2020 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT

ALABAMA POWER COMPANY
PLANT GORGAS
ASH POND

January 31, 2021

Prepared for

Alabama Power Company
Birmingham, Alabama

By

Southern Company Services
Earth Science and Environmental Engineering

Alabama Power

CERTIFICATION STATEMENT

This *Annual Groundwater Monitoring and Corrective Action Report, Alabama Power Company - Plant Gorgas Ash Pond* has been prepared in accordance with the United States Environmental Protection Agency's coal combustion residual rule (40 CFR Part 257, Subpart D) and ADEM Admin. Code Ch. 335-13-15 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.

1/31/2021

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1/31/2021

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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) and the State of Alabama Department of Environmental Management (ADEM) Admin. Code Ch. 335-13-15, this 2020 Annual Groundwater Monitoring and Corrective Action Report has been prepared to document 2020 semi-annual assessment groundwater monitoring activities at the Plant Gorgas Ash Pond (Ash Pond) and to satisfy the requirements of § 257.90(e) and ADEM Admin. Code r. 335-13-15-.06(1)(f). Semi-annual assessment monitoring and associated reporting for Plant Gorgas Ash 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 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.

Appendix IV parameters arsenic, lithium, and molybdenum were detected at statistically significant levels (SSL) above groundwater protection standards (GWPS) during the 2020 semiannual monitoring events. 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 and ADEM Admin. Code r. 335-13-15-.06(7). The ACM was subsequently submitted to ADEM and posted to the Ash Pond (Site) CCR compliance website. A public meeting to discuss the ACM was held on July 1, 2020.

The following summarizes results obtained from 2020 groundwater monitoring activities at the site:

- Submitted the Semi-Annual Progress Report for Groundwater Delineation Activities on March 30, 2020.
- Submitted the revised Groundwater Monitoring Plan on April 15, 2020, responded to ADEM comments and resubmitted the Groundwater Monitoring Plan on August 24, 2020.
- Submitted the Semi-Annual Remedy Selection and Design Progress Report on June 8, 2020.
- Submitted 2020 Semi-Annual Groundwater Monitoring and Corrective Action Report on July 31, 2020.
- Submitted Semi-Annual Progress and Groundwater Delineation Report on September 30, 2020.

- Continued the evaluation of monitored natural attenuation (MNA) and geochemical manipulation as potential groundwater remediation technologies for the Site as described in the Semi-Annual Remedy Selection and Design Progress Reports submitted in June and December 2020 in accordance with § 257.97(a) and the ADEM Admin. Code r. 335-13-15-.06(8)(a).
- Submitted the Semi-Annual Remedy Selection and Design Progress Report on December 12, 2020.
- Pursuant to 40 CFR 257.90(e)(6), Executive Summary Table – Monitoring Period Summary, describes the status of groundwater monitoring and corrective action during the monitoring period for this report.

The CCR Unit concluded the monitoring period in assessment monitoring, and Alabama Power Company (APC) is evaluating potential groundwater remedies identified in the ACM. The following future actions will be taken or are recommended for the site:

- Submit plan to ADEM for replacement monitoring wells.
- Collect additional data to further evaluate remedies selected as feasible for the remediation of arsenic, molybdenum, and lithium as described in the ACM.
- Perform a conceptual-level feasibility study of potentially viable corrective actions (January to July 2021).
- Show where the viable corrective actions could be applied on Site maps and on geologic sections.
- Compare site-specific corrective actions to the evaluation criteria in the CCR Rule, with emphasis on deficiencies that could eliminate a corrective action from further consideration.
- Determine how corrective actions could be integrated with pond closure.
- Determine data gaps and develop plans to collect additional data as needed.
- Begin the development of a detailed groundwater remedy plan.
- Submit the next Semi-Annual Progress Report for Groundwater Delineation Activities or Comprehensive Groundwater Investigation Report to ADEM by March 30, 2021.
- Complete an ASD study into the natural occurrence of lithium as a potential source of elevated lithium in Pratt Group flow system beneath the Site.
- Submit the next Semi-Annual Remedy Selection and Design Progress Report by June 12, 2021.
- Conduct the first semi-annual assessment monitoring event in the March or April of 2021 and submit a semi-annual groundwater monitoring report summarizing findings by July 31, 2021.

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

Assessment Monitoring Initiated: July 16, 2019	
Monitoring Period:	January 1 - December 31, 2020
Beginning Status:	Assessment
Ending Status:	Assessment

Statistical Analysis Results *

Appendix III SSIs

Parameter	Wells
Boron	GS-AP-MW-2, GS-AP-MW-6D, GS-AP-MW-6S, GS-AP-MW-7, GS-AP-MW-17, and GS-AP-MW-18,
Calcium	GS-AP-MW-6D and GS-AP-MW-6S
Chloride	GS-AP-MW-2, GS-AP-MW-6D, GS-AP-MW-6S, GS-AP-MW-7, GS-AP-MW-15, GS-AP-MW-17, GS-AP-MW-18, GS-AP-MW-19, and GS-AP-MW-21
Fluoride	GS-AP-MW-2, GS-AP-MW-6S, GS-AP-MW-15, GS-AP-MW-17, GS-AP-MW-18, and GS-AP-MW-19
pH	GS-AP-MW-2, GS-AP-MW-12, GS-AP-MW-15, GS-AP-MW-17, GS-AP-MW-19 and GS-AP-MW-21
Sulfate	GS-AP-MW-2, GS-AP-MW-6D, GS-AP-MW-6S, GS-AP-MW-7 GS-AP-MW-12, GS-AP-MW-17, GS-AP-MW-18, GS-AP-MW-19 and GS-AP-MW-21
TDS	GS-AP-MW-15, GS-AP-MW-17, GS-AP-MW-18 and GS-AP-MW-21

Appendix IV SSLs

Parameter	Wells
Arsenic	GS-AP-MW-6D and GS-AP-MW-7
Lithium	GS-AP-MW-6D, GS-AP-MW-7, GS-AP-MW-15, GS-AP-MW-17, GS-AP-MW-18, GS-AP-MW-21
Molybdenum	GS-AP-MW-7

* 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:	No
Selection Date:	Not yet selected
Initiated During Period:	No
Ongoing During Period:	No

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ABBREVATIONS

ACM	Assessment of Corrective Measures
ADEM	Alabama Department of Environmental Management
AL	Alabama
APC	Alabama Power Company
APCEL	APC Environmental Laboratory
ASD	Alternate Source Demonstration
ASTM	American Society for Testing and Materials
BGS	below ground surface
CCR	Coal Combustion Residual
CFR	Code of Federal Regulations
COC	chain of custody
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
MSL	mean sea level
MW-	denotes “Monitoring Well”
NELAP	National Environmental Laboratory Accreditation Program
NTU	nephelometric turbidity unit
NCRDS	National Coal Resources Data System
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
SM	Standard Method(s)
SSI	statistically significant increase
SSL	statistically significant level
TAL	Test America, Inc.
TOC	top of casing
TDS	total dissolved solids

USGS	Unites States Geological Survey
UTLs	Upper Tolerance Limits
XRD	X-ray diffraction
XRF	X-ray fluorescence

1.0 INTRODUCTION

In accordance with the United States Environmental Protection Agency (EPA) coal combustion residual (CCR) rule (40 CFR Part 257, Subpart D) and the State of Alabama Department of Environmental Management (ADEM) Admin. Code Ch. 335-13-15, this 2020 Annual Groundwater Monitoring and Corrective Action Report has been prepared to document 2020 semi-annual assessment groundwater monitoring activities at the Plant Gorgas Ash Pond (Ash Pond) and to satisfy the requirements of §257.90(e) and ADEM Admin. Code r. 335-13-15-.06(1)(f). Semi-annual assessment monitoring and associated reporting for the Ash Pond (Site) 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).

2.0 SITE LOCATION AND DESCRIPTION

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

2.1 SITE GEOLOGY AND HYDROGEOLOGY

2.1.1 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 to over 600 feet MSL east of the Ash Pond. The Ash Pond occupies a localized, narrow valley where ground elevations are higher to the west, north, and east of the Ash Pond. Ground elevations typically range between 400 and 600 feet MSL and can have steep slopes down to the Ash Pond, which historically resides around elevation 380 ft MSL. **Figure 2**, **Site Topographic Map**, provides the topography of the Site.

2.1.2 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 as shown on **Figure 3**, **Site Geologic Map** (GSA, 2010b). The Upper Pottsville formation directly underlies Plant Gorgas and extends down to a depth of approximately 2,100 feet below ground surface. This formation is characterized by cyclic sequences (cyclothems) of marginal marine shale/claystone, siltstone, sandstone, conglomerates, and individual coal beds. These depositional cyclothems reflect the sediment balance controlled by 4th or 5th order glacial eustasy, continued basin evolution, and variations in sedimentation rates (Pashin and Raymond, 2004). Deeper stratigraphy is marked by carbonates, shales, chert, and sandstones of Mississippian to Cambrian age (Raymond et al., 1988).

The Plant Gorgas Ash Pond is directly underlain by rocks belonging to the Pratt Coal Group (Ward II et al., 1989) of the Lower Pottsville Formation. In general, the Pratt Coal Group consists of mudstone, shale, fine-grained sandstone, and interbedded coal in fining-upward sequences. The Pratt Coal Group generally contains three named coal seams, each separated by 25 to 50 feet of intra-burden. In descending order, they are, the Pratt, Nickel Plate, and American coal seams. Locally, Pratt Coal Group strata gently dip (0.5 to 1.0 degrees) to the south and south-southwest. **Figure 4A-4H, Geologic Cross-Sections**, provide an illustration of the Pottsville strata underlying 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 formation is largely through infiltration of precipitation and to a lesser extent, downward seepage of river water at hydraulically favored locations.

Regionally, recharge is accommodated largely by fracture enhanced permeability. Major recharge zones to the Pottsville Formation 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).

2.1.3 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 that of the average of other coal basins (Bragg et al., 1997). Of the U.S. coal analyses for arsenic that are at least three standard deviations above the mean, approximately 90% are from the coal fields of Alabama (Diehl et al., 2004). The United States Geological Survey (USGS) maintains an inventory of coal quality that includes trace metal concentration data. It shows arsenic concentrations range from 1.08 milligrams per kilograms (mg/kg) to 611.0 mg/kg with a mean of 47 mg/kg for Walker County (USGS Coal Quality Database).

Similarly, 75 Pratt Coal Group samples (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:

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

2.1.4 Uppermost Aquifer

The Pottsville aquifer system is the uppermost aquifer beneath the site for groundwater monitoring purposes. Groundwater occurs in the Pratt Coal Group of the Upper Pottsville Formation at the site. The primary occurrences of groundwater in the uppermost aquifer are: (1) coal seams, (2) rock fractures or zones of fracture enhanced permeability, and to a lesser extent (3) bedding planes. Fractured intervals are sparse across the site as defined by caliper logging and tend to occur with greater density in the upper 100 feet of rock.

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

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).

2.1.5 Flow Interpretation

Groundwater flow is accomplished primarily by means of fracture flow, where groundwater flows along more conductive secondary discontinuities in the rock mass such as joints or cleat fabric in coal seams. Fracture flow in complex geologic media such as the heterogenous Pottsville Formation can be complex. Groundwater in the Pottsville aquifer is most commonly regarded as confined due to large permeability contrasts within the aquifer (Stricklin, 1989). The Pottsville at the Site is probably better described as a series of discrete, confined to semi-confined, groundwater yielding zones where groundwater elevations can vary significantly laterally and vertically and are governed by the heterogeneity of the lithology and degree of fracture network interconnectivity.

At the Site, the groundwater flow regime is now grouped into three general systems: (1) shallow water-table flow system, (2) Pratt Coal flow system, and (3) American Coal flow system. At higher stratigraphic intervals (water-table flow system), groundwater flows towards the Ash Pond or other surface water bodies. This flow system is driven by gravity and approximately mimics the topography of the site. Within deeper rock strata such as coals of the Pratt Group (Pratt Coal Group or deep bedrock flow system), groundwater flows radially away from the site. Potentiometric surface contour maps presented in a later section illustrate these concepts.

2.2 GROUNDWATER MONITORING SYSTEM

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

2.2.1 Monitoring Wells

Monitoring well locations are presented on **Figure 5, Monitoring Well Location Map**. **Table 1**, **Groundwater Monitoring Well Network Details**, summarizes the monitoring well construction details and design purpose for the Ash Pond.

2.2.1.1 Upgradient Wells

To evaluate upgradient well locations at the Site, groundwater elevations and CCR indicator parameters were reviewed.

As described in **Section 2.1.5**, there are multiple groundwater flow regimes within the Pottsville Formation at the Site: (1) an upper groundwater flow system found at higher elevations (water-table flow system) and (2) a deeper groundwater flow system composed of Pratt Coal Group strata that also represents the uppermost aquifer beneath the Ash Pond.

Historically, two upgradient well locations (GS-AP-MW-8 and GS-AP-MW-13) screened in the upper groundwater flow system have been used for statistical comparison of groundwater quality. The upper

groundwater flow system corresponds to younger or recharging groundwater and groundwater elevations are greater than those of the Ash Pond. Groundwater flows towards the Ash Pond or other surface water bodies. Spatially, these locations are among downgradient compliance wells but are screened across fractures that occur at higher elevations and are not hydraulically connected to downgradient flow away from the Ash Pond.

Appendix III (detection monitoring parameters) constituent concentrations, along with select other Appendix IV CCR indicator parameters, were also evaluated as further basis for designating locations GS-AP-MW-8 and GS-AP-MW-13 as upgradient. In general, concentrations of CCR indicator parameters reported for these well locations are well below published Groundwater Protection Standards (GWPS), downgradient wells, and pore-water (source) concentrations. The absence of elevated concentrations of CCR indicator parameters indicates younger, recharging groundwater and groundwater that has not been impacted by groundwater flowing away from the Ash Pond. The data, along with groundwater elevation data, support an upgradient designation for locations GS-AP-MW-8 and GS-AP-MW-13.

Upgradient location GS-AP-MW-13 was abandoned in 2019. Historical data collected from this location will still be used for statistical comparison of groundwater quality data. Location GS-AP-MW-17V was originally intended for vertical delineation but was screened at a higher elevation due to encountering the underlying Maxine Mine at depth and identifying more shallow groundwater flow. Groundwater elevations at GS-AP-MW-17V indicate this location is upgradient of the Ash Pond with groundwater elevations roughly 35 feet higher than the Ash Pond. This location was proposed as an additional upgradient location in an updated Groundwater Monitoring Plan submitted to ADEM in April 2020 (revised August 2020).

2.2.1.2 Downgradient Wells

Downgradient monitoring wells are detailed on **Table 1** and **Figure 5**. Borehole geophysics, hydrophysical logging, and occasional packer testing were used to determine well screen intervals. These logging techniques identify groundwater flow zones in open boreholes and are optimally suited for use in low-yielding, fractured rock media. Heat-pulse flowmeter logging or packer testing were often used to assess or further evaluate flow zones indicated by hydrophysical logging tools. If multiple flow zones were identified, then paired wells were often installed to screen both zones.

Preferential groundwater flow away from the Site, if existing, would occur within zones of enhanced permeability such as cleated coals or zones of intersecting rock discontinuities spatially located lateral to or beneath the base of the Ash Pond. Strata of the Pratt Coal Group are the uppermost aquifer lateral to or beneath the base of the Ash Pond, as indicated by borehole logging and geophysics. Downgradient

monitoring wells are installed in the Pratt Coal Group, and generally across the Pratt or American Coal Seam. To the north and beneath the Ash Pond dam, Pratt Coal Group strata exist above the ground surface or are mined out. In these areas, downgradient monitoring well locations were installed across the first groundwater yielding fractures identified by borehole geophysics and hydrophysical logging.

A study and re-analysis of low-yielding piezometers (GS-AP-MW-1, GS-AP-MW-3, GS-AP-MW-4, GS-AP-MW-7V, GS-AP-MW-16S, GS-AP-MW-20, GS-AP-MW-27H, GS-AP-MW-30H, GS-AP-MW-30HS, GS-AP-MW-37H, GS-AP-MW-39H, and GS-AP-MW-41HS) was conducted to assess potential for sampling and inclusion into the monitoring well network. These findings are documented in **Appendix B**.

Downgradient locations GS-AP-MW-9, GS-AP-MW-10, GS-AP-MW-11, GS-AP-MW-13, and GS-AP-MW-14 were abandoned in 2019. A plan for replacement well locations and designations is being drafted and is anticipated to be submitted to ADEM for review during the first quarter of 2020. This plan will also address the future of well GS-AP-MW-20.

2.2.1.3 Piezometers

There are currently 13 water-level piezometers at the Site. Five locations (GS-AP-MW-1, GS-AP-MW-3, GS-AP-MW-4, GS-AP-MW-16S, and GS-AP-MW-20) were originally intended to be incorporated as compliance monitoring wells.

A study and re-analysis of low-yielding piezometers (GS-AP-MW-1, GS-AP-MW-3, GS-AP-MW-4, GS-AP-MW-7V, GS-AP-MW-16S, GS-AP-MW-20, GS-AP-MW-27H, GS-AP-MW-30H, GS-AP-MW-30HS, GS-AP-MW-37H, GS-AP-MW-39H, and GS-AP-MW-41HS) was conducted to assess potential for sampling and inclusion into the monitoring well network. A report summarizing the analysis is included as **Appendix B, Low-Yield Well Study at Plant Gorgas Results and Recommendations.**

One of the key conclusions of this study was that shallow well GS-AP-MW-16S provided sufficient water column and recharge to re-develop and sample. At this time, it is unknown if well GS-AP-MW-16S will provide sufficient groundwater year-round or only seasonally during wetter periods. GS-AP-MW-16S is being evaluated for potential inclusion to the upgradient network. The following lines of evidence provide support for a future upgradient designation:

(1) Groundwater elevations and flow pattern consistent with uppermost Water-Table Aquifer System (Figure 6A and Figure 7A). This indicates that groundwater flow away from GS-AP-MW-16S is towards the ash pond and vertically downward, indicating upgradient conditions.

(2) Initial chemistry data set provided low concentrations of key Appendix III indicator parameters.

Key findings from this study suggest that downgradient piezometer GS-AP-MW-3 can be sampled using standard low-flow sampling methods, and it is recommended that this location be included in the downgradient network during the first semi-annual sampling event of 2021. At this time, it is unknown if well GS-AP-MW-3 will provide sufficient groundwater year-round or only seasonally during more wet periods. The study found that downgradient piezometer GS-AP-MW-20 could potentially be sampled using standard low-flow methods, but the combination of low recharge rate and well depth (~250 ft) provides more uncertainty and lower likelihood of success. At the time of publication, a final decision had not been made whether to proceed with a recommendation to include GS-AP-MW-3 in the downgradient network or potentially install a replacement location.

Nine other wells (GS-AP-MW-7V, GS-AP-MW-25H, GS-AP-MW-27H, GS-AP-MW-30H, GS-AP-MW-30HS, GS-AP-MW-37H, GS-AP-MW-39H, GS-AP-MW-41HS, and GS-AP-MW-7VR) were installed in 2019 and 2020 as horizontal and vertical delineation wells, but each produced insufficient groundwater for development or sampling and are maintained as water level piezometers.

The last key finding from the low-yield study suggests that downgradient piezometer GS-AP-MW-41HS can be sampled using standard low-flow sampling methods, and it is recommended that this location be included in the delineation network during the first semi-annual sampling event of 2021.

For the purposes of this report and until re-designations are approved by ADEM, all locations listed in this section will continue to be labeled and symbolized as piezometers on tables and figures.

2.2.1.4 Delineation Wells

Pursuant to 40 CFR § 257.95(g)(1), ADEM Admin. Code r. 335-13-15-.06(6)(g)2., and AO 18-096-GW, additional monitoring wells have been installed to characterize the horizontal and vertical extent of GWPS exceedances identified during assessment monitoring. Three historic piezometers, GS-AP-PZ-16, GS-AP-PZ-18, and GS-AP-PZ-22, monitor water levels in the adjacent Maxine Mine (American coal seam). These locations were converted to vertical delineation wells during the first quarter of 2020. Additionally, two vertical delineation wells north of the Ash Pond (GS-AP-MW-6V and GS-AP-MW-7VR), one horizontal delineation well west of the Ash Pond (GS-AP-MW-40H), and one off-site delineation well (GS-AP-MW-44H0) to the east of the Ash Pond, were installed between April 2020 and August 2020. During well development activities, GS-AP-MW-7VR did not produce sufficient groundwater for development and

sampling and is being maintained as a water-level only piezometer. Boring and well construction details are included in **Appendix A, Boring and Well Construction Logs.**

Three phases of field investigation have occurred since late 2018 to explore potential impacts to groundwater. Delineation well locations are presented on **Figure 5**. **Table 1** summarizes the monitoring well construction details and design purpose for the Plant Gorgas Ash Pond. A report summarizing findings from the most recent phases (Phase II and III) of delineation was submitted to ADEM September 30, 2020.

2.2.1.5 Monitoring Well Replacement and Abandonment

In 2019, ash pond closure activities necessitated the abandonment of six monitoring wells: GS-AP-MW-5 located north of the Ash Pond; and GS-AP-MW-9, GS-AP-MW-10, GS-AP-MW-11, GS-AP-MW-13, and GS-AP-MW-14 located west of the Ash Pond. Monitoring wells were abandoned in accordance with the ADEM Guidelines for Well Abandonments. A well abandonment report was submitted along with the 2019 Annual Groundwater Monitoring and Corrective Action Report documenting these activities.

A plan for replacement well locations and designations is being drafted and is anticipated to be submitted to ADEM for review during the first quarter of 2021. Replacement locations will be included in an update to the site Groundwater Monitoring Plan upon approval from ADEM.

2.2.1.6 Monitoring Variances

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.

2.2.2 Groundwater Monitoring History

Background groundwater samples were collected from August 2016 to June 2017. Semi-annual groundwater monitoring was initiated at the Ash Pond in August 2017.

2.2.2.1 Available Monitoring Data

In accordance with § 257.94(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, Alabama Power 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 January 2018, within 90 days of initiating the assessment monitoring program. Semi-annual assessment sampling has continued to date.

Tables summarizing analytical data from all previous groundwater monitoring events are included in **Appendix C, Groundwater Analytical Data**.

2.2.2.2 Historical Groundwater Flow

Historical groundwater elevations and potentiometric surface maps show that groundwater flow patterns are consistent across monitoring events. Upgradient wells monitoring higher fractures show horizontal flow towards the Ash Pond or other surface water bodies. Downgradient wells, generally installed within the Pratt Coal Group, indicate a radial flow pattern away from the Site within deeper rock units lateral to or below the base of the Ash Pond.

Groundwater elevations fluctuate in response to rainfall. Seasonal variations of 1 to 15 feet are typical at the site based on available monitoring data.

2.2.3 Groundwater Sampling and Analysis

Statistical evaluations of 2018 assessment monitoring data identified SSLs of Appendix IV constituents above the GWPS, and the Site entered Assessment of Corrective Measures. Pursuant to 40 CFR §257.95(g)(1), ADEM Admin. Code r. 335-13-15-.06(6)(g)2., and AO 18-096-GW, additional monitoring wells were installed to characterize the horizontal and vertical extent of GWPS exceedances identified during assessment monitoring. These wells, along with the compliance monitoring well network, are sampled semi-annually.

2.2.3.1 Sampling Event Summary

Semi-annual assessment monitoring sampling occurred in March 2020 and September 2020. Delineation wells installed at the Site in 2020 were sampled semi-annually for the first time between May and September 2020 in order to expedite delineation reporting. Beginning with the second semi-annual sampling event in September 2020, delineation wells were sampled concurrently with the compliance monitoring well network. The results of this investigation were submitted to ADEM in September 2020.

Groundwater samples were analyzed for the full list of Appendix III and Appendix IV parameters during each assessment monitoring event. Analytical data from the groundwater monitoring events are included as **Appendix D**, **Laboratory and Field Records**, in accordance with the requirements of § 257.90(e)(3) and ADEM Admin. Code r. 335-13-15-.06(1)(f)3.

2.2.3.2 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 in the compliance well network at the Ash Pond 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, a SmarTroll 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 D**.

2.2.3.3 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.

2.2.3.4 Chain of Custody

A COC record was used to track sample possession from the time of collection to the time of receipt at the laboratory. COC records are included with the analytical laboratory reports included in **Appendix D.**

2.2.3.5 Laboratory Analysis

Laboratory analyses were performed by the APC Environmental Laboratory (APCEL) in Calera, Alabama or Eurofins TestAmerica (TAL) of Pensacola, Florida and St. Louis, Missouri. Both APCEL and TAL are accredited by National Environmental Laboratory Accreditation Program (NELAP) and maintain a NELAP certification for all parameters analyzed**. Table 2, Monitoring Parameters and Reporting Limits**, lists Assessment Monitoring constituents analyzed at the Site. Groundwater data and chain of custody records for the monitoring events are presented in **Appendix D**.

3.0 GROUNDWATER ELEVATIONS

3.1 GROUNDWATER ELEVATIONS AND FLOW

During the March 2020 sampling event, depths to water ranged from 1.16 to 298.68 ft BTOC and groundwater elevations ranged from 144.22 to 535.16 ft MSL. During the September 2020 sampling event, depths to water ranged from 1.82 to 309.12 ft BTOC and groundwater elevations ranged from 121.83 to 426.83 ft MSL.

Figure 6A, Potentiometric Surface Contour Map (Upper) Water Table Aquifer (March 16, 2020), Figure 6B, Potentiometric Surface Contour Map Pratt Aquifer (March 16, 2020), and **Figure 6C, Potentiometric Surface Contour Map American Aquifer (March 16, 2020)** depict groundwater elevations and inferred groundwater flow direction during the first 2020 semi-annual sampling event. **Figure 7A, Potentiometric Surface Contour Map (Upper) Water Table Aquifer (September 14, 2020), Figure 7B, Potentiometric Surface Contour Map Pratt Aquifer (September 14, 2020),** and **Figure 7C, Potentiometric Surface Contour Map American Aquifer (September 14, 2020)** depict groundwater elevations and inferred groundwater flow direction during the second 2020 semi-annual sampling event. **Figures 6A** and **7A** show groundwater flow towards the Ash Pond in wells screened in the upper flow system and towards Mulberry Fork in the middle to lower portions of the flow system. **Figures 6B** and **7B** show radial groundwater flow away from the Ash Pond in the Pratt Coal Group flow system. **Figures 6C** and **7C** show groundwater flow away from the Ash Pond in the deeper American Coal seam flow system. All available groundwater elevation data recorded since 2016 have been tabulated and included in **Table 3, Groundwater Elevation Summary.**

3.2 GROUNDWATER FLOW VELOCITY CALCULATIONS

Because the geology at the Ash Pond is not homogeneous or isotropic with respect to groundwater flow, groundwater velocity calculations using derivations of Darcy's Law 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. During monitoring well installation, multiple techniques were used to successfully intercept groundwater flow paths with the monitoring wells located around the Ash Pond. These flow paths correspond to coal cleats and fractures, zones of fracture concentration, bedding planes, and other discontinuities in the rock. Therefore, groundwater flow velocity at the site cannot be accurately quantified using existing site data.

Slug testing provided horizontal hydraulic conductivities for the uppermost aquifer 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).

4.0 EVALUATION OF GROUNDWATER QUALITY DATA

4.1 DATA VALIDATION – QUALITY ASSURANCE/QUALITY CONTROL

During each sampling event, quality assurance/quality control samples (QA/QC) were collected at a rate of 1 sample per every group of 10 well samples. Equipment blank and field blank samples were also collected during each sampling event.

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

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

Where:

RPD = Relative Percent Difference (%)

Conc1 = Higher concentration of the sample or field duplicate

Conc2 = Lower concentration of the sample or field duplicate

Where the relative percent difference is below 20%, the difference is considered acceptable and no further action is needed. Where an RPD is greater than 20%, further evaluation is required to attempt to determine the cause of the difference and potentially result in qualified data. **Table 4, Relative Percent Difference Calculations,** provides the relative percent differences for sample and sample duplicates during 2020 sampling events. All RPDs were below 20% for the 2020 sampling events.

Fluoride was detected at a concentration of 0.167 mg/L in the field blank sample collected on September 15, 2020 during the second semi-annual sampling event. This concentration is below the reported background limit of 0.2499 mg/L and the State GWPS of 4 mg/L. Groundwater samples collected on this day include GS-AP-MW-6V, GS-AP-MW-33HO, and GS-AP-MW-44HO.

4.2 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).

4.2.1 Appendix III Evaluation

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

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

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

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

4.2.2 Appendix IV Evaluation

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

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

As described in 40 CFR §257.95(h)(1)-(3) and the ADEM Variance (see Section **2.2.1.6)**, 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. Appendix IV constituents will be updated every 2 years beginning with the most recent event (Fall 2019). The next update to GWPS will occur no earlier than the Fall of 2021. Data from upgradient wells collected between updates may still be used to support ASDs if merited.

4.3 STATISTICAL EXCEEDANCES

Analytical data from the 2020 semi-annual monitoring events in March and September 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 have returned to background levels. Appendix IV assessment monitoring parameters were evaluated to determine if concentrations statistically exceeded the established groundwater protection standard.

4.3.1 Appendix III Constituents

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

4.3.2 Appendix IV Constituents

Table 6, Summary of Background Levels and Groundwater Protection Standards, summarizes the background limit established at each monitoring well and the GWPS. A summary table of the statistical limits accompanies the prediction limits in **Appendix E.**

The following subsections describe statistical exceedances during 2020 monitoring events.

4.3.2.1 First Semi-Annual Groundwater Monitoring Event

During the first semi-annual monitoring event, statistical analysis of Appendix IV data identified the following SSLs over GWPS at the listed wells:

- GS-AP-MW-2: Lithium.
- GS-AP-MW-6D: Arsenic, Lithium.
- GS-AP-MW-7: Arsenic, Lithium, Molybdenum.
- GS-AP-MW-12: Arsenic.
- GS-AP-MW-15: Lithium.
- GS-AP-MW-17: Lithium.
- GS-AP-MW-18: Lithium.
- GS-AP-MW-21: Lithium.

Table 7, First Semi-Annual Monitoring Event Analytical Summary, provides a summary of all detected constituents for the first semi-annual sampling event. Statistical reporting output is included as **Appendix E.**

4.3.2.2 Second Semi-Annual Groundwater Monitoring Event

During the second semi-annual monitoring event, statistical analysis of Appendix IV data identified the following SSLs over GWPS at the listed wells:

- GS-AP-MW-6D: Arsenic, Lithium.
- GS-AP-MW-7: Arsenic, Lithium, Molybdenum.
- GS-AP-MW-15: Lithium.
- GS-AP-MW-17: Lithium.
- GS-AP-MW-18: Lithium.
- GS-AP-MW-21: Lithium.

Table 8, Second Semi-Annual Monitoring Event Analytical Summary, provides a summary of all detected constituents for the first semi-annual sampling event. Statistical reporting output is included as **Appendix E.**

Limited groundwater analytical data are available for delineation wells installed at the site in 2019 and 2020; therefore, groundwater quality is simply compared to the GWPS. A review of analytical data derived from delineation wells identified the following GWPS Exceedances for the second semi-annual sampling event:

- GS-AP-MW-6V: Lithium.
- GS-AP-MW-12V: Lithium.
- GS-AP-MW-15V: Arsenic, Lithium.
- GS-AP-MW-16S: Lithium.
- GS-AP-MW-17V: Lithium.
- GS-AP-PZ-16: Lithium.
- GS-AP-PZ-18: Arsenic, Lithium.
- GS-AP-PZ-22: Lithium.
- GS-AP-MW-21V: Lithium, Molybdenum.
- GS-AP-MW-23H: Arsenic.

- GS-AP-MW-25HA: Lithium.
- GS-AP-MW-26H: Lithium.
- GS-AP-MW-28H: Lithium.
- GS-AP-MW-29H: Lithium.
- GS-AP-MW-30HA: Lithium.
- GS-AP-MW-32H: Lithium.
- GS-AP-MW-33HO: Lithium.
- GS-AP-MW-34HO: Lithium.
- GS-AP-MW-35HO: Lithium.
- GS-AP-MW-38H: Lithium.
- GS-AP-MW-40H: Lithium.
- GS-AP-MW-41HD: Lithium.
- GS-AP-MW-43H: Lithium.
- GS-AP-MW-44HO: Lithium.

Table 8, Second Semi-Annual Monitoring Event Analytical Summary, provides a summary of all detected constituents for the second semi-annual sampling event. As described in **Section 2.2.1.1**, groundwater elevations indicate that GS-AP-MW-17V is upgradient of the Site and thus, the lithium exceedance observed is most likely the result of naturally elevated lithium in groundwater at the Site.

Comparison with Proposed Upgradient Locations

Using analytical data gathered to date from the proposed (additional) background location GS-AP-MW-17V, the GWPS for lithium would increase. This reduces the number of lithium exceedances (largely in site delineation wells). Using a lithium concentration of 0.0809 mg/L, the following exceedances would be noted:

- GS-AP-MW-6D: Arsenic, Lithium.
- GS-AP-MW-7: Arsenic, Lithium, Molybdenum.
- GS-AP-MW-15: Lithium.
- GS-AP-MW-18: Lithium.
- GS-AP-MW-21: Lithium.

Limited groundwater analytical data are available for delineation wells installed at the site in 2019 and 2020; therefore, groundwater quality is simply compared to the GWPS. A review of analytical data derived from delineation wells identified the following exceedances for the second semi-annual sampling event using .0809 mg/L as the GWPS:

- GS-AP-MW-6V: Lithium.
- GS-AP-MW-15V: Arsenic, Lithium.
- GS-AP-MW-21V: Lithium, Molybdenum.
- GS-AP-PZ-22: Lithium.
- GS-AP-MW-26H: Lithium.
- GS-AP-MW-34HO: Lithium.
- GS-AP-MW-41HD: Lithium.

It is important to note that location, GS-AP-MW-16S, sampled for the first time during the second semi-annual monitoring event provided a lithium result of 0.074 mg/L. This concentration is similar to that of proposed upgradient well GS-AP-MW-17V and provides a second hydraulically upgradient location with lithium concentrations above the Federally derived GWPS (described in Section **2.2.1.6**). This along with the discussion provided in the most recent Semi-Annual Progress and Groundwater Delineation Report (September 2020) provide strong lines of evidence that naturally occurring lithium exists at elevated concentrations.

To address SSLs at the site, an ACM was prepared to evaluate potential groundwater corrective measures for the occurrence of arsenic, lithium, and molybdenum in groundwater at the site in accordance with § 257.96, ADEM Admin. Code r. 335-13-15-.06(7), and ADEM Administrative Order AO 18-096-GW. The ACM was submitted to ADEM and placed in the operating record on June 12, 2019.

5.0 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 and SSLs of Appendix IV parameters were identified at the Gorgas Ash Pond during sampling events conducted in 2020. Pursuant to § 257.95(g)(3)(i) and ADEM Admin. Code r. 335-13-15-.06(6)(g)4.(i), APC completed an ACM in accordance with § 257.96, ADEM Admin. Code r. 335-13-15-.06(7), and ADEM Administrative Order AO 18-096-GW. The ACM was completed June 12, 2019 and a public meeting was held to discuss the ACM on July 1, 2020.

6.0 EVALUATION OF GROUNDWATER CORRECTIVE MEASURES

Site investigations and preliminary design work have continued at the Site to support remedy selection and design. As discussed in the ACM (Anchor QEA 2020), completing a final long-term corrective action plan is generally a multi-year process. Additional assessment work has been completed since June 2020, and laboratory work has been performed to support MNA and in situ geochemical manipulation as discussed in the ACM. MNA and geochemical manipulation are both geochemically based, so site-specific geochemical data and analyses can be applied to both technologies.

Laboratory analysis of groundwater and precipitates (attenuating solids) was conducted to support MNA and geochemical manipulation. The major rationale for these investigations includes the following:

- Identifying attenuating mechanisms.
- Gaining an understanding of the stability of the attenuating mechanisms.
- Identifying potential geochemical manipulation approaches for constituents of interest (COI) based on Site geochemical conditions and attenuation processes already occurring naturally.

In the previous semi-annual remedy selection and design reporting period (January through June 2020), the following field and laboratory investigations were performed:

- Evaluated groundwater analytical data (primarily graphing) to look for evidence of natural attenuation occurring in space and time.
- Collected groundwater samples from background and impacted wells and performed a complete chemical analysis on the samples to enable groundwater geochemical modeling and the development of a geochemical conceptual site model (CSM).
- Performed geochemical modeling using the U.S. Geological Survey (USGS) computer program PHREEQC with the WATEQ4F thermodynamic database.
- Collected precipitate samples from the bottom of monitoring wells.
- Analyzed precipitate samples by X-ray fluorescence (XRF) and X-ray diffraction (XRD).

The following investigations were begun in the last reporting period but completed in the current reporting period:

- Scanning electron microscopy (SEM) to directly observe attenuating mineral phases.
- Selective sequential extraction (SSE) to determine association of COI with attenuating phases, determine relative strength of attenuation, and provide a sense of permanence.

- Cation exchange capacity (CEC) to assess ion exchange as an attenuation mechanism.

The work performed since the completion of the June 2020 Remedy Selection and Design Progress Report includes the following:

- Installing and sampling delineation wells.
- Completing SEM, SSE, and CEC testing on well solids samples.
- Analyzing and synthesizing the laboratory data described above to develop a geochemical CSM and to evaluate MNA and geochemical manipulation.
- Conceptualizing other corrective action options in the context of site-specific conditions, should MNA not perform as expected.

6.1 PRELIMINARY FINDINGS FROM THE GEOCHEMICAL ANALYSES

As discussed in the Semi-Annual Remedy Selection and Design Progress Report Plant Gorgas (Anchor QEA 2020), results from existing groundwater data analysis, geochemical modeling, and well solids analyses provide evidence for attenuation mechanisms for arsenic. The attenuating mechanisms identified include sorption on amorphous iron oxides (arsenic and molybdenum), precipitation of arsenate and molybdate phases (for arsenic and molybdenum, respectively), and cation exchange on clays (lithium).

Concentration versus time, concentration versus distance graphs, and laboratory analyses were integrated with geochemical modeling results to develop an initial geochemical CSM, including probable attenuating mechanisms for arsenic, lithium, and molybdenum, and the relative permanence of those mechanisms. The initial CSM for the Site is:

- Multiple lines of evidence for arsenic, lithium, and molybdenum attenuation.
- Suboxic, neutral to acidic groundwater conditions.
- Redox buffered by iron oxide +/- carbonate equilibria.
- Arsenic attenuation by sorption to iron oxides, incorporation in pyrite, and possibly precipitation of barium arsenate.
- Lithium attenuation by cation exchange on clay minerals and/or incorporation in manganese oxides (e.g., lithiophorite).
- Molybdenum attenuation by adsorption to iron oxides.

As supported by SSE results and the scientific literature, incorporation of arsenic into iron minerals, arsenic into barium arsenate, and lithium into manganese oxides are relatively stable attenuation mechanisms.

Summary tables of the results are presented in **Appendix F, MNA - Geochemical Evaluation Data.**

7.0 SUMMARY AND CONCLUSIONS

Semi-annual assessment monitoring events took place in March and September 2020. Statistical evaluations of the 2020 assessment monitoring data identified SSLs of Appendix IV constituents above the GWPS. The site remains in assessment monitoring while groundwater corrective remedies are being evaluated. Additional monitoring wells were installed to assess the horizontal and vertical extent of groundwater impacts at the site. The results of this investigation were submitted to ADEM in September 2020. These additional monitoring wells will continue to be sampled and analyzed as part of the ongoing assessment monitoring program.

An ACM was completed on June 12, 2019 to address SSLs of Appendix IV above groundwater protection standards. A public meeting was held on July 1, 2020 to discuss the results of the ACM.

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

- Submit plan to ADEM for replacement monitoring well locations.
- Collect additional data to further evaluate remedies selected as feasible for the remediation of arsenic, molybdenum, and lithium as described in the ACM.
- Perform a conceptual-level feasibility study of potentially viable corrective actions (January to July 2021).
    - Show where the viable corrective actions could be applied on Site maps and on geologic sections.
    - Compare site-specific corrective actions to the evaluation criteria in the CCR Rule, with emphasis on deficiencies that could eliminate a corrective action from further consideration.
    - Determine how corrective actions could be integrated with pond closure.
    - Determine data gaps and develop plans to collect additional data as needed.
    - Begin the development of a detailed groundwater remedy plan.

- Submit the next Semi-Annual Progress Report for Groundwater Delineation Activities or Comprehensive Groundwater Investigation Report to ADEM by March 30, 2021.
- Complete an ASD study into the natural occurrence of lithium as a potential source of elevated lithium in Pratt Group flow system beneath the Site.

- Submit the next Semi-Annual Remedy Selection and Design Progress Report by June 12, 2021.
- Conduct the first semi-annual assessment monitoring event in the March or April of 2021 and submit a semi-annual groundwater monitoring report summarizing findings by July 31, 2021.

8.0 REFERENCES

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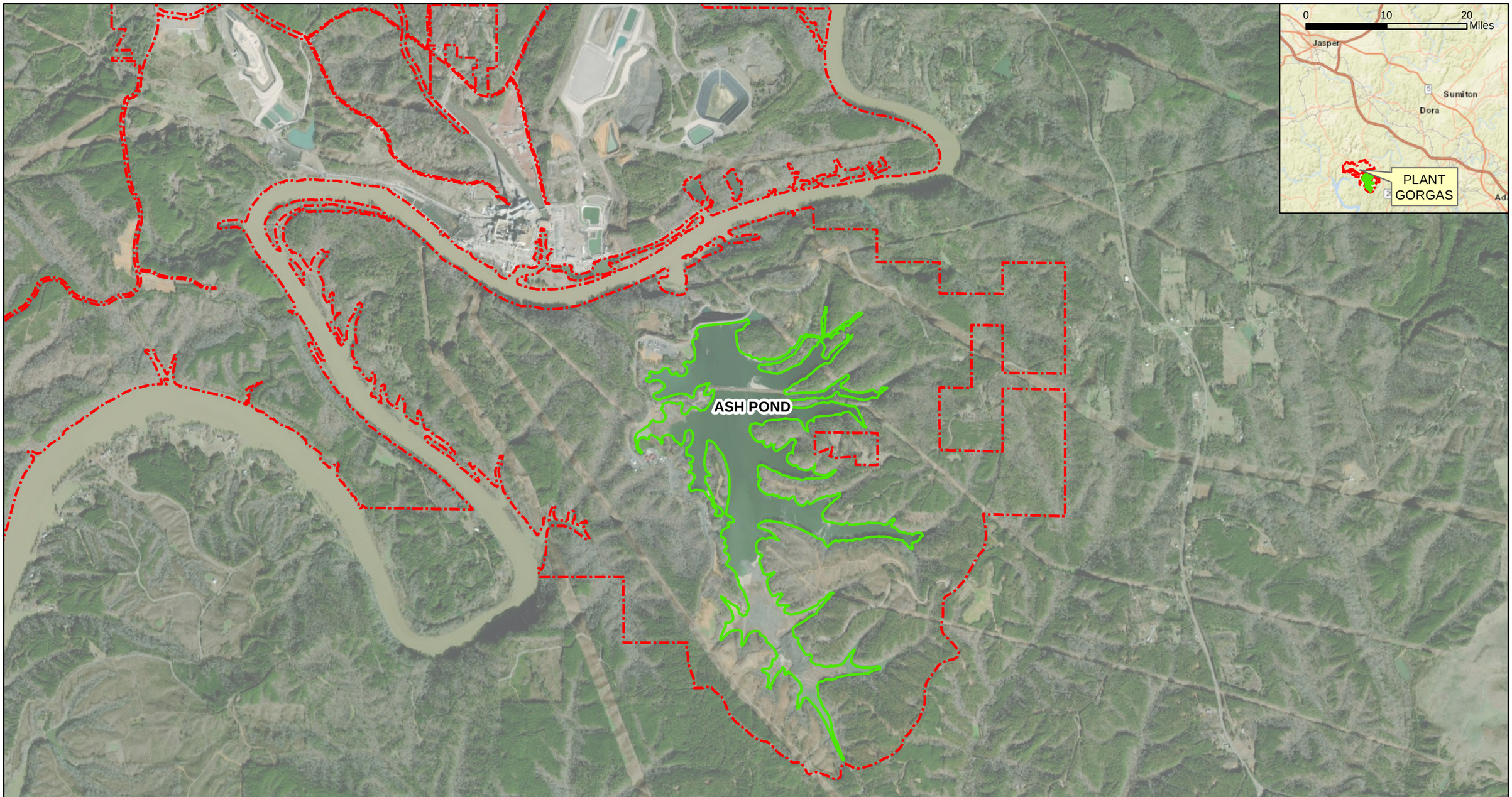
Figures



Legend

- Ash Pond Boundary
- Property Boundary (Approximate)

N

0 1,000 2,000 4,000 6,000 8,000 Feet

SCALE	1:24,000
DATE	12/10/2020
DRAWN BY	KWR
CHECKED BY	GBD

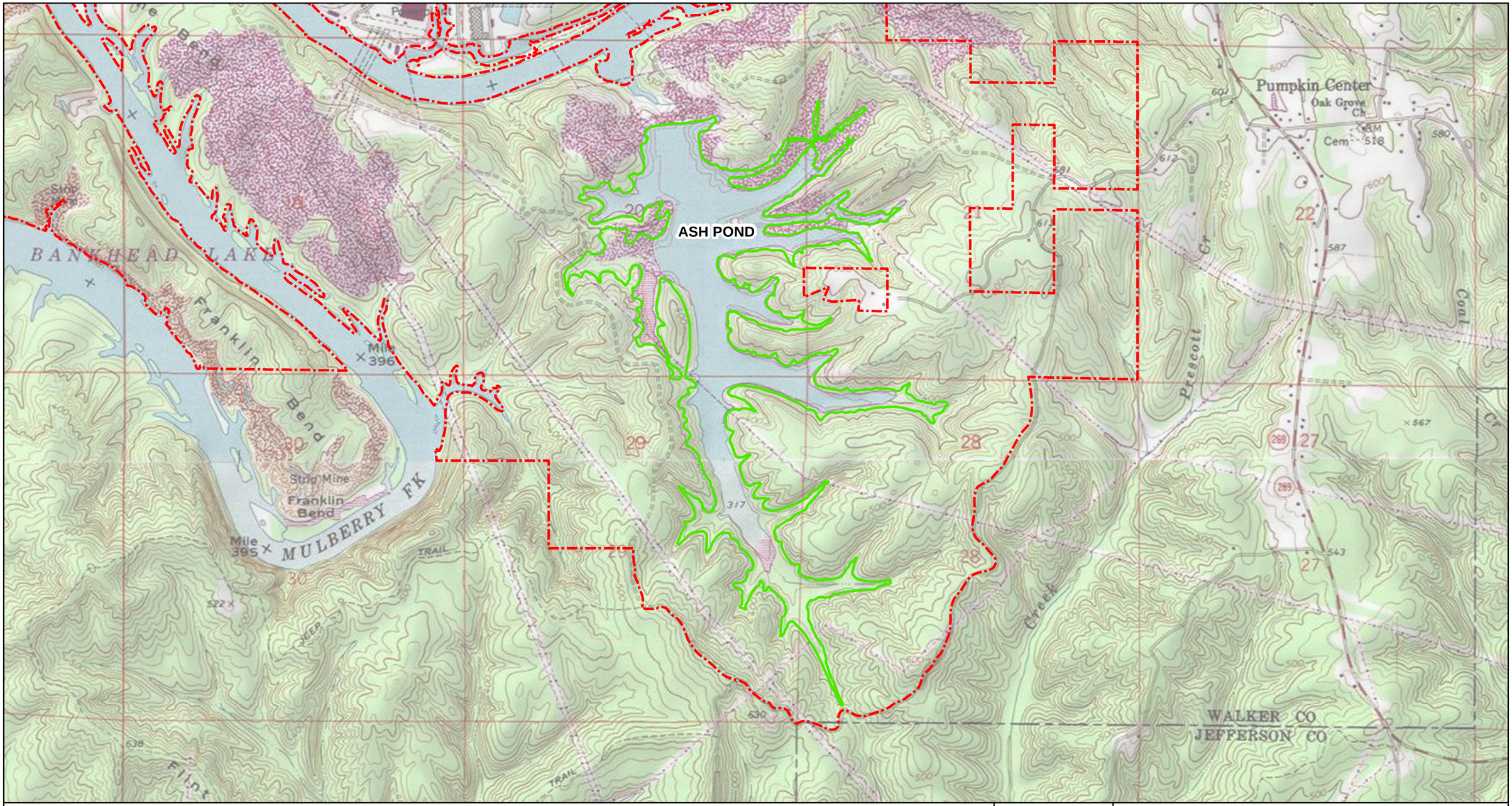
DRAWING TITLE

SITE LOCATION MAP
PLANT GORGAS ASH POND

FIGURE NO

FIGURE 1

Southern Company



Legend

- Ash Pond Boundary
- Property Boundary (Approximate)

N

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

SCALE	1:18,000
DATE	12/10/2020
DRAWN BY	KWR
CHECKED BY	GBD

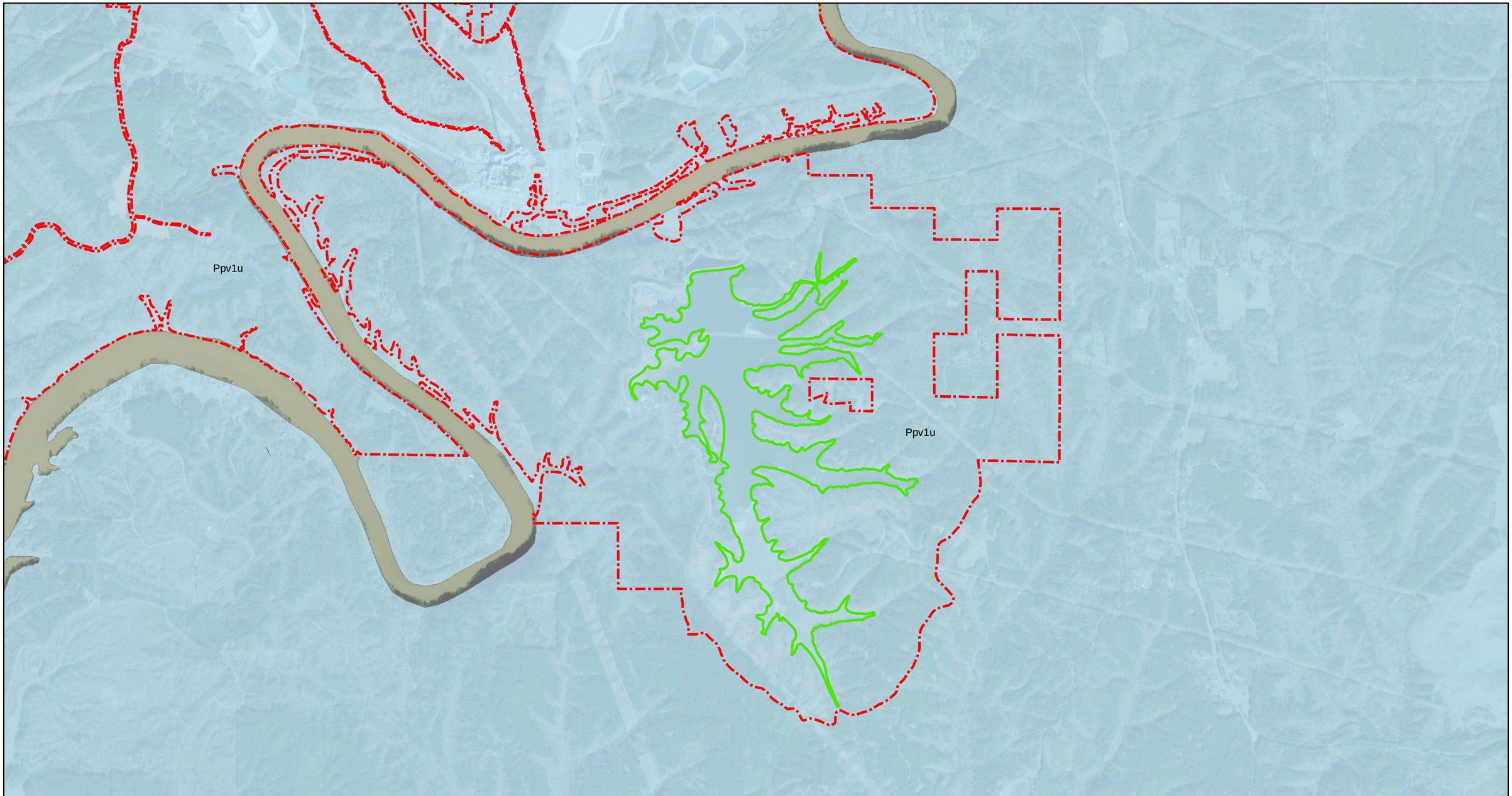
DRAWING TITLE

SITE TOPOGRAPHIC MAP
PLANT GORGAS ASH POND

FIGURE NO

FIGURE 2

Southern Company



Legend

Ash Pond Boundary

Property Boundary (Approximate)

Geologic Units

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

N

0 1,000 2,000 4,000 6,000 8,000 Feet

SCALE	1:24000
DATE	12/10/2020
DRAWN BY	KWR
CHECKED BY	GBD

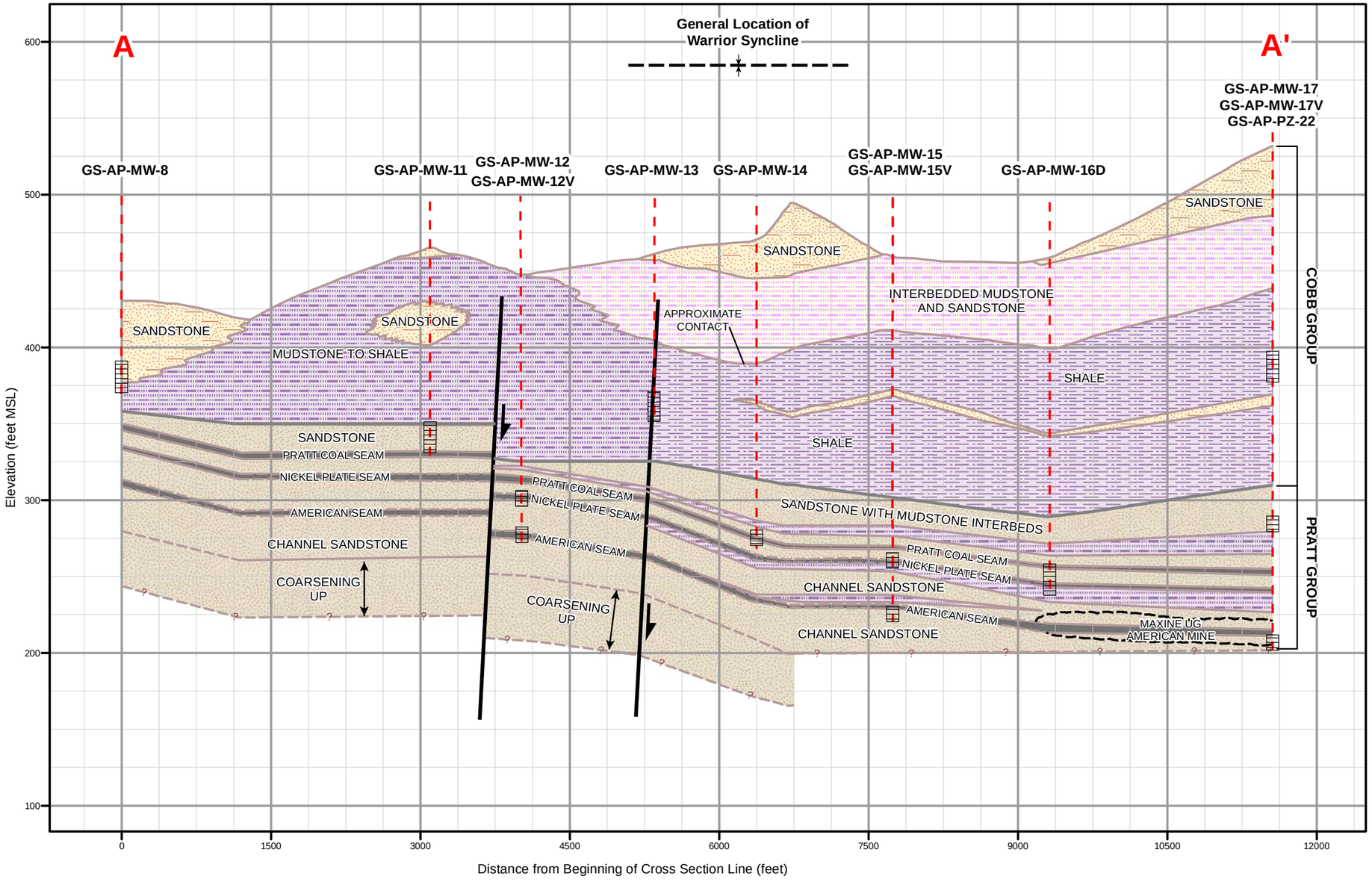
DRAWING TITLE

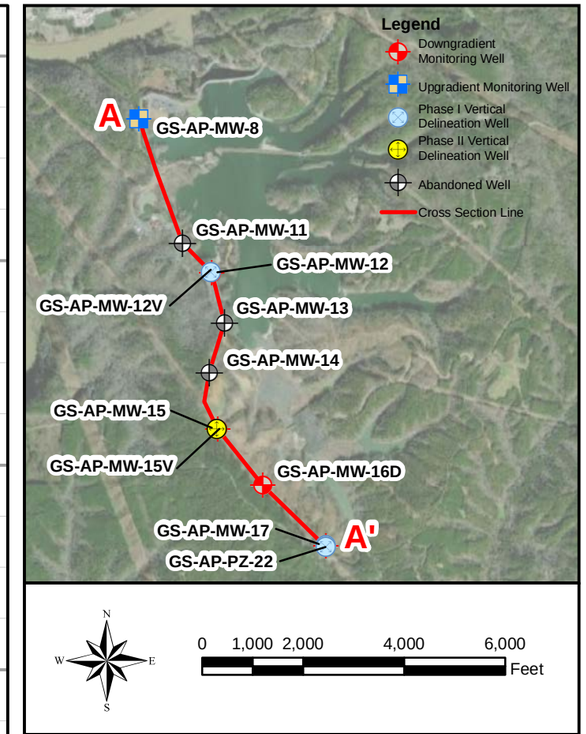
SITE GEOLOGIC MAP
PLANT GORGAS ASH POND

FIGURE NO

FIGURE 3

Southern Company





Legend

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

Geologic Units

- Shale
- Mudstone to Shale
- Interbedded Mudstone and Sandstone
- Sandstone
- Channel Sandstone
- Coal

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

SCALE	As Shown
DATE	9/22/2020
DRAWN BY	KWR
CHECKED BY	GBD

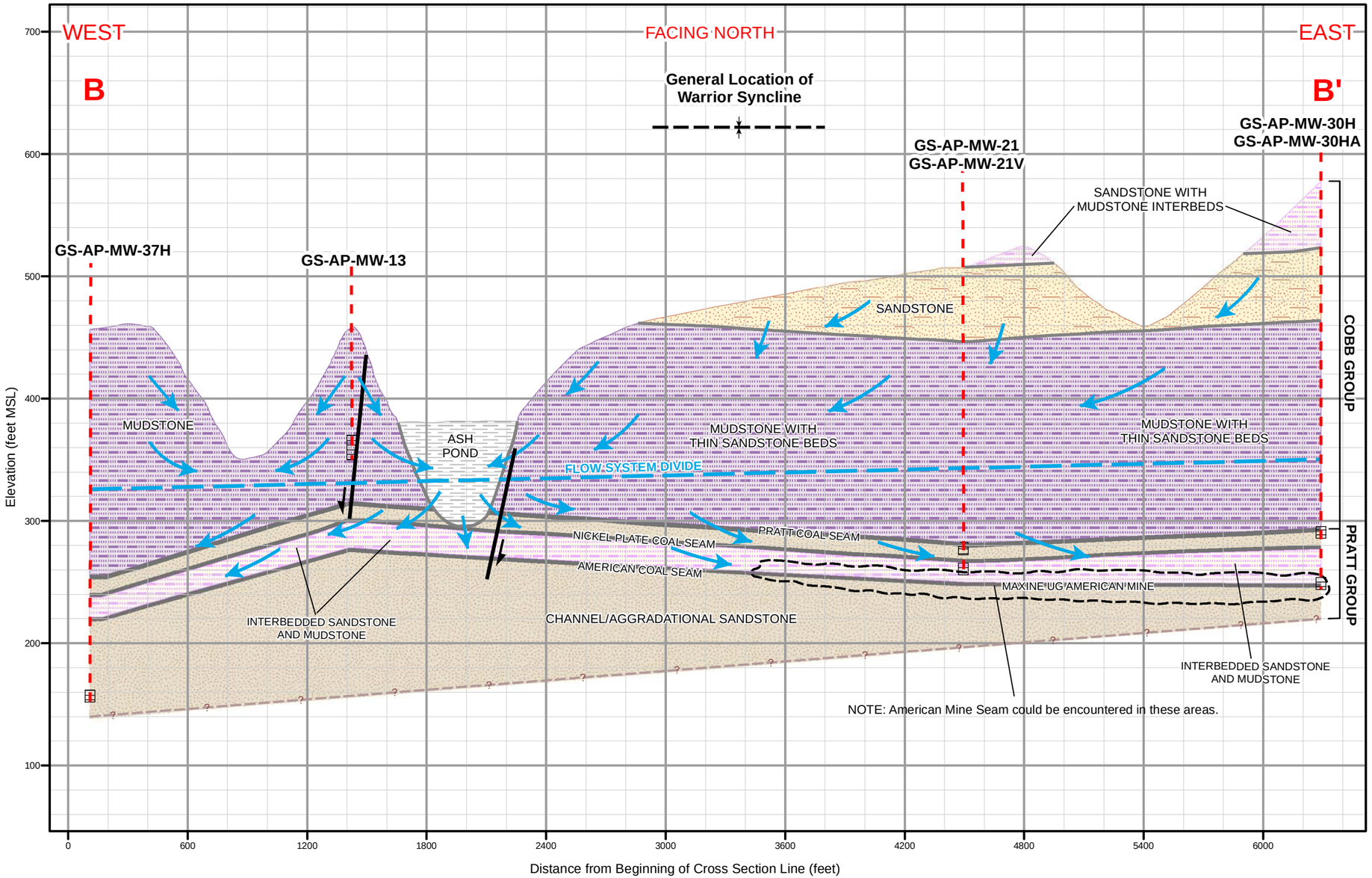
DRAWING TITLE

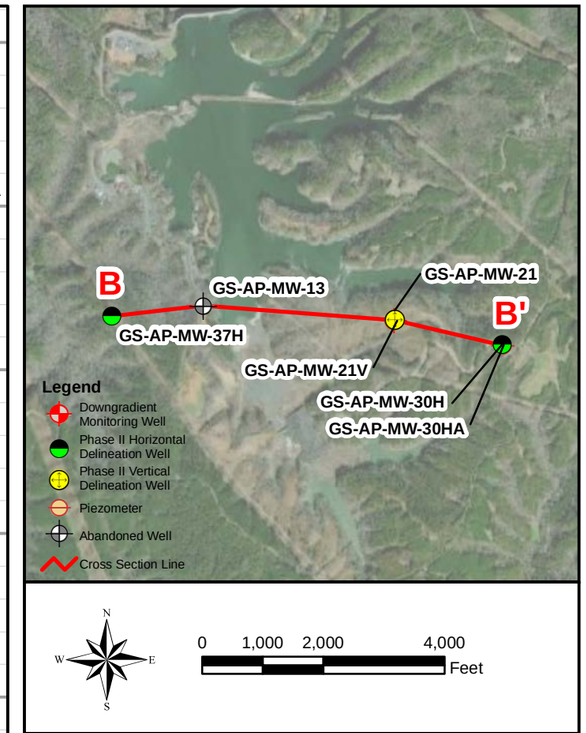
GEOLOGIC CROSS SECTION A - A'
PLANT GORGAS ASH POND

FIGURE NO

FIGURE 4A

Southern Company





Legend

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

Geologic Units

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

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

SCALE	As Shown
DATE	9/29/2020
DRAWN BY	KAR
CHECKED BY	GBD

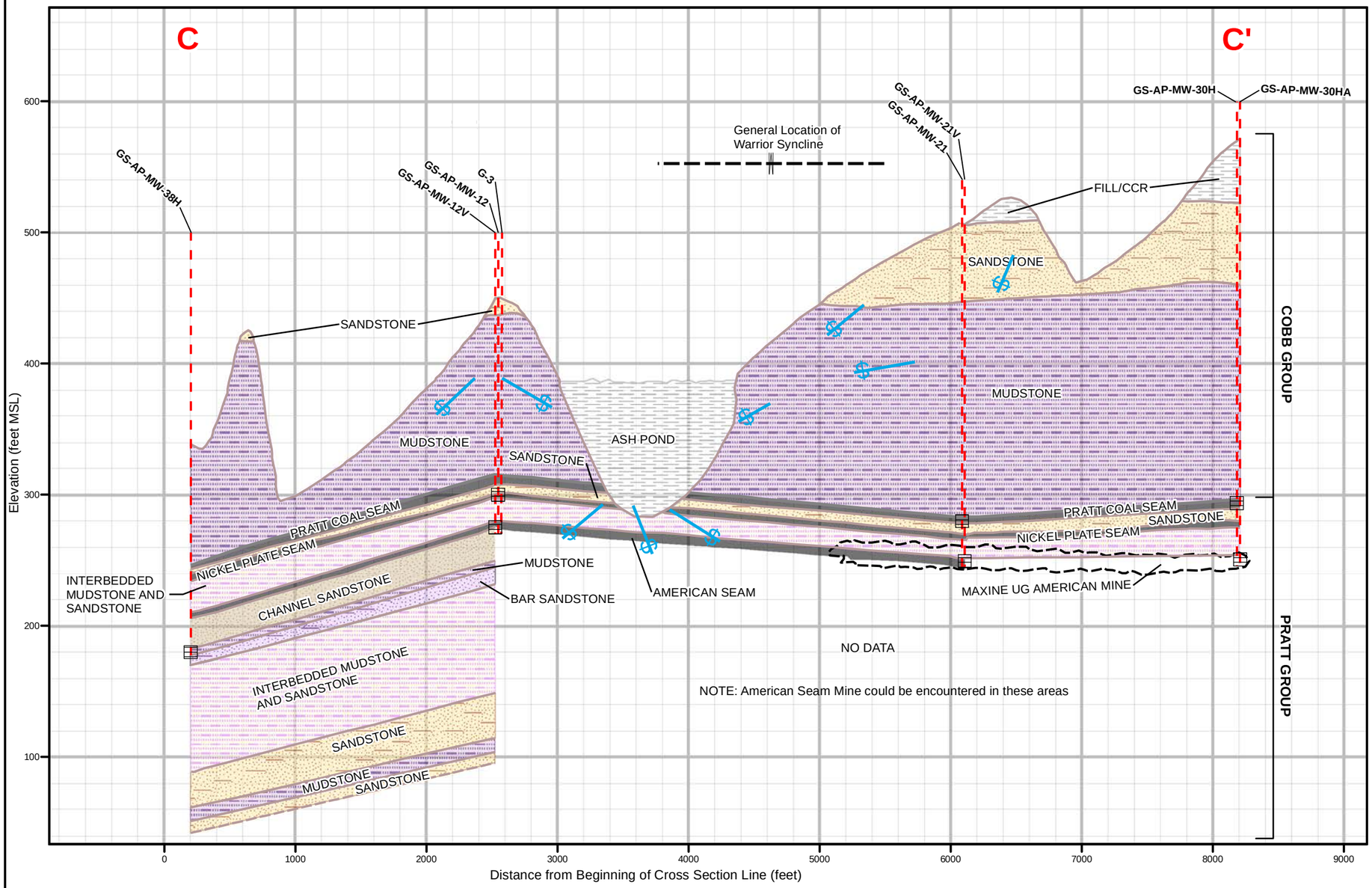
DRAWING TITLE

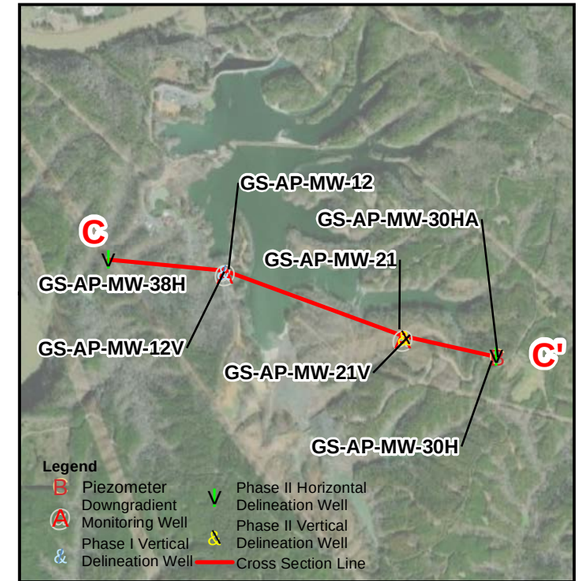
GEOLOGIC CROSS SECTION B - B'
PLANT GORGAS ASH POND

FIGURE NO

FIGURE 4B

Southern Company





0 1,000 2,000 4,000 Feet

Notes:

1. Stratigraphic layers were correlated using a combination of boring data and gamma logs.
2. Elevation data are reported using feet above Mean Sea Level (MSL).
3. Maxine Mine was not encountered at well GW-AP-MW-21v
4. Water samples were collected between March 18 and March 24, 2018
5. mg/L indicates milligrams per liter.
6. ND indicates not detected above the laboratory method detection limit.
7. Vertical exaggeration = 10x
8. GWPS indicates Groundwater Protection Standard.

Legend

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

Geologic Units

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

SCALE	As Shown
DATE	9/15/2020
DRAWN BY	MDM
CHECKED BY	GBD

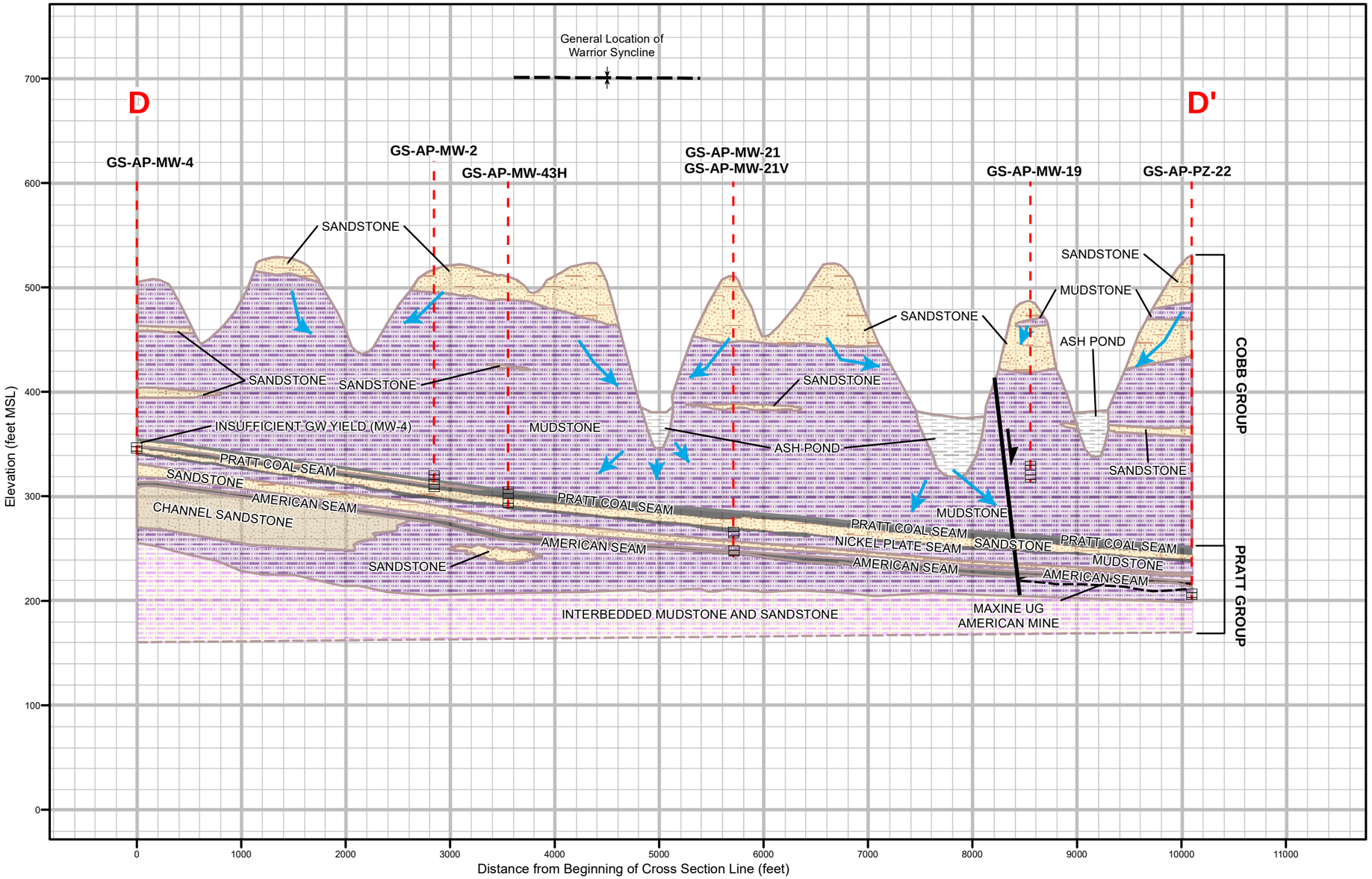
DRAWING TITLE

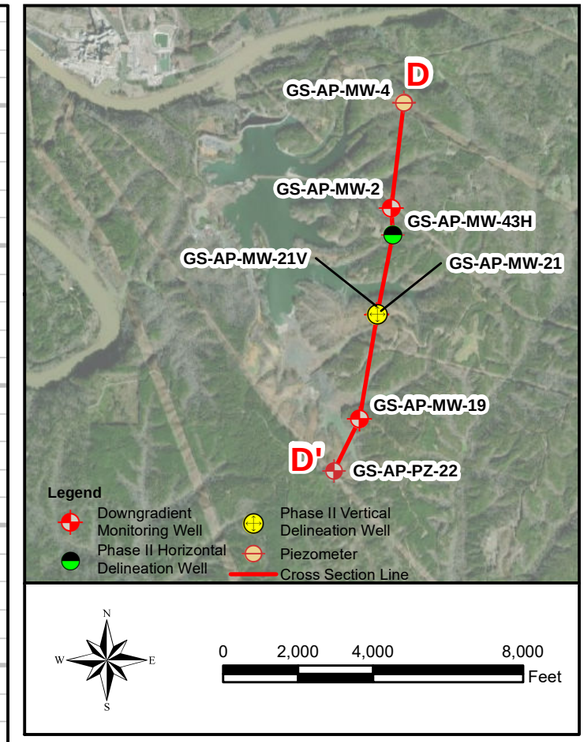
GEOLOGIC CROSS SECTION C - C'
PLANT GORGAS ASH POND

FIGURE NO

FIGURE 4C

Southern Company





Legend

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

Geologic Units

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

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

SCALE	As Shown
DATE	9/21/2020
DRAWN BY	JEM
CHECKED BY	GBD

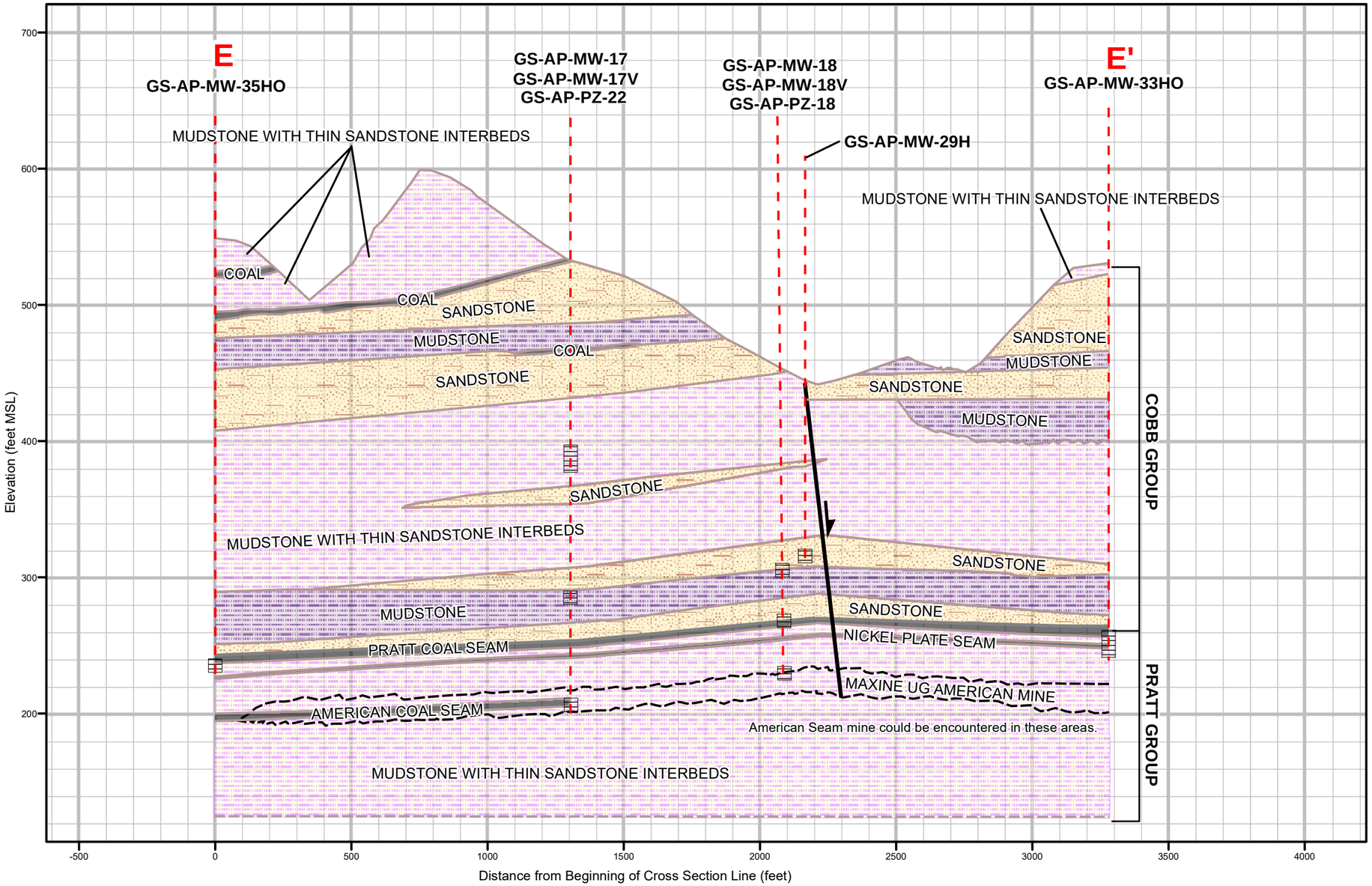
DRAWING TITLE

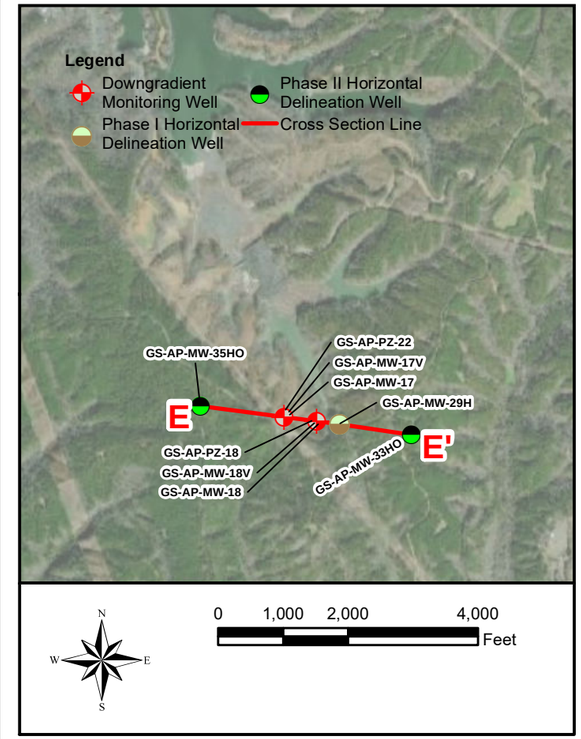
GEOLOGIC CROSS SECTION D – D'
PLANT GORGAS ASH POND

FIGURE NO

FIGURE 4D

Southern Company





Legend

- Monitoring Well Location
- Screen Interval
- Group Boundary
- Strata Boundary
- Inferred Strata Boundary
- Mine
- Fault

Geologic Units

- Mudstone
- Mudstone with Thin Sandstone Interbeds
- Sandstone
- Coarse Sandstone
- Coal

Notes:
1. Stratagraphic layers were correlated using a combination of boring data and gamma logs.
2. Elevation data are reported using feet above Mean Sea Level (MSL).
3. Vertical exaggeration = 5x.

SCALE	As Shown
DATE	9/21/2020
DRAWN BY	JEM
CHECKED BY	GBD

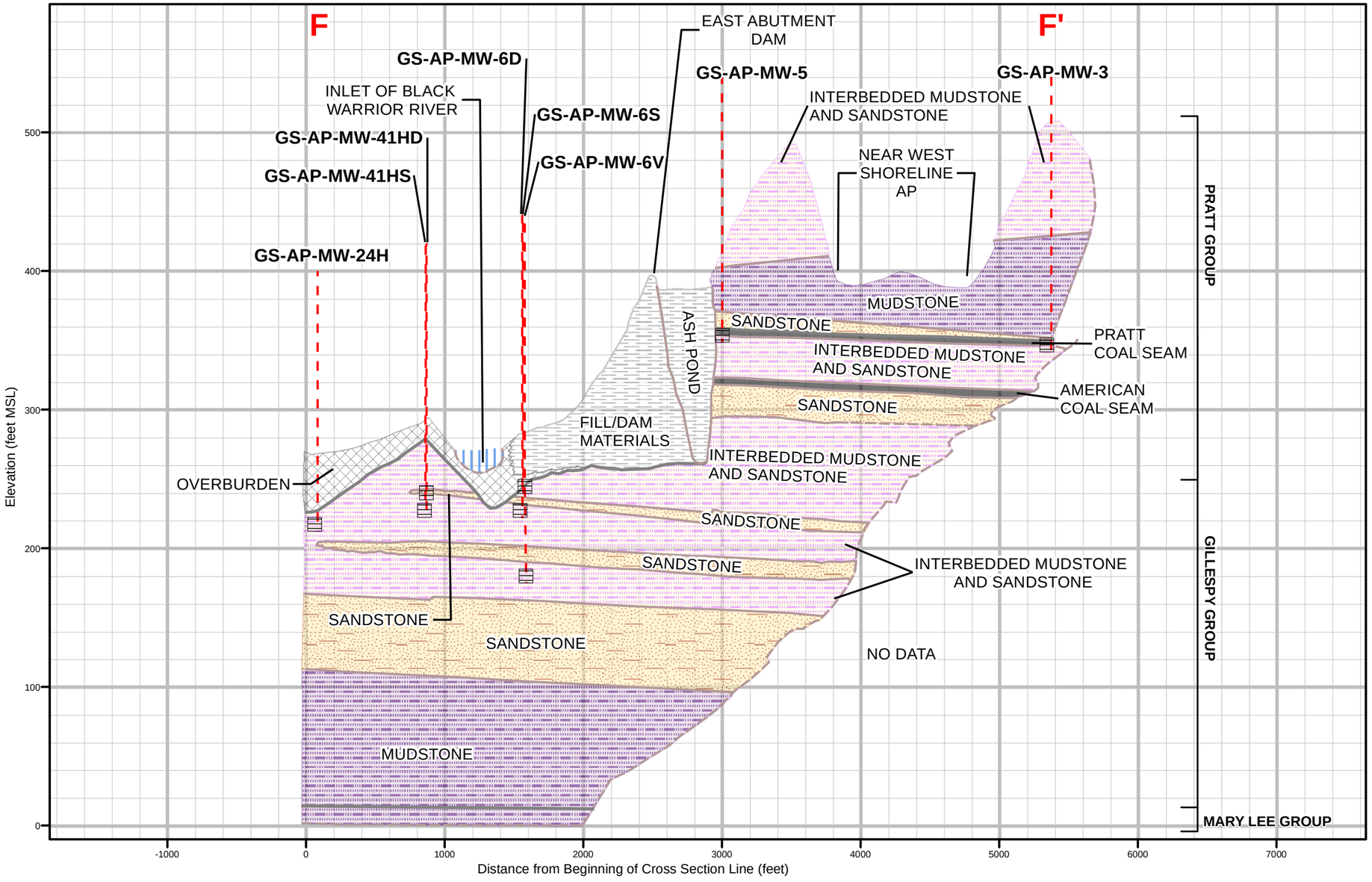
DRAWING TITLE

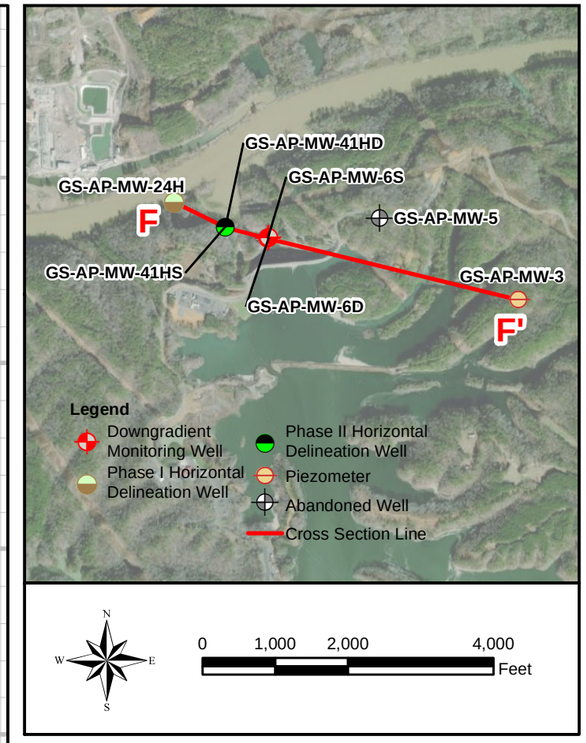
GEOLOGIC CROSS SECTION E – E'
PLANT GORGAS ASH POND

FIGURE NO

FIGURE 4E

Southern Company





Notes:

1. Stratigraphic layers were correlated using a combination of boring data and gamma logs.
2. Elevation data are reported using feet above Mean Sea Level (MSL).
3. Water samples were collected between March 17 and March 18, 2020
4. mg/L indicates milligrams per liter.
5. ND indicates not detected above the laboratory method detection limit.
6. Vertical exaggeration = 10x
7. GWPS indicates Groundwater Protection Standard.
8. Concentrations are representative only of groundwater occupying discrete fractures or coal seams and are not to be utilized to characterize mass.

Legend

- Screen Interval
- Monitoring Well Location
- Group Boundary
- Strata Boundary
- Inferred Strata Boundary

Geologic Units

- Coal
- Fill/CCR
- Interbedded Mudstone and Shale
- Mudstone
- Overburden
- Sandstone
- Water

SCALE	As Shown
DATE	9/29/2020
DRAWN BY	MDM
CHECKED BY	GBD

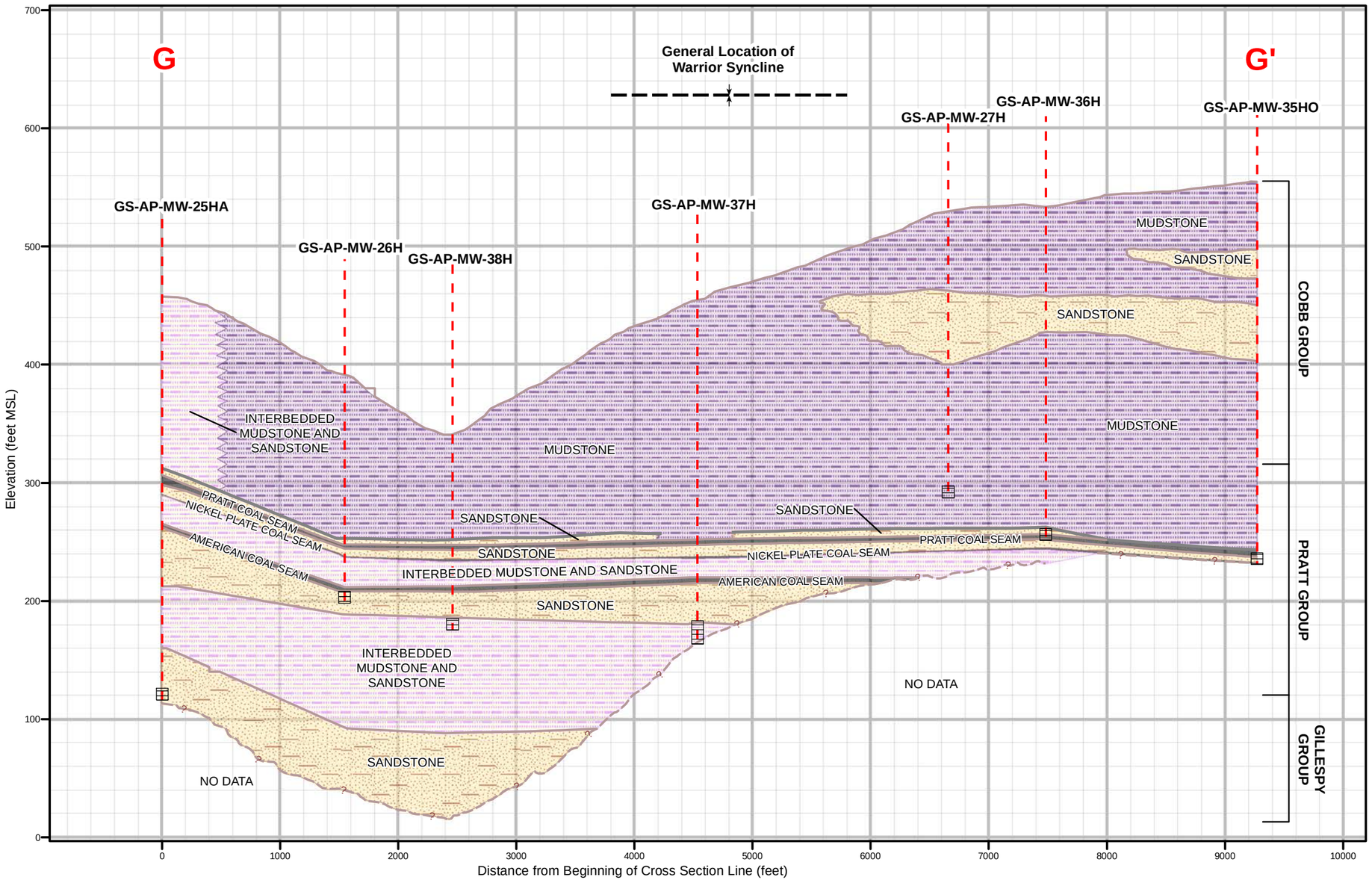
DRAWING TITLE

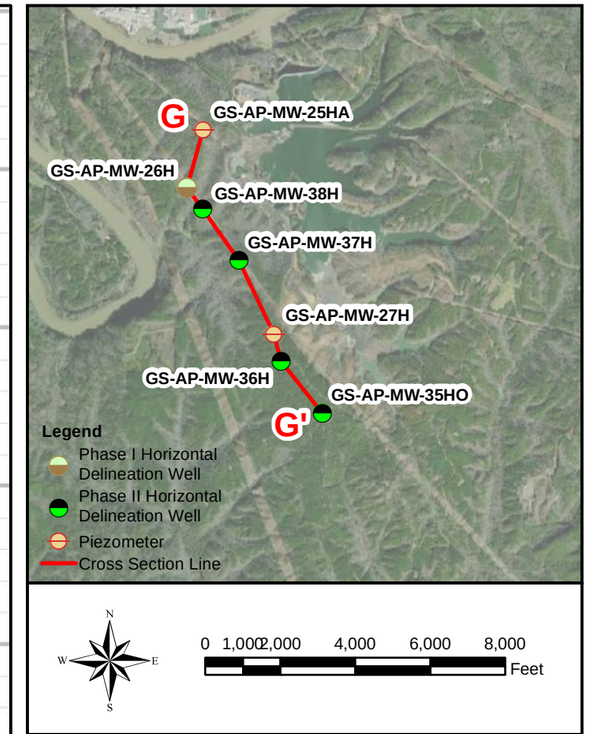
GEOLOGIC CROSS SECTION F - F'
PLANT GORGAS ASH POND

FIGURE NO

FIGURE 4F

Southern Company





Legend

- Screen Interval
- Monitoring Well Location
- Group Boundary
- Strata Boundary
- Inferred Strata Boundary
- Syncline

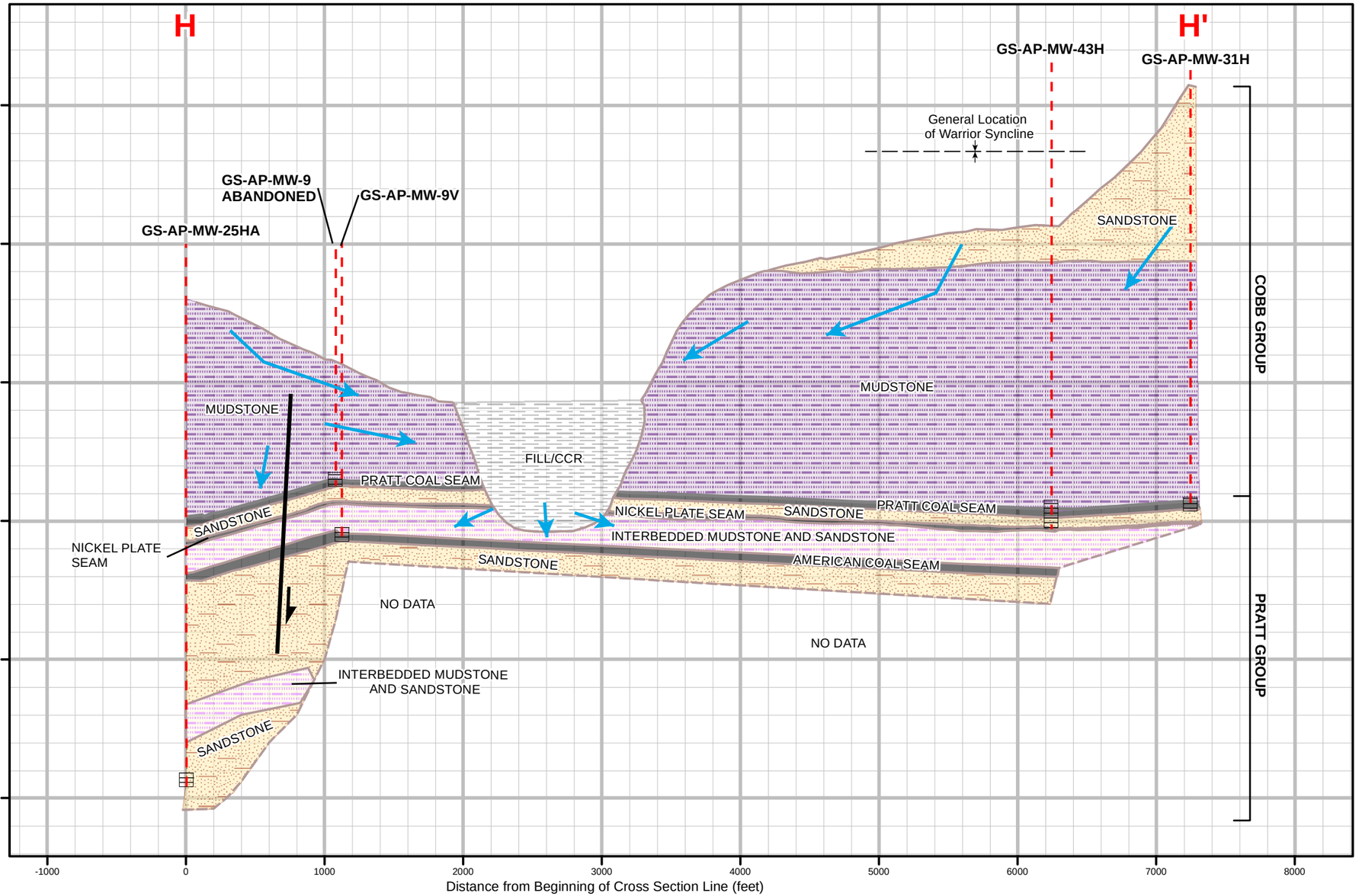
Geologic Units

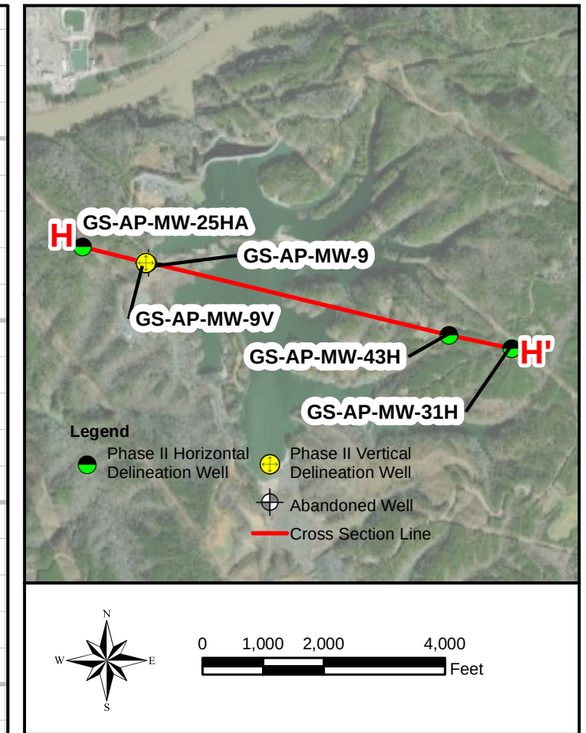
- Mudstone
- Interbedded Mudstone and Sandstone
- Sandstone
- Channel Sandstone
- Coal

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

SCALE	As Shown
DATE	9/22/2020
DRAWN BY	KWR
CHECKED BY	GBD
DRAWING TITLE	GEOLOGIC CROSS SECTION G - G' PLANT GORGAS ASH POND
FIGURE NO	**FIGURE 4G**

Southern Company





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

Legend

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

Geologic Units

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

SCALE	As Shown
DATE	9/21/2020
DRAWN BY	MDM
CHECKED BY	GBD

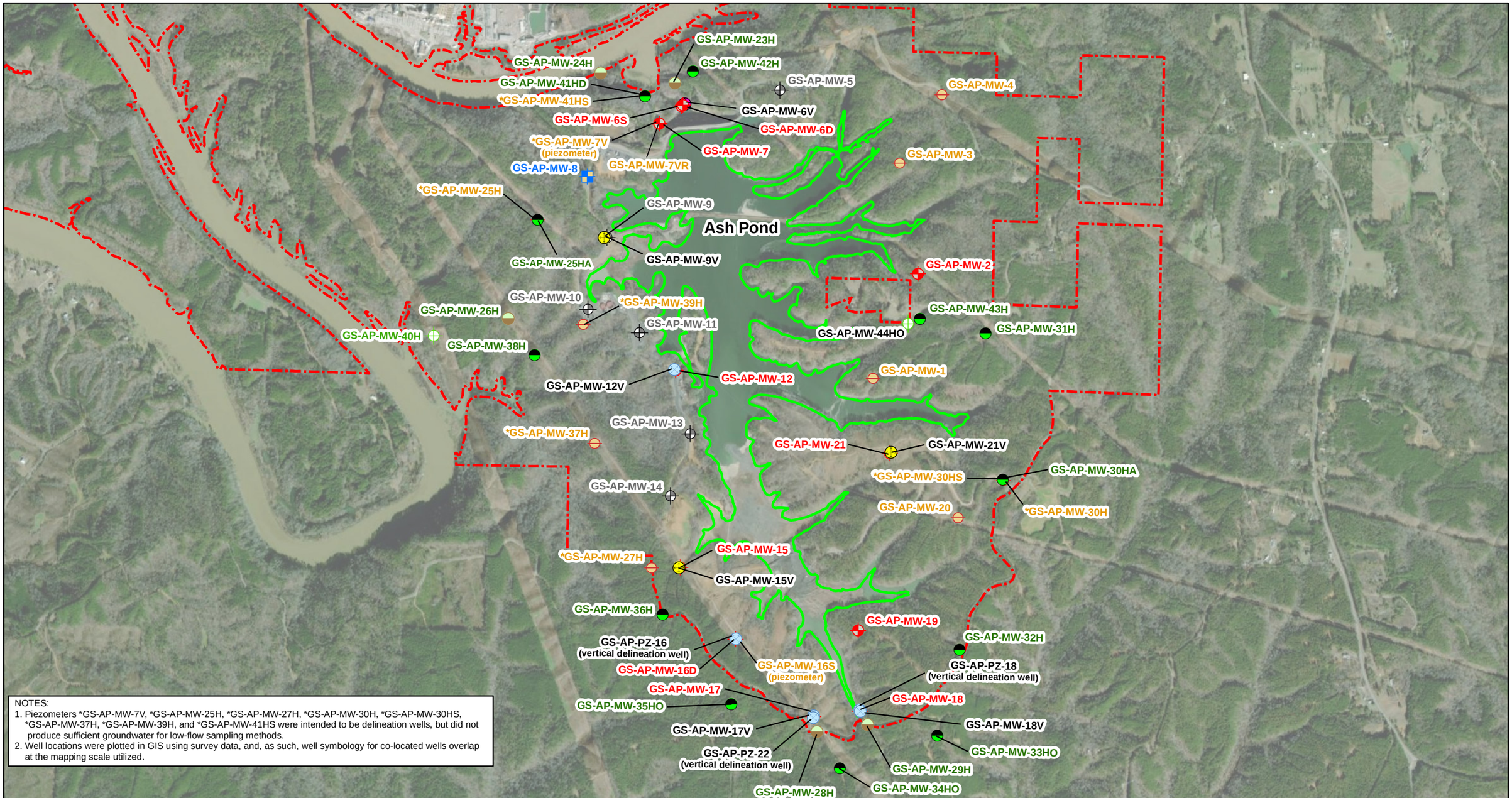
DRAWING TITLE

GEOLOGIC CROSS SECTION H - H'
PLANT GORGAS ASH POND

FIGURE NO

FIGURE 4H

Southern Company



NOTES:
1. Piezometers *GS-AP-MW-7V, *GS-AP-MW-25H, *GS-AP-MW-27H, *GS-AP-MW-30H, *GS-AP-MW-30HS, *GS-AP-MW-37H, *GS-AP-MW-39H, and *GS-AP-MW-41HS were intended to be delineation wells, but did not produce sufficient groundwater for low-flow sampling methods.
2. Well locations were plotted in GIS using survey data, and, as such, well symbology for co-located wells overlap at the mapping scale utilized.

