non-detects.

Natural systems continuously evolve due to physical changes made to the environment. Examples include capping a landfill, paving areas near a well, or lining a drainage channel to prevent erosion. Periodic updating of background statistical limits is necessary to accommodate these types of changes. In the intrawell case, data for all wells and constituents may be re-evaluated when a minimum of 4 new 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. Even though the data are excluded from the calculation, the values will continue to be reported and shown in tables and graphs.

Background Update Summary – Conducted in September 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. This process is described below and requires a minimum of four new data points. Historical data were evaluated for updating with newer data through May 2019 through the use of time series graphs to identify potential outliers when necessary, as well as the Mann Whitney test for equality of medians. 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.

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 prediction limits.

Prior to performing prediction limits, proposed background data through May 2019 were reviewed to identify any newly suspected outliers at all wells for pH, sulfate, and TDS and at upgradient wells for boron, calcium, chloride, and fluoride. Both Tukey's test and visual screening are used to identify potential outliers. When identified as outliers, values were flagged with "o" and excluded to reduce variation, better represent background conditions, and provide limits that are conservative from a regulatory perspective. Potential outliers that are identified by Tukey's test but are not greatly different from the rest of the data are not flagged. Also, outliers that are not identified as significant by Tukey's test may be identified visually. 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 of Tukey's test results for Appendix III parameters was included with the September 2019 screening.

For constituents requiring intrawell prediction limits, the Mann-Whitney (Wilcoxon Rank Sum) test was used to compare the medians of historical data through May 2017 to compliance data through May 2019. When no statistically significant difference between the two groups' data is found at a 99% confidence level, background data may be updated with newer compliance data. Statistically significant differences were found between the two groups for sulfate in well GS-GSA-MW-8, and TDS in wells GS-GSA-MW-8 and MW-1.

Typically, when the test concludes that the medians of the two groups are significantly different, particularly in the downgradient wells, the background data are not updated to include the newer data but will be reconsidered in the future. A summary of these results was included with the Mann Whitney test section in the September 2019 screening and a list of well/constituent pairs using a truncated portion of their records follows this report under the Date Ranges table.

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 is deselected prior to construction of interwell statistical limits if the trending data would result in statistical limits that are not conservative from a regulatory perspective. Statistically significant trends were noted in upgradient wells and the results were included with the September 2019 screening. These trends required no adjustments at that time, however, because the period of record is short and/or the magnitudes of the trends were low relative to the average concentrations in background.

Evaluation of Appendix III Parameters – February/March 2021

Intrawell prediction limits were constructed for pH, sulfate, and TDS using screened background data through May 2019 at each well (Figure D). Values in background which have been flagged as outliers may be seen in a lighter font and as a disconnected symbol on the graphs. A summary of flagged outliers follows this report (Figure C).

Intrawell limits constructed from carefully screened background data from within each well serve to provide statistical limits that are representative of the background data population, and that will rapidly identify a change in more recent compliance data from within a given well. The most recent sample from the same well is compared to its respective background. This statistical method removes the element of variation from across wells and eliminates the chance of mistaking natural spatial variation for a release from the facility. Intrawell prediction limits combined with a 1-of-2 verification strategy were constructed for pH, sulfate, and TDS. Background data will be re-evaluated when a

minimum of 4 compliance samples are available. This was last performed in September 2019, and the report was submitted at that time.

Interwell prediction limits combined with a 1-of-2 verification strategy were constructed for boron, calcium, chloride, and fluoride (Figure E). Interwell prediction limits pool upgradient well data to establish a background limit for an individual constituent. The most recent sample from each downgradient well is compared to the background limit to determine whether there are statistically significant increases (SSIs). Note that during this analysis, the reporting limit for boron increased from <0.1 mg/L to <0.1015 mg/L, but this increase did not result in any change to statistical limits.

In the event of an initial exceedance of compliance well data, the 1-of-2 resample plan allows for collection of one additional sample to determine whether the initial exceedance is confirmed. When the resample confirms the initial exceedance, a statistically significant increase (SSI) is identified, and further research is required to identify the cause of the exceedance (i.e. impact from the site, natural variation, or an off-site source). If a resample falls within the statistical limit, the initial exceedance is considered to be a false positive result; therefore, no further action is necessary. A summary of the prediction limits results may be found in the Prediction Limit Summary tables following this letter. Exceedances for both interwell and intrawell prediction limits were identified for the following well/constituent pairs:

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

Intrawell:

- pH: MW-1 (upgradient)

When prediction limit exceedances are identified in downgradient wells, data are further evaluated using the Sen's Slope/Mann Kendall trend test to determine whether concentrations are statistically increasing, decreasing, or stable (Figure F). Upgradient wells are included in the trend analyses for all parameters found to exceed their prediction limit in downgradient wells to identify whether similar patterns exist upgradient of the site. The existence of similar trends in both upgradient and downgradient wells is an indication of natural variability in groundwater that is unrelated to practices at the site. A summary of the trend test results follows this letter. Statistically significant trends were identified for the following well/constituent pairs:

Increasing

- Boron: GS-GSA-MW-8
- Chloride: GS-GSA-MW-8

Decreasing

- Boron: GS-GSA-MW-4
- Chloride: GS-GSA-MW-4

Evaluation of Appendix IV Parameters – February/March 2021

Data from all wells for Appendix IV parameters were reassessed for outliers during previous analyses. A summary of flagged outliers follows this report (Figure C).

In accordance with Alabama Department of Environmental Management, the Groundwater Protections Standards (GWPS) utilized during the 2019 2nd semi-annual report were used in the confidence interval analysis for this 2021 1st semi-annual report. The GWPS will be updated during the 2021 2nd semi-annual statistical analysis. The methodology used to create these GWPS is described below.

First, background limits were determined using tolerance limits constructed from pooled upgradient well data. The tolerance limits contain a known fraction (coverage) of the background population with a known level of confidence. When data followed a normal or transformed-normal distribution, parametric tolerance limits were used to calculate background limits for Appendix IV parameters using pooled upgradient well data through October 2019 with a target of 95% confidence and 95% coverage (Figure G).

Nonparametric tolerance limits, which use the highest value in background as the statistical limit, were constructed when data did not follow a normal or transformed-normal distribution or when there were greater than 50% non-detects. The confidence and coverage levels for nonparametric tolerance limits are dependent upon the number of background samples. These background limits were then compared to the Maximum Contaminant Levels (MCLs) for each parameter, and the higher of the two was used as the GWPS (Figure H) in the confidence interval comparisons described below. 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. Note that none of the parametric tolerance limits resulted in higher limits than the established MCLs or CCR-Rule Specified Limits. In future UTL calculations, nonparametric tolerance limits will be used exclusively, as requested by ADEM, to eliminate variation among upgradient well data.

Confidence intervals were then constructed on downgradient wells using a maximum of the most recent 8 samples through the February/March 2021 sample event for each of the Appendix IV parameters. These intervals were constructed as either parametric or nonparametric confidence intervals depending on the data distribution and percentage of non-detects. As mentioned above, well/constituent pairs with 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 also follows this report. The decision logic, with respect to the use of a parametric or nonparametric confidence interval, is similar to that used to construct tolerance limits as discussed above. Each confidence interval was compared with the corresponding GWPS. Only when the entire confidence interval was above the GWPS is the well/constituent pair considered to exceed its respective standard.

Note the following reporting limits changed from the previous analysis to this analysis:

- Antimony: <0.003 mg/L to <0.001015 mg/L
- Beryllium: <0.003 mg/L to <0.001015 mg/L
- Cadmium: <0.001 mg/L to <0.000203 mg/L
- Chromium: <0.01 mg/L to <0.001015 mg/L
- Cobalt: <0.005 mg/L to <0.000203 mg/L
- Lead: <0.005 mg/L to <0.000203 mg/L
- Molybdenum: <0.01 mg/L to <0.000203 mg/L
- Selenium: <0.01 mg/L to <0.001015 mg/L
- Thallium: <0.001 mg/L to <0.000203 mg/L

While this resulted in slight changes to the upper and lower confidence limits in some cases, the confidence interval findings for the above mentioned constituents were consistent with those from the Fall 2020 analysis. Both a tabular summary and graphical presentation of the confidence interval results follow this letter (Figure I). No exceedances were identified.

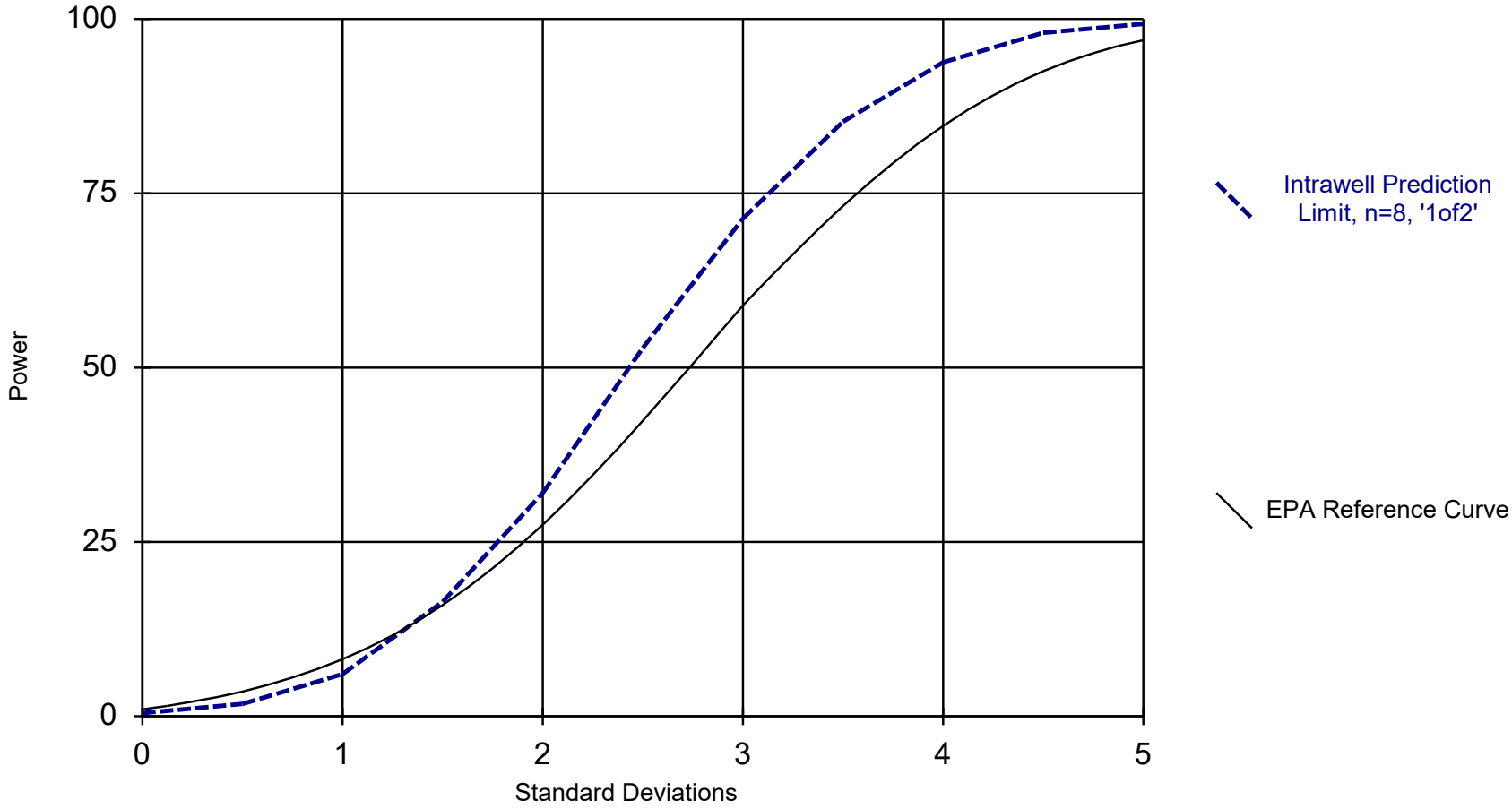
Thank you for the opportunity to assist you in the statistical analysis of groundwater quality for Gorgas Gypsum Pond. If you have any questions or comments, please feel free to contact us.

For Groundwater Stats Consulting,

Andrew Collins
Project Manager

Kristina Rayner
Groundwater Statistician

Intrawell Power Curve

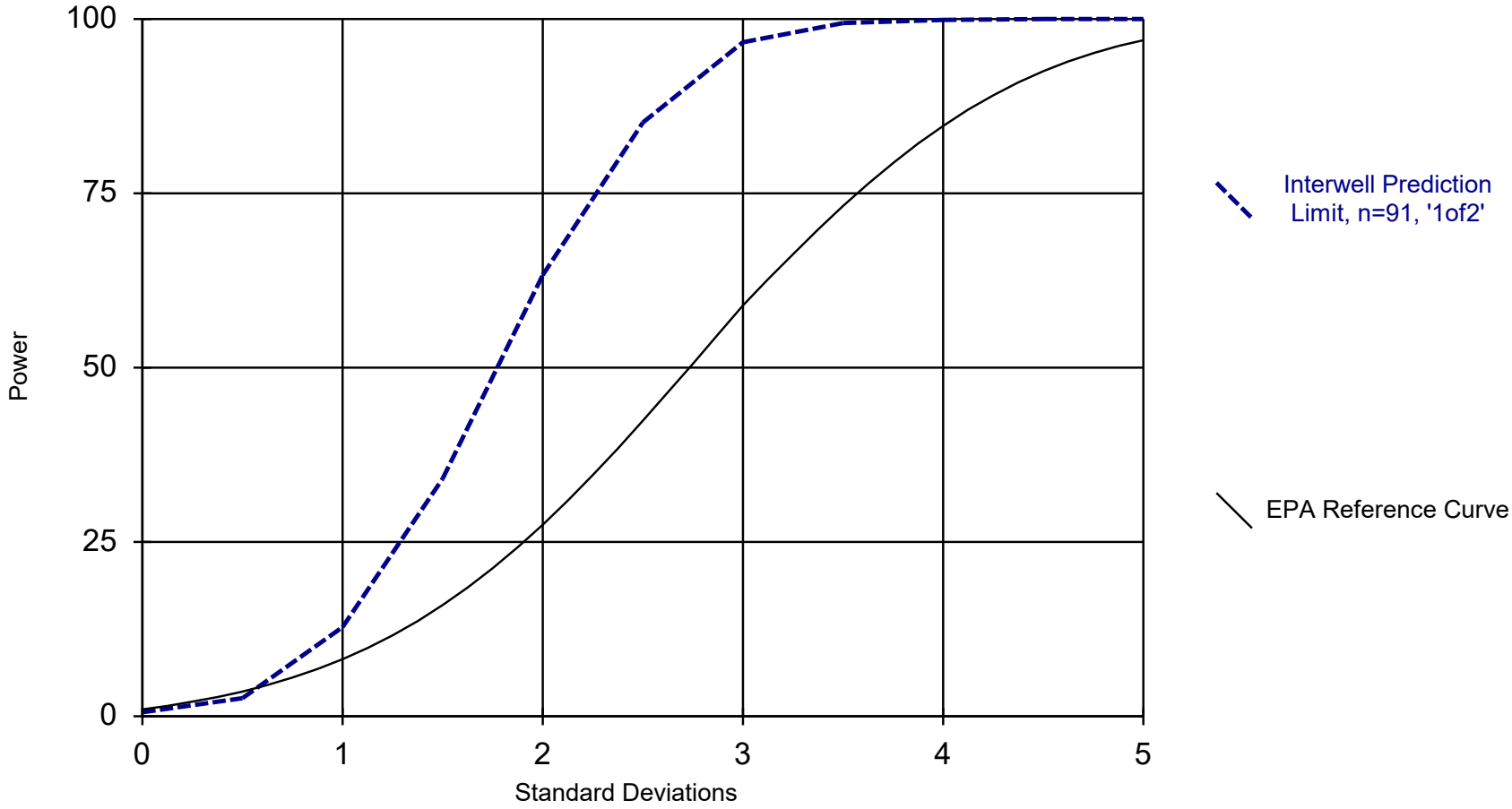


Kappa = 2.458, based on 3 compliance wells and 7 constituents, evaluated semi-annually (this report reflects annual total).

Analysis Run 5/21/2021 4:50 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Interwell Power Curve



Kappa = 1.681, based on 3 compliance wells and 7 constituents, evaluated semi-annually (this report reflects annual total).

Analysis Run 5/21/2021 4:49 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

100% Non-Detects: Appendix IV Downgradient

Analysis Run 5/20/2021 9:17 PM View: Appendix IV
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Beryllium (mg/L)
GS-GSA-MW-8

Cadmium (mg/L)
GS-GSA-MW-3, GS-GSA-MW-8

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

Date Ranges

Date: 5/20/2021 9:03 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Total dissolved solids (mg/L)

GS-GSA-MW-8 background:1/17/2017-4/10/2019

Appendix III Intrawell Prediction Limits - Significant Results

Plant Gorgas Client: Southern Company Data: Gorgas GSA Printed 5/20/2021, 9:06 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**	**5.24**	**5.09**	**2/22/2021**	**5.06**	**Yes**	**18**	**5.165**	**0.03869**	**0**	**None**	**No**	**0.001253**	**Param Intra 1 of 2**

Appendix III Intrawell Prediction Limits - All Results

Plant Gorgas Client: Southern Company Data: Gorgas GSA Printed 5/20/2021, 9:06 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	6.454	5.609	3/1/2021	5.82	No	13	6.032	0.2034	0	None	No	0.001253	Param Intra 1 of 2
pH (pH)	GS-GSA-MW-4	3.868	3.701	3/3/2021	3.76	No	13	3.785	0.04034	0	None	No	0.001253	Param Intra 1 of 2
pH (pH)	GS-GSA-MW-8	7.202	6.366	3/1/2021	6.48	No	13	6.784	0.2012	0	None	No	0.001253	Param Intra 1 of 2
pH (pH)	**MW-1**	**5.24**	**5.09**	**2/22/2021**	**5.06**	**Yes**	**18**	**5.165**	**0.03869**	**0**	**None**	**No**	**0.001253**	**Param Intra 1 of 2**
pH (pH)	MW-2	6.161	5.76	2/22/2021	6.1	No	18	5.961	0.1039	0	None	No	0.001253	Param Intra 1 of 2
pH (pH)	MW-3	6.175	4.135	2/22/2021	5.59	No	19	27.62	5.502	0	None	x^2	0.001253	Param Intra 1 of 2
pH (pH)	MW-4	6.246	6.063	2/22/2021	6.19	No	18	6.154	0.04755	0	None	No	0.001253	Param Intra 1 of 2
Sulfate (mg/L)	GS-GSA-MW-3	3089	n/a	3/1/2021	2320	No	12	1.9e17	4.2e16	0	None	x^5	0.002505	Param Intra 1 of 2
Sulfate (mg/L)	GS-GSA-MW-4	648.7	n/a	3/3/2021	609	No	12	564.5	39.86	0	None	No	0.002505	Param Intra 1 of 2
Sulfate (mg/L)	GS-GSA-MW-8	2123	n/a	3/1/2021	1450	No	12	1473	307.9	0	None	No	0.002505	Param Intra 1 of 2
Sulfate (mg/L)	MW-1	2100	n/a	2/22/2021	1400	No	18	n/a	n/a	0	n/a	n/a	0.005373	NP Intra (normality) 1 of 2
Sulfate (mg/L)	MW-2	1247	n/a	2/22/2021	864	No	18	1003	126.2	0	None	No	0.002505	Param Intra 1 of 2
Sulfate (mg/L)	MW-3	3164	n/a	2/22/2021	3040	No	18	2431	379.6	0	None	No	0.002505	Param Intra 1 of 2
Sulfate (mg/L)	MW-4	3023	n/a	2/22/2021	2040	No	17	2558	238.2	0	None	No	0.002505	Param Intra 1 of 2
Total dissolved solids (mg/L)	GS-GSA-MW-3	5416	n/a	3/1/2021	4390	No	12	1.4e22	5.4e21	0	None	x^6	0.002505	Param Intra 1 of 2
Total dissolved solids (mg/L)	GS-GSA-MW-4	1100	n/a	3/3/2021	1040	No	12	990.3	51.88	0	None	No	0.002505	Param Intra 1 of 2
Total dissolved solids (mg/L)	GS-GSA-MW-8	4264	n/a	3/1/2021	2870	No	8	3090	477.8	0	None	No	0.002505	Param Intra 1 of 2
Total dissolved solids (mg/L)	MW-1	2526	n/a	2/22/2021	2230	No	18	2183	178	0	None	No	0.002505	Param Intra 1 of 2
Total dissolved solids (mg/L)	MW-2	2032	n/a	2/22/2021	1620	No	18	1640	202.8	0	None	No	0.002505	Param Intra 1 of 2
Total dissolved solids (mg/L)	MW-3	4874	n/a	2/22/2021	4670	No	18	3661	628.6	0	None	No	0.002505	Param Intra 1 of 2
Total dissolved solids (mg/L)	MW-4	4639	n/a	2/22/2021	3190	No	17	3923	367.3	0	None	No	0.002505	Param Intra 1 of 2

Appendix III Interwell Prediction Limits - Significant Results

Plant Gorgas Client: Southern Company Data: Gorgas GSA Printed 5/20/2021, 9:07 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**	**0.0596**	**n/a**	**3/1/2021**	**2.55**	**Yes**	**91**	**n/a**	**n/a**	**17.58**	**n/a**	**n/a**	**0.0002337**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**GS-GSA-MW-4**	**0.0596**	**n/a**	**3/3/2021**	**2.42**	**Yes**	**91**	**n/a**	**n/a**	**17.58**	**n/a**	**n/a**	**0.0002337**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**GS-GSA-MW-8**	**0.0596**	**n/a**	**3/1/2021**	**1.85**	**Yes**	**91**	**n/a**	**n/a**	**17.58**	**n/a**	**n/a**	**0.0002337**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**GS-GSA-MW-3**	**431**	**n/a**	**3/1/2021**	**514**	**Yes**	**91**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0002337**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	**GS-GSA-MW-3**	**3.723**	**n/a**	**3/1/2021**	**250**	**Yes**	**91**	**1.479**	**0.2681**	**3.297**	**None**	**sqrt(x)**	**0.002505**	**Param Inter 1 of 2**
Chloride (mg/L)	**GS-GSA-MW-4**	**3.723**	**n/a**	**3/3/2021**	**40.3**	**Yes**	**91**	**1.479**	**0.2681**	**3.297**	**None**	**sqrt(x)**	**0.002505**	**Param Inter 1 of 2**
Chloride (mg/L)	**GS-GSA-MW-8**	**3.723**	**n/a**	**3/1/2021**	**92.5**	**Yes**	**91**	**1.479**	**0.2681**	**3.297**	**None**	**sqrt(x)**	**0.002505**	**Param Inter 1 of 2**

Appendix III Interwell Prediction Limits - All Results

Plant Gorgas Client: Southern Company Data: Gorgas GSA Printed 5/20/2021, 9:07 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**	**0.0596**	**n/a**	**3/1/2021**	**2.55**	**Yes**	**91**	**n/a**	**n/a**	**17.58**	**n/a**	**n/a**	**0.0002337**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**GS-GSA-MW-4**	**0.0596**	**n/a**	**3/3/2021**	**2.42**	**Yes**	**91**	**n/a**	**n/a**	**17.58**	**n/a**	**n/a**	**0.0002337**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**GS-GSA-MW-8**	**0.0596**	**n/a**	**3/1/2021**	**1.85**	**Yes**	**91**	**n/a**	**n/a**	**17.58**	**n/a**	**n/a**	**0.0002337**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**GS-GSA-MW-3**	**431**	**n/a**	**3/1/2021**	**514**	**Yes**	**91**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0002337**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	GS-GSA-MW-4	431	n/a	3/3/2021	100	No	91	n/a	n/a	0	n/a	n/a	0.0002337	NP Inter (normality) 1 of 2
Calcium (mg/L)	GS-GSA-MW-8	431	n/a	3/1/2021	386	No	91	n/a	n/a	0	n/a	n/a	0.0002337	NP Inter (normality) 1 of 2
Chloride (mg/L)	**GS-GSA-MW-3**	**3.723**	**n/a**	**3/1/2021**	**250**	**Yes**	**91**	**1.479**	**0.2681**	**3.297**	**None**	**sqrt(x)**	**0.002505**	**Param Inter 1 of 2**
Chloride (mg/L)	**GS-GSA-MW-4**	**3.723**	**n/a**	**3/3/2021**	**40.3**	**Yes**	**91**	**1.479**	**0.2681**	**3.297**	**None**	**sqrt(x)**	**0.002505**	**Param Inter 1 of 2**
Chloride (mg/L)	**GS-GSA-MW-8**	**3.723**	**n/a**	**3/1/2021**	**92.5**	**Yes**	**91**	**1.479**	**0.2681**	**3.297**	**None**	**sqrt(x)**	**0.002505**	**Param Inter 1 of 2**
Fluoride (mg/L)	GS-GSA-MW-3	0.4701	n/a	3/1/2021	0.449	No	95	0.4582	0.1357	1.053	None	sqrt(x)	0.002505	Param Inter 1 of 2
Fluoride (mg/L)	GS-GSA-MW-4	0.4701	n/a	3/3/2021	0.05ND	No	95	0.4582	0.1357	1.053	None	sqrt(x)	0.002505	Param Inter 1 of 2
Fluoride (mg/L)	GS-GSA-MW-8	0.4701	n/a	3/1/2021	0.106	No	95	0.4582	0.1357	1.053	None	sqrt(x)	0.002505	Param Inter 1 of 2

Appendix III Trend Tests - Prediction Limit Exceedances - Significant Results

Plant Gorgas Client: Southern Company Data: Gorgas GSA Printed 5/20/2021, 9:11 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	**GS-GSA-MW-4**	**-0.4966**	**-80**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**GS-GSA-MW-8**	**0.3589**	**90**	**58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**GS-GSA-MW-4**	**-16.96**	**-88**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**GS-GSA-MW-8**	**31.31**	**82**	**58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**

Appendix III Trend Tests - Prediction Limit Exceedances - All Results

Plant Gorgas Client: Southern Company Data: Gorgas GSA Printed 5/20/2021, 9:11 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	GS-GSA-MW-3	0.2687	22	58	No	16	0	n/a	n/a	0.01	NP
Boron (mg/L)	**GS-GSA-MW-4**	**-0.4966**	**-80**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**GS-GSA-MW-8**	**0.3589**	**90**	**58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	MW-1 (bg)	0.002566	76	98	No	23	26.09	n/a	n/a	0.01	NP
Boron (mg/L)	MW-2 (bg)	0.003547	91	98	No	23	17.39	n/a	n/a	0.01	NP
Boron (mg/L)	MW-3 (bg)	0.002599	67	98	No	23	21.74	n/a	n/a	0.01	NP
Boron (mg/L)	MW-4 (bg)	0.0005029	20	92	No	22	4.545	n/a	n/a	0.01	NP
Calcium (mg/L)	GS-GSA-MW-3	-3.236	-9	-58	No	16	0	n/a	n/a	0.01	NP
Calcium (mg/L)	MW-1 (bg)	4.795	91	98	No	23	0	n/a	n/a	0.01	NP
Calcium (mg/L)	MW-2 (bg)	5.045	51	98	No	23	0	n/a	n/a	0.01	NP
Calcium (mg/L)	MW-3 (bg)	22.35	87	98	No	23	0	n/a	n/a	0.01	NP
Calcium (mg/L)	MW-4 (bg)	-3.259	-19	-92	No	22	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GS-GSA-MW-3	-1.857	-3	-58	No	16	0	n/a	n/a	0.01	NP
Chloride (mg/L)	**GS-GSA-MW-4**	**-16.96**	**-88**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**GS-GSA-MW-8**	**31.31**	**82**	**58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	MW-1 (bg)	-0.01333	-14	-98	No	23	0	n/a	n/a	0.01	NP
Chloride (mg/L)	MW-2 (bg)	0	0	98	No	23	0	n/a	n/a	0.01	NP
Chloride (mg/L)	MW-3 (bg)	0.04373	43	98	No	23	8.696	n/a	n/a	0.01	NP
Chloride (mg/L)	MW-4 (bg)	-0.06045	-55	-92	No	22	4.545	n/a	n/a	0.01	NP

Upper Tolerance Limits - Appendix IV

Plant William C Gorgas Client: Southern Company Data: Gorgas GSA Printed 7/22/2020, 2:59 PM

Constituent	Upper Lim.	Lower Lim.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	0.003	n/a	79	n/a	n/a	92.41	n/a	n/a	0.01738	NP Inter(NDs)
Arsenic (mg/L)	0.005	n/a	79	n/a	n/a	91.14	n/a	n/a	0.01738	NP Inter(NDs)
Barium (mg/L)	0.01531	n/a	79	-4.516	0.1715	0	None	ln(x)	0.05	Inter
Beryllium (mg/L)	0.0121	n/a	77	n/a	n/a	81.82	n/a	n/a	0.01926	NP Inter(NDs)
Cadmium (mg/L)	0.00598	n/a	78	n/a	n/a	48.72	n/a	n/a	0.0183	NP Inter(normal...
Chromium (mg/L)	0.0105	n/a	79	n/a	n/a	94.94	n/a	n/a	0.01738	NP Inter(NDs)
Cobalt (mg/L)	1.07	n/a	79	n/a	n/a	24.05	n/a	n/a	0.01738	NP Inter(normal...
Combined Radium 226 + 228 (pCi/L)	1.151	n/a	65	0.4707	0.3403	0	None	No	0.05	Inter
Fluoride (mg/L)	0.5302	n/a	83	0.4625	0.1358	0	None	sqrt(x)	0.05	Inter
Lead (mg/L)	0.00692	n/a	79	n/a	n/a	96.2	n/a	n/a	0.01738	NP Inter(NDs)
Lithium (mg/L)	0.419	n/a	79	n/a	n/a	0	n/a	n/a	0.01738	NP Inter(normal...
Mercury (mg/L)	0.0005	n/a	79	n/a	n/a	100	n/a	n/a	0.01738	NP Inter(NDs)
Molybdenum (mg/L)	0.01	n/a	79	n/a	n/a	100	n/a	n/a	0.01738	NP Inter(NDs)
Selenium (mg/L)	0.0158	n/a	78	n/a	n/a	66.67	n/a	n/a	0.0183	NP Inter(NDs)
Thallium (mg/L)	0.001	n/a	79	n/a	n/a	96.2	n/a	n/a	0.01738	NP Inter(NDs)

GORGAS GYPSUM POND GWPS			
Analyte	**Units**	**Background**	**GWPS**
Antimony	mg/L	0.003	0.006
Arsenic	mg/L	0.005	0.01
Barium	mg/L	0.01531	2
Beryllium	mg/L	0.0121	0.004
Cadmium	mg/L	0.00598	0.005
Chromium	mg/L	0.0105	0.1
Cobalt	mg/L	1.07	1.07
Combined Radium-226/228	pCi/L	1.151	5
Fluoride	mg/L	0.5302	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	0.01	0.1
Selenium	mg/L	0.0158	0.05
Thallium	mg/L	0.001	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 2019.

Appendix IV Confidence Intervals - All Results (No Significant)

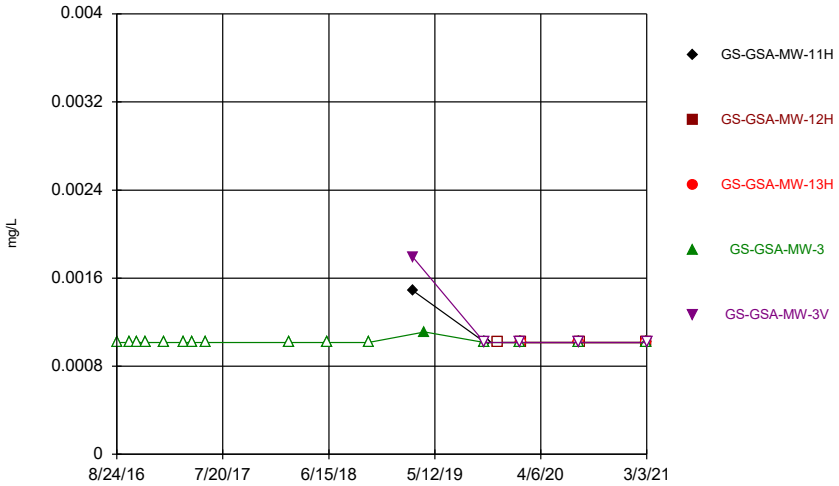
Plant Gorgas Client: Southern Company Data: Gorgas GSA Printed 5/21/2021, 2:28 PM

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	0.00111	0.001015	0.006	No	8	0.001027	0.00003359	87.5	None	No	0.004	NP (NDs)
Antimony (mg/L)	GS-GSA-MW-4	0.001015	0.000976	0.006	No	8	0.00101	0.00001379	87.5	None	No	0.004	NP (NDs)
Antimony (mg/L)	GS-GSA-MW-8	0.00102	0.001015	0.006	No	8	0.001016	0.000001768	87.5	None	No	0.004	NP (NDs)
Arsenic (mg/L)	GS-GSA-MW-3	0.005	0.00121	0.01	No	8	0.004076	0.001711	75	None	No	0.004	NP (NDs)
Arsenic (mg/L)	GS-GSA-MW-4	0.005	0.00115	0.01	No	8	0.002694	0.00192	37.5	None	No	0.004	NP (normality)
Arsenic (mg/L)	GS-GSA-MW-8	0.005	0.000633	0.01	No	8	0.004454	0.001544	87.5	None	No	0.004	NP (NDs)
Barium (mg/L)	GS-GSA-MW-3	0.01498	0.01212	2	No	8	0.01355	0.001353	0	None	No	0.01	Param.
Barium (mg/L)	GS-GSA-MW-4	0.0143	0.01197	2	No	8	0.01314	0.001099	0	None	No	0.01	Param.
Barium (mg/L)	GS-GSA-MW-8	0.02393	0.0199	2	No	8	0.02191	0.001899	0	None	No	0.01	Param.
Beryllium (mg/L)	GS-GSA-MW-3	0.003313	0.001355	0.004	No	8	0.002334	0.0009236	0	None	No	0.01	Param.
Beryllium (mg/L)	GS-GSA-MW-4	0.004923	0.003712	0.004	No	8	0.004318	0.0005714	0	None	No	0.01	Param.
Cadmium (mg/L)	GS-GSA-MW-4	0.001784	0.001446	0.005	No	8	0.001615	0.000159	0	None	No	0.01	Param.
Chromium (mg/L)	GS-GSA-MW-3	0.01	0.000386	0.1	No	8	0.008798	0.003399	87.5	None	No	0.004	NP (NDs)
Chromium (mg/L)	GS-GSA-MW-4	0.01	0.000567	0.1	No	8	0.008821	0.003335	87.5	None	No	0.004	NP (NDs)
Chromium (mg/L)	GS-GSA-MW-8	0.01	0.000423	0.1	No	8	0.008803	0.003386	87.5	None	No	0.004	NP (NDs)
Cobalt (mg/L)	GS-GSA-MW-3	0.1442	0.09145	1.07	No	8	0.1178	0.02487	0	None	No	0.01	Param.
Cobalt (mg/L)	GS-GSA-MW-4	0.2427	0.1713	1.07	No	8	0.207	0.03369	0	None	No	0.01	Param.
Cobalt (mg/L)	GS-GSA-MW-8	0.00546	0.00492	1.07	No	8	0.005047	0.000169	75	None	No	0.004	NP (NDs)
Combined Radium 226 + 228 (pCi/L)	GS-GSA-MW-3	0.701	0.283	5	No	8	0.492	0.1972	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-GSA-MW-4	0.8395	0.3075	5	No	8	0.5735	0.251	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-GSA-MW-8	0.9843	0.02874	5	No	8	0.5065	0.4507	0	None	No	0.01	Param.
Fluoride (mg/L)	GS-GSA-MW-3	0.7283	0.4222	4	No	8	0.5753	0.1444	0	None	No	0.01	Param.
Fluoride (mg/L)	GS-GSA-MW-4	0.63	0.1	4	No	8	0.245	0.2113	62.5	None	No	0.004	NP (NDs)
Fluoride (mg/L)	GS-GSA-MW-8	0.1579	0.1148	4	No	8	0.1364	0.02034	0	None	No	0.01	Param.
Lead (mg/L)	GS-GSA-MW-3	0.005	0.000157	0.015	No	8	0.004395	0.001712	87.5	None	No	0.004	NP (NDs)
Lead (mg/L)	GS-GSA-MW-4	0.005	0.000609	0.015	No	8	0.004451	0.001552	87.5	None	No	0.004	NP (NDs)
Lead (mg/L)	GS-GSA-MW-8	0.005	0.000145	0.015	No	8	0.004393	0.001717	87.5	None	No	0.004	NP (NDs)
Lithium (mg/L)	GS-GSA-MW-3	0.5029	0.3986	0.419	No	8	0.4508	0.04919	0	None	No	0.01	Param.
Lithium (mg/L)	GS-GSA-MW-4	0.296	0.2605	0.419	No	8	0.2783	0.01677	0	None	No	0.01	Param.
Lithium (mg/L)	GS-GSA-MW-8	0.2058	0.1602	0.419	No	8	0.183	0.02153	0	None	No	0.01	Param.
Molybdenum (mg/L)	GS-GSA-MW-3	0.01	0.00022	0.1	No	8	0.008777	0.003458	87.5	None	No	0.004	NP (NDs)
Molybdenum (mg/L)	GS-GSA-MW-8	0.01	0.00277	0.1	No	8	0.009096	0.002556	87.5	None	No	0.004	NP (NDs)
Selenium (mg/L)	GS-GSA-MW-3	0.01	0.00141	0.05	No	8	0.006097	0.004187	50	None	No	0.004	NP (normality)
Selenium (mg/L)	GS-GSA-MW-4	0.01	0.00294	0.05	No	8	0.006	0.003375	37.5	None	No	0.004	NP (normality)
Thallium (mg/L)	GS-GSA-MW-4	0.001	0.000178	0.002	No	8	0.0007979	0.0003743	75	None	No	0.004	NP (NDs)

FIGURE A.

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series



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Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
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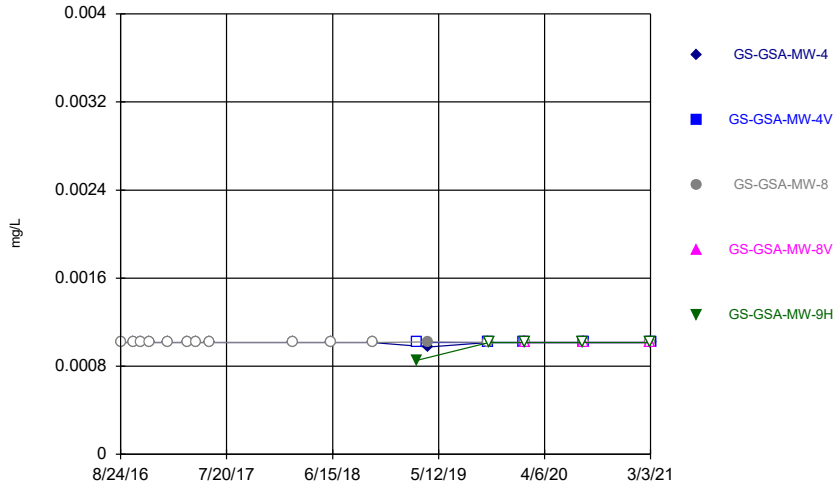

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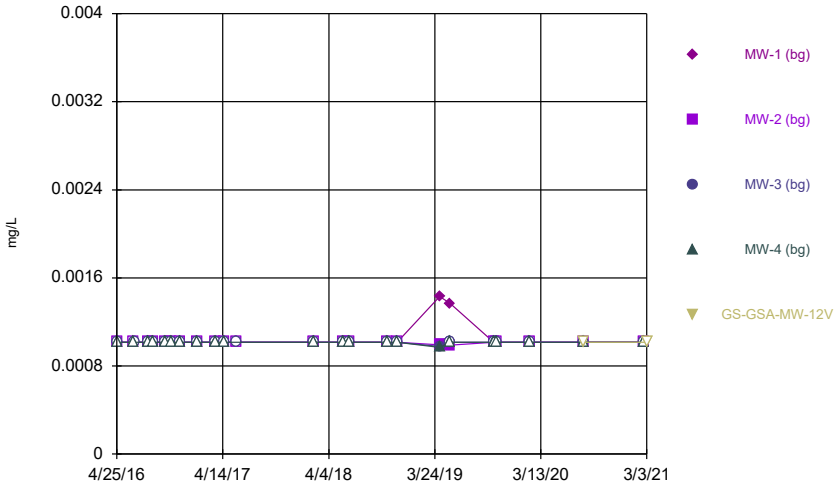

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Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

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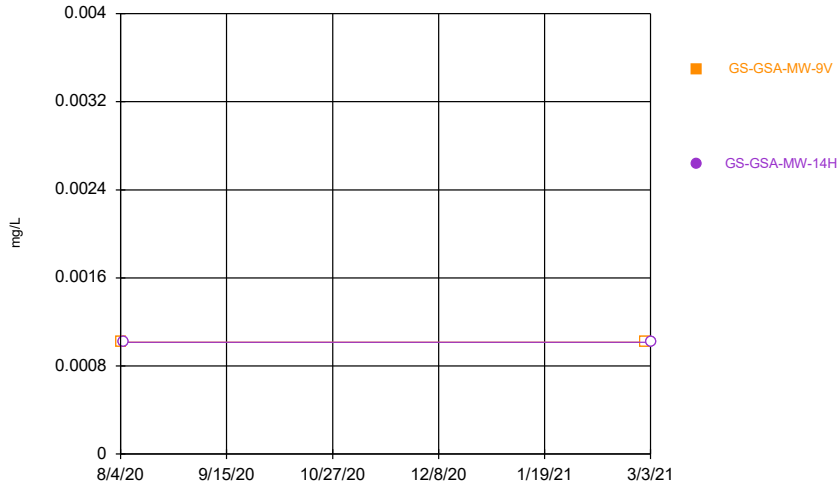

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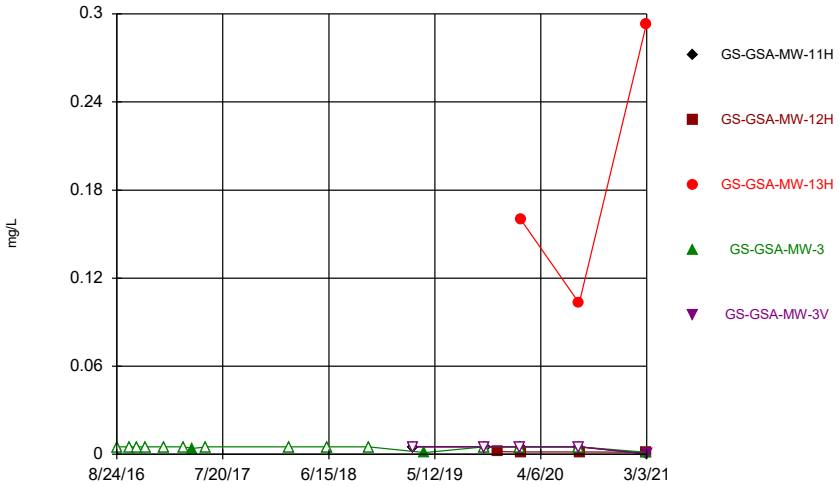
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

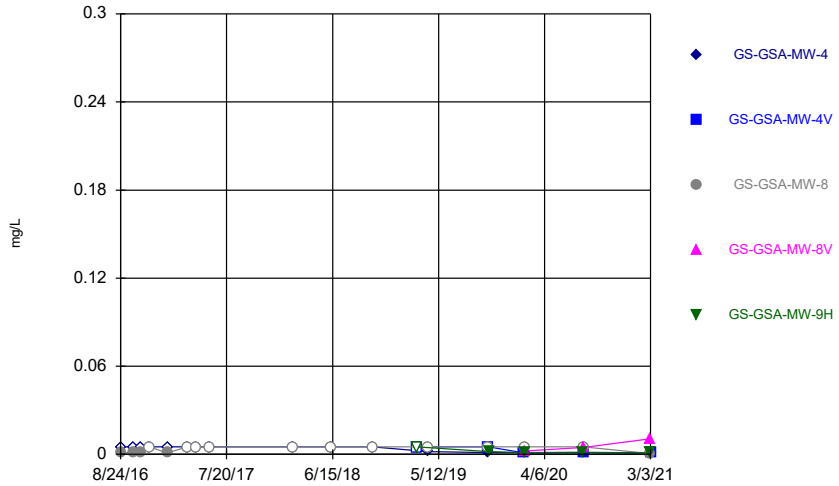
Time Series



Constituent: Arsenic Analysis Run 5/20/2021 5:03 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series



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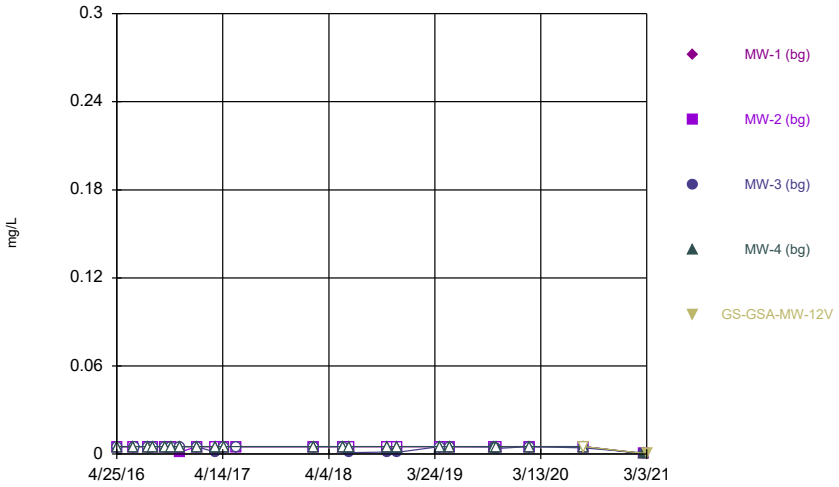
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

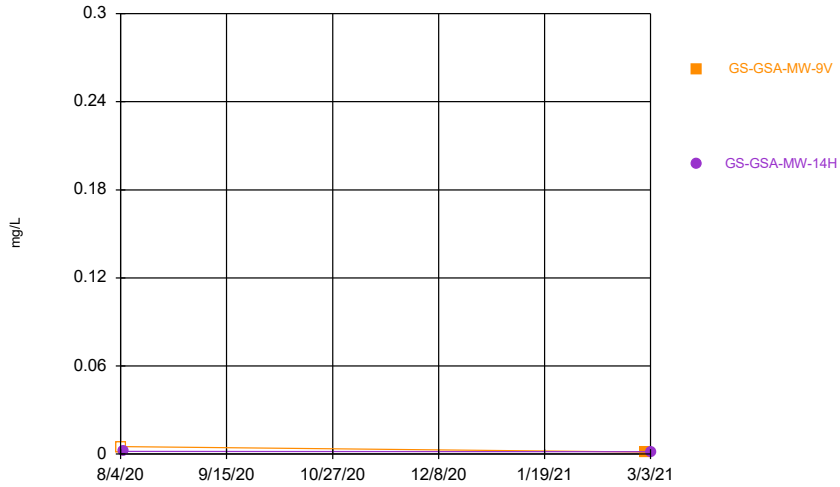
Time Series



Constituent: Arsenic Analysis Run 5/20/2021 5:03 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

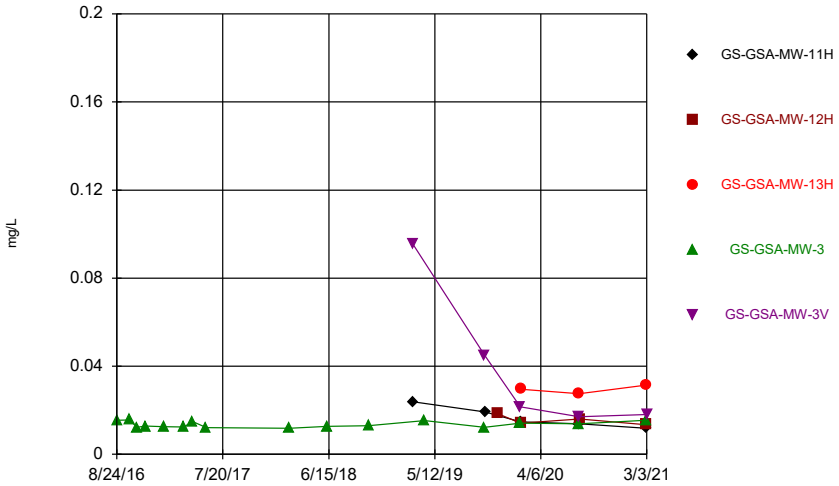
Time Series



Constituent: Arsenic Analysis Run 5/20/2021 5:03 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Time Series



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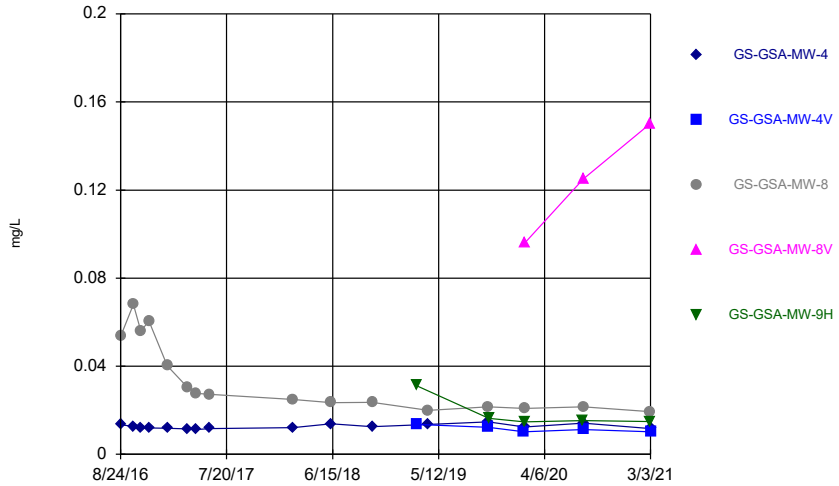
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Time Series

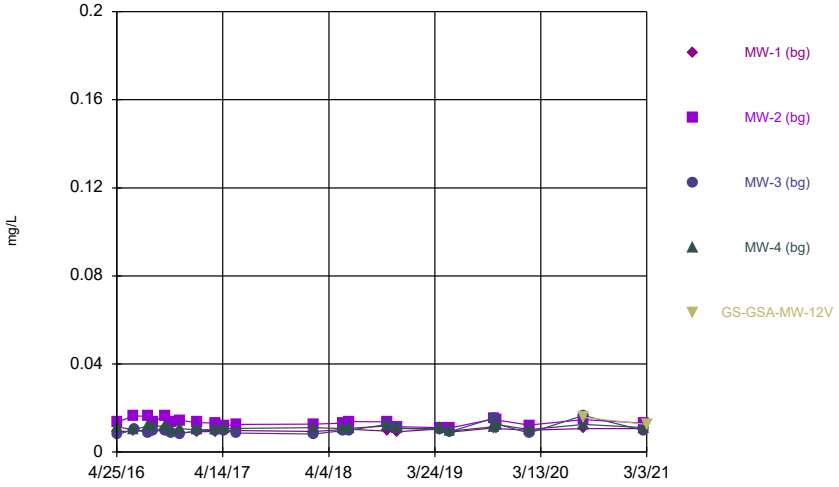


Constituent: Barium Analysis Run 5/20/2021 5:03 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Time Series



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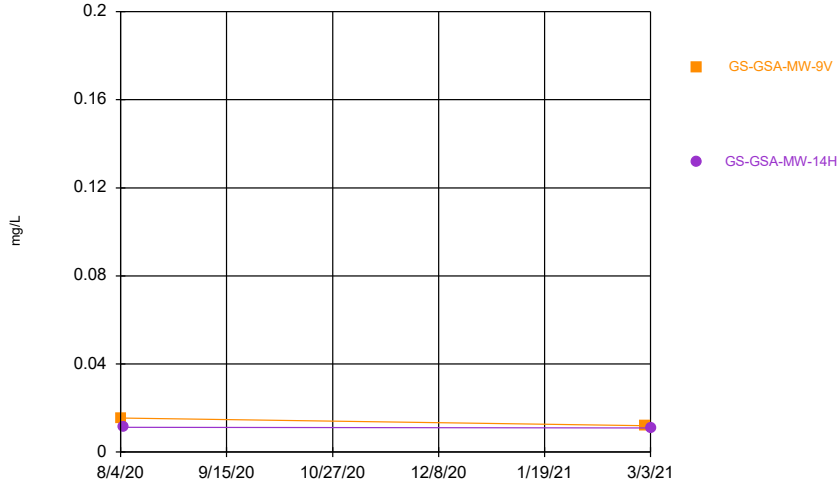
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Time Series

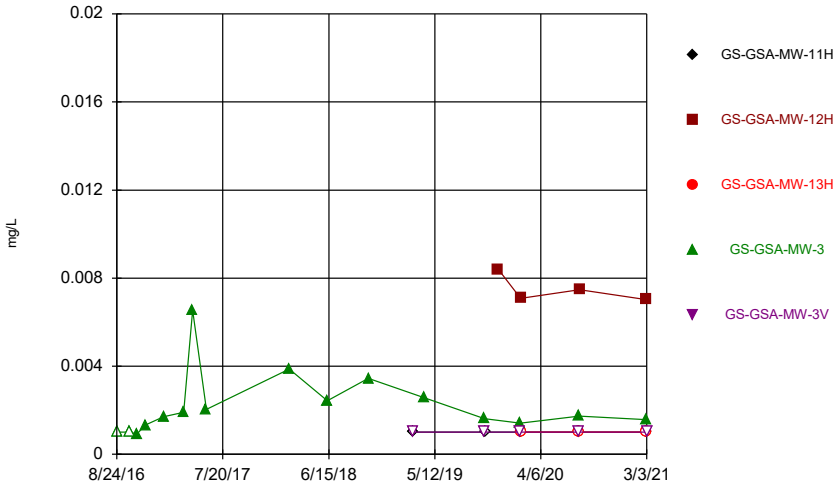


Constituent: Barium Analysis Run 5/20/2021 5:03 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

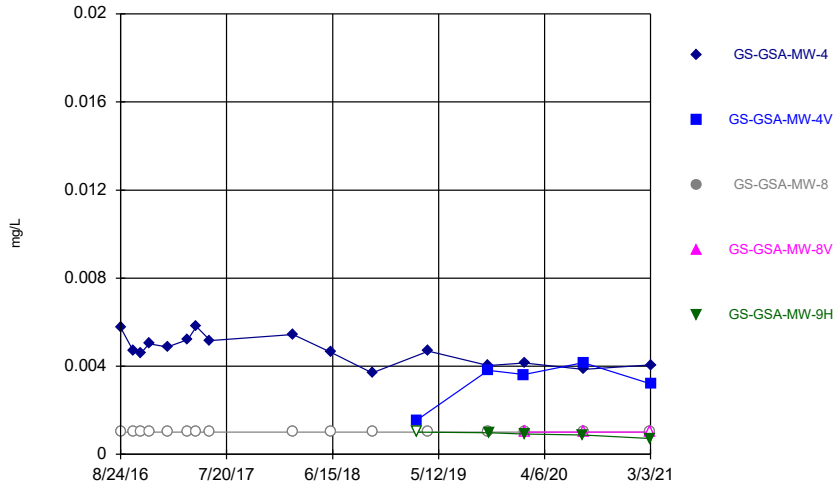
Time Series



Constituent: Beryllium Analysis Run 5/20/2021 5:03 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

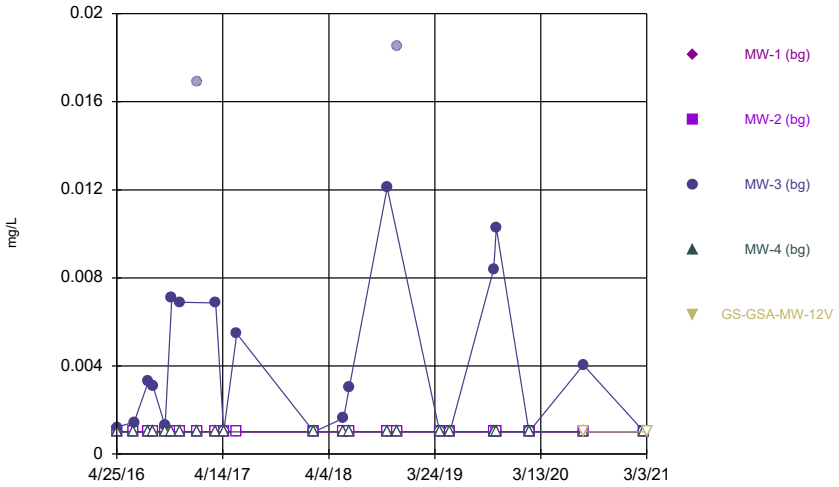
Time Series



Constituent: Beryllium Analysis Run 5/20/2021 5:03 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

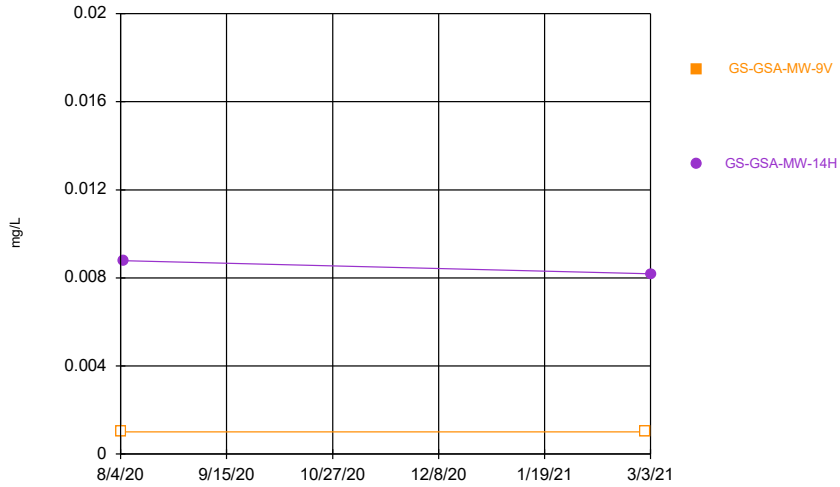
Time Series



Constituent: Beryllium Analysis Run 5/20/2021 5:03 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

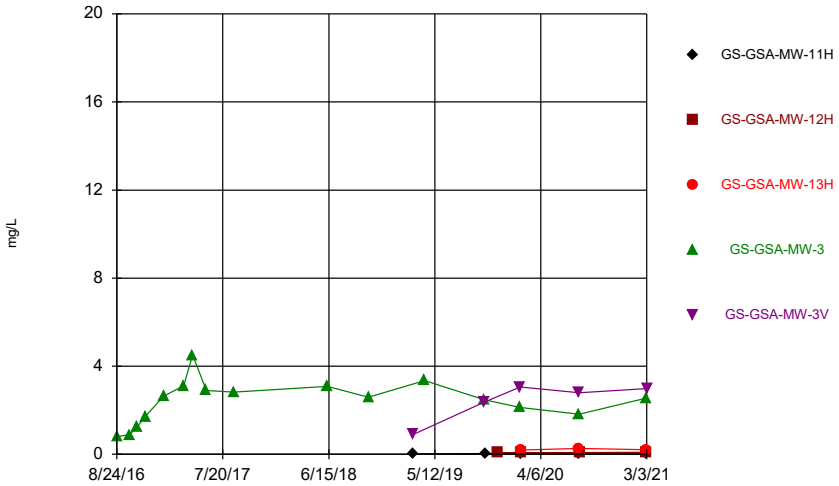
Time Series



Constituent: Beryllium Analysis Run 5/20/2021 5:03 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series



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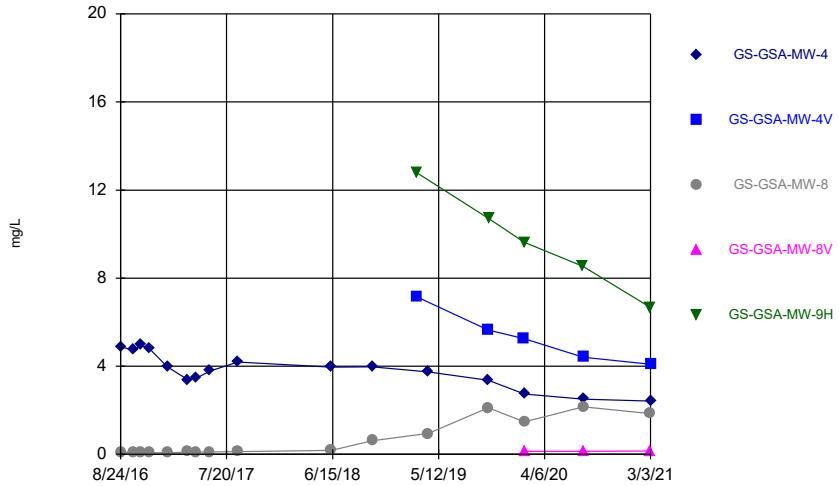
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Time Series



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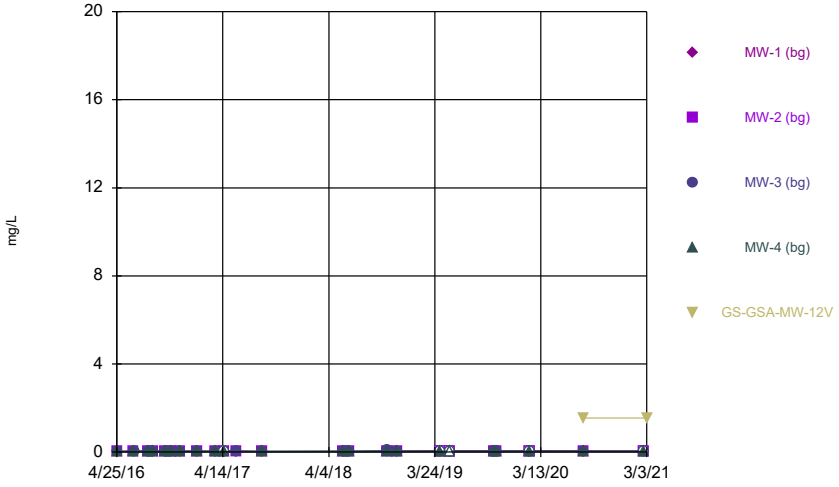
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series



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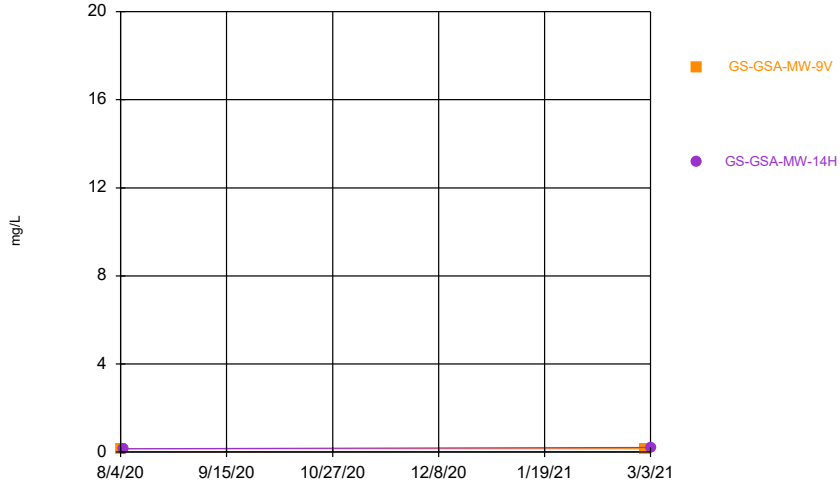
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

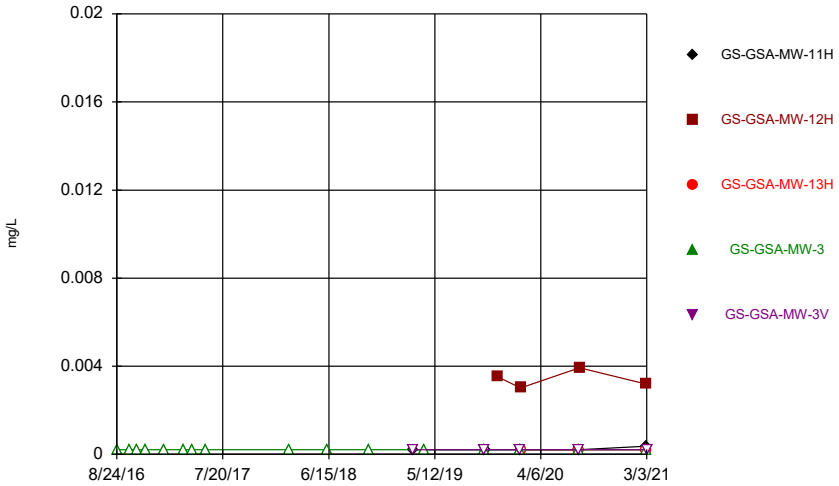
Time Series



Constituent: Boron Analysis Run 5/20/2021 5:03 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

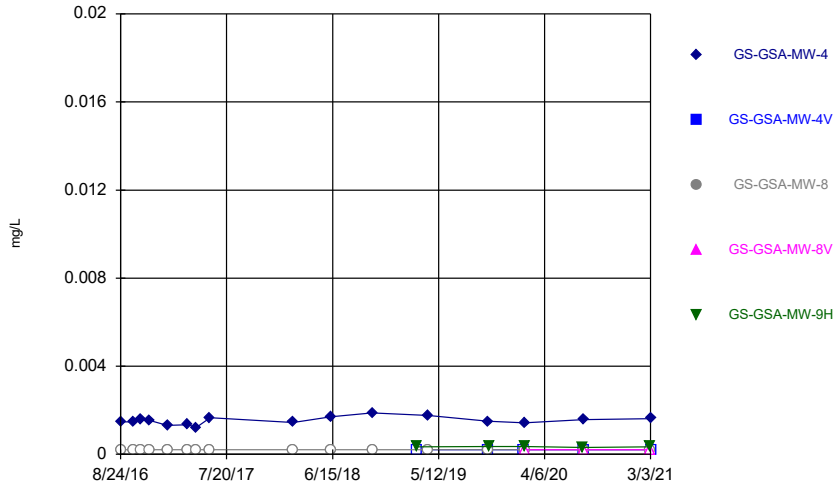
Time Series



Constituent: Cadmium Analysis Run 5/20/2021 5:03 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

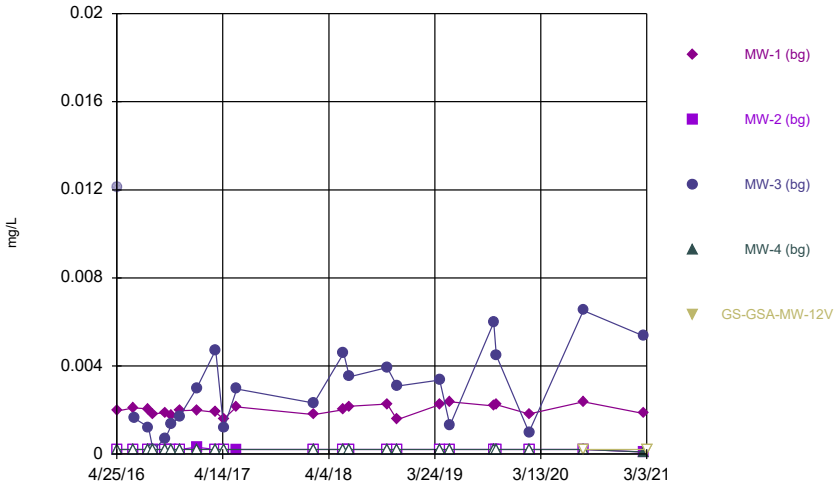
Time Series



Constituent: Cadmium Analysis Run 5/20/2021 5:03 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

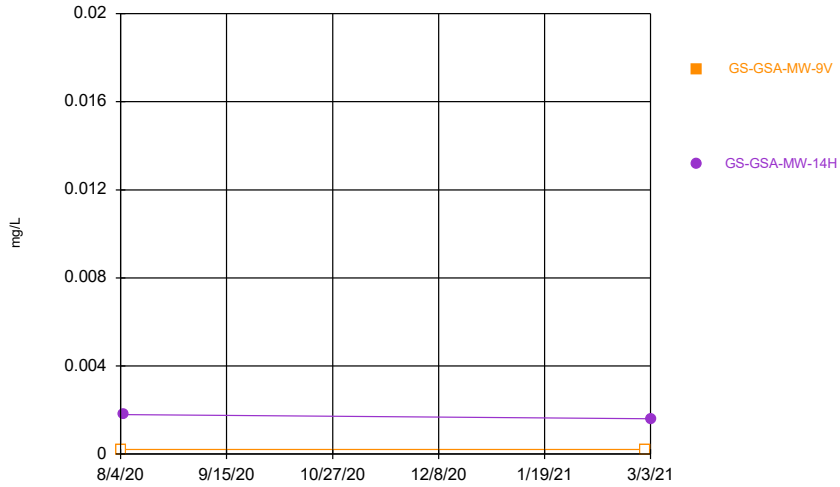
Time Series



Constituent: Cadmium Analysis Run 5/20/2021 5:03 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series



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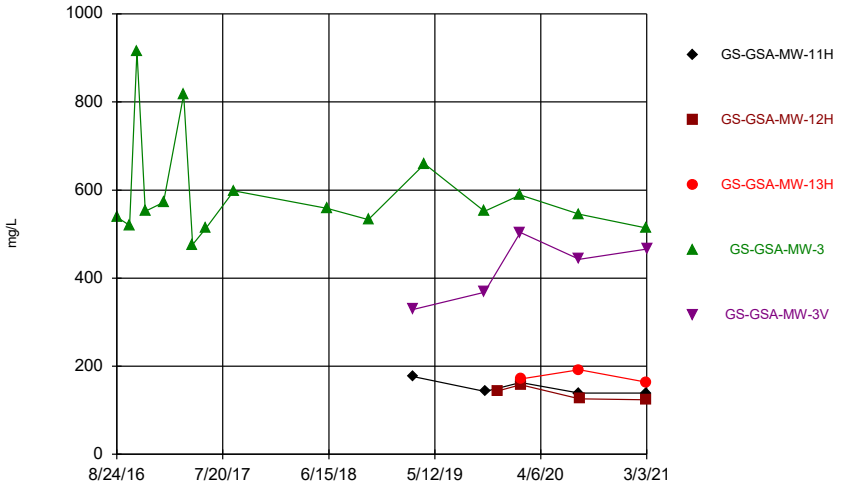
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Time Series

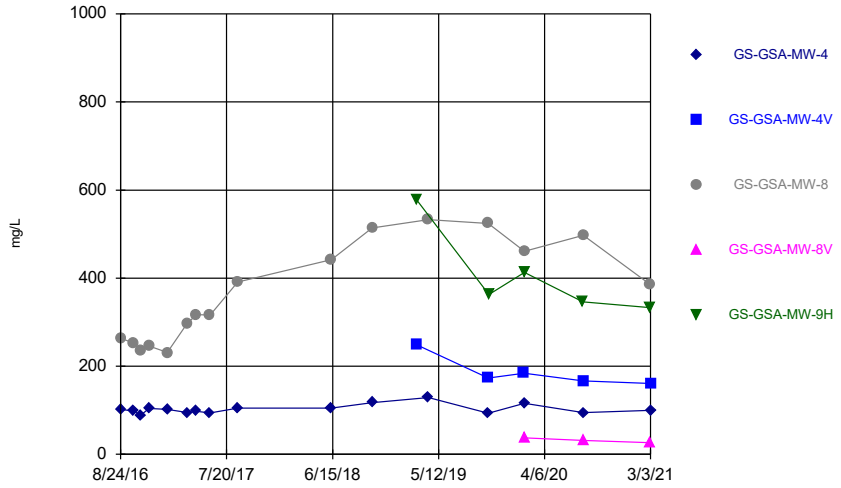


Constituent: Calcium Analysis Run 5/20/2021 5:03 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Time Series



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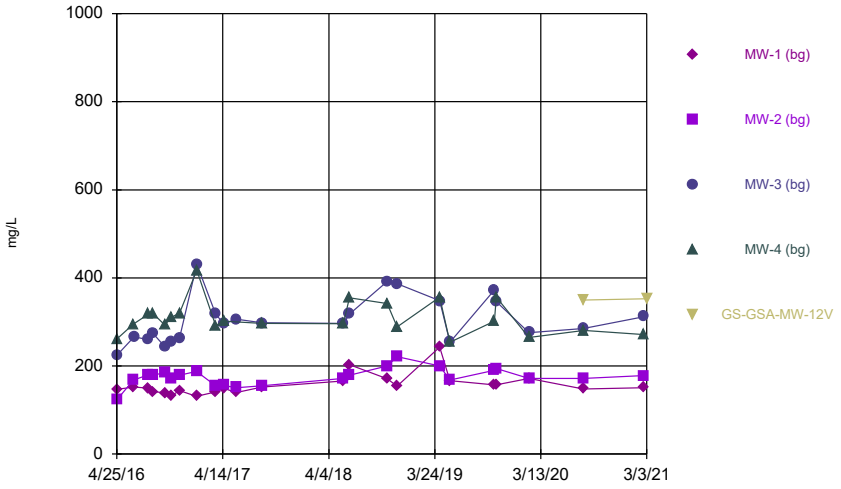
Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Time Series



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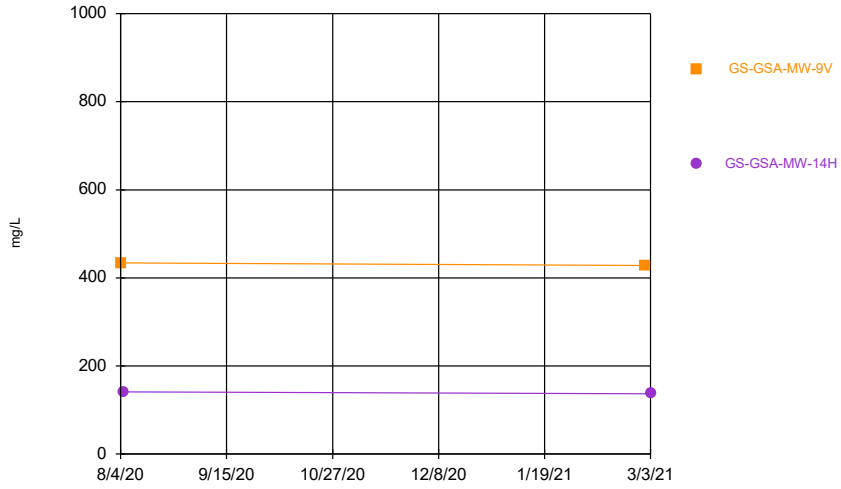
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Time Series



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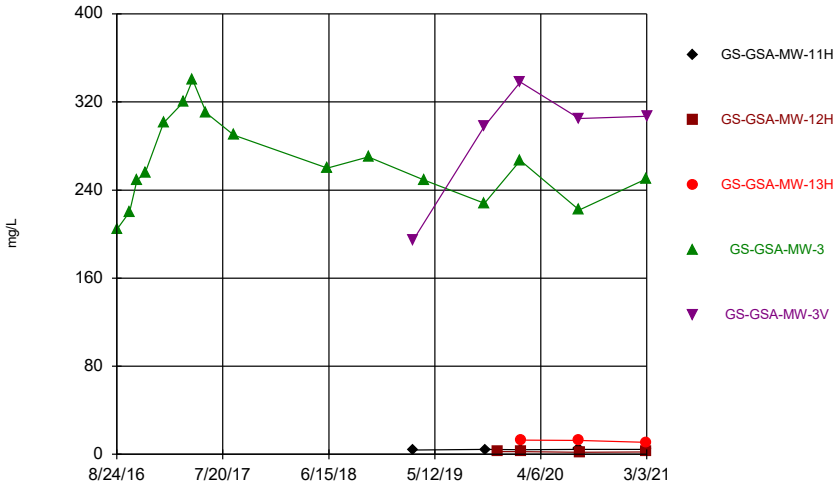
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Time Series

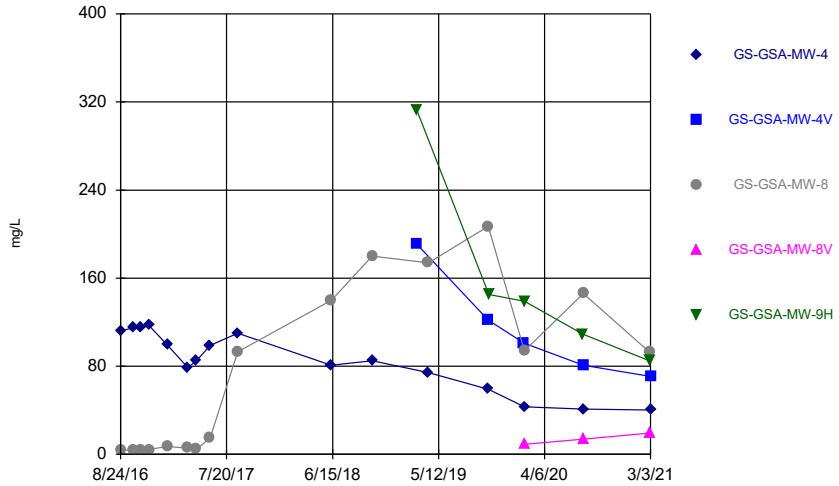


Constituent: Chloride Analysis Run 5/20/2021 5:03 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Time Series



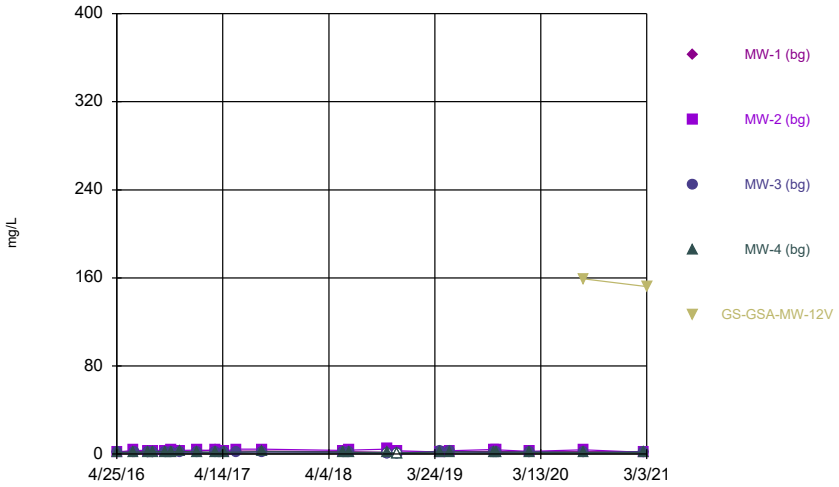
Constituent: Chloride Analysis Run 5/20/2021 5:03 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Time Series



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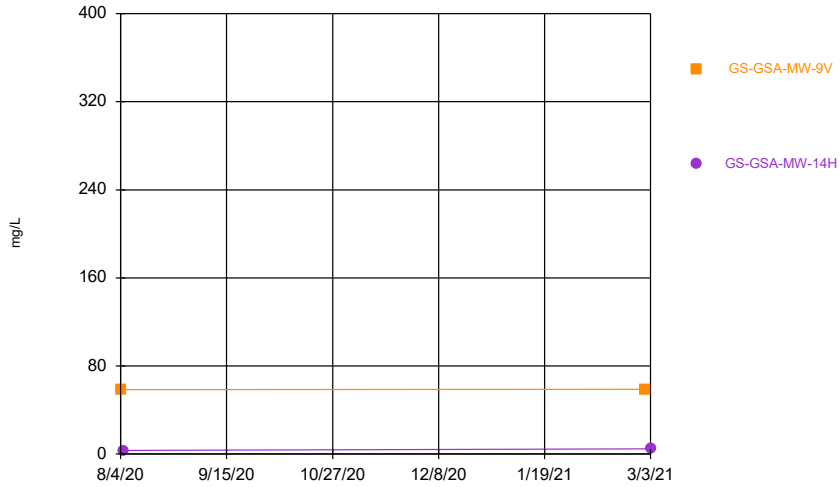
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Time Series



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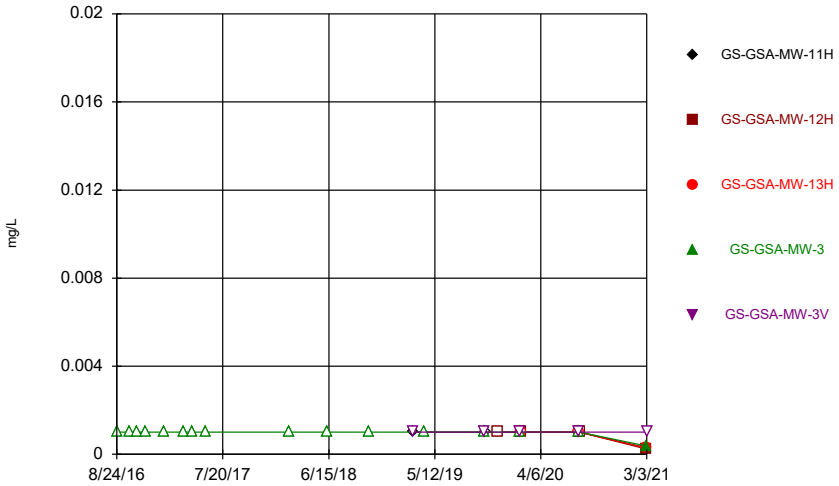
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

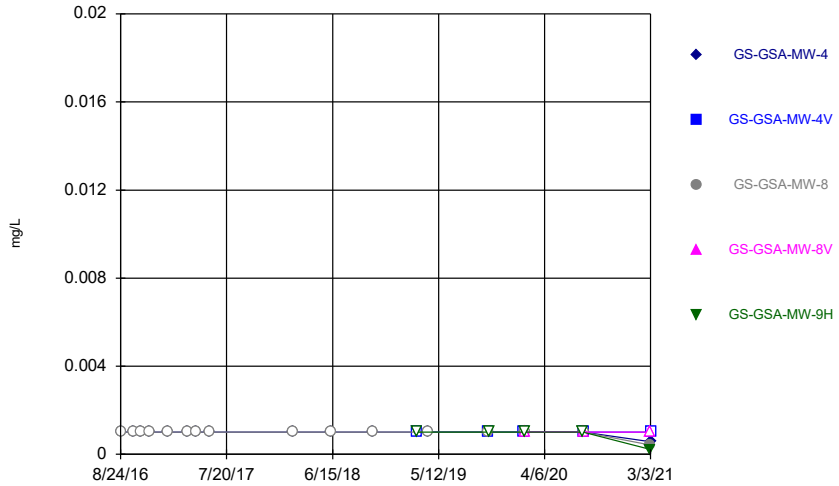
Time Series



Constituent: Chromium Analysis Run 5/20/2021 5:03 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

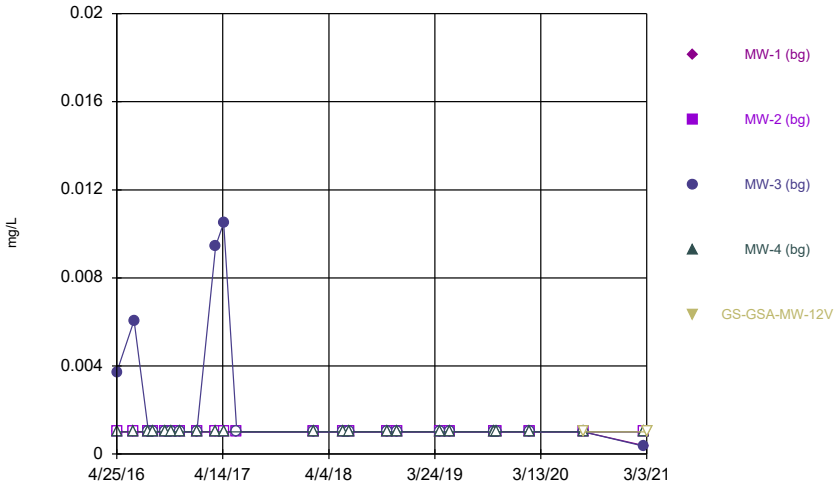
Time Series



Constituent: Chromium Analysis Run 5/20/2021 5:03 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

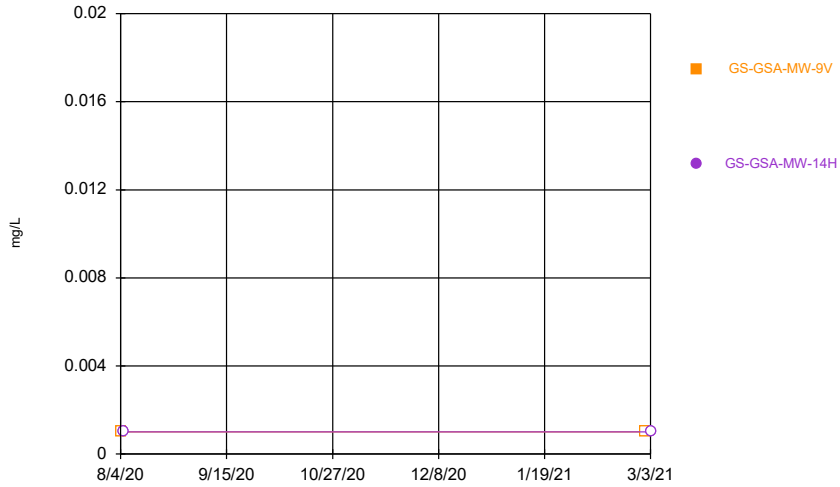
Time Series



Constituent: Chromium Analysis Run 5/20/2021 5:03 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series



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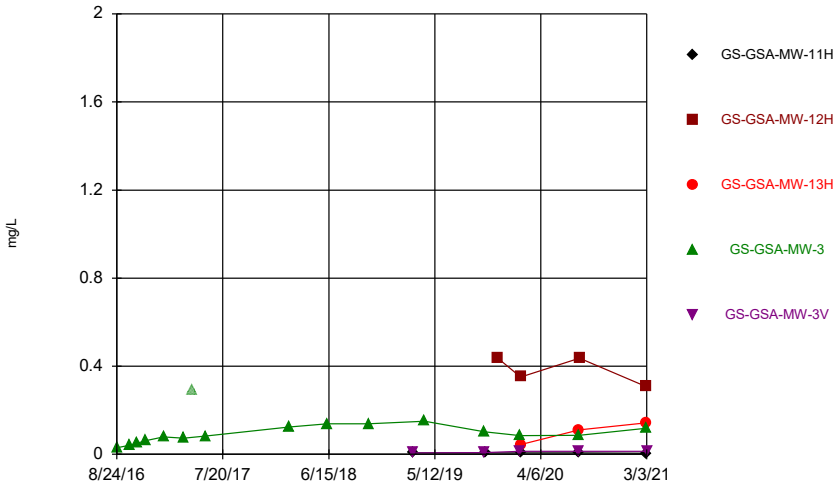
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Time Series



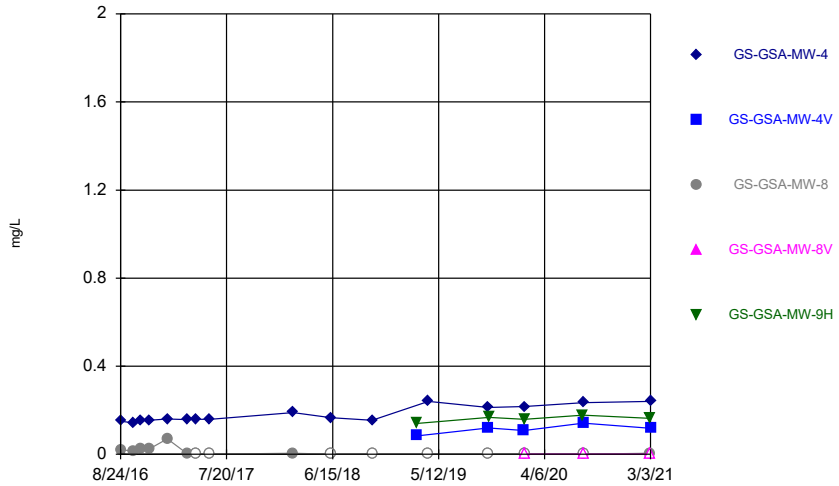
Constituent: Cobalt Analysis Run 5/20/2021 5:04 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Time Series



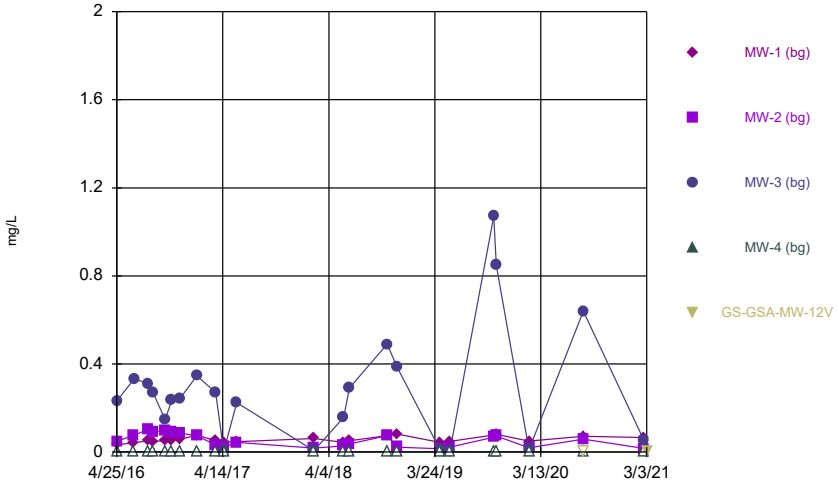
Constituent: Cobalt Analysis Run 5/20/2021 5:04 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Time Series

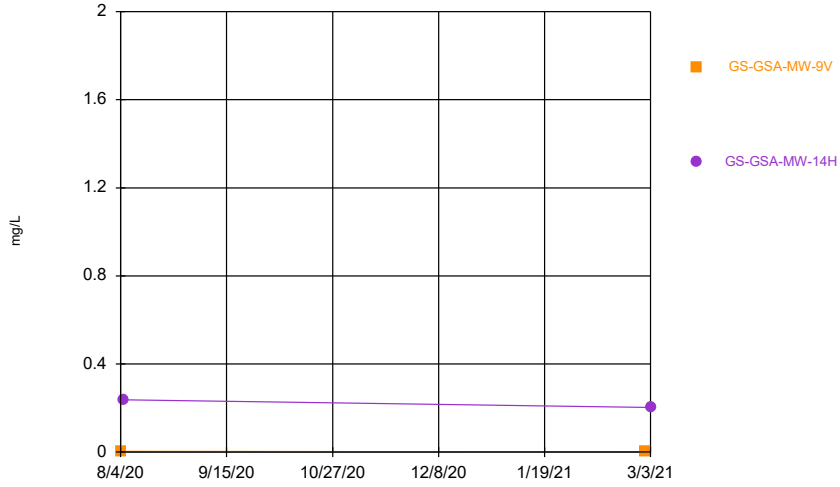


Constituent: Cobalt Analysis Run 5/20/2021 5:04 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Time Series

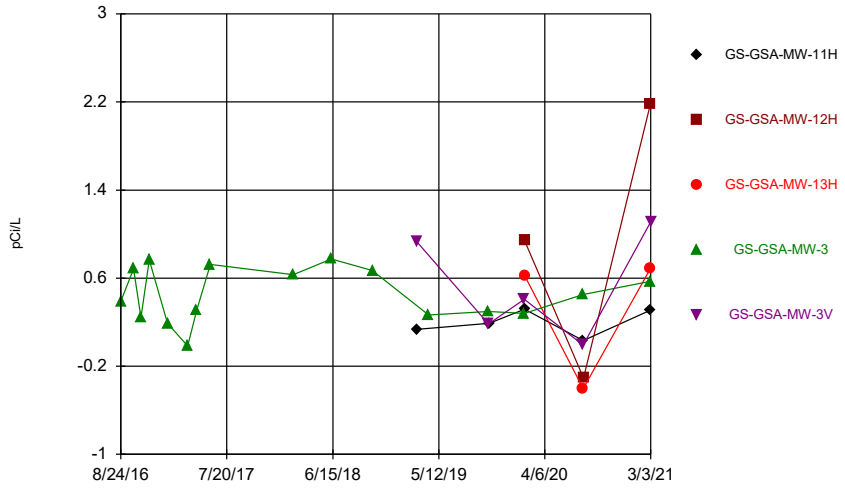


Constituent: Cobalt Analysis Run 5/20/2021 5:04 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Time Series

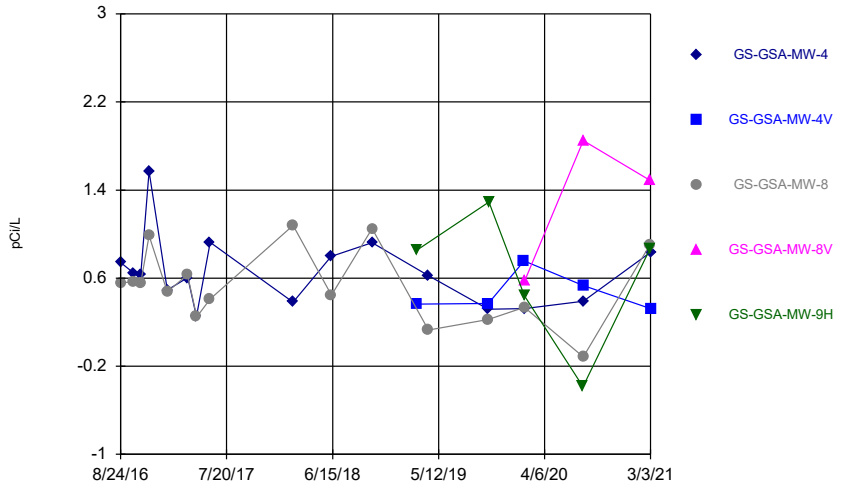


Constituent: Combined Radium 226 + 228 Analysis Run 5/20/2021 5:04 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Time Series

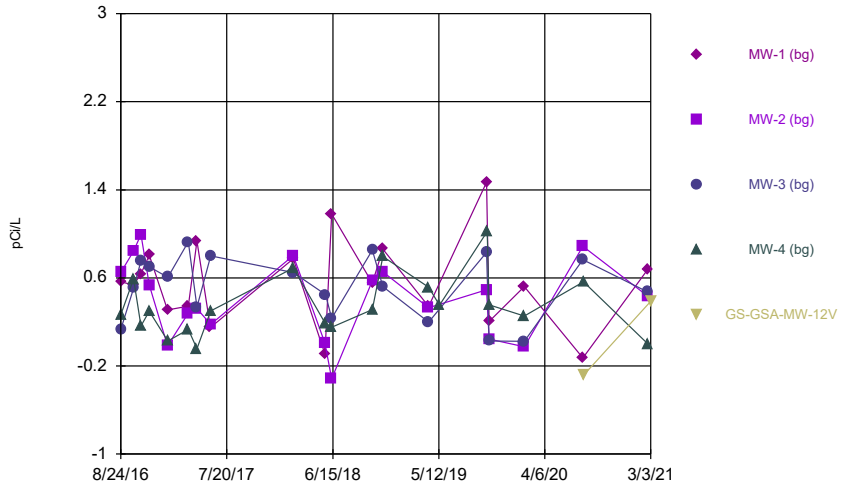


Constituent: Combined Radium 226 + 228 Analysis Run 5/20/2021 5:04 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Time Series

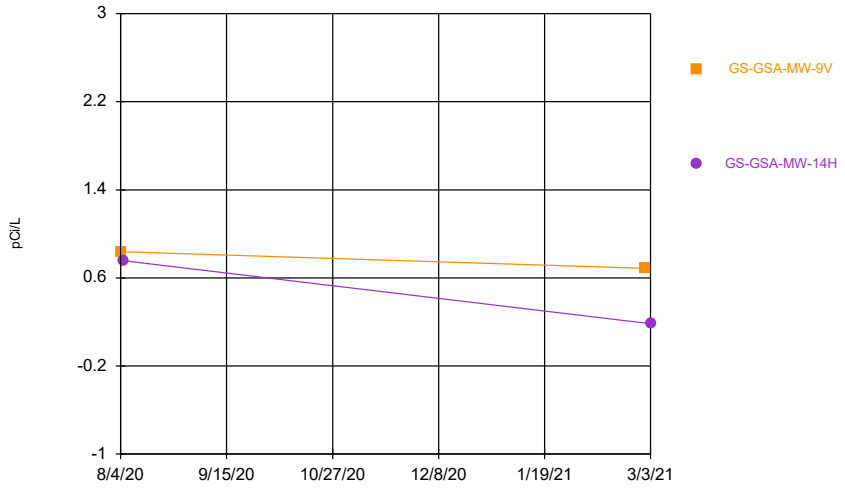


Constituent: Combined Radium 226 + 228 Analysis Run 5/20/2021 5:04 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Time Series

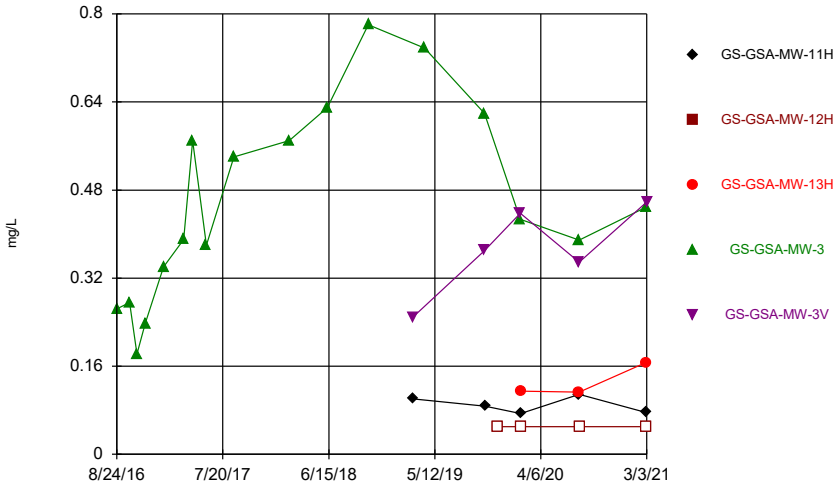


Constituent: Combined Radium 226 + 228 Analysis Run 5/20/2021 5:04 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

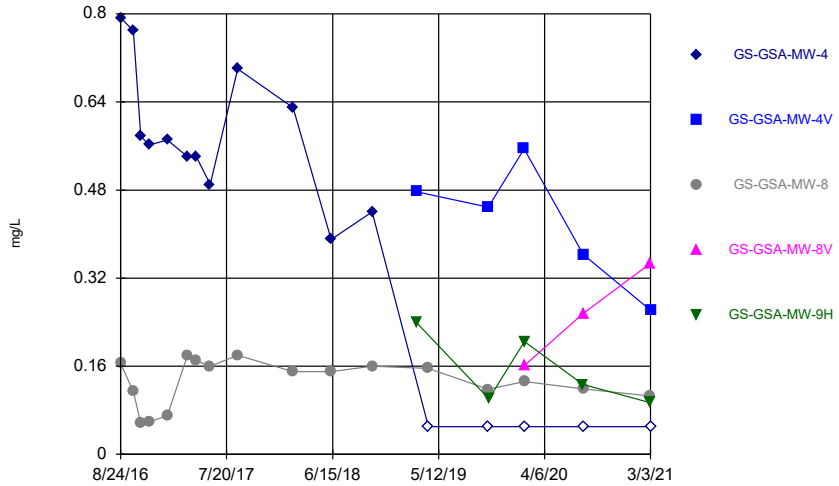
Time Series



Constituent: Fluoride Analysis Run 5/20/2021 5:04 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

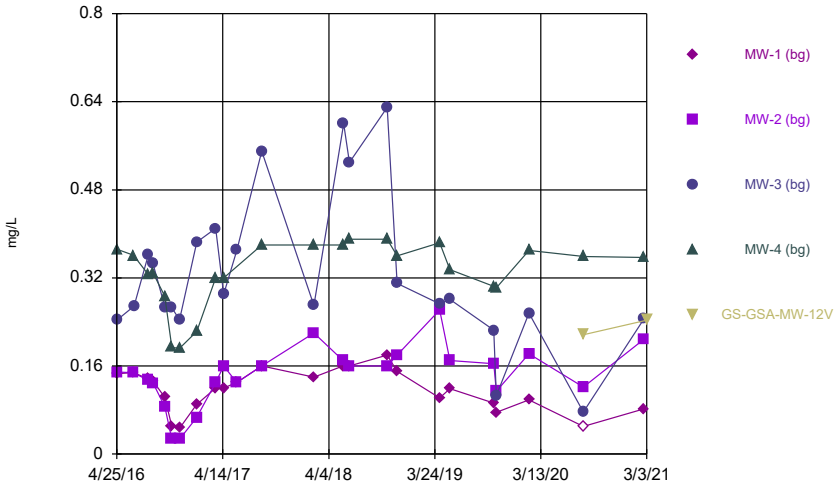
Time Series



Constituent: Fluoride Analysis Run 5/20/2021 5:04 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

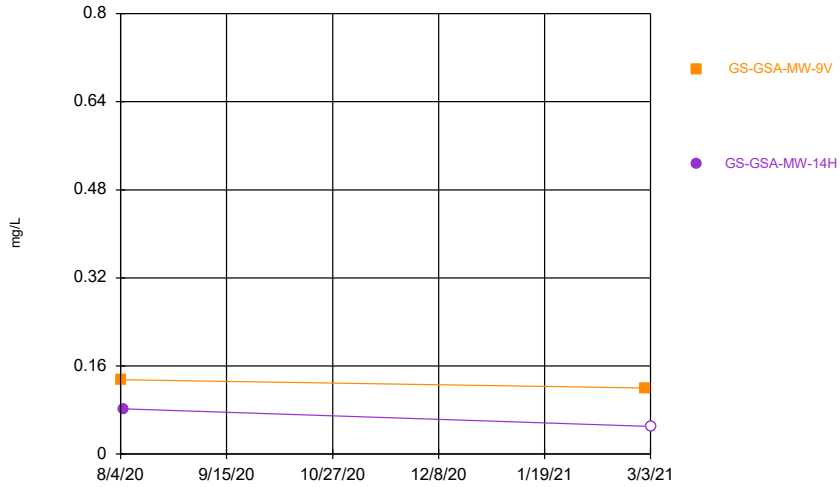
Time Series



Constituent: Fluoride Analysis Run 5/20/2021 5:04 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

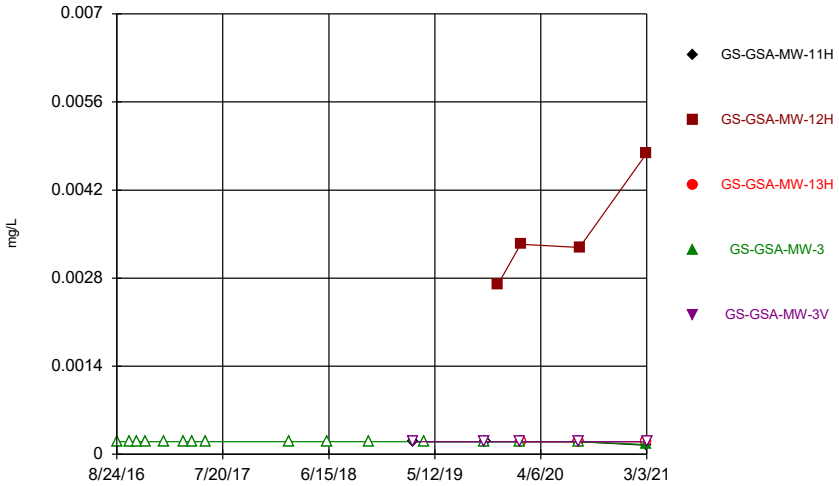
Time Series



Constituent: Fluoride Analysis Run 5/20/2021 5:04 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

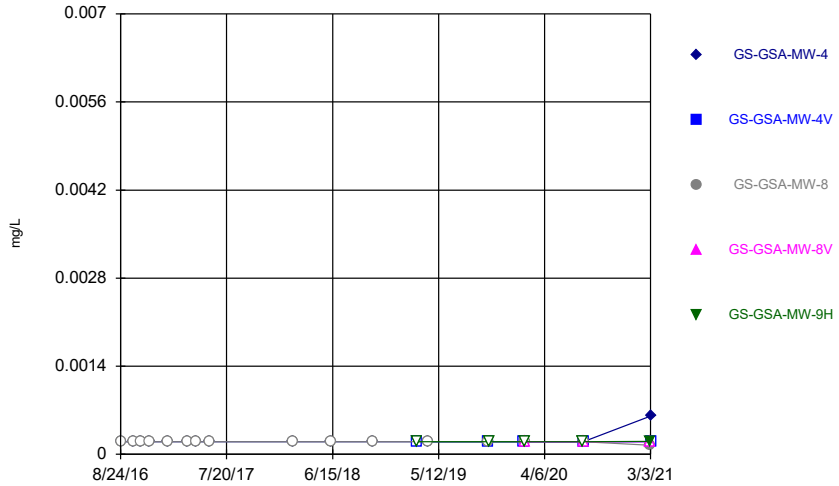
Time Series



Constituent: Lead Analysis Run 5/20/2021 5:04 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

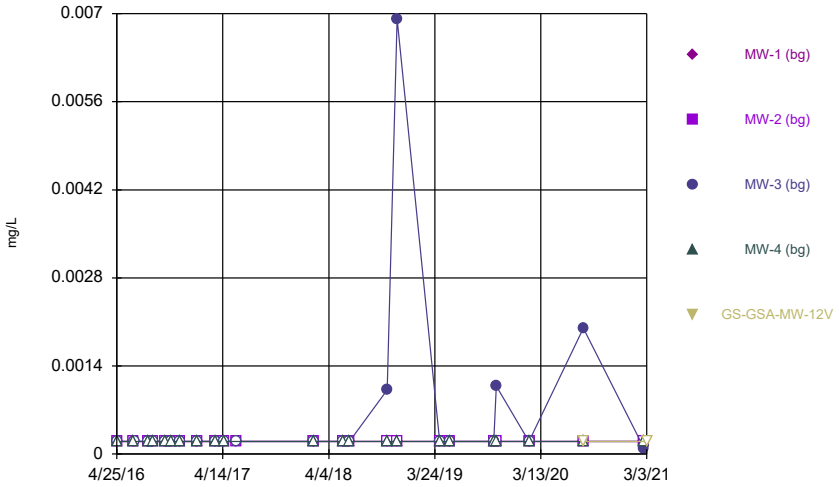
Time Series



Constituent: Lead Analysis Run 5/20/2021 5:04 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

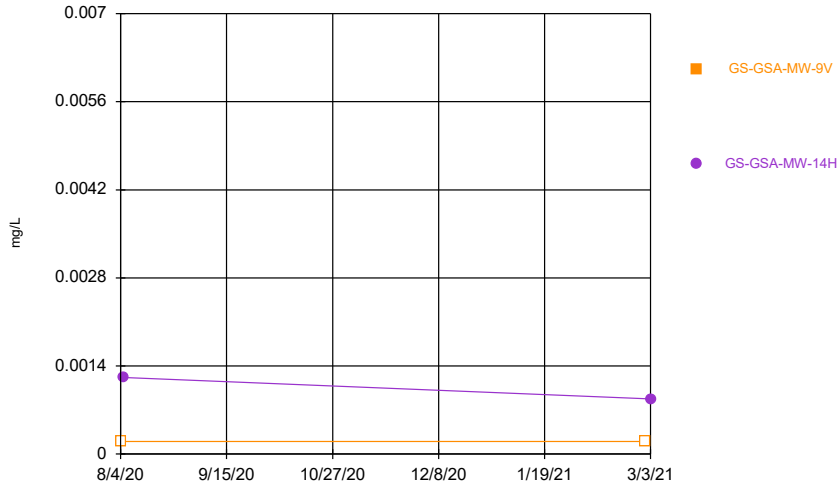
Time Series



Constituent: Lead Analysis Run 5/20/2021 5:04 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series



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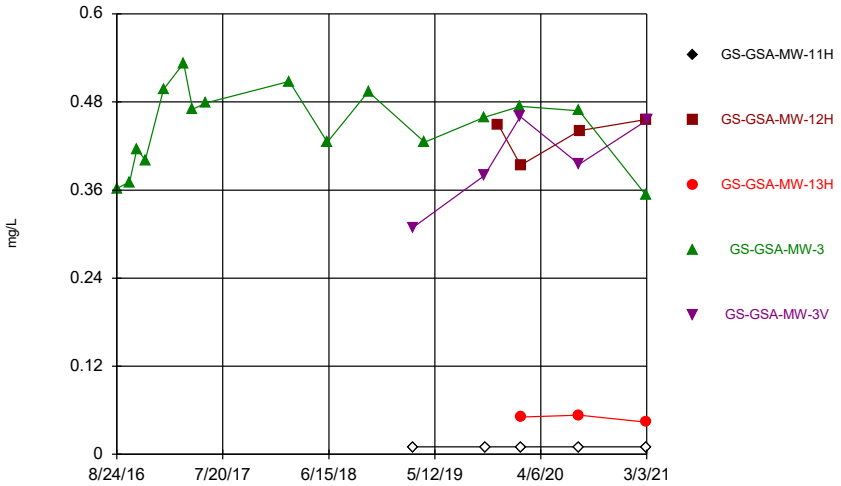
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series



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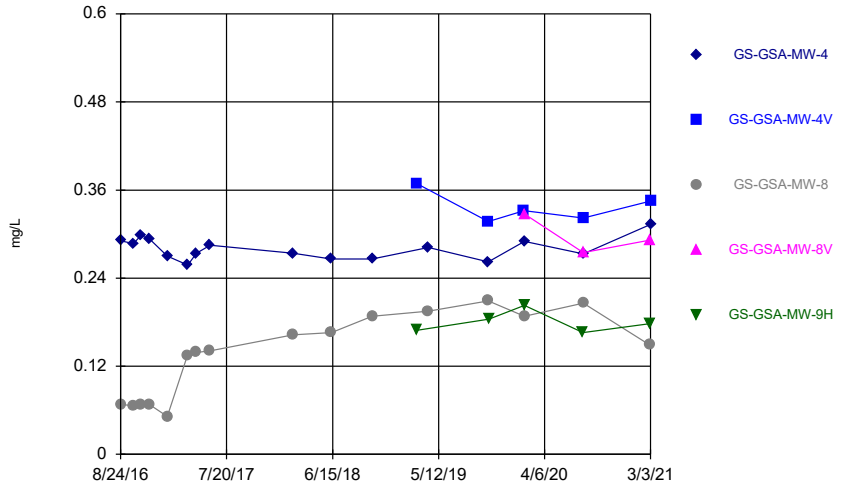
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Time Series



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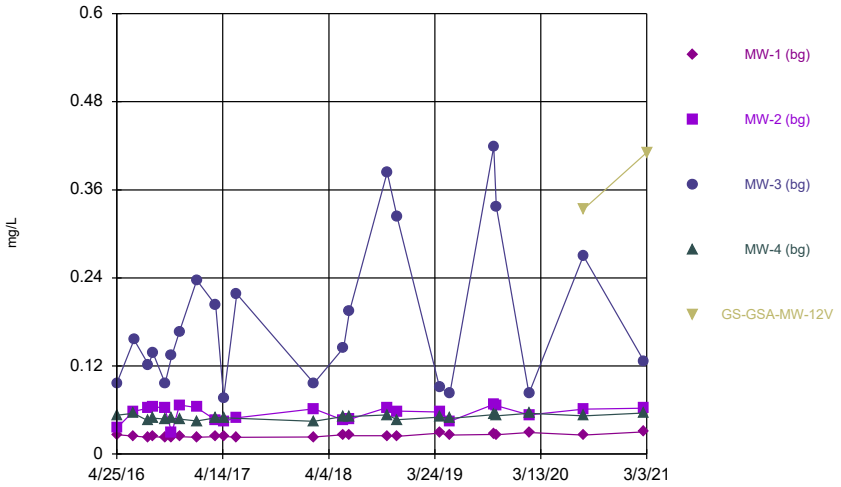
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Time Series



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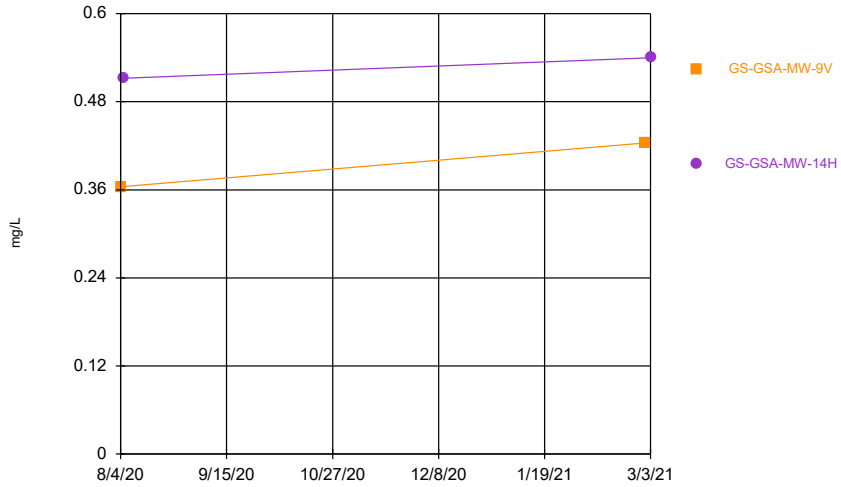
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

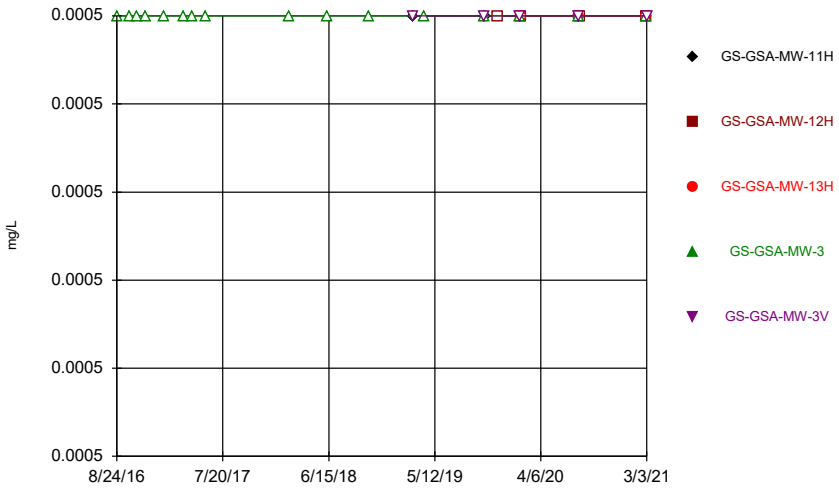
Time Series



Constituent: Lithium Analysis Run 5/20/2021 5:04 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

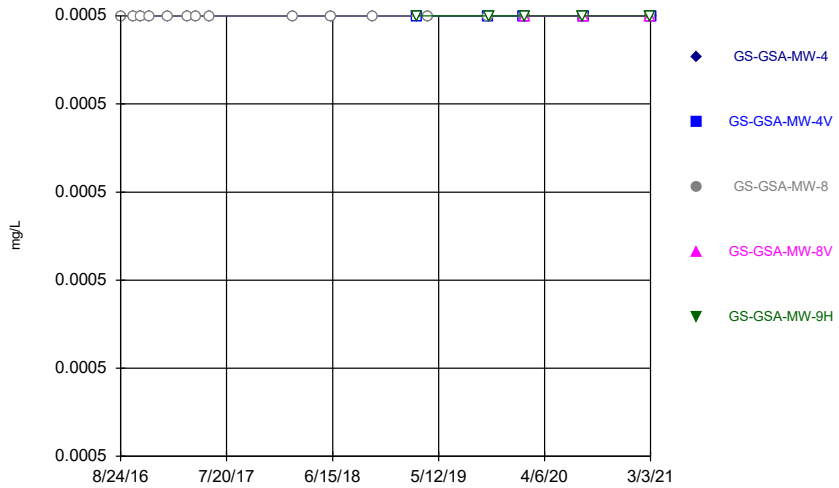
Time Series



Constituent: Mercury Analysis Run 5/20/2021 5:04 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

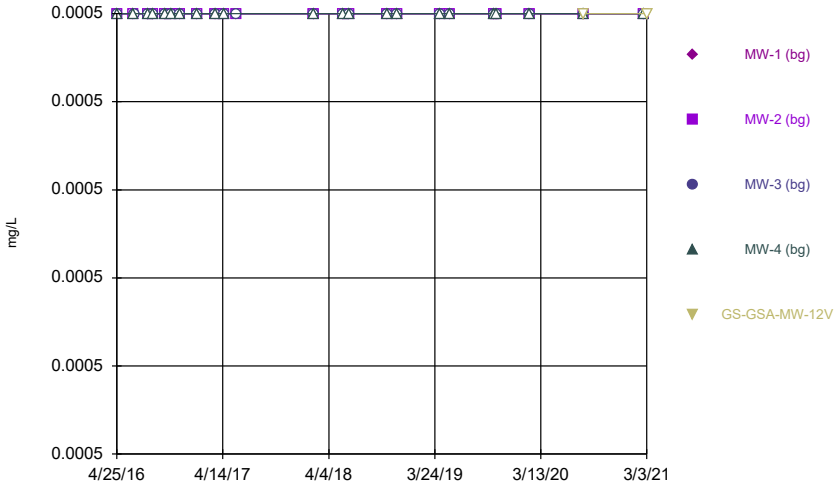
Time Series



Constituent: Mercury Analysis Run 5/20/2021 5:04 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

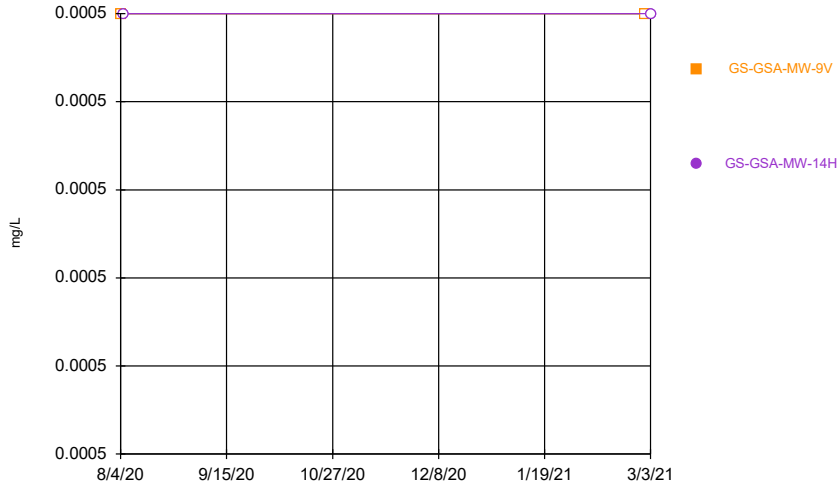
Time Series



Constituent: Mercury Analysis Run 5/20/2021 5:04 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