Legend

- Downgradient Monitoring Well
- Upgradient Monitoring Well
- Phase I Horizontal Delineation Well
- Phase I Vertical Delineation Well
- Phase II Horizontal Delineation Well
- Phase II Vertical Delineation Well
- Phase III Horizontal Delineation Well
- Phase III Vertical Delineation Well
- Piezometer
- Abandoned Well
- Ash Pond Boundary
- Property Boundary (Approximate)

GS-AP-MW-2	Downgradient Monitoring Well ID
GS-AP-MW-8	Upgradient Monitoring Well ID
GS-AP-MW-23H	Horizontal Delineation Well ID
GS-AP-MW-9V	Vertical Delineation Well ID
GS-AP-MW-1	Piezometer ID
GS-AP-MW-9	Abandoned Well ID

N

0 1,000 2,000 4,000 Feet

SCALE	1:18000
DATE	1/19/2021
DRAWN BY	KWR
CHECKED BY	GBD

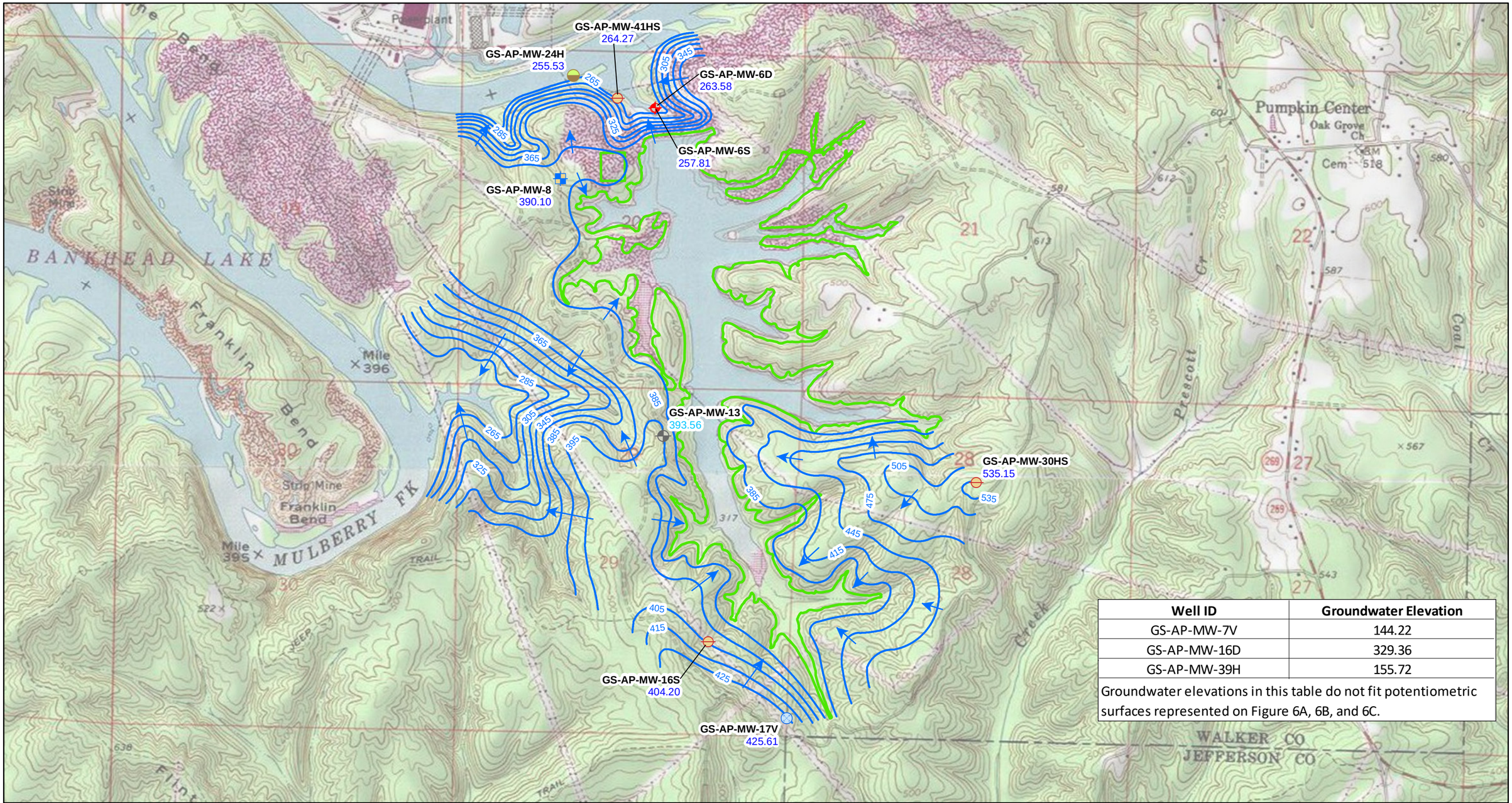
DRAWING TITLE

MONITORING WELL LOCATION MAP
PLANT GORGAS ASH POND

FIGURE NO

FIGURE 5

Southern Company



Well ID	Groundwater Elevation
GS-AP-MW-7V	144.22
GS-AP-MW-16D	329.36
GS-AP-MW-39H	155.72

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

Legend

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

GS-AP-MW-8 Well ID
390.10 Groundwater Elevation
393.56 Average Groundwater Elevation

N

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

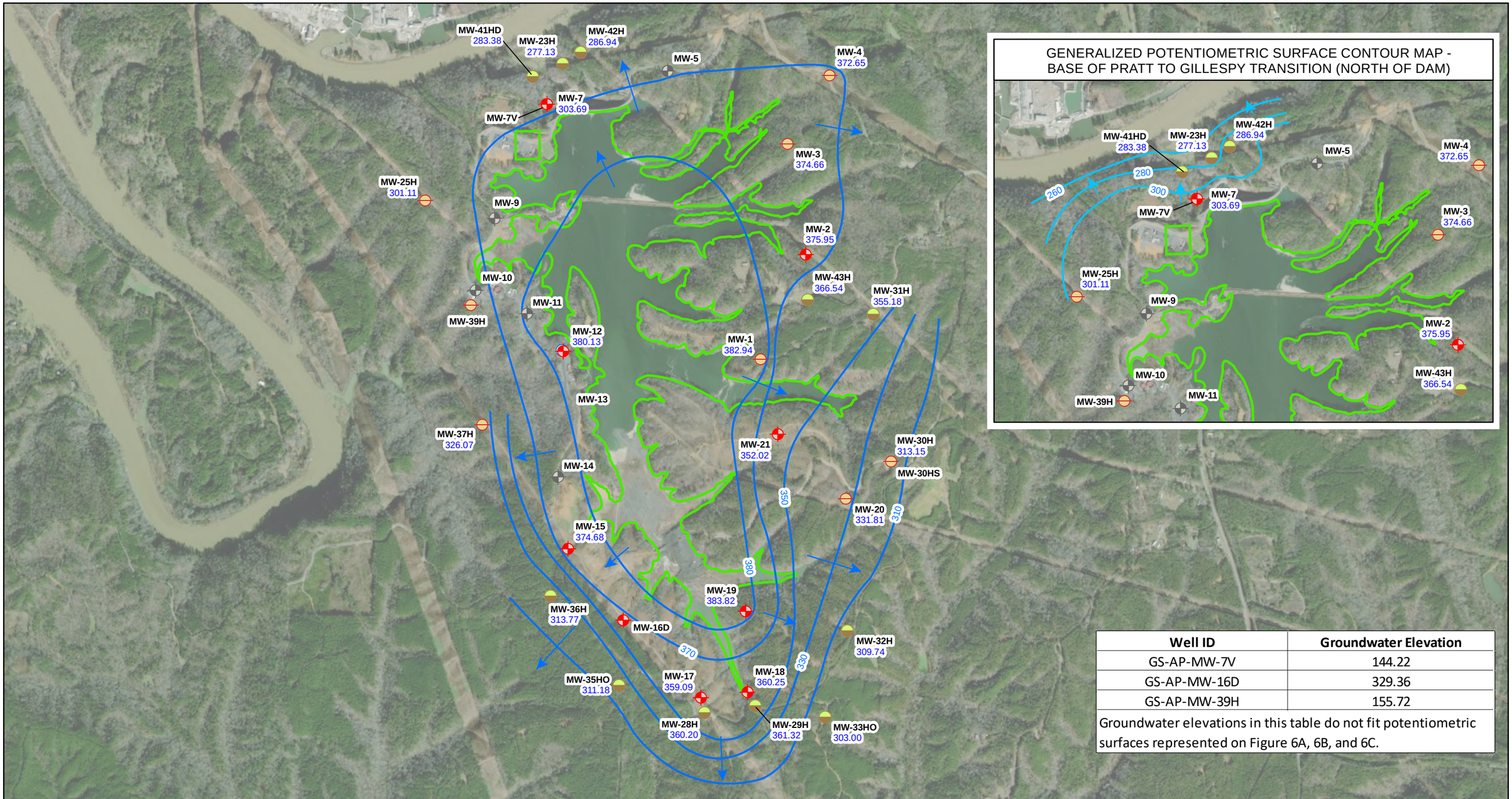
NOTE: 1. NAVD88 indicates North American Vertical Datum of 1988.
2. Generalized water table potentiometric surface map based upon groundwater elevations, surface water elevations, and topography.
3. Average groundwater elevation at GS-AP-MW-13 used to refine 390 ft NAVD88 contour.

SCALE 1:18000
DATE 12/10/2020
DRAWN BY KAR
CHECKED BY GBD

DRAWING TITLE
POTENTIOMETRIC SURFACE CONTOUR MAP
(UPPER) WATER TABLE AQUIFER
MARCH 16, 2020
PLANT GORGAS ASH POND

FIGURE NO
FIGURE 6A

Southern Company



Well ID	Groundwater Elevation
GS-AP-MW-7V	144.22
GS-AP-MW-16D	329.36
GS-AP-MW-39H	155.72

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

Legend

- Downgradient Monitoring Well
- Upgradient Monitoring Well
- Horizontal Delineation Well
- Vertical Delineation Well
- Piezometer
- Abandoned Well
- Potentiometric Surface Contour (ft NAVD88) (Pratt Aquifer)
- Approximate Groundwater Flow Direction (Pratt Aquifer)
- Potentiometric Surface Contour (ft NAVD88) (Base of Pratt to Gillespy Aquifer Transition)
- Approximate Groundwater Flow Direction (Base of Pratt to Gillespy Aquifer Transition)
- Ash Pond Boundary

GS-AP-MW-1 Well ID
382.94 Groundwater Elevation

N

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

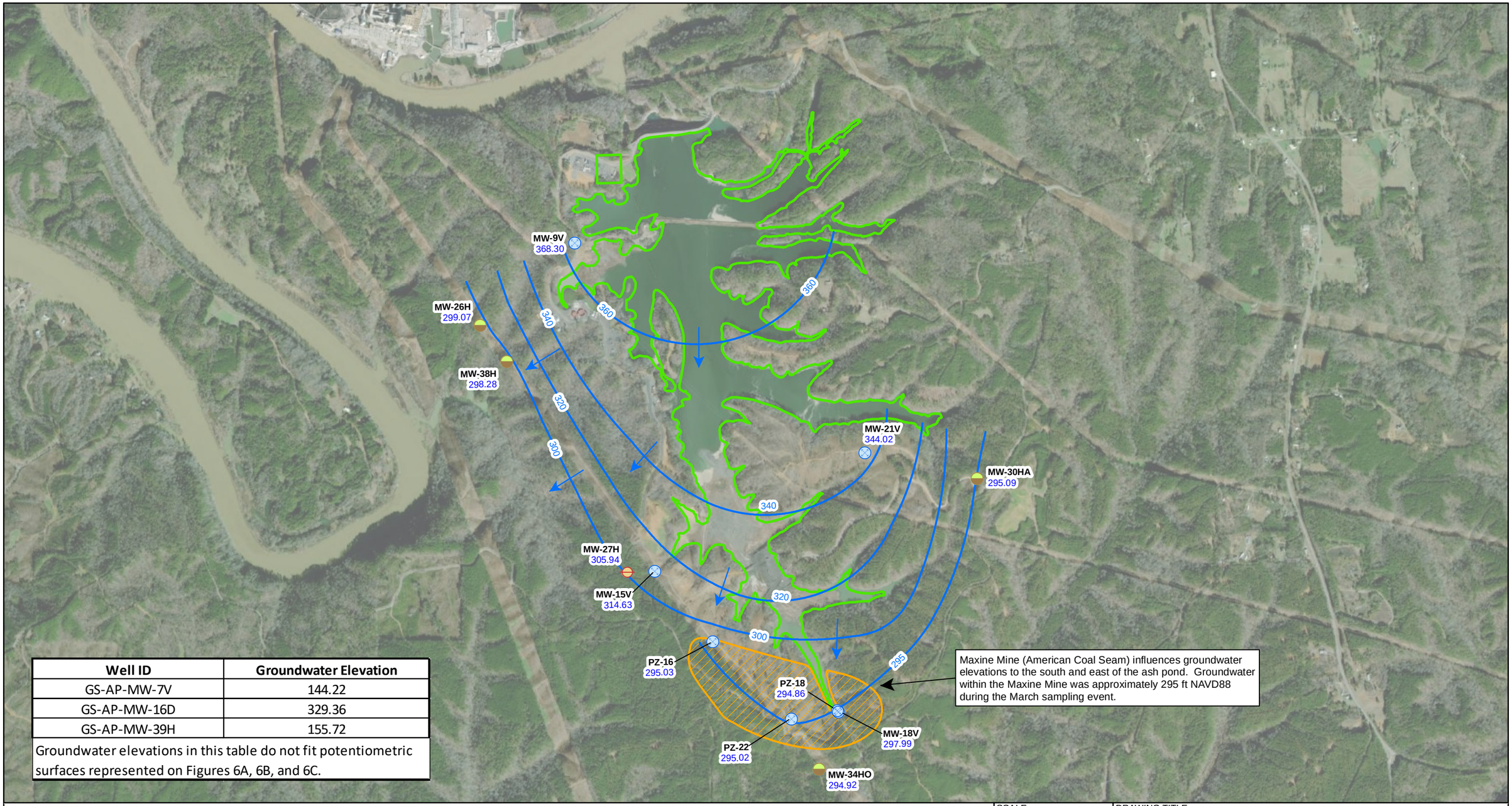
NOTES: 1. NAVD88 indicates North American Vertical Datum of 1988.
2. GS-AP-MW-5, GS-AP-MW-9, GS-AP-MW-10, GS-AP-MW-11, and GS-AP-MW-14 were abandoned prior to the March 2020 event.
3. Potentiometric contour lines were generalized for depiction and ease of reader.

SCALE 1:18000
DATE 12/10/2020
DRAWN BY KWR
CHECKED BY GBD

DRAWING TITLE
POTENTIOMETRIC SURFACE CONTOUR MAP
PRATT AQUIFER
MARCH 16, 2020
PLANT GORGAS ASH POND

FIGURE NO
FIGURE 6B

Southern Company



Well ID	Groundwater Elevation
GS-AP-MW-7V	144.22
GS-AP-MW-16D	329.36
GS-AP-MW-39H	155.72

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

Legend

- Horizontal Delineation Well
- Vertical Delineation Well
- Piezometer
- Potentiometric Surface Contour (ft NAVD88)
- Approximate Groundwater Flow Direction
- Maxine Mine
- Ash Pond Boundary

GS-AP-MW-9V Well ID
368.30 Groundwater Elevation

N

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

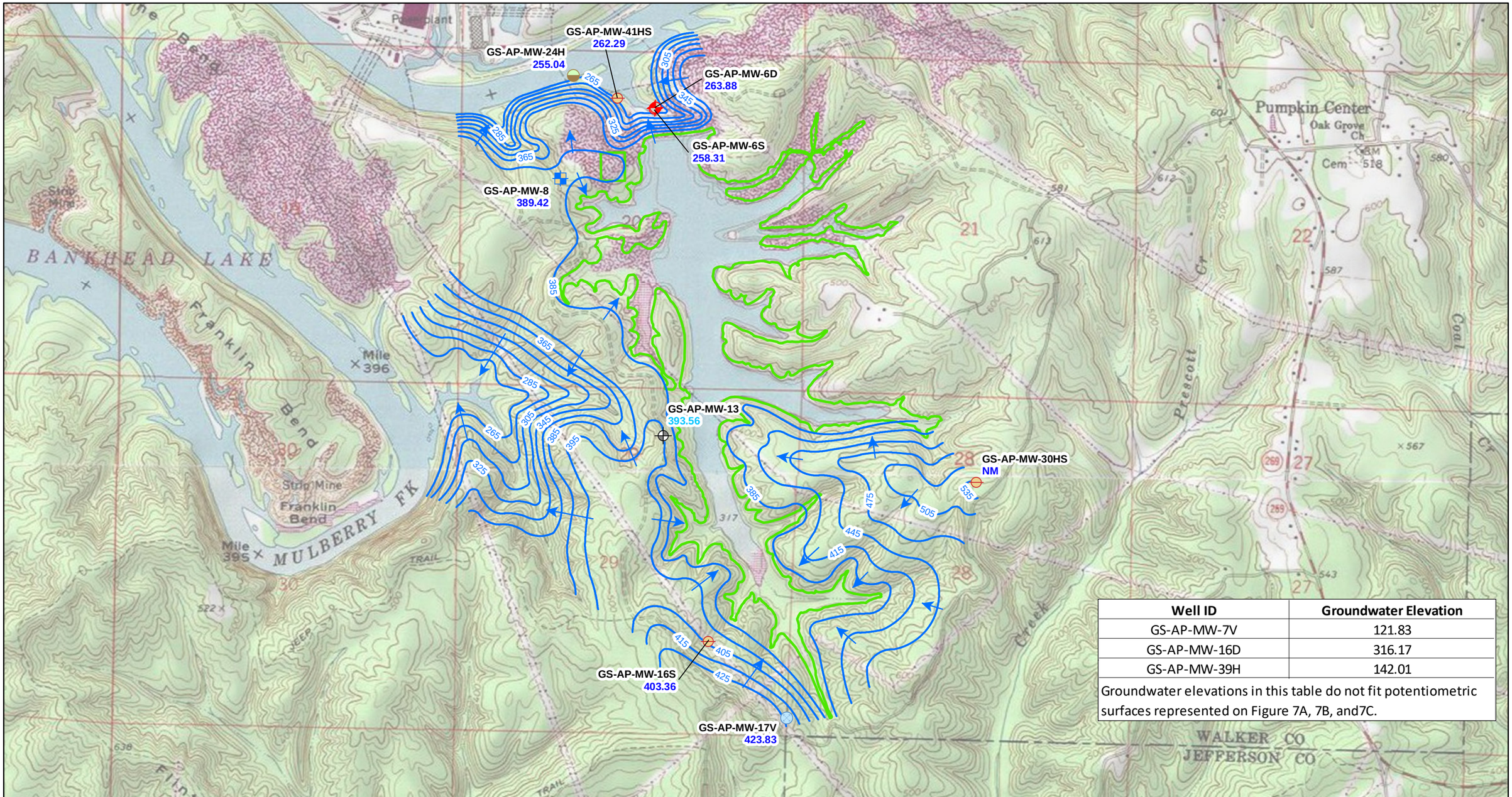
NOTES: 1. NAVD88 indicates North American Vertical Datum of 1988.
2. GS-AP-PZ-16, -18, and -22 monitor water levels in the Maxine Mine.
3. Potentiometric contour lines were generalized for depiction and ease of reader.

SCALE	1:18000
DATE	12/10/2020
DRAWN BY	KWR
CHECKED BY	GBD

DRAWING TITLE
POTENTIOMETRIC SURFACE CONTOUR MAP
AMERICAN AQUIFER
MARCH 16, 2020
PLANT GORGAS ASH POND

FIGURE NO
FIGURE 6C

Southern Company



Well ID	Groundwater Elevation
GS-AP-MW-7V	121.83
GS-AP-MW-16D	316.17
GS-AP-MW-39H	142.01

Groundwater elevations in this table do not fit potentiometric surfaces represented on Figure 7A, 7B, and7C.

Legend

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

GS-AP-MW-8 Well ID
389.42 Groundwater Elevation
393.56 Average Groundwater Elevation

N

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

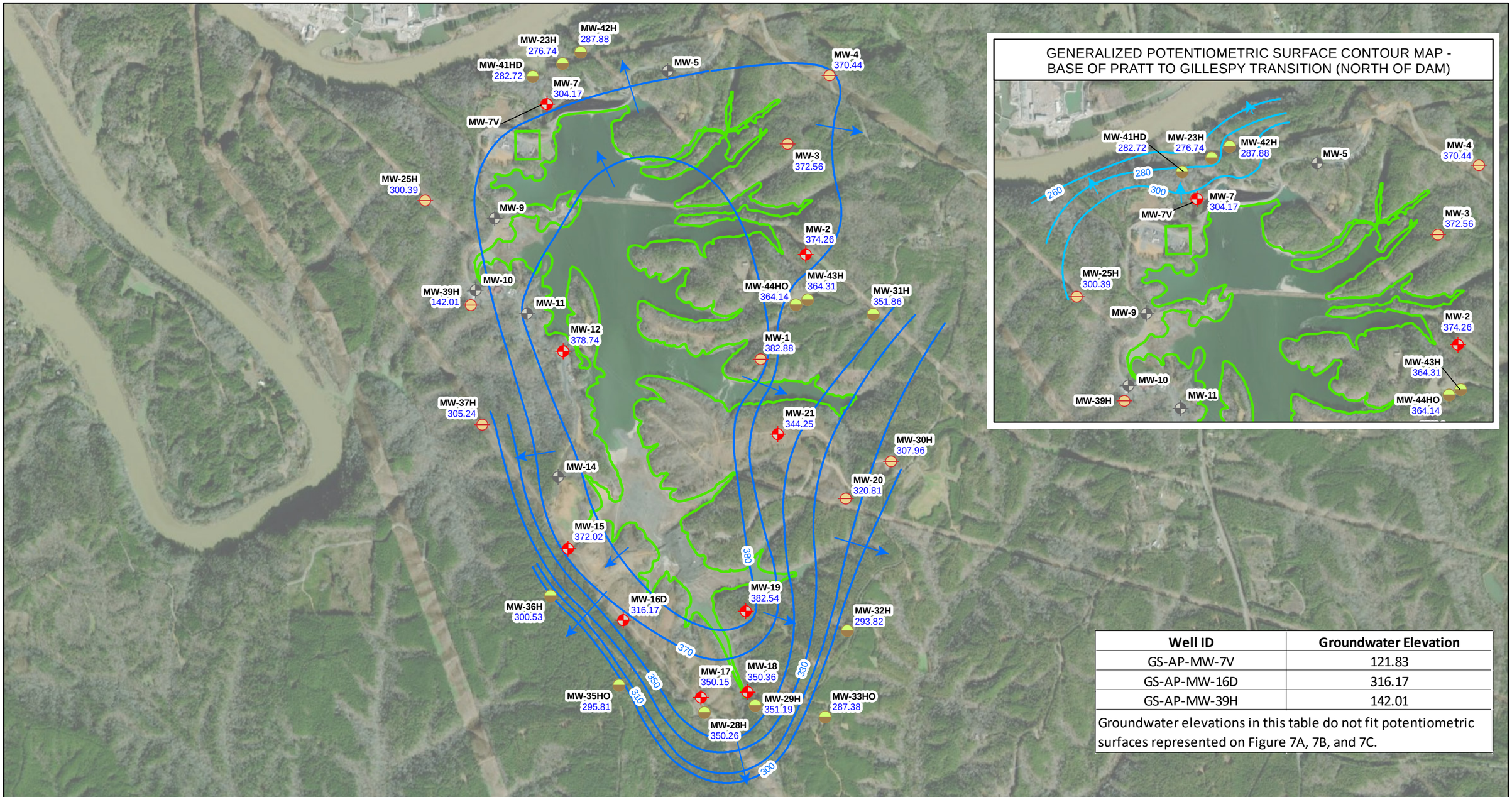
NOTE:
1. NAVD88 indicates North American Vertical Datum of 1988.
2. Generalized water table potentiometric surface map based upon groundwater elevations, surface water elevations, and topography.
3. Average groundwater elevation at GS-AP-MW-13 used to refine 390 ft NAVD88 contour.
4. NM indicates water level not measured.

SCALE 1:18000
DATE 12/10/2020
DRAWN BY KAR
CHECKED BY GBD

DRAWING TITLE
POTENTIOMETRIC SURFACE CONTOUR MAP
(UPPER) WATER TABLE AQUIFER
SEPTEMBER 14, 2020
PLANT GORGAS ASH POND

FIGURE NO
FIGURE 7A

Southern Company



Well ID	Groundwater Elevation
GS-AP-MW-7V	121.83
GS-AP-MW-16D	316.17
GS-AP-MW-39H	142.01

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

Legend

- Downgradient Monitoring Well
- Upgradient Monitoring Well
- Horizontal Delineation Well
- Vertical Delineation Well
- Piezometer
- Abandoned Well
- Potentiometric Surface Contour (ft NAVD88) (Pratt Aquifer)
- Approximate Groundwater Flow Direction (Pratt Aquifer)
- Potentiometric Surface Contour (ft NAVD88) (Base of Pratt to Gillespy Aquifer Transition)
- Approximate Groundwater Flow Direction (Base of Pratt to Gillespy Aquifer Transition)
- Ash Pond Boundary

MW-1 Well ID
382.88 Groundwater Elevation

N

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

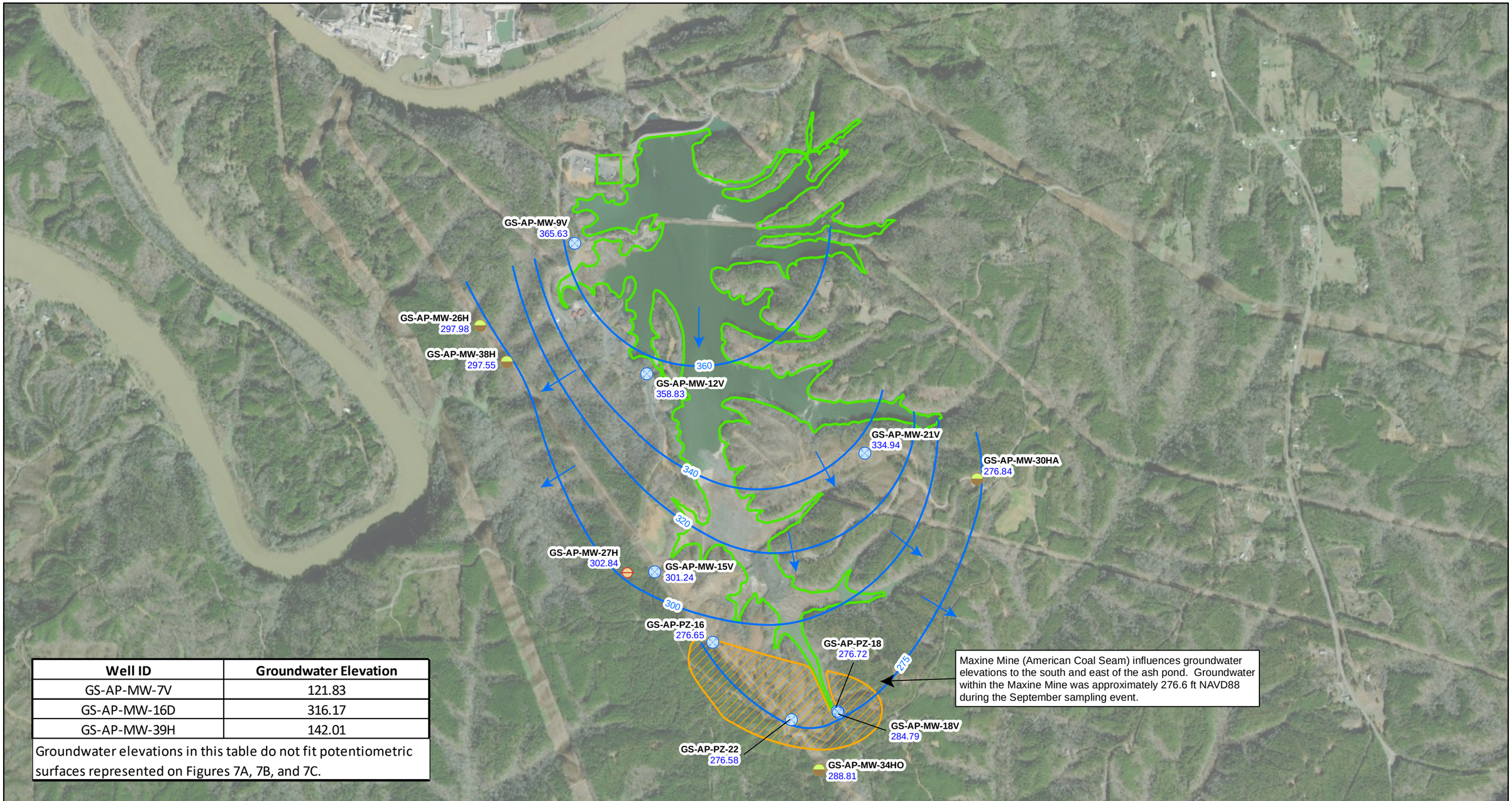
NOTES:
1. NAVD88 indicates North American Vertical Datum of 1988.
2. GS-AP-MW-5, GS-AP-MW-9, GS-AP-MW-10, GS-AP-MW-11, and GS-AP-MW-14 were abandoned prior to the March 2020 event.
3. Potentiometric contour lines were generalized for depiction and ease of reader.
4. Abbreviated well and piezometer designations are shown for readability. Formal well designations are preceded by "GS-AP-" as shown on the Monitoring Well Location Map.

SCALE: 1:18000
DATE: 1/26/2021
DRAWN BY: KWR
CHECKED BY: GBD

DRAWING TITLE
POTENTIOMETRIC SURFACE CONTOUR MAP
PRATT AQUIFER
SEPTEMBER 14, 2020
PLANT GORGAS ASH POND

FIGURE NO
FIGURE 7B

Southern Company



Well ID	Groundwater Elevation
GS-AP-MW-7V	121.83
GS-AP-MW-16D	316.17
GS-AP-MW-39H	142.01

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

Legend

- Horizontal Delineation Well
- Vertical Delineation Well
- Piezometer
- Potentiometric Surface Contour (ft NAVD88)
- Approximate Groundwater Flow Direction
- Maxine Mine
- Ash Pond Boundary

GS-AP-MW-9V Well ID
365.63 Groundwater Elevation

N

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

NOTES: 1. NAVD88 indicates North American Vertical Datum of 1988.
2. GS-AP-PZ-16, -18, and -22 monitor water levels in the Maxine Mine.
3. GS-AP-MW-18V is screened just above the American Coal and exhibits some vertical groundwater separation.
4. Potentiometric contour lines were generalized for depiction and ease of reader.

SCALE 1:18000
DATE 1/26/2021
DRAWN BY KWR
CHECKED BY GBD

DRAWING TITLE
POTENTIOMETRIC SURFACE CONTOUR MAP
AMERICAN AQUIFER
SEPTEMBER 14, 2020
PLANT GORGAS ASH POND

FIGURE NO
FIGURE 7C

Southern Company

Tables

Table 1.
Groundwater Monitoring Well Network Details

Well Name	Purpose	Installation Completion Date	Northing	Easting	Ground Elevation	Top of Casing Elevation	Well Depth (ft.) Below Top of Casing	Top of Screen Elevation (ft MSL)	Bottom of Screen Elevation (ft MSL)	Screen Length
GS-AP-MW-1	Piezometer	2/24/2016	1320292.58	2066945.10	487.30	490.68	148.38	362.30	342.30	20
GS-AP-MW-2	Downgradient	3/10/2016	1321951.86	2067629.25	518.77	522.03	214.22	327.81	307.81	20
GS-AP-MW-3	Piezometer	3/4/2016	1323690.18	2067314.13	508.77	512.29	180.52	341.77	331.77	10
GS-AP-MW-4	Piezometer	3/7/2016	1324779.03	2067957.03	504.61	507.90	163.29	354.61	344.61	10
GS-AP-MW-5	ABANDONED	4/2/2016	1324811.04	2065409.73	483.80	487.17	149.37	347.80	337.80	10
GS-AP-MW-6S	Downgradient	1/19/2016	1324533.13	2063864.63	271.57	274.67	46.55	238.12	228.12	10
GS-AP-MW-6D	Downgradient	1/18/2016	1324547.48	2063881.96	271.39	274.50	64.48	220.02	210.02	10
GS-AP-MW-7	Downgradient	1/26/2016	1324250.98	2063518.48	310.05	313.45	100.49	222.96	212.96	10
GS-AP-MW-8	Upgradient	2/26/2016	1323405.23	2062398.47	431.63	434.61	64.59	390.02	370.02	20
GS-AP-MW-9	ABANDONED	4/22/2016	1322446.73	2062720.10	417.06	420.04	111.38	328.66	308.66	20
GS-AP-MW-10	ABANDONED	1/21/2016	1321310.86	2062441.08	464.94	468.41	144.87	343.54	323.54	20
GS-AP-MW-11	ABANDONED	2/4/2016	1320953.14	2063257.73	465.34	468.34	139.90	348.44	328.44	20
GS-AP-MW-12	Downgradient	4/20/2016	1320369.19	2063836.90	447.48	450.67	153.98	306.69	296.69	10
GS-AP-MW-13	ABANDONED	2/4/2016	1319377.84	2064083.37	461.03	464.20	113.57	370.63	350.63	20
GS-AP-MW-14	ABANDONED	1/30/2016	1318393.75	2063787.88	469.60	472.40	203.20	279.20	269.20	10
GS-AP-MW-15	Downgradient	2/8/2016	1317267.07	2063959.21	452.21	454.89	200.08	264.81	254.81	10
GS-AP-PZ-16 [7]	Vertical Delineation	3/16/2016	1316157.31	2064852.10	458.83	462.29	252.66	219.63	209.63	10
GS-AP-MW-16S [3]	Proposed Upgradient	4/18/2016	1316149.55	2064844.29	459.04	462.42	133.38	349.04	329.04	20
GS-AP-MW-16D	Downgradient	4/20/2016	1316152.70	2064850.23	459.09	462.27	224.23	258.04	238.04	20
GS-AP-MW-17	Downgradient	2/11/2016	1314955.86	2066094.14	528.78	531.88	248.85	293.03	283.03	10
GS-AP-PZ-18 [7]	Vertical Delineation	2/25/2016	1315069.22	2066821.51	399.77	402.38	183.79	228.59	218.59	10
GS-AP-MW-18	Downgradient	3/29/2016	1315052.82	2066824.84	400.17	403.39	98.68	324.71	304.71	20
GS-AP-MW-19	Downgradient	4/29/2016	1316325.43	2066775.98	492.60	495.58	179.19	336.39	316.39	20
GS-AP-MW-21	Downgradient	2/20/2016	1319122.82	2067233.10	506.51	509.48	236.45	283.03	273.03	10
GS-AP-MW-7V [3,5]	Piezometer	1/18/2019	1324251.90	2063504.32	309.46	312.14	202.68	119.46	109.46	10
GS-AP-MW-12V [6]	Vertical Delineation	1/9/2019	1320383.14	2063813.29	446.54	449.74	179.10	312.22	302.22	10
GS-AP-MW-17V	Proposed Upgradient	1/20/2019	1314967.05	2066096.42	528.57	531.45	151.40	400.05	380.05	20
GS-AP-MW-18V	Vertical Delineation	1/30/2019	1315045.44	2066833.22	401.81	404.61	137.71	276.90	266.90	10
GS-AP-MW-20	Piezometer	2/1/2019	1318122.87	2068319.23	525.18	528.15	249.97	288.18	278.18	10
GS-AP-PZ-22 [7]	Vertical Delineation	4/11/2016	1314941.40	2066094.05	529.31	532.38	328.07	214.31	204.31	10
GS-AP-MW-23H	Horizontal Delineation	1/4/2019	1324901.11	2063751.19	301.9	304.98	42.50	272.48	262.48	10
GS-AP-MW-24H	Horizontal Delineation	1/3/2019	1325034.25	2062579.09	258.38	261.35	62.80	208.55	198.55	10
GS-AP-MW-25H [3,5]	Piezometer	1/2/2019	1322710.44	2061621.52	458.66	461.79	168.13	303.66	293.66	10
GS-AP-MW-26H	Horizontal Delineation	1/22/2019	1321144.11	2061189.28	391.68	394.68	193.60	211.08	201.08	10

Notes:

1. Northing and easting are in feet relative to the State Plane Alabama West North America Datum of 1983.
2. Elevations are in feet relative to the North American vertical Datum of 1988.
3. Piezometers are utilized for water level readings only; current piezometer MW-16S is being evaluated for potential as a site upgradient well
4. Top of screen and bottom of screen elevations are calculated relative to Top of Casing elevation and less the well sump length of 0.4’.
5. Delineation wells GS-AP-MW-7V, GS-AP-MW-7VR, GS-AP-MW-25H, GS-AP-MW-27H, GS-AP-MW-30H, and GS-AP-MW-30HS will be utilized for water level data only in future events.
6. Survey for MW-12V is incorrect and will be updated upon re-survey
7. Maxine Mine screened piezometer converted to vertical delineation location

Table 1.
Groundwater Monitoring Well Network Details

Well Name	Purpose	Installation Completion Date	Northing	Easting	Ground Elevation	Top of Casing Elevation	Well Depth (ft.) Below Top of Casing	Top of Screen Elevation (ft MSL)	Bottom of Screen Elevation (ft MSL)	Screen Length
GS-AP-MW-27H [3,5]	Piezometer	2/12/2019	1317251.09	2063507.76	532.08	535.03	244.95	300.08	290.08	10
GS-AP-MW-28H	Horizontal Delineation	2/26/2019	1314721.29	2066153.32	513.84	513.82	229.70	294.12	284.12	10
GS-AP-MW-29H	Horizontal Delineation	2/5/2019	1314844.80	2066948.77	440.71	440.95	130.64	320.31	310.31	10
GS-AP-MW-30H [3,5]	Piezometer	1/8/2019	1318714.64	2069028.11	579.62	582.49	295.87	296.62	286.62	10
GS-AP-MW-30HS [3,5]	Piezometer	1/10/2019	1318721.10	2069023.99	579.84	582.53	47.19	545.34	535.34	10
GS-AP-MW-9V	Vertical Delineation	11/6/2019	1322441.98	2062677.69	418.25	420.86	138.05	292.81	282.81	10
GS-AP-MW-15V	Vertical Delineation	10/28/2019	1317266.29	2063940.18	452.91	455.89	235.38	230.51	220.51	10
GS-AP-MW-21V	Vertical Delineation	9/26/2019	1319131.76	2067250.33	507.59	509.84	248.95	270.89	260.89	10
GS-AP-MW-25HA	Horizontal Delineation	11/7/2019	1322704.82	2061627.52	458.98	462.27	342.90	129.37	119.37	10
GS-AP-MW-30HA	Horizontal Delineation	10/23/2019	1318730.12	2069017.20	579.99	582.40	337.95	254.45	244.45	10
GS-AP-MW-31H	Horizontal Delineation	10/11/2019	1321029.58	2068711.01	584.48	587.39	287.58	309.81	299.81	10
GS-AP-MW-32H	Horizontal Delineation	10/12/2019	1316042.76	2068381.85	547.43	550.03	304.05	265.98	245.98	20
GS-AP-MW-33HO[9]	Horizontal Delineation	11/7/2019	1314683.64	2068050.79	524.08	526.79	282.91	263.88	243.88	20
GS-AP-MW-34HO[9]	Horizontal Delineation	11/9/2019	1314144.24	2066527.09	521.18	523.82	327.60	206.22	196.22	10
GS-AP-MW-35HO[9]	Horizontal Delineation	11/20/2019	1315127.10	2064800.69	550.60	553.35	320.48	242.87	232.87	10
GS-AP-MW-36H	Horizontal Delineation	10/28/2019	1316518.20	2063698.16	533.67	536.61	283.10	263.51	253.51	10
GS-AP-MW-37H	Piezometer	10/23/2019	1319199.34	2062581.05	456.12	459.28	293.45	185.83	165.83	20
GS-AP-MW-38H	Horizontal Delineation	11/22/2019	1320575.44	2061610.67	343.41	345.74	168.20	187.54	177.54	10
GS-AP-MW-39H	Piezometer	10/29/2019	1321072.42	2062371.29	448.47	451.13	348.50	122.63	102.63	20
GS-AP-MW-41HS	Piezometer	10/28/2019	1324686.47	2063278.88	281.75	284.65	37.65	257.00	247.00	10
GS-AP-MW-41HD	Horizontal Delineation	10/27/2019	1324683.42	2063283.86	282.32	284.54	58.30	236.24	226.24	10
GS-AP-MW-42H	Horizontal Delineation	10/29/2019	1325082.88	2064034.21	338.61	340.62	87.51	263.11	253.11	10
GS-AP-MW-43H	Horizontal Delineation	11/11/2019	1321244.07	2067672.16	511.87	514.62	222.75	311.87	291.87	20
GS-AP-MW-7VR [3,5]	Piezometer	4/18/2020	1324242.41	2063512.64	311.04	313.89	150.30	171.74	161.74	10
GS-AP-MW-6V (VR)	Vertical Delineation	6/23/2020	1324568.11	2063915.62	272.84	275.44	98.5	184.34	174.34	10
GS-AP-MW-40H (HO) [8]	Horizontal Delineation	5/1/2020	1320858.03	2060018.89	355.07	357.91	90.30	274.77	264.77	10
GS-AP-MW-44HO[9]	Horizontal Delineation	8/16/2020	1321163.745	2067488.902	503.33	506.21	208.48	307.23	297.23	10

Notes:
1. Northing and easting are in feet relative to the State Plane Alabama West North America Datum of 1983.
2. Elevations are in feet relative to the North American vertical Datum of 1988.
3. Piezometers are utilized for water level readings only
4. Top of screen and bottom of screen elevations are calculated relative to Top of Casing elevation and less the well sump length of 0.4’ or 0.5'.
5. Delineation wells GS-AP-MW-7V, GS-AP-MW-7VR, GS-AP-MW-25H, GS-AP-MW-27H, GS-AP-MW-30H, and GS-AP-MW-30HS will be utilized for water level data only in future events.
6. Survey for MW-12V is incorrect and will be updated upon re-survey
7. Maxine Mine screened piezometer converted to vertical delineation location
8. GS-AP-MW-40H when planned was an off-site well, but land was purchased by APC & was installed as an on-site delineation well
9.GS-AP-MW-33HO through GS-AP-MW-35HO and GS-AP-MW-44HO are off-site well locations.

Table 2.
Monitoring Parameters and Reporting Limits

Parameter	Analytical Method	Reporting Limit
		(Mg/L)
Appendix III Parameters		
Boron	EPA 200.7/200.8	0.05
Calcium	EPA 200.7/200.8	0.25
Chloride	EPA 300.0	2
Fluoride	EPA 300.0	0.1
pH	None	None
Sulfate	EPA 300.0	5
Total Dissolved Solids (TDS)	SM 2540C	5
Appendix IV Parameters		
Antimony	EPA 200.7/200.8	0.0025
Arsenic	EPA 200.7/200.8	0.00125
Barium	EPA 200.7/200.8	0.0025
Beryllium	EPA 200.7/200.8	0.0025
Cadmium	EPA 200.7/200.8	0.0025
Chromium	EPA 200.7/200.8	0.0025
Cobalt	EPA 200.7/200.8	0.0025
Fluoride	EPA 300.0	0.1
Lead	EPA 200.7/200.8	0.00125
Lithium	EPA 200.7/200.8	0.0025
Mercury	EPA 7470A	0.0002
Molybdenum	EPA 200.7/200.8	0.015
Selenium	EPA 200.7/200.8	0.00125
Thallium	EPA 200.7/200.8	0.0005
Radium 226 & 228 combined	EPA 9315/9320	1 pCi/L

Notes:

1. mg/L - Milligrams per liter

2. pCi/L - Picocuries per liter

Table 3.
Groundwater Elevations Summary

Well Name	Top of Casing Elevation	Groundwater Elevation (ft AMSL)																				
		6/30/2016	7/7/2016	7/27/2016	8/1/2016	9/19/2016	10/24/2016	12/12/2016	2/6/2017	3/27/2017	4/24/2017	6/5/2017	8/21/2017	2/19/2018	4/2/2018	5/14/2018	10/15/2018	3/13/2019	4/15/2019	9/23/2019	3/13/2020	9/14/2020
GS-AP-MW-1	**490.68**	382.93	--	DRY	382.95	382.91	382.91	382.93	382.92	382.94	382.93	382.87	382.90	382.93	DRY	382.89	382.88	385.41	382.90	383.18	382.94	382.88
GS-AP-MW-2	**522.03**	376.71	376.55	376.65	376.68	376.46	376.33	376.28	376.54	376.63	376.63	376.58	376.47	376.69	376.59	376.49	376.18	376.50	376.10	373.88	375.94	374.26
GS-AP-MW-3	**512.29**	374.34	--	374.64	374.70	374.67	374.54	374.44	374.81	374.89	374.83	374.66	374.63	375.18	374.99	374.88	374.64	375.16	374.79	372.92	374.66	372.56
GS-AP-MW-4	**507.90**	371.33	--	371.14	371.14	370.85	370.61	371.22	371.89	371.95	371.79	371.68	371.70	372.80	372.49	372.08	371.39	372.97	372.86	369.36	372.65	370.44
GS-AP-MW-5	**487.17**	368.33	--	368.37	368.33	367.97	367.42	367.13	367.75	367.67	367.91	367.23	367.25	368.42	368.07	368.09	367.27	369.39	369.01	--	--	--
GS-AP-MW-6S	**274.67**	258.02	257.82	258.02	258.20	257.67	258.17	258.77	258.70	257.64	257.36	257.36	257.70	256.76	256.75	256.70	256.98	256.84	256.77	257.27	257.81	258.31
GS-AP-MW-6D	**274.50**	263.74	263.70	263.95	264.17	263.67	263.80	264.52	264.45	263.52	263.34	263.02	263.30	262.01	262.11	261.95	263.06	262.62	262.89	263.13	263.58	263.88
GS-AP-MW-7	**313.45**	305.40	305.35	305.41	305.49	305.29	305.50	305.64	305.73	305.48	305.31	305.29	305.35	304.76	304.73	304.58	304.81	303.63	303.43	303.92	303.69	304.17
GS-AP-MW-8	**434.61**	388.30	388.22	387.95	388.05	387.65	386.81	387.48	388.46	388.59	389.32	389.28	389.87	391.02	390.73	391.08	389.43	391.66	391.88	387.52	390.10	389.42
GS-AP-MW-9	**420.04**	369.91	369.76	369.78	369.95	372.11	373.89	374.89	375.28	374.81	375.02	374.67	374.81	375.43	375.70	375.58	375.47	375.94	375.28	--	--	--
GS-AP-MW-10	**468.41**	330.26	--	333.22	333.86	338.12	340.33	342.14	343.26	343.99	344.09	343.47	343.78	343.71	344.09	344.10	343.35	--	344.05	--	--	--
GS-AP-MW-11	**468.34**	381.98	381.94	381.97	382.10	381.78	381.62	381.76	381.92	381.89	381.79	381.81	381.73	382.14	382.13	382.20	382.13	382.54	381.68	--	--	--
GS-AP-MW-12	**450.67**	380.86	380.84	380.90	380.90	380.78	380.70	380.76	380.92	380.82	380.74	380.76	380.72	380.91	380.85	380.84	380.81	380.86	380.30	378.16	380.13	378.74
GS-AP-MW-13	**464.20**	394.80	394.63	394.37	394.33	393.71	393.37	393.00	392.75	392.67	392.74	392.69	392.78	392.39	392.79	393.22	392.99	395.09	395.73	--	--	--
GS-AP-MW-14	**472.40**	371.58	371.48	371.46	371.50	371.26	371.31	371.30	371.55	371.57	371.62	371.54	371.46	372.11	372.11	371.88	371.77	372.46	371.98	--	--	--
GS-AP-MW-15	**454.89**	373.37	373.44	373.36	373.32	373.09	373.24	373.10	373.46	373.86	373.84	373.57	373.54	374.57	374.55	374.40	373.88	375.36	374.58	371.79	374.68	372.02
GS-AP-PZ-16	**462.29**	280.99	--	278.86	278.51	276.29	274.83	273.94	282.67	286.20	287.23	281.58	282.52	--	288.58	--	--	294.54	290.51	276.24	295.03	276.65
GS-AP-MW-16S	**462.42**	405.15	--	361.16	404.77	404.08	403.78	403.64	403.68	404.37	404.63	404.32	403.98	--	403.66	--	--	404.62	404.25	403.02	404.20	403.36
GS-AP-MW-16D	**462.27**	318.51	318.37	317.66	317.69	316.56	315.97	315.57	319.64	322.32	323.51	320.23	320.44	326.22	324.57	324.98	318.72	330.01	325.17	316.03	329.36	316.17
GS-AP-MW-17	**531.88**	350.67	350.39	306.00	349.78	349.31	349.16	349.44	354.10	355.00	354.18	351.51	351.56	358.80	357.07	355.09	277.68	358.92	360.49	349.34	359.09	350.15
GS-AP-MW-18	**403.39**	350.82	350.54	349.88	349.90	349.37	349.30	349.52	354.13	355.05	354.31	351.59	351.67	358.87	357.03	354.99	350.59	359.11	360.66	349.49	360.25	350.36
GS-AP-PZ-18	**402.38**	--	402.38	278.86	278.52	276.36	--	273.90	282.71	--	287.28	281.54	282.54	--	288.46	--	--	294.43	290.47	276.23	294.86	276.72
GS-AP-MW-19	**495.58**	381.98	382.22	382.13	382.10	381.86	382.60	382.76	382.94	383.05	383.05	382.97	383.01	383.40	383.50	383.52	383.72	384.44	384.09	382.96	383.82	382.54
GS-AP-MW-20	**528.15**	322.95	--	322.10	321.92	319.60	319.68	319.05	322.46	325.75	327.55	323.89	324.46	328.52	328.12	329.38	326.44	335.64	329.33	329.45	331.81	320.81
GS-AP-MW-21	**509.48**	346.52	346.50	346.11	346.04	345.05	344.39	344.04	345.97	348.27	349.53	347.30	347.58	349.73	349.98	350.33	346.15	352.67	349.05	343.85	352.02	344.25
GS-AP-PZ-22	**532.38**	--	--	278.73	278.43	276.31	274.79	273.88	282.63	286.16	287.18	281.54	282.46	--	288.52	--	--	294.43	290.48	276.21	295.02	276.58
***GS-AP-MW-7V**	**312.14**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	129.68	--	138.68	144.22	121.83
GS-AP-MW-12V	**481.32**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	392.70	--	389.97	392.16	390.41
GS-AP-MW-17V	**531.45**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	424.68	--	419.40	425.61	423.83
GS-AP-MW-18V	**404.61**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	295.94	--	285.03	297.99	284.79
GS-AP-MW-23H	**304.98**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	276.82	--	275.77	277.13	276.74
GS-AP-MW-24H	**261.35**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	255.11	--	254.99	255.53	255.04
***GS-AP-MW-25H**	**461.79**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	301.10	--	292.31	301.11	300.39
GS-AP-MW-26H	**394.68**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	299.13	--	297.55	299.07	297.98
***GS-AP-MW-27H**	**535.03**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	299.24	--	512.98	305.94	302.84
GS-AP-MW-28H	**513.82**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	359.02	--	349.40	360.20	350.26
GS-AP-MW-29H	**440.95**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	359.98	--	350.64	361.32	351.19
***GS-AP-MW-30H**	**582.49**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	582.49	--	311.02	313.15	307.96
***GS-AP-MW-30HS**	**582.53**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	582.53	--	DRY	535.15	Dry
GS-AP-MW-9V	**420.86**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	368.30	365.63
GS-AP-MW-15V	**455.89**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	314.63	301.24
GS-AP-MW-21V	**509.84**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	334.94
GS-AP-MW-25HA	**462.27**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	285.88
GS-AP-MW-30HA	**582.40**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	295.09	276.84
GS-AP-MW-31H	**587.39**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	355.18	351.86
GS-AP-MW-32H	**550.03**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	309.74	293.82
GS-AP-MW-33HO	**526.79**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	303.00	287.38
GS-AP-MW-34HO	**523.82**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	294.92	288.81
GS-AP-MW-35HO	**553.35**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	311.18	295.81
GS-AP-MW-36H	**536.61**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	313.77	300.53
GS-AP-MW-37H	**459.28**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	326.07	305.24
GS-AP-MW-38H	**345.74**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	298.28	297.55
GS-AP-MW-39H	**451.13**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	152.45	142.01
GS-AP-MW-41HS	**284.65**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	264.27	262.29
GS-AP-MW-41HD	**284.54**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	283.38	282.72
GS-AP-MW-42H	**340.62**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	286.94	287.88
GS-AP-MW-43H	**514.62**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	366.54	364.31
GS-AP-MW-40HO	**357.91**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	276.66
GS-AP-MW-44HO	**506.21**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	364.14
GS-AP-MW-7VR	**313.89**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	233.28
GS-AP-MW-6V	**275.44**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	264.51

Notes:
1. ft. AMSL - feet above mean sea level
2. -- Not Measured
3. TOC for MW-12V has been resurveyed and pending results

Table 4
Relative Percent Difference Calculations

2020 1st Semi-Annual Monitoring Event					2020 2nd Semi-Annual Monitoring Event				
Parameter	Units	Monitoring Point Identification		Relative Percent Difference (RPD %)	Parameter	Units	Monitoring Point Identification		Relative Percent Difference (RPD %)
		GS-AP-MW-6S	GS-AP-MW-6S DUP				GS-AP-MW-6S	GS-AP-MW-6S DUP	
Boron	mg/L	0.867	0.866	0.1	**Boron**	mg/L	0.8	0.8	0.0
Calcium	mg/L	59.3	59.2	0.2	**Calcium**	mg/L	55.9	55.4	0.9
Chloride	mg/L	17.4	17.4	0.0	**Chloride**	mg/L	14.6	14.7	0.7
Fluoride	mg/L	0.231	0.233	0.9	**Sulfate**	mg/L	115	115	0.0
Sulfate	mg/L	148	158	6.5	**TDS**	mg/L	269	276	2.6
TDS	mg/L	328	318	3.1	**Arsenic**	mg/L	0.00611	0.00605	1.0
Arsenic	mg/L	0.00778	0.00786	1.0	**Barium**	mg/L	0.0682	0.0696	2.0
Barium	mg/L	0.0725	0.0736	1.5	**Fluoride**	mg/L	0.308	0.304	1.3
Lithium	mg/L	0.0695	0.0693	0.3	**Lithium**	mg/L	0.066	0.0658	0.3
Molybdenum	mg/L	0.0272	0.0271	0.4	**Molybdenum**	mg/L	0.0427	0.0409	4.3

Parameter	Units	Monitoring Point Identification		Relative Percent Difference (RPD %)	Parameter	Units	Monitoring Point Identification		Relative Percent Difference (RPD %)
		GS-AP-MW-42H	GS-AP-MW-42H DUP				GS-AP-MW-42H	GS-AP-MW-42H DUP	
Calcium	mg/L	149	146	2.0	**Calcium**	mg/L	142	143	0.7
Chloride	mg/L	3.35	3.41	1.8	**Chloride**	mg/L	7.07	7.29	3.1
Fluoride	mg/L	0.13	0.127	2.3	**Sulfate**	mg/L	372	371	0.3
Sulfate	mg/L	449	436	2.9	**TDS**	mg/L	800	802	0.2
TDS	mg/L	850	848	0.2	**Arsenic**	mg/L	0.00912	0.00893	2.1
Arsenic	mg/L	0.00944	0.00947	0.3	**Barium**	mg/L	0.0237	0.0237	0.0
Barium	mg/L	0.0253	0.0253	0.0	**Fluoride**	mg/L	0.121	0.141	15.3
Lithium	mg/L	0.0346	0.0346	0.0	**Lithium**	mg/L	0.0333	0.0335	0.6

Table 4
Relative Percent Difference Calculations

2020 1st Semi-Annual Monitoring Event				
Parameter	Units	Monitoring Point Identification		Relative Percent Difference (RPD %)
		GS-AP-PZ-18	GS-AP-PZ-18 DUP	
Calcium	mg/L	34.5	33.7	2.3
Chloride	mg/L	2.88	2.91	1.0
Fluoride	mg/L	0.396	0.406	2.5
Sulfate	mg/L	355	356	0.3
TDS	mg/L	738	802	8.3
Arsenic	mg/L	0.0275	0.0258	6.4
Barium	mg/L	0.028	0.029	3.5
Lithium	mg/L	0.109	0.108	0.9

2020 2nd Semi-Annual Monitoring Event				
Parameter	Units	Monitoring Point Identification		Relative Percent Difference (RPD %)
		GS-AP-PZ-16	GS-AP-PZ-16 DUP	
Calcium	mg/L	9.69	9.78	0.9
Chloride	mg/L	6.57	6.54	0.5
Sulfate	mg/L	15.2	15.2	0.0
TDS	mg/L	387	384	0.8
Barium	mg/L	0.223	0.228	2.2
Fluoride	mg/L	0.237	0.227	4.3
Lithium	mg/L	0.073	0.0741	1.5

Parameter	Units	Monitoring Point Identification		Relative Percent Difference (RPD %)
		GS-AP-PZ-22	GS-AP-PZ-22 DUP	
Calcium	mg/L	19.3	20.2	4.6
Chloride	mg/L	2.53	2.7	6.5
Fluoride	mg/L	0.387	0.39	0.8
Sulfate	mg/L	70.1	71.3	1.7
TDS	mg/L	412	409	0.7
Barium	mg/L	0.104	0.109	4.7
Lithium	mg/L	0.0734	0.074	0.8

Parameter	Units	Monitoring Point Identification		Relative Percent Difference (RPD %)
		GS-AP-PZ-18	GS-AP-PZ-18 DUP	
Calcium	mg/L	26.2	26.5	1.1
Chloride	mg/L	2.73	2.63	3.7
Sulfate	mg/L	245	242	1.2
TDS	mg/L	648	638	1.6
Arsenic	mg/L	0.0119	0.0117	1.7
Barium	mg/L	0.0432	0.0435	0.7
Fluoride	mg/L	0.392	0.389	0.8
Lithium	mg/L	0.0789	0.0805	2.0

Parameter	Units	Monitoring Point Identification		Relative Percent Difference (RPD %)
		GS-AP-MW-34HO	GS-AP-MW-34HO DUP	
Boron	mg/L	0.0874	0.0874	0.0
Calcium	mg/L	86.9	87.6	0.8
Chloride	mg/L	210	218	3.7
Fluoride	mg/L	0.364	0.358	1.7
Sulfate	mg/L	1390	1350	2.9
TDS	mg/L	2720	2710	0.4
Arsenic	mg/L	0.00308	0.00314	1.9
Barium	mg/L	0.0451	0.0464	2.8
Lithium	mg/L	0.18	0.179	0.6
Molybdenum	mg/L	0.00598	0.00569	5.0

Parameter	Units	Monitoring Point Identification		Relative Percent Difference (RPD %)
		GS-AP-MW-44HO	GS-AP-MW-44HO DUP	
Boron	mg/L	0.0404	0.0395	2.3
Calcium	mg/L	2.94	2.84	3.5
Chloride	mg/L	36.2	35.9	0.8
Fluoride	mg/L	0.221	0.208	6.1
Sulfate	mg/L	71.6	72.5	1.2
TDS	mg/L	564	548	2.9
Antimony	mg/L	0.000819	0.000848	3.5
Arsenic	mg/L	0.00184	0.00194	5.3
Barium	mg/L	0.0783	0.0778	0.6
Lithium	mg/L	0.0494	0.0488	1.2
Molybdenum	mg/L	0.00858	0.00878	2.3

Table 5.
Summary of Background Levels and Groundwater Protection Standards

Analyte	Units	Background	State GWPS
Antimony	mg/L	0.003	0.006
Arsenic	mg/L	0.005	0.01
Barium	mg/L	0.208	2
Beryllium	mg/L	0.003	0.004
Cadmium	mg/L	0.001	0.005
Chromium	mg/L	0.01	0.1
Cobalt	mg/L	0.005	0.006
Combined Radium-226/228	pCi/L	1.03	5
Fluoride	mg/L	0.2499	4
Lead	mg/L	0.005	0.015
Lithium	mg/L	0.0809	0.04
Mercury	mg/L	0.0005	0.002
Molybdenum	mg/L	0.01	0.1
Selenium	mg/L	0.01	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 when determining the groundwater protection standard (GWPS)

under 40 CFR §257.95(h) and ADEM Rule 335-13-15-.06(h).

4. Lithium background derived from newly installed upgradient well GS-AP-MW-17V. Well will be formally evaluated after 4 sampling events.

TABLE 6.
FIRST SEMI-ANNUAL MONITORING EVENT ANALYTICAL SUMMARY

		FIELD PARAMETERS				
Well	**Sample Date**	**Conductivity**	**DO**	**Temperature**	**ORP**	**Turbidity**
UNITS		**uS/cm**	**mg/L**	**C**	**mv**	**NTU**
GS-AP-MW-02	**3/25/2020**	536.55	0.74	16.85	-150.15	1.47
GS-AP-MW-02	**5/13/2020**	525.92	0.11	17.62	-241.21	1.53
GS-AP-MW-06	**3/17/2020**	493.38	3.47	15.34	-41.81	3.82
GS-AP-MW-06D	**3/17/2020**	496.35	0.12	16.59	-184.37	1.28
GS-AP-MW-07	**3/17/2020**	524.28	0.31	16.89	-190.7	48.91
GS-AP-MW-08	**3/18/2020**	130.76	1	19.51	179.23	2.11
GS-AP-MW-12	**3/18/2020**	362.88	0.32	18.51	-144.01	2.05
GS-AP-MW-15	**3/18/2020**	1444.85	0.31	18.92	-241.79	2.71
GS-AP-MW-16D	**3/24/2020**	353.51	0.46	19.4	-84.89	1.38
GS-AP-MW-17	**3/16/2020**	750.21	0.6	18.79	-161.14	1.19
GS-AP-MW-17	**5/12/2020**	894.85	0.49	19.18	-166.1	0.76
GS-AP-MW-18	**3/18/2020**	922.27	0.15	16.71	-134.06	9.22
GS-AP-MW-19	**3/24/2020**	505.87	0.31	18.4	-177.54	0.95
GS-AP-MW-21	**3/18/2020**	1740.42	0.65	19.64	-168.92	1.16
GS-AP-MW-09V	**3/23/2020**	413.93	0.58	17.9	-230.34	1.21
GS-AP-MW-12V	**3/24/2020**	315.14	0.76	18.3	-165.35	67.8
GS-AP-MW-15V	**3/18/2020**	1735.33	0.44	19.8	-152.62	6.64
GS-AP-MW-17V	**3/25/2020**	538.31	0.57	19.37	-156.64	1.22
GS-AP-MW-18V	**3/25/2020**	447.72	0.82	19.34	-159.35	2.11
GS-AP-MW-21V	**3/23/2020**	5570.92	0.53	18.13	-221.93	2.8
GS-AP-MW-23H	**3/17/2020**	827.1	0.15	18.05	-37.21	1.71
GS-AP-MW-24H	**3/18/2020**	421.28	0.1	17.68	-105.27	4.51
GS-AP-MW-25HA	**3/24/2020**	1450.68	0.54	19.49	-191.05	8.74

Notes:

1. J value indicates the result is greater that or equal to the Method Detection Limit (MDL) and less that the Practical Quantitation Limit (PQL).
2. Non-Detect indicates the result was not detected above the MDL and is considered a non-detect.
3. U - Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurment.
4. TDS - Total Dissolved Solids

TABLE 6.
FIRST SEMI-ANNUAL MONITORING EVENT ANALYTICAL SUMMARY

		FIELD PARAMETERS				
Well	**Sample Date**	**Conductivity**	**DO**	**Temperature**	**ORP**	**Turbidity**
UNITS		**uS/cm**	**mg/L**	**C**	**mv**	**NTU**
GS-AP-MW-26H	**3/25/2020**	435.93	0.51	19.31	-92.92	44.7
GS-AP-MW-28H	**3/16/2020**	692.82	0.35	18.23	-198.43	4.11
GS-AP-MW-28H	**5/12/2020**	721.84	0.44	19.53	-168.63	7.6
GS-AP-MW-29H	**3/25/2020**	609.5	0.33	17.21	-139.37	2.49
GS-AP-MW-30HA	**3/18/2020**	963.86	0.49	17.98	-149.33	2.13
GS-AP-MW-30HA	**5/13/2020**	980.49	0.00	17.87	-298.89	1.26
GS-AP-MW-31H	**3/18/2020**	537.97	0.00	18.22	-255.4	8.45
GS-AP-MW-32H	**3/24/2020**	555.29	0.02	17.89	-197.4	2.19
GS-AP-MW-33HO	**3/17/2020**	1453.18	0.52	21.05	-324.45	6.21
GS-AP-MW-33HO	**5/13/2020**	773.62	0.13	19.91	-322.96	1.19
GS-AP-MW-34HO	**3/16/2020**	3377.22	0.33	18.71	-298.34	2.59
GS-AP-MW-34HO	**5/12/2020**	3587.61	0.00	21.8	-335.97	4.63
GS-AP-MW-35HO	**3/17/2020**	597.97	0.82	17.06	-128.06	3.84
GS-AP-MW-35HO	**5/12/2020**	510.05	0.09	18.72	-246.03	1.84
GS-AP-MW-36H	**3/17/2020**	555.93	0.42	18.28	-138.64	1.16
GS-AP-MW-36H	**5/13/2020**	492.41	0.23	18.52	-166.04	0.69
GS-AP-MW-38H	**3/24/2020**	550.85	0.64	18.41	-172.83	7.24
GS-AP-MW-41HD	**3/18/2020**	476.11	0.14	16.15	-27.76	2.45
GS-AP-MW-42H	**3/24/2020**	1089.07	0.13	17.52	-4.07	2.13
GS-AP-MW-43HO	**3/25/2020**	1270.87	1.09	17.15	-298.74	2.96
GS-AP-PZ-16	**3/24/2020**	610.89	0.03	17.58	-186.37	5.76
GS-AP-PZ-18	**3/25/2020**	1317.79	0.26	17.28	-102.62	4.49
GS-AP-PZ-22	**3/24/2020**	660.33	0.04	17.74	-186.94	7.39
GS-AP-MW-44HO	**8/27/2020**	733.57	0.89	21.73	-203.89	7.87
GS-AP-MW-6V	**9/8/2020**	1136.43	0.33	21.69	53.79	5.84

Notes:

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3. U - Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurment.
4. TDS - Total Dissolved Solids

TABLE 6.
FIRST SEMI-ANNUAL MONITORING EVENT ANALYTICAL SUMMARY

		APPENDIX III						
Well	**Sample Date**	**Boron**	**Calcium**	**Chloride**	**Fluoride**	**pH**	**Sulfate**	**TDS**
UNITS		**mg/L**	**mg/L**	**mg/L**	**mg/L**	**SU**	**mg/L**	**mg/L**
GS-AP-MW-02	**3/25/2020**	0.163	0.518	9.7	0.855	9.29	38.5	337
GS-AP-MW-02	**5/13/2020**	0.154	0.493(J)	8.25	0.777	9.43	33.6	328
GS-AP-MW-06	**3/17/2020**	0.867	59.3	17.4	0.231	6.92	148	328
GS-AP-MW-06D	**3/17/2020**	1.17	57.2	10.1	0.132	7.39	59.5	303
GS-AP-MW-07	**3/17/2020**	1.58	13.5	6.65	0.107	7.72	149	334
GS-AP-MW-08	**3/18/2020**	Non-Detect	4.51	4.35	0.108	5.81	4.86	90.7
GS-AP-MW-12	**3/18/2020**	0.0449(J)	44	4.22	0.122	7.56	20.8	236
GS-AP-MW-15	**3/18/2020**	0.0596(J)	5.25	8	0.647	11.47	15.9	515
GS-AP-MW-16D	**3/24/2020**	Non-Detect	34.1	2.88	0.109	7.46	14.1	205
GS-AP-MW-17	**3/16/2020**	0.0894(J)	3	9.95	0.261	8.45	48.6	516
GS-AP-MW-17	**5/12/2020**	0.0862(J)	2.95	9.16	0.263	8.42	44.4	493
GS-AP-MW-18	**3/18/2020**	0.492	90.9	6.68	0.437	6.99	216	618
GS-AP-MW-19	**3/24/2020**	0.0398(J)	41.7	6.29	0.327	7.93	15.2	302
GS-AP-MW-21	**3/18/2020**	0.0824(J)	2.35	49.5	0.234	11.37	228	661
GS-AP-MW-09V	**3/23/2020**	0.0316(J)	42.9	5.13	0.187	6.97	18.7	268
GS-AP-MW-12V	**3/24/2020**	0.0343(J)	48.9	4.46	0.155	7.8	Non-Detect	206
GS-AP-MW-15V	**3/18/2020**	0.0565(J)	8.01	108	0.243	10.89	261	873
GS-AP-MW-17V	**3/25/2020**	0.0482(J)	31.1	3.72	0.243	7.63	9.69	364
GS-AP-MW-18V	**3/25/2020**	0.0834(J)	6.18	6.23	0.353	8.19	16.5	287
GS-AP-MW-21V	**3/23/2020**	0.122	110	981	0.494	7.93	1050	3410
GS-AP-MW-23H	**3/17/2020**	0.0504(J)	79.8	2.62	0.241	5.95	356	626
GS-AP-MW-24H	**3/18/2020**	0.0811(J)	44	3.5	0.206	7	12.2	250
GS-AP-MW-25HA	**3/24/2020**	0.146	2.42	38	1.77	8.67	201	948

Notes:

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3. U - Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurment.
4. TDS - Total Dissolved Solids

TABLE 6.
FIRST SEMI-ANNUAL MONITORING EVENT ANALYTICAL SUMMARY

		APPENDIX III						
Well	**Sample Date**	**Boron**	**Calcium**	**Chloride**	**Fluoride**	**pH**	**Sulfate**	**TDS**
UNITS		**mg/L**	**mg/L**	**mg/L**	**mg/L**	**SU**	**mg/L**	**mg/L**
GS-AP-MW-26H	**3/25/2020**	Non-Detect	28.6	2.73	0.131	7.24	3.25	269
GS-AP-MW-28H	**3/16/2020**	0.0751(J)	2.4	10.6	0.183	8.31	9.91	449
GS-AP-MW-28H	**5/12/2020**	0.0719(J)	2.83	12.7	0.195	8.35	14.3	464
GS-AP-MW-29H	**3/25/2020**	Non-Detect	27.8	3.1	0.194	7.45	29.4	371
GS-AP-MW-30HA	**3/18/2020**	0.0734(J)	36	5.14	0.634	7.2	184	612
GS-AP-MW-30HA	**5/13/2020**	0.0747(J)	35.3	4.24	0.833	7.27	194	624
GS-AP-MW-31H	**3/18/2020**	Non-Detect	6.06	41.3	0.15	8.73	50.4	326
GS-AP-MW-32H	**3/24/2020**	0.0492(J)	2.62	20.5	0.18	8.47	33.2	331
GS-AP-MW-33HO	**3/17/2020**	0.066(J)	42.3	108	0.202	7.67	172	827
GS-AP-MW-33HO	**5/13/2020**	0.0409(J)	25.2	63.3	0.191	7.7	60	457
GS-AP-MW-34HO	**3/16/2020**	0.0827(J)	83.8	101	0.338	7.35	1480	2460
GS-AP-MW-34HO	**5/12/2020**	0.0929(J)	80.4	148	0.37	7.44	1330	2440
GS-AP-MW-35HO	**3/17/2020**	Non-Detect	5.27	23.9	0.166	8.4	40.1	365
GS-AP-MW-35HO	**5/12/2020**	Non-Detect	3.04	14.5	0.167	8.46	22.6	311
GS-AP-MW-36H	**3/17/2020**	0.0394(J)	3.45	29.4	0.214	8.44	57.1	362
GS-AP-MW-36H	**5/13/2020**	0.0359(J)	2.93	27.2	0.224	8.52	47.8	333
GS-AP-MW-38H	**3/24/2020**	0.0468(J)	9.33	12.6	0.291	7.99	16.7	335
GS-AP-MW-41HD	**3/18/2020**	1.45	56.6	6.02	0.165	7.2	122	309
GS-AP-MW-42H	**3/24/2020**	Non-Detect	149	3.35	0.13	6.28	449	850
GS-AP-MW-43HO	**3/25/2020**	0.112	4.11	90.6	0.204	8.24	327	930
GS-AP-PZ-16	**3/24/2020**	0.0772(J)	13.9	5.72	0.228	7.89	27.7	381
GS-AP-PZ-18	**3/25/2020**	0.0568(J)	34.5	2.88	0.396	6.8	355	738
GS-AP-PZ-22	**3/24/2020**	0.0521(J)	19.3	2.53	0.387	7.77	70.1	412
GS-AP-MW-44HO	**8/27/2020**	0.0366(J)	2.89	27.1	0.174	8.9	33.5	435
GS-AP-MW-6V	**9/8/2020**	0.0974(J)	1.8	50.4	4.46	8.67	9.06	810

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3. U - Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurment.
4. TDS - Total Dissolved Solids

TABLE 6.
FIRST SEMI-ANNUAL MONITORING EVENT ANALYTICAL SUMMARY

		APPENDIX IV						
Well	**Sample Date**	**Antimony**	**Arsenic**	**Barium**	**Beryllium**	**Cadmium**	**Chromium**	**Cobalt**
UNITS		**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**
GS-AP-MW-02	**3/25/2020**	Non-Detect	Non-Detect	0.0602	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-2	**5/13/2020**	Non-Detect	Non-Detect	0.0528	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-06	**3/17/2020**	Non-Detect	0.00778	0.0725	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-06D	**3/17/2020**	Non-Detect	0.105	0.638	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-07	**3/17/2020**	Non-Detect	0.285	0.174	Non-Detect	Non-Detect	0.0076(J)	0.00476(J)
GS-AP-MW-08	**3/18/2020**	Non-Detect	Non-Detect	0.00507(J)	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-12	**3/18/2020**	0.0022(J)	0.00693	0.195	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-15	**3/18/2020**	0.000976(J)	0.0217	0.14	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-16D	**3/24/2020**	Non-Detect	Non-Detect	0.323	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-17	**3/16/2020**	Non-Detect	0.00268(J)	0.0883	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-17	**5/12/2020**	Non-Detect	0.00326(J)	0.0941	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-18	**3/18/2020**	Non-Detect	0.00583	0.0587	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-19	**3/24/2020**	Non-Detect	0.00313(J)	0.324	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-21	**3/18/2020**	Non-Detect	Non-Detect	0.105	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-09V	**3/23/2020**	Non-Detect	Non-Detect	0.215	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-12V	**3/24/2020**	0.00128(J)	0.00266(J)	1.43	Non-Detect	Non-Detect	0.00774(J)	0.00277(J)
GS-AP-MW-15V	**3/18/2020**	0.0028(J)	0.011	0.155	Non-Detect	Non-Detect	0.00716(J)	Non-Detect
GS-AP-MW-17V	**3/25/2020**	Non-Detect	Non-Detect	0.314	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-18V	**3/25/2020**	Non-Detect	0.0063	0.234	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-21V	**3/23/2020**	0.000831(J)	0.0159	0.0574	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-23H	**3/17/2020**	Non-Detect	0.0524	0.0143	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-24H	**3/18/2020**	Non-Detect	Non-Detect	0.964	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-25HA	**3/24/2020**	Non-Detect	0.00798	0.147	Non-Detect	Non-Detect	Non-Detect	Non-Detect

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4. TDS - Total Dissolved Solids

TABLE 6.
FIRST SEMI-ANNUAL MONITORING EVENT ANALYTICAL SUMMARY

		APPENDIX IV						
Well	**Sample Date**	**Antimony**	**Arsenic**	**Barium**	**Beryllium**	**Cadmium**	**Chromium**	**Cobalt**
UNITS		**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**
GS-AP-MW-26H	**3/25/2020**	Non-Detect	Non-Detect	0.868	Non-Detect	Non-Detect	0.00547(J)	0.00207(J)
GS-AP-MW-28H	**3/16/2020**	Non-Detect	Non-Detect	0.0411	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-28H	**5/12/2020**	Non-Detect	0.00135(J)	0.0436	Non-Detect	Non-Detect	0.00281(J)	Non-Detect
GS-AP-MW-29H	**3/25/2020**	Non-Detect	0.00141(J)	0.527	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-30HA	**3/18/2020**	Non-Detect	0.00813	0.0791	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-30HA	**5/13/2020**	Non-Detect	0.00779	0.0819	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-31H	**3/18/2020**	Non-Detect	0.0012(J)	0.106	Non-Detect	Non-Detect	0.00264(J)	Non-Detect
GS-AP-MW-32H	**3/24/2020**	Non-Detect	Non-Detect	0.0362	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-33HO	**3/17/2020**	Non-Detect	0.0044(J)	0.329	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-33HO	**5/13/2020**	Non-Detect	0.00308(J)	0.324	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-34HO	**3/16/2020**	Non-Detect	0.00351(J)	0.0309	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-34HO	**5/12/2020**	Non-Detect	0.00668	0.0379	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-35HO	**3/17/2020**	Non-Detect	0.00105(J)	0.0426	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-35HO	**5/12/2020**	Non-Detect	Non-Detect	0.0472	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-36H	**3/17/2020**	Non-Detect	0.00171(J)	0.0353	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-36H	**5/13/2020**	Non-Detect	0.00122(J)	0.03	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-38H	**3/24/2020**	Non-Detect	0.00302(J)	0.253	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-41HD	**3/18/2020**	Non-Detect	Non-Detect	0.0393	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-42H	**3/24/2020**	Non-Detect	0.00944	0.0253	Non-Detect	Non-Detect	Non-Detect	0.00218(J)
GS-AP-MW-43HO	**3/25/2020**	Non-Detect	0.00509	0.0927	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-PZ-16	**3/24/2020**	Non-Detect	Non-Detect	0.295	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-PZ-18	**3/25/2020**	Non-Detect	0.0275	0.028	Non-Detect	Non-Detect	Non-Detect	0.00409(J)
GS-AP-PZ-22	**3/24/2020**	Non-Detect	0.00367(J)	0.104	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-44HO	**8/27/2020**	0.0013(J)	0.00321(J)	0.0867	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-6V	**9/8/2020**	Non-Detect	Non-Detect	0.164	Non-Detect	Non-Detect	Non-Detect	Non-Detect

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4. TDS - Total Dissolved Solids

TABLE 6.
FIRST SEMI-ANNUAL MONITORING EVENT ANALYTICAL SUMMARY

		APPENDIX IV							
Well	**Sample Date**	**Combined Radium 226 + 228**	**Fluoride**	**Lead**	**Lithium**	**Mercury**	**Molybdenum**	**Selenium**	**Thallium**
UNITS		**pCi/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**
GS-AP-MW-02	**3/25/2020**	4	0.855	Non-Detect	0.0434	Non-Detect	0.00343(J)	Non-Detect	Non-Detect
GS-AP-MW-2	**5/13/2020**	0.289(U)	0.777	Non-Detect	0.0409	Non-Detect	0.00224(J)	Non-Detect	Non-Detect
GS-AP-MW-06	**3/17/2020**	Non-Detect	0.231	Non-Detect	0.0695	Non-Detect	0.0272	Non-Detect	Non-Detect
GS-AP-MW-06D	**3/17/2020**	0.629	0.132	Non-Detect	0.292	Non-Detect	0.00959(J)	Non-Detect	Non-Detect
GS-AP-MW-07	**3/17/2020**	1.2	0.107	0.00386(J)	0.161	Non-Detect	0.193	Non-Detect	Non-Detect
GS-AP-MW-08	**3/18/2020**	Non-Detect	0.108	Non-Detect	Non-Detect	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-12	**3/18/2020**	0.605	0.122	Non-Detect	0.0297	Non-Detect	0.00444(J)	Non-Detect	Non-Detect
GS-AP-MW-15	**3/18/2020**	0.939	0.647	Non-Detect	0.378	Non-Detect	0.0673	Non-Detect	Non-Detect
GS-AP-MW-16D	**3/24/2020**	0.636	0.109	Non-Detect	0.035	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-17	**3/16/2020**	Non-Detect	0.261	Non-Detect	0.0665	Non-Detect	0.00504(J)	Non-Detect	Non-Detect
GS-AP-MW-17	**5/12/2020**	0.0339(U)	0.263	Non-Detect	0.0602	Non-Detect	0.00436(J)	Non-Detect	Non-Detect
GS-AP-MW-18	**3/18/2020**	Non-Detect	0.437	Non-Detect	0.116	Non-Detect	0.00927(J)	Non-Detect	Non-Detect
GS-AP-MW-19	**3/24/2020**	1.07	0.327	Non-Detect	0.0417	Non-Detect	0.00605(J)	Non-Detect	Non-Detect
GS-AP-MW-21	**3/18/2020**	0.732	0.234	Non-Detect	0.379	Non-Detect	0.102	Non-Detect	Non-Detect
GS-AP-MW-09V	**3/23/2020**	Non-Detect	0.187	Non-Detect	0.0309	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-12V	**3/24/2020**	Non-Detect	0.155	0.00279(J)	0.0462	Non-Detect	0.00454(J)	Non-Detect	Non-Detect
GS-AP-MW-15V	**3/18/2020**	Non-Detect	0.243	Non-Detect	0.208	Non-Detect	0.0327	Non-Detect	Non-Detect
GS-AP-MW-17V	**3/25/2020**	Non-Detect	0.243	Non-Detect	0.0646	Non-Detect	0.00508(J)	Non-Detect	Non-Detect
GS-AP-MW-18V	**3/25/2020**	Non-Detect	0.353	Non-Detect	0.0244	Non-Detect	0.0217	Non-Detect	Non-Detect
GS-AP-MW-21V	**3/23/2020**	0.982	0.494	Non-Detect	0.146	Non-Detect	0.117	Non-Detect	Non-Detect
GS-AP-MW-23H	**3/17/2020**	0.989	0.241	Non-Detect	0.0327	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-24H	**3/18/2020**	0.788	0.206	Non-Detect	0.0264	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-25HA	**3/24/2020**	Non-Detect	1.77	Non-Detect	0.0461	Non-Detect	0.0176	Non-Detect	Non-Detect

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4. TDS - Total Dissolved Solids

TABLE 6.
FIRST SEMI-ANNUAL MONITORING EVENT ANALYTICAL SUMMARY

		APPENDIX IV							
Well	**Sample Date**	**Combined Radium 226 + 228**	**Fluoride**	**Lead**	**Lithium**	**Mercury**	**Molybdenum**	**Selenium**	**Thallium**
UNITS		**pCi/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**
GS-AP-MW-26H	**3/25/2020**	Non-Detect	0.131	0.0019(J)	0.0946	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-28H	**3/16/2020**	Non-Detect	0.183	Non-Detect	0.0627	Non-Detect	0.00463(J)	Non-Detect	Non-Detect
GS-AP-MW-28H	**5/12/2020**	0.425(U)	0.195	Non-Detect	0.0569	Non-Detect	0.00644(J)	Non-Detect	Non-Detect
GS-AP-MW-29H	**3/25/2020**	Non-Detect	0.194	Non-Detect	0.0528	Non-Detect	0.0025(J)	Non-Detect	Non-Detect
GS-AP-MW-30HA	**3/18/2020**	2.26	0.634	Non-Detect	0.0528	Non-Detect	0.00603(J)	Non-Detect	Non-Detect
GS-AP-MW-30HA	**5/13/2020**	0.604	0.833	Non-Detect	0.0536	Non-Detect	0.00519(J)	Non-Detect	Non-Detect
GS-AP-MW-31H	**3/18/2020**	Non-Detect	0.15	Non-Detect	0.0347	Non-Detect	0.0102	Non-Detect	Non-Detect
GS-AP-MW-32H	**3/24/2020**	Non-Detect	0.18	Non-Detect	0.0428	Non-Detect	0.0826	Non-Detect	Non-Detect
GS-AP-MW-33HO	**3/17/2020**	2.14	0.202	Non-Detect	0.0516	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-33HO	**5/13/2020**	0.415(U)	0.191	Non-Detect	0.0455	Non-Detect	0.00626(J)	Non-Detect	Non-Detect
GS-AP-MW-34HO	**3/16/2020**	Non-Detect	0.338	Non-Detect	0.205	Non-Detect	0.00386(J)	Non-Detect	Non-Detect
GS-AP-MW-34HO	**5/12/2020**	0.345(U)	0.37	Non-Detect	0.18	Non-Detect	0.0088(J)	Non-Detect	Non-Detect
GS-AP-MW-35HO	**3/17/2020**	7.32	0.166	Non-Detect	0.074	Non-Detect	0.00222(J)	Non-Detect	Non-Detect
GS-AP-MW-35HO	**5/12/2020**	1.02	0.167	Non-Detect	0.0693	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-36H	**3/17/2020**	4.33	0.214	Non-Detect	0.0342	Non-Detect	0.00571(J)	Non-Detect	Non-Detect
GS-AP-MW-36H	**5/13/2020**	-0.225(U)	0.224	Non-Detect	0.0337	Non-Detect	0.00475(J)	Non-Detect	Non-Detect
GS-AP-MW-38H	**3/24/2020**	0.862	0.291	Non-Detect	0.0632	Non-Detect	0.00445(J)	Non-Detect	Non-Detect
GS-AP-MW-41HD	**3/18/2020**	0.64	0.165	Non-Detect	0.311	Non-Detect	0.0158	Non-Detect	Non-Detect
GS-AP-MW-42H	**3/24/2020**	Non-Detect	0.13	Non-Detect	0.0346	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-43HO	**3/25/2020**	Non-Detect	0.204	Non-Detect	0.0505	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-PZ-16	**3/24/2020**	0.847	0.228	Non-Detect	0.0714	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-PZ-18	**3/25/2020**	Non-Detect	0.396	Non-Detect	0.109	Non-Detect	0.00919(J)	Non-Detect	Non-Detect
GS-AP-PZ-22	**3/24/2020**	0.878	0.387	Non-Detect	0.0734	Non-Detect	0.00333(J)	Non-Detect	Non-Detect
GS-AP-MW-44HO	**8/27/2020**	0.798	0.174	Non-Detect	0.0411	Non-Detect	0.0071(J)	Non-Detect	Non-Detect
GS-AP-MW-6V	**9/8/2020**	-0.0377(U)	4.46	Non-Detect	0.138	Non-Detect	0.00317(J)	Non-Detect	Non-Detect

Notes:

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2. Non-Detect indicates the result was not detected above the MDL and is considered a non-detect.
3. U - Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurment.
4. TDS - Total Dissolved Solids

TABLE 7.
SECOND SEMI-ANNUAL MONITORING EVENT ANALYTICAL SUMMARY

		FIELD PARAMETERS				
Well	**Sample Date**	**Conductivity**	**DO**	**Temperature**	**ORP**	**Turbidity**
UNITS		**uS/cm**	**mg/L**	**C**	**mv**	**NTU**
GS-AP-MW-2	**9/22/2020**	510.12	0.4	18.2	-228.81	1.61
GS-AP-MW-6D	**9/17/2020**	502.97	0.16	20.58	-142.48	1.01
GS-AP-MW-6S	**9/16/2020**	427.21	1.37	23.47	-54.48	4.14
GS-AP-MW-6V	**9/15/2020**	1402.4	0.39	21.26	-117.33	7.49
GS-AP-MW-7	**9/16/2020**	527.64	0.35	18.35	-146.41	>10
GS-AP-MW-8	**9/21/2020**	94.1	1.68	20.34	117.41	4.22
GS-AP-MW-9V	**9/22/2020**	430.38	0.65	19.07	-246.83	2.8
GS-AP-MW-12	**9/23/2020**	324.73	0.34	18.99	-185.88	1.5
GS-AP-MW-12V	**9/23/2020**	247.65	0.55	19.02	-111.31	>10
GS-AP-MW-15	**9/23/2020**	1435.59	0.3	20.02	-247.75	1.13
GS-AP-MW-15V	**9/21/2020**	1858.9	0.18	19.89	-207.15	5.91
GS-AP-MW-16D	**9/22/2020**	331.72	0.63	17.66	-45.4	0.4
GS-AP-MW-16S	**9/21/2020**	602.8	2.01	18.32	-235.43	9.01
GS-AP-MW-17	**9/21/2020**	1024.09	0.41	21.2	-136.38	0.63
GS-AP-MW-17V	**9/23/2020**	532.61	0.26	19.56	-143.42	0.48
GS-AP-MW-18	**9/23/2020**	541.36	0.14	16.99	-191.44	2.93
GS-AP-MW-18V	**9/22/2020**	365.12	0.06	19.51	-239.9	1.89
GS-AP-MW-19	**9/22/2020**	470.98	0.32	18.07	-198.75	0.53
GS-AP-MW-21	**9/23/2020**	1124.19	0.62	19.03	-171.55	1.47
GS-AP-MW-21V	**9/23/2020**	4568.51	0.8	22.01	-130.42	0.76

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3. U - Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurment.
4. TDS - Total Dissolved Solids

TABLE 7.
SECOND SEMI-ANNUAL MONITORING EVENT ANALYTICAL SUMMARY

		FIELD PARAMETERS				
Well	**Sample Date**	**Conductivity**	**DO**	**Temperature**	**ORP**	**Turbidity**
UNITS		**uS/cm**	**mg/L**	**C**	**mv**	**NTU**
GS-AP-MW-23H	**9/17/2020**	825.61	0.55	18.35	-9.79	2.47
GS-AP-MW-24H	**9/17/2020**	405.22	0.15	19.33	-83.8	2.78
GS-AP-MW-25HA	**9/17/2020**	1481.12	0.02	19.44	-200.46	3.01
GS-AP-MW-26H	**9/21/2020**	417.46	0.74	20.38	-103.05	>10
GS-AP-MW-28H	**9/22/2020**	692.86	0.24	18.97	-185.76	2.97
GS-AP-MW-29H	**9/22/2020**	616.77	0.27	18.23	-149.72	2.86
GS-AP-MW-30HA	**9/21/2020**	960.45	0.13	20.96	-300.41	0.36
GS-AP-MW-31H	**9/22/2020**	446.36	0.07	17.92	-284.46	2.77
GS-AP-MW-32H	**9/21/2020**	606.19	0.41	20.98	-141	1.65
GS-AP-MW-36H	**9/17/2020**	561.02	0.18	22.22	-164.2	0.93
GS-AP-MW-38H	**9/22/2020**	606.59	0.2	18.91	-251.52	3.9
GS-AP-MW-40H	**9/22/2020**	1690.9	0.39	18.88	-66.34	4.76
GS-AP-MW-41HD	**9/17/2020**	474.23	0.16	18.88	-17.1	1.47
GS-AP-MW-42H	**9/22/2020**	861.97	0.2	17.91	-8.88	8.42
GS-AP-MW-43H	**9/22/2020**	1333.27	0.24	18.92	-303.21	2.86
GS-AP-PZ-16	**9/17/2020**	607.69	0.2	21.15	-205.46	2.17
GS-AP-PZ-18	**9/22/2020**	1094.45	0.04	17.9	-145.19	2.24
GS-AP-PZ-22	**9/17/2020**	646.98	0.12	20.48	-224.73	2.3
GS-AP-MW-33HO	**9/15/2020**	898.65	0.15	21.78	-235.56	0.62
GS-AP-MW-34HO	**9/16/2020**	3904.78	0.09	20.08	-309.48	1.54
GS-AP-MW-35HO	**9/16/2020**	527.09	0.22	18.64	-170.34	6.14
GS-AP-MW-44HO	**9/15/2020**	926.82	0.09	19.08	-239.06	4.13

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4. TDS - Total Dissolved Solids

TABLE 7.
SECOND SEMI-ANNUAL MONITORING EVENT ANALYTICAL SUMMARY

		APPENDIX III						
Well	**Sample Date**	**Boron**	**Calcium**	**Chloride**	**Fluoride**	**pH**	**Sulfate**	**TDS**
UNITS		**mg/L**	**mg/L**	**mg/L**	**mg/L**	**SU**	**mg/L**	**mg/L**
GS-AP-MW-2	**9/22/2020**	0.133	0.503	6.33	0.921	9.41	21.5	318
GS-AP-MW-6D	**9/17/2020**	1.22	61.5	10.5	0.133	7.41	65.1	314
GS-AP-MW-6S	**9/16/2020**	0.8	55.9	14.6	0.308	6.93	115	269
GS-AP-MW-6V	**9/15/2020**	0.0974(J)	1.74	49.8	4.59	8.76	7.02	857
GS-AP-MW-7	**9/16/2020**	1.54	12.2	6.17	0.126	7.74	131	351
GS-AP-MW-8	**9/21/2020**	Non-Detect	5.19	3.22	0.125	5.75	4.69	94
GS-AP-MW-9V	**9/22/2020**	0.0348(J)	45.3	7.57	0.174	7.08	21.2	285
GS-AP-MW-12	**9/23/2020**	0.0446(J)	45.9	3.15	0.12	8.3	19.1	216
GS-AP-MW-12V	**9/23/2020**	0.0322(J)	44.8	4.63	0.176	8.84	6.56	195
GS-AP-MW-15	**9/23/2020**	0.0537(J)	3.83	6	0.452	11.89	13.2	600
GS-AP-MW-15V	**9/21/2020**	0.0712(J)	8.2	171	0.372	10.07	348	1090
GS-AP-MW-16D	**9/22/2020**	Non-Detect	32	2.94	0.123	7.52	13.6	218
GS-AP-MW-16S	**9/21/2020**	0.0777(J)	10.9	5.42	0.572	9.99	2.95	426
GS-AP-MW-17	**9/21/2020**	0.102	3.73	13.8	0.371	8.22	104	658
GS-AP-MW-17V	**9/23/2020**	0.0478(J)	29.3	3.74	0.278	7.53	11.1	368
GS-AP-MW-18	**9/23/2020**	0.491	38.8	5.29	0.575	7.54	88.9	380
GS-AP-MW-18V	**9/22/2020**	0.0769(J)	5.12	5.57	0.368	8.35	14.4	290
GS-AP-MW-19	**9/22/2020**	0.037(J)	46.9	6.6	0.339	8.17	16.9	300
GS-AP-MW-21	**9/23/2020**	0.0871(J)	1.96	56.9	0.208	10.71	248	642
GS-AP-MW-21V	**9/23/2020**	0.126	119	1100	0.641	7.81	1120	3690

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4. TDS - Total Dissolved Solids

TABLE 7.
SECOND SEMI-ANNUAL MONITORING EVENT ANALYTICAL SUMMARY

		APPENDIX III						
Well	**Sample Date**	**Boron**	**Calcium**	**Chloride**	**Fluoride**	**pH**	**Sulfate**	**TDS**
UNITS		**mg/L**	**mg/L**	**mg/L**	**mg/L**	**SU**	**mg/L**	**mg/L**
GS-AP-MW-23H	**9/17/2020**	0.0637(J)	87.2	1.92	0.117	5.74	361	648
GS-AP-MW-24H	**9/17/2020**	0.069(J)	45.5	3.19	0.217	7.02	6.7	250
GS-AP-MW-25HA	**9/17/2020**	0.138	1.99	38.3	1.93	8.83	173	960
GS-AP-MW-26H	**9/21/2020**	0.0334(J)	27.6	3.25	0.151	7.25	4.54	287
GS-AP-MW-28H	**9/22/2020**	0.0728(J)	2.37	12.2	0.181	8.24	10.5	456
GS-AP-MW-29H	**9/22/2020**	0.175	28.1	13.2	0.198	7.42	81.6	430
GS-AP-MW-30HA	**9/21/2020**	0.0814(J)	29.4	3.45	0.872	7.56	128	592
GS-AP-MW-31H	**9/22/2020**	Non-Detect	5.31	27.3	0.148	8.76	22.1	298
GS-AP-MW-32H	**9/21/2020**	0.0455(J)	3	28.2	0.202	8.15	38.7	357
GS-AP-MW-36H	**9/17/2020**	0.0345(J)	4.12	38.5	0.209	8.18	50.2	348
GS-AP-MW-38H	**9/22/2020**	0.0461(J)	9.56	24.8	0.28	7.96	27	339
GS-AP-MW-40H	**9/22/2020**	0.0326(J)	205	30.4	0.114	6.64	626	1310
GS-AP-MW-41HD	**9/17/2020**	1.42	61.1	6.63	0.16	7.22	105	318
GS-AP-MW-42H	**9/22/2020**	0.0469(J)	142	7.07	0.121	6.51	372	800
GS-AP-MW-43H	**9/22/2020**	0.12	2.82	78	0.216	8.66	269	910
GS-AP-PZ-16	**9/17/2020**	0.0824(J)	9.69	6.57	0.237	9.15	15.2	387
GS-AP-PZ-18	**9/22/2020**	0.0603(J)	26.2	2.73	0.392	7	245	648
GS-AP-PZ-22	**9/17/2020**	0.0454(J)	12.6	2.46	0.402	8.81	79.9	438
GS-AP-MW-33HO	**9/15/2020**	0.0425(J)	29.5	75.6	0.188	7.66	98.6	538
GS-AP-MW-34HO	**9/16/2020**	0.0874(J)	86.9	210	0.364	7.45	1390	2720
GS-AP-MW-35HO	**9/16/2020**	Non-Detect	3.04	20.9	0.162	8.48	24.6	326
GS-AP-MW-44HO	**9/15/2020**	0.0404(J)	2.94	36.2	0.221	8.94	71.6	564

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3. U - Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurment.
4. TDS - Total Dissolved Solids

TABLE 7.
SECOND SEMI-ANNUAL MONITORING EVENT ANALYTICAL SUMMARY

		APPENDIX IV						
Well	**Sample Date**	**Antimony**	**Arsenic**	**Barium**	**Beryllium**	**Cadmium**	**Chromium**	**Cobalt**
UNITS		**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**
GS-AP-MW-2	**9/22/2020**	Non-Detect	Non-Detect	0.0563	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-6D	**9/17/2020**	Non-Detect	0.0931	0.378	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-6S	**9/16/2020**	0.000948(J)	0.00611	0.0682	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-6V	**9/15/2020**	Non-Detect	Non-Detect	0.16	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-7	**9/16/2020**	Non-Detect	0.282	0.124	Non-Detect	Non-Detect	0.00482(J)	0.00301(J)
GS-AP-MW-8	**9/21/2020**	Non-Detect	Non-Detect	0.026	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-9V	**9/22/2020**	Non-Detect	Non-Detect	0.187	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-12	**9/23/2020**	0.00202(J)	0.00616	0.193	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-12V	**9/23/2020**	0.00152(J)	0.00176(J)	1.27	Non-Detect	Non-Detect	0.00362(J)	Non-Detect
GS-AP-MW-15	**9/23/2020**	0.000844(J)	0.0165	0.119	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-15V	**9/21/2020**	0.0028(J)	0.0167	0.18	Non-Detect	Non-Detect	0.00239(J)	Non-Detect
GS-AP-MW-16D	**9/22/2020**	Non-Detect	Non-Detect	0.342	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-16S	**9/21/2020**	Non-Detect	0.00174(J)	0.0766	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-17	**9/21/2020**	Non-Detect	0.0055	0.128	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-17V	**9/23/2020**	Non-Detect	Non-Detect	0.299	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-18	**9/23/2020**	Non-Detect	0.00873	0.0911	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-18V	**9/22/2020**	Non-Detect	0.00654	0.253	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-19	**9/22/2020**	Non-Detect	0.00313(J)	0.337	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-21	**9/23/2020**	Non-Detect	Non-Detect	0.157	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-21V	**9/23/2020**	Non-Detect	0.01	0.0438	Non-Detect	Non-Detect	Non-Detect	Non-Detect

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4. TDS - Total Dissolved Solids

TABLE 7.
SECOND SEMI-ANNUAL MONITORING EVENT ANALYTICAL SUMMARY

		APPENDIX IV						
Well	**Sample Date**	**Antimony**	**Arsenic**	**Barium**	**Beryllium**	**Cadmium**	**Chromium**	**Cobalt**
UNITS		**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**
GS-AP-MW-23H	**9/17/2020**	Non-Detect	0.0579	0.0146	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-24H	**9/17/2020**	Non-Detect	Non-Detect	0.988	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-25HA	**9/17/2020**	Non-Detect	0.00904	0.164	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-26H	**9/21/2020**	Non-Detect	0.00143(J)	0.938	Non-Detect	Non-Detect	0.00804(J)	0.00357(J)
GS-AP-MW-28H	**9/22/2020**	Non-Detect	0.00112(J)	0.0385	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-29H	**9/22/2020**	Non-Detect	0.00109(J)	0.499	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-30HA	**9/21/2020**	Non-Detect	0.00551	0.0811	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-31H	**9/22/2020**	Non-Detect	Non-Detect	0.0916	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-32H	**9/21/2020**	Non-Detect	Non-Detect	0.0396	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-36H	**9/17/2020**	Non-Detect	0.0013(J)	0.0378	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-38H	**9/22/2020**	Non-Detect	0.00304(J)	0.319	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-40H	**9/22/2020**	Non-Detect	0.00193(J)	0.0417	Non-Detect	Non-Detect	Non-Detect	0.0027(J)
GS-AP-MW-41HD	**9/17/2020**	Non-Detect	0.0016(J)	0.0414	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-42H	**9/22/2020**	Non-Detect	0.00912	0.0237	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-43H	**9/22/2020**	Non-Detect	0.0039(J)	0.0921	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-PZ-16	**9/17/2020**	Non-Detect	Non-Detect	0.223	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-PZ-18	**9/22/2020**	Non-Detect	0.0119	0.0432	Non-Detect	Non-Detect	Non-Detect	0.00226(J)
GS-AP-PZ-22	**9/17/2020**	Non-Detect	0.00387(J)	0.109	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-33HO	**9/15/2020**	Non-Detect	0.00275(J)	0.469	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-34HO	**9/16/2020**	Non-Detect	0.00308(J)	0.0451	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-35HO	**9/16/2020**	Non-Detect	Non-Detect	0.0532	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-44HO	**9/15/2020**	0.000819(J)	0.00184(J)	0.0783	Non-Detect	Non-Detect	Non-Detect	Non-Detect

Notes:

1. J value indicates the result is greater that or equal to the Method Detection Limit (MDL) and less that the Practical Quantitation Limit (PQL).