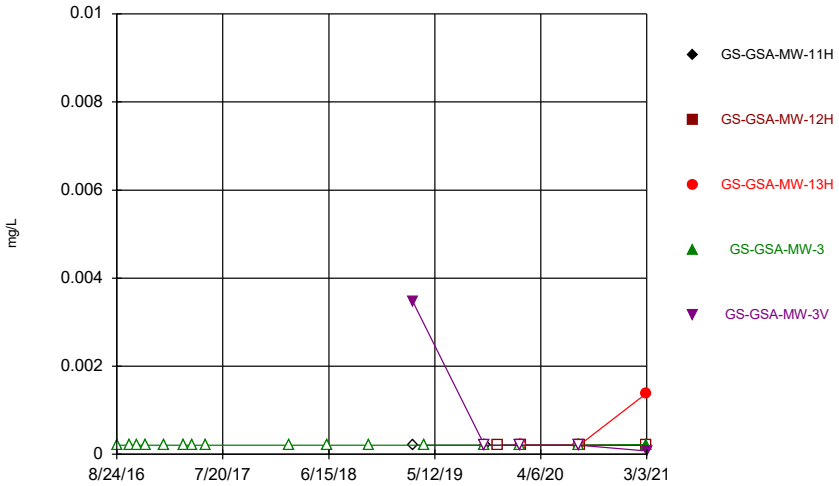
Time Series



Constituent: Mercury Analysis Run 5/20/2021 5:04 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

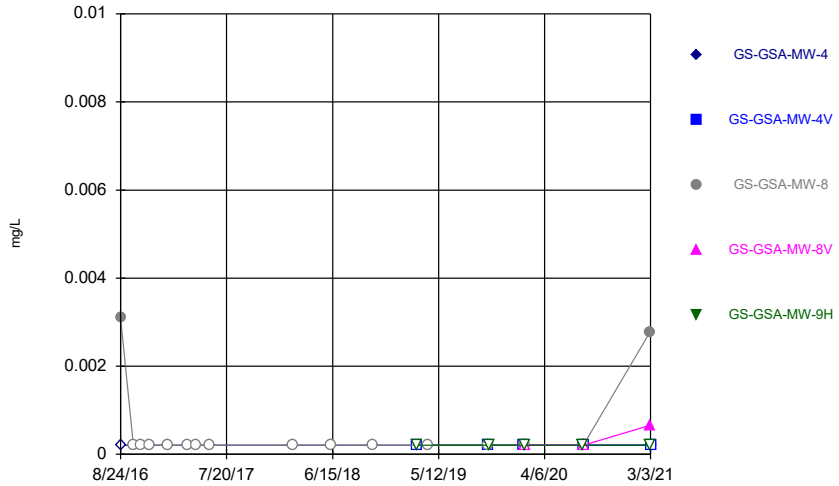
Time Series



Constituent: Molybdenum Analysis Run 5/20/2021 5:04 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

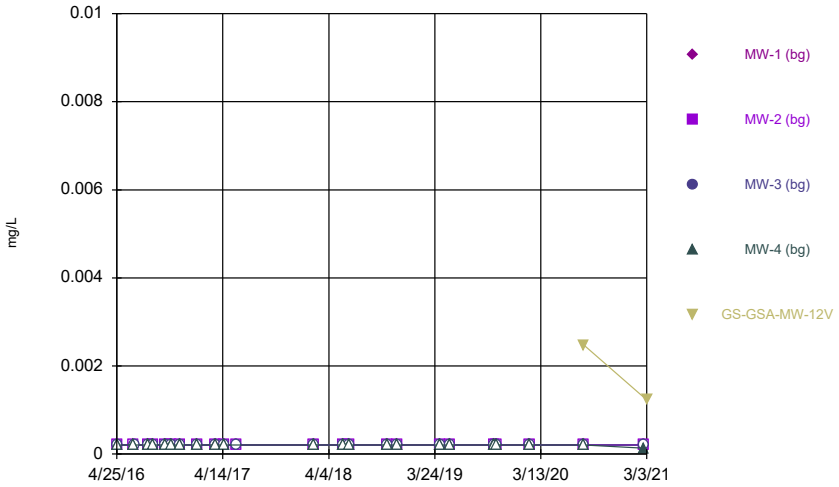
Time Series



Constituent: Molybdenum Analysis Run 5/20/2021 5:04 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

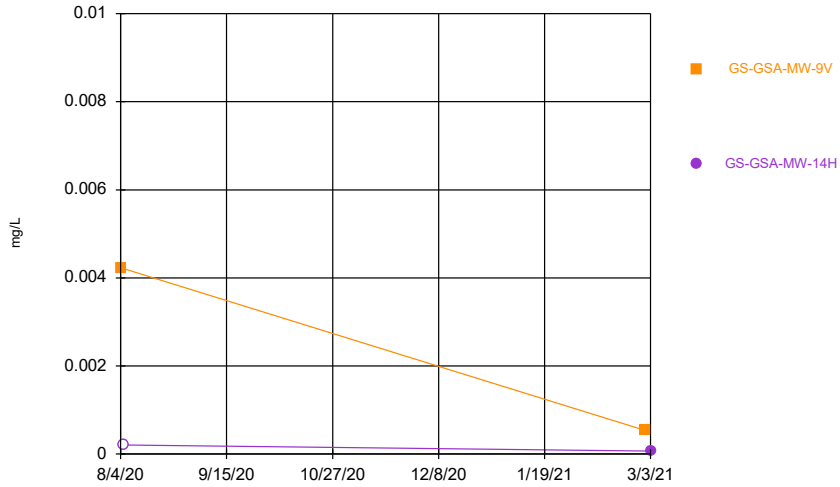
Time Series



Constituent: Molybdenum Analysis Run 5/20/2021 5:04 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

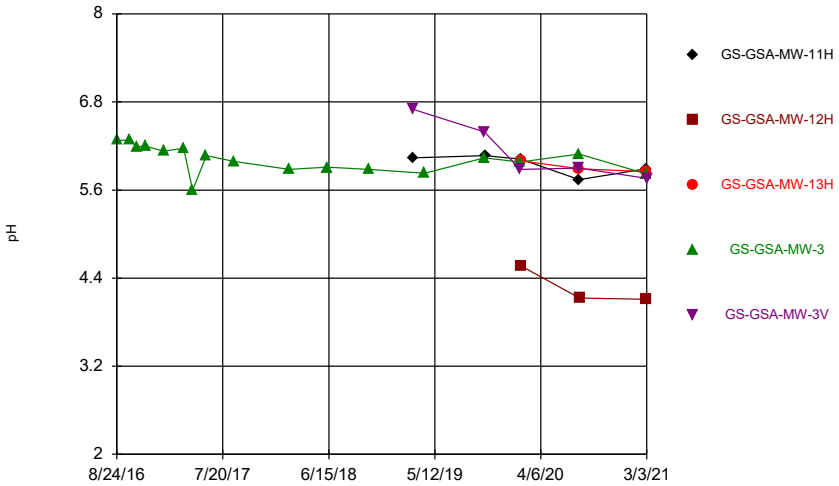
Time Series



Constituent: Molybdenum Analysis Run 5/20/2021 5:04 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Time Series

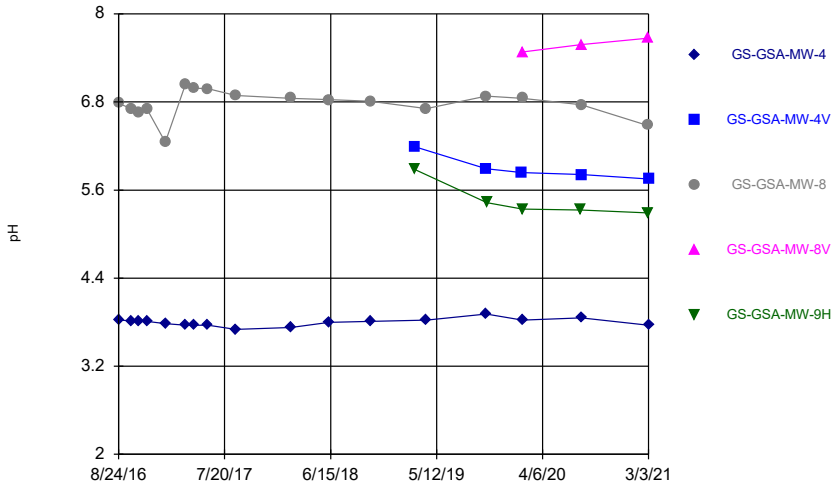


Constituent: pH Analysis Run 5/20/2021 5:04 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Time Series

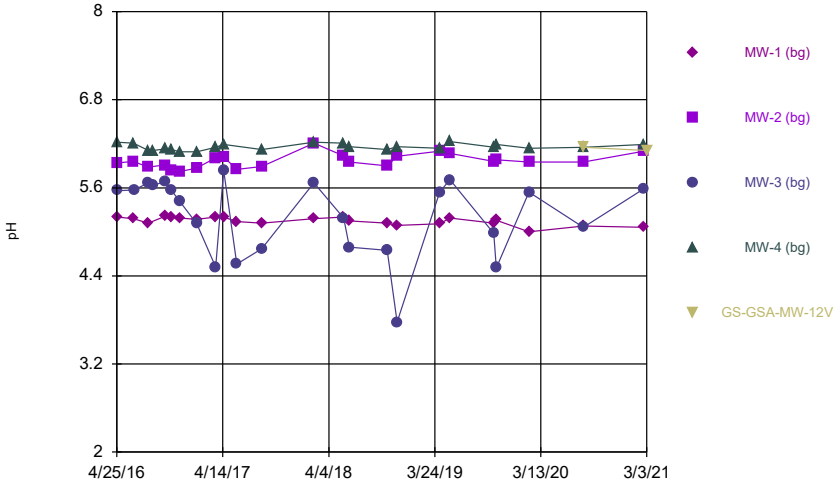


Constituent: pH Analysis Run 5/20/2021 5:04 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Time Series

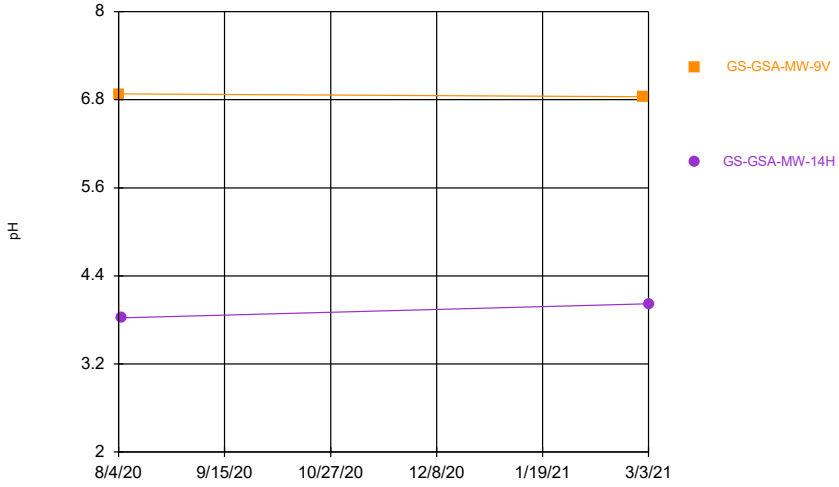


Constituent: pH Analysis Run 5/20/2021 5:04 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Time Series

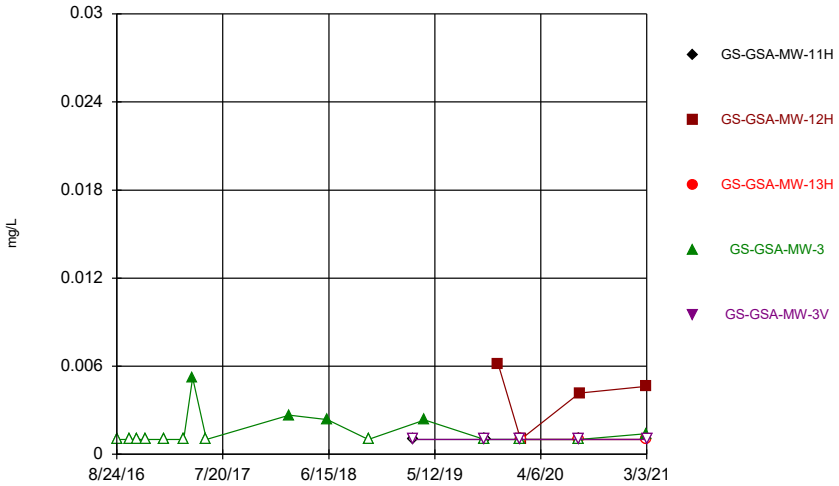


Constituent: pH Analysis Run 5/20/2021 5:04 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

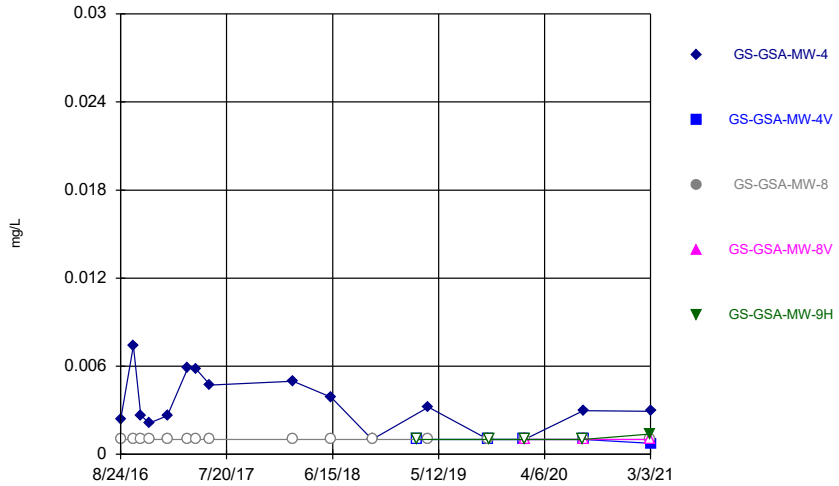
Time Series



Constituent: Selenium Analysis Run 5/20/2021 5:04 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

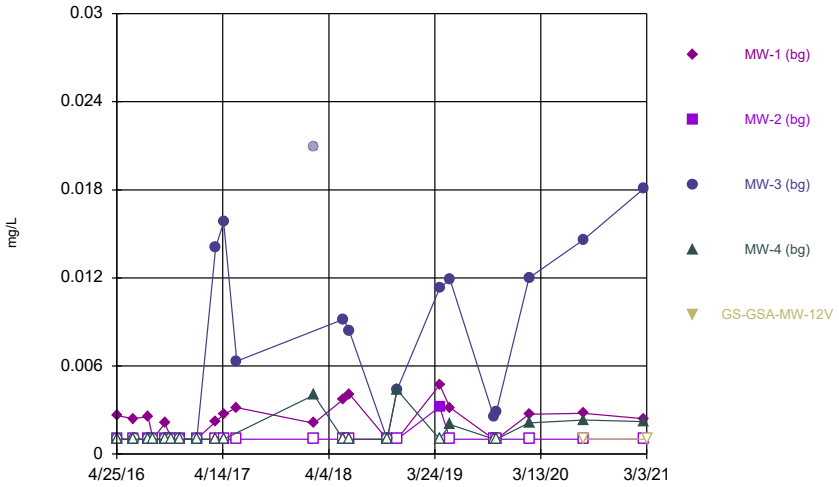
Time Series



Constituent: Selenium Analysis Run 5/20/2021 5:04 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

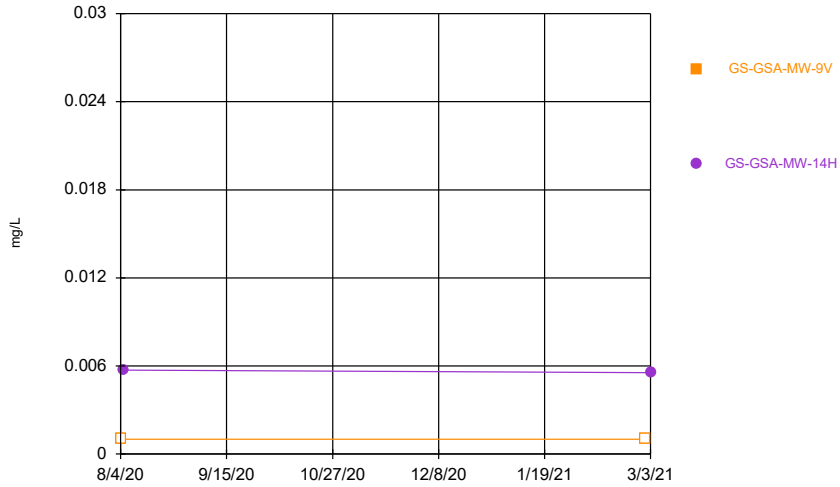
Time Series



Constituent: Selenium Analysis Run 5/20/2021 5:04 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

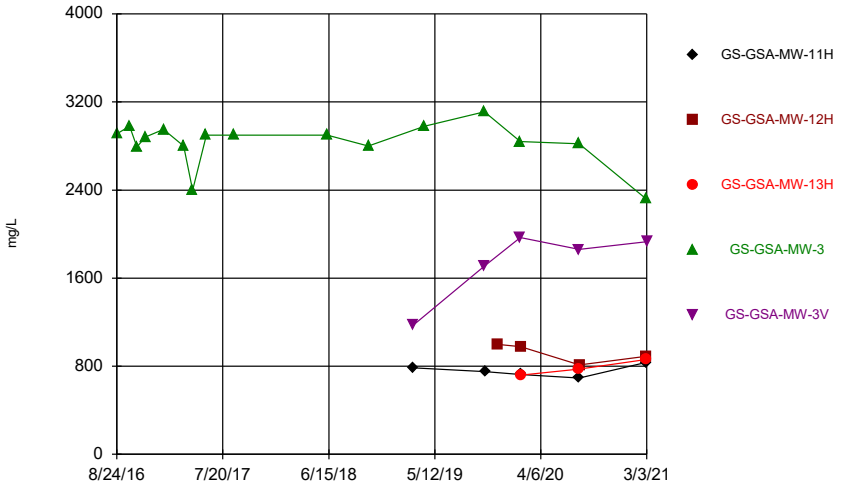
Time Series



Constituent: Selenium Analysis Run 5/20/2021 5:04 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Time Series

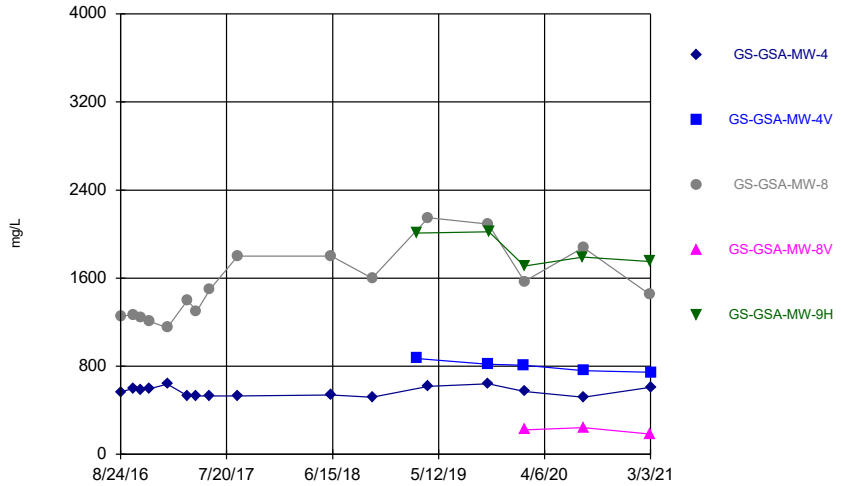


Constituent: Sulfate Analysis Run 5/20/2021 5:04 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Time Series

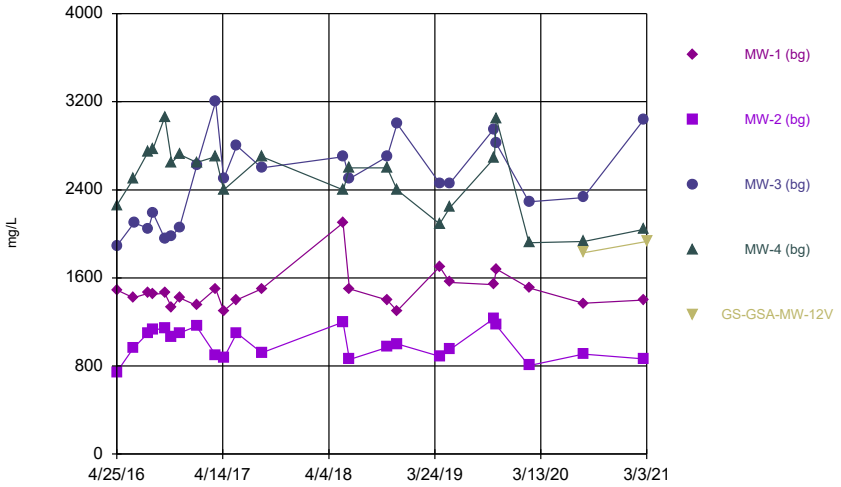


Constituent: Sulfate Analysis Run 5/20/2021 5:04 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Time Series

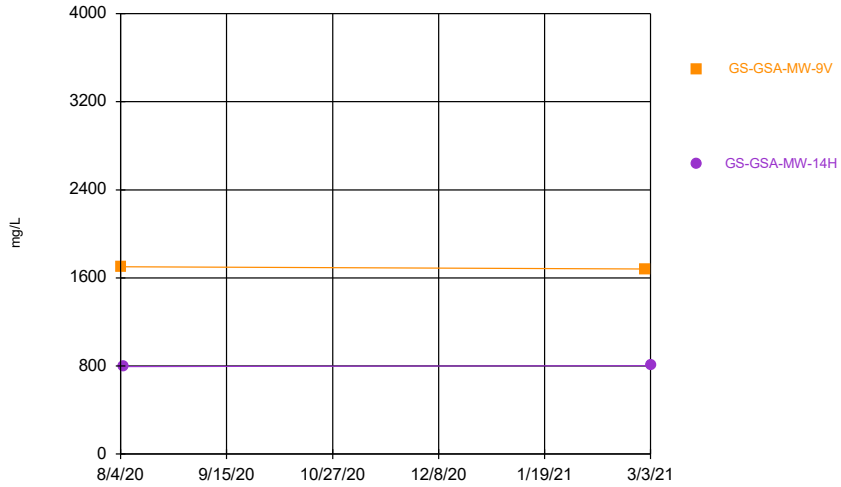


Constituent: Sulfate Analysis Run 5/20/2021 5:04 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Time Series

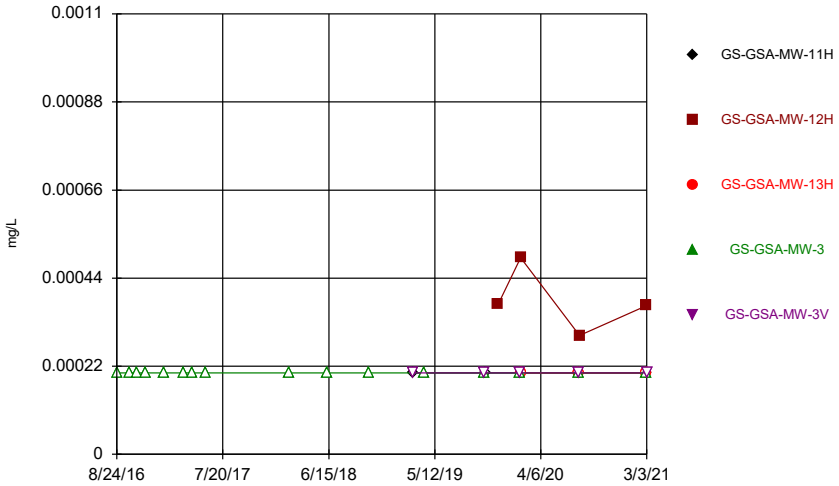


Constituent: Sulfate Analysis Run 5/20/2021 5:04 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

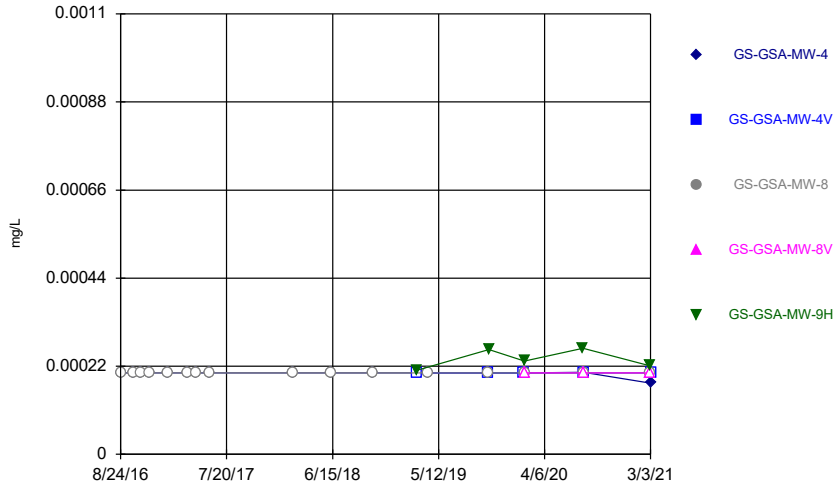
Time Series



Constituent: Thallium Analysis Run 5/20/2021 5:04 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

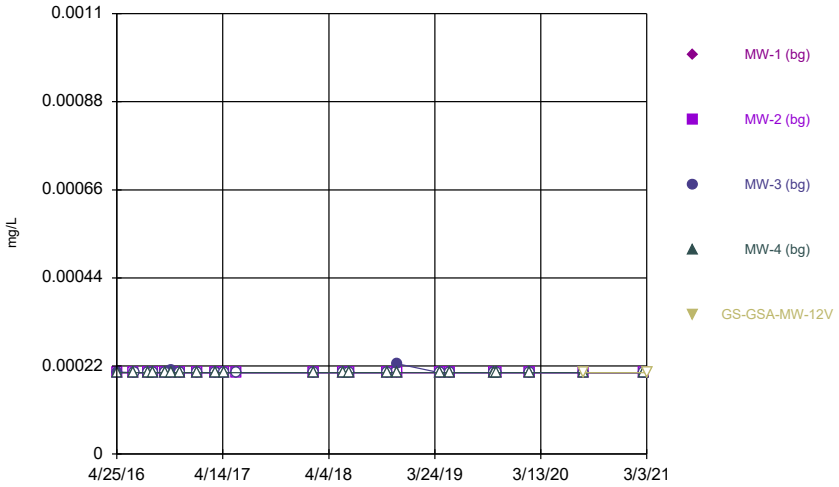
Time Series



Constituent: Thallium Analysis Run 5/20/2021 5:04 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

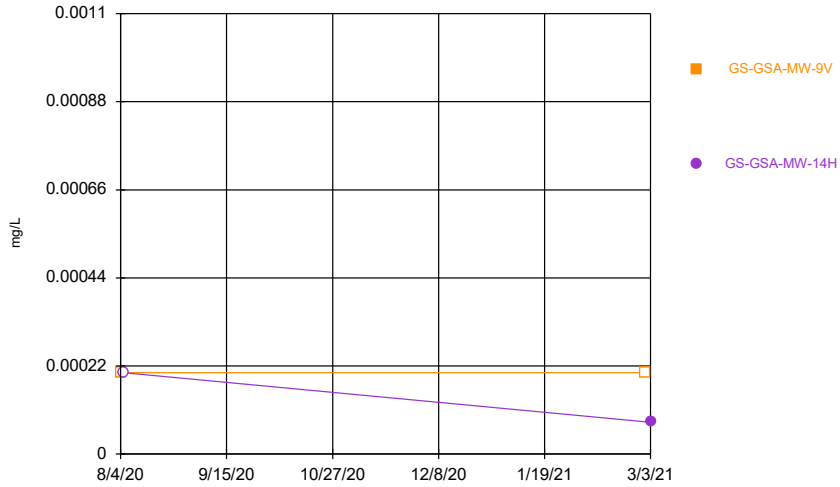
Time Series



Constituent: Thallium Analysis Run 5/20/2021 5:04 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

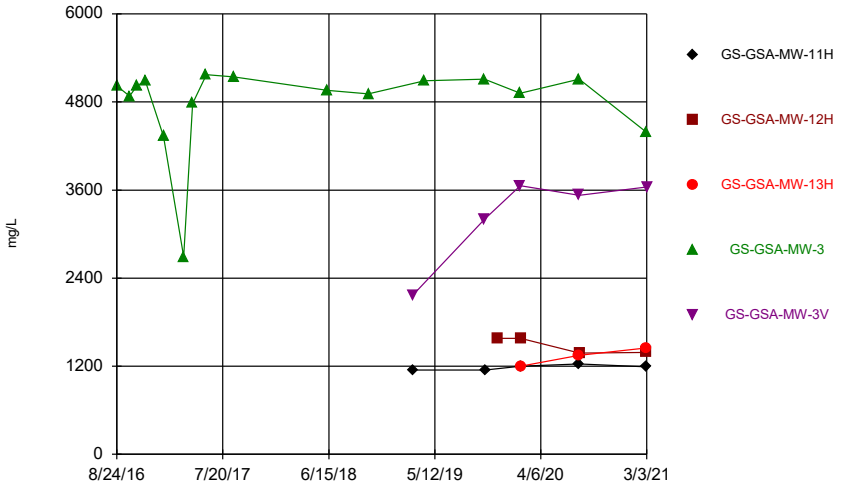
Time Series



Constituent: Thallium Analysis Run 5/20/2021 5:04 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Time Series

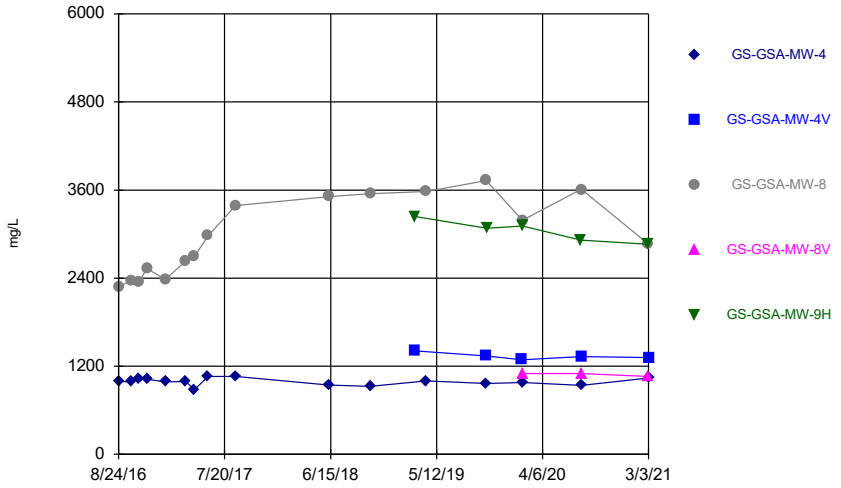


Constituent: Total dissolved solids Analysis Run 5/20/2021 5:04 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Time Series

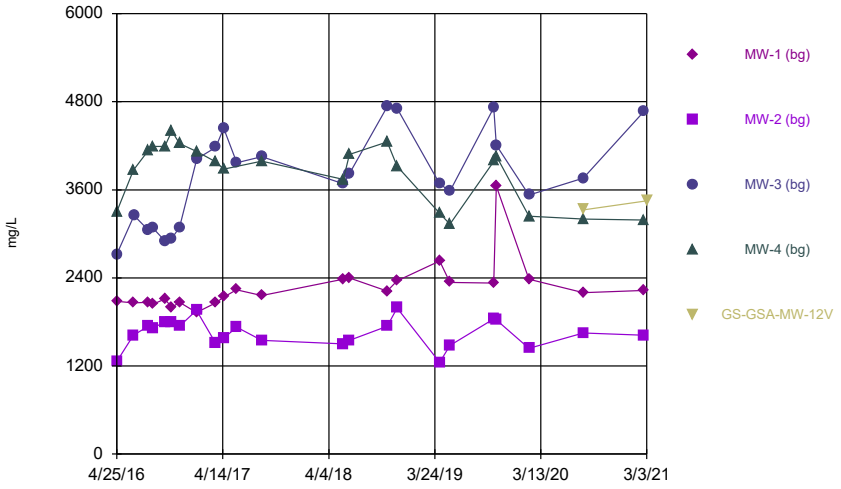


Constituent: Total dissolved solids Analysis Run 5/20/2021 5:04 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Time Series

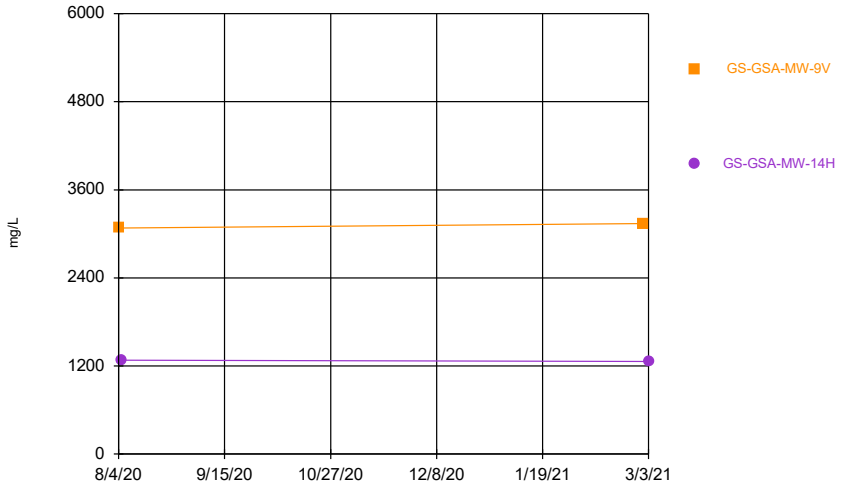


Constituent: Total dissolved solids Analysis Run 5/20/2021 5:04 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Time Series



Constituent: Total dissolved solids Analysis Run 5/20/2021 5:04 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Time Series

Constituent: Antimony (mg/L) Analysis Run 5/20/2021 5:06 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
8/24/2016				<0.001015	
10/3/2016				<0.001015	
10/26/2016				<0.001015	
11/21/2016				<0.001015	
1/17/2017				<0.001015	
3/20/2017				<0.001015	
4/17/2017				<0.001015	
5/30/2017				<0.001015	
2/13/2018				<0.001015	
6/11/2018				<0.001015	
10/17/2018				<0.001015	
3/4/2019	0.00149 (J)				
3/5/2019					0.00179 (J)
4/10/2019				0.00111 (J)	
10/14/2019				<0.001015	<0.001015
10/16/2019	<0.001015				
11/26/2019		<0.001015			
2/3/2020				<0.001015	<0.001015
2/4/2020	<0.001015	<0.001015	<0.001015		
8/4/2020	<0.001015		<0.001015	<0.001015	<0.001015
8/5/2020		<0.001015			
3/1/2021				<0.001015	
3/2/2021	<0.001015	<0.001015	<0.001015		
3/3/2021					<0.001015

Time Series

Constituent: Antimony (mg/L) Analysis Run 5/20/2021 5:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-4	GS-GSA-MW-4V	GS-GSA-MW-8	GS-GSA-MW-8V	GS-GSA-MW-9H
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				
4/18/2017			<0.001015		
5/30/2017	<0.001015		<0.001015		
2/13/2018	<0.001015		<0.001015		
6/11/2018	<0.001015				
6/12/2018			<0.001015		
10/17/2018	<0.001015		<0.001015		
3/5/2019		<0.001015			0.000852 (J)
4/10/2019	0.000976 (J)		0.00102 (J)		
10/14/2019	<0.001015	<0.001015	<0.001015		
10/16/2019					<0.001015
2/3/2020		<0.001015			
2/4/2020	<0.001015		<0.001015		<0.001015
2/5/2020				<0.001015	
8/4/2020					<0.001015
8/5/2020	<0.001015	<0.001015	<0.001015	<0.001015	
3/1/2021			<0.001015	<0.001015	
3/2/2021					<0.001015
3/3/2021	<0.001015	<0.001015			

Time Series

Constituent: Antimony (mg/L) Analysis Run 5/20/2021 5:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	MW-1 (bg)	MW-2 (bg)	MW-3 (bg)	MW-4 (bg)	GS-GSA-MW-12V
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		
2/13/2018	<0.001015	<0.001015	<0.001015	<0.001015	
5/22/2018	<0.001015	<0.001015			
5/23/2018				<0.001015	
5/24/2018			<0.001015		
6/12/2018	<0.001015	<0.001015	<0.001015	<0.001015	
10/17/2018	<0.001015	<0.001015	<0.001015	<0.001015	
11/19/2018	<0.001015	<0.001015	<0.001015	<0.001015	
4/10/2019	0.00143 (J)	0.000993 (J)	0.000978 (J)	0.00097 (J)	
5/14/2019	0.00137 (J)	0.000989 (J)	<0.001015	<0.001015	
10/8/2019	<0.001015	<0.001015	<0.001015		
10/10/2019				<0.001015	
10/16/2019	<0.001015	<0.001015	<0.001015	<0.001015	
2/3/2020	<0.001015	<0.001015	<0.001015	<0.001015	
8/3/2020	<0.001015	<0.001015	<0.001015		
8/5/2020				<0.001015	<0.001015
2/22/2021	<0.001015	<0.001015	<0.001015	<0.001015	
3/3/2021					<0.001015

Time Series

Constituent: Antimony (mg/L) Analysis Run 5/20/2021 5:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-9V	GS-GSA-MW-14H
8/4/2020	<0.001015	
8/5/2020		<0.001015
3/1/2021	<0.001015	
3/3/2021		<0.001015

Time Series

Constituent: Arsenic (mg/L) Analysis Run 5/20/2021 5:06 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
8/24/2016				<0.005	
10/3/2016				<0.005	
10/26/2016				<0.005	
11/21/2016				<0.005	
1/17/2017				<0.005	
3/20/2017				<0.005	
4/17/2017				0.00405 (J)	
5/30/2017				<0.005	
2/13/2018				<0.005	
6/11/2018				<0.005	
10/17/2018				<0.005	
3/4/2019	<0.005				
3/5/2019					<0.005
4/10/2019				0.00121 (J)	
10/14/2019				<0.005	<0.005
10/16/2019	<0.005				
11/26/2019		0.00194 (J)			
2/3/2020				<0.005	<0.005
2/4/2020	<0.005	0.00157 (J)	0.16		
8/4/2020	<0.005		0.103	<0.005	<0.005
8/5/2020		0.00158 (J)			
3/1/2021				0.0014	
3/2/2021	0.00039	0.00138	0.293		
3/3/2021					0.000296

Time Series

Constituent: Arsenic (mg/L) Analysis Run 5/20/2021 5:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-4	GS-GSA-MW-4V	GS-GSA-MW-8	GS-GSA-MW-8V	GS-GSA-MW-9H
8/24/2016	<0.005		0.00119 (J)		
10/3/2016	<0.005		0.00114 (J)		
10/26/2016	<0.005		0.0011 (J)		
11/21/2016	<0.005		<0.005		
1/17/2017	<0.005		0.00103 (J)		
3/20/2017			<0.005		
3/21/2017	<0.005				
4/17/2017	<0.005				
4/18/2017			<0.005		
5/30/2017	<0.005		<0.005		
2/13/2018	<0.005		<0.005		
6/11/2018	<0.005				
6/12/2018			<0.005		
10/17/2018	<0.005		<0.005		
3/5/2019		<0.005			<0.005
4/10/2019	0.00176 (J)		<0.005		
10/14/2019	0.0012 (J)	<0.005	<0.005		
10/16/2019					0.0019 (J)
2/3/2020		0.00101 (J)			
2/4/2020	0.00128 (J)		<0.005		0.00123 (J)
2/5/2020				0.00232 (J)	
8/4/2020					0.00137 (J)
8/5/2020	0.00115 (J)	0.00116 (J)	<0.005	0.00476 (J)	
3/1/2021			0.000633	0.0105	
3/2/2021					0.00105
3/3/2021	0.00116	0.00107			

Time Series

Constituent: Arsenic (mg/L) Analysis Run 5/20/2021 5:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	MW-1 (bg)	MW-2 (bg)	MW-3 (bg)	MW-4 (bg)	GS-GSA-MW-12V
4/25/2016		<0.005	<0.005	<0.005	
4/26/2016	<0.005				
6/20/2016	<0.005	<0.005		<0.005	
6/22/2016			<0.005		
8/8/2016	<0.005	<0.005			
8/9/2016			<0.005	<0.005	
8/24/2016	<0.005	<0.005	<0.005	<0.005	
10/3/2016	<0.005	<0.005		<0.005	
10/4/2016			<0.005		
10/26/2016	<0.005	<0.005	<0.005	<0.005	
11/21/2016	<0.005	0.00111 (J)	<0.005	<0.005	
1/17/2017	<0.005	<0.005			
1/18/2017			<0.005	<0.005	
3/22/2017	<0.005	<0.005	0.00122 (J)	<0.005	
4/18/2017	<0.005	<0.005	<0.005	<0.005	
5/30/2017	<0.005				
5/31/2017		<0.005	<0.005		
2/13/2018	<0.005	<0.005	<0.005	<0.005	
5/22/2018	<0.005	<0.005			
5/23/2018				<0.005	
5/24/2018			<0.005		
6/12/2018	<0.005	<0.005	0.00103 (J)	<0.005	
10/17/2018	<0.005	<0.005	0.00133 (J)	<0.005	
11/19/2018	<0.005	<0.005	0.0012 (J)	<0.005	
4/10/2019	<0.005	<0.005	<0.005	<0.005	
5/14/2019	<0.005	<0.005	<0.005	<0.005	
10/8/2019	<0.005	<0.005	0.0048 (J)		
10/10/2019				<0.005	
10/16/2019	<0.005	<0.005	0.00389 (J)	<0.005	
2/3/2020	<0.005	<0.005	<0.005	<0.005	
8/3/2020	<0.005	<0.005	0.00426 (J)		
8/5/2020				<0.005	<0.005
2/22/2021	0.000403	0.000295	0.000789	0.000125 (J)	
3/3/2021					0.000339

Time Series

Constituent: Arsenic (mg/L) Analysis Run 5/20/2021 5:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-9V	GS-GSA-MW-14H
8/4/2020	<0.005	
8/5/2020		0.00181 (J)
3/1/2021	0.00136	
3/3/2021		0.00155

Time Series

Constituent: Barium (mg/L) Analysis Run 5/20/2021 5:06 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
8/24/2016				0.0155	
10/3/2016				0.0156	
10/26/2016				0.0122	
11/21/2016				0.0128	
1/17/2017				0.0125	
3/20/2017				0.0124	
4/17/2017				0.0149	
5/30/2017				0.0121	
2/13/2018				0.0118	
6/11/2018				0.0127	
10/17/2018				0.013	
3/4/2019	0.0239				
3/5/2019					0.0956
4/10/2019				0.0153	
10/14/2019				0.0122	0.0451
10/16/2019	0.0192				
11/26/2019		0.0184			
2/3/2020				0.0141	0.0215
2/4/2020	0.0148	0.0141	0.0296		
8/4/2020	0.0138		0.0275	0.0139	0.017
8/5/2020		0.016			
3/1/2021				0.0154	
3/2/2021	0.0118	0.0134	0.0315		
3/3/2021					0.0181

Time Series

Constituent: Barium (mg/L) Analysis Run 5/20/2021 5:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-4	GS-GSA-MW-4V	GS-GSA-MW-8	GS-GSA-MW-8V	GS-GSA-MW-9H
8/24/2016	0.0135		0.0536		
10/3/2016	0.0127		0.0681		
10/26/2016	0.0118		0.0562		
11/21/2016	0.012		0.0604		
1/17/2017	0.0119		0.0402		
3/20/2017			0.0305		
3/21/2017	0.0116				
4/17/2017	0.0112				
4/18/2017			0.0276		
5/30/2017	0.0117		0.0272		
2/13/2018	0.0121		0.0249		
6/11/2018	0.0139				
6/12/2018			0.0234		
10/17/2018	0.0125		0.0236		
3/5/2019		0.0136			0.0312
4/10/2019	0.0136		0.02		
10/14/2019	0.0147	0.0123	0.0215		
10/16/2019					0.0163
2/3/2020		0.0103			
2/4/2020	0.0124		0.0209		0.0148
2/5/2020				0.096	
8/4/2020					0.0153
8/5/2020	0.0142	0.0112	0.0216	0.125	
3/1/2021			0.0194	0.15	
3/2/2021					0.0149
3/3/2021	0.0117	0.0103			

Time Series

Constituent: Barium (mg/L) Analysis Run 5/20/2021 5:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	MW-1 (bg)	MW-2 (bg)	MW-3 (bg)	MW-4 (bg)	GS-GSA-MW-12V
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)		
2/13/2018	0.00937 (J)	0.0127	0.00821 (J)	0.0111	
5/22/2018	0.0102	0.0131			
5/23/2018				0.0107	
5/24/2018			0.00977 (J)		
6/12/2018	0.0104	0.0138	0.00997 (J)	0.0108	
10/17/2018	0.00952 (J)	0.0137	0.0126	0.0119	
11/19/2018	0.00915 (J)	0.0115	0.0109	0.0107	
4/10/2019	0.0105	0.0111	0.0101	0.0107	
5/14/2019	0.00913 (J)	0.0109	0.00922 (J)	0.00949 (J)	
10/8/2019	0.0109	0.0151	0.0154		
10/10/2019				0.0116	
10/16/2019	0.0106	0.0146	0.0128	0.0125	
2/3/2020	0.00995 (J)	0.0122	0.0086 (J)	0.0103	
8/3/2020	0.0107	0.0147	0.0166		
8/5/2020				0.0125	0.0157
2/22/2021	0.0107	0.0132	0.00981	0.0111	
3/3/2021					0.0126

Time Series

Constituent: Barium (mg/L) Analysis Run 5/20/2021 5:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-9V	GS-GSA-MW-14H
8/4/2020	0.0155	
8/5/2020		0.0113
3/1/2021	0.012	
3/3/2021		0.0109

Time Series

Constituent: Beryllium (mg/L) Analysis Run 5/20/2021 5:06 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
8/24/2016				<0.001015	
10/3/2016				<0.001015	
10/26/2016				0.000922 (J)	
11/21/2016				0.00133 (J)	
1/17/2017				0.0017 (J)	
3/20/2017				0.00191 (J)	
4/17/2017				0.00655	
5/30/2017				0.00204 (J)	
2/13/2018				0.00387	
6/11/2018				0.00244 (J)	
10/17/2018				0.00345	
3/4/2019	<0.001015				
3/5/2019					<0.001015
4/10/2019				0.00257 (J)	
10/14/2019				0.00162 (J)	<0.001015
10/16/2019	<0.001015				
11/26/2019		0.0084			
2/3/2020				0.00141 (J)	<0.001015
2/4/2020	<0.001015	0.00709	<0.001015		
8/4/2020	<0.001015		<0.001015	0.00174 (J)	<0.001015
8/5/2020		0.00747			
3/1/2021				0.00157	
3/2/2021	<0.001015	0.00703	<0.001015		
3/3/2021					<0.001015

Time Series

Constituent: Beryllium (mg/L) Analysis Run 5/20/2021 5:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-4	GS-GSA-MW-4V	GS-GSA-MW-8	GS-GSA-MW-8V	GS-GSA-MW-9H
8/24/2016	0.00576		<0.001015		
10/3/2016	0.00469		<0.001015		
10/26/2016	0.00459		<0.001015		
11/21/2016	0.00502		<0.001015		
1/17/2017	0.00488		<0.001015		
3/20/2017			<0.001015		
3/21/2017	0.00521				
4/17/2017	0.0058				
4/18/2017			<0.001015		
5/30/2017	0.00517		<0.001015		
2/13/2018	0.00544		<0.001015		
6/11/2018	0.00463				
6/12/2018			<0.001015		
10/17/2018	0.00369		<0.001015		
3/5/2019		0.00155 (J)			<0.001015
4/10/2019	0.00469		<0.001015		
10/14/2019	0.00403	0.00382	<0.001015		
10/16/2019					0.000985 (J)
2/3/2020		0.00362			
2/4/2020	0.00415		<0.001015		0.000929 (J)
2/5/2020				<0.001015	
8/4/2020					0.000882 (J)
8/5/2020	0.00385	0.00416	<0.001015	<0.001015	
3/1/2021			<0.001015	<0.001015	
3/2/2021					0.000724 (J)
3/3/2021	0.00406	0.0032			

Time Series

Constituent: Beryllium (mg/L) Analysis Run 5/20/2021 5:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	MW-1 (bg)	MW-2 (bg)	MW-3 (bg)	MW-4 (bg)	GS-GSA-MW-12V
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		
2/13/2018	<0.001015	<0.001015	<0.001015	<0.001015	
5/22/2018	<0.001015	<0.001015			
5/23/2018				<0.001015	
5/24/2018			0.00164 (J)		
6/12/2018	<0.001015	<0.001015	0.00306	<0.001015	
10/17/2018	<0.001015	<0.001015	0.0121	<0.001015	
11/19/2018	<0.001015	<0.001015	0.0185 (o)	<0.001015	
4/10/2019	<0.001015	<0.001015	<0.001015	<0.001015	
5/14/2019	<0.001015	<0.001015	<0.001015	<0.001015	
10/8/2019	<0.001015	<0.001015	0.0084		
10/10/2019				<0.001015	
10/16/2019	<0.001015	<0.001015	0.0103	<0.001015	
2/3/2020	<0.001015	<0.001015	<0.001015	<0.001015	
8/3/2020	<0.001015	<0.001015	0.00405		
8/5/2020				<0.001015	<0.001015
2/22/2021	<0.001015	<0.001015	<0.001015	<0.001015	
3/3/2021					<0.001015

Time Series

Constituent: Beryllium (mg/L) Analysis Run 5/20/2021 5:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-9V	GS-GSA-MW-14H
8/4/2020	<0.001015	
8/5/2020		0.00879
3/1/2021	<0.001015	
3/3/2021		0.00818

Time Series

Constituent: Boron (mg/L) Analysis Run 5/20/2021 5:06 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
8/24/2016				0.799	
10/3/2016				0.889	
10/26/2016				1.23	
11/21/2016				1.72	
1/17/2017				2.63	
3/20/2017				3.11	
4/17/2017				4.51	
5/30/2017				2.9	
8/24/2017				2.83	
6/11/2018				3.09	
10/17/2018				2.59	
3/4/2019	0.0235 (J)				
3/5/2019					0.895
4/10/2019				3.35	
10/14/2019				2.48	2.38
10/16/2019	0.0352 (J)				
11/26/2019		0.0798 (J)			
2/3/2020				2.13	3.06
2/4/2020	<0.1015	0.0748 (J)	0.202		
8/4/2020	<0.1015		0.263	1.82	2.8
8/5/2020		0.0748 (J)			
3/1/2021				2.55	
3/2/2021	0.0305 (J)	0.0875 (J)	0.206		
3/3/2021					2.99

Time Series

Constituent: Boron (mg/L) Analysis Run 5/20/2021 5:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-4	GS-GSA-MW-4V	GS-GSA-MW-8	GS-GSA-MW-8V	GS-GSA-MW-9H
8/24/2016	4.88		0.0898 (J)		
10/3/2016	4.75		0.0821 (J)		
10/26/2016	4.96		0.0889 (J)		
11/21/2016	4.82		0.0788 (J)		
1/17/2017	3.97		0.0607 (J)		
3/20/2017			0.114		
3/21/2017	3.39				
4/17/2017	3.46				
4/18/2017			0.108		
5/30/2017	3.79		0.105		
8/24/2017	4.19		0.12		
6/11/2018	3.96				
6/12/2018			0.181		
10/17/2018	3.98		0.616		
3/5/2019		7.15			12.8
4/10/2019	3.74		0.944		
10/14/2019	3.37	5.64	2.11		
10/16/2019					10.7
2/3/2020		5.25			
2/4/2020	2.74		1.47		9.63
2/5/2020				0.136	
8/4/2020					8.53
8/5/2020	2.51	4.41	2.16	0.131	
3/1/2021			1.85	0.145	
3/2/2021					6.68
3/3/2021	2.42	4.09			

Time Series

Constituent: Boron (mg/L) Analysis Run 5/20/2021 5:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	MW-1 (bg)	MW-2 (bg)	MW-3 (bg)	MW-4 (bg)	GS-GSA-MW-12V
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)		
8/23/2017	0.0253 (J)	0.0267 (J)	0.0425 (J)	0.042 (J)	
5/22/2018	0.0224 (J)	0.0251 (J)			
5/23/2018				0.0433 (J)	
5/24/2018			0.0339 (J)		
6/12/2018	0.0214 (J)	0.0275 (J)	0.0371 (J)	0.0478 (J)	
10/17/2018	0.0216 (J)	0.0321 (J)	0.0596 (J)	0.0468 (J)	
11/19/2018	0.0237 (J)	0.0324 (J)	0.0514 (J)	0.0526 (J)	
4/10/2019	0.0304 (J)	<0.1015	<0.1015	0.0438 (J)	
5/14/2019	<0.1015	<0.1015	<0.1015	<0.1015	
10/8/2019	<0.1015	0.0371 (J)	0.0537 (J)		
10/10/2019				0.0487 (J)	
10/16/2019	0.0385 (J)	0.0419 (J)	0.05 (J)	0.0505 (J)	
2/3/2020	<0.1015	<0.1015	<0.1015	0.0433 (J)	
8/3/2020	<0.1015	0.0317 (J)	0.0424 (J)		
8/5/2020				0.0459 (J)	1.55
2/22/2021	0.0307 (J)	<0.1015	<0.1015	0.0397 (J)	
3/3/2021					1.54

Time Series

Constituent: Boron (mg/L) Analysis Run 5/20/2021 5:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-9V	GS-GSA-MW-14H
8/4/2020	0.149	
8/5/2020		0.158
3/1/2021	0.147	
3/3/2021		0.203

Time Series

Constituent: Cadmium (mg/L) Analysis Run 5/20/2021 5:06 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
8/24/2016				<0.000203	
10/3/2016				<0.000203	
10/26/2016				<0.000203	
11/21/2016				<0.000203	
1/17/2017				<0.000203	
3/20/2017				<0.000203	
4/17/2017				<0.000203	
5/30/2017				<0.000203	
2/13/2018				<0.000203	
6/11/2018				<0.000203	
10/17/2018				<0.000203	
3/4/2019	<0.000203				
3/5/2019					<0.000203
4/10/2019				<0.000203	
10/14/2019				<0.000203	<0.000203
10/16/2019	<0.000203				
11/26/2019		0.00351			
2/3/2020				<0.000203	<0.000203
2/4/2020	<0.000203	0.00301	<0.000203		
8/4/2020	<0.000203		<0.000203	<0.000203	<0.000203
8/5/2020		0.00393			
3/1/2021				<0.000203	
3/2/2021	0.000366	0.00319	<0.000203		
3/3/2021					<0.000203

Time Series

Constituent: Cadmium (mg/L) Analysis Run 5/20/2021 5:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-4	GS-GSA-MW-4V	GS-GSA-MW-8	GS-GSA-MW-8V	GS-GSA-MW-9H
8/24/2016	0.00148		<0.000203		
10/3/2016	0.00147		<0.000203		
10/26/2016	0.00157		<0.000203		
11/21/2016	0.00154		<0.000203		
1/17/2017	0.00131		<0.000203		
3/20/2017			<0.000203		
3/21/2017	0.00134				
4/17/2017	0.00122				
4/18/2017			<0.000203		
5/30/2017	0.00167		<0.000203		
2/13/2018	0.00145		<0.000203		
6/11/2018	0.00171				
6/12/2018			<0.000203		
10/17/2018	0.00188		<0.000203		
3/5/2019		<0.000203			0.000336 (J)
4/10/2019	0.00176		<0.000203		
10/14/2019	0.0015	<0.000203	<0.000203		
10/16/2019					0.000362 (J)
2/3/2020		<0.000203			
2/4/2020	0.00143		<0.000203		0.000349 (J)
2/5/2020				<0.000203	
8/4/2020					0.000308 (J)
8/5/2020	0.00157	<0.000203	<0.000203	<0.000203	
3/1/2021			<0.000203	<0.000203	
3/2/2021					0.000338
3/3/2021	0.00162	<0.000203			

Time Series

Constituent: Cadmium (mg/L) Analysis Run 5/20/2021 5:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	MW-1 (bg)	MW-2 (bg)	MW-3 (bg)	MW-4 (bg)	GS-GSA-MW-12V
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	<0.000203	<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		
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	
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	0.00225	<0.000203	0.00448	<0.000203	
2/3/2020	0.00182	<0.000203	0.000988 (J)	<0.000203	
8/3/2020	0.00237	<0.000203	0.00652		
8/5/2020				<0.000203	<0.000203
2/22/2021	0.00184	8.96E-05 (J)	0.00536	8.96E-05 (J)	
3/3/2021					<0.000203

Time Series

Constituent: Cadmium (mg/L) Analysis Run 5/20/2021 5:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-9V	GS-GSA-MW-14H
8/4/2020	<0.000203	
8/5/2020		0.0018
3/1/2021	<0.000203	
3/3/2021		0.0016

Time Series

Constituent: Calcium (mg/L) Analysis Run 5/20/2021 5:06 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
8/24/2016				539	
10/3/2016				519.7	
10/26/2016				916	
11/21/2016				552	
1/17/2017				572	
3/20/2017				817	
4/17/2017				476	
5/30/2017				515	
8/24/2017				598	
6/11/2018				558	
10/17/2018				533	
3/4/2019	177				
3/5/2019					329
4/10/2019				659	
10/14/2019				552	368
10/16/2019	143				
11/26/2019		144			
2/3/2020				589	504
2/4/2020	163	158	171		
8/4/2020	139		192	545	443
8/5/2020		126			
3/1/2021				514	
3/2/2021	139	124	164		
3/3/2021					466

Time Series

Constituent: Calcium (mg/L) Analysis Run 5/20/2021 5:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-4	GS-GSA-MW-4V	GS-GSA-MW-8	GS-GSA-MW-8V	GS-GSA-MW-9H
8/24/2016	102		263		
10/3/2016	98.4		253		
10/26/2016	88.7		235		
11/21/2016	104		246		
1/17/2017	102		231		
3/20/2017			298		
3/21/2017	94.7				
4/17/2017	97.9				
4/18/2017			317		
5/30/2017	93.9		316		
8/24/2017	105		391		
6/11/2018	105				
6/12/2018			442		
10/17/2018	117		514		
3/5/2019		249			578
4/10/2019	129		533		
10/14/2019	93.5	173	524		
10/16/2019					363
2/3/2020		184			
2/4/2020	116		461		413
2/5/2020				37.3	
8/4/2020					346
8/5/2020	94.7	167	497	31.9	
3/1/2021			386	26.2	
3/2/2021					333
3/3/2021	100	161			

Time Series

Constituent: Calcium (mg/L) Analysis Run 5/20/2021 5:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	MW-1 (bg)	MW-2 (bg)	MW-3 (bg)	MW-4 (bg)	GS-GSA-MW-12V
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		
8/23/2017	152	155	298	297	
5/22/2018	166	172			
5/23/2018				296	
5/24/2018			297		
6/12/2018	203	179	318	355	
10/17/2018	171	200	392	342	
11/19/2018	154	221	387	289	
4/10/2019	243	200	348	356	
5/14/2019	167	168	254	254	
10/8/2019	157	190	371		
10/10/2019				302	
10/16/2019	157	194	346	356	
2/3/2020	172	172	276	265	
8/3/2020	148	172	285		
8/5/2020				281	350
2/22/2021	151	178	312	271	
3/3/2021					353

Time Series

Constituent: Calcium (mg/L) Analysis Run 5/20/2021 5:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-9V	GS-GSA-MW-14H
8/4/2020	434	
8/5/2020		141
3/1/2021	428	
3/3/2021		137

Time Series

Constituent: Chloride (mg/L) Analysis Run 5/20/2021 5:06 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
8/24/2016				204	
10/3/2016				220	
10/26/2016				249	
11/21/2016				256	
1/17/2017				301	
3/20/2017				320	
4/17/2017				340	
5/30/2017				310	
8/24/2017				290	
6/11/2018				260	
10/17/2018				270	
3/4/2019	3.81				
3/5/2019					194
4/10/2019				249	
10/14/2019				228	298
10/16/2019	4.45				
11/26/2019		2.43			
2/3/2020				267	338
2/4/2020	4.27	2.34	12.9		
8/4/2020	4.51		12.7	222	305
8/5/2020		2			
3/1/2021				250	
3/2/2021	4.63	2.28	10.9		
3/3/2021					307

Time Series

Constituent: Chloride (mg/L) Analysis Run 5/20/2021 5:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-4	GS-GSA-MW-4V	GS-GSA-MW-8	GS-GSA-MW-8V	GS-GSA-MW-9H
8/24/2016	112		4.03		
10/3/2016	115		3.87		
10/26/2016	115		4.08		
11/21/2016	117		4.39		
1/17/2017	99.3		7.22		
3/20/2017			5.7		
3/21/2017	79				
4/17/2017	85				
4/18/2017			4.7		
5/30/2017	99		15		
8/24/2017	110		93		
6/11/2018	81				
6/12/2018			140		
10/17/2018	85		180		
3/5/2019		191			313
4/10/2019	74.3		174		
10/14/2019	59.1	122	207		
10/16/2019					145
2/3/2020		101			
2/4/2020	43.2		94.1		139
2/5/2020				9.05	
8/4/2020					109
8/5/2020	41	80.9	146	13.9	
3/1/2021			92.5	19.4	
3/2/2021					84.7
3/3/2021	40.3	70.8			

Time Series

Constituent: Chloride (mg/L) Analysis Run 5/20/2021 5:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	MW-1 (bg)	MW-2 (bg)	MW-3 (bg)	MW-4 (bg)	GS-GSA-MW-12V
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)		
8/23/2017	2.7	4.4	1.8 (J)	2.3	
5/22/2018	2.3	3.2			
5/23/2018				2	
5/24/2018			1.6 (J)		
6/12/2018	2.3	3.7	1.4 (J)	1.7 (J)	
10/17/2018	1.7 (J)	4.6	<2	1.5 (J)	
11/19/2018	1.7 (J)	3	<2	<2	
4/10/2019	2.36	1.76	2.25	1.88	
5/14/2019	2.28	2.98	2.28	1.82	
10/8/2019	2.31	4.26	1.36		
10/10/2019				1.93	
10/16/2019	2.42	4.04	1.4	1.92	
2/3/2020	2.07	2.48	2.12	1.72	
8/3/2020	2.05	4.03	1.17		
8/5/2020				1.57	159
2/22/2021	2.16	1.72	2.22	1.52	
3/3/2021					152

Time Series

Constituent: Chloride (mg/L) Analysis Run 5/20/2021 5:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-9V	GS-GSA-MW-14H
8/4/2020	58.6	
8/5/2020		3.28
3/1/2021	58.7	
3/3/2021		4.8

Time Series

Constituent: Chromium (mg/L) Analysis Run 5/20/2021 5:06 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
8/24/2016				<0.001015	
10/3/2016				<0.001015	
10/26/2016				<0.001015	
11/21/2016				<0.001015	
1/17/2017				<0.001015	
3/20/2017				<0.001015	
4/17/2017				<0.001015	
5/30/2017				<0.001015	
2/13/2018				<0.001015	
6/11/2018				<0.001015	
10/17/2018				<0.001015	
3/4/2019	<0.001015				
3/5/2019					<0.001015
4/10/2019				<0.001015	
10/14/2019				<0.001015	<0.001015
10/16/2019	<0.001015				
11/26/2019		<0.001015			
2/3/2020				<0.001015	<0.001015
2/4/2020	<0.001015	<0.001015	<0.001015		
8/4/2020	<0.001015		<0.001015	<0.001015	<0.001015
8/5/2020		<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

Time Series

Constituent: Chromium (mg/L) Analysis Run 5/20/2021 5:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-4	GS-GSA-MW-4V	GS-GSA-MW-8	GS-GSA-MW-8V	GS-GSA-MW-9H
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				
4/18/2017			<0.001015		
5/30/2017	<0.001015		<0.001015		
2/13/2018	<0.001015		<0.001015		
6/11/2018	<0.001015				
6/12/2018			<0.001015		
10/17/2018	<0.001015		<0.001015		
3/5/2019		<0.001015			<0.001015
4/10/2019	<0.001015		<0.001015		
10/14/2019	<0.001015	<0.001015	<0.001015		
10/16/2019					<0.001015
2/3/2020		<0.001015			
2/4/2020	<0.001015		<0.001015		<0.001015
2/5/2020				<0.001015	
8/4/2020					<0.001015
8/5/2020	<0.001015	<0.001015	<0.001015	<0.001015	
3/1/2021			0.000423 (J)	<0.001015	
3/2/2021					0.000218 (J)
3/3/2021	0.000567 (J)	<0.001015			

Time Series

Constituent: Chromium (mg/L) Analysis Run 5/20/2021 5:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	MW-1 (bg)	MW-2 (bg)	MW-3 (bg)	MW-4 (bg)	GS-GSA-MW-12V
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		
2/13/2018	<0.001015	<0.001015	<0.001015	<0.001015	
5/22/2018	<0.001015	<0.001015			
5/23/2018				<0.001015	
5/24/2018			<0.001015		
6/12/2018	<0.001015	<0.001015	<0.001015	<0.001015	
10/17/2018	<0.001015	<0.001015	<0.001015	<0.001015	
11/19/2018	<0.001015	<0.001015	<0.001015	<0.001015	
4/10/2019	<0.001015	<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	
2/3/2020	<0.001015	<0.001015	<0.001015	<0.001015	
8/3/2020	<0.001015	<0.001015	<0.001015		
8/5/2020				<0.001015	<0.001015
2/22/2021	0.000382 (J)	<0.001015	0.00035 (J)	<0.001015	
3/3/2021					<0.001015

Time Series

Constituent: Chromium (mg/L) Analysis Run 5/20/2021 5:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-9V	GS-GSA-MW-14H
8/4/2020	<0.001015	
8/5/2020		<0.001015
3/1/2021	<0.001015	
3/3/2021		<0.001015

Time Series

Constituent: Cobalt (mg/L) Analysis Run 5/20/2021 5:06 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
8/24/2016				0.0303	
10/3/2016				0.041	
10/26/2016				0.0505	
11/21/2016				0.0617	
1/17/2017				0.0793	
3/20/2017				0.0726	
4/17/2017				0.294 (o)	
5/30/2017				0.0832	
2/13/2018				0.124	
6/11/2018				0.138	
10/17/2018				0.138	
3/4/2019	0.0066				
3/5/2019					0.0059
4/10/2019				0.151	
10/14/2019				0.102	0.00845
10/16/2019	0.00598				
11/26/2019		0.435			
2/3/2020				0.0843	0.0135
2/4/2020	0.00582	0.351	0.0442		
8/4/2020	0.0061		0.111	0.0862	0.0133
8/5/2020		0.436			
3/1/2021				0.119	
3/2/2021	0.00512	0.307	0.143		
3/3/2021					0.0134

Time Series

Constituent: Cobalt (mg/L) Analysis Run 5/20/2021 5:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-4	GS-GSA-MW-4V	GS-GSA-MW-8	GS-GSA-MW-8V	GS-GSA-MW-9H
8/24/2016	0.151		0.0201		
10/3/2016	0.143		0.0167		
10/26/2016	0.154		0.0253		
11/21/2016	0.155		0.0233		
1/17/2017	0.16		0.0708		
3/20/2017			0.00277 (J)		
3/21/2017	0.158				
4/17/2017	0.159				
4/18/2017			<0.000203		
5/30/2017	0.159		<0.000203		
2/13/2018	0.19		0.00492 (J)		
6/11/2018	0.166				
6/12/2018			<0.000203		
10/17/2018	0.154		<0.000203		
3/5/2019		0.0836			0.14
4/10/2019	0.241		<0.000203		
10/14/2019	0.213	0.12	<0.000203		
10/16/2019					0.168
2/3/2020		0.108			
2/4/2020	0.217		<0.000203		0.159
2/5/2020				<0.000203	
8/4/2020					0.178
8/5/2020	0.235	0.141	<0.000203	<0.000203	
3/1/2021			0.00546	<0.000203	
3/2/2021					0.163
3/3/2021	0.24	0.118			

Time Series

Constituent: Cobalt (mg/L) Analysis Run 5/20/2021 5:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	MW-1 (bg)	MW-2 (bg)	MW-3 (bg)	MW-4 (bg)	GS-GSA-MW-12V
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		
2/13/2018	0.062	0.0179	0.00661 (J)	<0.000203	
5/22/2018	0.0443	0.028			
5/23/2018				<0.000203	
5/24/2018			0.158		
6/12/2018	0.0512	0.0366	0.291	<0.000203	
10/17/2018	0.0751	0.0745	0.49	<0.000203	
11/19/2018	0.0825	0.0225	0.386	<0.000203	
4/10/2019	0.0445	0.0152	0.0144	<0.000203	
5/14/2019	0.0485	0.0222	0.00536	<0.000203	
10/8/2019	0.0778	0.0674	1.07		
10/10/2019				<0.000203	
10/16/2019	0.08	0.073	0.848	<0.000203	
2/3/2020	0.0495	0.0193	0.0114	<0.000203	
8/3/2020	0.0722	0.0589	0.64		
8/5/2020				<0.000203	<0.000203
2/22/2021	0.0657	0.0161	0.0515	<0.000203	
3/3/2021					0.00028

Time Series

Constituent: Cobalt (mg/L) Analysis Run 5/20/2021 5:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-9V	GS-GSA-MW-14H
8/4/2020	0.00412 (J)	
8/5/2020		0.237
3/1/2021	0.000992	
3/3/2021		0.202

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 5/20/2021 5:06 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
8/24/2016				0.389 (U)	
10/3/2016				0.683	
10/26/2016				0.242 (U)	
11/21/2016				0.764	
1/17/2017				0.191 (U)	
3/20/2017				-0.0158 (U)	
4/17/2017				0.307 (U)	
5/30/2017				0.724	
2/13/2018				0.633	
6/11/2018				0.773	
10/17/2018				0.668	
3/4/2019	0.135 (U)				
3/5/2019					0.932
4/10/2019				0.265 (U)	
10/14/2019				0.297 (U)	0.184 (U)
10/16/2019	0.189 (U)				
2/3/2020				0.28 (U)	0.408 (U)
2/4/2020	0.319 (U)	0.939	0.624		
8/4/2020	0.0315 (U)		-0.402 (U)	0.45 (U)	-0.00668 (U)
8/5/2020		-0.306 (U)			
3/1/2021				0.57 (U)	
3/2/2021	0.308 (U)	2.18	0.686 (U)		
3/3/2021					1.11 (U)

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 5/20/2021 5:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-4	GS-GSA-MW-4V	GS-GSA-MW-8	GS-GSA-MW-8V	GS-GSA-MW-9H
8/24/2016	0.741		0.558 (U)		
10/3/2016	0.648		0.565		
10/26/2016	0.632		0.555 (U)		
11/21/2016	1.57		0.987		
1/17/2017	0.493		0.476 (U)		
3/20/2017			0.633 (U)		
3/21/2017	0.604 (U)				
4/17/2017	0.252 (U)				
4/18/2017			0.248 (U)		
5/30/2017	0.925		0.412 (U)		
2/13/2018	0.382		1.08		
6/11/2018	0.796				
6/12/2018			0.446 (U)		
10/17/2018	0.922		1.05		
3/5/2019		0.364 (U)			0.852
4/10/2019	0.622		0.128 (U)		
10/14/2019	0.317 (U)	0.369 (U)	0.225 (U)		
10/16/2019					1.29
2/3/2020		0.758			
2/4/2020	0.324 (U)		0.336 (U)		0.441 (U)
2/5/2020				0.576	
8/4/2020					-0.385 (U)
8/5/2020	0.389 (U)	0.533 (U)	-0.115 (U)	1.85	
3/1/2021			0.902 (U)	1.49	
3/2/2021					0.87 (U)
3/3/2021	0.836 (U)	0.325 (U)			

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 5/20/2021 5:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	MW-1 (bg)	MW-2 (bg)	MW-3 (bg)	MW-4 (bg)	GS-GSA-MW-12V
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 (D)	0.654 (D)	0.521 (D)	0.794	
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	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)	
8/3/2020	-0.127 (U)	0.888 (U)	0.765 (U)		
8/5/2020				0.565 (U)	-0.284 (U)
2/22/2021	0.677 (U)	0.434 (U)	0.472 (U)	0 (U)	
3/3/2021					0.388 (U)

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 5/20/2021 5:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-9V	GS-GSA-MW-14H
8/4/2020	0.837 (U)	
8/5/2020		0.758 (U)
3/1/2021	0.686 (U)	
3/3/2021		0.185 (U)

Time Series

Constituent: Fluoride (mg/L) Analysis Run 5/20/2021 5:06 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
8/24/2016				0.264 (J)	
10/3/2016				0.276 (J)	
10/26/2016				0.182 (J)	
11/21/2016				0.238 (J)	
1/17/2017				0.34	
3/20/2017				0.39	
4/17/2017				0.57	
5/30/2017				0.38	
8/24/2017				0.54	
2/13/2018				0.57 (D)	
6/11/2018				0.63	
10/17/2018				0.78	
3/4/2019	0.101				
3/5/2019					0.249
4/10/2019				0.738	
10/14/2019				0.619	0.37
10/16/2019	0.0875 (J)				
11/26/2019		<0.1			
2/3/2020				0.427	0.438
2/4/2020	0.0743 (J)	<0.1	0.115		
8/4/2020	0.109		0.113	0.389	0.349
8/5/2020		<0.1			
3/1/2021				0.449	
3/2/2021	0.0758 (J)	<0.1	0.167		
3/3/2021					0.458

Time Series

Constituent: Fluoride (mg/L) Analysis Run 5/20/2021 5:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-4	GS-GSA-MW-4V	GS-GSA-MW-8	GS-GSA-MW-8V	GS-GSA-MW-9H
8/24/2016	0.793		0.165 (J)		
10/3/2016	0.769		0.114 (J)		
10/26/2016	0.578		0.056 (J)		
11/21/2016	0.562		0.059 (J)		
1/17/2017	0.571		0.07 (J)		
3/20/2017			0.18		
3/21/2017	0.54				
4/17/2017	0.54				
4/18/2017			0.17		
5/30/2017	0.49		0.16		
8/24/2017	0.7		0.18		
2/13/2018	0.63 (D)		0.15 (D)		
6/11/2018	0.39				
6/12/2018			0.15		
10/17/2018	0.44		0.16		
3/5/2019		0.477			0.239
4/10/2019	<0.1		0.156		
10/14/2019	<0.1	0.449	0.118		
10/16/2019					0.101
2/3/2020		0.555			
2/4/2020	<0.1		0.132		0.205
2/5/2020				0.162	
8/4/2020					0.127
8/5/2020	<0.1	0.363	0.119	0.256	
3/1/2021			0.106	0.346	
3/2/2021					0.094 (J)
3/3/2021	<0.1	0.262			

Time Series

Constituent: Fluoride (mg/L) Analysis Run 5/20/2021 5:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	MW-1 (bg)	MW-2 (bg)	MW-3 (bg)	MW-4 (bg)	GS-GSA-MW-12V
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		
8/23/2017	0.16	0.16	0.55	0.38	
2/13/2018	0.14 (D)	0.22 (D)	0.27 (D)	0.38 (D)	
5/22/2018	0.16	0.17			
5/23/2018				0.38	
5/24/2018			0.6		
6/12/2018	0.16	0.16	0.53	0.39	
10/17/2018	0.18	0.16	0.63	0.39	
11/19/2018	0.15	0.18	0.31	0.36	
4/10/2019	0.102	0.262	0.273	0.384	
5/14/2019	0.119	0.17	0.281	0.335	
10/8/2019	0.0924 (J)	0.164	0.225		
10/10/2019				0.304	
10/16/2019	0.0756 (J)	0.114	0.106	0.302	
2/3/2020	0.0982 (J)	0.182	0.256	0.37	
8/3/2020	<0.1	0.122	0.0766 (J)		
8/5/2020				0.359	0.217
2/22/2021	0.082 (J)	0.209	0.246	0.357	
3/3/2021					0.243

Time Series

Constituent: Fluoride (mg/L) Analysis Run 5/20/2021 5:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-9V	GS-GSA-MW-14H
8/4/2020	0.135	
8/5/2020		0.082 (J)
3/1/2021	0.12	
3/3/2021		<0.1

Time Series

Constituent: Lead (mg/L) Analysis Run 5/20/2021 5:06 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
8/24/2016				<0.000203	
10/3/2016				<0.000203	
10/26/2016				<0.000203	
11/21/2016				<0.000203	
1/17/2017				<0.000203	
3/20/2017				<0.000203	
4/17/2017				<0.000203	
5/30/2017				<0.000203	
2/13/2018				<0.000203	
6/11/2018				<0.000203	
10/17/2018				<0.000203	
3/4/2019	<0.000203				
3/5/2019					<0.000203
4/10/2019				<0.000203	
10/14/2019				<0.000203	<0.000203
10/16/2019	<0.000203				
11/26/2019		0.00271 (J)			
2/3/2020				<0.000203	<0.000203
2/4/2020	<0.000203	0.00334 (J)	<0.000203		
8/4/2020	<0.000203		<0.000203	<0.000203	<0.000203
8/5/2020		0.00329 (J)			
3/1/2021				0.000157 (J)	
3/2/2021	0.000145 (J)	0.00478	<0.000203		
3/3/2021					<0.000203

Time Series

Constituent: Lead (mg/L) Analysis Run 5/20/2021 5:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-4	GS-GSA-MW-4V	GS-GSA-MW-8	GS-GSA-MW-8V	GS-GSA-MW-9H
8/24/2016	<0.000203		<0.000203		
10/3/2016	<0.000203		<0.000203		
10/26/2016	<0.000203		<0.000203		
11/21/2016	<0.000203		<0.000203		
1/17/2017	<0.000203		<0.000203		
3/20/2017			<0.000203		
3/21/2017	<0.000203				
4/17/2017	<0.000203				
4/18/2017			<0.000203		
5/30/2017	<0.000203		<0.000203		
2/13/2018	<0.000203		<0.000203		
6/11/2018	<0.000203				
6/12/2018			<0.000203		
10/17/2018	<0.000203		<0.000203		
3/5/2019		<0.000203			<0.000203
4/10/2019	<0.000203		<0.000203		
10/14/2019	<0.000203	<0.000203	<0.000203		
10/16/2019					<0.000203
2/3/2020		<0.000203			
2/4/2020	<0.000203		<0.000203		<0.000203
2/5/2020				<0.000203	
8/4/2020					<0.000203
8/5/2020	<0.000203	<0.000203	<0.000203	<0.000203	
3/1/2021			0.000145 (J)	<0.000203	
3/2/2021					0.000206
3/3/2021	0.000609	<0.000203			

Time Series

Constituent: Lead (mg/L) Analysis Run 5/20/2021 5:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	MW-1 (bg)	MW-2 (bg)	MW-3 (bg)	MW-4 (bg)	GS-GSA-MW-12V
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		
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	<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	0.00108 (J)	<0.000203	
2/3/2020	<0.000203	<0.000203	<0.000203	<0.000203	
8/3/2020	<0.000203	<0.000203	0.002 (J)		
8/5/2020				<0.000203	<0.000203
2/22/2021	<0.000203	<0.000203	8.8E-05 (J)	<0.000203	
3/3/2021					<0.000203

Time Series

Constituent: Lead (mg/L) Analysis Run 5/20/2021 5:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-9V	GS-GSA-MW-14H
8/4/2020	<0.000203	
8/5/2020		0.00122 (J)
3/1/2021	<0.000203	
3/3/2021		0.000876

Time Series

Constituent: Lithium (mg/L) Analysis Run 5/20/2021 5:06 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
8/24/2016				0.362	
10/3/2016				0.371	
10/26/2016				0.416	
11/21/2016				0.401	
1/17/2017				0.497	
3/20/2017				0.533	
4/17/2017				0.47	
5/30/2017				0.479	
2/13/2018				0.508	
6/11/2018				0.425	
10/17/2018				0.494	
3/4/2019	<0.01999956				
3/5/2019					0.309
4/10/2019				0.425	
10/14/2019				0.459	0.38
10/16/2019	<0.01999956				
11/26/2019		0.449			
2/3/2020				0.474	0.46
2/4/2020	<0.01999956	0.394	0.0506		
8/4/2020	<0.01999956		0.0534	0.468	0.395
8/5/2020		0.441			
3/1/2021				0.353	
3/2/2021	<0.01999956	0.456	0.0439		
3/3/2021					0.455

Time Series

Constituent: Lithium (mg/L) Analysis Run 5/20/2021 5:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-4	GS-GSA-MW-4V	GS-GSA-MW-8	GS-GSA-MW-8V	GS-GSA-MW-9H
8/24/2016	0.291		0.0683		
10/3/2016	0.287		0.0661		
10/26/2016	0.298		0.0681		
11/21/2016	0.294		0.0682		
1/17/2017	0.27		0.0516		
3/20/2017			0.135		
3/21/2017	0.258				
4/17/2017	0.274				
4/18/2017			0.139		
5/30/2017	0.285		0.141		
2/13/2018	0.274		0.163		
6/11/2018	0.266				
6/12/2018			0.166		
10/17/2018	0.266		0.188		
3/5/2019		0.369			0.169
4/10/2019	0.282		0.195		
10/14/2019	0.262	0.317	0.209		
10/16/2019					0.184
2/3/2020		0.332			
2/4/2020	0.29		0.188		0.203
2/5/2020				0.327	
8/4/2020					0.166
8/5/2020	0.273	0.322	0.206	0.275	
3/1/2021			0.149	0.292	
3/2/2021					0.178
3/3/2021	0.313	0.345			

Time Series

Constituent: Lithium (mg/L) Analysis Run 5/20/2021 5:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	MW-1 (bg)	MW-2 (bg)	MW-3 (bg)	MW-4 (bg)	GS-GSA-MW-12V
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		
2/13/2018	0.0233 (J)	0.0615	0.0964	0.0446 (J)	
5/22/2018	0.0263 (J)	0.0465 (J)			
5/23/2018				0.0513	
5/24/2018			0.145		
6/12/2018	0.0251 (J)	0.0472 (J)	0.194	0.0511	
10/17/2018	0.025 (J)	0.0633	0.384	0.0532	
11/19/2018	0.0241	0.0584	0.323	0.0467	
4/10/2019	0.0285	0.0574	0.0905	0.0504	
5/14/2019	0.026 (J)	0.0445	0.0828	0.0485	
10/8/2019	0.0268	0.0677	0.419		
10/10/2019				0.054	
10/16/2019	0.0263	0.0661	0.337	0.052	
2/3/2020	0.0292	0.0534	0.0825	0.0556	
8/3/2020	0.0259	0.0611	0.27		
8/5/2020				0.0519	0.334
2/22/2021	0.0301	0.0625	0.126	0.0558	
3/3/2021					0.411

Time Series

Constituent: Lithium (mg/L) Analysis Run 5/20/2021 5:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-9V	GS-GSA-MW-14H
8/4/2020	0.364	
8/5/2020		0.512
3/1/2021	0.424	
3/3/2021		0.54

Time Series

Constituent: Mercury (mg/L) Analysis Run 5/20/2021 5:06 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
8/24/2016				<0.0005	
10/3/2016				<0.0005	
10/26/2016				<0.0005	
11/21/2016				<0.0005	
1/17/2017				<0.0005	
3/20/2017				<0.0005	
4/17/2017				<0.0005	
5/30/2017				<0.0005	
2/13/2018				<0.0005	
6/11/2018				<0.0005	
10/17/2018				<0.0005	
3/4/2019	<0.0005				
3/5/2019					<0.0005
4/10/2019				<0.0005	
10/14/2019				<0.0005	<0.0005
10/16/2019	<0.0005				
11/26/2019		<0.0005			
2/3/2020				<0.0005	<0.0005
2/4/2020	<0.0005	<0.0005	<0.0005		
8/4/2020	<0.0005		<0.0005	<0.0005	<0.0005
8/5/2020		<0.0005			
3/1/2021				<0.0005	
3/2/2021	<0.0005	<0.0005	<0.0005		
3/3/2021					<0.0005

Time Series

Constituent: Mercury (mg/L) Analysis Run 5/20/2021 5:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-4	GS-GSA-MW-4V	GS-GSA-MW-8	GS-GSA-MW-8V	GS-GSA-MW-9H
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				
4/18/2017			<0.0005		
5/30/2017	<0.0005		<0.0005		
2/13/2018	<0.0005		<0.0005		
6/11/2018	<0.0005				
6/12/2018			<0.0005		
10/17/2018	<0.0005		<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		
10/16/2019					<0.0005
2/3/2020		<0.0005			
2/4/2020	<0.0005		<0.0005		<0.0005
2/5/2020				<0.0005	
8/4/2020					<0.0005
8/5/2020	<0.0005	<0.0005	<0.0005	<0.0005	
3/1/2021			<0.0005	<0.0005	
3/2/2021					<0.0005
3/3/2021	<0.0005	<0.0005			

Time Series

Constituent: Mercury (mg/L) Analysis Run 5/20/2021 5:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	MW-1 (bg)	MW-2 (bg)	MW-3 (bg)	MW-4 (bg)	GS-GSA-MW-12V
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		
2/13/2018	<0.0005	<0.0005	<0.0005	<0.0005	
5/22/2018	<0.0005	<0.0005			
5/23/2018				<0.0005	
5/24/2018			<0.0005		
6/12/2018	<0.0005	<0.0005	<0.0005	<0.0005	
10/17/2018	<0.0005	<0.0005	<0.0005	<0.0005	
11/19/2018	<0.0005	<0.0005	<0.0005	<0.0005	
4/10/2019	<0.0005	<0.0005	<0.0005	<0.0005	
5/14/2019	<0.0005	<0.0005	<0.0005	<0.0005	
10/8/2019	<0.0005	<0.0005	<0.0005		
10/10/2019				<0.0005	
10/16/2019	<0.0005	<0.0005	<0.0005	<0.0005	
2/3/2020	<0.0005	<0.0005	<0.0005	<0.0005	
8/3/2020	<0.0005	<0.0005	<0.0005		
8/5/2020				<0.0005	<0.0005
2/22/2021	<0.0005	<0.0005	<0.0005	<0.0005	
3/3/2021					<0.0005

Time Series

Constituent: Mercury (mg/L) Analysis Run 5/20/2021 5:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-9V	GS-GSA-MW-14H
8/4/2020	<0.0005	
8/5/2020		<0.0005
3/1/2021	<0.0005	
3/3/2021		<0.0005

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 5/20/2021 5:06 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
8/24/2016				<0.000203	
10/3/2016				<0.000203	
10/26/2016				<0.000203	
11/21/2016				<0.000203	
1/17/2017				<0.000203	
3/20/2017				<0.000203	
4/17/2017				<0.000203	
5/30/2017				<0.000203	
2/13/2018				<0.000203	
6/11/2018				<0.000203	
10/17/2018				<0.000203	
3/4/2019	<0.000203				
3/5/2019					0.00347 (J)
4/10/2019				<0.000203	
10/14/2019				<0.000203	<0.000203
10/16/2019	<0.000203				
11/26/2019		<0.000203			
2/3/2020				<0.000203	<0.000203
2/4/2020	<0.000203	<0.000203	<0.000203		
8/4/2020	<0.000203		<0.000203	<0.000203	<0.000203
8/5/2020		<0.000203			
3/1/2021				0.00022	
3/2/2021	<0.000203	<0.000203	0.00138		
3/3/2021					7.93E-05 (J)

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 5/20/2021 5:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-4	GS-GSA-MW-4V	GS-GSA-MW-8	GS-GSA-MW-8V	GS-GSA-MW-9H
8/24/2016	<0.000203		0.0031 (J)		
10/3/2016	<0.000203		<0.000203		
10/26/2016	<0.000203		<0.000203		
11/21/2016	<0.000203		<0.000203		
1/17/2017	<0.000203		<0.000203		
3/20/2017			<0.000203		
3/21/2017	<0.000203				
4/17/2017	<0.000203				
4/18/2017			<0.000203		
5/30/2017	<0.000203		<0.000203		
2/13/2018	<0.000203		<0.000203		
6/11/2018	<0.000203				
6/12/2018			<0.000203		
10/17/2018	<0.000203		<0.000203		
3/5/2019		<0.000203			<0.000203
4/10/2019	<0.000203		<0.000203		
10/14/2019	<0.000203	<0.000203	<0.000203		
10/16/2019					<0.000203
2/3/2020		<0.000203			
2/4/2020	<0.000203		<0.000203		<0.000203
2/5/2020				<0.000203	
8/4/2020					<0.000203
8/5/2020	<0.000203	<0.000203	<0.000203	<0.000203	
3/1/2021			0.00277	0.000654	
3/2/2021					<0.000203
3/3/2021	<0.000203	<0.000203			

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 5/20/2021 5:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	MW-1 (bg)	MW-2 (bg)	MW-3 (bg)	MW-4 (bg)	GS-GSA-MW-12V
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		
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	<0.000203	<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	<0.000203	
2/3/2020	<0.000203	<0.000203	<0.000203	<0.000203	
8/3/2020	<0.000203	<0.000203	<0.000203		
8/5/2020				<0.000203	0.00247 (J)
2/22/2021	<0.000203	<0.000203	<0.000203	0.000131 (J)	
3/3/2021					0.00123

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 5/20/2021 5:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-9V	GS-GSA-MW-14H
8/4/2020	0.00423 (J)	
8/5/2020		<0.000203
3/1/2021	0.000532	
3/3/2021		7.06E-05 (J)

Time Series

Constituent: pH (pH) Analysis Run 5/20/2021 5:06 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
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	
3/4/2019	6.04				
3/5/2019					6.7
4/10/2019				5.83	
10/14/2019				6.04	6.39
10/16/2019	6.07				
2/3/2020				5.98	5.88
2/4/2020	6.02	4.57	6		
8/4/2020	5.74		5.89	6.09	5.9
8/5/2020		4.13			
3/1/2021				5.82	
3/2/2021	5.89	4.11	5.85		
3/3/2021					5.76

Time Series

Constituent: pH (pH) Analysis Run 5/20/2021 5:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-4	GS-GSA-MW-4V	GS-GSA-MW-8	GS-GSA-MW-8V	GS-GSA-MW-9H
8/24/2016	3.83 (E)		6.78		
10/3/2016	3.82 (E)		6.71		
10/26/2016	3.81 (E)		6.65		
11/21/2016	3.81		6.7		
1/17/2017	3.78		6.25		
3/20/2017			7.04		
3/21/2017	3.76				
4/17/2017	3.76				
4/18/2017			6.99		
5/30/2017	3.76		6.98		
8/24/2017	3.7		6.89		
2/13/2018	3.73		6.85		
6/11/2018	3.8				
6/12/2018			6.83		
10/17/2018	3.81		6.81		
3/5/2019		6.19			5.88
4/10/2019	3.83		6.71		
10/14/2019	3.91	5.89	6.88		
10/16/2019					5.43
2/3/2020		5.84			
2/4/2020	3.83		6.85		5.34
2/5/2020				7.48	
8/4/2020					5.33
8/5/2020	3.86	5.81	6.76	7.58	
3/1/2021			6.48	7.67	
3/2/2021					5.29
3/3/2021	3.76	5.75			

Time Series

Constituent: pH (pH) Analysis Run 5/20/2021 5:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	MW-1 (bg)	MW-2 (bg)	MW-3 (bg)	MW-4 (bg)	GS-GSA-MW-12V
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 (D)	5.91 (D)		6.13 (D)	
10/4/2016			5.69 (D)		
10/26/2016	5.2	5.84	5.56	6.12	
11/21/2016	5.19 (D)	5.82 (D)	5.42 (D)	6.09 (D)	
1/17/2017	5.17 (D)	5.87 (D)			
1/18/2017			5.11 (D)	6.09 (D)	
3/22/2017	5.2 (D)	6.01 (D)	4.52 (D)	6.15 (D)	
4/18/2017	5.2	6.02	5.84	6.19	
5/30/2017	5.14 (D)				
5/31/2017		5.85 (D)	4.56 (D)		
8/23/2017	5.12 (D)	5.89 (D)	4.77 (D)	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 (D)	6.03 (D)	3.77 (D)	6.16 (D)	
4/10/2019	5.11	6.1	5.54	6.14	
5/14/2019	5.19	6.07	5.71	6.23	
10/8/2019	5.12	5.96	4.98		
10/10/2019				6.15	
10/16/2019	5.16	5.98	4.51	6.19	
2/3/2020	5	5.95	5.54	6.14	
8/3/2020	5.08	5.95	5.06		
8/5/2020				6.15	6.15
2/22/2021	5.06	6.1	5.59	6.19	
3/3/2021					6.11

Time Series

Constituent: pH (pH) Analysis Run 5/20/2021 5:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-9V	GS-GSA-MW-14H
8/4/2020	6.88	
8/5/2020		3.83
3/1/2021	6.84	
3/3/2021		4.02

Time Series

Constituent: Selenium (mg/L) Analysis Run 5/20/2021 5:06 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
8/24/2016				<0.001015	
10/3/2016				<0.001015	
10/26/2016				<0.001015	
11/21/2016				<0.001015	
1/17/2017				<0.001015	
3/20/2017				<0.001015	
4/17/2017				0.00521 (J)	
5/30/2017				<0.001015	
2/13/2018				0.00267 (J)	
6/11/2018				0.00236 (J)	
10/17/2018				<0.001015	
3/4/2019	<0.001015				
3/5/2019					<0.001015
4/10/2019				0.00234 (J)	
10/14/2019				<0.001015	<0.001015
10/16/2019	<0.001015				
11/26/2019		0.00614 (J)			
2/3/2020				<0.001015	<0.001015
2/4/2020	<0.001015	<0.001015	<0.001015		
8/4/2020	<0.001015		<0.001015	<0.001015	<0.001015
8/5/2020		0.00417 (J)			
3/1/2021				0.00141	
3/2/2021	<0.001015	0.00463	<0.001015		
3/3/2021					<0.001015

Time Series

Constituent: Selenium (mg/L) Analysis Run 5/20/2021 5:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-4	GS-GSA-MW-4V	GS-GSA-MW-8	GS-GSA-MW-8V	GS-GSA-MW-9H
8/24/2016	0.00234 (J)		<0.001015		
10/3/2016	0.00739 (J)		<0.001015		
10/26/2016	0.00266 (J)		<0.001015		
11/21/2016	0.00212 (J)		<0.001015		
1/17/2017	0.00263 (J)		<0.001015		
3/20/2017			<0.001015		
3/21/2017	0.00588 (J)				
4/17/2017	0.00579 (J)				
4/18/2017			<0.001015		
5/30/2017	0.00471 (J)		<0.001015		
2/13/2018	0.00498 (J)		<0.001015		
6/11/2018	0.00388 (J)				
6/12/2018			<0.001015		
10/17/2018	<0.001015		<0.001015		
3/5/2019		<0.001015			<0.001015
4/10/2019	0.00322 (J)		<0.001015		
10/14/2019	<0.001015	<0.001015	<0.001015		
10/16/2019					<0.001015
2/3/2020		<0.001015			
2/4/2020	<0.001015		<0.001015		<0.001015
2/5/2020				<0.001015	
8/4/2020					<0.001015
8/5/2020	0.00298 (J)	<0.001015	<0.001015	<0.001015	
3/1/2021			<0.001015	<0.001015	
3/2/2021					0.00138
3/3/2021	0.00294	0.000749 (J)			

Time Series

Constituent: Selenium (mg/L) Analysis Run 5/20/2021 5:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	MW-1 (bg)	MW-2 (bg)	MW-3 (bg)	MW-4 (bg)	GS-GSA-MW-12V
4/25/2016		<0.001015	<0.001015	<0.001015	
4/26/2016	0.00261 (J)				
6/20/2016	0.00242 (J)	<0.001015		<0.001015	
6/22/2016			<0.001015		
8/8/2016	0.00253 (J)	<0.001015			
8/9/2016			<0.001015	<0.001015	
8/24/2016	<0.001015	<0.001015	<0.001015	<0.001015	
10/3/2016	0.00211 (J)	<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	0.0022 (J)	<0.001015	0.0141	<0.001015	
4/18/2017	0.0027 (J)	<0.001015	0.0158	<0.001015	
5/30/2017	0.00316 (J)				
5/31/2017		<0.001015	0.00632 (J)		
2/13/2018	0.00211 (J)	<0.001015	0.0209 (o)	0.00403 (J)	
5/22/2018	0.00372 (J)	<0.001015			
5/23/2018				<0.001015	
5/24/2018			0.00918 (J)		
6/12/2018	0.00409 (J)	<0.001015	0.00836 (J)	<0.001015	
10/17/2018	<0.001015	<0.001015	<0.001015	<0.001015	
11/19/2018	<0.001015	<0.001015	0.00439 (J)	0.00436 (J)	
4/10/2019	0.00471 (J)	0.00322 (J)	0.0113	<0.001015	
5/14/2019	0.00316 (J)	<0.001015	0.0119	0.00201 (J)	
10/8/2019	<0.001015	<0.001015	0.00256 (J)		
10/10/2019				<0.001015	
10/16/2019	<0.001015	<0.001015	0.00286 (J)	<0.001015	
2/3/2020	0.00272 (J)	<0.001015	0.012	0.00212 (J)	
8/3/2020	0.00278 (J)	<0.001015	0.0146		
8/5/2020				0.00232 (J)	<0.001015
2/22/2021	0.00241	<0.001015	0.0181	0.00222	
3/3/2021					<0.001015

Time Series

Constituent: Selenium (mg/L) Analysis Run 5/20/2021 5:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-9V	GS-GSA-MW-14H
8/4/2020	<0.001015	
8/5/2020		0.00571 (J)
3/1/2021	<0.001015	
3/3/2021		0.00554

Time Series

Constituent: Sulfate (mg/L) Analysis Run 5/20/2021 5:06 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
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	
3/4/2019	785				
3/5/2019					1170
4/10/2019				2980	
10/14/2019				3110	1710
10/16/2019	750				
11/26/2019		997			
2/3/2020				2840	1970
2/4/2020	725	978	720		
8/4/2020	694		773	2820	1860
8/5/2020		811			
3/1/2021				2320	
3/2/2021	835	890	861		
3/3/2021					1930

Time Series

Constituent: Sulfate (mg/L) Analysis Run 5/20/2021 5:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-4	GS-GSA-MW-4V	GS-GSA-MW-8	GS-GSA-MW-8V	GS-GSA-MW-9H
8/24/2016	567		1250		
10/3/2016	596		1270		
10/26/2016	585		1240		
11/21/2016	593		1210		
1/17/2017	637		1150		
3/20/2017			1400		
3/21/2017	530				
4/17/2017	530				
4/18/2017			1300		
5/30/2017	530		1500		
8/24/2017	530		1800		
6/11/2018	540				
6/12/2018			1800		
10/17/2018	520		1600		
3/5/2019		871			2010
4/10/2019	616		2150		
10/14/2019	641	818	2090		
10/16/2019					2020
2/3/2020		808			
2/4/2020	571		1570		1710
2/5/2020				223	
8/4/2020					1790
8/5/2020	519	761	1880	243	
3/1/2021			1450	183	
3/2/2021					1750
3/3/2021	609	746			

Time Series

Constituent: Sulfate (mg/L) Analysis Run 5/20/2021 5:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	MW-1 (bg)	MW-2 (bg)	MW-3 (bg)	MW-4 (bg)	GS-GSA-MW-12V
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		
8/23/2017	1500	920	2600	2700	
5/22/2018	2100	1200			
5/23/2018				2400	
5/24/2018			2700		
6/12/2018	1500	860	2500	2600	
10/17/2018	1400	970	2700	2600	
11/19/2018	1300	1000	3000	2400	
4/10/2019	1700	889	2460	2090	
5/14/2019	1560	948	2460	2240	
10/8/2019	1540	1230	2950		
10/10/2019				2690	
10/16/2019	1680	1170	2820	3050	
2/3/2020	1510	803	2290	1920	
8/3/2020	1370	907	2330		
8/5/2020				1930	1830
2/22/2021	1400	864	3040	2040	
3/3/2021					1930

Time Series

Constituent: Sulfate (mg/L) Analysis Run 5/20/2021 5:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-9V	GS-GSA-MW-14H
8/4/2020	1700	
8/5/2020		796
3/1/2021	1680	
3/3/2021		803

Time Series

Constituent: Thallium (mg/L) Analysis Run 5/20/2021 5:06 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
8/24/2016				<0.000203	
10/3/2016				<0.000203	
10/26/2016				<0.000203	
11/21/2016				<0.000203	
1/17/2017				<0.000203	
3/20/2017				<0.000203	
4/17/2017				<0.000203	
5/30/2017				<0.000203	
2/13/2018				<0.000203	
6/11/2018				<0.000203	
10/17/2018				<0.000203	
3/4/2019	<0.000203				
3/5/2019					<0.000203
4/10/2019				<0.000203	
10/14/2019				<0.000203	<0.000203
10/16/2019	<0.000203				
11/26/2019		0.000375 (J)			
2/3/2020				<0.000203	<0.000203
2/4/2020	<0.000203	0.000491 (J)	<0.000203		
8/4/2020	<0.000203		<0.000203	<0.000203	<0.000203
8/5/2020		0.000297 (J)			
3/1/2021				<0.000203	
3/2/2021	<0.000203	0.000371	<0.000203		
3/3/2021					<0.000203

Time Series

Constituent: Thallium (mg/L) Analysis Run 5/20/2021 5:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-4	GS-GSA-MW-4V	GS-GSA-MW-8	GS-GSA-MW-8V	GS-GSA-MW-9H
8/24/2016	<0.000203		<0.000203		
10/3/2016	<0.000203		<0.000203		
10/26/2016	<0.000203		<0.000203		
11/21/2016	<0.000203		<0.000203		
1/17/2017	<0.000203		<0.000203		
3/20/2017			<0.000203		
3/21/2017	<0.000203				
4/17/2017	<0.000203				
4/18/2017			<0.000203		
5/30/2017	<0.000203		<0.000203		
2/13/2018	<0.000203		<0.000203		
6/11/2018	<0.000203				
6/12/2018			<0.000203		
10/17/2018	<0.000203		<0.000203		
3/5/2019		<0.000203			0.00021 (J)
4/10/2019	<0.000203		<0.000203		
10/14/2019	<0.000203	<0.000203	<0.000203		
10/16/2019					0.000262 (J)
2/3/2020		<0.000203			
2/4/2020	<0.000203		<0.000203		0.000233 (J)
2/5/2020				<0.000203	
8/4/2020					0.000265 (J)
8/5/2020	0.000205 (J)	<0.000203	<0.000203	<0.000203	
3/1/2021			<0.000203	<0.000203	
3/2/2021					0.000221
3/3/2021	0.000178 (J)	<0.000203			

Time Series

Constituent: Thallium (mg/L) Analysis Run 5/20/2021 5:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	MW-1 (bg)	MW-2 (bg)	MW-3 (bg)	MW-4 (bg)	GS-GSA-MW-12V
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		
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	
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	<0.000203	
2/3/2020	<0.000203	<0.000203	<0.000203	<0.000203	
8/3/2020	<0.000203	<0.000203	<0.000203		
8/5/2020				<0.000203	<0.000203
2/22/2021	<0.000203	<0.000203	<0.000203	<0.000203	
3/3/2021					<0.000203

Time Series

Constituent: Thallium (mg/L) Analysis Run 5/20/2021 5:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-9V	GS-GSA-MW-14H
8/4/2020	<0.000203	
8/5/2020		<0.000203
3/1/2021	<0.000203	
3/3/2021		7.98E-05 (J)

Time Series

Constituent: Total dissolved solids (mg/L) Analysis Run 5/20/2021 5:06 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
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	
3/4/2019	1150				
3/5/2019					2170
4/10/2019				5090	
10/14/2019				5110	3200
10/16/2019	1150				
11/26/2019		1580			
2/3/2020				4920	3660
2/4/2020	1200	1580	1200		
8/4/2020	1230		1350	5110	3530
8/5/2020		1380			
3/1/2021				4390	
3/2/2021	1190	1390	1450		
3/3/2021					3640

Time Series

Constituent: Total dissolved solids (mg/L) Analysis Run 5/20/2021 5:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-4	GS-GSA-MW-4V	GS-GSA-MW-8	GS-GSA-MW-8V	GS-GSA-MW-9H
8/24/2016	992		2280		
10/3/2016	988		2370		
10/26/2016	1030		2350		
11/21/2016	1020		2530		
1/17/2017	988		2380		
3/20/2017			2630		
3/21/2017	990				
4/17/2017	884				
4/18/2017			2700		
5/30/2017	1060		2980		
8/24/2017	1060		3390		
6/11/2018	944				
6/12/2018			3510		
10/17/2018	928		3550		
3/5/2019		1410			3240
4/10/2019	1000		3580		
10/14/2019	967	1340	3730		
10/16/2019					3080
2/3/2020		1290			
2/4/2020	978		3190		3110
2/5/2020				1100	
8/4/2020					2920
8/5/2020	938	1330	3610	1100	
3/1/2021			2870	1060	
3/2/2021					2860
3/3/2021	1040	1320			

Time Series

Constituent: Total dissolved solids (mg/L) Analysis Run 5/20/2021 5:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	MW-1 (bg)	MW-2 (bg)	MW-3 (bg)	MW-4 (bg)	GS-GSA-MW-12V
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		
8/23/2017	2160	1550	4050	3990	
5/22/2018	2380	1500			
5/23/2018				3740	
5/24/2018			3680		
6/12/2018	2400	1550	3820	4080	
10/17/2018	2220	1740	4730	4250	
11/19/2018	2360	1990	4710	3920	
4/10/2019	2630	1250	3680	3280	
5/14/2019	2340 (D)	1480	3580 (D)	3130 (D)	
10/8/2019	2330	1840	4720		
10/10/2019				4000	
10/16/2019	3650	1830	4210	4060	
2/3/2020	2380	1440	3530	3240	
8/3/2020	2200	1650	3760		
8/5/2020				3200	3330
2/22/2021	2230	1620	4670	3190	
3/3/2021					3450

Time Series

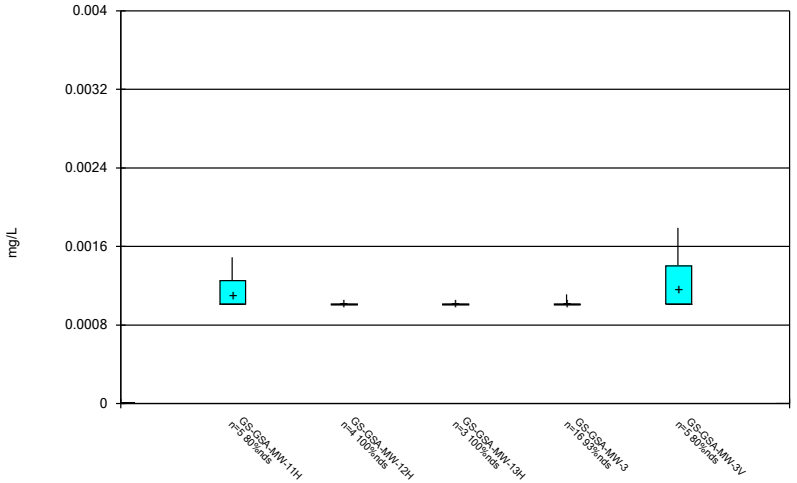
Constituent: Total dissolved solids (mg/L) Analysis Run 5/20/2021 5:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-9V	GS-GSA-MW-14H
8/4/2020	3080	
8/5/2020		1280
3/1/2021	3140	
3/3/2021		1260

FIGURE B.