2. Non-Detect indicates the result was not detected above the MDL and is considered a non-detect.

3. U - Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurment.

4. TDS - Total Dissolved Solids

TABLE 7.
SECOND SEMI-ANNUAL MONITORING EVENT ANALYTICAL SUMMARY

		APPENDIX IV							
Well	**Sample Date**	**Combined Radium 226 + 228**	**Fluoride**	**Lead**	**Lithium**	**Mercury**	**Molybdenum**	**Selenium**	**Thallium**
UNITS		**pCi/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**
GS-AP-MW-2	**9/22/2020**	0.712	0.921	Non-Detect	0.0395	Non-Detect	0.00308(J)	Non-Detect	Non-Detect
GS-AP-MW-6D	**9/17/2020**	0.32(U)	0.133	Non-Detect	0.299	Non-Detect	0.00924(J)	Non-Detect	Non-Detect
GS-AP-MW-6S	**9/16/2020**	1.05	0.308	Non-Detect	0.066	Non-Detect	0.0427	Non-Detect	Non-Detect
GS-AP-MW-6V	**9/15/2020**	1.25	4.59	Non-Detect	0.136	Non-Detect	0.00256(J)	Non-Detect	Non-Detect
GS-AP-MW-7	**9/16/2020**	1.74	0.126	0.00295(J)	0.16	Non-Detect	0.215	Non-Detect	Non-Detect
GS-AP-MW-8	**9/21/2020**	1.25	0.125	Non-Detect	Non-Detect	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-9V	**9/22/2020**	0.536(U)	0.174	Non-Detect	0.0293	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-12	**9/23/2020**	0.811(U)	0.12	Non-Detect	0.0279	Non-Detect	0.00577(J)	Non-Detect	Non-Detect
GS-AP-MW-12V	**9/23/2020**	1.38	0.176	0.0014(J)	0.0409	Non-Detect	0.00463(J)	Non-Detect	Non-Detect
GS-AP-MW-15	**9/23/2020**	0.547(U)	0.452	Non-Detect	0.414	Non-Detect	0.0744	Non-Detect	Non-Detect
GS-AP-MW-15V	**9/21/2020**	0.494(U)	0.372	Non-Detect	0.116	Non-Detect	0.0538	Non-Detect	Non-Detect
GS-AP-MW-16D	**9/22/2020**	0.59(U)	0.123	Non-Detect	0.0343	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-16S	**9/21/2020**	0.47(U)	0.572	Non-Detect	0.074	Non-Detect	0.041	Non-Detect	Non-Detect
GS-AP-MW-17	**9/21/2020**	0.651(U)	0.371	Non-Detect	0.0579	Non-Detect	0.00776(J)	Non-Detect	Non-Detect
GS-AP-MW-17V	**9/23/2020**	0.542(U)	0.278	Non-Detect	0.0574	Non-Detect	0.00664(J)	Non-Detect	Non-Detect
GS-AP-MW-18	**9/23/2020**	0.888	0.575	Non-Detect	0.0895	Non-Detect	0.044	Non-Detect	Non-Detect
GS-AP-MW-18V	**9/22/2020**	1.02	0.368	Non-Detect	0.0254	Non-Detect	0.0248	Non-Detect	Non-Detect
GS-AP-MW-19	**9/22/2020**	2.09	0.339	Non-Detect	0.0435	Non-Detect	0.0063(J)	Non-Detect	Non-Detect
GS-AP-MW-21	**9/23/2020**	0.468(U)	0.208	Non-Detect	0.179	Non-Detect	0.0404	Non-Detect	Non-Detect
GS-AP-MW-21V	**9/23/2020**	0.563(U)	0.641	Non-Detect	0.137	Non-Detect	0.12	Non-Detect	Non-Detect

Notes:

1. J value indicates the result is greater that or equal to the Method Detection Limit (MDL) and less that the Practical Quantitation Limit (PQL).
2. Non-Detect indicates the result was not detected above the MDL and is considered a non-detect.
3. U - Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurment.
4. TDS - Total Dissolved Solids

TABLE 7.
SECOND SEMI-ANNUAL MONITORING EVENT ANALYTICAL SUMMARY

		APPENDIX IV							
Well	**Sample Date**	**Combined Radium 226 + 228**	**Fluoride**	**Lead**	**Lithium**	**Mercury**	**Molybdenum**	**Selenium**	**Thallium**
UNITS		**pCi/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**
GS-AP-MW-23H	**9/17/2020**	0.66(U)	0.117	Non-Detect	0.0333	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-24H	**9/17/2020**	0.298(U)	0.217	Non-Detect	0.0237	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-25HA	**9/17/2020**	-0.369(U)	1.93	Non-Detect	0.0449	Non-Detect	0.0182	0.00636(J)	Non-Detect
GS-AP-MW-26H	**9/21/2020**	2.05	0.151	0.00309(J)	0.0958	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-28H	**9/22/2020**	1.02	0.181	Non-Detect	0.0574	Non-Detect	0.00616(J)	Non-Detect	Non-Detect
GS-AP-MW-29H	**9/22/2020**	0.591(U)	0.198	Non-Detect	0.0586	Non-Detect	0.0281	Non-Detect	Non-Detect
GS-AP-MW-30HA	**9/21/2020**	1.1	0.872	Non-Detect	0.0494	Non-Detect	0.00254(J)	Non-Detect	Non-Detect
GS-AP-MW-31H	**9/22/2020**	0.912	0.148	Non-Detect	0.0357	Non-Detect	0.00438(J)	Non-Detect	Non-Detect
GS-AP-MW-32H	**9/21/2020**	0.484(U)	0.202	Non-Detect	0.0421	Non-Detect	0.0896	Non-Detect	Non-Detect
GS-AP-MW-36H	**9/17/2020**	-0.125(U)	0.209	Non-Detect	0.035	Non-Detect	0.0105	Non-Detect	Non-Detect
GS-AP-MW-38H	**9/22/2020**	1.1	0.28	Non-Detect	0.0591	Non-Detect	0.00423(J)	Non-Detect	Non-Detect
GS-AP-MW-40H	**9/22/2020**	1.91	0.114	Non-Detect	0.0405	Non-Detect	0.00293(J)	Non-Detect	Non-Detect
GS-AP-MW-41HD	**9/17/2020**	0.14(U)	0.16	Non-Detect	0.341	Non-Detect	0.026	Non-Detect	Non-Detect
GS-AP-MW-42H	**9/22/2020**	0.36(U)	0.121	Non-Detect	0.0333	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-43H	**9/22/2020**	0.0466(U)	0.216	Non-Detect	0.0587	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-PZ-16	**9/17/2020**	0.438(U)	0.237	Non-Detect	0.073	Non-Detect	0.00241(J)	Non-Detect	Non-Detect
GS-AP-PZ-18	**9/22/2020**	0.96	0.392	Non-Detect	0.0789	Non-Detect	0.00496(J)	Non-Detect	Non-Detect
GS-AP-PZ-22	**9/17/2020**	0.896	0.402	Non-Detect	0.0862	Non-Detect	0.00357(J)	Non-Detect	Non-Detect
GS-AP-MW-33HO	**9/15/2020**	-0.106(U)	0.188	Non-Detect	0.0479	Non-Detect	0.00496(J)	Non-Detect	Non-Detect
GS-AP-MW-34HO	**9/16/2020**	0.286(U)	0.364	Non-Detect	0.180	Non-Detect	0.00598(J)	Non-Detect	Non-Detect
GS-AP-MW-35HO	**9/16/2020**	0.435(U)	0.162	Non-Detect	0.0685	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-44HO	**9/15/2020**	0.311(U)	0.221	Non-Detect	0.0494	Non-Detect	0.00858(J)	Non-Detect	Non-Detect

Notes:

1. J value indicates the result is greater that or equal to the Method Detection Limit (MDL) and less that the Practical Quantitation Limit (PQL).
2. Non-Detect indicates the result was not detected above the MDL and is considered a non-detect.
3. U - Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurment.
4. TDS - Total Dissolved Solids

Appendix A

PROJECT No.: 154-4912

RECORD OF SONIC HOLE: GS-AP-PZ-16

SHEET 1 OF 8

LOCATION: Rattlesnake Lake - Gorgas

DATUM: Ground Surface

DRILLING DATE: February 9 - March 16, 2016

DRILLING CONTRACTOR: Cascade Drilling, L.P.

INCLINATION: -90° AZIMUTH: n/a

Refer to "Lithological and Geotechnical Soil and Rock Description Terminology" for accompanying legend and notes.

DEPTH SCALE FEET	DRILLING RECORD	DESCRIPTION	ELEV. DEPTH (ft)	RUN No.	FRACTURE INDEX PER RUN	Jn	DISCONTINUITY DATA: TYPE AND SURFACE DESCRIPTION	Jcon	Jr	Ja	PIEZOMETER, STANDPIPE OR THERMISTOR INSTALLATION
		Ground Surface									
0	Truck Mounted Sonic Drill (12") Sonic	Completely decomposed rock. Textures and beddings of parent rock are increasingly preserved with depth. FeOx staining and precipitation. [SAPROLITE/REGOLITH] [WEATHERED BEDROCK]	0.00		0						Concrete Seal and Pad
5					0						
		Slightly weathered, thinly to medium bedded, gray, very fine grained, strong, SANDSTONE [Pottsville Formation]. [BEDROCK]	7.00		0						
			8.00		0						
		Fresh, thinly to medium bedded, gray, very fine grained, very strong, SANDSTONE [Pottsville Formation]. [BEDROCK]			0						
10				1	0						
					0						
					0						
15					0						
					0						
					0						
20	Truck Mounted Sonic Drill (6.25") Sonic				0		Freeze Mech. FX parallel to bedding, Dip ~0				Bentonite Grout Mix
		Fresh, thinly to medium bedded, very dark gray, very fine grained, very strong, SHALY SANDSTONE [Pottsville Formation]. [BEDROCK]	21.10	2	0						21.10 (110 gallons used)
					0						
		Fresh, thinly to medium bedded, gray, very fine grained, very strong, SANDSTONE [Pottsville Formation]. [BEDROCK]	23.50		0						23.50
			24.20		0						
25		Fresh, thinly to medium bedded, very dark gray, very fine grained, very strong, SHALY SANDSTONE [Pottsville Formation]. [BEDROCK]			0						24.70
					0						25.40
					0						26.80
		Fresh, thinly to medium bedded, gray, very fine grained, very strong, SANDSTONE [Pottsville Formation]. [BEDROCK]	27.30		0						27.50
					0						
30					0						
				3	0						
		Fresh, laminated, black, very fine grained, very strong, SHALE [Pottsville Formation]. [BEDROCK]	33.10		0						
					0						
35		Fresh, thinly to medium bedded, gray, very fine grained, very strong, SANDSTONE [Pottsville Formation]. [BEDROCK]			0						
					0						36.00
											37.00
		Shaly bed at 35.5' bgs.			0						
					0						
40					0						

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DEPTH SCALE

1 in to 5 ft

Golder Associates

LOGGED: CDL

CHECKED: CDL

DRAFT

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PROJECT No.: 154-4912

RECORD OF SONIC HOLE: GS-AP-PZ-16

LOCATION: Rattlesnake Lake - Gorgas

DATUM: Ground Surface

DRILLING DATE: February 9 - March 16, 2016

DRILLING CONTRACTOR: Cascade Drilling, L.P.

INCLINATION: -90° AZIMUTH: n/a

Refer to "Lithological and Geotechnical Soil and Rock Description Terminology" for accompanying legend and notes.

DEPTH SCALE FEET	DRILLING RECORD	DESCRIPTION	SYMBOLIC LOG	ELEV. / DEPTH (ft)	RUN No.	INDICES: ROCK STRENGTH (R5 R4 R3 R2 R1)	INDICES: WEATHERING (W2 W3 W4) / ALTERATION (2 3 4)	RECOVERY: TOTAL CORE % (80 60 40 20)	RECOVERY: RQD % (80 60 40 20)	FRACTURE INDEX PER RUN	Jn	DISCONTINUITY DATA: DIP w.r.t. CORE AXIS (alpha) (0 30 60 90)	DISCONTINUITY DATA: TYPE AND SURFACE DESCRIPTION	Jcon	Jr	Ja	Fault/Breccia/Gouge	Lost Core / Broken Core	PIEZOMETER, STANDPIPE OR THERMISTOR INSTALLATION
40	Truck Mounted Sonic Drill (6.25") Sonic	Fresh, thinly to medium bedded, very dark gray, very fine grained, very strong, SHALY SANDSTONE [Pottsville Formation] with mudstone interbeds. [BEDROCK]		40.20	4					0									40.20
45										0									
										0									47.00
										0									48.00
50					5					0									49.80
										0									51.70
55										0									54.30
										0									57.40
										0									59.40
60										0									60.70 / 61.10
										0									62.90 / 63.40
65					6					0									
70										0									70.70
75										0									77.00
80										0									

Bentonite Grout Mix (110 gallons used)

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DEPTH SCALE

1 in to 5 ft

Golder Associates

LOGGED: CDL

CHECKED: CDL

DRAFT

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PROJECT No.: 154-4912

RECORD OF SONIC HOLE: GS-AP-PZ-16

LOCATION: Rattlesnake Lake - Gorgas

DATUM: Ground Surface

DRILLING DATE: February 9 - March 16, 2016

DRILLING CONTRACTOR: Cascade Drilling, L.P.

INCLINATION: -90° AZIMUTH: n/a

Refer to "Lithological and Geotechnical Soil and Rock Description Terminology" for accompanying legend and notes.

DEPTH SCALE FEET	DRILLING RECORD	DESCRIPTION	RUN No.	FRACTURE INDEX PER RUN	PIEZOMETER, STANDPIPE OR THERMISTOR INSTALLATION
80	Truck Mounted Sonic Drill (6.25") Sonic	Fresh, thinly to medium bedded, very dark gray, very fine grained, very strong, SHALY SANDSTONE [Pottsville Formation] with mudstone interbeds. [BEDROCK] *(continued)*			Bentonite Grout Mix (110 gallons used)
85			7		85.30
90					
95					97.00
100			8		99.60
					Hole Plug Bentonite Chips 3/8" (27 x 50lb bags used)
					103.50
					104.60
105					105.30
					107.00
110			9		110.60
					112.00
115					
					118.40
120					120.00

INDICES: ROCK STRENGTH (R5, R4, R3, R2, R1); WEATHERING (W2, W3, W4); ALTERATION (2, 3, 4)

RECOVERY: TOTAL CORE % (80, 60, 40, 20); RQD % (80, 60, 40, 20)

DISCONTINUITY DATA: DIP w.r.t. CORE AXIS (alpha) (0, 30, 60, 90); TYPE AND SURFACE DESCRIPTION

Jn; J CON; Jr; Ja

Fault/Breccia/Gouge; Lost Core; Broken Core

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DEPTH SCALE

1 in to 5 ft

Golder Associates

LOGGED: CDL

CHECKED: CDL

DRAFT

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PROJECT No.: 154-4912

RECORD OF SONIC HOLE: GS-AP-PZ-16

LOCATION: Rattlesnake Lake - Gorgas

DATUM: Ground Surface

DRILLING DATE: February 9 - March 16, 2016

DRILLING CONTRACTOR: Cascade Drilling, L.P.

INCLINATION: -90° AZIMUTH: n/a

Refer to "Lithological and Geotechnical Soil and Rock Description Terminology" for accompanying legend and notes.

DEPTH SCALE FEET	DRILLING RECORD	DESCRIPTION	SYMBOLIC LOG	ELEV. / DEPTH (ft)	RUN No.	INDICES: ROCK STRENGTH (R5 R4 R3 R2 R1)	INDICES: WEATHERING (W2 W3 W4) / ALTERATION (2 3 4)	RECOVERY: TOTAL CORE % (80 60 40 20)	RECOVERY: RQD % (80 60 40 20)	FRACTURE INDEX PER RUN	Jn	DISCONTINUITY DATA: DIP w.r.t. CORE AXIS (alpha) (0 30 60 90)	DISCONTINUITY DATA: TYPE AND SURFACE DESCRIPTION	Jcon	Jr	Ja	Fault/Breccia/Gouge	Lost Core / Broken Core	PIEZOMETER, STANDPIPE OR THERMISTOR INSTALLATION
120	Truck Mounted Sonic Drill (6.25") Sonic	Fresh, thinly to medium bedded, very dark gray, very fine grained, very strong, SHALY SANDSTONE [Pottsville Formation] with mudstone interbeds. [BEDROCK] *(continued)*			10					0									
										0								121.00	
										0									
										0									
										0									
125										0								124.30	
										0									
										0									
					11					0								127.00	
										0									
130										0									
										0									
										0									
										0									
										0									
135										0									
										0								137.00	
					12					0									Hole Plug Bentonite Chips 3/8" (27 x 50lb bags used)
										0									
										0									
140										0									
										0									
										0									
										0									
145										0									
										0									
					13					0									
										0									
										0									
150										0									
										0									
										0									
										0									
155										0								155.60	
										0								157.00	
										0									
										0									
160										0									

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DEPTH SCALE

1 in to 5 ft

Golder Associates

LOGGED: CDL

CHECKED: CDL

DRAFT

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PROJECT No.: 154-4912

RECORD OF SONIC HOLE: GS-AP-PZ-16

LOCATION: Rattlesnake Lake - Gorgas

DATUM: Ground Surface

DRILLING DATE: February 9 - March 16, 2016

DRILLING CONTRACTOR: Cascade Drilling, L.P.

INCLINATION: -90° AZIMUTH: n/a

Refer to "Lithological and Geotechnical Soil and Rock Description Terminology" for accompanying legend and notes.

DEPTH SCALE FEET	DRILLING RECORD	DESCRIPTION	ELEV. / DEPTH (ft)	RUN No.	FRACTURE INDEX PER RUN	Jn	TYPE AND SURFACE DESCRIPTION	Fault/Breccia/Gouge	Lost Core / Broken Core	PIEZOMETER, STANDPIPE OR THERMISTOR INSTALLATION
160	Truck Mounted Sonic Drill (6.25")	Fresh, thinly to medium bedded, very dark gray, very fine grained, very strong, SHALY SANDSTONE [Pottsville Formation] with mudstone interbeds. [BEDROCK] *(continued)*		14	0					
165					0				165.50	
					0				167.00	
170				15	0		Freeze break ~80 possible plane of weakness			
		Fresh, thinly to medium bedded, gray, very fine grained, very strong, SANDSTONE [Pottsville Formation]. [BEDROCK]	173.70							
175	Sonic		174.60						174.60	
		Fresh, thinly to medium bedded, very dark gray, very fine grained, very strong, SHALY SANDSTONE [Pottsville Formation] with mudstone interbeds. [BEDROCK]	177.00						176.00 / 177.00	
		Fresh, thinly to medium bedded, gray, very fine grained, very strong, SANDSTONE [Pottsville Formation]. [BEDROCK]	178.40							
180		Fresh, thinly to medium bedded, very dark gray, very fine grained, very strong, SHALY SANDSTONE [Pottsville Formation] with mudstone interbeds. [BEDROCK]		16			Freeze break ~80 possible plane of weakness			Hole Plug Bentonite Chips 3/8" (27 x 50lb bags used)
185		Driller notes oil sheen and coal dust to surface.								
190				17						
195										
200									199.70	

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DEPTH SCALE

1 in to 5 ft

Golder Associates

LOGGED: CDL

CHECKED: CDL

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LOCATION: Rattlesnake Lake - Gorgas

DATUM: Ground Surface

DRILLING DATE: February 9 - March 16, 2016

DRILLING CONTRACTOR: Cascade Drilling, L.P.

INCLINATION: -90° AZIMUTH: n/a

Refer to "Lithological and Geotechnical Soil and Rock Description Terminology" for accompanying legend and notes.

Drilling record: Truck Mounted Sonic Drill (6.25") — Sonic

DEPTH (ft)	DESCRIPTION	ELEV. DEPTH (ft)	RUN No.	FRACTURE INDEX PER RUN	PIEZOMETER, STANDPIPE OR THERMISTOR INSTALLATION
200	Fresh, thinly to medium bedded, very dark gray, very fine grained, very strong, SHALY SANDSTONE [Pottsville Formation] with mudstone interbeds. [BEDROCK] *(continued)*		18	0, 0, 0, 0, 0	
	Possible coal seam (Lost Core)	204.60			204.60
205	Fresh, thinly to medium bedded, gray, very fine grained, very strong, SANDSTONE [Pottsville Formation]. [BEDROCK]	204.60		0, 0	
	Fresh, thinly to medium bedded, very dark gray, very fine grained, very strong, SHALY SANDSTONE [Pottsville Formation] with mudstone interbeds. [BEDROCK]	207.00		0	
210	Fresh, thinly bedded to laminated, black, fine to very fine grained, very strong, SHALY SANDSTONE [Pottsville Formation], with mudstone interbeds. Mudstone infill of fossiliferous features. Dissolution pathways parallel to bedding. Increasingly shaly with depth. [BEDROCK]	208.00	19	0, 0, 0, 0, 0, 0, 0, 0, 0, 0	Hole Plug Bentonite Chips 3/8" (27 x 50lb bags used)
220	Fresh, laminated to medium bedded, dark gray to very dark gray, very fine grained, very strong, SHALY SANDSTONE [Pottsville Formation] with mudstone interbeds. [BEDROCK]	218.90	20	0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0	PelPlug Bentonite Pellets (5 gallons used)
235	Grading to very dark gray to black shaly sandstone				Catcher installed. GP#1 Filter Media Sand in PrePack (0.5 x 50lb bags used)
					236.00
		237.00		0, 0, 0	237.00
240					

CONTINUED NEXT PAGE

PROJECT No.: 154-4912

RECORD OF SONIC HOLE: GS-AP-PZ-16

LOCATION: Rattlesnake Lake - Gorgas

DATUM: Ground Surface

DRILLING DATE: February 9 - March 16, 2016

DRILLING CONTRACTOR: Cascade Drilling, L.P.

INCLINATION: -90° AZIMUTH: n/a

Refer to "Lithological and Geotechnical Soil and Rock Description Terminology" for accompanying legend and notes.

DEPTH SCALE FEET	DRILLING RECORD	DESCRIPTION	SYMBOLIC LOG	ELEV. / DEPTH (ft)	RUN No.	INDICES: ROCK STRENGTH (R5, R4, R3, R2, R1)	INDICES: WEATHERING / ALTERATION (D, 2, W2, 3, W3, 4, W4)	RECOVERY: TOTAL CORE % (80, 60, 40, 20)	RECOVERY: RQD % (80, 60, 40, 20)	FRACTURE INDEX PER RUN	Jn	DISCONTINUITY DATA: DIP w.r.t. CORE AXIS (alpha) (0, 30, 60, 90)	DISCONTINUITY DATA: TYPE AND SURFACE DESCRIPTION	Jcon	Jr	Ja	Fault/Breccia/Gouge	Lost Core / Broken Core	PIEZOMETER, STANDPIPE OR THERMISTOR INSTALLATION
240	Truck Mounted Sonic Drill (6.25") Sonic	Fresh, thinly bedded to laminated, black, fine to very fine grained, very strong, SHALY SANDSTONE [Pottsville Formation], with mudstone interbeds. Mudstone infill of fossiliferous features. Dissolution pathways parallel to bedding. Increasingly shaly with depth. [BEDROCK] *(continued)*			21					0									244.00 2" PVC Sch 40 0.010 Slot PrePack Threaded Screen
245																			
																		249.00	
250																		250.20	GP#1 Filter Media Sand
255																			
260					22													262.50	
265																			
270																			
275																		277.00	
280																			

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DEPTH SCALE

1 in to 5 ft

Golder Associates

LOGGED: CDL

CHECKED: CDL

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PROJECT No.: 154-4912

RECORD OF SONIC HOLE: GS-AP-PZ-16

LOCATION: Rattlesnake Lake - Gorgas

DATUM: Ground Surface

DRILLING DATE: February 9 - March 16, 2016

DRILLING CONTRACTOR: Cascade Drilling, L.P.

INCLINATION: -90° AZIMUTH: n/a

Refer to "Lithological and Geotechnical Soil and Rock Description Terminology" for accompanying legend and notes.

DEPTH SCALE FEET	DRILLING RECORD	DESCRIPTION	SYMBOLIC LOG	ELEV. / DEPTH (ft)	RUN No.	INDICES: ROCK STRENGTH (R5 R4 R3 R2 R1)	INDICES: WEATHERING (W2 W3 W4) / ALTERATION (2 3 4)	RECOVERY: TOTAL CORE %	RECOVERY: RQD %	FRACTURE INDEX PER RUN	Jn	DISCONTINUITY DATA: DIP w.r.t. CORE AXIS (alpha)	DISCONTINUITY DATA: TYPE AND SURFACE DESCRIPTION	J CON	Jr	Ja	Fault/Breccia/Gouge	Lost Core / Broken Core	PIEZOMETER, STANDPIPE OR THERMISTOR INSTALLATION
280	Truck Mounted Sonic Drill (6.25") Sonic	Fresh, thinly bedded to laminated, black, fine to very fine grained, very strong, SHALY SANDSTONE [Pottsville Formation], with mudstone interbeds. Mudstone infill of fossiliferous features. Dissolution pathways parallel to bedding. Increasingly shaly with depth. [BEDROCK] *(continued)*			23					0									
285										0									
290										0									
295										0									
300					24					0									
305										0									
310										0									
315										0			JN,PL,SM,-						
										0								316.40 / 317.00	
		End of Borehole.		317.00															
320																			

DEPTH SCALE

1 in to 5 ft

Golder Associates

LOGGED: CDL

CHECKED: CDL

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PROJECT No.: 154-4912

RECORD OF SONIC HOLE: GS-AP-PZ-18

LOCATION: Rattlesnake Lake - Gorgas

DATUM: Ground Surface

DRILLING DATE: February 22-25, 2016

DRILLING CONTRACTOR: Cascade Drilling, L.P.

INCLINATION: -90° AZIMUTH: n/a

Refer to "Lithological and Geotechnical Soil and Rock Description Terminology" for accompanying legend and notes.

DEPTH SCALE FEET	DRILLING RECORD	DESCRIPTION	ELEV. / DEPTH (ft)	RUN No.	FRACTURE INDEX PER RUN	Jn	DISCONTINUITY DATA: TYPE AND SURFACE DESCRIPTION	J CON	Jr	Ja
		Ground Surface								
0	Truck Mounted Sonic Drill (12") / Sonic	Completely decomposed rock. Textures and beddings of parent rock are increasingly preserved with depth. FeOx staining and precipitation. [SAPROLITE/REGOLITH] [WEATHERED BEDROCK]	0.00	1	0					
5					0					
		Slightly weathered, massive bedded, gray, very fine grained, medium strong, SANDSTONE [Pottsville Formation]. [BEDROCK]	7.00		0		BD,PL,Ro,CC,Fe/He, 1	12	1.5	2
			8.20		2		BD,PL,Ro,CC,Fe/He, 1	12	1.5	2
10	Truck Mounted Sonic Drill (6.25") / Sonic	Slightly weathered to fresh, medium bedded to laminated, very dark gray, very fine grained, very strong to strong, SHALY SANDSTONE [Pottsville Formation], with mudstone interbeds. [BEDROCK]		2	0					
15					0					
20				3	0					
25					0					
30				4	0					
35					0					
40					0					

INDICES: ROCK STRENGTH (R5, R4, R3, R2, R1); WEATHERING (W2, W3, W4); ALTERATION (3, 2, 3, 4). RECOVERY: TOTAL CORE % (80, 60, 40, 20); RQD % (80, 60, 40, 20). DISCONTINUITY DATA: DIP w.r.t. CORE AXIS (alpha) (0, 30, 60, 90).

Fault/Breccia/Gouge; Lost Core; Broken Core

PIEZOMETER, STANDPIPE OR THERMISTOR INSTALLATION

Concrete Seal and Pad

7.30

13.00

15.00

17.00

17.90

20.50

Bentonite Grout Mix

27.00

28.50

32.10

37.00

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DEPTH SCALE

1 in to 5 ft

Golder Associates

LOGGED: CDL

CHECKED: CDL

DRAFT

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PROJECT No.: 154-4912

RECORD OF SONIC HOLE: GS-AP-PZ-18

LOCATION: Rattlesnake Lake - Gorgas

DATUM: Ground Surface

DRILLING DATE: February 22-25, 2016

DRILLING CONTRACTOR: Cascade Drilling, L.P.

INCLINATION: -90° AZIMUTH: n/a

Refer to "Lithological and Geotechnical Soil and Rock Description Terminology" for accompanying legend and notes.

DEPTH SCALE FEET	DRILLING RECORD	DESCRIPTION	SYMBOLIC LOG	ELEV. / DEPTH (ft)	RUN No.	INDICES: ROCK STRENGTH (R5 R4 R3 R2 R1)	INDICES: WEATHERING (W2 W3 W4) / ALTERATION (2 3 4)	RECOVERY: TOTAL CORE % (80 60 40 20)	RECOVERY: RQD % (80 60 40 20)	FRACTURE INDEX PER RUN	Jn	DISCONTINUITY DATA: DIP w.r.t. CORE AXIS (alpha) (0 30 60 90)	DISCONTINUITY DATA: TYPE AND SURFACE DESCRIPTION	Jcon	Jr	Ja	Fault/Breccia/Gouge	Lost Core / Broken Core	PIEZOMETER, STANDPIPE OR THERMISTOR INSTALLATION
40	Truck Mounted Sonic Drill (6.25") Sonic	Slightly weathered to fresh, medium bedded to laminated, very dark gray, very fine grained, very strong to strong, SHALY SANDSTONE [Pottsville Formation], with mudstone interbeds. [BEDROCK] *(continued)*			5					0								43.10	
45										0								47.00	
50					6					0								54.60	
55										0								57.00	
60					7					0									Bentonite Grout Mix
65										0								66.50	
																		67.00	
70					8					0								73.20	
		Fresh, massive bedded, gray, very fine grained, very strong, SANDSTONE [Pottsville Formation]. [BEDROCK]		73.20						0								74.10	
75										0								77.00	
80										0									

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DEPTH SCALE

1 in to 5 ft

Golder Associates

LOGGED: CDL

CHECKED: CDL

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PROJECT No.: 154-4912

LOCATION: Rattlesnake Lake - Gorgas

RECORD OF SONIC HOLE: GS-AP-PZ-18

DATUM: Ground Surface

DRILLING DATE: February 22-25, 2016

DRILLING CONTRACTOR: Cascade Drilling, L.P.

INCLINATION: -90°   AZIMUTH: n/a

Refer to "Lithological and Geotechnical Soil and Rock Description Terminology" for accompanying legend and notes.

DEPTH SCALE FEET	DRILLING RECORD	DESCRIPTION	ELEV. / DEPTH (ft)	RUN No.	FRACTURE INDEX PER RUN	DISCONTINUITY DATA: TYPE AND SURFACE DESCRIPTION	PIEZOMETER, STANDPIPE OR THERMISTOR INSTALLATION
80	Truck Mounted Sonic Drill (6.25") / Sonic				1	JN,PL,SM,CC,Ca, 1	
		Fresh, medium bedded to laminated, very dark gray, very fine grained, very strong, SHALY SANDSTONE [Pottsville Formation], with mudstone interbeds. [BEDROCK]	80.70		0, 0		
		Fresh, massive bedded, gray, very fine grained, very strong, SANDSTONE [Pottsville Formation]. [BEDROCK]	83.30		0, 0		
85		Fresh, medium bedded to laminated, very dark gray, very fine grained, very strong, SHALY SANDSTONE [Pottsville Formation], with mudstone interbeds. [BEDROCK]	85.40		0		
		Fresh, massive bedded, gray, very fine grained, very strong, SANDSTONE [Pottsville Formation]. [BEDROCK]	86.30	9	0		
90		Fresh, medium bedded to laminated, very dark gray, very fine grained, very strong, SHALY SANDSTONE [Pottsville Formation], with mudstone interbeds. [BEDROCK]	86.70		0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0		
95					0, 0		95.70
					0, 0, 0		97.00
100					0, 0, 0, 0, 0		Bentonite Grout Mix
105				10	0, 0, 0, 0, 0, 0, 0		104.50; 105.20
110					0, 0, 0, 0, 0		
115					0, 0, 0, 0, 0		117.00
120							

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DEPTH SCALE

1 in to 5 ft

Golder Associates

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PROJECT No.: 154-4912

RECORD OF SONIC HOLE: GS-AP-PZ-18

LOCATION: Rattlesnake Lake - Gorgas

DATUM: Ground Surface

DRILLING DATE: February 22-25, 2016

DRILLING CONTRACTOR: Cascade Drilling, L.P.

INCLINATION: -90° AZIMUTH: n/a

Refer to "Lithological and Geotechnical Soil and Rock Description Terminology" for accompanying legend and notes.

DEPTH SCALE FEET	DRILLING RECORD	DESCRIPTION	ELEV. / DEPTH (ft)	RUN No.	FRACTURE INDEX PER RUN	Jn	DISCONTINUITY DATA: TYPE AND SURFACE DESCRIPTION	Jr	Ja	Fault/Breccia/Gouge	Lost Core / Broken Core	PIEZOMETER, STANDPIPE OR THERMISTOR INSTALLATION
120	Truck Mounted Sonic Drill (6.25") / Sonic	Fresh, medium bedded to laminated, very dark gray, very fine grained, very strong, SHALY SANDSTONE [Pottsville Formation], with mudstone interbeds. [BEDROCK] *(continued)*			0							
					0							
					0							
					0							
					0							
125		Fresh, laminated, black, very fine grained, very strong, SHALE [Pottsville Formation]. [BEDROCK]	124.90		0							
		Fresh, medium bedded to laminated, very dark gray, very fine grained, very strong, SHALY SANDSTONE [Pottsville Formation], with mudstone interbeds. [BEDROCK]	126.20	11	0							
					0							
					0							
					0							
130					0							
					0							
					0							
					0						132.00	
					0							
					0							
135					0							
					0						137.00	
					0							
					0						138.70	
		One healed curved fracture parallel to core.			1		JN,CU,SM,CC,Ca, 1				139.70	Bentonite Grout Mix
140					0							
					0							
					0						143.00	
		One healed curved fracture parallel to core.			1		JN,CU,SM,CC,Ca, 1					
					0						144.60	
145					0							
				12	0							
					1							
					0						148.00	
		One healed curved fracture parallel to core.			0		JN,CU,SM,CC,Ca, 1					
150					0						151.00	
		Fresh, massive bedded, gray, very fine grained, very strong, SANDSTONE [Pottsville Formation]. [BEDROCK]	151.00		0							
					0						152.80	
		Fresh, medium bedded to laminated, very dark gray, very fine grained, very strong, SHALY SANDSTONE [Pottsville Formation], with mudstone interbeds. [BEDROCK]	152.80		0							
155					0							
					0						157.00	
					0							
					0							
160					0							

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DEPTH SCALE

1 in to 5 ft

Golder Associates

LOGGED: CDL

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PROJECT No.: 154-4912

RECORD OF SONIC HOLE: GS-AP-PZ-18

LOCATION: Rattlesnake Lake - Gorgas

DATUM: Ground Surface

DRILLING DATE: February 22-25, 2016

DRILLING CONTRACTOR: Cascade Drilling, L.P.

INCLINATION: -90° AZIMUTH: n/a

Refer to "Lithological and Geotechnical Soil and Rock Description Terminology" for accompanying legend and notes.

DEPTH SCALE FEET	DRILLING RECORD	DESCRIPTION	ELEV. / DEPTH (ft)	RUN No.	FRACTURE INDEX PER RUN	Jn	DISCONTINUITY DATA: TYPE AND SURFACE DESCRIPTION	J CON	Jr	Ja	Fault/Breccia/Gouge	Lost Core / Broken Core	PIEZOMETER, STANDPIPE OR THERMISTOR INSTALLATION
160	Truck Mounted Sonic Drill (6.25") Sonic	Fresh, medium bedded to laminated, very dark gray, very fine grained, very strong, SHALY SANDSTONE [Pottsville Formation], with mudstone interbeds. [BEDROCK] *(continued)*			0								Bentonite Grout Mix
					0								
					0								
					0								
					0								
165					0								PelPlug Bentonite Pellets (5 gallons used)
					0								
				13	0								
					1		JN,PL,SM,CC,Ca, 1						Catcher installed. GP#1 Filter Media Sand in PrePack (0.5 x 50lb bags used)
170					0								
					0								
					0								
					0								
					0								
					0							174.10	
175		Possible coal seam (Lost Core) - Driller notes difficult drilling, collapsed rubbly zone.			0								2" PVC Sch 40 0.010 Slot PrePack Threaded Screen
					0							177.00	
		Fresh, medium bedded to laminated, very dark gray to black, very fine grained, very strong, SHALY SANDSTONE [Pottsville Formation], with mudstone interbeds. Mudstone infilled fossils. Dissolution pathways parallel to bedding. [BEDROCK]	177.00		0								
					0								
180					0							179.60	
					0							180.30	
					0								
				14	0								GP#1 Filter Media Sand
					0								
					0							183.90	
185					0								
					0								
					0							187.00	
		End of Borehole.	187.00										
190													
195													
200													

DEPTH SCALE

1 in to 5 ft

Golder Associates

LOGGED: CDL

CHECKED: CDL

DRAFT

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PROJECT No.: 154-4912

RECORD OF SONIC HOLE: GS-AP-PZ-22

LOCATION: Rattlesnake Lake - Gorgas

SHEET 1 OF 9

DATUM: Ground Surface

DRILLING DATE:

INCLINATION: -90° AZIMUTH: n/a

Refer to "Lithological and Geotechnical Soil and Rock Description Terminology" for accompanying legend and notes.

DEPTH SCALE FEET	DRILLING RECORD	DESCRIPTION	SYMBOLIC LOG	ELEV. DEPTH (ft)	RUN No.	INDICES: ROCK STRENGTH (R5 R4 R3 R2 R1)	WEATHERING (W2 W3 W4) / ALTERATION (2 3 4)	RECOVERY: TOTAL CORE % (80 60 40 20)	RQD % (80 60 40 20)	FRACTURE INDEX PER RUN	Jn	DISCONTINUITY DATA: DIP w.r.t. CORE AXIS (alpha) (0 30 60 90)	TYPE AND SURFACE DESCRIPTION	J CON	Jr	Ja	Fault/Breccia/Gouge	Lost Core / Broken Core	PIEZOMETER, STANDPIPE OR THERMISTOR INSTALLATION
0		Ground Surface		0.00															Concrete Seal and Pad
5																			
10																			
15																			
20																			Bentonite Grout Mix
25																			
30																			
35																			
40																			

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DEPTH SCALE

1 in to 5 ft

Golder Associates

LOGGED: CDL

CHECKED: CDL

DRAFT

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RECORD OF SONIC HOLE: GS-AP-PZ-22

LOCATION: Rattlesnake Lake - Gorgas

DATUM: Ground Surface

DRILLING DATE:

INCLINATION: -90° AZIMUTH: n/a

DEPTH SCALE FEET	DRILLING RECORD	DESCRIPTION	SYMBOLIC LOG	ELEV. DEPTH (ft)	RUN No.	INDICES: ROCK STRENGTH (R5 R4 R3 R2 R1)	WEATHERING (W2 W3 W4) / ALTERATION (2 3 4)	RECOVERY: TOTAL CORE % (80 60 40 20)	RQD % (80 60 40 20)	FRACTURE INDEX PER RUN	Jn	DISCONTINUITY DATA: DIP w.r.t. CORE AXIS (alpha) (0 30 60 90)	TYPE AND SURFACE DESCRIPTION	J CON	Jr	Ja	Fault/Breccia/Gouge	Lost Core / Broken Core	PIEZOMETER, STANDPIPE OR THERMISTOR INSTALLATION
40																			
45																			
50																			
55																			
60																			Bentonite Grout Mix
65																			
70																			
75																			
80																			

Refer to "Lithological and Geotechnical Soil and Rock Description Terminology" for accompanying legend and notes.

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DEPTH SCALE

1 in to 5 ft

Golder Associates

LOGGED: CDL

CHECKED: CDL

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PROJECT No.: 154-4912

RECORD OF SONIC HOLE: GS-AP-PZ-22

LOCATION: Rattlesnake Lake - Gorgas

DATUM: Ground Surface

DRILLING DATE:

INCLINATION: -90° AZIMUTH: n/a

DEPTH SCALE FEET	DRILLING RECORD	DESCRIPTION	SYMBOLIC LOG	ELEV. / DEPTH (ft)	RUN No.	Refer to "Lithological and Geotechnical Soil and Rock Description Terminology" for accompanying legend and notes. INDICES: ROCK STRENGTH R5 R4 R3 R2 R1; WEATHERING W2 W3 W4; ALTERATION 1 2 3 4	RECOVERY: TOTAL CORE % 80 60 40 20; RQD % 80 60 40 20	FRACTURE INDEX PER RUN Jn	DISCONTINUITY DATA: DIP w.r.t. CORE AXIS (alpha) 0 30 60 90; TYPE AND SURFACE DESCRIPTION	Jcon	Jr	Ja	Fault/Breccia/Gouge	Lost Core / Broken Core	PIEZOMETER, STANDPIPE OR THERMISTOR INSTALLATION
80															
85															
90															
95															
100															Bentonite Grout Mix
105															
110															
115															
120															

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DEPTH SCALE

1 in to 5 ft

Golder Associates

LOGGED: CDL

CHECKED: CDL

DRAFT

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PROJECT No.: 154-4912

RECORD OF SONIC HOLE: GS-AP-PZ-22

LOCATION: Rattlesnake Lake - Gorgas

DATUM: Ground Surface

DRILLING DATE:

INCLINATION: -90° AZIMUTH: n/a

DEPTH SCALE FEET	DRILLING RECORD	DESCRIPTION	SYMBOLIC LOG	ELEV. DEPTH (ft)	RUN No.	INDICES: ROCK STRENGTH (R5 R4 R3 R2 R1) / WEATHERING (W2 W3 W4) / ALTERATION (2 3 4)	RECOVERY: TOTAL CORE % (80 60 40 20) / RQD % (80 60 40 20)	FRACTURE INDEX PER RUN	Jn	DISCONTINUITY DATA: DIP w.r.t. CORE AXIS (alpha) (0 30 60 90) / TYPE AND SURFACE DESCRIPTION	J CON	Jr	Ja	Fault/Breccia/Gouge / Lost Core / Broken Core	PIEZOMETER, STANDPIPE OR THERMISTOR INSTALLATION
120															
125															
130															
135															
140															Bentonite Grout Mix
145															
150															
155															
160															

Refer to "Lithological and Geotechnical Soil and Rock Description Terminology" for accompanying legend and notes.

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DEPTH SCALE

1 in to 5 ft

Golder Associates

LOGGED: CDL

CHECKED: CDL

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PROJECT No.: 154-4912

RECORD OF SONIC HOLE: GS-AP-PZ-22

SHEET 5 OF 9

LOCATION: Rattlesnake Lake - Gorgas

DATUM: Ground Surface

DRILLING DATE:

INCLINATION: -90°

AZIMUTH: n/a

DEPTH SCALE FEET	DRILLING RECORD	DESCRIPTION	SYMBOLIC LOG	ELEV. DEPTH (ft)	RUN No.	INDICES: ROCK STRENGTH (R5 R4 R3 R2 R1); WEATHERING (W2 W3 W4); ALTERATION (2 3 4)	RECOVERY: TOTAL CORE % (80 60 40 20); RQD % (80 60 40 20)	FRACTURE INDEX PER RUN	Jn	DISCONTINUITY DATA: DIP w.r.t. CORE AXIS (alpha) (0 30 60 90); TYPE AND SURFACE DESCRIPTION	J CON	Jr	Ja	Fault/Breccia/Gouge	Lost Core / Broken Core	PIEZOMETER, STANDPIPE OR THERMISTOR INSTALLATION
160																
165																
170																
175																
180																Bentonite Grout Mix
185																
190																
195																
200																

Refer to "Lithological and Geotechnical Soil and Rock Description Terminology" for accompanying legend and notes.

CONTINUED NEXT PAGE

DEPTH SCALE
1 in to 5 ft

Golder Associates

LOGGED: CDL
CHECKED: CDL

DRAFT

PROJECT No.: 154-4912

RECORD OF SONIC HOLE: GS-AP-PZ-22

LOCATION: Rattlesnake Lake - Gorgas

DATUM: Ground Surface

DRILLING DATE:

INCLINATION: -90° AZIMUTH: n/a

Refer to "Lithological and Geotechnical Soil and Rock Description Terminology" for accompanying legend and notes.

DEPTH SCALE FEET	DRILLING RECORD	DESCRIPTION	SYMBOLIC LOG	ELEV. DEPTH (ft)	RUN No.	INDICES: ROCK STRENGTH (R5 R4 R3 R2 R1) / WEATHERING (W2 W3 W4) / ALTERATION (2 3 4)	RECOVERY: TOTAL CORE % (80 60 40 20) / RQD % (80 60 40 20)	FRACTURE INDEX PER RUN	Jn	DISCONTINUITY DATA: DIP w.r.t. CORE AXIS (alpha) (0 30 60 90) / TYPE AND SURFACE DESCRIPTION	J CON	Jr	Ja	Fault/Breccia/Gouge	Lost Core / Broken Core	PIEZOMETER, STANDPIPE OR THERMISTOR INSTALLATION
200																
205																
210																
215																
220																Bentonite Grout Mix
225																
230																
235																
240																

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DEPTH SCALE

1 in to 5 ft

Golder Associates

LOGGED: CDL

CHECKED: CDL

DRAFT

PROJECT No.: 154-4912

RECORD OF SONIC HOLE: GS-AP-PZ-22

SHEET 7 OF 9

LOCATION: Rattlesnake Lake - Gorgas

DATUM: Ground Surface

DRILLING DATE:

INCLINATION: -90°   AZIMUTH: n/a

DEPTH SCALE FEET	DRILLING RECORD	DESCRIPTION	SYMBOLIC LOG	ELEV. DEPTH (ft)	RUN No.	INDICES: ROCK STRENGTH R5 R4 R3 R2 R1	WEATHERING W2 W3 W4 / ALTERATION 2 3 4	RECOVERY: TOTAL CORE % 80 60 40 20	RQD % 80 60 40 20	FRACTURE INDEX PER RUN	Jn	DISCONTINUITY DATA: DIP w.r.t. CORE AXIS (alpha) 0 30 60 90	TYPE AND SURFACE DESCRIPTION	J CON	Jr	Ja	Fault/Breccia/Gouge	Lost Core / Broken Core	PIEZOMETER, STANDPIPE OR THERMISTOR INSTALLATION
240																			
245																			
250																			
255																			
260																			Bentonite Grout Mix
265																			
270																			
275																			
280																			

Refer to "Lithological and Geotechnical Soil and Rock Description Terminology" for accompanying legend and notes.

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DEPTH SCALE

1 in to 5 ft

Golder Associates

LOGGED: CDL

CHECKED: CDL

DRAFT

File:C:\GOLDER\GORGAS\600 PROCESSED DATA\GINT\GORGAS.GPJ Output Form:BC_DRILLHOLE (MINING STD) Template:BC REGION TEMPLATE BETA 2.GDT Library:BC REGION LIBRARY.GLB CLangford 5/25/16

PROJECT No.: 154-4912

RECORD OF SONIC HOLE: GS-AP-PZ-22

LOCATION: Rattlesnake Lake - Gorgas

DATUM: Ground Surface

DRILLING DATE:

INCLINATION: -90° AZIMUTH: n/a

DEPTH SCALE FEET	DRILLING RECORD	DESCRIPTION	SYMBOLIC LOG	ELEV. / DEPTH (ft)	RUN No.	Refer to "Lithological and Geotechnical Soil and Rock Description Terminology" for accompanying legend and notes. INDICES: ROCK STRENGTH R5 R4 R3 R2 R1; WEATHERING W2 W3 W4; ALTERATION 2 3 4	RECOVERY: TOTAL CORE % 80 60 40 20; RQD % 80 60 40 20	FRACTURE INDEX PER RUN	Jn	DISCONTINUITY DATA: DIP w.r.t. CORE AXIS (alpha) 0 30 60 90; TYPE AND SURFACE DESCRIPTION	J CON	Jr	Ja	Fault/Breccia/Gouge	Lost Core / Broken Core	PIEZOMETER, STANDPIPE OR THERMISTOR INSTALLATION
280																
285																
290																Bentonite Grout Mix
295																
300																
305																PelPlug Bentonite Pellets (5 gallons used)
310																Catcher installed. GP#1 Filter Media Sand in PrePack (0.5 x 50lb bags used)
315																2" PVC Sch 40 0.010 Slot PrePack Threaded Screen
320		*CONTINUED NEXT PAGE*														

DEPTH SCALE

1 in to 5 ft

Golder Associates

LOGGED: CDL

CHECKED: CDL

DRAFT

File:C:\GOLDER\GORGAS\600 PROCESSED DATA\GINT\GORGAS.GPJ Output Form:BC_DRILLHOLE (MINING STD) Template:BC REGION TEMPLATE BETA 2.GDT Library:BC REGION LIBRARY.GLB CLangford 5/25/16

PROJECT No.: 154-4912

RECORD OF SONIC HOLE: GS-AP-PZ-22

LOCATION: Rattlesnake Lake - Gorgas

DATUM: Ground Surface

DRILLING DATE:

INCLINATION: -90°   AZIMUTH: n/a

DEPTH SCALE FEET	DRILLING RECORD	DESCRIPTION	SYMBOLIC LOG	ELEV. DEPTH (ft)	RUN No.	INDICES: ROCK STRENGTH (R5 R4 R3 R2 R1) / WEATHERING (W2 W3 W4) / ALTERATION (2 3 4)	RECOVERY: TOTAL CORE % (80 60 40 20) / RQD % (80 60 40 20)	FRACTURE INDEX PER RUN	Jn	DISCONTINUITY DATA: DIP w.r.t. CORE AXIS (alpha) (0 30 60 90) / TYPE AND SURFACE DESCRIPTION	J CON	Jr	Ja	Fault/Breccia/Gouge	Lost Core / Broken Core	PIEZOMETER, STANDPIPE OR THERMISTOR INSTALLATION
320																
																2" PVC Sch 40 0.010 Slot PrePack Threaded Screen
325																
330																
335																
340																
345																
350																
355																
360																

Refer to "Lithological and Geotechnical Soil and Rock Description Terminology" for accompanying legend and notes.

DEPTH SCALE

1 in to 5 ft

Golder Associates

LOGGED: CDL

CHECKED: CDL

DRAFT

File:C:\GOLDER\GORGAS\600 PROCESSED DATA\GINT\GORGAS.GPJ Output Form:BC_DRILLHOLE (MINING STD) Template:BC REGION TEMPLATE BETA 2.GDT Library:BC REGION LIBRARY.GLB CLangford 5/25/16

SUBSURFACE LOG

Client Borehole ID: GS-AP-MW-40HO
Stantec Boring No.: **GS-AP-MW-40HO**
Client: Southern Company Services (SCS)
Boring Location: 1,320,858.04 N; 2,060,018.89 E Alabama West NAD83
Project Number: 175620201
Surface Elevation: 357.91 ft
Elevation Datum: NAVD 1988
Project Name: Plant Gorgas
Date Started: 4/18/20
Completed: 4/21/20
Project Location: Walker County Co, Parrish, Alabama
Depth to Water: 76.9 ft
Date/Time: 5/1/20
Inspector: S. Bolden
Logger: S. Bolden
Depth to Water: N/A
Date/Time: N/A
Drilling Contractor: Cascade Drilling
Drill Rig Type and ID: PS-150 Sonic Rig
Overburden Drilling and Sampling Tools (Type and Size): 4" X 6" Rotosonic/ 6" Air Hammer Drill
Sampler Hammer Type: Other
Weight: N/A
Drop: N/A
Efficiency: N/A
Reviewed By: B. Halada
Approved By: B. Evans

Lithology: Depth Ft[2]	Lithology: Elevation	Description	Overburden: / Rock Core:	Sample[1] / RQD %	Depth Ft[2] / Run Ft	Rec. Ft / Rec. Ft	Blows/PSI / Rec. %	Remarks
0.0	357.9	Top of Hole						
		Previously drilled by a different Cascade crew and 7" casing installed to a depth of 38.5 ft.						
				AH-1	0.0 - 38.5			

0 5 10 15 20 25 30 35

STANTEC 1755 STD GORGAS_175620201.GPJ BC 1755 STD DATAT R0.GDT 8/20/20

SUBSURFACE LOG

Client Borehole ID: GS-AP-MW-40HO
Stantec Boring No.: **GS-AP-MW-40HO**
Client: Southern Company Services (SCS)
Boring Location: 1,320,858.04 N; 2,060,018.89 E Alabama West NAD83
Project Number: 175620201
Surface Elevation: 357.91 ft
Elevation Datum: NAVD 1988

Lithology Depth Ft[2]	Lithology Elevation		Description	Overburden: / Rock Core:	Sample[1] / RQD %	Depth Ft[2] / Run Ft	Rec. Ft / Rec. Ft	Blows/PSI / Rec. %	Remarks
38.5	319.4								
			Air hammer drilling, no lithology recovered. @ 38.5' Drill cutting dry. No visible water flow.						
					AH-2	38.5 - 50.0			
					AH-3	50.0 - 60.0			
					AH-4	60.0 - 70.0			
					AH-5	70.0 - 80.0			

40 45 50 55 60 65 70 75 80

STANTEC 1755 STD GORGAS_175620201.GPJ BC 1755 STD DATAT R0.GDT 8/20/20

SUBSURFACE LOG

Client Borehole ID: GS-AP-MW-40HO
Stantec Boring No.: **GS-AP-MW-40HO**
Client: Southern Company Services (SCS)
Boring Location: 1,320,858.04 N; 2,060,018.89 E Alabama West NAD83
Project Number: 175620201
Surface Elevation: 357.91 ft
Elevation Datum: NAVD 1988

Lithology Depth Ft[2]	Lithology Elevation		Description	Overburden: / Rock Core:	Sample[1] / RQD %	Depth Ft[2] / Run Ft	Rec. Ft / Rec. Ft	Blows/PSI / Rec. %	Remarks
			Air hammer drilling, no lithology recovered. *(Continued)*						
85					AH-6	80.0 - 90.0			
90									
95					AH-7	90.0 - 100.0			
			@ 97' to 99' soft zone encountered. Drill cuttings are dry to damp. Low to no visible water flow.						
100									
105					AH-8	100.0 - 110.0			
110									
115					AH-9	110.0 - 120.0			
120									
125					AH-10	120.0 - 130.0			

STANTEC 1755 STD GORGAS_175620201.GPJ BC 1755 STD DATAT R0.GDT 8/20/20

SUBSURFACE LOG

Client Borehole ID: GS-AP-MW-40HO
Stantec Boring No.: **GS-AP-MW-40HO**
Client: Southern Company Services (SCS)
Boring Location: 1,320,858.04 N; 2,060,018.89 E Alabama West NAD83
Project Number: 175620201
Surface Elevation: 357.91 ft
Elevation Datum: NAVD 1988

Lithology Depth Ft[2]	Lithology Elevation		Description	Overburden: / Rock Core:	Sample[1] / RQD %	Depth Ft[2] / Run Ft	Rec. Ft / Rec. Ft	Blows/PSI / Rec. %	Remarks
			Air hammer drilling, no lithology recovered. *(Continued)*						
130									
135					AH-11	130.0 - 140.0			
140									
145					AH-12	140.0 - 150.0			
150									
155					AH-13	150.0 - 160.0			
160									
165					AH-14	160.0 - 170.0			
170			@ 170' Drill cuttings moist to wet. Visible, intermittent water flow.						

STANTEC 1755 STD GORGAS_175620201.GPJ BC 1755 STD DATAT R0.GDT 8/20/20

SUBSURFACE LOG

Client Borehole ID: GS-AP-MW-40HO
Stantec Boring No.: **GS-AP-MW-40HO**
Client: Southern Company Services (SCS)
Boring Location: 1,320,858.04 N; 2,060,018.89 E Alabama West NAD83
Project Number: 175620201
Surface Elevation: 357.91 ft
Elevation Datum: NAVD 1988

Lithology Depth Ft[2]	Lithology Elevation		Description	Overburden: / Rock Core:	Sample[1] / RQD %	Depth Ft[2] / Run Ft	Rec. Ft / Rec. Ft	Blows/PSI / Rec. %	Remarks
175			Air hammer drilling, no lithology recovered. *(Continued)*		AH-15	170.0 - 180.0			
180									
185					AH-16	180.0 - 190.0			
190									
195					AH-17	190.0 - 200.0			
200			@ 200' Drill cuttings wet. Visible steady water flow.						
205					AH-18	200.0 - 210.0			
210									
215					AH-19	210.0 - 220.0			

STANTEC 1755 STD GORGAS_175620201.GPJ BC 1755 STD DATAT R0.GDT 8/20/20

SUBSURFACE LOG

Client Borehole ID: GS-AP-MW-40HO
Stantec Boring No.: **GS-AP-MW-40HO**
Client: Southern Company Services (SCS)
Boring Location: 1,320,858.04 N; 2,060,018.89 E Alabama West NAD83
Project Number: 175620201
Surface Elevation: 357.91 ft
Elevation Datum: NAVD 1988

Lithology Depth Ft[2]	Lithology Elevation		Description	Overburden: / Rock Core:	Sample[1] / RQD %	Depth Ft[2] / Run Ft	Rec. Ft / Rec. Ft	Blows/PSI / Rec. %	Remarks
220			Air hammer drilling, no lithology recovered. *(Continued)*						
225					AH-20	220.0 - 230.0			
230					AH-21	230.0 - 235.0			
235			@ 235' Drill rig jittering.		AH-22	235.0 - 240.0			
240									
245					AH-23	240.0 - 250.0			
250	250.0	107.9							

No Refusal /
Bottom of Hole at 250.0 Ft.

Top of Rock = 38.5 Ft.
Top of Rock Elevation = 319.4 Ft.

Note: No well installed in original borehole, see Boring Abandonment form for details. Offset 20' northwest (315°) and drilled to 95 ft bgs, set well from 80-90 ft bgs per G. Dyer.
Depths are reported in feet below ground surface

STANTEC 1755 STD GORGAS_175620201.GPJ BC 1755 STD DATAT R0.GDT 8/20/20

SUBSURFACE LOG

Client Borehole ID: GS-AP-MW-6V (Abandoned)
Stantec Boring No.: **GS-AP-MW-6V (Abandoned)**
Client: Southern Company Services (SCS)
Boring Location: TBD
Project Number: 175620201
Surface Elevation: TBD
Elevation Datum: TBD
Project Name: Plant Gorgas
Date Started: 4/18/20
Completed: 4/20/20
Project Location: Walker County Co, Parrish, Alabama
Depth to Water: 30.7 ft
Date/Time: 4/20/20
Inspector: S. Bolden
Logger: S. Bolden
Depth to Water: N/A
Date/Time: N/A
Drilling Contractor: Cascade Drilling
Drill Rig Type and ID: PS-150 Sonic Rig
Overburden Drilling and Sampling Tools (Type and Size): 4" X 6" Rotosonic/ 6" Air Hammer Drill
Sampler Hammer Type: Other
Weight: N/A
Drop: N/A
Efficiency: N/A
Reviewed By: B. Halada
Approved By: B. Evans

Lithology: Depth Ft[2]	Lithology: Elevation	Description	Overburden: / Rock Core:	Sample[1] / RQD %	Depth Ft[2] / Run Ft	Rec. Ft / Rec. Ft	Blows/PSI / Rec. %	Remarks
0.0		Top of Hole						
		Hydroexcavated to 7.1', no sample collected.						
8.0		WELL GRADED SAND WITH GRAVEL, SW, 10YR 6/6 (brownish yellow), medium to coarse grained, dry, iron oxide staining, Highly weathered sandstone and shale present. Saprolite		RS01	8.0 - 13.5	3.8	N/A	
13.2		WELL GRADED GRAVEL, GP-GC, 7.5YR 5/1 (gray) with 7.5YR 4/1 (dark gray), coarse grained, moist to wet, iron oxide staining, poorly graded, Highly weathered bedrock. Visible pieces of sandstone. Mine spoils		RS02	13.5 - 16.5	2.5	N/A	
16.5		Sandstone, brown yellow to dark gray, fine grained, moderately hard, highly weathered, wet, iron oxide staining, Small bands of shale visible. Highly fractured zone from 16.5' to 16.8'and from 19.1' to 20.0'.		RS03	16.5 - 26.0	9.6	N/A	
29.0		@ 20' Sandstone With Shale, gray to dark gray, fine to medium grained, moderately hard to hard, laminated, moist to wet, Laminated sandstone alternating between light gray/gray to dark gray.		RS04	26.0 - 29.0	2.3	N/A	
		Air hammer drilling, no lithology recovered. 7" casing advanced to 29'. @ 29.0' No water flow observed (Dry).		AH-1	29.0 - 40.0			

Depth scale: 0, 5, 10, 15, 20, 25, 30, 35, 40

STANTEC 1755 STD GORGAS_175620201.GPJ BC 1755 STD DATAT R0.GDT 8/20/20

SUBSURFACE LOG

Client Borehole ID: GS-AP-MW-6V (Abandoned)
Stantec Boring No.: **GS-AP-MW-6V (Abandoned)**
Client: Southern Company Services (SCS)
Boring Location: TBD
Project Number: 175620201
Surface Elevation: TBD
Elevation Datum: TBD

Lithology Depth Ft[2]	Lithology Elevation		Description	Overburden: / Rock Core:	Sample[1] / RQD %	Depth Ft[2] / Run Ft	Rec. Ft / Rec. Ft	Blows/PSI / Rec. %	Remarks
40			Air hammer drilling, no lithology recovered. *(Continued)*						
45					AH-2	40.0 - 50.0			
50									
55					AH-3	50.0 - 60.0			
60			@ 59' Low to medium water flow.						
65					AH-4	60.0 - 70.0			
70									
75			@75' Increase in water flow.		AH-5	70.0 - 80.0			
80									
85					AH-6	80.0 - 90.0			

STANTEC 1755 STD GORGAS_175620201.GPJ BC 1755 STD DATAT R0.GDT 8/20/20

SUBSURFACE LOG

Client Borehole ID: GS-AP-MW-6V (Abandoned)
Stantec Boring No.: **GS-AP-MW-6V (Abandoned)**
Client: Southern Company Services (SCS)
Boring Location: TBD
Project Number: 175620201
Surface Elevation: TBD
Elevation Datum: TBD

Lithology: Depth Ft[2]	Lithology: Elevation	Description	Overburden: / Rock Core:	Sample[1] / RQD %	Depth Ft[2] / Run Ft	Rec. Ft / Rec. Ft	Blows/PSI / Rec. %	Remarks
90		Air hammer drilling, no lithology recovered. *(Continued)* @ 91' to 94' Driller encountered "soft zones".						
95				AH-7	90.0 - 100.0			
100								
105		@ 104' to 105' Driller encountered "soft zones".		AH-8	100.0 - 110.0			
110								
115				AH-9	110.0 - 120.0			
120	120.0	@ 119' to 120' Driller encountered "soft zones".						

No Refusal /
Bottom of Hole at 120.0 Ft.

Top of Rock = 16.5 Ft.

Well was abandoned due to damage. Refer to Well Abandonment form for details.
Depths are reported in feet below ground surface

STANTEC 1755 STD GORGAS_175620201.GPJ BC 1755 STD DATAT R0.GDT 8/20/20

SUBSURFACE LOG

Client Borehole ID	GS-AP-MW-6VR	Stantec Boring No.	**GS-AP-MW-6VR**
Client	Southern Company Services (SCS)	Boring Location	1,324,568.11 N; 2,063,915.62 E Alabama West NAD83
Project Number	175620201	Surface Elevation	275.44 ft
		Elevation Datum	NAVD 1988
Project Name	Plant Gorgas	Date Started	6/15/20
		Completed	6/16/20
Project Location	Walker County Co, Parrish, Alabama	Depth to Water	43.3 ft
		Date/Time	6/23/20
Inspector	W. Padgett	Logger	W. Padgett
Depth to Water	N/A	Date/Time	N/A
Drilling Contractor	Cascade Drilling	Drill Rig Type and ID	PS-150 Sonic Rig

Overburden Drilling and Sampling Tools (Type and Size) 4" X 6" Rotosonic

Sampler Hammer Type Other Weight N/A Drop N/A Efficiency N/A

Reviewed By B. Halada Approved By B. Evans

Depth Ft[2]	Elevation	Description	Sample[1] / RQD %	Depth Ft[2] / Run Ft	Rec. Ft / Rec. Ft	Blows/PSI / Rec. %	Remarks
0.0	275.4	Top of Hole					
1.0	274.4	SILTY GRAVEL, GW-GM, fine to coarse, loose, Gravel road base, [FILL]					
		CLAYEY POORLY GRADED SAND, SP, 5YR 5/4 (reddish brown) and 10YR 5/6 (yellowish brown), fine to medium, medium dense, dry to moist, [FILL]	RS01	0.0 - 6.5	6.5	N/A	
5.5	269.9						
6.5	268.9	SANDY WELL GRADED GRAVEL WITH SILT, GW-GM, 2.5Y 4/1 (dark gray), fine to coarse, medium dense, moist to wet, well graded, [FILL]					
		SANDY WELL GRADED GRAVEL WITH CLAY, GW-GC, 10YR 6/2 (light brownish gray) to 10YR 4/4 (dark yellowish brown), fine to coarse, medium dense, moist to wet, well graded, Weathered bedrock	RS02	6.5 - 14.5	8.0	N/A	
14.5	260.9						
		Sandstone, gray to dark gray, fine grained, moderately hard to hard, thin to medium bedded, slightly weathered, moist to wet, iron oxide staining, Tight fractures with iron oxide staining 23.5 ft - 24.0 ft	RS03	14.5 - 16.5	2.0	N/A	
			RS04	16.5 - 22.5	4.0	N/A	
25.0	250.4		RS05	22.5 - 26.5	4.0	N/A	
		Mudstone (80%) With Sandstone (20%) Mudstone, gray to dark gray, moderately hard, thin to medium bedded, slightly weathered, moist, 0° to 15° bedding angle, Interbedded sandstone in mudstone matrix	RS06	26.5 - 36.5	10.0	N/A	

Overburden: / Rock Core:

STANTEC 1755 STD GORGAS_175620201.GPJ BC 1755 STD DATAT R0.GDT 8/20/20

SUBSURFACE LOG

Client Borehole ID: GS-AP-MW-6VR
Stantec Boring No.: **GS-AP-MW-6VR**
Client: Southern Company Services (SCS)
Boring Location: 1,324,568.11 N; 2,063,915.62 E Alabama West NAD83
Project Number: 175620201
Surface Elevation: 275.44 ft
Elevation Datum: NAVD 1988

Lithology: Depth Ft[2]	Lithology: Elevation	Description	Overburden: / Rock Core:	Sample[1] / RQD %	Depth Ft[2] / Run Ft	Rec. Ft / Rec. Ft	Blows/PSI / Rec. %	Remarks
40.0	235.4							
		Shale, dark gray, moderately hard, thin to very thin bedded, slightly weathered, moist to wet, 0° to 15° bedding angle, Intermittent fossils observed		RS07	36.5 - 46.5	9.0	N/A	
50.0	225.4							
51.0	224.4	Shale Mudstone, gray to dark gray, soft to moderately hard, thin to medium bedded, moist to wet, 0° to 15° bedding angle, Intermittent fossils observed		RS08	46.5 - 56.5	9.0	N/A	
51.5	223.9	Coal, black, soft, medium bedded, slightly weathered, moist to wet, 0° to 15° bedding angle						
		Shale Mudstone, gray to dark gray, soft to moderately hard, thin to medium bedded, moist to wet, 0° to 15° bedding angle, Intermittent fossils observed		RS09	56.5 - 66.5	7.0	N/A	
				RS10	66.5 - 76.5	10.0	N/A	
75.0	200.4							
		Sandstone, light gray to gray, fine grained, hard, medium bedded, slightly weathered, dry to moist, 0° to 15° bedding angle						
82.0	193.4			RS11	76.5 - 86.5	10.0	N/A	

STANTEC 1755 STD GORGAS_175620201.GPJ BC 1755 STD DATAT R0.GDT 8/20/20

SUBSURFACE LOG

Client Borehole ID: GS-AP-MW-6VR
Stantec Boring No.: **GS-AP-MW-6VR**
Client: Southern Company Services (SCS)
Boring Location: 1,324,568.11 N; 2,063,915.62 E Alabama West NAD83
Project Number: 175620201
Surface Elevation: 275.44 ft
Elevation Datum: NAVD 1988

Lithology Depth Ft[2]	Lithology Elevation	Description	Overburden: / Rock Core:	Sample[1] / RQD %	Depth Ft[2] / Run Ft	Rec. Ft / Rec. Ft	Blows/PSI / Rec. %	Remarks
85		Mudstone, gray to dark gray, moderately hard, thin to medium bedded, slightly weathered, moist, interbedded, 0° to 15° bedding angle, Trace thin interbedded sandstone layers. Potential fracture encountered 91-92 feet bgs *(Continued)*						
90				RS12	86.5 - 96.5	7.5	N/A	
94.0	181.4							
95		Sandstone (80%) With Mudstone (20%) Sandstone, light gray to gray, fine grained, hard, thin to medium bedded, slightly weathered, dry to moist, interbedded, 0° to 15° bedding angle, Very tight vertical fracture encountered 98 ft bgs. Potential fracture encountered 105 feet bgs.						
100				RS13	96.5 - 106.5	7.0	N/A	
105								
110				RS14	106.5 - 116.5	9.5	N/A	
115								
120		@ 119' Sandstone, gray, fine to medium grained, thin to thick bedded		RS15	116.5 - 126.5	10.0	N/A	
125								

STANTEC 1755 STD GORGAS_175620201.GPJ BC 1755 STD DATAT R0.GDT 8/20/20

SUBSURFACE LOG

Client Borehole ID GS-AP-MW-6VR
Stantec Boring No. **GS-AP-MW-6VR**
Client Southern Company Services (SCS)
Boring Location 1,324,568.11 N; 2,063,915.62 E Alabama West NAD83
Project Number 175620201
Surface Elevation 275.44 ft
Elevation Datum NAVD 1988

Lithology Depth Ft[2]	Lithology Elevation	Description	Overburden: / Rock Core:	Sample[1] / RQD %	Depth Ft[2] / Run Ft	Rec. Ft / Rec. Ft	Blows/PSI / Rec. %	Remarks
130 135		Sandstone (80%) With Mudstone (20%) Sandstone, light gray to gray, fine grained, hard, thin to medium bedded, slightly weathered, dry to moist, interbedded, 0° to 15° bedding angle, Very tight vertical fracture encountered 98 ft bgs. Potential fracture encountered 105 feet bgs. *(Continued)*		RS16	126.5 - 136.5	8.5	N/A	
136.5	138.9	No Refusal / Bottom of Hole at 136.5 Ft. Top of Rock = 14.5 Ft. Top of Rock Elevation = 260.9 Ft.						

Monitoring well installed. Refer to Well Installation form for well completion details.
Depths are reported in feet below ground surface

STANTEC 1755 STD GORGAS_175620201.GPJ BC 1755 STD DATAT R0.GDT 8/20/20

SUBSURFACE LOG

Client Borehole ID	GS-AP-MW-7VR	Stantec Boring No.	**GS-AP-MW-7VR**
Client	Southern Company Services (SCS)	Boring Location	1,324,242.41 N; 2,063,512.64 E Alabama West NAD83
Project Number	175620201	Surface Elevation 313.89 ft	Elevation Datum NAVD 1988
Project Name	Plant Gorgas	Date Started 4/15/20	Completed 4/16/20
Project Location	Walker County Co, Parrish, Alabama	Depth to Water 10.3 ft	Date/Time 4/20/20
Inspector S. Bolden	Logger S. Bolden	Depth to Water N/A	Date/Time N/A
Drilling Contractor	Cascade Drilling	Drill Rig Type and ID	PS-150 Sonic Rig

Overburden Drilling and Sampling Tools (Type and Size) 4" X 6" Rotosonic/ 4" X 6" Air Hammer Drill

Sampler Hammer Type Other Weight N/A Drop N/A Efficiency N/A

Reviewed By B. Halada Approved By B. Evans

Lithology Depth Ft[2]	Elevation	Description	Overburden: / Rock Core:	Sample[1] / RQD %	Depth Ft[2] / Run Ft	Rec. Ft / Rec. Ft	Blows/PSI / Rec. %	Remarks
0.0	313.9	Top of Hole						
		Hydroexcavated to 4.1', no sample collected.						
4.1	309.8							
		Sandstone, dark gray with light red tan, fine grained, weathered, dry, iron oxide staining, possible mine spoils, lithology similar to Ash Pond.		RS01	4.1 - 6.5	1.5	N/A	
				RS02	6.5 - 16.5	3.2	N/A	
				RS03	16.5 - 26.5	1.8	N/A	
26.3	287.6							
		Siltstone (65%) With Shale (35%)						
28.5	285.4							
		Siltstone, gray to dark gray, fine grained, soft to hard, interbedded, slightly weathered, iron oxide staining						
		Sandstone, gray to dark gray, fine to coarse grained, moderately hard to hard, slightly weathered, graded and bioturbated, Grading from fine grained to coarse grained sandstone. @ 30.5' Sandstone, light gray to gray, medium to coarse grained, freshly weathered, dry, Traces of		RS04	26.5 - 36.5	9.6	N/A	

STANTEC 1755 STD GORGAS_175620201.GPJ BC 1755 STD DATAT R0.GDT 8/20/20

SUBSURFACE LOG

Client Borehole ID: GS-AP-MW-7VR
Stantec Boring No.: **GS-AP-MW-7VR**
Client: Southern Company Services (SCS)
Boring Location: 1,324,242.41 N; 2,063,512.64 E Alabama West NAD83
Project Number: 175620201
Surface Elevation: 313.89 ft
Elevation Datum: NAVD 1988

Lithology: Depth Ft[2]	Lithology: Elevation	Description	Overburden: / Rock Core:	Sample[1] / RQD %	Depth Ft[2] / Run Ft	Rec. Ft / Rec. Ft	Blows/PSI / Rec. %	Remarks
		silty sand.		RS05	36.5 - 39.5	2.7	N/A	
39.5	274.4	Air hammer drilling, no lithology recovered. Advance 7" steel casing to 39.0' @39.5' Drill chips moist from visual observation. No visible water flow observed.						
40								
45				AH-7	39.5 - 50.0			
50								
55				AH-8	50.0 - 60.0			
60								
65				AH-9	60.0 - 70.0			
70								
75		@ 75' Water bearing fractures encountered. Visible water flow.		AH-10	70.0 - 80.0			
80								

STANTEC 1755 STD GORGAS_175620201.GPJ BC 1755 STD DATAT R0.GDT 8/20/20

SUBSURFACE LOG

Client Borehole ID: GS-AP-MW-7VR
Stantec Boring No.: **GS-AP-MW-7VR**
Client: Southern Company Services (SCS)
Boring Location: 1,324,242.41 N; 2,063,512.64 E Alabama West NAD83
Project Number: 175620201
Surface Elevation: 313.89 ft
Elevation Datum: NAVD 1988

Lithology Depth Ft[2]	Lithology Elevation		Description	Overburden: / Rock Core:	Sample[1] / RQD %	Depth Ft[2] / Run Ft	Rec. Ft / Rec. Ft	Blows/PSI / Rec. %	Remarks
			Air hammer drilling, no lithology recovered. *(Continued)*						
85					AH-11	80.0 - 90.0			
90									
95					AH-12	90.0 - 100.0			
100									
105					AH-13	100.0 - 110.0			
110									
115					AH-14	110.0 - 120.0			
120									
125					AH-15	120.0 - 130.0			

SUBSURFACE LOG

Client Borehole ID: GS-AP-MW-7VR
Stantec Boring No.: **GS-AP-MW-7VR**
Client: Southern Company Services (SCS)
Boring Location: 1,324,242.41 N; 2,063,512.64 E Alabama West NAD83
Project Number: 175620201
Surface Elevation: 313.89 ft
Elevation Datum: NAVD 1988

Lithology Depth Ft[2]	Lithology Elevation		Description	Overburden: / Rock Core:	Sample[1] / RQD %	Depth Ft[2] / Run Ft	Rec. Ft / Rec. Ft	Blows/PSI / Rec. %	Remarks
			Air hammer drilling, no lithology recovered. *(Continued)*						
130									
135					AH-16	130.0 - 140.0			
140									
145			@ 145' Water bearing fractures encountered. Visible water flow.		AH-17	140.0 - 150.0			
150									
155					AH-18	150.0 - 160.5			
160	160.5	153.4							

No Refusal /
Bottom of Hole at 160.5 Ft.

Top of Rock = 4.1 Ft.
Top of Rock Elevation = 309.8 Ft.

Monitoring well installed. Refer to Well Installation form for well completion details.
Depths are reported in feet below ground surface

STANTEC 1755 STD GORGAS_175620201.GPJ BC 1755 STD DATAT R0.GDT 8/20/20

Southern Company

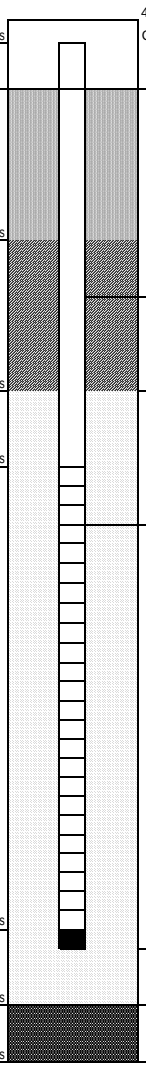
Well Installation Field Log

Project Name:	Plant Gorgas Phase III Delineation MW Installation	Date Started:	5/1/2020	Date Completed:	5/2/2020
Borehole/Well No:	GS-GSA-MW-6V (Abandoned)	Northing (ft):	TBD	Easting (ft):	TBD
Plant Name:	Plant Gorgas	Latitude:	TBD	Longitude:	TBD
Plant Address:	460 Gorgas Road Parrish, AL	Location Datum:	TBD	Elevation Datum:	TBD
Project & Task Number:	175620201	Surface/ Ground Elevation:	TBD	Stickup (ft, ags):	TBD
Goals/Task:	Delineation Well Installation	Borehole Diameter (in):	6.0 (29.0' -120.0') 7.0 (0.0' - 29.0')	Borehole Depth (ft, bgs):	120.0
Drilling Company:	Cascade	Well Casing Diameter (in):	2	Well Depth (ft, bgs):	98.0
Drilling Equipment/Rig Type:	Truck Mounted PS-150 Sonic	Top of Casing elev (ft):	TBD	Screen length (ft):	9.5
Drilling Method:	4" x 6" Rotosonic / 6" Air Hammer Drill	DTW at Completion (ft, bgs):	30.65 (4/20/2020)		
Sampling Method:	Sonic 4" core barrel				
Prepared By:	Matthew Edmunds				
Review By:	Briggs Evans				

***Not to Scale**

Depth (feet)

Well Construction



Stick up 3.0 ft, ags

4" Inch Diameter Protective Cover with Locking Lid

Ground surface - 0.0'

Bottom of Grout 80.8 ft , bgs
Top of Bentonite

2 inch casing

Bottom of Bentonite 85.0 ft , bgs
Top of Filter Pack

16/40 mesh Filter pack

Top of Screen 88.5 ft , bgs

0.010 Slot screen

Bottom of screen 98.0 ft , bgs

98.5 ft , bgs Sump/end cap

Top of Backfill below Filter Pack 102.9 ft , bgs

102.9 ft , bgs Base of filter pack

Terminus of borehole 120.0 ft , bgs

Materials Inventory

Stick up: 3.0 ft, ags

Casing Type (steel or PVC, schedule 40 or 80): 2" PVC, Schedule 40

Casing
Top: 3.0 ft, ags Bottom: 88.5 ft, bgs

Screen Type: Sch 40, 2" ID x 3" OD U-Pack

Screen Slot Size: 0.010

Screen
Top: 88.5 ft, bgs Bottom: 98.0 ft, bgs

Sump/end cap
Top: 98.0 ft, bgs Bottom: 98.5 ft, bgs

Grout Quantity: 85 gallons

Grout Type: Baroid Aqua Guard 30% Solids Grout

Grout
Top: 0.0 ft, bgs Bottom: 80.8 ft, bgs

Density Initital:
10.1 lbs/gal Return: 10.1 lbs/gal

Bentonite Type: Pel Plug 1/4" PDS TR30 pellets

Bentonite Seal
Top: 80.8 ft, bgs Bottom: 85.0 ft, bgs

Filter Pack - Pre-pack and Annular Space
Type (manufacturer, size):
Southern Product & Silica Co. Filter Sand and Gravel #1

Filter Pack:
Top: 85.0 ft, bgs Bottom: 102.9 ft, bgs

Notes: Bentonite seal hydrated a minimum of 4-hours prior to grout backfill placement. Well was abandoned and a replacement well GS-GSA-MW-6V (boring GS-GSA-MW-6VR) was drilled.

Backfill below sand pack:
Boring backfilled from 120.0 to 102.9 with Haliburton 3/8" bentonite chips.

Southern Company

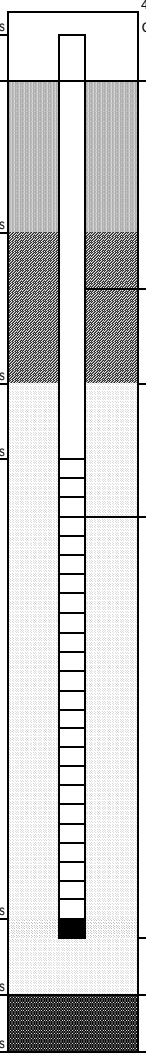
Well Installation Field Log

Project Name:	Plant Gorgas Phase III Delineation MW Installation	Date Started:	6/22/2020	Date Completed:	6/23/2020
Borehole/Well No:	GS-AP-MW-6V (Boring log GS-AP-MW-6VR)	Northing (ft):	1,324,568.11	Easting (ft):	2,063,915.62
Plant Name:	Plant Gorgas	Latitude:	33.641	Longitude:	-87.188
Plant Address:	460 Gorgas Road Parrish, AL	Location Datum:	Alabama West NAD83	Elevation Datum:	NAVD 1988
Project & Task Number:	175620201	Surface/ Ground Elevation:	275.44	Stickup (ft, ags):	2.8
Goals/Task:	Delineation Well Installation	Borehole Diameter (in):	6.0	Borehole Depth (ft, bgs):	136.5
Drilling Company:	Cascade	Well Casing Diameter (in):	2	Well Depth (ft, bgs):	98.5
Drilling Equipment/Rig Type:	Truck Mounted PS-150 Sonic	Top of Casing elev (ft):	272.84	Screen length (ft):	9.5
Drilling Method:	4" x 6" Rotosonic	DTW at Completion (ft, bgs):	43.3		
Sampling Method:	Sonic 4" core barrel				
Prepared By:	Walker Padgett				
Review By:	Briggs Evans				

***Not to Scale**

Depth (feet)

Well Construction



Stick up 2.8 ft, ags

4" Inch Diameter Protective Cover with Locking Lid

Ground surface - 0.0'

Bottom of Grout 81.2 ft , bgs
Top of Bentonite

2 inch casing

Bottom of Bentonite 85.0 ft , bgs
Top of Filter Pack

16/40 mesh Filter pack

Top of Screen 88.5 ft , bgs

0.010 Slot screen

Bottom of screen 98.0 ft , bgs

98.5 ft , bgs Sump/end cap

Top of Backfill below Filter Pack 103.1 ft , bgs

103.1 ft , bgs Base of filter pack

Terminus of borehole 136.5 ft , bgs

Materials Inventory

Stick up: 2.8 ft, ags

Casing Type (steel or PVC, schedule 40 or 80): 2" PVC, Schedule 40

Casing
Top: 2.8 ft, ags Bottom: 88.5 ft, bgs

Screen Type: Sch 40, 2" ID x 3" OD U-Pack

Screen Slot Size: 0.010

Screen
Top: 88.5 ft, bgs Bottom: 98.0 ft, bgs

Sump/end cap
Top: 98.0 ft, bgs Bottom: 98.5 ft, bgs

Grout Quantity: 110 gallons

Grout Type: Baroid Aqua Guard 30% Solids Grout

Grout
Top: 0.0 ft, bgs Bottom: 81.2 ft, bgs

Density:
Initial: 10.2 lbs/gal Return: 10.2 lbs/gal

Bentonite Type: Pel Plug 1/4" PDS TR30 pellets

Bentonite Seal
Top: 81.2 ft, bgs Bottom: 85.0 ft, bgs

Filter Pack - Pre-pack and Annular Space
Type (manufacturer, size):
Southern Product & Silica Co. Filter Sand and Gravel #1

Filter Pack:
Top: 85.0 ft, bgs Bottom: 103.1 ft, bgs

Notes: Bentonite seal hydrated a minimum of 4-hours prior to grout backfill placement.

Backfill below sand pack:
Boring backfilled from 136.5 to 103.1 with Haliburton 3/8" bentonite chips.

Southern Company

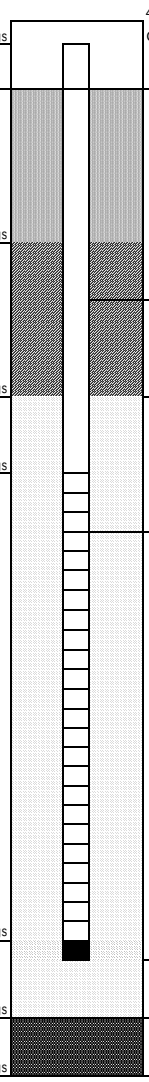
Well Installation Field Log

Project Name:	Plant Gorgas Phase III Delineation MW Installation	Date Started:	4/18/2020	Date Completed:	4/18/2020
Borehole/Well No:	GS-GSA-MW-7VR	Northing (ft):	1,324,242.41	Easting (ft):	2,063,512.64
Plant Name:	Plant Gorgas	Latitude:	33.640	Longitude:	-87.188
Plant Address:	460 Gorgas Road Parrish, AL	Location Datum:	Alabama West NAD83	Elevation Datum:	NAVD 1988
Project & Task Number:	175620201	Surface/ Ground Elevation:	311.04	Stickup (ft, ags):	2.8
Goals/Task:	Delineation Well Installation	Borehole Diameter (in):	6.0 (39.5' -160.5') 7.0 (0.0' - 39.5')	Borehole Depth (ft, bgs):	160.5
Drilling Company:	Cascade	Well Casing Diameter (in):	2	Well Depth (ft, bgs):	150.3
Drilling Equipment/Rig Type:	Truck Mounted PS-150 Sonic	Top of Casing elev (ft):	313.89	Screen length (ft):	9.5
Drilling Method:	4" x 6" Rotosonic, 6" Air Hammer	DTW at Completion (ft, bgs):	10.31 (4/20/2020)		
Sampling Method:	Sonic 4" core barrel				
Prepared By:	Suama Bolden				
Review By:	Briggs Evans				

***Not to Scale**

Depth (feet)

Well Construction



Materials Inventory

Stick up: 2.8 ft, ags

Casing Type (steel or PVC, schedule 40 or 80): 2" PVC, Schedule 40

Casing Top: 2.8 ft, ags Bottom: 139.3 ft, bgs

Screen Type: Sch 40, 2" ID x 3" OD U-Pack

Screen Slot Size: 0.010

Screen Top: 139.3 ft, bgs Bottom: 148.8 ft, bgs

Sump/end cap Top: 148.8 ft, bgs Bottom: 150.3 ft, bgs

Grout Quantity: 120 gallons

Grout Type: Baroid Aqua Guard 30% Solids Grout

Grout Top: 0.0 ft, bgs Bottom: 133.5 ft, bgs

Density Initital: 10.1 lbs/gal Return: 10.0 lbs/gal

Bentonite Type: Pel Plug 1/4" PDS TR30 pellets

Bentonite Seal Top: 133.5 ft, bgs Bottom: 137.9 ft, bgs

Filter Pack - Pre-pack and Annular Space Type (manufacturer, size): Southern Product & Silica Co. Filter Sand and Gravel #1

Filter Pack: Top: 137.9 ft, bgs Bottom: 155.5 ft, bgs

Notes: Bentonite seal hydrated a minimum of 4-hours prior to grout backfill placement.