Box & Whiskers Plot

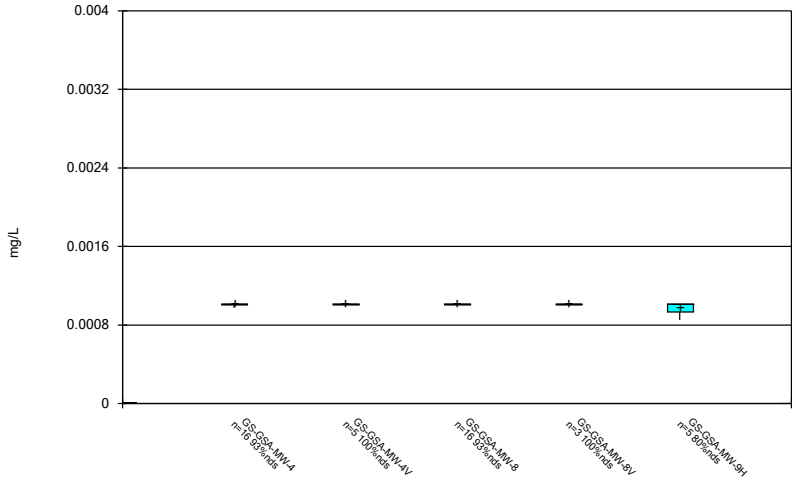


Constituent: Antimony Analysis Run 5/20/2021 5:09 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot

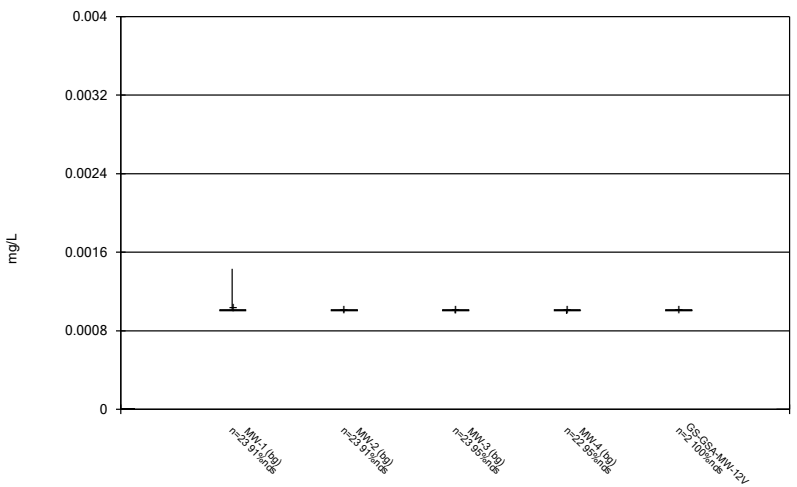


Constituent: Antimony Analysis Run 5/20/2021 5:09 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot

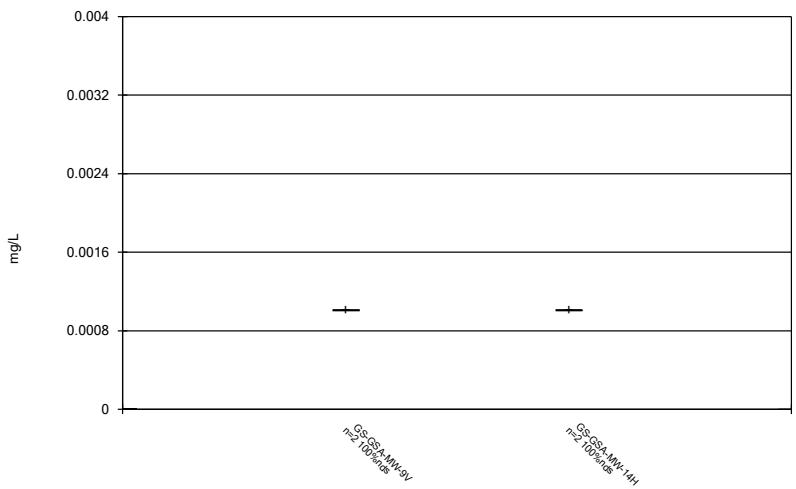


Constituent: Antimony Analysis Run 5/20/2021 5:09 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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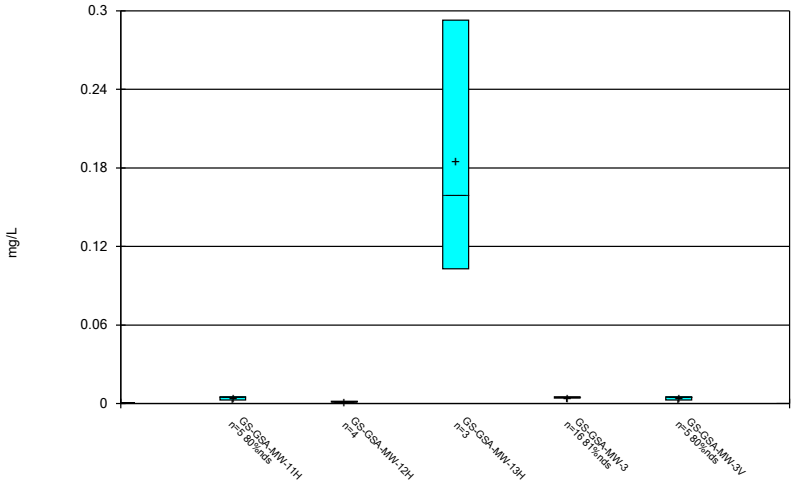
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Box & Whiskers Plot

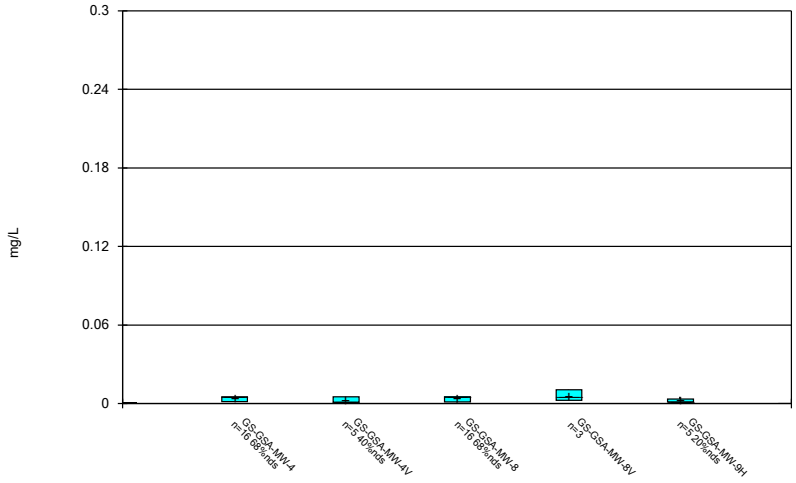


Constituent: Arsenic Analysis Run 5/20/2021 5:09 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot

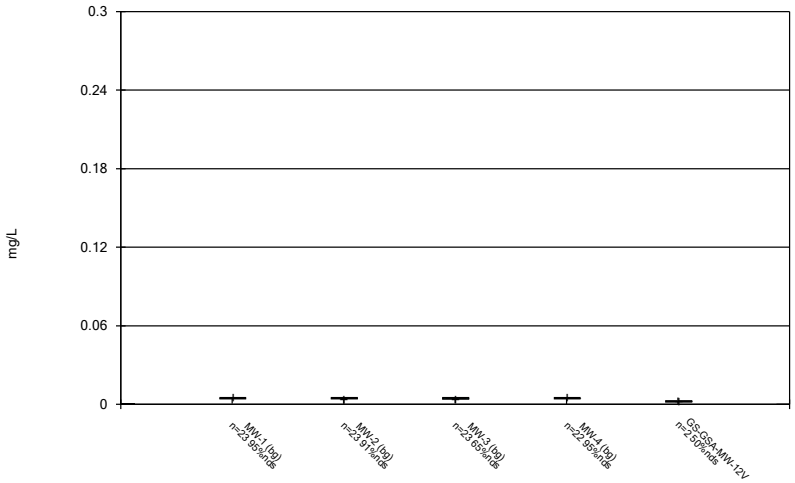


Constituent: Arsenic Analysis Run 5/20/2021 5:09 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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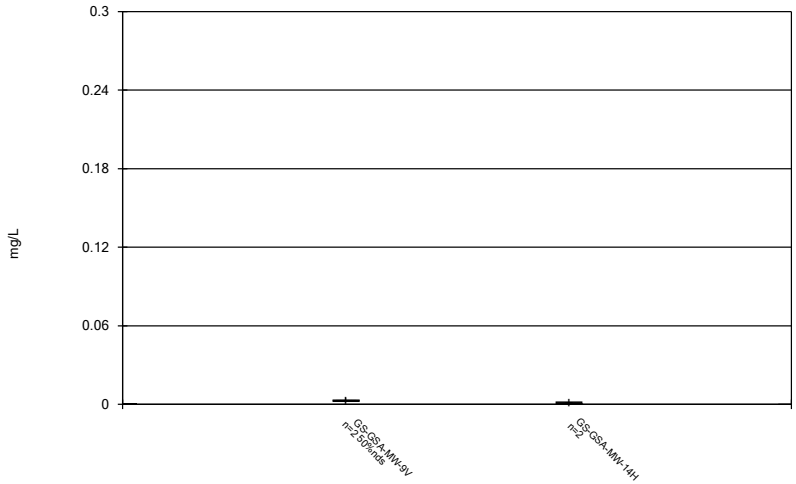
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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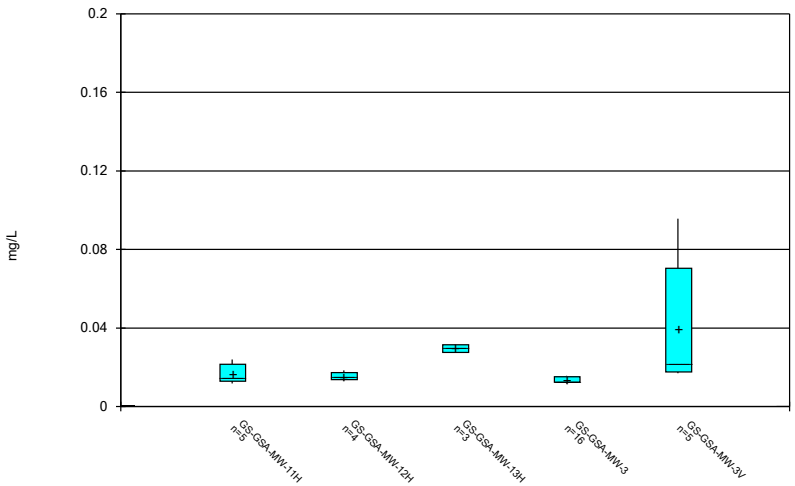
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot

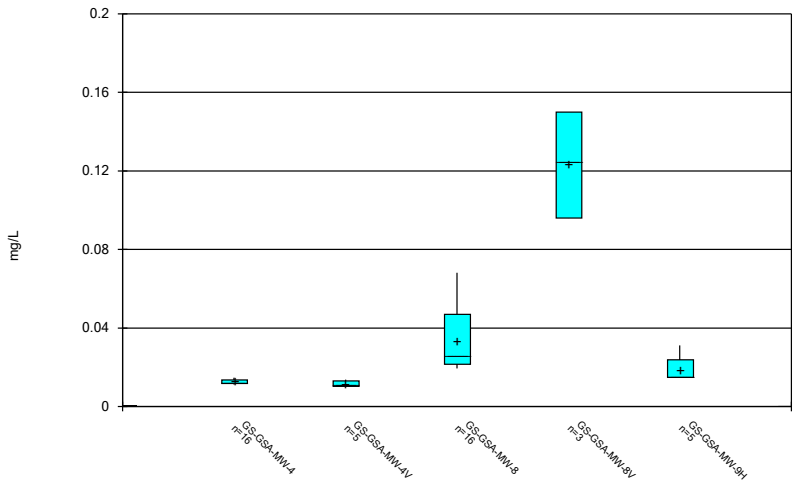


Constituent: Barium Analysis Run 5/20/2021 5:09 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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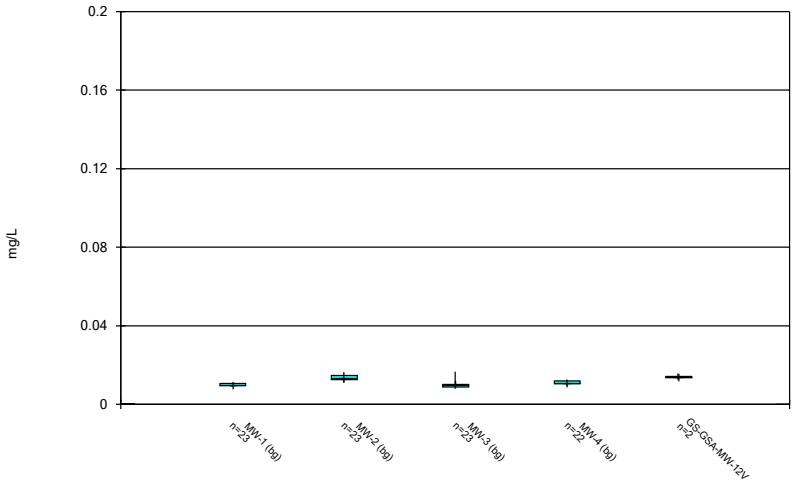
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot

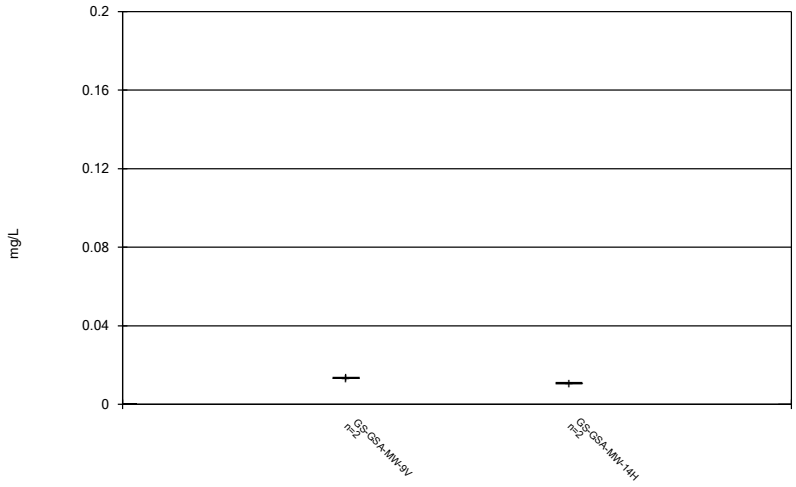


Constituent: Barium Analysis Run 5/20/2021 5:09 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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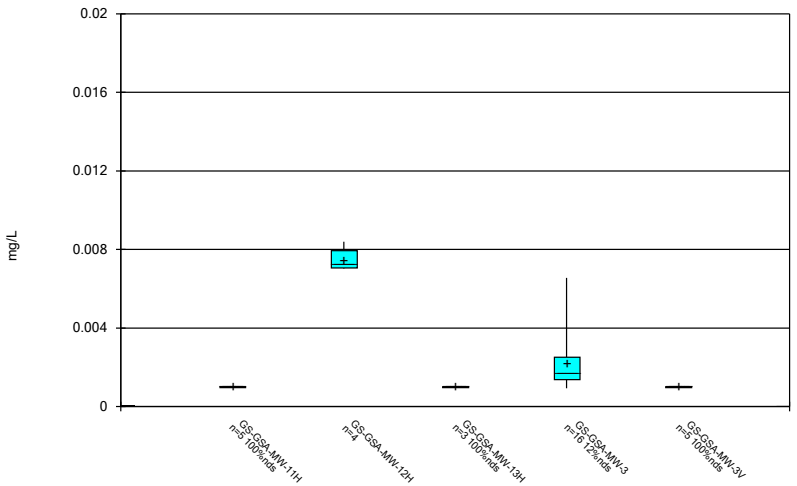
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Box & Whiskers Plot

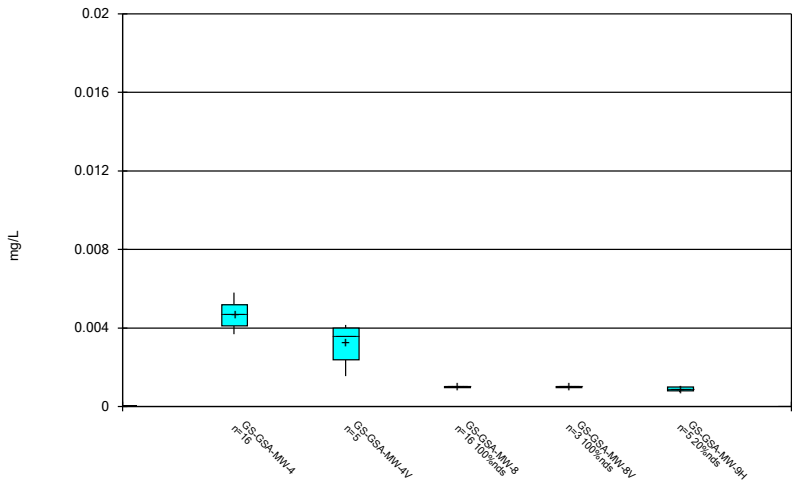


Constituent: Beryllium Analysis Run 5/20/2021 5:09 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot

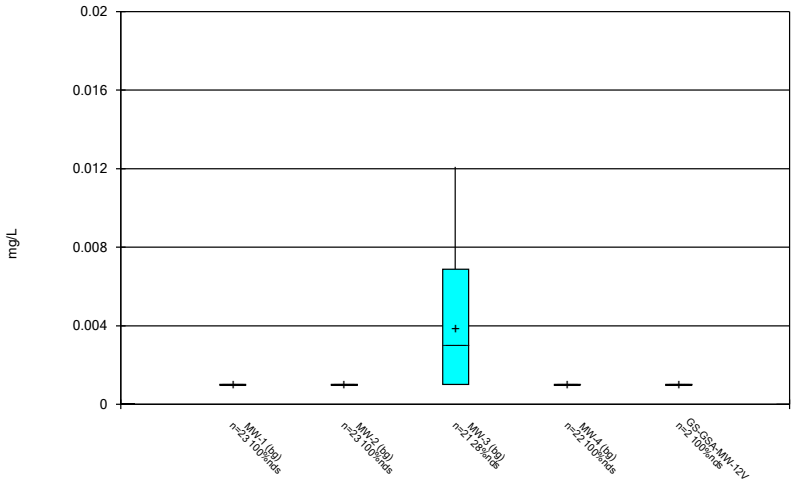


Constituent: Beryllium Analysis Run 5/20/2021 5:09 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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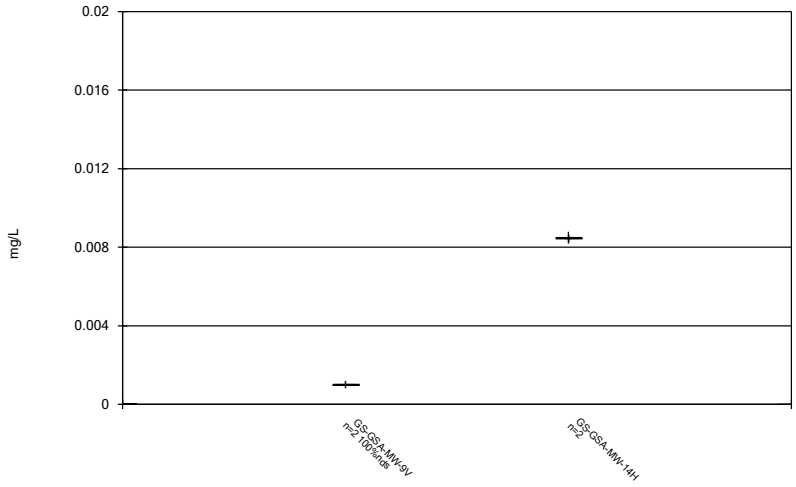
Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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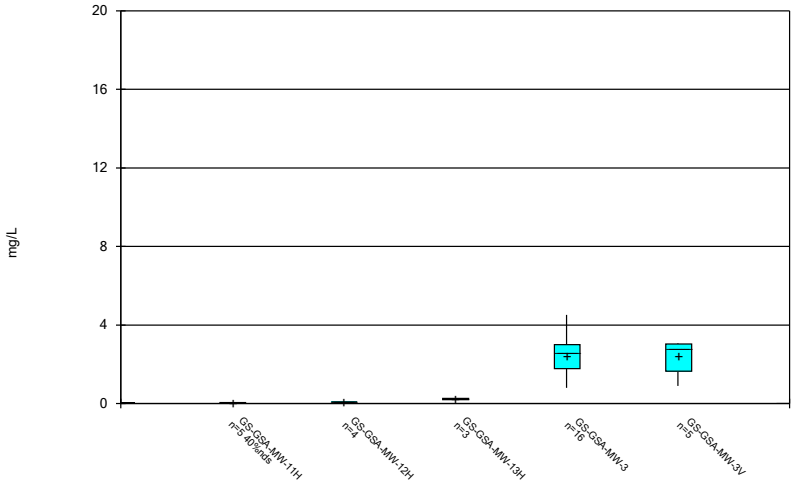
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Box & Whiskers Plot

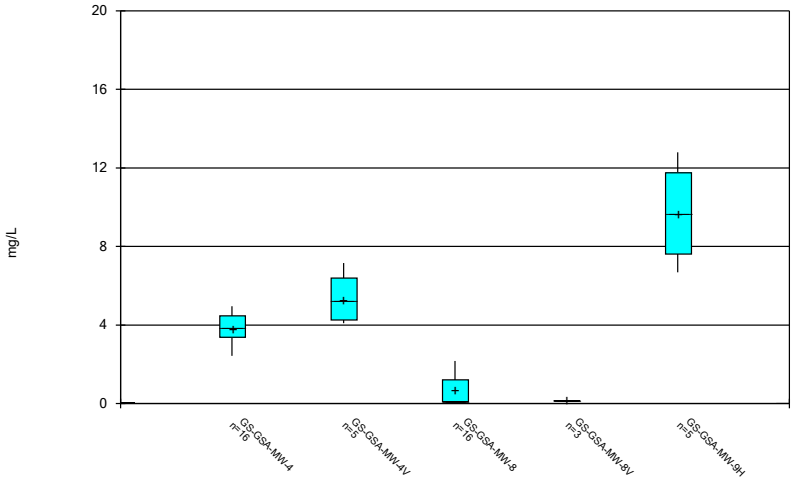


Constituent: Boron Analysis Run 5/20/2021 5:09 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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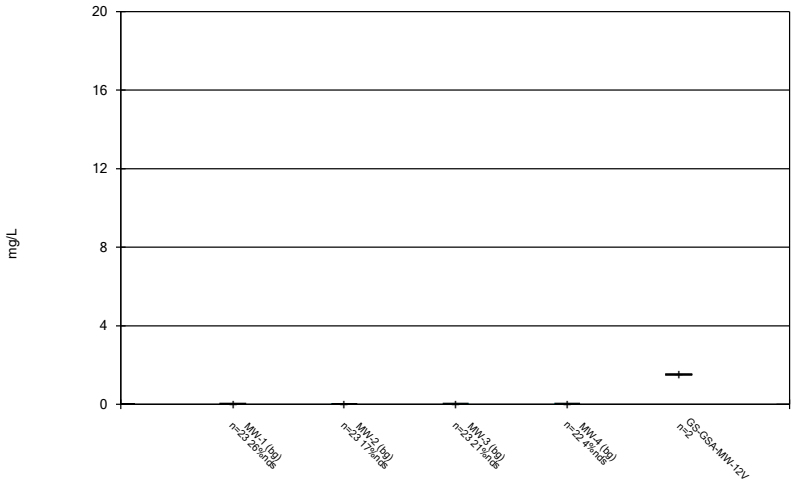
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

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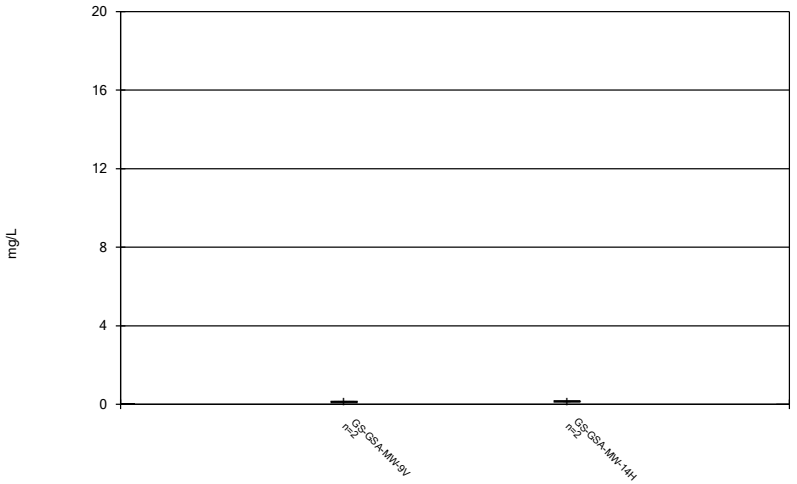

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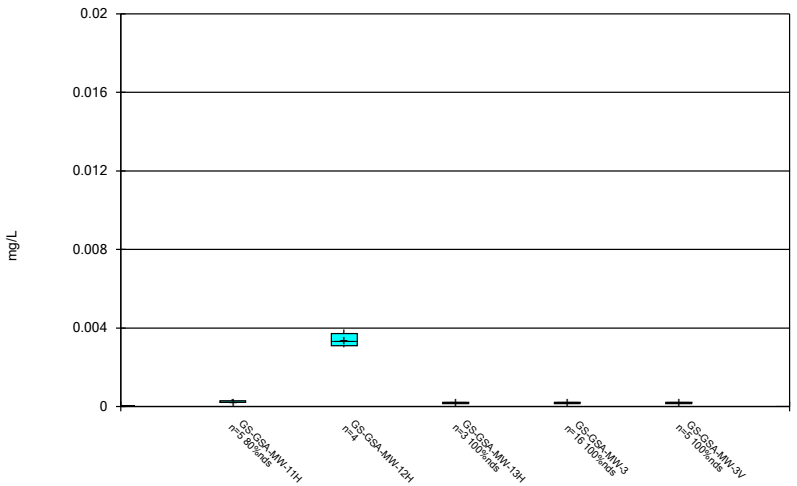
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Box & Whiskers Plot

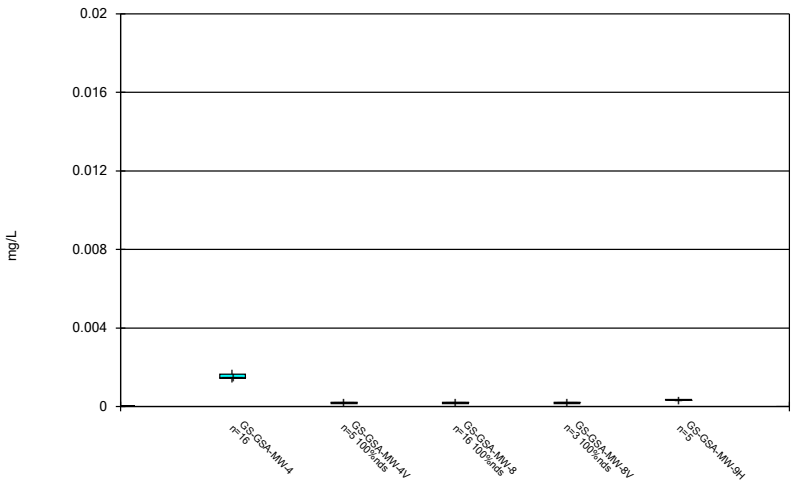


Constituent: Cadmium Analysis Run 5/20/2021 5:09 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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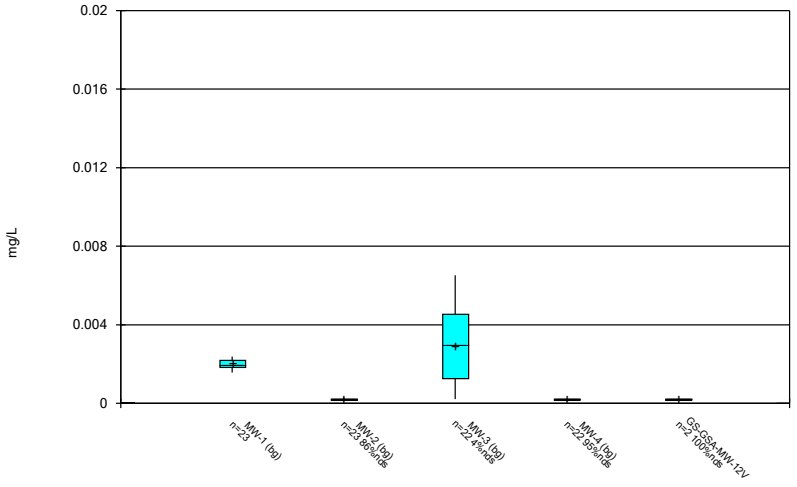
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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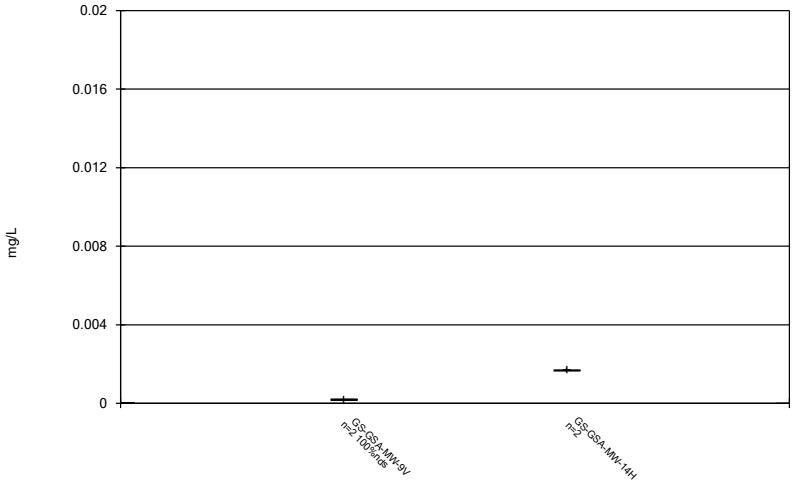
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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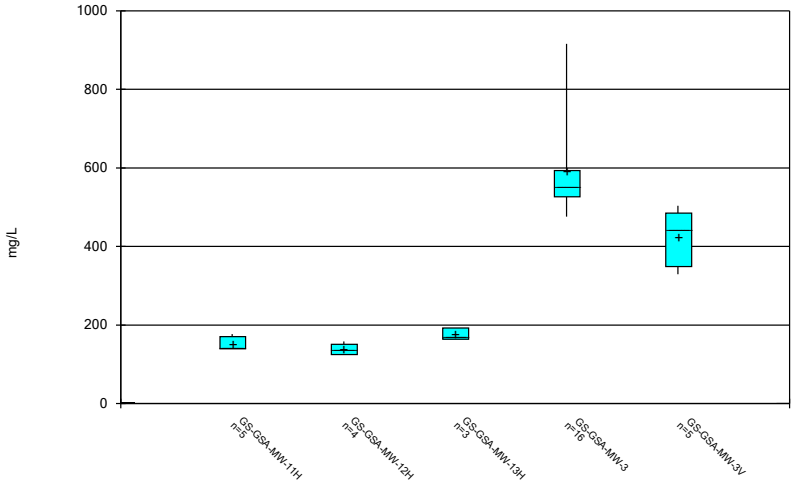
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Box & Whiskers Plot



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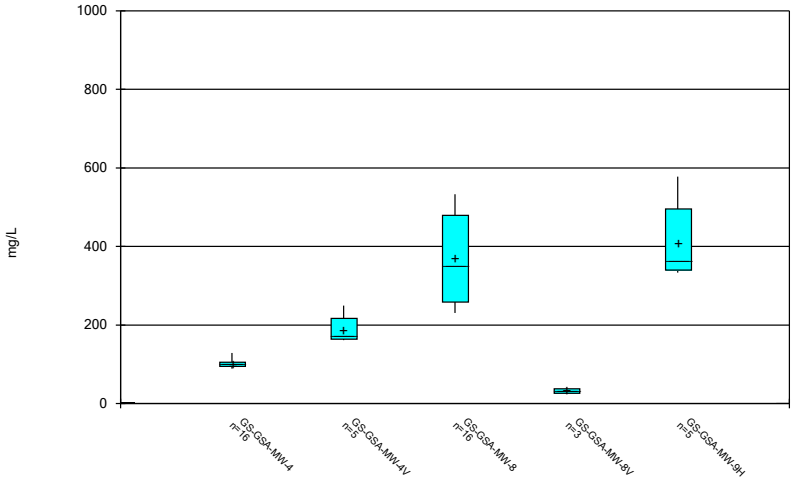
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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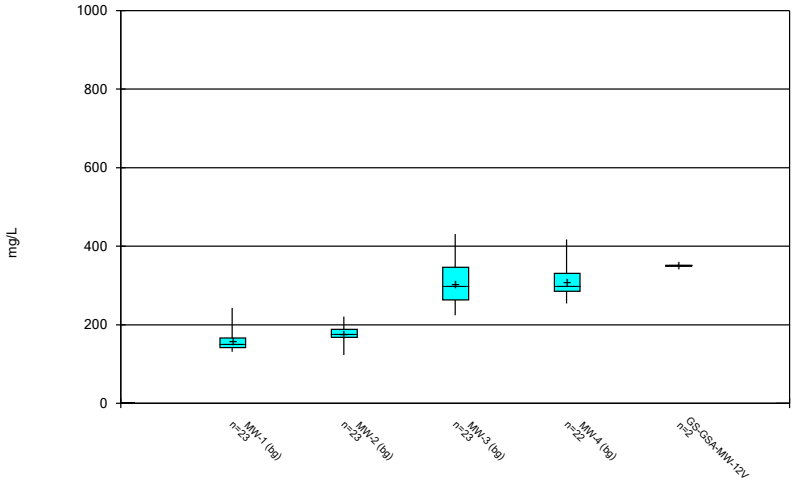
Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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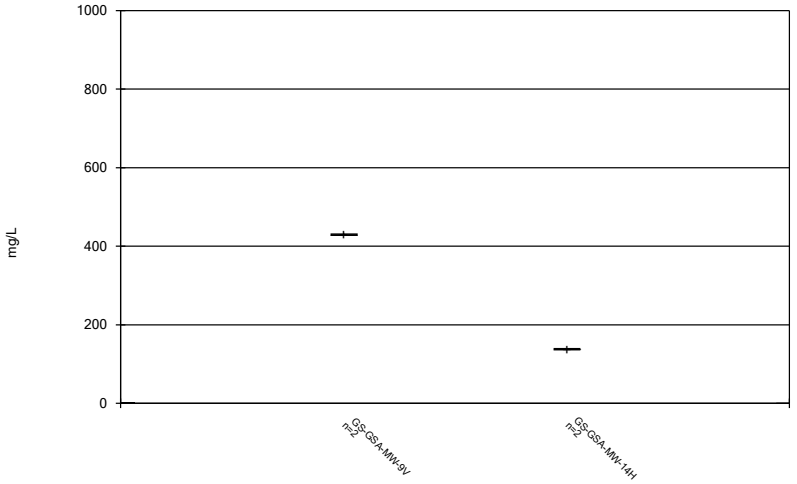
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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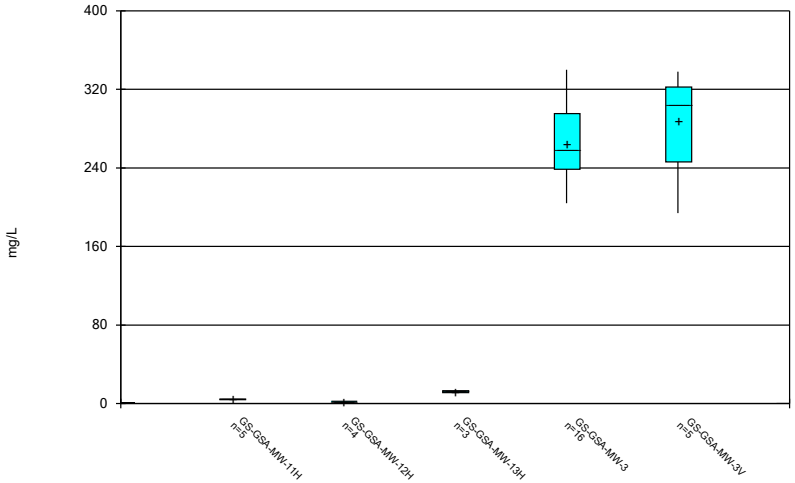
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Box & Whiskers Plot

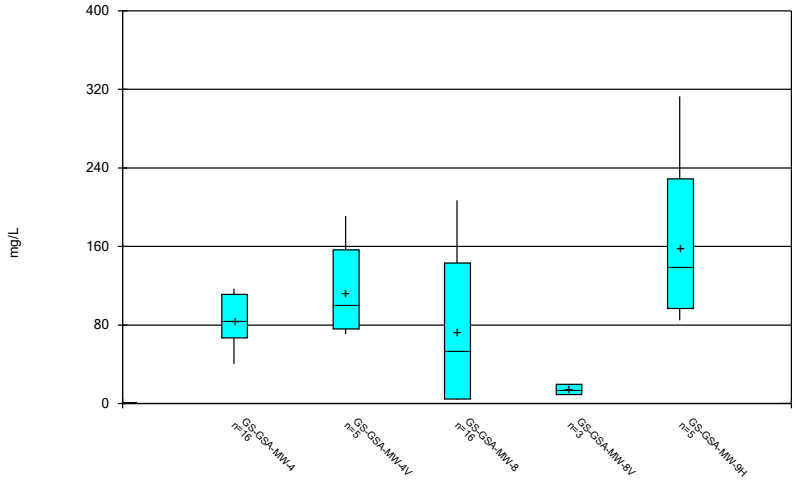


Constituent: Chloride Analysis Run 5/20/2021 5:09 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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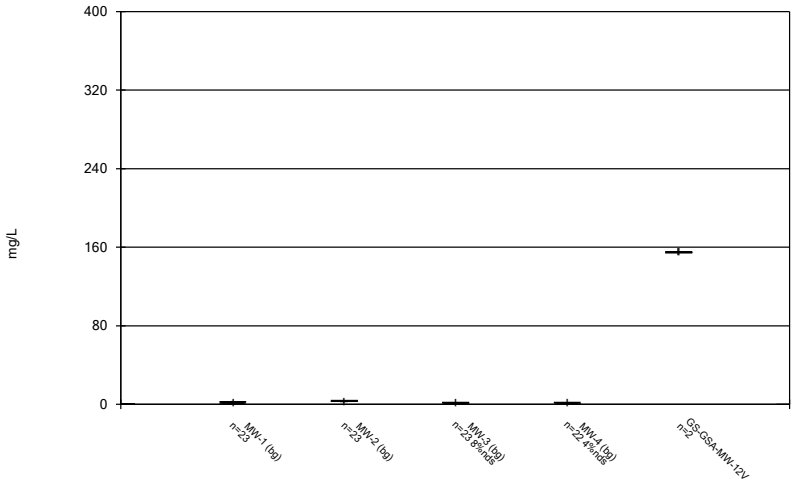
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot

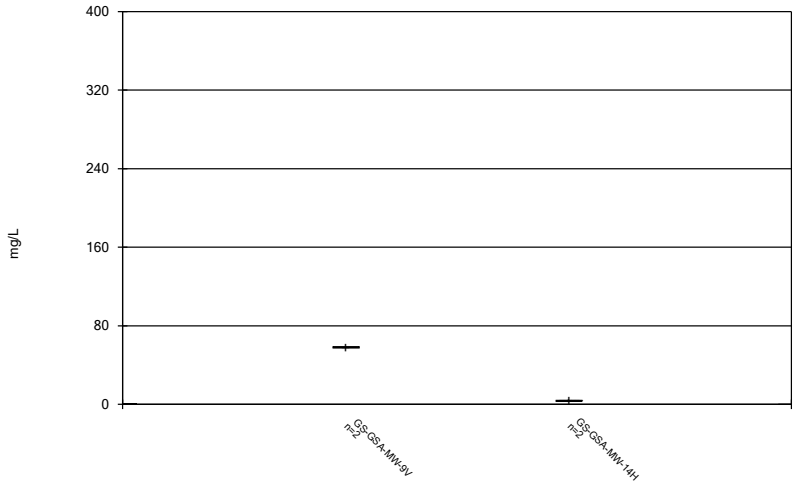


Constituent: Chloride Analysis Run 5/20/2021 5:09 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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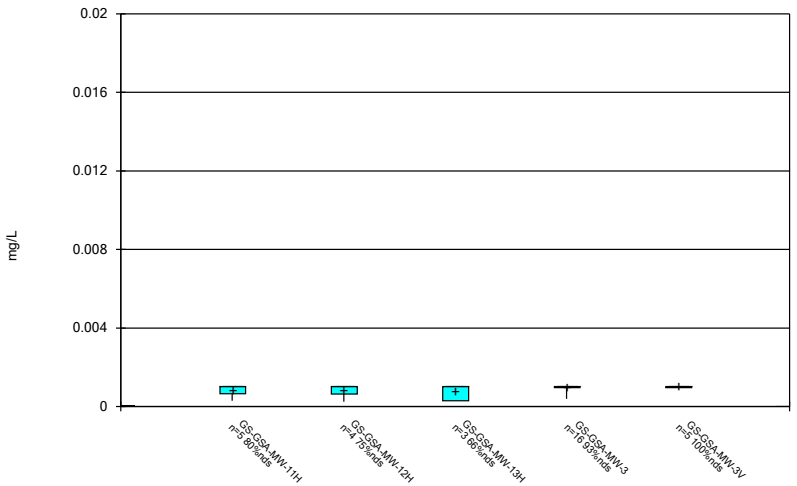
Plant Gorgas Client: Southern Company Data: Gorgas GSA

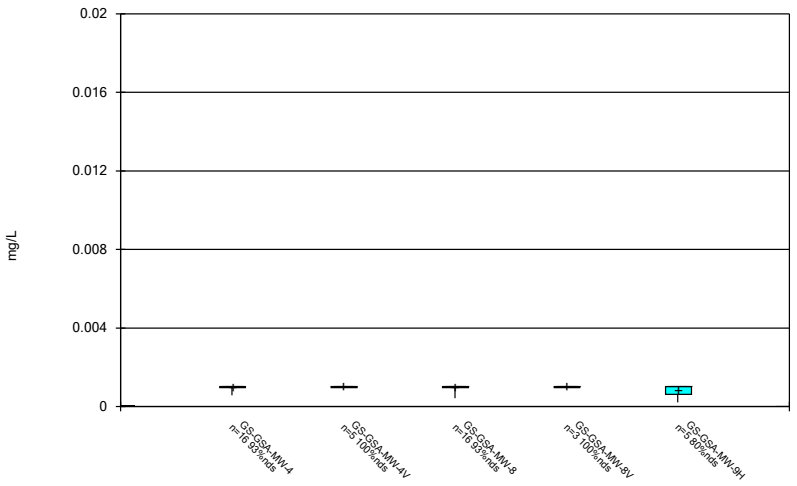
Box & Whiskers Plot



Constituent: Chromium Analysis Run 5/20/2021 5:09 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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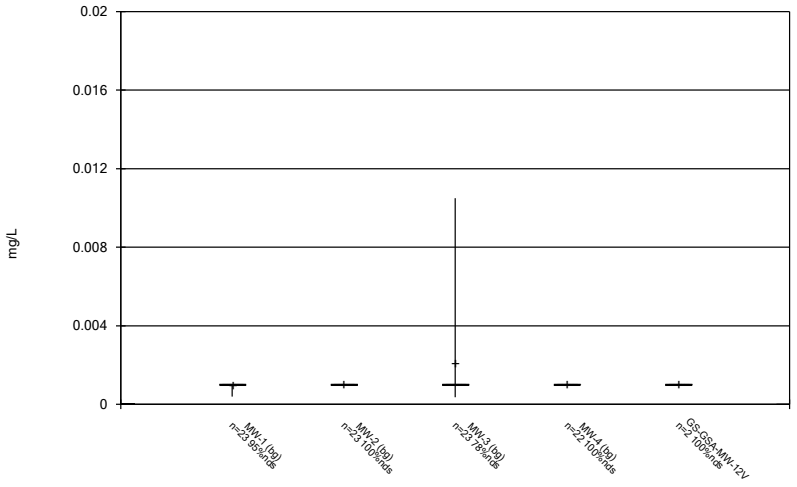
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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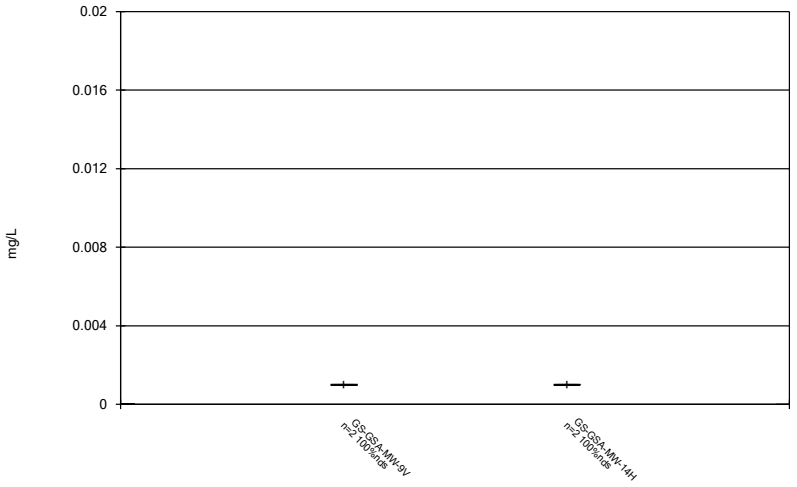
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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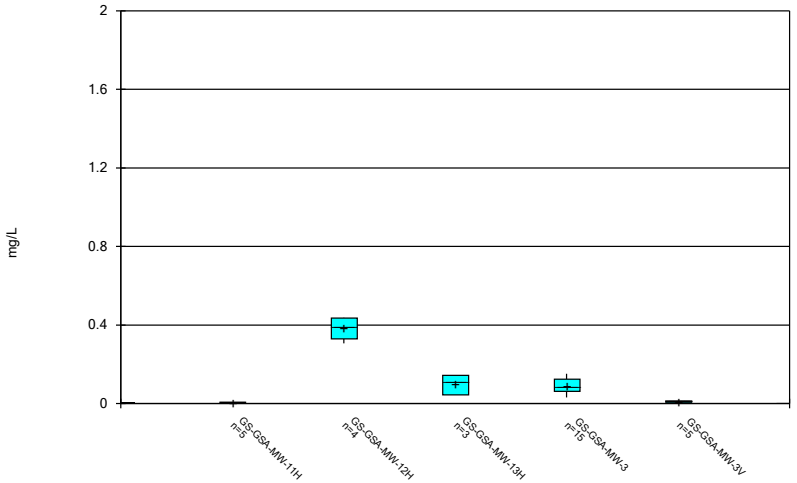
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Box & Whiskers Plot

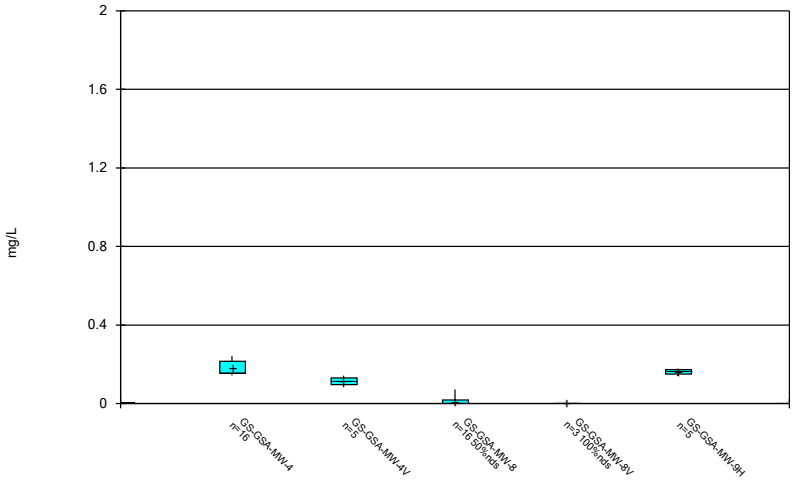


Constituent: Cobalt Analysis Run 5/20/2021 5:09 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot

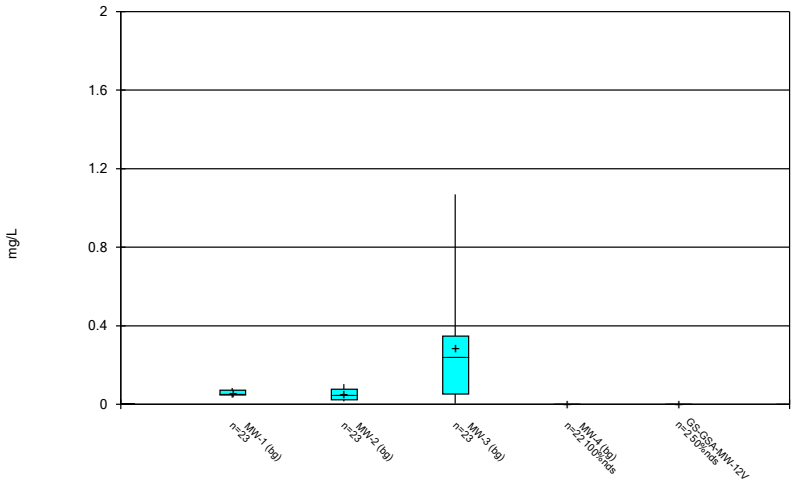


Constituent: Cobalt Analysis Run 5/20/2021 5:09 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot

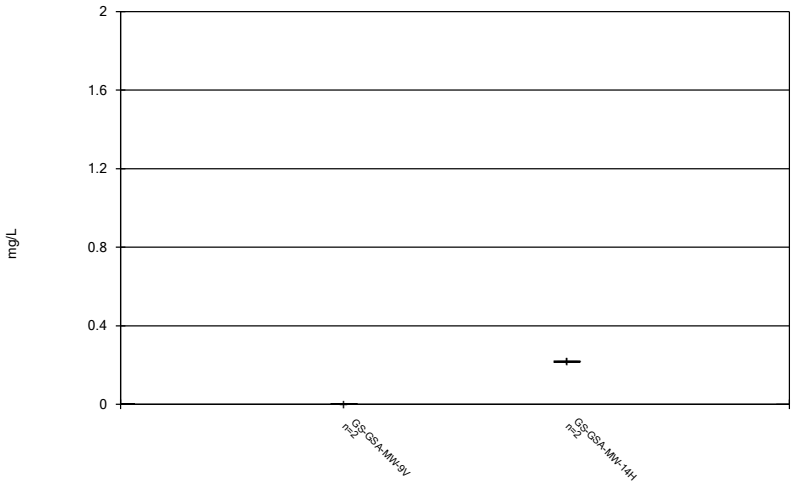


Constituent: Cobalt Analysis Run 5/20/2021 5:09 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

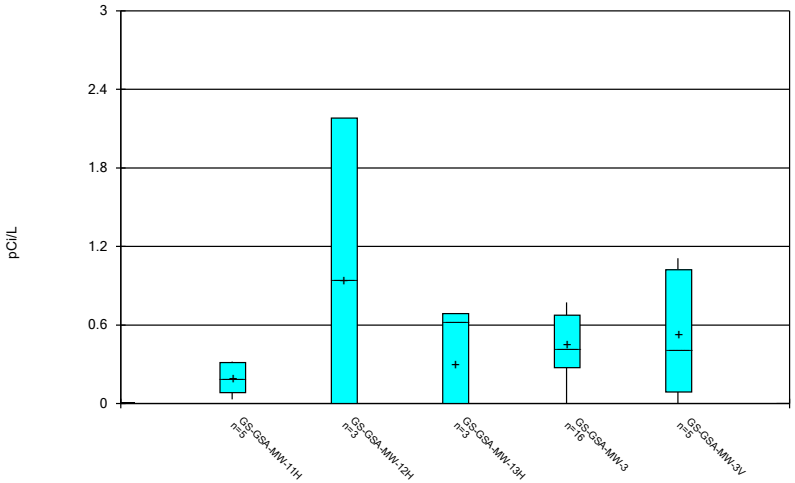
Box & Whiskers Plot



Constituent: Cobalt Analysis Run 5/20/2021 5:09 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Box & Whiskers Plot

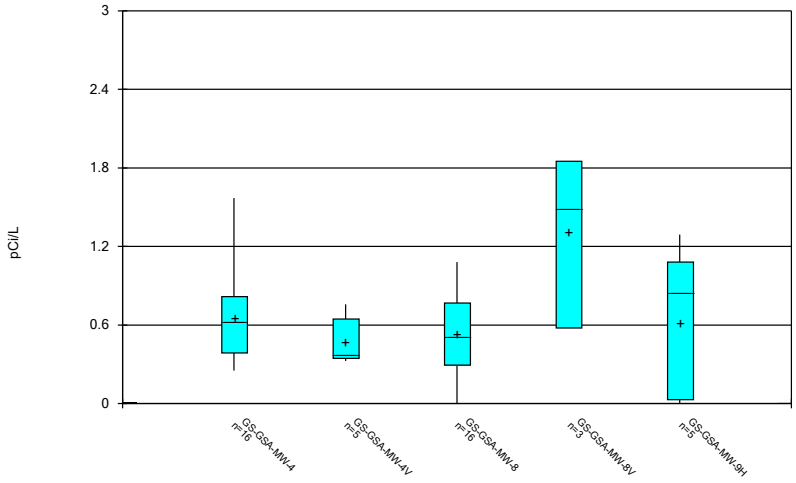


Constituent: Combined Radium 226 + 228 Analysis Run 5/20/2021 5:09 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot

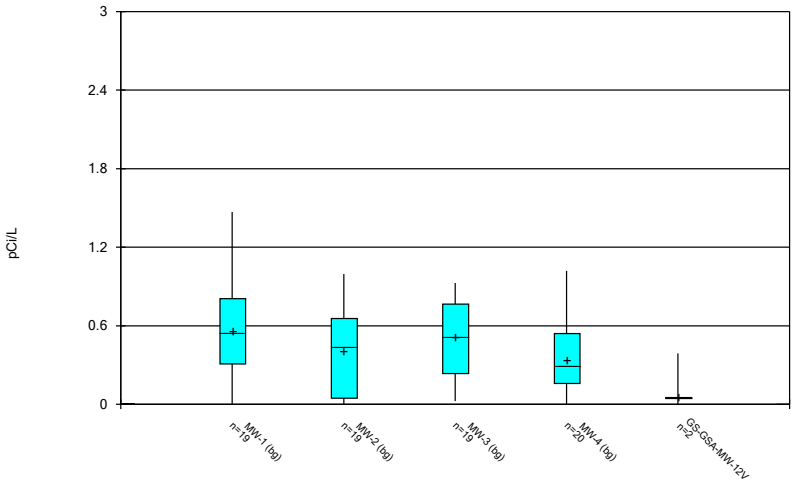


Constituent: Combined Radium 226 + 228 Analysis Run 5/20/2021 5:09 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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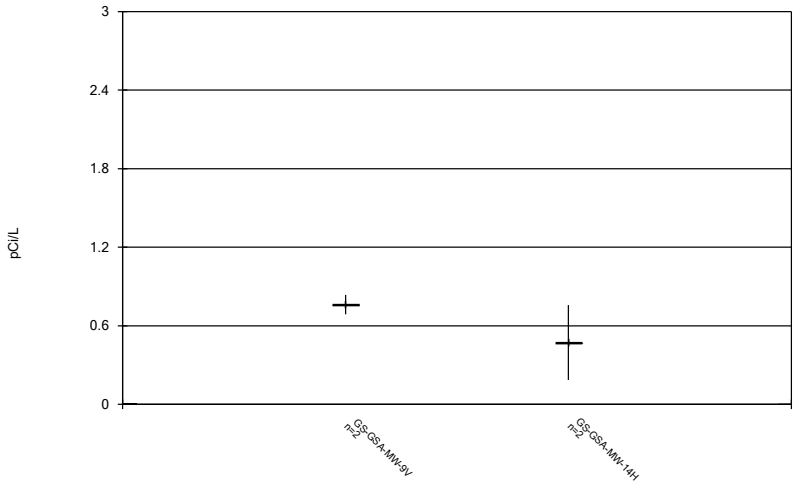
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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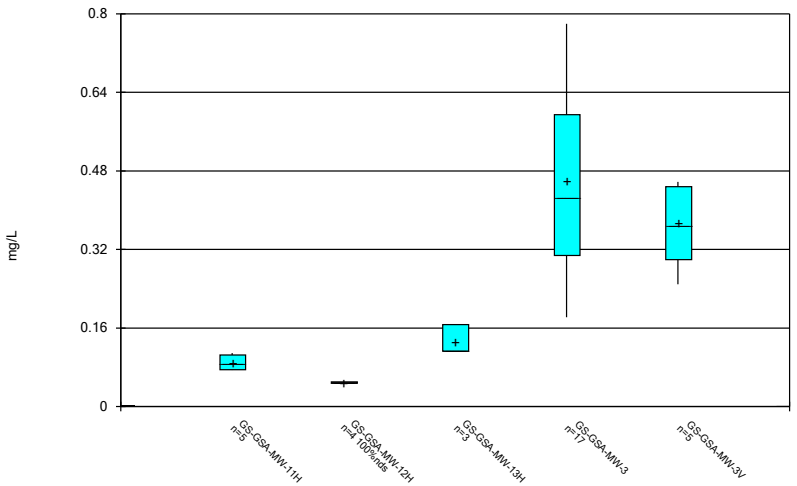
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Box & Whiskers Plot

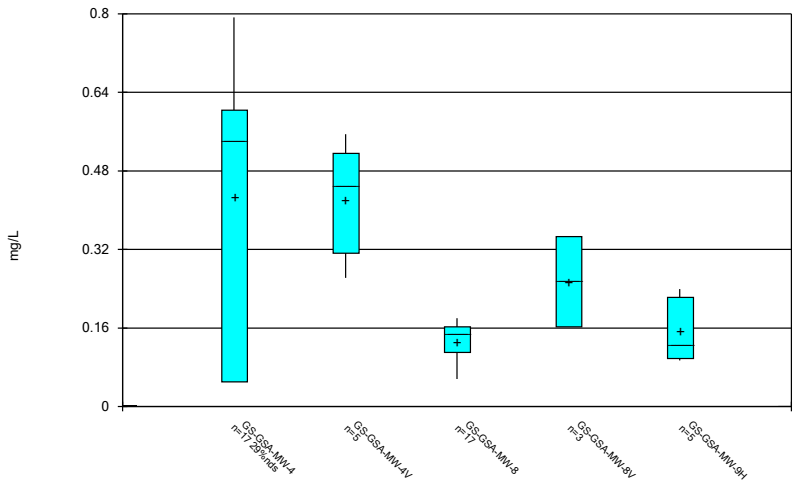


Constituent: Fluoride Analysis Run 5/20/2021 5:09 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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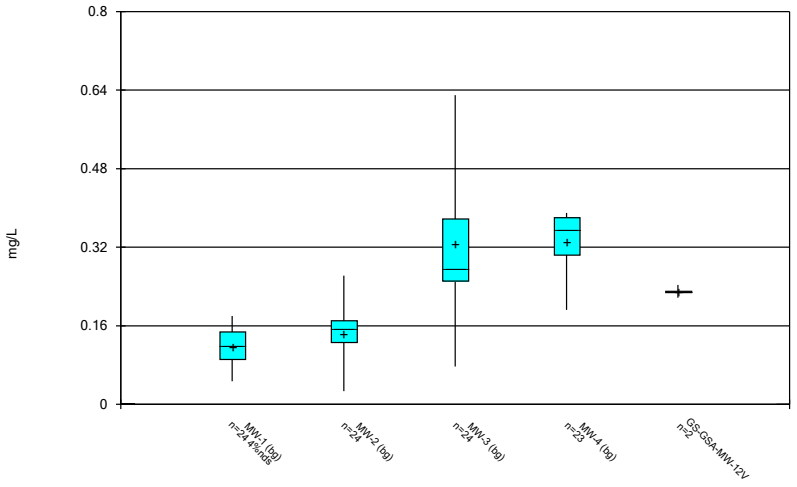
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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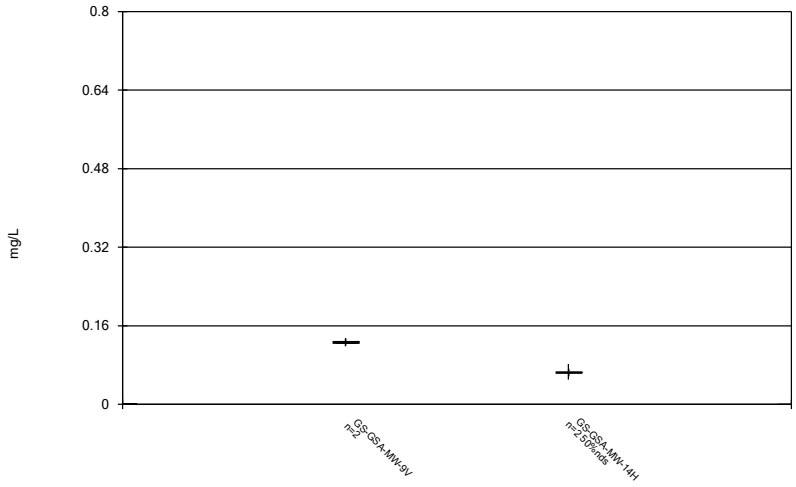
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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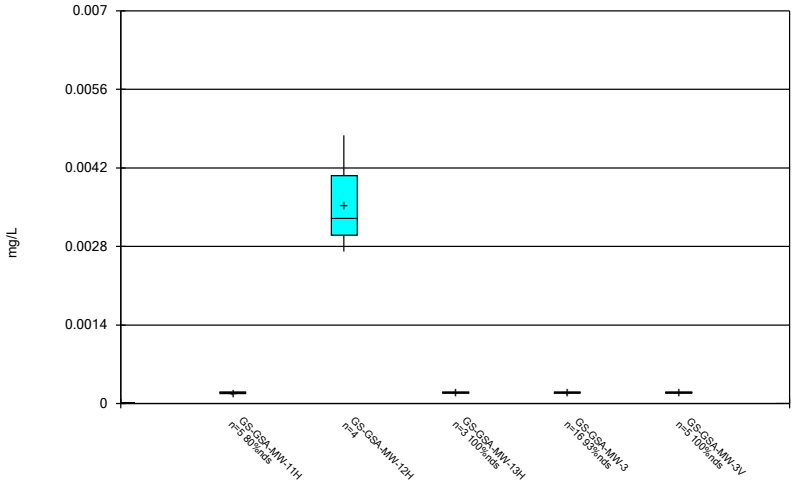
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot

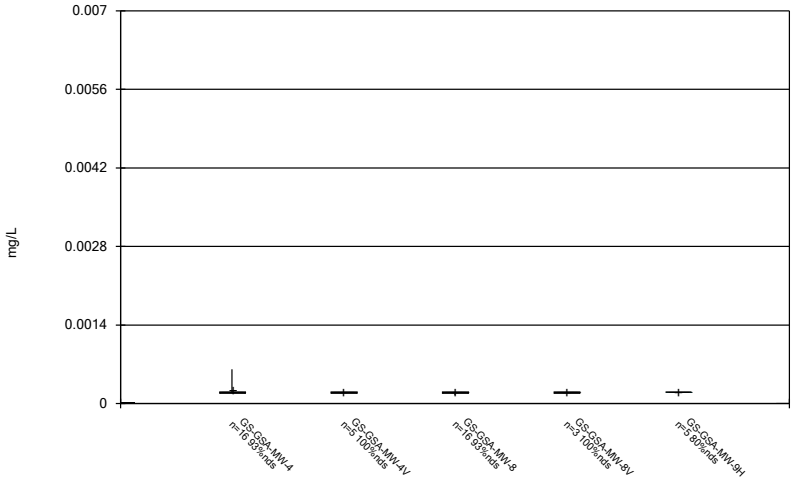


Constituent: Lead Analysis Run 5/20/2021 5:09 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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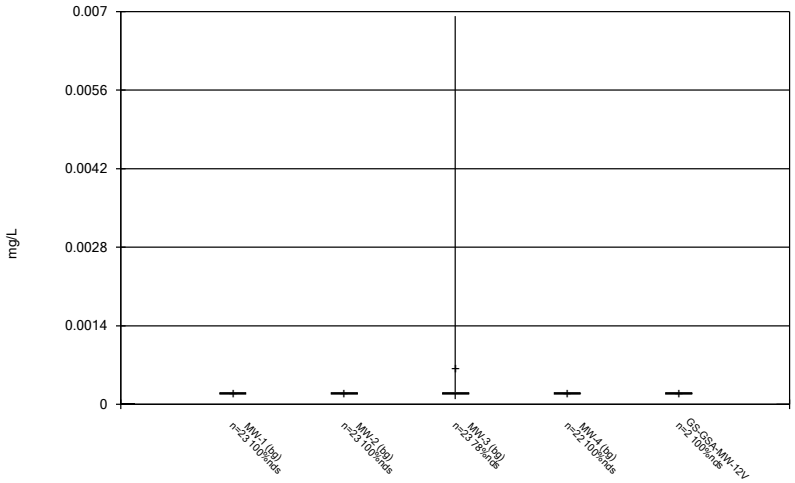
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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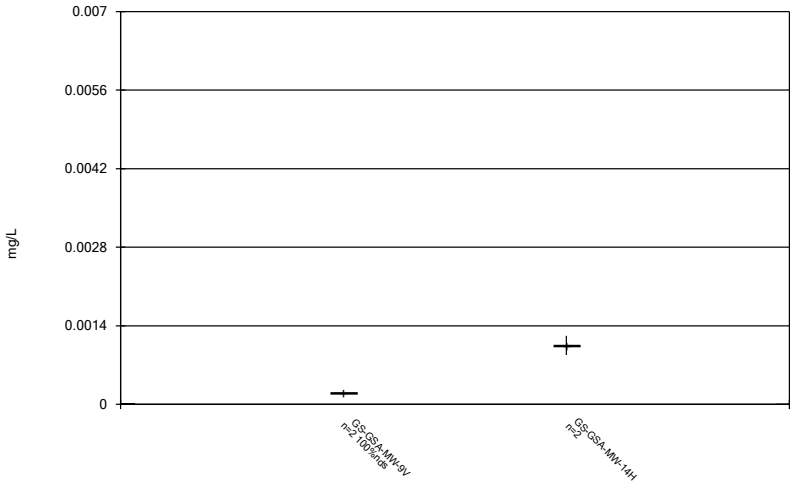
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

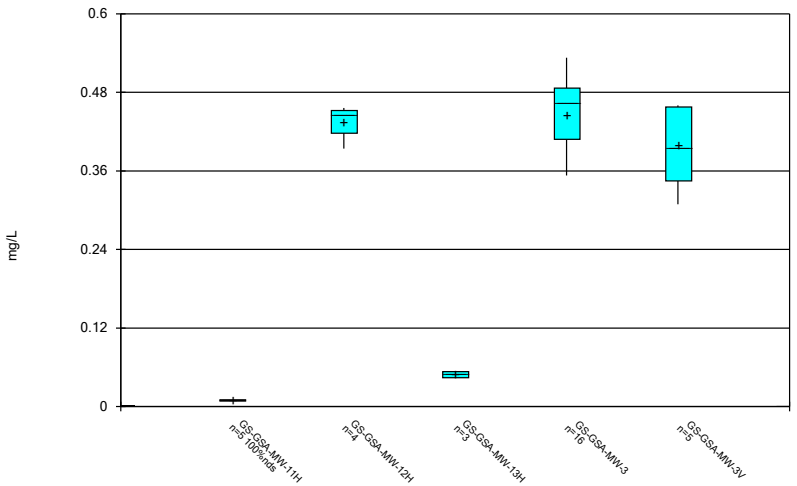
Box & Whiskers Plot



Constituent: Lead Analysis Run 5/20/2021 5:10 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Box & Whiskers Plot

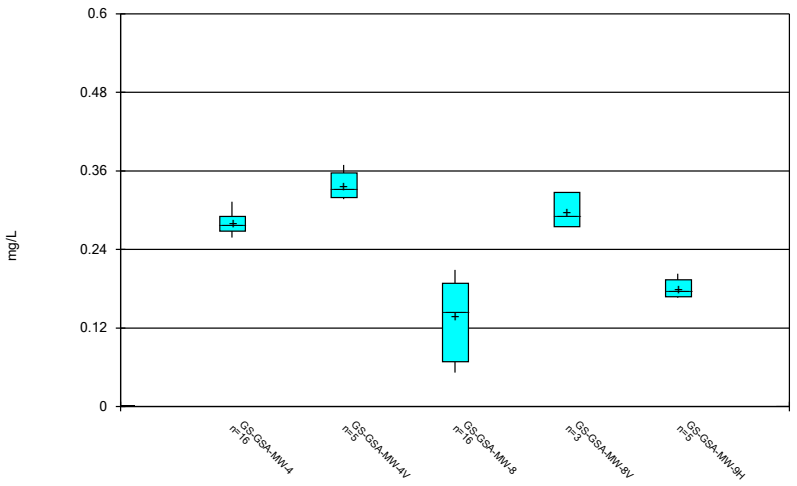


Constituent: Lithium Analysis Run 5/20/2021 5:10 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot

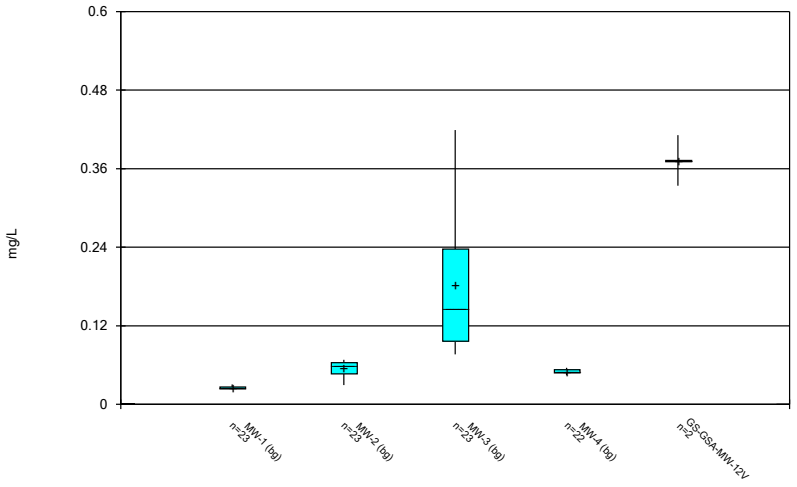


Constituent: Lithium Analysis Run 5/20/2021 5:10 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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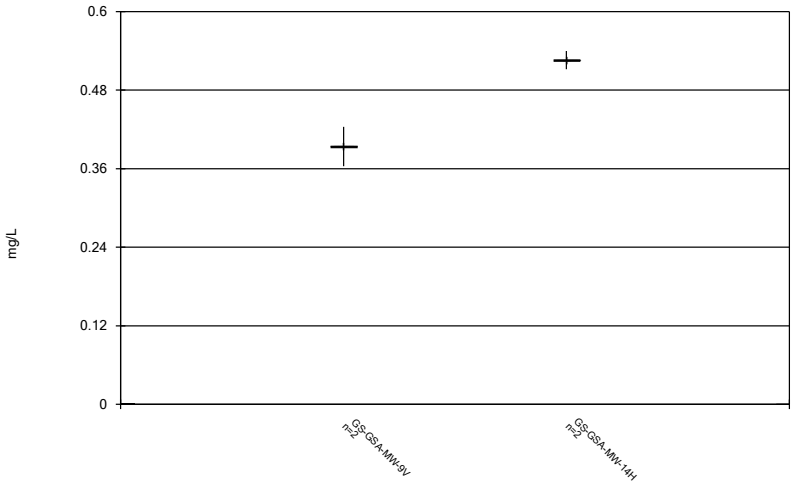
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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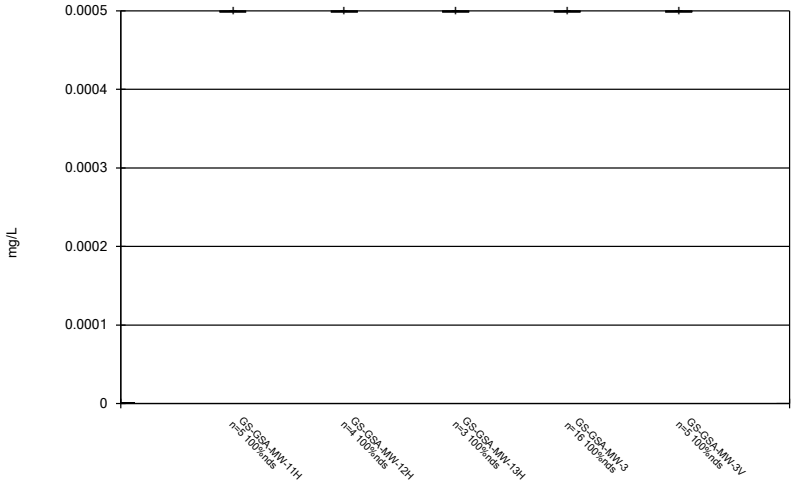
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Box & Whiskers Plot

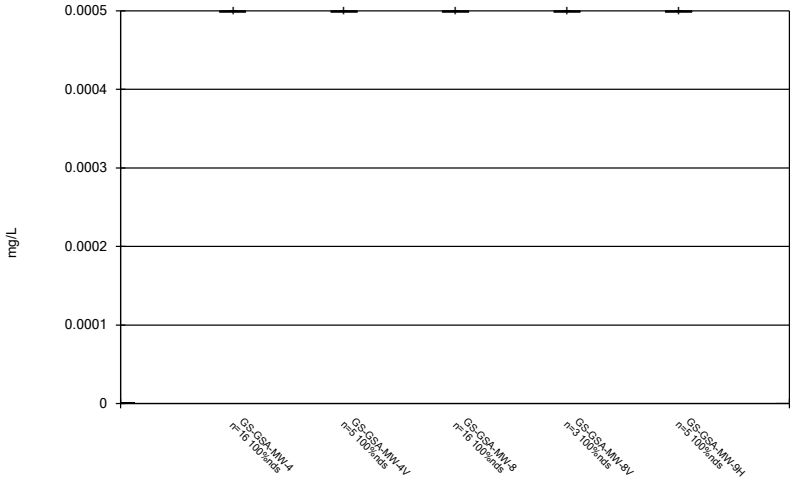


Constituent: Mercury Analysis Run 5/20/2021 5:10 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot

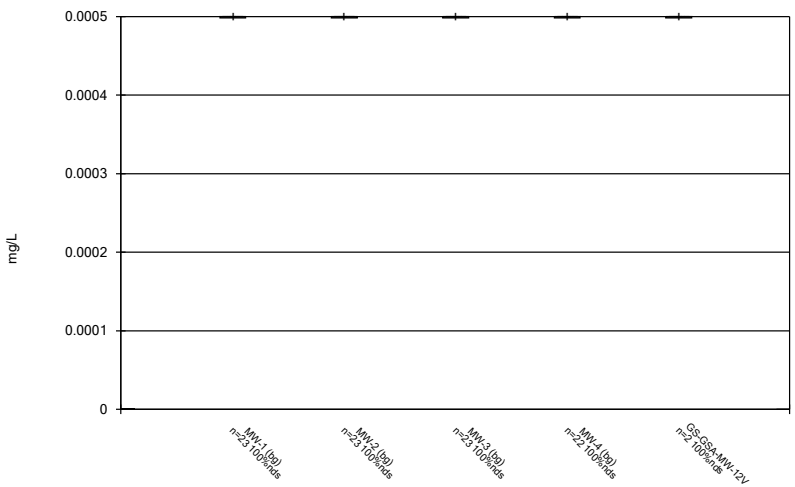


Constituent: Mercury Analysis Run 5/20/2021 5:10 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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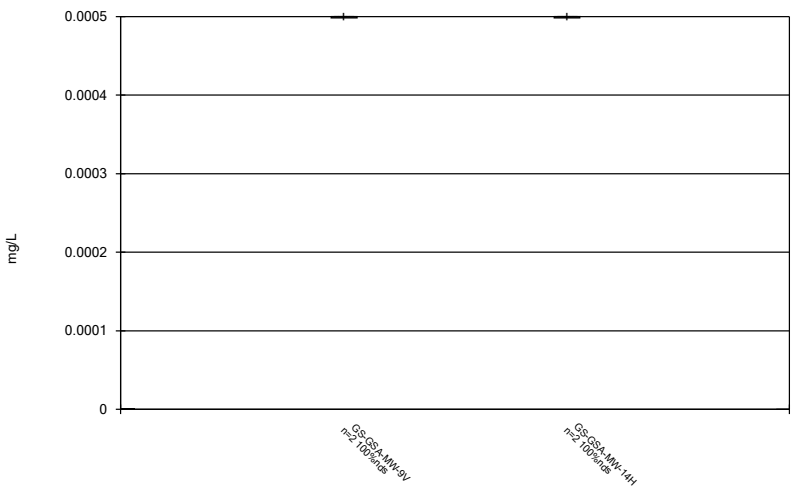
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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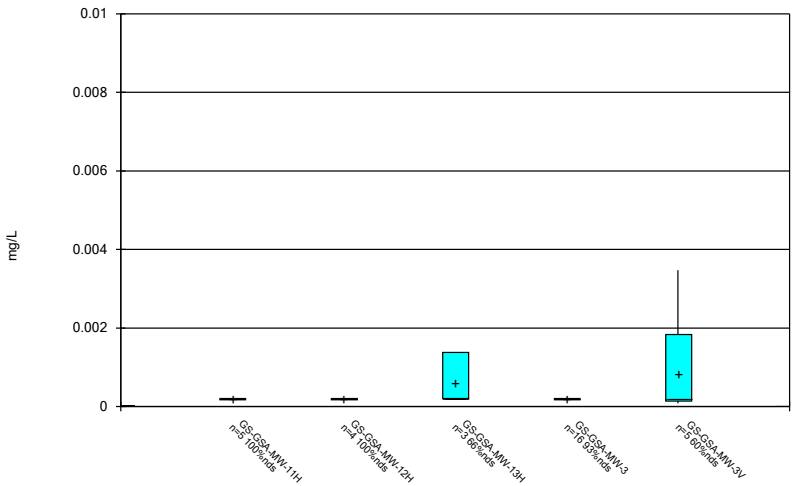
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Box & Whiskers Plot

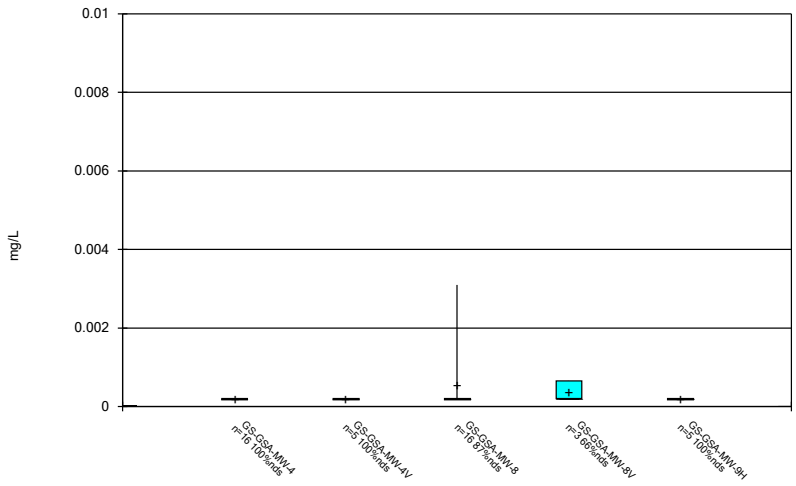


Constituent: Molybdenum Analysis Run 5/20/2021 5:10 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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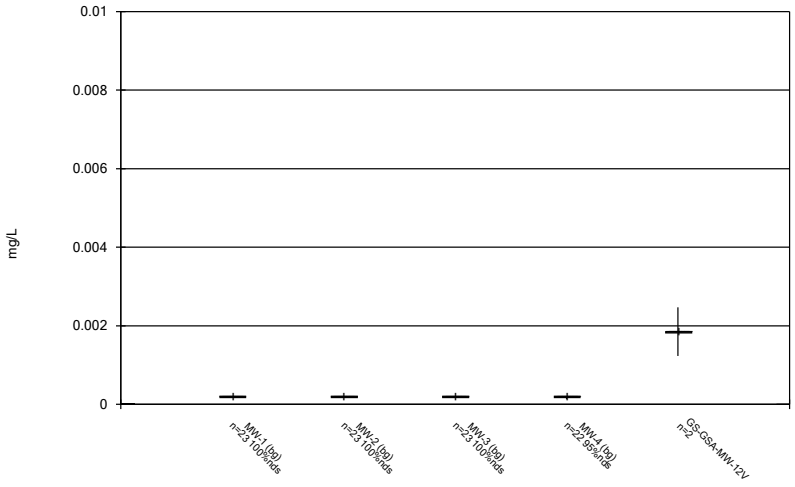
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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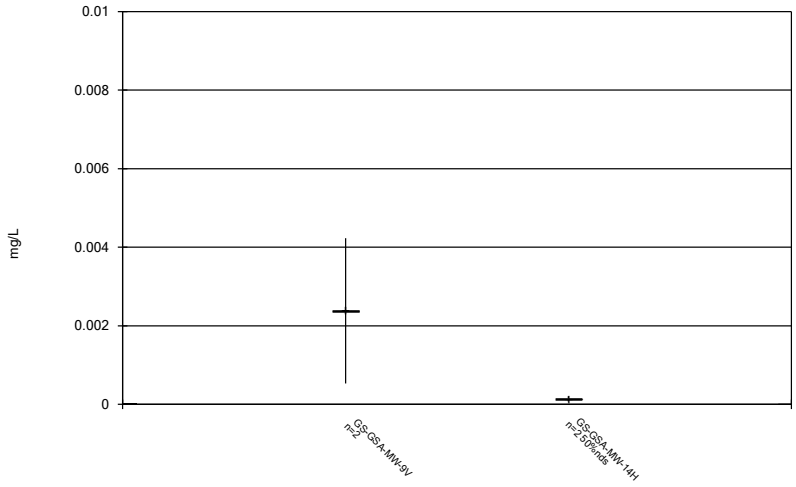
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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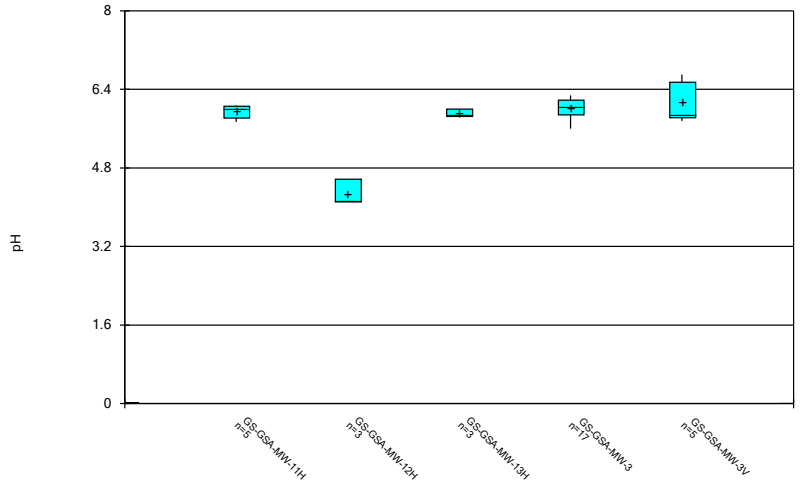
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Box & Whiskers Plot

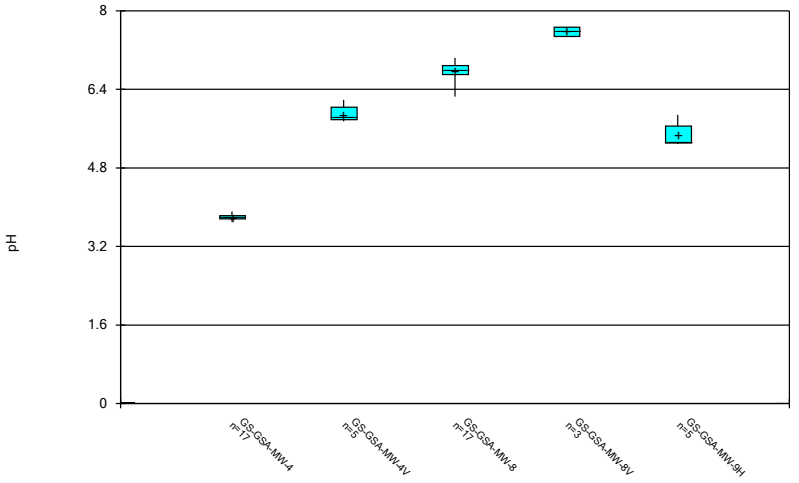


Constituent: pH Analysis Run 5/20/2021 5:10 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot

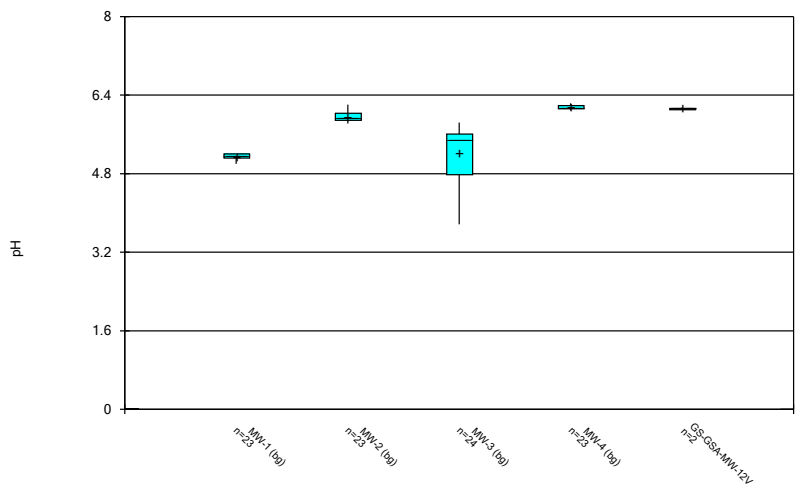


Constituent: pH Analysis Run 5/20/2021 5:10 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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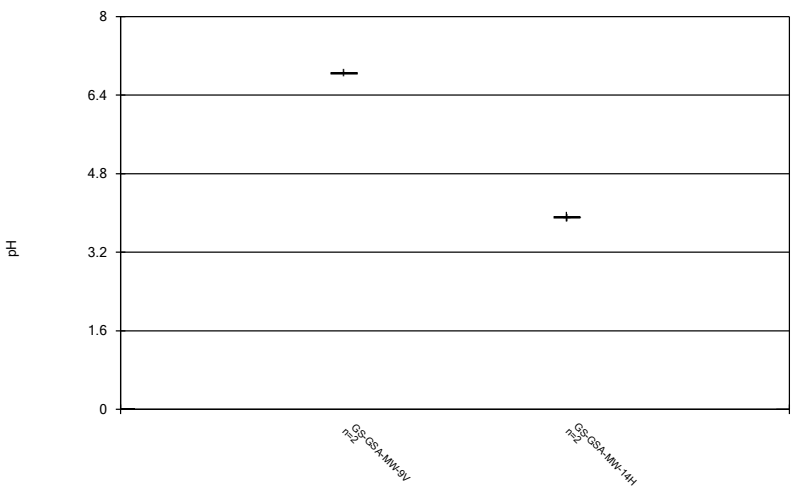
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

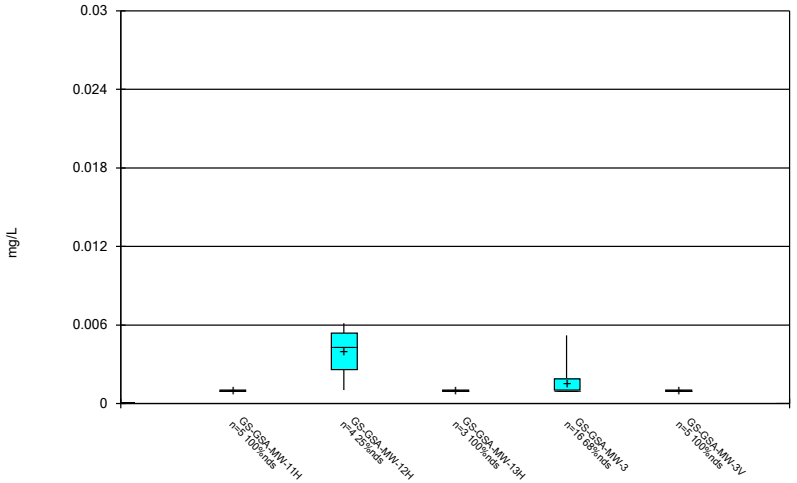
Box & Whiskers Plot



Constituent: pH Analysis Run 5/20/2021 5:10 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Box & Whiskers Plot



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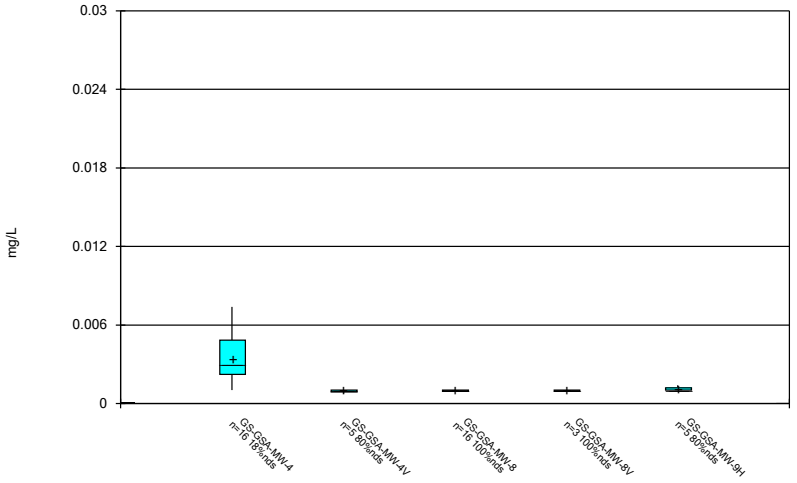
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot

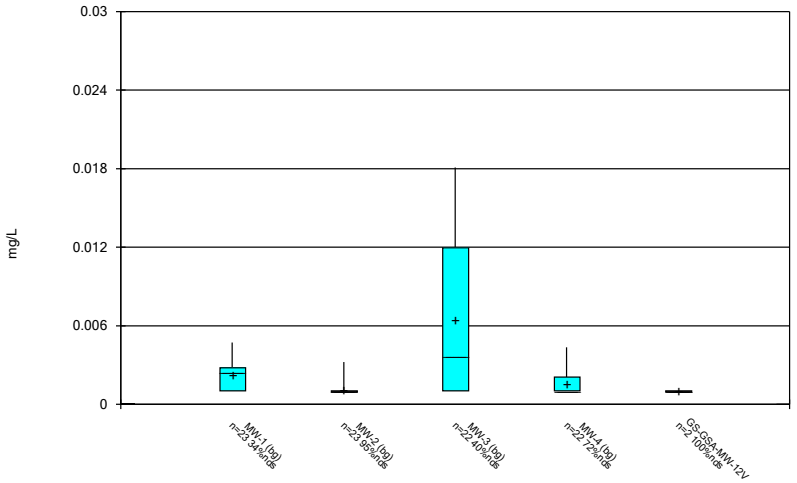


Constituent: Selenium Analysis Run 5/20/2021 5:10 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot

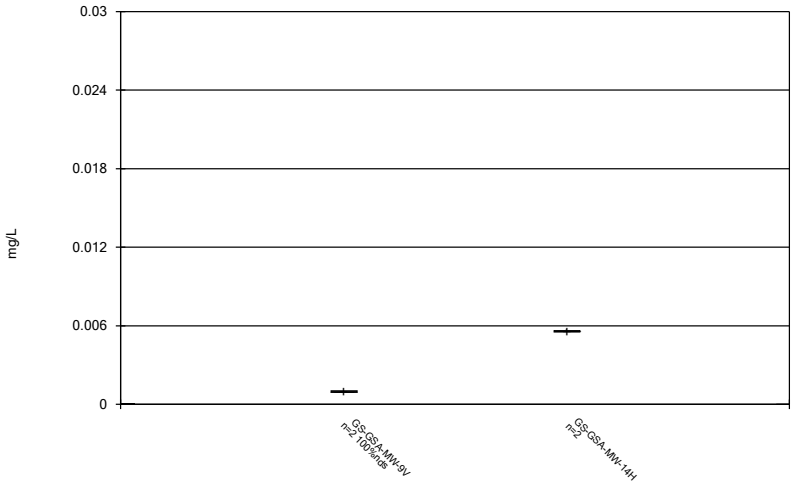


Constituent: Selenium Analysis Run 5/20/2021 5:10 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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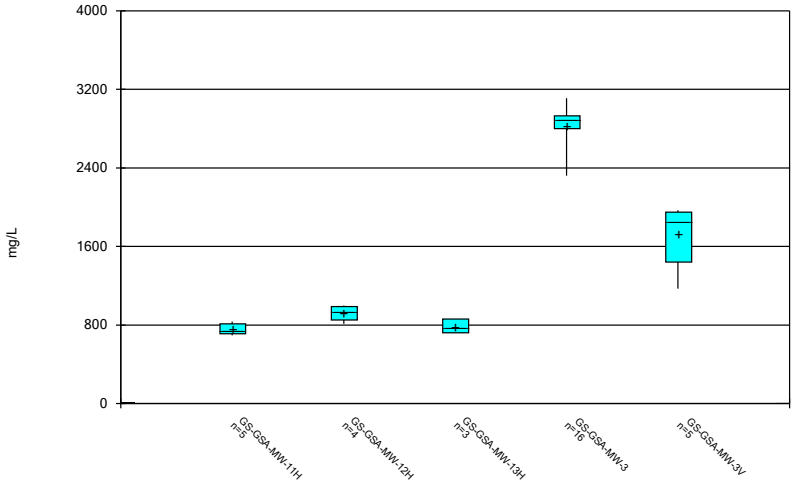
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Box & Whiskers Plot

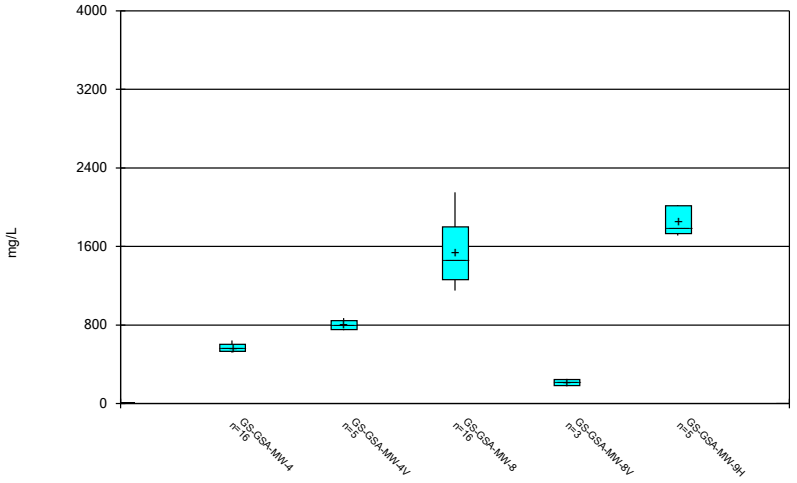


Constituent: Sulfate Analysis Run 5/20/2021 5:10 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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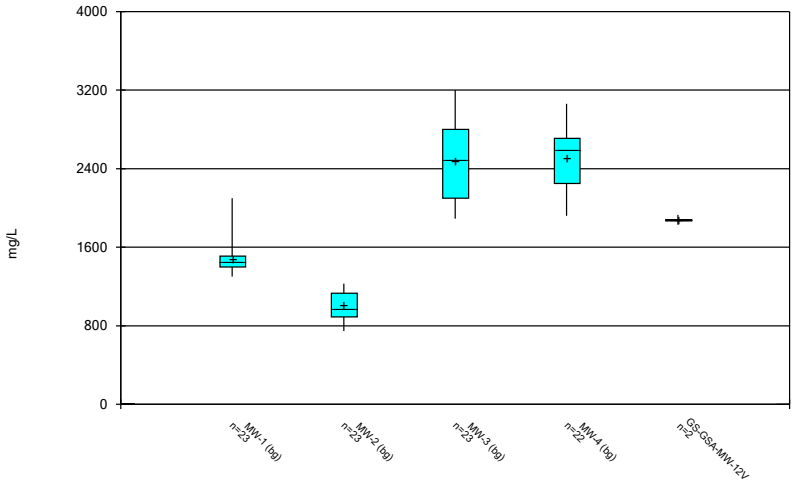
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot

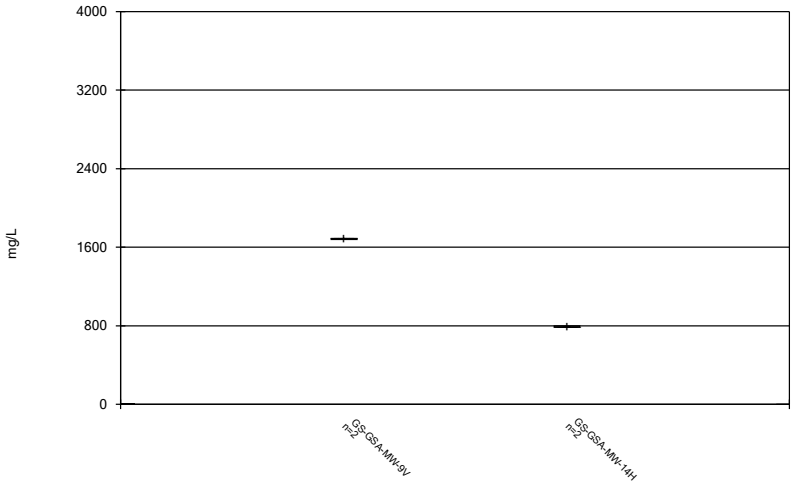


Constituent: Sulfate Analysis Run 5/20/2021 5:10 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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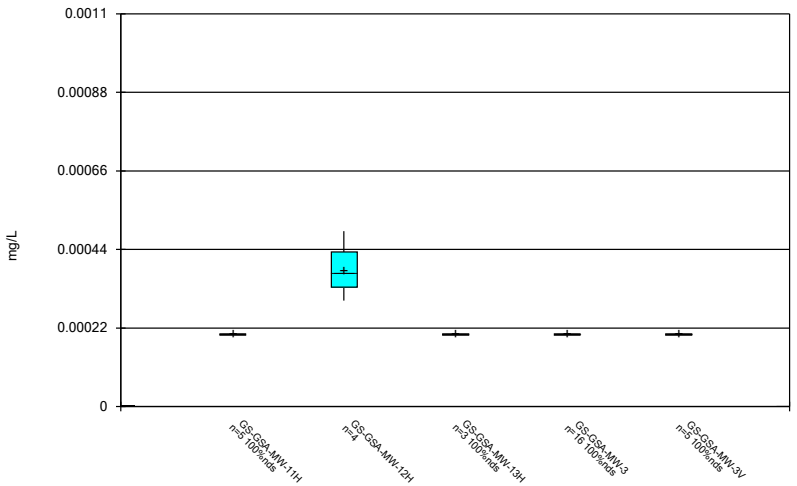
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Box & Whiskers Plot

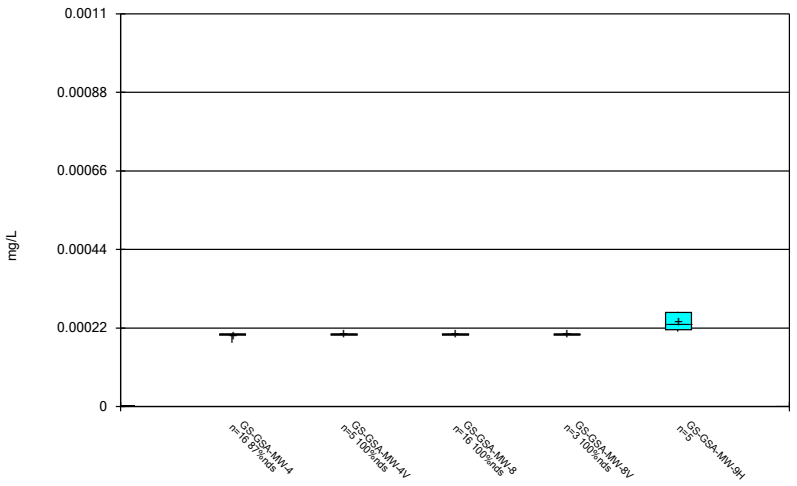


Constituent: Thallium Analysis Run 5/20/2021 5:10 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Thallium Analysis Run 5/20/2021 5:10 PM

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Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

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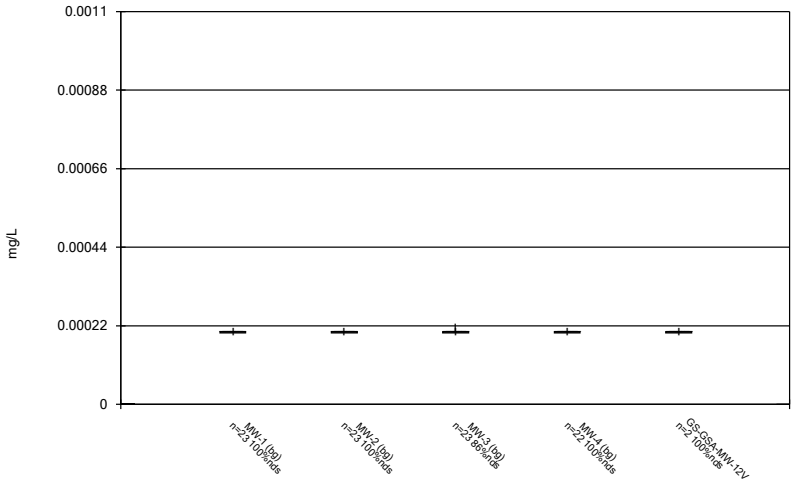

Constituent: Thallium Analysis Run 5/20/2021 5:10 PM

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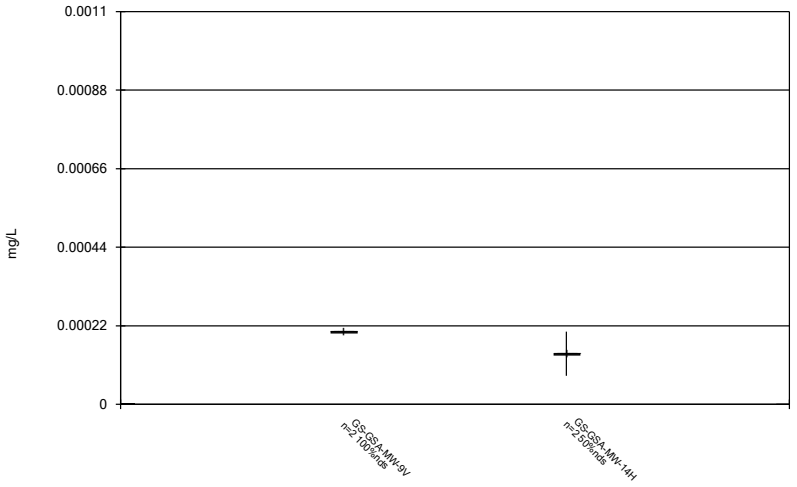
Box & Whiskers Plot



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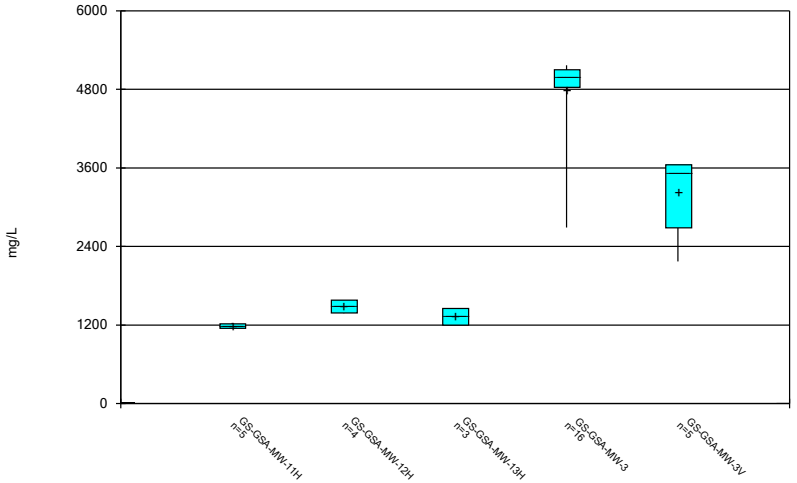
Plant Gorgas Client: Southern Company Data: Gorgas GSA

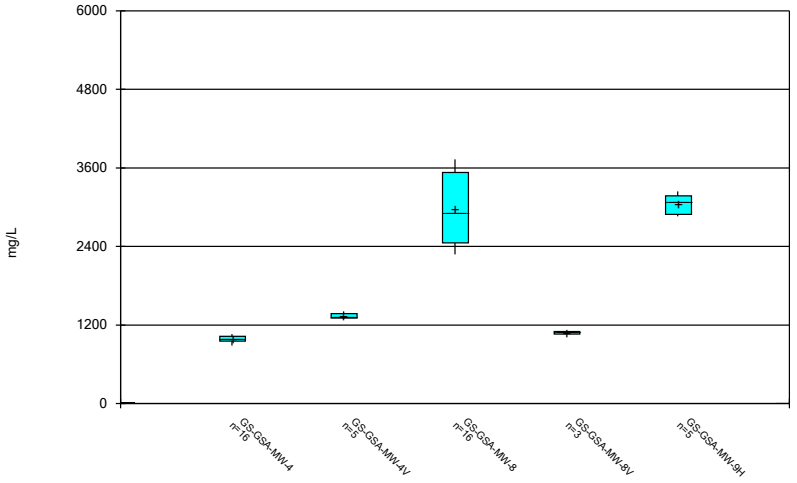
Box & Whiskers Plot



Constituent: Total dissolved solids Analysis Run 5/20/2021 5:10 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

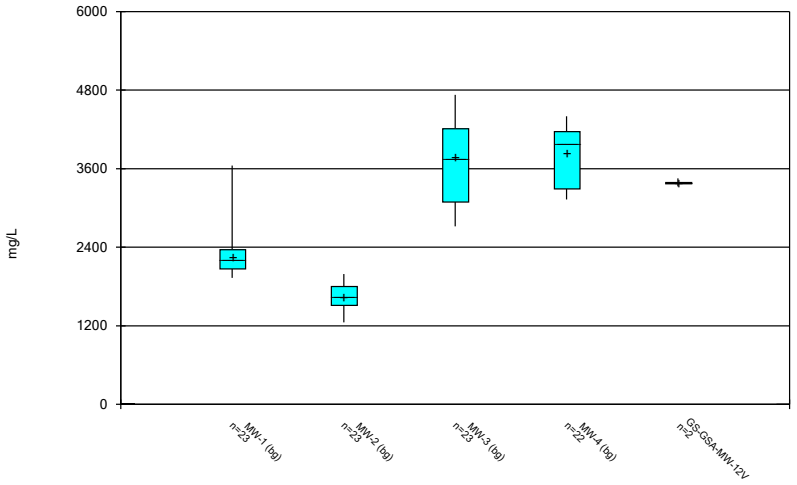
Box & Whiskers Plot



Constituent: Total dissolved solids Analysis Run 5/20/2021 5:10 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

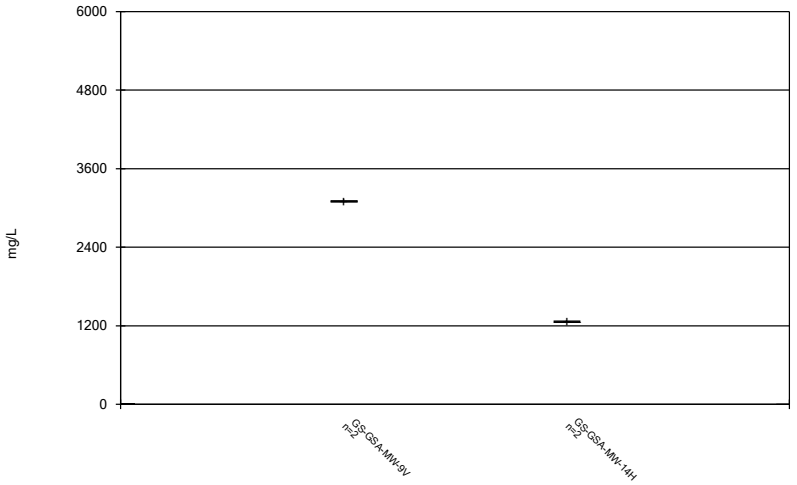
Box & Whiskers Plot



Constituent: Total dissolved solids Analysis Run 5/20/2021 5:10 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Total dissolved solids Analysis Run 5/20/2021 5:10 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

FIGURE C.

Outlier Summary

Plant Gorgas Client: Southern Company Data: Gorgas GSA Printed 5/20/2021, 9:01 PM

	MW-3 Beryllium (mg/L)	MW-3 Cadmium (mg/L)	GS-GSA-MW-3 Cobalt (mg/L)	MW-3 Selenium (mg/L)
4/25/2016		0.0121 (o)		
1/18/2017	0.0169 (o)			
4/17/2017			0.294 (o)	
2/13/2018				0.0209 (o)
11/19/2018	0.0185 (o)			

FIGURE D.

Appendix III Intrawell Prediction Limits - Significant Results

Plant Gorgas Client: Southern Company Data: Gorgas GSA Printed 5/20/2021, 9:06 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**	**5.24**	**5.09**	**2/22/2021**	**5.06**	**Yes**	**18**	**5.165**	**0.03869**	**0**	**None**	**No**	**0.001253**	**Param Intra 1 of 2**

Appendix III Intrawell Prediction Limits - All Results

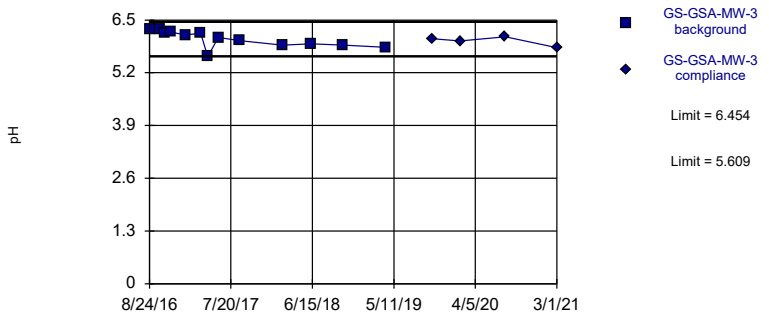
Plant Gorgas Client: Southern Company Data: Gorgas GSA Printed 5/20/2021, 9:06 PM

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	6.454	5.609	3/1/2021	5.82	No	13	6.032	0.2034	0	None	No	0.001253	Param Intra 1 of 2
pH (pH)	GS-GSA-MW-4	3.868	3.701	3/3/2021	3.76	No	13	3.785	0.04034	0	None	No	0.001253	Param Intra 1 of 2
pH (pH)	GS-GSA-MW-8	7.202	6.366	3/1/2021	6.48	No	13	6.784	0.2012	0	None	No	0.001253	Param Intra 1 of 2
pH (pH)	**MW-1**	**5.24**	**5.09**	**2/22/2021**	**5.06**	**Yes**	**18**	**5.165**	**0.03869**	**0**	**None**	**No**	**0.001253**	**Param Intra 1 of 2**
pH (pH)	MW-2	6.161	5.76	2/22/2021	6.1	No	18	5.961	0.1039	0	None	No	0.001253	Param Intra 1 of 2
pH (pH)	MW-3	6.175	4.135	2/22/2021	5.59	No	19	27.62	5.502	0	None	x^2	0.001253	Param Intra 1 of 2
pH (pH)	MW-4	6.246	6.063	2/22/2021	6.19	No	18	6.154	0.04755	0	None	No	0.001253	Param Intra 1 of 2
Sulfate (mg/L)	GS-GSA-MW-3	3089	n/a	3/1/2021	2320	No	12	1.9e17	4.2e16	0	None	x^5	0.002505	Param Intra 1 of 2
Sulfate (mg/L)	GS-GSA-MW-4	648.7	n/a	3/3/2021	609	No	12	564.5	39.86	0	None	No	0.002505	Param Intra 1 of 2
Sulfate (mg/L)	GS-GSA-MW-8	2123	n/a	3/1/2021	1450	No	12	1473	307.9	0	None	No	0.002505	Param Intra 1 of 2
Sulfate (mg/L)	MW-1	2100	n/a	2/22/2021	1400	No	18	n/a	n/a	0	n/a	n/a	0.005373	NP Intra (normality) 1 of 2
Sulfate (mg/L)	MW-2	1247	n/a	2/22/2021	864	No	18	1003	126.2	0	None	No	0.002505	Param Intra 1 of 2
Sulfate (mg/L)	MW-3	3164	n/a	2/22/2021	3040	No	18	2431	379.6	0	None	No	0.002505	Param Intra 1 of 2
Sulfate (mg/L)	MW-4	3023	n/a	2/22/2021	2040	No	17	2558	238.2	0	None	No	0.002505	Param Intra 1 of 2
Total dissolved solids (mg/L)	GS-GSA-MW-3	5416	n/a	3/1/2021	4390	No	12	1.4e22	5.4e21	0	None	x^6	0.002505	Param Intra 1 of 2
Total dissolved solids (mg/L)	GS-GSA-MW-4	1100	n/a	3/3/2021	1040	No	12	990.3	51.88	0	None	No	0.002505	Param Intra 1 of 2
Total dissolved solids (mg/L)	GS-GSA-MW-8	4264	n/a	3/1/2021	2870	No	8	3090	477.8	0	None	No	0.002505	Param Intra 1 of 2
Total dissolved solids (mg/L)	MW-1	2526	n/a	2/22/2021	2230	No	18	2183	178	0	None	No	0.002505	Param Intra 1 of 2
Total dissolved solids (mg/L)	MW-2	2032	n/a	2/22/2021	1620	No	18	1640	202.8	0	None	No	0.002505	Param Intra 1 of 2
Total dissolved solids (mg/L)	MW-3	4874	n/a	2/22/2021	4670	No	18	3661	628.6	0	None	No	0.002505	Param Intra 1 of 2
Total dissolved solids (mg/L)	MW-4	4639	n/a	2/22/2021	3190	No	17	3923	367.3	0	None	No	0.002505	Param Intra 1 of 2

Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=6.032, Std. Dev.=0.2034, n=13. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9319, critical = 0.814. Kappa = 2.077 (c=7, w=3, 1 of 2, event alpha = 0.05132). Report alpha = 0.002505.

Constituent: pH Analysis Run 5/20/2021 9:04 PM View: Appendix III - Intrawell

Plant Gorgas Client: Southern Company Data: Gorgas GSA

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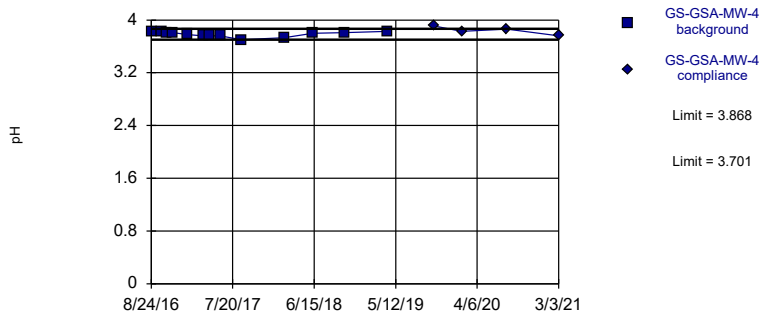
Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=3.785, Std. Dev.=0.04034, n=13. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9065, critical = 0.814. Kappa = 2.077 (c=7, w=3, 1 of 2, event alpha = 0.05132). Report alpha = 0.002505.

Constituent: pH Analysis Run 5/20/2021 9:04 PM View: Appendix III - Intrawell

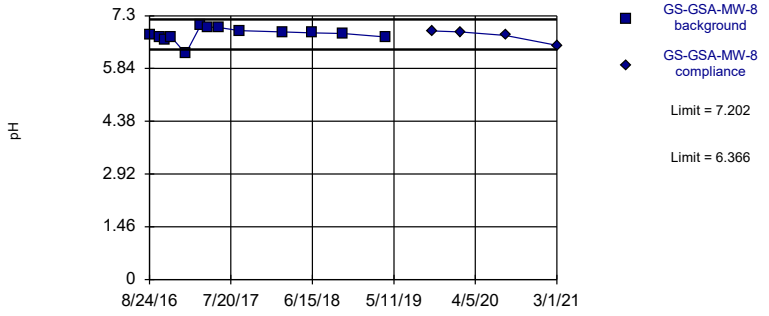
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=6.784, Std. Dev.=0.2012, n=13. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8769, critical = 0.814. Kappa = 2.077 (c=7, w=3, 1 of 2, event alpha = 0.05132). Report alpha = 0.002505.

Constituent: pH Analysis Run 5/20/2021 9:04 PM View: Appendix III - Intrawell

Plant Gorgas Client: Southern Company Data: Gorgas GSA

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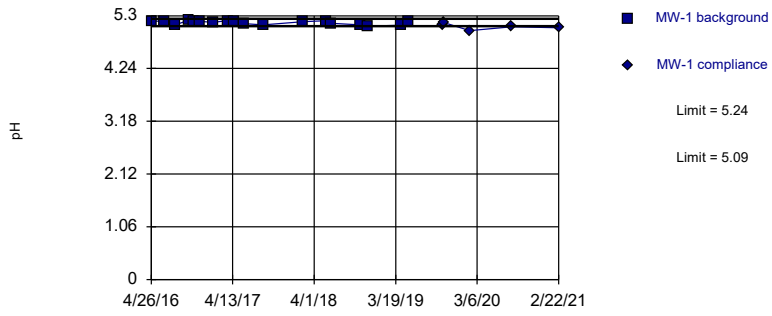
Exceeds Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=5.165, Std. Dev.=0.03869, n=18. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8696, critical = 0.858. Kappa = 1.931 (c=7, w=3, 1 of 2, event alpha = 0.05132). Report alpha = 0.002505.

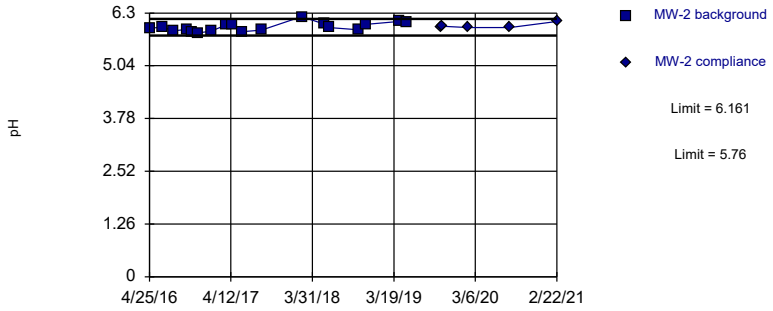
Constituent: pH Analysis Run 5/20/2021 9:04 PM View: Appendix III - Intrawell

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=5.961, Std. Dev.=0.1039, n=18. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9465, critical = 0.858. Kappa = 1.931 (c=7, w=3, 1 of 2, event alpha = 0.05132). Report alpha = 0.002505.

Constituent: pH Analysis Run 5/20/2021 9:04 PM View: Appendix III - Intrawell

Plant Gorgas Client: Southern Company Data: Gorgas GSA

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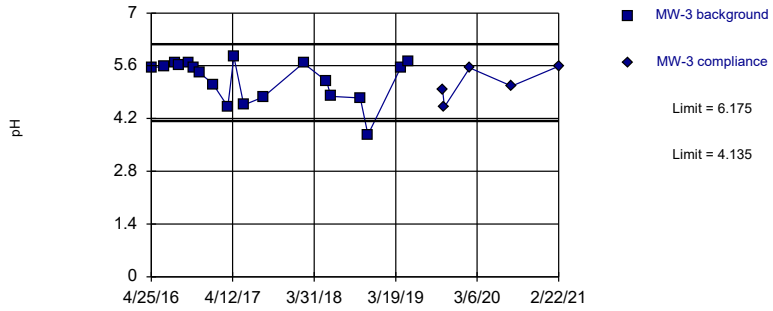
Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary (based on square transformation): Mean=27.62, Std. Dev.=5.502, n=19. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8755, critical = 0.863. Kappa = 1.912 (c=7, w=3, 1 of 2, event alpha = 0.05132). Report alpha = 0.002505.

Constituent: pH Analysis Run 5/20/2021 9:04 PM View: Appendix III - Intrawell

Plant Gorgas Client: Southern Company Data: Gorgas GSA

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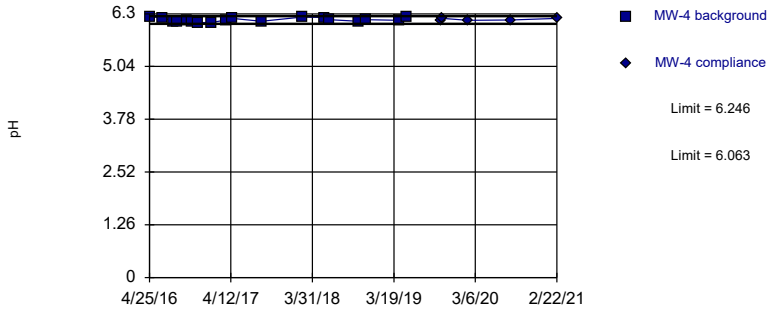
Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=6.154, Std. Dev.=0.04755, n=18. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9068, critical = 0.858. Kappa = 1.931 (c=7, w=3, 1 of 2, event alpha = 0.05132). Report alpha = 0.002505.

Constituent: pH Analysis Run 5/20/2021 9:04 PM View: Appendix III - Intrawell

Plant Gorgas Client: Southern Company Data: Gorgas GSA

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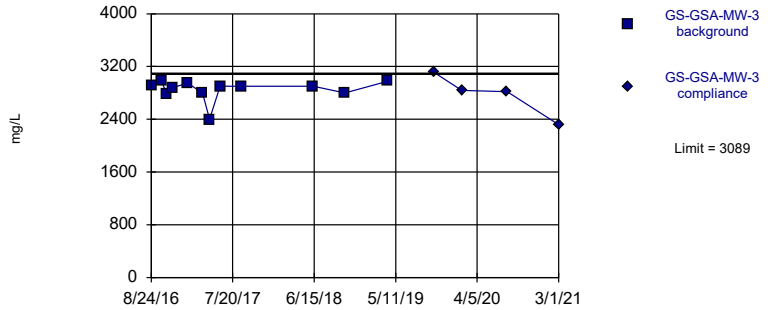
Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on x^5 transformation): Mean=1.9e17, Std. Dev.=4.2e16, n=12. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8091, critical = 0.805. Kappa = 2.112 (c=7, w=3, 1 of 2, event alpha = 0.05132). Report alpha = 0.002505.

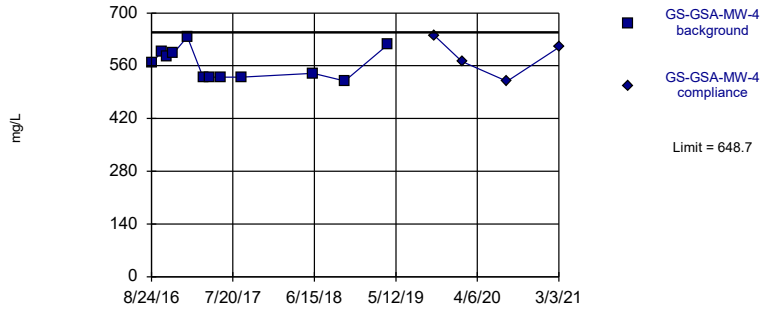
Constituent: Sulfate Analysis Run 5/20/2021 9:04 PM View: Appendix III - Intrawell

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=564.5, Std. Dev.=39.86, n=12. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8799, critical = 0.805. Kappa = 2.112 (c=7, w=3, 1 of 2, event alpha = 0.05132). Report alpha = 0.002505.

Constituent: Sulfate Analysis Run 5/20/2021 9:04 PM View: Appendix III - Intrawell

Plant Gorgas Client: Southern Company Data: Gorgas GSA

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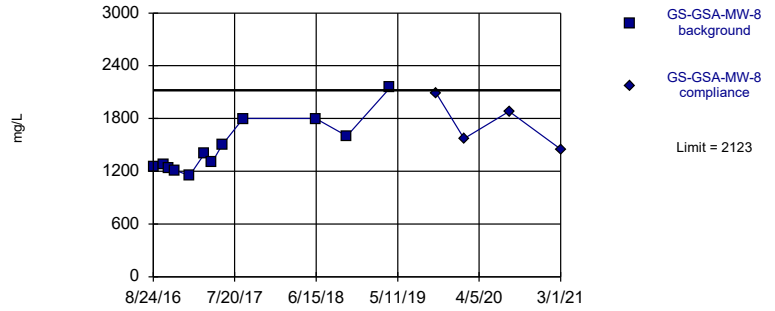
Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=1473, Std. Dev.=307.9, n=12. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8741, critical = 0.805. Kappa = 2.112 (c=7, w=3, 1 of 2, event alpha = 0.05132). Report alpha = 0.002505.

Constituent: Sulfate Analysis Run 5/20/2021 9:04 PM View: Appendix III - Intrawell

Plant Gorgas Client: Southern Company Data: Gorgas GSA

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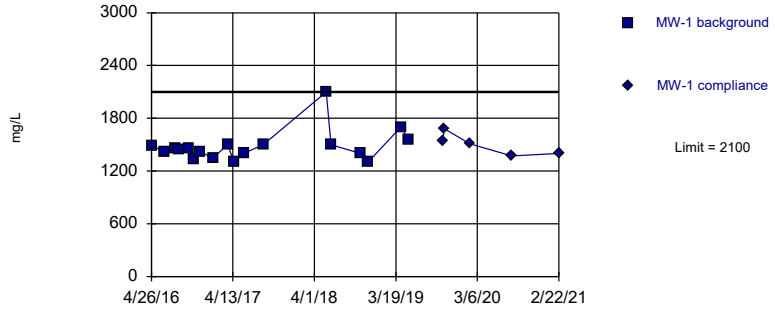
Within Limit

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 18 background values. Well-constituent pair annual alpha = 0.01072. Individual comparison alpha = 0.005373 (1 of 2).

Constituent: Sulfate Analysis Run 5/20/2021 9:04 PM View: Appendix III - Intrawell

Plant Gorgas Client: Southern Company Data: Gorgas GSA

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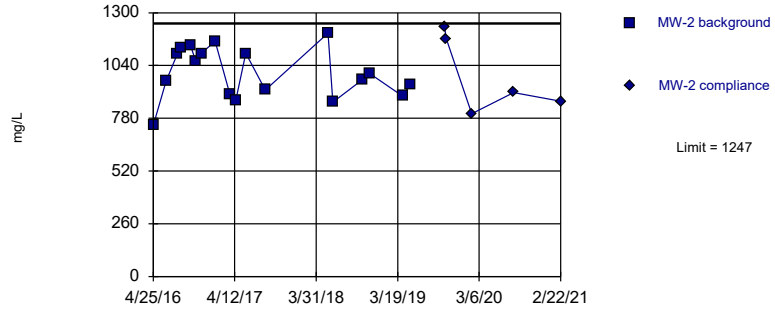
Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=1003, Std. Dev.=126.2, n=18. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.957, critical = 0.858. Kappa = 1.931 (c=7, w=3, 1 of 2, event alpha = 0.05132). Report alpha = 0.002505.

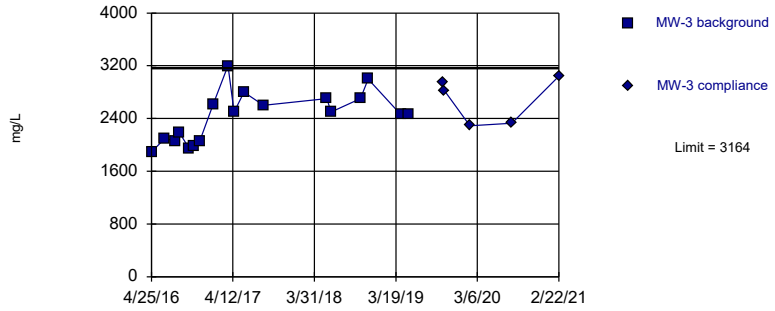
Constituent: Sulfate Analysis Run 5/20/2021 9:04 PM View: Appendix III - Intrawell

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=2431, Std. Dev.=379.6, n=18. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9476, critical = 0.858. Kappa = 1.931 (c=7, w=3, 1 of 2, event alpha = 0.05132). Report alpha = 0.002505.

Constituent: Sulfate Analysis Run 5/20/2021 9:04 PM View: Appendix III - Intrawell

Plant Gorgas Client: Southern Company Data: Gorgas GSA

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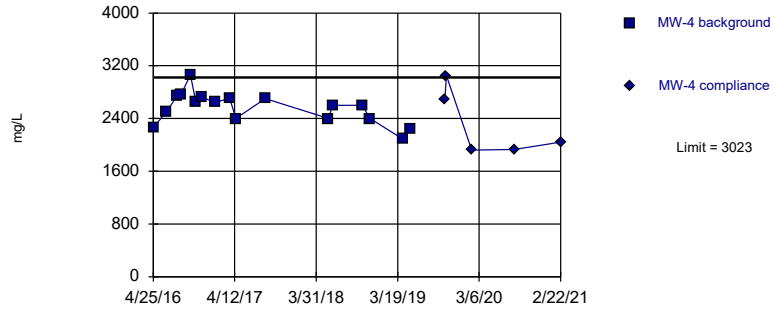
Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=2558, Std. Dev.=238.2, n=17. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.963, critical = 0.851. Kappa = 1.951 (c=7, w=3, 1 of 2, event alpha = 0.05132). Report alpha = 0.002505.

Constituent: Sulfate Analysis Run 5/20/2021 9:04 PM View: Appendix III - Intrawell

Plant Gorgas Client: Southern Company Data: Gorgas GSA

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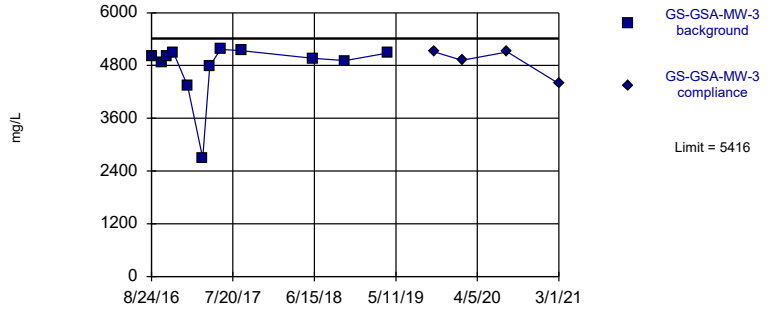
Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on x^6 transformation): Mean=1.4e22, Std. Dev.=5.4e21, n=12. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8255, critical = 0.805. Kappa = 2.112 (c=7, w=3, 1 of 2, event alpha = 0.05132). Report alpha = 0.002505.

Constituent: Total dissolved solids Analysis Run 5/20/2021 9:04 PM View: Appendix III - Intrawell

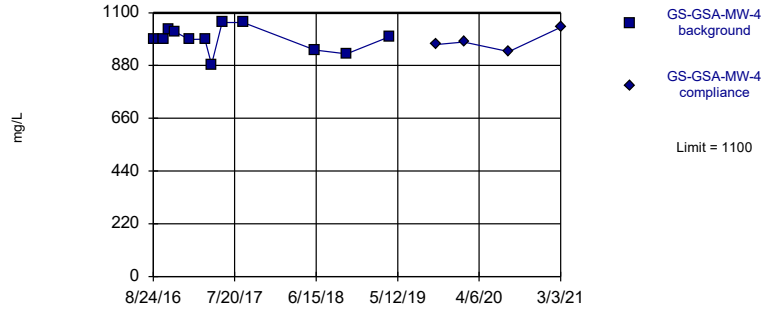
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=990.3, Std. Dev.=51.88, n=12. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9383, critical = 0.805. Kappa = 2.112 (c=7, w=3, 1 of 2, event alpha = 0.05132). Report alpha = 0.002505.

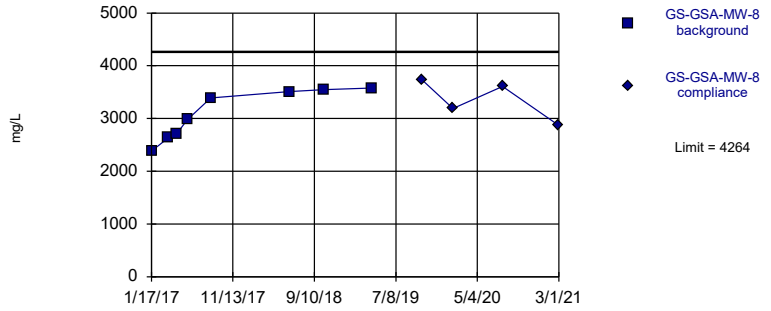
Constituent: Total dissolved solids Analysis Run 5/20/2021 9:04 PM View: Appendix III - Intrawell

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=3090, Std. Dev.=477.8, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8736, critical = 0.749. Kappa = 2.458 (c=7, w=3, 1 of 2, event alpha = 0.05132). Report alpha = 0.002505.

Constituent: Total dissolved solids Analysis Run 5/20/2021 9:04 PM View: Appendix III - Intrawell

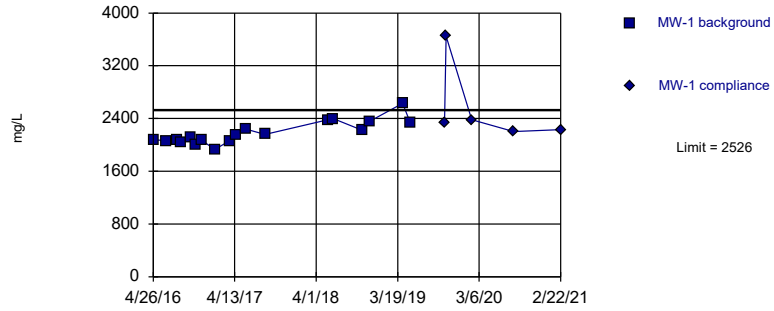
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=2183, Std. Dev.=178, n=18. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9142, critical = 0.858. Kappa = 1.931 (c=7, w=3, 1 of 2, event alpha = 0.05132). Report alpha = 0.002505.

Constituent: Total dissolved solids Analysis Run 5/20/2021 9:04 PM View: Appendix III - Intrawell

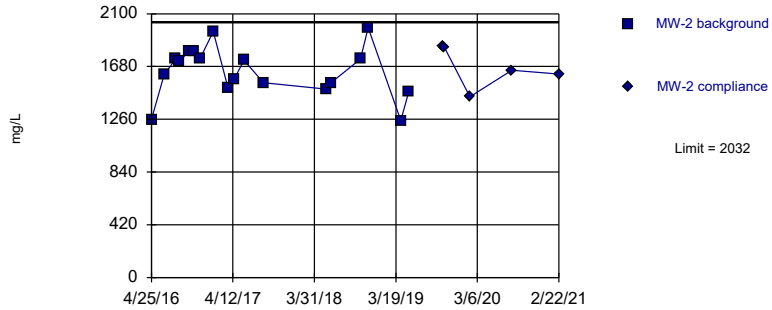
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=1640, Std. Dev.=202.8, n=18. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.952, critical = 0.858. Kappa = 1.931 (c=7, w=3, 1 of 2, event alpha = 0.05132). Report alpha = 0.002505.

Constituent: Total dissolved solids Analysis Run 5/20/2021 9:04 PM View: Appendix III - Intrawell

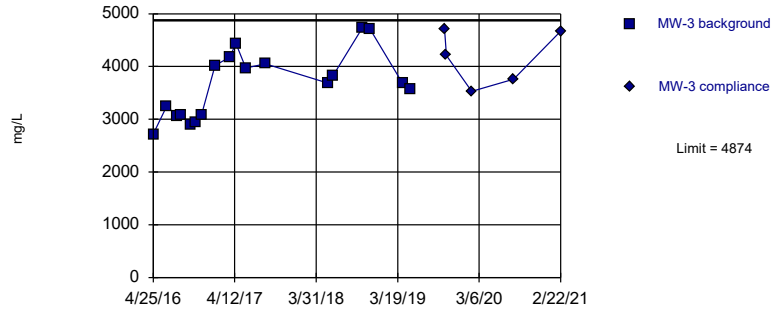
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=3661, Std. Dev.=628.6, n=18. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9455, critical = 0.858. Kappa = 1.931 (c=7, w=3, 1 of 2, event alpha = 0.05132). Report alpha = 0.002505.

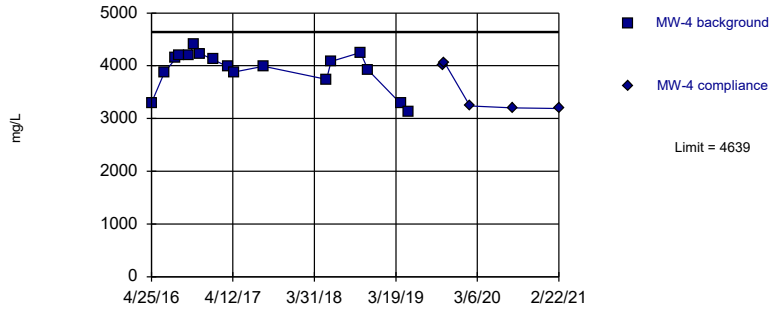
Constituent: Total dissolved solids Analysis Run 5/20/2021 9:04 PM View: Appendix III - Intrawell

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=3923, Std. Dev.=367.3, n=17. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8694, critical = 0.851. Kappa = 1.951 (c=7, w=3, 1 of 2, event alpha = 0.05132). Report alpha = 0.002505.

Constituent: Total dissolved solids Analysis Run 5/20/2021 9:04 PM View: Appendix III - Intrawell

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Prediction Limit

Constituent: pH (pH) Analysis Run 5/20/2021 9:06 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

Prediction Limit

Constituent: pH (pH) Analysis Run 5/20/2021 9:06 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

Prediction Limit

Constituent: pH (pH) Analysis Run 5/20/2021 9:06 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

Prediction Limit

Constituent: pH (pH) Analysis Run 5/20/2021 9:06 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 (D)	
10/26/2016	5.2	
11/21/2016	5.19 (D)	
1/17/2017	5.17 (D)	
3/22/2017	5.2 (D)	
4/18/2017	5.2	
5/30/2017	5.14 (D)	
8/23/2017	5.12 (D)	
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 (D)	
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

Prediction Limit

Constituent: pH (pH) Analysis Run 5/20/2021 9:06 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 (D)	
10/26/2016	5.84	
11/21/2016	5.82 (D)	
1/17/2017	5.87 (D)	
3/22/2017	6.01 (D)	
4/18/2017	6.02	
5/31/2017	5.85 (D)	
8/23/2017	5.89 (D)	
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 (D)	
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

Prediction Limit

Constituent: pH (pH) Analysis Run 5/20/2021 9:06 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 (D)	
10/26/2016	5.56	
11/21/2016	5.42 (D)	
1/18/2017	5.11 (D)	
3/22/2017	4.52 (D)	
4/18/2017	5.84	
5/31/2017	4.56 (D)	
8/23/2017	4.77 (D)	
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 (D)	
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

Prediction Limit

Constituent: pH (pH) Analysis Run 5/20/2021 9:06 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 (D)	
10/26/2016	6.12	
11/21/2016	6.09 (D)	
1/18/2017	6.09 (D)	
3/22/2017	6.15 (D)	
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 (D)	
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

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 5/20/2021 9:06 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

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 5/20/2021 9:06 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

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 5/20/2021 9:06 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

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 5/20/2021 9:06 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	
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

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 5/20/2021 9:06 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

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 5/20/2021 9:06 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

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 5/20/2021 9:06 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	
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

Prediction Limit

Constituent: Total dissolved solids (mg/L) Analysis Run 5/20/2021 9:06 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

Prediction Limit

Constituent: Total dissolved solids (mg/L) Analysis Run 5/20/2021 9:06 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

Prediction Limit

Constituent: Total dissolved solids (mg/L) Analysis Run 5/20/2021 9:06 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

Prediction Limit

Constituent: Total dissolved solids (mg/L) Analysis Run 5/20/2021 9:06 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 (D)	
10/8/2019		2330
10/16/2019		3650
2/3/2020		2380
8/3/2020		2200
2/22/2021		2230

Prediction Limit

Constituent: Total dissolved solids (mg/L) Analysis Run 5/20/2021 9:06 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

Prediction Limit

Constituent: Total dissolved solids (mg/L) Analysis Run 5/20/2021 9:06 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 (D)	
10/8/2019		4720
10/16/2019		4210
2/3/2020		3530
8/3/2020		3760
2/22/2021		4670

Prediction Limit

Constituent: Total dissolved solids (mg/L) Analysis Run 5/20/2021 9:06 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	
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

FIGURE E.

Appendix III Interwell Prediction Limits - Significant Results

Plant Gorgas Client: Southern Company Data: Gorgas GSA Printed 5/20/2021, 9:07 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**	**0.0596**	**n/a**	**3/1/2021**	**2.55**	**Yes**	**91**	**n/a**	**n/a**	**17.58**	**n/a**	**n/a**	**0.0002337**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**GS-GSA-MW-4**	**0.0596**	**n/a**	**3/3/2021**	**2.42**	**Yes**	**91**	**n/a**	**n/a**	**17.58**	**n/a**	**n/a**	**0.0002337**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**GS-GSA-MW-8**	**0.0596**	**n/a**	**3/1/2021**	**1.85**	**Yes**	**91**	**n/a**	**n/a**	**17.58**	**n/a**	**n/a**	**0.0002337**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**GS-GSA-MW-3**	**431**	**n/a**	**3/1/2021**	**514**	**Yes**	**91**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0002337**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	**GS-GSA-MW-3**	**3.723**	**n/a**	**3/1/2021**	**250**	**Yes**	**91**	**1.479**	**0.2681**	**3.297**	**None**	**sqrt(x)**	**0.002505**	**Param Inter 1 of 2**
Chloride (mg/L)	**GS-GSA-MW-4**	**3.723**	**n/a**	**3/3/2021**	**40.3**	**Yes**	**91**	**1.479**	**0.2681**	**3.297**	**None**	**sqrt(x)**	**0.002505**	**Param Inter 1 of 2**
Chloride (mg/L)	**GS-GSA-MW-8**	**3.723**	**n/a**	**3/1/2021**	**92.5**	**Yes**	**91**	**1.479**	**0.2681**	**3.297**	**None**	**sqrt(x)**	**0.002505**	**Param Inter 1 of 2**

Appendix III Interwell Prediction Limits - All Results

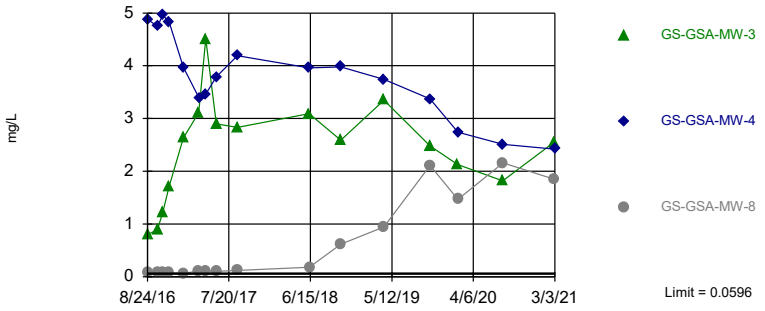
Plant Gorgas Client: Southern Company Data: Gorgas GSA Printed 5/20/2021, 9:07 PM

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**	**0.0596**	**n/a**	**3/1/2021**	**2.55**	**Yes**	**91**	**n/a**	**n/a**	**17.58**	**n/a**	**n/a**	**0.0002337**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**GS-GSA-MW-4**	**0.0596**	**n/a**	**3/3/2021**	**2.42**	**Yes**	**91**	**n/a**	**n/a**	**17.58**	**n/a**	**n/a**	**0.0002337**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**GS-GSA-MW-8**	**0.0596**	**n/a**	**3/1/2021**	**1.85**	**Yes**	**91**	**n/a**	**n/a**	**17.58**	**n/a**	**n/a**	**0.0002337**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**GS-GSA-MW-3**	**431**	**n/a**	**3/1/2021**	**514**	**Yes**	**91**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0002337**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	GS-GSA-MW-4	431	n/a	3/3/2021	100	No	91	n/a	n/a	0	n/a	n/a	0.0002337	NP Inter (normality) 1 of 2
Calcium (mg/L)	GS-GSA-MW-8	431	n/a	3/1/2021	386	No	91	n/a	n/a	0	n/a	n/a	0.0002337	NP Inter (normality) 1 of 2
Chloride (mg/L)	**GS-GSA-MW-3**	**3.723**	**n/a**	**3/1/2021**	**250**	**Yes**	**91**	**1.479**	**0.2681**	**3.297**	**None**	**sqrt(x)**	**0.002505**	**Param Inter 1 of 2**
Chloride (mg/L)	**GS-GSA-MW-4**	**3.723**	**n/a**	**3/3/2021**	**40.3**	**Yes**	**91**	**1.479**	**0.2681**	**3.297**	**None**	**sqrt(x)**	**0.002505**	**Param Inter 1 of 2**
Chloride (mg/L)	**GS-GSA-MW-8**	**3.723**	**n/a**	**3/1/2021**	**92.5**	**Yes**	**91**	**1.479**	**0.2681**	**3.297**	**None**	**sqrt(x)**	**0.002505**	**Param Inter 1 of 2**
Fluoride (mg/L)	GS-GSA-MW-3	0.4701	n/a	3/1/2021	0.449	No	95	0.4582	0.1357	1.053	None	sqrt(x)	0.002505	Param Inter 1 of 2
Fluoride (mg/L)	GS-GSA-MW-4	0.4701	n/a	3/3/2021	0.05ND	No	95	0.4582	0.1357	1.053	None	sqrt(x)	0.002505	Param Inter 1 of 2
Fluoride (mg/L)	GS-GSA-MW-8	0.4701	n/a	3/1/2021	0.106	No	95	0.4582	0.1357	1.053	None	sqrt(x)	0.002505	Param Inter 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 Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 91 background values. 17.58% NDs. Annual per-constituent alpha = 0.001401. Individual comparison alpha = 0.0002337 (1 of 2). Comparing 3 points to limit.

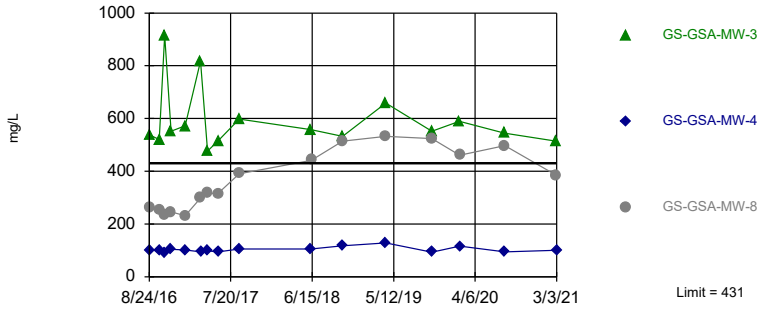
Constituent: Boron Analysis Run 5/20/2021 9:07 PM View: Appendix III - Interwell

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Exceeds Limit: GS-GSA-MW-3

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 91 background values. Annual per-constituent alpha = 0.001401. Individual comparison alpha = 0.0002337 (1 of 2). Comparing 3 points to limit.

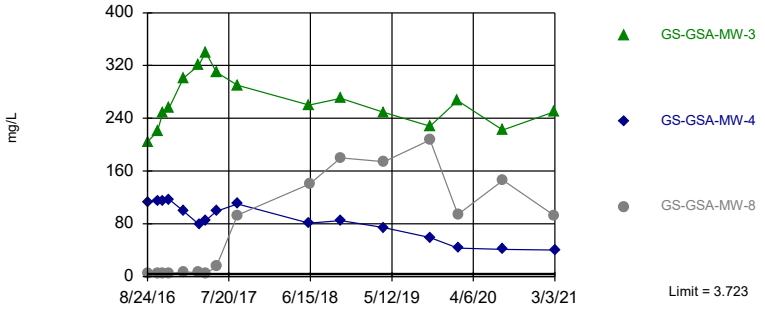
Constituent: Calcium Analysis Run 5/20/2021 9:07 PM View: Appendix III - Interwell

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 Parametric



Background Data Summary (based on square root transformation): Mean=1.479, Std. Dev.=0.2681, n=91, 3.297% NDs. Normality test: Shapiro Francia @alpha = 0.01, calculated = 0.9625, critical = 0.962. Kappa = 1.681 (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 5/20/2021 9:07 PM View: Appendix III - Interwell

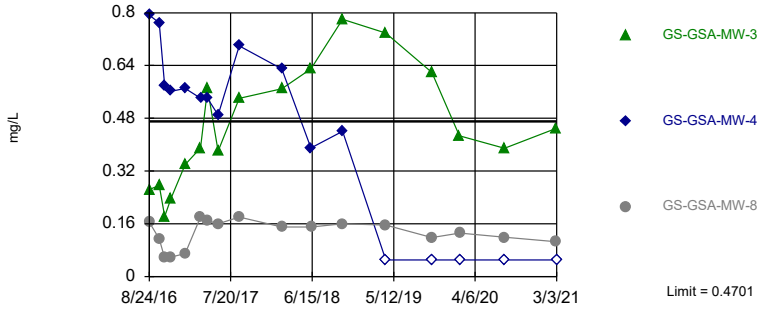
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Interwell Parametric



Background Data Summary (based on square root transformation): Mean=0.4582, Std. Dev.=0.1357, n=95, 1.053% NDs. Normality test: Shapiro Francia @alpha = 0.01, calculated = 0.9822, critical = 0.965. Kappa = 1.677 (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: Fluoride Analysis Run 5/20/2021 9:07 PM View: Appendix III - Interwell

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 5/20/2021 9:07 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-8	GS-GSA-MW-3	GS-GSA-MW-4
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)	0.0898 (J)	0.799	4.88
10/3/2016	0.0367 (J)		0.0511 (J)	0.0307 (J)	0.0821 (J)	0.889	4.75
10/4/2016		0.04 (J)					
10/26/2016	0.0331 (J)	0.0375 (J)	0.0507 (J)	0.0241 (J)	0.0889 (J)	1.23	4.96
11/21/2016	0.035 (J)	0.0406 (J)	0.0458 (J)	0.0202 (J)	0.0788 (J)	1.72	4.82
1/17/2017	0.0259 (J)			0.0201 (J)	0.0607 (J)	2.63	3.97
1/18/2017		0.0548 (J)	0.0445 (J)				
3/20/2017					0.114	3.11	
3/21/2017							3.39
3/22/2017	0.0243 (J)	0.0344 (J)	0.0432 (J)	0.0224 (J)			
4/17/2017						4.51	3.46
4/18/2017	0.0206 (J)	<0.1015	0.0409 (J)	<0.1015	0.108		
5/30/2017				<0.1015	0.105	2.9	3.79
5/31/2017	0.0234 (J)	0.0454 (J)					
8/23/2017	0.0267 (J)	0.0425 (J)	0.042 (J)	0.0253 (J)			
8/24/2017					0.12	2.83	4.19
5/22/2018	0.0251 (J)			0.0224 (J)			
5/23/2018			0.0433 (J)				
5/24/2018		0.0339 (J)					
6/11/2018						3.09	3.96
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)	0.616	2.59	3.98
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)	0.944	3.35	3.74
5/14/2019	<0.1015	<0.1015	<0.1015	<0.1015			
10/8/2019	0.0371 (J)	0.0537 (J)		<0.1015			
10/10/2019			0.0487 (J)				
10/14/2019					2.11	2.48	3.37
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					1.47		2.74
8/3/2020	0.0317 (J)	0.0424 (J)		<0.1015			
8/4/2020						1.82	
8/5/2020			0.0459 (J)		2.16		2.51
2/22/2021	<0.1015	<0.1015	0.0397 (J)	0.0307 (J)			
3/1/2021					1.85	2.55	
3/3/2021							2.42

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 5/20/2021 9:07 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-8	GS-GSA-MW-3	GS-GSA-MW-4
4/25/2016	123	224	261				
4/26/2016				147			
6/20/2016	168		295	152			
6/22/2016		266					
8/8/2016	180			150			
8/9/2016		260	318				
8/24/2016	180	274	319	142	263	539	102
10/3/2016	184		293	139	253	519.7	98.4
10/4/2016		243					
10/26/2016	171	254	311	133	235	916	88.7
11/21/2016	179	263	320	144	246	552	104
1/17/2017	188			131	231	572	102
1/18/2017		431	417				
3/20/2017					298	817	
3/21/2017							94.7
3/22/2017	155	318	292	141			
4/17/2017						476	97.9
4/18/2017	156	296	302	149	317		
5/30/2017				140	316	515	93.9
5/31/2017	151	306					
8/23/2017	155	298	297	152			
8/24/2017					391	598	105
5/22/2018	172			166			
5/23/2018			296				
5/24/2018		297					
6/11/2018						558	105
6/12/2018	179	318	355	203	442		
10/17/2018	200	392	342	171	514	533	117
11/19/2018	221	387	289	154			
4/10/2019	200	348	356	243	533	659	129
5/14/2019	168	254	254	167			
10/8/2019	190	371		157			
10/10/2019			302				
10/14/2019					524	552	93.5
10/16/2019	194	346	356	157			
2/3/2020	172	276	265	172		589	
2/4/2020					461		116
8/3/2020	172	285		148			
8/4/2020						545	
8/5/2020			281		497		94.7
2/22/2021	178	312	271	151			
3/1/2021					386	514	
3/3/2021							100

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 5/20/2021 9:07 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-8	GS-GSA-MW-3	GS-GSA-MW-4
4/25/2016	1.9	1.32	1.53				
4/26/2016				1.94			
6/20/2016	3.43		1.85	2.09			
6/22/2016		1.46					
8/8/2016	3.31			2.18			
8/9/2016		1.35	1.95				
8/24/2016	3.23	1.47	2.07	2.22	4.03	204	112
10/3/2016	3.21		2.02	2.34	3.87	220	115
10/4/2016		1.59					
10/26/2016	3.35	1.27	2.07	2.34	4.08	249	115
11/21/2016	3.34	1.38	2.39	2.5	4.39	256	117
1/17/2017	3.58			2.68	7.22	301	99.3
1/18/2017		1.34	1.9				
3/20/2017					5.7	320	
3/21/2017							79
3/22/2017	3.4	2	1.5 (J)	3.7			
4/17/2017						340	85
4/18/2017	2.6	2.2	1.6 (J)	2.4	4.7		
5/30/2017				2.6	15	310	99
5/31/2017	4.4	1.5 (J)					
8/23/2017	4.4	1.8 (J)	2.3	2.7			
8/24/2017					93	290	110
5/22/2018	3.2			2.3			
5/23/2018			2				
5/24/2018		1.6 (J)					
6/11/2018						260	81
6/12/2018	3.7	1.4 (J)	1.7 (J)	2.3	140		
10/17/2018	4.6	<2	1.5 (J)	1.7 (J)	180	270	85
11/19/2018	3	<2	<2	1.7 (J)			
4/10/2019	1.76	2.25	1.88	2.36	174	249	74.3
5/14/2019	2.98	2.28	1.82	2.28			
10/8/2019	4.26	1.36		2.31			
10/10/2019			1.93				
10/14/2019					207	228	59.1
10/16/2019	4.04	1.4	1.92	2.42			
2/3/2020	2.48	2.12	1.72	2.07		267	
2/4/2020					94.1		43.2
8/3/2020	4.03	1.17		2.05			
8/4/2020						222	
8/5/2020			1.57		146		41
2/22/2021	1.72	2.22	1.52	2.16			
3/1/2021					92.5	250	
3/3/2021							40.3

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 5/20/2021 9:07 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-3	GS-GSA-MW-4
4/25/2016	0.372	0.243 (J)	0.149 (J)				
4/26/2016				0.146 (J)			
6/20/2016	0.361		0.148 (J)	0.148 (J)			
6/22/2016		0.269 (J)					
8/8/2016			0.134 (J)	0.137 (J)			
8/9/2016	0.326	0.363					
8/24/2016	0.329	0.346	0.129 (J)	0.133 (J)	0.165 (J)	0.264 (J)	0.793
10/3/2016	0.287 (J)		0.086 (J)	0.103 (J)	0.114 (J)	0.276 (J)	0.769
10/4/2016		0.266 (J)					
10/26/2016	0.194 (J)	0.266 (J)	0.027 (J)	0.05 (J)	0.056 (J)	0.182 (J)	0.578
11/21/2016	0.192 (J)	0.244 (J)	0.027 (J)	0.047 (J)	0.059 (J)	0.238 (J)	0.562
1/17/2017			0.066 (J)	0.09 (J)	0.07 (J)	0.34	0.571
1/18/2017	0.223 (J)	0.385					
3/20/2017					0.18	0.39	
3/21/2017							0.54
3/22/2017	0.32	0.41	0.13	0.12			
4/17/2017						0.57	0.54
4/18/2017	0.32	0.29	0.16	0.12	0.17		
5/30/2017				0.13	0.16	0.38	0.49
5/31/2017		0.37	0.13				
8/23/2017	0.38	0.55	0.16	0.16			
8/24/2017					0.18	0.54	0.7
2/13/2018	0.38 (D)	0.27 (D)	0.22 (D)	0.14 (D)	0.15 (D)	0.57 (D)	0.63 (D)
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	0.39	0.53	0.16	0.16	0.15		
10/17/2018	0.39	0.63	0.16	0.18	0.16	0.78	0.44
11/19/2018	0.36	0.31	0.18	0.15			
4/10/2019	0.384	0.273	0.262	0.102	0.156	0.738	<0.1
5/14/2019	0.335	0.281	0.17	0.119			
10/8/2019		0.225	0.164	0.0924 (J)			
10/10/2019	0.304						
10/14/2019					0.118	0.619	<0.1
10/16/2019	0.302	0.106	0.114	0.0756 (J)			
2/3/2020	0.37	0.256	0.182	0.0982 (J)		0.427	
2/4/2020					0.132		<0.1
8/3/2020		0.0766 (J)	0.122	<0.1			
8/4/2020						0.389	
8/5/2020	0.359				0.119		<0.1
2/22/2021	0.357	0.246	0.209	0.082 (J)			
3/1/2021					0.106	0.449	
3/3/2021							<0.1

FIGURE F.

Appendix III Trend Tests - Prediction Limit Exceedances - Significant Results

Plant Gorgas Client: Southern Company Data: Gorgas GSA Printed 5/20/2021, 9:11 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	**GS-GSA-MW-4**	**-0.4966**	**-80**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**GS-GSA-MW-8**	**0.3589**	**90**	**58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**GS-GSA-MW-4**	**-16.96**	**-88**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**GS-GSA-MW-8**	**31.31**	**82**	**58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**

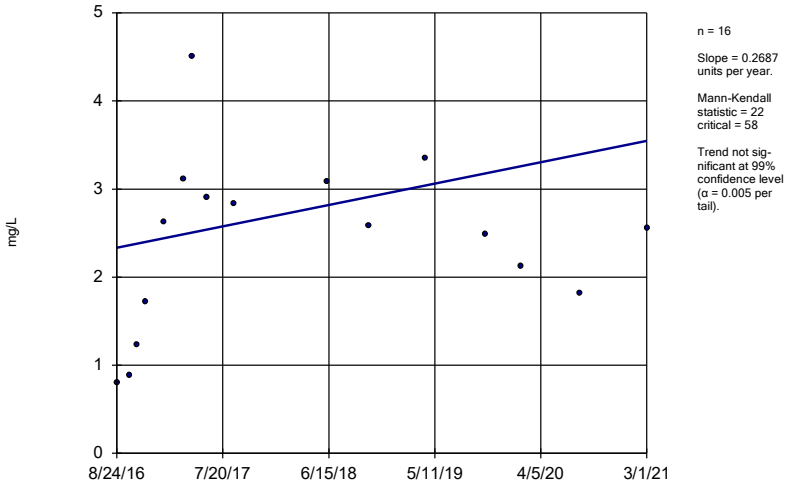
Appendix III Trend Tests - Prediction Limit Exceedances - All Results

Plant Gorgas Client: Southern Company Data: Gorgas GSA Printed 5/20/2021, 9:11 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	GS-GSA-MW-3	0.2687	22	58	No	16	0	n/a	n/a	0.01	NP
Boron (mg/L)	**GS-GSA-MW-4**	**-0.4966**	**-80**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**GS-GSA-MW-8**	**0.3589**	**90**	**58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	MW-1 (bg)	0.002566	76	98	No	23	26.09	n/a	n/a	0.01	NP
Boron (mg/L)	MW-2 (bg)	0.003547	91	98	No	23	17.39	n/a	n/a	0.01	NP
Boron (mg/L)	MW-3 (bg)	0.002599	67	98	No	23	21.74	n/a	n/a	0.01	NP
Boron (mg/L)	MW-4 (bg)	0.0005029	20	92	No	22	4.545	n/a	n/a	0.01	NP
Calcium (mg/L)	GS-GSA-MW-3	-3.236	-9	-58	No	16	0	n/a	n/a	0.01	NP
Calcium (mg/L)	MW-1 (bg)	4.795	91	98	No	23	0	n/a	n/a	0.01	NP
Calcium (mg/L)	MW-2 (bg)	5.045	51	98	No	23	0	n/a	n/a	0.01	NP
Calcium (mg/L)	MW-3 (bg)	22.35	87	98	No	23	0	n/a	n/a	0.01	NP
Calcium (mg/L)	MW-4 (bg)	-3.259	-19	-92	No	22	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GS-GSA-MW-3	-1.857	-3	-58	No	16	0	n/a	n/a	0.01	NP
Chloride (mg/L)	**GS-GSA-MW-4**	**-16.96**	**-88**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**GS-GSA-MW-8**	**31.31**	**82**	**58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	MW-1 (bg)	-0.01333	-14	-98	No	23	0	n/a	n/a	0.01	NP
Chloride (mg/L)	MW-2 (bg)	0	0	98	No	23	0	n/a	n/a	0.01	NP
Chloride (mg/L)	MW-3 (bg)	0.04373	43	98	No	23	8.696	n/a	n/a	0.01	NP
Chloride (mg/L)	MW-4 (bg)	-0.06045	-55	-92	No	22	4.545	n/a	n/a	0.01	NP

Sen's Slope Estimator

GS-GSA-MW-3



n = 16

Slope = 0.2687 units per year.

Mann-Kendall statistic = 22
critical = 58

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 5/20/2021 9:10 PM View: Appendix III
Plant Gorgas Client: Southern Company Data: Gorgas GSA

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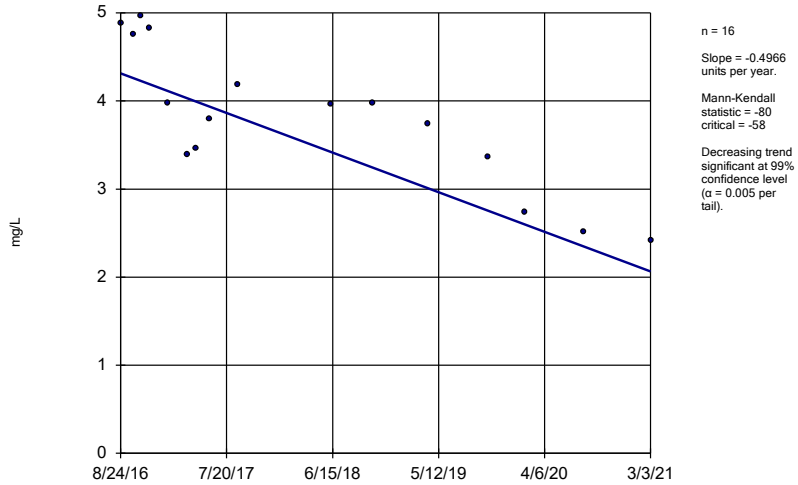
Sen's Slope Estimator

GS-GSA-MW-4



n = 16

Slope = -0.4966 units per year.

Mann-Kendall statistic = -80
critical = -58

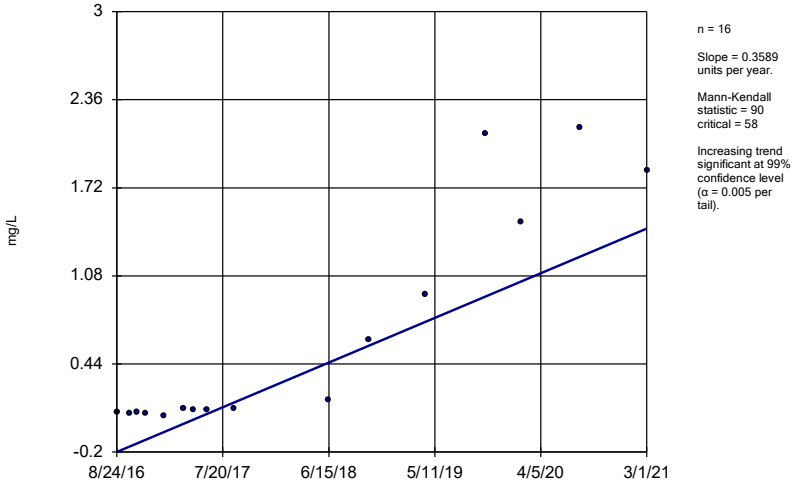
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 5/20/2021 9:10 PM View: Appendix III
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

GS-GSA-MW-8



n = 16

Slope = 0.3589 units per year.

Mann-Kendall statistic = 90
critical = 58

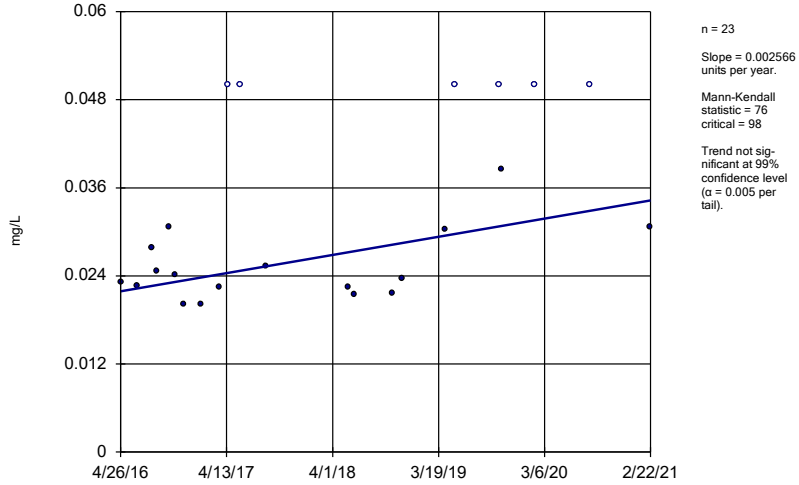
Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 5/20/2021 9:10 PM View: Appendix III
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-1 (bg)



n = 23

Slope = 0.002566 units per year.

Mann-Kendall statistic = 76
critical = 98

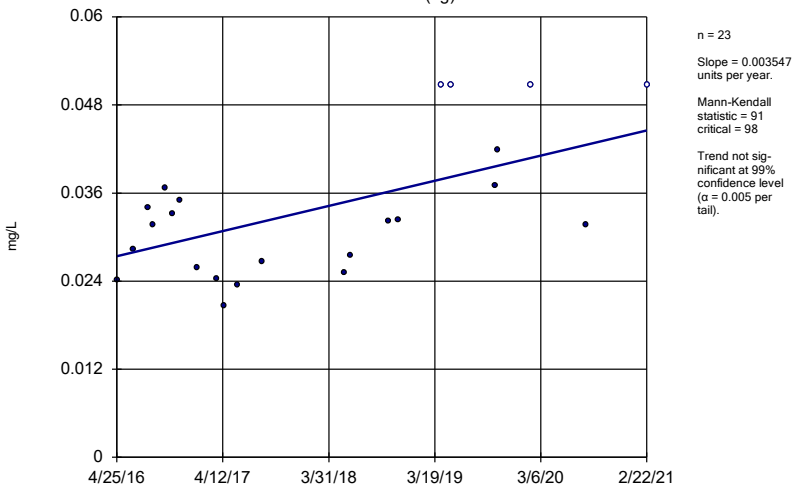
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 5/20/2021 9:10 PM View: Appendix III
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-2 (bg)



n = 23

Slope = 0.003547 units per year.

Mann-Kendall statistic = 91
critical = 98

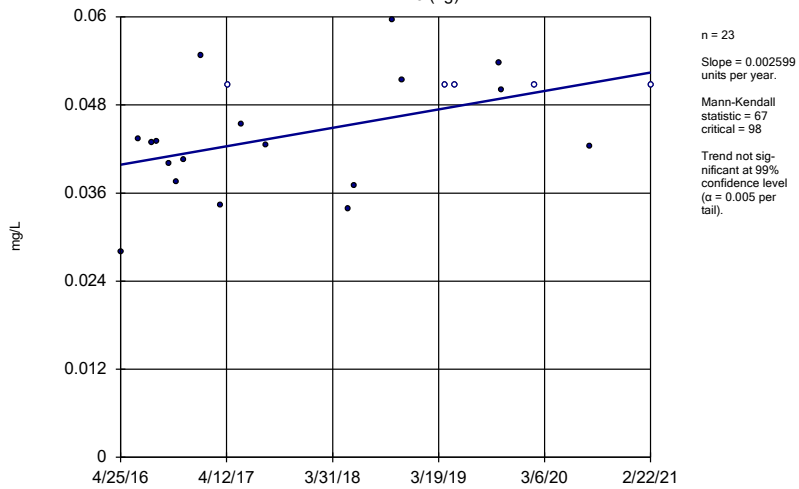
Trend not sig-nificant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 5/20/2021 9:10 PM View: Appendix III
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-3 (bg)



n = 23

Slope = 0.002599 units per year.

Mann-Kendall statistic = 67
critical = 98

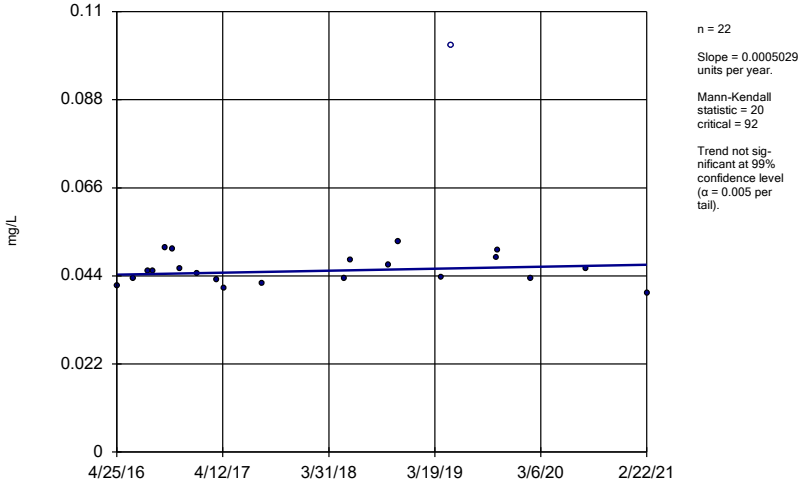
Trend not sig-nificant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 5/20/2021 9:10 PM View: Appendix III
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-4 (bg)



n = 22

Slope = 0.0005029 units per year.

Mann-Kendall statistic = 20
critical = 92

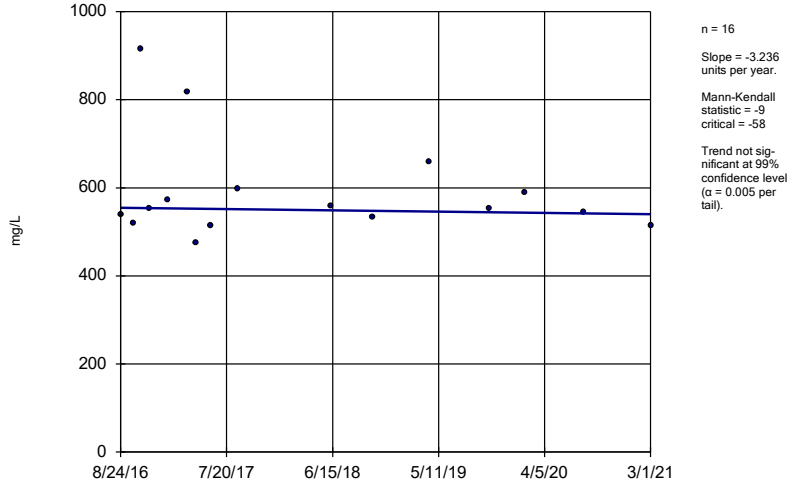
Trend not sig-nificant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 5/20/2021 9:10 PM View: Appendix III
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

GS-GSA-MW-3



n = 16

Slope = -3.236 units per year.

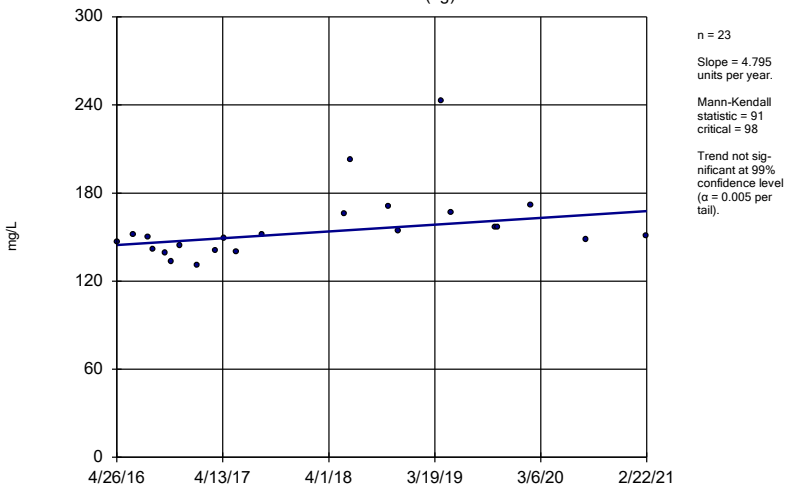
Mann-Kendall statistic = -9
critical = -58

Trend not sig-nificant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 5/20/2021 9:10 PM View: Appendix III
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sen's Slope Estimator

MW-1 (bg)



n = 23

Slope = 4.795 units per year.

Mann-Kendall statistic = 91
critical = 98

Trend not significant at 99% confidence level (α = 0.005 per tail).

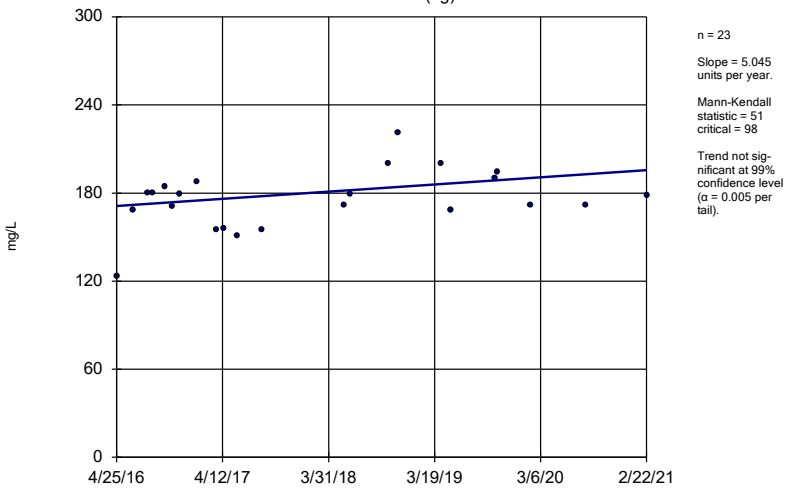
Constituent: Calcium Analysis Run 5/20/2021 9:10 PM View: Appendix III

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-2 (bg)



n = 23

Slope = 5.045 units per year.

Mann-Kendall statistic = 51
critical = 98

Trend not significant at 99% confidence level (α = 0.005 per tail).

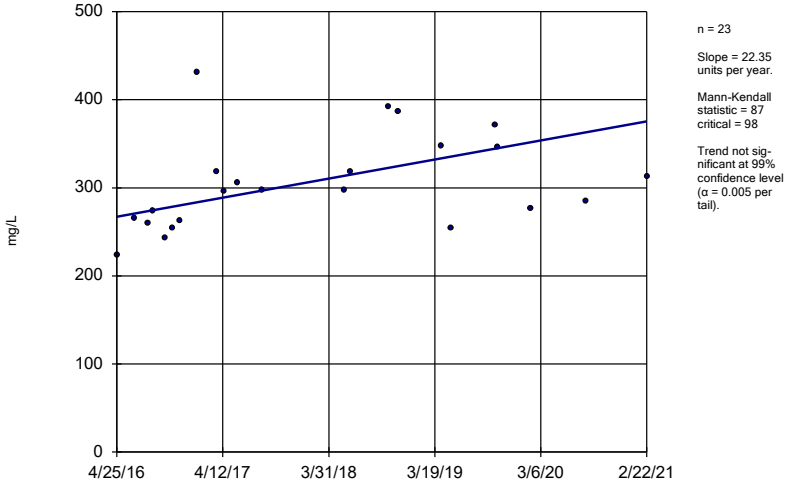
Constituent: Calcium Analysis Run 5/20/2021 9:10 PM View: Appendix III

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-3 (bg)



n = 23

Slope = 22.35 units per year.

Mann-Kendall statistic = 87
critical = 98

Trend not significant at 99% confidence level (α = 0.005 per tail).

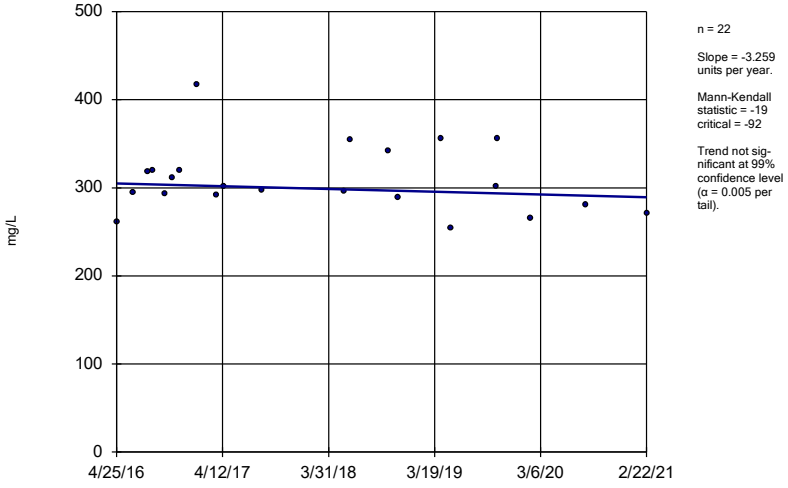
Constituent: Calcium Analysis Run 5/20/2021 9:10 PM View: Appendix III

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-4 (bg)



n = 22

Slope = -3.259 units per year.

Mann-Kendall statistic = -19
critical = -92

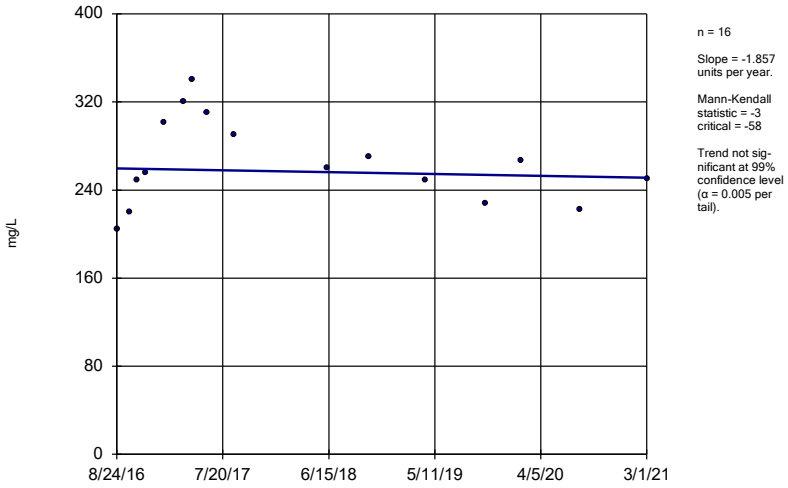
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 5/20/2021 9:10 PM View: Appendix III

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sen's Slope Estimator

GS-GSA-MW-3



n = 16

Slope = -1.857 units per year.

Mann-Kendall statistic = -3 critical = -58

Trend not significant at 99% confidence level (α = 0.005 per tail).

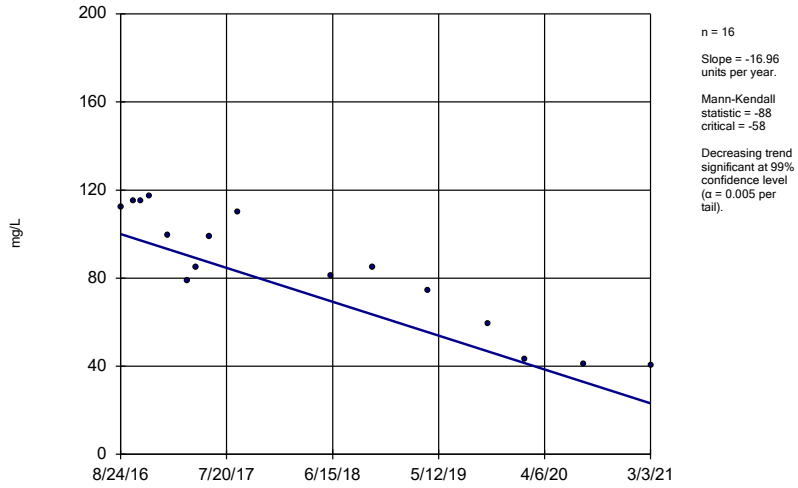
Constituent: Chloride Analysis Run 5/20/2021 9:10 PM View: Appendix III

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

GS-GSA-MW-4



n = 16

Slope = -16.96 units per year.

Mann-Kendall statistic = -88 critical = -58

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

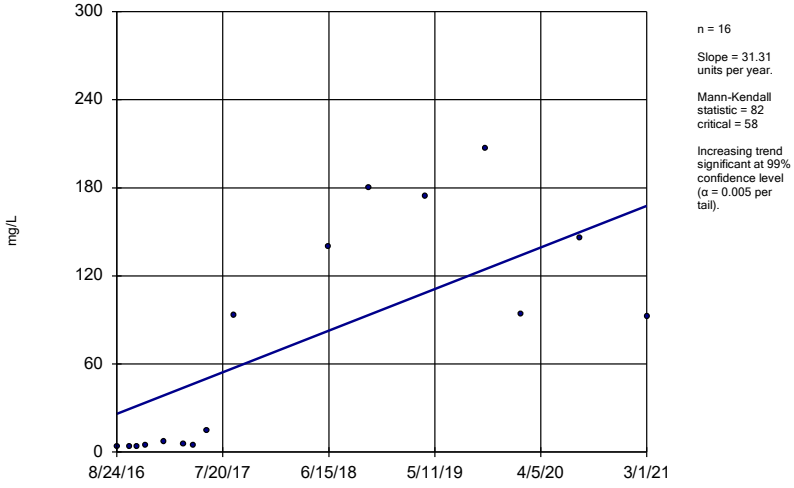
Constituent: Chloride Analysis Run 5/20/2021 9:10 PM View: Appendix III

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

GS-GSA-MW-8



n = 16

Slope = 31.31 units per year.

Mann-Kendall statistic = 82 critical = 58

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

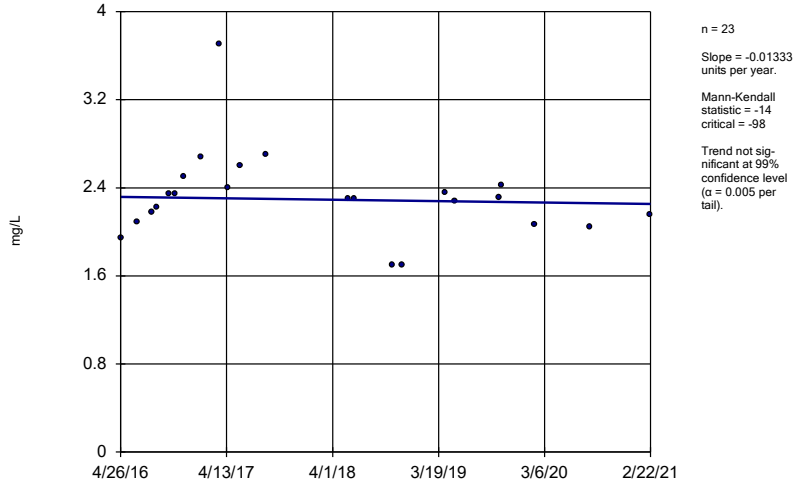
Constituent: Chloride Analysis Run 5/20/2021 9:10 PM View: Appendix III

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-1 (bg)



n = 23

Slope = -0.01333 units per year.

Mann-Kendall statistic = -14 critical = -98

Trend not significant at 99% confidence level (α = 0.005 per tail).

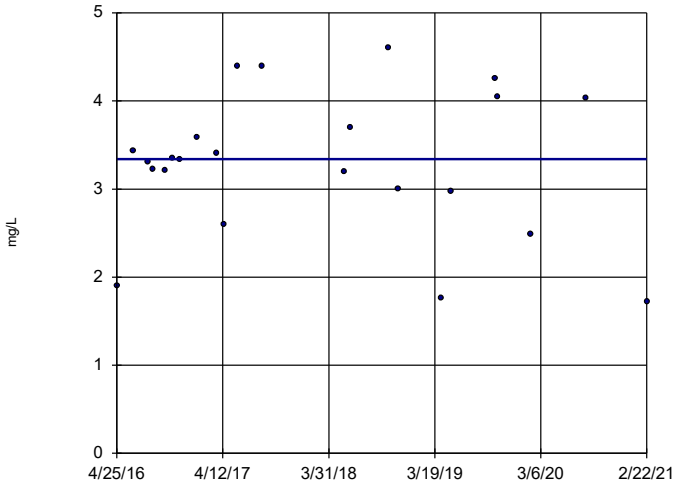
Constituent: Chloride Analysis Run 5/20/2021 9:10 PM View: Appendix III

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-2 (bg)



n = 23

Slope = 0 units per year.

Mann-Kendall statistic = 0 critical = 98

Trend not sig-nificant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 5/20/2021 9:10 PM View: Appendix III

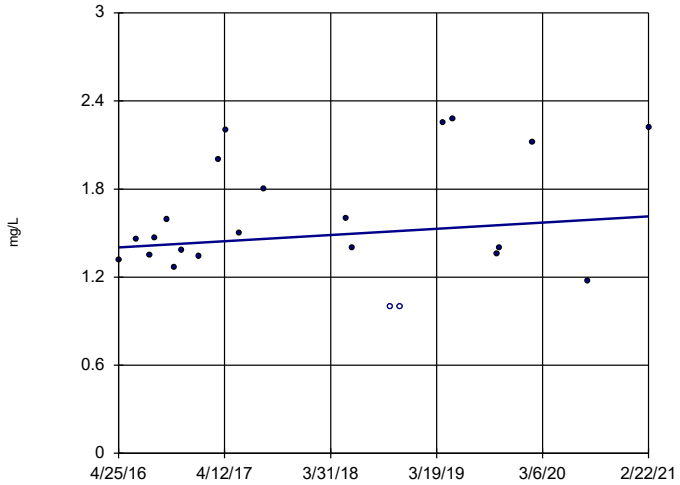
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-3 (bg)



n = 23

Slope = 0.04373 units per year.

Mann-Kendall statistic = 43 critical = 98

Trend not sig-nificant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 5/20/2021 9:10 PM View: Appendix III

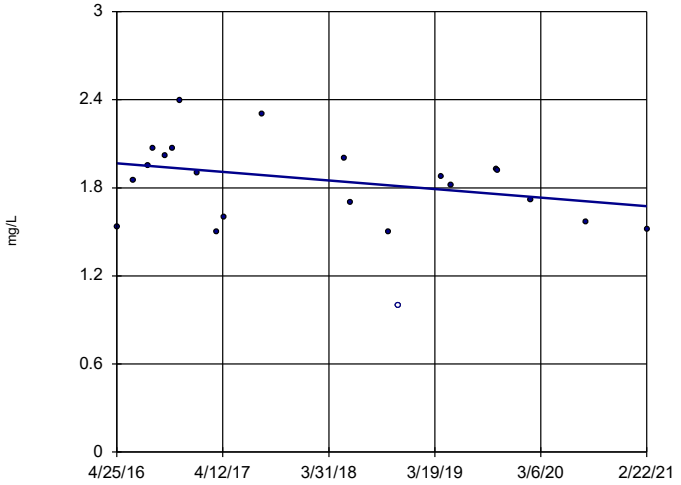
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-4 (bg)



n = 22

Slope = -0.06045 units per year.

Mann-Kendall statistic = -55 critical = -92

Trend not sig-nificant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 5/20/2021 9:10 PM View: Appendix III

Plant Gorgas Client: Southern Company Data: Gorgas GSA

FIGURE G.

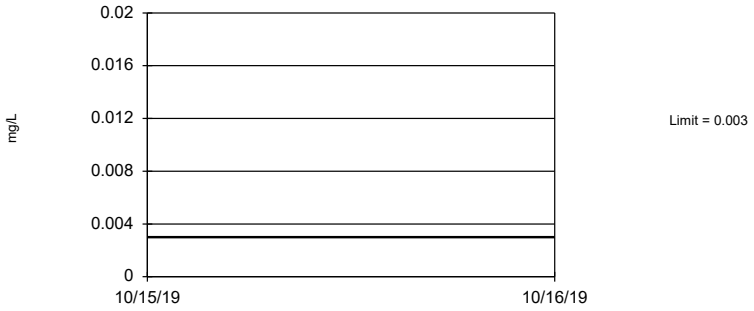
Upper Tolerance Limits - Appendix IV

Plant William C Gorgas Client: Southern Company Data: Gorgas GSA Printed 7/22/2020, 2:59 PM

Constituent	Upper Lim.	Lower Lim.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	0.003	n/a	79	n/a	n/a	92.41	n/a	n/a	0.01738	NP Inter(NDs)
Arsenic (mg/L)	0.005	n/a	79	n/a	n/a	91.14	n/a	n/a	0.01738	NP Inter(NDs)
Barium (mg/L)	0.01531	n/a	79	-4.516	0.1715	0	None	ln(x)	0.05	Inter
Beryllium (mg/L)	0.0121	n/a	77	n/a	n/a	81.82	n/a	n/a	0.01926	NP Inter(NDs)
Cadmium (mg/L)	0.00598	n/a	78	n/a	n/a	48.72	n/a	n/a	0.0183	NP Inter(normal...
Chromium (mg/L)	0.0105	n/a	79	n/a	n/a	94.94	n/a	n/a	0.01738	NP Inter(NDs)
Cobalt (mg/L)	1.07	n/a	79	n/a	n/a	24.05	n/a	n/a	0.01738	NP Inter(normal...
Combined Radium 226 + 228 (pCi/L)	1.151	n/a	65	0.4707	0.3403	0	None	No	0.05	Inter
Fluoride (mg/L)	0.5302	n/a	83	0.4625	0.1358	0	None	sqrt(x)	0.05	Inter
Lead (mg/L)	0.00692	n/a	79	n/a	n/a	96.2	n/a	n/a	0.01738	NP Inter(NDs)
Lithium (mg/L)	0.419	n/a	79	n/a	n/a	0	n/a	n/a	0.01738	NP Inter(normal...
Mercury (mg/L)	0.0005	n/a	79	n/a	n/a	100	n/a	n/a	0.01738	NP Inter(NDs)
Molybdenum (mg/L)	0.01	n/a	79	n/a	n/a	100	n/a	n/a	0.01738	NP Inter(NDs)
Selenium (mg/L)	0.0158	n/a	78	n/a	n/a	66.67	n/a	n/a	0.0183	NP Inter(NDs)
Thallium (mg/L)	0.001	n/a	79	n/a	n/a	96.2	n/a	n/a	0.01738	NP Inter(NDs)

Tolerance Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. Limit is highest of 79 background values. 92.41% NDs. 94.34% coverage at alpha=0.01; 96.29% coverage at alpha=0.05; 99.02% coverage at alpha=0.5. Report alpha = 0.01738.

Constituent: Antimony Analysis Run 7/22/2020 2:57 PM View: UTL's - Appendix IV

Plant William C Gorgas Client: Southern Company Data: Gorgas GSA

Tolerance Limit

Interwell Non-parametric

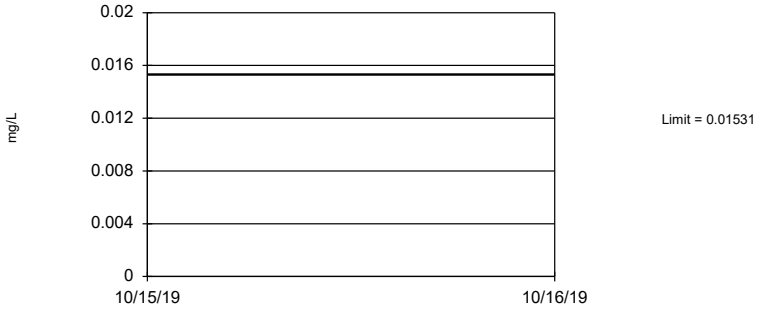
Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. Limit is highest of 79 background values. 91.14% NDs. 94.34% coverage at alpha=0.01; 96.29% coverage at alpha=0.05; 99.02% coverage at alpha=0.5. Report alpha = 0.01738.

Constituent: Arsenic Analysis Run 7/22/2020 2:57 PM View: UTL's - Appendix IV

Plant William C Gorgas Client: Southern Company Data: Gorgas GSA

Tolerance Limit

Interwell Parametric



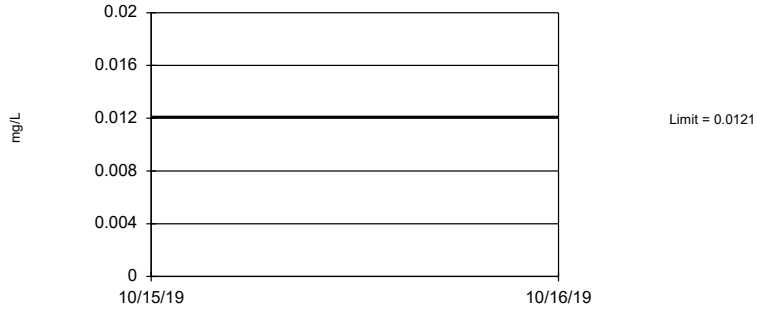
95% coverage. Background Data Summary (based on natural log transformation): Mean=-4.516, Std. Dev.=0.1715, n=79. Normality test: Shapiro Francia @alpha = 0.01, calculated = 0.9604, critical = 0.957. Report alpha = 0.05.

Constituent: Barium Analysis Run 7/22/2020 2:57 PM View: UTL's - Appendix IV

Plant William C Gorgas Client: Southern Company Data: Gorgas GSA

Tolerance Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. Limit is highest of 77 background values. 81.82% NDs. 94.34% coverage at alpha=0.01; 96.29% coverage at alpha=0.05; 99.02% coverage at alpha=0.5. Report alpha = 0.01926.

Constituent: Beryllium Analysis Run 7/22/2020 2:57 PM View: UTL's - Appendix IV

Plant William C Gorgas Client: Southern Company Data: Gorgas GSA

Tolerance Limit

Interwell Non-parametric

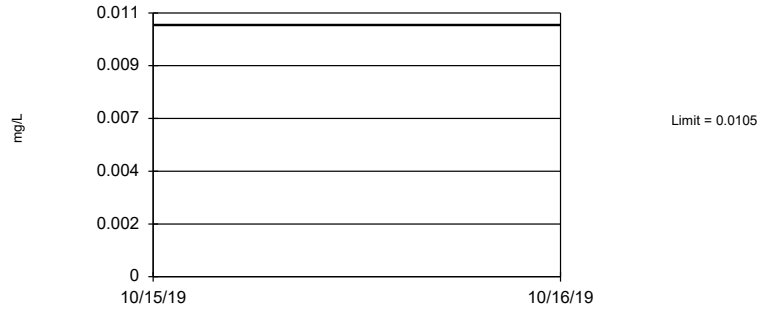
Non-parametric test used in lieu of parametric tolerance limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 78 background values. 48.72% NDs. 94.34% coverage at alpha=0.01; 96.29% coverage at alpha=0.05; 99.02% coverage at alpha=0.5. Report alpha = 0.0183.

Constituent: Cadmium Analysis Run 7/22/2020 2:57 PM View: UTL's - Appendix IV

Plant William C Gorgas Client: Southern Company Data: Gorgas GSA

Tolerance Limit

Interwell Non-parametric



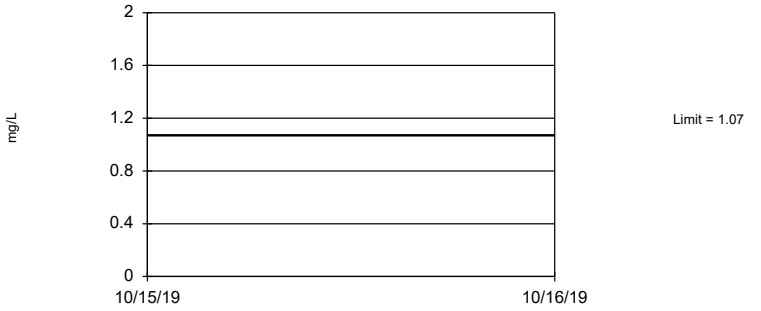
Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. Limit is highest of 79 background values. 94.94% NDs. 94.34% coverage at alpha=0.01; 96.29% coverage at alpha=0.05; 99.02% coverage at alpha=0.5. Report alpha = 0.01738.

Constituent: Chromium Analysis Run 7/22/2020 2:57 PM View: UTL's - Appendix IV

Plant William C Gorgas Client: Southern Company Data: Gorgas GSA

Tolerance Limit

Interwell Non-parametric



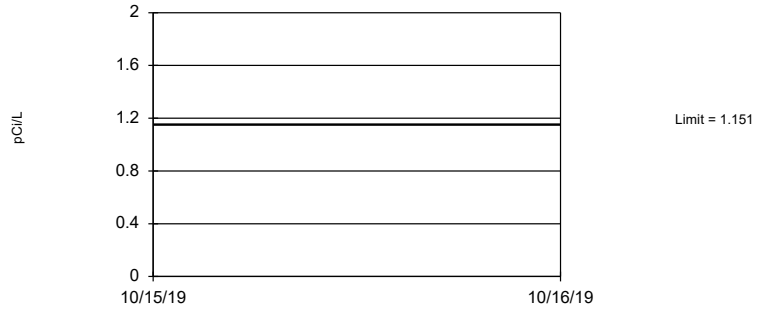
Non-parametric test used in lieu of parametric tolerance limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 79 background values. 24.05% NDs. 94.34% coverage at alpha=0.01; 96.29% coverage at alpha=0.05; 99.02% coverage at alpha=0.5. Report alpha = 0.01738.

Constituent: Cobalt Analysis Run 7/22/2020 2:57 PM View: UTL's - Appendix IV

Plant William C Gorgas Client: Southern Company Data: Gorgas GSA

Tolerance Limit

Interwell Parametric



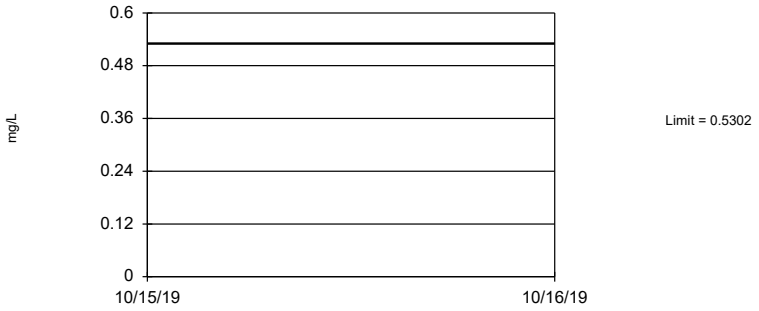
95% coverage. Background Data Summary: Mean=0.4707, Std. Dev.=0.3403, n=65. Normality test: Shapiro Francia @alpha = 0.01, calculated = 0.982, critical = 0.948. Report alpha = 0.05.

Constituent: Combined Radium 226 + 228 Analysis Run 7/22/2020 2:57 PM View: UTL's - Appendix IV

Plant William C Gorgas Client: Southern Company Data: Gorgas GSA

Tolerance Limit

Interwell Parametric



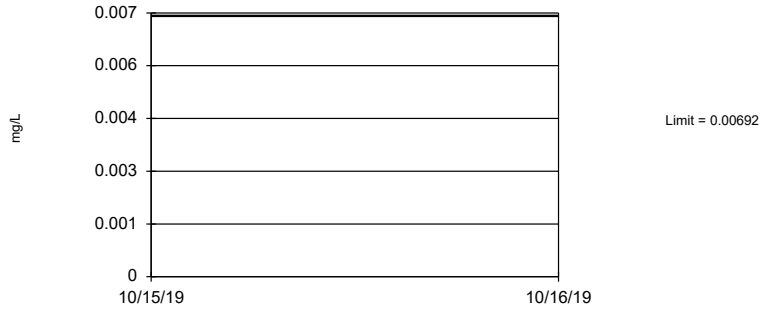
95% coverage. Background Data Summary (based on square root transformation): Mean=0.4625, Std. Dev.=0.1358, n=83. Normality test: Shapiro Francia @alpha = 0.01, calculated = 0.9794, critical = 0.96. Report alpha = 0.05.

Constituent: Fluoride Analysis Run 7/22/2020 2:58 PM View: UTL's - Appendix IV

Plant William C Gorgas Client: Southern Company Data: Gorgas GSA

Tolerance Limit

Interwell Non-parametric



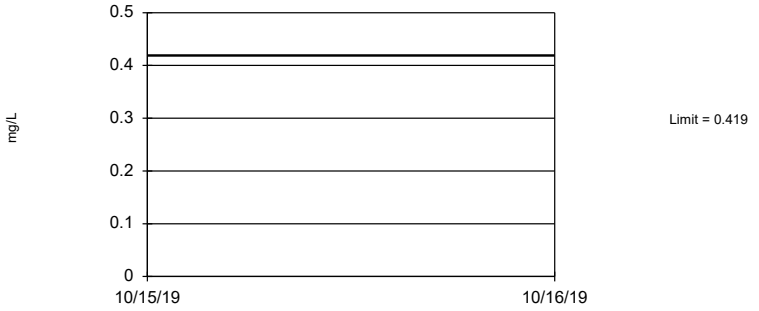
Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. Limit is highest of 79 background values. 96.2% NDs. 94.34% coverage at alpha=0.01; 96.29% coverage at alpha=0.05; 99.02% coverage at alpha=0.5. Report alpha = 0.01738.

Constituent: Lead Analysis Run 7/22/2020 2:58 PM View: UTL's - Appendix IV

Plant William C Gorgas Client: Southern Company Data: Gorgas GSA

Tolerance Limit

Interwell Non-parametric



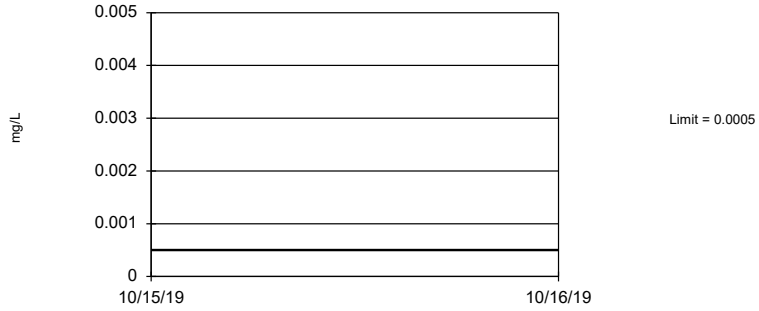
Non-parametric test used in lieu of parametric tolerance limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 79 background values. 94.34% coverage at alpha=0.01; 96.29% coverage at alpha=0.05; 99.02% coverage at alpha=0.5. Report alpha = 0.01738.

Constituent: Lithium Analysis Run 7/22/2020 2:58 PM View: UTL's - Appendix IV

Plant William C Gorgas Client: Southern Company Data: Gorgas GSA

Tolerance Limit

Interwell Non-parametric



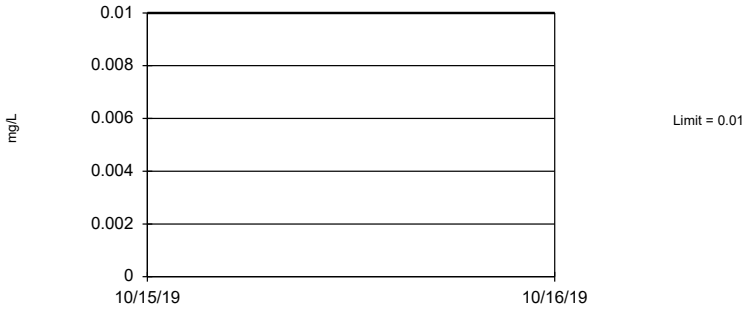
Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. All background values were censored; limit is most recent reporting limit. 94.34% coverage at alpha=0.01; 96.29% coverage at alpha=0.05; 99.02% coverage at alpha=0.5. Report alpha = 0.01738.

Constituent: Mercury Analysis Run 7/22/2020 2:58 PM View: UTL's - Appendix IV

Plant William C Gorgas Client: Southern Company Data: Gorgas GSA

Tolerance Limit

Interwell Non-parametric



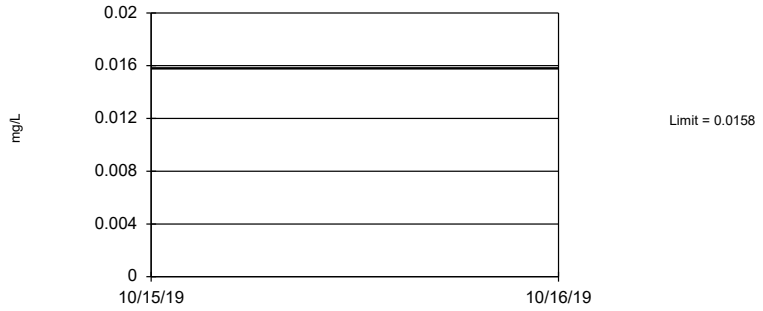
Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. All background values were censored; limit is most recent reporting limit. 94.34% coverage at alpha=0.01; 96.29% coverage at alpha=0.05; 99.02% coverage at alpha=0.5. Report alpha = 0.01738.

Constituent: Molybdenum Analysis Run 7/22/2020 2:58 PM View: UTL's - Appendix IV

Plant William C Gorgas Client: Southern Company Data: Gorgas GSA

Tolerance Limit

Interwell Non-parametric



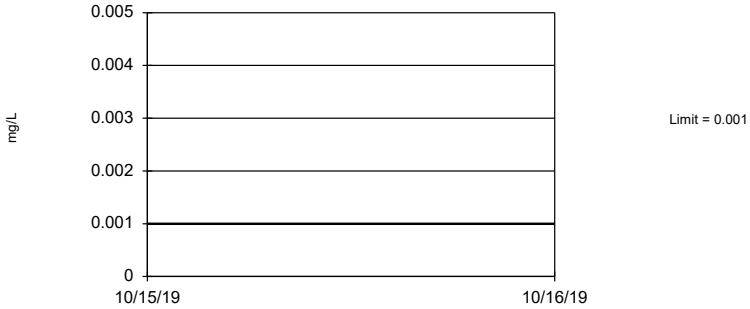
Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. Limit is highest of 78 background values. 66.67% NDs. 94.34% coverage at alpha=0.01; 96.29% coverage at alpha=0.05; 99.02% coverage at alpha=0.5. Report alpha = 0.0183.

Constituent: Selenium Analysis Run 7/22/2020 2:58 PM View: UTL's - Appendix IV

Plant William C Gorgas Client: Southern Company Data: Gorgas GSA

Tolerance Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. Limit is highest of 79 background values. 96.2% NDs. 94.34% coverage at alpha=0.01; 96.29% coverage at alpha=0.05; 99.02% coverage at alpha=0.5. Report alpha = 0.01738.

Constituent: Thallium Analysis Run 7/22/2020 2:58 PM View: UTL's - Appendix IV

Plant William C Gorgas Client: Southern Company Data: Gorgas GSA

FIGURE H.

GORGAS GYPSUM POND GWPS			
Analyte	**Units**	**Background**	**GWPS**
Antimony	mg/L	0.003	0.006
Arsenic	mg/L	0.005	0.01
Barium	mg/L	0.01531	2
Beryllium	mg/L	0.0121	0.004
Cadmium	mg/L	0.00598	0.005
Chromium	mg/L	0.0105	0.1
Cobalt	mg/L	1.07	1.07
Combined Radium-226/228	pCi/L	1.151	5
Fluoride	mg/L	0.5302	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	0.01	0.1
Selenium	mg/L	0.0158	0.05
Thallium	mg/L	0.001	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 2019.

FIGURE I.

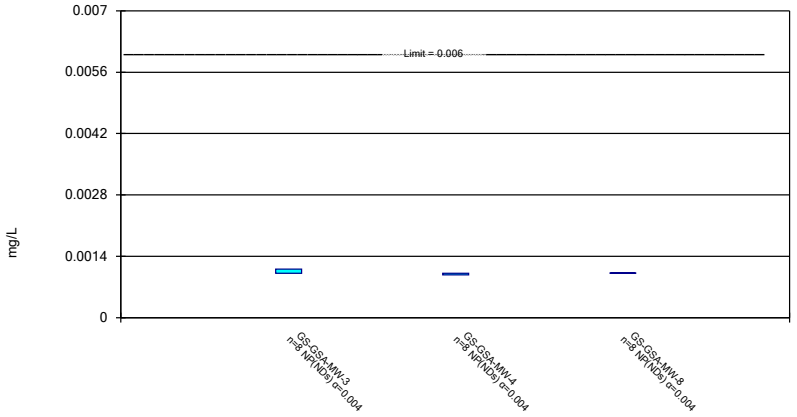
Appendix IV Confidence Intervals - All Results (No Significant)

Plant Gorgas Client: Southern Company Data: Gorgas GSA Printed 5/21/2021, 2:28 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	0.00111	0.001015	0.006	No	8	0.001027	0.00003359	87.5	None	No	0.004	NP (NDs)
Antimony (mg/L)	GS-GSA-MW-4	0.001015	0.000976	0.006	No	8	0.00101	0.00001379	87.5	None	No	0.004	NP (NDs)
Antimony (mg/L)	GS-GSA-MW-8	0.00102	0.001015	0.006	No	8	0.001016	0.000001768	87.5	None	No	0.004	NP (NDs)
Arsenic (mg/L)	GS-GSA-MW-3	0.005	0.00121	0.01	No	8	0.004076	0.001711	75	None	No	0.004	NP (NDs)
Arsenic (mg/L)	GS-GSA-MW-4	0.005	0.00115	0.01	No	8	0.002694	0.00192	37.5	None	No	0.004	NP (normality)
Arsenic (mg/L)	GS-GSA-MW-8	0.005	0.000633	0.01	No	8	0.004454	0.001544	87.5	None	No	0.004	NP (NDs)
Barium (mg/L)	GS-GSA-MW-3	0.01498	0.01212	2	No	8	0.01355	0.001353	0	None	No	0.01	Param.
Barium (mg/L)	GS-GSA-MW-4	0.0143	0.01197	2	No	8	0.01314	0.001099	0	None	No	0.01	Param.
Barium (mg/L)	GS-GSA-MW-8	0.02393	0.0199	2	No	8	0.02191	0.001899	0	None	No	0.01	Param.
Beryllium (mg/L)	GS-GSA-MW-3	0.003313	0.001355	0.004	No	8	0.002334	0.0009236	0	None	No	0.01	Param.
Beryllium (mg/L)	GS-GSA-MW-4	0.004923	0.003712	0.004	No	8	0.004318	0.0005714	0	None	No	0.01	Param.
Cadmium (mg/L)	GS-GSA-MW-4	0.001784	0.001446	0.005	No	8	0.001615	0.000159	0	None	No	0.01	Param.
Chromium (mg/L)	GS-GSA-MW-3	0.01	0.000386	0.1	No	8	0.008798	0.003399	87.5	None	No	0.004	NP (NDs)
Chromium (mg/L)	GS-GSA-MW-4	0.01	0.000567	0.1	No	8	0.008821	0.003335	87.5	None	No	0.004	NP (NDs)
Chromium (mg/L)	GS-GSA-MW-8	0.01	0.000423	0.1	No	8	0.008803	0.003386	87.5	None	No	0.004	NP (NDs)
Cobalt (mg/L)	GS-GSA-MW-3	0.1442	0.09145	1.07	No	8	0.1178	0.02487	0	None	No	0.01	Param.
Cobalt (mg/L)	GS-GSA-MW-4	0.2427	0.1713	1.07	No	8	0.207	0.03369	0	None	No	0.01	Param.
Cobalt (mg/L)	GS-GSA-MW-8	0.00546	0.00492	1.07	No	8	0.005047	0.000169	75	None	No	0.004	NP (NDs)
Combined Radium 226 + 228 (pCi/L)	GS-GSA-MW-3	0.701	0.283	5	No	8	0.492	0.1972	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-GSA-MW-4	0.8395	0.3075	5	No	8	0.5735	0.251	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-GSA-MW-8	0.9843	0.02874	5	No	8	0.5065	0.4507	0	None	No	0.01	Param.
Fluoride (mg/L)	GS-GSA-MW-3	0.7283	0.4222	4	No	8	0.5753	0.1444	0	None	No	0.01	Param.
Fluoride (mg/L)	GS-GSA-MW-4	0.63	0.1	4	No	8	0.245	0.2113	62.5	None	No	0.004	NP (NDs)
Fluoride (mg/L)	GS-GSA-MW-8	0.1579	0.1148	4	No	8	0.1364	0.02034	0	None	No	0.01	Param.
Lead (mg/L)	GS-GSA-MW-3	0.005	0.000157	0.015	No	8	0.004395	0.001712	87.5	None	No	0.004	NP (NDs)
Lead (mg/L)	GS-GSA-MW-4	0.005	0.000609	0.015	No	8	0.004451	0.001552	87.5	None	No	0.004	NP (NDs)
Lead (mg/L)	GS-GSA-MW-8	0.005	0.000145	0.015	No	8	0.004393	0.001717	87.5	None	No	0.004	NP (NDs)
Lithium (mg/L)	GS-GSA-MW-3	0.5029	0.3986	0.419	No	8	0.4508	0.04919	0	None	No	0.01	Param.
Lithium (mg/L)	GS-GSA-MW-4	0.296	0.2605	0.419	No	8	0.2783	0.01677	0	None	No	0.01	Param.
Lithium (mg/L)	GS-GSA-MW-8	0.2058	0.1602	0.419	No	8	0.183	0.02153	0	None	No	0.01	Param.
Molybdenum (mg/L)	GS-GSA-MW-3	0.01	0.00022	0.1	No	8	0.008777	0.003458	87.5	None	No	0.004	NP (NDs)
Molybdenum (mg/L)	GS-GSA-MW-8	0.01	0.00277	0.1	No	8	0.009096	0.002556	87.5	None	No	0.004	NP (NDs)
Selenium (mg/L)	GS-GSA-MW-3	0.01	0.00141	0.05	No	8	0.006097	0.004187	50	None	No	0.004	NP (normality)
Selenium (mg/L)	GS-GSA-MW-4	0.01	0.00294	0.05	No	8	0.006	0.003375	37.5	None	No	0.004	NP (normality)
Thallium (mg/L)	GS-GSA-MW-4	0.001	0.000178	0.002	No	8	0.0007979	0.0003743	75	None	No	0.004	NP (NDs)

Non-Parametric Confidence Interval

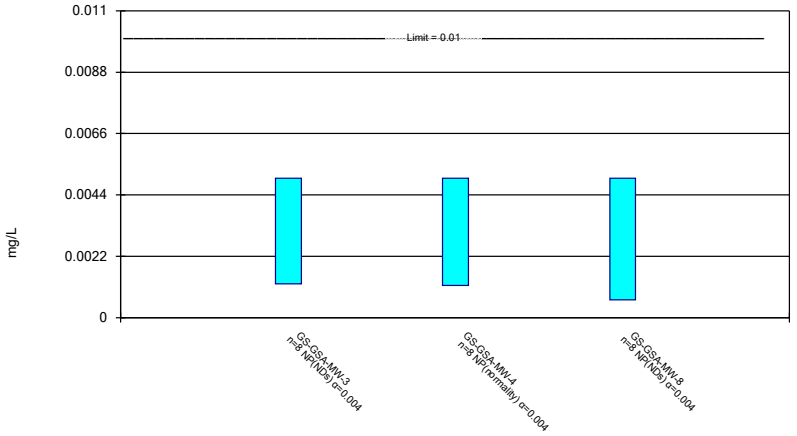
Compliance Limit is not exceeded.



Constituent: Antimony Analysis Run 5/20/2021 9:19 PM View: Appendix IV
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Non-Parametric Confidence Interval

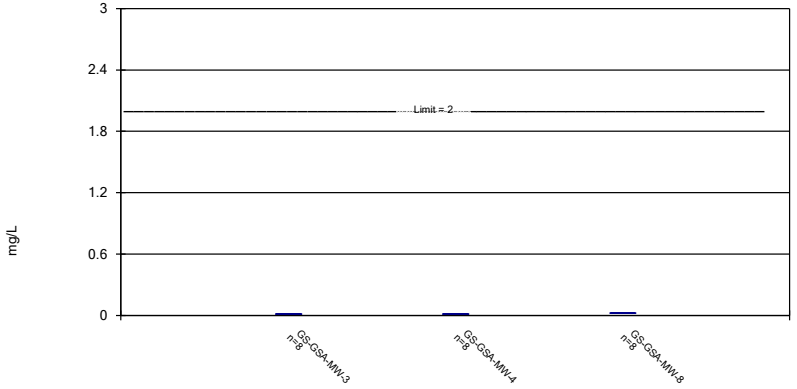
Compliance Limit is not exceeded.



Constituent: Arsenic Analysis Run 5/20/2021 9:19 PM View: Appendix IV
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Parametric Confidence Interval

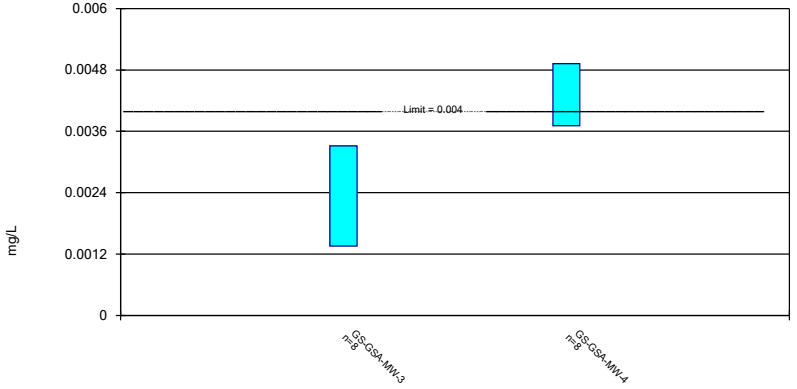
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Barium Analysis Run 5/20/2021 9:19 PM View: Appendix IV
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Parametric Confidence Interval

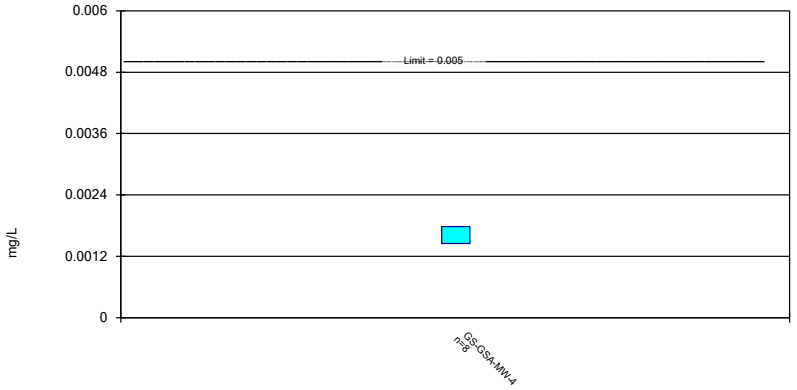
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Beryllium Analysis Run 5/20/2021 9:19 PM View: Appendix IV
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Parametric Confidence Interval

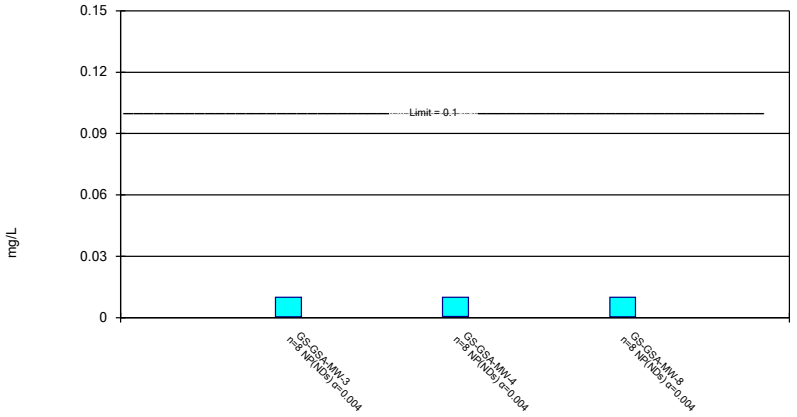
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Cadmium Analysis Run 5/20/2021 9:19 PM View: Appendix IV
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Non-Parametric Confidence Interval

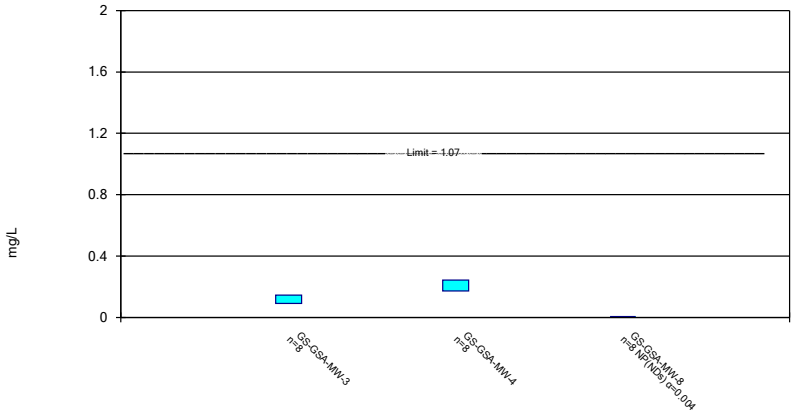
Compliance Limit is not exceeded.



Constituent: Chromium Analysis Run 5/20/2021 9:19 PM View: Appendix IV
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Parametric and Non-Parametric (NP) Confidence Interval

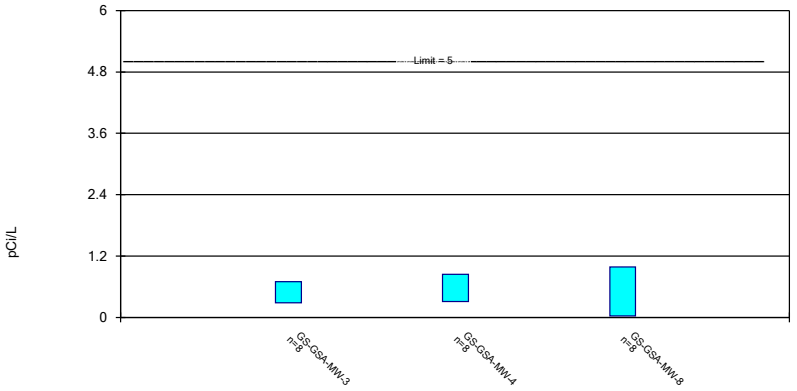
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Cobalt Analysis Run 5/20/2021 9:19 PM View: Appendix IV
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Parametric Confidence Interval

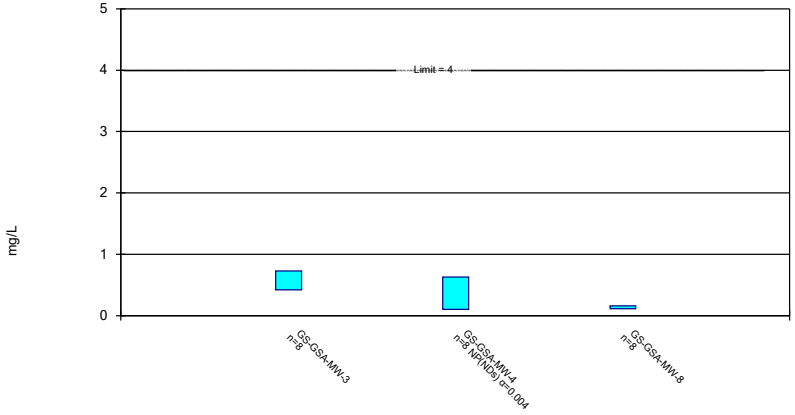
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Combined Radium 226 + 228 Analysis Run 5/20/2021 9:19 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: Fluoride Analysis Run 5/20/2021 9:19 PM View: Appendix IV
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Non-Parametric Confidence Interval

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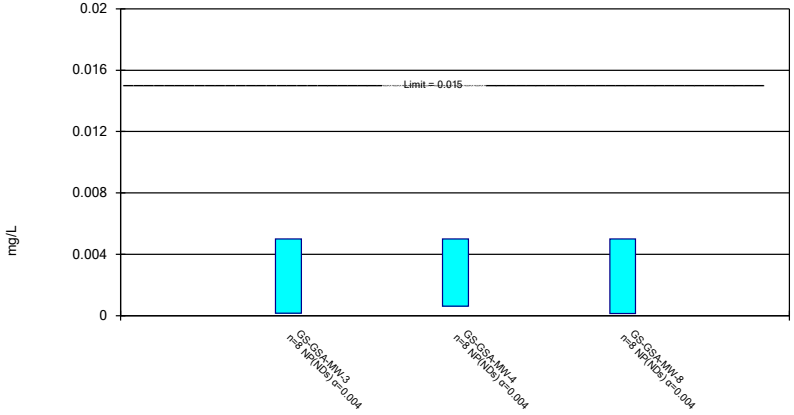
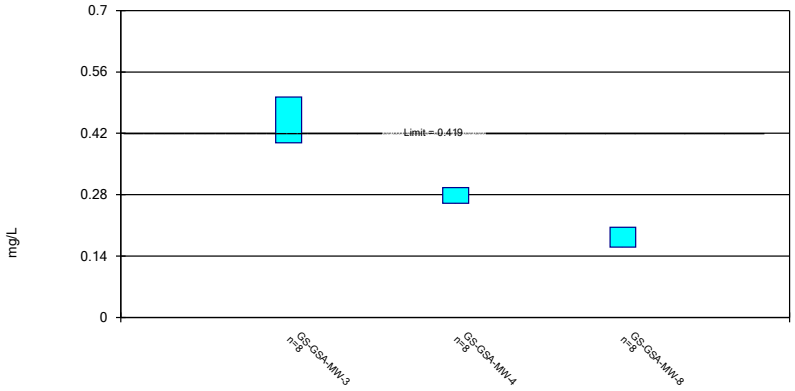


Constituent: Lead Analysis Run 5/20/2021 9:19 PM View: Appendix IV
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Parametric Confidence Interval

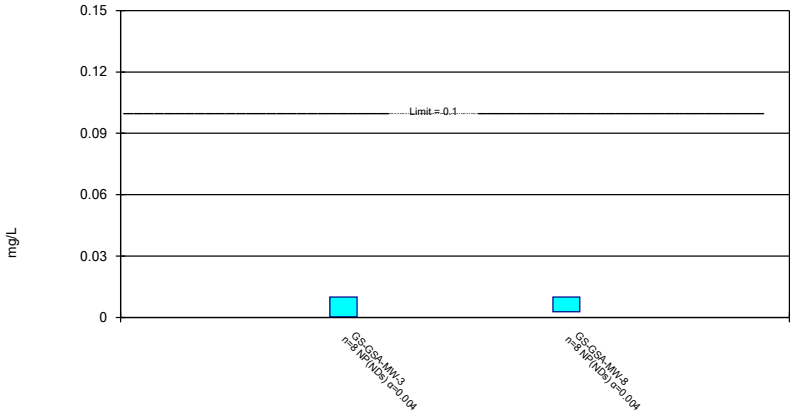
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Lithium Analysis Run 5/20/2021 9:19 PM View: Appendix IV
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Non-Parametric Confidence Interval

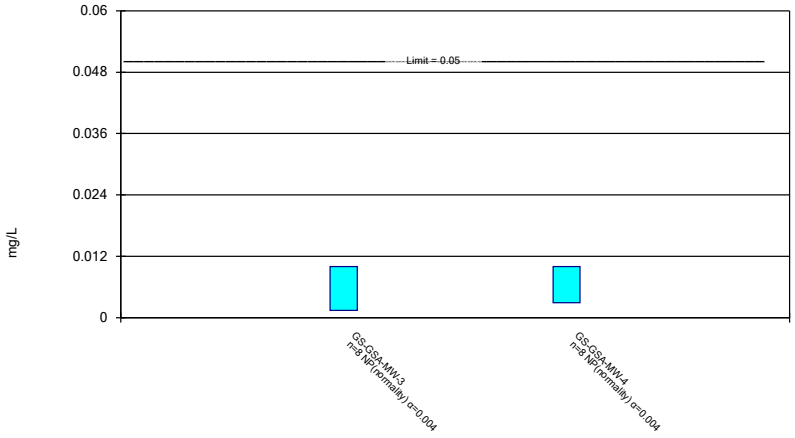
Compliance Limit is not exceeded.



Constituent: Molybdenum Analysis Run 5/20/2021 9:19 PM View: Appendix IV
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Non-Parametric Confidence Interval

Compliance Limit is not exceeded.

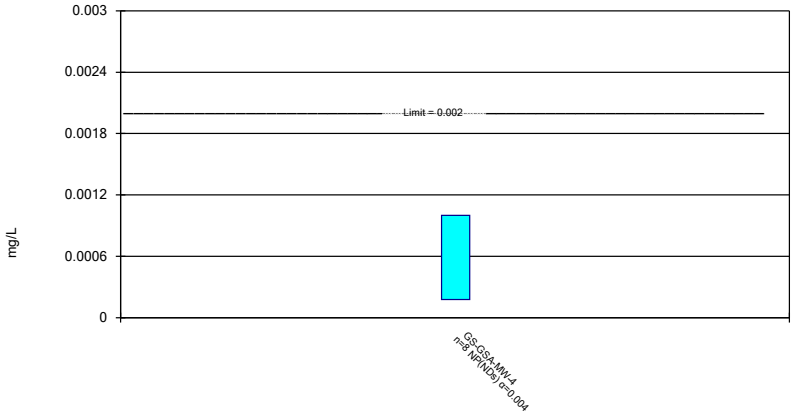


Constituent: Selenium Analysis Run 5/20/2021 9:19 PM View: Appendix IV
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded.



Constituent: Thallium Analysis Run 5/20/2021 9:19 PM View: Appendix IV
Plant Gorgas Client: Southern Company Data: Gorgas GSA

2nd
Semi-Annual
Monitoring Event

GROUNDWATER STATS CONSULTING

December 10, 2021

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

Re: Plant Gorgas Gypsum Pond
Background Update & 2nd Semi-Annual Statistical Analysis – July 2021

Dear Mr. Dyer,

Groundwater Stats Consulting, formerly the statistical consulting division of Sanitas Technologies, is pleased to provide the background update and statistical analysis of groundwater data for the July 2021 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-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, GS-GSA-MW-23VA, 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. 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 Dr. Jim Loftis, Civil & Environmental Engineering professor emeritus at Colorado State University and senior advisor to Groundwater Stats Consulting.

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

> **Appendix III** (Detection Monitoring) - boron, calcium, chloride, fluoride, pH, sulfate, and TDS
> **Appendix IV** (Assessment Monitoring) - antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, combined radium 226 + 228, fluoride, lead, lithium, mercury, molybdenum, selenium, and thallium

Note that when there are no detections present in downgradient wells for a given constituent, statistical analyses are not required. A list of Appendix IV downgradient well/constituent pairs containing 100% non-detects follows this letter.

Time series plots for Appendix III and IV parameters at all wells are provided for the purpose of screening data at these wells (Figure A). A substitution of the most recent reporting limit is used for non-detect data. Additionally, a separate section of box plots is included for all constituents at upgradient and downgradient wells (Figure B). The time series plots are used to initially screen for suspected outliers and trends, while the box plots provide visual representation of variation within individual wells and between all wells.

In earlier analyses, data at all wells were evaluated for the following: 1) outliers; 2) trends; 3) most appropriate statistical method for Appendix III parameters based on analysis of the spatial variability of groundwater quality data among wells upgradient of the facility; and 4) eligibility of downgradient wells when intrawell statistical methods are recommended. Power curves are provided in this report to demonstrate that the selected statistical methods for Appendix III parameters comply with the USEPA Unified Guidance. The EPA suggests that the selected statistical method should provide at least 55% power at 3 standard deviations or at least 80% power at 4 standard deviations. Power curves are based on the following statistical methods and site/data characteristics:

- Semi-Annual Sampling
- Intrawell Prediction Limits with 1-of-2 resample plan

- Interwell Prediction Limits with 1-of-2 resample plan
- # Background Samples (Intrawell): 16
- # Background Samples (Interwell): 94
- # 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 in background, simple substitution of one-half the reporting limit is utilized in the statistical analysis. The reporting limit utilized for non-detects is the most recent practical quantification limit (PQL) as reported by the laboratory.
- When data contain between 15-50% non-detects, the Kaplan-Meier non-detect adjustment is applied to the background data. This technique adjusts the mean and standard deviation of the historical concentrations to account for concentrations below the reporting limit.
- Nonparametric prediction limits are used on data containing greater than 50% non-detects.

Natural systems continuously evolve due to physical changes made to the environment. Examples include capping a landfill, paving areas near a well, or lining a drainage channel to prevent erosion. Periodic updating of background statistical limits is necessary to accommodate these types of changes. In the intrawell case, data for all wells and constituents may be re-evaluated when a minimum of 4 new 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 this analysis, 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 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 follows this letter (Figure E).

Evaluation of Appendix III Parameters - July 2021

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 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 natural spatial variation for a release from the facility. The July 2021 observation 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 July 2021 to establish a background limit for an individual constituent. The July 2021 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-2 and MW-4 (both upgradient)
- 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 and GS-GSA-MW-8
- Chloride: GS-GSA-MW-3, GS-GSA-MW-4, and GS-GSA-MW-8
- Fluoride: GS-GSA-MW-3

Trend Test Evaluation – Appendix III

When prediction limit exceedances are identified in downgradient wells, data are further evaluated using the Sen's Slope/Mann Kendall trend test to determine whether concentrations are statistically increasing, decreasing, or stable (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 natural variability in groundwater that is unrelated to practices at the site. A summary of the trend test results follows this letter. Statistically significant trends were identified for the following well/constituent pairs:

Increasing

- Boron: MW-2 (upgradient) and GS-GSA-MW-8
- Calcium: GS-GSA-MW-8
- Chloride: GS-GSA-MW-8
- Fluoride: MW-2 (upgradient) and GS-GSA-MW-3
- TDS: MW-1 (upgradient)

Decreasing

- Boron: GS-GSA-MW-4
- Chloride: GS-GSA-MW-4
- pH: MW-1 (upgradient)
- Sulfate: MW-4 (upgradient)
- TDS: MW-4 (upgradient)

Evaluation of Appendix IV Parameters – July 2021

Data from upgradient wells for Appendix IV parameters were assessed for outliers during this analysis. In addition to previously flagged outliers, 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 flagged outliers follows this report (Figure C).

In accordance with Alabama Department of Environmental Management, the Groundwater Protections Standards (GWPS) were updated during this 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 I). The tolerance limits contain a known fraction (coverage) of the background population with a known level of confidence. The confidence and coverage levels for nonparametric tolerance limits are dependent upon the number of background samples. As requested by ADEM to eliminate variation among upgradient well data, nonparametric tolerance limits, which use the highest value in background as the statistical limit, were constructed.

Groundwater Protection Standards

These background limits were then compared to the Maximum Contaminant Levels (MCLs) for each parameter, and the higher of the two was used as the GWPS (Figure J) in the confidence interval comparisons described below. Exceptions are noted in Figure J 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 July 2021 for each of the Appendix IV parameters (Figure K). These intervals were constructed as either parametric or nonparametric confidence intervals depending on the data distribution and percentage of non-detects. When data followed a normal or transformed-normal distribution, parametric confidence intervals were used for Appendix IV parameters. Nonparametric confidence intervals, which use the highest and lowest values in background as interval limits, were constructed when data did not follow a normal or transformed-normal distribution or when there were greater than 50% non-detects.

As mentioned above, well/constituent pairs containing 100% non-detects 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.

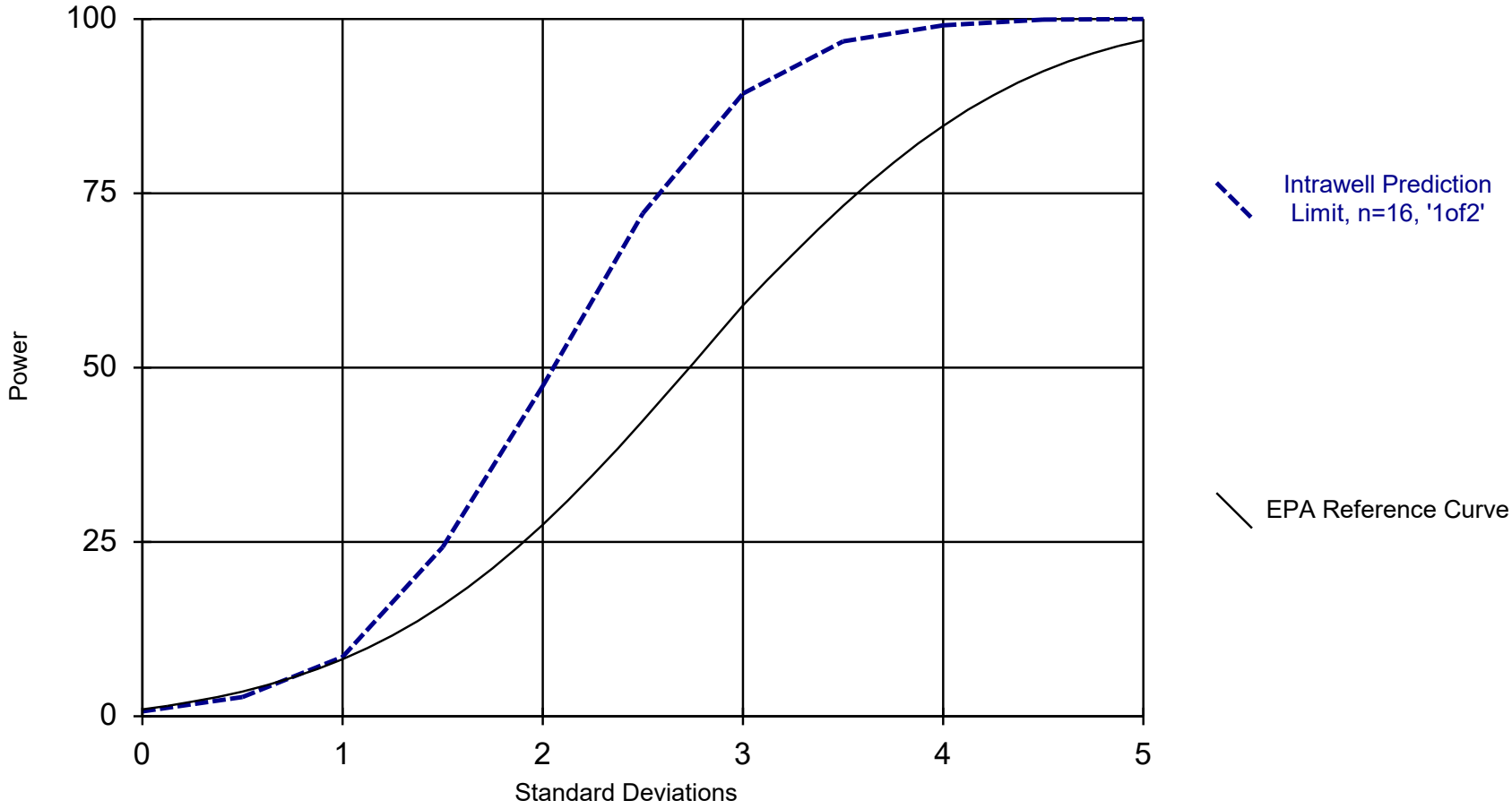
Thank you for the opportunity to assist you in the statistical analysis of groundwater quality for Gorgas Gypsum Pond. If you have any questions or comments, please feel free to contact us.

For Groundwater Stats Consulting,

Andrew Collins
Project Manager

Kristina Rayner
Groundwater Statistician

Intrawell Power Curve

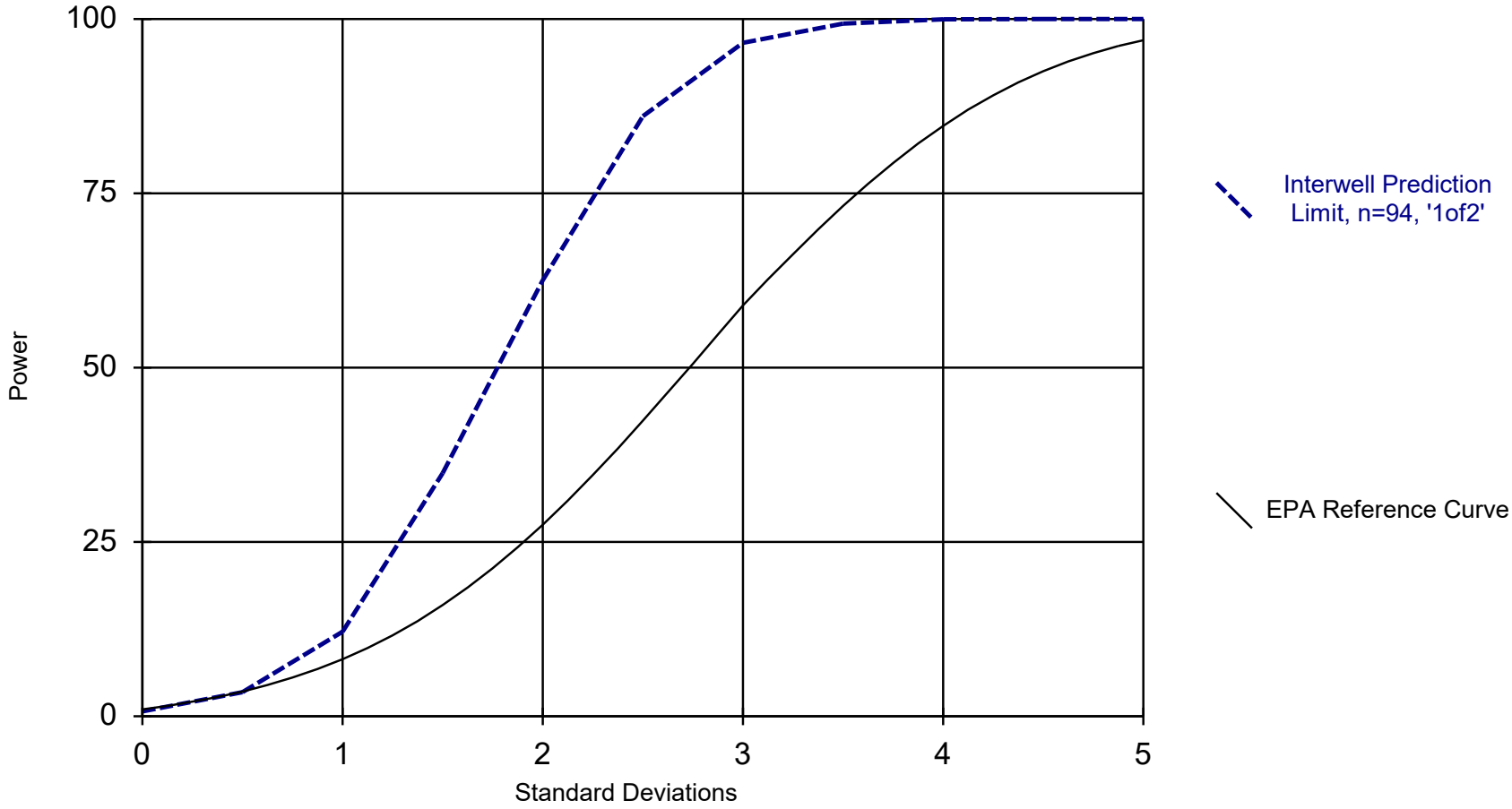


Kappa = 1.97, based on 3 compliance wells and 7 constituents, evaluated semi-annually (this report reflects annual total).

Analysis Run 11/11/2021 4:19 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Interwell Power Curve



Kappa = 1.678, based on 3 compliance wells and 7 constituents, evaluated semi-annually (this report reflects annual total).