Backfill below sand pack: Boring backfilled from 160.5' to 155.5' with Haliburton 3/8" bentonite chips

Southern Company

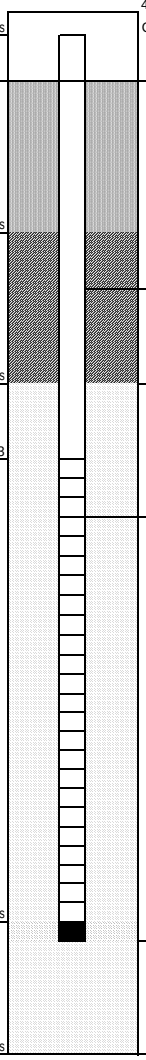
Well Installation Field Log

Project Name:	Plant Gorgas Phase III Delineation MW Installation	Date Started:	4/30/2020	Date Completed:	5/1/2020
Borehole/Well No:	GS-GSA-MW-40HO	Northing (ft):	1,320,858.03	Easting (ft):	2,060,018.89
Plant Name:	Plant Gorgas	Latitude:	33.631	Longitude:	-87.199
Plant Address:	460 Gorgas Road Parrish, AL	Location Datum:	Alabama West NAD83	Elevation Datum:	NAVD 1988
Project & Task Number:	175620201	Surface/ Ground Elevation:	355.07	Stickup (ft, ags):	2.8
Goals/Task:	Delineation Well Installation	Borehole Diameter (in):	6.0	Borehole Depth (ft, bgs):	95.0
Drilling Company:	Cascade	Well Casing Diameter (in):	2	Well Depth (ft, bgs):	90.3
Drilling Equipment/Rig Type:	Truck Mounted PS-150 Sonic	Top of Casing elev (ft):	357.91	Screen length (ft):	9.5
Drilling Method:	Sonic 4" x 6", 6" Air Hammer Drill	DTW at Completion (ft, bgs):	76.88 (5/1/2020)		
Sampling Method:	None				
Prepared By:	Matthew Edmunds				
Review By:	Briggs Evans				

***Not to Scale**

Depth (feet)

Well Construction



Stick up 2.8 ft, ags

4" Inch Diameter Protective Cover with Locking Lid

Ground surface - 0.0'

Bottom of Grout 72.9ft , bgs
Top of Bentonite

2 inch casing

Bottom of Bentonite 77.5 ft, bgs
Top of Filter Pack

16/40 mesh Filter pack

Top of Screen 80.3

0.010 Slot screen

Bottom of screen 89.8 ft , bgs

90.3 ft , bgs Sump/end cap

Terminus of borehole 95.0 ft , bgs

95.0 ft , bgs Base of filter pack

Materials Inventory

Stick up: 2.8 ft, ags

Casing Type (steel or PVC, schedule 40 or 80): 2" PVC, Schedule 40

Casing
Top: 2.8 ft, ags Bottom: 80.3 ft, bgs

Screen Type: Sch 40, 2" ID x 3" OD U-Pack

Screen Slot Size: 0.010

Screen
Top: 80.3 ft, bgs Bottom: 89.8 ft, bgs

Sump/end cap
Top: 89.8 ft, bgs Bottom: 90.3 ft, bgs

Grout Quantity: 77 gallons

Grout Type: Baroid Aqua Guard 30% Solids Grout

Grout
Top: 0.0 ft, bgs Bottom: 72.9 ft, bgs

Density
Initial: 10.1 lbs/gal Return: 10.1 lbs/gal

Bentonite Type: Pel Plug 1/4" PDS TR30 pellets

Bentonite Seal
Top: 72.9 ft, bgs Bottom: 77.5 ft, bgs

Filter Pack - Pre-pack and Annular Space
Type (manufacturer, size):
Southern Product & Silica Co. Filter Sand and Gravel #1

Filter Pack:
Top: 77.5 ft, bgs Bottom: 95.0 ft, bgs

Notes: Bentonite seal hydrated for a minimum of 4-hours prior to grout backfill placement. No stick-up because it was cut off for airlifting. A 2.8 ft stick-up was installed after airlifting.

Backfill below sand pack: None

Southern Company

Monitoring Well Abandonment Form

General Information

Project Name: Plant Gorgas – Phase III Deleneation Monitoring Well Installation

Monitoring Well Number: GS-AP-MW-6V

Plant Name: Plant Gorgas Ash Pond

Plant Address: 460 Gorgas Road Parrish, AL

Abandoned by: Walker Padgett

Project & Task Number: 175620201

Date: 6/23/2020

Goal/Task: Hydrogeologic Investigation

Well Details (Check one per section):

Casing Diameter		Borehole Diameter		Well Type	
n/a	2"	X	6" (29' - 120')	X	Permanent **Well replaced due to casing failure.**
n/a	4"	X	7" (0' - 29')	n/a	Temporary
X	7" (0' - 29')	n/a	12"	n/a	Geoprobe® Screen Point (GSP) or Equiv.
n/a	Other/NA	n/a	Other/NA	120'	Measured Total Depth
				30.7'	Measured Static Water Level (measured 4/20/2020)

Casing Material

x	PVC (2" PVC, Sch 40 riser from 0.0' - 88.5' and 2" Sch 40, ID U-Pack screen from 88.5' - 98.0')
n/a	Steel
n/a	Other/NA

Abandonment Details (Check one per section):

Refer to attached boring and well installation logs GS-AP-MW-6V

Abandonment Method (as detailed in SOW)

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

Materials and Quantity Used

n/a	Type 1 Portland Cement mixed with 3-5% bentonite
1 50 lb bag	Bentonite Pellets
n/a	Neat Cement
x	Other **- 15 gallons Pure Gold Bentonite Grout**

Overdrilled Well Cuttings and Debris

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

Prepared By: Walker Padgett Date: 7/21/2020

Reviewed By: Edgar Smith Date: 8/20/2020

Southern Company

Boring Abandonment Form

General Information

Project Name: Plant Gorgas – Phase III Deleneation Monitoring Well Installation

Monitoring Well Number: GS-AP-MW-40HO

Plant Name: Plant Gorgas

Plant Address: 460 Gorgas Road Parrish, AL

Abandoned by: Matthew Edmunds

Project & Task Number: 175620201

Date: 4/29/2020

Goal/Task: Hydrogeologic Investigation

Well Details (Check one per section):

Casing Diameter		Borehole Diameter		Well Type	
n/a	2"	X	6" (38.5' - 250')	n/a	Permanent
n/a	4"	X	7" (0' - 38.5')	X	Temporary **-Exploratory boring. No well installed**
X	7" (0' - 38.5')	n/a	12"	n/a	Geoprobe® Screen Point (GSP) or Equiv.
n/a	Other/NA	n/a	Other/NA	250.0	Measured Total Depth
				n/a	Measured Static Water Level

Casing Material

n/a PVC

X Steel **(7-inch steel surface casing to 38.5 feet)**

n/a Other N/A

Abandonment Details (Check one per section):

Refer to attached boring and well installation logs GS-AP-MW-40HO

Abandonment Method (as detailed in SOW)

n/a Overdrill and Grout

n/a Well Extraction

X Grout in Place

n/a Bentonite Sealing-Pellets and Neat Cement

n/a Bentonite Sealing-Pellets only

n/a Probe Hole Grouting

n/a Re-proved for through-the-rod grouting

Materials and Quantity Used

n/a Type 1 Portland Cement mixed with 3-5% bentonite

n/a Bentonite Pellets

n/a Neat Cement

x Othe **- 430 gallons Pure Gold Bentonite Grout**

Overdrilled Well Cuttings and Debris

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

n/a Drummed for Disposal

Prepared By: Matthew Edmunds Date: 8/12/2020

Reviewed By: Edgar Smith Date: 8/20/202

2012 GEOTECH ROCK LOG - ESEE2012DATABASE.GDT - 8/16/20 12:00 - S:\WORKGROUPS\APC GENERAL SERVICE COMPLEX\CIVIL TECH SUPPORT\DRILLING\PROJECTS\AL-GORGAS\GORGAS CCR WELLS PHASE III-GSA\SALTER WELL BORING LOG.GPJ

ES

SOUTHERN COMPANY

LOG OF TEST BORING

SOUTHERN COMPANY SERVICES, INC.
EARTH SCIENCE AND ENVIRONMENTAL ENGINEERING

PROJECT Plant Gorgas CCR Wells 2020
LOCATION Quentin, AL

DATE STARTED 8/11/2020 **COMPLETED** 8/16/2020 **SURF. ELEV.** Not Surveyed **COORDINATES:**
CONTRACTOR CFS **EQUIPMENT** CME-550X **METHOD** Hollow Stem Auger; HQ Rock Core
DRILLED BY S. Denty **LOGGED BY** S. McDonald **CHECKED BY** B. Coates **ANGLE** **BEARING**
BORING DEPTH 205.6 ft. **GROUND WATER DEPTH: DURING** **COMP.** **DELAYED** 69.17 ft. after 24 hrs.
NOTES Well installed. Refer to well data sheet.

DEPTH (ft)	GRAPHIC LOG	STRATA DESCRIPTION	CORE RUN NUMBER	RUN DEPTH (ft.)	PERCENT RECOVERY (RQD)	COMMENTS
5, 10		**Sandy Silt (ML)**	AU -1	0.0-13.5	**100**	
15		**Sandstone** - dark gray (N4), medium grain, hard to very hard, moderately to slightly weathered, with 21 primary, open, ~90-degree fractures and 1 open vertical fracture; iron-stained 13.5' - 14.2', 14.3', 14.5', 14.9', and 15.1' (Pottsville Formation)	RC -1	13.5-19.3	**100** (64)	
20		- gray (N6) to dark gray (N4), fine to medium grain, medium hard to hard, slightly to not weathered, thin shaly layer at top, interbedded siltstone and sandstone, 8 open fractures at ~90-degrees	RC -2	19.3-24.3	**102** (82)	
25		- gray (N5), fine to medium grain, hard to very hard, not weathered, sandstone with thin layers of siltstone, with 18 open fractures at ~90-degrees	RC -3	24.3-29.3	**100** (54)	
30		- gray (N6) to dark gray (N4), fine to medium grain, hard to very hard, not weathered, fissile, with 19 open fractures at ~90-degrees	RC -4	29.3-34.3	**100** (52)	
35		- with 7 open fractures at ~90-degrees along thin shaly platings	RC -5	34.3-39.3	**98** (84)	
40						

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SOUTHERN COMPANY

LOG OF TEST BORING

SOUTHERN COMPANY SERVICES, INC.
EARTH SCIENCE AND ENVIRONMENTAL ENGINEERING

PROJECT Plant Gorgas CCR Wells 2020
LOCATION Quentin, AL

DEPTH (ft)	STRATA DESCRIPTION	CORE RUN NUMBER	RUN DEPTH (ft.)	PERCENT RECOVERY (RQD)	COMMENTS
	Sandstone*(Con't)* - gray (N6) to dark gray (N4), fine to medium grain, hard to very hard *(Con't)*	RC -6	39.3-44.3	**100** (80)	
45	- Siltstone: gray (N6) to dark gray (N4), fine to medium grain, hard to very hard, not weathered, primarily siltstone with thin interbedded sandstone, with 8 open fractures at ~80- to 90-degrees (Pottsville Formation)				Auger refusal at 44.3 ft. Competent rock at Elev. .
50	- with 4 open fractures at ~90-degrees	RC -7	49.3-54.3	**102** (98)	
55	**Sandstone** - gray (N6) to dark gray (N4), fine to medium grain, hard to very hard, not weathered, with shaly platings, 2 open fractures at ~90-degrees (Pottsville Formation)	RC -8	54.3-59.3	**98** (98)	
60	- with 2 open fractures at ~90-degrees	RC -9	59.3-64.3	**100** (100)	
65	- sandstone with silty platings, 1 open fracture at ~90-degrees	RC -10	64.3-69.3	**100** (100)	
70	- with 2 open fractures at ~90-degrees	RC -11	69.3-74.3	**96** (96)	
75	- with 3 open fractures at ~90-degrees	RC -12	74.3-79.3	**104** (102)	
80	- with 9 open fractures at ~90-degrees	RC -13	79.3-84.3	**100** (88)	
85	- with 4 open fractures at ~90-degrees	RC -14	84.3-89.3	**94**	

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LOG OF TEST BORING

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EARTH SCIENCE AND ENVIRONMENTAL ENGINEERING

PROJECT Plant Gorgas CCR Wells 2020
LOCATION Quentin, AL

DEPTH (ft)	GRAPHIC LOG	STRATA DESCRIPTION	CORE RUN NUMBER	RUN DEPTH (ft.)	PERCENT RECOVERY (RQD)	COMMENTS
		Sandstone*(Con't)*	RC -14	84.3-89.3	(94)	
90		- with 5 open fractures at ~90-degrees	RC -15	89.3-94.3	**100** (94)	
95		**Siltstone** - gray (N6) to dark gray (N4), fine to medium grain, hard to very hard, not weathered, with interbedded sandstone, with 3 open fractures at ~90-degrees (Pottsville Formation)	RC -16	94.3-99.3	**104** (104)	Auger refusal at 94.3 ft. Competent rock at Elev. .
100		- with 2 open fractures at ~90-degrees	RC -17	99.3-104.3	**94** (92)	
105		- at 106.1' highly-weathered shale for 0.8', friable, muddy, fine-grained; overall with 13 open fractures at ~0 to 90-degrees, with healed fractures	RC -18	104.3-109.3	**106** (78)	
110		- with 5 open fractures at ~45- to 90-degrees	RC -19	109.3-114.3	**102** (98)	
115		- moderately weathered and highly fractured 114.8' - 115.6'; multiple partially-healed fractures 115.6' - 116.7'; otherwise 10 primary open fractures at ~30- to 90-degrees, healed fractures throughout	RC -20	114.3-119.3	**100** (78)	
120		- gray (N6) to dark gray (N4), fine grain, hard to very hard, not weathered, with 2 open fractures at ~45- and 90-degrees	RC -21	119.3-124.3	**92** (92)	
125		- with 2 open fractures at ~90-degrees	RC -22	124.3-129.3	**98** (98)	
130		- with 2 open fractures at ~90-degrees	RC -23	129.3-134.3	**106** (106)	

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LOG OF TEST BORING

SOUTHERN COMPANY SERVICES, INC.
EARTH SCIENCE AND ENVIRONMENTAL ENGINEERING

PROJECT Plant Gorgas CCR Wells 2020
LOCATION Quentin, AL

DEPTH (ft)	GRAPHIC LOG	STRATA DESCRIPTION	CORE RUN NUMBER	RUN DEPTH (ft.)	PERCENT RECOVERY (RQD)	COMMENTS
135		**Siltstone***(Con't)* - no fractures	RC -24	134.3-139.3	**96** (96)	
140		- no fractures, coarsening slightly	RC -25	139.3-144.3	**106** (106)	
145		- with 1 open fracture at ~90-degrees	RC -26	144.3-149.3	**102** (102)	
150		- no fractures	RC -27	149.3-154.3	**98** (98)	
155		- no fractures	RC -28	154.3-159.3	**98** (98)	
160			RC -29	159.3-164.3	**100** (100)	
165			RC -30	164.3-169.3	**100** (100)	
170			RC -31	169.3-174.3	**100** (100)	
175			RC -32	174.3-179.3	**100** (98)	
180			RC -33	179.3-184.3		

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LOG OF TEST BORING

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PROJECT Plant Gorgas CCR Wells 2020
LOCATION Quentin, AL

DEPTH (ft)	GRAPHIC LOG	STRATA DESCRIPTION	CORE RUN NUMBER	RUN DEPTH (ft.)	PERCENT RECOVERY (RQD)	COMMENTS
		Siltstone*(Con't)*	RC -33	179.3-184.3	**100** (98)	
185			RC -34	184.3-189.3	**100** (98)	
190			RC -35	189.3-194.3	**100** (100)	
195		- with 4 open fractures at ~90-degrees	RC -36	194.3-199.3	**100** (94)	
200		**Coal** - (Pottsville Formation)				Auger refusal at 198.6 ft. Competent rock at Elev. .
		Siltstone - gray, fine to medium grain, hard, interbedded siltstone and sandstone, with thin planar bedding (Pottsville Formation)	RC -37	199.3-204.3	**102** (96)	
205			RC -38	204.3-205.6	**100** (69)	

Bottom of borehole at 205.6 feet.

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RECORD OF WELL CONSTRUCTION

SOUTHERN COMPANY SERVICES, INC.
EARTH SCIENCE AND ENVIRONMENTAL ENGINEERING

PROJECT Plant Gorgas CCR Wells 2020
LOCATION Quentin, AL

DATE STARTED 8/11/2020 **COMPLETED** 8/16/2020 **SURF. ELEV.** Not Surveyed **COORDINATES:**
CONTRACTOR CFS **EQUIPMENT** CME-550X **METHOD** Hollow Stem Auger; HQ Rock Core
DRILLED BY S. Denty **LOGGED BY** S. McDonald **CHECKED BY** B. Coates **ANGLE** **BEARING**
BORING DEPTH 205.6 ft. **GROUND WATER DEPTH: DURING** **COMP.** **DELAYED** 69.17 ft. after 24 hrs.
NOTES Well installed. Refer to well data sheet.

BOREHOLE DATA	DEPTH (ft)	WELL DATA	COMMENTS
Strata		Protective steel cover 3-foot square concrete pad Top of casing Elev. = (DEPTH)	
		Surface Seal: concrete (2.0)	
	5		
	10		
	15		
	20		
	25		
	30		
	35		
	40		

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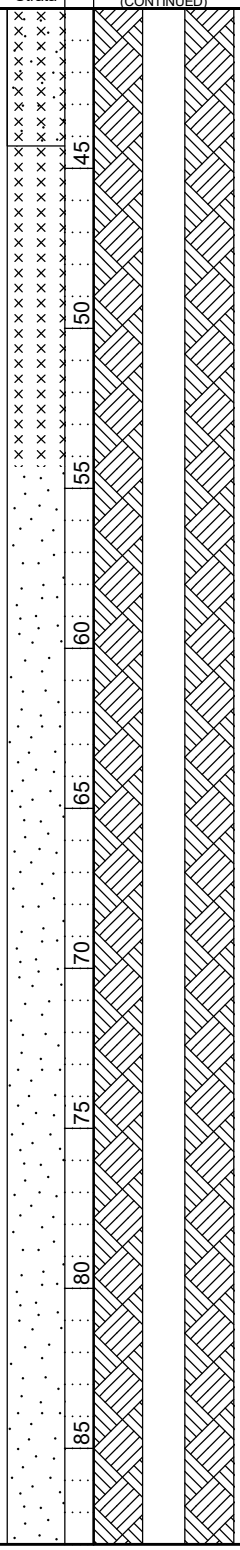
RECORD OF WELL CONSTRUCTION

SOUTHERN COMPANY SERVICES, INC.
EARTH SCIENCE AND ENVIRONMENTAL ENGINEERING

PROJECT Plant Gorgas CCR Wells 2020
LOCATION Quentin, AL

BOREHOLE DATA	DEPTH (ft)	WELL DATA	COMMENTS
Strata		Protective steel cover 3-foot square concrete pad Top of casing Elev. =	
		(CONTINUED) (DEPTH)	



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RECORD OF WELL CONSTRUCTION

SOUTHERN COMPANY SERVICES, INC.
EARTH SCIENCE AND ENVIRONMENTAL ENGINEERING

PROJECT Plant Gorgas CCR Wells 2020
LOCATION Quentin, AL

BOREHOLE DATA	DEPTH (ft)	WELL DATA	COMMENTS
Strata		Protective steel cover 3-foot square concrete pad Top of casing Elev. =	
		(CONTINUED) (DEPTH)	
	90		
	95	Annular Fill: 4 bags of Aquaguard grout and 44 gallons of water	
	100		
	105		
	110		
	115		
	120		
	125		
	130		
	135		

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RECORD OF WELL CONSTRUCTION

SOUTHERN COMPANY SERVICES, INC.
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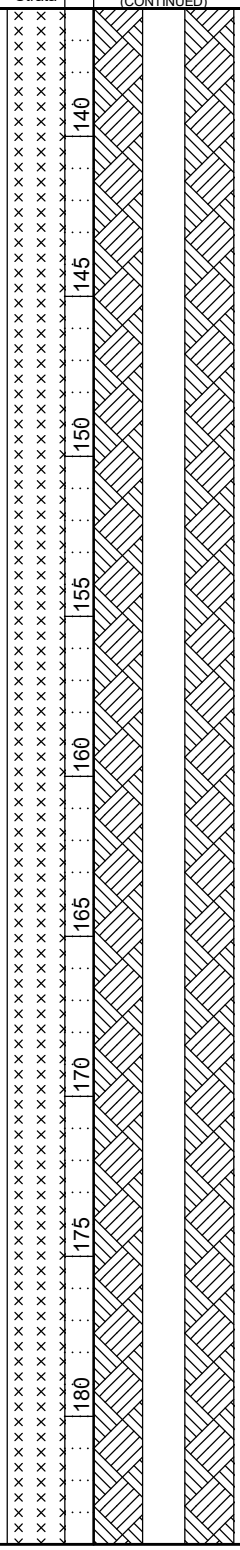
PROJECT Plant Gorgas CCR Wells 2020
LOCATION Quentin, AL

BOREHOLE DATA	DEPTH (ft)	WELL DATA	COMMENTS
Strata		Protective steel cover 3-foot square concrete pad Top of casing Elev. =	
		(CONTINUED) (DEPTH)	



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RECORD OF WELL CONSTRUCTION

SOUTHERN COMPANY SERVICES, INC.
EARTH SCIENCE AND ENVIRONMENTAL ENGINEERING

PROJECT Plant Gorgas CCR Wells 2020
LOCATION Quentin, AL

BOREHOLE DATA	DEPTH (ft)	WELL DATA	COMMENTS
Strata		Protective steel cover 3-foot square concrete pad Top of casing Elev. =	
		(CONTINUED)	(DEPTH)
	185		
			(187.1)
	190	Annular Seal: 0.5 bucket of Pel-Plug TR30 3/8" coated bentonite pellets, 50 pounds	
			(191.1)
		Filter: 1 bag of Filter Sil Industrial Quartz, 20/40 sand, 50 pounds	
	195		
			(195.1)
	200	**Well: 2" OD PVC (SCH 40)** **Screen: 10 ft. pre-pack**	
	205		
		Sump:0.50 ft.	

Appendix B

DRAFT

Low-Yield Well Study at Plant Gorgas Results and Recommendations

James C. Redwine, PG, PhD

Senior Reviewer/Principal Scientist/PG (AL No. 547)

Anchor QEA, LLC

Date: _____

DRAFT

600 Vestavia Parkway, Suite 121
Vestavia Hills, AL 35216
205.637.6632

ANCHOR QEA

Memorandum

September 2, 2020

To: Greg Dyer, PG, Southern Company Services (SCS)

From: Jim Redwine, PhD, PG; Alec Macbeth, PG; Gianluca De Bacco, PhD, Anchor QEA, LLC

cc: Eric Wallis, PG, SCS; Kristi Mitchell, PE, Anchor QEA

Re: Low-Yield Well Study at Plant Gorgas
Results and Recommendations

Introduction

In May 2019, Alabama Power Company (APC) submitted a *Groundwater Investigation Report* to the Alabama Department of Environmental Management (ADEM) to meet the requirements of an Administrative Order issued for Plant Gorgas (AO 18-096-GW). The *Groundwater Investigation Report*, in part, provided details on groundwater monitoring wells installed to delineate Appendix IV constituents detected at statistically significant levels that exceeded the groundwater protection standards (SCS 2019). As documented, several delineation wells did not produce sufficient groundwater for development or low-flow sampling methods, and therefore, were not sampled. APC maintained that locations where there was insufficient groundwater yield were considered successfully delineated. In November 2019, ADEM responded that further sampling attempts or additional wells may be necessary in order to confirm this determination (ADEM 2019).

Specifically, ADEM stated: "At selected sites, well locations where there was a lack of groundwater yield were considered successfully delineated as the lack of groundwater yield seems to indicate lack of groundwater and contaminant migration. APCO[1] should provide data obtained from further sampling attempts or the installation of additional wells near the well locations in question in order to confirm this claim (ADEM 2019)."

In the spring of 2020, APC engaged Anchor QEA, LLC, to perform a low-yield well study at selected monitoring wells located at Plant Gorgas (site). This summary memorandum presents the results of the field effort and includes the following information:

- A summary of well purging details and recharge rates, including a summary of recovery data collected from the deployed transducers
- Conclusions on the status of groundwater delineation
- Recommendations for sampling specific wells or installing additional wells to assure that delineation is complete

[1] Alabama Power Company

Scope of Work

Anchor QEA reviewed existing site data and conducted a site investigation to support recommendations for the following:

- If the low-yielding wells provide representative groundwater
- If each well can be used and incorporated into the monitoring system, either through conventional low-flow sampling or no-purge sampling
- If constituents of interest in groundwater are currently delineated

Pre-Field Work Analysis of Existing Data

Existing groundwater sampling and field data were evaluated prior to mobilizing into the field. Analysis of existing data consisted of review of the following information:

- Construction details of each well from boring and well construction logs
- Available down-hole geophysical logs
- Available well development data, including field parameters and pumping rates

Field Activities

Field work was conducted at Plant Gorgas on July 7 through July 13, 2020, at the following 13 monitoring wells (subject wells). A summary of field evaluation results is included in Appendix A.

- GS-AP-MW-01
- GS-AP-MW-03
- GS-AP-MW-04
- GS-AP-MW-07V
- GS-GSA-MW-10H
- GS-AP-MW-16S
- GS-AP-MW-20
- GS-AP-MW-27H
- GS-AP-MW-30H
- GS-AP-MW-30HS
- GS-AP-MW-37H
- GS-AP-MW-39H
- GS-AP-MW-41HS

Twelve of these monitoring wells are located at Plant Gorgas Ash Pond; one of them (GS-GSA-MW-10H) is located at the Gypsum Pond (Figures 1 and 2, respectively).

The scope of the field work consisted of the following activities:

- Measured static depth to groundwater from the subject wells and from nearby monitoring wells. Groundwater elevations from the subject wells are shown in Figure 3.
  - A substantial difference in groundwater elevation between the subject wells and sitewide trends or adjacent wells may suggest that the subject wells do not provide representative groundwater.
- Lowered a submersible pneumatic pump (Geotech Reclaimer pumps, either 24 or 48 inches in length) to a few feet from the bottom of each well.
- Pumped each subject well until the water level was generally a few feet above the pump. Pumping rates (ranging from 100 to 1,500 milliliters per minute [mL/min]), water levels, and field parameters (temperature, pH, specific conductivity, dissolved oxygen, oxidation-reduction potential, and turbidity) were monitored and documented on field sheets. Field data sheets are included in Appendix B.
- After pumping was completed, pulled the pump and lowered a pressure transducer (In-Situ's Troll 700) to a few feet from the bottom of the well to monitor recovery rates.
- Transducers were left in each well for a minimum of 40 hours, and water levels were recorded at 1-minute intervals for the entirety of the test. Recovery plots generated from transducer data are included in Appendix C.
- After completion of the recovery test, removed transducer and secured monitoring well.

Figure 1
Ash Pond Site Map

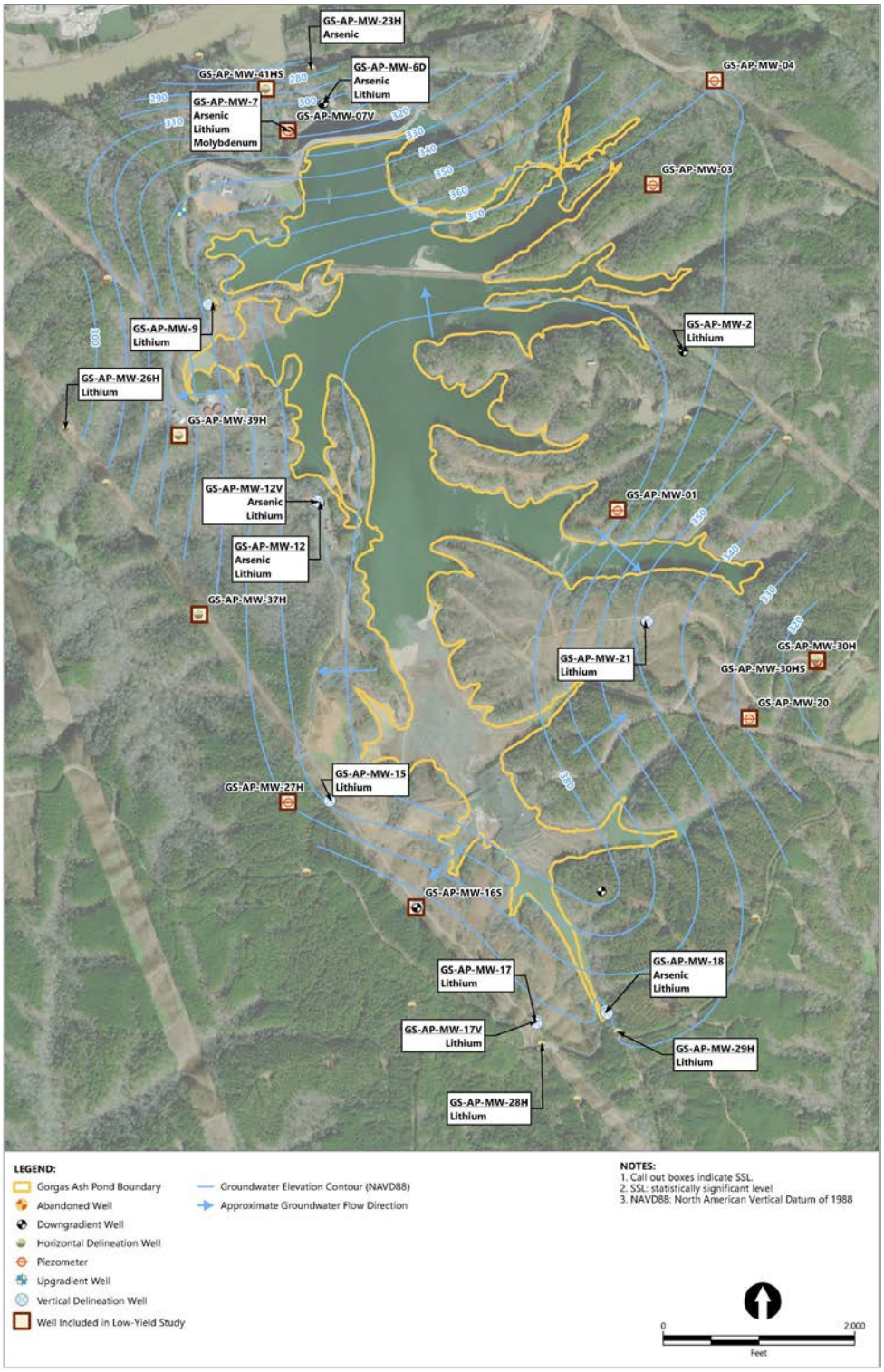
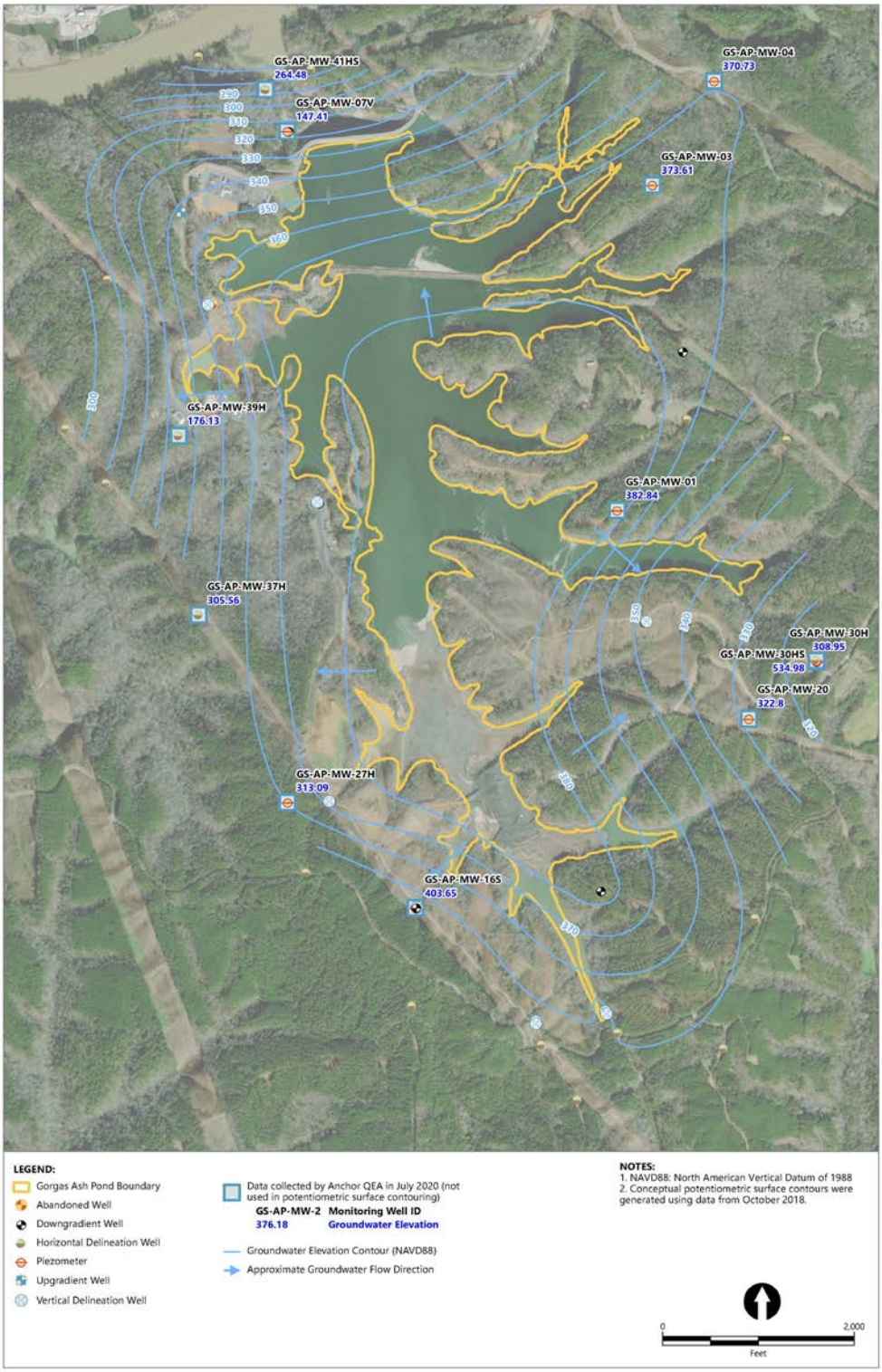


Figure 2
Gypsum Pond Site Map

Figure 3
Groundwater Elevation Summary



Data Evaluation

Following the field work described in the Field Activities section, Anchor QEA conducted a detailed evaluation of the data regarding the suitability of using each well in the monitoring network. Data evaluation consisted of the following tasks:

- Plotted recovery (residual drawdown versus time) curves (Appendix C)
- Reviewed applicable existing downhole geophysical logs
- Created a master table of data (included in Appendix A) that includes the following:
  - Well construction information
  - Geology
  - Pumping information (including pumping rates, drawdowns, and relative yield of formation and well bore)
  - Well recovery rates and well recovery observed at the end of the test, expressed as a percentage of the maximum residual drawdown
  - Summary of geophysical results
  - Criteria and recommendations on future disposition of well

Recommendations

Based on this evaluation, Anchor QEA assessed the following criteria to develop recommendations for future well disposition:

- Well recovery[2] at the end of the recovery test greater or less than 70%
- Formation contribution of water to well bore during pumping
- Presence of fractures within the screened interval (based on geophysical and/or boring logs)

Depending on these criteria, one of the following recommendations was made for each well:

- The well is functional as a monitoring well, and may be sampled using conventional low-flow methods.
  - The monitoring wells recommended to be retained for conventional low-flow sampling methods are included in Table 1.
  - Anchor QEA also suggests redeveloping these wells to attempt to increase yield. Each of the wells listed in Table 1 are also amenable to no purge sampling.
- The well is not functional as a conventional monitoring well but may be applicable using no-purge sampling techniques.
  - Anchor QEA suggests employing a comparison study for the no-purge versus purging sampling techniques to demonstrate applicability. A generic plan for no-purge

[2] Well recovery is defined as the ratio between the measured recovery at the end of the test (which lasted at least 40 hours) and the available recovery (which is based on the static water level measured prior to the pumping phase), expressed as a percentage.

sampling is included in Appendix D. A comparative study could be implemented to demonstrate effectiveness of the no purge sampling technique.
  - Monitoring wells recommended to be retained for no-purge sampling are included in Table 2. Anchor QEA also suggests redeveloping these wells.
- The well is not functional as a groundwater quality monitoring point.
  - If the well is not functional, Anchor QEA evaluated whether the delineation of the constituents detected at statistically significant levels (SSLs) is complete and whether the well should be replaced. Because of the high level of effort required for replacement, we suggest that prior to replacement, the original well be purged at 100 mL/min to confirm that it cannot maintain that flow rate.
  - Monitoring wells that are not functional as monitoring wells, and where groundwater sampling should possibly be discontinued, are included in Table 3.
  - Monitoring wells that are recommended to be replaced are included in Table 4.

Table 1
Monitoring Wells Recommended to be Retained for Standard Low-Flow Sampling

Monitoring Well	Suggested Purge Rates (mL/min)	Well Recovery (%) Relative to Available Residual Drawdown Greater than 70%?	Significant[1] Rate of Formation Yield during Pumping (mL/min)	Screened Across a Fracture? [2]
GS-AP-MW-03	100 to 300	Yes	Yes	Yes
GS-AP-MW-16S[3]	100 to 350	Yes	Yes	Yes[4]
GS-AP-MW-20	100 to 120	Yes	Yes	Yes
GS-AP-MW-41HS	100 to 200	Yes	Yes	Yes

Notes:
1. "Significant" is defined as greater than 200 mL/min.
2. Based on geophysical logs
3. Purge water pH was greater than 11.
4. Based on observed recovery and water volume yielded by formation.

Table 2
Monitoring Wells Recommended to be Retained for No Purge Sampling

Monitoring Well	Well Recovery (%) Relative to Available Residual Drawdown Greater than 70%?	Significant[1] Rate of Formation Yield during Pumping (mL/min)	Screened Across a Fracture?[2]
GS-AP-MW-04	Yes	No	Yes
GS-AP-MW-30H	Yes	No	Yes

Notes:
1. "Significant" is defined as greater than 200 mL/min.
2. Based on geophysical logs

Table 3
Monitoring Wells Recommended to Not be Used for Water Quality Monitoring

Monitoring Well	Well Recovery (%) Relative to Available Residual Drawdown Greater than 70%?	Significant[1] Rate of Formation Yield during Pumping (mL/min)	Screened Across a Fracture[2]?
GS-AP-MW-01	NA	NA	NA
GS-AP-MW-07V	No	No	No
GS-GSA-MW-10H	Yes	Yes	No
GS-AP-MW-27H	No	No	No
GS-AP-MW-30HS	NA	NA	NA
GS-AP-MW-37H	No	Yes	No
GS-AP-MW-39H	No	No	No

Notes:
1. "Significant" is defined as greater than 200 mL/min.
2. Based on geophysical logs

NA: not available

Table 4
Monitoring Wells Considered for Replacement

Monitoring Well	SSL at Well or Nearby Well?	Delineation Complete?	Rationale
GS-AP-MW-01	Li in GS-AP-MW-2 and GS-AP-MW-21	Possibly not, subject monitoring well is isolated	Recommendation based on distance between GS-AP-MW-2 and GS-AP-MW-21
GS-GSA-MW-10H	Li in GS-GSA-MW-3	Possibly not	Horizontal delineation may not be complete; consider installing replacement closer to Gypsum Pond
GS-AP-MW-27H	Li in GS-AP-MW-15	Possibly not, subject monitoring well is downgradient of GS-AP-MW-15	Move to west and install at similar screened elevation as GS-AP-MW-15
GS-AP-MW-30HS	No	Possibly not	Well has insufficient water; reinstall at deeper depth, above the screened intervals of clustered wells
GS-AP-MW-37H	No	Possibly not (along property boundary)	Use as sentry well along property boundary

Li: Lithium
SSL: statistically significant level

The following items pertain to the wells that are recommended to be replaced:

- Prior to discontinuing use as monitoring well, each well should be purged at 100 to 500 mL/min to confirm the well's inability to yield the minimum acceptable purge flow rate of 100 mL/min.
- Efforts should be made to screen the replacement well across a hydraulically active fracture.
- Replacement wells should be offset from original wells at least 500 feet to increase the chances of encountering hydraulically active fractures.
- Surface lineaments should be evaluated, and field reconnaissance should be performed to help locate replacement wells and maximize the chances for sufficient yield for sampling in the well.

Table 5 summarizes the results of this evaluation.

Table 5
Evaluation Summary

Monitoring Well	Recommended to be Retained for Standard Low-Flow Sampling	Recommended to be Retained for No Purge Sampling	Recommended to Not be Used for Water Quality Monitoring	Recommended to be Considered for Replacement	Substantial Difference in Potentiometric Surface from Trend
GS-AP-MW-01			X	X	
GS-AP-MW-03	X				
GS-AP-MW-04		X			
GS-AP-MW-07V			X		X
GS-GSA-MW-10H			X	X	--
GS-AP-MW-16S	X				X
GS-AP-MW-20	X				
GS-AP-MW-27H			X	X	X
GS-AP-MW-30H		X			
GS-AP-MW-30HS			X	X	X
GS-AP-MW-37H			X	X	X
GS-AP-MW-39H			X		X
GS-AP-MW-41HS	X				

Notes:
Greater than 25 feet is considered to be a substantial difference in potentiometric surface.
GS-AP-MW-30HS is screened approximately 250 feet shallower than GS-AP-MW-30H.
--: no groundwater elevation data was collected

References

ADEM (Alabama Department of Environmental Management), 2019. Letter to: Mr. Dustin Brooks, PG. Regarding: Response to CCR Documents Submitted to the Department. November 14, 2019.

SCS (Southern Company Services), 2019. *Groundwater Investigation Report*. Plant Gorgas Ash Pond. Prepared for Alabama Power Company. May 2019.

Appendices

Appendix A Field and Evaluation Results
Appendix B Field Data Sheets
Appendix C Recovery Plots
Appendix D Generic Plan for No-Purge Sampling Demonstration

Appendix A
Field and Evaluation Results

Appendix A
Field and Evaluation Results

		Well Construction			Geology	Pumping Data										Recovery Data		
Plant	Borehole ID	Total Depth	Total Depth (Alternate)	Depth Top of Screen	Lithology of Screened Interval	Initial Depth to Water	Initial Length of Water (1)	Range of Pumping Rates	One well Volume (2)	Volume Pumped	Duration of Pumping	Approximate Volume Yielded by Formation	Approximate Rate of Volume Yielded by Formation	Maximum Drawdown	Length of Water at Maximum Drawdown (3)	Recovery Rate		Well Recovery
		(feet TOC)	(feet TOC)	(feet TOC)		(feet TOC)	(feet)	(mL/min)	(liters)	(liters)	(minutes)	(liters)	(mL/min)	(feet)	(feet)	(feet/min)	(mL/min)	(% of residual drawdown)
Gorgas Ash Pond	GS-AP-MW-01	148.38	109.98	128.38	Coal	107.84	40.54	NA	25.0	NA	NA	NA	NA	NA	NA	NA	NA	NA
Gorgas Ash Pond	GS-AP-MW-03	180.52	181.3	170.52	Coal and shaly sandstone	138.68	41.84	150 to 1500	25.8	43.5	90	24.5	271.7	30.87	10.97	0.26	160.4	93
Gorgas Ash Pond	GS-AP-MW-04	163.29	153.7	153.29	Coal, laminated, fresh, v. f. grained	137.17	26.12	175	16.1	4.2	24	-1.4	-57.1	9.03	17.09	0.05	30.9	100
Gorgas Ash Pond	GS-AP-MW-07V	202.68	204.9	192.68	Sandstone with siltstone; sandstone and shale	164.73	37.95	200 to 400	23.4	20.1	69.0	0.9	13.3	31.05	6.90	0.002	1.2	<10%
Gorgas Gypsum	GS-GSA-MW-10H	29.48	29.48	9.5	Siltstone and Shale	26.48	3.00	600	1.9	2.4	4	2.1	522.9	1.41	2.5	0.001	0.6	100
Gorgas Ash Pond	GS-AP-MW-16S	133.38	NA	113.38	Shaly Sandstone (from MW-16D log)	58.77	74.61	350 to 1100	46.0	84.0	89	77.1	865.8	11.26	63.35	0.29	178.9	99

		Geophysical Notes				Criteria		
Plant	**Borehole ID**	**Caliper**	**Heat Pulse Flow Meter**	**Other**	**General Notes**	**Did well recover greater than 70% available residual drawdown?**	**Did formation contribute "significant" (greater than 200 mL/min) water during pumping?**	**Are there fractures within screened interval?**
Gorgas Ash Pond	GS-AP-MW-01	Not recorded.	Not recorded.	Not Available.	Bend in well just above water; could not lower pump or bailer past this bend.	NA	NA	NA
Gorgas Ash Pond	GS-AP-MW-03	Indications of a potential fracture zone within the screened interval observed.	Generally, downward flow in well under ambient conditions. Reduced downward flow at 176 feet may indicate that a water-bearing fracture is present.	Reduction in SPR log, anomalies on caliper log, gamma ray logs, and in fluid resistivity and fluid temperature observed between 170 and 185 feet. This response appears to indicate that the well screen intercepts a productive fracture system.	Moderate yield	Yes	Yes	Yes
Gorgas Ash Pond	GS-AP-MW-04	Potential fracture zone observed between 154 and 165.	Negative flow (injection) at 160 feet. Possibly related to fracture zone. The pressure transducer data seem to indicate that the formation was not receiving water during the injection test.	Reduction in gamma ray log, anomalies on caliper log, SPR logs, and in fluid resistivity and fluid temperature observed between 154 and 165 feet. This response appears to indicate that the well screen intercepts a productive fracture system.	Very Low Yield	Yes	No	Yes
Gorgas Ash Pond	GS-AP-MW-07V	No indications of fracture zones within the screened interval.	Not recorded.	Gamma log shows increasing values within the screened interval. Given the low yield of this well, this response could indicate the presence of finer clayey mineral, compatible with a fracture fill. Electrical logs not collected within screen interval. Fluid conductivity decrease between 178 and 200 feet could indicate flow from formation to well.	Very low yield; slow incomplete recovery; No drawdown measured in adjacent wells.	No	No	No (only evidence in well logs is drop in fluid conductivity)
Gorgas Gypsum	GS-GSA-MW-10H	No indications of water-bearing fracture zones observed in the log.	Not recorded.	No indications of water-bearing fracture zones observed in the log.	Very Low Yield; less than 3.5 feet of water in well	Yes	Yes	No
Gorgas Ash Pond	GS-AP-MW-16S	Not recorded	Not recorded	Not Available	Stabilize 10 feet of drawdown at 1,000 mL/min; rapid recovery; elevated pH	Yes	Yes	NA

		Well Construction			Geology	Pumping Data										Recovery Data		
Plant	Borehole ID	Total Depth	Total Depth (Alternate)	Depth Top of Screen	Lithology of Screened Interval	Initial Depth to Water	Initial Length of Water (1)	Range of Pumping Rates	One well Volume (2)	Volume Pumped	Duration of Pumping	Approximate Volume Yielded by Formation	Approximate Rate of Volume Yielded by Formation	Maximum Drawdown	Length of Water at Maximum Drawdown (3)	Recovery Rate		Well Recovery
		(feet TOC)	(feet TOC)	(feet TOC)		(feet TOC)	(feet)	(mL/min)	(liters)	(liters)	(minutes)	(liters)	(mL/min)	(feet)	(feet)	(feet/min)	(mL/min)	(% of residual drawdown)
Gorgas Ash Pond	GS-AP-MW-20	249.97	251.4	239.97	Shaly Sandstone (possible coal seam)	205.35	44.62	100 to 1000	27.5	54.6	135	31.8	235.6	36.95	7.67	0.07	43.2	97
Gorgas Ash Pond	GS-AP-MW-27H	244.95	245.1	234.95	Sandstone, siltstone, and shale	221.94	23.01	50 to 300	14.2	17.7	82.0	8.3	101.1	15.29	7.72	0.003 to 0.008	1.8 to 4.92	<5%
Gorgas Ash Pond	GS-AP-MW-30H	295.87	297.65	285.87	Sandstone, siltstone, and shale	273.54	22.33	100 to 800	13.8	21.28	75.00	9.9	131.8	18.46	3.87	0.02	12.3	100
Gorgas Ash Pond	GS-AP-MW-30HS	47.19	47.98	37.19	Siltstone	47.55	0.43	NA	0.3	NA	NA	NA	NA	NA	NA	NA	NA	NA
Gorgas Ash Pond	GS-AP-MW-37H	293.45	293.55	273.45	NA	153.72	139.73	600 to 1200	86.2	104	122	28.2	231.4	122.76	16.97	0.01	6.2	54

Appendix A
Field and Evaluation Results

		Geophysical Notes				Criteria		
Plant	**Borehole ID**	**Caliper**	**Heat Pulse Flow Meter**	**Other**	**General Notes**	**Did well recover greater than 70% available residual drawdown?**	**Did formation contribute "significant" (greater than 200 mL/min) water during pumping?**	**Are there fractures within screened interval?**
Gorgas Ash Pond	GS-AP-MW-20	Potential fracture zone observed within screened interval	Almost all the mass of water injected during heat pulse flowmeter testing is received by the fracture system that appears to exist within the screened interval.	Reduction in SPR log and anomalies on gamma ray logs and fluid temperature logs observed within the well screen. This response appears to indicate that the well screen intercepts a productive fracture system.	Low yield	Yes	No	Yes
Gorgas Ash Pond	GS-AP-MW-27H	No indications of water-bearing fracture zones observed in the log.	Not recorded	Fluid temperature decreases and fluid conductivity increases starting at approximately 250 feet. Resistivity N-64 crosses Resistivity N-16 at 235 feet: potential indication that a water system extending away from borehole exists.	Very low yield	No	No	No definitive evidences in well logs
Gorgas Ash Pond	GS-AP-MW-30H	Potential fracture zone observed within top of screened interval	Not recorded	Decrease in SPR log, gamma ray logs observed within screen. This response appears to indicate that the well screen intercepts a productive fracture system. Electrical logs within screened interval may indicate poor fracture interconnection away from borehole.	Low yield	Yes	No	Yes
Gorgas Ash Pond	GS-AP-MW-30HS	Not recorded	Not recorded	Not Available	Insufficient water; either well was set above water table or in a dry zone of bedrock, or screen is completely clogged	NA	NA	NA
Gorgas Ash Pond	GS-AP-MW-37H	Indications of water-bearing fracture zones within the screened interval not observed. Potential fracture zones observed at shallower intervals.	Not recorded	There are some anomalies in the gamma ray log within the screened interval. Fluid temperature start decreasing at 235 feet. There is an anomaly that could be interpreted as a horizontal fracture at 275 feet in the acoustic log. Sinusoidal traces typical of inclined fractures not observed. No indication from other logs of the potential transmissivity of this fracture.	Low yield	No	Yes	No definitive evidences in well logs

Appendix A
Field and Evaluation Results

		Well Construction			Geology	Pumping Data										Recovery Data		
Plant	Borehole ID	Total Depth	Total Depth (Alternate)	Depth Top of Screen	Lithology of Screened Interval	Initial Depth to Water	Initial Length of Water (1)	Range of Pumping Rates	One well Volume (2)	Volume Pumped	Duration of Pumping	Approximate Volume Yielded by Formation	Approximate Rate of Volume Yielded by Formation	Maximum Drawdown	Length of Water at Maximum Drawdown (3)	Recovery Rate		Well Recovery
		(feet TOC)	(feet TOC)	(feet TOC)		(feet TOC)	(feet)	(mL/min)	(liters)	(liters)	(minutes)	(liters)	(mL/min)	(feet)	(feet)	(feet/min)	(mL/min)	(% of residual drawdown)
Gorgas Ash Pond	GS-AP-MW-39H	348.5	348.55	328.5	NA	275	73.5	100 to 700	45.4	59	120	22.9	190.9	58.1	15.40	0.006	3.7	3
Gorgas Ash Pond	GS-AP-MW-41HS	37.65	30.67	27.65	NA	20.17	17.48	150 to 850	10.8	32	74	23.3	314.3	14.25	3.23	0.01	6.2	90

Appendix A
Field and Evaluation Results

		Geophysical Notes				Criteria		
Plant	**Borehole ID**	**Caliper**	**Heat Pulse Flow Meter**	**Other**	**General Notes**	**Did well recover greater than 70% available residual drawdown?**	**Did formation contribute "significant" (greater than 200 mL/min) water during pumping?**	**Are there fractures within screened interval?**
Gorgas Ash Pond	GS-AP-MW-39H	Indications of water-bearing fracture zones within the screened interval not observed. Potential fracture zones observed at shallower intervals.	Not recorded	Potential fracture is observed at 326 feet in the acoustic log. Sinusoidal trace typical of inclined fractures not observed for the screened interval, but observed between 287 and 290 feet. Indications of fractures in the gamma ray logs within the screened interval not observed. Temperature and fluid conductivity logs not collected within the screened interval.	Low yield; low % recovery	No	No	No definitive evidences in well logs
Gorgas Ash Pond	GS-AP-MW-41HS	Potential fracture zone observed within the screened interval. Caliper log seems to indicate that consolidated formation starts at 25 feet.	Not recorded	Fluid temperature anomaly consistent with the presence of a productive layer is identified within the screened interval.	Low to moderate yield	Yes	Yes	Yes

Appendix A
Field and Evalution Results

Notes:

1. Initial Length of Water: Length of the water column existing in the well in static conditions.
2. One Well Volume: Volume of water stored in the well in static conditions.
3. Length of Water at Maximum Drawdown: Length of the water column existing in the well at the end of the pumping period.

Alternate: Tagged by Alabama Power personnel prior to field work. Used as the total depth during the field work.

mL/min: milliliters per minute

NA: not available

SPR: single point resistance

TOC: top of casing

Appendix B
Field Data Sheets

ANCHOR QEA

Anchor QEA of North Carolina, PLLC
231 Haywood Street
Asheville, North Carolina 28801

Well Development Log

Project Name: APC LOW-YIELDING WELL EVAL
Date: 7/10/20
Page 1 of 1
Project Number:
Location:
Weather:
Personnel: A. de Varona, K. Lee
Sample Time:
Well Number: GS-AP-MW-01
Well Depth in Feet (WD): 109.98 TOC TAGGED BOTTOM
Initial Water Level in Feet (WL): 107.81 TOC
Well Diameter:
Length of Water Column: feet
Depth of Pump
One Casing Volume: gallons
Measuring Point:
Total Volume Removed: gallons
Stick Up

Comments:

Well Casing Volumes (WCV)

1" = 0.041 Gal/Ft 2" = 0.17 Gal/Ft 3" = 0.38 Gal/Ft 4" = 0.66 Gal/Ft 6" = 1.5 Gal/Ft 8" = 2.6 Gal/Ft 12" = 5.8 Gal/Ft

Purge Method: Bailer-Disp. Bailer-Teflon Dedicated Pump Whale Pump Grundfos Other: RECLAIMER PUMP

Sample Method: Bailer-Disp. Bailer-Teflon Dedicated Pump Whale Pump Grundfos Other:

Reading	Time	Gallons Purged	Flow Rate (gpm or mL/min)	Temp (°C)	Dissolved Oxygen (mg/L)	Specific Cond. (µS/cm)	pH (S.U.) *report to 0.1 S.U.*	Oxidation Reduction Potential (mV)	Turbidity (NTU)	Depth to Water	Comments
1		PUMP BECAME STUCK AROUND 98' BELOW TOC. RETRIEVED									
2		WITH EFFORT. IT HAD DRIED MUD CAKED AT EDGES. MUD WAS									
3		FINELY-GRAINED, LIGHT-GREY. IT'S ASSUMED THE PUMP HAD BEEN									
4		STUCK IN MUD CAKING THE WALLS OF THE WELL.									
5		WATER LEVEL AFTER PULLING PUMP WAS STILL 107.81									
6											
7											
8											
9											
10											
11											
12											
13											
14											
15											
16											
17											
18											
19											
20											

Notes: MP10 CONTROLLER, AIR COMPRESSOR, 2" PUMP.
0950 START PUMP

Protective Casing (if applicable): ____ Pad: ____ Lock: ____ Vegetation: ____ Access: ____

Sampling Personnel Signature: [signature] Date: 7/10/20

Page ____ of ____

ANCHOR QEA

Anchor QEA of North Carolina, PLL
231 Haywood Stree
Asheville, North Carolina 2880

Well Development Log

Project Name:
Project Number: Location:
Personnel: A. MACLEOD, E. DEVANEY, C. PARSONS
Well Number: GS-AP.MW-03
Well Diameter: 2-in.
Depth of Pump ~180 FT.
Measuring Point:
Stick Up

Date: 7/7/20 Page 1 of
Weather: PC, 80s-90s, STILL.
Sample Time: — AS MOST GOOD.
Well Depth in Feet (WD): 181.3 TOC
Initial Water Level in Feet (WL): 138.68 TOC @ 1130
Length of Water Column: feet
One Casing Volume: gallons
Total Volume Removed: gallons

Comments: LOWER PUMP @ 1225 PULL XD @ 1630 7/8/20
325 mL/min

Well Casing Volumes (WCV)
1" = 0.041 Gal/Ft 2" = 0.17 Gal/Ft 3" = 0.38 Gal/Ft 4" = 0.66 Gal/Ft 6" = 1.5 Gal/Ft 8" = 2.6 Gal/Ft 12" = 5.8 Gal/Ft

Purge Method: Bailer-Disp. Bailer-Teflon Dedicated Pump Whale Pump Grundfos Other:
Sample Method: Bailer-Disp. Bailer-Teflon Dedicated Pump Whale Pump Grundfos Other:

Reading	Time	Gallons Purged	Flow Rate (gpm or mL/min)	Temp (°C)	Dissolved Oxygen (mg/L)	Specific Cond. (µS/cm)	pH (S.U.) report to 0.1 S.U.	Oxidation Reduction Potential (mV)	Turbidity (NTU)	Depth to Water	Comments
1	1230									136.56	
2	1235	START	PUMP PIPE								
3	1240		325 mL/m	17.08	2.63	0.415	7.42	-38.5	Over	144.35	Dark grey, turbid
4	1245		300 mL	17.89	2.20	0.412	7.73	-68.0	2149 NTU	146.85	Dark grey
5	1250		250 mL	17.25	1.85	0.412	7.89	-84.2	822 NTU	147.80	
6	1255		150 mL	14.71	1.99	0.412	7.92	-92.8	~2 NTU	150.70	2; 23/7
7	1300		250 mL	17.38	1.68	0.412	7.98	-90.0	5 NTU	151.10	
8	1305		525 mL	16.59	1.80	0.413	8.10	-89.4	27 NTU	151.9	22/8
9	1310		375 mL	15.97	2.13	0.412	8.10	-87.4	59.8 NTU	154.35	21/9
10	1315		475 mL	16.86	2.38	0.416	8.07	-80.3	73.3 NTU	156.02	
11	1320		400 mL	16.77	2.23	0.421	8.07	-80.0	52.8 NTU	156.77	
12	1325		400 mL	16.02	2.26	0.432	8.07	-89.4	44.4	157.62	
13	1330		375 mL	16.57	2.15	0.449	7.98	-112.6	41.4	157.95	
14	1335		375 mL	16.06	1.98	0.471	7.89	-165.1	38.3	~~158.04~~	158.40 DTW
15	1340		375 mL	15.93	2.02	0.496	7.78	-186.5	38.7	158.81	
16	1345		375 mL	16.26	2.16	0.532	7.63	-189.8	46.2	159.11	
17	1350		400 mL	16.53	2.14	0.554	7.58	-195.1	33.5	159.25	
18	1355		350 mL	16.28	1.84	0.577	7.51	-192.5	23.1	~~159.05~~	161.0 DTW → 162.
19	1400		1500 mL	13.57	2.34	0.605	7.38	-162.5	28.6	163.41	2; 15/15
20	1403		1500 mL	13.47	2.93	0.5	7.39	-163.6	20.0	169.55	Pull after
	1405	Stop									

Notes:
1410 LOWER XD.
1415
1420

167.00
~~168.30~~ 163.30

Protective Casing (if applicable): Yes Pad: Yes Lock: Yes Vegetation: Good Access: Good

1523
1536
1600

16
155.21
141.72
139.62

Sampling Personnel Signature: Date: 7/8/2020

Page ___ of ___

ANCHOR QEA

Anchor QEA of North Carolina, PLLC
231 Haywood Street
Asheville, North Carolina 28801

Well Development Log

Project Name:
Project Number:
Personnel: AV, AG, EV
Location:
Date: 7/8/20
Page 1 of 1
Weather:
Sample Time:
Well Number: GS-AP-MW-04
Well Diameter: 2"
Well Depth in Feet (WD): 153.7 TOC
Depth of Pump
Initial Water Level in Feet (WL): 137.17 TOC 136.54 AFTER DROPPING PUMP
Measuring Point:
Length of Water Column: 16.53 feet
Stick Up
One Casing Volume: 2.8 gallons MUDDY BOTTOM
Total Volume Removed: gallons
Comments:

Well Casing Volumes (WCV)
1" = 0.041 Gal/Ft 2" = 0.17 Gal/Ft 3" = 0.38 Gal/Ft 4" = 0.66 Gal/Ft 6" = 1.5 Gal/Ft 8" = 2.6 Gal/Ft 12" = 5.8 Gal/Ft

Purge Method: Bailer-Disp. Bailer-Teflon Dedicated Pump Whale Pump Grundfos Other:
Sample Method: Bailer-Disp. Bailer-Teflon Dedicated Pump Whale Pump Grundfos Other:

Reading	Time	Gallons Purged	Flow Rate (gpm or mL/min)	Temp (°C)	Dissolved Oxygen (mg/L)	Specific Cond. (µS/cm)	pH (S.U.) report to 0.1 S.U.	Oxidation Reduction Potential (mV)	Turbidity (NTU)	Depth to Water	Comments
1	1029		175	21.78	9.80	988	10.26	-14.2	638 AV	142.03	2 CYCLES, 20 PAL, 10 DISCHARGE
2	1034			21.10	10.35	997	10.58	-10.6		141.34	TROUBLESHOOTING
3	1038			21.45	11.35	1010	10.56	-8.7	853 AV	141.24	TROUBLESHOOTING
4	1046	WATER LEVEL	AT	TOP OF	PUMP					146.20	h ≈ 9.03'
5	1053	DEPLOY	TRANSDUCER								
6	1056	START	LOGGING	WITH	TRANSDUCER					146.07	
7	1057									145.27	
8	1058									144.74	
9	1059									144.53	
10	1100									144.24	
11	1101									144.08	
12	1104									143.94	
13	1108									143.70	
14	1112									143.38	
15	1115									143.08	
16	1119									142.92	
17										142.71	
18											
19											
20											

Notes: BEGIN PUMPING AT 1000. TROUBLESHOOT PUMP. ~~WATER ARRIVES AT~~ 1022 PULL PUMP + CLEAN CHECK VALVE. MUDDY. REDEPLOY. 1024: WATER ARRIVES. MORE TROUBLESHOOTING.

AIR COMPRESSOR WITH MPIO CONTROLLER

Protective Casing (if applicable): ____ Pad: ____ Lock: ____ Vegetation: ____ Access: ____

Sampling Personnel Signature: [signature] Date: 7/8/20

Page ____ of ____

ANCHOR QEA

Anchor QEA of North Carolina, PLLC
231 Haywood Street
Asheville, North Carolina 28801

Well Development Log

Project Name:
Project Number: Location:
Personnel:
Date: 7/8/20 Page of
Weather:
Sample Time:

Well Number: MW-07V
Well Diameter:
Depth of Pump ~202.0 FT TOC
Measuring Point:
Stick Up

Well Depth in Feet (WD): 204.9 TOC
Initial Water Level in Feet (WL): 164.73 TOC (0820)
Length of Water Column: 40.2 FT feet
One Casing Volume: gallons
Total Volume Removed: gallons

Comments: Start 0915 ✓

MW-7VR 50.24' TOC (0825); 50.20' TOC (0940)
MW-7 9.14' TOC (0830); 9.14' TOC (0945)

Well Casing Volumes (WCV)
1" = 0.041 Gal/Ft 2" = 0.17 Gal/Ft 3" = 0.38 Gal/Ft 4" = 0.66 Gal/Ft 6" = 1.5 Gal/Ft 8" = 2.6 Gal/Ft 12" = 5.8 Gal/Ft

Purge Method: Bailer-Disp. Bailer-Teflon Dedicated Pump Whale Pump Grundfos Other:
Sample Method: Bailer-Disp. Bailer-Teflon Dedicated Pump Whale Pump Grundfos Other:

Reading	Time	Gallons Purged	Flow Rate (gpm or mL/min)	Temp (°C)	Dissolved Oxygen (mg/L)	Specific Cond. (µS/cm)	pH (S.U.) report to 0.1 S.U.	Oxidation Reduction Potential (mV)	Turbidity (NTU)	Depth to Water	Comments
1											
2											
3	0925		200 mL	14.60	2.86	1.327	9.47	-44.0	2346 NU	172.43	
4	0930		400 mL	15.60	2.75	1.330	9.59	-76.7	1605 NU	174.18	2; 15/12
5	0935		400 mL	15.40	2.87	1.334	9.65	-90.5	1164 NU	178.20	
6	0940		300 mL	15.38	2.97	1.333	9.66	-91.5	1007 NU	180.95	
7	0945		350 mL	15.55	3.27	1.335	9.69	-85.9	759 NU	183.48	
8	0950		250 mL	15.74	3.29	1.337	9.72	-81.4	732 NU	185.84	
9	0955		225 mL	15.77	3.46	1.338	9.72	-74.8	137 NU	187.75	
10	1000		225 mL	16.31	4.42	1.341	9.71	-53.3	719 NU	191.33	
11	1005		300 mL	16.71	4.64	1.339	9.70	-56.4	1006 NU	193.75	2; 17/13
12	1010		325 mL	15.91	5.27	1.344	9.71	-46.7	1126 NU	195.32	
13	1015		300 mL	15.82	6.10	1.346	9.69	-38.3	978 NU	195.78	
14	1024	STOP PUMPING - LOWER TO ~203 FT TOC									
15	~1035	START TRUCK RECOVERY TEST									
16	1040									197.52	
17	1115									197.42	
18											
19											
20											

Notes: V. LOW YIELD; SLOW RECOVERY
NO WELLS ON NEARBY MWS

MW-7VR 50.22' (1015)
MW-7 9.14' (1010)

Protective Casing (if applicable): Yes Pad: Yes Lock: Yes Vegetation: Good Access: Good

Sampling Personnel Signature: [signature] Date: 7/8/20

Page ___ of ___

ANCHOR QEA

Anchor QEA of North Carolina, PLLC
231 Haywood Street
Asheville, North Carolina 28801

Well Development Log

Project Name: APC LOW-YIELDING WELL EVALUATION
Date: 7/9/20
Page 1 of 1
Project Number:
Location:
Weather:
Personnel: E. de Varona, K. Lee
Sample Time:
Well Number: GS-GP-MW-10H
Well Depth in Feet (WD): 29.48 TOC
Well Diameter:
Initial Water Level in Feet (WL): 26.48 TOC 26.30 AFTER DROPPING PUMP
Depth of Pump
Length of Water Column: feet
Measuring Point:
One Casing Volume: gallons
Stick Up
Total Volume Removed: gallons
Comments:

Well Casing Volumes (WCV)
1" = 0.041 Gal/Ft 2" = 0.17 Gal/Ft 3" = 0.38 Gal/Ft 4" = 0.66 Gal/Ft 6" = 1.5 Gal/Ft 8" = 2.6 Gal/Ft 12" = 5.8 Gal/Ft

Purge Method: Bailer-Disp. Bailer-Teflon Dedicated Pump Whale Pump Grundfos Other:
Sample Method: Bailer-Disp. Bailer-Teflon Dedicated Pump Whale Pump Grundfos Other:

Reading	Time	Gallons Purged	Flow Rate (gpm or mL/min)	Temp (°C)	Dissolved Oxygen (mg/L)	mS/cm Specific Cond. (µS/cm)	pH (S.U.) report to 0.1 S.U.	Oxidation Reduction Potential (mV)	Turbidity (NTU)	Depth to Water	Comments
1	11:54		600	18.77	9.14	1.397	6.22	30.1	77		~~4.28~~ 6.73
2	IMMEDIATELY	PUMPED	BELOW	LEVEL	OF	PUMP.			DTW	IS	LOWER
3	THAN 26.49 ft TOC										
4											
5	12:11	WATER	LEVEL	STILL	BELOW	PUMP.	TURN ON	PUMP	TO	REMOVE	AS
6		MUCH WATER AS POSSIBLE.									
7											
8	12:13	PULL	PUMP.	DROP	TRANSDUCER						
9	12:15	START	LOGGING	WITH	TRANSDUCER					27.89	
10											
11	12:19									27.86	
12	12:22									27.83	
13	12:25									27.81	
14	12:28									27.81	
15	12:31									27.80	
16	12:34									27.79	
17	12:37									27.78	
18	12:40									27.76	
19	12:43									27.76	
20	12:46									27.75	

Notes: AIR COMPRESSOR WITH MPIO CONTROLLER

Protective Casing (if applicable): Pad: Lock: Vegetation: Access:

Sampling Personnel Signature: Date: 7/9/20

Page ___ of ___

ANCHOR QEA

Anchor QEA of North Carolina, PLLC
231 Haywood Street
Asheville, North Carolina 28801

Well Development Log

Project Name:
Project Number:
Location:
Personnel: K LEE, A. GOLLINS, E. DE VARONA
Well Number: GS-AP-MW-16S
Well Diameter:
Depth of Pump
Measuring Point:
Stick Up
Comments:

Date: 7/8/20 Page 1 of 2
Weather:
Sample Time:
Well Depth in Feet (WD): TOC
Initial Water Level in Feet (WL): 58.77 TOC
Length of Water Column: feet
One Casing Volume: gallons
Total Volume Removed: gallons

Well Casing Volumes (WCV)
1" = 0.041 Gal/Ft 2" = 0.17 Gal/Ft 3" = 0.38 Gal/Ft 4" = 0.66 Gal/Ft 6" = 1.5 Gal/Ft 8" = 2.6 Gal/Ft 12" = 5.8 Gal/Ft

Purge Method: Bailer-Disp. Bailer-Teflon Dedicated Pump Whale Pump Grundfos Other:
Sample Method: Bailer-Disp. Bailer-Teflon Dedicated Pump Whale Pump Grundfos Other:

Reading	Time	Gallons Purged	Flow Rate (gpm or mL/min)	Temp (°C)	Dissolved Oxygen (mg/L)	Specific Cond. (µS/cm)	pH (S.U.) report to 0.1 S.U.	Oxidation Reduction Potential (mV)	Turbidity (NTU)	Depth to Water	Comments
1	13:02		350	20.90	10.90	4666	12.28	-104.3	5.88	61.02	2, 20, 10
2	13:07		375	17.96	5.09	4375	12.31	-118.4	1150AU	61.35	
3	13:12		1300	18.04	3.83	4469	12.32	-114	97.8	61.40	2, 15, 15
4	13:17		1000	15.9	3.93	4321	12.39	-110.2	18.6	65.51	
5	13:22		1050	16.12	3.19	4130	12.34	-113.8	16.8	67.02	
6	13:27		1000	16.25	2.52	3803	12.32	-127.3	27.4	67.44	
7	13:32		1150	16.28	2.31	3355	12.33	-149.5	7.16	68.55	
8	13:37		800	15.83	2.07	2741	12.29	-166.4	12.2	69.41	
9	13:42		900	16.21	2.02	2209	12.20	-170.4	51.5	68.91	
10	13:47		1100	15.9	1.71	1666	12.11	-168.8	63.8	70.03	
11	13:52		800	16.27	1.45	1327	11.96	-167.1	61.2	69.42	
12	13:57		1050	16.5	1.38	1152	11.82	-159.3	57.9	69.14	
13	14:02		850	16.48	1.20	995	11.66	-156.6	48.6	69.42	
14	14:07		1000	16.61	1.20	875	11.43	-149.4	44.3	69.05	
15	1428:00										STOP PUMP
16	1428:15									69.79	
17	1428:30									69.5	
18	1428:50									69.0	
19	1429:10									68.5	
20	1429:35									68.0	

Notes: START PUMP AT 1259. WATER ARRIVES 1302
STOP PUMP + KINK HOSE, THEN MEASURE RECHARGE.

AIR COMPRESSOR WITH MPIO CONTROLLER

182.33 @ 1336
GS-AP-P2-16 DTW = 182.34 @ 1241
GS-AP-MW-16D DTW = 143.90 @ 1242
143.92 @ 1336
ADDITIONAL DTWs ON ~~FIELD NOTES~~ BACK

Protective Casing (if applicable): Pad: Lock: Vegetation: Access:

Sampling Personnel Signature: Eric de Varona Date: 7/8/20

ANCHOR QEA

Anchor QEA of North Carolina, PLLC
231 Haywood Street
Asheville, North Carolina 28801

Well Development Log

Project Name: _____ Date: 7/8/20 Page 2 of 2

Project Number: _____ Location: _____ Weather: _____

Personnel: _____ Sample Time: _____

Well Number: GS-AP-MW16S Well Depth in Feet (WD): _____ TOC

Well Diameter: _____ Initial Water Level in Feet (WL): _____ TOC

Depth of Pump _____ Length of Water Column: _____ feet

Measuring Point: _____ One Casing Volume: _____ gallons

Stick Up _____ Total Volume Removed: _____ gallons

Comments: _____

Well Casing Volumes (WCV)

1" = 0.041 Gal/Ft 2" = 0.17 Gal/Ft 3" = 0.38 Gal/Ft 4" = 0.66 Gal/Ft 6" = 1.5 Gal/Ft 8" = 2.6 Gal/Ft 12" = 5.8 Gal/Ft

Purge Method: Bailer-Disp. Bailer-Teflon Dedicated Pump Whale Pump Grundfos Other:

Sample Method: Bailer-Disp. Bailer-Teflon Dedicated Pump Whale Pump Grundfos Other:

Reading	Time	Gallons Purged	Flow Rate (gpm or mL/min)	Temp (°C)	Dissolved Oxygen (mg/L)	Specific Cond. (µS/cm)	pH (S.U.) *report to 0.1 S.U.*	Oxidation Reduction Potential (mV)	Turbidity (NTU)	Depth to Water	Comments
1	1429:55									67.5	
2	1430:25									67.0	
3	1430:50									66.5	
4	1431:20									66.0	
5	1431:50									65.5	
6	1432:25									65.0	
7	1433:00									64.5	
8	1433:35									64.0	
9	1434:15									63.5	
10	1435:00									63.0	
11	1435:50									62.5	
12	1436:45									62.0	
13	1437:45									61.5	
14	1439:00									61.0	
15	1440:30									60.5	
16	1442:30									60.0	
17	1445:50									59.5	
18	1455									59.0	
19	PP 1500									58.94	
20	PP 1506									58.91	

Notes: PULL PUMP @ 1510

Protective Casing (if applicable): _____ Pad: _____ Lock: _____ Vegetation: _____ Access: _____

Sampling Personnel Signature: [signature] Date: 7/8/20

ANCHOR QEA

0850 Well arrival
Nitrogen

Anchor QEA of North Carolina, PLLC
231 Haywood Street
Asheville, North Carolina 28801

Well Development Log

MW20

Project Name: Low-Yeilding Well Evalattions
Date: 7/9/2020 Page 1 of 2
Project Number: 201114-04.01 Task 01 Location: Gorges
Weather: 85°F, Overcast, Still
Personnel: C. Patterson / C Barnes
Sample Time:

Well Number: GS-AP-MW-20
Well Depth in Feet (WD): 251.4' TOC
Well Diameter: 2-in.
Initial Water Level in Feet (WL): 205.35' TOC 0910 measurement DTW
Depth of Pump: ~ ~~250~~ 246' intake
Length of Water Column: 46.05' feet
Measuring Point: intake of pump from TOC
One Casing Volume: gallons
Stick Up
Total Volume Removed: gallons

Comments: 0850 Arrive @ well
Nitrogen canister and control box
0958 flow → Logging starts 12:19:30
soft bottom: Drop transducer 1215 Leave well 1312
*Logger time one hour behind

Final DTW: 242.3' @ 1248

Well Casing Volumes (WCV)
1" = 0.041 Gal/Ft 2" = 0.17 Gal/Ft 3" = 0.38 Gal/Ft 4" = 0.66 Gal/Ft 6" = 1.5 Gal/Ft 8" = 2.6 Gal/Ft 12" = 5.8 Gal/Ft

Purge Method: Bailer-Disp. Bailer-Teflon Dedicated Pump Whale Pump Grundfos (Other) Pneumatic Pump (48-in)
~~Sample Method:~~ Bailer-Disp. Bailer-Teflon Dedicated Pump Whale Pump Grundfos Other:

Reading	Time	Gallons Purged	Flow Rate (gpm or mL/min)	Temp (°C)	Dissolved Oxygen (mg/L)	Specific Cond. (µS/cm)	pH (S.U.) report to 0.1 S.U.	Oxidation Reduction Potential (mV)	Turbidity (NTU)	Depth to Water	Comments
1	0955	Pump on	1000mL	15.97	6.77	8.539	-9.99	1228.3	2580 NTU	220.64	
2	1000		375mL	17.00	6.46	8.468	-9.99	1218.3	24.1 NTU	223.54	2; 20/10
3	1005		375mL	18.26	5.73	8.401	-9.99	1197.1	18.0 NTU	220.68	Pressure → 120
4	1010		120mL	19.15	5.53	8.363	-9.99	1197.1	11.32 NTU	221.99	2; 22/8
5	1015		125mL	19.72	5.33	8.390	-9.99	1197.5	12.9 NTU	222.22	
6	1020		375mL	19.87	5.76	8.364	-9.99	1199.0	13.6	223.55	2; 20/10
7	1025		375mL	17.62	5.75	8.367	-9.99	1199.8	12.8	223.91	
8	1030		400mL	17.43	5.65	8.343	-9.99	1196.0	9.27	223.72	2; 20/10 pressure up
9	1035		400mL	17.41	5.45	8.258	-9.99	1191.4	11.64	227.8	190 psi
10	1040		400mL	17.2	4.90	8.096	-9.99	1191.5	19.6	230.48	
11	1045		400mL	17.16	4.79	7.945	-9.99	1190.2	33.7 NTU	231.18	
12	1050		375mL	17.27	4.67	7.905	-9.99	1184.6	24.4	230.72	
13	1055		650mL	16.31	4.51	7.851	-9.99	1174	14.4	230.75	2; 18/12
14	1100		650mL	16.47	4.30	7.666	-9.99	1175.7	13.2	232.73	
15	1105		550mL	16.59	4.35	7.638	-9.99	1175.1	10.27	235.22	
16	1110		900mL	17.36	3.97	7.899	-9.99	1174.0	57.1	237.64	
17	1115		250mL	18.10	3.18	7.985	-9.99	1150.1	39.4	238.64	
18	1120		250mL	18.54	2.96	7.966	-9.99	1087.3	19.5	240.68	
19	1125		100mL	19.32	2.36	7.682	-8.61	1078.3	13.7	240.22	
20	1130		200mL	20.65	2.44	7.616	-8.84	1092.6	17.2	242.10	

Notes: Well seems to recharge. Logger started @ ~1220, water level rose 5 ft by ~1245 = 1 ft per 5 mins.
Logger data name: MW20. Possible pH probe malfunction. Probe calibrated perfectly and QC check was perfect.

Protective Casing (if applicable): Yes Pad: Yes Lock: Yes Good Vegetation: Good Access: Good

Sampling Personnel Signature: C Patt Date: 7/9/2020

ANCHOR QEA

Anchor QEA of North Carolina, PLLC
231 Haywood Street
Asheville, North Carolina 28801

Well Development Log

Project Name: _____ Date: 7/8/20 Page 1 of

Project Number: _____ Location: _____ Weather: _____

Personnel: A. MALOON, C. PARSONS, C. OAKES Sample Time: _____

Well Number: MW-27N Well Depth in Feet (WD): 245.1 TOC

Well Diameter: _____ Initial Water Level in Feet (WL): 221.94 TOC 1235

Depth of Pump ~243 Length of Water Column: 23.16 feet

Measuring Point: TOC One Casing Volume: _____ gallons

Stick Up _____ Total Volume Removed: _____ gallons

Comments: Start 1300, pump on @ 2; 26/10
Using MP10H controller w/ generator and air compressor
1309 2; 15/15. 1310 flow observed @ well head. 1314 flow in YSI

Well Casing Volumes (WCV)

1" = 0.041 Gal/Ft 2" = 0.17 Gal/Ft 3" = 0.38 Gal/Ft 4" = 0.66 Gal/Ft 6" = 1.5 Gal/Ft 8" = 2.6 Gal/Ft 12" = 5.8 Gal/Ft

Purge Method: Bailer-Disp. Bailer-Teflon Dedicated Pump Whale Pump Grundfos Other:

Sample Method: Bailer-Disp. Bailer-Teflon Dedicated Pump Whale Pump Grundfos Other:

Reading	Time	Gallons Purged	Flow Rate (gpm or mL/min)	Temp (°C)	Dissolved Oxygen (mg/L)	Specific Cond. (mS/cm)	pH (S.U.) report to 0.1 S.U.	Oxidation Reduction Potential (mV)	Turbidity (NTU)	Depth to Water	Comments
1											
2	1323	Flow									2; 12/18 @ 1320
3	1325		300 mL	18.24	5.52	5.146	7.71	-59.3	0 NTU	230.40	Turbid, black water
4	1330			20.83	3.98	5.133	7.79	-64.7	2436 AU	232.70	
5	1335		250	20.27	3.90	5.258	7.80	-74.2	1441 AU		
6	1340		250	19.59	4.96	5.453	7.8	-80.6	1310 AU	233.15	
7	1345		250 mL	17.91	4.66	5.476	7.74	-56.4	1320 AU	235.73	
8	1350			19.67	4.33	5.462	7.80	-73.0	1927 AU	236.01	
9	1355		175 mL	19.44	4.34	5.403	7.80	-77.3	2064 AU	236.47	
10	1400		150 mL	18.90	3.93	5.517	7.78	-77.9	1497 NU	236.95	
11	1405		125 mL	19.98	4.12	5.592	7.99	-52.1	—	237.05	
12	1410		175 mL	22.03	4.84	5.507	7.82	-32.5	1313 AU	237.23	
13	1415		50 mL	22.50	5.60	5.585	7.83	-26.1	1491 AU	237.13	
14	1420	Stop. LOWER XD TO ~1 FT ABOVE								237.11	Before pulling pump
15	~1431	SAVE XD DATA									
16	1436									238.15?	
17											
18											
19											
20											

Notes: LOW YIELD WELL

Protective Casing (if applicable): _____ Pad: _____ Lock: _____ Vegetation: _____ Access: _____

Sampling Personnel Signature: A. Maloon Date: 7/8/20

Page ___ of ___

Alabama Power Company

Well Development Form

Site ID: ,

Site Location:

Sampler: A. MAC BETH, A. GOGGINS

Weather: PC 80s-90s

Depth to water: 273.54' TOC (1155)

Depth to bottom: 297.65' TOC

Well Name: MW-30H

Well Diameter: 2"

Date: 7/9/20

Start Time:

Finish Time:

Total Volume Purged (Gal):

1240 BEGIN PUMP

24.11 FT HEIGHT OF H2O

TOP SCREEN ~287

PUMP @ ~292-296

Volume Calculation: Depth to bottom - depth to water * well capacity = Gallons per well volume

Time min	Volume (Gallons)	Cumul Volume (Gallons)	Pumping ~~rate (gpm)~~ ml/min	DTW (feet)	pH (SU)	Cond (~~uS/cm~~ mS/cm)	Temp (C)	Turb (NTUs)	Color	ORP mV	RDO mg/L	Comments
1250				280.2	7.51	0.601	24.04	—	CLEAR	-159.5		
1305			150	284.25	7.44	0.584	20.80	231	GRAY	-205		WATER ACCEPTS
1310			230	285.13	7.41	0.614	22.12	>1000	GRAY	-224		▽ FLUCTUATES 1'
1315			180	285.5								W/ DIS/REC. CYCLE
1320				285.98	6.117	0.621	27.79	>1000		-74		1:42/18 ↑P
1325			~800	287.68	6.07	0.626	18.42			-61.0		↑P. 190
1330			250	287.47	7.53	0.627	19.06	>1000		-230.1		↓ 170; NOT AS
1335			500	288.95	7.33	0.606	19.48	>1000		-249		MUCH ▽
1340			475	290.0	7.38	0.589	20.18	>1000		-254		FLUCT
1345			350	290.0	7.69	0.589	20.76	>1000		-270	0.44	
1355				~292*		0.589	20.12	>1000		-285	0.45	* TOP OF PUMP
1400	STOP PUMP START RECORDING											
1405	START ROUTINE RECORDING "1308"											
1407				292.31								
1417				291.90								
1425				291.5								
1447				290.49								

Well capacity (gallons per foot): 0.76" = 0.02; 1" = 0.04; 1.25" = 0.08; 2" = 0.16; 4" = 0.65

Comments: ▽ 30H @ 302.41 FT TOC/@ 1505

Alabama Power Company

Well Development Form

Site ID: '

Well Name: MW-304

Site Location:

Well Diameter: 2"

1240 BEGIN PUMP

Sampler: A. MAC BETH, A. GOGGINS

Date: 7/9/20

Weather: PC 80S-90S

Depth to water: 273.54' TOC (1155)

Start Time:

Total Volume Purged (Gal):

Depth to bottom: 297.65' TOC

Finish Time:

24.11 FT HEIGHT OF H2O

TOP SCREEN ~287

PUMP @ ~292-296

Volume Calculation: Depth to bottom - depth to water * well capacity = Gallons per well volume

Time min	Volume (Gallons)	Cumul Volume (Gallons)	Pumping ~~(gal/min)~~ ml/min	DTW (feet)	pH (SU)	Cond ~~(uSiem)~~ (mS/cm)	Temp (C)	Turb (NTUs)	Color	ORP mV	RDO mg/L	Comments
1250				280.2	7.51	0.601	24.04	—	CLEAR	-159.5		
1305			150	284.25	7.44	0.584	20.80	2318	GRAY	-208		WATER APPEARS
1310			230	285.13	7.41	0.614	23.62	>1000	GRAY	-224		& FLUCTUATES 1'
1315			100	285.5								W/ DIS/REC. RATE
1320				285.98	7.117	0.621	27.79	>1000		-74		1:42/18 TP
1325			~80	287.68	7.07	0.626	18.42			-61.1		TP 190
1330			250	287.74	7.53	0.627	19.06	>1000		-250.1		↓ 170; NOT AS
1335			500	288.95	7.33	0.606	19.48	>1000		-249		MUCH ↓
1340			475	290.0	7.38	0.589	20.18	>1000		-254		FLUCT
1345			350	290.0	7.69	0.589	20.76	>1000		-270	0.44	
1355				~292*		0.589	20.12	>1000		-285	0.45	* TOP OF PUMP
1400	STOP PUMP START RECOVERY											
1405	START PUMP FROM SING. "1308"											
1407				292.31								
1417				291.90								
1425				291.5								
1447				290.49								

Well capacity (gallons per foot): 0.76" = 0.02; 1" = 0.04; 1.25" = 0.08; 2" = 0.16; 4" = 0.65

Comments: ∇ 304A 302.41 FT TOC/W 1505

ANCHOR QEA

Anchor QEA of North Carolina, PLLC
231 Haywood Street
Asheville, North Carolina 28801

Well Development Log

MW37H

Project Name: Low-Yielding Well Evaluations
Project Number: 201114-04.01 Task 01 Location: Gorges
Personnel: C. Patterson; C. Barnes
Well Number: GS-AP-MW37H
Well Diameter: 2-in.
Depth of Pump ~283' below TOC
Measuring Point: pump intake
Stick Up yes

Date: 7/9/2020; 7/10/2020 Page 1 of 2
Weather: 85°F, Sunny, Humid, Still
~~Sample Time:~~

Well Depth in Feet (WD): 293.55' TOC
Initial Water Level in Feet (WL): 153.72' TOC
Length of Water Column: 139.83' feet
One Casing Volume: gallons
Total Volume Removed: gallons

DTW measured 1440 on 7/9
148.93 Initial DTW 7/10/2020 due to displacement

Comments: 7/9: · 1405 Arrive @ well. 1510 Drop pump down well. Soft bottom. 1525 Leave pump in well (secured). Nitrogen tank.
7/10: · Faint sulphur smell in water
· Start 2; 20/10 210 psi

~~93.77 gal~~

Well Casing Volumes (WCV)
1" = 0.041 Gal/Ft 2" = 0.17 Gal/Ft 3" = 0.38 Gal/Ft 4" = 0.66 Gal/Ft 6" = 1.5 Gal/Ft 8" = 2.6 Gal/Ft 12" = 5.8 Gal/Ft

Purge Method: Bailer-Disp. Bailer-Teflon Dedicated Pump Whale Pump Grundfos Other: Pneumatic Pump (48-in)
~~Sample Method:~~ Bailer-Disp. Bailer-Teflon Dedicated Pump Whale Pump Grundfos Other:

Reading	Time	Gallons Purged	Flow Rate (gpm or mL/min)	Temp (°C)	Dissolved Oxygen (mg/L)	Specific Cond. (mS/cm)	pH (S.U.) report to 0.1 S.U.	Oxidation Reduction Potential (mV)	Turbidity (NTU)	Depth to Water	Comments
1	0840	~~[illegible]~~	900mL	13.90	3.24	1.351	8.62	-287.9	-19	157.34	Flow 8:37am
2	0845		950mL	13.93	1.94	1.342	8.54	-306.7	-27	164.39	
3	0850		800mL	13.91	1.41	1.343	8.58	-326.7	30.1	170.40	Sulphur odor
4	0855		750mL	14.02	1.10	1.345	8.63	-339.4	20.5	177.05	
5	0900		700mL	14.00	0.99	1.345	8.63	-339.4	18.7	181.10	
6	0905		700mL	13.99	0.85	1.344	8.65	-351.3	16.7	186.95	
7	0910		650mL	14.24	0.82	1.345	8.65	-354.9	13.5	192.12	
8	0915		600mL	14.37	0.78	1.345	8.64	-358.0	13.0	195.45	
9	0920		1000mL	13.53	0.81	1.346	8.68	-358.3	12.4	204.20	2; 16/14
10	0925		1000mL	13.75	0.80	1.346	8.65	-356.2	13.1	210.28	
11	0930		1000mL	13.67	0.81	1.348	8.63	-355.1	15.2	218.50	
12	0935		1000mL	13.83	0.84	1.353	8.64	-353.6	13.3	224.13	
13	0940		975mL	13.93	0.80	1.361	8.64	-356.9	12.0	230.80	
14	0945		900mL	13.91	0.93	1.370	8.66	-355.3	14.9	238.76	
15	0950		900mL	13.91	0.75	1.380	8.64	-362.1	15.0	241.91	
16	0955		900mL	14.11	0.79	1.390	8.62	-362.9	22.3	248.44	
17	1000		900mL	14.06	0.78	1.393	8.65	-362.8	18.7	252.32	
18	1005		850mL	14.05	0.62	1.398	8.65	-362.3	17.9	257.38	
19	1010		800mL	14.09	0.64	1.404	8.61	-359.2	18.4	260.22	
20	1015		800mL	14.19	0.74	1.407	8.61	-361.2	22.1	265.97	

Notes:
· 2400 psi @ 0840
1750 psi @ 0930
~750 psi per hour
· 1037 pump cavitation, stopped
· 1038 pull pump
· 1050 drop transducer / 1054 Log start / 1139 Leave well

* Well recharges slowly = 0.5 ft in 20 minutes

Protective Casing (if applicable): Yes good Pad: Yes good Lock: Yes good Vegetation: Fair Access: Fair

Sampling Personnel Signature: C Patterson Date: 7/9/2020
C Patterson 7/10/2020

ANCHOR QEA

Anchor QEA of North Carolina, PLLC
231 Haywood Street
Asheville, North Carolina 28801

Well Development Log

Project Name: Low-Yield Well Evaluations
Project Number: 20114-04.01 Task 01 Location: Gorgas
Personnel: C. Patterson & C. Barnes
Well Number: GS-AP-MW37H
Well Diameter: 2-in
Depth of Pump: ~288' below TOC
Measuring Point: pump intake
Stick Up: yes
Comments:

Date: 7/10/2020 Page 2 of 2
Weather: 85°F, Sunny, Humid, Still
~~Sample Time~~:
Well Depth in Feet (WD): 293.55' TOC
Initial Water Level in Feet (WL): 153.72' TOC
Length of Water Column: 139.83' feet
One Casing Volume: gallons
Total Volume Removed: gallons

Well Casing Volumes (WCV)
1" = 0.041 Gal/Ft 2" = 0.17 Gal/Ft 3" = 0.38 Gal/Ft 4" = 0.66 Gal/Ft 6" = 1.5 Gal/Ft 8" = 2.6 Gal/Ft 12" = 5.8 Gal/Ft

Purge Method: Bailer-Disp. Bailer-Teflon Dedicated Pump Whale Pump Grundfos Other: Pneumatic Pump (4b-in)
Sample Method: Bailer-Disp. Bailer-Teflon Dedicated Pump Whale Pump Grundfos Other:

Reading	Time	Gallons Purged	Flow Rate (gpm or mL/min)	Temp (°C)	Dissolved Oxygen (mg/L)	Specific Cond. (µS/cm)	pH (S.U.) report to 0.1 S.U.	Oxidation Reduction Potential (mV)	Turbidity (NTU)	Depth to Water	Comments
1	1020		900 mL	14.09	0.63	1.411	8.62	-362.2	24.7	269.35	
2	1025		850	14.25	0.59	1.414	8.61	-362.9	25.4	273.28	
3	1030		800 mL	14.27	0.53	1.419	8.60	-364.8	23.4	275.25	
4	1035		800 mL	14.01	0.54	1.421	8.61	-365.8	19.1	276.48	
5											
6											Stop 10:37am
7											Pump cavitation
8											1050 Logger download
9											1054 Log start
10											
11											275.1' Final DTW
12											1139 leave well
13											
14											
15											
16											
17											
18											
19											
20											

Notes: Stabilized just below beginning of 20-ft screen (~276' below TOC)

ANCHOR QEA

Anchor QEA of North Carolina, PLLC
231 Haywood Street
Asheville, North Carolina 28801

Well Development Log

Project Name:
Project Number:
Location:
Personnel: A. McBride, A. Holmes
Well Number: MW 39M
Well Diameter:
Depth of Pump ~ 343 - 347
Measuring Point:
Stick Up

Date: 7/10/20 Page of
Weather: Clear, V. Sc. Bc. 90s
Sample Time: @
Well Depth in Feet (WD): 348.55 TOC
Initial Water Level in Feet (WL): 275.00 TOC @ 0840
Length of Water Column: 73.55 feet
One Casing Volume: gallons
Total Volume Removed: 12.5 gal gallons

Comments: 0900 Pump on pump.
640 mL/min
0.64 L/min
Screen 328-348

Well Casing Volumes (WCV)
1" = 0.041 Gal/Ft 2" = 0.17 Gal/Ft 3" = 0.38 Gal/Ft 4" = 0.66 Gal/Ft 6" = 1.5 Gal/Ft 8" = 2.6 Gal/Ft 12" = 5.8 Gal/Ft

Purge Method: Bailer-Disp. Bailer-Teflon Dedicated Pump Whale Pump Grundfos Other:
Sample Method: Bailer-Disp. Bailer-Teflon Dedicated Pump Whale Pump Grundfos Other:

Reading	Time	Gallons Purged	Flow Rate (gpm or mL/min)	Temp (°C)	Dissolved Oxygen (mg/L)	Specific Cond. (µS/cm)	pH (S.U.) report to 0.1 S.U.	Oxidation Reduction Potential (mV)	Turbidity (NTU)	* Depth to Water	Comments
1	0910									278.0	1; 45/15/0 160 psi
2	0915									279.7	
3	0920										4 p 200 psi 48/17
4	0925		650 mL	19.33	—	4899	8.33	-185	4	283.80	Sl. cloudy; S-odor
5	0930		450 mL	18.93	2.44	4836	8.16	-247	680	288.85	41/19 "
6	0935		650	18.01	1.47	4835	8.12	-306	-10	293.85	"
7	0945		550	18.31	1.60	4837	8.13	-325.9	-8	303.60	41/19 20 "
8	0950		650	18.16	0.72	4843	8.14	-341.6	32.3	309.4	
9	1000		600	18.27	0.63	4872	8.21	-349.7	-26.3	317.2	38/22**
10	1007										~~43/17~~ No
11											see if stable
12	1015		700								41/19 + p 180 psi
13	1020		700	17.69	0.60	4900	8.24	-349.3	—	324.00	
14	1025			18.41	0.60	4916	8.27	-351.0	-32	329.60	
15	1030		150	21.56	0.36	4953	8.23	-369.9	—	330.20	43/17 190
16	1035		550	18.57	0.53	4876	8.33	-354.5	—	332.32	✓ ✓
17	1040		250	—	—	—	—	—	—	332.20	✓ ✓
18	1045		150	22.74	0.31	4910	8.32	-387	672	333.10	— —
19	1101		<100	26.66	0.27	4931	8.33	-396.0	24		*
20	1105	Stop Pump	Prime Pump			Lowered	XD				
	1112	Begin XD									

Notes:
* hi SC; difficult to read!