Analysis Run 11/19/2021 8:23 AM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

100% Non-Detects: Appendix IV Downgradient

Analysis Run 11/11/2021 4:08 PM View: Appendix IV
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Beryllium (mg/L)
GS-GSA-MW-8

Cadmium (mg/L)
GS-GSA-MW-3, GS-GSA-MW-8

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 11/16/2021, 4:40 PM

Constituent	Well	Calc.	0.01	Method
pH (pH)	**MW-1 (bg)**	**-2.63**	**Yes**	**Mann-W**

Welch's t-test/Mann-Whitney - All Results

Plant Gorgas Client: Southern Company Data: Gorgas GSA Printed 11/16/2021, 4:40 PM

Constituent	Well	Calc.	0.01	Method
pH (pH)	GS-GSA-MW-3	-0.8503	No	Mann-W
pH (pH)	GS-GSA-MW-4	1.717	No	Mann-W
pH (pH)	GS-GSA-MW-8	-0.3401	No	Mann-W
pH (pH)	**MW-1 (bg)**	**-2.63**	**Yes**	**Mann-W**
pH (pH)	MW-2 (bg)	0.8584	No	Mann-W
pH (pH)	MW-3 (bg)	-1.119	No	Mann-W
pH (pH)	MW-4 (bg)	0.5241	No	Mann-W
Sulfate (mg/L)	GS-GSA-MW-3	-0.5481	No	Mann-W
Sulfate (mg/L)	GS-GSA-MW-4	0.5498	No	Mann-W
Sulfate (mg/L)	GS-GSA-MW-8	1.517	No	Mann-W
Sulfate (mg/L)	MW-1 (bg)	0.9431	No	Mann-W
Sulfate (mg/L)	MW-2 (bg)	-0.1865	No	Mann-W
Sulfate (mg/L)	MW-3 (bg)	1.305	No	Mann-W
Sulfate (mg/L)	MW-4 (bg)	-1.256	No	Mann-W
Total dissolved solids (mg/L)	GS-GSA-MW-3	0.3038	No	Mann-W
Total dissolved solids (mg/L)	GS-GSA-MW-4	-0.7894	No	Mann-W
Total dissolved solids (mg/L)	GS-GSA-MW-8	1.104	No	Mann-W
Total dissolved solids (mg/L)	MW-1 (bg)	1.278	No	Mann-W
Total dissolved solids (mg/L)	MW-2 (bg)	0.448	No	Mann-W
Total dissolved solids (mg/L)	MW-3 (bg)	1.454	No	Mann-W
Total dissolved solids (mg/L)	MW-4 (bg)	-1.724	No	Mann-W

Appendix III Trend Tests - Upgradient Wells - Summary Table - Significant Results

Plant Gorgas Client: Southern Company Data: Gorgas GSA Printed 11/16/2021, 4:48 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	**MW-2 (bg)**	**0.004881**	**110**	**105**	**Yes**	**24**	**20.83**	**n/a**	**n/a**	**0.01**	**NP**
Fluoride (mg/L)	**MW-2 (bg)**	**0.01335**	**119**	**111**	**Yes**	**25**	**0**	**n/a**	**n/a**	**0.01**	**NP**

Appendix III Trend Tests - Upgradient Wells - Summary Table - All Results

Plant Gorgas Client: Southern Company Data: Gorgas GSA Printed 11/16/2021, 4:48 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	MW-1 (bg)	0.003051	93	105	No	24	29.17	n/a	n/a	0.01	NP
Boron (mg/L)	**MW-2 (bg)**	**0.004881**	**110**	**105**	**Yes**	**24**	**20.83**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	MW-3 (bg)	0.006876	105	105	No	24	25	n/a	n/a	0.01	NP
Boron (mg/L)	MW-4 (bg)	-0.00006728	-8	-92	No	22	0	n/a	n/a	0.01	NP
Calcium (mg/L)	MW-1 (bg)	3.349	87	105	No	24	0	n/a	n/a	0.01	NP
Calcium (mg/L)	MW-2 (bg)	2.18	38	105	No	24	0	n/a	n/a	0.01	NP
Calcium (mg/L)	MW-3 (bg)	14.44	68	105	No	24	0	n/a	n/a	0.01	NP
Calcium (mg/L)	MW-4 (bg)	-5.475	-41	-98	No	23	0	n/a	n/a	0.01	NP
Chloride (mg/L)	MW-1 (bg)	-0.02109	-21	-105	No	24	0	n/a	n/a	0.01	NP
Chloride (mg/L)	MW-2 (bg)	-0.04511	-17	-105	No	24	0	n/a	n/a	0.01	NP
Chloride (mg/L)	MW-3 (bg)	0.08238	58	105	No	24	8.333	n/a	n/a	0.01	NP
Chloride (mg/L)	MW-4 (bg)	-0.06663	-67	-98	No	23	4.348	n/a	n/a	0.01	NP
Fluoride (mg/L)	MW-1 (bg)	-0.007029	-47	-111	No	25	4	n/a	n/a	0.01	NP
Fluoride (mg/L)	**MW-2 (bg)**	**0.01335**	**119**	**111**	**Yes**	**25**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Fluoride (mg/L)	MW-3 (bg)	-0.009085	-31	-111	No	25	0	n/a	n/a	0.01	NP
Fluoride (mg/L)	MW-4 (bg)	0.005826	31	105	No	24	0	n/a	n/a	0.01	NP

Appendix III Intrawell Prediction Limits - Significant Results

Plant Gorgas Client: Southern Company Data: Gorgas GSA Printed 11/16/2021, 4:52 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-2**	**6.145**	**5.788**	**7/12/2021**	**6.16**	**Yes**	**23**	**5.967**	**0.09604**	**0**	**None**	**No**	**0.001253**	**Param Intra 1 of 2**
pH (pH)	**MW-4**	**6.237**	**6.076**	**7/12/2021**	**6.06**	**Yes**	**23**	**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**	**7/14/2021**	**752**	**Yes**	**16**	**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**	**7/14/2021**	**1300**	**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 11/16/2021, 4:52 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	6.38	5.66	7/14/2021	5.93	No	17	6.02	0.1846	0	None	No	0.001253	Param Intra 1 of 2
pH (pH)	GS-GSA-MW-4	3.896	3.699	7/14/2021	3.74	No	17	3.798	0.05044	0	None	No	0.001253	Param Intra 1 of 2
pH (pH)	GS-GSA-MW-8	7.149	6.399	7/14/2021	6.88	No	17	6.774	0.1922	0	None	No	0.001253	Param Intra 1 of 2
pH (pH)	MW-1	5.249	5.046	7/12/2021	5.13	No	23	5.147	0.05471	0	None	No	0.001253	Param Intra 1 of 2
pH (pH)	**MW-2**	**6.145**	**5.788**	**7/12/2021**	**6.16**	**Yes**	**23**	**5.967**	**0.09604**	**0**	**None**	**No**	**0.001253**	**Param Intra 1 of 2**
pH (pH)	MW-3	5.987	4.38	7/12/2021	5.86	No	23	149.3	35.15	0	None	x^3	0.001253	Param Intra 1 of 2
pH (pH)	**MW-4**	**6.237**	**6.076**	**7/12/2021**	**6.06**	**Yes**	**23**	**6.157**	**0.04323**	**0**	**None**	**No**	**0.001253**	**Param Intra 1 of 2**
Sulfate (mg/L)	GS-GSA-MW-3	3163	n/a	7/14/2021	2880	No	16	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**	**7/14/2021**	**752**	**Yes**	**16**	**569.6**	**42.43**	**0**	**None**	**No**	**0.002505**	**Param Intra 1 of 2**
Sulfate (mg/L)	GS-GSA-MW-8	2169	n/a	7/14/2021	1700	No	16	1541	318.8	0	None	No	0.002505	Param Intra 1 of 2
Sulfate (mg/L)	MW-1	1653	n/a	7/12/2021	1560	No	22	1456	105.3	0	None	No	0.002505	Param Intra 1 of 2
Sulfate (mg/L)	MW-2	1257	n/a	7/12/2021	763	No	23	1001	137.9	0	None	No	0.002505	Param Intra 1 of 2
Sulfate (mg/L)	MW-3	3195	n/a	7/12/2021	2380	No	23	2487	381.4	0	None	No	0.002505	Param Intra 1 of 2
Sulfate (mg/L)	MW-4	3107	n/a	7/12/2021	1930	No	22	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	7/14/2021	4920	No	16	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**	**7/14/2021**	**1300**	**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	4017	n/a	7/14/2021	3150	No	16	2978	527.4	0	None	No	0.002505	Param Intra 1 of 2
Total dissolved solids (mg/L)	MW-1	2516	n/a	7/12/2021	2210	No	22	2201	168.2	0	None	No	0.002505	Param Intra 1 of 2
Total dissolved solids (mg/L)	MW-2	2005	n/a	7/12/2021	1390	No	23	1648	192.4	0	None	No	0.002505	Param Intra 1 of 2
Total dissolved solids (mg/L)	MW-3	4954	n/a	7/12/2021	3510	No	23	3773	635.9	0	None	No	0.002505	Param Intra 1 of 2
Total dissolved solids (mg/L)	MW-4	4484	n/a	7/12/2021	3000	No	22	5.8e10	1.7e10	0	None	x^3	0.002505	Param Intra 1 of 2

Appendix III Interwell Prediction Limits - Significant Results

Plant Gorgas Client: Southern Company Data: Gorgas GSA Printed 11/16/2021, 4:50 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**	**0.0596**	**n/a**	**7/14/2021**	**1.47**	**Yes**	**94**	**n/a**	**n/a**	**19.15**	**n/a**	**n/a**	**0.0002203**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**GS-GSA-MW-4**	**0.0596**	**n/a**	**7/14/2021**	**4.78**	**Yes**	**94**	**n/a**	**n/a**	**19.15**	**n/a**	**n/a**	**0.0002203**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**GS-GSA-MW-8**	**0.0596**	**n/a**	**7/14/2021**	**2.07**	**Yes**	**94**	**n/a**	**n/a**	**19.15**	**n/a**	**n/a**	**0.0002203**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**GS-GSA-MW-3**	**431**	**n/a**	**7/14/2021**	**533**	**Yes**	**95**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0002159**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**GS-GSA-MW-8**	**431**	**n/a**	**7/14/2021**	**444**	**Yes**	**95**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0002159**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	**GS-GSA-MW-3**	**3.711**	**n/a**	**7/14/2021**	**207**	**Yes**	**95**	**1.292**	**0.1525**	**3.158**	**None**	**x^(1/3)**	**0.002505**	**Param Inter 1 of 2**
Chloride (mg/L)	**GS-GSA-MW-4**	**3.711**	**n/a**	**7/14/2021**	**102**	**Yes**	**95**	**1.292**	**0.1525**	**3.158**	**None**	**x^(1/3)**	**0.002505**	**Param Inter 1 of 2**
Chloride (mg/L)	**GS-GSA-MW-8**	**3.711**	**n/a**	**7/14/2021**	**129**	**Yes**	**95**	**1.292**	**0.1525**	**3.158**	**None**	**x^(1/3)**	**0.002505**	**Param Inter 1 of 2**
Fluoride (mg/L)	**GS-GSA-MW-3**	**0.4673**	**n/a**	**7/14/2021**	**0.556**	**Yes**	**99**	**0.4591**	**0.1342**	**1.01**	**None**	**sqrt(x)**	**0.002505**	**Param Inter 1 of 2**

Appendix III Interwell Prediction Limits - All Results

Plant Gorgas Client: Southern Company Data: Gorgas GSA Printed 11/16/2021, 4:50 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**	**0.0596**	**n/a**	**7/14/2021**	**1.47**	**Yes**	**94**	**n/a**	**n/a**	**19.15**	**n/a**	**n/a**	**0.0002203**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**GS-GSA-MW-4**	**0.0596**	**n/a**	**7/14/2021**	**4.78**	**Yes**	**94**	**n/a**	**n/a**	**19.15**	**n/a**	**n/a**	**0.0002203**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**GS-GSA-MW-8**	**0.0596**	**n/a**	**7/14/2021**	**2.07**	**Yes**	**94**	**n/a**	**n/a**	**19.15**	**n/a**	**n/a**	**0.0002203**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**GS-GSA-MW-3**	**431**	**n/a**	**7/14/2021**	**533**	**Yes**	**95**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0002159**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	GS-GSA-MW-4	431	n/a	7/14/2021	130	No	95	n/a	n/a	0	n/a	n/a	0.0002159	NP Inter (normality) 1 of 2
Calcium (mg/L)	**GS-GSA-MW-8**	**431**	**n/a**	**7/14/2021**	**444**	**Yes**	**95**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0002159**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	**GS-GSA-MW-3**	**3.711**	**n/a**	**7/14/2021**	**207**	**Yes**	**95**	**1.292**	**0.1525**	**3.158**	**None**	**x^(1/3)**	**0.002505**	**Param Inter 1 of 2**
Chloride (mg/L)	**GS-GSA-MW-4**	**3.711**	**n/a**	**7/14/2021**	**102**	**Yes**	**95**	**1.292**	**0.1525**	**3.158**	**None**	**x^(1/3)**	**0.002505**	**Param Inter 1 of 2**
Chloride (mg/L)	**GS-GSA-MW-8**	**3.711**	**n/a**	**7/14/2021**	**129**	**Yes**	**95**	**1.292**	**0.1525**	**3.158**	**None**	**x^(1/3)**	**0.002505**	**Param Inter 1 of 2**
Fluoride (mg/L)	**GS-GSA-MW-3**	**0.4673**	**n/a**	**7/14/2021**	**0.556**	**Yes**	**99**	**0.4591**	**0.1342**	**1.01**	**None**	**sqrt(x)**	**0.002505**	**Param Inter 1 of 2**
Fluoride (mg/L)	GS-GSA-MW-4	0.4673	n/a	7/14/2021	0.05ND	No	99	0.4591	0.1342	1.01	None	sqrt(x)	0.002505	Param Inter 1 of 2
Fluoride (mg/L)	GS-GSA-MW-8	0.4673	n/a	7/14/2021	0.221	No	99	0.4591	0.1342	1.01	None	sqrt(x)	0.002505	Param Inter 1 of 2

Appendix III Trend Tests - Significant Results

Plant Gorgas Client: Southern Company Data: Gorgas GSA Printed 11/16/2021, 4:54 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	**GS-GSA-MW-4**	**-0.4403**	**-70**	**-63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**GS-GSA-MW-8**	**0.4021**	**102**	**63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**MW-2 (bg)**	**0.003842**	**110**	**105**	**Yes**	**24**	**20.83**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**GS-GSA-MW-8**	**67.39**	**78**	**63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**GS-GSA-MW-4**	**-16**	**-82**	**-63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**GS-GSA-MW-8**	**27.55**	**88**	**63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Fluoride (mg/L)	**GS-GSA-MW-3**	**0.08911**	**72**	**68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Fluoride (mg/L)	**MW-2 (bg)**	**0.01335**	**119**	**111**	**Yes**	**25**	**0**	**n/a**	**n/a**	**0.01**	**NP**
pH (pH)	**MW-1 (bg)**	**-0.02227**	**-132**	**-105**	**Yes**	**24**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**MW-4 (bg)**	**-136.2**	**-106**	**-98**	**Yes**	**23**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total dissolved solids (mg/L)	**MW-1 (bg)**	**74.49**	**116**	**98**	**Yes**	**23**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total dissolved solids (mg/L)	**MW-4 (bg)**	**-179.1**	**-104**	**-98**	**Yes**	**23**	**0**	**n/a**	**n/a**	**0.01**	**NP**

Appendix III Trend Tests - All Results

Plant Gorgas Client: Southern Company Data: Gorgas GSA Printed 11/16/2021, 4:54 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	GS-GSA-MW-3	0.1326	12	63	No	17	0	n/a	n/a	0.01	NP
Boron (mg/L)	**GS-GSA-MW-4**	**-0.4403**	**-70**	**-63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**GS-GSA-MW-8**	**0.4021**	**102**	**63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	MW-1 (bg)	0.003051	93	105	No	24	29.17	n/a	n/a	0.01	NP
Boron (mg/L)	**MW-2 (bg)**	**0.003842**	**110**	**105**	**Yes**	**24**	**20.83**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	MW-3 (bg)	0.002417	77	105	No	24	25	n/a	n/a	0.01	NP
Boron (mg/L)	MW-4 (bg)	-0.00006728	-8	-92	No	22	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GS-GSA-MW-3	-4.279	-16	-63	No	17	0	n/a	n/a	0.01	NP
Calcium (mg/L)	**GS-GSA-MW-8**	**67.39**	**78**	**63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	MW-1 (bg)	3.349	87	105	No	24	0	n/a	n/a	0.01	NP
Calcium (mg/L)	MW-2 (bg)	2.18	38	105	No	24	0	n/a	n/a	0.01	NP
Calcium (mg/L)	MW-3 (bg)	14.44	68	105	No	24	0	n/a	n/a	0.01	NP
Calcium (mg/L)	MW-4 (bg)	-5.475	-41	-98	No	23	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GS-GSA-MW-3	-7.927	-17	-63	No	17	0	n/a	n/a	0.01	NP
Chloride (mg/L)	**GS-GSA-MW-4**	**-16**	**-82**	**-63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**GS-GSA-MW-8**	**27.55**	**88**	**63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	MW-1 (bg)	-0.02109	-21	-105	No	24	0	n/a	n/a	0.01	NP
Chloride (mg/L)	MW-2 (bg)	-0.04511	-17	-105	No	24	0	n/a	n/a	0.01	NP
Chloride (mg/L)	MW-3 (bg)	0.08238	58	105	No	24	8.333	n/a	n/a	0.01	NP
Chloride (mg/L)	MW-4 (bg)	-0.06663	-67	-98	No	23	4.348	n/a	n/a	0.01	NP
Fluoride (mg/L)	**GS-GSA-MW-3**	**0.08911**	**72**	**68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Fluoride (mg/L)	MW-1 (bg)	-0.007029	-47	-111	No	25	4	n/a	n/a	0.01	NP
Fluoride (mg/L)	**MW-2 (bg)**	**0.01335**	**119**	**111**	**Yes**	**25**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Fluoride (mg/L)	MW-3 (bg)	-0.009085	-31	-111	No	25	0	n/a	n/a	0.01	NP
Fluoride (mg/L)	MW-4 (bg)	0.005826	31	105	No	24	0	n/a	n/a	0.01	NP
pH (pH)	**MW-1 (bg)**	**-0.02227**	**-132**	**-105**	**Yes**	**24**	**0**	**n/a**	**n/a**	**0.01**	**NP**
pH (pH)	MW-2 (bg)	0.0333	103	105	No	24	0	n/a	n/a	0.01	NP
pH (pH)	MW-3 (bg)	-0.0175	-25	-105	No	24	0	n/a	n/a	0.01	NP
pH (pH)	MW-4 (bg)	0.00427	21	105	No	24	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GS-GSA-MW-4	1.31	8	63	No	17	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	MW-1 (bg)	16.17	47	98	No	23	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	MW-2 (bg)	-34.2	-47	-105	No	24	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	MW-3 (bg)	130.9	95	105	No	24	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	**MW-4 (bg)**	**-136.2**	**-106**	**-98**	**Yes**	**23**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total dissolved solids (mg/L)	GS-GSA-MW-4	0	0	63	No	17	0	n/a	n/a	0.01	NP
Total dissolved solids (mg/L)	**MW-1 (bg)**	**74.49**	**116**	**98**	**Yes**	**23**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total dissolved solids (mg/L)	MW-2 (bg)	-27.12	-34	-105	No	24	0	n/a	n/a	0.01	NP
Total dissolved solids (mg/L)	MW-3 (bg)	232.2	95	105	No	24	0	n/a	n/a	0.01	NP
Total dissolved solids (mg/L)	**MW-4 (bg)**	**-179.1**	**-104**	**-98**	**Yes**	**23**	**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 Intervals - All Results (No Significant)

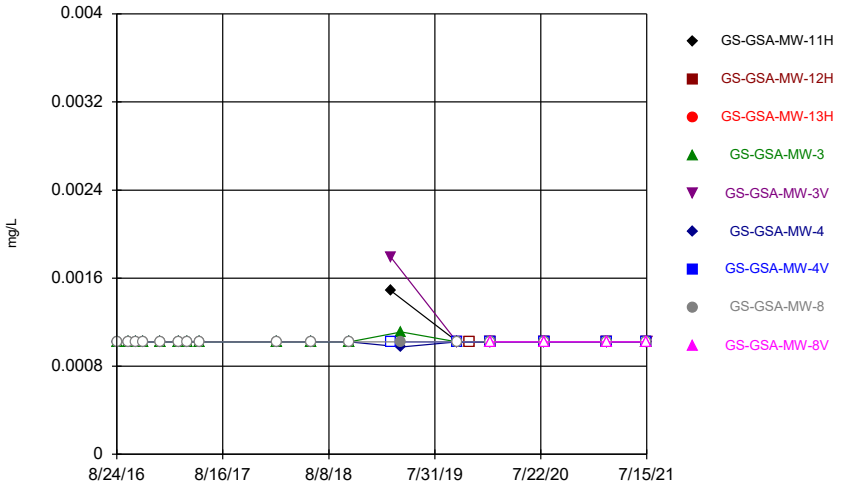
Plant Gorgas Client: Southern Company Data: Gorgas GSA Printed 11/16/2021, 5:05 PM

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	0.00111	0.00102	0.006	No	8	0.001031	0.00003182	87.5	None	No	0.004	NP (NDs)
Antimony (mg/L)	GS-GSA-MW-4	0.00102	0.000976	0.006	No	8	0.001014	0.00001556	87.5	None	No	0.004	NP (NDs)
Antimony (mg/L)	GS-GSA-MW-8	0.00102	0.00102	0.006	No	8	0.00102	1.2e-11	87.5	None	No	0.004	NP (NDs)
Arsenic (mg/L)	GS-GSA-MW-3	0.005	0.00057	0.01	No	8	0.003522	0.002052	62.5	None	No	0.004	NP (NDs)
Arsenic (mg/L)	GS-GSA-MW-4	0.005	0.00115	0.01	No	8	0.002286	0.001693	25	None	No	0.004	NP (normality)
Arsenic (mg/L)	GS-GSA-MW-8	0.005	0.00024	0.01	No	8	0.003859	0.002115	75	None	No	0.004	NP (NDs)
Barium (mg/L)	GS-GSA-MW-3	0.015	0.01255	2	No	8	0.01378	0.001156	0	None	No	0.01	Param.
Barium (mg/L)	GS-GSA-MW-4	0.01433	0.01179	2	No	8	0.01306	0.001196	0	None	No	0.01	Param.
Barium (mg/L)	GS-GSA-MW-8	0.02338	0.02002	2	No	8	0.0217	0.001587	0	None	No	0.01	Param.
Beryllium (mg/L)	GS-GSA-MW-3	0.002773	0.00139	0.004	No	8	0.002069	0.000696	0	None	sqrt(x)	0.01	Param.
Beryllium (mg/L)	GS-GSA-MW-4	0.005067	0.003651	0.004	No	8	0.004359	0.0006678	0	None	No	0.01	Param.
Cadmium (mg/L)	GS-GSA-MW-4	0.00207	0.001419	0.005	No	8	0.001741	0.0003243	0	None	sqrt(x)	0.01	Param.
Chromium (mg/L)	GS-GSA-MW-3	0.01	0.000386	0.1	No	8	0.007597	0.004449	75	None	No	0.004	NP (NDs)
Chromium (mg/L)	GS-GSA-MW-4	0.01	0.000567	0.1	No	8	0.007658	0.004336	75	None	No	0.004	NP (NDs)
Chromium (mg/L)	GS-GSA-MW-8	0.01	0.0003	0.1	No	8	0.00759	0.004462	75	None	No	0.004	NP (NDs)
Cobalt (mg/L)	GS-GSA-MW-3	0.1441	0.07436	0.64	No	8	0.1093	0.03292	0	None	No	0.01	Param.
Cobalt (mg/L)	GS-GSA-MW-4	0.2679	0.1726	0.64	No	8	0.2203	0.04499	0	None	No	0.01	Param.
Cobalt (mg/L)	GS-GSA-MW-8	0.00546	0.00026	0.64	No	8	0.004465	0.001707	75	None	No	0.004	NP (NDs)
Combined Radium 226 + 228 (pCi/L)	GS-GSA-MW-3	0.7095	0.2832	5	No	8	0.4964	0.2011	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-GSA-MW-4	1.169	0.2775	5	No	8	0.7233	0.4205	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-GSA-MW-8	1.034	0.0163	5	No	8	0.5253	0.4802	0	None	No	0.01	Param.
Fluoride (mg/L)	GS-GSA-MW-3	0.7267	0.4203	4	No	8	0.5735	0.1446	0	None	No	0.01	Param.
Fluoride (mg/L)	GS-GSA-MW-4	0.44	0.1	4	No	8	0.1788	0.1464	75	None	No	0.004	NP (NDs)
Fluoride (mg/L)	GS-GSA-MW-8	0.1838	0.1067	4	No	8	0.1453	0.03633	0	None	No	0.01	Param.
Lead (mg/L)	GS-GSA-MW-3	0.0002	0.000157	0.015	No	8	0.0001921	0.00001582	75	None	No	0.004	NP (NDs)
Lead (mg/L)	GS-GSA-MW-4	0.00079	0.0002	0.015	No	8	0.0003249	0.0002362	75	None	No	0.004	NP (NDs)
Lead (mg/L)	GS-GSA-MW-8	0.0002	0.000145	0.015	No	8	0.0001931	0.00001945	87.5	None	No	0.004	NP (NDs)
Lithium (mg/L)	GS-GSA-MW-3	0.4966	0.3992	0.419	No	8	0.4479	0.04593	0	None	No	0.01	Param.
Lithium (mg/L)	GS-GSA-MW-4	0.487	0.262	0.419	No	8	0.3049	0.07546	0	None	No	0.004	NP (normality)
Lithium (mg/L)	GS-GSA-MW-8	0.2127	0.1658	0.419	No	8	0.1893	0.02214	0	None	No	0.01	Param.
Molybdenum (mg/L)	GS-GSA-MW-3	0.01	0.00022	0.1	No	8	0.00756	0.004518	75	None	No	0.004	NP (NDs)
Molybdenum (mg/L)	GS-GSA-MW-8	0.01	0.00015	0.1	No	8	0.007865	0.004015	75	None	No	0.004	NP (NDs)
Selenium (mg/L)	GS-GSA-MW-3	0.01	0.00141	0.05	No	8	0.005952	0.00434	50	None	No	0.004	NP (normality)
Selenium (mg/L)	GS-GSA-MW-4	0.01	0.00294	0.05	No	8	0.006081	0.003355	37.5	None	No	0.004	NP (normality)
Thallium (mg/L)	GS-GSA-MW-4	0.001	0.00009	0.002	No	8	0.0006841	0.0004371	62.5	None	No	0.004	NP (NDs)

FIGURE A.

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

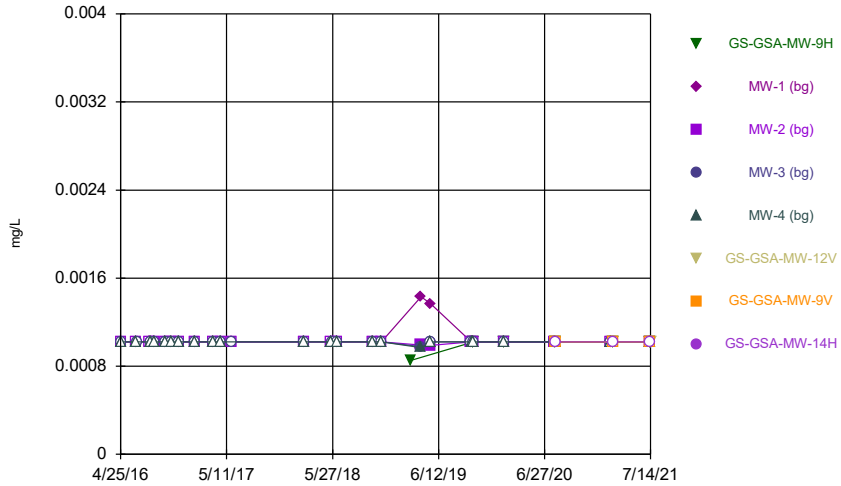
Time Series



Constituent: Antimony Analysis Run 11/16/2021 4:32 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

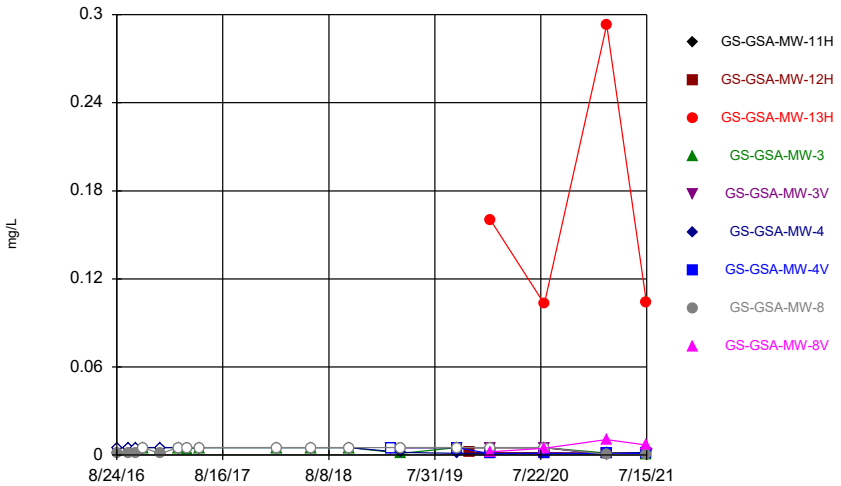
Time Series



Constituent: Antimony Analysis Run 11/16/2021 4:32 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

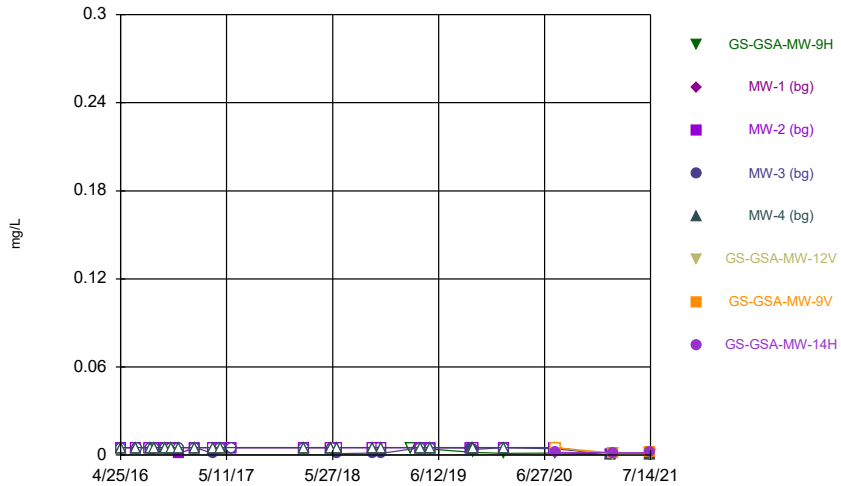
Time Series



Constituent: Arsenic Analysis Run 11/16/2021 4:32 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

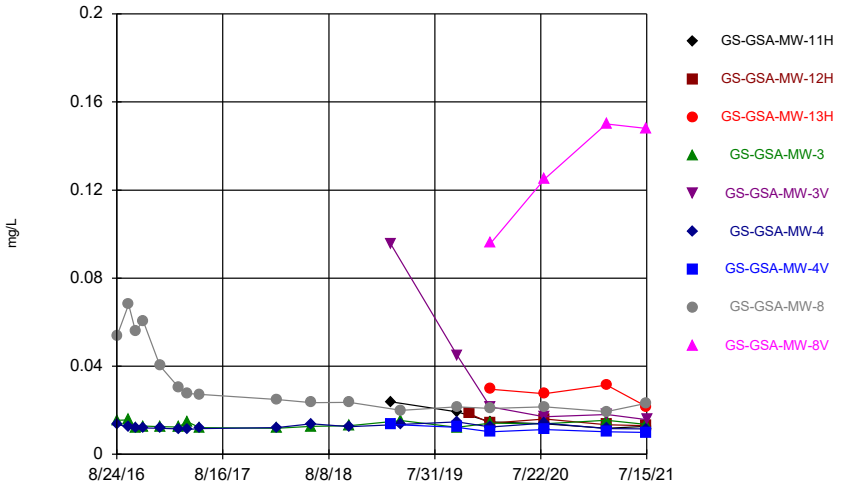
Time Series



Constituent: Arsenic Analysis Run 11/16/2021 4:32 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Time Series

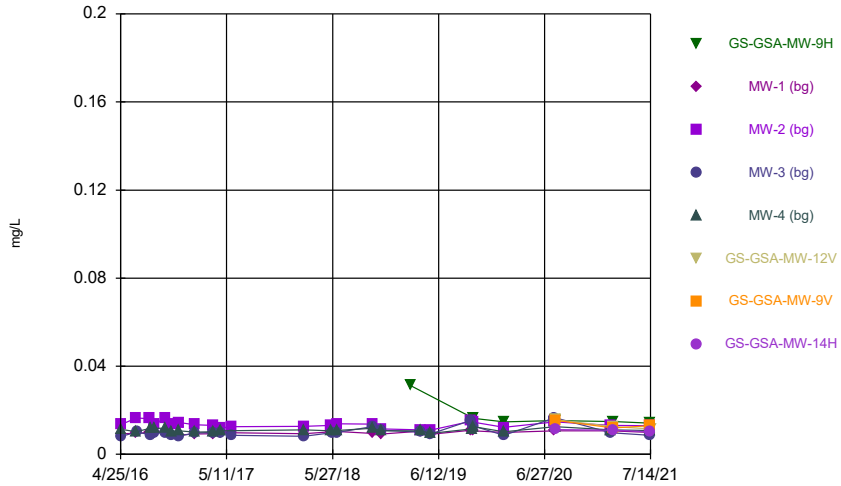


Constituent: Barium Analysis Run 11/16/2021 4:32 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Time Series

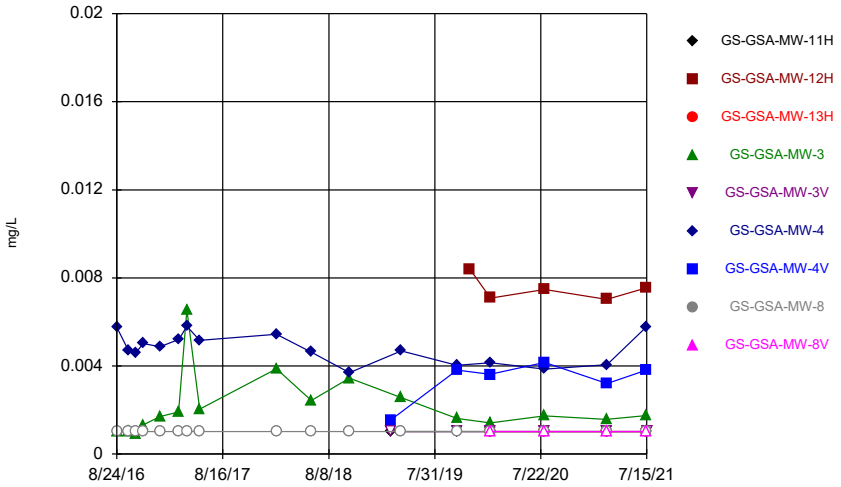


Constituent: Barium Analysis Run 11/16/2021 4:32 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series



Constituent: Beryllium Analysis Run 11/16/2021 4:32 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

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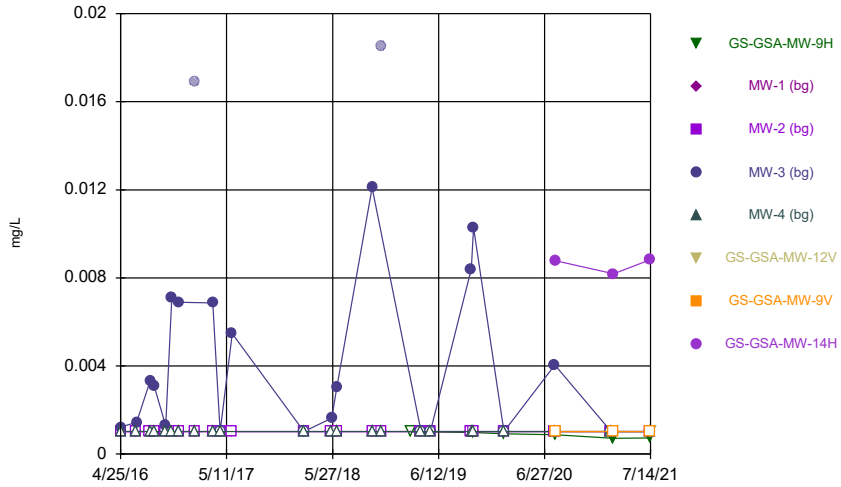
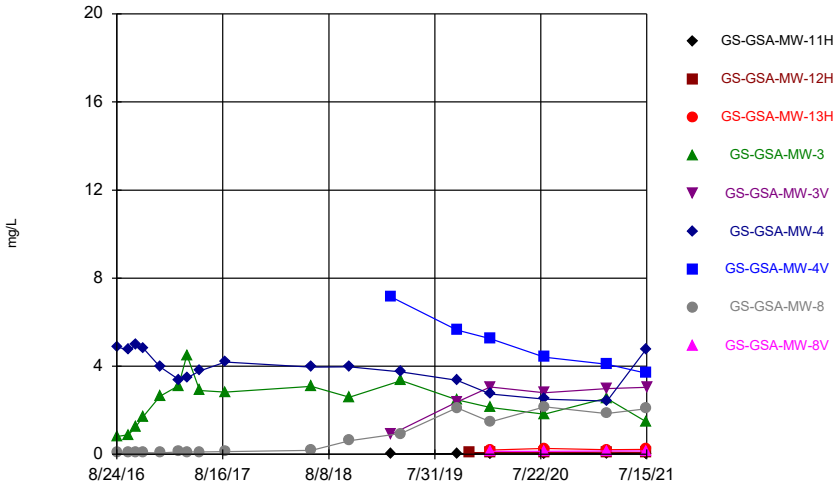


Constituent: Beryllium Analysis Run 11/16/2021 4:32 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

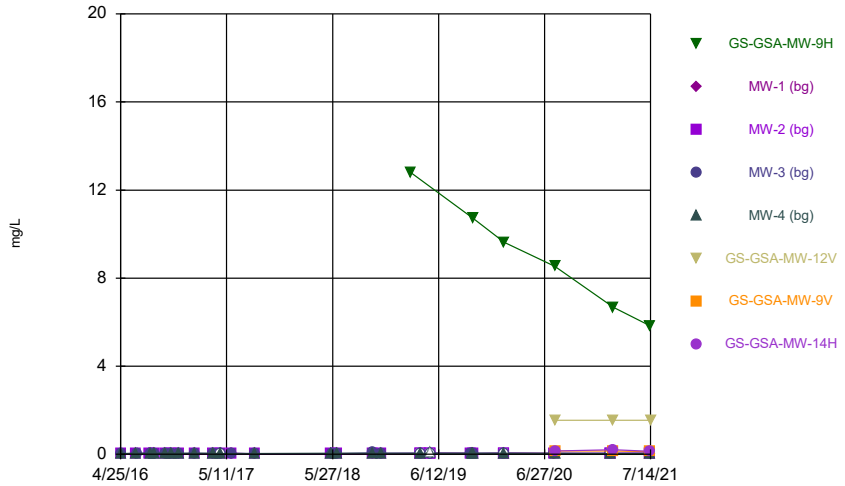
Time Series



Constituent: Boron Analysis Run 11/16/2021 4:32 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

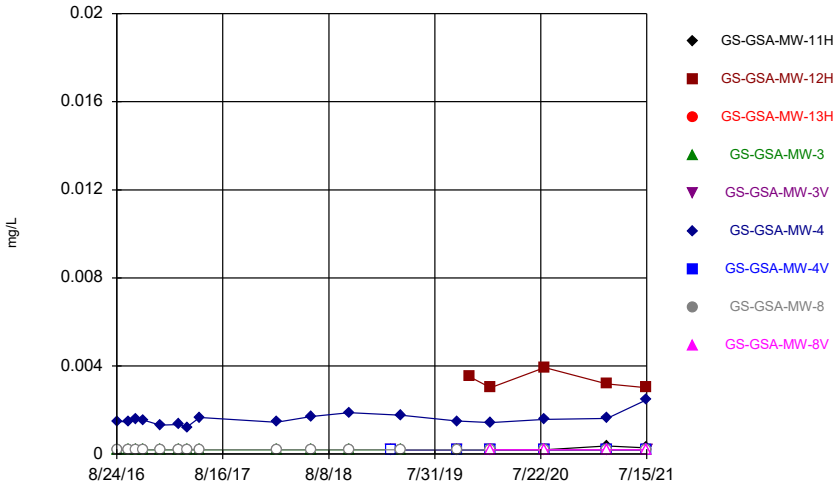
Time Series



Constituent: Boron Analysis Run 11/16/2021 4:32 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

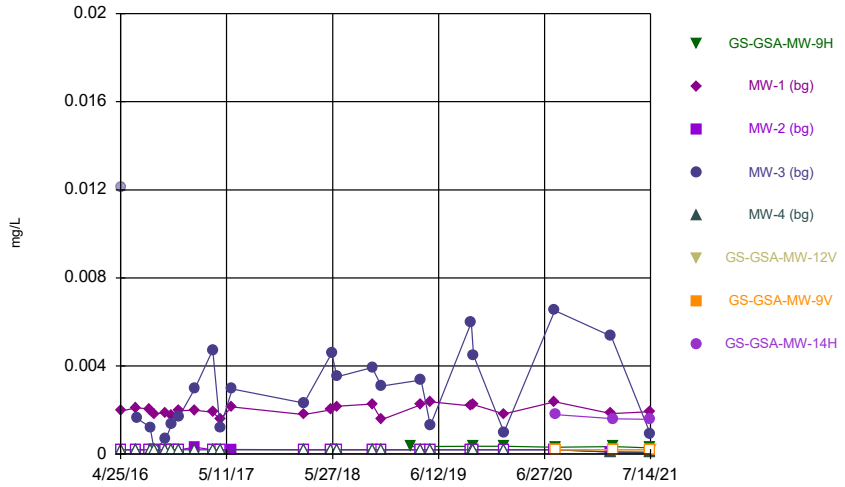
Time Series



Constituent: Cadmium Analysis Run 11/16/2021 4:32 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

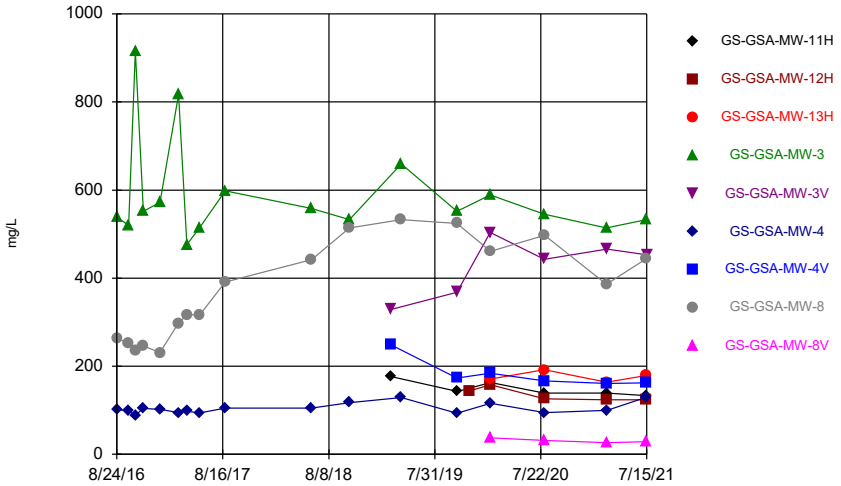
Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series



Constituent: Cadmium Analysis Run 11/16/2021 4:32 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Time Series

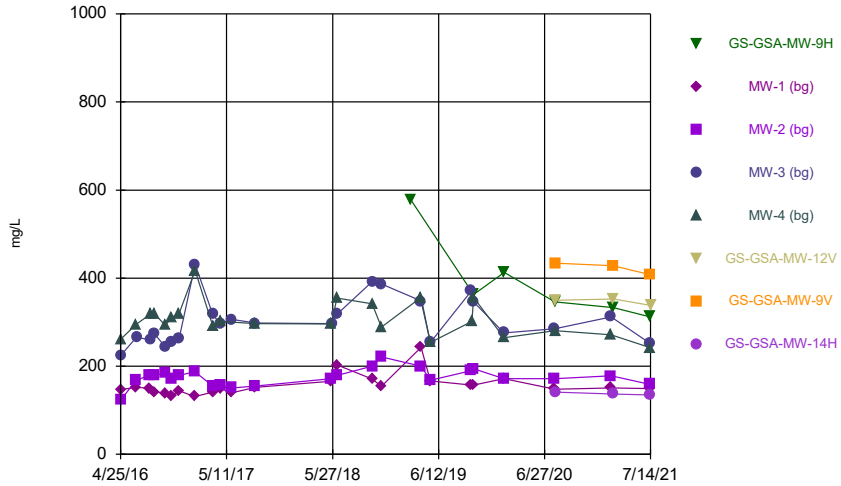


Constituent: Calcium Analysis Run 11/16/2021 4:32 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Time Series

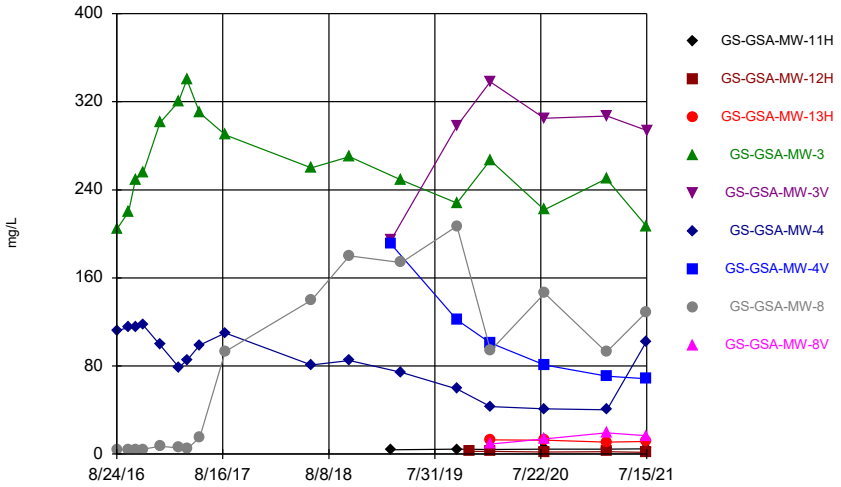


Constituent: Calcium Analysis Run 11/16/2021 4:32 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Time Series

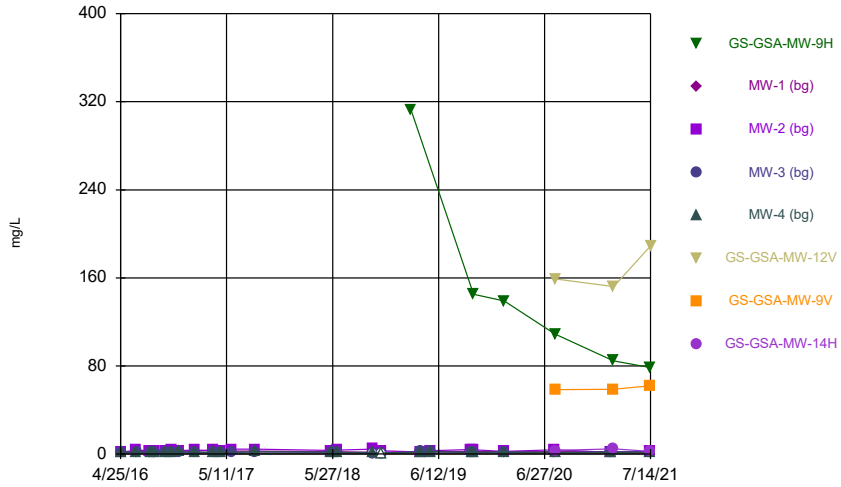


Constituent: Chloride Analysis Run 11/16/2021 4:32 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series

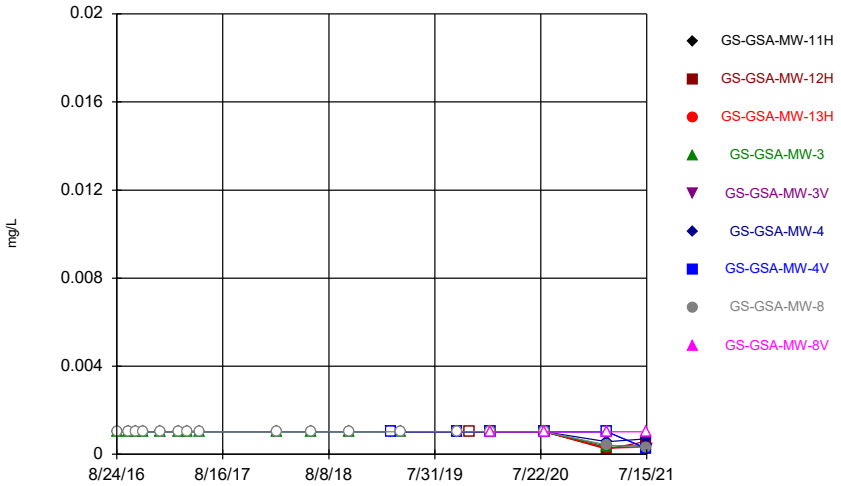


Constituent: Chloride Analysis Run 11/16/2021 4:32 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

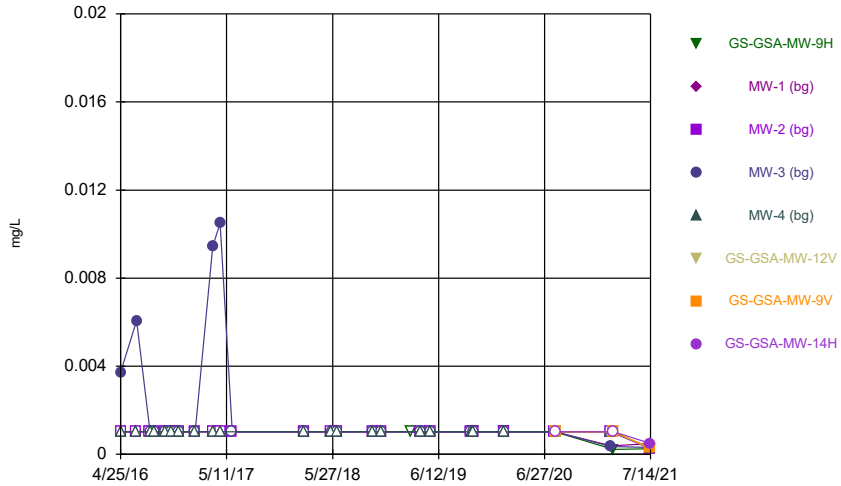
Time Series



Constituent: Chromium Analysis Run 11/16/2021 4:32 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series



Constituent: Chromium Analysis Run 11/16/2021 4:32 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

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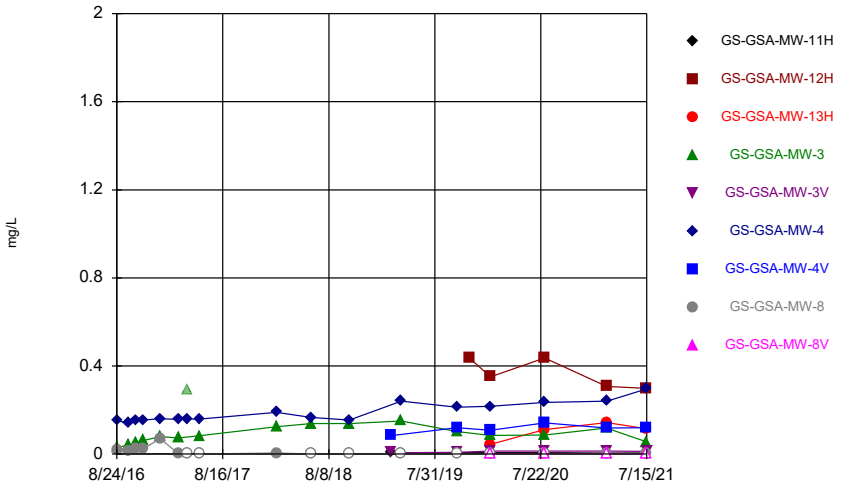
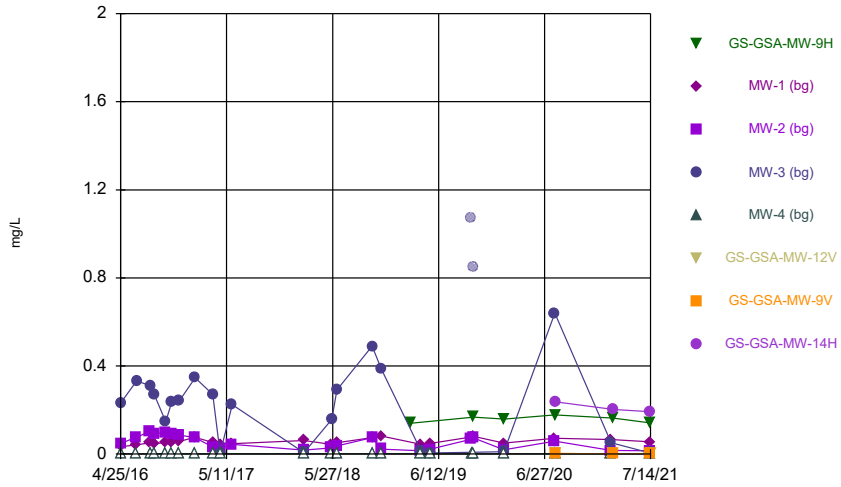


Constituent: Cobalt Analysis Run 11/16/2021 4:32 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

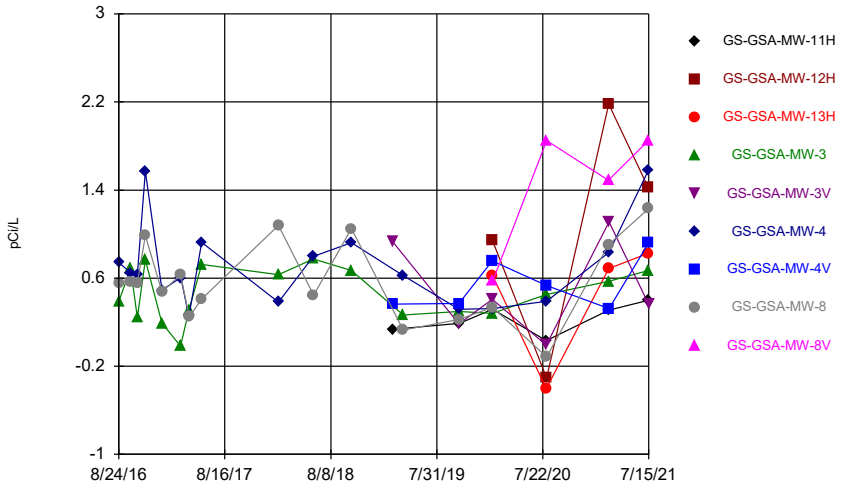
Time Series



Constituent: Cobalt Analysis Run 11/16/2021 4:32 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Time Series

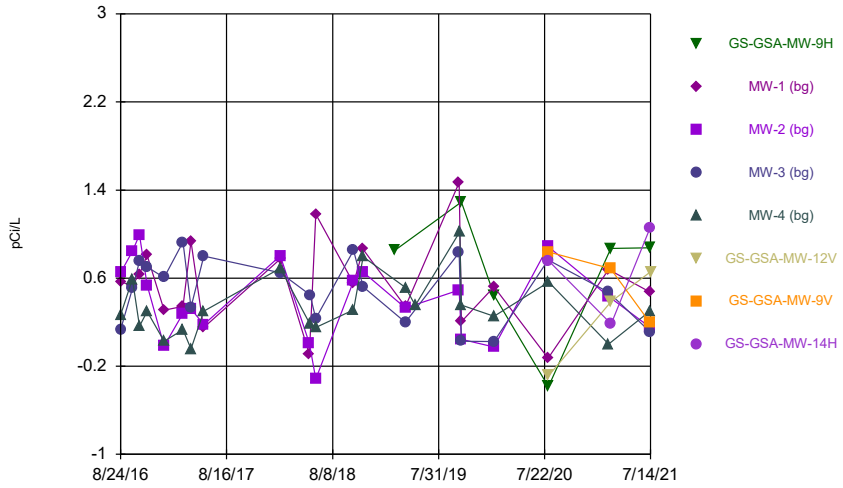


Constituent: Combined Radium 226 + 228 Analysis Run 11/16/2021 4:33 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Time Series



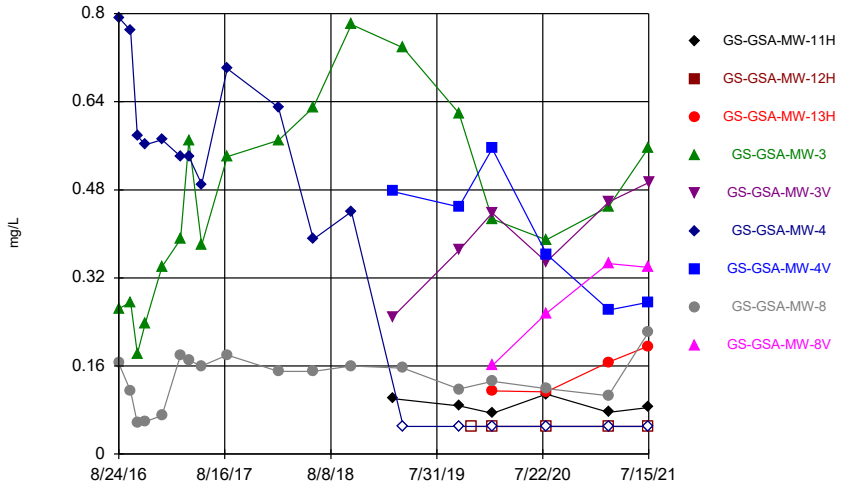
Constituent: Combined Radium 226 + 228 Analysis Run 11/16/2021 4:33 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Time Series



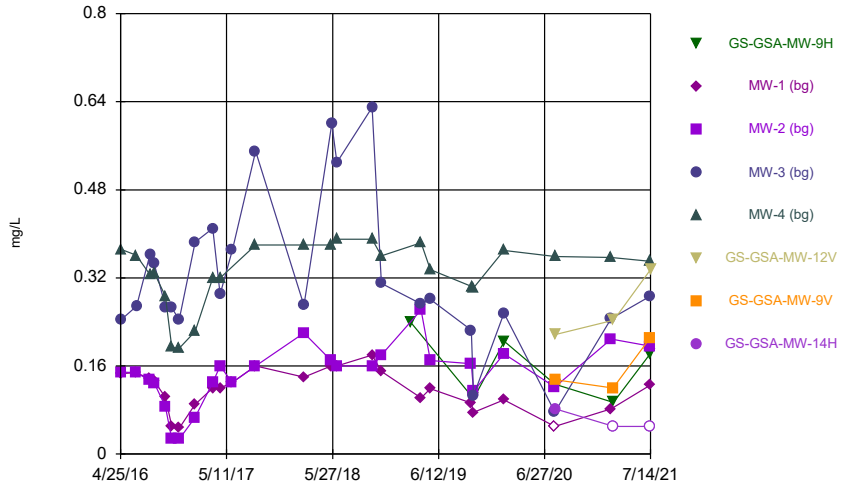
Constituent: Fluoride Analysis Run 11/16/2021 4:33 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Time Series



Constituent: Fluoride Analysis Run 11/16/2021 4:33 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

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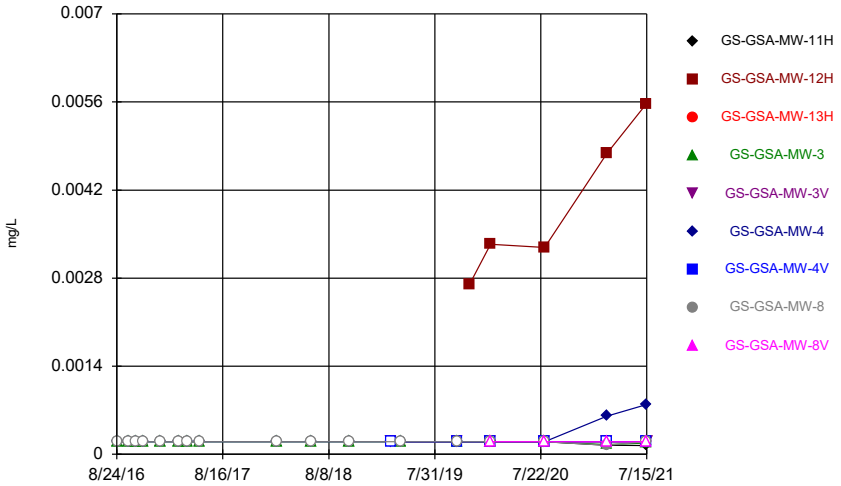
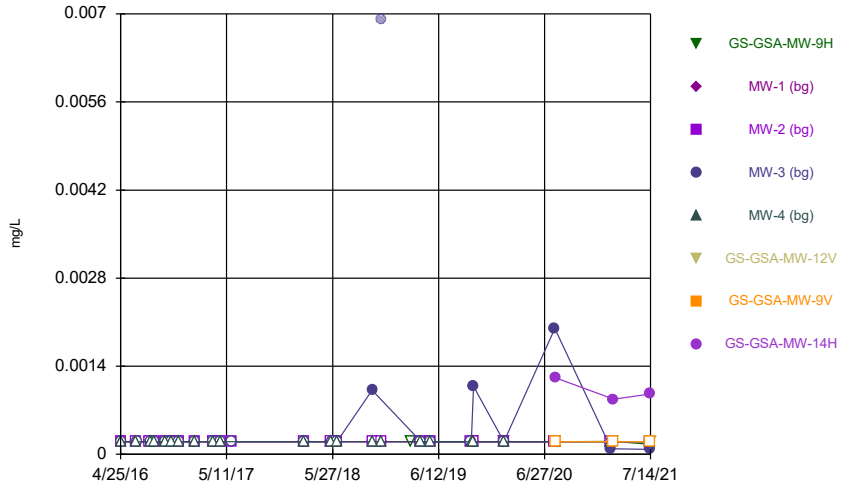


Constituent: Lead Analysis Run 11/16/2021 4:33 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series



Constituent: Lead Analysis Run 11/16/2021 4:33 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
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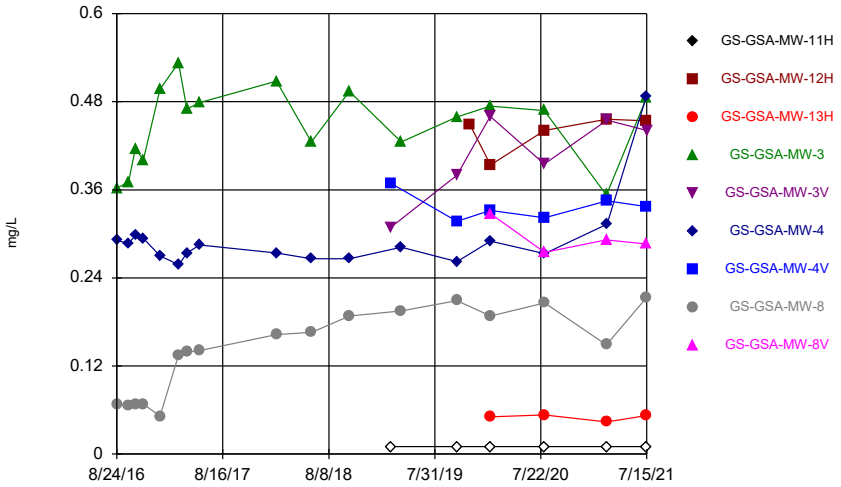
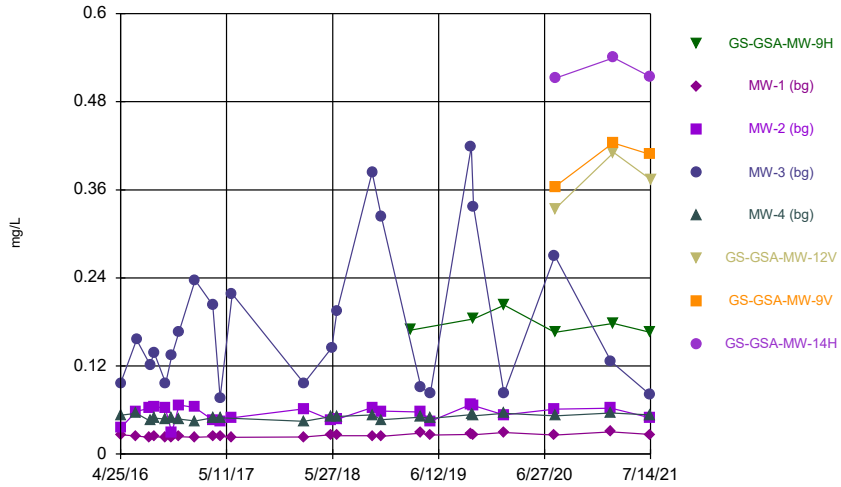


Constituent: Lithium Analysis Run 11/16/2021 4:33 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

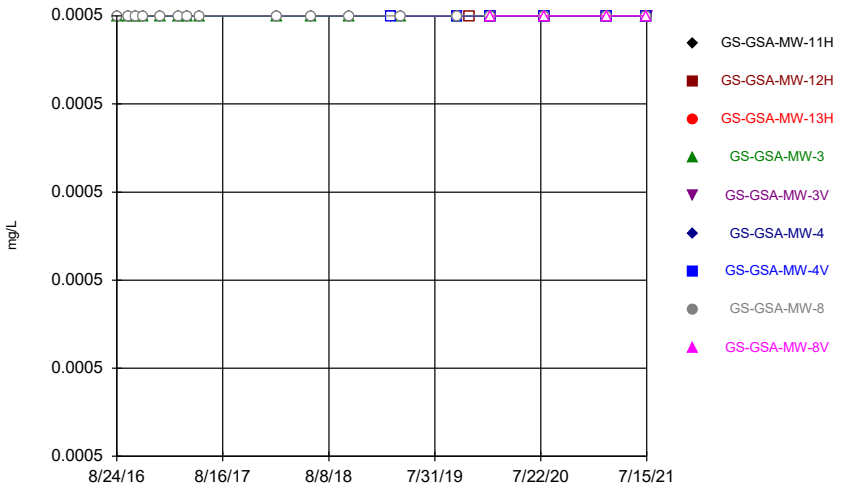
Time Series



Constituent: Lithium Analysis Run 11/16/2021 4:33 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

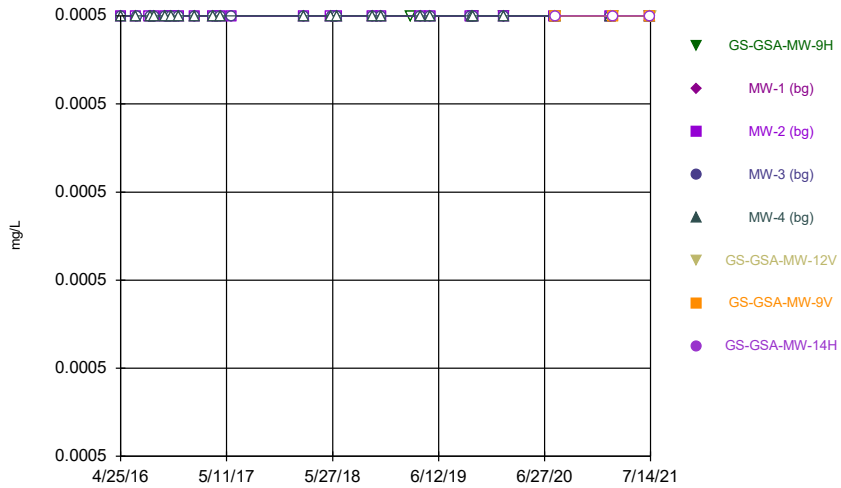
Time Series



Constituent: Mercury Analysis Run 11/16/2021 4:33 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

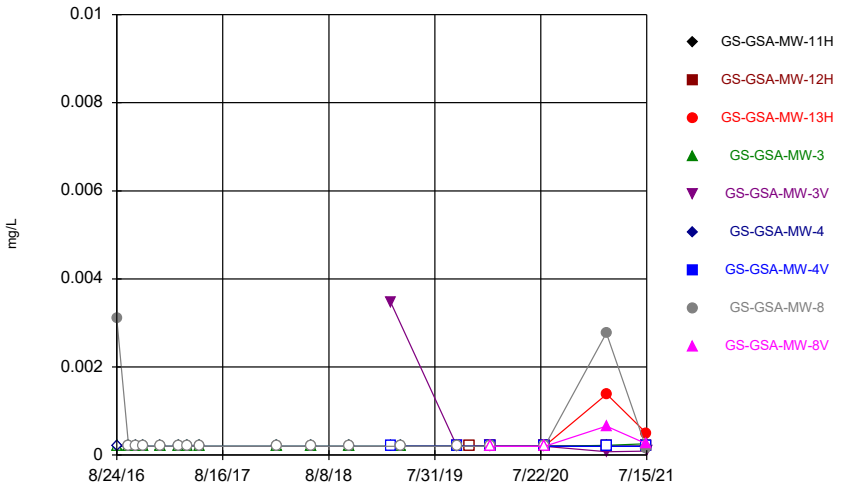
Time Series



Constituent: Mercury Analysis Run 11/16/2021 4:33 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

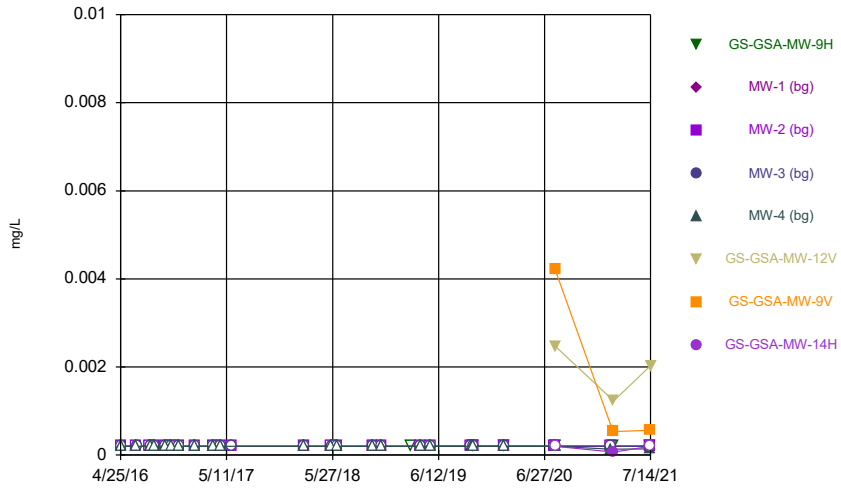
Time Series



Constituent: Molybdenum Analysis Run 11/16/2021 4:33 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

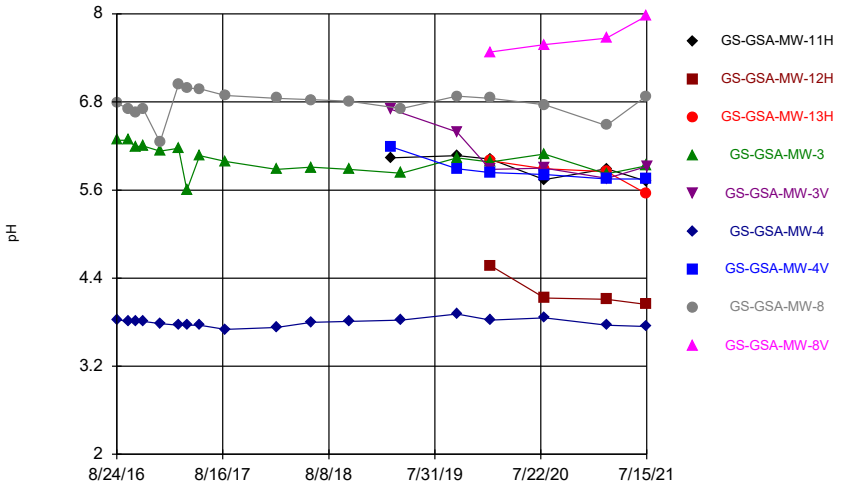
Time Series



Constituent: Molybdenum Analysis Run 11/16/2021 4:33 PM
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Time Series

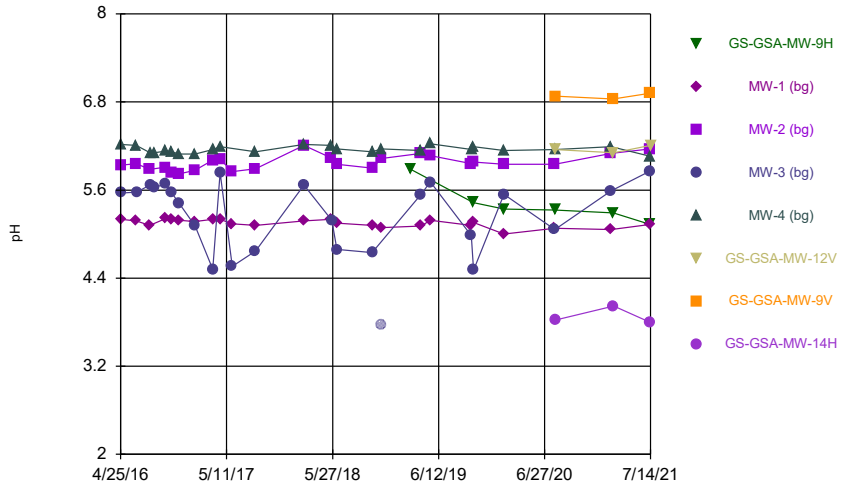


Constituent: pH Analysis Run 11/16/2021 4:33 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Time Series



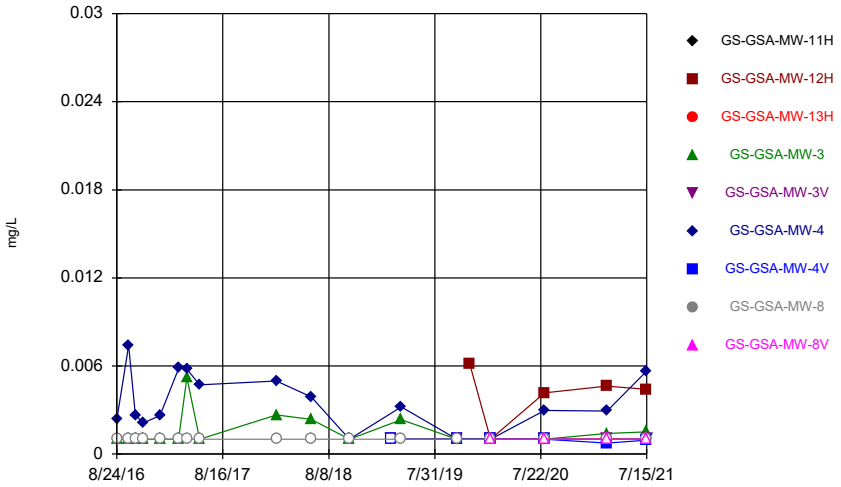
Constituent: pH Analysis Run 11/16/2021 4:33 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Time Series



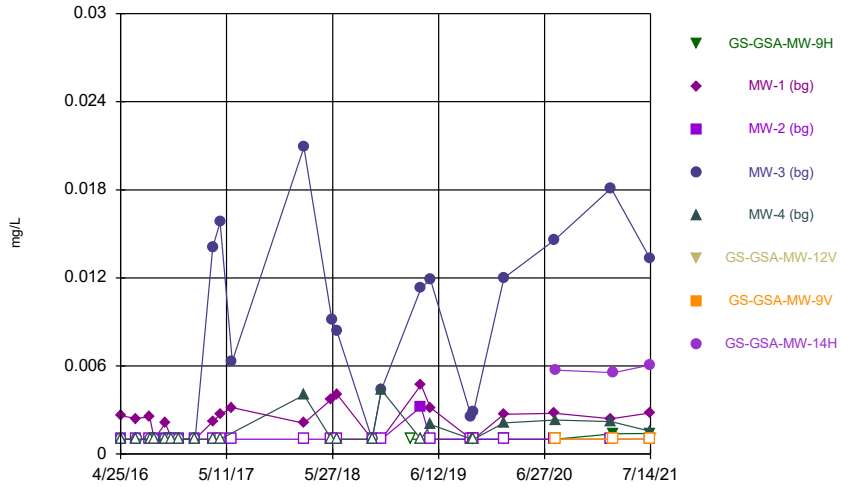
Constituent: Selenium Analysis Run 11/16/2021 4:33 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Time Series

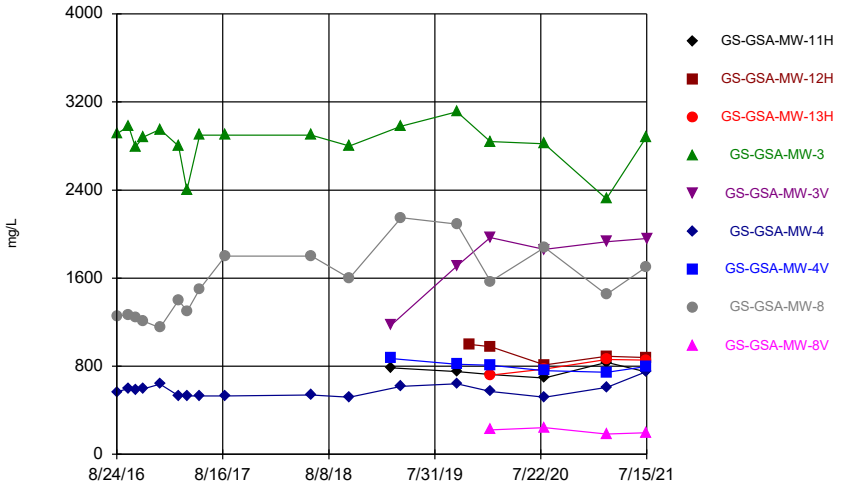


Constituent: Selenium Analysis Run 11/16/2021 4:33 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Time Series

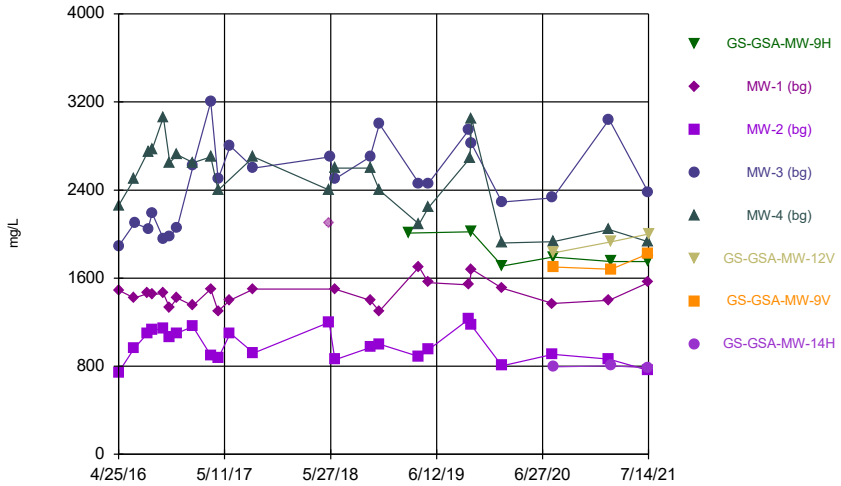


Constituent: Sulfate Analysis Run 11/16/2021 4:33 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Time Series

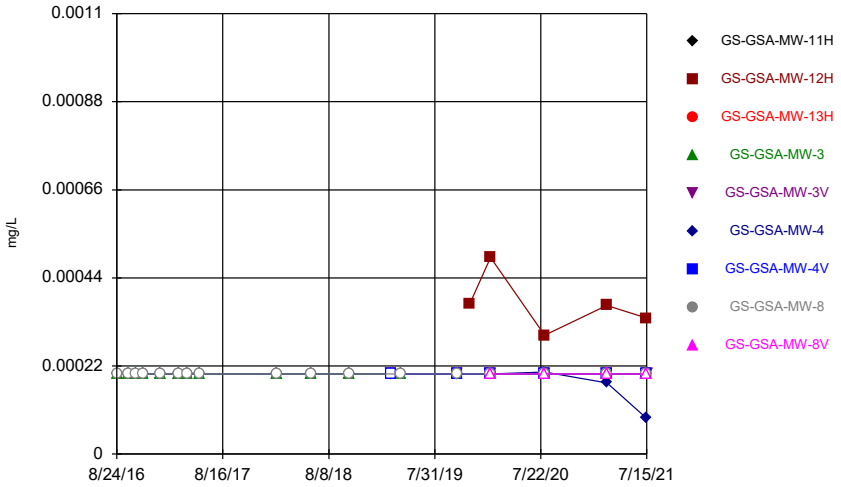


Constituent: Sulfate Analysis Run 11/16/2021 4:33 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series

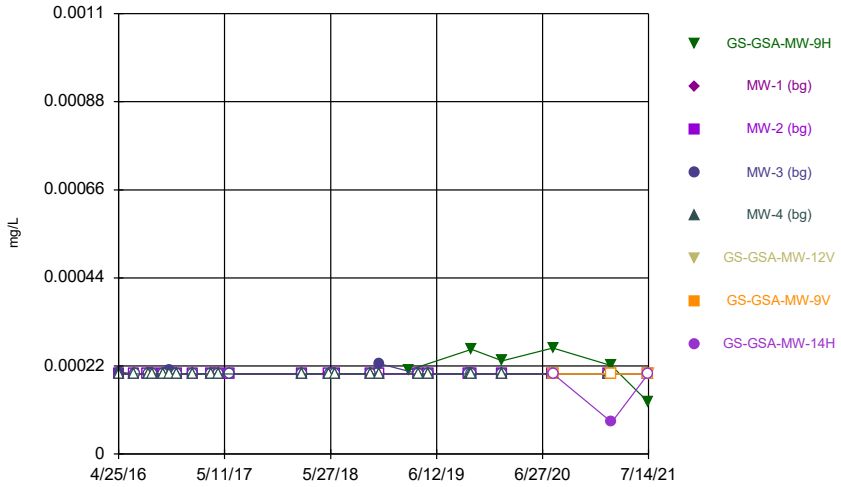


Constituent: Thallium Analysis Run 11/16/2021 4:33 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

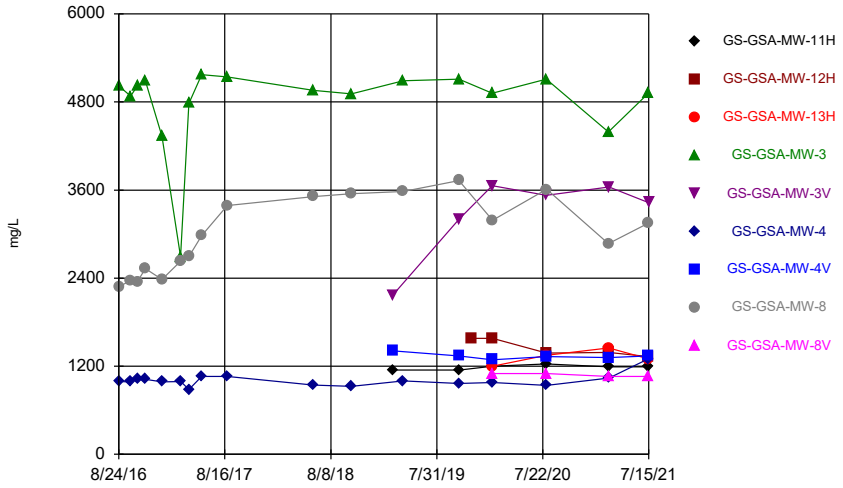
Time Series



Constituent: Thallium Analysis Run 11/16/2021 4:33 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Time Series

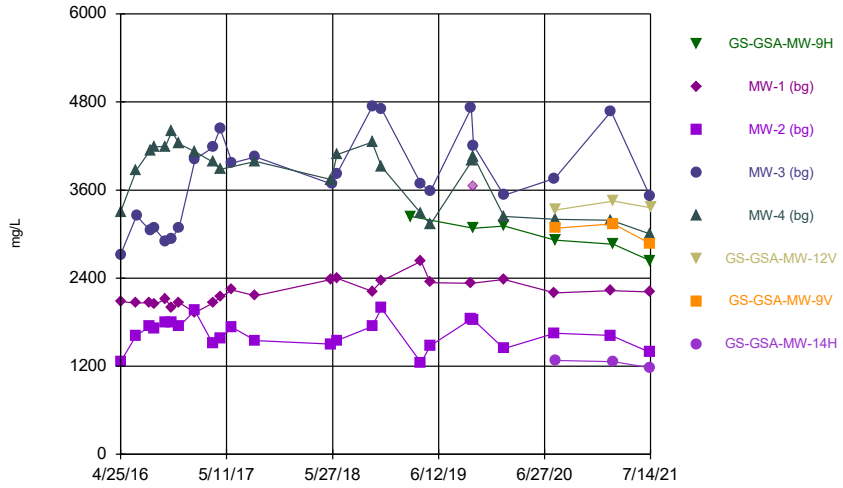


Constituent: Total dissolved solids Analysis Run 11/16/2021 4:33 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Time Series



Constituent: Total dissolved solids Analysis Run 11/16/2021 4:33 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Time Series

Constituent: Antimony (mg/L) Analysis Run 11/16/2021 4:33 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				<0.00102		<0.00102		<0.00102	
10/3/2016				<0.00102		<0.00102		<0.00102	
10/26/2016				<0.00102		<0.00102		<0.00102	
11/21/2016				<0.00102		<0.00102		<0.00102	
1/17/2017				<0.00102		<0.00102		<0.00102	
3/20/2017				<0.00102				<0.00102	
3/21/2017						<0.00102			
4/17/2017				<0.00102		<0.00102			
4/18/2017								<0.00102	
5/30/2017				<0.00102		<0.00102		<0.00102	
2/13/2018				<0.00102		<0.00102		<0.00102	
6/11/2018				<0.00102		<0.00102			
6/12/2018								<0.00102	
10/17/2018				<0.00102		<0.00102		<0.00102	
3/4/2019	0.00149 (J)								
3/5/2019					0.00179 (J)		<0.00102		
4/10/2019				0.00111 (J)		0.000976 (J)		0.00102 (J)	
10/14/2019				<0.00102	<0.00102	<0.00102	<0.00102	<0.00102	
10/16/2019	<0.00102								
11/26/2019		<0.00102							
2/3/2020				<0.00102	<0.00102		<0.00102		
2/4/2020	<0.00102	<0.00102	<0.00102			<0.00102		<0.00102	
2/5/2020									<0.00102
8/4/2020	<0.00102		<0.00102	<0.00102	<0.00102				
8/5/2020		<0.00102				<0.00102	<0.00102	<0.00102	<0.00102
3/1/2021				<0.00102				<0.00102	<0.00102
3/2/2021	<0.00102	<0.00102	<0.00102						
3/3/2021					<0.00102	<0.00102	<0.00102		
7/14/2021	<0.00102	<0.00102	<0.00102	<0.00102		<0.00102	<0.00102	<0.00102	<0.00102
7/15/2021					<0.00102				

Time Series

Constituent: Antimony (mg/L) Analysis Run 11/16/2021 4:33 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			<0.00102	<0.00102	<0.00102			
4/26/2016		<0.00102						
6/20/2016		<0.00102	<0.00102		<0.00102			
6/22/2016				<0.00102				
8/8/2016		<0.00102	<0.00102					
8/9/2016				<0.00102	<0.00102			
8/24/2016		<0.00102	<0.00102	<0.00102	<0.00102			
10/3/2016		<0.00102	<0.00102		<0.00102			
10/4/2016				<0.00102				
10/26/2016		<0.00102	<0.00102	<0.00102	<0.00102			
11/21/2016		<0.00102	<0.00102	<0.00102	<0.00102			
1/17/2017		<0.00102	<0.00102					
1/18/2017				<0.00102	<0.00102			
3/22/2017		<0.00102	<0.00102	<0.00102	<0.00102			
4/18/2017		<0.00102	<0.00102	<0.00102	<0.00102			
5/30/2017		<0.00102						
5/31/2017			<0.00102	<0.00102				
2/13/2018		<0.00102	<0.00102	<0.00102	<0.00102			
5/22/2018		<0.00102	<0.00102					
5/23/2018					<0.00102			
5/24/2018				<0.00102				
6/12/2018		<0.00102	<0.00102	<0.00102	<0.00102			
10/17/2018		<0.00102	<0.00102	<0.00102	<0.00102			
11/19/2018		<0.00102	<0.00102	<0.00102	<0.00102			
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)	<0.00102	<0.00102			
10/8/2019		<0.00102	<0.00102	<0.00102				
10/10/2019					<0.00102			
10/16/2019	<0.00102	<0.00102	<0.00102	<0.00102	<0.00102			
2/3/2020		<0.00102	<0.00102	<0.00102	<0.00102			
2/4/2020	<0.00102							
8/3/2020		<0.00102	<0.00102	<0.00102				
8/4/2020	<0.00102						<0.00102	
8/5/2020					<0.00102	<0.00102		<0.00102
2/22/2021		<0.00102	<0.00102	<0.00102	<0.00102			
3/1/2021							<0.00102	
3/2/2021	<0.00102							
3/3/2021						<0.00102		<0.00102
7/12/2021		<0.00102	<0.00102	<0.00102	<0.00102			
7/13/2021	<0.00102						<0.00102	<0.00102
7/14/2021						<0.00102		

Time Series

Constituent: Arsenic (mg/L) Analysis Run 11/16/2021 4:33 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				

Time Series

Constituent: Arsenic (mg/L) Analysis Run 11/16/2021 4:33 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	<0.005			
4/26/2016		<0.005						
6/20/2016		<0.005	<0.005		<0.005			
6/22/2016				<0.005				
8/8/2016		<0.005	<0.005					
8/9/2016				<0.005	<0.005			
8/24/2016		<0.005	<0.005	<0.005	<0.005			
10/3/2016		<0.005	<0.005		<0.005			
10/4/2016				<0.005				
10/26/2016		<0.005	<0.005	<0.005	<0.005			
11/21/2016		<0.005	0.00111 (J)	<0.005	<0.005			
1/17/2017		<0.005	<0.005					
1/18/2017				<0.005	<0.005			
3/22/2017		<0.005	<0.005	0.00122 (J)	<0.005			
4/18/2017		<0.005	<0.005	<0.005	<0.005			
5/30/2017		<0.005						
5/31/2017			<0.005	<0.005				
2/13/2018		<0.005	<0.005	<0.005	<0.005			
5/22/2018		<0.005	<0.005					
5/23/2018					<0.005			
5/24/2018				<0.005				
6/12/2018		<0.005	<0.005	0.00103 (J)	<0.005			
10/17/2018		<0.005	<0.005	0.00133 (J)	<0.005			
11/19/2018		<0.005	<0.005	0.0012 (J)	<0.005			
3/5/2019	<0.005							
4/10/2019		<0.005	<0.005	<0.005	<0.005			
5/14/2019		<0.005	<0.005	<0.005	<0.005			
10/8/2019		<0.005	<0.005	0.0048 (J)				
10/10/2019					<0.005			
10/16/2019	0.0019 (J)	<0.005	<0.005	0.00389 (J)	<0.005			
2/3/2020		<0.005	<0.005	<0.005	<0.005			
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					<0.005	<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		

Time Series

Constituent: Barium (mg/L) Analysis Run 11/16/2021 4:33 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				

Time Series

Constituent: Barium (mg/L) Analysis Run 11/16/2021 4:33 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)				
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		

Time Series

Constituent: Beryllium (mg/L) Analysis Run 11/16/2021 4:33 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				<0.00102		0.00576		<0.00102	
10/3/2016				<0.00102		0.00469		<0.00102	
10/26/2016				0.000922 (J)		0.00459		<0.00102	
11/21/2016				0.00133 (J)		0.00502		<0.00102	
1/17/2017				0.0017 (J)		0.00488		<0.00102	
3/20/2017				0.00191 (J)				<0.00102	
3/21/2017						0.00521			
4/17/2017				0.00655		0.0058			
4/18/2017								<0.00102	
5/30/2017				0.00204 (J)		0.00517		<0.00102	
2/13/2018				0.00387		0.00544		<0.00102	
6/11/2018				0.00244 (J)		0.00463			
6/12/2018								<0.00102	
10/17/2018				0.00345		0.00369		<0.00102	
3/4/2019	<0.00102								
3/5/2019					<0.00102		0.00155 (J)		
4/10/2019				0.00257 (J)		0.00469		<0.00102	
10/14/2019				0.00162 (J)	<0.00102	0.00403	0.00382	<0.00102	
10/16/2019	<0.00102								
11/26/2019		0.0084							
2/3/2020				0.00141 (J)	<0.00102		0.00362		
2/4/2020	<0.00102	0.00709	<0.00102			0.00415		<0.00102	
2/5/2020									<0.00102
8/4/2020	<0.00102		<0.00102	0.00174 (J)	<0.00102				
8/5/2020		0.00747				0.00385	0.00416	<0.00102	<0.00102
3/1/2021				0.00157				<0.00102	<0.00102
3/2/2021	<0.00102	0.00703	<0.00102						
3/3/2021					<0.00102	0.00406	0.0032		
7/14/2021	<0.00102	0.00755	<0.00102	0.00175		0.00577	0.00381	<0.00102	<0.00102
7/15/2021					<0.00102				

Time Series

Constituent: Beryllium (mg/L) Analysis Run 11/16/2021 4:33 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			<0.00102	0.00122 (J)	<0.00102			
4/26/2016		<0.00102						
6/20/2016		<0.00102	<0.00102		<0.00102			
6/22/2016				0.00144 (J)				
8/8/2016		<0.00102	<0.00102					
8/9/2016				0.00331	<0.00102			
8/24/2016		<0.00102	<0.00102	0.00308	<0.00102			
10/3/2016		<0.00102	<0.00102		<0.00102			
10/4/2016				0.00129 (J)				
10/26/2016		<0.00102	<0.00102	0.0071	<0.00102			
11/21/2016		<0.00102	<0.00102	0.00689	<0.00102			
1/17/2017		<0.00102	<0.00102					
1/18/2017				0.0169 (o)	<0.00102			
3/22/2017		<0.00102	<0.00102	0.00686	<0.00102			
4/18/2017		<0.00102	<0.00102	<0.00102	<0.00102			
5/30/2017		<0.00102						
5/31/2017			<0.00102	0.00547				
2/13/2018		<0.00102	<0.00102	<0.00102	<0.00102			
5/22/2018		<0.00102	<0.00102					
5/23/2018					<0.00102			
5/24/2018				0.00164 (J)				
6/12/2018		<0.00102	<0.00102	0.00306	<0.00102			
10/17/2018		<0.00102	<0.00102	0.0121	<0.00102			
11/19/2018		<0.00102	<0.00102	0.0185 (o)	<0.00102			
3/5/2019	<0.00102							
4/10/2019		<0.00102	<0.00102	<0.00102	<0.00102			
5/14/2019		<0.00102	<0.00102	<0.00102	<0.00102			
10/8/2019		<0.00102	<0.00102	0.0084				
10/10/2019					<0.00102			
10/16/2019	0.000985 (J)	<0.00102	<0.00102	0.0103	<0.00102			
2/3/2020		<0.00102	<0.00102	<0.00102	<0.00102			
2/4/2020	0.000929 (J)							
8/3/2020		<0.00102	<0.00102	0.00405				
8/4/2020	0.000882 (J)						<0.00102	
8/5/2020					<0.00102	<0.00102		0.00879
2/22/2021		<0.00102	<0.00102	<0.00102	<0.00102			
3/1/2021							<0.00102	
3/2/2021	0.000724 (J)							
3/3/2021						<0.00102		0.00818
7/12/2021		<0.00102	<0.00102	<0.00102	<0.00102			
7/13/2021	0.00073 (J)						<0.00102	0.00883
7/14/2021						<0.00102		

Time Series

Constituent: Boron (mg/L) Analysis Run 11/16/2021 4:33 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				

Time Series

Constituent: Boron (mg/L) Analysis Run 11/16/2021 4:33 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)				
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		

Time Series

Constituent: Cadmium (mg/L) Analysis Run 11/16/2021 4:33 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				<0.0002		0.00148		<0.0002	
10/3/2016				<0.0002		0.00147		<0.0002	
10/26/2016				<0.0002		0.00157		<0.0002	
11/21/2016				<0.0002		0.00154		<0.0002	
1/17/2017				<0.0002		0.00131		<0.0002	
3/20/2017				<0.0002				<0.0002	
3/21/2017						0.00134			
4/17/2017				<0.0002		0.00122			
4/18/2017								<0.0002	
5/30/2017				<0.0002		0.00167		<0.0002	
2/13/2018				<0.0002		0.00145		<0.0002	
6/11/2018				<0.0002		0.00171			
6/12/2018								<0.0002	
10/17/2018				<0.0002		0.00188		<0.0002	
3/4/2019	<0.0002								
3/5/2019					<0.0002		<0.0002		
4/10/2019				<0.0002		0.00176		<0.0002	
10/14/2019				<0.0002	<0.0002	0.0015	<0.0002	<0.0002	
10/16/2019	<0.0002								
11/26/2019		0.00351							
2/3/2020				<0.0002	<0.0002		<0.0002		
2/4/2020	<0.0002	0.00301	<0.0002			0.00143		<0.0002	
2/5/2020									<0.0002
8/4/2020	<0.0002		<0.0002	<0.0002	<0.0002				
8/5/2020		0.00393				0.00157	<0.0002	<0.0002	<0.0002
3/1/2021				<0.0002				<0.0002	<0.0002
3/2/2021	0.000366	0.00319	<0.0002						
3/3/2021					<0.0002	0.00162	<0.0002		
7/14/2021	0.00028	0.00301	<0.0002	<0.0002		0.00246	<0.0002	<0.0002	<0.0002
7/15/2021					<0.0002				

Time Series

Constituent: Cadmium (mg/L) Analysis Run 11/16/2021 4:33 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			<0.0002	0.0121 (o)	<0.0002			
4/26/2016		0.00196						
6/20/2016		0.0021	<0.0002		<0.0002			
6/22/2016				0.00163				
8/8/2016		0.00206	<0.0002					
8/9/2016				0.00122	<0.0002			
8/24/2016		0.00182	<0.0002	<0.0002	<0.0002			
10/3/2016		0.00188	<0.0002		<0.0002			
10/4/2016				0.000689 (J)				
10/26/2016		0.00175	<0.0002	0.00136	<0.0002			
11/21/2016		0.00197	<0.0002	0.00171	<0.0002			
1/17/2017		0.002	0.000311 (J)					
1/18/2017				0.003	<0.0002			
3/22/2017		0.0019	<0.0002	0.00473	<0.0002			
4/18/2017		0.00159	<0.0002	0.00117	<0.0002			
5/30/2017		0.00214						
5/31/2017			0.000212 (J)	0.00296				
2/13/2018		0.0018	<0.0002	0.00232	<0.0002			
5/22/2018		0.00201	<0.0002					
5/23/2018					<0.0002			
5/24/2018				0.00459				
6/12/2018		0.00217	<0.0002	0.00351	<0.0002			
10/17/2018		0.00228	<0.0002	0.00393	<0.0002			
11/19/2018		0.00156	<0.0002	0.00309	<0.0002			
3/5/2019	0.000336 (J)							
4/10/2019		0.00224	<0.0002	0.00337	<0.0002			
5/14/2019		0.00238	<0.0002	0.0013	<0.0002			
10/8/2019		0.00218	<0.0002	0.00598				
10/10/2019					<0.0002			
10/16/2019	0.000362 (J)	0.00225	<0.0002	0.00448	<0.0002			
2/3/2020		0.00182	<0.0002	0.000988 (J)	<0.0002			
2/4/2020	0.000349 (J)							
8/3/2020		0.00237	<0.0002	0.00652				
8/4/2020	0.000308 (J)						<0.0002	
8/5/2020					<0.0002	<0.0002		0.0018
2/22/2021		0.00184	8.96E-05 (J)	0.00536	8.96E-05 (J)			
3/1/2021							<0.0002	
3/2/2021	0.000338							
3/3/2021						<0.0002		0.0016
7/12/2021		0.00193	8E-05 (J)	0.00094	8E-05 (J)			
7/13/2021	0.00028						<0.0002	0.00157
7/14/2021						<0.0002		

Time Series

Constituent: Calcium (mg/L) Analysis Run 11/16/2021 4:33 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				

Time Series

Constituent: Calcium (mg/L) Analysis Run 11/16/2021 4:33 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				
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		

Time Series

Constituent: Chloride (mg/L) Analysis Run 11/16/2021 4:33 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				

Time Series

Constituent: Chloride (mg/L) Analysis Run 11/16/2021 4:33 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)				
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		

Time Series

Constituent: Chromium (mg/L) Analysis Run 11/16/2021 4:33 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				<0.00102		<0.00102		<0.00102	
10/3/2016				<0.00102		<0.00102		<0.00102	
10/26/2016				<0.00102		<0.00102		<0.00102	
11/21/2016				<0.00102		<0.00102		<0.00102	
1/17/2017				<0.00102		<0.00102		<0.00102	
3/20/2017				<0.00102				<0.00102	
3/21/2017						<0.00102			
4/17/2017				<0.00102		<0.00102			
4/18/2017								<0.00102	
5/30/2017				<0.00102		<0.00102		<0.00102	
2/13/2018				<0.00102		<0.00102		<0.00102	
6/11/2018				<0.00102		<0.00102			
6/12/2018								<0.00102	
10/17/2018				<0.00102		<0.00102		<0.00102	
3/4/2019	<0.00102								
3/5/2019					<0.00102		<0.00102		
4/10/2019				<0.00102		<0.00102		<0.00102	
10/14/2019				<0.00102	<0.00102	<0.00102	<0.00102	<0.00102	
10/16/2019	<0.00102								
11/26/2019		<0.00102							
2/3/2020				<0.00102	<0.00102		<0.00102		
2/4/2020	<0.00102	<0.00102	<0.00102			<0.00102		<0.00102	
2/5/2020									<0.00102
8/4/2020	<0.00102		<0.00102	<0.00102	<0.00102				
8/5/2020		<0.00102				<0.00102	<0.00102	<0.00102	<0.00102
3/1/2021				0.000386 (J)				0.000423 (J)	<0.00102
3/2/2021	0.000295 (J)	0.000242 (J)	0.000285 (J)						
3/3/2021					<0.00102	0.000567 (J)	<0.00102		
7/14/2021	0.00034 (J)	0.00059 (J)	0.00032 (J)	0.00039 (J)		0.0007 (J)	0.00027 (J)	0.0003 (J)	<0.00102
7/15/2021					0.00027 (J)				

Time Series

Constituent: Chromium (mg/L) Analysis Run 11/16/2021 4:33 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			<0.00102	0.00373 (J)	<0.00102			
4/26/2016		<0.00102						
6/20/2016		<0.00102	<0.00102		<0.00102			
6/22/2016				0.00606 (J)				
8/8/2016		<0.00102	<0.00102					
8/9/2016				<0.00102	<0.00102			
8/24/2016		<0.00102	<0.00102	<0.00102	<0.00102			
10/3/2016		<0.00102	<0.00102		<0.00102			
10/4/2016				<0.00102				
10/26/2016		<0.00102	<0.00102	<0.00102	<0.00102			
11/21/2016		<0.00102	<0.00102	<0.00102	<0.00102			
1/17/2017		<0.00102	<0.00102					
1/18/2017				<0.00102	<0.00102			
3/22/2017		<0.00102	<0.00102	0.00945 (J)	<0.00102			
4/18/2017		<0.00102	<0.00102	0.0105	<0.00102			
5/30/2017		<0.00102						
5/31/2017			<0.00102	<0.00102				
2/13/2018		<0.00102	<0.00102	<0.00102	<0.00102			
5/22/2018		<0.00102	<0.00102					
5/23/2018					<0.00102			
5/24/2018				<0.00102				
6/12/2018		<0.00102	<0.00102	<0.00102	<0.00102			
10/17/2018		<0.00102	<0.00102	<0.00102	<0.00102			
11/19/2018		<0.00102	<0.00102	<0.00102	<0.00102			
3/5/2019	<0.00102							
4/10/2019		<0.00102	<0.00102	<0.00102	<0.00102			
5/14/2019		<0.00102	<0.00102	<0.00102	<0.00102			
10/8/2019		<0.00102	<0.00102	<0.00102				
10/10/2019					<0.00102			
10/16/2019	<0.00102	<0.00102	<0.00102	<0.00102	<0.00102			
2/3/2020		<0.00102	<0.00102	<0.00102	<0.00102			
2/4/2020	<0.00102							
8/3/2020		<0.00102	<0.00102	<0.00102				
8/4/2020	<0.00102						<0.00102	
8/5/2020					<0.00102	<0.00102		<0.00102
2/22/2021		0.000382 (J)	<0.00102	0.00035 (J)	<0.00102			
3/1/2021							<0.00102	
3/2/2021	0.000218 (J)							
3/3/2021						<0.00102		<0.00102
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)		

Time Series

Constituent: Cobalt (mg/L) Analysis Run 11/16/2021 4:33 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 (o)		0.159			
4/18/2017								<0.0002	
5/30/2017				0.0832		0.159		<0.0002	
2/13/2018				0.124		0.19		0.00492 (J)	
6/11/2018				0.138		0.166			
6/12/2018								<0.0002	
10/17/2018				0.138		0.154		<0.0002	
3/4/2019	0.0066								
3/5/2019					0.0059		0.0836		
4/10/2019				0.151		0.241		<0.0002	
10/14/2019				0.102	0.00845	0.213	0.12	<0.0002	
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		<0.0002	
2/5/2020									<0.0002
8/4/2020	0.0061		0.111	0.0862	0.0133				
8/5/2020		0.436				0.235	0.141	<0.0002	<0.0002
3/1/2021				0.119				0.00546	<0.0002
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	<0.0002
7/15/2021					0.0121				

Time Series

Constituent: Cobalt (mg/L) Analysis Run 11/16/2021 4:33 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	<0.0002			
4/26/2016		0.0343						
6/20/2016		0.0413	0.0767		<0.0002			
6/22/2016				0.332				
8/8/2016		0.0513	0.103					
8/9/2016				0.311	<0.0002			
8/24/2016		0.0471	0.093	0.271	<0.0002			
10/3/2016		0.0525	0.0964		<0.0002			
10/4/2016				0.148				
10/26/2016		0.0527	0.0904	0.236	<0.0002			
11/21/2016		0.0569	0.0857	0.241	<0.0002			
1/17/2017		0.0768	0.0745					
1/18/2017				0.347	<0.0002			
3/22/2017		0.0535	0.0328	0.271	<0.0002			
4/18/2017		0.0442	0.0242	0.00324 (J)	<0.0002			
5/30/2017		0.0465						
5/31/2017			0.0441	0.225				
2/13/2018		0.062	0.0179	0.00661 (J)	<0.0002			
5/22/2018		0.0443	0.028					
5/23/2018					<0.0002			
5/24/2018				0.158				
6/12/2018		0.0512	0.0366	0.291	<0.0002			
10/17/2018		0.0751	0.0745	0.49	<0.0002			
11/19/2018		0.0825	0.0225	0.386	<0.0002			
3/5/2019	0.14							
4/10/2019		0.0445	0.0152	0.0144	<0.0002			
5/14/2019		0.0485	0.0222	0.00536	<0.0002			
10/8/2019		0.0778	0.0674	1.07 (o)				
10/10/2019					<0.0002			
10/16/2019	0.168	0.08	0.073	0.848 (o)	<0.0002			
2/3/2020		0.0495	0.0193	0.0114	<0.0002			
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					<0.0002	<0.0002		0.237
2/22/2021		0.0657	0.0161	0.0515	<0.0002			
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	<0.0002			
7/13/2021	0.141						0.00077	0.193
7/14/2021						0.00018 (J)		

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 11/16/2021 4:33 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)				

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 11/16/2021 4:33 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
8/24/2016		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)		

Time Series

Constituent: Fluoride (mg/L) Analysis Run 11/16/2021 4:33 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		<0.1		0.156	
10/14/2019				0.619	0.37	<0.1	0.449	0.118	
10/16/2019	0.0875 (J)								
11/26/2019		<0.1							
2/3/2020				0.427	0.438		0.555		
2/4/2020	0.0743 (J)	<0.1	0.115			<0.1		0.132	
2/5/2020									0.162
8/4/2020	0.109		0.113	0.389	0.349				
8/5/2020		<0.1				<0.1	0.363	0.119	0.256
3/1/2021				0.449				0.106	0.346
3/2/2021	0.0758 (J)	<0.1	0.167						
3/3/2021					0.458	<0.1	0.262		
7/14/2021	0.0848 (J)	<0.1	0.196	0.556		<0.1	0.276	0.221	0.339
7/15/2021					0.493				

Time Series

Constituent: Fluoride (mg/L) Analysis Run 11/16/2021 4:33 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				
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		<0.1
7/12/2021		0.125	0.196	0.287	0.35			
7/13/2021	0.182						0.211	<0.1
7/14/2021						0.335		

Time Series

Constituent: Lead (mg/L) Analysis Run 11/16/2021 4:33 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				<0.0002		<0.0002		<0.0002	
10/3/2016				<0.0002		<0.0002		<0.0002	
10/26/2016				<0.0002		<0.0002		<0.0002	
11/21/2016				<0.0002		<0.0002		<0.0002	
1/17/2017				<0.0002		<0.0002		<0.0002	
3/20/2017				<0.0002				<0.0002	
3/21/2017						<0.0002			
4/17/2017				<0.0002		<0.0002			
4/18/2017								<0.0002	
5/30/2017				<0.0002		<0.0002		<0.0002	
2/13/2018				<0.0002		<0.0002		<0.0002	
6/11/2018				<0.0002		<0.0002			
6/12/2018								<0.0002	
10/17/2018				<0.0002		<0.0002		<0.0002	
3/4/2019	<0.0002								
3/5/2019					<0.0002		<0.0002		
4/10/2019				<0.0002		<0.0002		<0.0002	
10/14/2019				<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	
10/16/2019	<0.0002								
11/26/2019		0.00271 (J)							
2/3/2020				<0.0002	<0.0002		<0.0002		
2/4/2020	<0.0002	0.00334 (J)	<0.0002			<0.0002		<0.0002	
2/5/2020									<0.0002
8/4/2020	<0.0002		<0.0002	<0.0002	<0.0002				
8/5/2020		0.00329 (J)				<0.0002	<0.0002	<0.0002	<0.0002
3/1/2021				0.000157 (J)				0.000145 (J)	<0.0002
3/2/2021	0.000145 (J)	0.00478	<0.0002						
3/3/2021					<0.0002	0.000609	<0.0002		
7/14/2021	0.00014 (J)	0.00557	<0.0002	0.00018 (J)		0.00079	<0.0002	<0.0002	<0.0002
7/15/2021					<0.0002				

Time Series

Constituent: Lead (mg/L) Analysis Run 11/16/2021 4:33 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			<0.0002	<0.0002	<0.0002			
4/26/2016		<0.0002						
6/20/2016		<0.0002	<0.0002		<0.0002			
6/22/2016				<0.0002				
8/8/2016		<0.0002	<0.0002					
8/9/2016				<0.0002	<0.0002			
8/24/2016		<0.0002	<0.0002	<0.0002	<0.0002			
10/3/2016		<0.0002	<0.0002		<0.0002			
10/4/2016				<0.0002				
10/26/2016		<0.0002	<0.0002	<0.0002	<0.0002			
11/21/2016		<0.0002	<0.0002	<0.0002	<0.0002			
1/17/2017		<0.0002	<0.0002					
1/18/2017				<0.0002	<0.0002			
3/22/2017		<0.0002	<0.0002	<0.0002	<0.0002			
4/18/2017		<0.0002	<0.0002	<0.0002	<0.0002			
5/30/2017		<0.0002						
5/31/2017			<0.0002	<0.0002				
2/13/2018		<0.0002	<0.0002	<0.0002	<0.0002			
5/22/2018		<0.0002	<0.0002					
5/23/2018					<0.0002			
5/24/2018				<0.0002				
6/12/2018		<0.0002	<0.0002	<0.0002	<0.0002			
10/17/2018		<0.0002	<0.0002	0.00102 (J)	<0.0002			
11/19/2018		<0.0002	<0.0002	0.00692 (o)	<0.0002			
3/5/2019	<0.0002							
4/10/2019		<0.0002	<0.0002	<0.0002	<0.0002			
5/14/2019		<0.0002	<0.0002	<0.0002	<0.0002			
10/8/2019		<0.0002	<0.0002	<0.0002				
10/10/2019					<0.0002			
10/16/2019	<0.0002	<0.0002	<0.0002	0.00108 (J)	<0.0002			
2/3/2020		<0.0002	<0.0002	<0.0002	<0.0002			
2/4/2020	<0.0002							
8/3/2020		<0.0002	<0.0002	0.002 (J)				
8/4/2020	<0.0002						<0.0002	
8/5/2020					<0.0002	<0.0002		0.00122 (J)
2/22/2021		<0.0002	<0.0002	8.8E-05 (J)	<0.0002			
3/1/2021							<0.0002	
3/2/2021	0.000206							
3/3/2021						<0.0002		0.000876
7/12/2021		<0.0002	<0.0002	8E-05 (J)	<0.0002			
7/13/2021	0.00016 (J)						<0.0002	0.00096
7/14/2021						<0.0002		

Time Series

Constituent: Lithium (mg/L) Analysis Run 11/16/2021 4:33 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				

Time Series

Constituent: Lithium (mg/L) Analysis Run 11/16/2021 4:33 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				
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		

Time Series

Constituent: Mercury (mg/L) Analysis Run 11/16/2021 4:33 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				

Time Series

Constituent: Mercury (mg/L) Analysis Run 11/16/2021 4:33 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				
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		

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 11/16/2021 4:33 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				<0.0002		<0.0002		0.0031 (J)	
10/3/2016				<0.0002		<0.0002		<0.0002	
10/26/2016				<0.0002		<0.0002		<0.0002	
11/21/2016				<0.0002		<0.0002		<0.0002	
1/17/2017				<0.0002		<0.0002		<0.0002	
3/20/2017				<0.0002				<0.0002	
3/21/2017						<0.0002			
4/17/2017				<0.0002		<0.0002			
4/18/2017								<0.0002	
5/30/2017				<0.0002		<0.0002		<0.0002	
2/13/2018				<0.0002		<0.0002		<0.0002	
6/11/2018				<0.0002		<0.0002			
6/12/2018								<0.0002	
10/17/2018				<0.0002		<0.0002		<0.0002	
3/4/2019	<0.0002								
3/5/2019					0.00347 (J)		<0.0002		
4/10/2019				<0.0002		<0.0002		<0.0002	
10/14/2019				<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	
10/16/2019	<0.0002								
11/26/2019		<0.0002							
2/3/2020				<0.0002	<0.0002		<0.0002		
2/4/2020	<0.0002	<0.0002	<0.0002			<0.0002		<0.0002	
2/5/2020									<0.0002
8/4/2020	<0.0002		<0.0002	<0.0002	<0.0002				
8/5/2020		<0.0002				<0.0002	<0.0002	<0.0002	<0.0002
3/1/2021				0.00022				0.00277	0.000654
3/2/2021	<0.0002	<0.0002	0.00138						
3/3/2021					7.93E-05 (J)	<0.0002	<0.0002		
7/14/2021	<0.0002	<0.0002	0.0005	0.00026		<0.0002	<0.0002	0.00015 (J)	0.00026
7/15/2021					9E-05 (J)				

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 11/16/2021 4:33 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			<0.0002	<0.0002	<0.0002			
4/26/2016		<0.0002						
6/20/2016		<0.0002	<0.0002		<0.0002			
6/22/2016				<0.0002				
8/8/2016		<0.0002	<0.0002					
8/9/2016				<0.0002	<0.0002			
8/24/2016		<0.0002	<0.0002	<0.0002	<0.0002			
10/3/2016		<0.0002	<0.0002		<0.0002			
10/4/2016				<0.0002				
10/26/2016		<0.0002	<0.0002	<0.0002	<0.0002			
11/21/2016		<0.0002	<0.0002	<0.0002	<0.0002			
1/17/2017		<0.0002	<0.0002					
1/18/2017				<0.0002	<0.0002			
3/22/2017		<0.0002	<0.0002	<0.0002	<0.0002			
4/18/2017		<0.0002	<0.0002	<0.0002	<0.0002			
5/30/2017		<0.0002						
5/31/2017			<0.0002	<0.0002				
2/13/2018		<0.0002	<0.0002	<0.0002	<0.0002			
5/22/2018		<0.0002	<0.0002					
5/23/2018					<0.0002			
5/24/2018				<0.0002				
6/12/2018		<0.0002	<0.0002	<0.0002	<0.0002			
10/17/2018		<0.0002	<0.0002	<0.0002	<0.0002			
11/19/2018		<0.0002	<0.0002	<0.0002	<0.0002			
3/5/2019	<0.0002							
4/10/2019		<0.0002	<0.0002	<0.0002	<0.0002			
5/14/2019		<0.0002	<0.0002	<0.0002	<0.0002			
10/8/2019		<0.0002	<0.0002	<0.0002				
10/10/2019					<0.0002			
10/16/2019	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002			
2/3/2020		<0.0002	<0.0002	<0.0002	<0.0002			
2/4/2020	<0.0002							
8/3/2020		<0.0002	<0.0002	<0.0002				
8/4/2020	<0.0002						0.00423 (J)	
8/5/2020					<0.0002	0.00247 (J)		<0.0002
2/22/2021		<0.0002	<0.0002	<0.0002	0.000131 (J)			
3/1/2021							0.000532	
3/2/2021	<0.0002							
3/3/2021						0.00123		7.06E-05 (J)
7/12/2021		<0.0002	<0.0002	<0.0002	0.00014 (J)			
7/13/2021	<0.0002						0.00056	<0.0002
7/14/2021						0.00203		

Time Series

Constituent: pH (pH) Analysis Run 11/16/2021 4:33 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				

Time Series

Constituent: pH (pH) Analysis Run 11/16/2021 4:33 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				
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		

Time Series

Constituent: Selenium (mg/L) Analysis Run 11/16/2021 4:33 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				<0.00102		0.00234 (J)		<0.00102	
10/3/2016				<0.00102		0.00739 (J)		<0.00102	
10/26/2016				<0.00102		0.00266 (J)		<0.00102	
11/21/2016				<0.00102		0.00212 (J)		<0.00102	
1/17/2017				<0.00102		0.00263 (J)		<0.00102	
3/20/2017				<0.00102				<0.00102	
3/21/2017						0.00588 (J)			
4/17/2017				0.00521 (J)		0.00579 (J)			
4/18/2017								<0.00102	
5/30/2017				<0.00102		0.00471 (J)		<0.00102	
2/13/2018				0.00267 (J)		0.00498 (J)		<0.00102	
6/11/2018				0.00236 (J)		0.00388 (J)			
6/12/2018								<0.00102	
10/17/2018				<0.00102		<0.00102		<0.00102	
3/4/2019	<0.00102								
3/5/2019					<0.00102		<0.00102		
4/10/2019				0.00234 (J)		0.00322 (J)		<0.00102	
10/14/2019				<0.00102	<0.00102	<0.00102	<0.00102	<0.00102	
10/16/2019	<0.00102								
11/26/2019		0.00614 (J)							
2/3/2020				<0.00102	<0.00102		<0.00102		
2/4/2020	<0.00102	<0.00102	<0.00102			<0.00102		<0.00102	
2/5/2020									<0.00102
8/4/2020	<0.00102		<0.00102	<0.00102	<0.00102				
8/5/2020		0.00417 (J)				0.00298 (J)	<0.00102	<0.00102	<0.00102
3/1/2021				0.00141				<0.00102	<0.00102
3/2/2021	<0.00102	0.00463	<0.00102						
3/3/2021					<0.00102	0.00294	0.000749 (J)		
7/14/2021	<0.00102	0.00441	<0.00102	0.00151		0.00563	0.00095 (J)	<0.00102	<0.00102
7/15/2021					<0.00102				

Time Series

Constituent: Selenium (mg/L) Analysis Run 11/16/2021 4:33 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			<0.00102	<0.00102	<0.00102			
4/26/2016		0.00261 (J)						
6/20/2016		0.00242 (J)	<0.00102		<0.00102			
6/22/2016				<0.00102				
8/8/2016		0.00253 (J)	<0.00102					
8/9/2016				<0.00102	<0.00102			
8/24/2016		<0.00102	<0.00102	<0.00102	<0.00102			
10/3/2016		0.00211 (J)	<0.00102		<0.00102			
10/4/2016				<0.00102				
10/26/2016		<0.00102	<0.00102	<0.00102	<0.00102			
11/21/2016		<0.00102	<0.00102	<0.00102	<0.00102			
1/17/2017		<0.00102	<0.00102					
1/18/2017				<0.00102	<0.00102			
3/22/2017		0.0022 (J)	<0.00102	0.0141	<0.00102			
4/18/2017		0.0027 (J)	<0.00102	0.0158	<0.00102			
5/30/2017		0.00316 (J)						
5/31/2017			<0.00102	0.00632 (J)				
2/13/2018		0.00211 (J)	<0.00102	0.0209	0.00403 (J)			
5/22/2018		0.00372 (J)	<0.00102					
5/23/2018					<0.00102			
5/24/2018				0.00918 (J)				
6/12/2018		0.00409 (J)	<0.00102	0.00836 (J)	<0.00102			
10/17/2018		<0.00102	<0.00102	<0.00102	<0.00102			
11/19/2018		<0.00102	<0.00102	0.00439 (J)	0.00436 (J)			
3/5/2019	<0.00102							
4/10/2019		0.00471 (J)	0.00322 (J)	0.0113	<0.00102			
5/14/2019		0.00316 (J)	<0.00102	0.0119	0.00201 (J)			
10/8/2019		<0.00102	<0.00102	0.00256 (J)				
10/10/2019					<0.00102			
10/16/2019	<0.00102	<0.00102	<0.00102	0.00286 (J)	<0.00102			
2/3/2020		0.00272 (J)	<0.00102	0.012	0.00212 (J)			
2/4/2020	<0.00102							
8/3/2020		0.00278 (J)	<0.00102	0.0146				
8/4/2020	<0.00102						<0.00102	
8/5/2020					0.00232 (J)	<0.00102		0.00571 (J)
2/22/2021		0.00241	<0.00102	0.0181	0.00222			
3/1/2021							<0.00102	
3/2/2021	0.00138							
3/3/2021						<0.00102		0.00554
7/12/2021		0.0028	<0.00102	0.0133	0.00155			
7/13/2021	0.00141						<0.00102	0.00607
7/14/2021						<0.00102		

Time Series

Constituent: Sulfate (mg/L) Analysis Run 11/16/2021 4:33 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				

Time Series

Constituent: Sulfate (mg/L) Analysis Run 11/16/2021 4:33 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				
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		

Time Series

Constituent: Thallium (mg/L) Analysis Run 11/16/2021 4:33 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				<0.0002		<0.0002		<0.0002	
10/3/2016				<0.0002		<0.0002		<0.0002	
10/26/2016				<0.0002		<0.0002		<0.0002	
11/21/2016				<0.0002		<0.0002		<0.0002	
1/17/2017				<0.0002		<0.0002		<0.0002	
3/20/2017				<0.0002				<0.0002	
3/21/2017						<0.0002			
4/17/2017				<0.0002		<0.0002			
4/18/2017								<0.0002	
5/30/2017				<0.0002		<0.0002		<0.0002	
2/13/2018				<0.0002		<0.0002		<0.0002	
6/11/2018				<0.0002		<0.0002			
6/12/2018								<0.0002	
10/17/2018				<0.0002		<0.0002		<0.0002	
3/4/2019	<0.0002								
3/5/2019					<0.0002		<0.0002		
4/10/2019				<0.0002		<0.0002		<0.0002	
10/14/2019				<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	
10/16/2019	<0.0002								
11/26/2019		0.000375 (J)							
2/3/2020				<0.0002	<0.0002		<0.0002		
2/4/2020	<0.0002	0.000491 (J)	<0.0002			<0.0002		<0.0002	
2/5/2020									<0.0002
8/4/2020	<0.0002		<0.0002	<0.0002	<0.0002				
8/5/2020		0.000297 (J)				0.000205 (J)	<0.0002	<0.0002	<0.0002
3/1/2021				<0.0002				<0.0002	<0.0002
3/2/2021	<0.0002	0.000371	<0.0002						
3/3/2021					<0.0002	0.000178 (J)	<0.0002		
7/14/2021	<0.0002	0.00034	<0.0002	<0.0002		9E-05 (J)	<0.0002	<0.0002	<0.0002
7/15/2021					<0.0002				

Time Series

Constituent: Thallium (mg/L) Analysis Run 11/16/2021 4:33 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			<0.0002	0.000205 (J)	<0.0002			
4/26/2016		<0.0002						
6/20/2016		<0.0002	<0.0002		<0.0002			
6/22/2016				<0.0002				
8/8/2016		<0.0002	<0.0002					
8/9/2016				<0.0002	<0.0002			
8/24/2016		<0.0002	<0.0002	<0.0002	<0.0002			
10/3/2016		<0.0002	<0.0002		<0.0002			
10/4/2016				<0.0002				
10/26/2016		<0.0002	<0.0002	0.000209 (J)	<0.0002			
11/21/2016		<0.0002	<0.0002	<0.0002	<0.0002			
1/17/2017		<0.0002	<0.0002					
1/18/2017				<0.0002	<0.0002			
3/22/2017		<0.0002	<0.0002	<0.0002	<0.0002			
4/18/2017		<0.0002	<0.0002	<0.0002	<0.0002			
5/30/2017		<0.0002						
5/31/2017			<0.0002	<0.0002				
2/13/2018		<0.0002	<0.0002	<0.0002	<0.0002			
5/22/2018		<0.0002	<0.0002					
5/23/2018					<0.0002			
5/24/2018				<0.0002				
6/12/2018		<0.0002	<0.0002	<0.0002	<0.0002			
10/17/2018		<0.0002	<0.0002	<0.0002	<0.0002			
11/19/2018		<0.0002	<0.0002	0.000226 (J)	<0.0002			
3/5/2019	0.00021 (J)							
4/10/2019		<0.0002	<0.0002	<0.0002	<0.0002			
5/14/2019		<0.0002	<0.0002	<0.0002	<0.0002			
10/8/2019		<0.0002	<0.0002	<0.0002				
10/10/2019					<0.0002			
10/16/2019	0.000262 (J)	<0.0002	<0.0002	<0.0002	<0.0002			
2/3/2020		<0.0002	<0.0002	<0.0002	<0.0002			
2/4/2020	0.000233 (J)							
8/3/2020		<0.0002	<0.0002	<0.0002				
8/4/2020	0.000265 (J)						<0.0002	
8/5/2020					<0.0002	<0.0002		<0.0002
2/22/2021		<0.0002	<0.0002	<0.0002	<0.0002			
3/1/2021							<0.0002	
3/2/2021	0.000221							
3/3/2021						<0.0002		7.98E-05 (J)
7/12/2021		<0.0002	<0.0002	<0.0002	<0.0002			
7/13/2021	0.00013 (J)						<0.0002	<0.0002
7/14/2021						<0.0002		

Time Series

Constituent: Total dissolved solids (mg/L) Analysis Run 11/16/2021 4:33 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				

Time Series

Constituent: Total dissolved solids (mg/L) Analysis Run 11/16/2021 4:33 PM

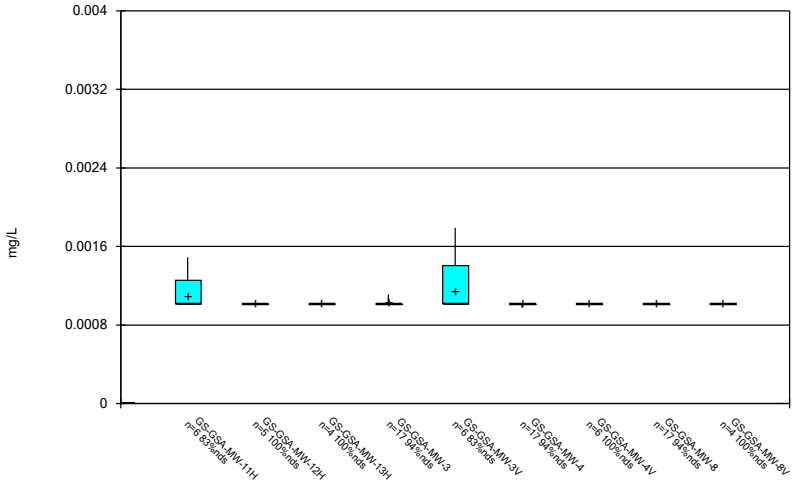
Plant Gorgas Client: Southern Company Data: Gorgas GSA

	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				
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		

FIGURE B.