** Not enough time to fill pump

N_2 / MMOH

Protective Casing (if applicable): Pad: Lock: Vegetation: Access:

Sampling Personnel Signature: Date:

OVER

Page ___ of ___

Time	V (kt knots)
1116	333.65
1125	333.30
1140	-330

ANCHOR QEA

Anchor QEA of North Carolina, PLLC
231 Haywood Street
Asheville, North Carolina 28801

Well Development Log

Project Name: APC LOW-YIELDING WELL EVALUATION
Date: 7/9/20
Page 1 of 1 & BACKSIDE
Project Number:
Location:
Weather:
Personnel: E. de Varona, K Lee
Sample Time:
Well Number: GS-AP-MW-~~[illegible]~~ 41HS
Well Depth in Feet (WD): 30.67 - written. Did not measure TOC
Well Diameter:
Initial Water Level in Feet (WL): 20.17 TOC 19.79 AFTER DROPPING PUMP
Depth of Pump 6" OFF BOTTOM
Length of Water Column: feet
Measuring Point:
One Casing Volume: gallons
Stick Up
Total Volume Removed: gallons
Comments:

Well Casing Volumes (WCV)

1" = 0.041 Gal/Ft 2" = 0.17 Gal/Ft 3" = 0.38 Gal/Ft 4" = 0.66 Gal/Ft 6" = 1.5 Gal/Ft 8" = 2.6 Gal/Ft 12" = 5.8 Gal/Ft

Purge Method: Bailer-Disp. Bailer-Teflon Dedicated Pump Whale Pump Grundfos Other: RECLAIMER PUMP
Sample Method: Bailer-Disp. Bailer-Teflon Dedicated Pump Whale Pump Grundfos Other:

Reading	Time	Gallons Purged	Flow Rate (gpm or mL/min)	Temp (°C)	Dissolved Oxygen (mg/L)	mS/cm Specific Cond. (µS/cm)	pH (S.U.) report to 0.1 S.U.	Oxidation Reduction Potential (mV)	Turbidity (NTU)	Depth to Water	Comments
1											4 CYCLES, 12 GAL, 3 DISCHARGE
2	14:25		350	15.08	4.40	0.589	6.37	-74.8	88	21.85	4,13,2
3	14:30		160	16.26	3.01	0.528	6.24	-63.3	71.9	21.87	4,12,3
4	14:35		150	16.90	3.36	0.504	6.34	-54.9	46.7	22.19	
5	14:40		150	16.91	3.47	0.497	6.39	-49.4	39.5	22.41	
6	14:45		150	17.03	3.33	0.498	6.42	-48.5	42.6	22.85	
7	14:50		250	15.66	3.24	0.502	6.42	-47.1	20.6	23.51	4,8,7
8	14:55		250	15.41	2.98	0.494	6.38	-43.1	22.8	24.25	
9	15:00		240	15.48	2.81	0.488	6.37	-40.3	17.2	24.65	
10	15:05		850	13.07	3.10	0.506	6.32	-39	14.2	27.35	4,10,5
11	15:10		850	13.06	2.90	0.480	6.31	-27.6	9.65	27.95	
12	15:15		850	13.22	2.86	0.464	6.31	-23	87.6	30.21	
13	15:20		850	13.26	2.68	0.476	6.35	-31.9	47.3	32.04	
14	15:25		500	13.88	2.39	0.493	6.43	-39.6	21.2	33.43	4,11,4
15	15:30		450	14.06	2.21	0.495	6.48	-44.3	12.2	34.42	
16	1534:30	TURN	OFF	PUMP							Water lvl at top of pump WATER LVL BELOW TOP OF PUMP
17	1541	PULL	PUMP.	DROP	TRANSDUCER						
18	1544	START	LOGGING							35.25	
19	1547									35.21	
20	1550									35.15	

Notes: AIR COMPRESSOR, MP10 CONTROLLER, 2-ft pump

GS-AP-MW-41

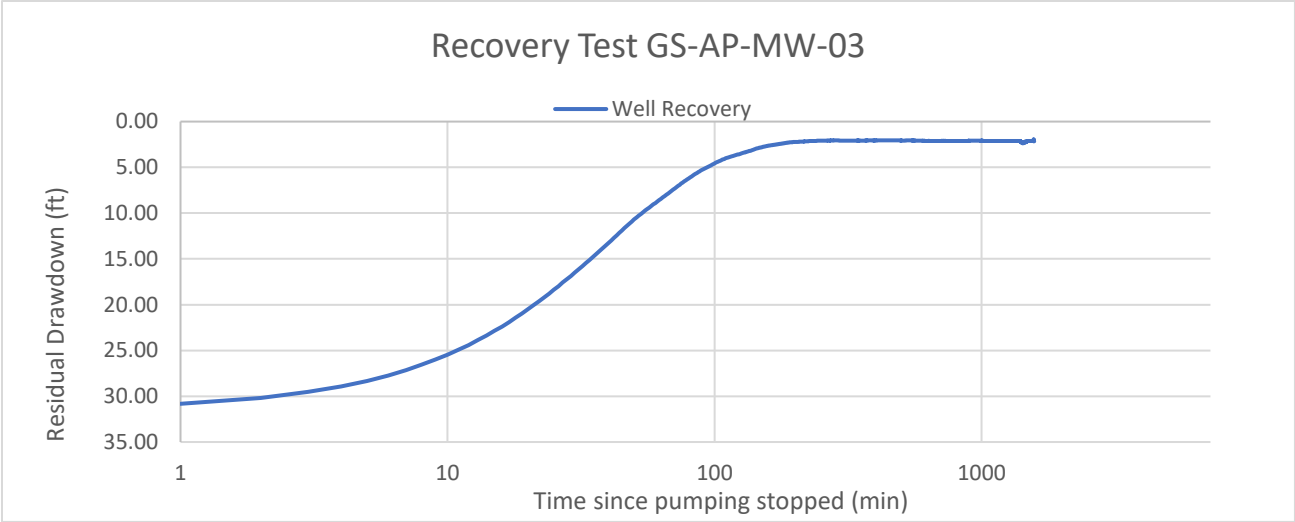
Time	DTW (ft)				
1435	2.32	1450	2.01 ft	1515	1.80
1440	2.15	1455	1.95 ft	1520	1.77
1445	2.10	1500	1.91	1525	1.74
		1505	1.89	1530	1.72
		1510	1.85	1556	1.61

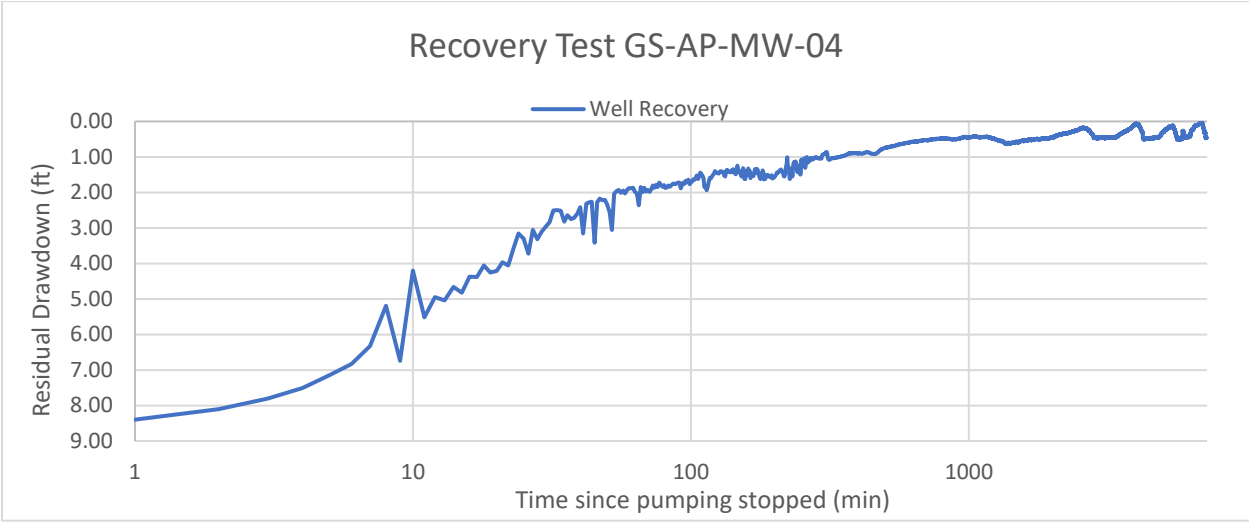
Protective Casing (if applicable): ____ Pad: ____ Lock: ____ Vegetation: ____ Access: ____

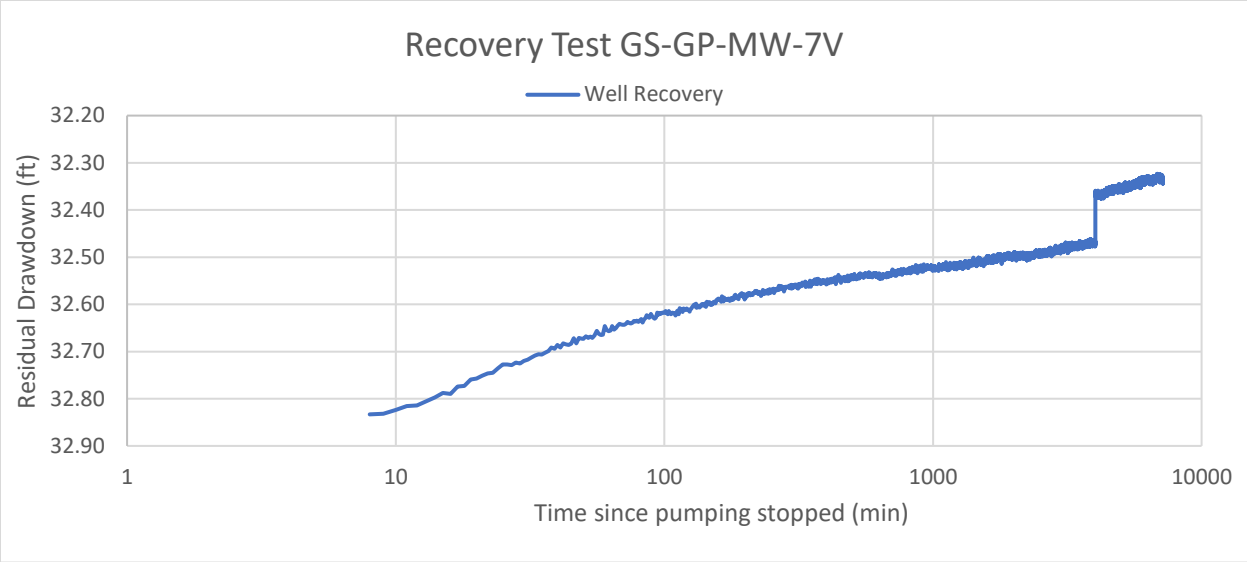
Sampling Personnel Signature: [signature] Date: 7/9/20

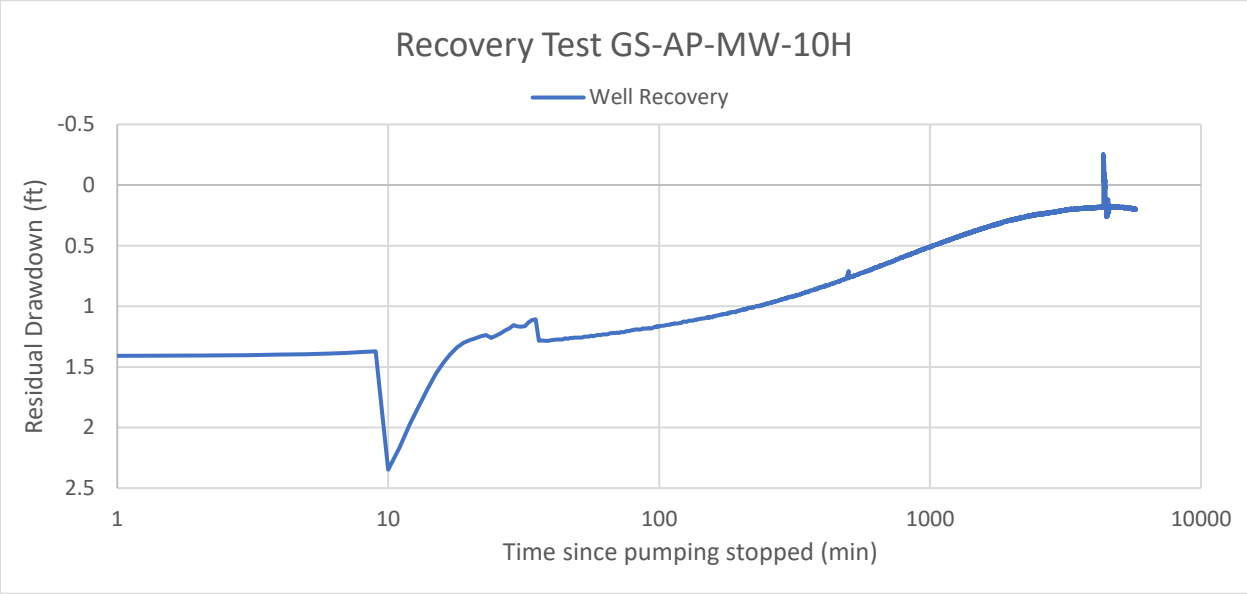
Page ____ of ____

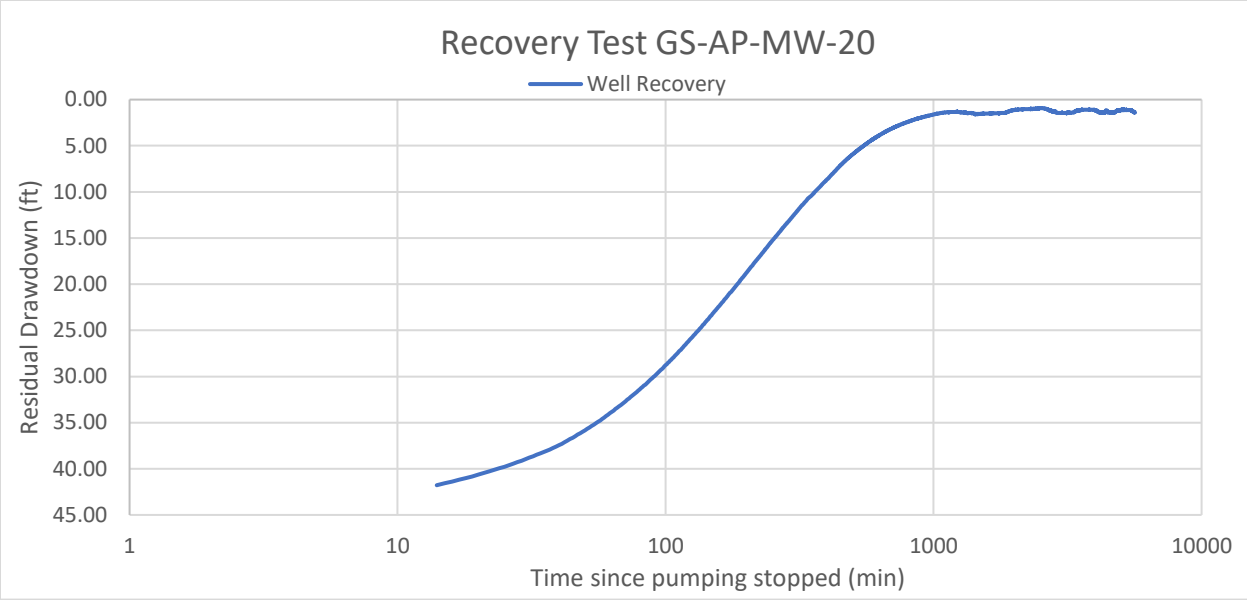
Appendix C
Recovery Plots

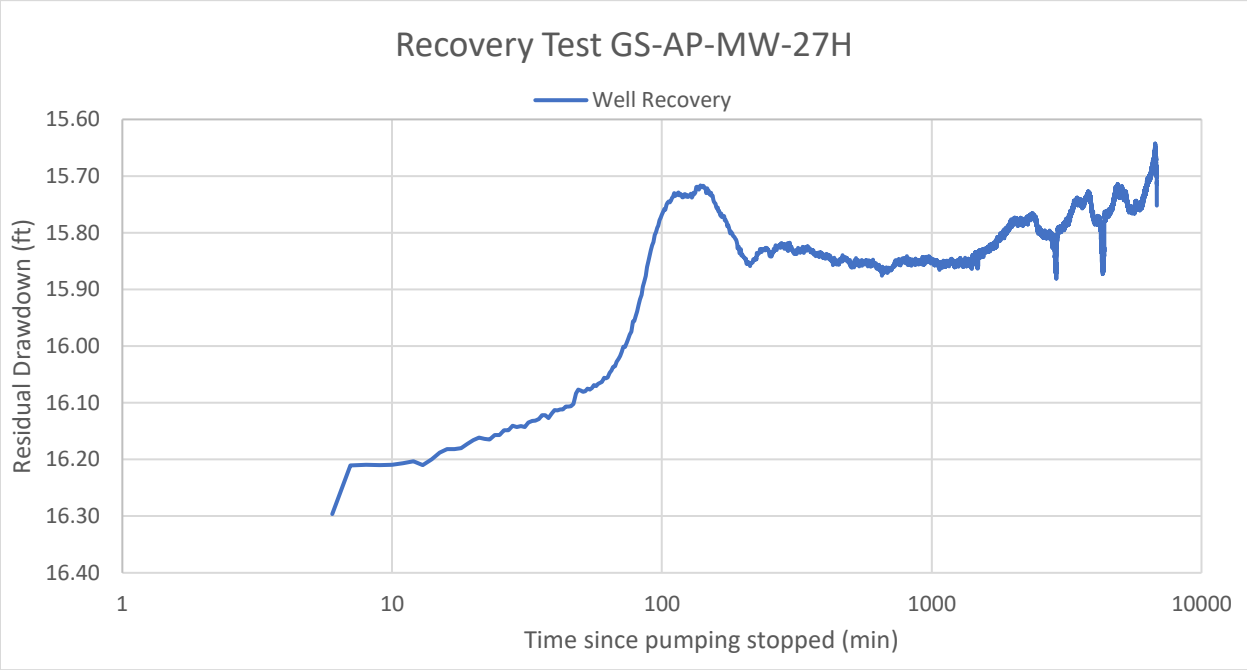

Recovery Test GS-AP-MW-03
Well Recovery
Residual Drawdown (ft)
0.00
5.00
10.00
15.00
20.00
25.00
30.00
35.00
1
10
100
1000
Time since pumping stopped (min)

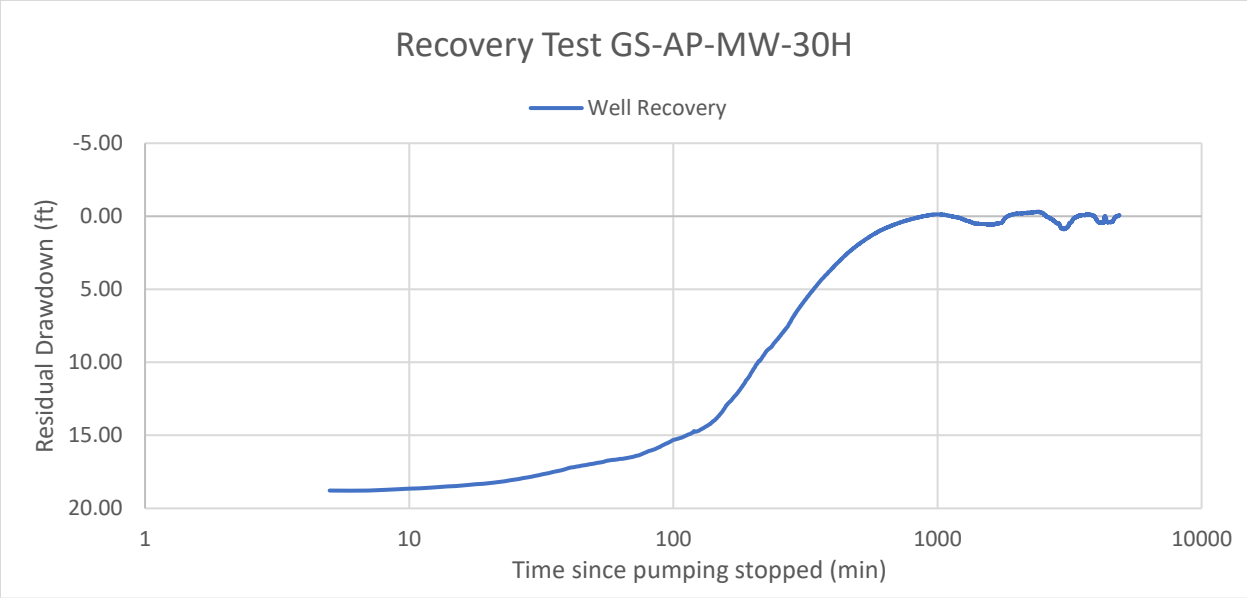

Recovery Test GS-AP-MW-04
Well Recovery
Residual Drawdown (ft)
0.00
1.00
2.00
3.00
4.00
5.00
6.00
7.00
8.00
9.00
1
10
100
1000
Time since pumping stopped (min)

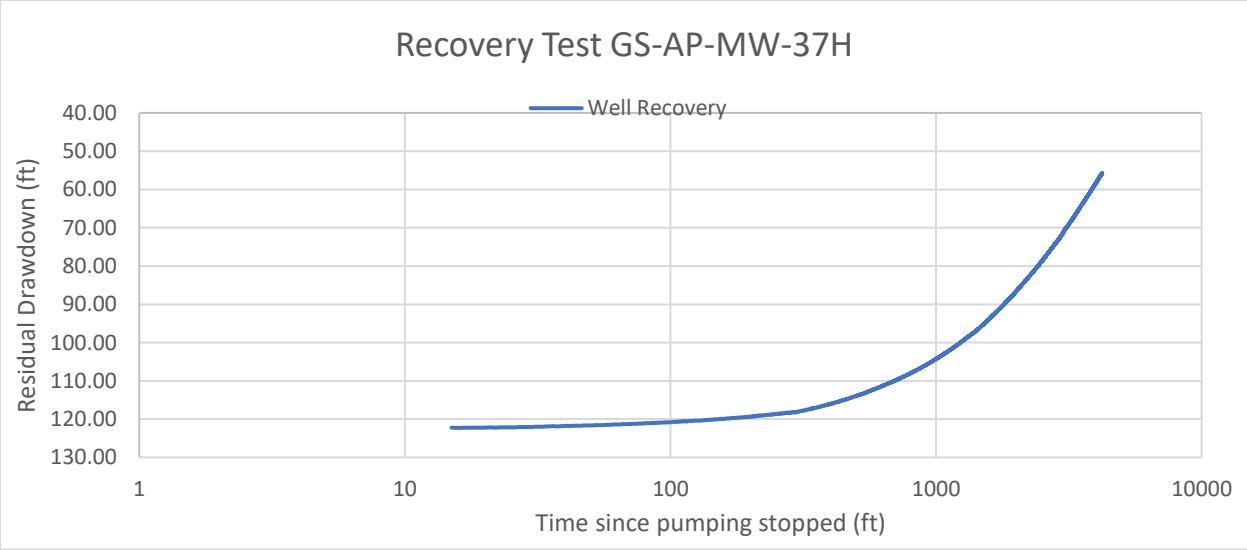

Recovery Test GS-GP-MW-7V
Well Recovery
Residual Drawdown (ft)
32.20
32.30
32.40
32.50
32.60
32.70
32.80
32.90
1
10
100
1000
10000
Time since pumping stopped (min)

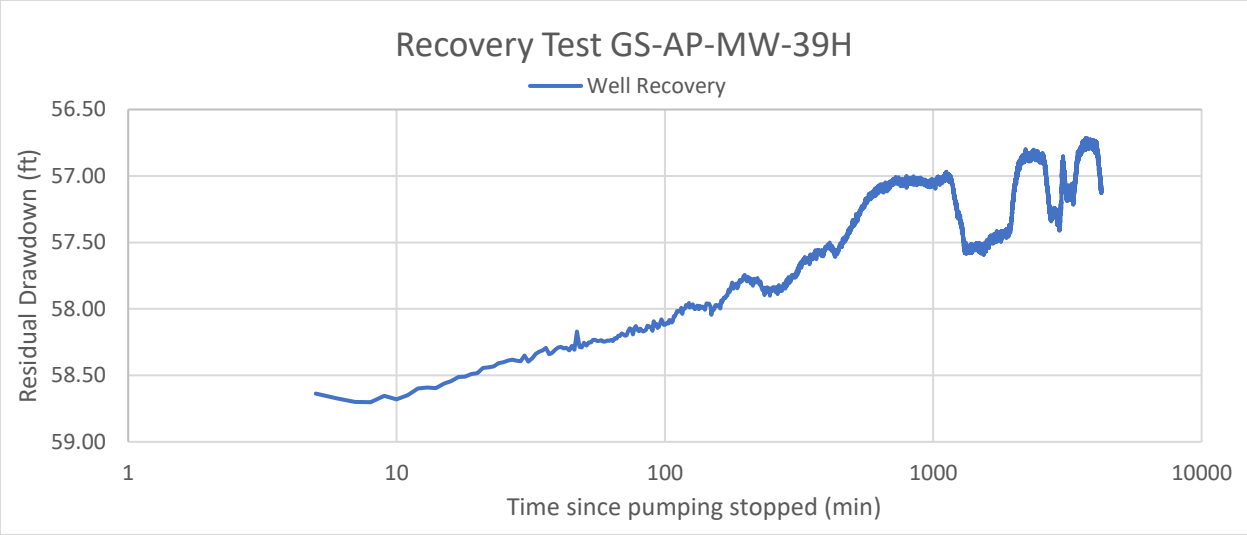

Recovery Test GS-AP-MW-10H
Well Recovery
Residual Drawdown (ft)
-0.5
0
0.5
1
1.5
2
2.5
1
10
100
1000
10000
Time since pumping stopped (min)

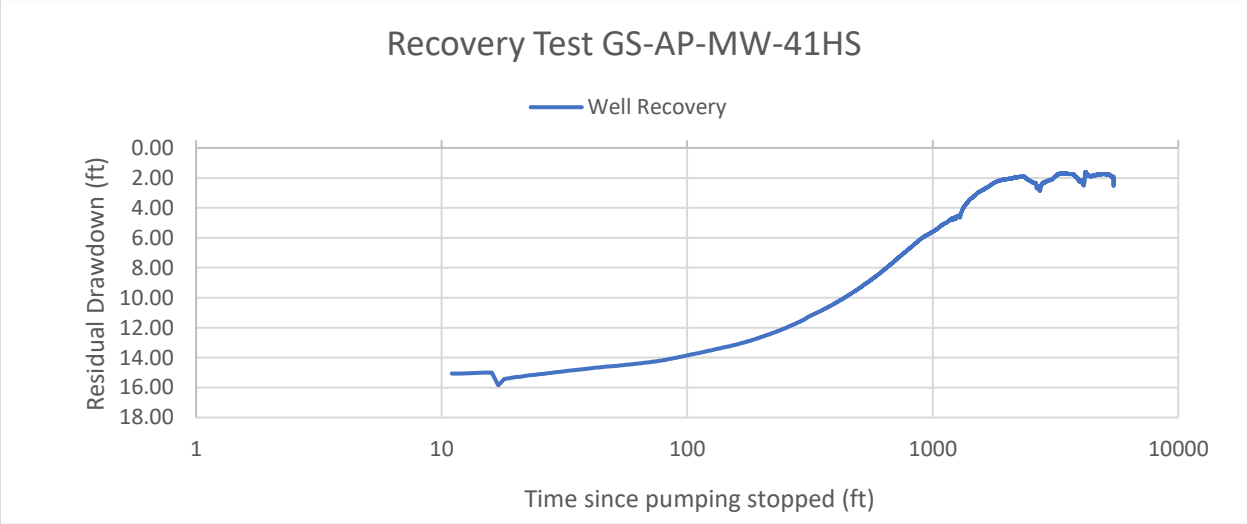

Recovery Test GS-AP-MW-20
Well Recovery
Residual Drawdown (ft)
0.00
5.00
10.00
15.00
20.00
25.00
30.00
35.00
40.00
45.00
1
10
100
1000
10000
Time since pumping stopped (min)


Recovery Test GS-AP-MW-27H
Well Recovery
Residual Drawdown (ft)
15.60
15.70
15.80
15.90
16.00
16.10
16.20
16.30
16.40
1
10
100
1000
10000
Time since pumping stopped (min)


Recovery Test GS-AP-MW-30H
Well Recovery
-5.00
0.00
5.00
10.00
15.00
20.00
Residual Drawdown (ft)
1
10
100
1000
10000
Time since pumping stopped (min)


Recovery Test GS-AP-MW-37H
Well Recovery
40.00
50.00
60.00
70.00
80.00
90.00
100.00
110.00
120.00
130.00
Residual Drawdown (ft)
1
10
100
1000
10000
Time since pumping stopped (ft)


Recovery Test GS-AP-MW-39H
Well Recovery
Residual Drawdown (ft)
56.50
57.00
57.50
58.00
58.50
59.00
1
10
100
1000
10000
Time since pumping stopped (min)


Recovery Test GS-AP-MW-41HS
Well Recovery
Residual Drawdown (ft)
0.00
2.00
4.00
6.00
8.00
10.00
12.00
14.00
16.00
18.00
1
10
100
1000
10000
Time since pumping stopped (ft)

Appendix D
Generic Plan for No-Purge Sampling Demonstration

1 No-Purge Sampling Method

No-purge groundwater sampling is a technique that is gaining acceptance for groundwater monitoring. The technique could be useful for low-yielding wells, as the wells would not need to be purged prior to sampling.

With no-purge groundwater sampling, the water inside the open interval of a monitoring well is demonstrated or assumed to be representative of ambient groundwater. Wellbore hydraulic conductivity is typically higher than that of the surrounding formation in almost all geologic settings. Flushing of the well by ambient groundwater flow can, therefore, produce representative water quality within the open interval without well purging (e.g., Robin and Gillham 1987; Powell and Puls 1993).

During no-purge sampling, a sampling device is deployed into the screened interval of a well, where ambient groundwater flow occurs. A sample is obtained by mechanically activating the sampler to allow entry and collection of ambient water from the selected depth or depth interval, or by allowing molecular diffusion to occur for a period sufficient for the water inside the sampler to achieve equilibrium with the surrounding water.

No-purge sampling offers several logistical and cost advantages over other groundwater sampling methods, including:

- Eliminating well purging, which is particularly advantageous for low-yielding or slow recharging wells
- Minimizing waste handling and disposal
- Reducing sampling time and associated site interference
- Reducing field equipment needs
- Simplifying sampling method implementation
- Reducing overall sampling cost
- Increasing sampling repeatability due to the simplicity of the field procedure
- Potentially increasing safety due to simplicity of the field procedure and reduced sampling time

No-purge sampling techniques fall into either of two categories:

- Diffusion-based sampling (e.g., passive diffusion bag sampler, dialysis sampler, rigid porous polyethylene sampler)
- Grab sampling (e.g., HydraSleeve, bailer grab sample, Snap Sampler, discrete interval sampler, Pneumo-Bailer, Kemmerer well sampler)

Diffusion-based samplers require an equilibration period to achieve representative concentrations within the sampler; both the required equilibration period and the ability to achieve representative

DRAFT

concentrations are analyte-specific. In contrast, grab sampling methods do not rely on diffusion, but remove a sample of the water from the well.

2 No-Purge Demonstration

The objective of a site-specific no-purge groundwater sampling demonstration is to compare no-purge sample analytical results to the low-flow sampling results. No-purge sampling involves collecting groundwater samples from a monitoring well without purging the well (Interstate Technology and Regulatory Council [ITRC] 2006, 2007).

Sampling Protocol

The site-specific no-purge demonstration may be performed by sampling selected monitoring wells using no-purge samplers, in addition to the low-flow sampling methods. It is a common practice during no-purge sampling to monitor groundwater field parameters using a downhole probe (such as an In-Situ multiparameter sonde described in Alabama Power's *WFG Low-Flow Groundwater Sampling TSOP* [Alabama Power 2020]). Field parameters should be measured during the low-flow sampling using a flow-through cell and multiparameter probe. Because low-flow sampling may cause more perturbation to the water column in the well than no-purge sampling, the no-purge samples will be obtained before the low-flow samples. The samples obtained by low-flow and no-purge methods should be packaged as part of the same sample delivery group and shipped to the laboratory for analysis.

Comparison of No-Purge and Low-Flow Data

The following tables will be compiled to compare the no-purge and low-flow data:

- Summary table for the groundwater field parameters measured using the downhole probe and the multiparameter water quality meter at the surface
- Summary table for the analytical results reported for the low-flow and no-purge samples

In addition, the following graphical and statistical method could be used to compare the analytical results reported for the low-flow and no-purge samples:

- Bar charts comparing reported concentrations for specific analytes at the wells selected for the no-purge demonstration
- Regression analysis of the no-purge and no-flow analytical results reported for selected analytes
- Quadrant plots comparing analytical results reported for the no-purge and low-flow analytical results for selected analytes.

Though no-purge sampling is proposed to allow continued use of some low-yielding wells, modest cost savings may be realized through the use of no-purge sampling methods.

DRAFT

3 References

Alabama Power, 2020. *WFG Low-Flow Groundwater Sampling TSOP*, Procedure No. 7839, Revision 4, March 23, 2020.

ITRC (Interstate Technology and Regulatory Council), 2006. *Technology Overview of Passive Sampler Technologies*.

ITRC, 2007. *Protocol for Use of Five Passive Samplers to Sample for a Variety of Contaminants in Groundwater*.

Powell, R.M., and Puls, R.W., 1993. "Passive Sampling of Groundwater Monitoring Wells Without Purging: Multilevel Well Chemistry and Tracer Disappearance." *Journal of Contaminant Hydrology* 12:51-77.

Robin, M.J.L., Gilham. R.W., 1987. "Passive Sampling of Groundwater Monitoring Wells Without Purging: Multilevel Well Chemistry and Tracer Disappearance." *Journal of Contaminant Hydrology* 12:51-77.

Appendix C

Appendix C
Abbreviations

Abbreviations:

1. mg/L - Milligrams per liter
2. pCi/L - Picocuries per liter
3. N/A indicates the constituent was not analyzed during the sampling event.
4. J value indicates the result is greater that or equal to the Method Detection Limit (MDL) and less that the Practical Quantitation Limit (PQL).
Values are displayed as less than the PQL with a J.
5. Non-Detect indicates the result was not detected above the MDL and is considered a non-detect.
6. Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration),
data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
7. Annual sampling for Appendix IV constituents only was
completed following initiation of assessment monitoring. Appendix III
constituents were not required during this monitoring event.

Analytical Data Summary
Plant Gorgas Ash Pond
Alabama Power Company

		APPENDIX III							APPENDIX IV														
WELL	SAMPLE DATE	Boron	Calcium	Chloride	Fluoride	pH	Sulfate	TDS	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Combined Radium 226 + 228	Fluoride	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium
UNITS		mg/L	mg/L	mg/L	mg/L	SU	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	pCi/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
GS-AP-MW-2	8/2/2016	0.178	2.25	6.15	1.76	9.18	2.87	390	Non-Detect	Non-Detect	0.0895	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.274(U)	1.76	Non-Detect	0.0495(J)	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-2	9/19/2016	0.0937(J)	0.724	5.98	1.55	9.18	1.22	398	Non-Detect	Non-Detect	0.0744	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.0478(U)	1.55	Non-Detect	0.049(J)	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-2	10/24/2016	0.0986(J)	0.635	5.93	1.29	9.14	Non-Detect	395	Non-Detect	Non-Detect	0.0787	Non-Detect	Non-Detect	Non-Detect	Non-Detect	1.41	1.29	Non-Detect	0.0488(J)	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-2	12/13/2016	0.0965(J)	0.714	5.7	1.19	9.2	Non-Detect	381	Non-Detect	Non-Detect	0.0758	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.733	1.19	Non-Detect	0.0483(J)	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-2	2/8/2017	0.0896(J)	0.722	8.44	1.6	9.17	19.4	376	Non-Detect	Non-Detect	0.0823	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.0206(U)	1.6	Non-Detect	0.0644	Non-Detect	0.00359(J)	Non-Detect	Non-Detect
GS-AP-MW-2	3/30/2017	0.0871(J)	0.686	11	1.5	9.08	31	391	Non-Detect	Non-Detect	0.0768	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.122(U)	1.5	Non-Detect	0.0597	Non-Detect	0.00485(J)	Non-Detect	Non-Detect
GS-AP-MW-2	4/26/2017	0.0818(J)	0.646	10	1.4	9.22	29	384	Non-Detect	Non-Detect	0.077	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.397(U)	1.4	Non-Detect	0.0459(J)	Non-Detect	0.00444(J)	Non-Detect	Non-Detect
GS-AP-MW-2	6/6/2017	0.0805(J)	0.569	9.6	1.3	9.22	37	404	Non-Detect	Non-Detect	0.0711	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.0873(U)	1.3	Non-Detect	0.0491(J)	Non-Detect	0.00489(J)	Non-Detect	Non-Detect
GS-AP-MW-2	8/21/2017	0.102	0.634	12	1.4	9.12	55	416	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	1.4	n/a	n/a	n/a	n/a	n/a	n/a
GS-AP-MW-2	2/21/2018	n/a	n/a	n/a	1.1	9.17	n/a	n/a	Non-Detect	Non-Detect	0.0864	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.562	1.1	Non-Detect	0.0534	Non-Detect	0.0112	Non-Detect	Non-Detect
GS-AP-MW-2	5/16/2018	0.147	0.588	12	1.1	9.28	34	365	Non-Detect	Non-Detect	0.0658	Non-Detect	Non-Detect	Non-Detect	Non-Detect	1.44	1.1	Non-Detect	0.0451(J)	Non-Detect	0.00547(J)	Non-Detect	Non-Detect
GS-AP-MW-2	10/16/2018	0.169	0.714	20	1	9.35	90	430	Non-Detect	Non-Detect	0.0846	0.00138(J)	Non-Detect	Non-Detect	Non-Detect	0.736	1	Non-Detect	0.0511	Non-Detect	0.00919(J)	Non-Detect	Non-Detect
GS-AP-MW-2	4/17/2019	0.165	0.511	9.5	0.868	9.26	48.6	341	Non-Detect	Non-Detect	0.0576	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.0905(U)	0.868	Non-Detect	0.0421	Non-Detect	0.00293(J)	Non-Detect	Non-Detect
GS-AP-MW-2	9/25/2019	0.153	0.581	12	0.86	9.31	47.7	358	Non-Detect	Non-Detect	0.065	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.537(U)	0.86	Non-Detect	0.0457	Non-Detect	0.00803(J)	Non-Detect	Non-Detect
GS-AP-MW-2	3/25/2020	0.163	0.518	9.7	0.855	9.29	38.5	337	Non-Detect	Non-Detect	0.0602	Non-Detect	Non-Detect	Non-Detect	Non-Detect	4	0.855	Non-Detect	0.0434	Non-Detect	0.00343(J)	Non-Detect	Non-Detect
GS-AP-MW-2	5/13/2020	0.154	0.493(J)	8.25	0.777	9.43	33.6	328	Non-Detect	Non-Detect	0.0528	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.289(U)	0.777	Non-Detect	0.0409	Non-Detect	0.00224(J)	Non-Detect	Non-Detect
GS-AP-MW-2	9/22/2020	0.133	0.503	6.33	0.921	9.41	21.5	318	Non-Detect	Non-Detect	0.0563	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.712	0.921	Non-Detect	0.0395	Non-Detect	0.00308(J)	Non-Detect	Non-Detect

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		APPENDIX III							APPENDIX IV														
WELL	SAMPLE DATE	Boron	Calcium	Chloride	Fluoride	pH	Sulfate	TDS	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Combined Radium 226 + 228	Fluoride	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium
UNITS		mg/L	mg/L	mg/L	mg/L	SU	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	pCi/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
GS-AP-MW-6D	8/3/2016	1.04	48.1	5.2	0.127(J)	7.27	52	302	Non-Detect	0.0547	0.852	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.42(U)	0.127(J)	Non-Detect	0.204	Non-Detect	0.00372(J)	Non-Detect	Non-Detect
GS-AP-MW-6D	9/20/2016	1.01	51.2	5.31	0.087(J)	7.27	56	298	Non-Detect	0.0625	0.685	Non-Detect	Non-Detect	Non-Detect	Non-Detect	1.13	0.087(J)	Non-Detect	0.223	Non-Detect	0.00481(J)	Non-Detect	Non-Detect
GS-AP-MW-6D	10/24/2016	1.08	49.5	5.4	0.019(J)	7.25	57.5	306	Non-Detect	0.0695	0.711	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.327(U)	0.019(J)	Non-Detect	0.243	Non-Detect	0.00496(J)	Non-Detect	Non-Detect
GS-AP-MW-6D	12/12/2016	1.09	54.3	5.46	0.043(J)	7.26	50	291	0.00104(J)	0.0611	0.789	Non-Detect	Non-Detect	Non-Detect	Non-Detect	1.26	0.043(J)	Non-Detect	0.22	Non-Detect	0.00467(J)	Non-Detect	Non-Detect
GS-AP-MW-6D	2/6/2017	1.06	51.2	5.28	0.11	7.24	54.9	285	Non-Detect	0.0618	0.779	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.532	0.11	Non-Detect	0.247	Non-Detect	0.00468(J)	Non-Detect	Non-Detect
GS-AP-MW-6D	3/27/2017	1.07	51.4	6.4	0.12	7.29	50	305	Non-Detect	0.0711	0.77	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.334(U)	0.12	Non-Detect	0.263	Non-Detect	0.00548(J)	Non-Detect	Non-Detect
GS-AP-MW-6D	4/24/2017	1.08	54.7	6.5	0.11	7.46	56	301	Non-Detect	0.0787	0.716	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.492	0.11	Non-Detect	0.237	Non-Detect	0.00606(J)	Non-Detect	Non-Detect
GS-AP-MW-6D	6/6/2017	1.11	53.9	4.7	0.12	7.29	63	311	Non-Detect	0.0778	0.611	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.156(U)	0.12	Non-Detect	0.259	Non-Detect	0.00545(J)	Non-Detect	Non-Detect
GS-AP-MW-6D	8/21/2017	0.906	47.3	6.1	0.15	7.21	35	289	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	0.15	n/a	n/a	n/a	n/a	n/a	n/a
GS-AP-MW-6D	2/19/2018	n/a	n/a	n/a	0.13	7.36	n/a	n/a	Non-Detect	0.0616	0.872	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.283(U)	0.13	Non-Detect	0.213	Non-Detect	0.00537(J)	Non-Detect	Non-Detect
GS-AP-MW-6D	5/14/2018	1.04	54.8	6	0.13	7.36	46	303	Non-Detect	0.074	0.914	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.083(U)	0.13	Non-Detect	0.239	Non-Detect	0.00564(J)	Non-Detect	Non-Detect
GS-AP-MW-6D	10/15/2018	1.06	53.9	7	0.16	7.33	37	309	Non-Detect	0.0758	0.896	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.656	0.16	Non-Detect	0.236	Non-Detect	0.00538(J)	Non-Detect	Non-Detect
GS-AP-MW-6D	4/16/2019	1.1	54	8.36	0.156	7.26	46.8	285	0.000828(J)	0.088	0.879	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.528	0.156	Non-Detect	0.267	Non-Detect	0.00747(J)	Non-Detect	Non-Detect
GS-AP-MW-6D	9/23/2019	1.15	56.1	8.72	0.132	7.23	47.9	296	Non-Detect	0.0876	0.903	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.677	0.132	Non-Detect	0.264	Non-Detect	0.00758(J)	Non-Detect	Non-Detect
GS-AP-MW-6D	3/17/2020	1.17	57.2	10.1	0.132	7.39	59.5	303	Non-Detect	0.105	0.638	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.629	0.132	Non-Detect	0.292	Non-Detect	0.00959(J)	Non-Detect	Non-Detect
GS-AP-MW-6D	9/17/2020	1.22	61.5	10.5	0.133	7.41	65.1	314	Non-Detect	0.0931	0.378	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.32(U)	0.133	Non-Detect	0.299	Non-Detect	0.00924(J)	Non-Detect	Non-Detect

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		APPENDIX III							APPENDIX IV														
WELL	SAMPLE DATE	Boron	Calcium	Chloride	Fluoride	pH	Sulfate	TDS	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Combined Radium 226 + 228	Fluoride	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium
UNITS		mg/L	mg/L	mg/L	mg/L	SU	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	pCi/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
GS-AP-MW-6S	8/3/2016	1.16	42.5	21.9	0.099(J)	6.81	203	394	Non-Detect	0.0103	0.27	Non-Detect	Non-Detect	Non-Detect	Non-Detect	1.38	0.099(J)	Non-Detect	Non-Detect	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-6S	9/20/2016	1.16	51.1	20.9	0.074(J)	6.72	209	444	Non-Detect	0.0103	0.228	Non-Detect	Non-Detect	Non-Detect	Non-Detect	1.3	0.074(J)	Non-Detect	Non-Detect	Non-Detect	0.00202(J)	Non-Detect	Non-Detect
GS-AP-MW-6S	10/26/2016	1.24	65.6	20.7	0.032(J)	6.68	224	456	Non-Detect	0.0115	0.23	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.721(U)	0.032(J)	Non-Detect	0.0199(J)	Non-Detect	0.00599(J)	Non-Detect	Non-Detect
GS-AP-MW-6S	12/12/2016	1.24	66.5	21.1	0.034(J)	6.76	249	491	0.000727(J)	0.0106	0.276	Non-Detect	Non-Detect	Non-Detect	0.00212(J)	1.36	0.034(J)	Non-Detect	Non-Detect	Non-Detect	0.00214(J)	Non-Detect	Non-Detect
GS-AP-MW-6S	2/6/2017	1.1	73.1	23.3	0.06(J)	6.75	309	580	Non-Detect	0.0106	0.25	Non-Detect	Non-Detect	Non-Detect	0.00247(J)	0.702	0.06(J)	Non-Detect	Non-Detect	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-6S	3/27/2017	1.04	71.9	25	0.07(J)	6.67	290	554	Non-Detect	0.00989	0.196	Non-Detect	Non-Detect	Non-Detect	0.00224(J)	0.325(U)	0.07(J)	Non-Detect	Non-Detect	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-6S	4/24/2017	1	73.5	24	0.08(J)	6.81	300	566	Non-Detect	0.00907	0.159	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.436(U)	0.08(J)	Non-Detect	Non-Detect	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-6S	6/6/2017	1.02	71.8	22	0.09(J)	6.8	310	580	Non-Detect	0.0105	0.137	Non-Detect	Non-Detect	Non-Detect	0.00222(J)	0.592	0.09(J)	Non-Detect	Non-Detect	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-6S	8/21/2017	1.05	63.5	21	0.1	6.78	260	524	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	0.1	n/a	n/a	n/a	n/a	n/a	n/a
GS-AP-MW-6S	2/19/2018	n/a	n/a	n/a	0.1	6.85	n/a	n/a	Non-Detect	0.0108	0.145	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.776	0.1	Non-Detect	Non-Detect	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-6S	5/14/2018	0.99	67.5	20	0.13	6.82	210	458	Non-Detect	0.00864	0.12	Non-Detect	Non-Detect	Non-Detect	Non-Detect	-0.169(U)	0.13	Non-Detect	0.0238(J)	Non-Detect	0.00526(J)	Non-Detect	Non-Detect
GS-AP-MW-6S	10/15/2018	1.05	68.9	20	0.14	6.78	170	404	Non-Detect	0.00832	0.118	0.000794(J)	Non-Detect	Non-Detect	Non-Detect	0.792	0.14	Non-Detect	0.03	Non-Detect	0.00644(J)	Non-Detect	Non-Detect
GS-AP-MW-6S	4/16/2019	0.961	57.1	23.1	0.147	6.82	195	382	Non-Detect	0.0164	0.124	Non-Detect	Non-Detect	Non-Detect	Non-Detect	1.11	0.147	Non-Detect	Non-Detect	Non-Detect	0.00246(J)	Non-Detect	Non-Detect
GS-AP-MW-6S	9/23/2019	1.08	60	23.4	0.142	6.51	176	381	Non-Detect	0.0105	0.124	Non-Detect	Non-Detect	Non-Detect	Non-Detect	1.06	0.142	Non-Detect	0.0105(J)	Non-Detect	0.00412(J)	Non-Detect	Non-Detect
GS-AP-MW-6S	3/17/2020	0.867	59.3	17.4	0.231	6.92	148	328	Non-Detect	0.00778	0.0725	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.351(U)	0.231	Non-Detect	0.0695	Non-Detect	0.0272	Non-Detect	Non-Detect
GS-AP-MW-6S	9/16/2020	0.8	55.9	14.6	0.308	6.93	115	269	0.000948(J)	0.00611	0.0682	Non-Detect	Non-Detect	Non-Detect	Non-Detect	1.05	0.308	Non-Detect	0.066	Non-Detect	0.0427	Non-Detect	Non-Detect
GS-AP-MW-6V	9/15/2020	0.0974(J)	1.74	49.8	4.59	8.76	7.02	857	Non-Detect	Non-Detect	0.16	Non-Detect	Non-Detect	Non-Detect	Non-Detect	1.25	4.59	Non-Detect	0.136	Non-Detect	0.00256(J)	Non-Detect	Non-Detect

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WELL	SAMPLE DATE	Boron	Calcium	Chloride	Fluoride	pH	Sulfate	TDS	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Combined Radium 226 + 228	Fluoride	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium
UNITS		mg/L	mg/L	mg/L	mg/L	SU	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	pCi/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
GS-AP-MW-7	8/2/2016	1.57	19.4	3.7	0.098(J)	7.72	154	358	Non-Detect	0.188	0.0927	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.87	0.098(J)	0.00279(J)	0.144	Non-Detect	0.146	Non-Detect	Non-Detect
GS-AP-MW-7	9/21/2016	1.4	15.4	3.74	0.061(J)	7.6	146	370	Non-Detect	0.179	0.0979	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.107(U)	0.061(J)	0.0024(J)	0.136	Non-Detect	0.146	Non-Detect	Non-Detect
GS-AP-MW-7	10/24/2016	1.42	14.8	3.75	Non-Detect	7.68	131	370	Non-Detect	0.151	0.0751	Non-Detect	Non-Detect	0.00216(J)	Non-Detect	0.337(U)	Non-Detect	Non-Detect	0.135	Non-Detect	0.136	Non-Detect	Non-Detect
GS-AP-MW-7	12/12/2016	1.38	15	4.06	0.01(J)	7.72	141	353	0.000891(J)	0.181	0.0737	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.803	0.01(J)	Non-Detect	0.146	Non-Detect	0.14	Non-Detect	Non-Detect
GS-AP-MW-7	2/6/2017	1.44	14.9	3.92	0.07(J)	7.64	135	338	Non-Detect	0.194	0.0773	Non-Detect	Non-Detect	Non-Detect	Non-Detect	-0.0165(U)	0.07(J)	Non-Detect	0.182	Non-Detect	0.15	Non-Detect	Non-Detect
GS-AP-MW-7	3/28/2017	1.44	14.3	4.3	0.07(J)	7.58	140	352	Non-Detect	0.205	0.0728	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.00697(U)	0.07(J)	Non-Detect	0.175	Non-Detect	0.159	Non-Detect	Non-Detect
GS-AP-MW-7	4/24/2017	1.41	14.5	4.6	0.08(J)	7.68	140	362	Non-Detect	0.202	0.0724	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.672	0.08(J)	Non-Detect	0.143	Non-Detect	0.16	Non-Detect	Non-Detect
GS-AP-MW-7	6/7/2017	1.45	14.1	4.3	0.09(J)	7.56	150	348	Non-Detect	0.193	0.0581	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.096(U)	0.09(J)	Non-Detect	0.152	Non-Detect	0.15	Non-Detect	Non-Detect
GS-AP-MW-7	8/21/2017	1.39	12.6	4.7	0.09(J)	7.61	140	362	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	0.09(J)	n/a	n/a	n/a	n/a	n/a	n/a
GS-AP-MW-7	2/19/2018	n/a	n/a	n/a	0.09(J)	7.65	n/a	n/a	Non-Detect	0.182	0.0464	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.207(U)	0.09(J)	Non-Detect	0.143	Non-Detect	0.172	Non-Detect	Non-Detect
GS-AP-MW-7	5/15/2018	1.5	12.9	4.3	0.09(J)	7.69	120	338	Non-Detect	0.211	0.0501	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.0311(U)	0.09(J)	Non-Detect	0.151	Non-Detect	0.177	Non-Detect	Non-Detect
GS-AP-MW-7	10/15/2018	1.53	12.5	5.1	0.11	7.62	130	333	Non-Detect	0.217	0.049	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.309(U)	0.11	Non-Detect	0.155	Non-Detect	0.168	Non-Detect	Non-Detect
GS-AP-MW-7	4/23/2019	1.5	13.8	5.16	0.111	7.83	156	354	0.00105(J)	0.207	0.113	Non-Detect	Non-Detect	0.00435(J)	0.00231(J)	0.894	0.111	0.00207(J)	0.144	Non-Detect	0.185	Non-Detect	Non-Detect
GS-AP-MW-7	9/24/2019	1.6	13.4	5.76	0.106	7.38	145	344	Non-Detect	0.233	0.0834	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.618(U)	0.106	Non-Detect	0.156	Non-Detect	0.178	Non-Detect	Non-Detect
GS-AP-MW-7	3/17/2020	1.58	13.5	6.65	0.107	7.72	149	334	Non-Detect	0.285	0.174	Non-Detect	Non-Detect	0.0076(J)	0.00476(J)	1.2	0.107	0.00386(J)	0.161	Non-Detect	0.193	Non-Detect	Non-Detect
GS-AP-MW-7	9/16/2020	1.54	12.2	6.17	0.126	7.74	131	351	Non-Detect	0.282	0.124	Non-Detect	Non-Detect	0.00482(J)	0.00301(J)	1.74	0.126	0.00295(J)	0.16	Non-Detect	0.215	Non-Detect	Non-Detect

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WELL	SAMPLE DATE	Boron	Calcium	Chloride	Fluoride	pH	Sulfate	TDS	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Combined Radium 226 + 228	Fluoride	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium
UNITS		mg/L	mg/L	mg/L	mg/L	SU	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	pCi/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
GS-AP-MW-8	8/3/2016	0.0239(J)	6.85	3.21	0.125(J)	5.84	4.2	113	Non-Detect	0.00214(J)	0.0274	Non-Detect	Non-Detect	Non-Detect	0.0026(J)	0.299(U)	0.125(J)	Non-Detect	Non-Detect	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-8	9/21/2016	Non-Detect	11.7	2.95	0.098(J)	5.99	4.27	128	Non-Detect	0.00112(J)	0.0811	Non-Detect	Non-Detect	0.00266(J)	0.00362(J)	0.835	0.098(J)	Non-Detect	Non-Detect	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-8	10/25/2016	Non-Detect	10.8	3.03	0.025(J)	5.94	2.78	121	Non-Detect	Non-Detect	0.0576	Non-Detect	Non-Detect	Non-Detect	0.00305(J)	0.0629(U)	0.025(J)	Non-Detect	Non-Detect	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-8	12/13/2016	Non-Detect	5.86	3.21	0.045(J)	5.84	3.18	101	0.00067(J)	Non-Detect	0.0241	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.547	0.045(J)	Non-Detect	Non-Detect	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-8	2/6/2017	Non-Detect	9.76	3	0.1	5.9	3.74	108	Non-Detect	0.00111(J)	0.0747	Non-Detect	Non-Detect	Non-Detect	0.00308(J)	0.251(U)	0.1	Non-Detect	Non-Detect	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-8	3/28/2017	Non-Detect	5.28	3.3	0.08(J)	5.67	3.4(J)	91	Non-Detect	0.00109(J)	0.0183	Non-Detect	Non-Detect	0.00322(J)	Non-Detect	-0.109(U)	0.08(J)	Non-Detect	Non-Detect	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-8	4/24/2017	Non-Detect	6.89	3.8	0.09(J)	5.79	2.7(J)	89.3	Non-Detect	Non-Detect	0.04	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.293(U)	0.09(J)	Non-Detect	Non-Detect	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-8	6/7/2017	Non-Detect	3.58	3.5	0.08(J)	5.71	2.7(J)	84	Non-Detect	Non-Detect	0.00769(J)	Non-Detect	Non-Detect	0.00227(J)	Non-Detect	0.529	0.08(J)	Non-Detect	Non-Detect	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-8	8/21/2017	Non-Detect	3.38	3.6	0.08(J)	5.7	3.9(J)	91.3	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	0.08(J)	n/a	n/a	n/a	n/a	n/a	n/a
GS-AP-MW-8	2/19/2018	n/a	n/a	n/a	0.08(J)	5.78	n/a	n/a	Non-Detect	Non-Detect	0.00762(J)	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.497	0.08(J)	Non-Detect	Non-Detect	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-8	5/15/2018	Non-Detect	4.25	3.3	0.1	5.84	2.5(J)	94.7	Non-Detect	Non-Detect	0.00701(J)	Non-Detect	Non-Detect	Non-Detect	Non-Detect	-0.601(U)	0.1	Non-Detect	Non-Detect	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-8	10/16/2018	Non-Detect	3.21	3.3	0.09(J)	5.75	2.4(J)	76.7	Non-Detect	Non-Detect	0.0094(J)	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.2(U)	0.09(J)	Non-Detect	Non-Detect	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-8	4/16/2019	Non-Detect	4.43	3.69	0.143	5.76	4.53	92	Non-Detect	Non-Detect	0.00459(J)	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.733	0.143	Non-Detect	Non-Detect	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-8	9/24/2019	Non-Detect	7.24	3.21	0.128	5.27	6.61	109	Non-Detect	Non-Detect	0.0434	Non-Detect	Non-Detect	Non-Detect	0.00234(J)	0.753	0.128	Non-Detect	Non-Detect	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-8	3/18/2020	Non-Detect	4.51	4.35	0.108	5.81	4.86	90.7	Non-Detect	Non-Detect	0.00507(J)	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.465(U)	0.108	Non-Detect	Non-Detect	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-8	9/21/2020	Non-Detect	5.19	3.22	0.125	5.75	4.69	94	Non-Detect	Non-Detect	0.026	Non-Detect	Non-Detect	Non-Detect	Non-Detect	1.25	0.125	Non-Detect	Non-Detect	Non-Detect	Non-Detect	Non-Detect	Non-Detect

Analytical Data Summary
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		APPENDIX III							APPENDIX IV														
WELL	SAMPLE DATE	Boron	Calcium	Chloride	Fluoride	pH	Sulfate	TDS	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Combined Radium 226 + 228	Fluoride	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium
UNITS		mg/L	mg/L	mg/L	mg/L	SU	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	pCi/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
GS-AP-MW-9	8/3/2016	0.264	80.8	2.18	0.123(J)	6.51	218	514	Non-Detect	0.00781	0.029	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.241(U)	0.123(J)	Non-Detect	0.101	Non-Detect	0.00571(J)	Non-Detect	Non-Detect
GS-AP-MW-9	9/21/2016	0.192	81.5	2.11	0.09(J)	6.57	195	508	Non-Detect	0.0062	0.0218	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.304(U)	0.09(J)	Non-Detect	0.0902	Non-Detect	0.005(J)	Non-Detect	Non-Detect
GS-AP-MW-9	10/25/2016	0.167	81.7	2.06	0.028(J)	6.58	163	470	Non-Detect	0.00525	0.0253	Non-Detect	Non-Detect	Non-Detect	Non-Detect	1.34	0.028(J)	Non-Detect	0.0825	Non-Detect	0.00452(J)	Non-Detect	Non-Detect
GS-AP-MW-9	12/13/2016	0.143	70.1	2.05	0.049(J)	6.71	155	441	Non-Detect	0.00535	0.0268	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.683	0.049(J)	Non-Detect	0.0693	Non-Detect	0.00467(J)	Non-Detect	Non-Detect
GS-AP-MW-9	2/8/2017	0.16	77.6	2.21	0.1	6.66	157	442	Non-Detect	0.00659	0.0264	0.000705(J)	Non-Detect	Non-Detect	Non-Detect	0.27(U)	0.1	Non-Detect	0.0935	Non-Detect	0.0067(J)	Non-Detect	Non-Detect
GS-AP-MW-9	3/28/2017	0.187	84.1	2.3	0.11	6.65	170	472	Non-Detect	0.00735	0.0264	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.129(U)	0.11	Non-Detect	0.108	Non-Detect	0.00752(J)	Non-Detect	Non-Detect
GS-AP-MW-9	4/26/2017	0.187	85	2.7	0.12	6.63	160	469	Non-Detect	0.00689	0.0234	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.16(U)	0.12	Non-Detect	0.0901	Non-Detect	0.00676(J)	Non-Detect	Non-Detect
GS-AP-MW-9	6/7/2017	0.185	83.9	2.6	0.12	6.61	180	503	Non-Detect	0.00743	0.0229	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.0871(U)	0.12	Non-Detect	0.0937	Non-Detect	0.00701(J)	Non-Detect	Non-Detect
GS-AP-MW-9	8/22/2017	0.191	77.6	3.3	0.14	6.7	170	474	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	0.14	n/a	n/a	n/a	n/a	n/a	n/a
GS-AP-MW-9	2/20/2018	n/a	n/a	n/a	0.13	6.75	n/a	n/a	Non-Detect	0.00676	0.0255	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.882	0.13	Non-Detect	0.0833	Non-Detect	0.00747(J)	Non-Detect	Non-Detect
GS-AP-MW-9	5/15/2018	0.16	76.2	2.1	0.14	6.78	130	426	Non-Detect	0.00698	0.0258	Non-Detect	Non-Detect	Non-Detect	Non-Detect	-0.462(U)	0.14	Non-Detect	0.0861	Non-Detect	0.00736(J)	Non-Detect	Non-Detect
GS-AP-MW-9	10/16/2018	0.1(J)	71.2	2.3	0.15	6.72	120	417	Non-Detect	0.00473(J)	0.0282	0.000893(J)	Non-Detect	Non-Detect	Non-Detect	0.761	0.15	Non-Detect	0.0676	Non-Detect	0.00425(J)	Non-Detect	Non-Detect
GS-AP-MW-9	4/16/2019	0.0979(J)	73.3	2.81	0.154	6.69	154	397	Non-Detect	0.00403(J)	0.0256	Non-Detect	Non-Detect	Non-Detect	Non-Detect	-0.065(U)	0.154	Non-Detect	0.0673	Non-Detect	0.00462(J)	Non-Detect	Non-Detect

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		APPENDIX III							APPENDIX IV														
WELL	SAMPLE DATE	Boron	Calcium	Chloride	Fluoride	pH	Sulfate	TDS	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Combined Radium 226 + 228	Fluoride	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium
UNITS		mg/L	mg/L	mg/L	mg/L	SU	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	pCi/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
GS-AP-MW-11	8/2/2016	Non-Detect	43.5	6.7	0.14(J)	7.14	20.5	235	Non-Detect	Non-Detect	0.245	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.105(U)	0.14(J)	Non-Detect	0.0146(J)	Non-Detect	0.00217(J)	Non-Detect	Non-Detect
GS-AP-MW-11	9/21/2016	Non-Detect	43.6	6.28	0.098(J)	7.05	21.3	232	Non-Detect	Non-Detect	0.203	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.694	0.098(J)	Non-Detect	0.0141(J)	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-11	10/25/2016	Non-Detect	42.6	5.53	0.031(J)	6.97	20.1	229	Non-Detect	Non-Detect	0.218	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.241(U)	0.031(J)	Non-Detect	0.012(J)	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-11	12/13/2016	0.0362(J)	41.4	4.84	0.04(J)	7.01	21.7	227	Non-Detect	Non-Detect	0.22	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.499	0.04(J)	Non-Detect	0.0138(J)	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-11	2/8/2017	Non-Detect	44.6	4.84	0.11	6.93	21.1	236	Non-Detect	Non-Detect	0.234	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.596	0.11	Non-Detect	0.0148(J)	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-11	3/28/2017	Non-Detect	44.4	4.4	0.12	6.92	23	228	Non-Detect	Non-Detect	0.226	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.403(U)	0.12	Non-Detect	0.0149(J)	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-11	4/26/2017	Non-Detect	46	5.5	0.13	6.91	23	234	Non-Detect	Non-Detect	0.222	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.258(U)	0.13	Non-Detect	0.0123(J)	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-11	6/7/2017	Non-Detect	45.1	5.1	0.13	6.92	22	223	Non-Detect	Non-Detect	0.201	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.077(U)	0.13	Non-Detect	0.0125(J)	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-11	8/22/2017	Non-Detect	42.4	6	0.14	7.01	21	244	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	0.14	n/a	n/a	n/a	n/a	n/a	n/a
GS-AP-MW-11	2/20/2018	n/a	n/a	n/a	0.13	6.98	n/a	n/a	Non-Detect	Non-Detect	0.201	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.303(U)	0.13	Non-Detect	0.0119(J)	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-11	5/15/2018	0.0255(J)	47	6.9	0.14	7.01	23	246	Non-Detect	Non-Detect	0.214	Non-Detect	Non-Detect	Non-Detect	Non-Detect	-0.232(U)	0.14	Non-Detect	0.013(J)	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-11	10/16/2018	0.0221(J)	47.7	8.1	0.16	7.01	22	242	Non-Detect	Non-Detect	0.233	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.307(U)	0.16	Non-Detect	0.012(J)	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-11	4/16/2019	Non-Detect	46.7	8.06	0.177	6.93	23.2	226	Non-Detect	Non-Detect	0.21	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.609(U)	0.177	Non-Detect	0.0129(J)	Non-Detect	Non-Detect	Non-Detect	Non-Detect

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		APPENDIX III							APPENDIX IV														
WELL	SAMPLE DATE	Boron	Calcium	Chloride	Fluoride	pH	Sulfate	TDS	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Combined Radium 226 + 228	Fluoride	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium
UNITS		mg/L	mg/L	mg/L	mg/L	SU	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	pCi/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
GS-AP-MW-12	8/3/2016	0.34	36.1	14.5	0.656	7.36	19.2	546	Non-Detect	0.11	0.144	Non-Detect	Non-Detect	Non-Detect	Non-Detect	1.08	0.656	Non-Detect	0.0265(J)	Non-Detect	0.0269	Non-Detect	Non-Detect
GS-AP-MW-12	9/20/2016	0.299	27	12.9	0.691	7.28	1.42	542	Non-Detect	0.0746	0.102	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.848	0.691	Non-Detect	0.0225(J)	Non-Detect	0.00762(J)	Non-Detect	Non-Detect
GS-AP-MW-12	10/25/2016	0.323	26.1	12.2	0.588	7.23	Non-Detect	518	Non-Detect	0.0728	0.109	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.92	0.588	Non-Detect	0.0217(J)	Non-Detect	0.00456(J)	Non-Detect	Non-Detect
GS-AP-MW-12	12/13/2016	0.294	29.4	10.4	0.545	7.27	3.21	424	0.000681(J)	0.0538	0.115	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.974	0.545	Non-Detect	0.026(J)	Non-Detect	0.00411(J)	Non-Detect	Non-Detect
GS-AP-MW-12	2/8/2017	0.264	31.9	8.77	0.79	7.25	3.3	379	Non-Detect	0.0427	0.122	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.535	0.79	Non-Detect	0.0315(J)	Non-Detect	0.00235(J)	Non-Detect	Non-Detect
GS-AP-MW-12	3/29/2017	0.246	31.8	10	0.51	7.34	3.8(J)	334	Non-Detect	0.0404	0.116	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.194(U)	0.51	Non-Detect	0.0308(J)	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-12	4/26/2017	0.234	34.6	9.8	0.49	7.19	1.4(J)	332	Non-Detect	0.0372	0.127	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.384(U)	0.49	Non-Detect	0.0248(J)	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-12	6/7/2017	0.194	33.4	8	0.43	7.24	1.7(J)	308	Non-Detect	0.0307	0.115	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.729	0.43	Non-Detect	0.0234(J)	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-12	8/22/2017	0.156	31.5	6.5	0.41	7.31	4.2(J)	286	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	0.41	n/a	n/a	n/a	n/a	n/a	n/a
GS-AP-MW-12	2/20/2018	n/a	n/a	n/a	0.27	7.69	n/a	n/a	Non-Detect	0.0282	0.132	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.242(U)	0.27	Non-Detect	0.058	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-12	5/15/2018	0.0781(J)	34.8	4.4	0.23	7.69	14	235	Non-Detect	0.0253	0.163	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.433(U)	0.23	Non-Detect	0.0489(J)	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-12	10/16/2018	0.057(J)	35.6	3.1	0.23	7.51	13	211	Non-Detect	0.0203	0.159	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.421(U)	0.23	Non-Detect	0.0341	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-12	4/16/2019	0.0385(J)	38.3	3.22	0.188	7.41	13.3	193	Non-Detect	0.014	0.161	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.184(U)	0.188	Non-Detect	0.0261	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-12	9/25/2019	0.122	48.1	6.68	0.168	7.38	25.5	253	Non-Detect	0.0135	0.202	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.442(U)	0.168	Non-Detect	0.028	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-12	3/18/2020	0.0449(J)	44	4.22	0.122	7.56	20.8	236	0.0022(J)	0.00693	0.195	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.605	0.122	Non-Detect	0.0297	Non-Detect	0.00444(J)	Non-Detect	Non-Detect
GS-AP-MW-12	9/23/2020	0.0446(J)	45.9	3.15	0.12	8.3	19.1	216	0.00202(J)	0.00616	0.193	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.811(U)	0.12	Non-Detect	0.0279	Non-Detect	0.00577(J)	Non-Detect	Non-Detect

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		APPENDIX III							APPENDIX IV														
WELL	SAMPLE DATE	Boron	Calcium	Chloride	Fluoride	pH	Sulfate	TDS	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Combined Radium 226 + 228	Fluoride	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium
UNITS		mg/L	mg/L	mg/L	mg/L	SU	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	pCi/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
GS-AP-MW-13	8/2/2016	Non-Detect	47.2	2.91	0.161(J)	6.8	12	221	Non-Detect	Non-Detect	0.184	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.0177(U)	0.161(J)	Non-Detect	0.0121(J)	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-13	9/20/2016	Non-Detect	46.3	2.94	0.122(J)	6.8	11.2	221	Non-Detect	Non-Detect	0.153	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.725	0.122(J)	Non-Detect	0.0116(J)	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-13	10/25/2016	Non-Detect	46.6	2.94	0.058(J)	6.85	10.1	226	Non-Detect	Non-Detect	0.176	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.494(U)	0.058(J)	Non-Detect	0.0114(J)	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-13	12/13/2016	Non-Detect	43.1	2.93	0.072(J)	6.8	11.4	211	Non-Detect	Non-Detect	0.184	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.39(U)	0.072(J)	Non-Detect	0.0116(J)	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-13	2/8/2017	Non-Detect	47.5	2.85	0.16	6.76	10.9	212	Non-Detect	Non-Detect	0.189	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.455(U)	0.16	Non-Detect	0.0118(J)	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-13	3/29/2017	Non-Detect	46.8	3.4	0.14	6.76	11	217	Non-Detect	Non-Detect	0.184	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.251(U)	0.14	Non-Detect	0.0118(J)	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-13	4/26/2017	Non-Detect	48.1	3.7	0.16	6.71	11	202	Non-Detect	Non-Detect	0.177	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.0762(U)	0.16	Non-Detect	Non-Detect	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-13	6/7/2017	Non-Detect	44.4	3.3	0.15	6.71	11	218	Non-Detect	Non-Detect	0.164	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.32(U)	0.15	Non-Detect	Non-Detect	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-13	8/22/2017	Non-Detect	42.9	3.4	0.18	6.84	11	224	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	0.18	n/a	n/a	n/a	n/a	n/a	n/a
GS-AP-MW-13	2/20/2018	n/a	n/a	n/a	0.17	6.77	n/a	n/a	Non-Detect	Non-Detect	0.165	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.465	0.17	Non-Detect	Non-Detect	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-13	5/15/2018	Non-Detect	44.3	3.2	0.17	6.8	11	209	Non-Detect	Non-Detect	0.172	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.0571(U)	0.17	Non-Detect	0.0101	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-13	10/17/2018	Non-Detect	41.8	2.3	0.19	6.67	12	208	Non-Detect	Non-Detect	0.165	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.482	0.19	Non-Detect	Non-Detect	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-13	4/16/2019	Non-Detect	38.6	3.23	0.197	6.64	12.1	185	Non-Detect	Non-Detect	0.16	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.506(U)	0.197	Non-Detect	0.0101(J)	Non-Detect	Non-Detect	Non-Detect	Non-Detect

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		APPENDIX III							APPENDIX IV														
WELL	SAMPLE DATE	Boron	Calcium	Chloride	Fluoride	pH	Sulfate	TDS	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Combined Radium 226 + 228	Fluoride	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium
UNITS		mg/L	mg/L	mg/L	mg/L	SU	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	pCi/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
GS-AP-MW-14	8/2/2016	Non-Detect	36.4	5.17	0.154(J)	7.39	10.6	222	Non-Detect	0.00189(J)	0.249	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.657	0.154(J)	Non-Detect	0.0425(J)	Non-Detect	0.00283(J)	Non-Detect	Non-Detect
GS-AP-MW-14	9/19/2016	Non-Detect	33.9	4.9	0.108(J)	7.2	9.9	225	Non-Detect	0.00173(J)	0.219	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.543	0.108(J)	Non-Detect	0.0344(J)	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-14	10/25/2016	Non-Detect	35.8	5.08	0.04(J)	7.23	8.12	219	Non-Detect	0.00199(J)	0.252	Non-Detect	Non-Detect	Non-Detect	Non-Detect	1.12	0.04(J)	Non-Detect	0.0321(J)	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-14	12/13/2016	Non-Detect	35.9	5.1	0.058(J)	7.19	10.5	207	Non-Detect	0.00186(J)	0.276	Non-Detect	Non-Detect	Non-Detect	Non-Detect	1.37	0.058(J)	Non-Detect	0.0281(J)	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-14	2/8/2017	Non-Detect	35.7	5	0.15	7.09	11.1	208	Non-Detect	0.00157(J)	0.277	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.717	0.15	Non-Detect	0.0348(J)	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-14	3/28/2017	Non-Detect	33.3	5.5	0.15	7.35	14	222	Non-Detect	0.00125(J)	0.243	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.618	0.15	Non-Detect	0.0488(J)	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-14	4/26/2017	Non-Detect	35.6	7	0.16	7.16	13	222	Non-Detect	0.0011(J)	0.246	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.442	0.16	Non-Detect	0.0431(J)	Non-Detect	0.00212(J)	Non-Detect	Non-Detect
GS-AP-MW-14	6/7/2017	Non-Detect	35.8	6.2	0.15	7.13	13	223	Non-Detect	0.00108(J)	0.225	Non-Detect	Non-Detect	Non-Detect	Non-Detect	-0.113(U)	0.15	Non-Detect	0.0397(J)	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-14	8/22/2017	Non-Detect	35.3	5.9	0.17	7.18	12	243	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	0.17	n/a	n/a	n/a	n/a	n/a	n/a
GS-AP-MW-14	2/20/2018	n/a	n/a	n/a	0.17	7.19	n/a	n/a	Non-Detect	0.00139(J)	0.276	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.186(U)	0.17	Non-Detect	0.0353(J)	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-14	5/16/2018	Non-Detect	39.9	6.5	0.17	7.12	13	225	Non-Detect	0.00112(J)	0.286	Non-Detect	Non-Detect	Non-Detect	Non-Detect	1.07	0.17	Non-Detect	0.033(J)	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-14	10/17/2018	Non-Detect	39.3	6.9	0.18	7.1	13	199	Non-Detect	0.00132(J)	0.314	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.101(U)	0.18	Non-Detect	0.0327	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-14	4/16/2019	Non-Detect	39.5	7.7	0.204	7.03	16.9	184(P)	Non-Detect	0.0011(J)	0.305	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.408(U)	0.204	Non-Detect	0.0328	Non-Detect	Non-Detect	Non-Detect	Non-Detect

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		APPENDIX III							APPENDIX IV														
WELL	SAMPLE DATE	Boron	Calcium	Chloride	Fluoride	pH	Sulfate	TDS	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Combined Radium 226 + 228	Fluoride	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium
UNITS		mg/L	mg/L	mg/L	mg/L	SU	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	pCi/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
GS-AP-MW-15	8/1/2016	0.0955(J)	10.5	15.6	1.16	11.74	102	640	0.00115(J)	0.015	0.117	Non-Detect	Non-Detect	0.00209(J)	Non-Detect	0.682	1.16	Non-Detect	0.393	Non-Detect	0.142	Non-Detect	Non-Detect
GS-AP-MW-15	9/20/2016	0.0706(J)	14.7	8.6	0.7	10.33	53.3	434	0.000876(J)	0.0111	0.193	Non-Detect	Non-Detect	Non-Detect	Non-Detect	1.2	0.7	Non-Detect	0.144	Non-Detect	0.0683	Non-Detect	Non-Detect
GS-AP-MW-15	10/25/2016	0.0849(J)	14.7	7.96	0.544	10.24	49.8	394	Non-Detect	0.0109	0.222	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.194(U)	0.544	Non-Detect	0.152	Non-Detect	0.063	Non-Detect	Non-Detect
GS-AP-MW-15	12/14/2016	0.0914(J)	11.9	6.94	0.51	10.09	40.9	387	0.000858(J)	0.011	0.222	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.688	0.51	Non-Detect	0.136	Non-Detect	0.0604	Non-Detect	Non-Detect
GS-AP-MW-15	2/8/2017	0.0524(J)	14.4	4.96	0.56	9.75	25	303	Non-Detect	0.00625	0.294	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.254(U)	0.56	Non-Detect	0.15	Non-Detect	0.0346	Non-Detect	Non-Detect
GS-AP-MW-15	3/28/2017	0.0532(J)	12.9	5.2	0.59	9.9	27	305	Non-Detect	0.00558	0.288	Non-Detect	Non-Detect	Non-Detect	Non-Detect	-0.0411(U)	0.59	Non-Detect	0.137	Non-Detect	0.0331	Non-Detect	Non-Detect
GS-AP-MW-15	4/26/2017	0.0598(J)	10.4	6	0.72	10.08	29	329	Non-Detect	0.007	0.24	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.207(U)	0.72	Non-Detect	0.123	Non-Detect	0.038	Non-Detect	Non-Detect
GS-AP-MW-15	6/6/2017	0.0576(J)	9.41	4.9	0.65	10.2	23	331	Non-Detect	0.00663	0.228	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.0618(U)	0.65	Non-Detect	0.123	Non-Detect	0.0327	Non-Detect	Non-Detect
GS-AP-MW-15	8/22/2017	0.0702(J)	6.89	5.3	0.9	10.57	22	364	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	0.9	n/a	n/a	n/a	n/a	n/a	n/a
GS-AP-MW-15	2/20/2018	n/a	n/a	n/a	0.6	10.63	n/a	n/a	0.000636(J)	0.00724	0.224	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.0898(U)	0.6	Non-Detect	0.149	Non-Detect	0.0362	Non-Detect	Non-Detect
GS-AP-MW-15	5/15/2018	0.0567(J)	6.86	3.8	0.57	10.71	13	340	Non-Detect	0.00749	0.212	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.829	0.57	Non-Detect	0.159	Non-Detect	0.0344	Non-Detect	Non-Detect
GS-AP-MW-15	10/15/2018	0.07(J)	6.28	6.6	0.77	11.51	14	448	Non-Detect	0.0123	0.133	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.708	0.77	Non-Detect	0.297	Non-Detect	0.0525	Non-Detect	Non-Detect
GS-AP-MW-15	4/17/2019	0.0388(J)	8.53	5.2	0.463	10.76	9.02	354	Non-Detect	0.00633	0.264	Non-Detect	Non-Detect	Non-Detect	Non-Detect	-0.11(U)	0.463	Non-Detect	0.19	Non-Detect	0.029	Non-Detect	Non-Detect
GS-AP-MW-15	9/24/2019	0.0607(J)	3.26	5.96	0.628	11.7	12.4	536	Non-Detect	0.011	0.0913	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.951	0.628	Non-Detect	0.469	Non-Detect	0.0597	Non-Detect	Non-Detect
GS-AP-MW-15	3/18/2020	0.0596(J)	5.25	8	0.647	11.47	15.9	515	0.000976(J)	0.0217	0.14	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.939	0.647	Non-Detect	0.378	Non-Detect	0.0673	Non-Detect	Non-Detect
GS-AP-MW-15	9/23/2020	0.0537(J)	3.83	6	0.452	11.89	13.2	600	0.000844(J)	0.0165	0.119	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.547(U)	0.452	Non-Detect	0.414	Non-Detect	0.0744	Non-Detect	Non-Detect

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WELL	SAMPLE DATE	Boron	Calcium	Chloride	Fluoride	pH	Sulfate	TDS	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Combined Radium 226 + 228	Fluoride	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium
UNITS		mg/L	mg/L	mg/L	mg/L	SU	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	pCi/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
GS-AP-MW-16D	8/1/2016	0.0266(J)	33	2.6	0.117(J)	7.53	13.4	222	Non-Detect	Non-Detect	0.316	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.363(U)	0.117(J)	Non-Detect	0.036(J)	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-16D	9/19/2016	0.0262(J)	31.7	2.51	0.078(J)	7.5	12.9	220	Non-Detect	Non-Detect	0.276	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.435(U)	0.078(J)	Non-Detect	0.0346(J)	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-16D	10/25/2016	0.0273(J)	32.2	2.53	0.018(J)	7.44	11.6	223	Non-Detect	Non-Detect	0.3	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.725	0.018(J)	Non-Detect	0.0353(J)	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-16D	12/13/2016	0.0258(J)	33.1	2.53	0.035(J)	7.45	12.7	211	0.000633(J)	Non-Detect	0.314	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.309(U)	0.035(J)	Non-Detect	0.0361(J)	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-16D	2/8/2017	0.0249(J)	32.7	2.5	0.1	7.41	12.2	206	Non-Detect	Non-Detect	0.324	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.00772(U)	0.1	Non-Detect	0.0401(J)	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-16D	3/29/2017	0.0247(J)	32.7	2.9	0.08(J)	7.44	12	215	Non-Detect	Non-Detect	0.316	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.36(U)	0.08(J)	Non-Detect	0.0379(J)	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-16D	4/26/2017	0.0264(J)	33.8	3.2	0.11	7.47	13	212	Non-Detect	Non-Detect	0.323	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.0175(U)	0.11	Non-Detect	0.0318(J)	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-16D	6/6/2017	0.0247(J)	32.2	2.6	0.11	7.37	12	227	Non-Detect	Non-Detect	0.29	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.464	0.11	Non-Detect	0.032(J)	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-16D	8/22/2017	0.0246(J)	30.9	2.9	0.11	7.48	12	230	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	0.11	n/a	n/a	n/a	n/a	n/a	n/a
GS-AP-MW-16D	2/21/2018	n/a	n/a	n/a	0.11	7.44	n/a	n/a	Non-Detect	Non-Detect	0.3	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.44	0.11	Non-Detect	0.0327(J)	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-16D	5/16/2018	0.0247(J)	33.5	3	0.12	7.45	13	216	Non-Detect	Non-Detect	0.315	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.209(U)	0.12	Non-Detect	0.0337(J)	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-16D	10/17/2018	0.0251(J)	32	2.2	0.13	7.41	13	191	Non-Detect	Non-Detect	0.331	0.00109(J)	Non-Detect	Non-Detect	Non-Detect	0.368(U)	0.13	Non-Detect	0.0336	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-16D	4/17/2019	Non-Detect	32.3	2.82	0.171	7.33	14.1	207	Non-Detect	Non-Detect	0.322	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.121(U)	0.171	Non-Detect	0.0349	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-16D	9/24/2019	Non-Detect	34.3	2.9	0.124	7.43	14.1	208	Non-Detect	Non-Detect	0.342	Non-Detect	Non-Detect	Non-Detect	Non-Detect	-0.033(U)	0.124	Non-Detect	0.0362	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-16D	3/24/2020	Non-Detect	34.1	2.88	0.109	7.46	14.1	205	Non-Detect	Non-Detect	0.323	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.636	0.109	Non-Detect	0.035	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-16D	9/22/2020	Non-Detect	32	2.94	0.123	7.52	13.6	218	Non-Detect	Non-Detect	0.342	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.59(U)	0.123	Non-Detect	0.0343	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-16S	9/21/2020	0.0777(J)	10.9	5.42	0.572	9.99	2.95	426	Non-Detect	0.00174(J)	0.0766	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.47(U)	0.572	Non-Detect	0.074	Non-Detect	0.041	Non-Detect	Non-Detect

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WELL	SAMPLE DATE	Boron	Calcium	Chloride	Fluoride	pH	Sulfate	TDS	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Combined Radium 226 + 228	Fluoride	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium
UNITS		mg/L	mg/L	mg/L	mg/L	SU	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	pCi/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
GS-AP-MW-17	8/1/2016	0.0712(J)	4.52	6.47	0.214(J)	8.39	9.56	408	Non-Detect	0.00138(J)	0.0696	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.508(U)	0.214(J)	Non-Detect	0.0479(J)	Non-Detect	0.00738(J)	Non-Detect	Non-Detect
GS-AP-MW-17	9/19/2016	0.0716(J)	4.3	7.78	0.151(J)	8.42	12.7	441	0.000636(J)	0.00137(J)	0.0503	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.216(U)	0.151(J)	Non-Detect	0.0467(J)	Non-Detect	0.00889(J)	Non-Detect	Non-Detect
GS-AP-MW-17	10/24/2016	0.0858(J)	4.02	7.29	0.086(J)	8.42	8.58	424	Non-Detect	0.00122(J)	0.0468	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.694	0.086(J)	Non-Detect	0.0462(J)	Non-Detect	0.00819(J)	Non-Detect	Non-Detect
GS-AP-MW-17	12/13/2016	0.0875(J)	5.5	12.2	0.14(J)	8.43	31	466	0.00072(J)	0.00243(J)	0.0472	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.614	0.14(J)	Non-Detect	0.0296(J)	Non-Detect	0.0189	Non-Detect	Non-Detect
GS-AP-MW-17	2/6/2017	0.0729(J)	3.79	7.68	0.2	8.38	14.7	414	Non-Detect	0.00158(J)	0.0498	Non-Detect	Non-Detect	Non-Detect	Non-Detect	-0.0283(U)	0.2	Non-Detect	0.064	Non-Detect	0.00852(J)	Non-Detect	Non-Detect
GS-AP-MW-17	3/27/2017	0.0706(J)	3.13	9	0.21	8.43	14	444	Non-Detect	0.0011(J)	0.0559	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.0736(U)	0.21	Non-Detect	0.0683	Non-Detect	0.00592(J)	Non-Detect	Non-Detect
GS-AP-MW-17	4/24/2017	0.0737(J)	3.41	10	0.2	8.39	22	446	Non-Detect	0.00133(J)	0.055	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.114(U)	0.2	Non-Detect	0.0534	Non-Detect	0.00644(J)	Non-Detect	Non-Detect
GS-AP-MW-17	6/5/2017	0.0767(J)	3.32	10	0.2	8.42	30	493	Non-Detect	0.00115(J)	0.0552	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.476	0.2	Non-Detect	0.0574	Non-Detect	0.00537(J)	Non-Detect	Non-Detect
GS-AP-MW-17	8/22/2017	0.0786(J)	3.52	12	0.24	8.4	42	500	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	0.24	n/a	n/a	n/a	n/a	n/a	n/a
GS-AP-MW-17	2/19/2018	n/a	n/a	n/a	0.34	8.33	n/a	n/a	Non-Detect	0.00424(J)	0.077	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.322(U)	0.34	Non-Detect	0.0481(J)	Non-Detect	0.0134	Non-Detect	Non-Detect
GS-AP-MW-17	5/15/2018	0.0953(J)	4.53	13	0.27	8.3	54	528	Non-Detect	0.00352(J)	0.0751	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.526	0.27	Non-Detect	0.0551	Non-Detect	0.00789(J)	Non-Detect	Non-Detect
GS-AP-MW-17	10/15/2018	0.0842(J)	3.38	10	0.23	8.37	34	462	Non-Detect	0.0018(J)	0.0682	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.199(U)	0.23	Non-Detect	0.0606	Non-Detect	0.00376(J)	Non-Detect	Non-Detect
GS-AP-MW-17	4/17/2019	0.0916(J)	3.86	12.7	0.354	8.36	76.6	540	Non-Detect	0.00343(J)	0.0946	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.00935(U)	0.354	Non-Detect	0.0574	Non-Detect	0.00661(J)	Non-Detect	Non-Detect
GS-AP-MW-17	9/23/2019	0.116	5.43	16.2	0.351	8.37	124	684	Non-Detect	0.00631	0.135	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.983	0.351	Non-Detect	0.0583	Non-Detect	0.011	Non-Detect	Non-Detect
GS-AP-MW-17	3/16/2020	0.0894(J)	3	9.95	0.261	8.45	48.6	516	Non-Detect	0.00268(J)	0.0883	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.185(U)	0.261	Non-Detect	0.0665	Non-Detect	0.00504(J)	Non-Detect	Non-Detect
GS-AP-MW-17	5/12/2020	0.0862(J)	2.95	9.16	0.263	8.42	44.4	493	Non-Detect	0.00326(J)	0.0941	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.0339(U)	0.263	Non-Detect	0.0602	Non-Detect	0.00436(J)	Non-Detect	Non-Detect
GS-AP-MW-17	9/21/2020	0.102	3.73	13.8	0.371	8.22	104	658	Non-Detect	0.0055	0.128	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.651(U)	0.371	Non-Detect	0.0579	Non-Detect	0.00776(J)	Non-Detect	Non-Detect

Analytical Data Summary
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		APPENDIX III							APPENDIX IV														
WELL	SAMPLE DATE	Boron	Calcium	Chloride	Fluoride	pH	Sulfate	TDS	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Combined Radium 226 + 228	Fluoride	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium
UNITS		mg/L	mg/L	mg/L	mg/L	SU	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	pCi/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
GS-AP-MW-18	8/2/2016	1.21	64.2	20.8	0.219(J)	7.65	295	586	Non-Detect	0.0505	0.21	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.665	0.219(J)	Non-Detect	0.196	Non-Detect	0.0516	Non-Detect	Non-Detect
GS-AP-MW-18	9/21/2016	1.32	110	23.3	0.213(J)	7.47	440	848	Non-Detect	0.0527	0.107	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.801	0.213(J)	Non-Detect	0.25	Non-Detect	0.0567	Non-Detect	Non-Detect
GS-AP-MW-18	10/24/2016	1.6	166	27.9	0.141(J)	7.44	608	1100	Non-Detect	0.0597	0.0999	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.809	0.141(J)	Non-Detect	0.293	Non-Detect	0.0517	Non-Detect	Non-Detect
GS-AP-MW-18	12/12/2016	1.82	204	36	0.206(J)	7.39	755	1260	Non-Detect	0.0659	0.0772	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.628(U)	0.206(J)	Non-Detect	0.284(J)	Non-Detect	0.0431	Non-Detect	Non-Detect
GS-AP-MW-18	2/8/2017	1.79	199	33.3	0.34	7.31	672	1160	Non-Detect	0.0669	0.0625	Non-Detect	Non-Detect	Non-Detect	Non-Detect	-0.0851(U)	0.34	Non-Detect	0.371	Non-Detect	0.0381	Non-Detect	Non-Detect
GS-AP-MW-18	3/28/2017	1.62	162	35	0.36	7.6	610	1100	Non-Detect	0.0668	0.0581	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.0973(U)	0.36	Non-Detect	0.316	Non-Detect	0.0333	Non-Detect	Non-Detect
GS-AP-MW-18	4/26/2017	1.53	159	34	0.31	7.5	600	1090	Non-Detect	0.0722	0.0587	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.388(U)	0.31	Non-Detect	0.24	Non-Detect	0.0348	Non-Detect	Non-Detect
GS-AP-MW-18	6/6/2017	1.73	159	36	0.29	7.34	670	1170	Non-Detect	0.0673	0.0452	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.0674(U)	0.29	Non-Detect	0.262	Non-Detect	0.0384	Non-Detect	Non-Detect
GS-AP-MW-18	8/23/2017	1.71	153	31	0.34	7.4	560	1020	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	0.34	n/a	n/a	n/a	n/a	n/a	n/a
GS-AP-MW-18	2/21/2018	n/a	n/a	n/a	0.46	7.44	n/a	n/a	Non-Detect	0.0922	0.0455	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.418(U)	0.46	Non-Detect	0.189	Non-Detect	0.0441	Non-Detect	Non-Detect
GS-AP-MW-18	5/16/2018	1.23	92.1	22	0.43	7.47	260	658	Non-Detect	0.0876	0.0505	Non-Detect	Non-Detect	Non-Detect	Non-Detect	1.04	0.43	Non-Detect	0.172	Non-Detect	0.0374	Non-Detect	Non-Detect
GS-AP-MW-18	10/16/2018	2.12	203	35	0.64	7.06	520	1030	Non-Detect	0.0158	0.0436	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.779	0.64	Non-Detect	0.314	Non-Detect	0.0425	Non-Detect	Non-Detect
GS-AP-MW-18	4/17/2019	0.449	40.9	6.61	0.632	7.58	71.6	347	Non-Detect	0.00481(J)	0.105	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.196(U)	0.632	Non-Detect	0.0942	Non-Detect	0.0113	Non-Detect	Non-Detect
GS-AP-MW-18	9/24/2019	0.883	57.4	12.3	0.578	7.49	119	372	Non-Detect	0.00854	0.0896	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.375(U)	0.578	Non-Detect	0.114	Non-Detect	0.0504	Non-Detect	Non-Detect
GS-AP-MW-18	3/18/2020	0.492	90.9	6.68	0.437	6.99	216	618	Non-Detect	0.00583	0.0587	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.281(U)	0.437	Non-Detect	0.116	Non-Detect	0.00927(J)	Non-Detect	Non-Detect
GS-AP-MW-18	9/23/2020	0.491	38.8	5.29	0.575	7.54	88.9	380	Non-Detect	0.00873	0.0911	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.888	0.575	Non-Detect	0.0895	Non-Detect	0.044	Non-Detect	Non-Detect