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Box & Whiskers Plot

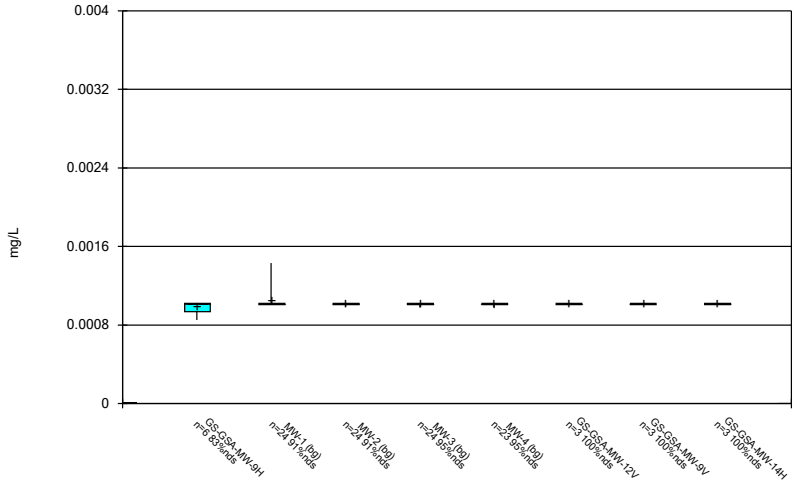


Constituent: Antimony Analysis Run 11/16/2021 4:33 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Box & Whiskers Plot

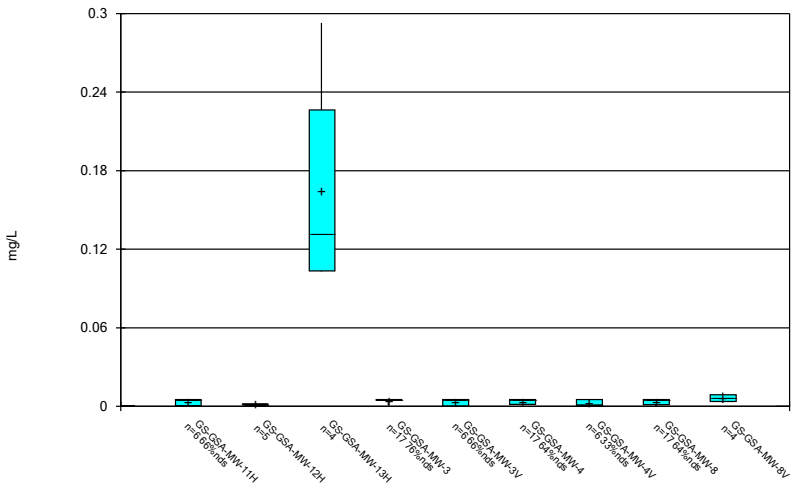


Constituent: Antimony Analysis Run 11/16/2021 4:33 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Box & Whiskers Plot

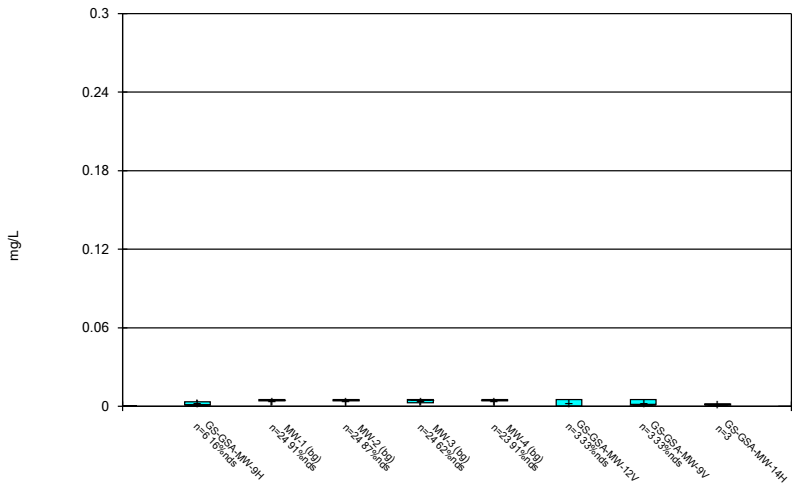


Constituent: Arsenic Analysis Run 11/16/2021 4:33 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

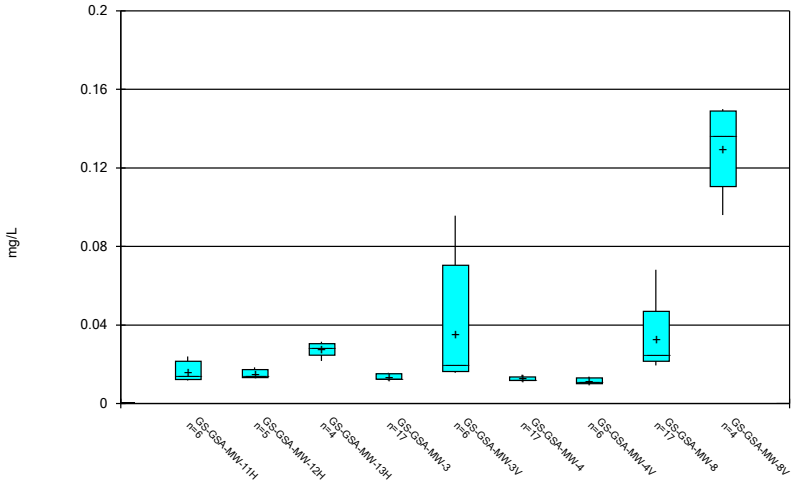
Box & Whiskers Plot



Constituent: Arsenic Analysis Run 11/16/2021 4:33 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Box & Whiskers Plot

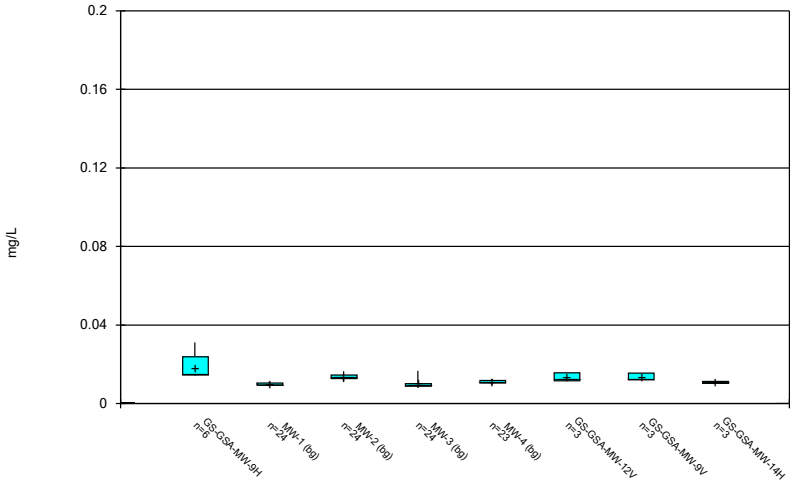


Constituent: Barium Analysis Run 11/16/2021 4:33 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Box & Whiskers Plot

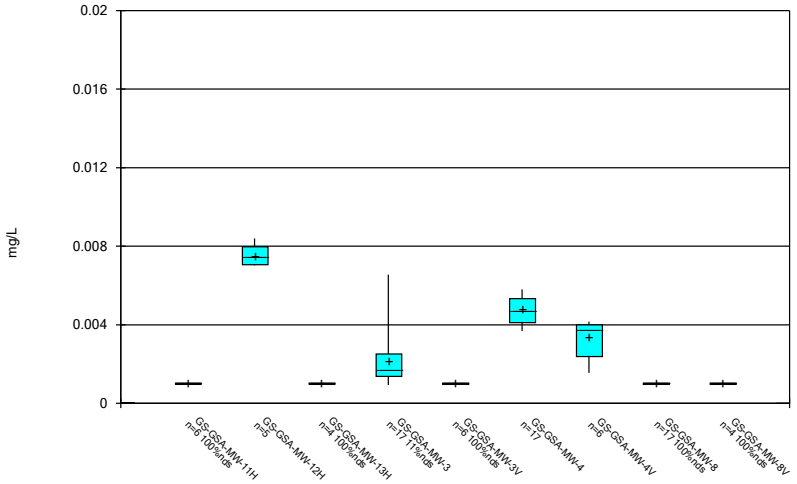


Constituent: Barium Analysis Run 11/16/2021 4:33 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Box & Whiskers Plot

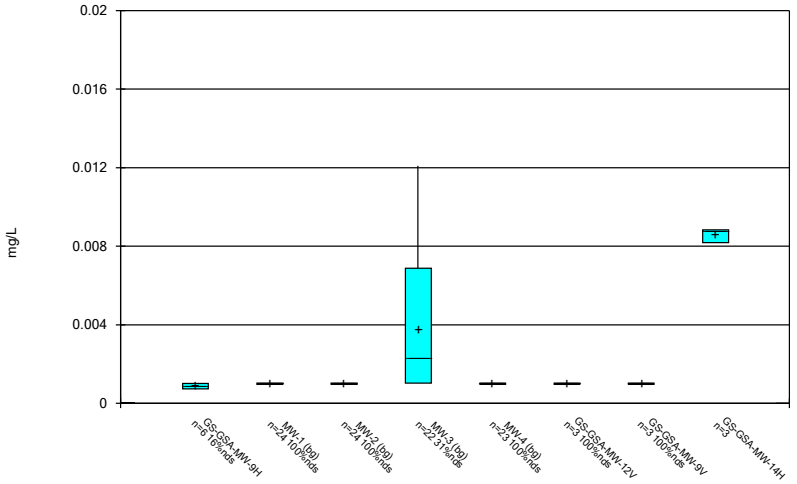


Constituent: Beryllium Analysis Run 11/16/2021 4:33 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

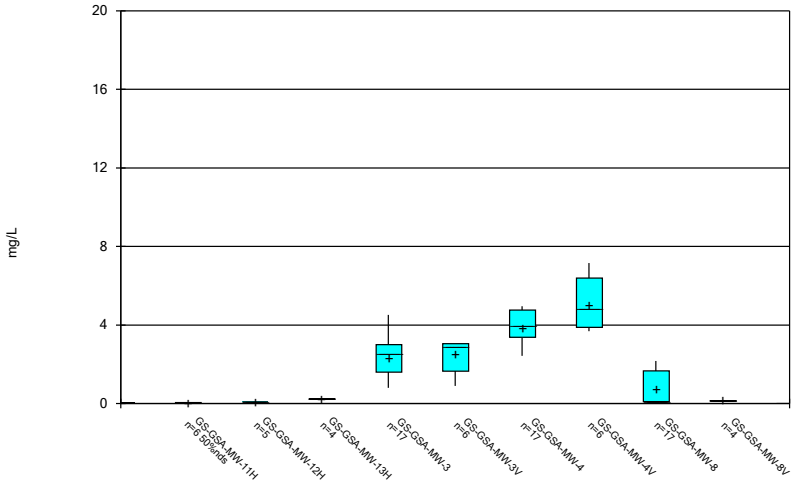
Box & Whiskers Plot



Constituent: Beryllium Analysis Run 11/16/2021 4:33 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Box & Whiskers Plot

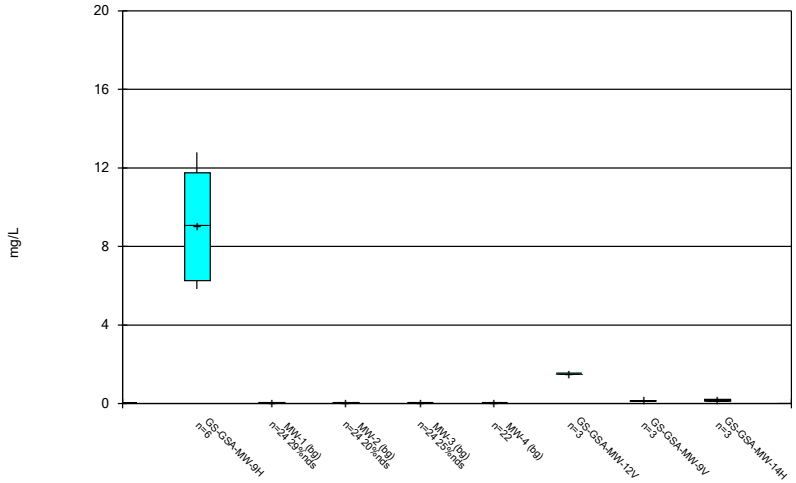


Constituent: Boron Analysis Run 11/16/2021 4:34 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Box & Whiskers Plot

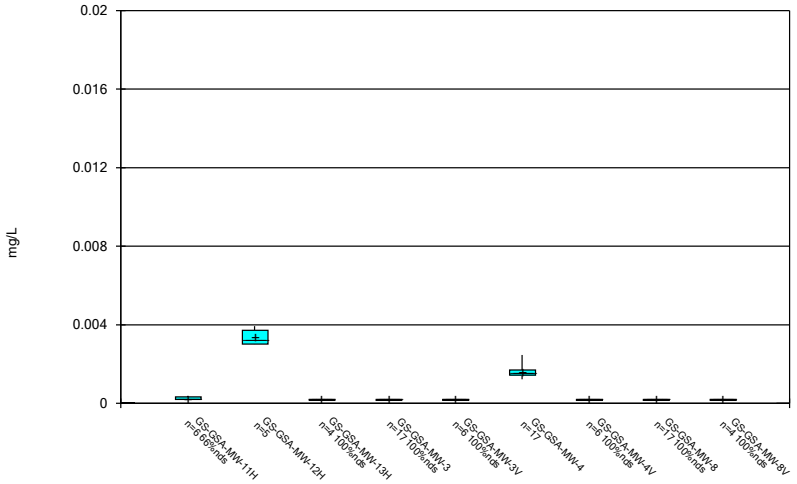


Constituent: Boron Analysis Run 11/16/2021 4:34 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Box & Whiskers Plot

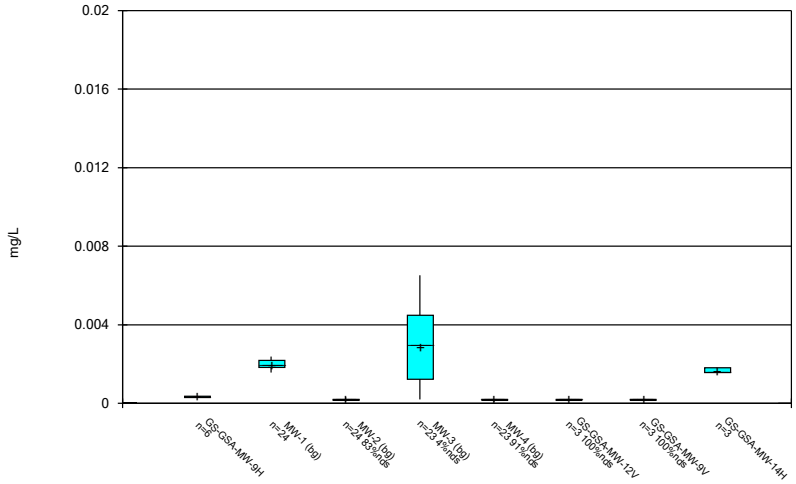


Constituent: Cadmium Analysis Run 11/16/2021 4:34 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

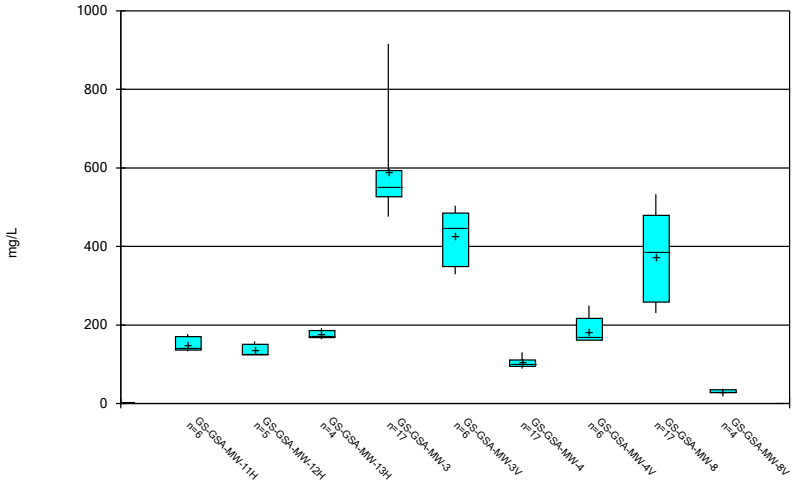
Box & Whiskers Plot



Constituent: Cadmium Analysis Run 11/16/2021 4:34 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Box & Whiskers Plot

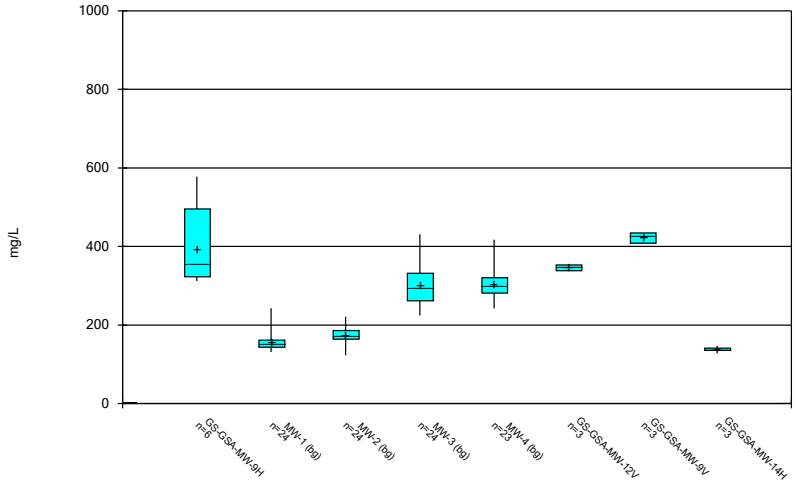


Constituent: Calcium Analysis Run 11/16/2021 4:34 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Box & Whiskers Plot

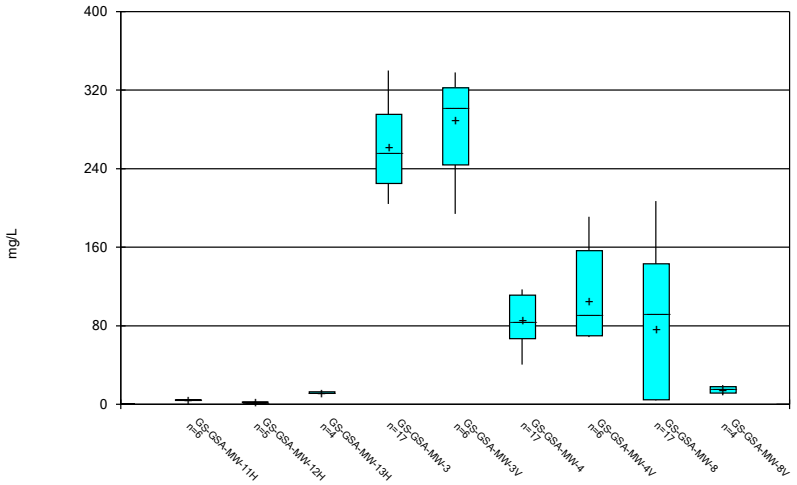


Constituent: Calcium Analysis Run 11/16/2021 4:34 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Box & Whiskers Plot

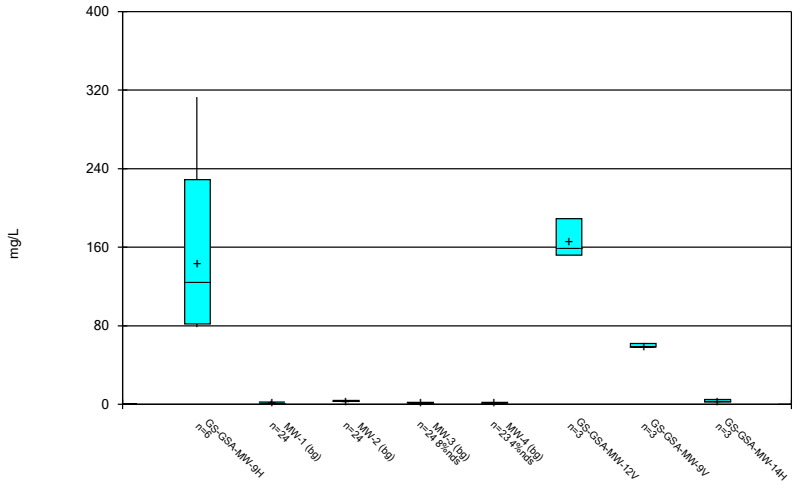


Constituent: Chloride Analysis Run 11/16/2021 4:34 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Box & Whiskers Plot

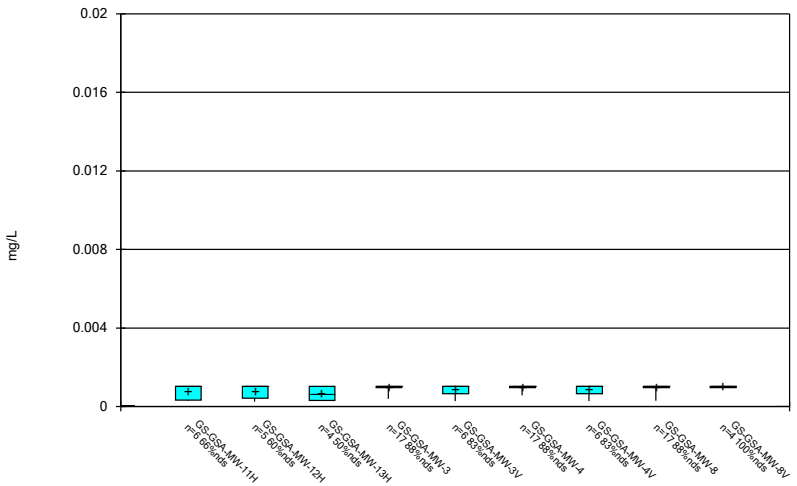


Constituent: Chloride Analysis Run 11/16/2021 4:34 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Box & Whiskers Plot

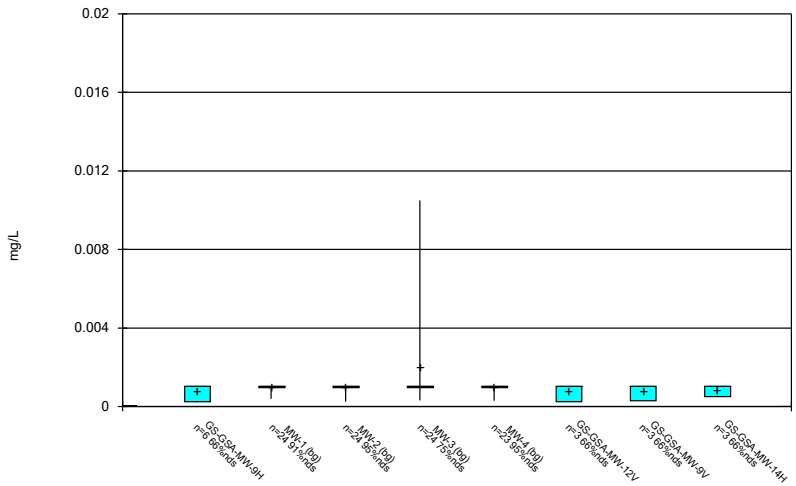


Constituent: Chromium Analysis Run 11/16/2021 4:34 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Box & Whiskers Plot

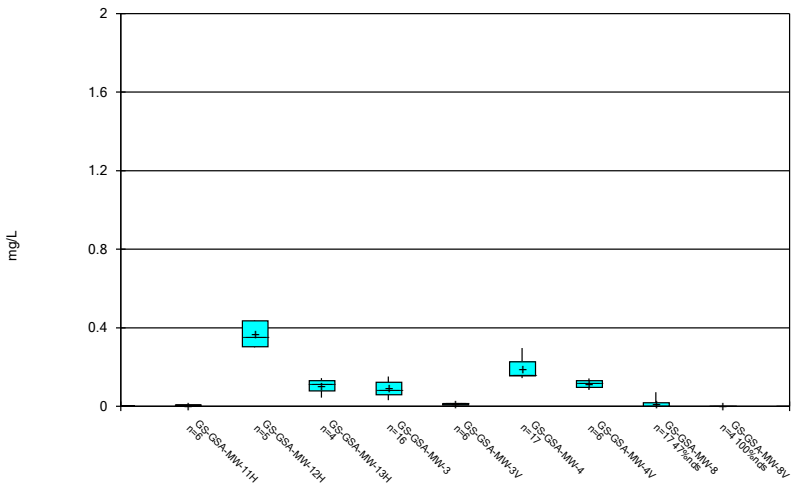


Constituent: Chromium Analysis Run 11/16/2021 4:34 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Box & Whiskers Plot

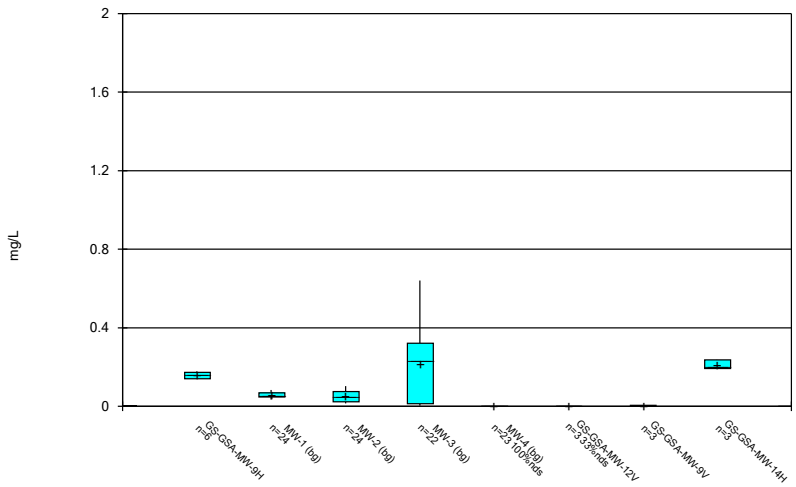


Constituent: Cobalt Analysis Run 11/16/2021 4:34 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

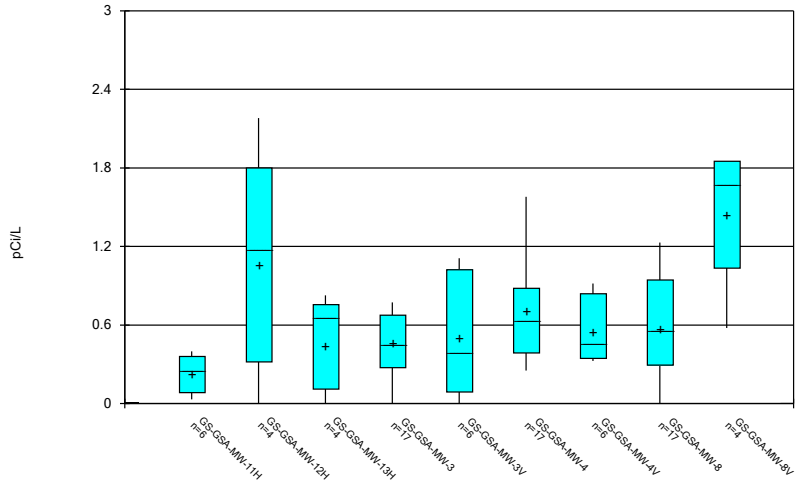
Box & Whiskers Plot



Constituent: Cobalt Analysis Run 11/16/2021 4:34 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Box & Whiskers Plot

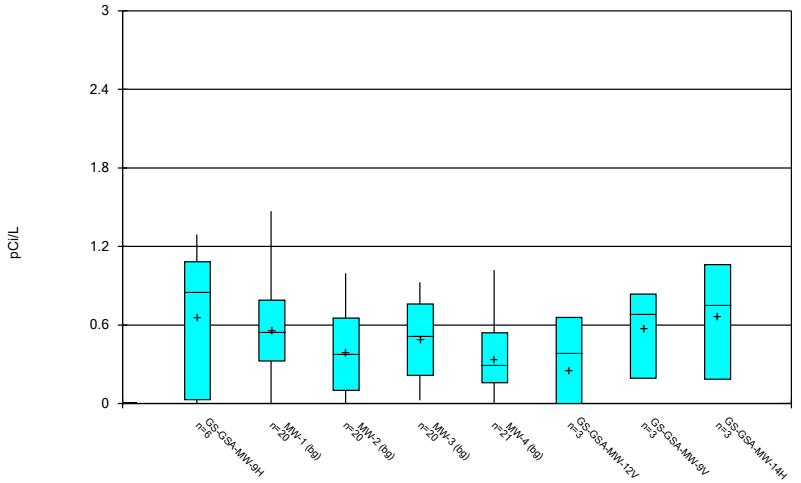


Constituent: Combined Radium 226 + 228 Analysis Run 11/16/2021 4:34 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Box & Whiskers Plot

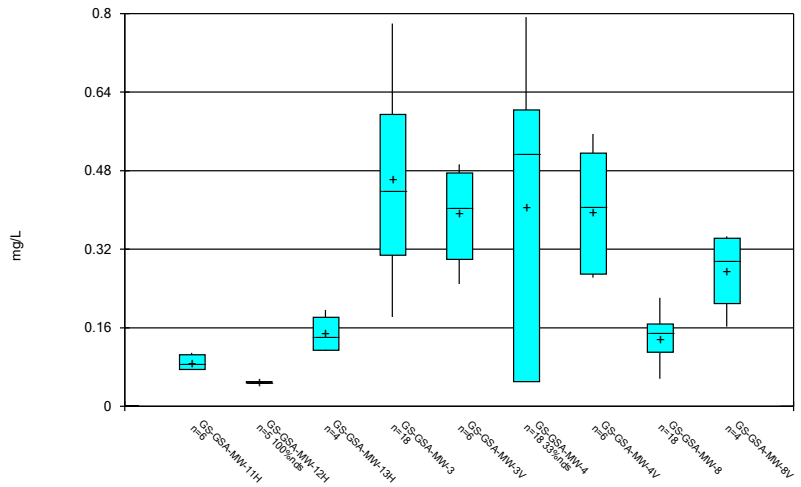


Constituent: Combined Radium 226 + 228 Analysis Run 11/16/2021 4:34 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Box & Whiskers Plot

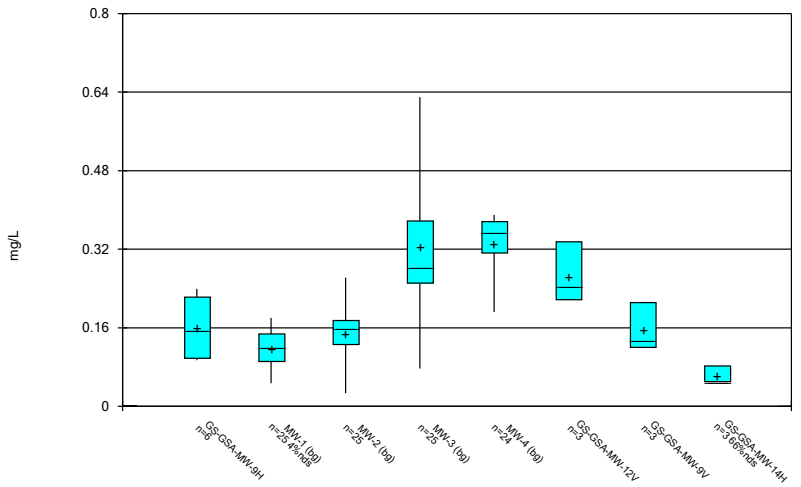


Constituent: Fluoride Analysis Run 11/16/2021 4:34 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Box & Whiskers Plot

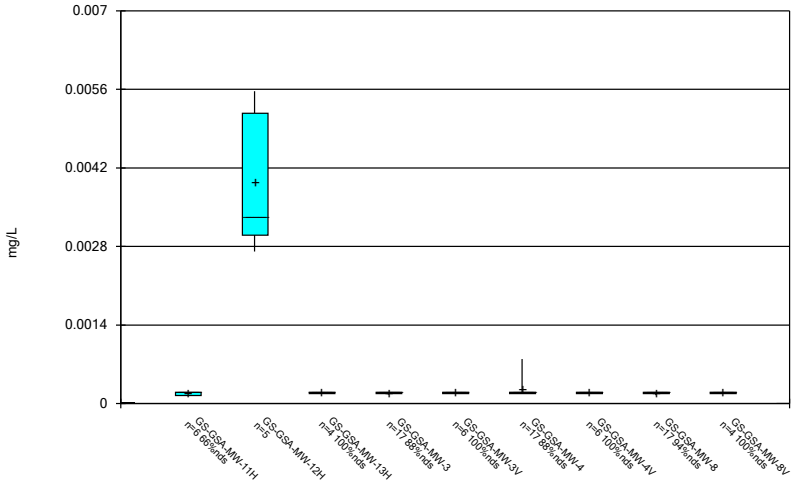


Constituent: Fluoride Analysis Run 11/16/2021 4:34 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Box & Whiskers Plot

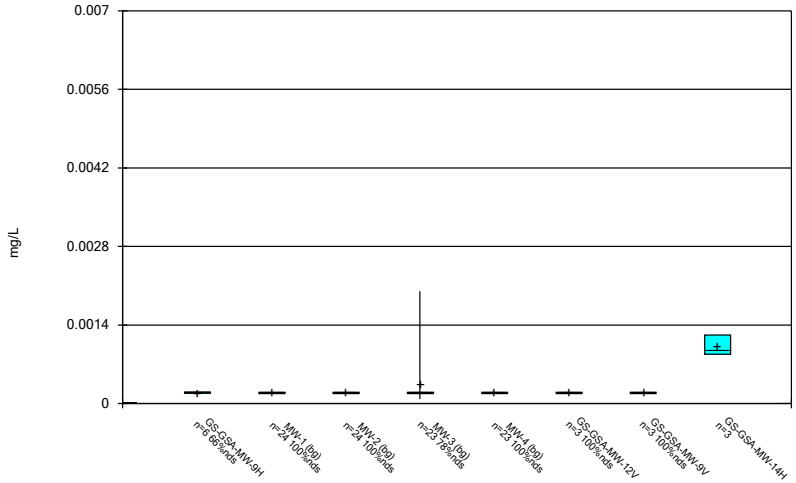


Constituent: Lead Analysis Run 11/16/2021 4:34 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Box & Whiskers Plot

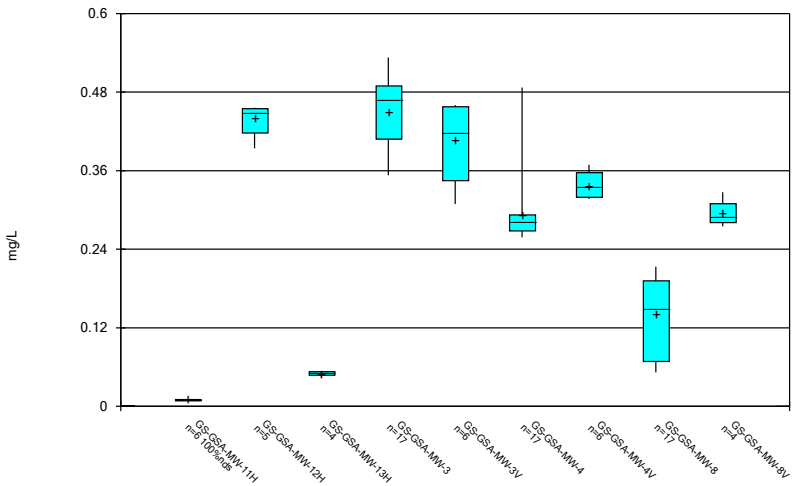


Constituent: Lead Analysis Run 11/16/2021 4:34 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Box & Whiskers Plot

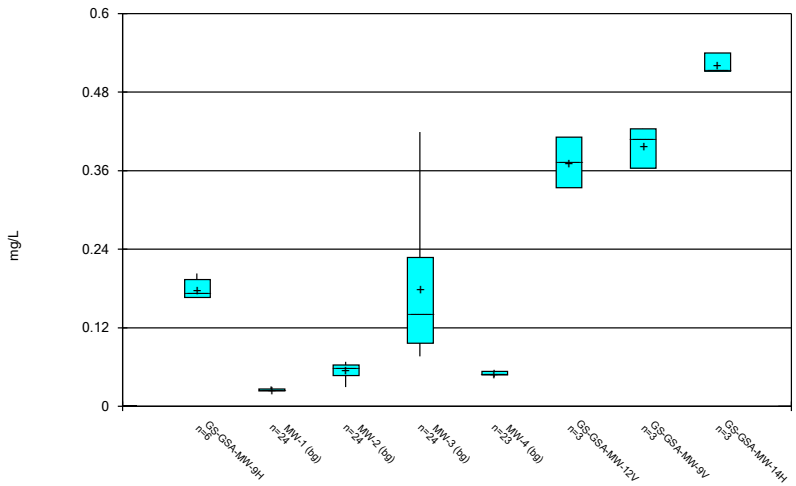


Constituent: Lithium Analysis Run 11/16/2021 4:34 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

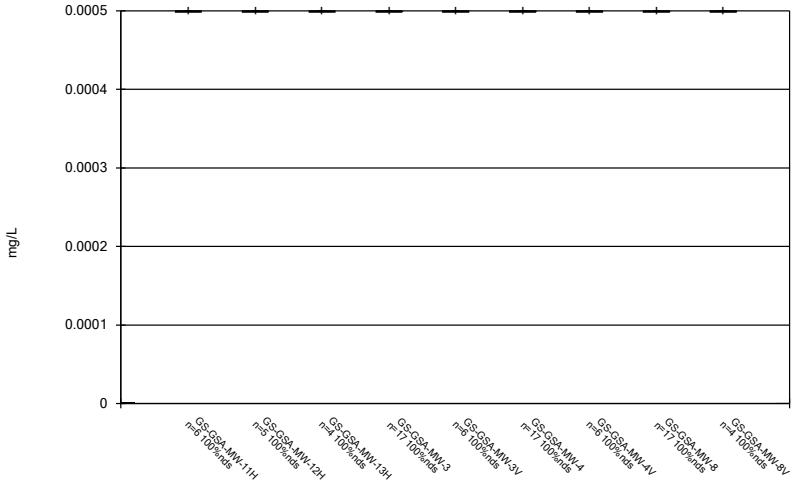
Box & Whiskers Plot



Constituent: Lithium Analysis Run 11/16/2021 4:34 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Box & Whiskers Plot

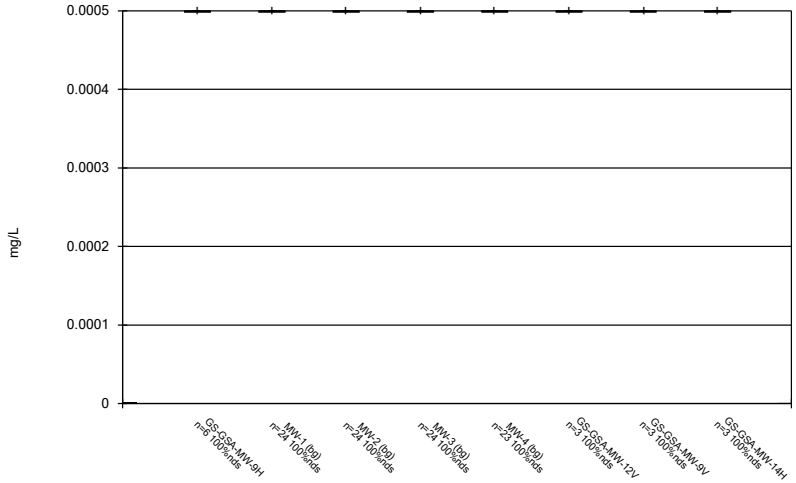


Constituent: Mercury Analysis Run 11/16/2021 4:34 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Box & Whiskers Plot

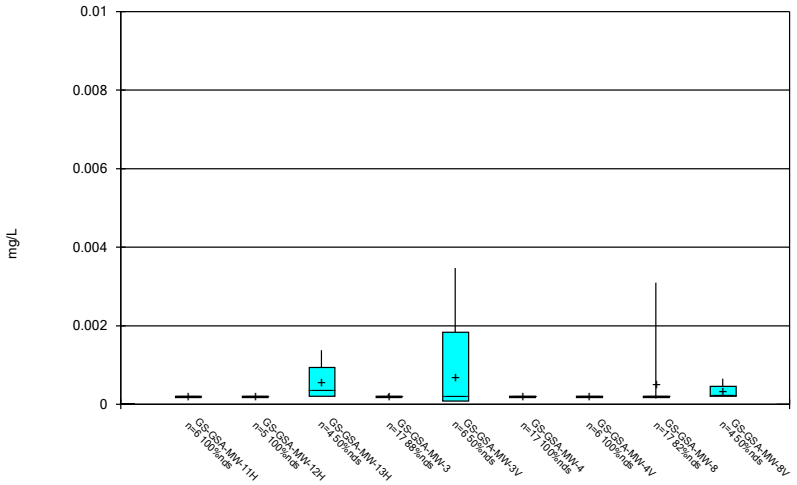


Constituent: Mercury Analysis Run 11/16/2021 4:34 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Box & Whiskers Plot

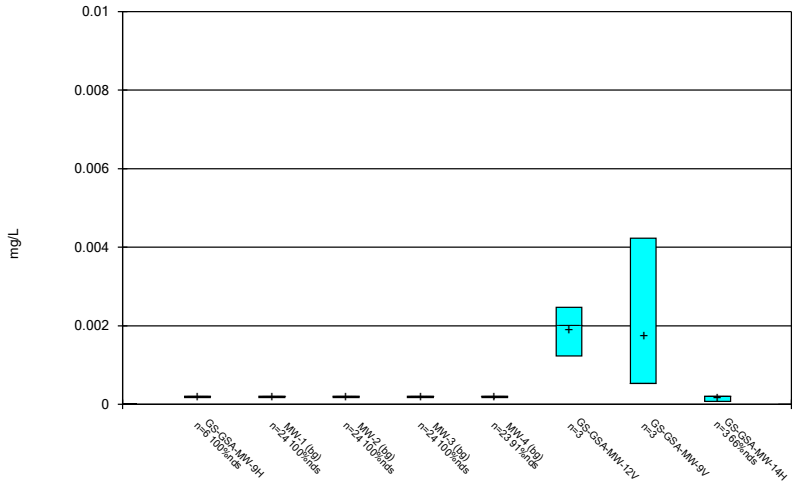


Constituent: Molybdenum Analysis Run 11/16/2021 4:34 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

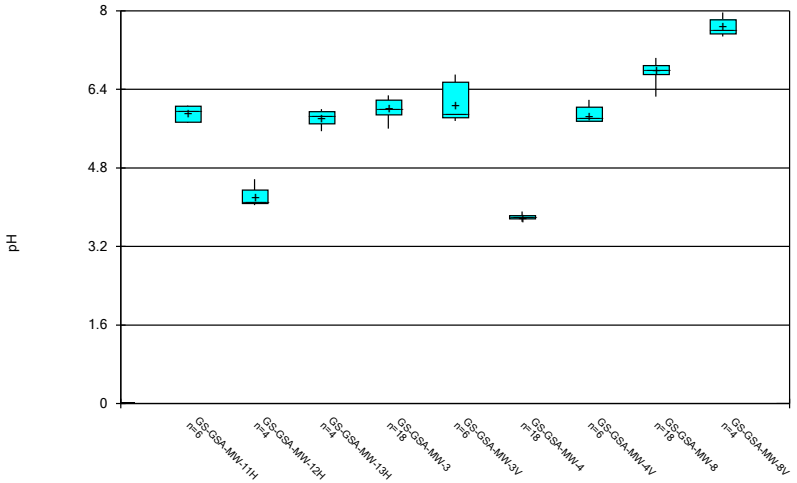
Box & Whiskers Plot



Constituent: Molybdenum Analysis Run 11/16/2021 4:34 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Box & Whiskers Plot

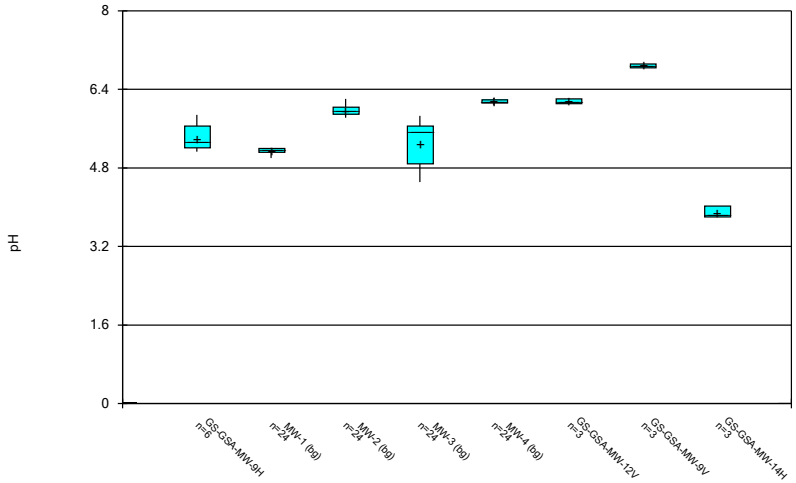


Constituent: pH Analysis Run 11/16/2021 4:34 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Box & Whiskers Plot

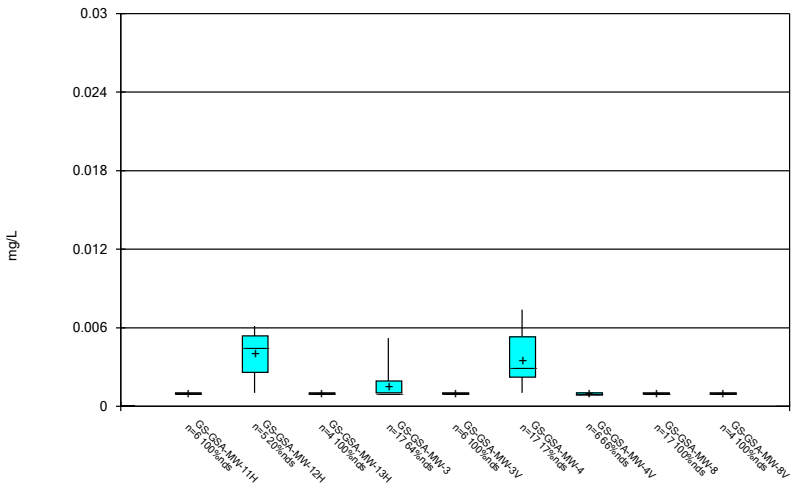


Constituent: pH Analysis Run 11/16/2021 4:34 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Box & Whiskers Plot

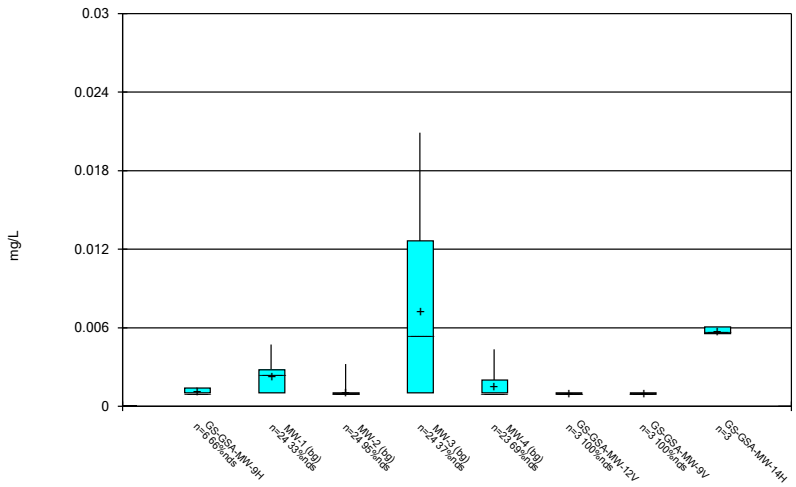


Constituent: Selenium Analysis Run 11/16/2021 4:34 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

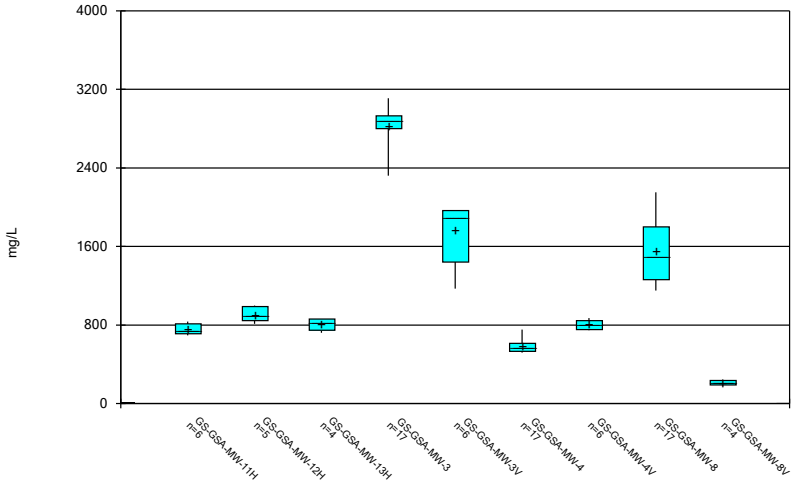
Box & Whiskers Plot



Constituent: Selenium Analysis Run 11/16/2021 4:34 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Box & Whiskers Plot

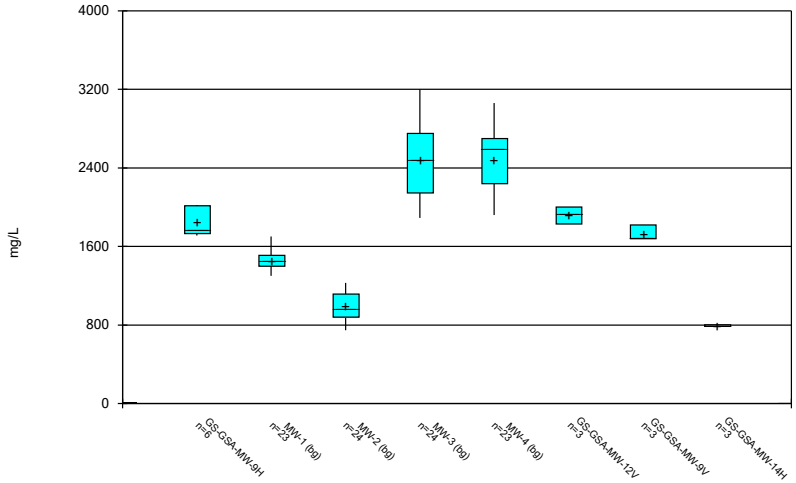


Constituent: Sulfate Analysis Run 11/16/2021 4:34 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Box & Whiskers Plot

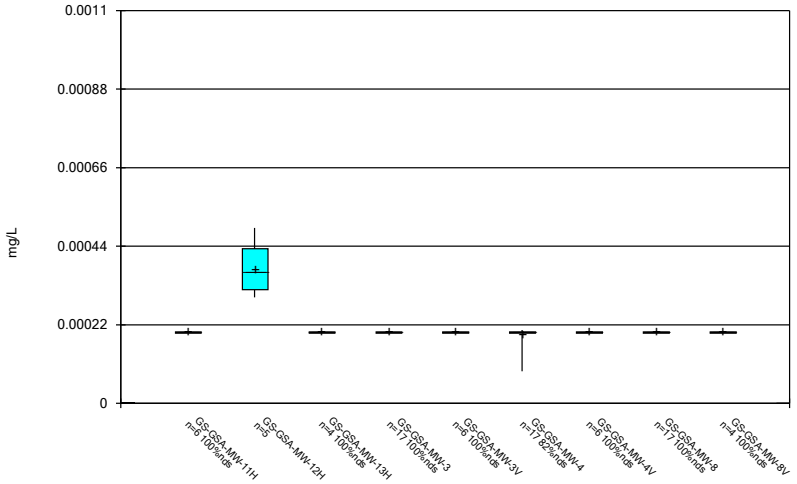


Constituent: Sulfate Analysis Run 11/16/2021 4:34 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Box & Whiskers Plot

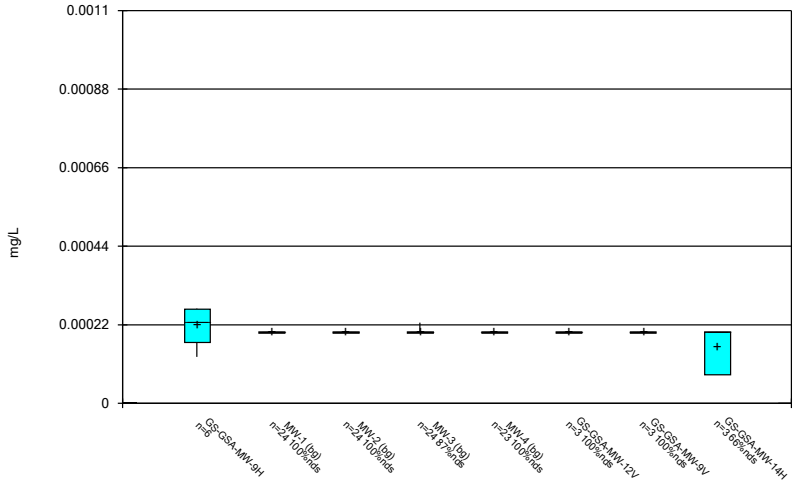


Constituent: Thallium Analysis Run 11/16/2021 4:34 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

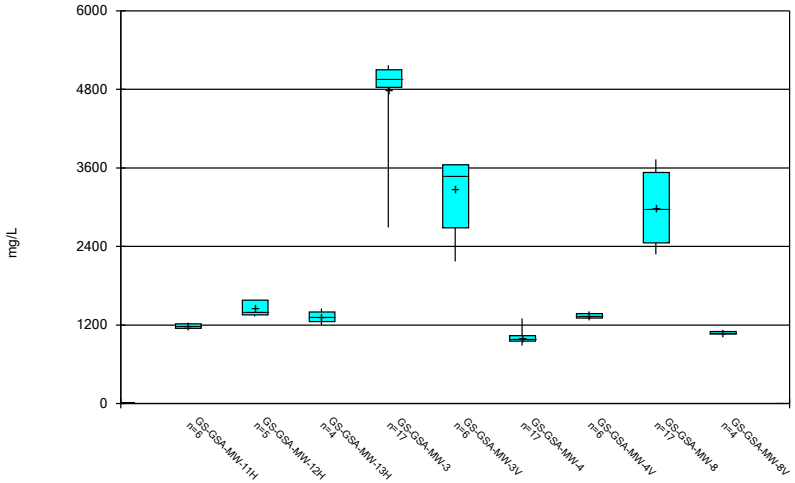
Box & Whiskers Plot



Constituent: Thallium Analysis Run 11/16/2021 4:34 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Box & Whiskers Plot

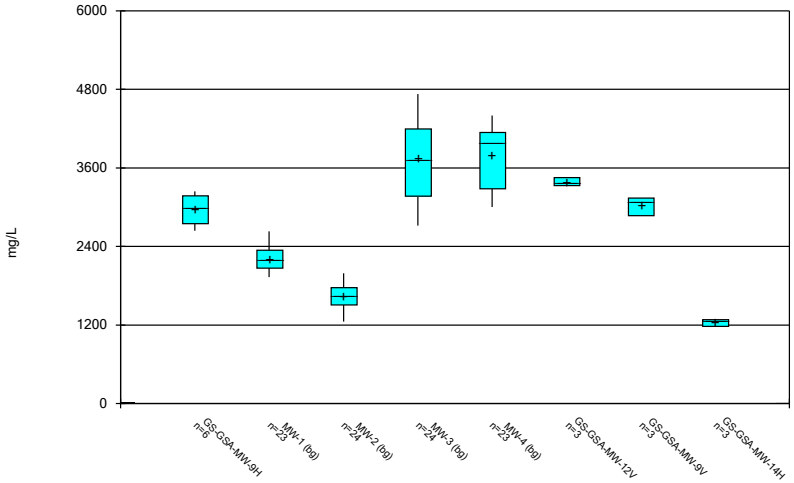


Constituent: Total dissolved solids Analysis Run 11/16/2021 4:34 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Total dissolved solids Analysis Run 11/16/2021 4:34 PM

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Outlier Summary

Plant Gorgas Client: Southern Company Data: Gorgas GSA Printed 11/16/2021, 4:36 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 C.

FIGURE D.

Welch's t-test/Mann-Whitney - Significant Results

Plant Gorgas Client: Southern Company Data: Gorgas GSA Printed 11/16/2021, 4:40 PM

Constituent	Well	Calc.	0.01	Method
pH (pH)	**MW-1 (bg)**	**-2.63**	**Yes**	**Mann-W**

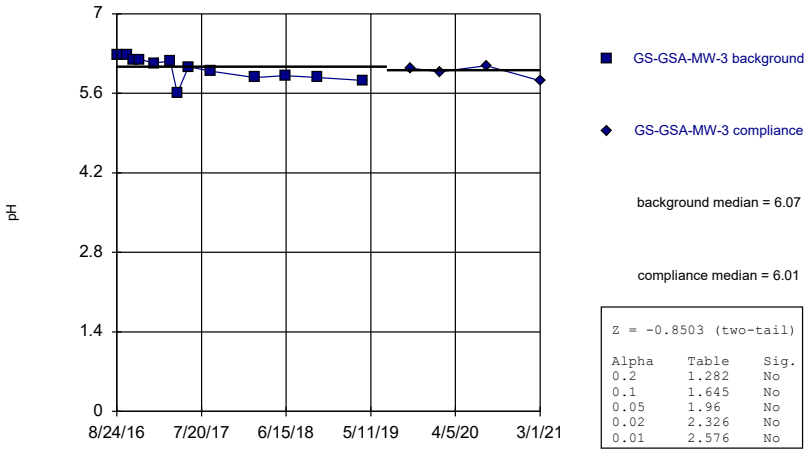
Welch's t-test/Mann-Whitney - All Results

Plant Gorgas Client: Southern Company Data: Gorgas GSA Printed 11/16/2021, 4:40 PM

Constituent	Well	Calc.	0.01	Method
pH (pH)	GS-GSA-MW-3	-0.8503	No	Mann-W
pH (pH)	GS-GSA-MW-4	1.717	No	Mann-W
pH (pH)	GS-GSA-MW-8	-0.3401	No	Mann-W
pH (pH)	**MW-1 (bg)**	**-2.63**	**Yes**	**Mann-W**
pH (pH)	MW-2 (bg)	0.8584	No	Mann-W
pH (pH)	MW-3 (bg)	-1.119	No	Mann-W
pH (pH)	MW-4 (bg)	0.5241	No	Mann-W
Sulfate (mg/L)	GS-GSA-MW-3	-0.5481	No	Mann-W
Sulfate (mg/L)	GS-GSA-MW-4	0.5498	No	Mann-W
Sulfate (mg/L)	GS-GSA-MW-8	1.517	No	Mann-W
Sulfate (mg/L)	MW-1 (bg)	0.9431	No	Mann-W
Sulfate (mg/L)	MW-2 (bg)	-0.1865	No	Mann-W
Sulfate (mg/L)	MW-3 (bg)	1.305	No	Mann-W
Sulfate (mg/L)	MW-4 (bg)	-1.256	No	Mann-W
Total dissolved solids (mg/L)	GS-GSA-MW-3	0.3038	No	Mann-W
Total dissolved solids (mg/L)	GS-GSA-MW-4	-0.7894	No	Mann-W
Total dissolved solids (mg/L)	GS-GSA-MW-8	1.104	No	Mann-W
Total dissolved solids (mg/L)	MW-1 (bg)	1.278	No	Mann-W
Total dissolved solids (mg/L)	MW-2 (bg)	0.448	No	Mann-W
Total dissolved solids (mg/L)	MW-3 (bg)	1.454	No	Mann-W
Total dissolved solids (mg/L)	MW-4 (bg)	-1.724	No	Mann-W

Mann-Whitney (Wilcoxon Rank Sum)

GS-GSA-MW-3

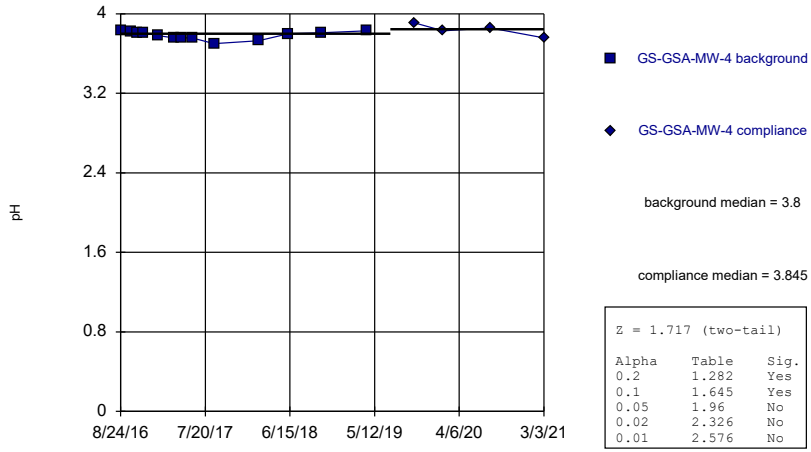


Constituent: pH Analysis Run 11/16/2021 4:38 PM View: Mann-Whitney
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Mann-Whitney (Wilcoxon Rank Sum)

GS-GSA-MW-4

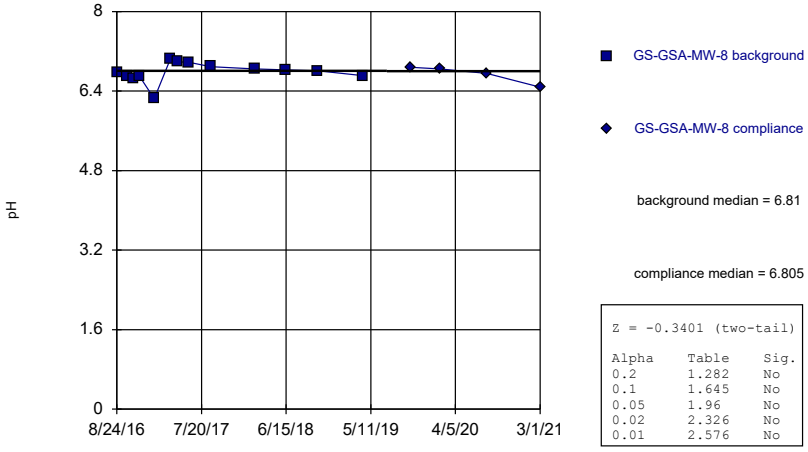


Constituent: pH Analysis Run 11/16/2021 4:38 PM View: Mann-Whitney
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Mann-Whitney (Wilcoxon Rank Sum)

GS-GSA-MW-8

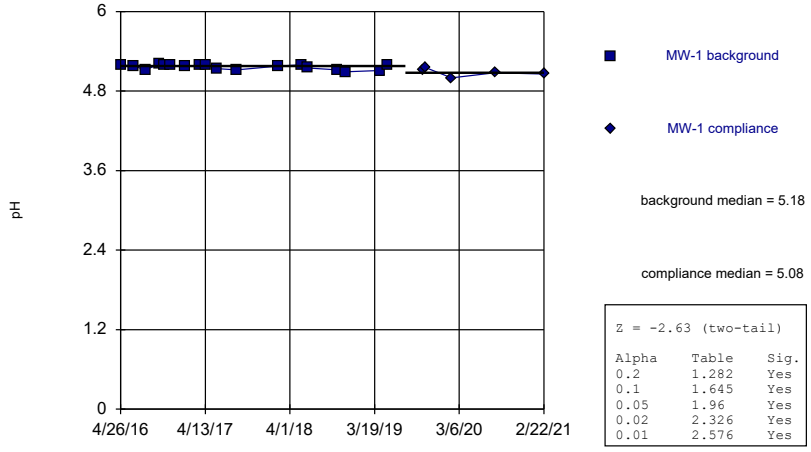


Constituent: pH Analysis Run 11/16/2021 4:38 PM View: Mann-Whitney
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Mann-Whitney (Wilcoxon Rank Sum)

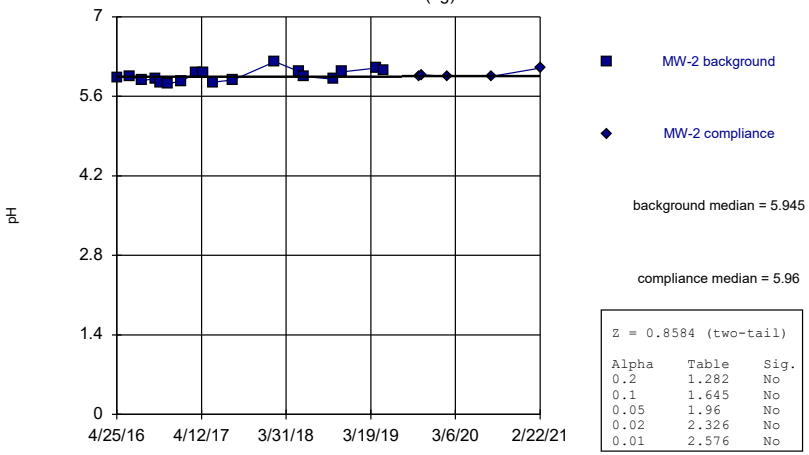
MW-1 (bg)



Constituent: pH Analysis Run 11/16/2021 4:38 PM View: Mann-Whitney
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Mann-Whitney (Wilcoxon Rank Sum)

MW-2 (bg)



background median = 5.945

compliance median = 5.96

Z = 0.8584 (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

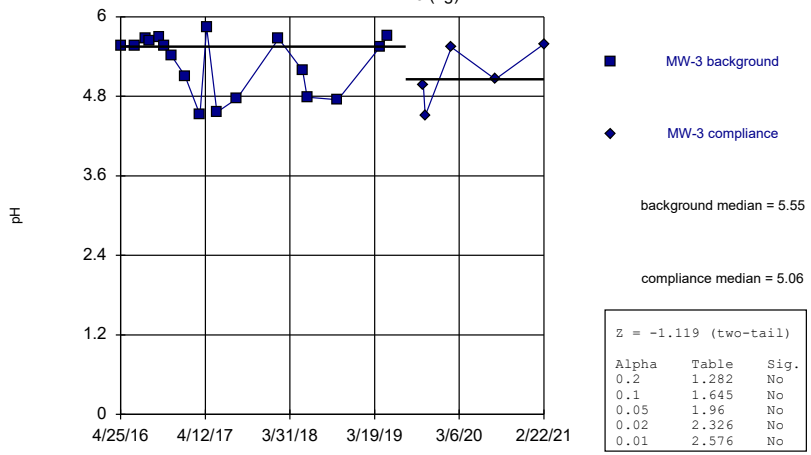
Constituent: pH Analysis Run 11/16/2021 4:38 PM View: Mann-Whitney

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Mann-Whitney (Wilcoxon Rank Sum)

MW-3 (bg)



background median = 5.55

compliance median = 5.06

Z = -1.119 (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

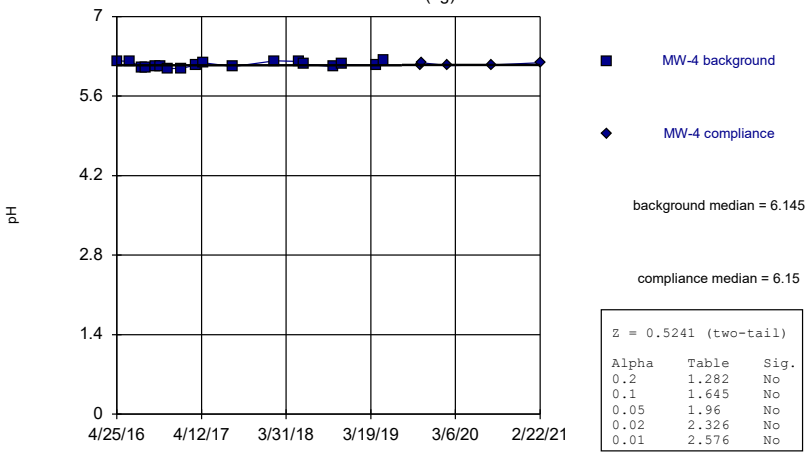
Constituent: pH Analysis Run 11/16/2021 4:38 PM View: Mann-Whitney

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Mann-Whitney (Wilcoxon Rank Sum)

MW-4 (bg)



background median = 6.145

compliance median = 6.15

Z = 0.5241 (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

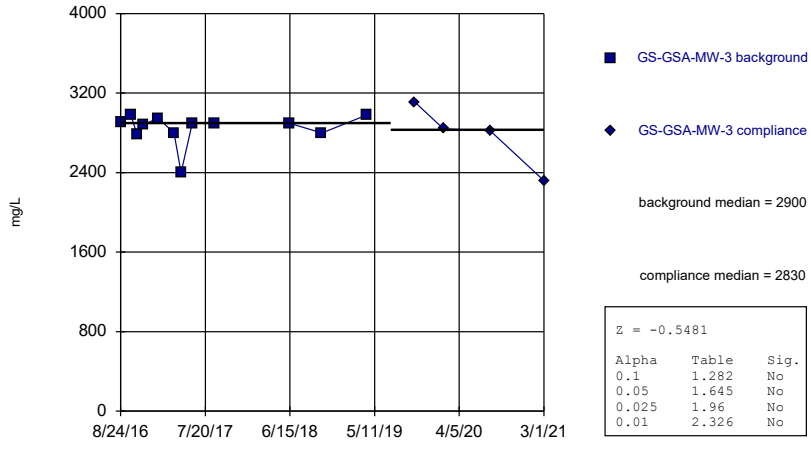
Constituent: pH Analysis Run 11/16/2021 4:38 PM View: Mann-Whitney

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Mann-Whitney (Wilcoxon Rank Sum)

GS-GSA-MW-3



background median = 2900

compliance median = 2830

Z = -0.5481

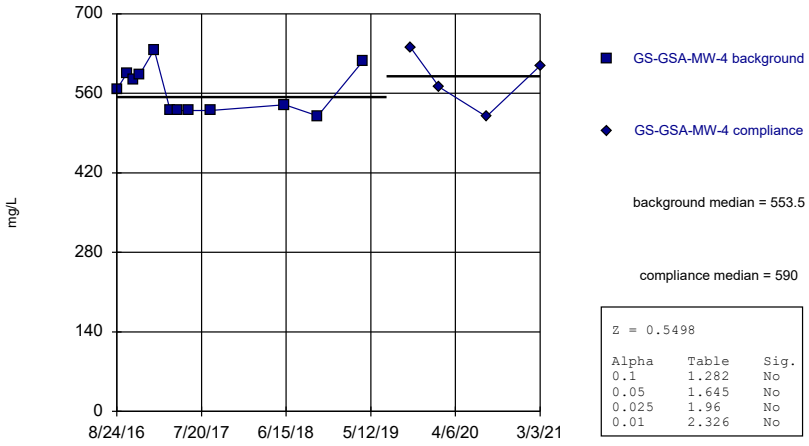
Alpha	Table	Sig.
0.1	1.282	No
0.05	1.645	No
0.025	1.96	No
0.01	2.326	No

Constituent: Sulfate Analysis Run 11/16/2021 4:38 PM View: Mann-Whitney

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Mann-Whitney (Wilcoxon Rank Sum)

GS-GSA-MW-4



Z = 0.5498

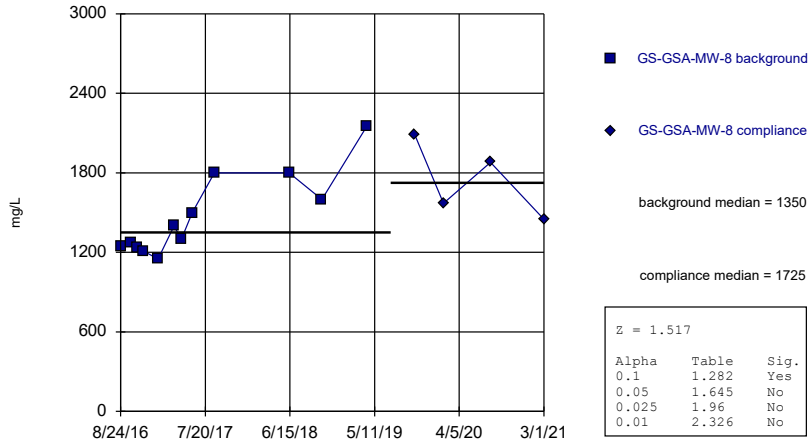
Alpha	Table	Sig.
0.1	1.282	No
0.05	1.645	No
0.025	1.96	No
0.01	2.326	No

Constituent: Sulfate Analysis Run 11/16/2021 4:38 PM View: Mann-Whitney
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Mann-Whitney (Wilcoxon Rank Sum)

GS-GSA-MW-8



Z = 1.517

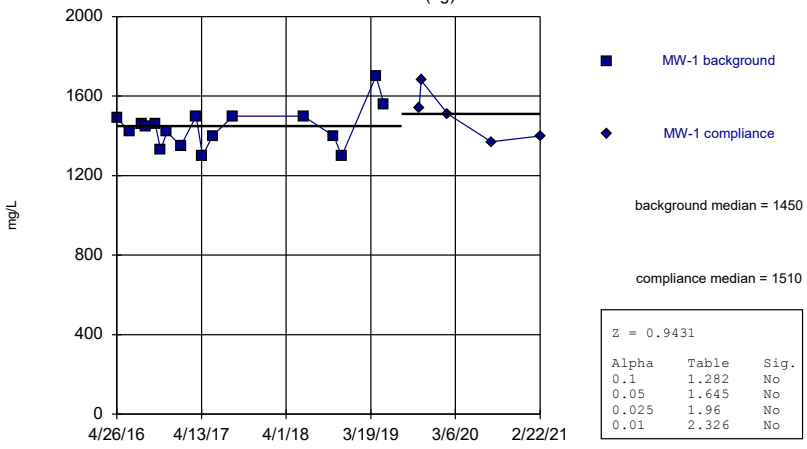
Alpha	Table	Sig.
0.1	1.282	Yes
0.05	1.645	No
0.025	1.96	No
0.01	2.326	No

Constituent: Sulfate Analysis Run 11/16/2021 4:38 PM View: Mann-Whitney
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Mann-Whitney (Wilcoxon Rank Sum)

MW-1 (bg)



Z = 0.9431

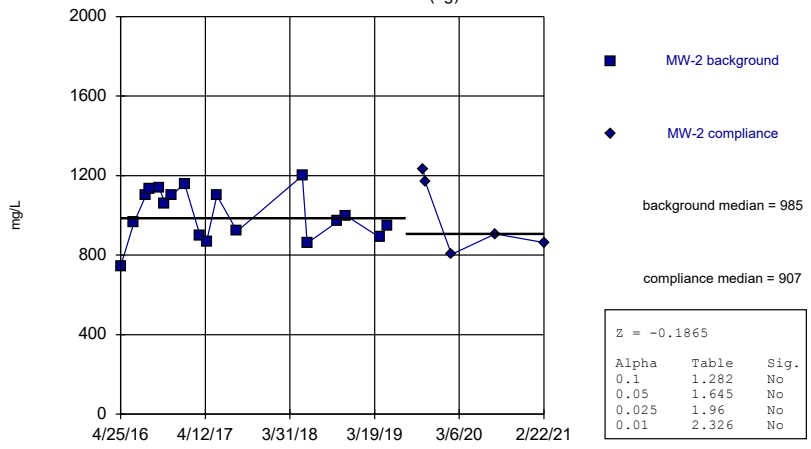
Alpha	Table	Sig.
0.1	1.282	No
0.05	1.645	No
0.025	1.96	No
0.01	2.326	No

Constituent: Sulfate Analysis Run 11/16/2021 4:38 PM View: Mann-Whitney
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Mann-Whitney (Wilcoxon Rank Sum)

MW-2 (bg)



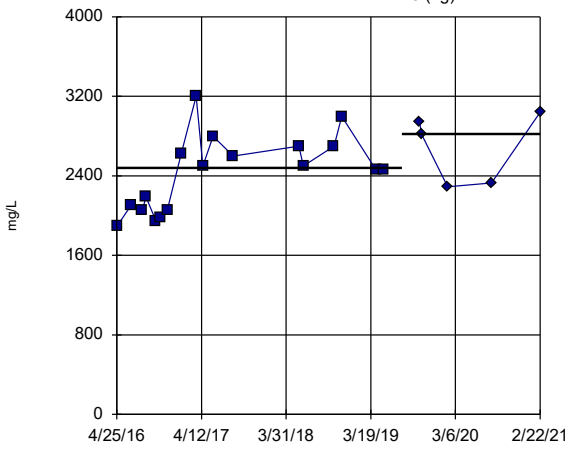
Z = -0.1865

Alpha	Table	Sig.
0.1	1.282	No
0.05	1.645	No
0.025	1.96	No
0.01	2.326	No

Constituent: Sulfate Analysis Run 11/16/2021 4:38 PM View: Mann-Whitney
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Mann-Whitney (Wilcoxon Rank Sum)

MW-3 (bg)



MW-3 background

MW-3 compliance

background median = 2480

compliance median = 2820

Z = 1.305

Alpha	Table	Sig.
0.1	1.282	Yes
0.05	1.645	No
0.025	1.96	No
0.01	2.326	No

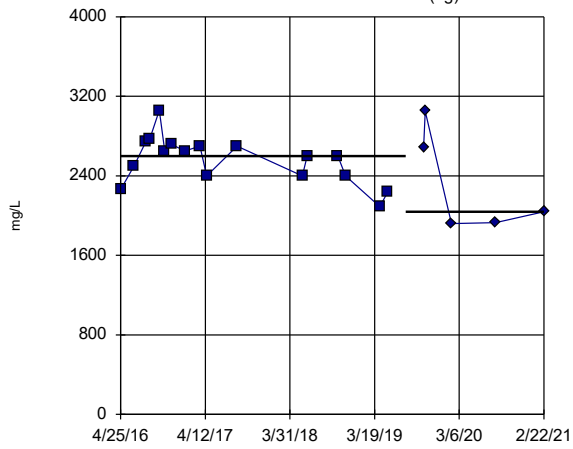
Constituent: Sulfate Analysis Run 11/16/2021 4:38 PM View: Mann-Whitney

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Mann-Whitney (Wilcoxon Rank Sum)

MW-4 (bg)



MW-4 background

MW-4 compliance

background median = 2600

compliance median = 2040

Z = -1.256

Alpha	Table	Sig.
0.1	1.282	No
0.05	1.645	No
0.025	1.96	No
0.01	2.326	No

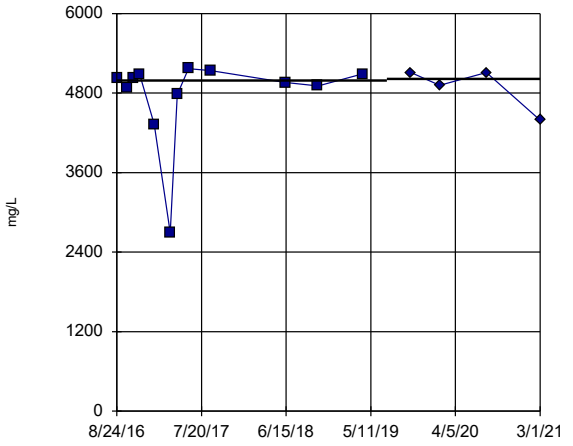
Constituent: Sulfate Analysis Run 11/16/2021 4:38 PM View: Mann-Whitney

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Mann-Whitney (Wilcoxon Rank Sum)

GS-GSA-MW-3



GS-GSA-MW-3 background

GS-GSA-MW-3 compliance

background median = 4990

compliance median = 5015

Z = 0.3038

Alpha	Table	Sig.
0.1	1.282	No
0.05	1.645	No
0.025	1.96	No
0.01	2.326	No

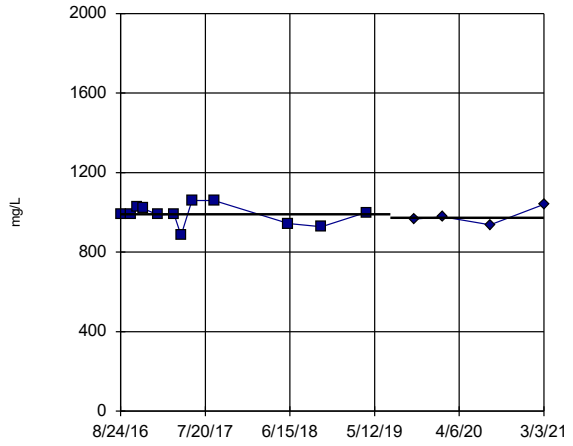
Constituent: Total dissolved solids Analysis Run 11/16/2021 4:38 PM View: Mann-Whitney

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Mann-Whitney (Wilcoxon Rank Sum)

GS-GSA-MW-4



GS-GSA-MW-4 background

GS-GSA-MW-4 compliance

background median = 991

compliance median = 972.5

Z = -0.7894

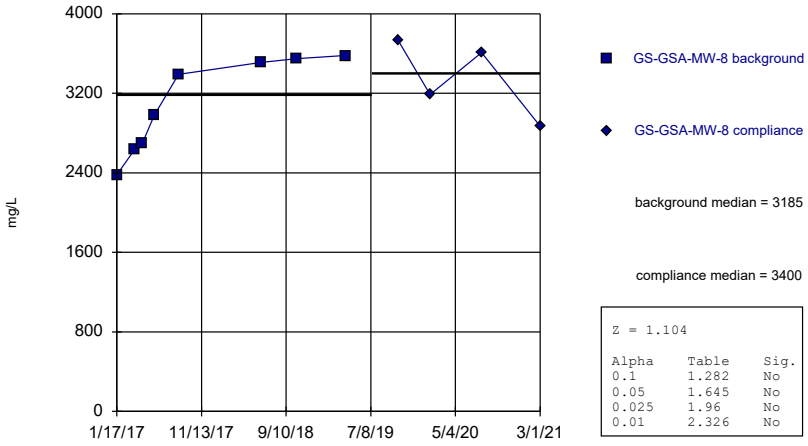
Alpha	Table	Sig.
0.1	1.282	No
0.05	1.645	No
0.025	1.96	No
0.01	2.326	No

Constituent: Total dissolved solids Analysis Run 11/16/2021 4:39 PM View: Mann-Whitney

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Mann-Whitney (Wilcoxon Rank Sum)

GS-GSA-MW-8

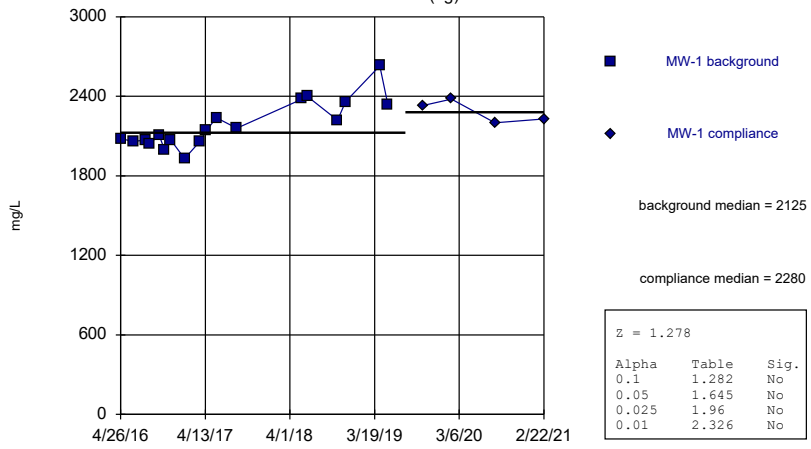


Constituent: Total dissolved solids Analysis Run 11/16/2021 4:39 PM View: Mann-Whitney
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Mann-Whitney (Wilcoxon Rank Sum)

MW-1 (bg)

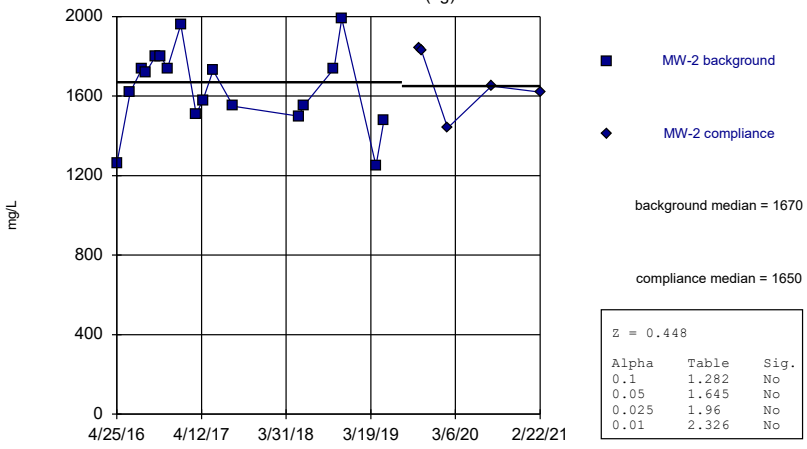


Constituent: Total dissolved solids Analysis Run 11/16/2021 4:39 PM View: Mann-Whitney
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Mann-Whitney (Wilcoxon Rank Sum)

MW-2 (bg)

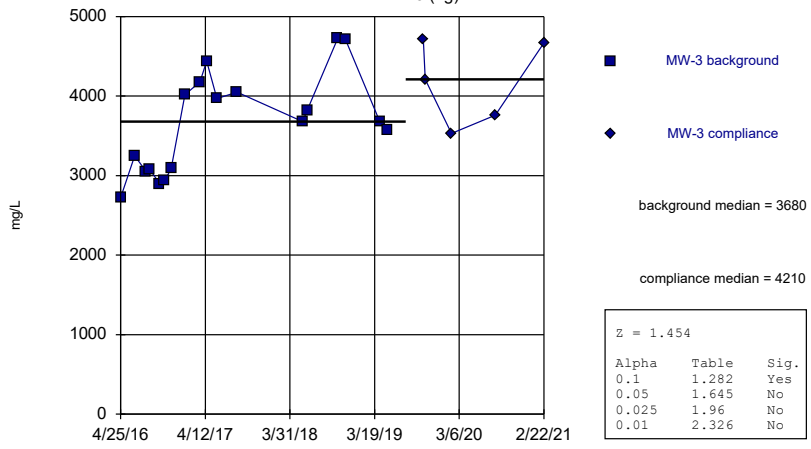


Constituent: Total dissolved solids Analysis Run 11/16/2021 4:39 PM View: Mann-Whitney
Plant Gorgas Client: Southern Company Data: Gorgas GSA

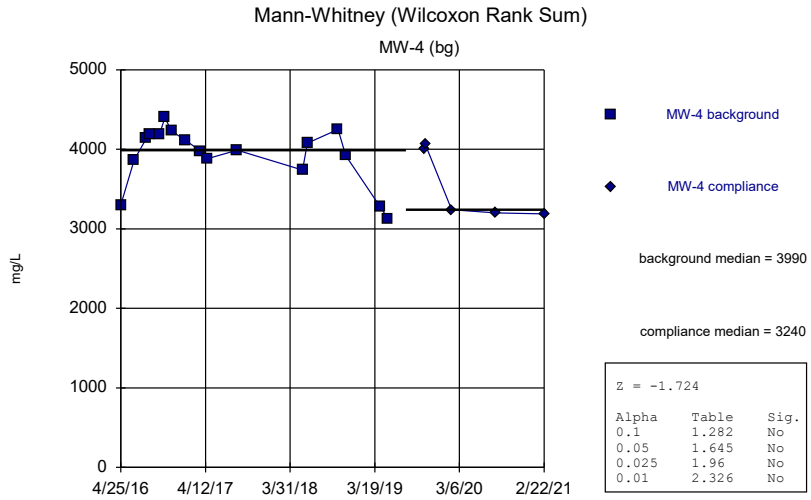
Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Mann-Whitney (Wilcoxon Rank Sum)

MW-3 (bg)



Constituent: Total dissolved solids Analysis Run 11/16/2021 4:39 PM View: Mann-Whitney
Plant Gorgas Client: Southern Company Data: Gorgas GSA



Constituent: Total dissolved solids Analysis Run 11/16/2021 4:39 PM View: Mann-Whitney
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Mann-Whitney (Wilcoxon Rank Sum)

Constituent: pH (pH) Analysis Run 11/16/2021 4:40 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

Mann-Whitney (Wilcoxon Rank Sum)

Constituent: pH (pH) Analysis Run 11/16/2021 4:40 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

Mann-Whitney (Wilcoxon Rank Sum)

Constituent: pH (pH) Analysis Run 11/16/2021 4:40 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

Mann-Whitney (Wilcoxon Rank Sum)

Constituent: pH (pH) Analysis Run 11/16/2021 4:40 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

Mann-Whitney (Wilcoxon Rank Sum)

Constituent: pH (pH) Analysis Run 11/16/2021 4:40 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

Mann-Whitney (Wilcoxon Rank Sum)

Constituent: pH (pH) Analysis Run 11/16/2021 4:40 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

Mann-Whitney (Wilcoxon Rank Sum)

Constituent: pH (pH) Analysis Run 11/16/2021 4:40 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	
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

Mann-Whitney (Wilcoxon Rank Sum)

Constituent: Sulfate (mg/L) Analysis Run 11/16/2021 4:40 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

Mann-Whitney (Wilcoxon Rank Sum)

Constituent: Sulfate (mg/L) Analysis Run 11/16/2021 4:40 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

Mann-Whitney (Wilcoxon Rank Sum)

Constituent: Sulfate (mg/L) Analysis Run 11/16/2021 4:40 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

Mann-Whitney (Wilcoxon Rank Sum)

Constituent: Sulfate (mg/L) Analysis Run 11/16/2021 4:40 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

Mann-Whitney (Wilcoxon Rank Sum)

Constituent: Sulfate (mg/L) Analysis Run 11/16/2021 4:40 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

Mann-Whitney (Wilcoxon Rank Sum)

Constituent: Sulfate (mg/L) Analysis Run 11/16/2021 4:40 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

Mann-Whitney (Wilcoxon Rank Sum)

Constituent: Sulfate (mg/L) Analysis Run 11/16/2021 4:40 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	
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

Mann-Whitney (Wilcoxon Rank Sum)

Constituent: Total dissolved solids (mg/L) Analysis Run 11/16/2021 4:40 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

Mann-Whitney (Wilcoxon Rank Sum)

Constituent: Total dissolved solids (mg/L) Analysis Run 11/16/2021 4:40 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

Mann-Whitney (Wilcoxon Rank Sum)

Constituent: Total dissolved solids (mg/L) Analysis Run 11/16/2021 4:40 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

Mann-Whitney (Wilcoxon Rank Sum)

Constituent: Total dissolved solids (mg/L) Analysis Run 11/16/2021 4:40 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

Mann-Whitney (Wilcoxon Rank Sum)

Constituent: Total dissolved solids (mg/L) Analysis Run 11/16/2021 4:40 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

Mann-Whitney (Wilcoxon Rank Sum)

Constituent: Total dissolved solids (mg/L) Analysis Run 11/16/2021 4:40 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

Mann-Whitney (Wilcoxon Rank Sum)

Constituent: Total dissolved solids (mg/L) Analysis Run 11/16/2021 4:40 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	
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

FIGURE E.

Appendix III Trend Tests - Upgradient Wells - Summary Table - Significant Results

Plant Gorgas Client: Southern Company Data: Gorgas GSA Printed 11/16/2021, 4:48 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	**MW-2 (bg)**	**0.004881**	**110**	**105**	**Yes**	**24**	**20.83**	**n/a**	**n/a**	**0.01**	**NP**
Fluoride (mg/L)	**MW-2 (bg)**	**0.01335**	**119**	**111**	**Yes**	**25**	**0**	**n/a**	**n/a**	**0.01**	**NP**

Appendix III Trend Tests - Upgradient Wells - Summary Table - All Results

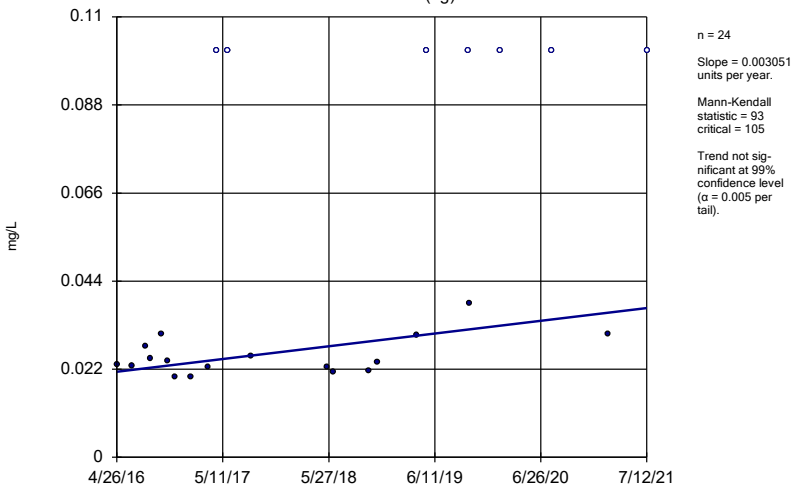
Plant Gorgas Client: Southern Company Data: Gorgas GSA Printed 11/16/2021, 4:48 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	MW-1 (bg)	0.003051	93	105	No	24	29.17	n/a	n/a	0.01	NP
Boron (mg/L)	**MW-2 (bg)**	**0.004881**	**110**	**105**	**Yes**	**24**	**20.83**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	MW-3 (bg)	0.006876	105	105	No	24	25	n/a	n/a	0.01	NP
Boron (mg/L)	MW-4 (bg)	-0.00006728	-8	-92	No	22	0	n/a	n/a	0.01	NP
Calcium (mg/L)	MW-1 (bg)	3.349	87	105	No	24	0	n/a	n/a	0.01	NP
Calcium (mg/L)	MW-2 (bg)	2.18	38	105	No	24	0	n/a	n/a	0.01	NP
Calcium (mg/L)	MW-3 (bg)	14.44	68	105	No	24	0	n/a	n/a	0.01	NP
Calcium (mg/L)	MW-4 (bg)	-5.475	-41	-98	No	23	0	n/a	n/a	0.01	NP
Chloride (mg/L)	MW-1 (bg)	-0.02109	-21	-105	No	24	0	n/a	n/a	0.01	NP
Chloride (mg/L)	MW-2 (bg)	-0.04511	-17	-105	No	24	0	n/a	n/a	0.01	NP
Chloride (mg/L)	MW-3 (bg)	0.08238	58	105	No	24	8.333	n/a	n/a	0.01	NP
Chloride (mg/L)	MW-4 (bg)	-0.06663	-67	-98	No	23	4.348	n/a	n/a	0.01	NP
Fluoride (mg/L)	MW-1 (bg)	-0.007029	-47	-111	No	25	4	n/a	n/a	0.01	NP
Fluoride (mg/L)	**MW-2 (bg)**	**0.01335**	**119**	**111**	**Yes**	**25**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Fluoride (mg/L)	MW-3 (bg)	-0.009085	-31	-111	No	25	0	n/a	n/a	0.01	NP
Fluoride (mg/L)	MW-4 (bg)	0.005826	31	105	No	24	0	n/a	n/a	0.01	NP

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-1 (bg)



n = 24

Slope = 0.003051 units per year.

Mann-Kendall statistic = 93
critical = 105

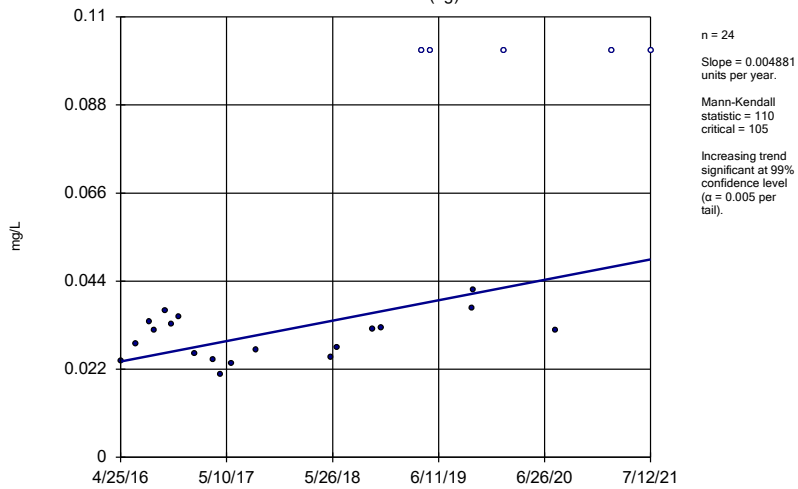
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 11/16/2021 4:47 PM View: Appendix III - Interwell
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-2 (bg)



n = 24

Slope = 0.004881 units per year.

Mann-Kendall statistic = 110
critical = 105

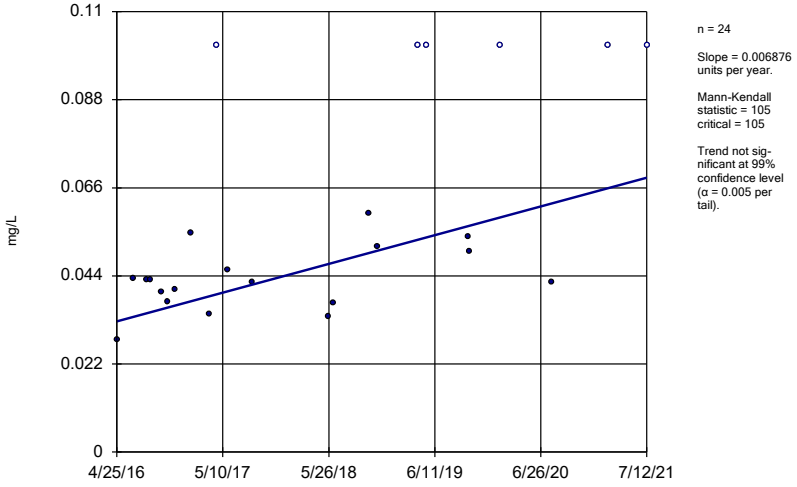
Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 11/16/2021 4:47 PM View: Appendix III - Interwell
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-3 (bg)



n = 24

Slope = 0.006876 units per year.

Mann-Kendall statistic = 105
critical = 105

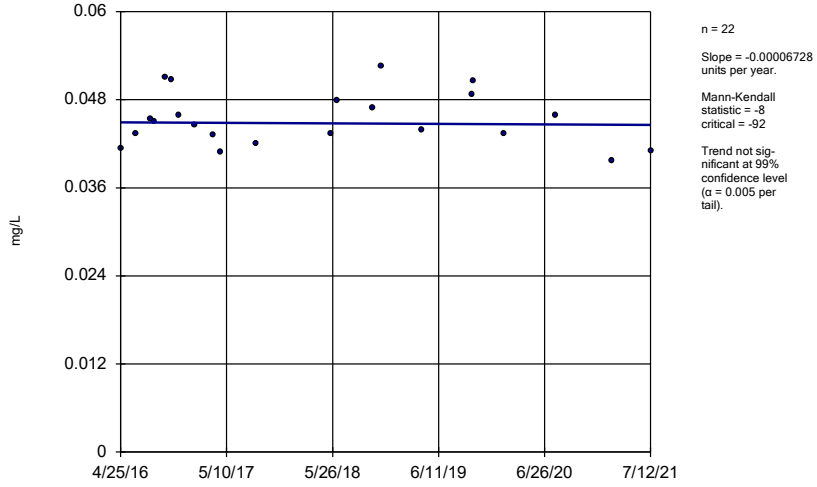
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 11/16/2021 4:47 PM View: Appendix III - Interwell
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-4 (bg)



n = 22

Slope = -0.00006728 units per year.

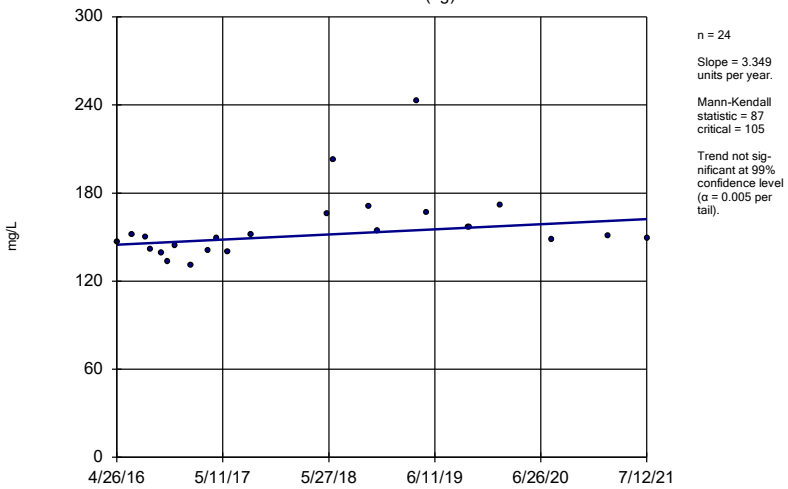
Mann-Kendall statistic = -8
critical = -92

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 11/16/2021 4:47 PM View: Appendix III - Interwell
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sen's Slope Estimator

MW-1 (bg)



n = 24

Slope = 3.349 units per year.

Mann-Kendall statistic = 87
critical = 105

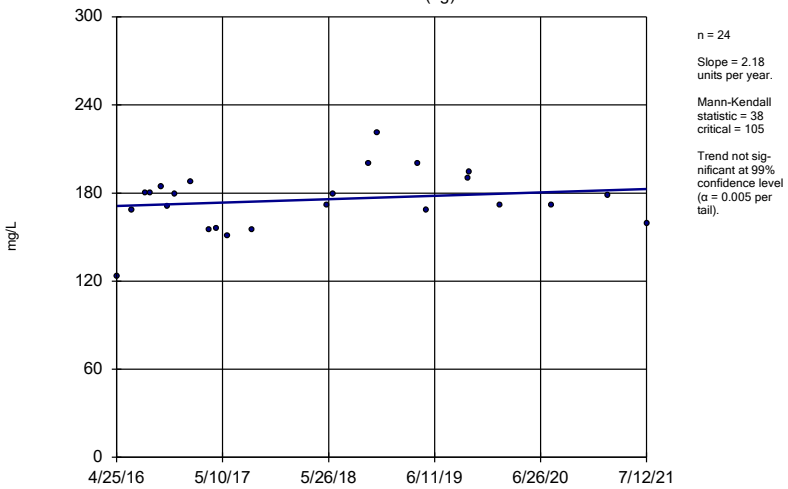
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 11/16/2021 4:47 PM View: Appendix III - Interwell
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-2 (bg)



n = 24

Slope = 2.18 units per year.

Mann-Kendall statistic = 38
critical = 105

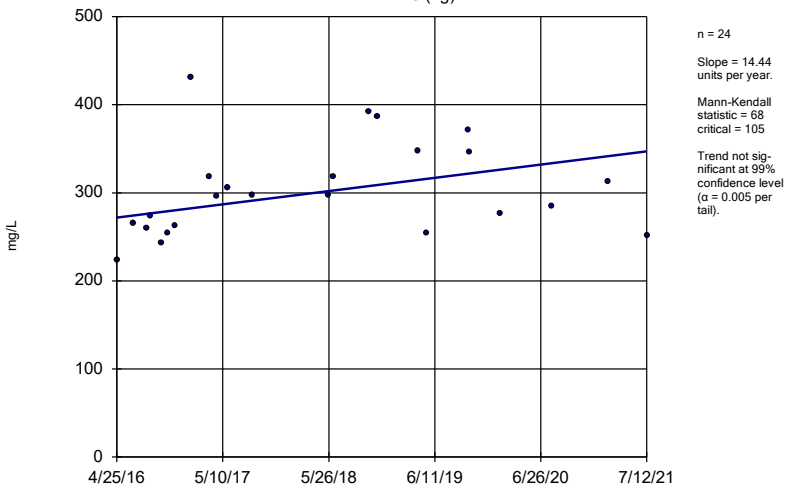
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 11/16/2021 4:47 PM View: Appendix III - Interwell
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-3 (bg)



n = 24

Slope = 14.44 units per year.

Mann-Kendall statistic = 68
critical = 105

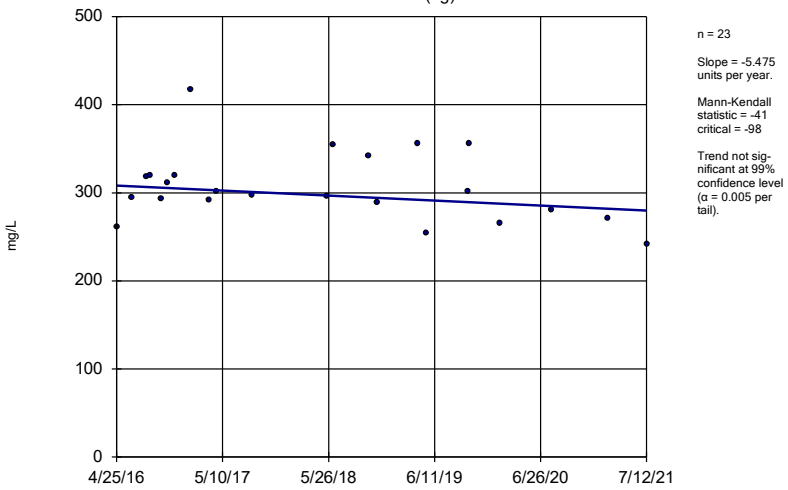
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 11/16/2021 4:47 PM View: Appendix III - Interwell
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-4 (bg)



n = 23

Slope = -5.475 units per year.

Mann-Kendall statistic = -41
critical = -98

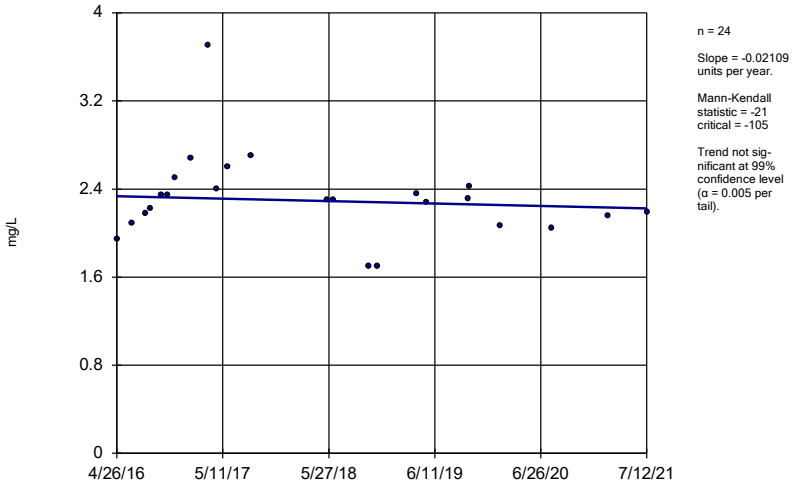
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 11/16/2021 4:47 PM View: Appendix III - Interwell
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-1 (bg)



n = 24

Slope = -0.02109 units per year.

Mann-Kendall statistic = -21
critical = -105

Trend not sig-nificant at 99% confidence level (α = 0.005 per tail).

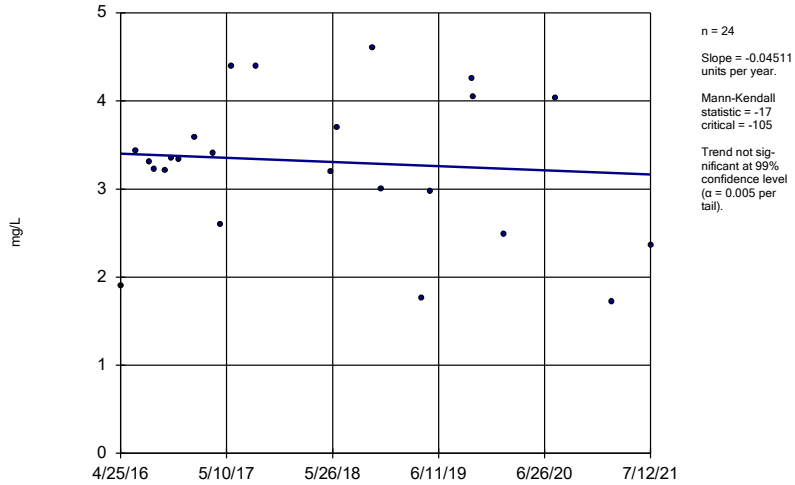
Constituent: Chloride Analysis Run 11/16/2021 4:47 PM View: Appendix III - Interwell

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-2 (bg)



n = 24

Slope = -0.04511 units per year.

Mann-Kendall statistic = -17
critical = -105

Trend not sig-nificant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 11/16/2021 4:47 PM View: Appendix III - Interwell

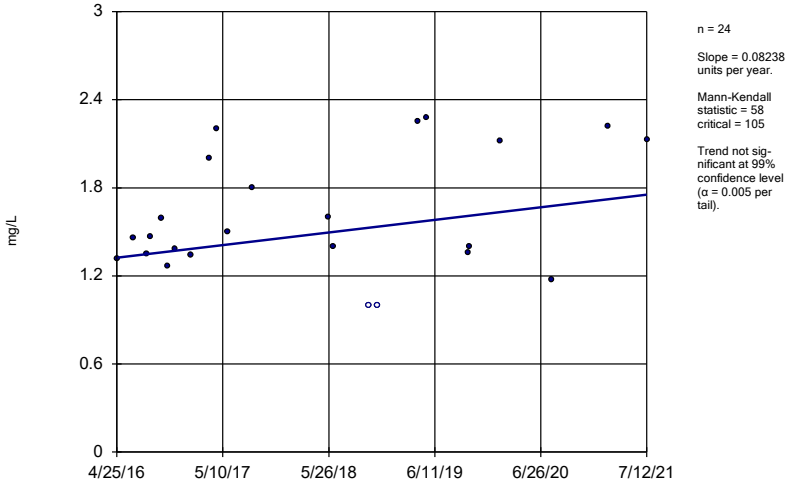
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-3 (bg)



n = 24

Slope = 0.08238 units per year.

Mann-Kendall statistic = 58
critical = 105

Trend not sig-nificant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 11/16/2021 4:47 PM View: Appendix III - Interwell

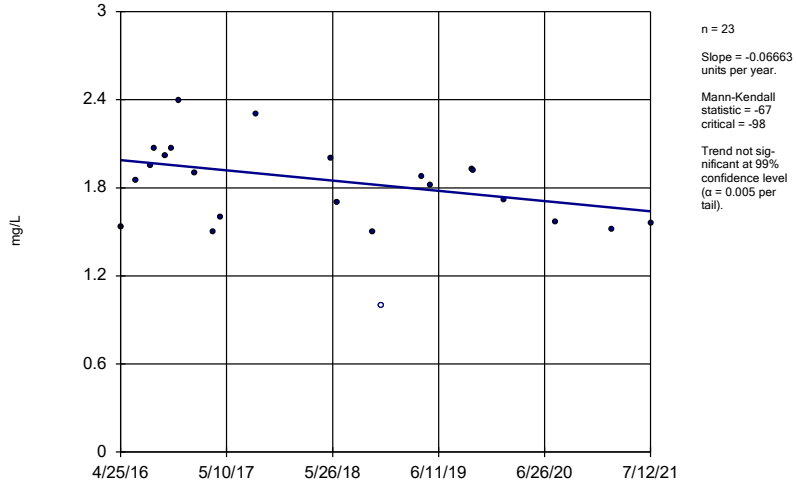
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-4 (bg)



n = 23

Slope = -0.06663 units per year.

Mann-Kendall statistic = -67
critical = -98

Trend not sig-nificant at 99% confidence level (α = 0.005 per tail).

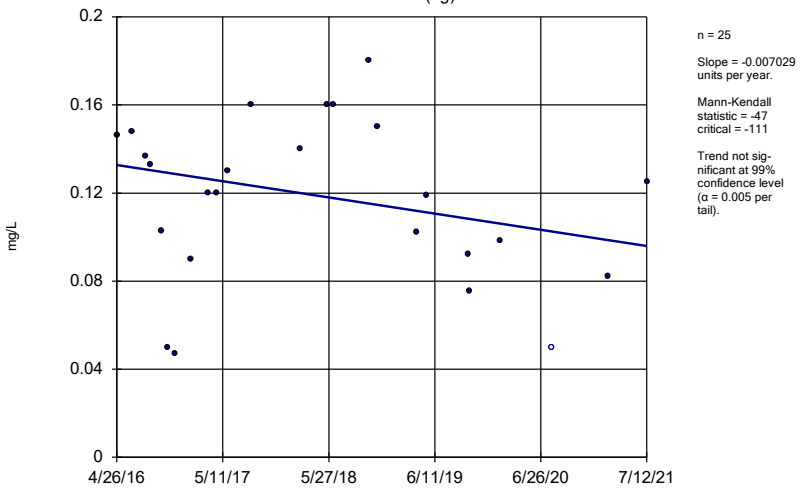
Constituent: Chloride Analysis Run 11/16/2021 4:47 PM View: Appendix III - Interwell

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-1 (bg)



n = 25

Slope = -0.007029 units per year.

Mann-Kendall statistic = -47
critical = -111

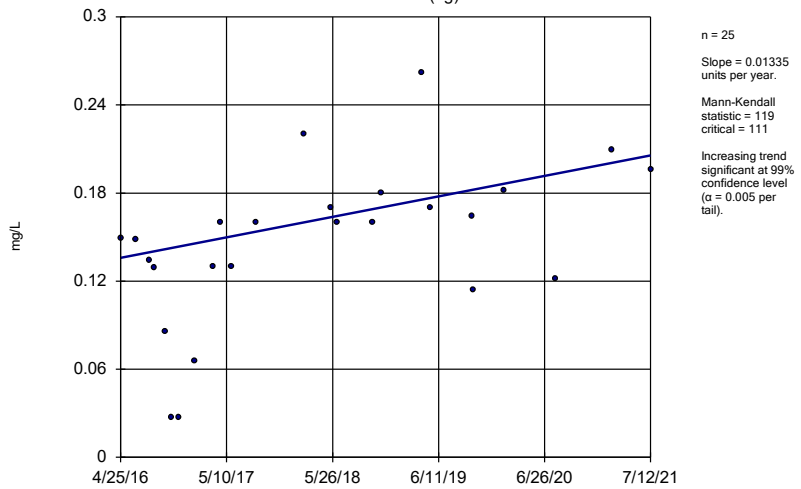
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Fluoride Analysis Run 11/16/2021 4:47 PM View: Appendix III - Interwell
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-2 (bg)



n = 25

Slope = 0.01335 units per year.

Mann-Kendall statistic = 119
critical = 111

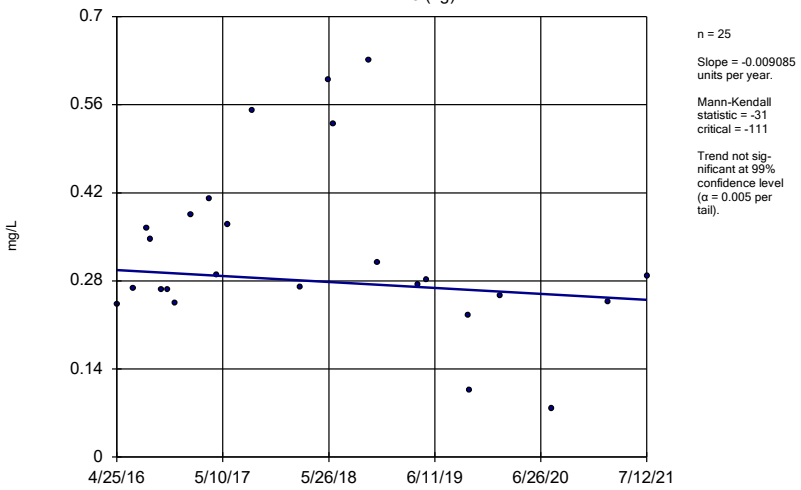
Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Fluoride Analysis Run 11/16/2021 4:47 PM View: Appendix III - Interwell
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-3 (bg)



n = 25

Slope = -0.009085 units per year.

Mann-Kendall statistic = -31
critical = -111

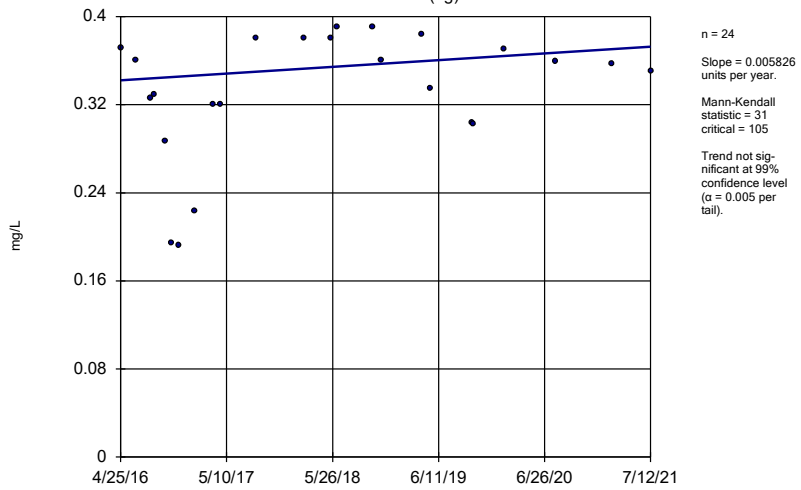
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Fluoride Analysis Run 11/16/2021 4:47 PM View: Appendix III - Interwell
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-4 (bg)



n = 24

Slope = 0.005826 units per year.

Mann-Kendall statistic = 31
critical = 105

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Fluoride Analysis Run 11/16/2021 4:47 PM View: Appendix III - Interwell
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 11/16/2021, 4:52 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-2**	**6.145**	**5.788**	**7/12/2021**	**6.16**	**Yes**	**23**	**5.967**	**0.09604**	**0**	**None**	**No**	**0.001253**	**Param Intra 1 of 2**
pH (pH)	**MW-4**	**6.237**	**6.076**	**7/12/2021**	**6.06**	**Yes**	**23**	**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**	**7/14/2021**	**752**	**Yes**	**16**	**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**	**7/14/2021**	**1300**	**Yes**	**16**	**987.9**	**48.59**	**0**	**None**	**No**	**0.002505**	**Param Intra 1 of 2**

Appendix III Intrawell Prediction Limits - All Results

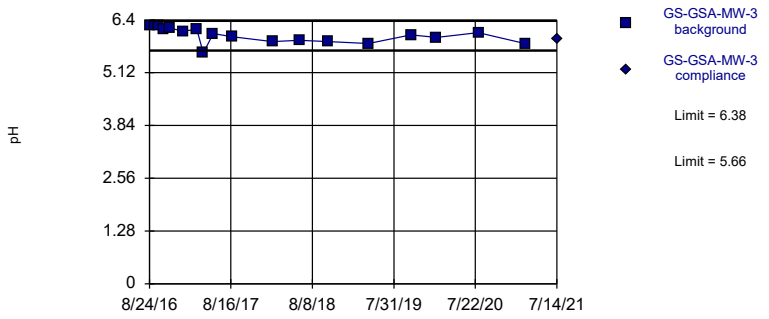
Plant Gorgas Client: Southern Company Data: Gorgas GSA Printed 11/16/2021, 4:52 PM

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	6.38	5.66	7/14/2021	5.93	No	17	6.02	0.1846	0	None	No	0.001253	Param Intra 1 of 2
pH (pH)	GS-GSA-MW-4	3.896	3.699	7/14/2021	3.74	No	17	3.798	0.05044	0	None	No	0.001253	Param Intra 1 of 2
pH (pH)	GS-GSA-MW-8	7.149	6.399	7/14/2021	6.88	No	17	6.774	0.1922	0	None	No	0.001253	Param Intra 1 of 2
pH (pH)	MW-1	5.249	5.046	7/12/2021	5.13	No	23	5.147	0.05471	0	None	No	0.001253	Param Intra 1 of 2
pH (pH)	**MW-2**	**6.145**	**5.788**	**7/12/2021**	**6.16**	**Yes**	**23**	**5.967**	**0.09604**	**0**	**None**	**No**	**0.001253**	**Param Intra 1 of 2**
pH (pH)	MW-3	5.987	4.38	7/12/2021	5.86	No	23	149.3	35.15	0	None	x^3	0.001253	Param Intra 1 of 2
pH (pH)	**MW-4**	**6.237**	**6.076**	**7/12/2021**	**6.06**	**Yes**	**23**	**6.157**	**0.04323**	**0**	**None**	**No**	**0.001253**	**Param Intra 1 of 2**
Sulfate (mg/L)	GS-GSA-MW-3	3163	n/a	7/14/2021	2880	No	16	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**	**7/14/2021**	**752**	**Yes**	**16**	**569.6**	**42.43**	**0**	**None**	**No**	**0.002505**	**Param Intra 1 of 2**
Sulfate (mg/L)	GS-GSA-MW-8	2169	n/a	7/14/2021	1700	No	16	1541	318.8	0	None	No	0.002505	Param Intra 1 of 2
Sulfate (mg/L)	MW-1	1653	n/a	7/12/2021	1560	No	22	1456	105.3	0	None	No	0.002505	Param Intra 1 of 2
Sulfate (mg/L)	MW-2	1257	n/a	7/12/2021	763	No	23	1001	137.9	0	None	No	0.002505	Param Intra 1 of 2
Sulfate (mg/L)	MW-3	3195	n/a	7/12/2021	2380	No	23	2487	381.4	0	None	No	0.002505	Param Intra 1 of 2
Sulfate (mg/L)	MW-4	3107	n/a	7/12/2021	1930	No	22	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	7/14/2021	4920	No	16	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**	**7/14/2021**	**1300**	**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	4017	n/a	7/14/2021	3150	No	16	2978	527.4	0	None	No	0.002505	Param Intra 1 of 2
Total dissolved solids (mg/L)	MW-1	2516	n/a	7/12/2021	2210	No	22	2201	168.2	0	None	No	0.002505	Param Intra 1 of 2
Total dissolved solids (mg/L)	MW-2	2005	n/a	7/12/2021	1390	No	23	1648	192.4	0	None	No	0.002505	Param Intra 1 of 2
Total dissolved solids (mg/L)	MW-3	4954	n/a	7/12/2021	3510	No	23	3773	635.9	0	None	No	0.002505	Param Intra 1 of 2
Total dissolved solids (mg/L)	MW-4	4484	n/a	7/12/2021	3000	No	22	5.8e10	1.7e10	0	None	x^3	0.002505	Param Intra 1 of 2

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 11/16/2021 4:50 PM View: Appendix III - Intrawell

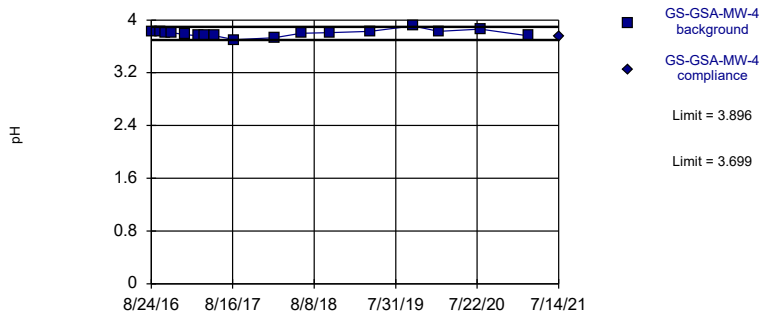
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Within 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 11/16/2021 4:50 PM View: Appendix III - Intrawell

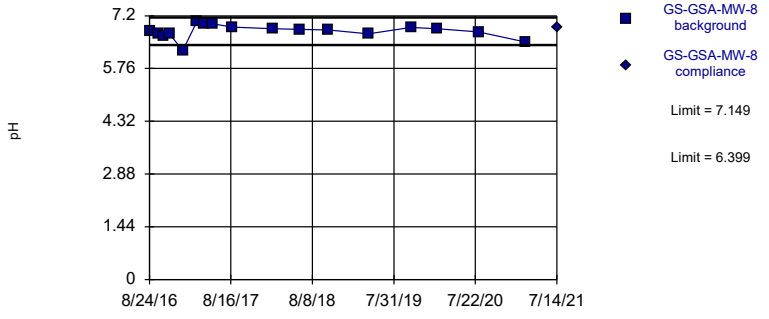
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.31 Groundwater Stats Consulting. 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 11/16/2021 4:50 PM View: Appendix III - Intrawell

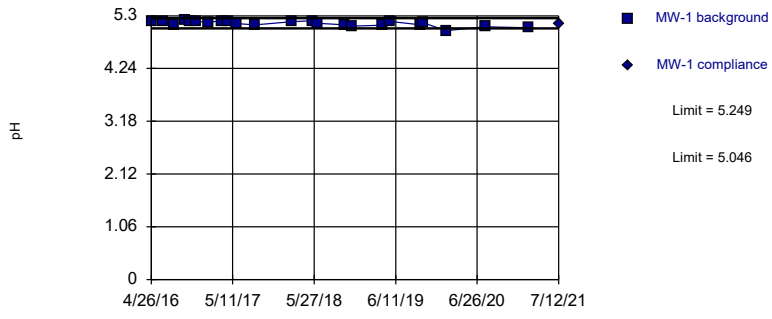
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.31 Groundwater Stats Consulting. 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.

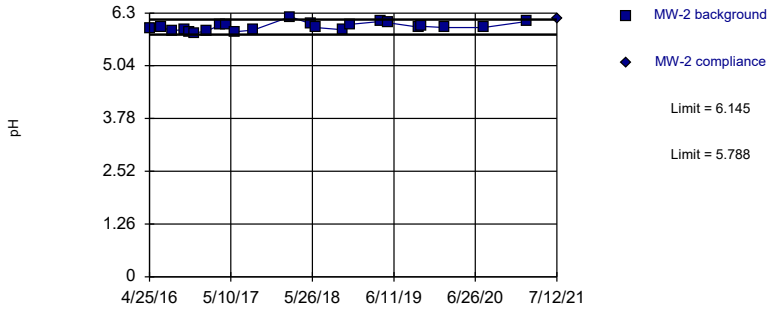
Constituent: pH Analysis Run 11/16/2021 4:50 PM View: Appendix III - Intrawell

Plant Gorgas Client: Southern Company Data: Gorgas GSA

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.

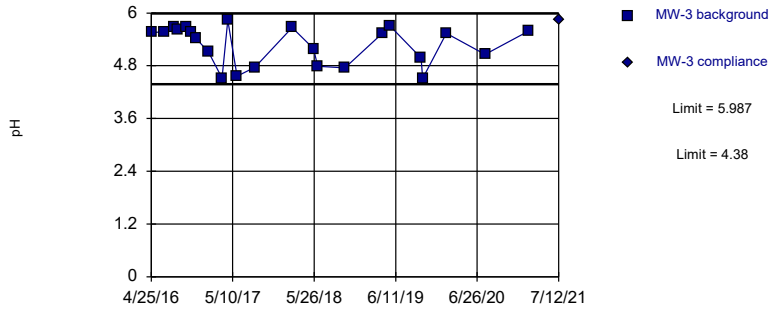
Constituent: pH Analysis Run 11/16/2021 4:50 PM View: Appendix III - Intrawell

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Within 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.

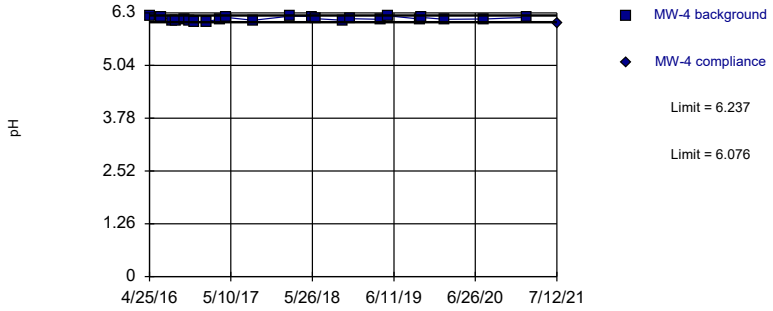
Constituent: pH Analysis Run 11/16/2021 4:50 PM View: Appendix III - Intrawell

Plant Gorgas Client: Southern Company Data: Gorgas GSA

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.

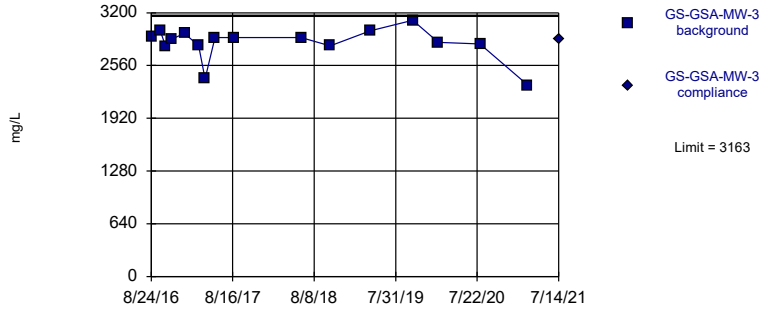
Constituent: pH Analysis Run 11/16/2021 4:50 PM View: Appendix III - Intrawell

Plant Gorgas Client: Southern Company Data: Gorgas GSA

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.

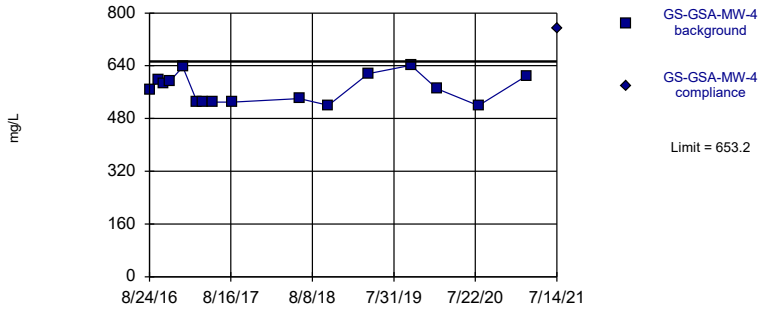
Constituent: Sulfate Analysis Run 11/16/2021 4:50 PM View: Appendix III - Intrawell

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Exceeds Limit

Prediction Limit

Intrawell Parametric



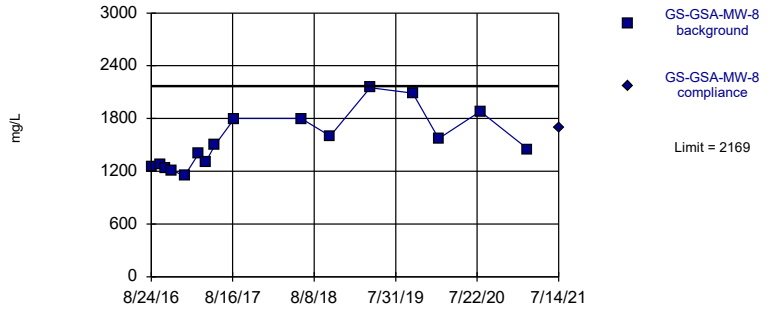
Background Data Summary: Mean=569.6, Std. Dev.=42.43, n=16. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8989, critical = 0.844. Kappa = 1.97 (c=7, w=3, 1 of 2, event alpha = 0.05132). Report alpha = 0.002505.

Constituent: Sulfate Analysis Run 11/16/2021 4:51 PM View: Appendix III - Intrawell
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Within Limit

Prediction Limit

Intrawell Parametric



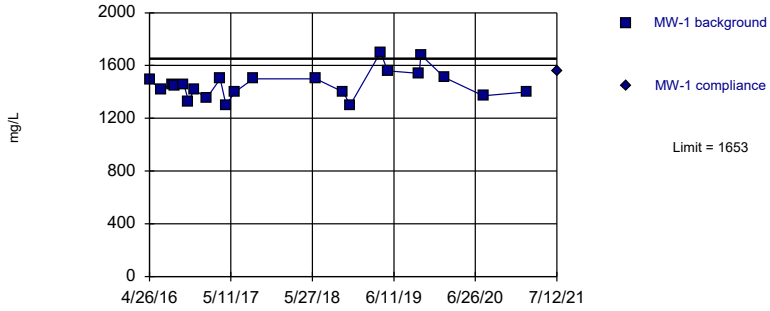
Background Data Summary: Mean=1541, Std. Dev.=318.8, n=16. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9147, critical = 0.844. Kappa = 1.97 (c=7, w=3, 1 of 2, event alpha = 0.05132). Report alpha = 0.002505.

Constituent: Sulfate Analysis Run 11/16/2021 4:51 PM View: Appendix III - Intrawell
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Within Limit

Prediction Limit

Intrawell Parametric



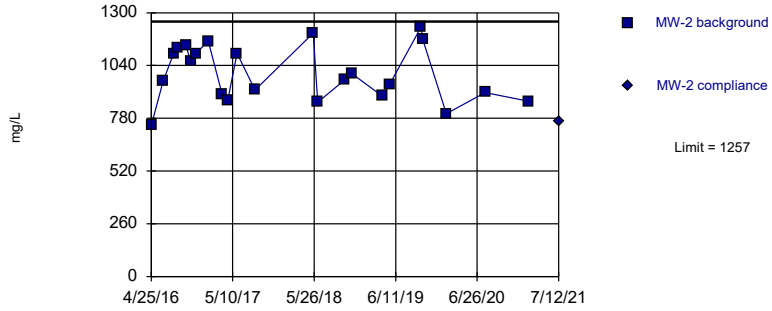
Background Data Summary: Mean=1456, Std. Dev.=105.3, n=22. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9431, critical = 0.878. Kappa = 1.869 (c=7, w=3, 1 of 2, event alpha = 0.05132). Report alpha = 0.002505.

Constituent: Sulfate Analysis Run 11/16/2021 4:51 PM View: Appendix III - Intrawell
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Within Limit

Prediction Limit

Intrawell Parametric



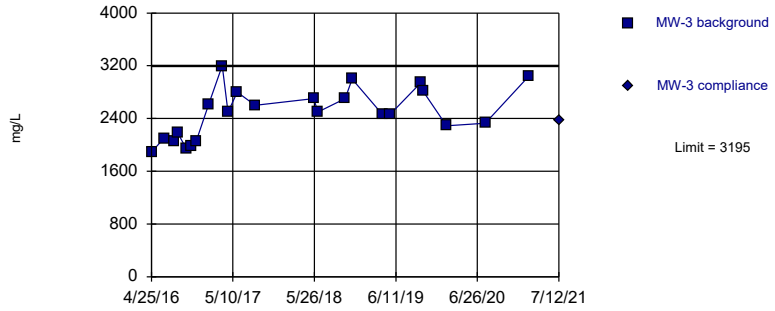
Background Data Summary: Mean=1001, Std. Dev.=137.9, n=23. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9535, critical = 0.881. Kappa = 1.857 (c=7, w=3, 1 of 2, event alpha = 0.05132). Report alpha = 0.002505.

Constituent: Sulfate Analysis Run 11/16/2021 4:51 PM View: Appendix III - Intrawell
Plant Gorgas Client: Southern Company Data: Gorgas GSA

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 11/16/2021 4:51 PM View: Appendix III - Intrawell

Plant Gorgas Client: Southern Company Data: Gorgas GSA

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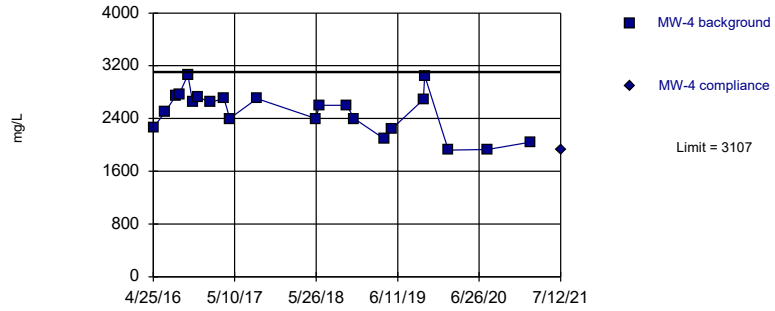
Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=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 11/16/2021 4:51 PM View: Appendix III - Intrawell

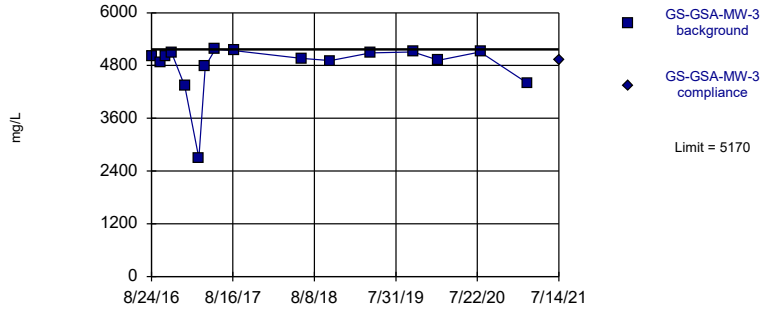
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 16 background values. Well-constituent pair annual alpha = 0.01287. Individual comparison alpha = 0.006456 (1 of 2).

Constituent: Total dissolved solids Analysis Run 11/16/2021 4:51 PM View: Appendix III - Intrawell

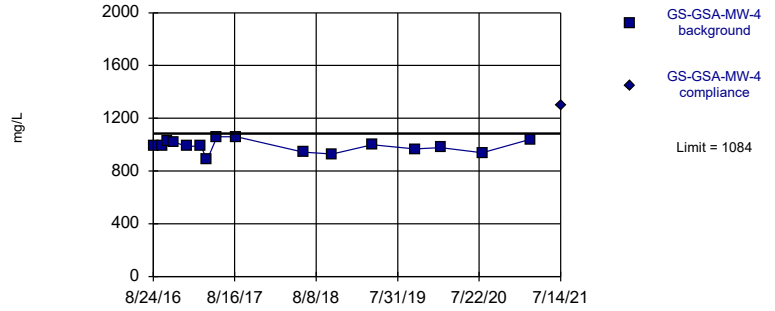
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.31 Groundwater Stats Consulting. 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.

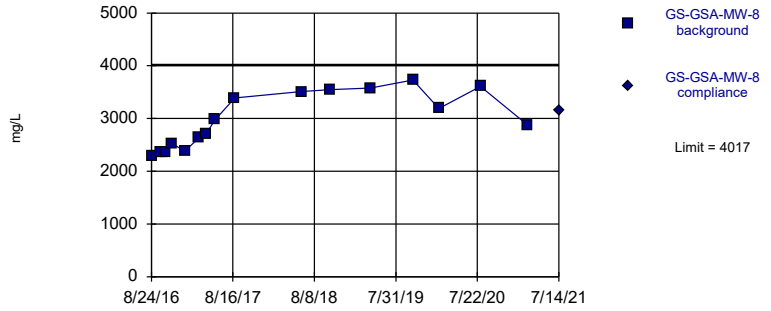
Constituent: Total dissolved solids Analysis Run 11/16/2021 4:51 PM View: Appendix III - Intrawell

Plant Gorgas Client: Southern Company Data: Gorgas GSA

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 11/16/2021 4:51 PM View: Appendix III - Intrawell

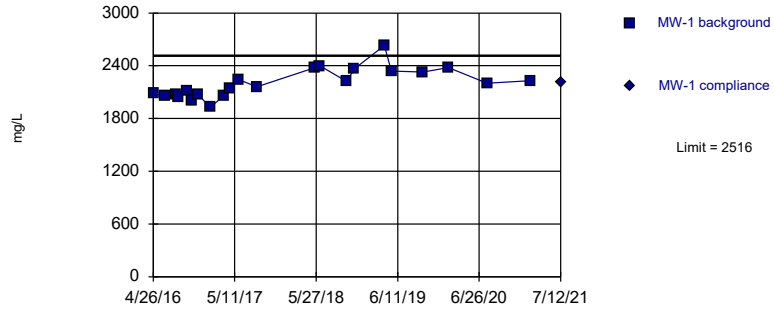
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.31 Groundwater Stats Consulting. 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 11/16/2021 4:51 PM View: Appendix III - Intrawell

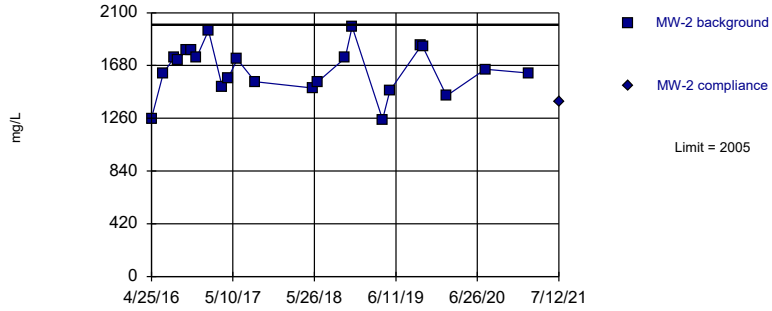
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.31 Groundwater Stats Consulting. 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 11/16/2021 4:51 PM View: Appendix III - Intrawell

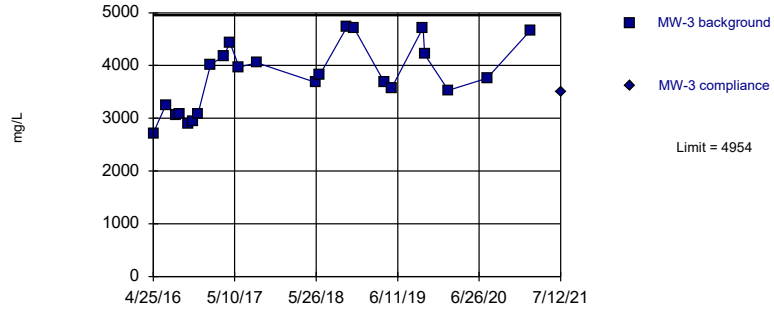
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.31 Groundwater Stats Consulting. 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.

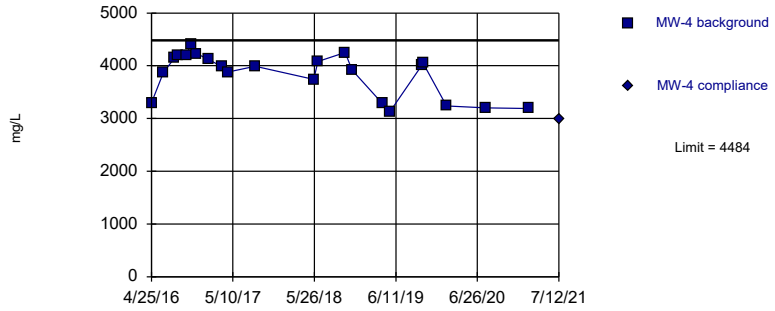
Constituent: Total dissolved solids Analysis Run 11/16/2021 4:51 PM View: Appendix III - Intrawell

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 11/16/2021 4:51 PM View: Appendix III - Intrawell

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Prediction Limit

Constituent: pH (pH) Analysis Run 11/16/2021 4:52 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

Prediction Limit

Constituent: pH (pH) Analysis Run 11/16/2021 4:52 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

Prediction Limit

Constituent: pH (pH) Analysis Run 11/16/2021 4:52 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

Prediction Limit

Constituent: pH (pH) Analysis Run 11/16/2021 4:52 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

Prediction Limit

Constituent: pH (pH) Analysis Run 11/16/2021 4:52 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

Prediction Limit

Constituent: pH (pH) Analysis Run 11/16/2021 4:52 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

Prediction Limit

Constituent: pH (pH) Analysis Run 11/16/2021 4:52 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	
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

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 11/16/2021 4:52 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

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 11/16/2021 4:52 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

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 11/16/2021 4:52 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

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 11/16/2021 4:52 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

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 11/16/2021 4:52 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

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 11/16/2021 4:52 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

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 11/16/2021 4:52 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	
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

Prediction Limit

Constituent: Total dissolved solids (mg/L) Analysis Run 11/16/2021 4:52 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

Prediction Limit

Constituent: Total dissolved solids (mg/L) Analysis Run 11/16/2021 4:52 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

Prediction Limit

Constituent: Total dissolved solids (mg/L) Analysis Run 11/16/2021 4:52 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

Prediction Limit

Constituent: Total dissolved solids (mg/L) Analysis Run 11/16/2021 4:52 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

Prediction Limit

Constituent: Total dissolved solids (mg/L) Analysis Run 11/16/2021 4:52 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

Prediction Limit

Constituent: Total dissolved solids (mg/L) Analysis Run 11/16/2021 4:52 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

Prediction Limit

Constituent: Total dissolved solids (mg/L) Analysis Run 11/16/2021 4:52 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	
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

FIGURE G.

Appendix III Interwell Prediction Limits - Significant Results

Plant Gorgas Client: Southern Company Data: Gorgas GSA Printed 11/16/2021, 4:50 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**	**0.0596**	**n/a**	**7/14/2021**	**1.47**	**Yes**	**94**	**n/a**	**n/a**	**19.15**	**n/a**	**n/a**	**0.0002203**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**GS-GSA-MW-4**	**0.0596**	**n/a**	**7/14/2021**	**4.78**	**Yes**	**94**	**n/a**	**n/a**	**19.15**	**n/a**	**n/a**	**0.0002203**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**GS-GSA-MW-8**	**0.0596**	**n/a**	**7/14/2021**	**2.07**	**Yes**	**94**	**n/a**	**n/a**	**19.15**	**n/a**	**n/a**	**0.0002203**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**GS-GSA-MW-3**	**431**	**n/a**	**7/14/2021**	**533**	**Yes**	**95**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0002159**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**GS-GSA-MW-8**	**431**	**n/a**	**7/14/2021**	**444**	**Yes**	**95**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0002159**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	**GS-GSA-MW-3**	**3.711**	**n/a**	**7/14/2021**	**207**	**Yes**	**95**	**1.292**	**0.1525**	**3.158**	**None**	**x^(1/3)**	**0.002505**	**Param Inter 1 of 2**
Chloride (mg/L)	**GS-GSA-MW-4**	**3.711**	**n/a**	**7/14/2021**	**102**	**Yes**	**95**	**1.292**	**0.1525**	**3.158**	**None**	**x^(1/3)**	**0.002505**	**Param Inter 1 of 2**
Chloride (mg/L)	**GS-GSA-MW-8**	**3.711**	**n/a**	**7/14/2021**	**129**	**Yes**	**95**	**1.292**	**0.1525**	**3.158**	**None**	**x^(1/3)**	**0.002505**	**Param Inter 1 of 2**
Fluoride (mg/L)	**GS-GSA-MW-3**	**0.4673**	**n/a**	**7/14/2021**	**0.556**	**Yes**	**99**	**0.4591**	**0.1342**	**1.01**	**None**	**sqrt(x)**	**0.002505**	**Param Inter 1 of 2**

Appendix III Interwell Prediction Limits - All Results

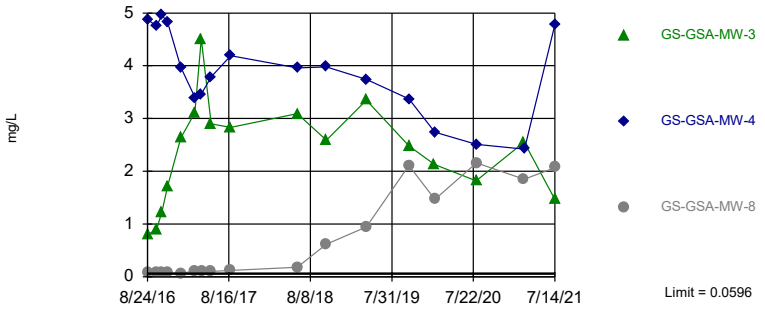
Plant Gorgas Client: Southern Company Data: Gorgas GSA Printed 11/16/2021, 4:50 PM

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**	**0.0596**	**n/a**	**7/14/2021**	**1.47**	**Yes**	**94**	**n/a**	**n/a**	**19.15**	**n/a**	**n/a**	**0.0002203**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**GS-GSA-MW-4**	**0.0596**	**n/a**	**7/14/2021**	**4.78**	**Yes**	**94**	**n/a**	**n/a**	**19.15**	**n/a**	**n/a**	**0.0002203**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**GS-GSA-MW-8**	**0.0596**	**n/a**	**7/14/2021**	**2.07**	**Yes**	**94**	**n/a**	**n/a**	**19.15**	**n/a**	**n/a**	**0.0002203**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**GS-GSA-MW-3**	**431**	**n/a**	**7/14/2021**	**533**	**Yes**	**95**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0002159**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	GS-GSA-MW-4	431	n/a	7/14/2021	130	No	95	n/a	n/a	0	n/a	n/a	0.0002159	NP Inter (normality) 1 of 2
Calcium (mg/L)	**GS-GSA-MW-8**	**431**	**n/a**	**7/14/2021**	**444**	**Yes**	**95**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0002159**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	**GS-GSA-MW-3**	**3.711**	**n/a**	**7/14/2021**	**207**	**Yes**	**95**	**1.292**	**0.1525**	**3.158**	**None**	**x^(1/3)**	**0.002505**	**Param Inter 1 of 2**
Chloride (mg/L)	**GS-GSA-MW-4**	**3.711**	**n/a**	**7/14/2021**	**102**	**Yes**	**95**	**1.292**	**0.1525**	**3.158**	**None**	**x^(1/3)**	**0.002505**	**Param Inter 1 of 2**
Chloride (mg/L)	**GS-GSA-MW-8**	**3.711**	**n/a**	**7/14/2021**	**129**	**Yes**	**95**	**1.292**	**0.1525**	**3.158**	**None**	**x^(1/3)**	**0.002505**	**Param Inter 1 of 2**
Fluoride (mg/L)	**GS-GSA-MW-3**	**0.4673**	**n/a**	**7/14/2021**	**0.556**	**Yes**	**99**	**0.4591**	**0.1342**	**1.01**	**None**	**sqrt(x)**	**0.002505**	**Param Inter 1 of 2**
Fluoride (mg/L)	GS-GSA-MW-4	0.4673	n/a	7/14/2021	0.05ND	No	99	0.4591	0.1342	1.01	None	sqrt(x)	0.002505	Param Inter 1 of 2
Fluoride (mg/L)	GS-GSA-MW-8	0.4673	n/a	7/14/2021	0.221	No	99	0.4591	0.1342	1.01	None	sqrt(x)	0.002505	Param Inter 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 Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 94 background values. 19.15% NDs. Annual per-constituent alpha = 0.001321. Individual comparison alpha = 0.0002203 (1 of 2). Comparing 3 points to limit.

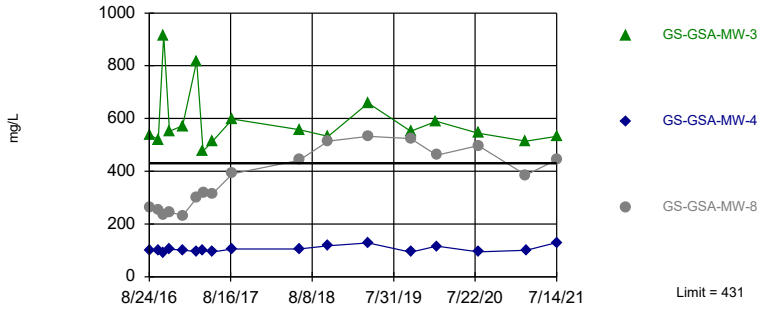
Constituent: Boron Analysis Run 11/16/2021 4:49 PM View: Appendix III - Interwell

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 Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 95 background values. Annual per-constituent alpha = 0.001295. Individual comparison alpha = 0.0002159 (1 of 2). Comparing 3 points to limit.

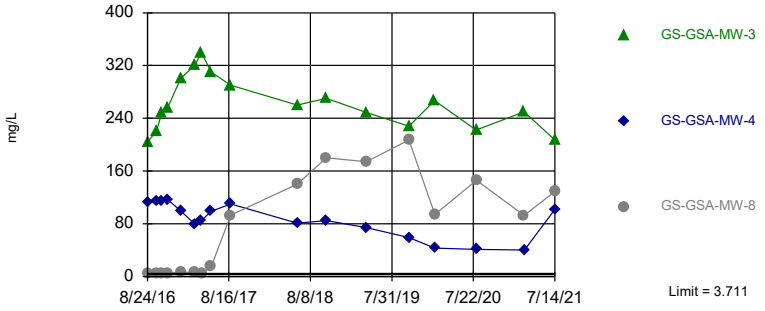
Constituent: Calcium Analysis Run 11/16/2021 4:49 PM View: Appendix III - Interwell

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 Parametric



Background Data Summary (based on cube root transformation): Mean=1.292, Std. Dev.=0.1525, n=95, 3.158% NDs. Normality test: Shapiro Francia @alpha = 0.01, calculated = 0.9712, critical = 0.965. Kappa = 1.677 (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 11/16/2021 4:49 PM View: Appendix III - Interwell

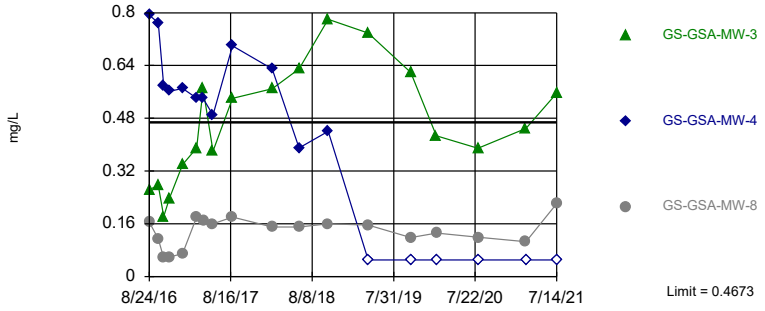
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Hollow symbols indicate censored values.

Exceeds Limit: GS-GSA-MW-3

Prediction Limit

Interwell Parametric



Background Data Summary (based on square root transformation): Mean=0.4591, Std. Dev.=0.1342, n=99, 1.01% NDs. Normality test: Shapiro Francia @alpha = 0.01, calculated = 0.9823, critical = 0.967. Kappa = 1.673 (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: Fluoride Analysis Run 11/16/2021 4:49 PM View: Appendix III - Interwell

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 11/16/2021 4:50 PM View: Appendix III - Interwell

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	MW-4 (bg)	MW-2 (bg)	MW-3 (bg)	MW-1 (bg)	GS-GSA-MW-8	GS-GSA-MW-3	GS-GSA-MW-4
4/25/2016	0.0414 (J)	0.0241 (J)	0.028 (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	0.0453 (J)		0.0429 (J)				
8/24/2016	0.0451 (J)	0.0316 (J)	0.0431 (J)	0.0247 (J)	0.0898 (J)	0.799	4.88
10/3/2016	0.0511 (J)	0.0367 (J)		0.0307 (J)	0.0821 (J)	0.889	4.75
10/4/2016			0.04 (J)				
10/26/2016	0.0507 (J)	0.0331 (J)	0.0375 (J)	0.0241 (J)	0.0889 (J)	1.23	4.96
11/21/2016	0.0458 (J)	0.035 (J)	0.0406 (J)	0.0202 (J)	0.0788 (J)	1.72	4.82
1/17/2017		0.0259 (J)		0.0201 (J)	0.0607 (J)	2.63	3.97
1/18/2017	0.0445 (J)		0.0548 (J)				
3/20/2017					0.114	3.11	
3/21/2017							3.39
3/22/2017	0.0432 (J)	0.0243 (J)	0.0344 (J)	0.0224 (J)			
4/17/2017						4.51	3.46
4/18/2017	0.0409 (J)	0.0206 (J)	<0.1015	<0.1015	0.108		
5/30/2017				<0.1015	0.105	2.9	3.79
5/31/2017		0.0234 (J)	0.0454 (J)				
8/23/2017	0.042 (J)	0.0267 (J)	0.0425 (J)	0.0253 (J)			
8/24/2017					0.12	2.83	4.19
5/22/2018		0.0251 (J)		0.0224 (J)			
5/23/2018	0.0433 (J)						
5/24/2018			0.0339 (J)				
6/11/2018						3.09	3.96
6/12/2018	0.0478 (J)	0.0275 (J)	0.0371 (J)	0.0214 (J)	0.181		
10/17/2018	0.0468 (J)	0.0321 (J)	0.0596 (J)	0.0216 (J)	0.616	2.59	3.98
11/19/2018	0.0526 (J)	0.0324 (J)	0.0514 (J)	0.0237 (J)			
4/10/2019	0.0438 (J)	<0.1015	<0.1015	0.0304 (J)	0.944	3.35	3.74
5/14/2019	<0.203 (o)	<0.1015	<0.1015	<0.1015			
10/8/2019		0.0371 (J)	0.0537 (J)	<0.1015			
10/10/2019	0.0487 (J)						
10/14/2019					2.11	2.48	3.37
10/16/2019	0.0505 (J)	0.0419 (J)	0.05 (J)	0.0385 (J)			
2/3/2020	0.0433 (J)	<0.1015	<0.1015	<0.1015		2.13	
2/4/2020					1.47		2.74
8/3/2020		0.0317 (J)	0.0424 (J)	<0.1015			
8/4/2020						1.82	
8/5/2020	0.0459 (J)				2.16		2.51
2/22/2021	0.0397 (J)	<0.1015	<0.1015	0.0307 (J)			
3/1/2021					1.85	2.55	
3/3/2021							2.42
7/12/2021	0.0411 (J)	<0.1015	<0.1015	<0.1015			
7/14/2021					2.07	1.47	4.78

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 11/16/2021 4:50 PM View: Appendix III - Interwell

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	MW-4 (bg)	MW-2 (bg)	MW-3 (bg)	MW-1 (bg)	GS-GSA-MW-8	GS-GSA-MW-3	GS-GSA-MW-4
4/25/2016	261	123	224				
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	180	274	142	263	539	102
10/3/2016	293	184		139	253	519.7	98.4
10/4/2016			243				
10/26/2016	311	171	254	133	235	916	88.7
11/21/2016	320	179	263	144	246	552	104
1/17/2017		188		131	231	572	102
1/18/2017	417		431				
3/20/2017					298	817	
3/21/2017							94.7
3/22/2017	292	155	318	141			
4/17/2017						476	97.9
4/18/2017	302	156	296	149	317		
5/30/2017				140	316	515	93.9
5/31/2017		151	306				
8/23/2017	297	155	298	152			
8/24/2017					391	598	105
5/22/2018		172		166			
5/23/2018	296						
5/24/2018			297				
6/11/2018						558	105
6/12/2018	355	179	318	203	442		
10/17/2018	342	200	392	171	514	533	117
11/19/2018	289	221	387	154			
4/10/2019	356	200	348	243	533	659	129
5/14/2019	254	168	254	167			
10/8/2019		190	371	157			
10/10/2019	302						
10/14/2019					524	552	93.5
10/16/2019	356	194	346	157			
2/3/2020	265	172	276	172		589	
2/4/2020					461		116
8/3/2020		172	285	148			
8/4/2020						545	
8/5/2020	281				497		94.7
2/22/2021	271	178	312	151			
3/1/2021					386	514	
3/3/2021							100
7/12/2021	242	159	252	149			
7/14/2021					444	533	130

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 11/16/2021 4:50 PM View: Appendix III - Interwell

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	MW-4 (bg)	MW-2 (bg)	MW-3 (bg)	MW-1 (bg)	GS-GSA-MW-8	GS-GSA-MW-3	GS-GSA-MW-4
4/25/2016	1.53	1.9	1.32				
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	3.23	1.47	2.22	4.03	204	112
10/3/2016	2.02	3.21		2.34	3.87	220	115
10/4/2016			1.59				
10/26/2016	2.07	3.35	1.27	2.34	4.08	249	115
11/21/2016	2.39	3.34	1.38	2.5	4.39	256	117
1/17/2017		3.58		2.68	7.22	301	99.3
1/18/2017	1.9		1.34				
3/20/2017					5.7	320	
3/21/2017							79
3/22/2017	1.5 (J)	3.4	2	3.7			
4/17/2017						340	85
4/18/2017	1.6 (J)	2.6	2.2	2.4	4.7		
5/30/2017				2.6	15	310	99
5/31/2017		4.4	1.5 (J)				
8/23/2017	2.3	4.4	1.8 (J)	2.7			
8/24/2017					93	290	110
5/22/2018		3.2		2.3			
5/23/2018	2						
5/24/2018			1.6 (J)				
6/11/2018						260	81
6/12/2018	1.7 (J)	3.7	1.4 (J)	2.3	140		
10/17/2018	1.5 (J)	4.6	<2	1.7 (J)	180	270	85
11/19/2018	<2	3	<2	1.7 (J)			
4/10/2019	1.88	1.76	2.25	2.36	174	249	74.3
5/14/2019	1.82	2.98	2.28	2.28			
10/8/2019		4.26	1.36	2.31			
10/10/2019	1.93						
10/14/2019					207	228	59.1
10/16/2019	1.92	4.04	1.4	2.42			
2/3/2020	1.72	2.48	2.12	2.07		267	
2/4/2020					94.1		43.2
8/3/2020		4.03	1.17	2.05			
8/4/2020						222	
8/5/2020	1.57				146		41
2/22/2021	1.52	1.72	2.22	2.16			
3/1/2021					92.5	250	
3/3/2021							40.3
7/12/2021	1.56	2.36	2.13	2.19			
7/14/2021					129	207	102

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 11/16/2021 4:50 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	0.372	0.243 (J)	0.149 (J)				
4/26/2016				0.146 (J)			
6/20/2016	0.361		0.148 (J)	0.148 (J)			
6/22/2016		0.269 (J)					
8/8/2016			0.134 (J)	0.137 (J)			
8/9/2016	0.326	0.363					
8/24/2016	0.329	0.346	0.129 (J)	0.133 (J)	0.165 (J)	0.793	0.264 (J)
10/3/2016	0.287 (J)		0.086 (J)	0.103 (J)	0.114 (J)	0.769	0.276 (J)
10/4/2016		0.266 (J)					
10/26/2016	0.194 (J)	0.266 (J)	0.027 (J)	0.05 (J)	0.056 (J)	0.578	0.182 (J)
11/21/2016	0.192 (J)	0.244 (J)	0.027 (J)	0.047 (J)	0.059 (J)	0.562	0.238 (J)
1/17/2017			0.066 (J)	0.09 (J)	0.07 (J)	0.571	0.34
1/18/2017	0.223 (J)	0.385					
3/20/2017					0.18		0.39
3/21/2017						0.54	
3/22/2017	0.32	0.41	0.13	0.12			
4/17/2017						0.54	0.57
4/18/2017	0.32	0.29	0.16	0.12	0.17		
5/30/2017				0.13	0.16	0.49	0.38
5/31/2017		0.37	0.13				
8/23/2017	0.38	0.55	0.16	0.16			
8/24/2017					0.18	0.7	0.54
2/13/2018	0.38	0.27	0.22	0.14	0.15	0.63	0.57
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	0.39	0.53	0.16	0.16	0.15		
10/17/2018	0.39	0.63	0.16	0.18	0.16	0.44	0.78
11/19/2018	0.36	0.31	0.18	0.15			
4/10/2019	0.384	0.273	0.262	0.102	0.156	<0.1	0.738
5/14/2019	0.335	0.281	0.17	0.119			
10/8/2019		0.225	0.164	0.0924 (J)			
10/10/2019	0.304						
10/14/2019					0.118	<0.1	0.619
10/16/2019	0.302	0.106	0.114	0.0756 (J)			
2/3/2020	0.37	0.256	0.182	0.0982 (J)			0.427
2/4/2020					0.132	<0.1	
8/3/2020		0.0766 (J)	0.122	<0.1			
8/4/2020							0.389
8/5/2020	0.359				0.119	<0.1	
2/22/2021	0.357	0.246	0.209	0.082 (J)			
3/1/2021					0.106		0.449
3/3/2021						<0.1	
7/12/2021	0.35	0.287	0.196	0.125			
7/14/2021					0.221	<0.1	0.556

FIGURE H.

Appendix III Trend Tests - Significant Results

Plant Gorgas Client: Southern Company Data: Gorgas GSA Printed 11/16/2021, 4:54 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	**GS-GSA-MW-4**	**-0.4403**	**-70**	**-63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**GS-GSA-MW-8**	**0.4021**	**102**	**63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**MW-2 (bg)**	**0.003842**	**110**	**105**	**Yes**	**24**	**20.83**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**GS-GSA-MW-8**	**67.39**	**78**	**63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**GS-GSA-MW-4**	**-16**	**-82**	**-63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**GS-GSA-MW-8**	**27.55**	**88**	**63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Fluoride (mg/L)	**GS-GSA-MW-3**	**0.08911**	**72**	**68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Fluoride (mg/L)	**MW-2 (bg)**	**0.01335**	**119**	**111**	**Yes**	**25**	**0**	**n/a**	**n/a**	**0.01**	**NP**
pH (pH)	**MW-1 (bg)**	**-0.02227**	**-132**	**-105**	**Yes**	**24**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**MW-4 (bg)**	**-136.2**	**-106**	**-98**	**Yes**	**23**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total dissolved solids (mg/L)	**MW-1 (bg)**	**74.49**	**116**	**98**	**Yes**	**23**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total dissolved solids (mg/L)	**MW-4 (bg)**	**-179.1**	**-104**	**-98**	**Yes**	**23**	**0**	**n/a**	**n/a**	**0.01**	**NP**

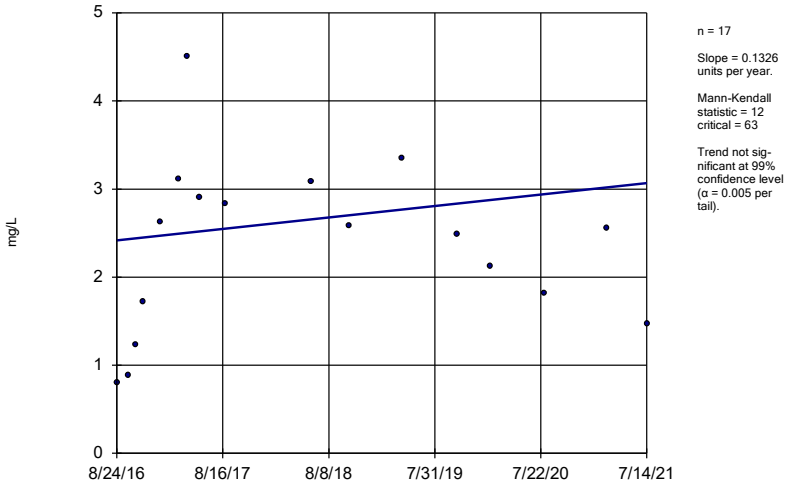
Appendix III Trend Tests - All Results

Plant Gorgas Client: Southern Company Data: Gorgas GSA Printed 11/16/2021, 4:54 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	GS-GSA-MW-3	0.1326	12	63	No	17	0	n/a	n/a	0.01	NP
Boron (mg/L)	**GS-GSA-MW-4**	**-0.4403**	**-70**	**-63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**GS-GSA-MW-8**	**0.4021**	**102**	**63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	MW-1 (bg)	0.003051	93	105	No	24	29.17	n/a	n/a	0.01	NP
Boron (mg/L)	**MW-2 (bg)**	**0.003842**	**110**	**105**	**Yes**	**24**	**20.83**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	MW-3 (bg)	0.002417	77	105	No	24	25	n/a	n/a	0.01	NP
Boron (mg/L)	MW-4 (bg)	-0.00006728	-8	-92	No	22	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GS-GSA-MW-3	-4.279	-16	-63	No	17	0	n/a	n/a	0.01	NP
Calcium (mg/L)	**GS-GSA-MW-8**	**67.39**	**78**	**63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	MW-1 (bg)	3.349	87	105	No	24	0	n/a	n/a	0.01	NP
Calcium (mg/L)	MW-2 (bg)	2.18	38	105	No	24	0	n/a	n/a	0.01	NP
Calcium (mg/L)	MW-3 (bg)	14.44	68	105	No	24	0	n/a	n/a	0.01	NP
Calcium (mg/L)	MW-4 (bg)	-5.475	-41	-98	No	23	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GS-GSA-MW-3	-7.927	-17	-63	No	17	0	n/a	n/a	0.01	NP
Chloride (mg/L)	**GS-GSA-MW-4**	**-16**	**-82**	**-63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**GS-GSA-MW-8**	**27.55**	**88**	**63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	MW-1 (bg)	-0.02109	-21	-105	No	24	0	n/a	n/a	0.01	NP
Chloride (mg/L)	MW-2 (bg)	-0.04511	-17	-105	No	24	0	n/a	n/a	0.01	NP
Chloride (mg/L)	MW-3 (bg)	0.08238	58	105	No	24	8.333	n/a	n/a	0.01	NP
Chloride (mg/L)	MW-4 (bg)	-0.06663	-67	-98	No	23	4.348	n/a	n/a	0.01	NP
Fluoride (mg/L)	**GS-GSA-MW-3**	**0.08911**	**72**	**68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Fluoride (mg/L)	MW-1 (bg)	-0.007029	-47	-111	No	25	4	n/a	n/a	0.01	NP
Fluoride (mg/L)	**MW-2 (bg)**	**0.01335**	**119**	**111**	**Yes**	**25**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Fluoride (mg/L)	MW-3 (bg)	-0.009085	-31	-111	No	25	0	n/a	n/a	0.01	NP
Fluoride (mg/L)	MW-4 (bg)	0.005826	31	105	No	24	0	n/a	n/a	0.01	NP
pH (pH)	**MW-1 (bg)**	**-0.02227**	**-132**	**-105**	**Yes**	**24**	**0**	**n/a**	**n/a**	**0.01**	**NP**
pH (pH)	MW-2 (bg)	0.0333	103	105	No	24	0	n/a	n/a	0.01	NP
pH (pH)	MW-3 (bg)	-0.0175	-25	-105	No	24	0	n/a	n/a	0.01	NP
pH (pH)	MW-4 (bg)	0.00427	21	105	No	24	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GS-GSA-MW-4	1.31	8	63	No	17	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	MW-1 (bg)	16.17	47	98	No	23	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	MW-2 (bg)	-34.2	-47	-105	No	24	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	MW-3 (bg)	130.9	95	105	No	24	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	**MW-4 (bg)**	**-136.2**	**-106**	**-98**	**Yes**	**23**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total dissolved solids (mg/L)	GS-GSA-MW-4	0	0	63	No	17	0	n/a	n/a	0.01	NP
Total dissolved solids (mg/L)	**MW-1 (bg)**	**74.49**	**116**	**98**	**Yes**	**23**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total dissolved solids (mg/L)	MW-2 (bg)	-27.12	-34	-105	No	24	0	n/a	n/a	0.01	NP
Total dissolved solids (mg/L)	MW-3 (bg)	232.2	95	105	No	24	0	n/a	n/a	0.01	NP
Total dissolved solids (mg/L)	**MW-4 (bg)**	**-179.1**	**-104**	**-98**	**Yes**	**23**	**0**	**n/a**	**n/a**	**0.01**	**NP**

Sen's Slope Estimator

GS-GSA-MW-3



n = 17

Slope = 0.1326 units per year.

Mann-Kendall statistic = 12
critical = 63

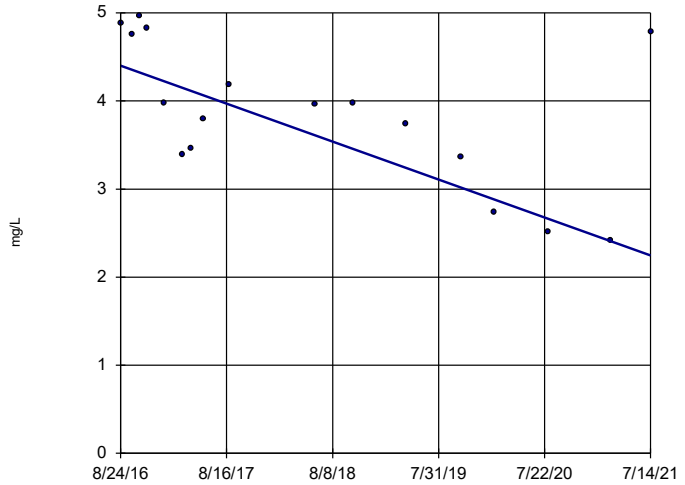
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 11/16/2021 4:52 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Sen's Slope Estimator

GS-GSA-MW-4



n = 17

Slope = -0.4403 units per year.

Mann-Kendall statistic = -70
critical = -63

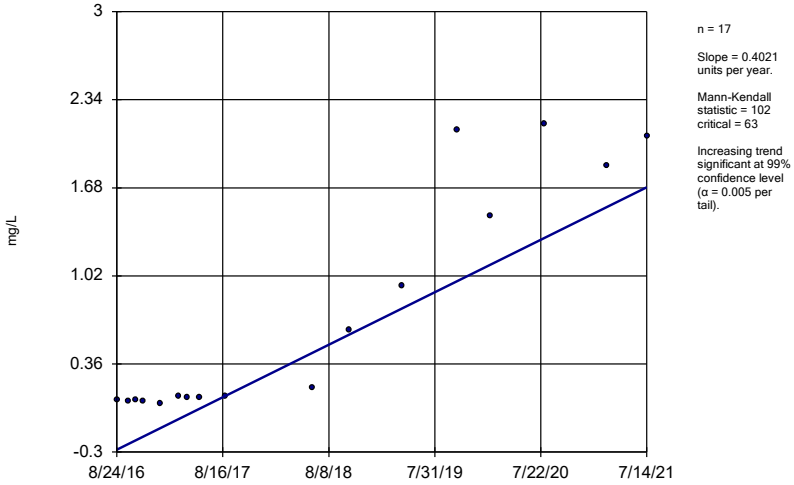
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 11/16/2021 4:52 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Sen's Slope Estimator

GS-GSA-MW-8



n = 17

Slope = 0.4021 units per year.

Mann-Kendall statistic = 102
critical = 63

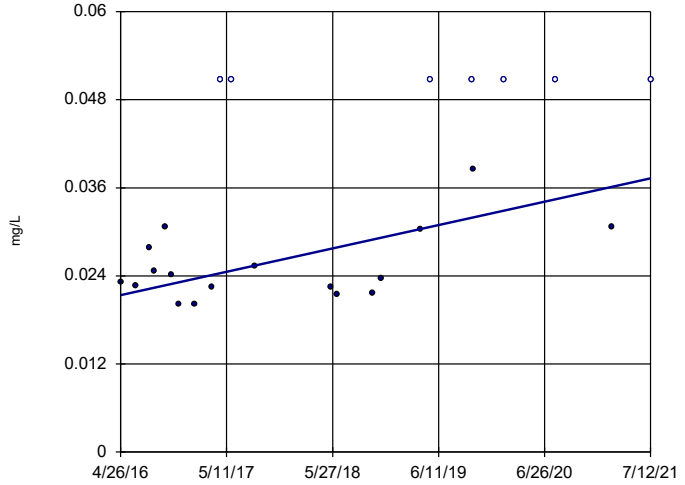
Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 11/16/2021 4:52 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-1 (bg)



n = 24

Slope = 0.003051 units per year.

Mann-Kendall statistic = 93
critical = 105

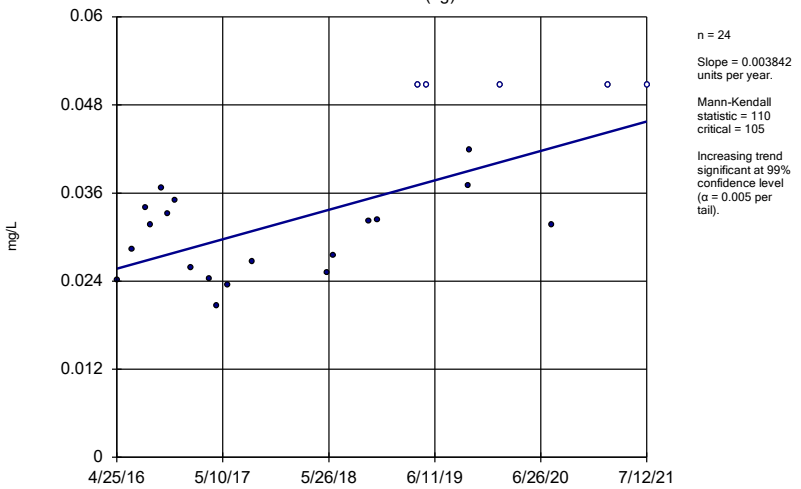
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 11/16/2021 4:53 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-2 (bg)



n = 24

Slope = 0.003842 units per year.

Mann-Kendall statistic = 110
critical = 105

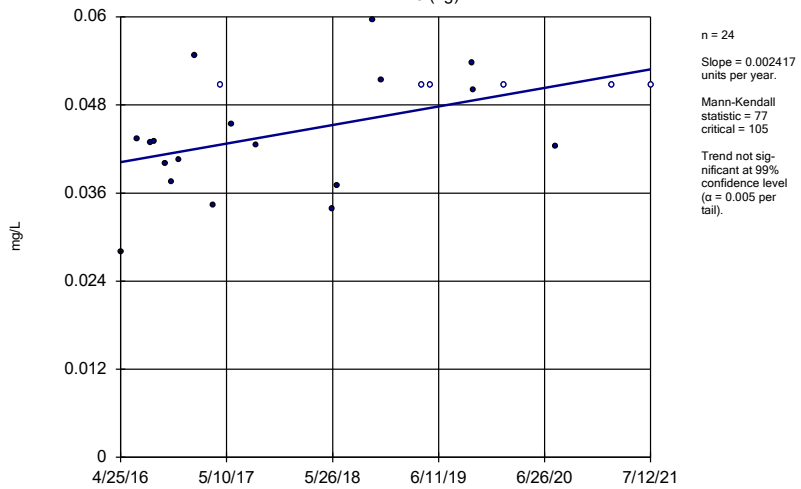
Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 11/16/2021 4:53 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-3 (bg)



n = 24

Slope = 0.002417 units per year.

Mann-Kendall statistic = 77
critical = 105

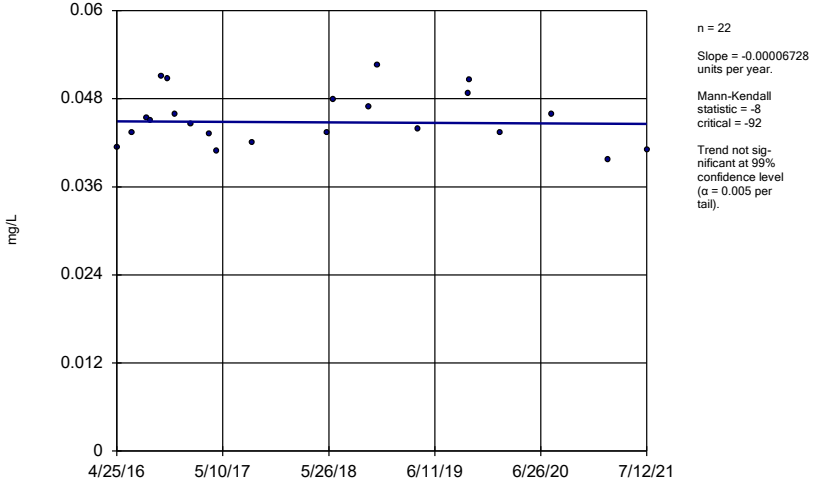
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 11/16/2021 4:53 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-4 (bg)



n = 22

Slope = -0.00006728 units per year.

Mann-Kendall statistic = -8
critical = -92

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 11/16/2021 4:53 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas GSA

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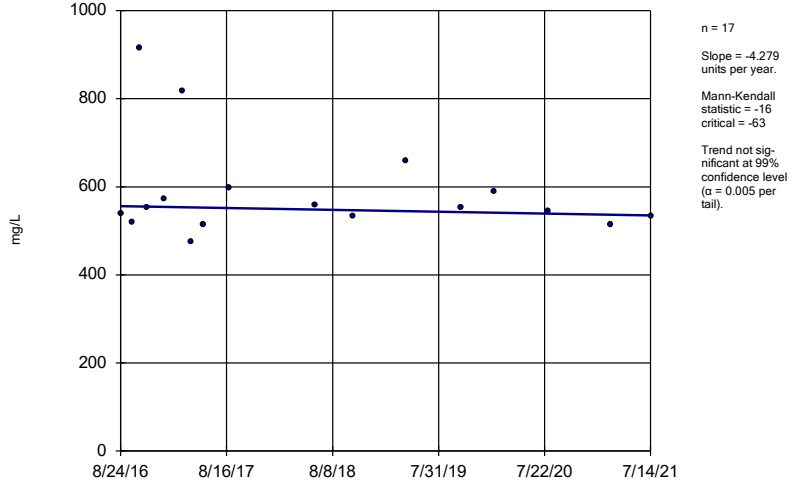
Sen's Slope Estimator

GS-GSA-MW-3



n = 17

Slope = -4.279 units per year.

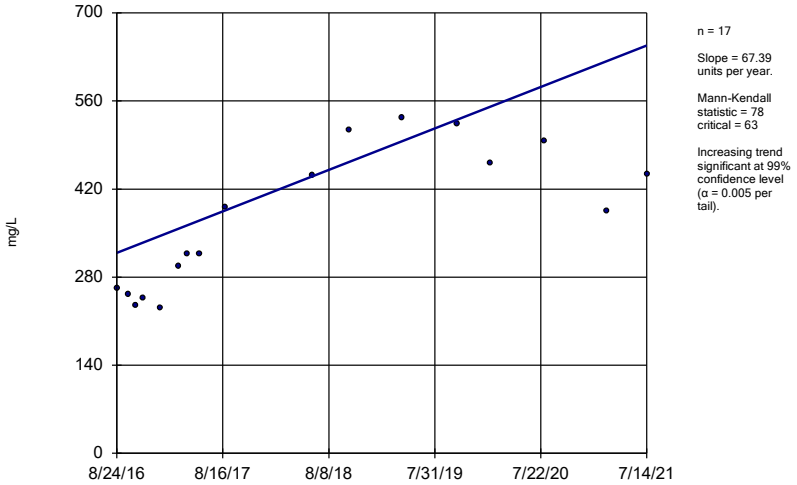
Mann-Kendall statistic = -16
critical = -63

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 11/16/2021 4:53 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sen's Slope Estimator

GS-GSA-MW-8



n = 17

Slope = 67.39 units per year.

Mann-Kendall statistic = 78 critical = 63

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

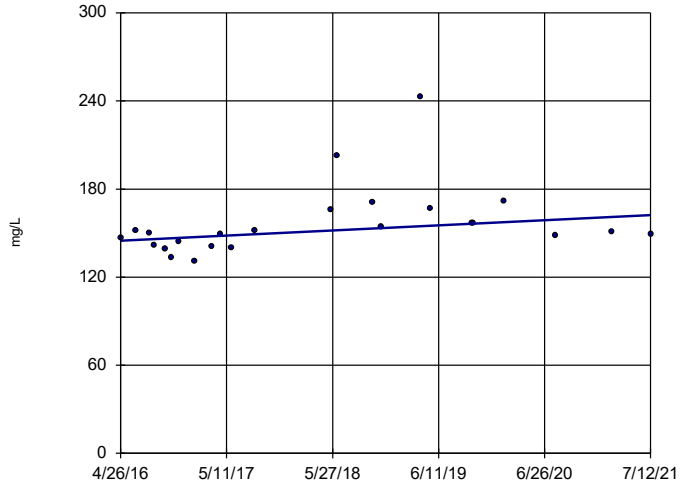
Constituent: Calcium Analysis Run 11/16/2021 4:53 PM View: Appendix III - Trend Tests

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-1 (bg)



n = 24

Slope = 3.349 units per year.

Mann-Kendall statistic = 87 critical = 105

Trend not significant at 99% confidence level (α = 0.005 per tail).

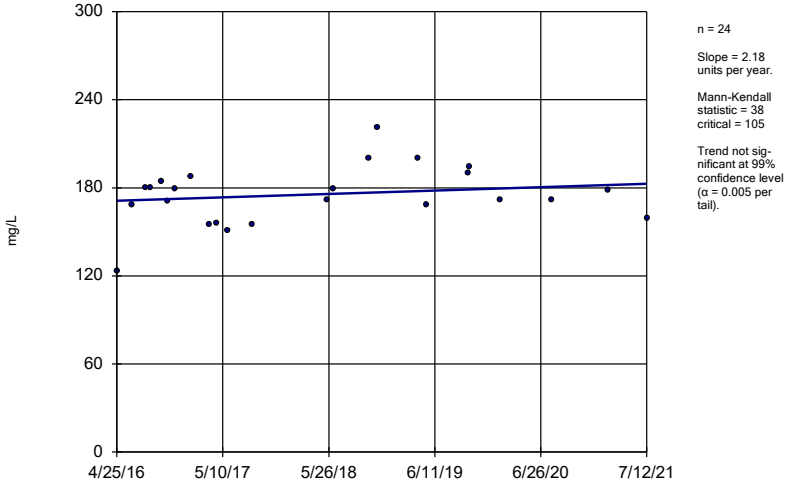
Constituent: Calcium Analysis Run 11/16/2021 4:53 PM View: Appendix III - Trend Tests

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-2 (bg)



n = 24

Slope = 2.18 units per year.

Mann-Kendall statistic = 38 critical = 105

Trend not significant at 99% confidence level (α = 0.005 per tail).

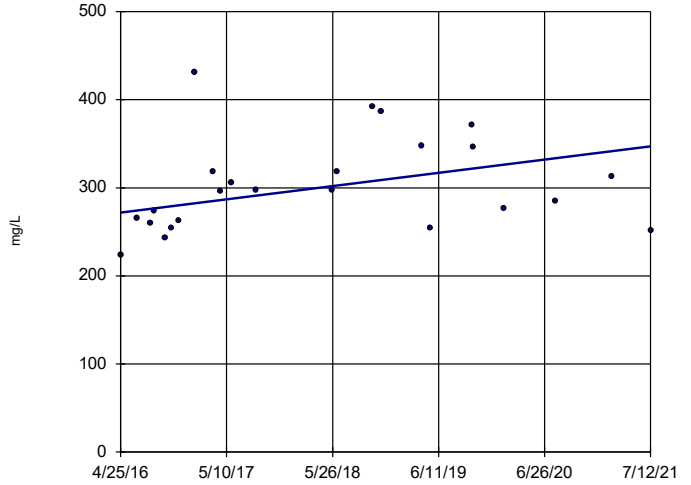
Constituent: Calcium Analysis Run 11/16/2021 4:53 PM View: Appendix III - Trend Tests

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-3 (bg)



n = 24

Slope = 14.44 units per year.

Mann-Kendall statistic = 68 critical = 105

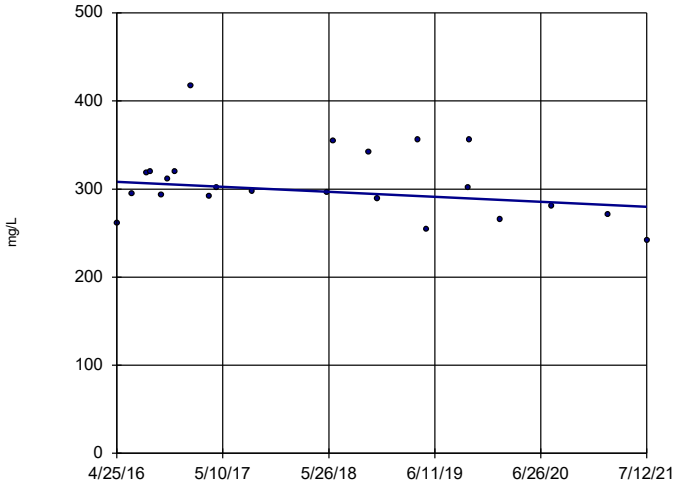
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 11/16/2021 4:53 PM View: Appendix III - Trend Tests

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sen's Slope Estimator

MW-4 (bg)



n = 23

Slope = -5.475 units per year.

Mann-Kendall statistic = -41
critical = -98

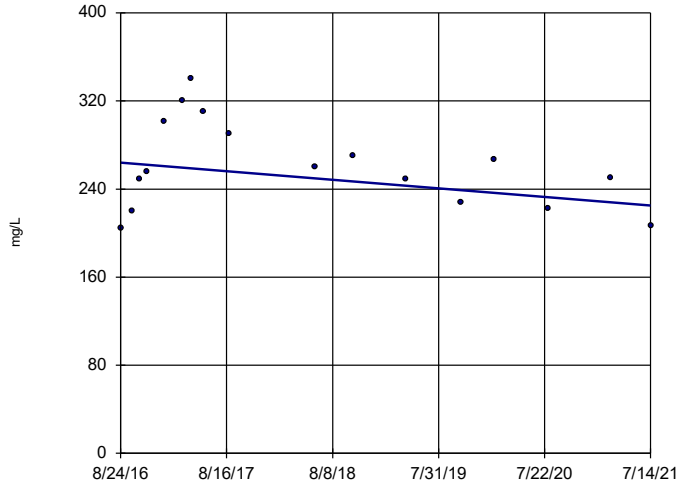
Trend not sig-nificant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 11/16/2021 4:53 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Sen's Slope Estimator

GS-GSA-MW-3



n = 17

Slope = -7.927 units per year.

Mann-Kendall statistic = -17
critical = -63

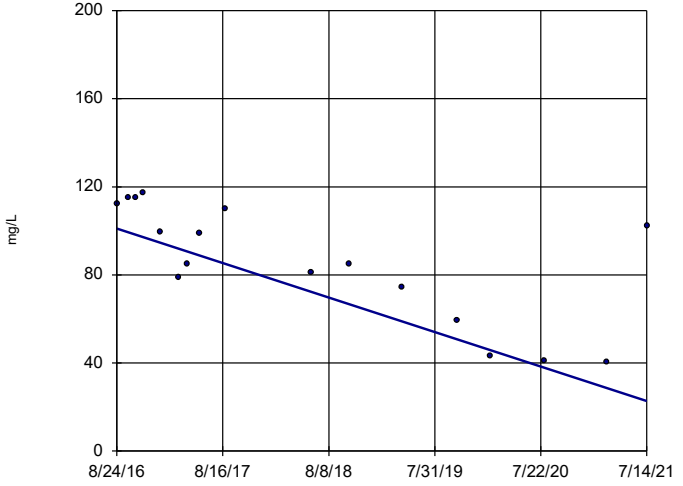
Trend not sig-nificant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 11/16/2021 4:53 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Sen's Slope Estimator

GS-GSA-MW-4



n = 17

Slope = -16 units per year.

Mann-Kendall statistic = -82
critical = -63

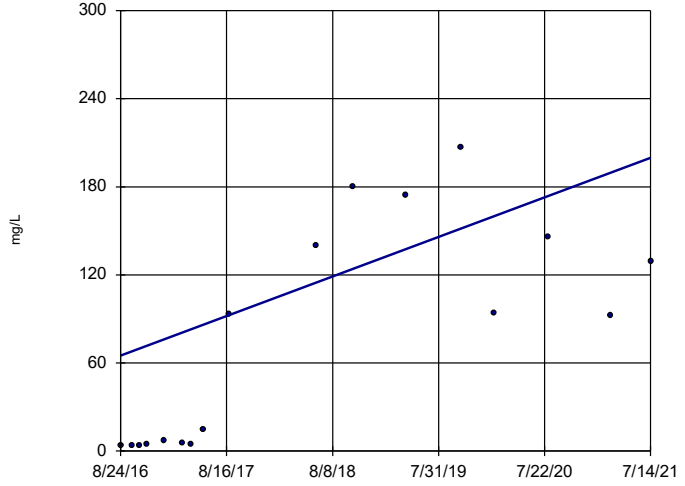
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 11/16/2021 4:53 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Sen's Slope Estimator

GS-GSA-MW-8



n = 17

Slope = 27.55 units per year.

Mann-Kendall statistic = 88
critical = 63

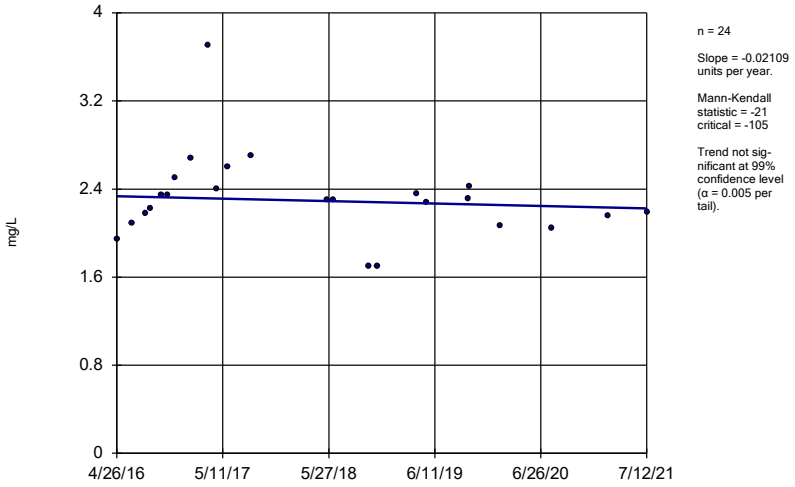
Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 11/16/2021 4:53 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-1 (bg)



n = 24

Slope = -0.02109 units per year.

Mann-Kendall statistic = -21
critical = -105

Trend not sig-nificant at 99% confidence level (α = 0.005 per tail).

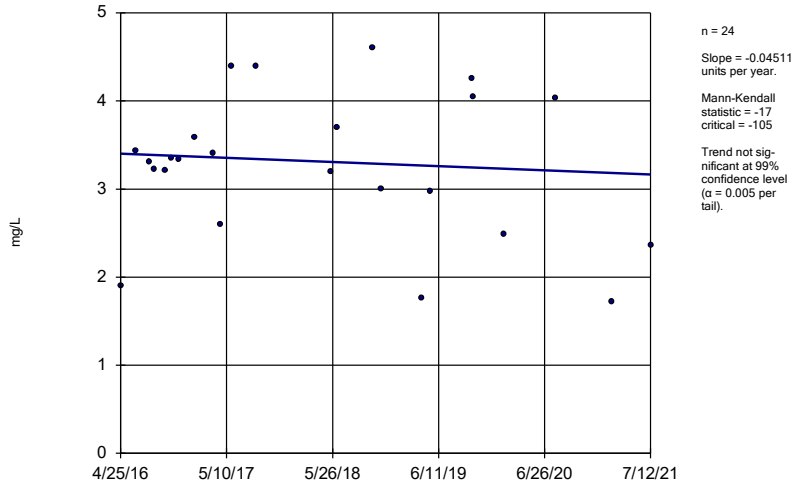
Constituent: Chloride Analysis Run 11/16/2021 4:53 PM View: Appendix III - Trend Tests

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-2 (bg)



n = 24

Slope = -0.04511 units per year.

Mann-Kendall statistic = -17
critical = -105

Trend not sig-nificant at 99% confidence level (α = 0.005 per tail).

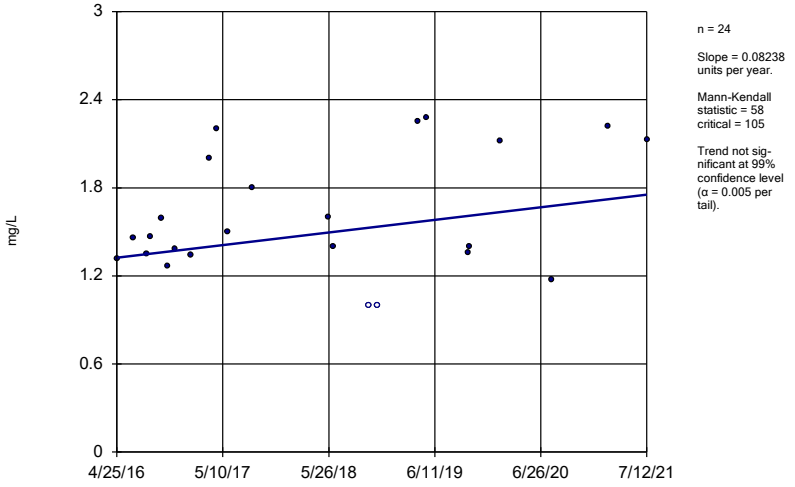
Constituent: Chloride Analysis Run 11/16/2021 4:53 PM View: Appendix III - Trend Tests

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-3 (bg)



n = 24

Slope = 0.08238 units per year.

Mann-Kendall statistic = 58
critical = 105

Trend not sig-nificant at 99% confidence level (α = 0.005 per tail).

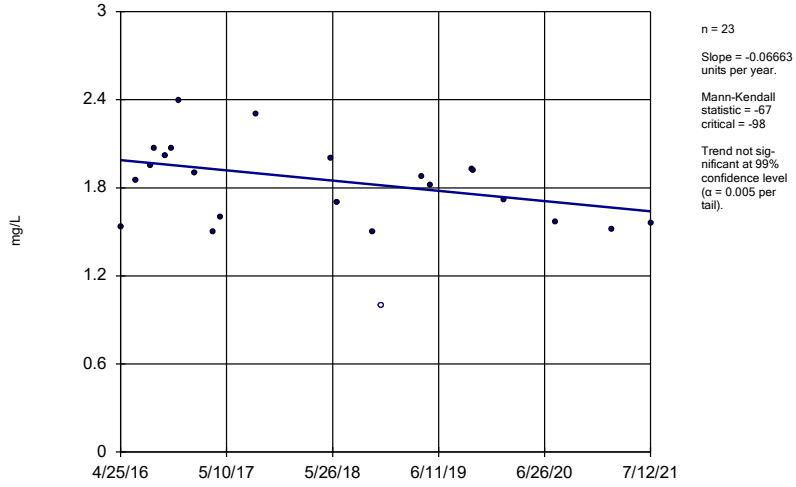
Constituent: Chloride Analysis Run 11/16/2021 4:53 PM View: Appendix III - Trend Tests

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-4 (bg)



n = 23

Slope = -0.06663 units per year.

Mann-Kendall statistic = -67
critical = -98

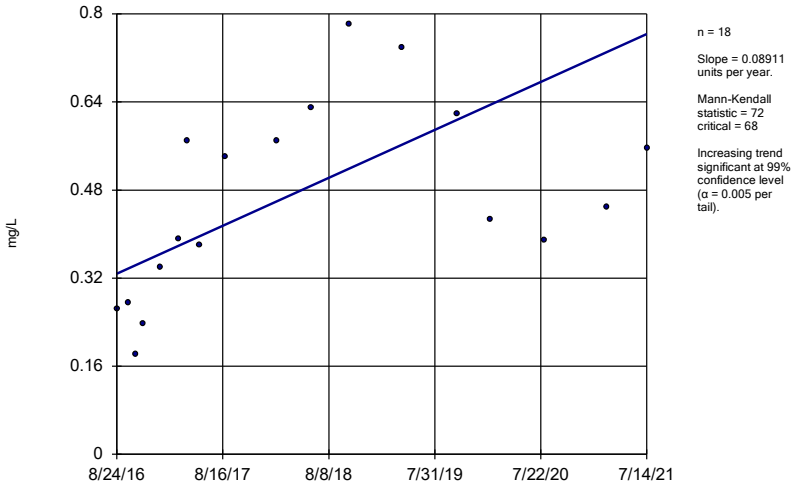
Trend not sig-nificant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 11/16/2021 4:53 PM View: Appendix III - Trend Tests

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sen's Slope Estimator

GS-GSA-MW-3



n = 18

Slope = 0.08911 units per year.

Mann-Kendall statistic = 72
critical = 68

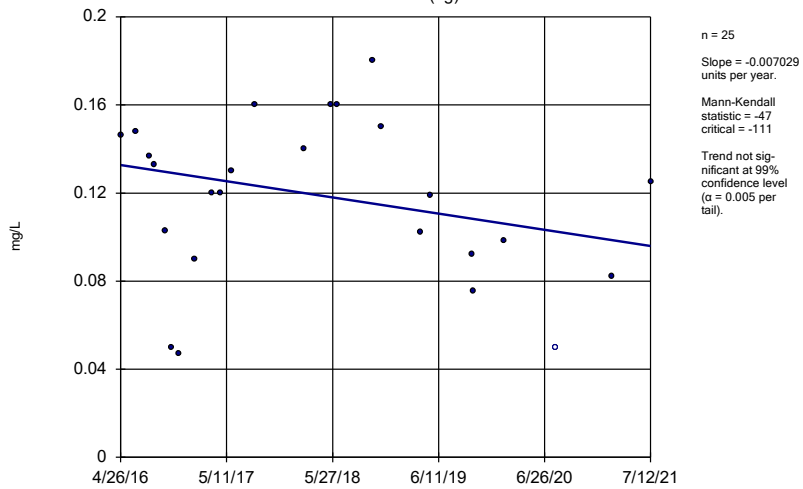
Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Fluoride Analysis Run 11/16/2021 4:53 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 = 25

Slope = -0.007029 units per year.

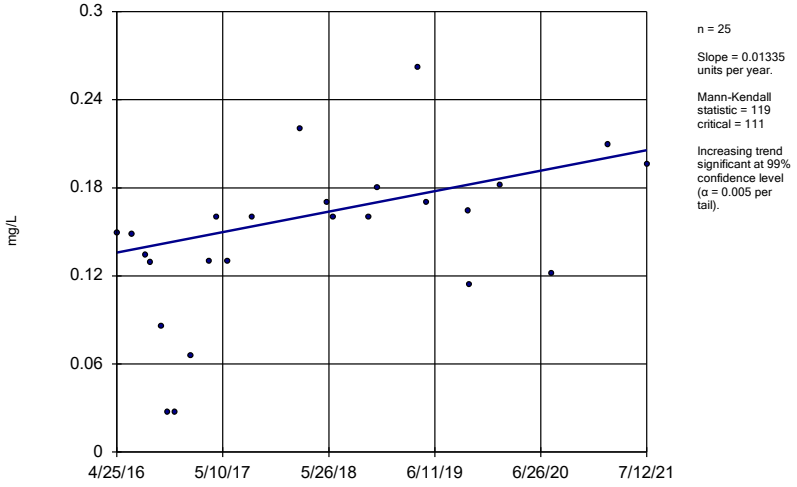
Mann-Kendall statistic = -47
critical = -111

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Fluoride Analysis Run 11/16/2021 4:53 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sen's Slope Estimator

MW-2 (bg)



n = 25

Slope = 0.01335 units per year.

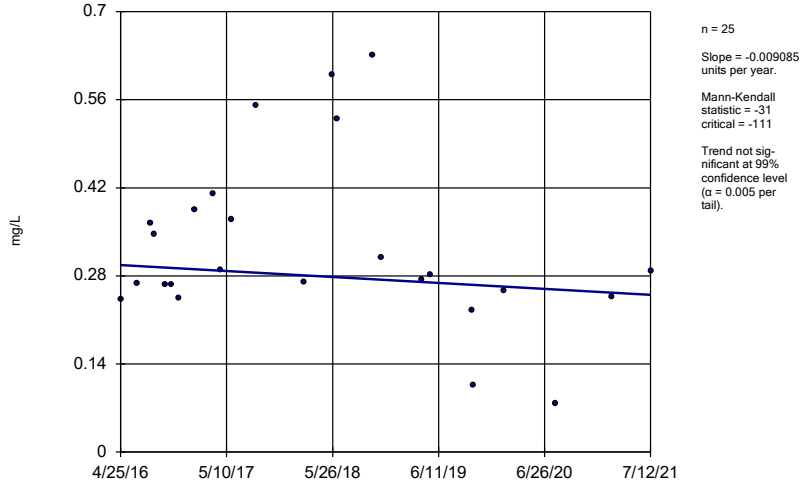
Mann-Kendall statistic = 119
critical = 111

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Fluoride Analysis Run 11/16/2021 4:53 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sen's Slope Estimator

MW-3 (bg)



n = 25

Slope = -0.009085 units per year.

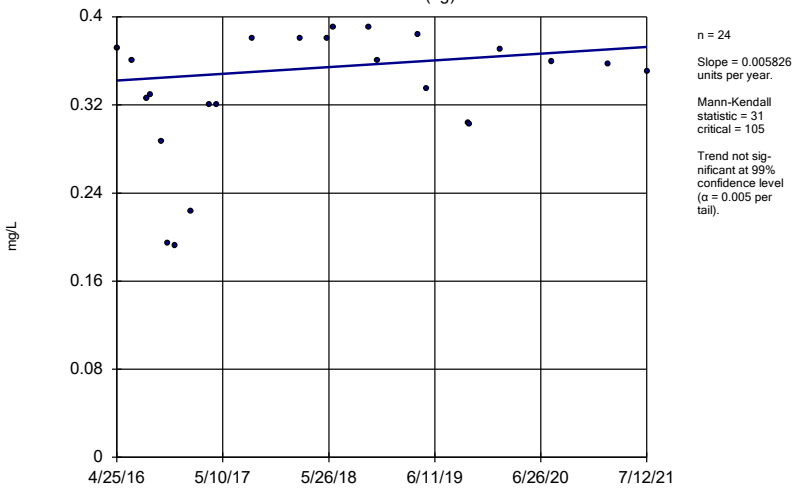
Mann-Kendall statistic = -31
critical = -111

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Fluoride Analysis Run 11/16/2021 4:53 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sen's Slope Estimator

MW-4 (bg)



n = 24

Slope = 0.005826 units per year.

Mann-Kendall statistic = 31
critical = 105

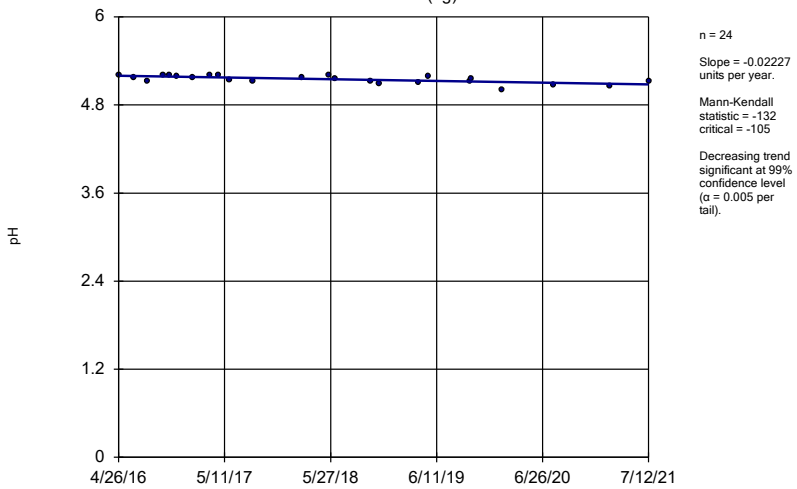
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Fluoride Analysis Run 11/16/2021 4:53 PM View: Appendix III - Trend Tests

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sen's Slope Estimator

MW-1 (bg)



n = 24

Slope = -0.02227 units per year.

Mann-Kendall statistic = -132
critical = -105

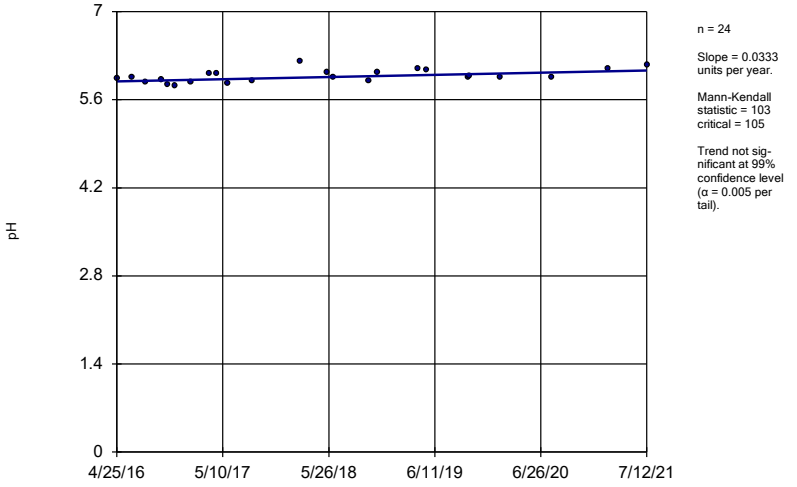
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH Analysis Run 11/16/2021 4:53 PM View: Appendix III - Trend Tests

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sen's Slope Estimator

MW-2 (bg)



n = 24

Slope = 0.0333 units per year.

Mann-Kendall statistic = 103
critical = 105

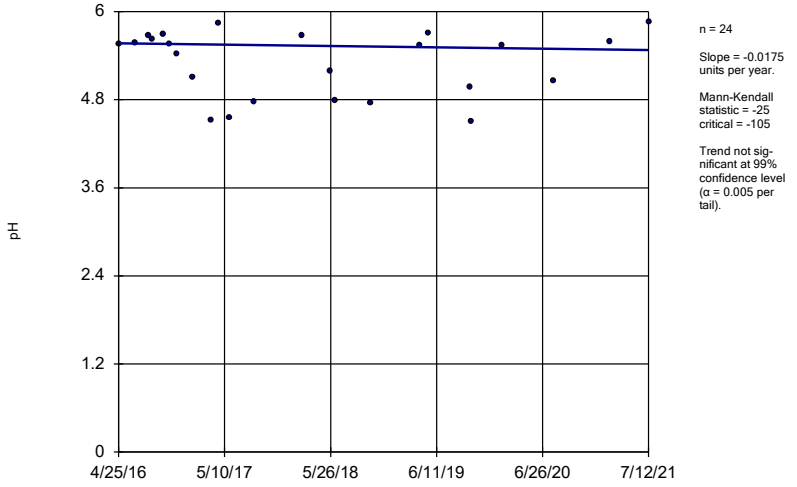
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH Analysis Run 11/16/2021 4:53 PM View: Appendix III - Trend Tests

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sen's Slope Estimator

MW-3 (bg)



n = 24

Slope = -0.0175 units per year.

Mann-Kendall statistic = -25
critical = -105

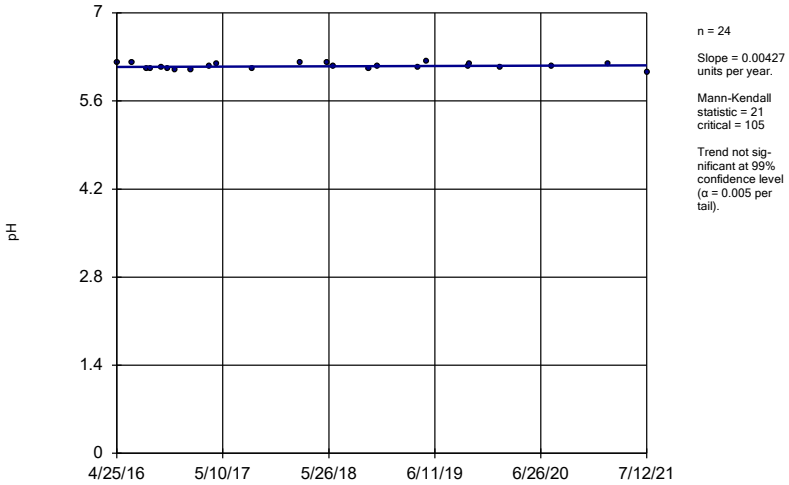
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH Analysis Run 11/16/2021 4:53 PM View: Appendix III - Trend Tests

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sen's Slope Estimator

MW-4 (bg)



n = 24

Slope = 0.00427 units per year.

Mann-Kendall statistic = 21
critical = 105

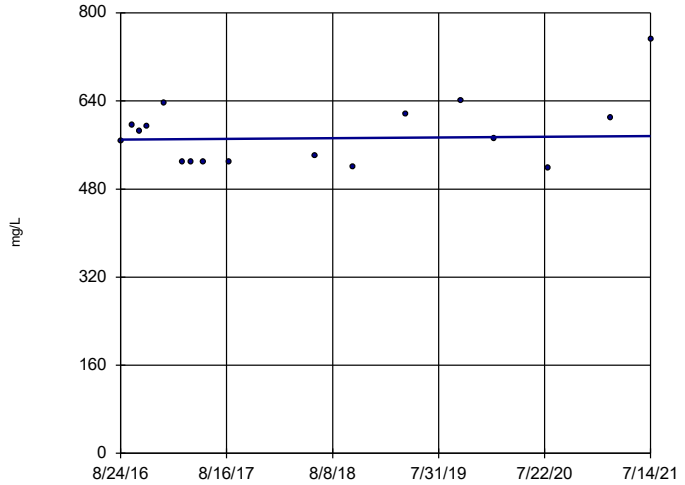
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH Analysis Run 11/16/2021 4:53 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Sen's Slope Estimator

GS-GSA-MW-4



n = 17

Slope = 1.31 units per year.

Mann-Kendall statistic = 8
critical = 63

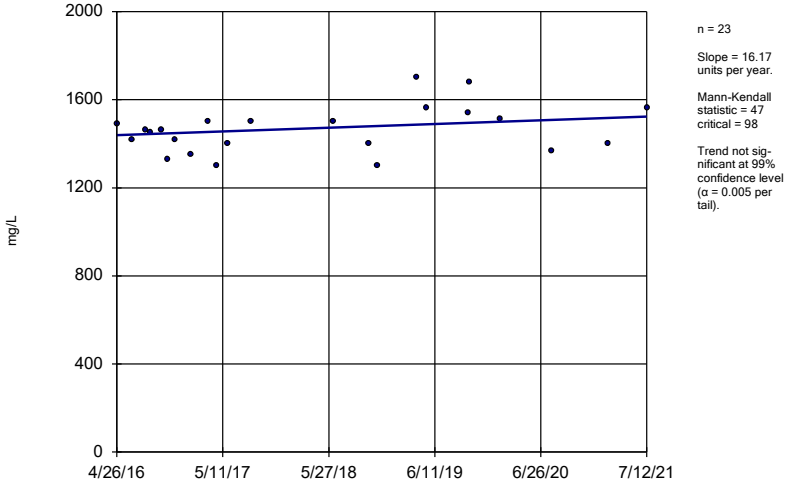
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 11/16/2021 4:53 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-1 (bg)



n = 23

Slope = 16.17 units per year.

Mann-Kendall statistic = 47
critical = 98

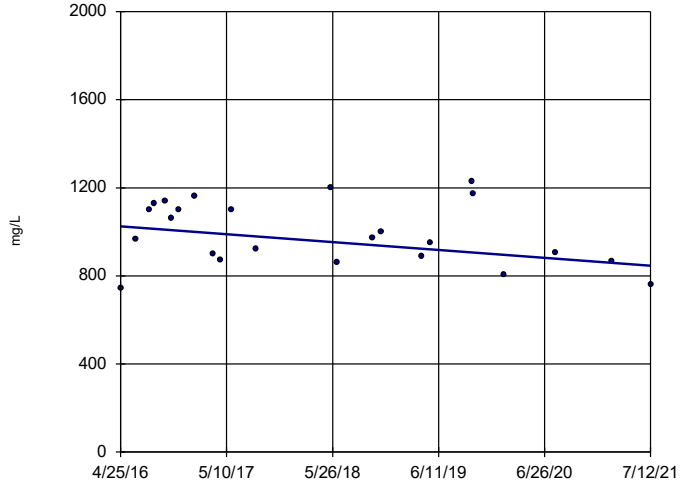
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 11/16/2021 4:53 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-2 (bg)



n = 24

Slope = -34.2 units per year.

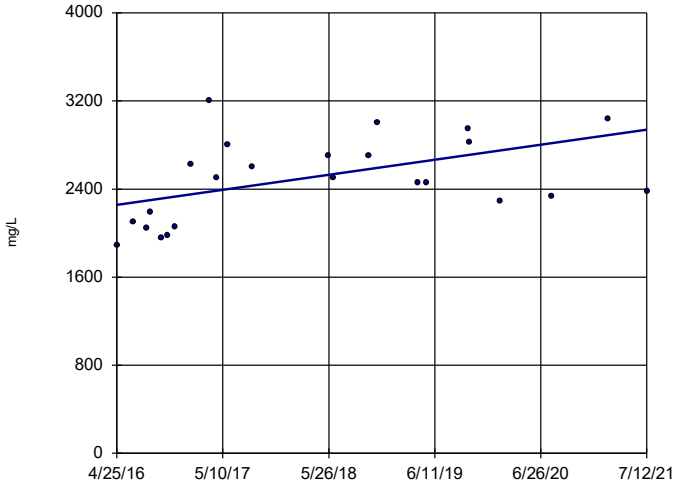
Mann-Kendall statistic = -47
critical = -105

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 11/16/2021 4:53 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sen's Slope Estimator

MW-3 (bg)



n = 24

Slope = 130.9 units per year.

Mann-Kendall statistic = 95
critical = 105

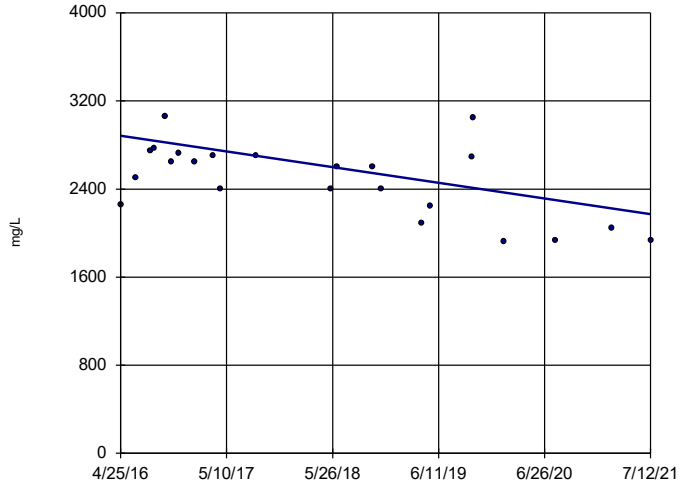
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 11/16/2021 4:53 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-4 (bg)



n = 23

Slope = -136.2 units per year.

Mann-Kendall statistic = -106
critical = -98

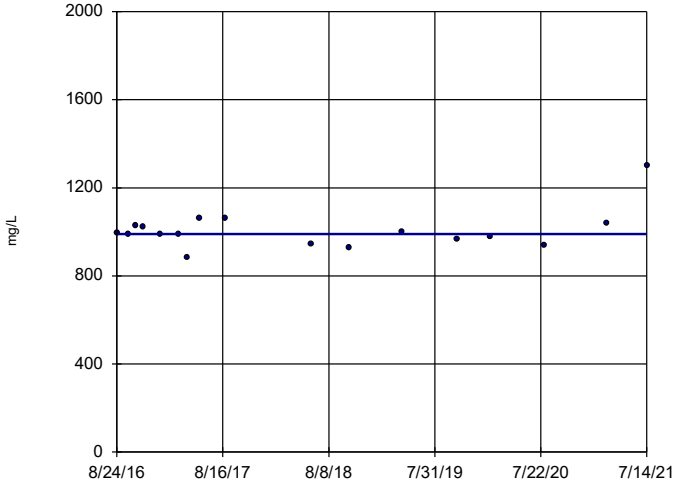
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 11/16/2021 4:53 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Sen's Slope Estimator

GS-GSA-MW-4



n = 17

Slope = 0 units per year.

Mann-Kendall statistic = 0
critical = 63

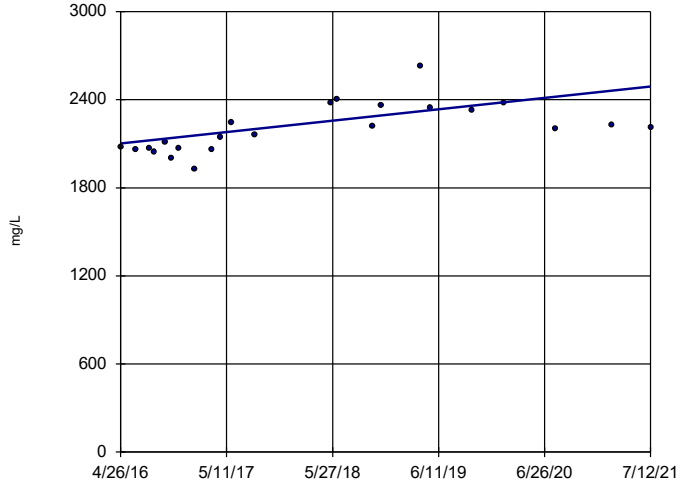
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total dissolved solids Analysis Run 11/16/2021 4:53 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-1 (bg)



n = 23

Slope = 74.49 units per year.

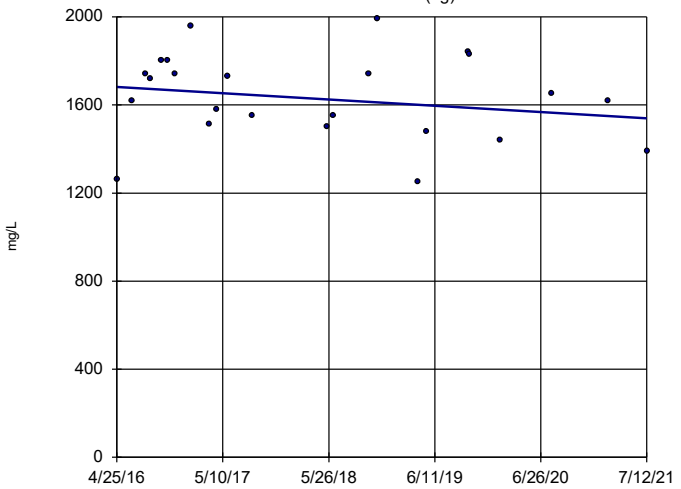
Mann-Kendall statistic = 116
critical = 98

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total dissolved solids Analysis Run 11/16/2021 4:53 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sen's Slope Estimator

MW-2 (bg)



n = 24

Slope = -27.12 units per year.

Mann-Kendall statistic = -34 critical = -105

Trend not significant at 99% confidence level (α = 0.005 per tail).

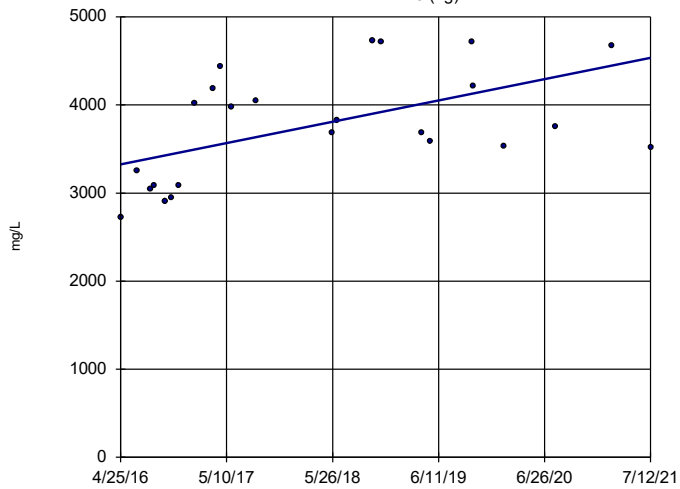
Constituent: Total dissolved solids Analysis Run 11/16/2021 4:53 PM View: Appendix III - Trend Tests

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-3 (bg)



n = 24

Slope = 232.2 units per year.

Mann-Kendall statistic = 95 critical = 105

Trend not significant at 99% confidence level (α = 0.005 per tail).

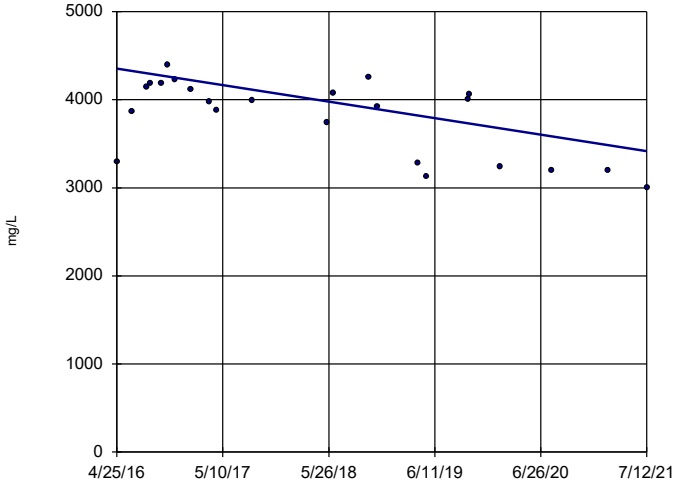
Constituent: Total dissolved solids Analysis Run 11/16/2021 4:53 PM View: Appendix III - Trend Tests

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-4 (bg)



n = 23

Slope = -179.1 units per year.

Mann-Kendall statistic = -104 critical = -98

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total dissolved solids Analysis Run 11/16/2021 4:53 PM View: Appendix III - Trend Tests

Plant Gorgas Client: Southern Company Data: Gorgas GSA

FIGURE I.

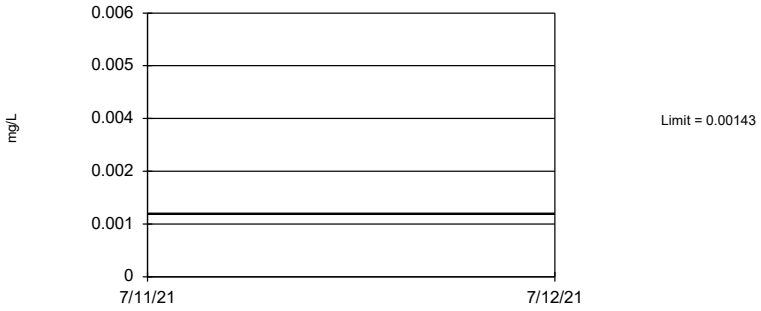
Upper Tolerance Limits Summary Table

Plant Gorgas Client: Southern Company Data: Gorgas GSA Printed 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.

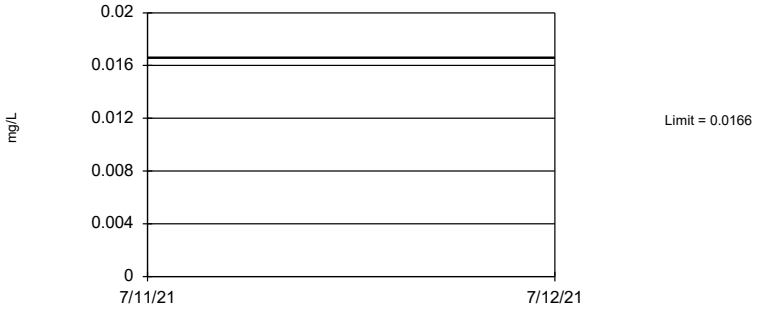
Constituent: Arsenic Analysis Run 11/16/2021 4:55 PM View: UTLs

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

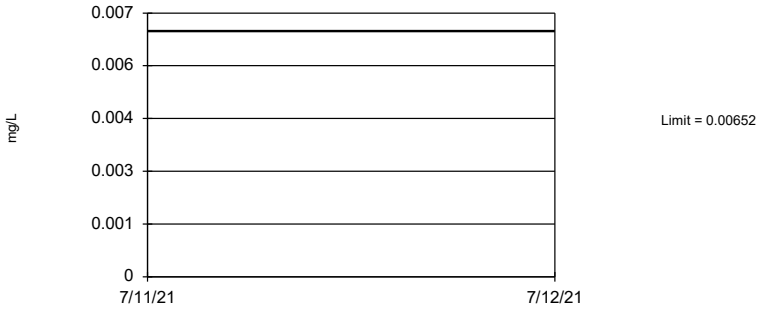
NP test selected by user. Limit is highest of 93 background values. 83.87% NDs. 95.12% coverage at alpha=0.01; 96.68% coverage at alpha=0.05; 99.41% coverage at alpha=0.5. Report alpha = 0.008478.

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.

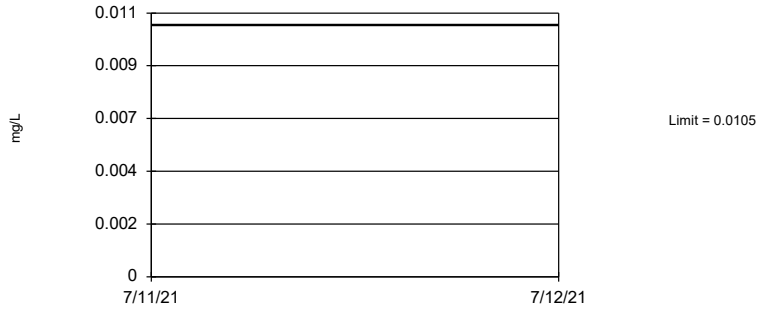
Constituent: Cadmium Analysis Run 11/16/2021 4:55 PM View: UTLs

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.

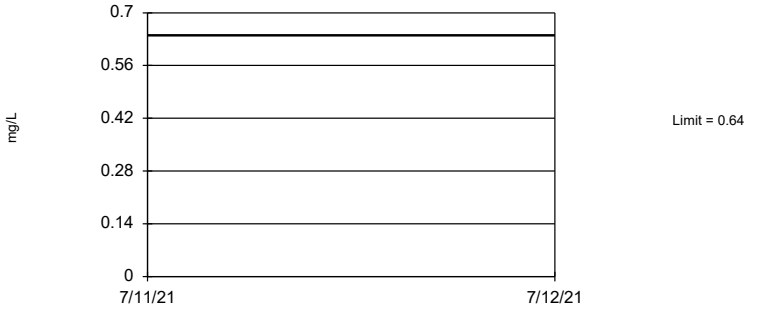
Constituent: Chromium Analysis Run 11/16/2021 4:55 PM View: UTLs

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.

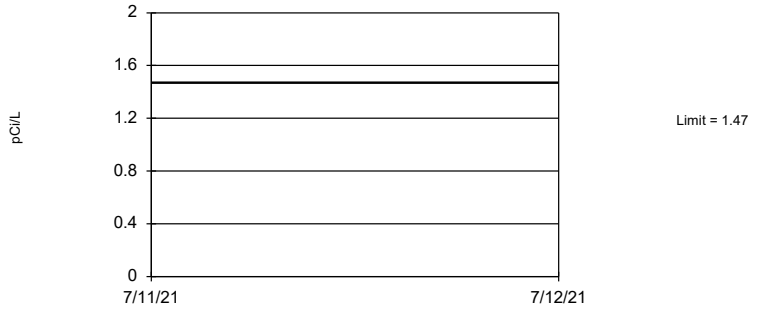
Constituent: Cobalt Analysis Run 11/16/2021 4:55 PM View: UTLs

Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Tolerance Limit

Interwell Non-parametric



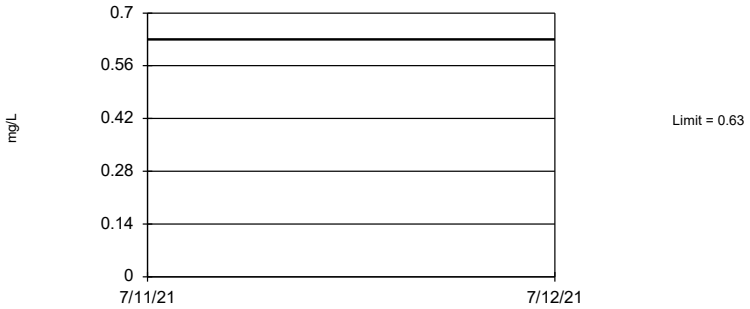
NP test selected by user. Limit is highest of 81 background values. 94.34% coverage at alpha=0.01; 96.29% coverage at alpha=0.05; 99.02% coverage at alpha=0.5. Report alpha = 0.01569.