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WELL	SAMPLE DATE	Boron	Calcium	Chloride	Fluoride	pH	Sulfate	TDS	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Combined Radium 226 + 228	Fluoride	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium
UNITS		mg/L	mg/L	mg/L	mg/L	SU	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	pCi/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
GS-AP-MW-19	8/1/2016	0.0279(J)	39.6	6.67	0.385	8.05	9.02	245	Non-Detect	Non-Detect	0.492	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.697(U)	0.385	Non-Detect	0.0252(J)	Non-Detect	0.00752(J)	Non-Detect	Non-Detect
GS-AP-MW-19	9/21/2016	0.0235(J)	38.1	6.54	0.303	8.14	8.38	267	Non-Detect	Non-Detect	0.371	Non-Detect	Non-Detect	Non-Detect	Non-Detect	1.79	0.303	Non-Detect	0.0223(J)	Non-Detect	0.0117	Non-Detect	Non-Detect
GS-AP-MW-19	10/24/2016	0.0444(J)	34.7	8.77	0.24(J)	8.55	18.5	275	Non-Detect	Non-Detect	0.311	Non-Detect	Non-Detect	Non-Detect	Non-Detect	1.53	0.24(J)	Non-Detect	0.0247(J)	Non-Detect	0.0198	Non-Detect	Non-Detect
GS-AP-MW-19	12/13/2016	0.0285(J)	44	6.16	0.188(J)	8.08	7.4	255	0.000613(J)	Non-Detect	0.374	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.758	0.188(J)	Non-Detect	0.0312(J)	Non-Detect	0.00703(J)	Non-Detect	Non-Detect
GS-AP-MW-19	2/7/2017	0.03(J)	39	7.57	0.38	8.61	8.16	272	Non-Detect	Non-Detect	0.368	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.473	0.38	Non-Detect	0.0406(J)	Non-Detect	0.0103	Non-Detect	Non-Detect
GS-AP-MW-19	3/28/2017	0.0309(J)	43.9	5.9	0.32	7.94	6.4	271	Non-Detect	Non-Detect	0.391	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.0705(U)	0.32	Non-Detect	0.0309(J)	Non-Detect	0.00599(J)	Non-Detect	Non-Detect
GS-AP-MW-19	4/26/2017	0.0273(J)	42.8	6.5	0.31	8.26	4.6(J)	265	Non-Detect	Non-Detect	0.371	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.238(U)	0.31	Non-Detect	0.0267(J)	Non-Detect	0.00845(J)	Non-Detect	Non-Detect
GS-AP-MW-19	6/6/2017	0.0212(J)	43.1	5.5	0.31	8.23	5.2	287	Non-Detect	Non-Detect	0.33	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.909	0.31	Non-Detect	0.0311(J)	Non-Detect	0.00624(J)	Non-Detect	Non-Detect
GS-AP-MW-19	8/22/2017	0.0294(J)	40.7	6.5	0.35	8.1	5.3	293	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	0.35	n/a	n/a	n/a	n/a	n/a	n/a
GS-AP-MW-19	2/21/2018	n/a	n/a	n/a	0.39	8.48	n/a	n/a	Non-Detect	0.00138(J)	0.291	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.349(U)	0.39	Non-Detect	0.0472(J)	Non-Detect	0.00903(J)	Non-Detect	Non-Detect
GS-AP-MW-19	5/16/2018	0.0356(J)	45.3	6.6	0.36	8.12	6	301	Non-Detect	0.00114(J)	0.343	Non-Detect	Non-Detect	Non-Detect	Non-Detect	1.12	0.36	Non-Detect	0.0391(J)	Non-Detect	0.00515(J)	Non-Detect	Non-Detect
GS-AP-MW-19	10/16/2018	0.0363(J)	40.9	6.2	0.37	8.22	5.6	303	Non-Detect	0.00216(J)	0.35	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.856	0.37	Non-Detect	0.0406	Non-Detect	0.00593(J)	Non-Detect	Non-Detect
GS-AP-MW-19	4/17/2019	0.0336(J)	38.4	7.27	0.27	8.06	14.3	296	Non-Detect	0.00302(J)	0.316	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.507(U)	0.27	Non-Detect	0.0429	Non-Detect	0.00703(J)	Non-Detect	Non-Detect
GS-AP-MW-19	9/24/2019	0.0375(J)	48.4	5.83	0.307	7.8	13.8	302	Non-Detect	0.00289(J)	0.356	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.664	0.307	Non-Detect	0.0392	Non-Detect	0.00562(J)	Non-Detect	Non-Detect
GS-AP-MW-19	3/24/2020	0.0398(J)	41.7	6.29	0.327	7.93	15.2	302	Non-Detect	0.00313(J)	0.324	Non-Detect	Non-Detect	Non-Detect	Non-Detect	1.07	0.327	Non-Detect	0.0417	Non-Detect	0.00605(J)	Non-Detect	Non-Detect
GS-AP-MW-19	9/22/2020	0.037(J)	46.9	6.6	0.339	8.17	16.9	300	Non-Detect	0.00313(J)	0.337	Non-Detect	Non-Detect	Non-Detect	Non-Detect	2.09	0.339	Non-Detect	0.0435	Non-Detect	0.0063(J)	Non-Detect	Non-Detect

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WELL	SAMPLE DATE	Boron	Calcium	Chloride	Fluoride	pH	Sulfate	TDS	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Combined Radium 226 + 228	Fluoride	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium
UNITS		mg/L	mg/L	mg/L	mg/L	SU	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	pCi/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
GS-AP-MW-21	8/2/2016	0.176	5.29	28.1	0.282(J)	10.26	9.14	348	Non-Detect	0.0027(J)	0.0535	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.665	0.282(J)	Non-Detect	0.145	Non-Detect	0.0365	Non-Detect	Non-Detect
GS-AP-MW-21	9/21/2016	0.0723(J)	4.51	26.8	0.231(J)	10.45	8.71	368	Non-Detect	0.00258(J)	0.0458	Non-Detect	Non-Detect	0.00233(J)	Non-Detect	0.532(U)	0.231(J)	Non-Detect	0.153	Non-Detect	0.0362	Non-Detect	Non-Detect
GS-AP-MW-21	10/25/2016	0.0867(J)	4.92	26	0.137(J)	10.42	8.54	348	Non-Detect	0.00214(J)	0.0489	Non-Detect	Non-Detect	0.00204(J)	Non-Detect	0.601	0.137(J)	Non-Detect	0.171	Non-Detect	0.0326	Non-Detect	Non-Detect
GS-AP-MW-21	12/14/2016	0.092(J)	3.5	25.3	0.131(J)	10.12	11.5	352	0.00119(J)	0.00193(J)	0.0494	Non-Detect	Non-Detect	Non-Detect	Non-Detect	1.02	0.131(J)	Non-Detect	0.182	Non-Detect	0.0345	Non-Detect	Non-Detect
GS-AP-MW-21	2/8/2017	0.0803(J)	3.75	23.8	0.25	10.28	17	352	Non-Detect	0.00188(J)	0.0449	Non-Detect	Non-Detect	Non-Detect	Non-Detect	-0.074(U)	0.25	Non-Detect	0.178	Non-Detect	0.0419	Non-Detect	Non-Detect
GS-AP-MW-21	3/28/2017	0.0804(J)	3.63	28	0.27	10.67	25	370	Non-Detect	0.00153(J)	0.0446	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.3(U)	0.27	Non-Detect	0.161	Non-Detect	0.0523	Non-Detect	Non-Detect
GS-AP-MW-21	4/26/2017	0.0801(J)	3.3	27	0.24	10.42	28	342	Non-Detect	0.00135(J)	0.0424	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.982(U)	0.24	Non-Detect	0.126	Non-Detect	0.0502	Non-Detect	Non-Detect
GS-AP-MW-21	6/6/2017	0.0795(J)	3.24	28	0.25	10.51	33	367	Non-Detect	0.00131(J)	0.0402	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.312(U)	0.25	Non-Detect	0.135	Non-Detect	0.05	Non-Detect	Non-Detect
GS-AP-MW-21	8/23/2017	0.0764(J)	6.6	29	0.3	11.91	43	508	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	0.3	n/a	n/a	n/a	n/a	n/a	n/a
GS-AP-MW-21	2/20/2018	n/a	n/a	n/a	0.23	11.57	n/a	n/a	Non-Detect	Non-Detect	0.0441	Non-Detect	Non-Detect	0.00219(J)	Non-Detect	0.321(U)	0.23	Non-Detect	0.158	Non-Detect	0.0966	Non-Detect	Non-Detect
GS-AP-MW-21	5/15/2018	0.0769(J)	7.57	27	0.24	11.26	110	438	Non-Detect	Non-Detect	0.0456	Non-Detect	Non-Detect	Non-Detect	Non-Detect	1.7	0.24	Non-Detect	0.174	Non-Detect	0.0687	Non-Detect	Non-Detect
GS-AP-MW-21	10/16/2018	0.0764(J)	4.4	31	0.25	11.34	160	520	Non-Detect	Non-Detect	0.0909	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.586	0.25	Non-Detect	0.219	Non-Detect	0.061	Non-Detect	Non-Detect
GS-AP-MW-21	4/17/2019	0.0675(J)	2.88	32.3	0.272	11.71	215	582	Non-Detect	Non-Detect	0.0914	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.47(U)	0.272	Non-Detect	0.312	Non-Detect	0.0885	Non-Detect	Non-Detect
GS-AP-MW-21	9/24/2019	0.0843(J)	2.47	36	0.209	11.24	224	630	Non-Detect	Non-Detect	0.114	Non-Detect	Non-Detect	Non-Detect	Non-Detect	1.08	0.209	Non-Detect	0.276	Non-Detect	0.0613	Non-Detect	Non-Detect
GS-AP-MW-21	3/18/2020	0.0824(J)	2.35	49.5	0.234	11.37	228	661	Non-Detect	Non-Detect	0.105	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.732	0.234	Non-Detect	0.379	Non-Detect	0.102	Non-Detect	Non-Detect
GS-AP-MW-21	9/23/2020	0.0871(J)	1.96	56.9	0.208	10.71	248	642	Non-Detect	Non-Detect	0.157	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.468(U)	0.208	Non-Detect	0.179	Non-Detect	0.0404	Non-Detect	Non-Detect

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UNITS		mg/L	mg/L	mg/L	mg/L	SU	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	pCi/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
GS-AP-MW-9V	3/23/2020	0.0316(J)	42.9	5.13	0.187	6.97	18.7	268	Non-Detect	Non-Detect	0.215	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.156(U)	0.187	Non-Detect	0.0309	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-9V	9/22/2020	0.0348(J)	45.3	7.57	0.174	7.08	21.2	285	Non-Detect	Non-Detect	0.187	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.536(U)	0.174	Non-Detect	0.0293	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-12V	2/21/2019	0.0303(J)	52.3	3.77	0.205	7.46	Non-Detect	237	0.000841(J)	Non-Detect	1.35	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.296(U)	0.205	Non-Detect	0.0468	Non-Detect	0.00253(J)	Non-Detect	Non-Detect
GS-AP-MW-12V	9/25/2019	0.0347(J)	33.4	3.84	0.185	9.29	1.61	183	0.0025(J)	0.00129(J)	1.06	Non-Detect	Non-Detect	0.00202(J)	Non-Detect	1.03	0.185	Non-Detect	0.0611	Non-Detect	0.00942(J)	Non-Detect	Non-Detect
GS-AP-MW-12V	3/24/2020	0.0343(J)	48.9	4.46	0.155	7.8	Non-Detect	206	0.00128(J)	0.00266(J)	1.43	Non-Detect	Non-Detect	0.00774(J)	0.00277(J)	0.877(U)	0.155	0.00279(J)	0.0462	Non-Detect	0.00454(J)	Non-Detect	Non-Detect
GS-AP-MW-12V	9/23/2020	0.0322(J)	44.8	4.63	0.176	8.84	6.56	195	0.00152(J)	0.00176(J)	1.27	Non-Detect	Non-Detect	0.00362(J)	Non-Detect	1.38	0.176	0.0014(J)	0.0409	Non-Detect	0.00463(J)	Non-Detect	Non-Detect
GS-AP-MW-15V	3/18/2020	0.0565(J)	8.01	108	0.243	10.89	261	873	0.0028(J)	0.011	0.155	Non-Detect	Non-Detect	0.00716(J)	Non-Detect	0.566(U)	0.243	Non-Detect	0.208	Non-Detect	0.0327	Non-Detect	Non-Detect
GS-AP-MW-15V	9/21/2020	0.0712(J)	8.2	171	0.372	10.07	348	1090	0.0028(J)	0.0167	0.18	Non-Detect	Non-Detect	0.00239(J)	Non-Detect	0.494(U)	0.372	Non-Detect	0.116	Non-Detect	0.0538	Non-Detect	Non-Detect
GS-AP-MW-17V	2/20/2019	0.0337(J)	30.6	3.56	0.239	7.76	15.2	346	0.00115(J)	0.0011(J)	0.191	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.398(U)	0.239	0.00189(J)	0.0671	Non-Detect	0.00577(J)	Non-Detect	Non-Detect
GS-AP-MW-17V	9/24/2019	0.0532(J)	29.7	3.69	0.245	7.65	11.8	365	Non-Detect	0.00149(J)	0.208	Non-Detect	Non-Detect	0.00405(J)	Non-Detect	0.373(U)	0.245	Non-Detect	0.0809	Non-Detect	0.00906(J)	Non-Detect	Non-Detect
GS-AP-MW-17V	3/25/2020	0.0482(J)	31.1	3.72	0.243	7.63	9.69	364	Non-Detect	Non-Detect	0.314	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.0656(U)	0.243	Non-Detect	0.0646	Non-Detect	0.00508(J)	Non-Detect	Non-Detect
GS-AP-MW-17V	9/23/2020	0.0478(J)	29.3	3.74	0.278	7.53	11.1	368	Non-Detect	Non-Detect	0.299	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.542(U)	0.278	Non-Detect	0.0574	Non-Detect	0.00664(J)	Non-Detect	Non-Detect
GS-AP-MW-18V	2/26/2019	0.109	13.6	7.13	0.165	7.79	39.9	238	0.00098(J)	0.00368(J)	0.243	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.278(U)	0.165	Non-Detect	0.0423	Non-Detect	0.00696(J)	Non-Detect	Non-Detect
GS-AP-MW-18V	3/25/2020	0.0834(J)	6.18	6.23	0.353	8.19	16.5	287	Non-Detect	0.0063	0.234	Non-Detect	Non-Detect	Non-Detect	Non-Detect	-0.00344(U)	0.353	Non-Detect	0.0244	Non-Detect	0.0217	Non-Detect	Non-Detect
GS-AP-MW-18V	9/22/2020	0.0769(J)	5.12	5.57	0.368	8.35	14.4	290	Non-Detect	0.00654	0.253	Non-Detect	Non-Detect	Non-Detect	Non-Detect	1.02	0.368	Non-Detect	0.0254	Non-Detect	0.0248	Non-Detect	Non-Detect

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		APPENDIX III							APPENDIX IV														
WELL	SAMPLE DATE	Boron	Calcium	Chloride	Fluoride	pH	Sulfate	TDS	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Combined Radium 226 + 228	Fluoride	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium
UNITS		mg/L	mg/L	mg/L	mg/L	SU	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	pCi/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
GS-AP-MW-21V	3/23/2020	0.122	110	981	0.494	7.93	1050	3410	0.000831(J)	0.0159	0.0574	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.982	0.494	Non-Detect	0.146	Non-Detect	0.117	Non-Detect	Non-Detect
GS-AP-MW-21V	9/23/2020	0.126	119	1100	0.641	7.81	1120	3690	Non-Detect	0.01	0.0438	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.563(U)	0.641	Non-Detect	0.137	Non-Detect	0.12	Non-Detect	Non-Detect
GS-AP-MW-23H	2/20/2019	0.0498(J)	64.5	2.58	0.188	6.17	352	560	0.000809(J)	0.0306	0.0227	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.0759(U)	0.188	Non-Detect	0.031	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-23H	9/23/2019	0.0641(J)	80.6	2.26	0.144	5.76	394	598	Non-Detect	0.0369	0.0148	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.00709(U)	0.144	Non-Detect	0.0324	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-23H	3/17/2020	0.0504(J)	79.8	2.62	0.241	5.95	356	626	Non-Detect	0.0524	0.0143	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.989	0.241	Non-Detect	0.0327	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-23H	9/17/2020	0.0637(J)	87.2	1.92	0.117	5.74	361	648	Non-Detect	0.0579	0.0146	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.66(U)	0.117	Non-Detect	0.0333	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-24H	2/26/2019	0.0719(J)	46	3.28	0.19	7.04	10.9	249	0.000918(J)	Non-Detect	0.887	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.9	0.19	Non-Detect	0.0282	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-24H	9/24/2019	0.0821(J)	46.5	2.89	0.201	6.59	15.3	253	Non-Detect	Non-Detect	1.04	Non-Detect	Non-Detect	Non-Detect	Non-Detect	1.23	0.201	Non-Detect	0.0275	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-24H	3/18/2020	0.0811(J)	44	3.5	0.206	7	12.2	250	Non-Detect	Non-Detect	0.964	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.788	0.206	Non-Detect	0.0264	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-24H	9/17/2020	0.069(J)	45.5	3.19	0.217	7.02	6.7	250	Non-Detect	Non-Detect	0.988	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.298(U)	0.217	Non-Detect	0.0237	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-25HA	3/24/2020	0.146	2.42	38	1.77	8.67	201	948	Non-Detect	0.00798	0.147	Non-Detect	Non-Detect	Non-Detect	Non-Detect	-0.00194(U)	1.77	Non-Detect	0.0461	Non-Detect	0.0176	Non-Detect	Non-Detect
GS-AP-MW-25HA	9/17/2020	0.138	1.99	38.3	1.93	8.83	173	960	Non-Detect	0.00904	0.164	Non-Detect	Non-Detect	Non-Detect	Non-Detect	-0.369(U)	1.93	Non-Detect	0.0449	Non-Detect	0.0182	0.00636(J)	Non-Detect
GS-AP-MW-26H	2/27/2019	Non-Detect	29.1	2.87	0.14	7.25	4.89	266	0.00094(J)	Non-Detect	0.622	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.492	0.14	Non-Detect	0.0966	Non-Detect	0.00286(J)	Non-Detect	Non-Detect
GS-AP-MW-26H	9/23/2019	Non-Detect	29.6	2.35	0.146	7.25	16.9	278	Non-Detect	Non-Detect	0.922	Non-Detect	Non-Detect	0.00295(J)	Non-Detect	0.404(U)	0.146	0.00109(J)	0.0945	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-26H	3/25/2020	Non-Detect	28.6	2.73	0.131	7.24	3.25	269	Non-Detect	Non-Detect	0.868	Non-Detect	Non-Detect	0.00547(J)	0.00207(J)	0.707(U)	0.131	0.0019(J)	0.0946	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-26H	9/21/2020	0.0334(J)	27.6	3.25	0.151	7.25	4.54	287	Non-Detect	0.00143(J)	0.938	Non-Detect	Non-Detect	0.00804(J)	0.00357(J)	2.05	0.151	0.00309(J)	0.0958	Non-Detect	Non-Detect	Non-Detect	Non-Detect

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WELL	SAMPLE DATE	Boron	Calcium	Chloride	Fluoride	pH	Sulfate	TDS	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Combined Radium 226 + 228	Fluoride	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium
UNITS		mg/L	mg/L	mg/L	mg/L	SU	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	pCi/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
GS-AP-MW-28H	3/13/2019	0.0819(J)	3.42	8	0.187	8.3	30	514	0.00241(J)	0.00142(J)	0.164	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.824	0.187	0.00208(J)	0.0625	Non-Detect	0.00555(J)	Non-Detect	Non-Detect
GS-AP-MW-28H	9/25/2019	0.0784(J)	2.52	8.93	0.172	8.57	10.2	443	Non-Detect	Non-Detect	0.0528	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.648(U)	0.172	Non-Detect	0.0619	Non-Detect	0.00338(J)	Non-Detect	Non-Detect
GS-AP-MW-28H	3/16/2020	0.0751(J)	2.4	10.6	0.183	8.31	9.91	449	Non-Detect	Non-Detect	0.0411	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.762(U)	0.183	Non-Detect	0.0627	Non-Detect	0.00463(J)	Non-Detect	Non-Detect
GS-AP-MW-28H	5/12/2020	0.0719(J)	2.83	12.7	0.195	8.35	14.3	464	Non-Detect	0.00135(J)	0.0436	Non-Detect	Non-Detect	0.00281(J)	Non-Detect	0.425(U)	0.195	Non-Detect	0.0569	Non-Detect	0.00644(J)	Non-Detect	Non-Detect
GS-AP-MW-28H	9/22/2020	0.0728(J)	2.37	12.2	0.181	8.24	10.5	456	Non-Detect	0.00112(J)	0.0385	Non-Detect	Non-Detect	Non-Detect	Non-Detect	1.02	0.181	Non-Detect	0.0574	Non-Detect	0.00616(J)	Non-Detect	Non-Detect
GS-AP-MW-29H	2/27/2019	0.0359(J)	12.1	3.09	0.218	8.01	20.7	414	0.000932(J)	Non-Detect	0.517	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.556	0.218	Non-Detect	0.07	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-29H	9/24/2019	0.0305(J)	32.8	3.11	0.183	7.11	32.6	389	Non-Detect	0.00155(J)	0.712	Non-Detect	Non-Detect	Non-Detect	Non-Detect	1.09	0.183	Non-Detect	0.0509	Non-Detect	0.00424(J)	Non-Detect	Non-Detect
GS-AP-MW-29H	3/25/2020	Non-Detect	27.8	3.1	0.194	7.45	29.4	371	Non-Detect	0.00141(J)	0.527	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.036(U)	0.194	Non-Detect	0.0528	Non-Detect	0.0025(J)	Non-Detect	Non-Detect
GS-AP-MW-29H	9/22/2020	0.175	28.1	13.2	0.198	7.42	81.6	430	Non-Detect	0.00109(J)	0.499	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.591(U)	0.198	Non-Detect	0.0586	Non-Detect	0.0281	Non-Detect	Non-Detect
GS-AP-MW-30HA	3/18/2020	0.0734(J)	36	5.14	0.634	7.2	184	612	Non-Detect	0.00813	0.0791	Non-Detect	Non-Detect	Non-Detect	Non-Detect	2.26	0.634	Non-Detect	0.0528	Non-Detect	0.00603(J)	Non-Detect	Non-Detect
GS-AP-MW-30HA	5/13/2020	0.0747(J)	35.3	4.24	0.833	7.27	194	624	Non-Detect	0.00779	0.0819	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.604	0.833	Non-Detect	0.0536	Non-Detect	0.00519(J)	Non-Detect	Non-Detect
GS-AP-MW-30HA	9/21/2020	0.0814(J)	29.4	3.45	0.872	7.56	128	592	Non-Detect	0.00551	0.0811	Non-Detect	Non-Detect	Non-Detect	Non-Detect	1.1	0.872	Non-Detect	0.0494	Non-Detect	0.00254(J)	Non-Detect	Non-Detect
GS-AP-MW-31H	3/18/2020	Non-Detect	6.06	41.3	0.15	8.73	50.4	326	Non-Detect	0.0012(J)	0.106	Non-Detect	Non-Detect	0.00264(J)	Non-Detect	0.0549(U)	0.15	Non-Detect	0.0347	Non-Detect	0.0102	Non-Detect	Non-Detect
GS-AP-MW-31H	9/22/2020	Non-Detect	5.31	27.3	0.148	8.76	22.1	298	Non-Detect	Non-Detect	0.0916	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.912	0.148	Non-Detect	0.0357	Non-Detect	0.00438(J)	Non-Detect	Non-Detect
GS-AP-MW-32H	3/24/2020	0.0492(J)	2.62	20.5	0.18	8.47	33.2	331	Non-Detect	Non-Detect	0.0362	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.313(U)	0.18	Non-Detect	0.0428	Non-Detect	0.0826	Non-Detect	Non-Detect
GS-AP-MW-32H	9/21/2020	0.0455(J)	3	28.2	0.202	8.15	38.7	357	Non-Detect	Non-Detect	0.0396	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.484(U)	0.202	Non-Detect	0.0421	Non-Detect	0.0896	Non-Detect	Non-Detect

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WELL	SAMPLE DATE	Boron	Calcium	Chloride	Fluoride	pH	Sulfate	TDS	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Combined Radium 226 + 228	Fluoride	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium
UNITS		mg/L	mg/L	mg/L	mg/L	SU	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	pCi/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
GS-AP-MW-33HO	3/17/2020	0.066(J)	42.3	108	0.202	7.67	172	827	Non-Detect	0.0044(J)	0.329	Non-Detect	Non-Detect	Non-Detect	Non-Detect	2.14	0.202	Non-Detect	0.0516	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-33HO	5/13/2020	0.0409(J)	25.2	63.3	0.191	7.7	60	457	Non-Detect	0.00308(J)	0.324	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.415(U)	0.191	Non-Detect	0.0455	Non-Detect	0.00626(J)	Non-Detect	Non-Detect
GS-AP-MW-33HO	9/15/2020	0.0425(J)	29.5	75.6	0.188	7.66	98.6	538	Non-Detect	0.00275(J)	0.469	Non-Detect	Non-Detect	Non-Detect	Non-Detect	-0.106(U)	0.188	Non-Detect	0.0479	Non-Detect	0.00496(J)	Non-Detect	Non-Detect
GS-AP-MW-34HO	3/16/2020	0.0827(J)	83.8	101	0.338	7.35	1480	2460	Non-Detect	0.00351(J)	0.0309	Non-Detect	Non-Detect	Non-Detect	Non-Detect	-0.085(U)	0.338	Non-Detect	0.205	Non-Detect	0.00386(J)	Non-Detect	Non-Detect
GS-AP-MW-34HO	5/12/2020	0.0929(J)	80.4	148	0.37	7.44	1330	2440	Non-Detect	0.00668	0.0379	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.345(U)	0.37	Non-Detect	0.18	Non-Detect	0.0088(J)	Non-Detect	Non-Detect
GS-AP-MW-34HO	9/16/2020	0.0874(J)	86.9	210	0.364	7.45	1390	2720	Non-Detect	0.00308(J)	0.0451	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.286(U)	0.364	Non-Detect	0.18	Non-Detect	0.00598(J)	Non-Detect	Non-Detect
GS-AP-MW-35HO	3/17/2020	Non-Detect	5.27	23.9	0.166	8.4	40.1	365	Non-Detect	0.00105(J)	0.0426	Non-Detect	Non-Detect	Non-Detect	Non-Detect	7.32	0.166	Non-Detect	0.074	Non-Detect	0.00222(J)	Non-Detect	Non-Detect
GS-AP-MW-35HO	5/12/2020	Non-Detect	3.04	14.5	0.167	8.46	22.6	311	Non-Detect	Non-Detect	0.0472	Non-Detect	Non-Detect	Non-Detect	Non-Detect	1.02	0.167	Non-Detect	0.0693	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-35HO	9/16/2020	Non-Detect	3.04	20.9	0.162	8.48	24.6	326	Non-Detect	Non-Detect	0.0532	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.435(U)	0.162	Non-Detect	0.0685	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-36H	3/17/2020	0.0394(J)	3.45	29.4	0.214	8.44	57.1	362	Non-Detect	0.00171(J)	0.0353	Non-Detect	Non-Detect	Non-Detect	Non-Detect	4.33	0.214	Non-Detect	0.0342	Non-Detect	0.00571(J)	Non-Detect	Non-Detect
GS-AP-MW-36H	5/13/2020	0.0359(J)	2.93	27.2	0.224	8.52	47.8	333	Non-Detect	0.00122(J)	0.03	Non-Detect	Non-Detect	Non-Detect	Non-Detect	-0.225(U)	0.224	Non-Detect	0.0337	Non-Detect	0.00475(J)	Non-Detect	Non-Detect
GS-AP-MW-36H	9/17/2020	0.0345(J)	4.12	38.5	0.209	8.18	50.2	348	Non-Detect	0.0013(J)	0.0378	Non-Detect	Non-Detect	Non-Detect	Non-Detect	-0.125(U)	0.209	Non-Detect	0.035	Non-Detect	0.0105	Non-Detect	Non-Detect
GS-AP-MW-38H	3/24/2020	0.0468(J)	9.33	12.6	0.291	7.99	16.7	335	Non-Detect	0.00302(J)	0.253	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.862	0.291	Non-Detect	0.0632	Non-Detect	0.00445(J)	Non-Detect	Non-Detect
GS-AP-MW-38H	9/22/2020	0.0461(J)	9.56	24.8	0.28	7.96	27	339	Non-Detect	0.00304(J)	0.319	Non-Detect	Non-Detect	Non-Detect	Non-Detect	1.1	0.28	Non-Detect	0.0591	Non-Detect	0.00423(J)	Non-Detect	Non-Detect
GS-AP-MW-40H	9/22/2020	0.0326(J)	205	30.4	0.114	6.64	626	1310	Non-Detect	0.00193(J)	0.0417	Non-Detect	Non-Detect	Non-Detect	0.0027(J)	1.91	0.114	Non-Detect	0.0405	Non-Detect	0.00293(J)	Non-Detect	Non-Detect
GS-AP-MW-41HD	3/18/2020	1.45	56.6	6.02	0.165	7.2	122	309	Non-Detect	Non-Detect	0.0393	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.64	0.165	Non-Detect	0.311	Non-Detect	0.0158	Non-Detect	Non-Detect
GS-AP-MW-41HD	9/17/2020	1.42	61.1	6.63	0.16	7.22	105	318	Non-Detect	0.0016(J)	0.0414	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.14(U)	0.16	Non-Detect	0.341	Non-Detect	0.026	Non-Detect	Non-Detect

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WELL	SAMPLE DATE	Boron	Calcium	Chloride	Fluoride	pH	Sulfate	TDS	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Combined Radium 226 + 228	Fluoride	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium
UNITS		mg/L	mg/L	mg/L	mg/L	SU	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	pCi/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
GS-AP-MW-42H	3/24/2020	Non-Detect	149	3.35	0.13	6.28	449	850	Non-Detect	0.00944	0.0253	Non-Detect	Non-Detect	Non-Detect	0.00218(J)	0.0821(U)	0.13	Non-Detect	0.0346	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-42H	9/22/2020	0.0469(J)	142	7.07	0.121	6.51	372	800	Non-Detect	0.00912	0.0237	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.36(U)	0.121	Non-Detect	0.0333	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-43HO	3/25/2020	0.112	4.11	90.6	0.204	8.24	327	930	Non-Detect	0.00509	0.0927	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.678(U)	0.204	Non-Detect	0.0505	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-43H	9/22/2020	0.12	2.82	78	0.216	8.66	269	910	Non-Detect	0.0039(J)	0.0921	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.0466(U)	0.216	Non-Detect	0.0587	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-PZ-16	3/24/2020	0.0772(J)	13.9	5.72	0.228	7.89	27.7	381	Non-Detect	Non-Detect	0.295	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.847	0.228	Non-Detect	0.0714	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-PZ-16	9/17/2020	0.0824(J)	9.69	6.57	0.237	9.15	15.2	387	Non-Detect	Non-Detect	0.223	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.438(U)	0.237	Non-Detect	0.073	Non-Detect	0.00241(J)	Non-Detect	Non-Detect
GS-AP-PZ-18	3/25/2020	0.0568(J)	34.5	2.88	0.396	6.8	355	738	Non-Detect	0.0275	0.028	Non-Detect	Non-Detect	Non-Detect	0.00409(J)	0.13(U)	0.396	Non-Detect	0.109	Non-Detect	0.00919(J)	Non-Detect	Non-Detect
GS-AP-PZ-18	9/22/2020	0.0603(J)	26.2	2.73	0.392	7	245	648	Non-Detect	0.0119	0.0432	Non-Detect	Non-Detect	Non-Detect	0.00226(J)	0.96	0.392	Non-Detect	0.0789	Non-Detect	0.00496(J)	Non-Detect	Non-Detect
GS-AP-PZ-22	3/24/2020	0.0521(J)	19.3	2.53	0.387	7.77	70.1	412	Non-Detect	0.00367(J)	0.104	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.878	0.387	Non-Detect	0.0734	Non-Detect	0.00333(J)	Non-Detect	Non-Detect
GS-AP-PZ-22	9/17/2020	0.0454(J)	12.6	2.46	0.402	8.81	79.9	438	Non-Detect	0.00387(J)	0.109	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.896	0.402	Non-Detect	0.0862	Non-Detect	0.00357(J)	Non-Detect	Non-Detect
GS-AP-MW-44HO	9/15/2020	0.0404(J)	2.94	36.2	0.221	8.94	71.6	564	0.000819(J)	0.00184(J)	0.0783	Non-Detect	Non-Detect	Non-Detect	Non-Detect	0.311(U)	0.221	Non-Detect	0.0494	Non-Detect	0.00858(J)	Non-Detect	Non-Detect

Appendix D

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

Field Case Narrative

Gorgas Ash Pond

2020 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).

Turbidity levels less than 10 NTU were not able to be achieved after extended pumping for wells MW-7, MW-12V & MW-26H. A complete sample set for totals analysis was collected followed by a field filtered set for dissolved analysis.

Due to low yield, wells MW-18V, MW-32H and MW-17V were sampled using the Minimal Purge Method, as defined in the SAP.

Rainy conditions were present when pumping and sampling wells MW-21V and MW-12V.

Heavy vehicle traffic and dusty conditions were present when pumping and sampling wells MW-12 and MW-15.

Suspected iron bacteria was present during initial pumping of well MW-6S and discharge water from MW-34HO appeared cloudy and black prior to sampling.

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 : WMWGORAP_1268

Project/Site : Gorgas Ash Pond
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

April 14, 2020

Dear Dustin Brooks,

Enclosed are the analytical results for sample(s) received by the laboratory between March 19, 2020 and March 26, 2020. 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, 2020

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: 2020.04.14 14:13:14 -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: 2020.04.15 14:09:07 -05'00'

NELAP ACCREDITED TNI LABORATORY

REPORT OF LABORATORY ANALYSIS

This Certificate states the physical and/or chemical characteristics of the sample as submitted. This document shall not be reproduced, except in full, without written consent from Alabama Power's General Test Laboratory.

Alabama Power 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 Ash Pond

WMWGORAP_1268

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 are NIST/ISO/IEC/Guide 34 traceable and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BA05401	669443	WMWGORAP_1268
BA05402	669443	WMWGORAP_1268
BA05403	669443	WMWGORAP_1268
BA05404	669443	WMWGORAP_1268
BA05405	669443	WMWGORAP_1268
BA05406	669443	WMWGORAP_1268
BA05407	669443	WMWGORAP_1268
BA05408	669443	WMWGORAP_1268
BA05409	669443	WMWGORAP_1268
BA05410	669443	WMWGORAP_1268
BA05411	669444	WMWGORAP_1268
BA05412	669444	WMWGORAP_1268
BA05413	669444	WMWGORAP_1268
BA05414	669444	WMWGORAP_1268
BA05415	669444	WMWGORAP_1268
BA05416	669444	WMWGORAP_1268
BA05418	669444	WMWGORAP_1268
BA05419	669444	WMWGORAP_1268
BA05420	669444	WMWGORAP_1268
BA05421	669444	WMWGORAP_1268
BA05422	669445	WMWGORAP_1268
BA05423	669445	WMWGORAP_1268
BA05424	669445	WMWGORAP_1268
BA05846	669445	WMWGORAP_1268
BA05847	669445	WMWGORAP_1268
BA05848	669445	WMWGORAP_1268
BA05849	669445	WMWGORAP_1268
BA05850	669445	WMWGORAP_1268
BA05851	669445	WMWGORAP_1268
BA05852	669445	WMWGORAP_1268
BA05853	669446	WMWGORAP_1268

BA05854	669446	WMWGORAP_1268
BA05855	669446	WMWGORAP_1268
BA05856	669446	WMWGORAP_1268
BA05858	669446	WMWGORAP_1268
BA05859	669446	WMWGORAP_1268
BA05860	669446	WMWGORAP_1268
BA05861	669446	WMWGORAP_1268
BA05862	669446	WMWGORAP_1268
BA05863	669446	WMWGORAP_1268
BA05864	669447	WMWGORAP_1268
BA05865	669447	WMWGORAP_1268
BA05866	669447	WMWGORAP_1268
BA05867	669447	WMWGORAP_1268
BA05868	669447	WMWGORAP_1268
BA05869	669447	WMWGORAP_1268
BA05870	669447	WMWGORAP_1268

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 high standard readbacks associated with EPA 200.7 were within acceptance criteria.
- 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
BA05404	Calcium	10.15
BA05407	Calcium	10.15
BA05412	Calcium	10.15
BA05413	Calcium	10.15
BA05414	Calcium	10.15
BA05415	Calcium	10.15
BA05418	Calcium	10.15
BA05419	Calcium	10.15
BA05421	Calcium	10.15
BA05422	Calcium	10.15
BA05846	Calcium	10.15
BA05847	Calcium	10.15
BA05848	Calcium	10.15
BA05850	Calcium	10.15
BA05855	Calcium	10.15
BA05856	Calcium	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 Ash Pond

WMWGORAP_1268

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 are NIST/ISO/IEC/Guide 34 traceable and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BA05417	669419	WMWGORAP_1268
BA05857	669419	WMWGORAP_1268
BA05871	669419	WMWGORAP_1268

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 high standard readbacks associated with EPA 200.7 were within acceptance criteria.
- 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. The following sample was diluted due to the analyzed sample concentration being greater than the high standard of the calibration curve:

Sample ID	Analyte	Dilution Factor
BA05857	Calcium	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 Ash Pond

WMWGORAP_1268

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 are NIST/ISO/IEC/Guide 34 traceable and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BA05401	669691	WMWGORAP_1268
BA05402	669691	WMWGORAP_1268
BA05403	669691	WMWGORAP_1268
BA05404	669691	WMWGORAP_1268
BA05405	669691	WMWGORAP_1268
BA05406	669691	WMWGORAP_1268
BA05407	669691	WMWGORAP_1268
BA05408	669691	WMWGORAP_1268
BA05409	669691	WMWGORAP_1268
BA05410	669691	WMWGORAP_1268
BA05411	669692	WMWGORAP_1268
BA05412	669692	WMWGORAP_1268
BA05413	669692	WMWGORAP_1268
BA05414	669692	WMWGORAP_1268
BA05415	669692	WMWGORAP_1268
BA05416	669692	WMWGORAP_1268
BA05418	669692	WMWGORAP_1268
BA05419	669692	WMWGORAP_1268
BA05420	669692	WMWGORAP_1268
BA05421	669692	WMWGORAP_1268
BA05422	669693	WMWGORAP_1268
BA05423	669693	WMWGORAP_1268
BA05424	669693	WMWGORAP_1268
BA05846	669693	WMWGORAP_1268
BA05847	669693	WMWGORAP_1268
BA05848	669693	WMWGORAP_1268
BA05849	669693	WMWGORAP_1268
BA05850	669693	WMWGORAP_1268
BA05851	669693	WMWGORAP_1268
BA05852	669693	WMWGORAP_1268
BA05853	669694	WMWGORAP_1268

BA05854	669694	WMWGORAP_1268
BA05855	669694	WMWGORAP_1268
BA05856	669694	WMWGORAP_1268
BA05858	669694	WMWGORAP_1268
BA05859	669694	WMWGORAP_1268
BA05860	669694	WMWGORAP_1268
BA05861	669694	WMWGORAP_1268
BA05862	669694	WMWGORAP_1268
BA05863	669694	WMWGORAP_1268
BA05864	669695	WMWGORAP_1268
BA05865	669695	WMWGORAP_1268
BA05866	669695	WMWGORAP_1268
BA05867	669695	WMWGORAP_1268
BA05868	669695	WMWGORAP_1268
BA05869	669695	WMWGORAP_1268
BA05870	669695	WMWGORAP_1268

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

Sample ID	Analyte	Dilution Factor
BA05856	Barium	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 Ash Pond

WMWGORAP_1268

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 are NIST/ISO/IEC/Guide 34 traceable and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BA05417	669624	WMWGORAP_1268
BA05857	669624	WMWGORAP_1268
BA05871	669624	WMWGORAP_1268

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. 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 Mercury

Gorgas Ash Pond

WMWGORAP_1268

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 are NIST/ISO/IEC/Guide 34 traceable and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BA05401	669236	WMWGORAP_1268
BA05402	669236	WMWGORAP_1268
BA05403	669236	WMWGORAP_1268
BA05404	669236	WMWGORAP_1268
BA05405	669236	WMWGORAP_1268
BA05406	669236	WMWGORAP_1268
BA05407	669236	WMWGORAP_1268
BA05408	669236	WMWGORAP_1268
BA05409	669236	WMWGORAP_1268
BA05410	669236	WMWGORAP_1268
BA05411	669237	WMWGORAP_1268
BA05412	669237	WMWGORAP_1268
BA05413	669237	WMWGORAP_1268
BA05414	669237	WMWGORAP_1268
BA05415	669237	WMWGORAP_1268
BA05416	669237	WMWGORAP_1268
BA05418	669237	WMWGORAP_1268
BA05419	669237	WMWGORAP_1268
BA05420	669237	WMWGORAP_1268
BA05421	669237	WMWGORAP_1268
BA05422	669238	WMWGORAP_1268
BA05423	669238	WMWGORAP_1268
BA05424	669238	WMWGORAP_1268
BA05846	669714	WMWGORAP_1268
BA05847	669714	WMWGORAP_1268
BA05848	669714	WMWGORAP_1268
BA05849	669714	WMWGORAP_1268
BA05850	669714	WMWGORAP_1268
BA05851	669714	WMWGORAP_1268
BA05852	669714	WMWGORAP_1268
BA05853	669714	WMWGORAP_1268

BA05854	669714	WMWGORAP_1268
BA05855	669714	WMWGORAP_1268
BA05856	669715	WMWGORAP_1268
BA05858	669715	WMWGORAP_1268
BA05859	669715	WMWGORAP_1268
BA05860	669715	WMWGORAP_1268
BA05861	669715	WMWGORAP_1268
BA05862	669715	WMWGORAP_1268
BA05863	669715	WMWGORAP_1268
BA05864	669715	WMWGORAP_1268
BA05865	669715	WMWGORAP_1268
BA05866	669715	WMWGORAP_1268
BA05867	669716	WMWGORAP_1268
BA05868	669716	WMWGORAP_1268
BA05869	669716	WMWGORAP_1268
BA05870	669716	WMWGORAP_1268

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

Dissolved Mercury

Gorgas Ash Pond

WMWGORAP_1268

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 are NIST/ISO/IEC/Guide 34 traceable and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BA05417	669239	WMWGORAP_1268
BA05857	669717	WMWGORAP_1268
BA05871	669717	WMWGORAP_1268

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

General Quality Control Procedures:

- Prior to sample analysis, an initial calibration verification (ICV) was analyzed and all criteria were met.
- Following the ICV, an initial calibration blank (ICB) was analyzed and was below the method detection limit for the requested analyte.
- All continued calibration verification (CCV) were within the acceptance criteria for the requested analyte.
- All continued calibration blanks (CCB) were below the limit of quantitation for the requested analyte.
- Due to no filtered method blank (MB) or laboratory control sample (LCS) submitted with the sample set, an unfiltered MB and LCS were digested and analyzed with the samples in each 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.

Case Narrative

TDS

Gorgas Ash Pond

WMWGORAP_1268

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 are NIST/ISO/IEC/Guide 34 traceable and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BA05401	669106	WMWGORAP_1268
BA05402	669106	WMWGORAP_1268
BA05403	669106	WMWGORAP_1268
BA05404	669106	WMWGORAP_1268
BA05405	669106	WMWGORAP_1268
BA05406	669106	WMWGORAP_1268
BA05407	669106	WMWGORAP_1268
BA05408	669106	WMWGORAP_1268
BA05409	669106	WMWGORAP_1268
BA05410	669106	WMWGORAP_1268
BA05411	669107	WMWGORAP_1268
BA05412	669107	WMWGORAP_1268
BA05413	669107	WMWGORAP_1268
BA05414	669107	WMWGORAP_1268
BA05415	669107	WMWGORAP_1268
BA05416	669107	WMWGORAP_1268
BA05417	669107	WMWGORAP_1268
BA05418	669107	WMWGORAP_1268
BA05419	669107	WMWGORAP_1268
BA05420	669107	WMWGORAP_1268
BA05421	669131	WMWGORAP_1268
BA05422	669131	WMWGORAP_1268
BA05423	669131	WMWGORAP_1268
BA05424	669131	WMWGORAP_1268
BA05846	669465	WMWGORAP_1268
BA05847	669465	WMWGORAP_1268
BA05848	669465	WMWGORAP_1268
BA05849	669465	WMWGORAP_1268
BA05850	669465	WMWGORAP_1268
BA05851	669465	WMWGORAP_1268
BA05852	669465	WMWGORAP_1268

BA05853	669465	WMWGORAP_1268
BA05854	669465	WMWGORAP_1268
BA05855	669478	WMWGORAP_1268
BA05856	669478	WMWGORAP_1268
BA05857	669478	WMWGORAP_1268
BA05858	669478	WMWGORAP_1268
BA05859	669478	WMWGORAP_1268
BA05860	669478	WMWGORAP_1268
BA05861	669479	WMWGORAP_1268
BA05862	669478	WMWGORAP_1268
BA05863	669478	WMWGORAP_1268
BA05864	669478	WMWGORAP_1268
BA05865	669478	WMWGORAP_1268
BA05866	669479	WMWGORAP_1268
BA05867	669479	WMWGORAP_1268
BA05868	669479	WMWGORAP_1268
BA05869	669479	WMWGORAP_1268
BA05870	669479	WMWGORAP_1268
BA05871	669479	WMWGORAP_1268

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:
  - BA05403
  - BA05423
  - BA05851
  - BA05854
  - BA05865

Anions

Gorgas Ash Pond

WMWGORAP_1268

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 are NIST/ISO/IEC/Guide 34 traceable and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BA05401	669255, 669261, & 669258	WMWGORAP_1268
BA05402	669255, 669261, & 669258	WMWGORAP_1268
BA05403	669255, 669261, & 669258	WMWGORAP_1268
BA05404	669255, 669261, & 669258	WMWGORAP_1268
BA05405	669255, 669261, & 669258	WMWGORAP_1268
BA05406	669255, 669261, & 669258	WMWGORAP_1268
BA05407	669255, 669261, & 669258	WMWGORAP_1268
BA05408	669255, 669261, & 669258	WMWGORAP_1268
BA05409	669255, 669261, & 669258	WMWGORAP_1268
BA05410	669255, 669261, & 669258	WMWGORAP_1268
BA05411	669256, 669262, & 669259	WMWGORAP_1268
BA05412	669256, 669262, & 669259	WMWGORAP_1268
BA05413	669256, 669262, & 669259	WMWGORAP_1268
BA05414	669256, 669262, & 669259	WMWGORAP_1268
BA05415	669256, 669262, & 669259	WMWGORAP_1268
BA05416	669256, 669262, & 669259	WMWGORAP_1268
BA05417	669256, 669262, & 669259	WMWGORAP_1268
BA05418	669256, 669262, & 669259	WMWGORAP_1268
BA05419	669256, 669262, & 669259	WMWGORAP_1268
BA05420	669256, 669262, & 669259	WMWGORAP_1268
BA05421	669257, 669263, & 669260	WMWGORAP_1268
BA05422	669257, 669263, & 669260	WMWGORAP_1268
BA05423	669257, 669263, & 669260	WMWGORAP_1268
BA05424	669257, 669263, & 669260	WMWGORAP_1268
BA05846	669618, 669621, & 669771	WMWGORAP_1268
BA05847	669618, 669621, & 669771	WMWGORAP_1268
BA05848	669618, 669621, & 669771	WMWGORAP_1268
BA05849	669618, 669621, & 669771	WMWGORAP_1268
BA05850	669618, 669621, & 669771	WMWGORAP_1268
BA05851	669618, 669621, & 669771	WMWGORAP_1268
BA05852	669618, 669621, & 669771	WMWGORAP_1268

BA05853	669618, 669621, & 669771	WMWGORAP_1268
BA05854	669618, 669621, & 669771	WMWGORAP_1268
BA05855	669618, 669621, & 669771	WMWGORAP_1268
BA05856	669619, 669622, & 669772	WMWGORAP_1268
BA05857	669619, 669622, & 669772	WMWGORAP_1268
BA05858	669619, 669622, & 669772	WMWGORAP_1268
BA05859	669619, 669622, & 669772	WMWGORAP_1268
BA05860	669619, 669622, & 669772	WMWGORAP_1268
BA05861	669619, 669622, & 669772	WMWGORAP_1268
BA05862	669619, 669622, & 669772	WMWGORAP_1268
BA05863	669619, 669622, & 669772	WMWGORAP_1268
BA05864	669619, 669622, & 669772	WMWGORAP_1268
BA05865	669619, 669622, & 669772	WMWGORAP_1268
BA05866	669620, 669623, & 669773	WMWGORAP_1268
BA05867	669620, 669623, & 669773	WMWGORAP_1268
BA05868	669620, 669623, & 669773	WMWGORAP_1268
BA05869	669620, 669623, & 669773	WMWGORAP_1268
BA05870	669620, 669623, & 669773	WMWGORAP_1268
BA05871	669620, 669623, & 669773	WMWGORAP_1268

4. All of the above samples analyzed and prepared by SM4500 Cl E, SM4500 F G, and SM4500 SO4 E.
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:

- 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 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.
- 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 high standard of the calibration curve:

Sample ID	Analyte	Dilution Factor
BA05401	Sulfate	3
BA05404	Chloride & Sulfate	10 & 40
BA05405	Chloride & Sulfate	3 & 2
BA05406	Chloride & Sulfate	3 & 3
BA05407	Chloride & Sulfate	10 & 10
BA05408	Sulfate	10
BA05409	Chloride & Sulfate	10 & 25
BA05411	Chloride & Sulfate	4 & 16
BA05412	Sulfate	10
BA05413	Sulfate	10
BA05414	Sulfate	4
BA05415	Sulfate	20
BA05416	Sulfate	10
BA05417	Sulfate	10
BA05418	Sulfate	8
BA05422	Sulfate	16
BA05424	Chloride & Sulfate	4 & 3
BA05847	Sulfate	25
BA05848	Sulfate	25
BA05855	Chloride & Sulfate	200 & 50
BA05858	Chloride & Sulfate	5 & 10
BA05860	Chloride & Sulfate	8 & 20
BA05861	Sulfate	20
BA05862	Sulfate	20
BA05864	Chloride	2
BA05866	Sulfate	4
BA05867	Sulfate	4

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

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-17

Location Code: WMWGORAP
Collected: 3/16/20 13:41
Customer ID:
Submittal Date: 3/19/20 10:59

Laboratory ID Number: BA05401

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	3/30/20 13:30	3/31/20 10:00		1.015	0.0894	mg/L	0.03	0.1	J
* Calcium, Total	3/30/20 13:30	3/31/20 10:00		1.015	3.00	mg/L	0.1	0.5	
* Lithium, Total	3/30/20 13:30	3/31/20 10:00		1.015	0.0665	mg/L	0.01	0.02	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/26/20 13:06	3/27/20 10:06		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	3/26/20 13:06	3/27/20 10:06		1.015	0.00268	mg/L	0.001	0.005	J
* Barium, Total	3/26/20 13:06	3/27/20 10:06		1.015	0.0883	mg/L	0.002	0.01	
* Beryllium, Total	3/26/20 13:06	3/27/20 10:06		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	3/26/20 13:06	3/27/20 10:06		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	3/26/20 13:06	3/27/20 10:06		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	3/26/20 13:06	3/27/20 10:06		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	3/26/20 13:06	3/27/20 10:06		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	3/26/20 13:06	3/27/20 10:06		1.015	0.00504	mg/L	0.002	0.01	J
* Selenium, Total	3/26/20 13:06	3/27/20 10:06		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	3/26/20 13:06	3/27/20 10:06		1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	3/23/20 08:34	3/24/20 09:55		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2540C	***Analyst: TJW***								
* Solids, Dissolved	3/19/20 17:25	3/20/20 15:00		1	516	mg/L		50	
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	3/20/20 16:29	3/20/20 16:29		1	9.95	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	3/20/20 12:20	3/20/20 12:20		1	0.261	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E	***Analyst: JCC***								
* Sulfate	3/20/20 10:18	3/20/20 10:18		3	48.6	mg/L	1.50	3	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	3/16/20 13:39	3/16/20 13:39			750.21	uS/cm			FA
pH	3/16/20 13:39	3/16/20 13:39			8.45	SU			FA
Temperature	3/16/20 13:39	3/16/20 13:39			18.79	C			FA
Turbidity	3/16/20 13:39	3/16/20 13:39			1.19	NTU			FA

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

Comments:

Reported: 4/14/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORAP
Sample Date: 3/16/20 13:41
Customer ID:
Delivery Date: 3/19/20 10:59

Description: Gorgas Ash Pond - MW-17

Laboratory ID Number: BA05401

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA05410	Lead, Total	mg/L	0.00000068	0.0001474	0.10	0.103	0.102	0.1000	0.085 to 0.115	103	70 to 130	0.976	20
BA05410	Thallium, Total	mg/L	-0.00000422	0.0001474	0.10	0.104	0.104	0.0992	0.085 to 0.115	104	70 to 130	0.00	20
BA05410	Cobalt, Total	mg/L	0.00000321	0.0001474	0.10	0.0991	0.0972	0.0995	0.085 to 0.115	99.1	70 to 130	1.94	20
BA05410	Antimony, Total	mg/L	0.000104	0.00066	0.10	0.0977	0.0963	0.0938	0.085 to 0.115	96.7	70 to 130	1.44	20
BA05410	Arsenic, Total	mg/L	0.00000233	0.0001474	0.10	0.126	0.125	0.106	0.085 to 0.115	104	70 to 130	0.797	20
BA05410	Barium, Total	mg/L	0.00000739	0.0002	0.10	0.230	0.228	0.0928	0.085 to 0.115	90.0	70 to 130	0.873	20
BA05410	Beryllium, Total	mg/L	0.0000213	0.00088	0.10	0.0938	0.0944	0.0891	0.085 to 0.115	93.8	70 to 130	0.638	20
BA05410	Boron, Total	mg/L	0.00324	0.0650254	1.00	1.05	1.08	0.990	0.85 to 1.15	99.0	70 to 130	2.82	20
BA05410	Chromium, Total	mg/L	0.000204	0.00044	0.10	0.101	0.0997	0.102	0.085 to 0.115	101	70 to 130	1.30	20
BA05410	Mercury, Total by CVAA	mg/L	0.0000228	0.0005	0.004	0.00358	0.00354	0.00389	0.0034 to 0.0046	89.5	70 to 130	1.12	20
BA05410	Lithium, Total	mg/L	0.0000545	0.0154	0.20	0.605	0.616	0.196	0.17 to 0.23	114	70 to 130	1.80	20
BA05410	Calcium, Total	mg/L	-0.0152	0.1518	5.00	10.1	10.3	5.04	4.25 to 5.75	97.0	70 to 130	1.96	20
BA05410	Cadmium, Total	mg/L	-0.00000022	0.0001474	0.10	0.0996	0.0996	0.101	0.085 to 0.115	99.6	70 to 130	0.00	20
BA05410	Molybdenum, Total	mg/L	0.0000144	0.0001474	0.10	0.164	0.160	0.0978	0.085 to 0.115	96.7	70 to 130	2.47	20
BA05410	Selenium, Total	mg/L	0.0000250	0.00066	0.10	0.0873	0.0872	0.106	0.085 to 0.115	87.3	70 to 130	0.115	20

Comments:

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/16/20 13:41
Customer ID:
Delivery Date: 3/19/20 10:59

Description: Gorgas Ash Pond - MW-17

Laboratory ID Number: BA05401

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA05410	Chloride	mg/L	-0.128	0.50	10.0	16.8	8.07	10.0	9 to 11	88.0	80 to 120	0.871	20
BA05410	Solids, Dissolved	mg/L	0.0000	25			521	52.0	40 to 60			0.579	5
BA05410	Fluoride	mg/L	0.0355	0.05	2.50	3.28	0.653	2.64	2.25 to 2.75	105	80 to 120	0.923	20
BA05410	Sulfate	mg/L	-0.390	0.50	20.0	35.3	16.0	19.4	18 to 22	97.0	80 to 120	0.627	20

Comments:

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-28H

Location Code: WMWGORAP
Collected: 3/16/20 14:57
Customer ID:
Submittal Date: 3/19/20 10:59

Laboratory ID Number: BA05402

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	3/30/20 13:30	3/31/20 10:03		1.015	0.0751	mg/L	0.03	0.1	J
* Calcium, Total	3/30/20 13:30	3/31/20 10:03		1.015	2.40	mg/L	0.1	0.5	
* Lithium, Total	3/30/20 13:30	3/31/20 10:03		1.015	0.0627	mg/L	0.01	0.02	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/26/20 13:06	3/27/20 10:09		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	3/26/20 13:06	3/27/20 10:09		1.015	Not Detected	mg/L	0.001	0.005	U
* Barium, Total	3/26/20 13:06	3/27/20 10:09		1.015	0.0411	mg/L	0.002	0.01	
* Beryllium, Total	3/26/20 13:06	3/27/20 10:09		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	3/26/20 13:06	3/27/20 10:09		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	3/26/20 13:06	3/27/20 10:09		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	3/26/20 13:06	3/27/20 10:09		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	3/26/20 13:06	3/27/20 10:09		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	3/26/20 13:06	3/27/20 10:09		1.015	0.00463	mg/L	0.002	0.01	J
* Selenium, Total	3/26/20 13:06	3/27/20 10:09		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	3/26/20 13:06	3/27/20 10:09		1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	3/23/20 08:34	3/24/20 09:58		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2540C	***Analyst: TJW***								
* Solids, Dissolved	3/19/20 17:25	3/20/20 15:00		1	449	mg/L		25	
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	3/20/20 16:30	3/20/20 16:30		1	10.6	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	3/20/20 12:21	3/20/20 12:21		1	0.183	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E	***Analyst: JCC***								
* Sulfate	3/20/20 10:19	3/20/20 10:19		1	9.91	mg/L	0.50	1	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	3/16/20 14:53	3/16/20 14:53			692.82	uS/cm			FA
pH	3/16/20 14:53	3/16/20 14:53			8.31	SU			FA
Temperature	3/16/20 14:53	3/16/20 14:53			18.23	C			FA
Turbidity	3/16/20 14:53	3/16/20 14:53			4.11	NTU			FA

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

Comments:

Reported: 4/14/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORAP
Sample Date: 3/16/20 14:57
Customer ID:
Delivery Date: 3/19/20 10:59

Description: Gorgas Ash Pond - MW-28H

Laboratory ID Number: BA05402

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA05410	Thallium, Total	mg/L	-0.00000422	0.0001474	0.10	0.104	0.104	0.0992	0.085 to 0.115	104	70 to 130	0.00	20
BA05410	Lead, Total	mg/L	0.00000068	0.0001474	0.10	0.103	0.102	0.1000	0.085 to 0.115	103	70 to 130	0.976	20
BA05410	Arsenic, Total	mg/L	0.00000233	0.0001474	0.10	0.126	0.125	0.106	0.085 to 0.115	104	70 to 130	0.797	20
BA05410	Barium, Total	mg/L	0.00000739	0.0002	0.10	0.230	0.228	0.0928	0.085 to 0.115	90.0	70 to 130	0.873	20
BA05410	Beryllium, Total	mg/L	0.0000213	0.00088	0.10	0.0938	0.0944	0.0891	0.085 to 0.115	93.8	70 to 130	0.638	20
BA05410	Boron, Total	mg/L	0.00324	0.0650254	1.00	1.05	1.08	0.990	0.85 to 1.15	99.0	70 to 130	2.82	20
BA05410	Cobalt, Total	mg/L	0.00000321	0.0001474	0.10	0.0991	0.0972	0.0995	0.085 to 0.115	99.1	70 to 130	1.94	20
BA05410	Antimony, Total	mg/L	0.000104	0.00066	0.10	0.0977	0.0963	0.0938	0.085 to 0.115	96.7	70 to 130	1.44	20
BA05410	Chromium, Total	mg/L	0.000204	0.00044	0.10	0.101	0.0997	0.102	0.085 to 0.115	101	70 to 130	1.30	20
BA05410	Mercury, Total by CVAA	mg/L	0.0000228	0.0005	0.004	0.00358	0.00354	0.00389	0.0034 to 0.0046	89.5	70 to 130	1.12	20
BA05410	Lithium, Total	mg/L	0.0000545	0.0154	0.20	0.605	0.616	0.196	0.17 to 0.23	114	70 to 130	1.80	20
BA05410	Calcium, Total	mg/L	-0.0152	0.1518	5.00	10.1	10.3	5.04	4.25 to 5.75	97.0	70 to 130	1.96	20
BA05410	Cadmium, Total	mg/L	-0.00000022	0.0001474	0.10	0.0996	0.0996	0.101	0.085 to 0.115	99.6	70 to 130	0.00	20
BA05410	Molybdenum, Total	mg/L	0.0000144	0.0001474	0.10	0.164	0.160	0.0978	0.085 to 0.115	96.7	70 to 130	2.47	20
BA05410	Selenium, Total	mg/L	0.0000250	0.00066	0.10	0.0873	0.0872	0.106	0.085 to 0.115	87.3	70 to 130	0.115	20

Comments:

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/16/20 14:57
Customer ID:
Delivery Date: 3/19/20 10:59

Description: Gorgas Ash Pond - MW-28H

Laboratory ID Number: BA05402

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA05410	Chloride	mg/L	-0.128	0.50	10.0	16.8	8.07	10.0	9 to 11	88.0	80 to 120	0.871	20
BA05410	Solids, Dissolved	mg/L	0.0000	25			521	52.0	40 to 60			0.579	5
BA05410	Fluoride	mg/L	0.0355	0.05	2.50	3.28	0.653	2.64	2.25 to 2.75	105	80 to 120	0.923	20
BA05410	Sulfate	mg/L	-0.390	0.50	20.0	35.3	16.0	19.4	18 to 22	97.0	80 to 120	0.627	20

Comments:

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond Field Blank

Location Code: WMWGORAPFB
Collected: 3/16/20 16:15
Customer ID:
Submittal Date: 3/19/20 10:59

Laboratory ID Number: BA05403

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	3/30/20 13:30	3/31/20 10:06		1.015	Not Detected	mg/L	0.03	0.1	U
* Calcium, Total	3/30/20 13:30	3/31/20 10:06		1.015	Not Detected	mg/L	0.1	0.5	U
* Lithium, Total	3/30/20 13:30	3/31/20 10:06		1.015	Not Detected	mg/L	0.01	0.02	U
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/26/20 13:06	3/27/20 10:11		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	3/26/20 13:06	3/27/20 10:11		1.015	Not Detected	mg/L	0.001	0.005	U
* Barium, Total	3/26/20 13:06	3/27/20 10:11		1.015	Not Detected	mg/L	0.002	0.01	U
* Beryllium, Total	3/26/20 13:06	3/27/20 10:11		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	3/26/20 13:06	3/27/20 10:11		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	3/26/20 13:06	3/27/20 10:11		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	3/26/20 13:06	3/27/20 10:11		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	3/26/20 13:06	3/27/20 10:11		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	3/26/20 13:06	3/27/20 10:11		1.015	Not Detected	mg/L	0.002	0.01	U
* Selenium, Total	3/26/20 13:06	3/27/20 10:11		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	3/26/20 13:06	3/27/20 10:11		1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	3/23/20 08:34	3/24/20 10:00		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2540C	***Analyst: TJW***								
* Solids, Dissolved	3/19/20 17:25	3/20/20 15:00		1	Not Detected	mg/L		25	U
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	3/20/20 16:31	3/20/20 16:31		1	Not Detected	mg/L	0.50	1	U
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	3/20/20 12:22	3/20/20 12:22		1	Not Detected	mg/L	0.06	0.1	U
Analytical Method: SM4500SO4 E	***Analyst: JCC***								
* Sulfate	3/20/20 10:20	3/20/20 10:20		1	Not Detected	mg/L	0.50	1	U

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

Comments:

Reported: 4/14/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORAPFB
Sample Date: 3/16/20 16:15
Customer ID:
Delivery Date: 3/19/20 10:59

Description: Gorgas Ash Pond Field Blank

Laboratory ID Number: BA05403

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA05410	Thallium, Total	mg/L	-0.00000422	0.0001474	0.10	0.104	0.104	0.0992	0.085 to 0.115	104	70 to 130	0.00	20
BA05410	Lead, Total	mg/L	0.00000068	0.0001474	0.10	0.103	0.102	0.1000	0.085 to 0.115	103	70 to 130	0.976	20
BA05410	Cobalt, Total	mg/L	0.00000321	0.0001474	0.10	0.0991	0.0972	0.0995	0.085 to 0.115	99.1	70 to 130	1.94	20
BA05410	Antimony, Total	mg/L	0.000104	0.00066	0.10	0.0977	0.0963	0.0938	0.085 to 0.115	96.7	70 to 130	1.44	20
BA05410	Arsenic, Total	mg/L	0.00000233	0.0001474	0.10	0.126	0.125	0.106	0.085 to 0.115	104	70 to 130	0.797	20
BA05410	Barium, Total	mg/L	0.00000739	0.0002	0.10	0.230	0.228	0.0928	0.085 to 0.115	90.0	70 to 130	0.873	20
BA05410	Beryllium, Total	mg/L	0.0000213	0.00088	0.10	0.0938	0.0944	0.0891	0.085 to 0.115	93.8	70 to 130	0.638	20
BA05410	Boron, Total	mg/L	0.00324	0.0650254	1.00	1.05	1.08	0.990	0.85 to 1.15	99.0	70 to 130	2.82	20
BA05410	Chromium, Total	mg/L	0.000204	0.00044	0.10	0.101	0.0997	0.102	0.085 to 0.115	101	70 to 130	1.30	20
BA05410	Mercury, Total by CVAA	mg/L	0.0000228	0.0005	0.004	0.00358	0.00354	0.00389	0.0034 to 0.0046	89.5	70 to 130	1.12	20
BA05410	Lithium, Total	mg/L	0.0000545	0.0154	0.20	0.605	0.616	0.196	0.17 to 0.23	114	70 to 130	1.80	20
BA05410	Calcium, Total	mg/L	-0.0152	0.1518	5.00	10.1	10.3	5.04	4.25 to 5.75	97.0	70 to 130	1.96	20
BA05410	Cadmium, Total	mg/L	-0.00000022	0.0001474	0.10	0.0996	0.0996	0.101	0.085 to 0.115	99.6	70 to 130	0.00	20
BA05410	Molybdenum, Total	mg/L	0.0000144	0.0001474	0.10	0.164	0.160	0.0978	0.085 to 0.115	96.7	70 to 130	2.47	20
BA05410	Selenium, Total	mg/L	0.0000250	0.00066	0.10	0.0873	0.0872	0.106	0.085 to 0.115	87.3	70 to 130	0.115	20

Comments:

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

Batch QC Summary

Customer Account: WMWGORAPFB
Sample Date: 3/16/20 16:15
Customer ID:
Delivery Date: 3/19/20 10:59

Description: Gorgas Ash Pond Field Blank

Laboratory ID Number: BA05403

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA05410	Chloride	mg/L	-0.128	0.50	10.0	16.8	8.07	10.0	9 to 11	88.0	80 to 120	0.871	20
BA05410	Solids, Dissolved	mg/L	0.0000	25			521	52.0	40 to 60			0.579	5
BA05410	Fluoride	mg/L	0.0355	0.05	2.50	3.28	0.653	2.64	2.25 to 2.75	105	80 to 120	0.923	20
BA05410	Sulfate	mg/L	-0.390	0.50	20.0	35.3	16.0	19.4	18 to 22	97.0	80 to 120	0.627	20

Comments:

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-34HO

Location Code: WMWGORAP
Collected: 3/16/20 16:52
Customer ID:
Submittal Date: 3/19/20 10:59

Laboratory ID Number: BA05404

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	3/30/20 13:30	3/31/20 10:09		1.015	0.0827	mg/L	0.03	0.1	J
* Calcium, Total	3/30/20 13:30	3/31/20 11:31		10.15	83.8	mg/L	1.015	5.075	
* Lithium, Total	3/30/20 13:30	3/31/20 10:09		1.015	0.205	mg/L	0.01	0.02	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/26/20 13:06	3/27/20 10:14		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	3/26/20 13:06	3/27/20 10:14		1.015	0.00351	mg/L	0.001	0.005	J
* Barium, Total	3/26/20 13:06	3/27/20 10:14		1.015	0.0309	mg/L	0.002	0.01	
* Beryllium, Total	3/26/20 13:06	3/27/20 10:14		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	3/26/20 13:06	3/27/20 10:14		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	3/26/20 13:06	3/27/20 10:14		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	3/26/20 13:06	3/27/20 10:14		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	3/26/20 13:06	3/27/20 10:14		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	3/26/20 13:06	3/27/20 10:14		1.015	0.00386	mg/L	0.002	0.01	J
* Selenium, Total	3/26/20 13:06	3/27/20 10:14		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	3/26/20 13:06	3/27/20 10:14		1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	3/23/20 08:34	3/24/20 10:02		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2540C	***Analyst: TJW***								
* Solids, Dissolved	3/19/20 17:25	3/20/20 15:00		1	2460	mg/L		178.6	
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	3/20/20 16:21	3/20/20 16:21		10	101	mg/L	5.00	10	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	3/20/20 12:24	3/20/20 12:24		1	0.338	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E	***Analyst: JCC***								
* Sulfate	3/20/20 10:21	3/20/20 10:21		40	1480	mg/L	20.00	40	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	3/16/20 16:48	3/16/20 16:48			3377.22	uS/cm			FA
pH	3/16/20 16:48	3/16/20 16:48			7.35	SU			FA
Temperature	3/16/20 16:48	3/16/20 16:48			18.71	C			FA
Turbidity	3/16/20 16:48	3/16/20 16:48			2.59	NTU			FA

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

Comments:

Reported: 4/14/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORAP
Sample Date: 3/16/20 16:52
Customer ID:
Delivery Date: 3/19/20 10:59

Description: Gorgas Ash Pond - MW-34HO

Laboratory ID Number: BA05404

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA05410	Thallium, Total	mg/L	-0.00000422	0.0001474	0.10	0.104	0.104	0.0992	0.085 to 0.115	104	70 to 130	0.00	20
BA05410	Lead, Total	mg/L	0.00000068	0.0001474	0.10	0.103	0.102	0.1000	0.085 to 0.115	103	70 to 130	0.976	20
BA05410	Cobalt, Total	mg/L	0.00000321	0.0001474	0.10	0.0991	0.0972	0.0995	0.085 to 0.115	99.1	70 to 130	1.94	20
BA05410	Antimony, Total	mg/L	0.000104	0.00066	0.10	0.0977	0.0963	0.0938	0.085 to 0.115	96.7	70 to 130	1.44	20
BA05410	Arsenic, Total	mg/L	0.00000233	0.0001474	0.10	0.126	0.125	0.106	0.085 to 0.115	104	70 to 130	0.797	20
BA05410	Barium, Total	mg/L	0.00000739	0.0002	0.10	0.230	0.228	0.0928	0.085 to 0.115	90.0	70 to 130	0.873	20
BA05410	Beryllium, Total	mg/L	0.0000213	0.00088	0.10	0.0938	0.0944	0.0891	0.085 to 0.115	93.8	70 to 130	0.638	20
BA05410	Boron, Total	mg/L	0.00324	0.0650254	1.00	1.05	1.08	0.990	0.85 to 1.15	99.0	70 to 130	2.82	20
BA05410	Chromium, Total	mg/L	0.000204	0.00044	0.10	0.101	0.0997	0.102	0.085 to 0.115	101	70 to 130	1.30	20
BA05410	Mercury, Total by CVAA	mg/L	0.0000228	0.0005	0.004	0.00358	0.00354	0.00389	0.0034 to 0.0046	89.5	70 to 130	1.12	20
BA05410	Lithium, Total	mg/L	0.0000545	0.0154	0.20	0.605	0.616	0.196	0.17 to 0.23	114	70 to 130	1.80	20
BA05410	Calcium, Total	mg/L	-0.0152	0.1518	5.00	10.1	10.3	5.04	4.25 to 5.75	97.0	70 to 130	1.96	20
BA05410	Cadmium, Total	mg/L	-0.00000022	0.0001474	0.10	0.0996	0.0996	0.101	0.085 to 0.115	99.6	70 to 130	0.00	20
BA05410	Molybdenum, Total	mg/L	0.0000144	0.0001474	0.10	0.164	0.160	0.0978	0.085 to 0.115	96.7	70 to 130	2.47	20
BA05410	Selenium, Total	mg/L	0.0000250	0.00066	0.10	0.0873	0.0872	0.106	0.085 to 0.115	87.3	70 to 130	0.115	20

Comments:

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/16/20 16:52
Customer ID:
Delivery Date: 3/19/20 10:59

Description: Gorgas Ash Pond - MW-34HO

Laboratory ID Number: BA05404

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA05410	Chloride	mg/L	-0.128	0.50	10.0	16.8	8.07	10.0	9 to 11	88.0	80 to 120	0.871	20
BA05410	Solids, Dissolved	mg/L	0.0000	25			521	52.0	40 to 60			0.579	5
BA05410	Fluoride	mg/L	0.0355	0.05	2.50	3.28	0.653	2.64	2.25 to 2.75	105	80 to 120	0.923	20
BA05410	Sulfate	mg/L	-0.390	0.50	20.0	35.3	16.0	19.4	18 to 22	97.0	80 to 120	0.627	20

Comments:

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-35HO

Location Code: WMWGORAP
Collected: 3/17/20 09:04
Customer ID:
Submittal Date: 3/19/20 10:59

Laboratory ID Number: BA05405

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	3/30/20 13:30	3/31/20 10:12		1.015	Not Detected	mg/L	0.03	0.1	U
* Calcium, Total	3/30/20 13:30	3/31/20 10:12		1.015	5.27	mg/L	0.1	0.5	
* Lithium, Total	3/30/20 13:30	3/31/20 10:12		1.015	0.0740	mg/L	0.01	0.02	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/26/20 13:06	3/27/20 10:16		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	3/26/20 13:06	3/27/20 10:16		1.015	0.00105	mg/L	0.001	0.005	J
* Barium, Total	3/26/20 13:06	3/27/20 10:16		1.015	0.0426	mg/L	0.002	0.01	
* Beryllium, Total	3/26/20 13:06	3/27/20 10:16		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	3/26/20 13:06	3/27/20 10:16		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	3/26/20 13:06	3/27/20 10:16		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	3/26/20 13:06	3/27/20 10:16		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	3/26/20 13:06	3/27/20 10:16		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	3/26/20 13:06	3/27/20 10:16		1.015	0.00222	mg/L	0.002	0.01	J
* Selenium, Total	3/26/20 13:06	3/27/20 10:16		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	3/26/20 13:06	3/27/20 10:16		1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	3/23/20 08:34	3/24/20 10:05		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2540C	***Analyst: TJW***								
* Solids, Dissolved	3/19/20 17:25	3/20/20 15:00		1	365	mg/L		25	
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	3/20/20 16:23	3/20/20 16:23		3	23.9	mg/L	1.50	3	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	3/20/20 12:25	3/20/20 12:25		1	0.166	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E	***Analyst: JCC***								
* Sulfate	3/20/20 10:22	3/20/20 10:22		2	40.1	mg/L	1.00	2	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	3/17/20 09:00	3/17/20 09:00			597.97	uS/cm			FA
pH	3/17/20 09:00	3/17/20 09:00			8.40	SU			FA
Temperature	3/17/20 09:00	3/17/20 09:00			17.06	C			FA
Turbidity	3/17/20 09:00	3/17/20 09:00			3.84	NTU			FA

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

Comments:

Reported: 4/14/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORAP
Sample Date: 3/17/20 09:04
Customer ID:
Delivery Date: 3/19/20 10:59

Description: Gorgas Ash Pond - MW-35HO

Laboratory ID Number: BA05405

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA05410	Lead, Total	mg/L	0.00000068	0.0001474	0.10	0.103	0.102	0.1000	0.085 to 0.115	103	70 to 130	0.976	20
BA05410	Thallium, Total	mg/L	-0.00000422	0.0001474	0.10	0.104	0.104	0.0992	0.085 to 0.115	104	70 to 130	0.00	20
BA05410	Cobalt, Total	mg/L	0.00000321	0.0001474	0.10	0.0991	0.0972	0.0995	0.085 to 0.115	99.1	70 to 130	1.94	20
BA05410	Antimony, Total	mg/L	0.000104	0.00066	0.10	0.0977	0.0963	0.0938	0.085 to 0.115	96.7	70 to 130	1.44	20
BA05410	Chromium, Total	mg/L	0.000204	0.00044	0.10	0.101	0.0997	0.102	0.085 to 0.115	101	70 to 130	1.30	20
BA05410	Mercury, Total by CVAA	mg/L	0.0000228	0.0005	0.004	0.00358	0.00354	0.00389	0.0034 to 0.0046	89.5	70 to 130	1.12	20
BA05410	Lithium, Total	mg/L	0.0000545	0.0154	0.20	0.605	0.616	0.196	0.17 to 0.23	114	70 to 130	1.80	20
BA05410	Arsenic, Total	mg/L	0.00000233	0.0001474	0.10	0.126	0.125	0.106	0.085 to 0.115	104	70 to 130	0.797	20
BA05410	Barium, Total	mg/L	0.00000739	0.0002	0.10	0.230	0.228	0.0928	0.085 to 0.115	90.0	70 to 130	0.873	20
BA05410	Beryllium, Total	mg/L	0.0000213	0.00088	0.10	0.0938	0.0944	0.0891	0.085 to 0.115	93.8	70 to 130	0.638	20
BA05410	Boron, Total	mg/L	0.00324	0.0650254	1.00	1.05	1.08	0.990	0.85 to 1.15	99.0	70 to 130	2.82	20
BA05410	Calcium, Total	mg/L	-0.0152	0.1518	5.00	10.1	10.3	5.04	4.25 to 5.75	97.0	70 to 130	1.96	20
BA05410	Cadmium, Total	mg/L	-0.00000022	0.0001474	0.10	0.0996	0.0996	0.101	0.085 to 0.115	99.6	70 to 130	0.00	20
BA05410	Molybdenum, Total	mg/L	0.0000144	0.0001474	0.10	0.164	0.160	0.0978	0.085 to 0.115	96.7	70 to 130	2.47	20
BA05410	Selenium, Total	mg/L	0.0000250	0.00066	0.10	0.0873	0.0872	0.106	0.085 to 0.115	87.3	70 to 130	0.115	20

Comments:

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/17/20 09:04
Customer ID:
Delivery Date: 3/19/20 10:59

Description: Gorgas Ash Pond - MW-35HO

Laboratory ID Number: BA05405

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA05410	Chloride	mg/L	-0.128	0.50	10.0	16.8	8.07	10.0	9 to 11	88.0	80 to 120	0.871	20
BA05410	Solids, Dissolved	mg/L	0.0000	25			521	52.0	40 to 60			0.579	5
BA05410	Fluoride	mg/L	0.0355	0.05	2.50	3.28	0.653	2.64	2.25 to 2.75	105	80 to 120	0.923	20
BA05410	Sulfate	mg/L	-0.390	0.50	20.0	35.3	16.0	19.4	18 to 22	97.0	80 to 120	0.627	20

Comments:

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-36H

Location Code: WMWGORAP
Collected: 3/17/20 11:45
Customer ID:
Submittal Date: 3/19/20 10:59

Laboratory ID Number: BA05406

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	3/30/20 13:30	3/31/20 10:15		1.015	0.0394	mg/L	0.03	0.1	J
* Calcium, Total	3/30/20 13:30	3/31/20 10:15		1.015	3.45	mg/L	0.1	0.5	
* Lithium, Total	3/30/20 13:30	3/31/20 10:15		1.015	0.0342	mg/L	0.01	0.02	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/26/20 13:06	3/27/20 10:19		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	3/26/20 13:06	3/27/20 10:19		1.015	0.00171	mg/L	0.001	0.005	J
* Barium, Total	3/26/20 13:06	3/27/20 10:19		1.015	0.0353	mg/L	0.002	0.01	
* Beryllium, Total	3/26/20 13:06	3/27/20 10:19		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	3/26/20 13:06	3/27/20 10:19		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	3/26/20 13:06	3/27/20 10:19		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	3/26/20 13:06	3/27/20 10:19		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	3/26/20 13:06	3/27/20 10:19		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	3/26/20 13:06	3/27/20 10:19		1.015	0.00571	mg/L	0.002	0.01	J
* Selenium, Total	3/26/20 13:06	3/27/20 10:19		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	3/26/20 13:06	3/27/20 10:19		1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	3/23/20 08:34	3/24/20 10:07		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2540C	***Analyst: TJW***								
* Solids, Dissolved	3/19/20 17:25	3/20/20 15:00		1	362	mg/L		25	
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	3/20/20 16:24	3/20/20 16:24		3	29.4	mg/L	1.50	3	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	3/20/20 12:26	3/20/20 12:26		1	0.214	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E	***Analyst: JCC***								
* Sulfate	3/20/20 10:24	3/20/20 10:24		3	57.1	mg/L	1.50	3	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	3/17/20 11:42	3/17/20 11:42			555.93	uS/cm			FA
pH	3/17/20 11:42	3/17/20 11:42			8.44	SU			FA
Temperature	3/17/20 11:42	3/17/20 11:42			18.28	C			FA
Turbidity	3/17/20 11:42	3/17/20 11:42			1.16	NTU			FA

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

Comments:

Reported: 4/14/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORAP
Sample Date: 3/17/20 11:45
Customer ID:
Delivery Date: 3/19/20 10:59

Description: Gorgas Ash Pond - MW-36H

Laboratory ID Number: BA05406

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA05410	Thallium, Total	mg/L	-0.00000422	0.0001474	0.10	0.104	0.104	0.0992	0.085 to 0.115	104	70 to 130	0.00	20
BA05410	Lead, Total	mg/L	0.00000068	0.0001474	0.10	0.103	0.102	0.1000	0.085 to 0.115	103	70 to 130	0.976	20
BA05410	Cobalt, Total	mg/L	0.00000321	0.0001474	0.10	0.0991	0.0972	0.0995	0.085 to 0.115	99.1	70 to 130	1.94	20
BA05410	Antimony, Total	mg/L	0.000104	0.00066	0.10	0.0977	0.0963	0.0938	0.085 to 0.115	96.7	70 to 130	1.44	20
BA05410	Chromium, Total	mg/L	0.000204	0.00044	0.10	0.101	0.0997	0.102	0.085 to 0.115	101	70 to 130	1.30	20
BA05410	Mercury, Total by CVAA	mg/L	0.0000228	0.0005	0.004	0.00358	0.00354	0.00389	0.0034 to 0.0046	89.5	70 to 130	1.12	20
BA05410	Lithium, Total	mg/L	0.0000545	0.0154	0.20	0.605	0.616	0.196	0.17 to 0.23	114	70 to 130	1.80	20
BA05410	Arsenic, Total	mg/L	0.00000233	0.0001474	0.10	0.126	0.125	0.106	0.085 to 0.115	104	70 to 130	0.797	20
BA05410	Barium, Total	mg/L	0.00000739	0.0002	0.10	0.230	0.228	0.0928	0.085 to 0.115	90.0	70 to 130	0.873	20
BA05410	Beryllium, Total	mg/L	0.0000213	0.00088	0.10	0.0938	0.0944	0.0891	0.085 to 0.115	93.8	70 to 130	0.638	20
BA05410	Boron, Total	mg/L	0.00324	0.0650254	1.00	1.05	1.08	0.990	0.85 to 1.15	99.0	70 to 130	2.82	20
BA05410	Calcium, Total	mg/L	-0.0152	0.1518	5.00	10.1	10.3	5.04	4.25 to 5.75	97.0	70 to 130	1.96	20
BA05410	Cadmium, Total	mg/L	-0.00000022	0.0001474	0.10	0.0996	0.0996	0.101	0.085 to 0.115	99.6	70 to 130	0.00	20
BA05410	Molybdenum, Total	mg/L	0.0000144	0.0001474	0.10	0.164	0.160	0.0978	0.085 to 0.115	96.7	70 to 130	2.47	20
BA05410	Selenium, Total	mg/L	0.0000250	0.00066	0.10	0.0873	0.0872	0.106	0.085 to 0.115	87.3	70 to 130	0.115	20

Comments:

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/17/20 11:45
Customer ID:
Delivery Date: 3/19/20 10:59

Description: Gorgas Ash Pond - MW-36H

Laboratory ID Number: BA05406

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA05410	Chloride	mg/L	-0.128	0.50	10.0	16.8	8.07	10.0	9 to 11	88.0	80 to 120	0.871	20
BA05410	Solids, Dissolved	mg/L	0.0000	25			521	52.0	40 to 60			0.579	5
BA05410	Fluoride	mg/L	0.0355	0.05	2.50	3.28	0.653	2.64	2.25 to 2.75	105	80 to 120	0.923	20
BA05410	Sulfate	mg/L	-0.390	0.50	20.0	35.3	16.0	19.4	18 to 22	97.0	80 to 120	0.627	20

Comments:

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-33HO

Location Code: WMWGORAP
Collected: 3/17/20 13:48
Customer ID:
Submittal Date: 3/19/20 10:59

Laboratory ID Number: BA05407

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	3/30/20 13:30	3/31/20 10:18		1.015	0.0660	mg/L	0.03	0.1	J
* Calcium, Total	3/30/20 13:30	3/31/20 11:34		10.15	42.3	mg/L	1.015	5.075	
* Lithium, Total	3/30/20 13:30	3/31/20 10:18		1.015	0.0516	mg/L	0.01	0.02	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/26/20 13:06	3/27/20 10:22		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	3/26/20 13:06	3/27/20 10:22		1.015	0.00440	mg/L	0.001	0.005	J
* Barium, Total	3/26/20 13:06	3/27/20 10:22		1.015	0.329	mg/L	0.002	0.01	
* Beryllium, Total	3/26/20 13:06	3/27/20 10:22		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	3/26/20 13:06	3/27/20 10:22		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	3/26/20 13:06	3/27/20 10:22		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	3/26/20 13:06	3/27/20 10:22		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	3/26/20 13:06	3/27/20 10:22		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	3/26/20 13:06	3/27/20 10:22		1.015	Not Detected	mg/L	0.002	0.01	U
* Selenium, Total	3/26/20 13:06	3/27/20 10:22		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	3/26/20 13:06	3/27/20 10:22		1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	3/23/20 08:34	3/24/20 10:09		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2540C	***Analyst: TJW***								
* Solids, Dissolved	3/19/20 17:25	3/20/20 15:00		1	827	mg/L		75.8	
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	3/20/20 16:25	3/20/20 16:25		10	108	mg/L	5.00	10	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	3/20/20 12:27	3/20/20 12:27		1	0.202	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E	***Analyst: JCC***								
* Sulfate	3/20/20 10:25	3/20/20 10:25		10	172	mg/L	5.00	10	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	3/17/20 13:45	3/17/20 13:45			1453.18	uS/cm			FA
pH	3/17/20 13:45	3/17/20 13:45			7.67	SU			FA
Temperature	3/17/20 13:45	3/17/20 13:45			21.05	C			FA
Turbidity	3/17/20 13:45	3/17/20 13:45			6.21	NTU			FA

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

Comments:

Reported: 4/14/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORAP
Sample Date: 3/17/20 13:48
Customer ID:
Delivery Date: 3/19/20 10:59

Description: Gorgas Ash Pond - MW-33HO

Laboratory ID Number: BA05407

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA05410	Thallium, Total	mg/L	-0.00000422	0.0001474	0.10	0.104	0.104	0.0992	0.085 to 0.115	104	70 to 130	0.00	20
BA05410	Lead, Total	mg/L	0.00000068	0.0001474	0.10	0.103	0.102	0.1000	0.085 to 0.115	103	70 to 130	0.976	20
BA05410	Cobalt, Total	mg/L	0.00000321	0.0001474	0.10	0.0991	0.0972	0.0995	0.085 to 0.115	99.1	70 to 130	1.94	20
BA05410	Antimony, Total	mg/L	0.000104	0.00066	0.10	0.0977	0.0963	0.0938	0.085 to 0.115	96.7	70 to 130	1.44	20
BA05410	Arsenic, Total	mg/L	0.00000233	0.0001474	0.10	0.126	0.125	0.106	0.085 to 0.115	104	70 to 130	0.797	20
BA05410	Barium, Total	mg/L	0.00000739	0.0002	0.10	0.230	0.228	0.0928	0.085 to 0.115	90.0	70 to 130	0.873	20
BA05410	Beryllium, Total	mg/L	0.0000213	0.00088	0.10	0.0938	0.0944	0.0891	0.085 to 0.115	93.8	70 to 130	0.638	20
BA05410	Boron, Total	mg/L	0.00324	0.0650254	1.00	1.05	1.08	0.990	0.85 to 1.15	99.0	70 to 130	2.82	20
BA05410	Chromium, Total	mg/L	0.000204	0.00044	0.10	0.101	0.0997	0.102	0.085 to 0.115	101	70 to 130	1.30	20
BA05410	Mercury, Total by CVAA	mg/L	0.0000228	0.0005	0.004	0.00358	0.00354	0.00389	0.0034 to 0.0046	89.5	70 to 130	1.12	20
BA05410	Lithium, Total	mg/L	0.0000545	0.0154	0.20	0.605	0.616	0.196	0.17 to 0.23	114	70 to 130	1.80	20
BA05410	Calcium, Total	mg/L	-0.0152	0.1518	5.00	10.1	10.3	5.04	4.25 to 5.75	97.0	70 to 130	1.96	20
BA05410	Cadmium, Total	mg/L	-0.00000022	0.0001474	0.10	0.0996	0.0996	0.101	0.085 to 0.115	99.6	70 to 130	0.00	20
BA05410	Molybdenum, Total	mg/L	0.0000144	0.0001474	0.10	0.164	0.160	0.0978	0.085 to 0.115	96.7	70 to 130	2.47	20
BA05410	Selenium, Total	mg/L	0.0000250	0.00066	0.10	0.0873	0.0872	0.106	0.085 to 0.115	87.3	70 to 130	0.115	20

Comments:

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/17/20 13:48
Customer ID:
Delivery Date: 3/19/20 10:59

Description: Gorgas Ash Pond - MW-33HO

Laboratory ID Number: BA05407

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA05410	Chloride	mg/L	-0.128	0.50	10.0	16.8	8.07	10.0	9 to 11	88.0	80 to 120	0.871	20
BA05410	Solids, Dissolved	mg/L	0.0000	25			521	52.0	40 to 60			0.579	5
BA05410	Fluoride	mg/L	0.0355	0.05	2.50	3.28	0.653	2.64	2.25 to 2.75	105	80 to 120	0.923	20
BA05410	Sulfate	mg/L	-0.390	0.50	20.0	35.3	16.0	19.4	18 to 22	97.0	80 to 120	0.627	20

Comments:

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-30HA

Location Code: WMWGORAP
Collected: 3/18/20 09:35
Customer ID:
Submittal Date: 3/19/20 10:59

Laboratory ID Number: BA05408

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	3/30/20 13:30	3/31/20 10:21		1.015	0.0734	mg/L	0.03	0.1	J
* Calcium, Total	3/30/20 13:30	3/31/20 10:21		1.015	36.0	mg/L	0.1	0.5	
* Lithium, Total	3/30/20 13:30	3/31/20 10:21		1.015	0.0528	mg/L	0.01	0.02	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/26/20 13:06	3/27/20 10:24		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	3/26/20 13:06	3/27/20 10:24		1.015	0.00813	mg/L	0.001	0.005	
* Barium, Total	3/26/20 13:06	3/27/20 10:24		1.015	0.0791	mg/L	0.002	0.01	
* Beryllium, Total	3/26/20 13:06	3/27/20 10:24		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	3/26/20 13:06	3/27/20 10:24		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	3/26/20 13:06	3/27/20 10:24		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	3/26/20 13:06	3/27/20 10:24		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	3/26/20 13:06	3/27/20 10:24		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	3/26/20 13:06	3/27/20 10:24		1.015	0.00603	mg/L	0.002	0.01	J
* Selenium, Total	3/26/20 13:06	3/27/20 10:24		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	3/26/20 13:06	3/27/20 10:24		1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	3/23/20 08:34	3/24/20 10:12		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2540C	***Analyst: TJW***								
* Solids, Dissolved	3/19/20 17:25	3/20/20 15:00		1	612	mg/L		50	
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	3/20/20 16:26	3/20/20 16:26		1	5.14	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	3/20/20 12:28	3/20/20 12:28		1	0.634	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E	***Analyst: JCC***								
* Sulfate	3/20/20 10:26	3/20/20 10:26		10	184	mg/L	5.00	10	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	3/18/20 09:31	3/18/20 09:31			963.86	uS/cm			FA
pH	3/18/20 09:31	3/18/20 09:31			7.20	SU			FA
Temperature	3/18/20 09:31	3/18/20 09:31			17.98	C			FA
Turbidity	3/18/20 09:31	3/18/20 09:31			2.13	NTU			FA

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

Comments:

Reported: 4/14/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORAP
Sample Date: 3/18/20 09:35
Customer ID:
Delivery Date: 3/19/20 10:59

Description: Gorgas Ash Pond - MW-30HA

Laboratory ID Number: BA05408

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA05410	Thallium, Total	mg/L	-0.00000422	0.0001474	0.10	0.104	0.104	0.0992	0.085 to 0.115	104	70 to 130	0.00	20
BA05410	Lead, Total	mg/L	0.00000068	0.0001474	0.10	0.103	0.102	0.1000	0.085 to 0.115	103	70 to 130	0.976	20
BA05410	Arsenic, Total	mg/L	0.00000233	0.0001474	0.10	0.126	0.125	0.106	0.085 to 0.115	104	70 to 130	0.797	20
BA05410	Barium, Total	mg/L	0.00000739	0.0002	0.10	0.230	0.228	0.0928	0.085 to 0.115	90.0	70 to 130	0.873	20
BA05410	Beryllium, Total	mg/L	0.0000213	0.00088	0.10	0.0938	0.0944	0.0891	0.085 to 0.115	93.8	70 to 130	0.638	20
BA05410	Boron, Total	mg/L	0.00324	0.0650254	1.00	1.05	1.08	0.990	0.85 to 1.15	99.0	70 to 130	2.82	20
BA05410	Chromium, Total	mg/L	0.000204	0.00044	0.10	0.101	0.0997	0.102	0.085 to 0.115	101	70 to 130	1.30	20
BA05410	Mercury, Total by CVAA	mg/L	0.0000228	0.0005	0.004	0.00358	0.00354	0.00389	0.0034 to 0.0046	89.5	70 to 130	1.12	20
BA05410	Lithium, Total	mg/L	0.0000545	0.0154	0.20	0.605	0.616	0.196	0.17 to 0.23	114	70 to 130	1.80	20
BA05410	Cobalt, Total	mg/L	0.00000321	0.0001474	0.10	0.0991	0.0972	0.0995	0.085 to 0.115	99.1	70 to 130	1.94	20
BA05410	Antimony, Total	mg/L	0.000104	0.00066	0.10	0.0977	0.0963	0.0938	0.085 to 0.115	96.7	70 to 130	1.44	20
BA05410	Calcium, Total	mg/L	-0.0152	0.1518	5.00	10.1	10.3	5.04	4.25 to 5.75	97.0	70 to 130	1.96	20
BA05410	Cadmium, Total	mg/L	-0.00000022	0.0001474	0.10	0.0996	0.0996	0.101	0.085 to 0.115	99.6	70 to 130	0.00	20
BA05410	Molybdenum, Total	mg/L	0.0000144	0.0001474	0.10	0.164	0.160	0.0978	0.085 to 0.115	96.7	70 to 130	2.47	20
BA05410	Selenium, Total	mg/L	0.0000250	0.00066	0.10	0.0873	0.0872	0.106	0.085 to 0.115	87.3	70 to 130	0.115	20

Comments:

Reported: 4/14/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/18/20 09:35
Customer ID:
Delivery Date: 3/19/20 10:59

Description: Gorgas Ash Pond - MW-30HA

Laboratory ID Number: BA05408

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA05410	Solids, Dissolved	mg/L	0.0000	25			521	52.0	40 to 60			0.579	5
BA05410	Chloride	mg/L	-0.128	0.50	10.0	16.8	8.07	10.0	9 to 11	88.0	80 to 120	0.871	20
BA05410	Fluoride	mg/L	0.0355	0.05	2.50	3.28	0.653	2.64	2.25 to 2.75	105	80 to 120	0.923	20
BA05410	Sulfate	mg/L	-0.390	0.50	20.0	35.3	16.0	19.4	18 to 22	97.0	80 to 120	0.627	20

Comments:

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-15V

Location Code: WMWGORAP
Collected: 3/18/20 11:58
Customer ID:
Submittal Date: 3/19/20 10:59

Laboratory ID Number: BA05409

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	3/30/20 13:30	3/31/20 10:24		1.015	0.0565	mg/L	0.03	0.1	J
* Calcium, Total	3/30/20 13:30	3/31/20 10:24		1.015	8.01	mg/L	0.1	0.5	
* Lithium, Total	3/30/20 13:30	3/31/20 10:24		1.015	0.208	mg/L	0.01	0.02	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/26/20 13:06	3/27/20 10:27		1.015	0.00280	mg/L	0.0008	0.003	J
* Arsenic, Total	3/26/20 13:06	3/27/20 10:27		1.015	0.0110	mg/L	0.001	0.005	
* Barium, Total	3/26/20 13:06	3/27/20 10:27		1.015	0.155	mg/L	0.002	0.01	
* Beryllium, Total	3/26/20 13:06	3/27/20 10:27		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	3/26/20 13:06	3/27/20 10:27		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	3/26/20 13:06	3/27/20 10:27		1.015	0.00716	mg/L	0.002	0.01	J
* Cobalt, Total	3/26/20 13:06	3/27/20 10:27		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	3/26/20 13:06	3/27/20 10:27		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	3/26/20 13:06	3/27/20 10:27		1.015	0.0327	mg/L	0.002	0.01	
* Selenium, Total	3/26/20 13:06	3/27/20 10:27		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	3/26/20 13:06	3/27/20 10:27		1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	3/23/20 08:34	3/24/20 10:14		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2540C	***Analyst: TJW***								
* Solids, Dissolved	3/19/20 17:25	3/20/20 15:00		1	873	mg/L		75.8	
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	3/20/20 16:27	3/20/20 16:27		10	108	mg/L	5.00	10	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	3/20/20 12:30	3/20/20 12:30		1	0.243	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E	***Analyst: JCC***								
* Sulfate	3/20/20 10:27	3/20/20 10:27		25	261	mg/L	12.50	25	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	3/18/20 11:55	3/18/20 11:55			1735.33	uS/cm			FA
pH	3/18/20 11:55	3/18/20 11:55			10.89	SU			FA
Temperature	3/18/20 11:55	3/18/20 11:55			19.80	C			FA
Turbidity	3/18/20 11:55	3/18/20 11:55			6.64	NTU			FA

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

Comments:

Reported: 4/14/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORAP
Sample Date: 3/18/20 11:58
Customer ID:
Delivery Date: 3/19/20 10:59