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



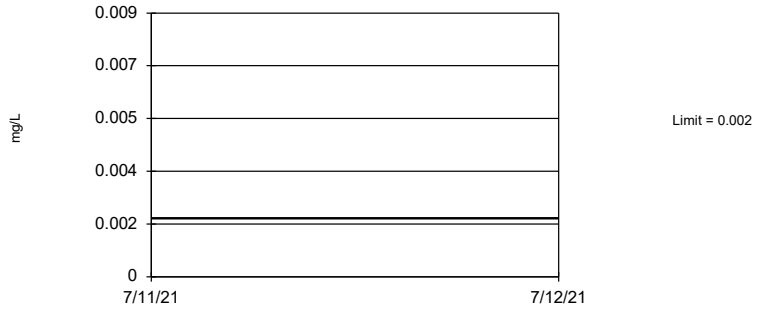
NP test selected by user. Limit is highest of 99 background values. 1.01% NDs. 95.51% coverage at alpha=0.01; 97.07% coverage at alpha=0.05; 99.41% coverage at alpha=0.5. Report alpha = 0.006232.

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



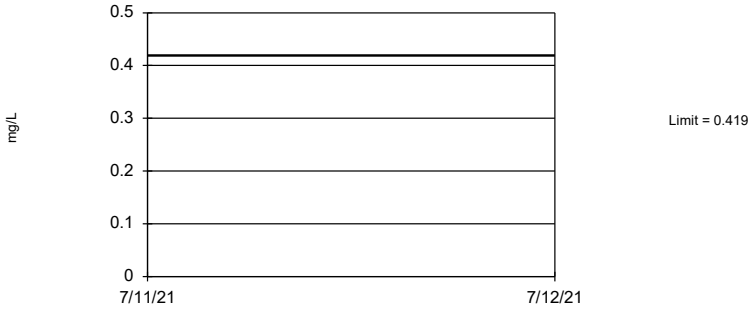
NP test selected by user. Limit is highest of 94 background values. 94.68% NDs. 95.12% coverage at alpha=0.01; 96.68% coverage at alpha=0.05; 99.41% coverage at alpha=0.5. Report alpha = 0.008054.

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



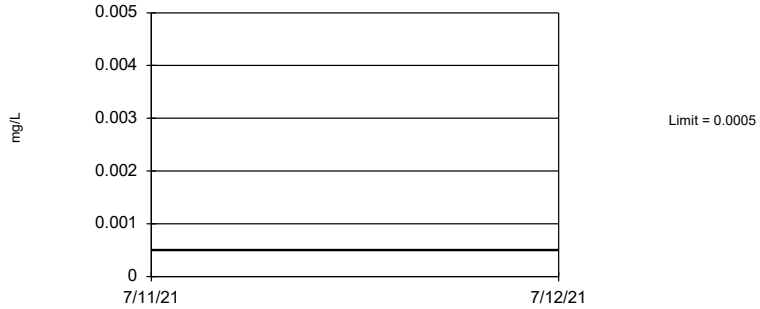
NP test selected by user. Limit is highest of 95 background values. 95.12% coverage at alpha=0.01; 97.07% coverage at alpha=0.05; 99.41% coverage at alpha=0.5. Report alpha = 0.007651.

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



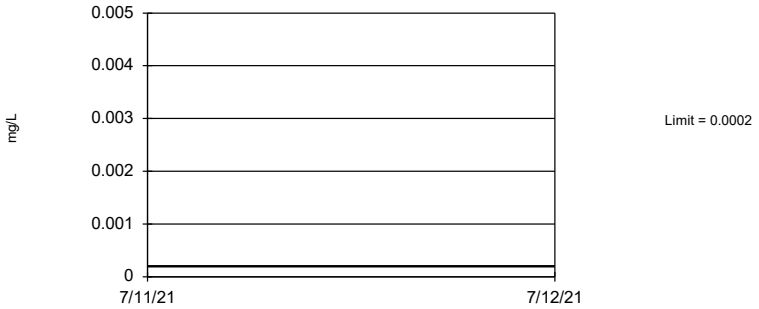
NP test selected by user. All background values were censored; limit is most recent reporting limit. 95.12% coverage at alpha=0.01; 97.07% coverage at alpha=0.05; 99.41% coverage at alpha=0.5. Report alpha = 0.007651.

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



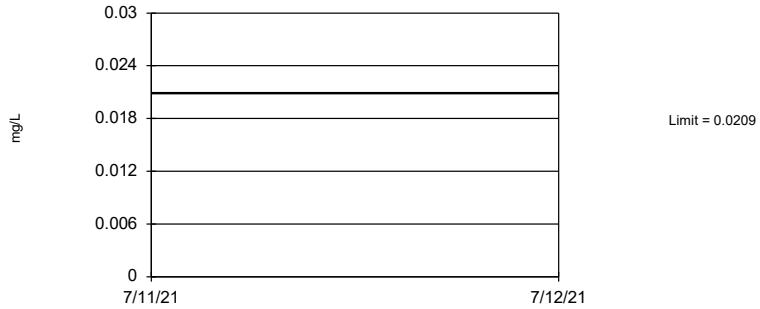
NP test selected by user. Limit is highest of 95 background values. 97.89% NDs. 95.12% coverage at alpha=0.01; 97.07% coverage at alpha=0.05; 99.41% coverage at alpha=0.5. Report alpha = 0.007651.

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



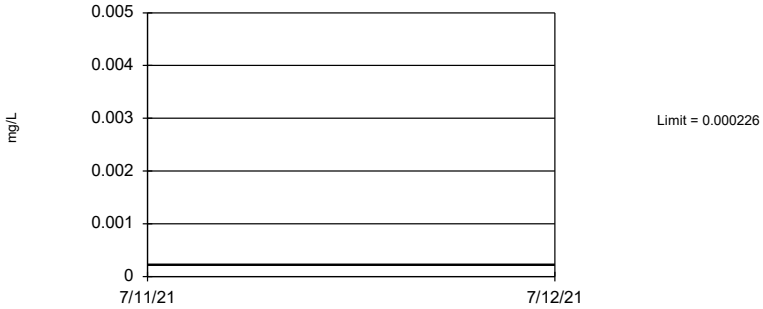
NP test selected by user. Limit is highest of 95 background values. 58.95% NDs. 95.12% coverage at alpha=0.01; 97.07% coverage at alpha=0.05; 99.41% coverage at alpha=0.5. Report alpha = 0.007651.

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 J.

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 K.

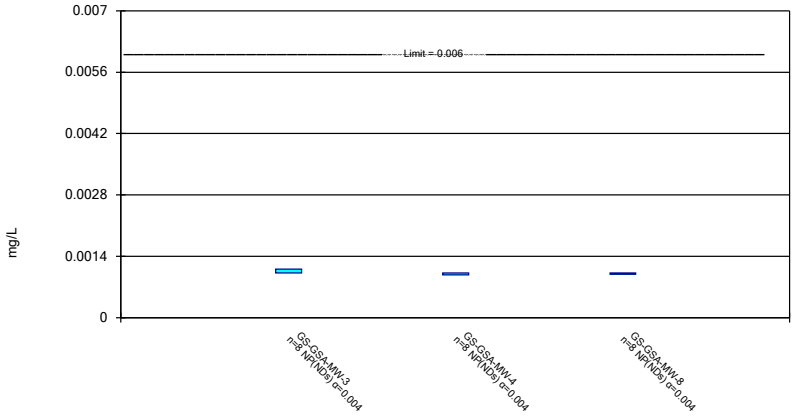
Confidence Intervals - All Results (No Significant)

Plant Gorgas Client: Southern Company Data: Gorgas GSA Printed 11/16/2021, 5:05 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	0.00111	0.00102	0.006	No	8	0.001031	0.00003182	87.5	None	No	0.004	NP (NDs)
Antimony (mg/L)	GS-GSA-MW-4	0.00102	0.000976	0.006	No	8	0.001014	0.00001556	87.5	None	No	0.004	NP (NDs)
Antimony (mg/L)	GS-GSA-MW-8	0.00102	0.00102	0.006	No	8	0.00102	1.2e-11	87.5	None	No	0.004	NP (NDs)
Arsenic (mg/L)	GS-GSA-MW-3	0.005	0.00057	0.01	No	8	0.003522	0.002052	62.5	None	No	0.004	NP (NDs)
Arsenic (mg/L)	GS-GSA-MW-4	0.005	0.00115	0.01	No	8	0.002286	0.001693	25	None	No	0.004	NP (normality)
Arsenic (mg/L)	GS-GSA-MW-8	0.005	0.00024	0.01	No	8	0.003859	0.002115	75	None	No	0.004	NP (NDs)
Barium (mg/L)	GS-GSA-MW-3	0.015	0.01255	2	No	8	0.01378	0.001156	0	None	No	0.01	Param.
Barium (mg/L)	GS-GSA-MW-4	0.01433	0.01179	2	No	8	0.01306	0.001196	0	None	No	0.01	Param.
Barium (mg/L)	GS-GSA-MW-8	0.02338	0.02002	2	No	8	0.0217	0.001587	0	None	No	0.01	Param.
Beryllium (mg/L)	GS-GSA-MW-3	0.002773	0.00139	0.004	No	8	0.002069	0.000696	0	None	sqrt(x)	0.01	Param.
Beryllium (mg/L)	GS-GSA-MW-4	0.005067	0.003651	0.004	No	8	0.004359	0.0006678	0	None	No	0.01	Param.
Cadmium (mg/L)	GS-GSA-MW-4	0.00207	0.001419	0.005	No	8	0.001741	0.0003243	0	None	sqrt(x)	0.01	Param.
Chromium (mg/L)	GS-GSA-MW-3	0.01	0.000386	0.1	No	8	0.007597	0.004449	75	None	No	0.004	NP (NDs)
Chromium (mg/L)	GS-GSA-MW-4	0.01	0.000567	0.1	No	8	0.007658	0.004336	75	None	No	0.004	NP (NDs)
Chromium (mg/L)	GS-GSA-MW-8	0.01	0.0003	0.1	No	8	0.00759	0.004462	75	None	No	0.004	NP (NDs)
Cobalt (mg/L)	GS-GSA-MW-3	0.1441	0.07436	0.64	No	8	0.1093	0.03292	0	None	No	0.01	Param.
Cobalt (mg/L)	GS-GSA-MW-4	0.2679	0.1726	0.64	No	8	0.2203	0.04499	0	None	No	0.01	Param.
Cobalt (mg/L)	GS-GSA-MW-8	0.00546	0.00026	0.64	No	8	0.004465	0.001707	75	None	No	0.004	NP (NDs)
Combined Radium 226 + 228 (pCi/L)	GS-GSA-MW-3	0.7095	0.2832	5	No	8	0.4964	0.2011	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-GSA-MW-4	1.169	0.2775	5	No	8	0.7233	0.4205	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-GSA-MW-8	1.034	0.0163	5	No	8	0.5253	0.4802	0	None	No	0.01	Param.
Fluoride (mg/L)	GS-GSA-MW-3	0.7267	0.4203	4	No	8	0.5735	0.1446	0	None	No	0.01	Param.
Fluoride (mg/L)	GS-GSA-MW-4	0.44	0.1	4	No	8	0.1788	0.1464	75	None	No	0.004	NP (NDs)
Fluoride (mg/L)	GS-GSA-MW-8	0.1838	0.1067	4	No	8	0.1453	0.03633	0	None	No	0.01	Param.
Lead (mg/L)	GS-GSA-MW-3	0.0002	0.000157	0.015	No	8	0.0001921	0.00001582	75	None	No	0.004	NP (NDs)
Lead (mg/L)	GS-GSA-MW-4	0.00079	0.0002	0.015	No	8	0.0003249	0.0002362	75	None	No	0.004	NP (NDs)
Lead (mg/L)	GS-GSA-MW-8	0.0002	0.000145	0.015	No	8	0.0001931	0.00001945	87.5	None	No	0.004	NP (NDs)
Lithium (mg/L)	GS-GSA-MW-3	0.4966	0.3992	0.419	No	8	0.4479	0.04593	0	None	No	0.01	Param.
Lithium (mg/L)	GS-GSA-MW-4	0.487	0.262	0.419	No	8	0.3049	0.07546	0	None	No	0.004	NP (normality)
Lithium (mg/L)	GS-GSA-MW-8	0.2127	0.1658	0.419	No	8	0.1893	0.02214	0	None	No	0.01	Param.
Molybdenum (mg/L)	GS-GSA-MW-3	0.01	0.00022	0.1	No	8	0.00756	0.004518	75	None	No	0.004	NP (NDs)
Molybdenum (mg/L)	GS-GSA-MW-8	0.01	0.00015	0.1	No	8	0.007865	0.004015	75	None	No	0.004	NP (NDs)
Selenium (mg/L)	GS-GSA-MW-3	0.01	0.00141	0.05	No	8	0.005952	0.00434	50	None	No	0.004	NP (normality)
Selenium (mg/L)	GS-GSA-MW-4	0.01	0.00294	0.05	No	8	0.006081	0.003355	37.5	None	No	0.004	NP (normality)
Thallium (mg/L)	GS-GSA-MW-4	0.001	0.00009	0.002	No	8	0.0006841	0.0004371	62.5	None	No	0.004	NP (NDs)

Non-Parametric Confidence Interval

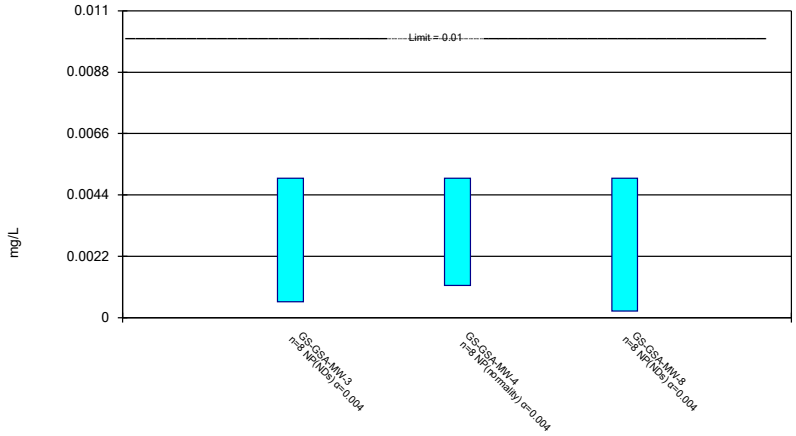
Compliance Limit is not exceeded.



Constituent: Antimony Analysis Run 11/16/2021 5:02 PM View: Appendix IV
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Non-Parametric Confidence Interval

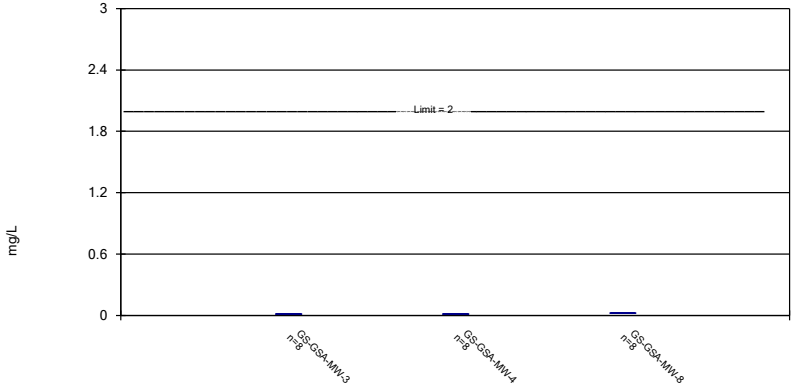
Compliance Limit is not exceeded.



Constituent: Arsenic Analysis Run 11/16/2021 5:02 PM View: Appendix IV
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Parametric Confidence Interval

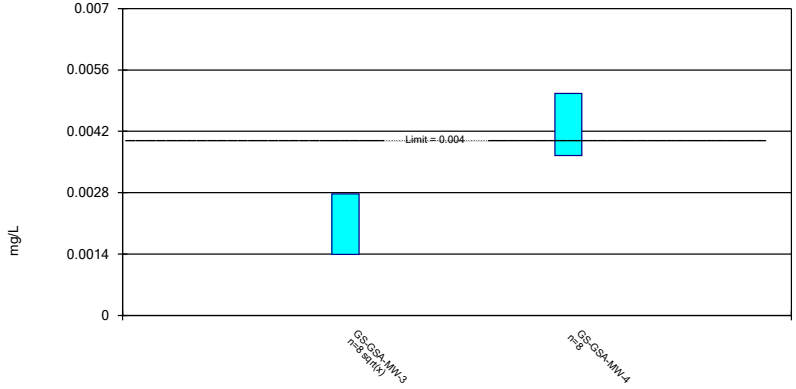
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Barium Analysis Run 11/16/2021 5:02 PM View: Appendix IV
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Parametric Confidence Interval

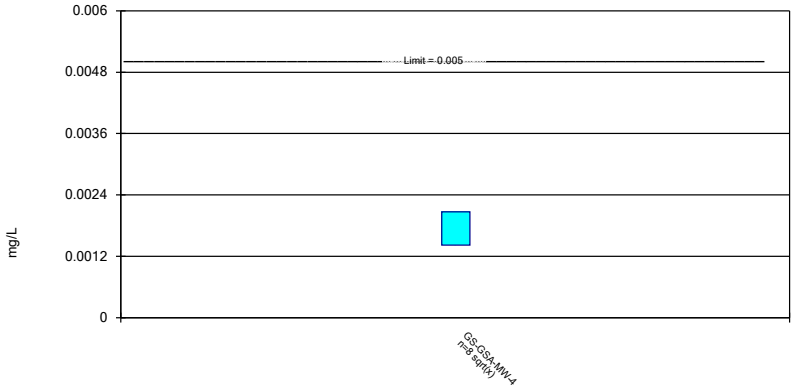
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Beryllium Analysis Run 11/16/2021 5:02 PM View: Appendix IV
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Parametric Confidence Interval

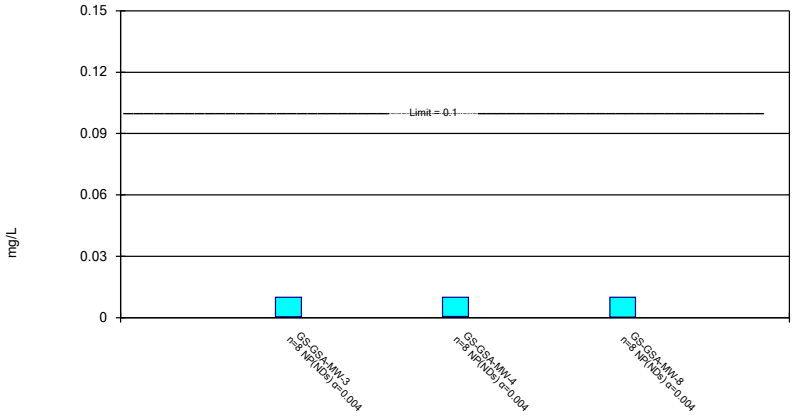
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Cadmium Analysis Run 11/16/2021 5:02 PM View: Appendix IV
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Non-Parametric Confidence Interval

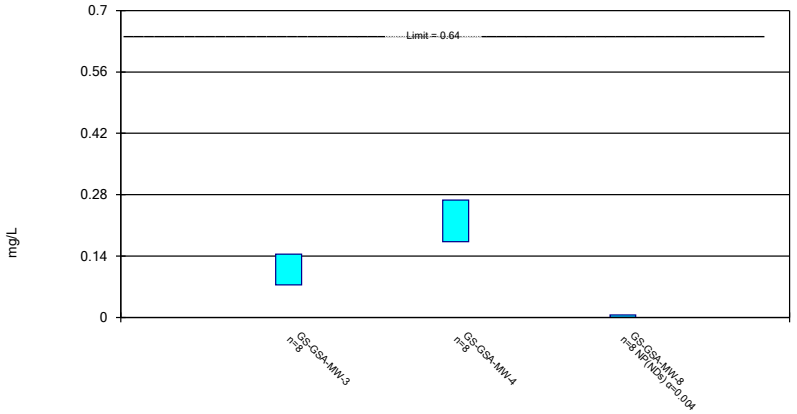
Compliance Limit is not exceeded.



Constituent: Chromium Analysis Run 11/16/2021 5:02 PM View: Appendix IV
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Parametric and Non-Parametric (NP) Confidence Interval

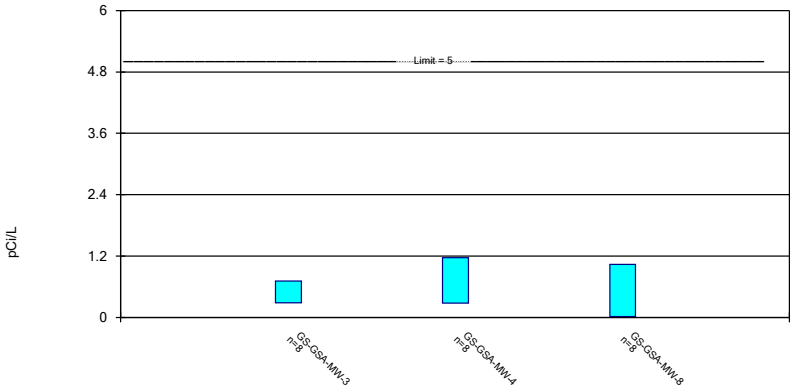
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Cobalt Analysis Run 11/16/2021 5:02 PM View: Appendix IV
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Parametric Confidence Interval

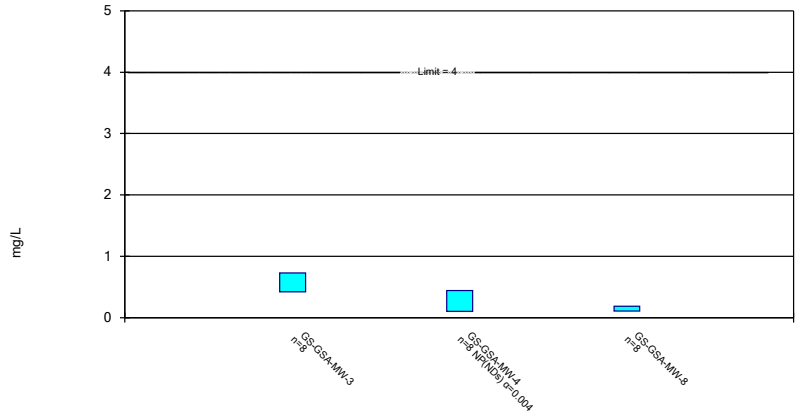
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Combined Radium 226 + 228 Analysis Run 11/16/2021 5:02 PM View: Appendix IV
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Parametric and Non-Parametric (NP) Confidence Interval

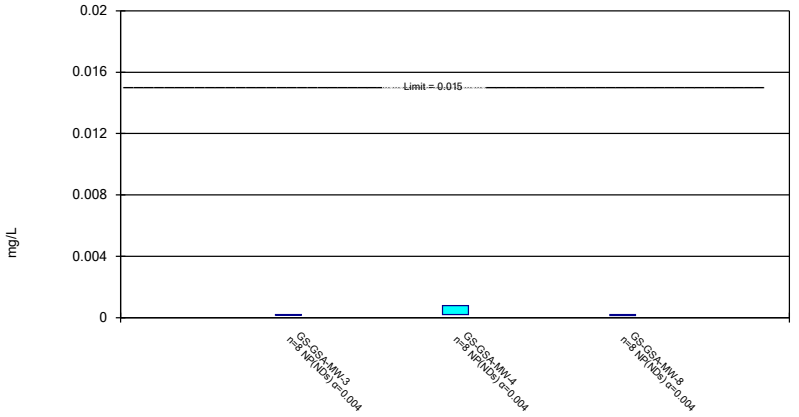
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Fluoride Analysis Run 11/16/2021 5:02 PM View: Appendix IV
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Non-Parametric Confidence Interval

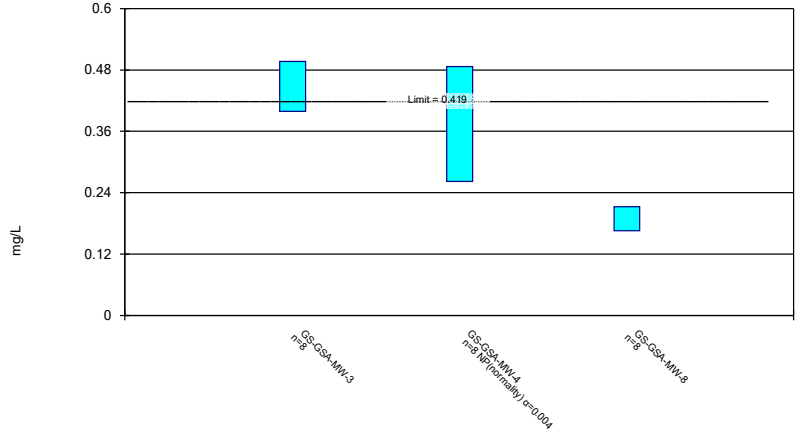
Compliance Limit is not exceeded.



Constituent: Lead Analysis Run 11/16/2021 5:02 PM View: Appendix IV
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Parametric and Non-Parametric (NP) Confidence Interval

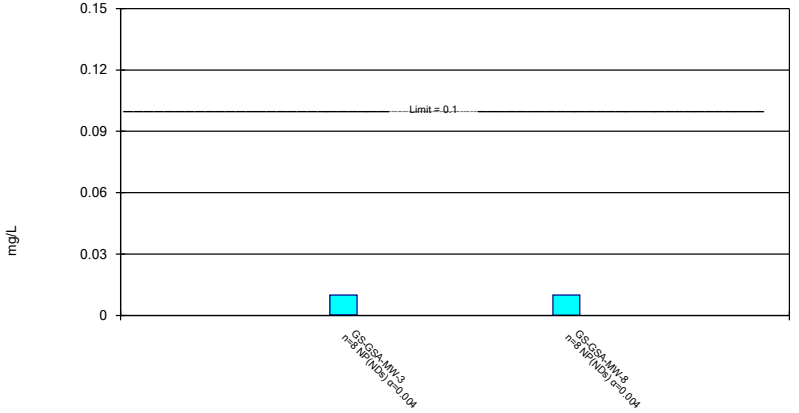
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Lithium Analysis Run 11/16/2021 5:02 PM View: Appendix IV
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Non-Parametric Confidence Interval

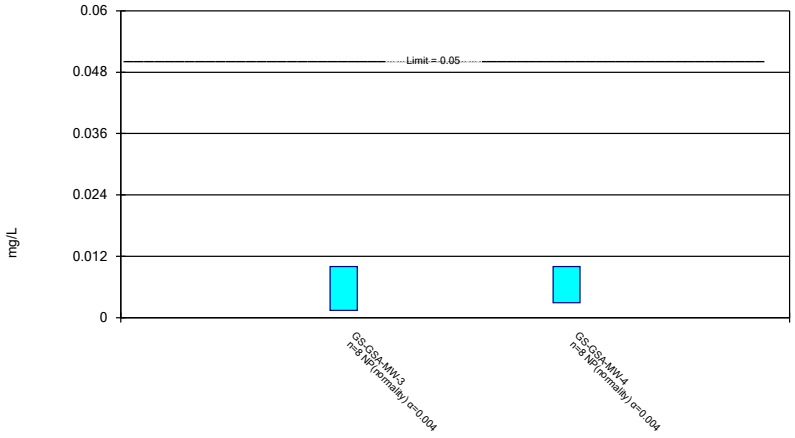
Compliance Limit is not exceeded.



Constituent: Molybdenum Analysis Run 11/16/2021 5:02 PM View: Appendix IV
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Non-Parametric Confidence Interval

Compliance Limit is not exceeded.

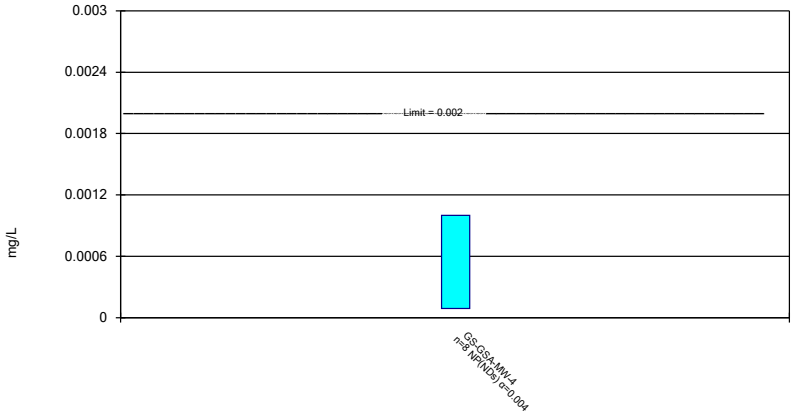


Constituent: Selenium Analysis Run 11/16/2021 5:02 PM View: Appendix IV
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded.



Constituent: Thallium Analysis Run 11/16/2021 5:02 PM View: Appendix IV
Plant Gorgas Client: Southern Company Data: Gorgas GSA

Confidence Interval

Constituent: Antimony (mg/L) Analysis Run 11/16/2021 5:05 PM View: Appendix IV

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-3	GS-GSA-MW-4	GS-GSA-MW-8
6/11/2018	<0.00102	<0.00102	
6/12/2018			<0.00102
10/17/2018	<0.00102	<0.00102	<0.00102
4/10/2019	0.00111 (J)	0.000976 (J)	0.00102 (J)
10/14/2019	<0.00102	<0.00102	<0.00102
2/3/2020	<0.00102		
2/4/2020		<0.00102	<0.00102
8/4/2020	<0.00102		
8/5/2020		<0.00102	<0.00102
3/1/2021	<0.00102		<0.00102
3/3/2021		<0.00102	
7/14/2021	<0.00102	<0.00102	<0.00102
Mean	0.001031	0.001014	0.00102
Std. Dev.	3.182E-05	1.556E-05	1.2E-11
Upper Lim.	0.00111	0.00102	0.00102
Lower Lim.	0.00102	0.000976	0.00102

Confidence Interval

Constituent: Arsenic (mg/L) Analysis Run 11/16/2021 5:05 PM View: Appendix IV

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-3	GS-GSA-MW-4	GS-GSA-MW-8
6/11/2018	<0.005	<0.005	
6/12/2018			<0.005
10/17/2018	<0.005	<0.005	<0.005
4/10/2019	0.00121 (J)	0.00176 (J)	<0.005
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
Mean	0.003522	0.002286	0.003859
Std. Dev.	0.002052	0.001693	0.002115
Upper Lim.	0.005	0.005	0.005
Lower Lim.	0.00057	0.00115	0.00024

Confidence Interval

Constituent: Barium (mg/L) Analysis Run 11/16/2021 5:05 PM View: Appendix IV

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-3	GS-GSA-MW-4	GS-GSA-MW-8
6/11/2018	0.0127	0.0139	
6/12/2018			0.0234
10/17/2018	0.013	0.0125	0.0236
4/10/2019	0.0153	0.0136	0.02
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
Mean	0.01378	0.01306	0.0217
Std. Dev.	0.001156	0.001196	0.001587
Upper Lim.	0.015	0.01433	0.02338
Lower Lim.	0.01255	0.01179	0.02002

Confidence Interval

Constituent: Beryllium (mg/L) Analysis Run 11/16/2021 5:05 PM View: Appendix IV

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-3	GS-GSA-MW-4
6/11/2018	0.00244 (J)	0.00463
10/17/2018	0.00345	0.00369
4/10/2019	0.00257 (J)	0.00469
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
Mean	0.002069	0.004359
Std. Dev.	0.000696	0.0006678
Upper Lim.	0.002773	0.005067
Lower Lim.	0.00139	0.003651

Confidence Interval

Constituent: Cadmium (mg/L) Analysis Run 11/16/2021 5:05 PM View: Appendix IV

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-4
6/11/2018	0.00171
10/17/2018	0.00188
4/10/2019	0.00176
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
Mean	0.001741
Std. Dev.	0.0003243
Upper Lim.	0.00207
Lower Lim.	0.001419

Confidence Interval

Constituent: Chromium (mg/L) Analysis Run 11/16/2021 5:05 PM View: Appendix IV

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-3	GS-GSA-MW-4	GS-GSA-MW-8
6/11/2018	<0.01	<0.01	
6/12/2018			<0.01
10/17/2018	<0.01	<0.01	<0.01
4/10/2019	<0.01	<0.01	<0.01
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)
Mean	0.007597	0.007658	0.00759
Std. Dev.	0.004449	0.004336	0.004462
Upper Lim.	0.01	0.01	0.01
Lower Lim.	0.000386	0.000567	0.0003

Confidence Interval

Constituent: Cobalt (mg/L) Analysis Run 11/16/2021 5:05 PM View: Appendix IV

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-3	GS-GSA-MW-4	GS-GSA-MW-8
6/11/2018	0.138	0.166	
6/12/2018			<0.005
10/17/2018	0.138	0.154	<0.005
4/10/2019	0.151	0.241	<0.005
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
Mean	0.1093	0.2203	0.004465
Std. Dev.	0.03292	0.04499	0.001707
Upper Lim.	0.1441	0.2679	0.00546
Lower Lim.	0.07436	0.1726	0.00026

Confidence Interval

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 11/16/2021 5:05 PM View: Appendix IV

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-3	GS-GSA-MW-4	GS-GSA-MW-8
6/11/2018	0.773	0.796	
6/12/2018			0.446 (U)
10/17/2018	0.668	0.922	1.05
4/10/2019	0.265 (U)	0.622	0.128 (U)
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)
Mean	0.4964	0.7233	0.5253
Std. Dev.	0.2011	0.4205	0.4802
Upper Lim.	0.7095	1.169	1.034
Lower Lim.	0.2832	0.2775	0.0163

Confidence Interval

Constituent: Fluoride (mg/L) Analysis Run 11/16/2021 5:05 PM View: Appendix IV

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-3	GS-GSA-MW-4	GS-GSA-MW-8
6/11/2018	0.63	0.39	
6/12/2018			0.15
10/17/2018	0.78	0.44	0.16
4/10/2019	0.738	<0.1	0.156
10/14/2019	0.619	<0.1	0.118
2/3/2020	0.427		
2/4/2020		<0.1	0.132
8/4/2020	0.389		
8/5/2020		<0.1	0.119
3/1/2021	0.449		0.106
3/3/2021		<0.1	
7/14/2021	0.556	<0.1	0.221
Mean	0.5735	0.1788	0.1453
Std. Dev.	0.1446	0.1464	0.03633
Upper Lim.	0.7267	0.44	0.1838
Lower Lim.	0.4203	0.1	0.1067

Confidence Interval

Constituent: Lead (mg/L) Analysis Run 11/16/2021 5:05 PM View: Appendix IV

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-3	GS-GSA-MW-4	GS-GSA-MW-8
6/11/2018	<0.0002	<0.0002	
6/12/2018			<0.0002
10/17/2018	<0.0002	<0.0002	<0.0002
4/10/2019	<0.0002	<0.0002	<0.0002
10/14/2019	<0.0002	<0.0002	<0.0002
2/3/2020	<0.0002		
2/4/2020		<0.0002	<0.0002
8/4/2020	<0.0002		
8/5/2020		<0.0002	<0.0002
3/1/2021	0.000157 (J)		0.000145 (J)
3/3/2021		0.000609	
7/14/2021	0.00018 (J)	0.00079	<0.0002
Mean	0.0001921	0.0003249	0.0001931
Std. Dev.	1.582E-05	0.0002362	1.945E-05
Upper Lim.	0.0002	0.00079	0.0002
Lower Lim.	0.000157	0.0002	0.000145

Confidence Interval

Constituent: Lithium (mg/L) Analysis Run 11/16/2021 5:05 PM View: Appendix IV

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-3	GS-GSA-MW-4	GS-GSA-MW-8
6/11/2018	0.425	0.266	
6/12/2018			0.166
10/17/2018	0.494	0.266	0.188
4/10/2019	0.425	0.282	0.195
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
Mean	0.4479	0.3049	0.1893
Std. Dev.	0.04593	0.07546	0.02214
Upper Lim.	0.4966	0.487	0.2127
Lower Lim.	0.3992	0.262	0.1658

Confidence Interval

Constituent: Molybdenum (mg/L) Analysis Run 11/16/2021 5:05 PM View: Appendix IV

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-3	GS-GSA-MW-8
6/11/2018	<0.01	
6/12/2018		<0.01
10/17/2018	<0.01	<0.01
4/10/2019	<0.01	<0.01
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)
Mean	0.00756	0.007865
Std. Dev.	0.004518	0.004015
Upper Lim.	0.01	0.01
Lower Lim.	0.00022	0.00015

Confidence Interval

Constituent: Selenium (mg/L) Analysis Run 11/16/2021 5:05 PM View: Appendix IV

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-3	GS-GSA-MW-4
6/11/2018	0.00236 (J)	0.00388 (J)
10/17/2018	<0.01	<0.01
4/10/2019	0.00234 (J)	0.00322 (J)
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
Mean	0.005952	0.006081
Std. Dev.	0.00434	0.003355
Upper Lim.	0.01	0.01
Lower Lim.	0.00141	0.00294

Confidence Interval

Constituent: Thallium (mg/L) Analysis Run 11/16/2021 5:05 PM View: Appendix IV

Plant Gorgas Client: Southern Company Data: Gorgas GSA

	GS-GSA-MW-4
6/11/2018	<0.001
10/17/2018	<0.001
4/10/2019	<0.001
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)
Mean	0.0006841
Std. Dev.	0.0004371
Upper Lim.	0.001
Lower Lim.	9E-05

Appendix E

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

Analytical Report

Alabama Power

Sample Group : WMWGORG_1342

Project/Site : Gorgas Gypsum
Parrish, AL 35580

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

Attention : Dustin Brooks & Greg Dyer

Released By : Laura Midkiff
lbmidkif@southernco.com
(205) 664-6197

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

Alabama Power

November 19, 2021

Dear Dustin Brooks,

Enclosed are the analytical results for sample(s) received by the laboratory on October 13, 2021.
All results reported herein conform to the laboratory's most current Quality Assurance Manual. Results marked with an asterisk conform to the most current applicable TNI/NELAC requirements. Exceptions will be noted in the body of the report.

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

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

Sincerely,

Quality Control: Laura Midkiff
Digitally signed by Laura Midkiff
DN: cn=Laura Midkiff, o=Alabama Power Company, ou=Environmental Affairs, email=lbmidkif@southernco.com, c=US
Date: 2021.11.19 14:20:21 -06'00'

Supervision: T. Durant Maske
Digitally signed by T. Durant Maske
DN: cn=T. Durant Maske, o=Alabama Power Company, ou=Environmental Affairs, email=tdmaske@southernco.com, c=US
Date: 2021.11.22 08:59:32 -06'00'

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_1342

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
BB19046	711015	WMWGORG_1342
BB19047	711015	WMWGORG_1342
BB19048	711015	WMWGORG_1342
BB19049	711015	WMWGORG_1342
BB19050	711015	WMWGORG_1342
BB19051	711015	WMWGORG_1342

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

General Quality Control Procedures:

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

Matrix Specific Quality Control Procedures:

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

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

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

Sample ID	Analyte	Dilution Factor
BB19046	Calcium & Magnesium	50.75
BB19047	Calcium & Magnesium	50.75
BB19049	Calcium & Magnesium	50.75
BB19050	Calcium	50.75

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_1342

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
BB19046	710937	WMWGORG_1342
BB19047	710937	WMWGORG_1342
BB19049	710937	WMWGORG_1342
BB19050	710937	WMWGORG_1342

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

General Quality Control Procedures:

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

Matrix Specific Quality Control Procedures:

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

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

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

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

Case Narrative

Alabama Power

Total Metals ICPMS

Gorgas Gypsum

WMWGORG_1342

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
BB19046	710844	WMWGORG_1342
BB19047	710844	WMWGORG_1342
BB19048	710844	WMWGORG_1342
BB19049	710844	WMWGORG_1342
BB19050	710844	WMWGORG_1342
BB19051	710844	WMWGORG_1342

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. 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

Dissolved Metals ICPMS

Gorgas Gypsum

WMWGORG_1342

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
BB19046	710735	WMWGORG_1342
BB19047	710735	WMWGORG_1342
BB19049	710735	WMWGORG_1342
BB19050	710735	WMWGORG_1342

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. 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

Mercury

Gorgas Gypsum

WMWGORG_1342

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
BB19046	710869	WMWGORG_1342
BB19047	710869	WMWGORG_1342
BB19048	710869	WMWGORG_1342
BB19049	710869	WMWGORG_1342
BB19050	710869	WMWGORG_1342
BB19051	710869	WMWGORG_1342

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

General Quality Control Procedures:

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

Matrix Specific Quality Control Procedures:

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

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

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

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

Case Narrative

Alabama Power

TDS

Gorgas Gypsum

WMWGORG_1342

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
BB19046	710477	WMWGORG_1342
BB19047	710477	WMWGORG_1342
BB19048	710477	WMWGORG_1342
BB19049	710477	WMWGORG_1342
BB19050	710477	WMWGORG_1342
BB19051	710477	WMWGORG_1342

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

General Quality Control Procedures:

- A Method Blank was analyzed with each batch. All criteria were met.
- All final weights of samples, standards, and blanks agreed within 0.5mg of the previous weight.
- A sample duplicate was analyzed with each batch. RPD/2 was less than 5%.
- A laboratory control sample was analyzed with each batch. All criteria were met.
- Samples were between 2.5mg and 200mg residue.
- All samples with residue <2.5mg had the maximum volume of 150mL filtered. Affected samples are as follows:
    - BB19048
    - BB19051

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

Case Narrative

Alabama Power

Anions

Gorgas Gypsum

WMWGORG_1342

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
BB19046	710407, 710882, & 710966	WMWGORG_1342
BB19047	710407, 710882, & 710966	WMWGORG_1342
BB19048	710407, 710882, & 710966	WMWGORG_1342
BB19049	710407, 710882, & 710966	WMWGORG_1342
BB19050	710407, 710882, & 710966	WMWGORG_1342
BB19051	710407, 710882, & 710966	WMWGORG_1342

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

General Quality Control Procedures:

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

Matrix Specific Quality Control Procedures:

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

- A matrix spike was analyzed with each batch. Acceptance criteria for accuracy were met.
- A sample duplicate was analyzed with each batch. Acceptance criteria for precision were met.

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
BB19046	Chloride & Sulfate	10 & 50
BB19047	Chloride & Sulfate	10 & 50
BB19049	Chloride & Sulfate	10 & 50
BB19050	Sulfate	40

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

Alkalinity

Gorgas Gypsum

WMWGORG_1342

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
BB19046	711480 & 711481	WMWGORG_1342
BB19047	711480 & 711481	WMWGORG_1342
BB19049	711480 & 711481	WMWGORG_1342
BB19050	711480 & 711481	WMWGORG_1342

4. All of the above samples were analyzed and prepared 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.

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Gypsum - SP-3

Location Code: WMWGORG
Collected: 10/13/21 10:18
Customer ID:
Submittal Date: 10/13/21 15:24

Laboratory ID Number: BB19046

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	10/21/21 12:00	10/22/21 11:29		1.015	7.25	mg/L	0.030000	0.1015	
* Calcium, Total	10/21/21 12:00	10/22/21 14:13		50.75	656	mg/L	3.50175	20.3	
* Iron, Total	10/21/21 12:00	10/22/21 11:29		1.015	0.0142	mg/L	0.008120	0.0406	J
* Lithium, Total	10/21/21 12:00	10/22/21 11:29		1.015	0.0330	mg/L	0.007105	0.01999956	
* Magnesium, Total	10/21/21 12:00	10/22/21 14:13		50.75	65.7	mg/L	1.06575	20.3	
* Sodium, Total	10/21/21 12:00	10/22/21 11:29		1.015	3.21	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Iron, Dissolved	10/20/21 14:00	10/21/21 11:19		1.015	Not Detected	mg/L	0.008120	0.0406	U
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	10/14/21 07:36	10/14/21 16:54		1.015	0.00132	mg/L	0.000508	0.001015	
* Arsenic, Total	10/14/21 07:36	10/14/21 16:54		1.015	0.0344	mg/L	0.000068	0.000203	
* Barium, Total	10/14/21 07:36	10/14/21 16:54		1.015	0.0195	mg/L	0.000102	0.000203	
* Beryllium, Total	10/14/21 07:36	10/14/21 16:54		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	10/14/21 07:36	10/14/21 16:54		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	10/14/21 07:36	10/14/21 16:54		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	10/14/21 07:36	10/14/21 16:54		1.015	0.000469	mg/L	0.000068	0.000203	
* Lead, Total	10/14/21 07:36	10/14/21 16:54		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Molybdenum, Total	10/14/21 07:36	10/14/21 16:54		1.015	0.0152	mg/L	0.000068	0.000203	
* Potassium, Total	10/14/21 07:36	10/14/21 16:54		1.015	4.00	mg/L	0.169505	0.5075	
* Manganese, Total	10/14/21 07:36	10/14/21 16:54		1.015	0.0654	mg/L	0.000068	0.000203	
* Selenium, Total	10/14/21 07:36	10/14/21 16:54		1.015	0.0169	mg/L	0.000508	0.001015	
* Thallium, Total	10/14/21 07:36	10/14/21 16:54		1.015	0.000230	mg/L	0.000068	0.000203	
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Manganese, Dissolved	10/14/21 08:13	10/14/21 09:54		1.015	0.00168	mg/L	0.000068	0.000203	
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	10/19/21 13:32	10/19/21 19:23		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2320 B	***Analyst: JAG***								
Alkalinity, Total as CaCO3	10/26/21 10:15	10/26/21 10:50		1	43.4	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	10/15/21 10:41	10/18/21 13:10		1	2380	mg/L		125	

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

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Reported: 11/19/2021
Version: 3.4
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Gypsum - SP-3

Location Code: WMWGORG
Collected: 10/13/21 10:18
Customer ID:
Submittal Date: 10/13/21 15:24

Laboratory ID Number: BB19046

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 4500CO2 D	***Analyst: JAG***								
Bicarbonate Alkalinity, (calc.)	10/26/21 10:15	10/26/21 10:50		1	42.6	mg/L			
Carbonate Alkalinity, (calc.)	10/26/21 10:15	10/26/21 10:50		1	0.71	mg/L			
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	10/14/21 12:01	10/14/21 12:01		10	102	mg/L	5.00	10	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	10/19/21 09:13	10/19/21 09:13		1	3.19	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	10/20/21 14:02	10/20/21 14:02		50	1650	mg/L	25.00	50	
Analytical Method: Field Measurements	***Analyst: AWG***								
Conductivity	10/13/21 10:15	10/13/21 10:15			2541.12	uS/cm			FA
pH	10/13/21 10:15	10/13/21 10:15			8.24	SU			FA
Temperature	10/13/21 10:15	10/13/21 10:15			27.51	C			FA
Turbidity	10/13/21 10:15	10/13/21 10:15			1.79	NTU			FA

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

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Reported: 11/19/2021
Version: 3.4
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORG
Sample Date: 10/13/21 10:18
Customer ID:
Delivery Date: 10/13/21 15:24

Description: Gorgas Gypsum - SP-3

Laboratory ID Number: BB19046

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB19051	Barium, Total	mg/L	0.0000000	0.000200	0.100	0.101	0.0999	0.0979	0.0850 to 0.115	101	70.0 to 130	1.10	20.0
BB19051	Boron, Total	mg/L	0.00153	0.0650	1.00	1.02	1.03	1.02	0.850 to 1.15	102	70.0 to 130	0.976	20.0
BB19051	Mercury, Total by CVAA	mg/L	6.000E-05	0.000500	0.004	0.00396	0.0039	0.00404	0.00340 to 0.00460	99.0	70.0 to 130	1.53	20.0
BB19051	Manganese, Total	mg/L	0.0000251	0.000147	0.100	0.0981	0.102	0.103	0.0850 to 0.115	98.1	70.0 to 130	3.90	20.0
BB19051	Arsenic, Total	mg/L	-0.0000563	0.000147	0.100	0.100	0.0996	0.103	0.0850 to 0.115	100	70.0 to 130	0.401	20.0
BB19051	Cadmium, Total	mg/L	0.0000000	0.000147	0.100	0.0997	0.103	0.101	0.0850 to 0.115	99.7	70.0 to 130	3.26	20.0
BB19051	Sodium, Total	mg/L	0.000254	0.0660	5.00	5.06	5.07	5.08	4.25 to 5.75	101	70.0 to 130	0.197	20.0
BB19051	Beryllium, Total	mg/L	0.0000219	0.000880	0.100	0.106	0.108	0.0915	0.0850 to 0.115	106	70.0 to 130	1.87	20.0
BB19051	Molybdenum, Total	mg/L	0.0000519	0.000147	0.100	0.0986	0.0997	0.0993	0.0850 to 0.115	98.6	70.0 to 130	1.11	20.0
BB19051	Lead, Total	mg/L	0.0000094	0.000147	0.100	0.101	0.104	0.102	0.0850 to 0.115	101	70.0 to 130	2.93	20.0
BB19051	Calcium, Total	mg/L	0.00139	0.152	5.00	5.23	5.27	5.13	4.25 to 5.75	105	70.0 to 130	0.762	20.0
BB19051	Thallium, Total	mg/L	0.0000015	0.000147	0.100	0.0942	0.0970	0.0945	0.0850 to 0.115	94.2	70.0 to 130	2.93	20.0
BB19051	Iron, Total	mg/L	0.000116	0.0176	0.2	0.206	0.208	0.205	0.170 to 0.230	103	70.0 to 130	0.966	20.0
BB19051	Cobalt, Total	mg/L	0.0000059	0.000147	0.100	0.0993	0.101	0.104	0.0850 to 0.115	99.3	70.0 to 130	1.70	20.0
BB19051	Lithium, Total	mg/L	-3.240E-05	0.0154	0.200	0.204	0.205	0.201	0.170 to 0.230	102	70.0 to 130	0.489	20.0
BB19051	Antimony, Total	mg/L	0.000153	0.00100	0.100	0.0960	0.0931	0.0979	0.0850 to 0.115	96.0	70.0 to 130	3.07	20.0
BB19050	Manganese, Dissolved	mg/L	-0.0000441	0.000147	0.100	0.101	0.106	0.104	0.0850 to 0.115	101	70.0 to 130	4.83	20.0
BB19051	Chromium, Total	mg/L	-0.0000246	0.000440	0.100	0.0976	0.0988	0.103	0.0850 to 0.115	97.6	70.0 to 130	1.22	20.0
BB19051	Potassium, Total	mg/L	-0.00508	0.367	10.0	10.2	10.3	10.3	8.50 to 11.5	102	70.0 to 130	0.976	20.0
BB19050	Iron, Dissolved	mg/L	-2.780E-05	0.0176	0.2	0.204	0.203	0.205	0.170 to 0.230	102	70.0 to 130	0.491	20.0
BB19051	Selenium, Total	mg/L	-0.0000644	0.00100	0.100	0.102	0.105	0.103	0.0850 to 0.115	102	70.0 to 130	2.90	20.0
BB19051	Magnesium, Total	mg/L	0.000272	0.0462	5.00	5.29	5.37	5.22	4.25 to 5.75	106	70.0 to 130	1.50	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Reported: 11/19/2021
Version: 3.4
COA_CCR

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

Alabama Power

Batch QC Summary

Customer Account: WMWGORG
Sample Date: 10/13/21 10:18
Customer ID:
Delivery Date: 10/13/21 15:24

Description: Gorgas Gypsum - SP-3

Laboratory ID Number: BB19046

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB19050	Alkalinity, Total as CaCO3	mg/L					37.6	49.7	45.0 to 55.0			5.75	10.0
BB19051	Sulfate	mg/L	0.201	1.00	20.0	19.3	0.222	18.1	18.0 to 22.0	96.5	80.0 to 120	0.00	20.0
BB19050	Solids, Dissolved	mg/L	0.0000	25.0			902	49.0	40.0 to 60.0			0.445	10.0
BB19051	Fluoride	mg/L	-0.0151	0.100	2.50	2.47	0.0121	2.57	2.25 to 2.75	98.8	80.0 to 120	0.00	20.0
BB19051	Chloride	mg/L	0.0129	1.00	10.0	9.89	0.049	9.96	9.00 to 11.0	98.9	80.0 to 120	0.00	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Gypsum - SP-3 DUP

Location Code: WMWGORG
Collected: 10/13/21 10:18
Customer ID:
Submittal Date: 10/13/21 15:24

Laboratory ID Number: BB19047

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	10/21/21 12:00	10/22/21 11:32		1.015	7.21	mg/L	0.030000	0.1015	
* Calcium, Total	10/21/21 12:00	10/22/21 14:16		50.75	654	mg/L	3.50175	20.3	
* Iron, Total	10/21/21 12:00	10/22/21 11:32		1.015	0.0145	mg/L	0.008120	0.0406	J
* Lithium, Total	10/21/21 12:00	10/22/21 11:32		1.015	0.0330	mg/L	0.007105	0.01999956	
* Magnesium, Total	10/21/21 12:00	10/22/21 14:16		50.75	65.6	mg/L	1.06575	20.3	
* Sodium, Total	10/21/21 12:00	10/22/21 11:32		1.015	3.19	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Iron, Dissolved	10/20/21 14:00	10/21/21 11:22		1.015	Not Detected	mg/L	0.008120	0.0406	U
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	10/14/21 07:36	10/14/21 16:57		1.015	0.00127	mg/L	0.000508	0.001015	
* Arsenic, Total	10/14/21 07:36	10/14/21 16:57		1.015	0.0344	mg/L	0.000068	0.000203	
* Barium, Total	10/14/21 07:36	10/14/21 16:57		1.015	0.0190	mg/L	0.000102	0.000203	
* Beryllium, Total	10/14/21 07:36	10/14/21 16:57		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	10/14/21 07:36	10/14/21 16:57		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	10/14/21 07:36	10/14/21 16:57		1.015	0.000322	mg/L	0.000203	0.001015	J
* Cobalt, Total	10/14/21 07:36	10/14/21 16:57		1.015	0.000471	mg/L	0.000068	0.000203	
* Lead, Total	10/14/21 07:36	10/14/21 16:57		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Molybdenum, Total	10/14/21 07:36	10/14/21 16:57		1.015	0.0162	mg/L	0.000068	0.000203	
* Potassium, Total	10/14/21 07:36	10/14/21 16:57		1.015	4.12	mg/L	0.169505	0.5075	
* Manganese, Total	10/14/21 07:36	10/14/21 16:57		1.015	0.0679	mg/L	0.000068	0.000203	
* Selenium, Total	10/14/21 07:36	10/14/21 16:57		1.015	0.0174	mg/L	0.000508	0.001015	
* Thallium, Total	10/14/21 07:36	10/14/21 16:57		1.015	0.000247	mg/L	0.000068	0.000203	
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Manganese, Dissolved	10/14/21 08:13	10/14/21 09:58		1.015	0.00172	mg/L	0.000068	0.000203	
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	10/19/21 13:32	10/19/21 19:27		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2320 B	***Analyst: JAG***								
Alkalinity, Total as CaCO3	10/26/21 10:15	10/26/21 10:50		1	46.8	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	10/15/21 10:41	10/18/21 13:10		1	2360	mg/L		125	

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

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Reported: 11/19/2021
Version: 3.4
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Gypsum - SP-3 DUP

Location Code: WMWGORG
Collected: 10/13/21 10:18
Customer ID:
Submittal Date: 10/13/21 15:24

Laboratory ID Number: BB19047

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 4500CO2 D	***Analyst: JAG***								
Bicarbonate Alkalinity, (calc.)	10/26/21 10:15	10/26/21 10:50		1	45.8	mg/L			
Carbonate Alkalinity, (calc.)	10/26/21 10:15	10/26/21 10:50		1	0.90	mg/L			
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	10/14/21 12:03	10/14/21 12:03		10	98.8	mg/L	5.00	10	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	10/19/21 09:14	10/19/21 09:14		1	3.47	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	10/20/21 14:04	10/20/21 14:04		50	1650	mg/L	25.00	50	
Analytical Method: Field Measurements	***Analyst: AWG***								
Conductivity	10/13/21 10:15	10/13/21 10:15			2541.12	uS/cm			FA
pH	10/13/21 10:15	10/13/21 10:15			8.24	SU			FA
Temperature	10/13/21 10:15	10/13/21 10:15			27.51	C			FA
Turbidity	10/13/21 10:15	10/13/21 10:15			1.79	NTU			FA

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

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Reported: 11/19/2021
Version: 3.4
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORG
Sample Date: 10/13/21 10:18
Customer ID:
Delivery Date: 10/13/21 15:24

Description: Gorgas Gypsum - SP-3 DUP

Laboratory ID Number: BB19047

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB19051	Mercury, Total by CVAA	mg/L	6.000E-05	0.000500	0.004	0.00396	0.0039	0.00404	0.00340 to 0.00460	99.0	70.0 to 130	1.53	20.0
BB19051	Manganese, Total	mg/L	0.0000251	0.000147	0.100	0.0981	0.102	0.103	0.0850 to 0.115	98.1	70.0 to 130	3.90	20.0
BB19051	Arsenic, Total	mg/L	-0.0000563	0.000147	0.100	0.100	0.0996	0.103	0.0850 to 0.115	100	70.0 to 130	0.401	20.0
BB19051	Cadmium, Total	mg/L	0.0000000	0.000147	0.100	0.0997	0.103	0.101	0.0850 to 0.115	99.7	70.0 to 130	3.26	20.0
BB19051	Barium, Total	mg/L	0.0000000	0.000200	0.100	0.101	0.0999	0.0979	0.0850 to 0.115	101	70.0 to 130	1.10	20.0
BB19051	Boron, Total	mg/L	0.00153	0.0650	1.00	1.02	1.03	1.02	0.850 to 1.15	102	70.0 to 130	0.976	20.0
BB19051	Selenium, Total	mg/L	-0.0000644	0.00100	0.100	0.102	0.105	0.103	0.0850 to 0.115	102	70.0 to 130	2.90	20.0
BB19051	Magnesium, Total	mg/L	0.000272	0.0462	5.00	5.29	5.37	5.22	4.25 to 5.75	106	70.0 to 130	1.50	20.0
BB19051	Antimony, Total	mg/L	0.000153	0.00100	0.100	0.0960	0.0931	0.0979	0.0850 to 0.115	96.0	70.0 to 130	3.07	20.0
BB19050	Manganese, Dissolved	mg/L	-0.0000441	0.000147	0.100	0.101	0.106	0.104	0.0850 to 0.115	101	70.0 to 130	4.83	20.0
BB19051	Chromium, Total	mg/L	-0.0000246	0.000440	0.100	0.0976	0.0988	0.103	0.0850 to 0.115	97.6	70.0 to 130	1.22	20.0
BB19051	Potassium, Total	mg/L	-0.00508	0.367	10.0	10.2	10.3	10.3	8.50 to 11.5	102	70.0 to 130	0.976	20.0
BB19050	Iron, Dissolved	mg/L	-2.780E-05	0.0176	0.2	0.204	0.203	0.205	0.170 to 0.230	102	70.0 to 130	0.491	20.0
BB19051	Lithium, Total	mg/L	-3.240E-05	0.0154	0.200	0.204	0.205	0.201	0.170 to 0.230	102	70.0 to 130	0.489	20.0
BB19051	Sodium, Total	mg/L	0.000254	0.0660	5.00	5.06	5.07	5.08	4.25 to 5.75	101	70.0 to 130	0.197	20.0
BB19051	Beryllium, Total	mg/L	0.0000219	0.000880	0.100	0.106	0.108	0.0915	0.0850 to 0.115	106	70.0 to 130	1.87	20.0
BB19051	Molybdenum, Total	mg/L	0.0000519	0.000147	0.100	0.0986	0.0997	0.0993	0.0850 to 0.115	98.6	70.0 to 130	1.11	20.0
BB19051	Lead, Total	mg/L	0.0000094	0.000147	0.100	0.101	0.104	0.102	0.0850 to 0.115	101	70.0 to 130	2.93	20.0
BB19051	Calcium, Total	mg/L	0.00139	0.152	5.00	5.23	5.27	5.13	4.25 to 5.75	105	70.0 to 130	0.762	20.0
BB19051	Thallium, Total	mg/L	0.0000015	0.000147	0.100	0.0942	0.0970	0.0945	0.0850 to 0.115	94.2	70.0 to 130	2.93	20.0
BB19051	Iron, Total	mg/L	0.000116	0.0176	0.2	0.206	0.208	0.205	0.170 to 0.230	103	70.0 to 130	0.966	20.0
BB19051	Cobalt, Total	mg/L	0.0000059	0.000147	0.100	0.0993	0.101	0.104	0.0850 to 0.115	99.3	70.0 to 130	1.70	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Reported: 11/19/2021
Version: 3.4
COA_CCR

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

Alabama Power

Batch QC Summary

Customer Account: WMWGORG
Sample Date: 10/13/21 10:18
Customer ID:
Delivery Date: 10/13/21 15:24

Description: Gorgas Gypsum - SP-3 DUP

Laboratory ID Number: BB19047

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB19050	Solids, Dissolved	mg/L	0.0000	25.0			902	49.0	40.0 to 60.0			0.445	10.0
BB19050	Alkalinity, Total as CaCO3	mg/L					37.6	49.7	45.0 to 55.0			5.75	10.0
BB19051	Sulfate	mg/L	0.201	1.00	20.0	19.3	0.222	18.1	18.0 to 22.0	96.5	80.0 to 120	0.00	20.0
BB19051	Fluoride	mg/L	-0.0151	0.100	2.50	2.47	0.0121	2.57	2.25 to 2.75	98.8	80.0 to 120	0.00	20.0
BB19051	Chloride	mg/L	0.0129	1.00	10.0	9.89	0.049	9.96	9.00 to 11.0	98.9	80.0 to 120	0.00	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Reported: 11/19/2021
Version: 3.4
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Gypsum Field Blank-1

Location Code: WMWGORGFB
Collected: 10/13/21 10:40
Customer ID:
Submittal Date: 10/13/21 15:25

Laboratory ID Number: BB19048

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	10/21/21 12:00	10/22/21 11:36		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	10/21/21 12:00	10/22/21 11:36		1.015	Not Detected	mg/L	0.070035	0.406	U
* Iron, Total	10/21/21 12:00	10/22/21 11:36		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Total	10/21/21 12:00	10/22/21 11:36		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	10/21/21 12:00	10/22/21 11:36		1.015	Not Detected	mg/L	0.021315	0.406	U
* Sodium, Total	10/21/21 12:00	10/22/21 11:36		1.015	Not Detected	mg/L	0.03045	0.406	U
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	10/14/21 07:36	10/14/21 17:01		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Arsenic, Total	10/14/21 07:36	10/14/21 17:01		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Barium, Total	10/14/21 07:36	10/14/21 17:01		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Beryllium, Total	10/14/21 07:36	10/14/21 17:01		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	10/14/21 07:36	10/14/21 17:01		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	10/14/21 07:36	10/14/21 17:01		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	10/14/21 07:36	10/14/21 17:01		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	10/14/21 07:36	10/14/21 17:01		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Molybdenum, Total	10/14/21 07:36	10/14/21 17:01		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	10/14/21 07:36	10/14/21 17:01		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Potassium, Total	10/14/21 07:36	10/14/21 17:01		1.015	Not Detected	mg/L	0.169505	0.5075	U
* Selenium, Total	10/14/21 07:36	10/14/21 17:01		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	10/14/21 07:36	10/14/21 17:01		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	10/19/21 13:32	10/19/21 19:31		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	10/15/21 10:41	10/18/21 13:10		1	Not Detected	mg/L		25	U
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	10/14/21 12:04	10/14/21 12:04		1	Not Detected	mg/L	0.50	1	U
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	10/19/21 09:15	10/19/21 09:15		1	Not Detected	mg/L	0.06	0.1	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	10/20/21 14:08	10/20/21 14:08		1	0.638	mg/L	0.50	1	J

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

Comments:

Reported: 11/19/2021
Version: 3.4
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORGFB
Sample Date: 10/13/21 10:40
Customer ID:
Delivery Date: 10/13/21 15:25

Description: Gorgas Gypsum Field Blank-1

Laboratory ID Number: BB19048

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB19051	Barium, Total	mg/L	0.0000000	0.000200	0.100	0.101	0.0999	0.0979	0.0850 to 0.115	101	70.0 to 130	1.10	20.0
BB19051	Boron, Total	mg/L	0.00153	0.0650	1.00	1.02	1.03	1.02	0.850 to 1.15	102	70.0 to 130	0.976	20.0
BB19051	Lithium, Total	mg/L	-3.240E-05	0.0154	0.200	0.204	0.205	0.201	0.170 to 0.230	102	70.0 to 130	0.489	20.0
BB19051	Selenium, Total	mg/L	-0.0000644	0.00100	0.100	0.102	0.105	0.103	0.0850 to 0.115	102	70.0 to 130	2.90	20.0
BB19051	Magnesium, Total	mg/L	0.000272	0.0462	5.00	5.29	5.37	5.22	4.25 to 5.75	106	70.0 to 130	1.50	20.0
BB19051	Mercury, Total by CVAA	mg/L	6.000E-05	0.000500	0.004	0.00396	0.0039	0.00404	0.00340 to 0.00460	99.0	70.0 to 130	1.53	20.0
BB19051	Manganese, Total	mg/L	0.0000251	0.000147	0.100	0.0981	0.102	0.103	0.0850 to 0.115	98.1	70.0 to 130	3.90	20.0
BB19051	Arsenic, Total	mg/L	-0.0000563	0.000147	0.100	0.100	0.0996	0.103	0.0850 to 0.115	100	70.0 to 130	0.401	20.0
BB19051	Cadmium, Total	mg/L	0.0000000	0.000147	0.100	0.0997	0.103	0.101	0.0850 to 0.115	99.7	70.0 to 130	3.26	20.0
BB19051	Antimony, Total	mg/L	0.000153	0.00100	0.100	0.0960	0.0931	0.0979	0.0850 to 0.115	96.0	70.0 to 130	3.07	20.0
BB19051	Chromium, Total	mg/L	-0.0000246	0.000440	0.100	0.0976	0.0988	0.103	0.0850 to 0.115	97.6	70.0 to 130	1.22	20.0
BB19051	Potassium, Total	mg/L	-0.00508	0.367	10.0	10.2	10.3	10.3	8.50 to 11.5	102	70.0 to 130	0.976	20.0
BB19051	Lead, Total	mg/L	0.0000094	0.000147	0.100	0.101	0.104	0.102	0.0850 to 0.115	101	70.0 to 130	2.93	20.0
BB19051	Calcium, Total	mg/L	0.00139	0.152	5.00	5.23	5.27	5.13	4.25 to 5.75	105	70.0 to 130	0.762	20.0
BB19051	Thallium, Total	mg/L	0.0000015	0.000147	0.100	0.0942	0.0970	0.0945	0.0850 to 0.115	94.2	70.0 to 130	2.93	20.0
BB19051	Iron, Total	mg/L	0.000116	0.0176	0.2	0.206	0.208	0.205	0.170 to 0.230	103	70.0 to 130	0.966	20.0
BB19051	Cobalt, Total	mg/L	0.0000059	0.000147	0.100	0.0993	0.101	0.104	0.0850 to 0.115	99.3	70.0 to 130	1.70	20.0
BB19051	Sodium, Total	mg/L	0.000254	0.0660	5.00	5.06	5.07	5.08	4.25 to 5.75	101	70.0 to 130	0.197	20.0
BB19051	Beryllium, Total	mg/L	0.0000219	0.000880	0.100	0.106	0.108	0.0915	0.0850 to 0.115	106	70.0 to 130	1.87	20.0
BB19051	Molybdenum, Total	mg/L	0.0000519	0.000147	0.100	0.0986	0.0997	0.0993	0.0850 to 0.115	98.6	70.0 to 130	1.11	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: 10/13/21 10:40
Customer ID:
Delivery Date: 10/13/21 15:25

Description: Gorgas Gypsum Field Blank-1

Laboratory ID Number: BB19048

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB19051	Sulfate	mg/L	0.201	1.00	20.0	19.3	0.222	18.1	18.0 to 22.0	96.5	80.0 to 120	0.00	20.0
BB19051	Fluoride	mg/L	-0.0151	0.100	2.50	2.47	0.0121	2.57	2.25 to 2.75	98.8	80.0 to 120	0.00	20.0
BB19051	Chloride	mg/L	0.0129	1.00	10.0	9.89	0.049	9.96	9.00 to 11.0	98.9	80.0 to 120	0.00	20.0
BB19050	Solids, Dissolved	mg/L	0.0000	25.0			902	49.0	40.0 to 60.0			0.445	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 - SP-2

Location Code: WMWGORG
Collected: 10/13/21 10:54
Customer ID:
Submittal Date: 10/13/21 15:25

Laboratory ID Number: BB19049

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	10/21/21 12:00	10/22/21 11:39		1.015	6.52	mg/L	0.030000	0.1015	
* Calcium, Total	10/21/21 12:00	10/22/21 14:26		50.75	592	mg/L	3.50175	20.3	
* Iron, Total	10/21/21 12:00	10/22/21 11:39		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Total	10/21/21 12:00	10/22/21 11:39		1.015	0.0299	mg/L	0.007105	0.01999956	
* Magnesium, Total	10/21/21 12:00	10/22/21 14:26		50.75	58.8	mg/L	1.06575	20.3	
* Sodium, Total	10/21/21 12:00	10/22/21 11:39		1.015	3.00	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Iron, Dissolved	10/20/21 14:00	10/21/21 11:26		1.015	Not Detected	mg/L	0.008120	0.0406	U
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	10/14/21 07:36	10/14/21 17:04		1.015	0.00123	mg/L	0.000508	0.001015	
* Arsenic, Total	10/14/21 07:36	10/14/21 17:04		1.015	0.0566	mg/L	0.000068	0.000203	
* Barium, Total	10/14/21 07:36	10/14/21 17:04		1.015	0.0197	mg/L	0.000102	0.000203	
* Beryllium, Total	10/14/21 07:36	10/14/21 17:04		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	10/14/21 07:36	10/14/21 17:04		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	10/14/21 07:36	10/14/21 17:04		1.015	0.000207	mg/L	0.000203	0.001015	J
* Cobalt, Total	10/14/21 07:36	10/14/21 17:04		1.015	0.000249	mg/L	0.000068	0.000203	
* Lead, Total	10/14/21 07:36	10/14/21 17:04		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Molybdenum, Total	10/14/21 07:36	10/14/21 17:04		1.015	0.0137	mg/L	0.000068	0.000203	
* Potassium, Total	10/14/21 07:36	10/14/21 17:04		1.015	3.78	mg/L	0.169505	0.5075	
* Manganese, Total	10/14/21 07:36	10/14/21 17:04		1.015	0.0743	mg/L	0.000068	0.000203	
* Selenium, Total	10/14/21 07:36	10/14/21 17:04		1.015	0.0179	mg/L	0.000508	0.001015	
* Thallium, Total	10/14/21 07:36	10/14/21 17:04		1.015	0.000250	mg/L	0.000068	0.000203	
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Manganese, Dissolved	10/14/21 08:13	10/14/21 10:01		1.015	0.00334	mg/L	0.000068	0.000203	
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	10/19/21 13:32	10/19/21 19:35		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2320 B	***Analyst: JAG***								
Alkalinity, Total as CaCO3	10/26/21 10:15	10/26/21 10:50		1	42.8	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	10/15/21 10:41	10/18/21 13:10		1	2130	mg/L		125	

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

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Reported: 11/19/2021
Version: 3.4
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Gypsum - SP-2

Location Code: WMWGORG
Collected: 10/13/21 10:54
Customer ID:
Submittal Date: 10/13/21 15:25

Laboratory ID Number: BB19049

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 4500CO2 D	***Analyst: JAG***								
Bicarbonate Alkalinity, (calc.)	10/26/21 10:15	10/26/21 10:50		1	42.0	mg/L			
Carbonate Alkalinity, (calc.)	10/26/21 10:15	10/26/21 10:50		1	0.70	mg/L			
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	10/14/21 12:05	10/14/21 12:05		10	87.4	mg/L	5.00	10	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	10/19/21 09:16	10/19/21 09:16		1	3.15	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	10/20/21 14:05	10/20/21 14:05		50	1470	mg/L	25.00	50	
Analytical Method: Field Measurements	***Analyst: AWG***								
Conductivity	10/13/21 10:51	10/13/21 10:51			2344.21	uS/cm			FA
pH	10/13/21 10:51	10/13/21 10:51			8.18	SU			FA
Temperature	10/13/21 10:51	10/13/21 10:51			27.71	C			FA
Turbidity	10/13/21 10:51	10/13/21 10:51			2.3	NTU			FA

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

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Reported: 11/19/2021
Version: 3.4
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORG
Sample Date: 10/13/21 10:54
Customer ID:
Delivery Date: 10/13/21 15:25

Description: Gorgas Gypsum - SP-2

Laboratory ID Number: BB19049

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB19051	Barium, Total	mg/L	0.0000000	0.000200	0.100	0.101	0.0999	0.0979	0.0850 to 0.115	101	70.0 to 130	1.10	20.0
BB19051	Boron, Total	mg/L	0.00153	0.0650	1.00	1.02	1.03	1.02	0.850 to 1.15	102	70.0 to 130	0.976	20.0
BB19051	Mercury, Total by CVAA	mg/L	6.000E-05	0.000500	0.004	0.00396	0.0039	0.00404	0.00340 to 0.00460	99.0	70.0 to 130	1.53	20.0
BB19051	Manganese, Total	mg/L	0.0000251	0.000147	0.100	0.0981	0.102	0.103	0.0850 to 0.115	98.1	70.0 to 130	3.90	20.0
BB19051	Arsenic, Total	mg/L	-0.0000563	0.000147	0.100	0.100	0.0996	0.103	0.0850 to 0.115	100	70.0 to 130	0.401	20.0
BB19051	Cadmium, Total	mg/L	0.0000000	0.000147	0.100	0.0997	0.103	0.101	0.0850 to 0.115	99.7	70.0 to 130	3.26	20.0
BB19051	Selenium, Total	mg/L	-0.0000644	0.00100	0.100	0.102	0.105	0.103	0.0850 to 0.115	102	70.0 to 130	2.90	20.0
BB19051	Magnesium, Total	mg/L	0.000272	0.0462	5.00	5.29	5.37	5.22	4.25 to 5.75	106	70.0 to 130	1.50	20.0
BB19051	Lithium, Total	mg/L	-3.240E-05	0.0154	0.200	0.204	0.205	0.201	0.170 to 0.230	102	70.0 to 130	0.489	20.0
BB19051	Sodium, Total	mg/L	0.000254	0.0660	5.00	5.06	5.07	5.08	4.25 to 5.75	101	70.0 to 130	0.197	20.0
BB19051	Beryllium, Total	mg/L	0.0000219	0.000880	0.100	0.106	0.108	0.0915	0.0850 to 0.115	106	70.0 to 130	1.87	20.0
BB19051	Molybdenum, Total	mg/L	0.0000519	0.000147	0.100	0.0986	0.0997	0.0993	0.0850 to 0.115	98.6	70.0 to 130	1.11	20.0
BB19051	Antimony, Total	mg/L	0.000153	0.00100	0.100	0.0960	0.0931	0.0979	0.0850 to 0.115	96.0	70.0 to 130	3.07	20.0
BB19050	Manganese, Dissolved	mg/L	-0.0000441	0.000147	0.100	0.101	0.106	0.104	0.0850 to 0.115	101	70.0 to 130	4.83	20.0
BB19051	Chromium, Total	mg/L	-0.0000246	0.000440	0.100	0.0976	0.0988	0.103	0.0850 to 0.115	97.6	70.0 to 130	1.22	20.0
BB19051	Potassium, Total	mg/L	-0.00508	0.367	10.0	10.2	10.3	10.3	8.50 to 11.5	102	70.0 to 130	0.976	20.0
BB19050	Iron, Dissolved	mg/L	-2.780E-05	0.0176	0.2	0.204	0.203	0.205	0.170 to 0.230	102	70.0 to 130	0.491	20.0
BB19051	Lead, Total	mg/L	0.0000094	0.000147	0.100	0.101	0.104	0.102	0.0850 to 0.115	101	70.0 to 130	2.93	20.0
BB19051	Calcium, Total	mg/L	0.00139	0.152	5.00	5.23	5.27	5.13	4.25 to 5.75	105	70.0 to 130	0.762	20.0
BB19051	Thallium, Total	mg/L	0.0000015	0.000147	0.100	0.0942	0.0970	0.0945	0.0850 to 0.115	94.2	70.0 to 130	2.93	20.0
BB19051	Iron, Total	mg/L	0.000116	0.0176	0.2	0.206	0.208	0.205	0.170 to 0.230	103	70.0 to 130	0.966	20.0
BB19051	Cobalt, Total	mg/L	0.0000059	0.000147	0.100	0.0993	0.101	0.104	0.0850 to 0.115	99.3	70.0 to 130	1.70	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

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

Alabama Power

Batch QC Summary

Customer Account: WMWGORG
Sample Date: 10/13/21 10:54
Customer ID:
Delivery Date: 10/13/21 15:25

Description: Gorgas Gypsum - SP-2

Laboratory ID Number: BB19049

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB19050	Alkalinity, Total as CaCO3	mg/L					37.6	49.7	45.0 to 55.0			5.75	10.0
BB19051	Sulfate	mg/L	0.201	1.00	20.0	19.3	0.222	18.1	18.0 to 22.0	96.5	80.0 to 120	0.00	20.0
BB19051	Fluoride	mg/L	-0.0151	0.100	2.50	2.47	0.0121	2.57	2.25 to 2.75	98.8	80.0 to 120	0.00	20.0
BB19051	Chloride	mg/L	0.0129	1.00	10.0	9.89	0.049	9.96	9.00 to 11.0	98.9	80.0 to 120	0.00	20.0
BB19050	Solids, Dissolved	mg/L	0.0000	25.0			902	49.0	40.0 to 60.0			0.445	10.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Reported: 11/19/2021
Version: 3.4
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Gypsum - SP-1

Location Code: WMWGORG
Collected: 10/13/21 11:28
Customer ID:
Submittal Date: 10/13/21 15:25

Laboratory ID Number: BB19050

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	10/21/21 12:00	10/22/21 11:42		1.015	0.0866	mg/L	0.030000	0.1015	J
* Calcium, Total	10/21/21 12:00	10/22/21 14:30		50.75	260	mg/L	3.50175	20.3	
* Iron, Total	10/21/21 12:00	10/22/21 11:42		1.015	0.00935	mg/L	0.008120	0.0406	J
* Lithium, Total	10/21/21 12:00	10/22/21 11:42		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	10/21/21 12:00	10/22/21 11:42		1.015	8.04	mg/L	0.021315	0.406	
* Sodium, Total	10/21/21 12:00	10/22/21 11:42		1.015	1.23	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Iron, Dissolved	10/20/21 14:00	10/21/21 11:29		1.015	Not Detected	mg/L	0.008120	0.0406	U
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	10/14/21 07:36	10/14/21 17:08		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Arsenic, Total	10/14/21 07:36	10/14/21 17:08		1.015	0.00529	mg/L	0.000068	0.000203	
* Barium, Total	10/14/21 07:36	10/14/21 17:08		1.015	0.0133	mg/L	0.000102	0.000203	
* Beryllium, Total	10/14/21 07:36	10/14/21 17:08		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	10/14/21 07:36	10/14/21 17:08		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	10/14/21 07:36	10/14/21 17:08		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	10/14/21 07:36	10/14/21 17:08		1.015	0.0000699	mg/L	0.000068	0.000203	J
* Lead, Total	10/14/21 07:36	10/14/21 17:08		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Molybdenum, Total	10/14/21 07:36	10/14/21 17:08		1.015	0.00146	mg/L	0.000068	0.000203	
* Potassium, Total	10/14/21 07:36	10/14/21 17:08		1.015	0.860	mg/L	0.169505	0.5075	
* Manganese, Total	10/14/21 07:36	10/14/21 17:08		1.015	0.0962	mg/L	0.000068	0.000203	
* Selenium, Total	10/14/21 07:36	10/14/21 17:08		1.015	0.000759	mg/L	0.000508	0.001015	J
* Thallium, Total	10/14/21 07:36	10/14/21 17:08		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Manganese, Dissolved	10/14/21 08:13	10/14/21 10:05		1.015	0.000341	mg/L	0.000068	0.000203	
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	10/19/21 13:32	10/19/21 19:39		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2320 B	***Analyst: JAG***								
Alkalinity, Total as CaCO3	10/26/21 10:15	10/26/21 10:50		1	35.5	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	10/15/21 10:41	10/18/21 13:10		1	894	mg/L		50	

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

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Reported: 11/19/2021
Version: 3.4
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Gypsum - SP-1

Location Code: WMWGORG
Collected: 10/13/21 11:28
Customer ID:
Submittal Date: 10/13/21 15:25

Laboratory ID Number: BB19050

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 4500CO2 D	***Analyst: JAG***								
Bicarbonate Alkalinity, (calc.)	10/26/21 10:15	10/26/21 10:50		1	34.9	mg/L			
Carbonate Alkalinity, (calc.)	10/26/21 10:15	10/26/21 10:50		1	0.50	mg/L			
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	10/14/21 12:06	10/14/21 12:06		1	0.725	mg/L	0.50	1	J
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	10/19/21 09:18	10/19/21 09:18		1	0.990	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	10/20/21 14:06	10/20/21 14:06		40	554	mg/L	20.00	40	
Analytical Method: Field Measurements	***Analyst: AWG***								
Conductivity	10/13/21 11:25	10/13/21 11:25			1079.72	uS/cm			FA
pH	10/13/21 11:25	10/13/21 11:25			8.21	SU			FA
Temperature	10/13/21 11:25	10/13/21 11:25			28.15	C			FA
Turbidity	10/13/21 11:25	10/13/21 11:25			2.37	NTU			FA

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

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Reported: 11/19/2021
Version: 3.4
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORG
Sample Date: 10/13/21 11:28
Customer ID:
Delivery Date: 10/13/21 15:25

Description: Gorgas Gypsum - SP-1

Laboratory ID Number: BB19050

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB19051	Mercury, Total by CVAA	mg/L	6.000E-05	0.000500	0.004	0.00396	0.0039	0.00404	0.00340 to 0.00460	99.0	70.0 to 130	1.53	20.0
BB19051	Manganese, Total	mg/L	0.0000251	0.000147	0.100	0.0981	0.102	0.103	0.0850 to 0.115	98.1	70.0 to 130	3.90	20.0
BB19051	Arsenic, Total	mg/L	-0.0000563	0.000147	0.100	0.100	0.0996	0.103	0.0850 to 0.115	100	70.0 to 130	0.401	20.0
BB19051	Cadmium, Total	mg/L	0.0000000	0.000147	0.100	0.0997	0.103	0.101	0.0850 to 0.115	99.7	70.0 to 130	3.26	20.0
BB19051	Lithium, Total	mg/L	-3.240E-05	0.0154	0.200	0.204	0.205	0.201	0.170 to 0.230	102	70.0 to 130	0.489	20.0
BB19051	Barium, Total	mg/L	0.0000000	0.000200	0.100	0.101	0.0999	0.0979	0.0850 to 0.115	101	70.0 to 130	1.10	20.0
BB19051	Boron, Total	mg/L	0.00153	0.0650	1.00	1.02	1.03	1.02	0.850 to 1.15	102	70.0 to 130	0.976	20.0
BB19051	Selenium, Total	mg/L	-0.0000644	0.00100	0.100	0.102	0.105	0.103	0.0850 to 0.115	102	70.0 to 130	2.90	20.0
BB19051	Magnesium, Total	mg/L	0.000272	0.0462	5.00	5.29	5.37	5.22	4.25 to 5.75	106	70.0 to 130	1.50	20.0
BB19051	Sodium, Total	mg/L	0.000254	0.0660	5.00	5.06	5.07	5.08	4.25 to 5.75	101	70.0 to 130	0.197	20.0
BB19051	Beryllium, Total	mg/L	0.0000219	0.000880	0.100	0.106	0.108	0.0915	0.0850 to 0.115	106	70.0 to 130	1.87	20.0
BB19051	Molybdenum, Total	mg/L	0.0000519	0.000147	0.100	0.0986	0.0997	0.0993	0.0850 to 0.115	98.6	70.0 to 130	1.11	20.0
BB19051	Antimony, Total	mg/L	0.000153	0.00100	0.100	0.0960	0.0931	0.0979	0.0850 to 0.115	96.0	70.0 to 130	3.07	20.0
BB19050	Manganese, Dissolved	mg/L	-0.0000441	0.000147	0.100	0.101	0.106	0.104	0.0850 to 0.115	101	70.0 to 130	4.83	20.0
BB19051	Chromium, Total	mg/L	-0.0000246	0.000440	0.100	0.0976	0.0988	0.103	0.0850 to 0.115	97.6	70.0 to 130	1.22	20.0
BB19051	Potassium, Total	mg/L	-0.00508	0.367	10.0	10.2	10.3	10.3	8.50 to 11.5	102	70.0 to 130	0.976	20.0
BB19050	Iron, Dissolved	mg/L	-2.780E-05	0.0176	0.2	0.204	0.203	0.205	0.170 to 0.230	102	70.0 to 130	0.491	20.0
BB19051	Lead, Total	mg/L	0.0000094	0.000147	0.100	0.101	0.104	0.102	0.0850 to 0.115	101	70.0 to 130	2.93	20.0
BB19051	Calcium, Total	mg/L	0.00139	0.152	5.00	5.23	5.27	5.13	4.25 to 5.75	105	70.0 to 130	0.762	20.0
BB19051	Thallium, Total	mg/L	0.0000015	0.000147	0.100	0.0942	0.0970	0.0945	0.0850 to 0.115	94.2	70.0 to 130	2.93	20.0
BB19051	Iron, Total	mg/L	0.000116	0.0176	0.2	0.206	0.208	0.205	0.170 to 0.230	103	70.0 to 130	0.966	20.0
BB19051	Cobalt, Total	mg/L	0.0000059	0.000147	0.100	0.0993	0.101	0.104	0.0850 to 0.115	99.3	70.0 to 130	1.70	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Reported: 11/19/2021
Version: 3.4
COA_CCR

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

Alabama Power

Batch QC Summary

Customer Account: WMWGORG
Sample Date: 10/13/21 11:28
Customer ID:
Delivery Date: 10/13/21 15:25

Description: Gorgas Gypsum - SP-1

Laboratory ID Number: BB19050

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB19050	Solids, Dissolved	mg/L	0.0000	25.0			902	49.0	40.0 to 60.0			0.445	10.0
BB19051	Fluoride	mg/L	-0.0151	0.100	2.50	2.47	0.0121	2.57	2.25 to 2.75	98.8	80.0 to 120	0.00	20.0
BB19051	Chloride	mg/L	0.0129	1.00	10.0	9.89	0.049	9.96	9.00 to 11.0	98.9	80.0 to 120	0.00	20.0
BB19050	Alkalinity, Total as CaCO3	mg/L					37.6	49.7	45.0 to 55.0			5.75	10.0
BB19051	Sulfate	mg/L	0.201	1.00	20.0	19.3	0.222	18.1	18.0 to 22.0	96.5	80.0 to 120	0.00	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Gypsum Equipment Blank-1

Location Code: WMWGORGEB
Collected: 10/13/21 11:50
Customer ID:
Submittal Date: 10/13/21 15:25

Laboratory ID Number: BB19051

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	10/21/21 12:00	10/22/21 11:46		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	10/21/21 12:00	10/22/21 11:46		1.015	Not Detected	mg/L	0.070035	0.406	U
* Iron, Total	10/21/21 12:00	10/22/21 11:46		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Total	10/21/21 12:00	10/22/21 11:46		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	10/21/21 12:00	10/22/21 11:46		1.015	Not Detected	mg/L	0.021315	0.406	U
* Sodium, Total	10/21/21 12:00	10/22/21 11:46		1.015	Not Detected	mg/L	0.03045	0.406	U
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	10/14/21 07:36	10/14/21 17:12		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Arsenic, Total	10/14/21 07:36	10/14/21 17:12		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Barium, Total	10/14/21 07:36	10/14/21 17:12		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Beryllium, Total	10/14/21 07:36	10/14/21 17:12		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	10/14/21 07:36	10/14/21 17:12		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	10/14/21 07:36	10/14/21 17:12		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	10/14/21 07:36	10/14/21 17:12		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	10/14/21 07:36	10/14/21 17:12		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Molybdenum, Total	10/14/21 07:36	10/14/21 17:12		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	10/14/21 07:36	10/14/21 17:12		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Potassium, Total	10/14/21 07:36	10/14/21 17:12		1.015	Not Detected	mg/L	0.169505	0.5075	U
* Selenium, Total	10/14/21 07:36	10/14/21 17:12		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	10/14/21 07:36	10/14/21 17:12		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	10/19/21 13:32	10/19/21 19:43		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	10/15/21 10:41	10/18/21 13:10		1	Not Detected	mg/L		25	U
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	10/14/21 12:07	10/14/21 12:07		1	Not Detected	mg/L	0.50	1	U
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	10/19/21 09:19	10/19/21 09:19		1	Not Detected	mg/L	0.06	0.1	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	10/20/21 14:07	10/20/21 14:07		1	Not Detected	mg/L	0.50	1	U

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

Comments:

Reported: 11/19/2021
Version: 3.4
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORGEB
Sample Date: 10/13/21 11:50
Customer ID:
Delivery Date: 10/13/21 15:25

Description: Gorgas Gypsum Equipment Blank-1

Laboratory ID Number: BB19051

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB19051	Antimony, Total	mg/L	0.000153	0.00100	0.100	0.0960	0.0931	0.0979	0.0850 to 0.115	96.0	70.0 to 130	3.07	20.0
BB19051	Chromium, Total	mg/L	-0.0000246	0.000440	0.100	0.0976	0.0988	0.103	0.0850 to 0.115	97.6	70.0 to 130	1.22	20.0
BB19051	Potassium, Total	mg/L	-0.00508	0.367	10.0	10.2	10.3	10.3	8.50 to 11.5	102	70.0 to 130	0.976	20.0
BB19051	Sodium, Total	mg/L	0.000254	0.0660	5.00	5.06	5.07	5.08	4.25 to 5.75	101	70.0 to 130	0.197	20.0
BB19051	Beryllium, Total	mg/L	0.0000219	0.000880	0.100	0.106	0.108	0.0915	0.0850 to 0.115	106	70.0 to 130	1.87	20.0
BB19051	Molybdenum, Total	mg/L	0.0000519	0.000147	0.100	0.0986	0.0997	0.0993	0.0850 to 0.115	98.6	70.0 to 130	1.11	20.0
BB19051	Barium, Total	mg/L	0.0000000	0.000200	0.100	0.101	0.0999	0.0979	0.0850 to 0.115	101	70.0 to 130	1.10	20.0
BB19051	Boron, Total	mg/L	0.00153	0.0650	1.00	1.02	1.03	1.02	0.850 to 1.15	102	70.0 to 130	0.976	20.0
BB19051	Mercury, Total by CVAA	mg/L	6.000E-05	0.000500	0.004	0.00396	0.0039	0.00404	0.00340 to 0.00460	99.0	70.0 to 130	1.53	20.0
BB19051	Manganese, Total	mg/L	0.0000251	0.000147	0.100	0.0981	0.102	0.103	0.0850 to 0.115	98.1	70.0 to 130	3.90	20.0
BB19051	Arsenic, Total	mg/L	-0.0000563	0.000147	0.100	0.100	0.0996	0.103	0.0850 to 0.115	100	70.0 to 130	0.401	20.0
BB19051	Cadmium, Total	mg/L	0.0000000	0.000147	0.100	0.0997	0.103	0.101	0.0850 to 0.115	99.7	70.0 to 130	3.26	20.0
BB19051	Lithium, Total	mg/L	-3.240E-05	0.0154	0.200	0.204	0.205	0.201	0.170 to 0.230	102	70.0 to 130	0.489	20.0
BB19051	Selenium, Total	mg/L	-0.0000644	0.00100	0.100	0.102	0.105	0.103	0.0850 to 0.115	102	70.0 to 130	2.90	20.0
BB19051	Magnesium, Total	mg/L	0.000272	0.0462	5.00	5.29	5.37	5.22	4.25 to 5.75	106	70.0 to 130	1.50	20.0
BB19051	Lead, Total	mg/L	0.0000094	0.000147	0.100	0.101	0.104	0.102	0.0850 to 0.115	101	70.0 to 130	2.93	20.0
BB19051	Calcium, Total	mg/L	0.00139	0.152	5.00	5.23	5.27	5.13	4.25 to 5.75	105	70.0 to 130	0.762	20.0
BB19051	Thallium, Total	mg/L	0.0000015	0.000147	0.100	0.0942	0.0970	0.0945	0.0850 to 0.115	94.2	70.0 to 130	2.93	20.0
BB19051	Iron, Total	mg/L	0.000116	0.0176	0.2	0.206	0.208	0.205	0.170 to 0.230	103	70.0 to 130	0.966	20.0
BB19051	Cobalt, Total	mg/L	0.0000059	0.000147	0.100	0.0993	0.101	0.104	0.0850 to 0.115	99.3	70.0 to 130	1.70	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: 10/13/21 11:50
Customer ID:
Delivery Date: 10/13/21 15:25

Description: Gorgas Gypsum Equipment Blank-1

Laboratory ID Number: BB19051

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB19050	Solids, Dissolved	mg/L	0.0000	25.0			902	49.0	40.0 to 60.0			0.445	10.0
BB19051	Fluoride	mg/L	-0.0151	0.100	2.50	2.47	0.0121	2.57	2.25 to 2.75	98.8	80.0 to 120	0.00	20.0
BB19051	Chloride	mg/L	0.0129	1.00	10.0	9.89	0.049	9.96	9.00 to 11.0	98.9	80.0 to 120	0.00	20.0
BB19051	Sulfate	mg/L	0.201	1.00	20.0	19.3	0.222	18.1	18.0 to 22.0	96.5	80.0 to 120	0.00	20.0

Comments:

Reported: 11/19/2021
Version: 3.4
COA_CCR

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

Definitions

Alabama Power

Project Number: WMWGORG_1342

Abbreviation	Description
DF	Dilution Factor
LCS	Lab Control Sample
LFM	Lab Fortified Matrix
MB	Method Blank
MDL	Method Detection Limit; minimum concentration of an analyte that can be determined with 99% confidence that the concentration is greater than zero.
MS	Matrix Spike
MSD	Matrix Spike Duplicate
Prec	Precision (% RPD)
Q	Qualifier; comment used to note deviations or additional information associated with analytical results.
QC	Quality Control
Rec	Recovery of Matrix Spike
RL	Reporting Limit; lowest concentration at which an analyte can be quantitatively measured.
Vio Spec	Violation Specification; regulatory limit which has been exceeded by the sample analyzed.

Qualifier	Description
FA	Field results were reviewed by the Water Field Group. Refer to APC Field Case Narrative.
J	Reported value is an estimate because concentration is less than reporting limit.
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 Dyer
		Location	Gorgas Gypsum

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

Comments: Correcting Description from Groundwater to Sediment Pond. LBM 11/17/21

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
SP-3	10/13/2021	10:18	6	Sediment Pond		BB19046
SP-3 DUP	10/13/2021	10:18	6	Sample Duplicate		BB19047
FB-1	10/13/2021	10:40	4	Field Blank		BB19048
SP-2	10/13/2021	10:54	6	Sediment Pond		BB19049
SP-1	10/13/2021	11:28	6	Sediment Pond		BB19050
EB-1	10/13/2021	11:50	4	Equipment Blank		BB19051

Relinquished By	Received By	Date/Time
		10/13/2021 14:50

SmarTroll ID	7586-41415-5-4	All metals and radiological bottles have pH < 2	☑
Turbidity ID	4677-23343-4-2	Cooler Temp	0.1 degrees C
Sample Event	1342	Thermometer ID	5408-27568-2-2
		pH Strip ID	8440-53679-10-5

Bottles/Pre-Preserved Bottles are provided by the GTL

ISOTOPE TRACER TECHNOLOGIES INC

Isotope Analyses for: Alabama Power General Test Lab

IT^2 FILE # 210277

2021-09-03

Approved by:

Orfan Shouakar-Stash, PhD
Director
Isotope Tracer Technologies Inc.
695 Rupert St. Unit B, Waterloo, ON, N2V 1Z5
Tel: 519-886-5555 | Fax: 519-886-5575
Email: orfan@it2isotopes.com
Website: www.it2isotopes.com

ISOTOPE TRACER TECHNOLOGIES INC

Client: Alabama Power General Test Lab
Address: 744 Co. Rd. 87, GSC#8
Calera, AL 35040
USA
Tel: 205-664-6197
Attn.: Laura Midkiff
E-mail: lbmidkif@southernco.com
E-mail: TBWILL@southernco.com
E-mail: RGARNER@SOUTHERNCO.COM

File Number: **210277**
Project Number: **WMWGORG_1329**

#	Sample ID	Sample Collection		Sample #	$\delta^{11}B$	Result	Repeat	Sample Size	B Concen.
		Date	Time		‰	NIST 951a			mg/L
1	BB12697 MW-8	2021-07-14	10:52	74181	X	33.6	32.7	1 x 1Litre Bottle	2.07
2	BB12776 MW-14H	2021-07-13	13:51	74182	X	11.6		1 x 1Litre Bottle	0.139
3	BB12777 MW-14H DUP	2021-07-13	13:51	74183	X	3.7		1 x 1Litre Bottle	0.139
4	BB12779 MW-4	2021-07-14	8:38	74184	X	2.8	4.0	1 x 1Litre Bottle	4.78
5	BB12780 MW-4V	2021-07-14	10:04	74185	X	-2.6		1 x 1Litre Bottle	3.68
6	BB12785 EB-1	2021-07-14	16:15	74186	X	BDL		1 x 1Litre Bottle	N.D.
7	BB12846 MW-9H	2021-07-13	13:45	74187	X	0.0	-0.1	1 x 1Litre Bottle	5.84
8	BB12847 MW-12H	2021-07-14	9:35	74188	X	8.8		1 x 1Litre Bottle	0.0742
9	BB12852 MW-3	2021-07-14	14:55	74189	X	14.4		1 x 1Litre Bottle	1.47
10	BB12853 MW-3V	2021-07-15	10:50	74190	X	25.3		1 x 1Litre Bottle	3.04
11	BB12854 FB-2	2021-07-15	12:05	74191	X	BDL		1 x 1Litre Bottle	N.D.

BDL: Below Detection Limit
Low signal, uncertainty higher than normal

^{11}B Analyses

Instrument Used:
Thermal Ionization Mass Spectrometry (TIMS), TI-Box, spectromat, Germany
Standard Used:
120 ratios are taken for each sample and the average is used to calculate the delta value.
Delta values are calculated with respect to NIST SRM951a.
A secondary standard of sea water (SB1) is ran with each carousel.
Typical Standard deviation:
+/- 2 permil

Approved by:

Orfan S-Stash

Orfan Shouakar-Stash, PhD
Director
Isotope Tracer Technologies Inc.
695 Rupert St. Unit B, Waterloo, ON, N2V 1Z5
Tel: 519-886-5555 | Fax: 519-886-5575
Email: orfan@it2isotopes.com
Website: www.it2isotopes.com

ISOTOPE TRACER TECHNOLOGIES INC

CHAIN OF CUSTODY / ANALYTICAL SERVICES REQUEST FORM

Note: all TAT Quoted material is in business days which exclude statutory holidays and weekends.

Specify date required	Service Requested
	(regular)
4 Weeks	(Rush)

COMPANY NAME	Alabama Power General Test Lab
OFFICE ADDRESS	744 Co. Rd. 87, GSC#8 Calera, AL 35040
PROJECT MANAGER:	Laura Midkiff
PROJECT #	WMWGORG_1329
PHONE	205-664-6197
FAX	
PO #	APC63628-0001

REPORT FORMAT/DISTRIBUTION

EMAIL __X___ FAX _______ BOTH _______
SELECT: PDF ____ DIGITAL _____ BOTH _X_
EMAIL 1 __LBMIDKIF@SOUTHERNCO.COM__
EMAIL 2 __RGARNER@ SOUTHERNCO.COM__
EMAIL 3 __TBWILL@ SOUTHERNCO.COM__

ANALYSIS REQUEST

PLEASE INDICATE FILTERED, PRESERVED OR BOTH <- - - - - (F, P, F/P)

SUBMISSION #:

ENTERED BY:

DATE/TIME ENTERED:

BIN #:

SAMPLING INFORMATION

Sample Date (YYYY-MM-DD)	Time (24hr) (hh:mm)	TYPE: COMP	TYPE: GRAB	MATRIX: WATER	MATRIX: SOIL	MATRIX: OTHER	SAMPLE DESCRIPTION TO APPEAR ON REPORT	NUMBER OF CONTAINERS	Boron Method (Isotopes 10 & 11)	COMMENTS	LAB ID
7/14/2021	10:52		x	x			BB12697 MW-8	1	X		

SPECIAL INSTRUCTIONS/COMMENTS

THE QUESTIONS BELOW MUST BE ANSWERED FORWATER SAMPLES (CHECK Yes OR No)

Are any samples taken from a regulated DW System? Yes ___ No _X_
If yes, an authorized drinking water COC MUST be used for this submission.
Is the water sampled intended to be potable for human consumption? Yes ___ No ___

SAMPLE CONDITION

___ FROZEN
___ COLD
___ COOLING INITIATED
___ AMBIENT

Observations

SAMPLED BY: Anthony Goggins	7/14/2021 15:35	RECEIVED BY: Laura Midkiff	7/14/2021 15:35
RELINQUISHED BY: Laura Midkiff	DATE & TIME 7/16/21 1320	RECEIVED AT LAB BY: K M	DATE & TIME Jul. 22, 2021 12:00

1. TAT may vary dependent on complexity of analysis and lab workload at time of submission. Please contact the lab to confirm TATs.

2. Any known or suspected hazards relating to a sample must be noted on the chain of custody in comments section.

ISOTOPE TRACER TECHNOLOGIES INC

CHAIN OF CUSTODY / ANALYTICAL SERVICES REQUEST FORM

Note: all TAT Quoted material is in business days which exclude statutory holidays and weekends.

Specify date required: 4 Weeks

Service Requested: (regular) / (Rush)

COMPANY NAME	Alabama Power General Test Lab
OFFICE ADDRESS	744 Co. Rd. 87, GSC#8 Calera, AL 3S040
PROJECT MANAGER: Laura Midkiff	
PROJECT # WMWGORG_1329	
PHONE 205-664-6197	FAX
	PO # APC63628-0001

REPORT FORMAT/DISTRIBUTION

EMAIL _X_ FAX _____ BOTH _____
SELECT: PDF ____ DIGITAL ____ BOTH _X_
EMAIL 1 _LBMIDKIF@SOUTHERNCO.COM_
EMAIL 2 _RGARNER@ SOUTHERNCO.COM_
EMAIL 3 _TBWILL@ SOUTHERNCO.COM_

ANALYSIS REQUEST

PLEASE INDICATE FILTERED, PRESERVED OR BOTH <----- (F, P, F/P)

SUBMISSION #:

ENTERED BY:

DATE/TIME ENTERED:

BIN #:

SAMPLING INFORMATION

Sample Date/Time		TYPE		MATRIX															
Date (YYYY-MM-DD)	Time (24hr) (hh:mm)	COMP	GRAB	WATER	SOIL	OTHER	SAMPLE DESCRIPTION TO APPEAR ON REPORT	NUMBER OF CONTAINERS	Boron Method (Isotopes 10 & 11)										COMMENTS	LAB ID
7/13/2021	13:51		x	x			BB12776 MW-14H	x	x											
7/13/2021	13:51		x	x			BB12777 MW-14H DUP	x	x											
7/14/2021	8:38		x	x			BB12779 MW-4	x	x											
7/14/2021	10:04		x	x			BB12780 MW-4V	x	x											
7/14/2021	16:15		x	x			BB12785 EB-1	x	x											

SPECIAL INSTRUCTIONS/COMMENTS

THE QUESTIONS BELOW MUST BE ANSWERED FORWATER SAMPLES (CHECK Yes OR No)

Are any samples taken from a regulated DW System? Yes ___ No _X_
If yes, an authorized drinking water COC MUST be used for this submission.
Is the water sampled intended to be potable for human consumption? Yes ___ No ___

SAMPLE CONDITION

___ FROZEN
___ COLD
___ COOLING INITIATED
___ AMBIENT

Observations

SAMPLED BY: Dallas Gentry	7/15/2021 8:44	RECEIVED BY: Laura Midkiff	7/15/2021 8:44
RELINQUISHED BY: Laura Midkiff	DATE & TIME 7/16/21 1310	RECEIVED AT LAB BY: K. M.	DATE & TIME Jul 22, 21 12:20

1. TAT may vary dependent on complexity of analysis and lab workload at time of submission. Please contact the lab to confirm TATs.

2. Any known or suspected hazards relating to a sample must be noted on the chain of custody in comments section.

ISOTOPE TRACER TECHNOLOGIES INC

CHAIN OF CUSTODY / ANALYTICAL SERVICES REQUEST FORM

Note: all TAT Quoted material is in business days which exclude statutory holidays and weekends.

Specify date required: 4 Weeks

Service Requested: (regular) / (Rush)

COMPANY NAME	Alabama Power General Test Lab
OFFICE ADDRESS	744 Co. Rd. 87, GSC#8 Calera, AL 35040
PROJECT MANAGER: Laura Midkiff	
PROJECT # WMWGORG_1329	
PHONE 205-664-6197	FAX
	PO # APC63628-0001

REPORT FORMAT/DISTRIBUTION

EMAIL _X__ FAX _____ BOTH _____
SELECT: PDF ____ DIGITAL ____ BOTH _X_
EMAIL 1 __LBMIDKIF@SOUTHERNCO.COM__
EMAIL 2 __RGARNER@ SOUTHERNCO.COM__
EMAIL 3 __TBWILL@ SOUTHERNCO.COM__

ANALYSIS REQUEST

PLEASE INDICATE FILTERED, PRESERVED OR BOTH <----- (F, P, F/P)

SUBMISSION #:

ENTERED BY:

DATE/TIME ENTERED:

BIN #:

SAMPLING INFORMATION

Sample Date/Time		TYPE		MATRIX			SAMPLE DESCRIPTION TO APPEAR ON REPORT	NUMBER OF CONTAINERS	Boron Method (Isotopes 10 & 11)	COMMENTS	LAB ID
Date (YYYY-MM-DD)	Time (24hr) (hh:mm)	COMP	GRAB	WATER	SOIL	OTHER					
7/13/2021	13:45		x	x			BB12846 MW-9H	x	x		
7/14/2021	9:35		x	x			BB12847 MW-12H	x	x		
7/14/2021	14:55		x	x			BB12852 MW-3	x	x		
7/15/2021	10:50		x	x			BB12853 MW-3V	x	x		
7/15/2021	12:05		x	x			BB12854 FB-2	x	x		

SPECIAL INSTRUCTIONS/COMMENTS

THE QUESTIONS BELOW MUST BE ANSWERED FORWATER SAMPLES (CHECK Yes OR No)

Are any samples taken from a regulated DW System? Yes ___ No _X_
If yes, an authorized drinking water COC MUST be used for this submission.
Is the water sampled intended to be potable for human consumption? Yes ___ No ___

SAMPLE CONDITION

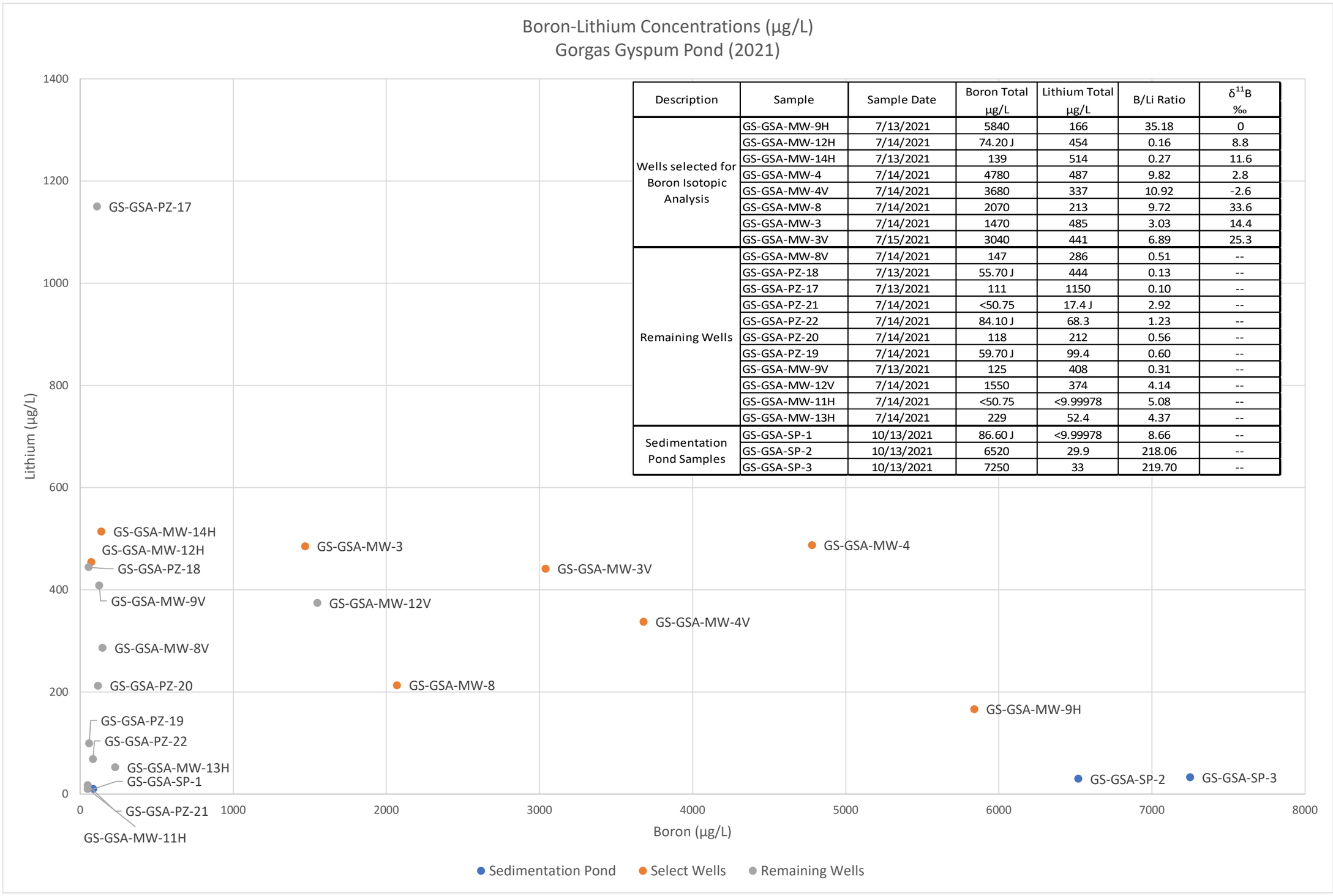
___ FROZEN
___ COLD
___ COOLING INITIATED
___ AMBIENT

Observations

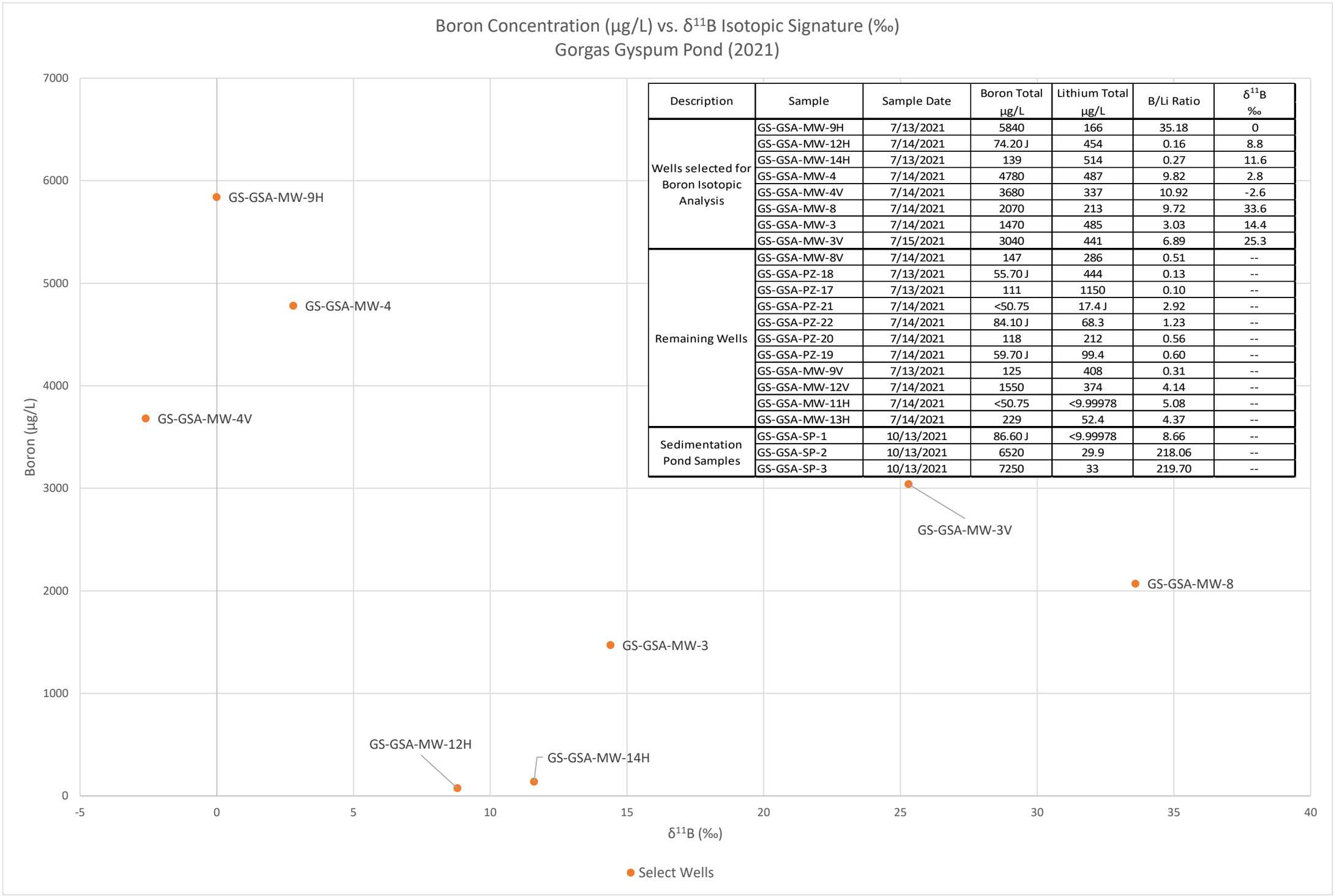
SAMPLED BY: TJ Daugherty	7/15/2021 14:35	RECEIVED BY: Laura Midkiff	7/15/2021 14:35
RELINQUISHED BY: Laura Midkiff	DATE & TIME 7/15/21 1320	RECEIVED AT LAB BY: K. M.	DATE & TIME July 22, 21 12:00

1. TAT may vary dependent on complexity of analysis and lab workload at time of submission. Please contact the lab to confirm TATs.

2. Any known or suspected hazards relating to a sample must be noted on the chain of custody in comments section.



Description	Sample	Sample Date	Boron Total µg/L	Lithium Total µg/L	B/Li Ratio	$\delta^{11}B$ ‰
Wells selected for Boron Isotopic Analysis	GS-GSA-MW-9H	7/13/2021	5840	166	35.18	0
	GS-GSA-MW-12H	7/14/2021	74.20 J	454	0.16	8.8
	GS-GSA-MW-14H	7/13/2021	139	514	0.27	11.6
	GS-GSA-MW-4	7/14/2021	4780	487	9.82	2.8
	GS-GSA-MW-4V	7/14/2021	3680	337	10.92	-2.6
	GS-GSA-MW-8	7/14/2021	2070	213	9.72	33.6
	GS-GSA-MW-3	7/14/2021	1470	485	3.03	14.4
	GS-GSA-MW-3V	7/15/2021	3040	441	6.89	25.3
Remaining Wells	GS-GSA-MW-8V	7/14/2021	147	286	0.51	--
	GS-GSA-PZ-18	7/13/2021	55.70 J	444	0.13	--
	GS-GSA-PZ-17	7/13/2021	111	1150	0.10	--
	GS-GSA-PZ-21	7/14/2021	<50.75	17.4 J	2.92	--
	GS-GSA-PZ-22	7/14/2021	84.10 J	68.3	1.23	--
	GS-GSA-PZ-20	7/14/2021	118	212	0.56	--
	GS-GSA-PZ-19	7/14/2021	59.70 J	99.4	0.60	--
	GS-GSA-MW-9V	7/13/2021	125	408	0.31	--
	GS-GSA-MW-12V	7/14/2021	1550	374	4.14	--
	GS-GSA-MW-11H	7/14/2021	<50.75	<9.99978	5.08	--
	GS-GSA-MW-13H	7/14/2021	229	52.4	4.37	--
Sedimentation Pond Samples	GS-GSA-SP-1	10/13/2021	86.60 J	<9.99978	8.66	--
	GS-GSA-SP-2	10/13/2021	6520	29.9	218.06	--
	GS-GSA-SP-3	10/13/2021	7250	33	219.70	--



Description	Sample	Sample Date	Boron Total µg/L	Lithium Total µg/L	B/Li Ratio	$\delta^{11}B$ ‰
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	GS-GSA-MW-4V	7/14/2021	3680	337	10.92	-2.6
	GS-GSA-MW-8	7/14/2021	2070	213	9.72	33.6
	GS-GSA-MW-3	7/14/2021	1470	485	3.03	14.4
	GS-GSA-MW-3V	7/15/2021	3040	441	6.89	25.3
Remaining Wells	GS-GSA-MW-8V	7/14/2021	147	286	0.51	--
	GS-GSA-PZ-18	7/13/2021	55.70 J	444	0.13	--
	GS-GSA-PZ-17	7/13/2021	111	1150	0.10	--
	GS-GSA-PZ-21	7/14/2021	<50.75	17.4 J	2.92	--
	GS-GSA-PZ-22	7/14/2021	84.10 J	68.3	1.23	--
	GS-GSA-PZ-20	7/14/2021	118	212	0.56	--
	GS-GSA-PZ-19	7/14/2021	59.70 J	99.4	0.60	--
	GS-GSA-MW-9V	7/13/2021	125	408	0.31	--
	GS-GSA-MW-12V	7/14/2021	1550	374	4.14	--
	GS-GSA-MW-11H	7/14/2021	<50.75	<9.99978	5.08	--
	GS-GSA-MW-13H	7/14/2021	229	52.4	4.37	--
Sedimentation Pond Samples	GS-GSA-SP-1	10/13/2021	86.60 J	<9.99978	8.66	--
	GS-GSA-SP-2	10/13/2021	6520	29.9	218.06	--
	GS-GSA-SP-3	10/13/2021	7250	33	219.70	--