Description: Gorgas Ash Pond - MW-15V

Laboratory ID Number: BA05409

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA05410	Thallium, Total	mg/L	-0.00000422	0.0001474	0.10	0.104	0.104	0.0992	0.085 to 0.115	104	70 to 130	0.00	20
BA05410	Lead, Total	mg/L	0.00000068	0.0001474	0.10	0.103	0.102	0.1000	0.085 to 0.115	103	70 to 130	0.976	20
BA05410	Chromium, Total	mg/L	0.000204	0.00044	0.10	0.101	0.0997	0.102	0.085 to 0.115	101	70 to 130	1.30	20
BA05410	Mercury, Total by CVAA	mg/L	0.0000228	0.0005	0.004	0.00358	0.00354	0.00389	0.0034 to 0.0046	89.5	70 to 130	1.12	20
BA05410	Lithium, Total	mg/L	0.0000545	0.0154	0.20	0.605	0.616	0.196	0.17 to 0.23	114	70 to 130	1.80	20
BA05410	Cobalt, Total	mg/L	0.00000321	0.0001474	0.10	0.0991	0.0972	0.0995	0.085 to 0.115	99.1	70 to 130	1.94	20
BA05410	Antimony, Total	mg/L	0.000104	0.00066	0.10	0.0977	0.0963	0.0938	0.085 to 0.115	96.7	70 to 130	1.44	20
BA05410	Calcium, Total	mg/L	-0.0152	0.1518	5.00	10.1	10.3	5.04	4.25 to 5.75	97.0	70 to 130	1.96	20
BA05410	Cadmium, Total	mg/L	-0.00000022	0.0001474	0.10	0.0996	0.0996	0.101	0.085 to 0.115	99.6	70 to 130	0.00	20
BA05410	Molybdenum, Total	mg/L	0.0000144	0.0001474	0.10	0.164	0.160	0.0978	0.085 to 0.115	96.7	70 to 130	2.47	20
BA05410	Selenium, Total	mg/L	0.0000250	0.00066	0.10	0.0873	0.0872	0.106	0.085 to 0.115	87.3	70 to 130	0.115	20
BA05410	Arsenic, Total	mg/L	0.00000233	0.0001474	0.10	0.126	0.125	0.106	0.085 to 0.115	104	70 to 130	0.797	20
BA05410	Barium, Total	mg/L	0.00000739	0.0002	0.10	0.230	0.228	0.0928	0.085 to 0.115	90.0	70 to 130	0.873	20
BA05410	Beryllium, Total	mg/L	0.0000213	0.00088	0.10	0.0938	0.0944	0.0891	0.085 to 0.115	93.8	70 to 130	0.638	20
BA05410	Boron, Total	mg/L	0.00324	0.0650254	1.00	1.05	1.08	0.990	0.85 to 1.15	99.0	70 to 130	2.82	20

Comments:

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/18/20 11:58
Customer ID:
Delivery Date: 3/19/20 10:59

Description: Gorgas Ash Pond - MW-15V

Laboratory ID Number: BA05409

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA05410	Chloride	mg/L	-0.128	0.50	10.0	16.8	8.07	10.0	9 to 11	88.0	80 to 120	0.871	20
BA05410	Solids, Dissolved	mg/L	0.0000	25			521	52.0	40 to 60			0.579	5
BA05410	Fluoride	mg/L	0.0355	0.05	2.50	3.28	0.653	2.64	2.25 to 2.75	105	80 to 120	0.923	20
BA05410	Sulfate	mg/L	-0.390	0.50	20.0	35.3	16.0	19.4	18 to 22	97.0	80 to 120	0.627	20

Comments:

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-15

Location Code: WMWGORAP
Collected: 3/18/20 14:03
Customer ID:
Submittal Date: 3/19/20 10:59

Laboratory ID Number: BA05410

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	3/30/20 13:30	3/31/20 10:27		1.015	0.0596	mg/L	0.03	0.1	J
* Calcium, Total	3/30/20 13:30	3/31/20 10:27		1.015	5.25	mg/L	0.1	0.5	
* Lithium, Total	3/30/20 13:30	3/31/20 10:27		1.015	0.378	mg/L	0.01	0.02	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/26/20 13:06	3/27/20 10:30		1.015	0.000976	mg/L	0.0008	0.003	J
* Arsenic, Total	3/26/20 13:06	3/27/20 10:30		1.015	0.0217	mg/L	0.001	0.005	
* Barium, Total	3/26/20 13:06	3/27/20 10:30		1.015	0.140	mg/L	0.002	0.01	
* Beryllium, Total	3/26/20 13:06	3/27/20 10:30		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	3/26/20 13:06	3/27/20 10:30		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	3/26/20 13:06	3/27/20 10:30		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	3/26/20 13:06	3/27/20 10:30		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	3/26/20 13:06	3/27/20 10:30		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	3/26/20 13:06	3/27/20 10:30		1.015	0.0673	mg/L	0.002	0.01	
* Selenium, Total	3/26/20 13:06	3/27/20 10:30		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	3/26/20 13:06	3/27/20 10:30		1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	3/23/20 08:34	3/24/20 10:16		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2540C	***Analyst: TJW***								
* Solids, Dissolved	3/19/20 17:25	3/20/20 15:00		1	515	mg/L		75.8	
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	3/20/20 16:32	3/20/20 16:32		1	8.00	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	3/20/20 12:31	3/20/20 12:31		1	0.647	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E	***Analyst: JCC***								
* Sulfate	3/20/20 10:28	3/20/20 10:28		1	15.9	mg/L	0.50	1	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	3/18/20 14:00	3/18/20 14:00			1444.85	uS/cm			FA
pH	3/18/20 14:00	3/18/20 14:00			11.47	SU			FA
Temperature	3/18/20 14:00	3/18/20 14:00			18.92	C			FA
Turbidity	3/18/20 14:00	3/18/20 14:00			2.71	NTU			FA

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

Comments:

Reported: 4/14/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORAP
Sample Date: 3/18/20 14:03
Customer ID:
Delivery Date: 3/19/20 10:59

Description: Gorgas Ash Pond - MW-15

Laboratory ID Number: BA05410

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA05410	Thallium, Total	mg/L	-0.00000422	0.0001474	0.10	0.104	0.104	0.0992	0.085 to 0.115	104	70 to 130	0.00	20
BA05410	Lead, Total	mg/L	0.00000068	0.0001474	0.10	0.103	0.102	0.1000	0.085 to 0.115	103	70 to 130	0.976	20
BA05410	Cobalt, Total	mg/L	0.00000321	0.0001474	0.10	0.0991	0.0972	0.0995	0.085 to 0.115	99.1	70 to 130	1.94	20
BA05410	Antimony, Total	mg/L	0.000104	0.00066	0.10	0.0977	0.0963	0.0938	0.085 to 0.115	96.7	70 to 130	1.44	20
BA05410	Chromium, Total	mg/L	0.000204	0.00044	0.10	0.101	0.0997	0.102	0.085 to 0.115	101	70 to 130	1.30	20
BA05410	Mercury, Total by CVAA	mg/L	0.0000228	0.0005	0.004	0.00358	0.00354	0.00389	0.0034 to 0.0046	89.5	70 to 130	1.12	20
BA05410	Lithium, Total	mg/L	0.0000545	0.0154	0.20	0.605	0.616	0.196	0.17 to 0.23	114	70 to 130	1.80	20
BA05410	Arsenic, Total	mg/L	0.00000233	0.0001474	0.10	0.126	0.125	0.106	0.085 to 0.115	104	70 to 130	0.797	20
BA05410	Barium, Total	mg/L	0.00000739	0.0002	0.10	0.230	0.228	0.0928	0.085 to 0.115	90.0	70 to 130	0.873	20
BA05410	Beryllium, Total	mg/L	0.0000213	0.00088	0.10	0.0938	0.0944	0.0891	0.085 to 0.115	93.8	70 to 130	0.638	20
BA05410	Boron, Total	mg/L	0.00324	0.0650254	1.00	1.05	1.08	0.990	0.85 to 1.15	99.0	70 to 130	2.82	20
BA05410	Calcium, Total	mg/L	-0.0152	0.1518	5.00	10.1	10.3	5.04	4.25 to 5.75	97.0	70 to 130	1.96	20
BA05410	Cadmium, Total	mg/L	-0.00000022	0.0001474	0.10	0.0996	0.0996	0.101	0.085 to 0.115	99.6	70 to 130	0.00	20
BA05410	Molybdenum, Total	mg/L	0.0000144	0.0001474	0.10	0.164	0.160	0.0978	0.085 to 0.115	96.7	70 to 130	2.47	20
BA05410	Selenium, Total	mg/L	0.0000250	0.00066	0.10	0.0873	0.0872	0.106	0.085 to 0.115	87.3	70 to 130	0.115	20

Comments:

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/18/20 14:03
Customer ID:
Delivery Date: 3/19/20 10:59

Description: Gorgas Ash Pond - MW-15

Laboratory ID Number: BA05410

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA05410	Chloride	mg/L	-0.128	0.50	10.0	16.8	8.07	10.0	9 to 11	88.0	80 to 120	0.871	20
BA05410	Fluoride	mg/L	0.0355	0.05	2.50	3.28	0.653	2.64	2.25 to 2.75	105	80 to 120	0.923	20
BA05410	Sulfate	mg/L	-0.390	0.50	20.0	35.3	16.0	19.4	18 to 22	97.0	80 to 120	0.627	20
BA05410	Solids, Dissolved	mg/L	0.0000	25			521	52.0	40 to 60			0.579	5

Comments:

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-21

Location Code: WMWGORAP
Collected: 3/18/20 15:50
Customer ID:
Submittal Date: 3/19/20 10:59

Laboratory ID Number: BA05411

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	3/30/20 13:30	3/31/20 10:41		1.015	0.0824	mg/L	0.03	0.1	J
* Calcium, Total	3/30/20 13:30	3/31/20 10:41		1.015	2.35	mg/L	0.1	0.5	
* Lithium, Total	3/30/20 13:30	3/31/20 10:41		1.015	0.379	mg/L	0.01	0.02	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/26/20 13:06	3/27/20 10:45		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	3/26/20 13:06	3/27/20 10:45		1.015	Not Detected	mg/L	0.001	0.005	U
* Barium, Total	3/26/20 13:06	3/27/20 10:45		1.015	0.105	mg/L	0.002	0.01	
* Beryllium, Total	3/26/20 13:06	3/27/20 10:45		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	3/26/20 13:06	3/27/20 10:45		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	3/26/20 13:06	3/27/20 10:45		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	3/26/20 13:06	3/27/20 10:45		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	3/26/20 13:06	3/27/20 10:45		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	3/26/20 13:06	3/27/20 10:45		1.015	0.102	mg/L	0.002	0.01	
* Selenium, Total	3/26/20 13:06	3/27/20 10:45		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	3/26/20 13:06	3/27/20 10:45		1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	3/23/20 08:34	3/24/20 10:33		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2540C	***Analyst: TJW***								
* Solids, Dissolved	3/19/20 17:25	3/20/20 15:00		1	661	mg/L		75.8	
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	3/20/20 16:59	3/20/20 16:59		4	49.5	mg/L	2.00	4	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	3/20/20 12:43	3/20/20 12:43		1	0.234	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E	***Analyst: JCC***								
* Sulfate	3/20/20 11:14	3/20/20 11:14		16	228	mg/L	8.00	16	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	3/18/20 15:47	3/18/20 15:47			1740.42	uS/cm			FA
pH	3/18/20 15:47	3/18/20 15:47			11.37	SU			FA
Temperature	3/18/20 15:47	3/18/20 15:47			19.64	C			FA
Turbidity	3/18/20 15:47	3/18/20 15:47			1.16	NTU			FA

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

Comments:

Reported: 4/14/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORAP
Sample Date: 3/18/20 15:50
Customer ID:
Delivery Date: 3/19/20 10:59

Description: Gorgas Ash Pond - MW-21

Laboratory ID Number: BA05411

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA05421	Arsenic, Total	mg/L	0.00000233	0.0001474	0.10	0.106	0.110	0.106	0.085 to 0.115	99.1	70 to 130	3.70	20
BA05421	Lead, Total	mg/L	0.00000068	0.0001474	0.10	0.0981	0.102	0.1000	0.085 to 0.115	98.1	70 to 130	3.90	20
BA05421	Barium, Total	mg/L	0.00000739	0.0002	0.10	0.287	0.290	0.0928	0.085 to 0.115	92.0	70 to 130	1.04	20
BA05421	Cadmium, Total	mg/L	-0.00000022	0.0001474	0.10	0.0933	0.0992	0.101	0.085 to 0.115	93.3	70 to 130	6.13	20
BA05421	Selenium, Total	mg/L	0.0000250	0.00066	0.10	0.0990	0.101	0.106	0.085 to 0.115	99.0	70 to 130	2.00	20
BA05421	Boron, Total	mg/L	0.00324	0.0650254	1.00	1.05	1.06	0.990	0.85 to 1.15	101	70 to 130	0.948	20
BA05421	Lithium, Total	mg/L	0.0000545	0.0154	0.20	0.240	0.240	0.196	0.17 to 0.23	105	70 to 130	0.00	20
BA05421	Antimony, Total	mg/L	0.000104	0.00066	0.10	0.0992	0.100	0.0938	0.085 to 0.115	97.0	70 to 130	0.803	20
BA05421	Thallium, Total	mg/L	-0.00000422	0.0001474	0.10	0.102	0.102	0.0992	0.085 to 0.115	102	70 to 130	0.00	20
BA05421	Beryllium, Total	mg/L	0.0000213	0.00088	0.10	0.0881	0.0923	0.0891	0.085 to 0.115	88.1	70 to 130	4.66	20
BA05421	Chromium, Total	mg/L	0.000204	0.00044	0.10	0.0960	0.102	0.102	0.085 to 0.115	96.0	70 to 130	6.06	20
BA05421	Mercury, Total by CVAA	mg/L	0.0000180	0.0005	0.004	0.00368	0.00369	0.00380	0.0034 to 0.0046	92.0	70 to 130	0.271	20
BA05421	Calcium, Total	mg/L	-0.0152	0.1518	5.00	49.1	49.3	5.04	4.25 to 5.75	102	70 to 130	0.407	20
BA05421	Cobalt, Total	mg/L	0.00000321	0.0001474	0.10	0.0926	0.0972	0.0995	0.085 to 0.115	92.6	70 to 130	4.85	20
BA05421	Molybdenum, Total	mg/L	0.0000144	0.0001474	0.10	0.101	0.104	0.0978	0.085 to 0.115	96.6	70 to 130	2.93	20

Comments:

Reported: 4/14/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/18/20 15:50
Customer ID:
Delivery Date: 3/19/20 10:59

Description: Gorgas Ash Pond - MW-21

Laboratory ID Number: BA05411

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA05419	Solids, Dissolved	mg/L	0.0000	25			247	52.0	40 to 60			0.604	5
BA05420	Chloride	mg/L	-0.0758	0.50	10.0	13.9	4.39	10.4	9 to 11	95.5	80 to 120	0.915	20
BA05420	Sulfate	mg/L	-0.470	0.50	20.0	22.8	4.81	18.9	18 to 22	89.7	80 to 120	1.03	20
BA05420	Fluoride	mg/L	0.0224	0.05	2.50	2.76	0.114	2.63	2.25 to 2.75	106	80 to 120	5.41	20

Comments:

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-6S

Location Code: WMWGORAP
Collected: 3/17/20 11:30
Customer ID:
Submittal Date: 3/19/20 10:59

Laboratory ID Number: BA05412

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	3/30/20 13:30	3/31/20 10:44		1.015	0.867	mg/L	0.03	0.1	
* Calcium, Total	3/30/20 13:30	3/31/20 11:37		10.15	59.3	mg/L	1.015	5.075	
* Lithium, Total	3/30/20 13:30	3/31/20 10:44		1.015	0.0695	mg/L	0.01	0.02	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/26/20 13:06	3/27/20 10:48		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	3/26/20 13:06	3/27/20 10:48		1.015	0.00778	mg/L	0.001	0.005	
* Barium, Total	3/26/20 13:06	3/27/20 10:48		1.015	0.0725	mg/L	0.002	0.01	
* Beryllium, Total	3/26/20 13:06	3/27/20 10:48		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	3/26/20 13:06	3/27/20 10:48		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	3/26/20 13:06	3/27/20 10:48		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	3/26/20 13:06	3/27/20 10:48		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	3/26/20 13:06	3/27/20 10:48		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	3/26/20 13:06	3/27/20 10:48		1.015	0.0272	mg/L	0.002	0.01	
* Selenium, Total	3/26/20 13:06	3/27/20 10:48		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	3/26/20 13:06	3/27/20 10:48		1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	3/23/20 08:34	3/24/20 10:35		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2540C	***Analyst: TJW***								
* Solids, Dissolved	3/19/20 17:25	3/20/20 15:00		1	328	mg/L		25	
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	3/20/20 16:50	3/20/20 16:50		1	17.4	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	3/20/20 12:44	3/20/20 12:44		1	0.231	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E	***Analyst: JCC***								
* Sulfate	3/20/20 11:15	3/20/20 11:15		10	148	mg/L	5.00	10	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	3/17/20 11:27	3/17/20 11:27			493.38	uS/cm			FA
pH	3/17/20 11:27	3/17/20 11:27			6.92	SU			FA
Temperature	3/17/20 11:27	3/17/20 11:27			15.34	C			FA
Turbidity	3/17/20 11:27	3/17/20 11:27			3.82	NTU			FA

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

Comments:

Reported: 4/14/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORAP
Sample Date: 3/17/20 11:30
Customer ID:
Delivery Date: 3/19/20 10:59

Description: Gorgas Ash Pond - MW-6S

Laboratory ID Number: BA05412

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA05421	Arsenic, Total	mg/L	0.00000233	0.0001474	0.10	0.106	0.110	0.106	0.085 to 0.115	99.1	70 to 130	3.70	20
BA05421	Lead, Total	mg/L	0.00000068	0.0001474	0.10	0.0981	0.102	0.1000	0.085 to 0.115	98.1	70 to 130	3.90	20
BA05421	Barium, Total	mg/L	0.00000739	0.0002	0.10	0.287	0.290	0.0928	0.085 to 0.115	92.0	70 to 130	1.04	20
BA05421	Cadmium, Total	mg/L	-0.00000022	0.0001474	0.10	0.0933	0.0992	0.101	0.085 to 0.115	93.3	70 to 130	6.13	20
BA05421	Selenium, Total	mg/L	0.0000250	0.00066	0.10	0.0990	0.101	0.106	0.085 to 0.115	99.0	70 to 130	2.00	20
BA05421	Boron, Total	mg/L	0.00324	0.0650254	1.00	1.05	1.06	0.990	0.85 to 1.15	101	70 to 130	0.948	20
BA05421	Lithium, Total	mg/L	0.0000545	0.0154	0.20	0.240	0.240	0.196	0.17 to 0.23	105	70 to 130	0.00	20
BA05421	Antimony, Total	mg/L	0.000104	0.00066	0.10	0.0992	0.100	0.0938	0.085 to 0.115	97.0	70 to 130	0.803	20
BA05421	Thallium, Total	mg/L	-0.00000422	0.0001474	0.10	0.102	0.102	0.0992	0.085 to 0.115	102	70 to 130	0.00	20
BA05421	Beryllium, Total	mg/L	0.0000213	0.00088	0.10	0.0881	0.0923	0.0891	0.085 to 0.115	88.1	70 to 130	4.66	20
BA05421	Chromium, Total	mg/L	0.000204	0.00044	0.10	0.0960	0.102	0.102	0.085 to 0.115	96.0	70 to 130	6.06	20
BA05421	Mercury, Total by CVAA	mg/L	0.0000180	0.0005	0.004	0.00368	0.00369	0.00380	0.0034 to 0.0046	92.0	70 to 130	0.271	20
BA05421	Calcium, Total	mg/L	-0.0152	0.1518	5.00	49.1	49.3	5.04	4.25 to 5.75	102	70 to 130	0.407	20
BA05421	Cobalt, Total	mg/L	0.00000321	0.0001474	0.10	0.0926	0.0972	0.0995	0.085 to 0.115	92.6	70 to 130	4.85	20
BA05421	Molybdenum, Total	mg/L	0.0000144	0.0001474	0.10	0.101	0.104	0.0978	0.085 to 0.115	96.6	70 to 130	2.93	20

Comments:

Reported: 4/14/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/17/20 11:30
Customer ID:
Delivery Date: 3/19/20 10:59

Description: Gorgas Ash Pond - MW-6S

Laboratory ID Number: BA05412

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA05419	Solids, Dissolved	mg/L	0.0000	25			247	52.0	40 to 60			0.604	5
BA05420	Sulfate	mg/L	-0.470	0.50	20.0	22.8	4.81	18.9	18 to 22	89.7	80 to 120	1.03	20
BA05420	Chloride	mg/L	-0.0758	0.50	10.0	13.9	4.39	10.4	9 to 11	95.5	80 to 120	0.915	20
BA05420	Fluoride	mg/L	0.0224	0.05	2.50	2.76	0.114	2.63	2.25 to 2.75	106	80 to 120	5.41	20

Comments:

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-6S DUP

Location Code: WMWGORAP
Collected: 3/17/20 11:30
Customer ID:
Submittal Date: 3/19/20 10:59

Laboratory ID Number: BA05413

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	3/30/20 13:30	3/31/20 10:47		1.015	0.866	mg/L	0.03	0.1	
* Calcium, Total	3/30/20 13:30	3/31/20 11:40		10.15	59.2	mg/L	1.015	5.075	
* Lithium, Total	3/30/20 13:30	3/31/20 10:47		1.015	0.0693	mg/L	0.01	0.02	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/26/20 13:06	3/27/20 10:51		1.015	0.000858	mg/L	0.0008	0.003	J
* Arsenic, Total	3/26/20 13:06	3/27/20 10:51		1.015	0.00786	mg/L	0.001	0.005	
* Barium, Total	3/26/20 13:06	3/27/20 10:51		1.015	0.0736	mg/L	0.002	0.01	
* Beryllium, Total	3/26/20 13:06	3/27/20 10:51		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	3/26/20 13:06	3/27/20 10:51		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	3/26/20 13:06	3/27/20 10:51		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	3/26/20 13:06	3/27/20 10:51		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	3/26/20 13:06	3/27/20 10:51		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	3/26/20 13:06	3/27/20 10:51		1.015	0.0271	mg/L	0.002	0.01	
* Selenium, Total	3/26/20 13:06	3/27/20 10:51		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	3/26/20 13:06	3/27/20 10:51		1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	3/23/20 08:34	3/24/20 10:38		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2540C	***Analyst: TJW***								
* Solids, Dissolved	3/19/20 17:25	3/20/20 15:00		1	318	mg/L		25	
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	3/20/20 16:51	3/20/20 16:51		1	17.4	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	3/20/20 12:45	3/20/20 12:45		1	0.223	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E	***Analyst: JCC***								
* Sulfate	3/20/20 11:17	3/20/20 11:17		10	158	mg/L	5.00	10	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	3/17/20 11:27	3/17/20 11:27			493.38	uS/cm			FA
pH	3/17/20 11:27	3/17/20 11:27			6.92	SU			FA
Temperature	3/17/20 11:27	3/17/20 11:27			15.34	C			FA
Turbidity	3/17/20 11:27	3/17/20 11:27			3.82	NTU			FA

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

Comments:

Reported: 4/14/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORAP
Sample Date: 3/17/20 11:30
Customer ID:
Delivery Date: 3/19/20 10:59

Description: Gorgas Ash Pond - MW-6S DUP

Laboratory ID Number: BA05413

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA05421	Lead, Total	mg/L	0.00000068	0.0001474	0.10	0.0981	0.102	0.1000	0.085 to 0.115	98.1	70 to 130	3.90	20
BA05421	Barium, Total	mg/L	0.00000739	0.0002	0.10	0.287	0.290	0.0928	0.085 to 0.115	92.0	70 to 130	1.04	20
BA05421	Cadmium, Total	mg/L	-0.00000022	0.0001474	0.10	0.0933	0.0992	0.101	0.085 to 0.115	93.3	70 to 130	6.13	20
BA05421	Selenium, Total	mg/L	0.0000250	0.00066	0.10	0.0990	0.101	0.106	0.085 to 0.115	99.0	70 to 130	2.00	20
BA05421	Beryllium, Total	mg/L	0.0000213	0.00088	0.10	0.0881	0.0923	0.0891	0.085 to 0.115	88.1	70 to 130	4.66	20
BA05421	Chromium, Total	mg/L	0.000204	0.00044	0.10	0.0960	0.102	0.102	0.085 to 0.115	96.0	70 to 130	6.06	20
BA05421	Mercury, Total by CVAA	mg/L	0.0000180	0.0005	0.004	0.00368	0.00369	0.00380	0.0034 to 0.0046	92.0	70 to 130	0.271	20
BA05421	Calcium, Total	mg/L	-0.0152	0.1518	5.00	49.1	49.3	5.04	4.25 to 5.75	102	70 to 130	0.407	20
BA05421	Cobalt, Total	mg/L	0.00000321	0.0001474	0.10	0.0926	0.0972	0.0995	0.085 to 0.115	92.6	70 to 130	4.85	20
BA05421	Molybdenum, Total	mg/L	0.0000144	0.0001474	0.10	0.101	0.104	0.0978	0.085 to 0.115	96.6	70 to 130	2.93	20
BA05421	Boron, Total	mg/L	0.00324	0.0650254	1.00	1.05	1.06	0.990	0.85 to 1.15	101	70 to 130	0.948	20
BA05421	Lithium, Total	mg/L	0.0000545	0.0154	0.20	0.240	0.240	0.196	0.17 to 0.23	105	70 to 130	0.00	20
BA05421	Antimony, Total	mg/L	0.000104	0.00066	0.10	0.0992	0.100	0.0938	0.085 to 0.115	97.0	70 to 130	0.803	20
BA05421	Thallium, Total	mg/L	-0.00000422	0.0001474	0.10	0.102	0.102	0.0992	0.085 to 0.115	102	70 to 130	0.00	20
BA05421	Arsenic, Total	mg/L	0.00000233	0.0001474	0.10	0.106	0.110	0.106	0.085 to 0.115	99.1	70 to 130	3.70	20

Comments:

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/17/20 11:30
Customer ID:
Delivery Date: 3/19/20 10:59

Description: Gorgas Ash Pond - MW-6S DUP

Laboratory ID Number: BA05413

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA05419	Solids, Dissolved	mg/L	0.0000	25			247	52.0	40 to 60			0.604	5
BA05420	Sulfate	mg/L	-0.470	0.50	20.0	22.8	4.81	18.9	18 to 22	89.7	80 to 120	1.03	20
BA05420	Chloride	mg/L	-0.0758	0.50	10.0	13.9	4.39	10.4	9 to 11	95.5	80 to 120	0.915	20
BA05420	Fluoride	mg/L	0.0224	0.05	2.50	2.76	0.114	2.63	2.25 to 2.75	106	80 to 120	5.41	20

Comments:

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-6D

Location Code: WMWGORAP
Collected: 3/17/20 12:40
Customer ID:
Submittal Date: 3/19/20 10:59

Laboratory ID Number: BA05414

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	3/30/20 13:30	3/31/20 10:50		1.015	1.17	mg/L	0.03	0.1	
* Calcium, Total	3/30/20 13:30	3/31/20 11:43		10.15	57.2	mg/L	1.015	5.075	
* Lithium, Total	3/30/20 13:30	3/31/20 10:50		1.015	0.292	mg/L	0.01	0.02	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/26/20 13:06	3/27/20 10:53		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	3/26/20 13:06	3/27/20 10:53		1.015	0.105	mg/L	0.001	0.005	
* Barium, Total	3/26/20 13:06	3/27/20 10:53		1.015	0.638	mg/L	0.002	0.01	
* Beryllium, Total	3/26/20 13:06	3/27/20 10:53		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	3/26/20 13:06	3/27/20 10:53		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	3/26/20 13:06	3/27/20 10:53		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	3/26/20 13:06	3/27/20 10:53		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	3/26/20 13:06	3/27/20 10:53		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	3/26/20 13:06	3/27/20 10:53		1.015	0.00959	mg/L	0.002	0.01	J
* Selenium, Total	3/26/20 13:06	3/27/20 10:53		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	3/26/20 13:06	3/27/20 10:53		1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	3/23/20 08:34	3/24/20 10:40		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2540C	***Analyst: TJW***								
* Solids, Dissolved	3/19/20 17:25	3/20/20 15:00		1	303	mg/L		25	
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	3/20/20 16:52	3/20/20 16:52		1	10.1	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	3/20/20 12:46	3/20/20 12:46		1	0.132	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E	***Analyst: JCC***								
* Sulfate	3/20/20 11:18	3/20/20 11:18		4	59.5	mg/L	2.00	4	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	3/17/20 12:35	3/17/20 12:35			496.35	uS/cm			FA
pH	3/17/20 12:35	3/17/20 12:35			7.39	SU			FA
Temperature	3/17/20 12:35	3/17/20 12:35			16.59	C			FA
Turbidity	3/17/20 12:35	3/17/20 12:35			1.28	NTU			FA

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

Comments:

Reported: 4/14/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORAP
Sample Date: 3/17/20 12:40
Customer ID:
Delivery Date: 3/19/20 10:59

Description: Gorgas Ash Pond - MW-6D

Laboratory ID Number: BA05414

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA05421	Arsenic, Total	mg/L	0.00000233	0.0001474	0.10	0.106	0.110	0.106	0.085 to 0.115	99.1	70 to 130	3.70	20
BA05421	Lead, Total	mg/L	0.00000068	0.0001474	0.10	0.0981	0.102	0.1000	0.085 to 0.115	98.1	70 to 130	3.90	20
BA05421	Barium, Total	mg/L	0.00000739	0.0002	0.10	0.287	0.290	0.0928	0.085 to 0.115	92.0	70 to 130	1.04	20
BA05421	Beryllium, Total	mg/L	0.0000213	0.00088	0.10	0.0881	0.0923	0.0891	0.085 to 0.115	88.1	70 to 130	4.66	20
BA05421	Chromium, Total	mg/L	0.000204	0.00044	0.10	0.0960	0.102	0.102	0.085 to 0.115	96.0	70 to 130	6.06	20
BA05421	Mercury, Total by CVAA	mg/L	0.0000180	0.0005	0.004	0.00368	0.00369	0.00380	0.0034 to 0.0046	92.0	70 to 130	0.271	20
BA05421	Cadmium, Total	mg/L	-0.00000022	0.0001474	0.10	0.0933	0.0992	0.101	0.085 to 0.115	93.3	70 to 130	6.13	20
BA05421	Selenium, Total	mg/L	0.0000250	0.00066	0.10	0.0990	0.101	0.106	0.085 to 0.115	99.0	70 to 130	2.00	20
BA05421	Boron, Total	mg/L	0.00324	0.0650254	1.00	1.05	1.06	0.990	0.85 to 1.15	101	70 to 130	0.948	20
BA05421	Lithium, Total	mg/L	0.0000545	0.0154	0.20	0.240	0.240	0.196	0.17 to 0.23	105	70 to 130	0.00	20
BA05421	Antimony, Total	mg/L	0.000104	0.00066	0.10	0.0992	0.100	0.0938	0.085 to 0.115	97.0	70 to 130	0.803	20
BA05421	Thallium, Total	mg/L	-0.00000422	0.0001474	0.10	0.102	0.102	0.0992	0.085 to 0.115	102	70 to 130	0.00	20
BA05421	Calcium, Total	mg/L	-0.0152	0.1518	5.00	49.1	49.3	5.04	4.25 to 5.75	102	70 to 130	0.407	20
BA05421	Cobalt, Total	mg/L	0.00000321	0.0001474	0.10	0.0926	0.0972	0.0995	0.085 to 0.115	92.6	70 to 130	4.85	20
BA05421	Molybdenum, Total	mg/L	0.0000144	0.0001474	0.10	0.101	0.104	0.0978	0.085 to 0.115	96.6	70 to 130	2.93	20

Comments:

Reported: 4/14/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/17/20 12:40
Customer ID:
Delivery Date: 3/19/20 10:59

Description: Gorgas Ash Pond - MW-6D

Laboratory ID Number: BA05414

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA05419	Solids, Dissolved	mg/L	0.0000	25			247	52.0	40 to 60			0.604	5
BA05420	Sulfate	mg/L	-0.470	0.50	20.0	22.8	4.81	18.9	18 to 22	89.7	80 to 120	1.03	20
BA05420	Chloride	mg/L	-0.0758	0.50	10.0	13.9	4.39	10.4	9 to 11	95.5	80 to 120	0.915	20
BA05420	Fluoride	mg/L	0.0224	0.05	2.50	2.76	0.114	2.63	2.25 to 2.75	106	80 to 120	5.41	20

Comments:

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-23H

Location Code: WMWGORAP
Collected: 3/17/20 13:53
Customer ID:
Submittal Date: 3/19/20 10:59

Laboratory ID Number: BA05415

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	3/30/20 13:30	3/31/20 10:53		1.015	0.0504	mg/L	0.03	0.1	J
* Calcium, Total	3/30/20 13:30	3/31/20 11:46		10.15	79.8	mg/L	1.015	5.075	
* Lithium, Total	3/30/20 13:30	3/31/20 10:53		1.015	0.0327	mg/L	0.01	0.02	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/26/20 13:06	3/27/20 10:56		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	3/26/20 13:06	3/27/20 10:56		1.015	0.0524	mg/L	0.001	0.005	
* Barium, Total	3/26/20 13:06	3/27/20 10:56		1.015	0.0143	mg/L	0.002	0.01	
* Beryllium, Total	3/26/20 13:06	3/27/20 10:56		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	3/26/20 13:06	3/27/20 10:56		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	3/26/20 13:06	3/27/20 10:56		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	3/26/20 13:06	3/27/20 10:56		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	3/26/20 13:06	3/27/20 10:56		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	3/26/20 13:06	3/27/20 10:56		1.015	Not Detected	mg/L	0.002	0.01	U
* Selenium, Total	3/26/20 13:06	3/27/20 10:56		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	3/26/20 13:06	3/27/20 10:56		1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	3/23/20 08:34	3/24/20 10:43		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2540C	***Analyst: TJW***								
* Solids, Dissolved	3/19/20 17:25	3/20/20 15:00		1	626	mg/L		50	
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	3/20/20 16:53	3/20/20 16:53		1	2.62	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	3/20/20 12:47	3/20/20 12:47		1	0.241	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E	***Analyst: JCC***								
* Sulfate	3/20/20 11:19	3/20/20 11:19		20	356	mg/L	10.00	20	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	3/17/20 13:49	3/17/20 13:49			827.10	uS/cm			FA
pH	3/17/20 13:49	3/17/20 13:49			5.95	SU			FA
Temperature	3/17/20 13:49	3/17/20 13:49			18.05	C			FA
Turbidity	3/17/20 13:49	3/17/20 13:49			1.71	NTU			FA

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

Comments:

Reported: 4/14/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORAP
Sample Date: 3/17/20 13:53
Customer ID:
Delivery Date: 3/19/20 10:59

Description: Gorgas Ash Pond - MW-23H

Laboratory ID Number: BA05415

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA05421	Arsenic, Total	mg/L	0.00000233	0.0001474	0.10	0.106	0.110	0.106	0.085 to 0.115	99.1	70 to 130	3.70	20
BA05421	Lead, Total	mg/L	0.00000068	0.0001474	0.10	0.0981	0.102	0.1000	0.085 to 0.115	98.1	70 to 130	3.90	20
BA05421	Barium, Total	mg/L	0.00000739	0.0002	0.10	0.287	0.290	0.0928	0.085 to 0.115	92.0	70 to 130	1.04	20
BA05421	Boron, Total	mg/L	0.00324	0.0650254	1.00	1.05	1.06	0.990	0.85 to 1.15	101	70 to 130	0.948	20
BA05421	Lithium, Total	mg/L	0.0000545	0.0154	0.20	0.240	0.240	0.196	0.17 to 0.23	105	70 to 130	0.00	20
BA05421	Antimony, Total	mg/L	0.000104	0.00066	0.10	0.0992	0.100	0.0938	0.085 to 0.115	97.0	70 to 130	0.803	20
BA05421	Thallium, Total	mg/L	-0.00000422	0.0001474	0.10	0.102	0.102	0.0992	0.085 to 0.115	102	70 to 130	0.00	20
BA05421	Cadmium, Total	mg/L	-0.00000022	0.0001474	0.10	0.0933	0.0992	0.101	0.085 to 0.115	93.3	70 to 130	6.13	20
BA05421	Selenium, Total	mg/L	0.0000250	0.00066	0.10	0.0990	0.101	0.106	0.085 to 0.115	99.0	70 to 130	2.00	20
BA05421	Calcium, Total	mg/L	-0.0152	0.1518	5.00	49.1	49.3	5.04	4.25 to 5.75	102	70 to 130	0.407	20
BA05421	Cobalt, Total	mg/L	0.00000321	0.0001474	0.10	0.0926	0.0972	0.0995	0.085 to 0.115	92.6	70 to 130	4.85	20
BA05421	Molybdenum, Total	mg/L	0.0000144	0.0001474	0.10	0.101	0.104	0.0978	0.085 to 0.115	96.6	70 to 130	2.93	20
BA05421	Beryllium, Total	mg/L	0.0000213	0.00088	0.10	0.0881	0.0923	0.0891	0.085 to 0.115	88.1	70 to 130	4.66	20
BA05421	Chromium, Total	mg/L	0.000204	0.00044	0.10	0.0960	0.102	0.102	0.085 to 0.115	96.0	70 to 130	6.06	20
BA05421	Mercury, Total by CVAA	mg/L	0.0000180	0.0005	0.004	0.00368	0.00369	0.00380	0.0034 to 0.0046	92.0	70 to 130	0.271	20

Comments:

Reported: 4/14/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/17/20 13:53
Customer ID:
Delivery Date: 3/19/20 10:59

Description: Gorgas Ash Pond - MW-23H

Laboratory ID Number: BA05415

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA05419	Solids, Dissolved	mg/L	0.0000	25			247	52.0	40 to 60			0.604	5
BA05420	Sulfate	mg/L	-0.470	0.50	20.0	22.8	4.81	18.9	18 to 22	89.7	80 to 120	1.03	20
BA05420	Chloride	mg/L	-0.0758	0.50	10.0	13.9	4.39	10.4	9 to 11	95.5	80 to 120	0.915	20
BA05420	Fluoride	mg/L	0.0224	0.05	2.50	2.76	0.114	2.63	2.25 to 2.75	106	80 to 120	5.41	20

Comments:

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-7

Location Code: WMWGORAP
Collected: 3/17/20 17:07
Customer ID:
Submittal Date: 3/19/20 10:59

Laboratory ID Number: BA05416

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	3/30/20 13:30	3/31/20 10:56		1.015	1.58	mg/L	0.03	0.1	
* Calcium, Total	3/30/20 13:30	3/31/20 10:56		1.015	13.5	mg/L	0.1	0.5	
* Lithium, Total	3/30/20 13:30	3/31/20 10:56		1.015	0.161	mg/L	0.01	0.02	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/26/20 13:06	3/27/20 10:59		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	3/26/20 13:06	3/27/20 10:59		1.015	0.285	mg/L	0.001	0.005	
* Barium, Total	3/26/20 13:06	3/27/20 10:59		1.015	0.174	mg/L	0.002	0.01	
* Beryllium, Total	3/26/20 13:06	3/27/20 10:59		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	3/26/20 13:06	3/27/20 10:59		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	3/26/20 13:06	3/27/20 10:59		1.015	0.00760	mg/L	0.002	0.01	J
* Cobalt, Total	3/26/20 13:06	3/27/20 10:59		1.015	0.00476	mg/L	0.002	0.005	J
* Lead, Total	3/26/20 13:06	3/27/20 10:59		1.015	0.00386	mg/L	0.001	0.005	J
* Molybdenum, Total	3/26/20 13:06	3/27/20 10:59		1.015	0.193	mg/L	0.002	0.01	
* Selenium, Total	3/26/20 13:06	3/27/20 10:59		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	3/26/20 13:06	3/27/20 10:59		1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	3/23/20 08:34	3/24/20 10:45		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2540C	***Analyst: TJW***								
* Solids, Dissolved	3/19/20 17:25	3/20/20 15:00		1	334	mg/L		25	
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	3/20/20 16:55	3/20/20 16:55		1	6.65	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	3/20/20 12:49	3/20/20 12:49		1	0.107	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E	***Analyst: JCC***								
* Sulfate	3/20/20 11:20	3/20/20 11:20		10	149	mg/L	5.00	10	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	3/17/20 17:04	3/17/20 17:04			524.28	uS/cm			FA
pH	3/17/20 17:04	3/17/20 17:04			7.72	SU			FA
Temperature	3/17/20 17:04	3/17/20 17:04			16.89	C			FA
Turbidity	3/17/20 17:04	3/17/20 17:04			48.91	NTU			FA

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

Comments:

Reported: 4/14/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORAP
Sample Date: 3/17/20 17:07
Customer ID:
Delivery Date: 3/19/20 10:59

Description: Gorgas Ash Pond - MW-7

Laboratory ID Number: BA05416

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA05421	Arsenic, Total	mg/L	0.00000233	0.0001474	0.10	0.106	0.110	0.106	0.085 to 0.115	99.1	70 to 130	3.70	20
BA05421	Lead, Total	mg/L	0.00000068	0.0001474	0.10	0.0981	0.102	0.1000	0.085 to 0.115	98.1	70 to 130	3.90	20
BA05421	Barium, Total	mg/L	0.00000739	0.0002	0.10	0.287	0.290	0.0928	0.085 to 0.115	92.0	70 to 130	1.04	20
BA05421	Beryllium, Total	mg/L	0.0000213	0.00088	0.10	0.0881	0.0923	0.0891	0.085 to 0.115	88.1	70 to 130	4.66	20
BA05421	Chromium, Total	mg/L	0.000204	0.00044	0.10	0.0960	0.102	0.102	0.085 to 0.115	96.0	70 to 130	6.06	20
BA05421	Mercury, Total by CVAA	mg/L	0.0000180	0.0005	0.004	0.00368	0.00369	0.00380	0.0034 to 0.0046	92.0	70 to 130	0.271	20
BA05421	Cadmium, Total	mg/L	-0.00000022	0.0001474	0.10	0.0933	0.0992	0.101	0.085 to 0.115	93.3	70 to 130	6.13	20
BA05421	Selenium, Total	mg/L	0.0000250	0.00066	0.10	0.0990	0.101	0.106	0.085 to 0.115	99.0	70 to 130	2.00	20
BA05421	Boron, Total	mg/L	0.00324	0.0650254	1.00	1.05	1.06	0.990	0.85 to 1.15	101	70 to 130	0.948	20
BA05421	Lithium, Total	mg/L	0.0000545	0.0154	0.20	0.240	0.240	0.196	0.17 to 0.23	105	70 to 130	0.00	20
BA05421	Antimony, Total	mg/L	0.000104	0.00066	0.10	0.0992	0.100	0.0938	0.085 to 0.115	97.0	70 to 130	0.803	20
BA05421	Thallium, Total	mg/L	-0.00000422	0.0001474	0.10	0.102	0.102	0.0992	0.085 to 0.115	102	70 to 130	0.00	20
BA05421	Calcium, Total	mg/L	-0.0152	0.1518	5.00	49.1	49.3	5.04	4.25 to 5.75	102	70 to 130	0.407	20
BA05421	Cobalt, Total	mg/L	0.00000321	0.0001474	0.10	0.0926	0.0972	0.0995	0.085 to 0.115	92.6	70 to 130	4.85	20
BA05421	Molybdenum, Total	mg/L	0.0000144	0.0001474	0.10	0.101	0.104	0.0978	0.085 to 0.115	96.6	70 to 130	2.93	20

Comments:

Reported: 4/14/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/17/20 17:07
Customer ID:
Delivery Date: 3/19/20 10:59

Description: Gorgas Ash Pond - MW-7

Laboratory ID Number: BA05416

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA05419	Solids, Dissolved	mg/L	0.0000	25			247	52.0	40 to 60			0.604	5
BA05420	Sulfate	mg/L	-0.470	0.50	20.0	22.8	4.81	18.9	18 to 22	89.7	80 to 120	1.03	20
BA05420	Chloride	mg/L	-0.0758	0.50	10.0	13.9	4.39	10.4	9 to 11	95.5	80 to 120	0.915	20
BA05420	Fluoride	mg/L	0.0224	0.05	2.50	2.76	0.114	2.63	2.25 to 2.75	106	80 to 120	5.41	20

Comments:

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-7 DIS

Location Code: WMWGORAP
Collected: 3/17/20 17:07
Customer ID:
Submittal Date: 3/19/20 10:59

Laboratory ID Number: BA05417

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Boron, Dissolved	3/30/20 11:30	3/31/20 09:30		1.015	1.60	mg/L	0.03	0.1	
* Calcium, Dissolved	3/30/20 11:30	3/31/20 09:30		1.015	12.8	mg/L	0.1	0.5	
* Lithium, Dissolved	3/30/20 11:30	3/31/20 09:30		1.015	0.155	mg/L	0.01	0.02	
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	3/26/20 12:41	3/27/20 13:49		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Dissolved	3/26/20 12:41	3/27/20 13:49		1.015	0.229	mg/L	0.001	0.005	
* Barium, Dissolved	3/26/20 12:41	3/27/20 13:49		1.015	0.0578	mg/L	0.002	0.01	
* Beryllium, Dissolved	3/26/20 12:41	3/27/20 13:49		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Dissolved	3/26/20 12:41	3/27/20 13:49		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Dissolved	3/26/20 12:41	3/27/20 13:49		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Dissolved	3/26/20 12:41	3/27/20 13:49		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Dissolved	3/26/20 12:41	3/27/20 13:49		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Dissolved	3/26/20 12:41	3/27/20 13:49		1.015	0.182	mg/L	0.002	0.01	
* Selenium, Dissolved	3/26/20 12:41	3/27/20 13:49		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Dissolved	3/26/20 12:41	3/27/20 13:49		1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Dissolved by CVAA	3/23/20 08:34	3/24/20 11:32		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2540C	***Analyst: TJW***								
* Solids, Dissolved	3/19/20 17:25	3/20/20 15:00		1	328	mg/L		25	
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	3/20/20 16:56	3/20/20 16:56		1	6.99	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	3/20/20 12:50	3/20/20 12:50		1	0.107	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E	***Analyst: JCC***								
* Sulfate	3/20/20 11:21	3/20/20 11:21		10	141	mg/L	5.00	10	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	3/17/20 17:04	3/17/20 17:04			524.28	uS/cm			FA
pH	3/17/20 17:04	3/17/20 17:04			7.72	SU			FA
Temperature	3/17/20 17:04	3/17/20 17:04			16.89	C			FA
Turbidity	3/17/20 17:04	3/17/20 17:04			48.91	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 4/13/2020

Reported: 4/14/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORAP
Sample Date: 3/17/20 17:07
Customer ID:
Delivery Date: 3/19/20 10:59

Description: Gorgas Ash Pond - MW-7 DIS

Laboratory ID Number: BA05417

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA05871	Molybdenum, Dissolved	mg/L	0.00000193	0.0001474	0.10	0.0973	0.0971	0.0989	0.085 to 0.115	97.3	70 to 130	0.206	20
BA05871	Lithium, Dissolved	mg/L	0.0000749	0.0154	0.20	0.311	0.314	0.197	0.17 to 0.23	109	70 to 130	0.960	20
BA05871	Beryllium, Dissolved	mg/L	0.0000303	0.00088	0.10	0.0923	0.0914	0.0918	0.085 to 0.115	92.3	70 to 130	0.980	20
BA05871	Thallium, Dissolved	mg/L	-0.00000316	0.0001474	0.10	0.100	0.0998	0.102	0.085 to 0.115	100	70 to 130	0.200	20
BA05871	Calcium, Dissolved	mg/L	-0.0187	0.1518	5.00	33.0	33.1	5.11	4.25 to 5.75	102	70 to 130	0.303	20
BA05871	Cobalt, Dissolved	mg/L	-0.00000152	0.0001474	0.10	0.0948	0.0961	0.1000	0.085 to 0.115	94.8	70 to 130	1.36	20
BA05871	Boron, Dissolved	mg/L	0.00203	0.0650254	1.00	1.04	1.06	1.01	0.85 to 1.15	104	70 to 130	1.90	20
BA05871	Lead, Dissolved	mg/L	0.00000458	0.0001474	0.10	0.0981	0.0984	0.0998	0.085 to 0.115	98.1	70 to 130	0.305	20
BA05871	Cadmium, Dissolved	mg/L	0.0000112	0.0001474	0.10	0.0959	0.0981	0.0992	0.085 to 0.115	95.9	70 to 130	2.27	20
BA05871	Chromium, Dissolved	mg/L	-0.00000597	0.00044	0.10	0.0985	0.0991	0.102	0.085 to 0.115	98.5	70 to 130	0.607	20
BA05871	Antimony, Dissolved	mg/L	0.000215	0.00066	0.10	0.0911	0.0919	0.0907	0.085 to 0.115	91.1	70 to 130	0.874	20
BA05871	Selenium, Dissolved	mg/L	0.0000619	0.00066	0.10	0.101	0.103	0.102	0.085 to 0.115	101	70 to 130	1.96	20
BA05417	Mercury, Dissolved by	mg/L	0.0000195	0.0005	0.004	0.00361	0.00360	0.00376	0.0034 to 0.0046	90.2	70 to 130	0.277	20
BA05871	Arsenic, Dissolved	mg/L	-0.00000717	0.0001474	0.10	0.102	0.104	0.103	0.085 to 0.115	102	70 to 130	1.94	20
BA05871	Barium, Dissolved	mg/L	0.0000512	0.0002	0.10	0.883	0.889	0.0932	0.085 to 0.115	86.0	70 to 130	0.677	20

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 4/13/2020

Reported: 4/14/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/17/20 17:07
Customer ID:
Delivery Date: 3/19/20 10:59

Description: Gorgas Ash Pond - MW-7 DIS

Laboratory ID Number: BA05417

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA05419	Solids, Dissolved	mg/L	0.0000	25			247	52.0	40 to 60			0.604	5
BA05420	Sulfate	mg/L	-0.470	0.50	20.0	22.8	4.81	18.9	18 to 22	89.7	80 to 120	1.03	20
BA05420	Chloride	mg/L	-0.0758	0.50	10.0	13.9	4.39	10.4	9 to 11	95.5	80 to 120	0.915	20
BA05420	Fluoride	mg/L	0.0224	0.05	2.50	2.76	0.114	2.63	2.25 to 2.75	106	80 to 120	5.41	20

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 4/13/2020

Reported: 4/14/2020
Version: 3.1
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-41HD

Location Code: WMWGORAP
Collected: 3/18/20 09:40
Customer ID:
Submittal Date: 3/19/20 10:59

Laboratory ID Number: BA05418

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	3/30/20 13:30	3/31/20 10:59		1.015	1.45	mg/L	0.03	0.1	
* Calcium, Total	3/30/20 13:30	3/31/20 11:49		10.15	56.6	mg/L	1.015	5.075	
* Lithium, Total	3/30/20 13:30	3/31/20 10:59		1.015	0.311	mg/L	0.01	0.02	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/26/20 13:06	3/27/20 11:01		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	3/26/20 13:06	3/27/20 11:01		1.015	Not Detected	mg/L	0.001	0.005	U
* Barium, Total	3/26/20 13:06	3/27/20 11:01		1.015	0.0393	mg/L	0.002	0.01	
* Beryllium, Total	3/26/20 13:06	3/27/20 11:01		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	3/26/20 13:06	3/27/20 11:01		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	3/26/20 13:06	3/27/20 11:01		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	3/26/20 13:06	3/27/20 11:01		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	3/26/20 13:06	3/27/20 11:01		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	3/26/20 13:06	3/27/20 11:01		1.015	0.0158	mg/L	0.002	0.01	
* Selenium, Total	3/26/20 13:06	3/27/20 11:01		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	3/26/20 13:06	3/27/20 11:01		1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	3/23/20 08:34	3/24/20 10:47		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2540C	***Analyst: TJW***								
* Solids, Dissolved	3/19/20 17:25	3/20/20 15:00		1	309	mg/L		25	
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	3/20/20 16:57	3/20/20 16:57		1	6.02	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	3/20/20 12:51	3/20/20 12:51		1	0.165	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E	***Analyst: JCC***								
* Sulfate	3/20/20 11:23	3/20/20 11:23		8	122	mg/L	4.00	8	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	3/18/20 09:36	3/18/20 09:36			476.11	uS/cm			FA
pH	3/18/20 09:36	3/18/20 09:36			7.20	SU			FA
Temperature	3/18/20 09:36	3/18/20 09:36			16.15	C			FA
Turbidity	3/18/20 09:36	3/18/20 09:36			2.45	NTU			FA

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

Comments:

Reported: 4/14/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORAP
Sample Date: 3/18/20 09:40
Customer ID:
Delivery Date: 3/19/20 10:59

Description: Gorgas Ash Pond - MW-41HD

Laboratory ID Number: BA05418

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA05421	Arsenic, Total	mg/L	0.00000233	0.0001474	0.10	0.106	0.110	0.106	0.085 to 0.115	99.1	70 to 130	3.70	20
BA05421	Barium, Total	mg/L	0.00000739	0.0002	0.10	0.287	0.290	0.0928	0.085 to 0.115	92.0	70 to 130	1.04	20
BA05421	Lead, Total	mg/L	0.00000068	0.0001474	0.10	0.0981	0.102	0.1000	0.085 to 0.115	98.1	70 to 130	3.90	20
BA05421	Cadmium, Total	mg/L	-0.00000022	0.0001474	0.10	0.0933	0.0992	0.101	0.085 to 0.115	93.3	70 to 130	6.13	20
BA05421	Selenium, Total	mg/L	0.0000250	0.00066	0.10	0.0990	0.101	0.106	0.085 to 0.115	99.0	70 to 130	2.00	20
BA05421	Beryllium, Total	mg/L	0.0000213	0.00088	0.10	0.0881	0.0923	0.0891	0.085 to 0.115	88.1	70 to 130	4.66	20
BA05421	Chromium, Total	mg/L	0.000204	0.00044	0.10	0.0960	0.102	0.102	0.085 to 0.115	96.0	70 to 130	6.06	20
BA05421	Mercury, Total by CVAA	mg/L	0.0000180	0.0005	0.004	0.00368	0.00369	0.00380	0.0034 to 0.0046	92.0	70 to 130	0.271	20
BA05421	Boron, Total	mg/L	0.00324	0.0650254	1.00	1.05	1.06	0.990	0.85 to 1.15	101	70 to 130	0.948	20
BA05421	Lithium, Total	mg/L	0.0000545	0.0154	0.20	0.240	0.240	0.196	0.17 to 0.23	105	70 to 130	0.00	20
BA05421	Antimony, Total	mg/L	0.000104	0.00066	0.10	0.0992	0.100	0.0938	0.085 to 0.115	97.0	70 to 130	0.803	20
BA05421	Thallium, Total	mg/L	-0.00000422	0.0001474	0.10	0.102	0.102	0.0992	0.085 to 0.115	102	70 to 130	0.00	20
BA05421	Calcium, Total	mg/L	-0.0152	0.1518	5.00	49.1	49.3	5.04	4.25 to 5.75	102	70 to 130	0.407	20
BA05421	Cobalt, Total	mg/L	0.00000321	0.0001474	0.10	0.0926	0.0972	0.0995	0.085 to 0.115	92.6	70 to 130	4.85	20
BA05421	Molybdenum, Total	mg/L	0.0000144	0.0001474	0.10	0.101	0.104	0.0978	0.085 to 0.115	96.6	70 to 130	2.93	20

Comments:

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/18/20 09:40
Customer ID:
Delivery Date: 3/19/20 10:59

Description: Gorgas Ash Pond - MW-41HD

Laboratory ID Number: BA05418

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA05419	Solids, Dissolved	mg/L	0.0000	25			247	52.0	40 to 60			0.604	5
BA05420	Chloride	mg/L	-0.0758	0.50	10.0	13.9	4.39	10.4	9 to 11	95.5	80 to 120	0.915	20
BA05420	Sulfate	mg/L	-0.470	0.50	20.0	22.8	4.81	18.9	18 to 22	89.7	80 to 120	1.03	20
BA05420	Fluoride	mg/L	0.0224	0.05	2.50	2.76	0.114	2.63	2.25 to 2.75	106	80 to 120	5.41	20

Comments:

Reported: 4/14/2020
Version: 3.1
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-24H

Location Code: WMWGORAP
Collected: 3/18/20 10:35
Customer ID:
Submittal Date: 3/19/20 10:59

Laboratory ID Number: BA05419

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	3/30/20 13:30	3/31/20 11:02		1.015	0.0811	mg/L	0.03	0.1	J
* Calcium, Total	3/30/20 13:30	3/31/20 11:51		10.15	44.0	mg/L	1.015	5.075	
* Lithium, Total	3/30/20 13:30	3/31/20 11:02		1.015	0.0264	mg/L	0.01	0.02	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/26/20 13:06	3/27/20 11:04		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	3/26/20 13:06	3/27/20 11:04		1.015	Not Detected	mg/L	0.001	0.005	U
* Barium, Total	3/26/20 13:06	3/27/20 11:04		1.015	0.964	mg/L	0.002	0.01	
* Beryllium, Total	3/26/20 13:06	3/27/20 11:04		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	3/26/20 13:06	3/27/20 11:04		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	3/26/20 13:06	3/27/20 11:04		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	3/26/20 13:06	3/27/20 11:04		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	3/26/20 13:06	3/27/20 11:04		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	3/26/20 13:06	3/27/20 11:04		1.015	Not Detected	mg/L	0.002	0.01	U
* Selenium, Total	3/26/20 13:06	3/27/20 11:04		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	3/26/20 13:06	3/27/20 11:04		1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	3/23/20 08:34	3/24/20 10:50		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2540C	***Analyst: TJW***								
* Solids, Dissolved	3/19/20 17:25	3/20/20 15:00		1	250	mg/L		25	
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	3/20/20 16:58	3/20/20 16:58		1	3.50	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	3/20/20 12:52	3/20/20 12:52		1	0.206	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E	***Analyst: JCC***								
* Sulfate	3/20/20 11:24	3/20/20 11:24		1	12.2	mg/L	0.50	1	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	3/18/20 10:32	3/18/20 10:32			421.28	uS/cm			FA
pH	3/18/20 10:32	3/18/20 10:32			7.00	SU			FA
Temperature	3/18/20 10:32	3/18/20 10:32			17.68	C			FA
Turbidity	3/18/20 10:32	3/18/20 10:32			4.51	NTU			FA

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

Comments:

Reported: 4/14/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORAP
Sample Date: 3/18/20 10:35
Customer ID:
Delivery Date: 3/19/20 10:59

Description: Gorgas Ash Pond - MW-24H

Laboratory ID Number: BA05419

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA05421	Lead, Total	mg/L	0.00000068	0.0001474	0.10	0.0981	0.102	0.1000	0.085 to 0.115	98.1	70 to 130	3.90	20
BA05421	Arsenic, Total	mg/L	0.00000233	0.0001474	0.10	0.106	0.110	0.106	0.085 to 0.115	99.1	70 to 130	3.70	20
BA05421	Barium, Total	mg/L	0.00000739	0.0002	0.10	0.287	0.290	0.0928	0.085 to 0.115	92.0	70 to 130	1.04	20
BA05421	Boron, Total	mg/L	0.00324	0.0650254	1.00	1.05	1.06	0.990	0.85 to 1.15	101	70 to 130	0.948	20
BA05421	Lithium, Total	mg/L	0.0000545	0.0154	0.20	0.240	0.240	0.196	0.17 to 0.23	105	70 to 130	0.00	20
BA05421	Antimony, Total	mg/L	0.000104	0.00066	0.10	0.0992	0.100	0.0938	0.085 to 0.115	97.0	70 to 130	0.803	20
BA05421	Thallium, Total	mg/L	-0.00000422	0.0001474	0.10	0.102	0.102	0.0992	0.085 to 0.115	102	70 to 130	0.00	20
BA05421	Beryllium, Total	mg/L	0.0000213	0.00088	0.10	0.0881	0.0923	0.0891	0.085 to 0.115	88.1	70 to 130	4.66	20
BA05421	Chromium, Total	mg/L	0.000204	0.00044	0.10	0.0960	0.102	0.102	0.085 to 0.115	96.0	70 to 130	6.06	20
BA05421	Mercury, Total by CVAA	mg/L	0.0000180	0.0005	0.004	0.00368	0.00369	0.00380	0.0034 to 0.0046	92.0	70 to 130	0.271	20
BA05421	Cadmium, Total	mg/L	-0.00000022	0.0001474	0.10	0.0933	0.0992	0.101	0.085 to 0.115	93.3	70 to 130	6.13	20
BA05421	Selenium, Total	mg/L	0.0000250	0.00066	0.10	0.0990	0.101	0.106	0.085 to 0.115	99.0	70 to 130	2.00	20
BA05421	Calcium, Total	mg/L	-0.0152	0.1518	5.00	49.1	49.3	5.04	4.25 to 5.75	102	70 to 130	0.407	20
BA05421	Cobalt, Total	mg/L	0.00000321	0.0001474	0.10	0.0926	0.0972	0.0995	0.085 to 0.115	92.6	70 to 130	4.85	20
BA05421	Molybdenum, Total	mg/L	0.0000144	0.0001474	0.10	0.101	0.104	0.0978	0.085 to 0.115	96.6	70 to 130	2.93	20

Comments:

Reported: 4/14/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/18/20 10:35
Customer ID:
Delivery Date: 3/19/20 10:59

Description: Gorgas Ash Pond - MW-24H

Laboratory ID Number: BA05419

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA05419	Solids, Dissolved	mg/L	0.0000	25			247	52.0	40 to 60			0.604	5
BA05420	Chloride	mg/L	-0.0758	0.50	10.0	13.9	4.39	10.4	9 to 11	95.5	80 to 120	0.915	20
BA05420	Sulfate	mg/L	-0.470	0.50	20.0	22.8	4.81	18.9	18 to 22	89.7	80 to 120	1.03	20
BA05420	Fluoride	mg/L	0.0224	0.05	2.50	2.76	0.114	2.63	2.25 to 2.75	106	80 to 120	5.41	20

Comments:

Reported: 4/14/2020
Version: 3.1
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-8

Location Code: WMWGORAP
Collected: 3/18/20 11:43
Customer ID:
Submittal Date: 3/19/20 10:59

Laboratory ID Number: BA05420

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	3/30/20 13:30	3/31/20 11:05		1.015	Not Detected	mg/L	0.03	0.1	U
* Calcium, Total	3/30/20 13:30	3/31/20 11:05		1.015	4.51	mg/L	0.1	0.5	
* Lithium, Total	3/30/20 13:30	3/31/20 11:05		1.015	Not Detected	mg/L	0.01	0.02	U
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/26/20 13:06	3/27/20 11:06		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	3/26/20 13:06	3/27/20 11:06		1.015	Not Detected	mg/L	0.001	0.005	U
* Barium, Total	3/26/20 13:06	3/27/20 11:06		1.015	0.00507	mg/L	0.002	0.01	J
* Beryllium, Total	3/26/20 13:06	3/27/20 11:06		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	3/26/20 13:06	3/27/20 11:06		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	3/26/20 13:06	3/27/20 11:06		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	3/26/20 13:06	3/27/20 11:06		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	3/26/20 13:06	3/27/20 11:06		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	3/26/20 13:06	3/27/20 11:06		1.015	Not Detected	mg/L	0.002	0.01	U
* Selenium, Total	3/26/20 13:06	3/27/20 11:06		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	3/26/20 13:06	3/27/20 11:06		1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	3/23/20 08:34	3/24/20 10:52		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2540C	***Analyst: TJW***								
* Solids, Dissolved	3/19/20 17:25	3/20/20 15:00		1	90.7	mg/L		25	
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	3/20/20 17:01	3/20/20 17:01		1	4.35	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	3/20/20 12:53	3/20/20 12:53		1	0.108	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E	***Analyst: JCC***								
* Sulfate	3/20/20 11:25	3/20/20 11:25		1	4.86	mg/L	0.50	1	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	3/18/20 11:39	3/18/20 11:39			130.76	uS/cm			FA
pH	3/18/20 11:39	3/18/20 11:39			5.81	SU			FA
Temperature	3/18/20 11:39	3/18/20 11:39			19.51	C			FA
Turbidity	3/18/20 11:39	3/18/20 11:39			2.11	NTU			FA

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

Comments:

Reported: 4/14/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORAP
Sample Date: 3/18/20 11:43
Customer ID:
Delivery Date: 3/19/20 10:59

Description: Gorgas Ash Pond - MW-8

Laboratory ID Number: BA05420

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA05421	Arsenic, Total	mg/L	0.00000233	0.0001474	0.10	0.106	0.110	0.106	0.085 to 0.115	99.1	70 to 130	3.70	20
BA05421	Barium, Total	mg/L	0.00000739	0.0002	0.10	0.287	0.290	0.0928	0.085 to 0.115	92.0	70 to 130	1.04	20
BA05421	Lead, Total	mg/L	0.00000068	0.0001474	0.10	0.0981	0.102	0.1000	0.085 to 0.115	98.1	70 to 130	3.90	20
BA05421	Cadmium, Total	mg/L	-0.00000022	0.0001474	0.10	0.0933	0.0992	0.101	0.085 to 0.115	93.3	70 to 130	6.13	20
BA05421	Selenium, Total	mg/L	0.0000250	0.00066	0.10	0.0990	0.101	0.106	0.085 to 0.115	99.0	70 to 130	2.00	20
BA05421	Boron, Total	mg/L	0.00324	0.0650254	1.00	1.05	1.06	0.990	0.85 to 1.15	101	70 to 130	0.948	20
BA05421	Lithium, Total	mg/L	0.0000545	0.0154	0.20	0.240	0.240	0.196	0.17 to 0.23	105	70 to 130	0.00	20
BA05421	Antimony, Total	mg/L	0.000104	0.00066	0.10	0.0992	0.100	0.0938	0.085 to 0.115	97.0	70 to 130	0.803	20
BA05421	Thallium, Total	mg/L	-0.00000422	0.0001474	0.10	0.102	0.102	0.0992	0.085 to 0.115	102	70 to 130	0.00	20
BA05421	Beryllium, Total	mg/L	0.0000213	0.00088	0.10	0.0881	0.0923	0.0891	0.085 to 0.115	88.1	70 to 130	4.66	20
BA05421	Chromium, Total	mg/L	0.000204	0.00044	0.10	0.0960	0.102	0.102	0.085 to 0.115	96.0	70 to 130	6.06	20
BA05421	Mercury, Total by CVAA	mg/L	0.0000180	0.0005	0.004	0.00368	0.00369	0.00380	0.0034 to 0.0046	92.0	70 to 130	0.271	20
BA05421	Calcium, Total	mg/L	-0.0152	0.1518	5.00	49.1	49.3	5.04	4.25 to 5.75	102	70 to 130	0.407	20
BA05421	Cobalt, Total	mg/L	0.00000321	0.0001474	0.10	0.0926	0.0972	0.0995	0.085 to 0.115	92.6	70 to 130	4.85	20
BA05421	Molybdenum, Total	mg/L	0.0000144	0.0001474	0.10	0.101	0.104	0.0978	0.085 to 0.115	96.6	70 to 130	2.93	20

Comments:

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/18/20 11:43
Customer ID:
Delivery Date: 3/19/20 10:59

Description: Gorgas Ash Pond - MW-8

Laboratory ID Number: BA05420

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA05420	Sulfate	mg/L	-0.470	0.50	20.0	22.8	4.81	18.9	18 to 22	89.7	80 to 120	1.03	20
BA05419	Solids, Dissolved	mg/L	0.0000	25			247	52.0	40 to 60			0.604	5
BA05420	Chloride	mg/L	-0.0758	0.50	10.0	13.9	4.39	10.4	9 to 11	95.5	80 to 120	0.915	20
BA05420	Fluoride	mg/L	0.0224	0.05	2.50	2.76	0.114	2.63	2.25 to 2.75	106	80 to 120	5.41	20

Comments:

Reported: 4/14/2020
Version: 3.1
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-12

Location Code: WMWGORAP
Collected: 3/18/20 14:20
Customer ID:
Submittal Date: 3/19/20 10:59

Laboratory ID Number: BA05421

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	3/30/20 13:30	3/31/20 11:08		1.015	0.0449	mg/L	0.03	0.1	J
* Calcium, Total	3/30/20 13:30	3/31/20 11:54		10.15	44.0	mg/L	1.015	5.075	
* Lithium, Total	3/30/20 13:30	3/31/20 11:08		1.015	0.0297	mg/L	0.01	0.02	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/26/20 13:06	3/27/20 11:09		1.015	0.00220	mg/L	0.0008	0.003	J
* Arsenic, Total	3/26/20 13:06	3/27/20 11:09		1.015	0.00693	mg/L	0.001	0.005	
* Barium, Total	3/26/20 13:06	3/27/20 11:09		1.015	0.195	mg/L	0.002	0.01	
* Beryllium, Total	3/26/20 13:06	3/27/20 11:09		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	3/26/20 13:06	3/27/20 11:09		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	3/26/20 13:06	3/27/20 11:09		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	3/26/20 13:06	3/27/20 11:09		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	3/26/20 13:06	3/27/20 11:09		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	3/26/20 13:06	3/27/20 11:09		1.015	0.00444	mg/L	0.002	0.01	J
* Selenium, Total	3/26/20 13:06	3/27/20 11:09		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	3/26/20 13:06	3/27/20 11:09		1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	3/23/20 08:34	3/24/20 10:54		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2540C	***Analyst: TJW***								
* Solids, Dissolved	3/20/20 11:00	3/23/20 16:04		1	236	mg/L		25	
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	3/20/20 17:28	3/20/20 17:28		1	4.22	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	3/20/20 13:08	3/20/20 13:08		1	0.122	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E	***Analyst: JCC***								
* Sulfate	3/20/20 11:37	3/20/20 11:37		1	20.8	mg/L	0.50	1	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	3/18/20 14:18	3/18/20 14:18			362.88	uS/cm			FA
pH	3/18/20 14:18	3/18/20 14:18			7.56	SU			FA
Temperature	3/18/20 14:18	3/18/20 14:18			18.51	C			FA
Turbidity	3/18/20 14:18	3/18/20 14:18			2.05	NTU			FA

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

Comments:

Reported: 4/14/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORAP
Sample Date: 3/18/20 14:20
Customer ID:
Delivery Date: 3/19/20 10:59

Description: Gorgas Ash Pond - MW-12

Laboratory ID Number: BA05421

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA05421	Lead, Total	mg/L	0.00000068	0.0001474	0.10	0.0981	0.102	0.1000	0.085 to 0.115	98.1	70 to 130	3.90	20
BA05421	Barium, Total	mg/L	0.00000739	0.0002	0.10	0.287	0.290	0.0928	0.085 to 0.115	92.0	70 to 130	1.04	20
BA05421	Arsenic, Total	mg/L	0.00000233	0.0001474	0.10	0.106	0.110	0.106	0.085 to 0.115	99.1	70 to 130	3.70	20
BA05421	Cadmium, Total	mg/L	-0.00000022	0.0001474	0.10	0.0933	0.0992	0.101	0.085 to 0.115	93.3	70 to 130	6.13	20
BA05421	Selenium, Total	mg/L	0.0000250	0.00066	0.10	0.0990	0.101	0.106	0.085 to 0.115	99.0	70 to 130	2.00	20
BA05421	Beryllium, Total	mg/L	0.0000213	0.00088	0.10	0.0881	0.0923	0.0891	0.085 to 0.115	88.1	70 to 130	4.66	20
BA05421	Chromium, Total	mg/L	0.000204	0.00044	0.10	0.0960	0.102	0.102	0.085 to 0.115	96.0	70 to 130	6.06	20
BA05421	Mercury, Total by CVAA	mg/L	0.0000180	0.0005	0.004	0.00368	0.00369	0.00380	0.0034 to 0.0046	92.0	70 to 130	0.271	20
BA05421	Boron, Total	mg/L	0.00324	0.0650254	1.00	1.05	1.06	0.990	0.85 to 1.15	101	70 to 130	0.948	20
BA05421	Lithium, Total	mg/L	0.0000545	0.0154	0.20	0.240	0.240	0.196	0.17 to 0.23	105	70 to 130	0.00	20
BA05421	Antimony, Total	mg/L	0.000104	0.00066	0.10	0.0992	0.100	0.0938	0.085 to 0.115	97.0	70 to 130	0.803	20
BA05421	Thallium, Total	mg/L	-0.00000422	0.0001474	0.10	0.102	0.102	0.0992	0.085 to 0.115	102	70 to 130	0.00	20
BA05421	Calcium, Total	mg/L	-0.0152	0.1518	5.00	49.1	49.3	5.04	4.25 to 5.75	102	70 to 130	0.407	20
BA05421	Cobalt, Total	mg/L	0.00000321	0.0001474	0.10	0.0926	0.0972	0.0995	0.085 to 0.115	92.6	70 to 130	4.85	20
BA05421	Molybdenum, Total	mg/L	0.0000144	0.0001474	0.10	0.101	0.104	0.0978	0.085 to 0.115	96.6	70 to 130	2.93	20

Comments:

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/18/20 14:20
Customer ID:
Delivery Date: 3/19/20 10:59

Description: Gorgas Ash Pond - MW-12

Laboratory ID Number: BA05421

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA05424	Sulfate	mg/L	-0.237	0.50	80.0	129	49.7	19.0	18 to 22	98.2	80 to 120	1.40	20
BA05424	Fluoride	mg/L	0.0192	0.05	2.50	2.75	0.147	2.64	2.25 to 2.75	104	80 to 120	2.02	20
BA05424	Chloride	mg/L	-0.213	0.50	40.0	77.3	39.9	10.3	9 to 11	90.0	80 to 120	3.45	20
BA05424	Solids, Dissolved	mg/L	2.00	25			327	55.0	40 to 60			0.153	5

Comments:

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-18

Location Code: WMWGORAP
Collected: 3/18/20 16:32
Customer ID:
Submittal Date: 3/19/20 10:59

Laboratory ID Number: BA05422

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	3/30/20 13:30	3/31/20 11:29		1.015	0.492	mg/L	0.03	0.1	
* Calcium, Total	3/30/20 13:30	3/31/20 12:53		10.15	90.9	mg/L	1.015	5.075	
* Lithium, Total	3/30/20 13:30	3/31/20 11:29		1.015	0.116	mg/L	0.01	0.02	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/26/20 13:06	3/27/20 11:30		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	3/26/20 13:06	3/27/20 11:30		1.015	0.00583	mg/L	0.001	0.005	
* Barium, Total	3/26/20 13:06	3/27/20 11:30		1.015	0.0587	mg/L	0.002	0.01	
* Beryllium, Total	3/26/20 13:06	3/27/20 11:30		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	3/26/20 13:06	3/27/20 11:30		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	3/26/20 13:06	3/27/20 11:30		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	3/26/20 13:06	3/27/20 11:30		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	3/26/20 13:06	3/27/20 11:30		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	3/26/20 13:06	3/27/20 11:30		1.015	0.00927	mg/L	0.002	0.01	J
* Selenium, Total	3/26/20 13:06	3/27/20 11:30		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	3/26/20 13:06	3/27/20 11:30		1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	3/23/20 08:34	3/24/20 11:11		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2540C	***Analyst: TJW***								
* Solids, Dissolved	3/20/20 11:00	3/23/20 16:04		1	618	mg/L		50	
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	3/20/20 17:29	3/20/20 17:29		1	6.68	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	3/20/20 13:09	3/20/20 13:09		1	0.437	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E	***Analyst: JCC***								
* Sulfate	3/20/20 11:39	3/20/20 11:39		16	216	mg/L	8.00	16	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	3/18/20 16:29	3/18/20 16:29			922.27	uS/cm			FA
pH	3/18/20 16:29	3/18/20 16:29			6.99	SU			FA
Temperature	3/18/20 16:29	3/18/20 16:29			16.71	C			FA
Turbidity	3/18/20 16:29	3/18/20 16:29			9.22	NTU			FA

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

Comments:

Reported: 4/14/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORAP
Sample Date: 3/18/20 16:32
Customer ID:
Delivery Date: 3/19/20 10:59

Description: Gorgas Ash Pond - MW-18

Laboratory ID Number: BA05422

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA05852	Barium, Total	mg/L	0.0000153	0.0002	0.10	0.631	0.626	0.0955	0.085 to 0.115	104	70 to 130	0.796	20
BA05424	Mercury, Total by CVAA	mg/L	0.0000165	0.0005	0.004	0.00383	0.00380	0.00384	0.0034 to 0.0046	95.8	70 to 130	0.786	20
BA05852	Arsenic, Total	mg/L	-0.00000532	0.0001474	0.10	0.105	0.101	0.103	0.085 to 0.115	104	70 to 130	3.88	20
BA05852	Calcium, Total	mg/L	-0.0154	0.1518	5.00	32.7	32.9	5.21	4.25 to 5.75	98.0	70 to 130	0.610	20
BA05852	Beryllium, Total	mg/L	0.0000309	0.00088	0.10	0.0923	0.0935	0.0916	0.085 to 0.115	92.3	70 to 130	1.29	20
BA05852	Chromium, Total	mg/L	0.0000214	0.00044	0.10	0.102	0.0984	0.102	0.085 to 0.115	102	70 to 130	3.59	20
BA05852	Lithium, Total	mg/L	0.000116	0.0154	0.20	0.276	0.275	0.198	0.17 to 0.23	112	70 to 130	0.363	20
BA05852	Thallium, Total	mg/L	-0.00000172	0.0001474	0.10	0.103	0.101	0.105	0.085 to 0.115	103	70 to 130	1.96	20
BA05852	Boron, Total	mg/L	0.00282	0.0650254	1.00	1.03	1.03	1.01	0.85 to 1.15	103	70 to 130	0.00	20
BA05852	Cobalt, Total	mg/L	-0.00000297	0.0001474	0.10	0.0995	0.0954	0.0997	0.085 to 0.115	99.5	70 to 130	4.21	20
BA05852	Molybdenum, Total	mg/L	0.00000378	0.0001474	0.10	0.101	0.0984	0.0988	0.085 to 0.115	98.5	70 to 130	2.61	20
BA05852	Lead, Total	mg/L	0.00000303	0.0001474	0.10	0.101	0.0980	0.102	0.085 to 0.115	101	70 to 130	3.02	20
BA05852	Antimony, Total	mg/L	0.000225	0.00066	0.10	0.0984	0.0980	0.0956	0.085 to 0.115	98.4	70 to 130	0.407	20
BA05852	Cadmium, Total	mg/L	-0.00000379	0.0001474	0.10	0.1000	0.0979	0.103	0.085 to 0.115	100	70 to 130	2.12	20
BA05852	Selenium, Total	mg/L	0.0000712	0.00066	0.10	0.0998	0.0977	0.102	0.085 to 0.115	99.8	70 to 130	2.13	20

Comments:

Reported: 4/14/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/18/20 16:32
Customer ID:
Delivery Date: 3/19/20 10:59

Description: Gorgas Ash Pond - MW-18

Laboratory ID Number: BA05422

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA05424	Fluoride	mg/L	0.0192	0.05	2.50	2.75	0.147	2.64	2.25 to 2.75	104	80 to 120	2.02	20
BA05424	Sulfate	mg/L	-0.237	0.50	80.0	129	49.7	19.0	18 to 22	98.2	80 to 120	1.40	20
BA05424	Chloride	mg/L	-0.213	0.50	40.0	77.3	39.9	10.3	9 to 11	90.0	80 to 120	3.45	20
BA05424	Solids, Dissolved	mg/L	2.00	25			327	55.0	40 to 60			0.153	5

Comments:

Reported: 4/14/2020
Version: 3.1
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond Field Blank

Location Code: WMWGORAPFB
Collected: 3/18/20 13:45
Customer ID:
Submittal Date: 3/19/20 10:59

Laboratory ID Number: BA05423

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	3/30/20 13:30	3/31/20 11:32		1.015	Not Detected	mg/L	0.03	0.1	U
* Calcium, Total	3/30/20 13:30	3/31/20 11:32		1.015	Not Detected	mg/L	0.1	0.5	U
* Lithium, Total	3/30/20 13:30	3/31/20 11:32		1.015	Not Detected	mg/L	0.01	0.02	U
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/26/20 13:06	3/27/20 11:33		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	3/26/20 13:06	3/27/20 11:33		1.015	Not Detected	mg/L	0.001	0.005	U
* Barium, Total	3/26/20 13:06	3/27/20 11:33		1.015	Not Detected	mg/L	0.002	0.01	U
* Beryllium, Total	3/26/20 13:06	3/27/20 11:33		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	3/26/20 13:06	3/27/20 11:33		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	3/26/20 13:06	3/27/20 11:33		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	3/26/20 13:06	3/27/20 11:33		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	3/26/20 13:06	3/27/20 11:33		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	3/26/20 13:06	3/27/20 11:33		1.015	Not Detected	mg/L	0.002	0.01	U
* Selenium, Total	3/26/20 13:06	3/27/20 11:33		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	3/26/20 13:06	3/27/20 11:33		1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	3/23/20 08:34	3/24/20 11:13		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2540C	***Analyst: TJW***								
* Solids, Dissolved	3/20/20 11:00	3/23/20 16:04		1	Not Detected	mg/L		25	U
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	3/20/20 17:31	3/20/20 17:31		1	Not Detected	mg/L	0.50	1	U
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	3/20/20 13:10	3/20/20 13:10		1	Not Detected	mg/L	0.06	0.1	U
Analytical Method: SM4500SO4 E	***Analyst: JCC***								
* Sulfate	3/20/20 11:40	3/20/20 11:40		1	Not Detected	mg/L	0.50	1	U

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

Comments:

Reported: 4/14/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORAPFB
Sample Date: 3/18/20 13:45
Customer ID:
Delivery Date: 3/19/20 10:59

Description: Gorgas Ash Pond Field Blank

Laboratory ID Number: BA05423

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA05852	Barium, Total	mg/L	0.0000153	0.0002	0.10	0.631	0.626	0.0955	0.085 to 0.115	104	70 to 130	0.796	20
BA05424	Mercury, Total by CVAA	mg/L	0.0000165	0.0005	0.004	0.00383	0.00380	0.00384	0.0034 to 0.0046	95.8	70 to 130	0.786	20
BA05852	Calcium, Total	mg/L	-0.0154	0.1518	5.00	32.7	32.9	5.21	4.25 to 5.75	98.0	70 to 130	0.610	20
BA05852	Beryllium, Total	mg/L	0.0000309	0.00088	0.10	0.0923	0.0935	0.0916	0.085 to 0.115	92.3	70 to 130	1.29	20
BA05852	Chromium, Total	mg/L	0.0000214	0.00044	0.10	0.102	0.0984	0.102	0.085 to 0.115	102	70 to 130	3.59	20
BA05852	Lithium, Total	mg/L	0.000116	0.0154	0.20	0.276	0.275	0.198	0.17 to 0.23	112	70 to 130	0.363	20
BA05852	Thallium, Total	mg/L	-0.00000172	0.0001474	0.10	0.103	0.101	0.105	0.085 to 0.115	103	70 to 130	1.96	20
BA05852	Boron, Total	mg/L	0.00282	0.0650254	1.00	1.03	1.03	1.01	0.85 to 1.15	103	70 to 130	0.00	20
BA05852	Cobalt, Total	mg/L	-0.00000297	0.0001474	0.10	0.0995	0.0954	0.0997	0.085 to 0.115	99.5	70 to 130	4.21	20
BA05852	Molybdenum, Total	mg/L	0.00000378	0.0001474	0.10	0.101	0.0984	0.0988	0.085 to 0.115	98.5	70 to 130	2.61	20
BA05852	Lead, Total	mg/L	0.00000303	0.0001474	0.10	0.101	0.0980	0.102	0.085 to 0.115	101	70 to 130	3.02	20
BA05852	Antimony, Total	mg/L	0.000225	0.00066	0.10	0.0984	0.0980	0.0956	0.085 to 0.115	98.4	70 to 130	0.407	20
BA05852	Cadmium, Total	mg/L	-0.00000379	0.0001474	0.10	0.1000	0.0979	0.103	0.085 to 0.115	100	70 to 130	2.12	20
BA05852	Selenium, Total	mg/L	0.0000712	0.00066	0.10	0.0998	0.0977	0.102	0.085 to 0.115	99.8	70 to 130	2.13	20
BA05852	Arsenic, Total	mg/L	-0.00000532	0.0001474	0.10	0.105	0.101	0.103	0.085 to 0.115	104	70 to 130	3.88	20

Comments:

Reported: 4/14/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Customer Account: WMWGORAPFB
Sample Date: 3/18/20 13:45
Customer ID:
Delivery Date: 3/19/20 10:59

Description: Gorgas Ash Pond Field Blank

Laboratory ID Number: BA05423

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA05424	Fluoride	mg/L	0.0192	0.05	2.50	2.75	0.147	2.64	2.25 to 2.75	104	80 to 120	2.02	20
BA05424	Sulfate	mg/L	-0.237	0.50	80.0	129	49.7	19.0	18 to 22	98.2	80 to 120	1.40	20
BA05424	Chloride	mg/L	-0.213	0.50	40.0	77.3	39.9	10.3	9 to 11	90.0	80 to 120	3.45	20
BA05424	Solids, Dissolved	mg/L	2.00	25			327	55.0	40 to 60			0.153	5

Comments:

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-31H

Location Code: WMWGORAP
Collected: 3/18/20 14:35
Customer ID:
Submittal Date: 3/19/20 10:59

Laboratory ID Number: BA05424

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	3/30/20 13:30	3/31/20 11:35		1.015	Not Detected	mg/L	0.03	0.1	U
* Calcium, Total	3/30/20 13:30	3/31/20 11:35		1.015	6.06	mg/L	0.1	0.5	
* Lithium, Total	3/30/20 13:30	3/31/20 11:35		1.015	0.0347	mg/L	0.01	0.02	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/26/20 13:06	3/27/20 11:35		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	3/26/20 13:06	3/27/20 11:35		1.015	0.00120	mg/L	0.001	0.005	J
* Barium, Total	3/26/20 13:06	3/27/20 11:35		1.015	0.106	mg/L	0.002	0.01	
* Beryllium, Total	3/26/20 13:06	3/27/20 11:35		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	3/26/20 13:06	3/27/20 11:35		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	3/26/20 13:06	3/27/20 11:35		1.015	0.00264	mg/L	0.002	0.01	J
* Cobalt, Total	3/26/20 13:06	3/27/20 11:35		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	3/26/20 13:06	3/27/20 11:35		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	3/26/20 13:06	3/27/20 11:35		1.015	0.0102	mg/L	0.002	0.01	
* Selenium, Total	3/26/20 13:06	3/27/20 11:35		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	3/26/20 13:06	3/27/20 11:35		1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	3/23/20 08:34	3/24/20 11:16		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2540C	***Analyst: TJW***								
* Solids, Dissolved	3/20/20 11:00	3/23/20 16:04		1	326	mg/L		25	
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	3/20/20 17:32	3/20/20 17:32		4	41.3	mg/L	2.00	4	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	3/20/20 13:12	3/20/20 13:12		1	0.150	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E	***Analyst: JCC***								
* Sulfate	3/20/20 11:41	3/20/20 11:41		3	50.4	mg/L	1.50	3	
Analytical Method: Field Measurements	***Analyst: AWG***								
Conductivity	3/18/20 14:31	3/18/20 14:31			537.97	uS/cm			FA
pH	3/18/20 14:31	3/18/20 14:31			8.73	SU			FA
Temperature	3/18/20 14:31	3/18/20 14:31			18.22	C			FA
Turbidity	3/18/20 14:31	3/18/20 14:31			8.45	NTU			FA

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

Comments:

Reported: 4/14/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORAP
Sample Date: 3/18/20 14:35
Customer ID:
Delivery Date: 3/19/20 10:59

Description: Gorgas Ash Pond - MW-31H

Laboratory ID Number: BA05424

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA05852	Barium, Total	mg/L	0.0000153	0.0002	0.10	0.631	0.626	0.0955	0.085 to 0.115	104	70 to 130	0.796	20
BA05424	Mercury, Total by CVAA	mg/L	0.0000165	0.0005	0.004	0.00383	0.00380	0.00384	0.0034 to 0.0046	95.8	70 to 130	0.786	20
BA05852	Arsenic, Total	mg/L	-0.00000532	0.0001474	0.10	0.105	0.101	0.103	0.085 to 0.115	104	70 to 130	3.88	20
BA05852	Calcium, Total	mg/L	-0.0154	0.1518	5.00	32.7	32.9	5.21	4.25 to 5.75	98.0	70 to 130	0.610	20
BA05852	Molybdenum, Total	mg/L	0.00000378	0.0001474	0.10	0.101	0.0984	0.0988	0.085 to 0.115	98.5	70 to 130	2.61	20
BA05852	Lead, Total	mg/L	0.00000303	0.0001474	0.10	0.101	0.0980	0.102	0.085 to 0.115	101	70 to 130	3.02	20
BA05852	Antimony, Total	mg/L	0.000225	0.00066	0.10	0.0984	0.0980	0.0956	0.085 to 0.115	98.4	70 to 130	0.407	20
BA05852	Beryllium, Total	mg/L	0.0000309	0.00088	0.10	0.0923	0.0935	0.0916	0.085 to 0.115	92.3	70 to 130	1.29	20
BA05852	Chromium, Total	mg/L	0.0000214	0.00044	0.10	0.102	0.0984	0.102	0.085 to 0.115	102	70 to 130	3.59	20
BA05852	Lithium, Total	mg/L	0.000116	0.0154	0.20	0.276	0.275	0.198	0.17 to 0.23	112	70 to 130	0.363	20
BA05852	Thallium, Total	mg/L	-0.00000172	0.0001474	0.10	0.103	0.101	0.105	0.085 to 0.115	103	70 to 130	1.96	20
BA05852	Boron, Total	mg/L	0.00282	0.0650254	1.00	1.03	1.03	1.01	0.85 to 1.15	103	70 to 130	0.00	20
BA05852	Cobalt, Total	mg/L	-0.00000297	0.0001474	0.10	0.0995	0.0954	0.0997	0.085 to 0.115	99.5	70 to 130	4.21	20
BA05852	Cadmium, Total	mg/L	-0.00000379	0.0001474	0.10	0.1000	0.0979	0.103	0.085 to 0.115	100	70 to 130	2.12	20
BA05852	Selenium, Total	mg/L	0.0000712	0.00066	0.10	0.0998	0.0977	0.102	0.085 to 0.115	99.8	70 to 130	2.13	20

Comments:

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/18/20 14:35
Customer ID:
Delivery Date: 3/19/20 10:59

Description: Gorgas Ash Pond - MW-31H

Laboratory ID Number: BA05424

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA05424	Sulfate	mg/L	-0.237	0.50	80.0	129	49.7	19.0	18 to 22	98.2	80 to 120	1.40	20
BA05424	Fluoride	mg/L	0.0192	0.05	2.50	2.75	0.147	2.64	2.25 to 2.75	104	80 to 120	2.02	20
BA05424	Chloride	mg/L	-0.213	0.50	40.0	77.3	39.9	10.3	9 to 11	90.0	80 to 120	3.45	20
BA05424	Solids, Dissolved	mg/L	2.00	25			327	55.0	40 to 60			0.153	5

Comments:

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-9V

Location Code: WMWGORAP
Collected: 3/23/20 16:05
Customer ID:
Submittal Date: 3/26/20 11:12

Laboratory ID Number: BA05846

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	3/30/20 13:30	3/31/20 11:38		1.015	0.0316	mg/L	0.03	0.1	J
* Calcium, Total	3/30/20 13:30	3/31/20 12:56		10.15	42.9	mg/L	1.015	5.075	
* Lithium, Total	3/30/20 13:30	3/31/20 11:38		1.015	0.0309	mg/L	0.01	0.02	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/26/20 13:06	3/27/20 11:38		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	3/26/20 13:06	3/27/20 11:38		1.015	Not Detected	mg/L	0.001	0.005	U
* Barium, Total	3/26/20 13:06	3/27/20 11:38		1.015	0.215	mg/L	0.002	0.01	
* Beryllium, Total	3/26/20 13:06	3/27/20 11:38		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	3/26/20 13:06	3/27/20 11:38		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	3/26/20 13:06	3/27/20 11:38		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	3/26/20 13:06	3/27/20 11:38		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	3/26/20 13:06	3/27/20 11:38		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	3/26/20 13:06	3/27/20 11:38		1.015	Not Detected	mg/L	0.002	0.01	U
* Selenium, Total	3/26/20 13:06	3/27/20 11:38		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	3/26/20 13:06	3/27/20 11:38		1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 245.1	***Analyst: GAS***								
* Mercury, Total by CVAA	3/31/20 10:03	4/1/20 11:04		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2540C	***Analyst: TJW***								
* Solids, Dissolved	3/27/20 10:30	3/31/20 12:14		1	268	mg/L		25	
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	3/30/20 10:01	3/30/20 10:01		1	5.13	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	3/30/20 12:26	3/30/20 12:26		1	0.187	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E	***Analyst: JCC***								
* Sulfate	4/1/20 09:46	4/1/20 09:46		1	18.7	mg/L	0.50	1	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	3/23/20 16:02	3/23/20 16:02			413.93	uS/cm			FA
pH	3/23/20 16:02	3/23/20 16:02			6.97	SU			FA
Temperature	3/23/20 16:02	3/23/20 16:02			17.90	C			FA
Turbidity	3/23/20 16:02	3/23/20 16:02			1.21	NTU			FA

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

Comments:

Reported: 4/14/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORAP
Sample Date: 3/23/20 16:05
Customer ID:
Delivery Date: 3/26/20 11:12

Description: Gorgas Ash Pond - MW-9V

Laboratory ID Number: BA05846

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA05852	Arsenic, Total	mg/L	-0.00000532	0.0001474	0.10	0.105	0.101	0.103	0.085 to 0.115	104	70 to 130	3.88	20
BA05852	Calcium, Total	mg/L	-0.0154	0.1518	5.00	32.7	32.9	5.21	4.25 to 5.75	98.0	70 to 130	0.610	20
BA05852	Barium, Total	mg/L	0.0000153	0.0002	0.10	0.631	0.626	0.0955	0.085 to 0.115	104	70 to 130	0.796	20
BA05855	Mercury, Total by CVAA	mg/L	-0.0000411	0.0005	0.004	0.00390	0.00398	0.00422	0.0034 to 0.0046	97.5	70 to 130	2.03	20
BA05852	Boron, Total	mg/L	0.00282	0.0650254	1.00	1.03	1.03	1.01	0.85 to 1.15	103	70 to 130	0.00	20
BA05852	Cobalt, Total	mg/L	-0.00000297	0.0001474	0.10	0.0995	0.0954	0.0997	0.085 to 0.115	99.5	70 to 130	4.21	20
BA05852	Molybdenum, Total	mg/L	0.00000378	0.0001474	0.10	0.101	0.0984	0.0988	0.085 to 0.115	98.5	70 to 130	2.61	20
BA05852	Lead, Total	mg/L	0.00000303	0.0001474	0.10	0.101	0.0980	0.102	0.085 to 0.115	101	70 to 130	3.02	20
BA05852	Antimony, Total	mg/L	0.000225	0.00066	0.10	0.0984	0.0980	0.0956	0.085 to 0.115	98.4	70 to 130	0.407	20
BA05852	Cadmium, Total	mg/L	-0.00000379	0.0001474	0.10	0.1000	0.0979	0.103	0.085 to 0.115	100	70 to 130	2.12	20
BA05852	Selenium, Total	mg/L	0.0000712	0.00066	0.10	0.0998	0.0977	0.102	0.085 to 0.115	99.8	70 to 130	2.13	20
BA05852	Beryllium, Total	mg/L	0.0000309	0.00088	0.10	0.0923	0.0935	0.0916	0.085 to 0.115	92.3	70 to 130	1.29	20
BA05852	Chromium, Total	mg/L	0.0000214	0.00044	0.10	0.102	0.0984	0.102	0.085 to 0.115	102	70 to 130	3.59	20
BA05852	Lithium, Total	mg/L	0.000116	0.0154	0.20	0.276	0.275	0.198	0.17 to 0.23	112	70 to 130	0.363	20
BA05852	Thallium, Total	mg/L	-0.00000172	0.0001474	0.10	0.103	0.101	0.105	0.085 to 0.115	103	70 to 130	1.96	20

Comments:

Reported: 4/14/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/23/20 16:05
Customer ID:
Delivery Date: 3/26/20 11:12

Description: Gorgas Ash Pond - MW-9V

Laboratory ID Number: BA05846

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA05855	Sulfate	mg/L	-0.119	0.50	1000	2120	1000	19.2	18 to 22	107	80 to 120	4.88	20
BA05853	Solids, Dissolved	mg/L	2.00	25			362	54.0	40 to 60			0.275	5
BA05855	Chloride	mg/L	0.047	0.50	2000	3070	961	10.4	9 to 11	104	80 to 120	2.06	20
BA05855	Fluoride	mg/L	0.0191	0.05	2.50	3.10	0.478	2.57	2.25 to 2.75	104	80 to 120	3.29	20

Comments:

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-42H

Location Code: WMWGORAP
Collected: 3/24/20 08:50
Customer ID:
Submittal Date: 3/26/20 11:12

Laboratory ID Number: BA05847

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	3/30/20 13:30	3/31/20 11:41		1.015	Not Detected	mg/L	0.03	0.1	U
* Calcium, Total	3/30/20 13:30	3/31/20 12:59		10.15	149	mg/L	1.015	5.075	
* Lithium, Total	3/30/20 13:30	3/31/20 11:41		1.015	0.0346	mg/L	0.01	0.02	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/26/20 13:06	3/27/20 11:41		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	3/26/20 13:06	3/27/20 11:41		1.015	0.00944	mg/L	0.001	0.005	
* Barium, Total	3/26/20 13:06	3/27/20 11:41		1.015	0.0253	mg/L	0.002	0.01	
* Beryllium, Total	3/26/20 13:06	3/27/20 11:41		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	3/26/20 13:06	3/27/20 11:41		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	3/26/20 13:06	3/27/20 11:41		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	3/26/20 13:06	3/27/20 11:41		1.015	0.00218	mg/L	0.002	0.005	J
* Lead, Total	3/26/20 13:06	3/27/20 11:41		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	3/26/20 13:06	3/27/20 11:41		1.015	Not Detected	mg/L	0.002	0.01	U
* Selenium, Total	3/26/20 13:06	3/27/20 11:41		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	3/26/20 13:06	3/27/20 11:41		1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 245.1	***Analyst: GAS***								
* Mercury, Total by CVAA	3/31/20 10:03	4/1/20 11:07		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2540C	***Analyst: TJW***								
* Solids, Dissolved	3/27/20 10:30	3/31/20 12:14		1	850	mg/L		50	
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	3/30/20 10:02	3/30/20 10:02		1	3.35	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	3/30/20 12:28	3/30/20 12:28		1	0.130	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E	***Analyst: JCC***								
* Sulfate	4/1/20 09:57	4/1/20 09:57		25	449	mg/L	12.50	25	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	3/24/20 08:46	3/24/20 08:46			1089.07	uS/cm			FA
pH	3/24/20 08:46	3/24/20 08:46			6.28	SU			FA
Temperature	3/24/20 08:46	3/24/20 08:46			17.52	C			FA
Turbidity	3/24/20 08:46	3/24/20 08:46			2.13	NTU			FA

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

Comments:

Reported: 4/14/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORAP
Sample Date: 3/24/20 08:50
Customer ID:
Delivery Date: 3/26/20 11:12

Description: Gorgas Ash Pond - MW-42H

Laboratory ID Number: BA05847

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA05852	Calcium, Total	mg/L	-0.0154	0.1518	5.00	32.7	32.9	5.21	4.25 to 5.75	98.0	70 to 130	0.610	20
BA05852	Arsenic, Total	mg/L	-0.00000532	0.0001474	0.10	0.105	0.101	0.103	0.085 to 0.115	104	70 to 130	3.88	20
BA05852	Boron, Total	mg/L	0.00282	0.0650254	1.00	1.03	1.03	1.01	0.85 to 1.15	103	70 to 130	0.00	20
BA05852	Cobalt, Total	mg/L	-0.00000297	0.0001474	0.10	0.0995	0.0954	0.0997	0.085 to 0.115	99.5	70 to 130	4.21	20
BA05852	Barium, Total	mg/L	0.0000153	0.0002	0.10	0.631	0.626	0.0955	0.085 to 0.115	104	70 to 130	0.796	20
BA05855	Mercury, Total by CVAA	mg/L	-0.0000411	0.0005	0.004	0.00390	0.00398	0.00422	0.0034 to 0.0046	97.5	70 to 130	2.03	20
BA05852	Beryllium, Total	mg/L	0.0000309	0.00088	0.10	0.0923	0.0935	0.0916	0.085 to 0.115	92.3	70 to 130	1.29	20
BA05852	Chromium, Total	mg/L	0.0000214	0.00044	0.10	0.102	0.0984	0.102	0.085 to 0.115	102	70 to 130	3.59	20
BA05852	Lithium, Total	mg/L	0.000116	0.0154	0.20	0.276	0.275	0.198	0.17 to 0.23	112	70 to 130	0.363	20
BA05852	Thallium, Total	mg/L	-0.00000172	0.0001474	0.10	0.103	0.101	0.105	0.085 to 0.115	103	70 to 130	1.96	20
BA05852	Molybdenum, Total	mg/L	0.00000378	0.0001474	0.10	0.101	0.0984	0.0988	0.085 to 0.115	98.5	70 to 130	2.61	20
BA05852	Lead, Total	mg/L	0.00000303	0.0001474	0.10	0.101	0.0980	0.102	0.085 to 0.115	101	70 to 130	3.02	20
BA05852	Antimony, Total	mg/L	0.000225	0.00066	0.10	0.0984	0.0980	0.0956	0.085 to 0.115	98.4	70 to 130	0.407	20
BA05852	Cadmium, Total	mg/L	-0.00000379	0.0001474	0.10	0.1000	0.0979	0.103	0.085 to 0.115	100	70 to 130	2.12	20
BA05852	Selenium, Total	mg/L	0.0000712	0.00066	0.10	0.0998	0.0977	0.102	0.085 to 0.115	99.8	70 to 130	2.13	20

Comments:

Reported: 4/14/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/24/20 08:50
Customer ID:
Delivery Date: 3/26/20 11:12

Description: Gorgas Ash Pond - MW-42H

Laboratory ID Number: BA05847

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA05855	Sulfate	mg/L	-0.119	0.50	1000	2120	1000	19.2	18 to 22	107	80 to 120	4.88	20
BA05853	Solids, Dissolved	mg/L	2.00	25			362	54.0	40 to 60			0.275	5
BA05855	Chloride	mg/L	0.047	0.50	2000	3070	961	10.4	9 to 11	104	80 to 120	2.06	20
BA05855	Fluoride	mg/L	0.0191	0.05	2.50	3.10	0.478	2.57	2.25 to 2.75	104	80 to 120	3.29	20

Comments:

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-42H DUP

Location Code: WMWGORAP
Collected: 3/24/20 08:50
Customer ID:
Submittal Date: 3/26/20 11:12

Laboratory ID Number: BA05848

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	3/30/20 13:30	3/31/20 11:44		1.015	Not Detected	mg/L	0.03	0.1	U
* Calcium, Total	3/30/20 13:30	3/31/20 13:01		10.15	146	mg/L	1.015	5.075	
* Lithium, Total	3/30/20 13:30	3/31/20 11:44		1.015	0.0346	mg/L	0.01	0.02	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/26/20 13:06	3/27/20 11:43		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	3/26/20 13:06	3/27/20 11:43		1.015	0.00947	mg/L	0.001	0.005	
* Barium, Total	3/26/20 13:06	3/27/20 11:43		1.015	0.0253	mg/L	0.002	0.01	
* Beryllium, Total	3/26/20 13:06	3/27/20 11:43		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	3/26/20 13:06	3/27/20 11:43		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	3/26/20 13:06	3/27/20 11:43		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	3/26/20 13:06	3/27/20 11:43		1.015	0.00216	mg/L	0.002	0.005	J
* Lead, Total	3/26/20 13:06	3/27/20 11:43		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	3/26/20 13:06	3/27/20 11:43		1.015	Not Detected	mg/L	0.002	0.01	U
* Selenium, Total	3/26/20 13:06	3/27/20 11:43		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	3/26/20 13:06	3/27/20 11:43		1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 245.1	***Analyst: GAS***								
* Mercury, Total by CVAA	3/31/20 10:03	4/1/20 11:09		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2540C	***Analyst: TJW***								
* Solids, Dissolved	3/27/20 10:30	3/31/20 12:14		1	848	mg/L		50	
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	3/30/20 10:03	3/30/20 10:03		1	3.41	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	3/30/20 12:29	3/30/20 12:29		1	0.127	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E	***Analyst: JCC***								
* Sulfate	4/1/20 09:58	4/1/20 09:58		25	436	mg/L	12.50	25	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	3/24/20 08:46	3/24/20 08:46			1089.07	uS/cm			FA
pH	3/24/20 08:46	3/24/20 08:46			6.28	SU			FA
Temperature	3/24/20 08:46	3/24/20 08:46			17.52	C			FA
Turbidity	3/24/20 08:46	3/24/20 08:46			2.13	NTU			FA

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

Comments:

Reported: 4/14/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORAP
Sample Date: 3/24/20 08:50
Customer ID:
Delivery Date: 3/26/20 11:12

Description: Gorgas Ash Pond - MW-42H DUP

Laboratory ID Number: BA05848

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA05852	Calcium, Total	mg/L	-0.0154	0.1518	5.00	32.7	32.9	5.21	4.25 to 5.75	98.0	70 to 130	0.610	20
BA05852	Arsenic, Total	mg/L	-0.00000532	0.0001474	0.10	0.105	0.101	0.103	0.085 to 0.115	104	70 to 130	3.88	20
BA05852	Boron, Total	mg/L	0.00282	0.0650254	1.00	1.03	1.03	1.01	0.85 to 1.15	103	70 to 130	0.00	20
BA05852	Cobalt, Total	mg/L	-0.00000297	0.0001474	0.10	0.0995	0.0954	0.0997	0.085 to 0.115	99.5	70 to 130	4.21	20
BA05852	Molybdenum, Total	mg/L	0.00000378	0.0001474	0.10	0.101	0.0984	0.0988	0.085 to 0.115	98.5	70 to 130	2.61	20
BA05852	Lead, Total	mg/L	0.00000303	0.0001474	0.10	0.101	0.0980	0.102	0.085 to 0.115	101	70 to 130	3.02	20
BA05852	Antimony, Total	mg/L	0.000225	0.00066	0.10	0.0984	0.0980	0.0956	0.085 to 0.115	98.4	70 to 130	0.407	20
BA05852	Beryllium, Total	mg/L	0.0000309	0.00088	0.10	0.0923	0.0935	0.0916	0.085 to 0.115	92.3	70 to 130	1.29	20
BA05852	Chromium, Total	mg/L	0.0000214	0.00044	0.10	0.102	0.0984	0.102	0.085 to 0.115	102	70 to 130	3.59	20
BA05852	Lithium, Total	mg/L	0.000116	0.0154	0.20	0.276	0.275	0.198	0.17 to 0.23	112	70 to 130	0.363	20
BA05852	Thallium, Total	mg/L	-0.00000172	0.0001474	0.10	0.103	0.101	0.105	0.085 to 0.115	103	70 to 130	1.96	20
BA05852	Cadmium, Total	mg/L	-0.00000379	0.0001474	0.10	0.1000	0.0979	0.103	0.085 to 0.115	100	70 to 130	2.12	20
BA05852	Selenium, Total	mg/L	0.0000712	0.00066	0.10	0.0998	0.0977	0.102	0.085 to 0.115	99.8	70 to 130	2.13	20
BA05852	Barium, Total	mg/L	0.0000153	0.0002	0.10	0.631	0.626	0.0955	0.085 to 0.115	104	70 to 130	0.796	20
BA05855	Mercury, Total by CVAA	mg/L	-0.0000411	0.0005	0.004	0.00390	0.00398	0.00422	0.0034 to 0.0046	97.5	70 to 130	2.03	20

Comments:

Reported: 4/14/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/24/20 08:50
Customer ID:
Delivery Date: 3/26/20 11:12

Description: Gorgas Ash Pond - MW-42H DUP

Laboratory ID Number: BA05848

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA05855	Sulfate	mg/L	-0.119	0.50	1000	2120	1000	19.2	18 to 22	107	80 to 120	4.88	20
BA05853	Solids, Dissolved	mg/L	2.00	25			362	54.0	40 to 60			0.275	5
BA05855	Chloride	mg/L	0.047	0.50	2000	3070	961	10.4	9 to 11	104	80 to 120	2.06	20
BA05855	Fluoride	mg/L	0.0191	0.05	2.50	3.10	0.478	2.57	2.25 to 2.75	104	80 to 120	3.29	20

Comments:

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-38H

Location Code: WMWGORAP
Collected: 3/24/20 10:55
Customer ID:
Submittal Date: 3/26/20 11:12

Laboratory ID Number: BA05849

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	3/30/20 13:30	3/31/20 11:47		1.015	0.0468	mg/L	0.03	0.1	J
* Calcium, Total	3/30/20 13:30	3/31/20 11:47		1.015	9.33	mg/L	0.1	0.5	
* Lithium, Total	3/30/20 13:30	3/31/20 11:47		1.015	0.0632	mg/L	0.01	0.02	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/26/20 13:06	3/27/20 11:46		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	3/26/20 13:06	3/27/20 11:46		1.015	0.00302	mg/L	0.001	0.005	J
* Barium, Total	3/26/20 13:06	3/27/20 11:46		1.015	0.253	mg/L	0.002	0.01	
* Beryllium, Total	3/26/20 13:06	3/27/20 11:46		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	3/26/20 13:06	3/27/20 11:46		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	3/26/20 13:06	3/27/20 11:46		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	3/26/20 13:06	3/27/20 11:46		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	3/26/20 13:06	3/27/20 11:46		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	3/26/20 13:06	3/27/20 11:46		1.015	0.00445	mg/L	0.002	0.01	J
* Selenium, Total	3/26/20 13:06	3/27/20 11:46		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	3/26/20 13:06	3/27/20 11:46		1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 245.1	***Analyst: GAS***								
* Mercury, Total by CVAA	3/31/20 10:03	4/1/20 11:11		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2540C	***Analyst: TJW***								
* Solids, Dissolved	3/27/20 10:30	3/31/20 12:14		1	335	mg/L		25	
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	3/30/20 10:04	3/30/20 10:04		1	12.6	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	3/30/20 12:30	3/30/20 12:30		1	0.291	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E	***Analyst: JCC***								
* Sulfate	4/1/20 09:49	4/1/20 09:49		1	16.7	mg/L	0.50	1	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	3/24/20 10:50	3/24/20 10:50			550.85	uS/cm			FA
pH	3/24/20 10:50	3/24/20 10:50			7.99	SU			FA
Temperature	3/24/20 10:50	3/24/20 10:50			18.41	C			FA
Turbidity	3/24/20 10:50	3/24/20 10:50			7.24	NTU			FA

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

Comments:

Reported: 4/14/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORAP
Sample Date: 3/24/20 10:55
Customer ID:
Delivery Date: 3/26/20 11:12

Description: Gorgas Ash Pond - MW-38H

Laboratory ID Number: BA05849

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA05852	Calcium, Total	mg/L	-0.0154	0.1518	5.00	32.7	32.9	5.21	4.25 to 5.75	98.0	70 to 130	0.610	20
BA05852	Arsenic, Total	mg/L	-0.00000532	0.0001474	0.10	0.105	0.101	0.103	0.085 to 0.115	104	70 to 130	3.88	20
BA05852	Barium, Total	mg/L	0.0000153	0.0002	0.10	0.631	0.626	0.0955	0.085 to 0.115	104	70 to 130	0.796	20
BA05855	Mercury, Total by CVAA	mg/L	-0.0000411	0.0005	0.004	0.00390	0.00398	0.00422	0.0034 to 0.0046	97.5	70 to 130	2.03	20
BA05852	Boron, Total	mg/L	0.00282	0.0650254	1.00	1.03	1.03	1.01	0.85 to 1.15	103	70 to 130	0.00	20
BA05852	Cobalt, Total	mg/L	-0.00000297	0.0001474	0.10	0.0995	0.0954	0.0997	0.085 to 0.115	99.5	70 to 130	4.21	20
BA05852	Molybdenum, Total	mg/L	0.00000378	0.0001474	0.10	0.101	0.0984	0.0988	0.085 to 0.115	98.5	70 to 130	2.61	20
BA05852	Lead, Total	mg/L	0.00000303	0.0001474	0.10	0.101	0.0980	0.102	0.085 to 0.115	101	70 to 130	3.02	20
BA05852	Antimony, Total	mg/L	0.000225	0.00066	0.10	0.0984	0.0980	0.0956	0.085 to 0.115	98.4	70 to 130	0.407	20
BA05852	Beryllium, Total	mg/L	0.0000309	0.00088	0.10	0.0923	0.0935	0.0916	0.085 to 0.115	92.3	70 to 130	1.29	20
BA05852	Chromium, Total	mg/L	0.0000214	0.00044	0.10	0.102	0.0984	0.102	0.085 to 0.115	102	70 to 130	3.59	20
BA05852	Lithium, Total	mg/L	0.000116	0.0154	0.20	0.276	0.275	0.198	0.17 to 0.23	112	70 to 130	0.363	20
BA05852	Thallium, Total	mg/L	-0.00000172	0.0001474	0.10	0.103	0.101	0.105	0.085 to 0.115	103	70 to 130	1.96	20
BA05852	Cadmium, Total	mg/L	-0.00000379	0.0001474	0.10	0.1000	0.0979	0.103	0.085 to 0.115	100	70 to 130	2.12	20
BA05852	Selenium, Total	mg/L	0.0000712	0.00066	0.10	0.0998	0.0977	0.102	0.085 to 0.115	99.8	70 to 130	2.13	20

Comments:

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/24/20 10:55
Customer ID:
Delivery Date: 3/26/20 11:12

Description: Gorgas Ash Pond - MW-38H

Laboratory ID Number: BA05849

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA05855	Sulfate	mg/L	-0.119	0.50	1000	2120	1000	19.2	18 to 22	107	80 to 120	4.88	20
BA05853	Solids, Dissolved	mg/L	2.00	25			362	54.0	40 to 60			0.275	5
BA05855	Chloride	mg/L	0.047	0.50	2000	3070	961	10.4	9 to 11	104	80 to 120	2.06	20
BA05855	Fluoride	mg/L	0.0191	0.05	2.50	3.10	0.478	2.57	2.25 to 2.75	104	80 to 120	3.29	20

Comments:

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-19

Location Code: WMWGORAP
Collected: 3/24/20 14:25
Customer ID:
Submittal Date: 3/26/20 11:12

Laboratory ID Number: BA05850

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	3/30/20 13:30	3/31/20 11:49		1.015	0.0398	mg/L	0.03	0.1	J
* Calcium, Total	3/30/20 13:30	3/31/20 13:04		10.15	41.7	mg/L	1.015	5.075	
* Lithium, Total	3/30/20 13:30	3/31/20 11:49		1.015	0.0417	mg/L	0.01	0.02	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/26/20 13:06	3/27/20 11:49		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	3/26/20 13:06	3/27/20 11:49		1.015	0.00313	mg/L	0.001	0.005	J
* Barium, Total	3/26/20 13:06	3/27/20 11:49		1.015	0.324	mg/L	0.002	0.01	
* Beryllium, Total	3/26/20 13:06	3/27/20 11:49		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	3/26/20 13:06	3/27/20 11:49		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	3/26/20 13:06	3/27/20 11:49		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	3/26/20 13:06	3/27/20 11:49		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	3/26/20 13:06	3/27/20 11:49		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	3/26/20 13:06	3/27/20 11:49		1.015	0.00605	mg/L	0.002	0.01	J
* Selenium, Total	3/26/20 13:06	3/27/20 11:49		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	3/26/20 13:06	3/27/20 11:49		1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 245.1	***Analyst: GAS***								
* Mercury, Total by CVAA	3/31/20 10:03	4/1/20 11:14		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2540C	***Analyst: TJW***								
* Solids, Dissolved	3/27/20 10:30	3/31/20 12:14		1	302	mg/L		25	
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	3/30/20 10:05	3/30/20 10:05		1	6.29	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	3/30/20 12:31	3/30/20 12:31		1	0.327	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E	***Analyst: JCC***								
* Sulfate	4/1/20 09:51	4/1/20 09:51		1	15.2	mg/L	0.50	1	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	3/24/20 14:20	3/24/20 14:20			505.87	uS/cm			FA
pH	3/24/20 14:20	3/24/20 14:20			7.93	SU			FA
Temperature	3/24/20 14:20	3/24/20 14:20			18.40	C			FA
Turbidity	3/24/20 14:20	3/24/20 14:20			0.95	NTU			FA

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

Comments:

Reported: 4/14/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORAP
Sample Date: 3/24/20 14:25
Customer ID:
Delivery Date: 3/26/20 11:12

Description: Gorgas Ash Pond - MW-19

Laboratory ID Number: BA05850

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA05852	Calcium, Total	mg/L	-0.0154	0.1518	5.00	32.7	32.9	5.21	4.25 to 5.75	98.0	70 to 130	0.610	20
BA05852	Arsenic, Total	mg/L	-0.00000532	0.0001474	0.10	0.105	0.101	0.103	0.085 to 0.115	104	70 to 130	3.88	20
BA05852	Boron, Total	mg/L	0.00282	0.0650254	1.00	1.03	1.03	1.01	0.85 to 1.15	103	70 to 130	0.00	20
BA05852	Cobalt, Total	mg/L	-0.00000297	0.0001474	0.10	0.0995	0.0954	0.0997	0.085 to 0.115	99.5	70 to 130	4.21	20
BA05852	Molybdenum, Total	mg/L	0.00000378	0.0001474	0.10	0.101	0.0984	0.0988	0.085 to 0.115	98.5	70 to 130	2.61	20
BA05852	Lead, Total	mg/L	0.00000303	0.0001474	0.10	0.101	0.0980	0.102	0.085 to 0.115	101	70 to 130	3.02	20
BA05852	Antimony, Total	mg/L	0.000225	0.00066	0.10	0.0984	0.0980	0.0956	0.085 to 0.115	98.4	70 to 130	0.407	20
BA05852	Barium, Total	mg/L	0.0000153	0.0002	0.10	0.631	0.626	0.0955	0.085 to 0.115	104	70 to 130	0.796	20
BA05855	Mercury, Total by CVAA	mg/L	-0.0000411	0.0005	0.004	0.00390	0.00398	0.00422	0.0034 to 0.0046	97.5	70 to 130	2.03	20
BA05852	Beryllium, Total	mg/L	0.0000309	0.00088	0.10	0.0923	0.0935	0.0916	0.085 to 0.115	92.3	70 to 130	1.29	20
BA05852	Chromium, Total	mg/L	0.0000214	0.00044	0.10	0.102	0.0984	0.102	0.085 to 0.115	102	70 to 130	3.59	20
BA05852	Lithium, Total	mg/L	0.000116	0.0154	0.20	0.276	0.275	0.198	0.17 to 0.23	112	70 to 130	0.363	20
BA05852	Thallium, Total	mg/L	-0.00000172	0.0001474	0.10	0.103	0.101	0.105	0.085 to 0.115	103	70 to 130	1.96	20
BA05852	Cadmium, Total	mg/L	-0.00000379	0.0001474	0.10	0.1000	0.0979	0.103	0.085 to 0.115	100	70 to 130	2.12	20
BA05852	Selenium, Total	mg/L	0.0000712	0.00066	0.10	0.0998	0.0977	0.102	0.085 to 0.115	99.8	70 to 130	2.13	20

Comments:

Reported: 4/14/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/24/20 14:25
Customer ID:
Delivery Date: 3/26/20 11:12

Description: Gorgas Ash Pond - MW-19

Laboratory ID Number: BA05850

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA05855	Sulfate	mg/L	-0.119	0.50	1000	2120	1000	19.2	18 to 22	107	80 to 120	4.88	20
BA05853	Solids, Dissolved	mg/L	2.00	25			362	54.0	40 to 60			0.275	5
BA05855	Chloride	mg/L	0.047	0.50	2000	3070	961	10.4	9 to 11	104	80 to 120	2.06	20
BA05855	Fluoride	mg/L	0.0191	0.05	2.50	3.10	0.478	2.57	2.25 to 2.75	104	80 to 120	3.29	20

Comments:

Reported: 4/14/2020
Version: 3.1
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond Equipment Blank

Location Code: WMWGORAPEB
Collected: 3/24/20 14:50
Customer ID:
Submittal Date: 3/26/20 11:12

Laboratory ID Number: BA05851

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	3/30/20 13:30	3/31/20 11:52		1.015	Not Detected	mg/L	0.03	0.1	U
* Calcium, Total	3/30/20 13:30	3/31/20 11:52		1.015	Not Detected	mg/L	0.1	0.5	U
* Lithium, Total	3/30/20 13:30	3/31/20 11:52		1.015	Not Detected	mg/L	0.01	0.02	U
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/26/20 13:06	3/27/20 11:51		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	3/26/20 13:06	3/27/20 11:51		1.015	Not Detected	mg/L	0.001	0.005	U
* Barium, Total	3/26/20 13:06	3/27/20 11:51		1.015	Not Detected	mg/L	0.002	0.01	U
* Beryllium, Total	3/26/20 13:06	3/27/20 11:51		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	3/26/20 13:06	3/27/20 11:51		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	3/26/20 13:06	3/27/20 11:51		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	3/26/20 13:06	3/27/20 11:51		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	3/26/20 13:06	3/27/20 11:51		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	3/26/20 13:06	3/27/20 11:51		1.015	Not Detected	mg/L	0.002	0.01	U
* Selenium, Total	3/26/20 13:06	3/27/20 11:51		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	3/26/20 13:06	3/27/20 11:51		1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 245.1	***Analyst: GAS***								
* Mercury, Total by CVAA	3/31/20 10:03	4/1/20 11:16		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2540C	***Analyst: TJW***								
* Solids, Dissolved	3/27/20 10:30	3/31/20 12:14		1	Not Detected	mg/L		25	U
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	3/30/20 10:07	3/30/20 10:07		1	Not Detected	mg/L	0.50	1	U
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	3/30/20 12:32	3/30/20 12:32		1	Not Detected	mg/L	0.06	0.1	U
Analytical Method: SM4500SO4 E	***Analyst: JCC***								
* Sulfate	4/1/20 09:52	4/1/20 09:52		1	Not Detected	mg/L	0.50	1	U

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

Comments:

Reported: 4/14/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORAPEB
Sample Date: 3/24/20 14:50
Customer ID:
Delivery Date: 3/26/20 11:12

Description: Gorgas Ash Pond Equipment Blank

Laboratory ID Number: BA05851

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA05852	Calcium, Total	mg/L	-0.0154	0.1518	5.00	32.7	32.9	5.21	4.25 to 5.75	98.0	70 to 130	0.610	20
BA05852	Arsenic, Total	mg/L	-0.00000532	0.0001474	0.10	0.105	0.101	0.103	0.085 to 0.115	104	70 to 130	3.88	20
BA05852	Barium, Total	mg/L	0.0000153	0.0002	0.10	0.631	0.626	0.0955	0.085 to 0.115	104	70 to 130	0.796	20
BA05855	Mercury, Total by CVAA	mg/L	-0.0000411	0.0005	0.004	0.00390	0.00398	0.00422	0.0034 to 0.0046	97.5	70 to 130	2.03	20
BA05852	Molybdenum, Total	mg/L	0.00000378	0.0001474	0.10	0.101	0.0984	0.0988	0.085 to 0.115	98.5	70 to 130	2.61	20
BA05852	Lead, Total	mg/L	0.00000303	0.0001474	0.10	0.101	0.0980	0.102	0.085 to 0.115	101	70 to 130	3.02	20
BA05852	Antimony, Total	mg/L	0.000225	0.00066	0.10	0.0984	0.0980	0.0956	0.085 to 0.115	98.4	70 to 130	0.407	20
BA05852	Boron, Total	mg/L	0.00282	0.0650254	1.00	1.03	1.03	1.01	0.85 to 1.15	103	70 to 130	0.00	20
BA05852	Cobalt, Total	mg/L	-0.00000297	0.0001474	0.10	0.0995	0.0954	0.0997	0.085 to 0.115	99.5	70 to 130	4.21	20
BA05852	Beryllium, Total	mg/L	0.0000309	0.00088	0.10	0.0923	0.0935	0.0916	0.085 to 0.115	92.3	70 to 130	1.29	20
BA05852	Chromium, Total	mg/L	0.0000214	0.00044	0.10	0.102	0.0984	0.102	0.085 to 0.115	102	70 to 130	3.59	20
BA05852	Lithium, Total	mg/L	0.000116	0.0154	0.20	0.276	0.275	0.198	0.17 to 0.23	112	70 to 130	0.363	20
BA05852	Thallium, Total	mg/L	-0.00000172	0.0001474	0.10	0.103	0.101	0.105	0.085 to 0.115	103	70 to 130	1.96	20
BA05852	Cadmium, Total	mg/L	-0.00000379	0.0001474	0.10	0.1000	0.0979	0.103	0.085 to 0.115	100	70 to 130	2.12	20
BA05852	Selenium, Total	mg/L	0.0000712	0.00066	0.10	0.0998	0.0977	0.102	0.085 to 0.115	99.8	70 to 130	2.13	20

Comments:

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

Batch QC Summary

Customer Account: WMWGORAPEB
Sample Date: 3/24/20 14:50
Customer ID:
Delivery Date: 3/26/20 11:12

Description: Gorgas Ash Pond Equipment Blank

Laboratory ID Number: BA05851

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA05855	Sulfate	mg/L	-0.119	0.50	1000	2120	1000	19.2	18 to 22	107	80 to 120	4.88	20
BA05853	Solids, Dissolved	mg/L	2.00	25			362	54.0	40 to 60			0.275	5
BA05855	Chloride	mg/L	0.047	0.50	2000	3070	961	10.4	9 to 11	104	80 to 120	2.06	20
BA05855	Fluoride	mg/L	0.0191	0.05	2.50	3.10	0.478	2.57	2.25 to 2.75	104	80 to 120	3.29	20

Comments:

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-29H

Location Code: WMWGORAP
Collected: 3/25/20 10:08
Customer ID:
Submittal Date: 3/26/20 11:12

Laboratory ID Number: BA05852

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	3/30/20 13:30	3/31/20 11:55		1.015	Not Detected	mg/L	0.03	0.1	U
* Calcium, Total	3/30/20 13:30	3/31/20 11:55		1.015	27.8	mg/L	0.1	0.5	
* Lithium, Total	3/30/20 13:30	3/31/20 11:55		1.015	0.0528	mg/L	0.01	0.02	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/26/20 13:06	3/27/20 11:54		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	3/26/20 13:06	3/27/20 11:54		1.015	0.00141	mg/L	0.001	0.005	J
* Barium, Total	3/26/20 13:06	3/27/20 11:54		1.015	0.527	mg/L	0.002	0.01	
* Beryllium, Total	3/26/20 13:06	3/27/20 11:54		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	3/26/20 13:06	3/27/20 11:54		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	3/26/20 13:06	3/27/20 11:54		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	3/26/20 13:06	3/27/20 11:54		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	3/26/20 13:06	3/27/20 11:54		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	3/26/20 13:06	3/27/20 11:54		1.015	0.00250	mg/L	0.002	0.01	J
* Selenium, Total	3/26/20 13:06	3/27/20 11:54		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	3/26/20 13:06	3/27/20 11:54		1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 245.1	***Analyst: GAS***								
* Mercury, Total by CVAA	3/31/20 10:03	4/1/20 11:18		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2540C	***Analyst: TJW***								
* Solids, Dissolved	3/27/20 10:30	3/31/20 12:14		1	371	mg/L		25	
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	3/30/20 10:08	3/30/20 10:08		1	3.10	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	3/30/20 12:34	3/30/20 12:34		1	0.194	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E	***Analyst: JCC***								
* Sulfate	4/1/20 09:53	4/1/20 09:53		1	29.4	mg/L	0.50	1	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	3/25/20 10:04	3/25/20 10:04			609.50	uS/cm			FA
pH	3/25/20 10:04	3/25/20 10:04			7.45	SU			FA
Temperature	3/25/20 10:04	3/25/20 10:04			17.21	C			FA
Turbidity	3/25/20 10:04	3/25/20 10:04			2.49	NTU			FA

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

Comments:

Reported: 4/14/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORAP
Sample Date: 3/25/20 10:08
Customer ID:
Delivery Date: 3/26/20 11:12

Description: Gorgas Ash Pond - MW-29H

Laboratory ID Number: BA05852

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA05852	Calcium, Total	mg/L	-0.0154	0.1518	5.00	32.7	32.9	5.21	4.25 to 5.75	98.0	70 to 130	0.610	20
BA05852	Arsenic, Total	mg/L	-0.00000532	0.0001474	0.10	0.105	0.101	0.103	0.085 to 0.115	104	70 to 130	3.88	20
BA05852	Barium, Total	mg/L	0.0000153	0.0002	0.10	0.631	0.626	0.0955	0.085 to 0.115	104	70 to 130	0.796	20
BA05855	Mercury, Total by CVAA	mg/L	-0.0000411	0.0005	0.004	0.00390	0.00398	0.00422	0.0034 to 0.0046	97.5	70 to 130	2.03	20
BA05852	Boron, Total	mg/L	0.00282	0.0650254	1.00	1.03	1.03	1.01	0.85 to 1.15	103	70 to 130	0.00	20
BA05852	Cobalt, Total	mg/L	-0.00000297	0.0001474	0.10	0.0995	0.0954	0.0997	0.085 to 0.115	99.5	70 to 130	4.21	20
BA05852	Beryllium, Total	mg/L	0.0000309	0.00088	0.10	0.0923	0.0935	0.0916	0.085 to 0.115	92.3	70 to 130	1.29	20
BA05852	Chromium, Total	mg/L	0.0000214	0.00044	0.10	0.102	0.0984	0.102	0.085 to 0.115	102	70 to 130	3.59	20
BA05852	Lithium, Total	mg/L	0.000116	0.0154	0.20	0.276	0.275	0.198	0.17 to 0.23	112	70 to 130	0.363	20
BA05852	Thallium, Total	mg/L	-0.00000172	0.0001474	0.10	0.103	0.101	0.105	0.085 to 0.115	103	70 to 130	1.96	20
BA05852	Molybdenum, Total	mg/L	0.00000378	0.0001474	0.10	0.101	0.0984	0.0988	0.085 to 0.115	98.5	70 to 130	2.61	20
BA05852	Lead, Total	mg/L	0.00000303	0.0001474	0.10	0.101	0.0980	0.102	0.085 to 0.115	101	70 to 130	3.02	20
BA05852	Antimony, Total	mg/L	0.000225	0.00066	0.10	0.0984	0.0980	0.0956	0.085 to 0.115	98.4	70 to 130	0.407	20
BA05852	Cadmium, Total	mg/L	-0.00000379	0.0001474	0.10	0.1000	0.0979	0.103	0.085 to 0.115	100	70 to 130	2.12	20
BA05852	Selenium, Total	mg/L	0.0000712	0.00066	0.10	0.0998	0.0977	0.102	0.085 to 0.115	99.8	70 to 130	2.13	20

Comments:

Reported: 4/14/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/25/20 10:08
Customer ID:
Delivery Date: 3/26/20 11:12

Description: Gorgas Ash Pond - MW-29H

Laboratory ID Number: BA05852

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA05855	Sulfate	mg/L	-0.119	0.50	1000	2120	1000	19.2	18 to 22	107	80 to 120	4.88	20
BA05853	Solids, Dissolved	mg/L	2.00	25			362	54.0	40 to 60			0.275	5
BA05855	Chloride	mg/L	0.047	0.50	2000	3070	961	10.4	9 to 11	104	80 to 120	2.06	20
BA05855	Fluoride	mg/L	0.0191	0.05	2.50	3.10	0.478	2.57	2.25 to 2.75	104	80 to 120	3.29	20

Comments:

Reported: 4/14/2020
Version: 3.1
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-17V

Location Code: WMWGORAP
Collected: 3/25/20 12:38
Customer ID:
Submittal Date: 3/26/20 11:12

Laboratory ID Number: BA05853

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	3/30/20 13:30	3/31/20 12:10		1.015	0.0482	mg/L	0.03	0.1	J
* Calcium, Total	3/30/20 13:30	3/31/20 12:10		1.015	31.1	mg/L	0.1	0.5	
* Lithium, Total	3/30/20 13:30	3/31/20 12:10		1.015	0.0646	mg/L	0.01	0.02	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/26/20 13:06	3/27/20 12:10		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	3/26/20 13:06	3/27/20 12:10		1.015	Not Detected	mg/L	0.001	0.005	U
* Barium, Total	3/26/20 13:06	3/27/20 12:10		1.015	0.314	mg/L	0.002	0.01	
* Beryllium, Total	3/26/20 13:06	3/27/20 12:10		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	3/26/20 13:06	3/27/20 12:10		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	3/26/20 13:06	3/27/20 12:10		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	3/26/20 13:06	3/27/20 12:10		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	3/26/20 13:06	3/27/20 12:10		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	3/26/20 13:06	3/27/20 12:10		1.015	0.00508	mg/L	0.002	0.01	J
* Selenium, Total	3/26/20 13:06	3/27/20 12:10		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	3/26/20 13:06	3/27/20 12:10		1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 245.1	***Analyst: GAS***								
* Mercury, Total by CVAA	3/31/20 10:03	4/1/20 11:21		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2540C	***Analyst: TJW***								
* Solids, Dissolved	3/27/20 10:30	3/31/20 12:14		1	364	mg/L		25	
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	3/30/20 10:09	3/30/20 10:09		1	3.72	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	3/30/20 12:35	3/30/20 12:35		1	0.243	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E	***Analyst: JCC***								
* Sulfate	4/1/20 09:54	4/1/20 09:54		1	9.69	mg/L	0.50	1	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	3/25/20 12:33	3/25/20 12:33			538.31	uS/cm			FA
pH	3/25/20 12:33	3/25/20 12:33			7.63	SU			FA
Temperature	3/25/20 12:33	3/25/20 12:33			19.37	C			FA
Turbidity	3/25/20 12:33	3/25/20 12:33			1.22	NTU			FA

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

Comments:

Reported: 4/14/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORAP
Sample Date: 3/25/20 12:38
Customer ID:
Delivery Date: 3/26/20 11:12

Description: Gorgas Ash Pond - MW-17V

Laboratory ID Number: BA05853

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA05863	Beryllium, Total	mg/L	0.0000309	0.00088	0.10	0.0909	0.0938	0.0916	0.085 to 0.115	90.9	70 to 130	3.14	20
BA05863	Chromium, Total	mg/L	0.0000214	0.00044	0.10	0.101	0.101	0.102	0.085 to 0.115	101	70 to 130	0.00	20
BA05863	Selenium, Total	mg/L	0.0000712	0.00066	0.10	0.104	0.102	0.102	0.085 to 0.115	104	70 to 130	1.94	20
BA05863	Arsenic, Total	mg/L	-0.00000532	0.0001474	0.10	0.110	0.111	0.103	0.085 to 0.115	104	70 to 130	0.905	20
BA05863	Cadmium, Total	mg/L	-0.00000379	0.0001474	0.10	0.0987	0.0983	0.103	0.085 to 0.115	98.7	70 to 130	0.406	20
BA05855	Mercury, Total by CVAA	mg/L	-0.0000411	0.0005	0.004	0.00390	0.00398	0.00422	0.0034 to 0.0046	97.5	70 to 130	2.03	20
BA05863	Molybdenum, Total	mg/L	0.00000378	0.0001474	0.10	0.120	0.120	0.0988	0.085 to 0.115	98.3	70 to 130	0.00	20
BA05863	Lead, Total	mg/L	0.00000303	0.0001474	0.10	0.0993	0.102	0.102	0.085 to 0.115	99.3	70 to 130	2.68	20
BA05863	Thallium, Total	mg/L	-0.00000172	0.0001474	0.10	0.0997	0.106	0.105	0.085 to 0.115	99.7	70 to 130	6.13	20
BA05863	Boron, Total	mg/L	0.00282	0.0650254	1.00	1.09	1.09	1.01	0.85 to 1.15	101	70 to 130	0.00	20
BA05863	Calcium, Total	mg/L	-0.0154	0.1518	5.00	11.5	11.4	5.21	4.25 to 5.75	106	70 to 130	0.873	20
BA05863	Cobalt, Total	mg/L	-0.00000297	0.0001474	0.10	0.0983	0.0986	0.0997	0.085 to 0.115	98.3	70 to 130	0.305	20
BA05863	Antimony, Total	mg/L	0.000225	0.00066	0.10	0.0976	0.0986	0.0956	0.085 to 0.115	97.6	70 to 130	1.02	20
BA05863	Barium, Total	mg/L	0.0000153	0.0002	0.10	0.324	0.326	0.0955	0.085 to 0.115	90.0	70 to 130	0.615	20
BA05863	Lithium, Total	mg/L	0.000116	0.0154	0.20	0.247	0.247	0.198	0.17 to 0.23	111	70 to 130	0.00	20

Comments:

Reported: 4/14/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/25/20 12:38
Customer ID:
Delivery Date: 3/26/20 11:12

Description: Gorgas Ash Pond - MW-17V

Laboratory ID Number: BA05853

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA05855	Sulfate	mg/L	-0.119	0.50	1000	2120	1000	19.2	18 to 22	107	80 to 120	4.88	20
BA05853	Solids, Dissolved	mg/L	2.00	25			362	54.0	40 to 60			0.275	5
BA05855	Chloride	mg/L	0.047	0.50	2000	3070	961	10.4	9 to 11	104	80 to 120	2.06	20
BA05855	Fluoride	mg/L	0.0191	0.05	2.50	3.10	0.478	2.57	2.25 to 2.75	104	80 to 120	3.29	20

Comments:

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond Field Blank

Location Code: WMWGORAPFB
Collected: 3/25/20 13:20
Customer ID:
Submittal Date: 3/26/20 11:12

Laboratory ID Number: BA05854

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	3/30/20 13:30	3/31/20 12:13		1.015	Not Detected	mg/L	0.03	0.1	U
* Calcium, Total	3/30/20 13:30	3/31/20 12:13		1.015	Not Detected	mg/L	0.1	0.5	U
* Lithium, Total	3/30/20 13:30	3/31/20 12:13		1.015	Not Detected	mg/L	0.01	0.02	U
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/26/20 13:06	3/27/20 12:12		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	3/26/20 13:06	3/27/20 12:12		1.015	Not Detected	mg/L	0.001	0.005	U
* Barium, Total	3/26/20 13:06	3/27/20 12:12		1.015	Not Detected	mg/L	0.002	0.01	U
* Beryllium, Total	3/26/20 13:06	3/27/20 12:12		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	3/26/20 13:06	3/27/20 12:12		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	3/26/20 13:06	3/27/20 12:12		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	3/26/20 13:06	3/27/20 12:12		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	3/26/20 13:06	3/27/20 12:12		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	3/26/20 13:06	3/27/20 12:12		1.015	Not Detected	mg/L	0.002	0.01	U
* Selenium, Total	3/26/20 13:06	3/27/20 12:12		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	3/26/20 13:06	3/27/20 12:12		1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 245.1	***Analyst: GAS***								
* Mercury, Total by CVAA	3/31/20 10:03	4/1/20 11:23		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2540C	***Analyst: TJW***								
* Solids, Dissolved	3/27/20 10:30	3/31/20 12:14		1	Not Detected	mg/L		25	U
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	3/30/20 10:10	3/30/20 10:10		1	Not Detected	mg/L	0.50	1	U
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	3/30/20 12:36	3/30/20 12:36		1	Not Detected	mg/L	0.06	0.1	U
Analytical Method: SM4500SO4 E	***Analyst: JCC***								
* Sulfate	4/1/20 09:55	4/1/20 09:55		1	Not Detected	mg/L	0.50	1	U

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

Comments:

Reported: 4/14/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORAPFB
Sample Date: 3/25/20 13:20
Customer ID:
Delivery Date: 3/26/20 11:12

Description: Gorgas Ash Pond Field Blank

Laboratory ID Number: BA05854

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA05863	Beryllium, Total	mg/L	0.0000309	0.00088	0.10	0.0909	0.0938	0.0916	0.085 to 0.115	90.9	70 to 130	3.14	20
BA05863	Chromium, Total	mg/L	0.0000214	0.00044	0.10	0.101	0.101	0.102	0.085 to 0.115	101	70 to 130	0.00	20
BA05863	Selenium, Total	mg/L	0.0000712	0.00066	0.10	0.104	0.102	0.102	0.085 to 0.115	104	70 to 130	1.94	20
BA05855	Mercury, Total by CVAA	mg/L	-0.0000411	0.0005	0.004	0.00390	0.00398	0.00422	0.0034 to 0.0046	97.5	70 to 130	2.03	20
BA05863	Molybdenum, Total	mg/L	0.00000378	0.0001474	0.10	0.120	0.120	0.0988	0.085 to 0.115	98.3	70 to 130	0.00	20
BA05863	Lead, Total	mg/L	0.00000303	0.0001474	0.10	0.0993	0.102	0.102	0.085 to 0.115	99.3	70 to 130	2.68	20
BA05863	Thallium, Total	mg/L	-0.00000172	0.0001474	0.10	0.0997	0.106	0.105	0.085 to 0.115	99.7	70 to 130	6.13	20
BA05863	Boron, Total	mg/L	0.00282	0.0650254	1.00	1.09	1.09	1.01	0.85 to 1.15	101	70 to 130	0.00	20
BA05863	Calcium, Total	mg/L	-0.0154	0.1518	5.00	11.5	11.4	5.21	4.25 to 5.75	106	70 to 130	0.873	20
BA05863	Cobalt, Total	mg/L	-0.00000297	0.0001474	0.10	0.0983	0.0986	0.0997	0.085 to 0.115	98.3	70 to 130	0.305	20
BA05863	Antimony, Total	mg/L	0.000225	0.00066	0.10	0.0976	0.0986	0.0956	0.085 to 0.115	97.6	70 to 130	1.02	20
BA05863	Arsenic, Total	mg/L	-0.00000532	0.0001474	0.10	0.110	0.111	0.103	0.085 to 0.115	104	70 to 130	0.905	20
BA05863	Cadmium, Total	mg/L	-0.00000379	0.0001474	0.10	0.0987	0.0983	0.103	0.085 to 0.115	98.7	70 to 130	0.406	20
BA05863	Barium, Total	mg/L	0.0000153	0.0002	0.10	0.324	0.326	0.0955	0.085 to 0.115	90.0	70 to 130	0.615	20
BA05863	Lithium, Total	mg/L	0.000116	0.0154	0.20	0.247	0.247	0.198	0.17 to 0.23	111	70 to 130	0.00	20

Comments:

Reported: 4/14/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Customer Account: WMWGORAPFB
Sample Date: 3/25/20 13:20
Customer ID:
Delivery Date: 3/26/20 11:12

Description: Gorgas Ash Pond Field Blank

Laboratory ID Number: BA05854

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA05855	Sulfate	mg/L	-0.119	0.50	1000	2120	1000	19.2	18 to 22	107	80 to 120	4.88	20
BA05853	Solids, Dissolved	mg/L	2.00	25			362	54.0	40 to 60			0.275	5
BA05855	Chloride	mg/L	0.047	0.50	2000	3070	961	10.4	9 to 11	104	80 to 120	2.06	20
BA05855	Fluoride	mg/L	0.0191	0.05	2.50	3.10	0.478	2.57	2.25 to 2.75	104	80 to 120	3.29	20

Comments:

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-21V

Location Code: WMWGORAP
Collected: 3/23/20 17:14
Customer ID:
Submittal Date: 3/26/20 11:12

Laboratory ID Number: BA05855

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	3/30/20 13:30	3/31/20 12:16		1.015	0.122	mg/L	0.03	0.1	
* Calcium, Total	3/30/20 13:30	3/31/20 13:07		10.15	110	mg/L	1.015	5.075	
* Lithium, Total	3/30/20 13:30	3/31/20 12:16		1.015	0.146	mg/L	0.01	0.02	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/26/20 13:06	3/27/20 12:15		1.015	0.000831	mg/L	0.0008	0.003	J
* Arsenic, Total	3/26/20 13:06	3/27/20 12:15		1.015	0.0159	mg/L	0.001	0.005	
* Barium, Total	3/26/20 13:06	3/27/20 12:15		1.015	0.0574	mg/L	0.002	0.01	
* Beryllium, Total	3/26/20 13:06	3/27/20 12:15		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	3/26/20 13:06	3/27/20 12:15		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	3/26/20 13:06	3/27/20 12:15		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	3/26/20 13:06	3/27/20 12:15		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	3/26/20 13:06	3/27/20 12:15		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	3/26/20 13:06	3/27/20 12:15		1.015	0.117	mg/L	0.002	0.01	
* Selenium, Total	3/26/20 13:06	3/27/20 12:15		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	3/26/20 13:06	3/27/20 12:15		1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 245.1	***Analyst: GAS***								
* Mercury, Total by CVAA	3/31/20 10:03	4/1/20 11:25		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2540C	***Analyst: TJW***								
* Solids, Dissolved	3/27/20 14:25	4/1/20 15:12		1	3410	mg/L		277.8	
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	3/30/20 10:30	3/30/20 10:30		200	981	mg/L	100.00	200	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	3/30/20 12:37	3/30/20 12:37		1	0.494	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E	***Analyst: JCC***								
* Sulfate	4/1/20 10:13	4/1/20 10:13		50	1050	mg/L	25.00	50	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	3/23/20 17:10	3/23/20 17:10			5570.92	uS/cm			FA
pH	3/23/20 17:10	3/23/20 17:10			7.93	SU			FA
Temperature	3/23/20 17:10	3/23/20 17:10			18.13	C			FA
Turbidity	3/23/20 17:10	3/23/20 17:10			2.8	NTU			FA

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

Comments:

Reported: 4/14/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORAP
Sample Date: 3/23/20 17:14
Customer ID:
Delivery Date: 3/26/20 11:12

Description: Gorgas Ash Pond - MW-21V

Laboratory ID Number: BA05855

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA05863	Beryllium, Total	mg/L	0.0000309	0.00088	0.10	0.0909	0.0938	0.0916	0.085 to 0.115	90.9	70 to 130	3.14	20
BA05863	Chromium, Total	mg/L	0.0000214	0.00044	0.10	0.101	0.101	0.102	0.085 to 0.115	101	70 to 130	0.00	20
BA05863	Selenium, Total	mg/L	0.0000712	0.00066	0.10	0.104	0.102	0.102	0.085 to 0.115	104	70 to 130	1.94	20
BA05863	Lead, Total	mg/L	0.00000303	0.0001474	0.10	0.0993	0.102	0.102	0.085 to 0.115	99.3	70 to 130	2.68	20
BA05863	Thallium, Total	mg/L	-0.00000172	0.0001474	0.10	0.0997	0.106	0.105	0.085 to 0.115	99.7	70 to 130	6.13	20
BA05863	Arsenic, Total	mg/L	-0.00000532	0.0001474	0.10	0.110	0.111	0.103	0.085 to 0.115	104	70 to 130	0.905	20
BA05863	Cadmium, Total	mg/L	-0.00000379	0.0001474	0.10	0.0987	0.0983	0.103	0.085 to 0.115	98.7	70 to 130	0.406	20
BA05855	Mercury, Total by CVAA	mg/L	-0.0000411	0.0005	0.004	0.00390	0.00398	0.00422	0.0034 to 0.0046	97.5	70 to 130	2.03	20
BA05863	Molybdenum, Total	mg/L	0.00000378	0.0001474	0.10	0.120	0.120	0.0988	0.085 to 0.115	98.3	70 to 130	0.00	20
BA05863	Boron, Total	mg/L	0.00282	0.0650254	1.00	1.09	1.09	1.01	0.85 to 1.15	101	70 to 130	0.00	20
BA05863	Calcium, Total	mg/L	-0.0154	0.1518	5.00	11.5	11.4	5.21	4.25 to 5.75	106	70 to 130	0.873	20
BA05863	Cobalt, Total	mg/L	-0.00000297	0.0001474	0.10	0.0983	0.0986	0.0997	0.085 to 0.115	98.3	70 to 130	0.305	20
BA05863	Antimony, Total	mg/L	0.000225	0.00066	0.10	0.0976	0.0986	0.0956	0.085 to 0.115	97.6	70 to 130	1.02	20
BA05863	Barium, Total	mg/L	0.0000153	0.0002	0.10	0.324	0.326	0.0955	0.085 to 0.115	90.0	70 to 130	0.615	20
BA05863	Lithium, Total	mg/L	0.000116	0.0154	0.20	0.247	0.247	0.198	0.17 to 0.23	111	70 to 130	0.00	20

Comments:

Reported: 4/14/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/23/20 17:14
Customer ID:
Delivery Date: 3/26/20 11:12

Description: Gorgas Ash Pond - MW-21V

Laboratory ID Number: BA05855

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA05864	Solids, Dissolved	mg/L	0.0000	25			333	49.0	40 to 60			0.301	5
BA05855	Sulfate	mg/L	-0.119	0.50	1000	2120	1000	19.2	18 to 22	107	80 to 120	4.88	20
BA05855	Chloride	mg/L	0.047	0.50	2000	3070	961	10.4	9 to 11	104	80 to 120	2.06	20
BA05855	Fluoride	mg/L	0.0191	0.05	2.50	3.10	0.478	2.57	2.25 to 2.75	104	80 to 120	3.29	20

Comments:

Reported: 4/14/2020
Version: 3.1
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-12V

Location Code: WMWGORAP
Collected: 3/24/20 11:32
Customer ID:
Submittal Date: 3/26/20 11:12

Laboratory ID Number: BA05856

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	3/30/20 13:30	3/31/20 12:19		1.015	0.0343	mg/L	0.03	0.1	J
* Calcium, Total	3/30/20 13:30	3/31/20 13:10		10.15	48.9	mg/L	1.015	5.075	
* Lithium, Total	3/30/20 13:30	3/31/20 12:19		1.015	0.0462	mg/L	0.01	0.02	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/26/20 13:06	3/27/20 12:18		1.015	0.00128	mg/L	0.0008	0.003	J
* Arsenic, Total	3/26/20 13:06	3/27/20 12:18		1.015	0.00266	mg/L	0.001	0.005	J
* Barium, Total	3/26/20 13:06	3/27/20 13:33		5.075	1.43	mg/L	0.01015	0.05075	
* Beryllium, Total	3/26/20 13:06	3/27/20 12:18		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	3/26/20 13:06	3/27/20 12:18		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	3/26/20 13:06	3/27/20 12:18		1.015	0.00774	mg/L	0.002	0.01	J
* Cobalt, Total	3/26/20 13:06	3/27/20 12:18		1.015	0.00277	mg/L	0.002	0.005	J
* Lead, Total	3/26/20 13:06	3/27/20 12:18		1.015	0.00279	mg/L	0.001	0.005	J
* Molybdenum, Total	3/26/20 13:06	3/27/20 12:18		1.015	0.00454	mg/L	0.002	0.01	J
* Selenium, Total	3/26/20 13:06	3/27/20 12:18		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	3/26/20 13:06	3/27/20 12:18		1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 245.1	***Analyst: GAS***								
* Mercury, Total by CVAA	3/31/20 10:03	4/1/20 11:42		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2540C	***Analyst: TJW***								
* Solids, Dissolved	3/27/20 14:25	4/1/20 15:12		1	206	mg/L		25	
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	3/30/20 10:41	3/30/20 10:41		1	4.46	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	3/30/20 12:49	3/30/20 12:49		1	0.155	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E	***Analyst: JCC***								
* Sulfate	4/1/20 10:56	4/1/20 10:56		1	Not Detected	mg/L	0.50	1	U
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	3/24/20 11:28	3/24/20 11:28			315.14	uS/cm			FA
pH	3/24/20 11:28	3/24/20 11:28			7.80	SU			FA
Temperature	3/24/20 11:28	3/24/20 11:28			18.30	C			FA
Turbidity	3/24/20 11:28	3/24/20 11:28			67.8	NTU			FA

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

Comments:

Reported: 4/14/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORAP
Sample Date: 3/24/20 11:32
Customer ID:
Delivery Date: 3/26/20 11:12

Description: Gorgas Ash Pond - MW-12V

Laboratory ID Number: BA05856

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA05863	Molybdenum, Total	mg/L	0.00000378	0.0001474	0.10	0.120	0.120	0.0988	0.085 to 0.115	98.3	70 to 130	0.00	20
BA05863	Beryllium, Total	mg/L	0.0000309	0.00088	0.10	0.0909	0.0938	0.0916	0.085 to 0.115	90.9	70 to 130	3.14	20
BA05863	Chromium, Total	mg/L	0.0000214	0.00044	0.10	0.101	0.101	0.102	0.085 to 0.115	101	70 to 130	0.00	20
BA05863	Arsenic, Total	mg/L	-0.00000532	0.0001474	0.10	0.110	0.111	0.103	0.085 to 0.115	104	70 to 130	0.905	20
BA05863	Cadmium, Total	mg/L	-0.00000379	0.0001474	0.10	0.0987	0.0983	0.103	0.085 to 0.115	98.7	70 to 130	0.406	20
BA05863	Boron, Total	mg/L	0.00282	0.0650254	1.00	1.09	1.09	1.01	0.85 to 1.15	101	70 to 130	0.00	20
BA05863	Calcium, Total	mg/L	-0.0154	0.1518	5.00	11.5	11.4	5.21	4.25 to 5.75	106	70 to 130	0.873	20
BA05863	Cobalt, Total	mg/L	-0.00000297	0.0001474	0.10	0.0983	0.0986	0.0997	0.085 to 0.115	98.3	70 to 130	0.305	20
BA05863	Antimony, Total	mg/L	0.000225	0.00066	0.10	0.0976	0.0986	0.0956	0.085 to 0.115	97.6	70 to 130	1.02	20
BA05863	Barium, Total	mg/L	0.0000153	0.0002	0.10	0.324	0.326	0.0955	0.085 to 0.115	90.0	70 to 130	0.615	20
BA05863	Lithium, Total	mg/L	0.000116	0.0154	0.20	0.247	0.247	0.198	0.17 to 0.23	111	70 to 130	0.00	20
BA05863	Selenium, Total	mg/L	0.0000712	0.00066	0.10	0.104	0.102	0.102	0.085 to 0.115	104	70 to 130	1.94	20
BA05866	Mercury, Total by CVAA	mg/L	-0.0000164	0.0005	0.004	0.00400	0.00422	0.00417	0.0034 to 0.0046	100	70 to 130	5.35	20
BA05863	Lead, Total	mg/L	0.00000303	0.0001474	0.10	0.0993	0.102	0.102	0.085 to 0.115	99.3	70 to 130	2.68	20
BA05863	Thallium, Total	mg/L	-0.00000172	0.0001474	0.10	0.0997	0.106	0.105	0.085 to 0.115	99.7	70 to 130	6.13	20

Comments:

Reported: 4/14/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/24/20 11:32
Customer ID:
Delivery Date: 3/26/20 11:12

Description: Gorgas Ash Pond - MW-12V

Laboratory ID Number: BA05856

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA05864	Solids, Dissolved	mg/L	0.0000	25			333	49.0	40 to 60			0.301	5
BA05865	Chloride	mg/L	-0.029	0.50	10.0	10.6	0.193	9.97	9 to 11	106	80 to 120	0.00	20
BA05865	Sulfate	mg/L	-0.483	0.50	20.0	19.1	-0.344	19.4	18 to 22	95.5	80 to 120	0.00	20
BA05865	Fluoride	mg/L	0.0102	0.05	2.50	2.57	0.0126	2.57	2.25 to 2.75	103	80 to 120	0.00	20

Comments:

Reported: 4/14/2020
Version: 3.1
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-12V DIS

Location Code: WMWGORAP
Collected: 3/24/20 11:32
Customer ID:
Submittal Date: 3/26/20 11:12

Laboratory ID Number: BA05857

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7		***Analyst: RDA***							
* Boron, Dissolved	3/30/20 11:30	3/31/20 09:33		1.015	0.0353	mg/L	0.03	0.1	J
* Calcium, Dissolved	3/30/20 11:30	3/31/20 10:28		10.15	41.7	mg/L	1.015	5.075	
* Lithium, Dissolved	3/30/20 11:30	3/31/20 09:33		1.015	0.0451	mg/L	0.01	0.02	
Analytical Method: EPA 200.8		***Analyst: DLJ***							
* Antimony, Dissolved	3/26/20 12:41	3/27/20 13:52		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Dissolved	3/26/20 12:41	3/27/20 13:52		1.015	0.00122	mg/L	0.001	0.005	J
* Barium, Dissolved	3/26/20 12:41	3/27/20 13:52		1.015	1.21	mg/L	0.002	0.01	
* Beryllium, Dissolved	3/26/20 12:41	3/27/20 13:52		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Dissolved	3/26/20 12:41	3/27/20 13:52		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Dissolved	3/26/20 12:41	3/27/20 13:52		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Dissolved	3/26/20 12:41	3/27/20 13:52		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Dissolved	3/26/20 12:41	3/27/20 13:52		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Dissolved	3/26/20 12:41	3/27/20 13:52		1.015	0.00526	mg/L	0.002	0.01	J
* Selenium, Dissolved	3/26/20 12:41	3/27/20 13:52		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Dissolved	3/26/20 12:41	3/27/20 13:52		1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 245.1		***Analyst: GAS***							
* Mercury, Dissolved by CVAA	3/31/20 10:03	4/1/20 12:47		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2540C		***Analyst: TJW***							
* Solids, Dissolved	3/27/20 14:25	4/1/20 15:12		1	201	mg/L		25	
Analytical Method: SM4500Cl E		***Analyst: JCC***							
* Chloride	3/30/20 10:43	3/30/20 10:43		1	4.61	mg/L	0.50	1	
Analytical Method: SM4500F G 2017		***Analyst: JCC***							
* Fluoride	3/30/20 12:50	3/30/20 12:50		1	0.168	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E		***Analyst: JCC***							
* Sulfate	4/1/20 10:46	4/1/20 10:46		1	1.11	mg/L	0.50	1	
Analytical Method: Field Measurements		***Analyst: DKG***							
Conductivity	3/24/20 11:28	3/24/20 11:28			315.14	uS/cm			FA
pH	3/24/20 11:28	3/24/20 11:28			7.80	SU			FA
Temperature	3/24/20 11:28	3/24/20 11:28			18.30	C			FA
Turbidity	3/24/20 11:28	3/24/20 11:28			67.8	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 4/13/2020

Reported: 4/14/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORAP
Sample Date: 3/24/20 11:32
Customer ID:
Delivery Date: 3/26/20 11:12

Description: Gorgas Ash Pond - MW-12V DIS

Laboratory ID Number: BA05857

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA05871	Lithium, Dissolved	mg/L	0.0000749	0.0154	0.20	0.311	0.314	0.197	0.17 to 0.23	109	70 to 130	0.960	20
BA05871	Mercury, Dissolved by	mg/L	-0.0000329	0.0005	0.004	0.00426	0.00421	0.00422	0.0034 to 0.0046	106	70 to 130	1.18	20
BA05871	Molybdenum, Dissolved	mg/L	0.00000193	0.0001474	0.10	0.0973	0.0971	0.0989	0.085 to 0.115	97.3	70 to 130	0.206	20
BA05871	Boron, Dissolved	mg/L	0.00203	0.0650254	1.00	1.04	1.06	1.01	0.85 to 1.15	104	70 to 130	1.90	20
BA05871	Lead, Dissolved	mg/L	0.00000458	0.0001474	0.10	0.0981	0.0984	0.0998	0.085 to 0.115	98.1	70 to 130	0.305	20
BA05871	Calcium, Dissolved	mg/L	-0.0187	0.1518	5.00	33.0	33.1	5.11	4.25 to 5.75	102	70 to 130	0.303	20
BA05871	Cobalt, Dissolved	mg/L	-0.00000152	0.0001474	0.10	0.0948	0.0961	0.1000	0.085 to 0.115	94.8	70 to 130	1.36	20
BA05871	Beryllium, Dissolved	mg/L	0.0000303	0.00088	0.10	0.0923	0.0914	0.0918	0.085 to 0.115	92.3	70 to 130	0.980	20
BA05871	Thallium, Dissolved	mg/L	-0.00000316	0.0001474	0.10	0.100	0.0998	0.102	0.085 to 0.115	100	70 to 130	0.200	20
BA05871	Cadmium, Dissolved	mg/L	0.0000112	0.0001474	0.10	0.0959	0.0981	0.0992	0.085 to 0.115	95.9	70 to 130	2.27	20
BA05871	Chromium, Dissolved	mg/L	-0.00000597	0.00044	0.10	0.0985	0.0991	0.102	0.085 to 0.115	98.5	70 to 130	0.607	20
BA05871	Antimony, Dissolved	mg/L	0.000215	0.00066	0.10	0.0911	0.0919	0.0907	0.085 to 0.115	91.1	70 to 130	0.874	20
BA05871	Selenium, Dissolved	mg/L	0.0000619	0.00066	0.10	0.101	0.103	0.102	0.085 to 0.115	101	70 to 130	1.96	20
BA05871	Arsenic, Dissolved	mg/L	-0.00000717	0.0001474	0.10	0.102	0.104	0.103	0.085 to 0.115	102	70 to 130	1.94	20
BA05871	Barium, Dissolved	mg/L	0.0000512	0.0002	0.10	0.883	0.889	0.0932	0.085 to 0.115	86.0	70 to 130	0.677	20

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 4/13/2020

Reported: 4/14/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/24/20 11:32
Customer ID:
Delivery Date: 3/26/20 11:12

Description: Gorgas Ash Pond - MW-12V DIS

Laboratory ID Number: BA05857

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA05865	Fluoride	mg/L	0.0102	0.05	2.50	2.57	0.0126	2.57	2.25 to 2.75	103	80 to 120	0.00	20
BA05864	Solids, Dissolved	mg/L	0.0000	25			333	49.0	40 to 60			0.301	5
BA05865	Sulfate	mg/L	-0.483	0.50	20.0	19.1	-0.344	19.4	18 to 22	95.5	80 to 120	0.00	20
BA05865	Chloride	mg/L	-0.029	0.50	10.0	10.6	0.193	9.97	9 to 11	106	80 to 120	0.00	20

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 4/13/2020

Reported: 4/14/2020
Version: 3.1
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-25HA

Location Code: WMWGORAP
Collected: 3/24/20 13:10
Customer ID:
Submittal Date: 3/26/20 11:12

Laboratory ID Number: BA05858

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	3/30/20 13:30	3/31/20 12:22		1.015	0.146	mg/L	0.03	0.1	
* Calcium, Total	3/30/20 13:30	3/31/20 12:22		1.015	2.42	mg/L	0.1	0.5	
* Lithium, Total	3/30/20 13:30	3/31/20 12:22		1.015	0.0461	mg/L	0.01	0.02	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/26/20 13:06	3/27/20 12:20		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	3/26/20 13:06	3/27/20 12:20		1.015	0.00798	mg/L	0.001	0.005	
* Barium, Total	3/26/20 13:06	3/27/20 12:20		1.015	0.147	mg/L	0.002	0.01	
* Beryllium, Total	3/26/20 13:06	3/27/20 12:20		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	3/26/20 13:06	3/27/20 12:20		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	3/26/20 13:06	3/27/20 12:20		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	3/26/20 13:06	3/27/20 12:20		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	3/26/20 13:06	3/27/20 12:20		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	3/26/20 13:06	3/27/20 12:20		1.015	0.0176	mg/L	0.002	0.01	
* Selenium, Total	3/26/20 13:06	3/27/20 12:20		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	3/26/20 13:06	3/27/20 12:20		1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 245.1	***Analyst: GAS***								
* Mercury, Total by CVAA	3/31/20 10:03	4/1/20 11:44		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2540C	***Analyst: TJW***								
* Solids, Dissolved	3/27/20 14:25	4/1/20 15:12		1	948	mg/L		75.8	
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	3/30/20 10:56	3/30/20 10:56		5	38.0	mg/L	2.50	5	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	3/30/20 12:51	3/30/20 12:51		1	1.77	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E	***Analyst: JCC***								
* Sulfate	4/1/20 10:47	4/1/20 10:47		10	201	mg/L	5.00	10	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	3/24/20 13:06	3/24/20 13:06			1450.68	uS/cm			FA
pH	3/24/20 13:06	3/24/20 13:06			8.67	SU			FA
Temperature	3/24/20 13:06	3/24/20 13:06			19.49	C			FA
Turbidity	3/24/20 13:06	3/24/20 13:06			8.74	NTU			FA

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

Comments:

Reported: 4/14/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORAP
Sample Date: 3/24/20 13:10
Customer ID:
Delivery Date: 3/26/20 11:12

Description: Gorgas Ash Pond - MW-25HA

Laboratory ID Number: BA05858

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA05863	Molybdenum, Total	mg/L	0.00000378	0.0001474	0.10	0.120	0.120	0.0988	0.085 to 0.115	98.3	70 to 130	0.00	20
BA05863	Chromium, Total	mg/L	0.0000214	0.00044	0.10	0.101	0.101	0.102	0.085 to 0.115	101	70 to 130	0.00	20
BA05863	Beryllium, Total	mg/L	0.0000309	0.00088	0.10	0.0909	0.0938	0.0916	0.085 to 0.115	90.9	70 to 130	3.14	20
BA05863	Selenium, Total	mg/L	0.0000712	0.00066	0.10	0.104	0.102	0.102	0.085 to 0.115	104	70 to 130	1.94	20
BA05866	Mercury, Total by CVAA	mg/L	-0.0000164	0.0005	0.004	0.00400	0.00422	0.00417	0.0034 to 0.0046	100	70 to 130	5.35	20
BA05863	Boron, Total	mg/L	0.00282	0.0650254	1.00	1.09	1.09	1.01	0.85 to 1.15	101	70 to 130	0.00	20
BA05863	Calcium, Total	mg/L	-0.0154	0.1518	5.00	11.5	11.4	5.21	4.25 to 5.75	106	70 to 130	0.873	20
BA05863	Cobalt, Total	mg/L	-0.00000297	0.0001474	0.10	0.0983	0.0986	0.0997	0.085 to 0.115	98.3	70 to 130	0.305	20
BA05863	Antimony, Total	mg/L	0.000225	0.00066	0.10	0.0976	0.0986	0.0956	0.085 to 0.115	97.6	70 to 130	1.02	20
BA05863	Arsenic, Total	mg/L	-0.00000532	0.0001474	0.10	0.110	0.111	0.103	0.085 to 0.115	104	70 to 130	0.905	20
BA05863	Cadmium, Total	mg/L	-0.00000379	0.0001474	0.10	0.0987	0.0983	0.103	0.085 to 0.115	98.7	70 to 130	0.406	20
BA05863	Lead, Total	mg/L	0.00000303	0.0001474	0.10	0.0993	0.102	0.102	0.085 to 0.115	99.3	70 to 130	2.68	20
BA05863	Thallium, Total	mg/L	-0.00000172	0.0001474	0.10	0.0997	0.106	0.105	0.085 to 0.115	99.7	70 to 130	6.13	20
BA05863	Barium, Total	mg/L	0.0000153	0.0002	0.10	0.324	0.326	0.0955	0.085 to 0.115	90.0	70 to 130	0.615	20
BA05863	Lithium, Total	mg/L	0.000116	0.0154	0.20	0.247	0.247	0.198	0.17 to 0.23	111	70 to 130	0.00	20

Comments:

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/24/20 13:10
Customer ID:
Delivery Date: 3/26/20 11:12

Description: Gorgas Ash Pond - MW-25HA

Laboratory ID Number: BA05858

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA05864	Solids, Dissolved	mg/L	0.0000	25			333	49.0	40 to 60			0.301	5
BA05865	Chloride	mg/L	-0.029	0.50	10.0	10.6	0.193	9.97	9 to 11	106	80 to 120	0.00	20
BA05865	Fluoride	mg/L	0.0102	0.05	2.50	2.57	0.0126	2.57	2.25 to 2.75	103	80 to 120	0.00	20
BA05865	Sulfate	mg/L	-0.483	0.50	20.0	19.1	-0.344	19.4	18 to 22	95.5	80 to 120	0.00	20

Comments:

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-2

Location Code: WMWGORAP
Collected: 3/25/20 08:32
Customer ID:
Submittal Date: 3/26/20 11:12

Laboratory ID Number: BA05859

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	3/30/20 13:30	3/31/20 12:25		1.015	0.163	mg/L	0.03	0.1	
* Calcium, Total	3/30/20 13:30	3/31/20 12:25		1.015	0.518	mg/L	0.1	0.5	
* Lithium, Total	3/30/20 13:30	3/31/20 12:25		1.015	0.0434	mg/L	0.01	0.02	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/26/20 13:06	3/27/20 12:23		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	3/26/20 13:06	3/27/20 12:23		1.015	Not Detected	mg/L	0.001	0.005	U
* Barium, Total	3/26/20 13:06	3/27/20 12:23		1.015	0.0602	mg/L	0.002	0.01	
* Beryllium, Total	3/26/20 13:06	3/27/20 12:23		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	3/26/20 13:06	3/27/20 12:23		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	3/26/20 13:06	3/27/20 12:23		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	3/26/20 13:06	3/27/20 12:23		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	3/26/20 13:06	3/27/20 12:23		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	3/26/20 13:06	3/27/20 12:23		1.015	0.00343	mg/L	0.002	0.01	J
* Selenium, Total	3/26/20 13:06	3/27/20 12:23		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	3/26/20 13:06	3/27/20 12:23		1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 245.1	***Analyst: GAS***								
* Mercury, Total by CVAA	3/31/20 10:03	4/1/20 11:47		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2540C	***Analyst: TJW***								
* Solids, Dissolved	3/27/20 14:25	4/1/20 15:12		1	337	mg/L		25	
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	3/30/20 10:45	3/30/20 10:45		1	9.70	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	3/30/20 12:53	3/30/20 12:53		1	0.855	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E	***Analyst: JCC***								
* Sulfate	4/1/20 10:48	4/1/20 10:48		1	38.5	mg/L	0.50	1	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	3/25/20 08:28	3/25/20 08:28			536.55	uS/cm			FA
pH	3/25/20 08:28	3/25/20 08:28			9.29	SU			FA
Temperature	3/25/20 08:28	3/25/20 08:28			16.85	C			FA
Turbidity	3/25/20 08:28	3/25/20 08:28			1.47	NTU			FA

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

Comments:

Reported: 4/14/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORAP
Sample Date: 3/25/20 08:32
Customer ID:
Delivery Date: 3/26/20 11:12

Description: Gorgas Ash Pond - MW-2

Laboratory ID Number: BA05859

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA05863	Molybdenum, Total	mg/L	0.00000378	0.0001474	0.10	0.120	0.120	0.0988	0.085 to 0.115	98.3	70 to 130	0.00	20
BA05863	Beryllium, Total	mg/L	0.0000309	0.00088	0.10	0.0909	0.0938	0.0916	0.085 to 0.115	90.9	70 to 130	3.14	20
BA05863	Chromium, Total	mg/L	0.0000214	0.00044	0.10	0.101	0.101	0.102	0.085 to 0.115	101	70 to 130	0.00	20
BA05863	Lead, Total	mg/L	0.00000303	0.0001474	0.10	0.0993	0.102	0.102	0.085 to 0.115	99.3	70 to 130	2.68	20
BA05863	Thallium, Total	mg/L	-0.00000172	0.0001474	0.10	0.0997	0.106	0.105	0.085 to 0.115	99.7	70 to 130	6.13	20
BA05863	Boron, Total	mg/L	0.00282	0.0650254	1.00	1.09	1.09	1.01	0.85 to 1.15	101	70 to 130	0.00	20
BA05863	Calcium, Total	mg/L	-0.0154	0.1518	5.00	11.5	11.4	5.21	4.25 to 5.75	106	70 to 130	0.873	20
BA05863	Cobalt, Total	mg/L	-0.00000297	0.0001474	0.10	0.0983	0.0986	0.0997	0.085 to 0.115	98.3	70 to 130	0.305	20
BA05863	Antimony, Total	mg/L	0.000225	0.00066	0.10	0.0976	0.0986	0.0956	0.085 to 0.115	97.6	70 to 130	1.02	20
BA05863	Selenium, Total	mg/L	0.0000712	0.00066	0.10	0.104	0.102	0.102	0.085 to 0.115	104	70 to 130	1.94	20
BA05866	Mercury, Total by CVAA	mg/L	-0.0000164	0.0005	0.004	0.00400	0.00422	0.00417	0.0034 to 0.0046	100	70 to 130	5.35	20
BA05863	Arsenic, Total	mg/L	-0.00000532	0.0001474	0.10	0.110	0.111	0.103	0.085 to 0.115	104	70 to 130	0.905	20
BA05863	Cadmium, Total	mg/L	-0.00000379	0.0001474	0.10	0.0987	0.0983	0.103	0.085 to 0.115	98.7	70 to 130	0.406	20
BA05863	Barium, Total	mg/L	0.0000153	0.0002	0.10	0.324	0.326	0.0955	0.085 to 0.115	90.0	70 to 130	0.615	20
BA05863	Lithium, Total	mg/L	0.000116	0.0154	0.20	0.247	0.247	0.198	0.17 to 0.23	111	70 to 130	0.00	20

Comments:

Reported: 4/14/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/25/20 08:32
Customer ID:
Delivery Date: 3/26/20 11:12

Description: Gorgas Ash Pond - MW-2

Laboratory ID Number: BA05859

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA05864	Solids, Dissolved	mg/L	0.0000	25			333	49.0	40 to 60			0.301	5
BA05865	Fluoride	mg/L	0.0102	0.05	2.50	2.57	0.0126	2.57	2.25 to 2.75	103	80 to 120	0.00	20
BA05865	Chloride	mg/L	-0.029	0.50	10.0	10.6	0.193	9.97	9 to 11	106	80 to 120	0.00	20
BA05865	Sulfate	mg/L	-0.483	0.50	20.0	19.1	-0.344	19.4	18 to 22	95.5	80 to 120	0.00	20

Comments:

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-43HO

Location Code: WMWGORAP
Collected: 3/25/20 10:00
Customer ID:
Submittal Date: 3/26/20 11:12

Laboratory ID Number: BA05860

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	3/30/20 13:30	3/31/20 12:28		1.015	0.112	mg/L	0.03	0.1	
* Calcium, Total	3/30/20 13:30	3/31/20 12:28		1.015	4.11	mg/L	0.1	0.5	
* Lithium, Total	3/30/20 13:30	3/31/20 12:28		1.015	0.0505	mg/L	0.01	0.02	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/26/20 13:06	3/27/20 12:26		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	3/26/20 13:06	3/27/20 12:26		1.015	0.00509	mg/L	0.001	0.005	
* Barium, Total	3/26/20 13:06	3/27/20 12:26		1.015	0.0927	mg/L	0.002	0.01	
* Beryllium, Total	3/26/20 13:06	3/27/20 12:26		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	3/26/20 13:06	3/27/20 12:26		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	3/26/20 13:06	3/27/20 12:26		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	3/26/20 13:06	3/27/20 12:26		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	3/26/20 13:06	3/27/20 12:26		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	3/26/20 13:06	3/27/20 12:26		1.015	Not Detected	mg/L	0.002	0.01	U
* Selenium, Total	3/26/20 13:06	3/27/20 12:26		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	3/26/20 13:06	3/27/20 12:26		1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 245.1	***Analyst: GAS***								
* Mercury, Total by CVAA	3/31/20 10:03	4/1/20 11:49		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2540C	***Analyst: TJW***								
* Solids, Dissolved	3/27/20 14:25	4/1/20 15:12		1	930	mg/L		75.8	
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	3/30/20 10:57	3/30/20 10:57		8	90.6	mg/L	4.00	8	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	3/30/20 12:54	3/30/20 12:54		1	0.204	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E	***Analyst: JCC***								
* Sulfate	4/1/20 10:57	4/1/20 10:57		20	327	mg/L	10.00	20	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	3/25/20 09:57	3/25/20 09:57			1270.87	uS/cm			FA
pH	3/25/20 09:57	3/25/20 09:57			8.24	SU			FA
Temperature	3/25/20 09:57	3/25/20 09:57			17.15	C			FA
Turbidity	3/25/20 09:57	3/25/20 09:57			2.96	NTU			FA

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

Comments:

Reported: 4/14/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORAP
Sample Date: 3/25/20 10:00
Customer ID:
Delivery Date: 3/26/20 11:12

Description: Gorgas Ash Pond - MW-43HO

Laboratory ID Number: BA05860

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA05863	Beryllium, Total	mg/L	0.0000309	0.00088	0.10	0.0909	0.0938	0.0916	0.085 to 0.115	90.9	70 to 130	3.14	20
BA05863	Molybdenum, Total	mg/L	0.00000378	0.0001474	0.10	0.120	0.120	0.0988	0.085 to 0.115	98.3	70 to 130	0.00	20
BA05863	Chromium, Total	mg/L	0.0000214	0.00044	0.10	0.101	0.101	0.102	0.085 to 0.115	101	70 to 130	0.00	20
BA05863	Lead, Total	mg/L	0.00000303	0.0001474	0.10	0.0993	0.102	0.102	0.085 to 0.115	99.3	70 to 130	2.68	20
BA05863	Thallium, Total	mg/L	-0.00000172	0.0001474	0.10	0.0997	0.106	0.105	0.085 to 0.115	99.7	70 to 130	6.13	20
BA05863	Selenium, Total	mg/L	0.0000712	0.00066	0.10	0.104	0.102	0.102	0.085 to 0.115	104	70 to 130	1.94	20
BA05866	Mercury, Total by CVAA	mg/L	-0.0000164	0.0005	0.004	0.00400	0.00422	0.00417	0.0034 to 0.0046	100	70 to 130	5.35	20
BA05863	Boron, Total	mg/L	0.00282	0.0650254	1.00	1.09	1.09	1.01	0.85 to 1.15	101	70 to 130	0.00	20
BA05863	Calcium, Total	mg/L	-0.0154	0.1518	5.00	11.5	11.4	5.21	4.25 to 5.75	106	70 to 130	0.873	20
BA05863	Cobalt, Total	mg/L	-0.00000297	0.0001474	0.10	0.0983	0.0986	0.0997	0.085 to 0.115	98.3	70 to 130	0.305	20
BA05863	Antimony, Total	mg/L	0.000225	0.00066	0.10	0.0976	0.0986	0.0956	0.085 to 0.115	97.6	70 to 130	1.02	20
BA05863	Arsenic, Total	mg/L	-0.00000532	0.0001474	0.10	0.110	0.111	0.103	0.085 to 0.115	104	70 to 130	0.905	20
BA05863	Cadmium, Total	mg/L	-0.00000379	0.0001474	0.10	0.0987	0.0983	0.103	0.085 to 0.115	98.7	70 to 130	0.406	20
BA05863	Barium, Total	mg/L	0.0000153	0.0002	0.10	0.324	0.326	0.0955	0.085 to 0.115	90.0	70 to 130	0.615	20
BA05863	Lithium, Total	mg/L	0.000116	0.0154	0.20	0.247	0.247	0.198	0.17 to 0.23	111	70 to 130	0.00	20

Comments:

Reported: 4/14/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/25/20 10:00
Customer ID:
Delivery Date: 3/26/20 11:12

Description: Gorgas Ash Pond - MW-43HO

Laboratory ID Number: BA05860

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA05864	Solids, Dissolved	mg/L	0.0000	25			333	49.0	40 to 60			0.301	5
BA05865	Fluoride	mg/L	0.0102	0.05	2.50	2.57	0.0126	2.57	2.25 to 2.75	103	80 to 120	0.00	20
BA05865	Chloride	mg/L	-0.029	0.50	10.0	10.6	0.193	9.97	9 to 11	106	80 to 120	0.00	20
BA05865	Sulfate	mg/L	-0.483	0.50	20.0	19.1	-0.344	19.4	18 to 22	95.5	80 to 120	0.00	20

Comments:

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - PZ-18

Location Code: WMWGORAP
Collected: 3/25/20 11:53
Customer ID:
Submittal Date: 3/26/20 11:12

Laboratory ID Number: BA05861

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	3/30/20 13:30	3/31/20 12:31		1.015	0.0568	mg/L	0.03	0.1	J
* Calcium, Total	3/30/20 13:30	3/31/20 12:31		1.015	34.5	mg/L	0.1	0.5	
* Lithium, Total	3/30/20 13:30	3/31/20 12:31		1.015	0.109	mg/L	0.01	0.02	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/26/20 13:06	3/27/20 12:28		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	3/26/20 13:06	3/27/20 12:28		1.015	0.0275	mg/L	0.001	0.005	
* Barium, Total	3/26/20 13:06	3/27/20 12:28		1.015	0.0280	mg/L	0.002	0.01	
* Beryllium, Total	3/26/20 13:06	3/27/20 12:28		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	3/26/20 13:06	3/27/20 12:28		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	3/26/20 13:06	3/27/20 12:28		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	3/26/20 13:06	3/27/20 12:28		1.015	0.00409	mg/L	0.002	0.005	J
* Lead, Total	3/26/20 13:06	3/27/20 12:28		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	3/26/20 13:06	3/27/20 12:28		1.015	0.00919	mg/L	0.002	0.01	J
* Selenium, Total	3/26/20 13:06	3/27/20 12:28		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	3/26/20 13:06	3/27/20 12:28		1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 245.1	***Analyst: GAS***								
* Mercury, Total by CVAA	3/31/20 10:03	4/1/20 11:51		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2540C	***Analyst: TJW***								
* Solids, Dissolved	3/27/20 14:25	4/1/20 15:12		1	738	mg/L		50	
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	3/30/20 10:47	3/30/20 10:47		1	2.88	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	3/30/20 12:55	3/30/20 12:55		1	0.396	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E	***Analyst: JCC***								
* Sulfate	4/1/20 10:51	4/1/20 10:51		20	355	mg/L	10.00	20	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	3/25/20 11:49	3/25/20 11:49			1317.79	uS/cm			FA
pH	3/25/20 11:49	3/25/20 11:49			6.80	SU			FA
Temperature	3/25/20 11:49	3/25/20 11:49			17.28	C			FA
Turbidity	3/25/20 11:49	3/25/20 11:49			4.49	NTU			FA

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

Comments:

Reported: 4/14/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORAP
Sample Date: 3/25/20 11:53
Customer ID:
Delivery Date: 3/26/20 11:12

Description: Gorgas Ash Pond - PZ-18

Laboratory ID Number: BA05861

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA05863	Beryllium, Total	mg/L	0.0000309	0.00088	0.10	0.0909	0.0938	0.0916	0.085 to 0.115	90.9	70 to 130	3.14	20
BA05863	Molybdenum, Total	mg/L	0.00000378	0.0001474	0.10	0.120	0.120	0.0988	0.085 to 0.115	98.3	70 to 130	0.00	20
BA05863	Chromium, Total	mg/L	0.0000214	0.00044	0.10	0.101	0.101	0.102	0.085 to 0.115	101	70 to 130	0.00	20
BA05863	Lead, Total	mg/L	0.00000303	0.0001474	0.10	0.0993	0.102	0.102	0.085 to 0.115	99.3	70 to 130	2.68	20
BA05863	Thallium, Total	mg/L	-0.00000172	0.0001474	0.10	0.0997	0.106	0.105	0.085 to 0.115	99.7	70 to 130	6.13	20
BA05863	Arsenic, Total	mg/L	-0.00000532	0.0001474	0.10	0.110	0.111	0.103	0.085 to 0.115	104	70 to 130	0.905	20
BA05863	Cadmium, Total	mg/L	-0.00000379	0.0001474	0.10	0.0987	0.0983	0.103	0.085 to 0.115	98.7	70 to 130	0.406	20
BA05863	Selenium, Total	mg/L	0.0000712	0.00066	0.10	0.104	0.102	0.102	0.085 to 0.115	104	70 to 130	1.94	20
BA05866	Mercury, Total by CVAA	mg/L	-0.0000164	0.0005	0.004	0.00400	0.00422	0.00417	0.0034 to 0.0046	100	70 to 130	5.35	20
BA05863	Boron, Total	mg/L	0.00282	0.0650254	1.00	1.09	1.09	1.01	0.85 to 1.15	101	70 to 130	0.00	20
BA05863	Calcium, Total	mg/L	-0.0154	0.1518	5.00	11.5	11.4	5.21	4.25 to 5.75	106	70 to 130	0.873	20
BA05863	Cobalt, Total	mg/L	-0.00000297	0.0001474	0.10	0.0983	0.0986	0.0997	0.085 to 0.115	98.3	70 to 130	0.305	20
BA05863	Antimony, Total	mg/L	0.000225	0.00066	0.10	0.0976	0.0986	0.0956	0.085 to 0.115	97.6	70 to 130	1.02	20
BA05863	Barium, Total	mg/L	0.0000153	0.0002	0.10	0.324	0.326	0.0955	0.085 to 0.115	90.0	70 to 130	0.615	20
BA05863	Lithium, Total	mg/L	0.000116	0.0154	0.20	0.247	0.247	0.198	0.17 to 0.23	111	70 to 130	0.00	20

Comments:

Reported: 4/14/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/25/20 11:53
Customer ID:
Delivery Date: 3/26/20 11:12

Description: Gorgas Ash Pond - PZ-18

Laboratory ID Number: BA05861

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA05865	Sulfate	mg/L	-0.483	0.50	20.0	19.1	-0.344	19.4	18 to 22	95.5	80 to 120	0.00	20
BA05861	Solids, Dissolved	mg/L	0.0000	25			796	49.0	40 to 60			3.78	5
BA05865	Fluoride	mg/L	0.0102	0.05	2.50	2.57	0.0126	2.57	2.25 to 2.75	103	80 to 120	0.00	20
BA05865	Chloride	mg/L	-0.029	0.50	10.0	10.6	0.193	9.97	9 to 11	106	80 to 120	0.00	20

Comments:

Reported: 4/14/2020
Version: 3.1
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - PZ-18 DUP

Location Code: WMWGORAP
Collected: 3/25/20 11:53
Customer ID:
Submittal Date: 3/26/20 11:12

Laboratory ID Number: BA05862

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	3/30/20 13:30	3/31/20 12:34		1.015	0.0560	mg/L	0.03	0.1	J
* Calcium, Total	3/30/20 13:30	3/31/20 12:34		1.015	33.7	mg/L	0.1	0.5	
* Lithium, Total	3/30/20 13:30	3/31/20 12:34		1.015	0.108	mg/L	0.01	0.02	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/26/20 13:06	3/27/20 12:31		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	3/26/20 13:06	3/27/20 12:31		1.015	0.0258	mg/L	0.001	0.005	
* Barium, Total	3/26/20 13:06	3/27/20 12:31		1.015	0.0290	mg/L	0.002	0.01	
* Beryllium, Total	3/26/20 13:06	3/27/20 12:31		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	3/26/20 13:06	3/27/20 12:31		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	3/26/20 13:06	3/27/20 12:31		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	3/26/20 13:06	3/27/20 12:31		1.015	0.00387	mg/L	0.002	0.005	J
* Lead, Total	3/26/20 13:06	3/27/20 12:31		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	3/26/20 13:06	3/27/20 12:31		1.015	0.00893	mg/L	0.002	0.01	J
* Selenium, Total	3/26/20 13:06	3/27/20 12:31		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	3/26/20 13:06	3/27/20 12:31		1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 245.1	***Analyst: GAS***								
* Mercury, Total by CVAA	3/31/20 10:03	4/1/20 11:54		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2540C	***Analyst: TJW***								
* Solids, Dissolved	3/27/20 14:25	4/1/20 15:12		1	802	mg/L		50	
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	3/30/20 10:49	3/30/20 10:49		1	2.91	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	3/30/20 12:56	3/30/20 12:56		1	0.406	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E	***Analyst: JCC***								
* Sulfate	4/1/20 10:52	4/1/20 10:52		20	356	mg/L	10.00	20	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	3/25/20 11:49	3/25/20 11:49			1317.79	uS/cm			FA
pH	3/25/20 11:49	3/25/20 11:49			6.80	SU			FA
Temperature	3/25/20 11:49	3/25/20 11:49			17.28	C			FA
Turbidity	3/25/20 11:49	3/25/20 11:49			4.49	NTU			FA

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

Comments:

Reported: 4/14/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORAP
Sample Date: 3/25/20 11:53
Customer ID:
Delivery Date: 3/26/20 11:12

Description: Gorgas Ash Pond - PZ-18 DUP

Laboratory ID Number: BA05862

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA05863	Molybdenum, Total	mg/L	0.00000378	0.0001474	0.10	0.120	0.120	0.0988	0.085 to 0.115	98.3	70 to 130	0.00	20
BA05863	Beryllium, Total	mg/L	0.0000309	0.00088	0.10	0.0909	0.0938	0.0916	0.085 to 0.115	90.9	70 to 130	3.14	20
BA05863	Chromium, Total	mg/L	0.0000214	0.00044	0.10	0.101	0.101	0.102	0.085 to 0.115	101	70 to 130	0.00	20
BA05863	Lead, Total	mg/L	0.00000303	0.0001474	0.10	0.0993	0.102	0.102	0.085 to 0.115	99.3	70 to 130	2.68	20
BA05863	Thallium, Total	mg/L	-0.00000172	0.0001474	0.10	0.0997	0.106	0.105	0.085 to 0.115	99.7	70 to 130	6.13	20
BA05863	Arsenic, Total	mg/L	-0.00000532	0.0001474	0.10	0.110	0.111	0.103	0.085 to 0.115	104	70 to 130	0.905	20
BA05863	Cadmium, Total	mg/L	-0.00000379	0.0001474	0.10	0.0987	0.0983	0.103	0.085 to 0.115	98.7	70 to 130	0.406	20
BA05863	Selenium, Total	mg/L	0.0000712	0.00066	0.10	0.104	0.102	0.102	0.085 to 0.115	104	70 to 130	1.94	20
BA05866	Mercury, Total by CVAA	mg/L	-0.0000164	0.0005	0.004	0.00400	0.00422	0.00417	0.0034 to 0.0046	100	70 to 130	5.35	20
BA05863	Boron, Total	mg/L	0.00282	0.0650254	1.00	1.09	1.09	1.01	0.85 to 1.15	101	70 to 130	0.00	20
BA05863	Calcium, Total	mg/L	-0.0154	0.1518	5.00	11.5	11.4	5.21	4.25 to 5.75	106	70 to 130	0.873	20
BA05863	Cobalt, Total	mg/L	-0.00000297	0.0001474	0.10	0.0983	0.0986	0.0997	0.085 to 0.115	98.3	70 to 130	0.305	20
BA05863	Antimony, Total	mg/L	0.000225	0.00066	0.10	0.0976	0.0986	0.0956	0.085 to 0.115	97.6	70 to 130	1.02	20
BA05863	Barium, Total	mg/L	0.0000153	0.0002	0.10	0.324	0.326	0.0955	0.085 to 0.115	90.0	70 to 130	0.615	20
BA05863	Lithium, Total	mg/L	0.000116	0.0154	0.20	0.247	0.247	0.198	0.17 to 0.23	111	70 to 130	0.00	20

Comments:

Reported: 4/14/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/25/20 11:53
Customer ID:
Delivery Date: 3/26/20 11:12

Description: Gorgas Ash Pond - PZ-18 DUP

Laboratory ID Number: BA05862

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA05865	Fluoride	mg/L	0.0102	0.05	2.50	2.57	0.0126	2.57	2.25 to 2.75	103	80 to 120	0.00	20
BA05864	Solids, Dissolved	mg/L	0.0000	25			333	49.0	40 to 60			0.301	5
BA05865	Chloride	mg/L	-0.029	0.50	10.0	10.6	0.193	9.97	9 to 11	106	80 to 120	0.00	20
BA05865	Sulfate	mg/L	-0.483	0.50	20.0	19.1	-0.344	19.4	18 to 22	95.5	80 to 120	0.00	20

Comments:

Reported: 4/14/2020
Version: 3.1
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-18V

Location Code: WMWGORAP
Collected: 3/25/20 13:00
Customer ID:
Submittal Date: 3/26/20 11:12

Laboratory ID Number: BA05863

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	3/30/20 13:30	3/31/20 12:37		1.015	0.0834	mg/L	0.03	0.1	J
* Calcium, Total	3/30/20 13:30	3/31/20 12:37		1.015	6.18	mg/L	0.1	0.5	
* Lithium, Total	3/30/20 13:30	3/31/20 12:37		1.015	0.0244	mg/L	0.01	0.02	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/26/20 13:06	3/27/20 12:33		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	3/26/20 13:06	3/27/20 12:33		1.015	0.00630	mg/L	0.001	0.005	
* Barium, Total	3/26/20 13:06	3/27/20 12:33		1.015	0.234	mg/L	0.002	0.01	
* Beryllium, Total	3/26/20 13:06	3/27/20 12:33		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	3/26/20 13:06	3/27/20 12:33		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	3/26/20 13:06	3/27/20 12:33		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	3/26/20 13:06	3/27/20 12:33		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	3/26/20 13:06	3/27/20 12:33		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	3/26/20 13:06	3/27/20 12:33		1.015	0.0217	mg/L	0.002	0.01	
* Selenium, Total	3/26/20 13:06	3/27/20 12:33		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	3/26/20 13:06	3/27/20 12:33		1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 245.1	***Analyst: GAS***								
* Mercury, Total by CVAA	3/31/20 10:03	4/1/20 11:56		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2540C	***Analyst: TJW***								
* Solids, Dissolved	3/27/20 14:25	4/1/20 15:12		1	287	mg/L		25	
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	3/30/20 10:50	3/30/20 10:50		1	6.23	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	3/30/20 12:57	3/30/20 12:57		1	0.353	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E	***Analyst: JCC***								
* Sulfate	4/1/20 10:53	4/1/20 10:53		1	16.5	mg/L	0.50	1	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	3/25/20 12:56	3/25/20 12:56			447.72	uS/cm			FA
pH	3/25/20 12:56	3/25/20 12:56			8.19	SU			FA
Temperature	3/25/20 12:56	3/25/20 12:56			19.34	C			FA
Turbidity	3/25/20 12:56	3/25/20 12:56			2.11	NTU			FA

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

Comments:

Reported: 4/14/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORAP
Sample Date: 3/25/20 13:00
Customer ID:
Delivery Date: 3/26/20 11:12

Description: Gorgas Ash Pond - MW-18V

Laboratory ID Number: BA05863

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA05863	Chromium, Total	mg/L	0.0000214	0.00044	0.10	0.101	0.101	0.102	0.085 to 0.115	101	70 to 130	0.00	20
BA05863	Molybdenum, Total	mg/L	0.00000378	0.0001474	0.10	0.120	0.120	0.0988	0.085 to 0.115	98.3	70 to 130	0.00	20
BA05863	Beryllium, Total	mg/L	0.0000309	0.00088	0.10	0.0909	0.0938	0.0916	0.085 to 0.115	90.9	70 to 130	3.14	20
BA05863	Selenium, Total	mg/L	0.0000712	0.00066	0.10	0.104	0.102	0.102	0.085 to 0.115	104	70 to 130	1.94	20
BA05866	Mercury, Total by CVAA	mg/L	-0.0000164	0.0005	0.004	0.00400	0.00422	0.00417	0.0034 to 0.0046	100	70 to 130	5.35	20
BA05863	Arsenic, Total	mg/L	-0.00000532	0.0001474	0.10	0.110	0.111	0.103	0.085 to 0.115	104	70 to 130	0.905	20
BA05863	Cadmium, Total	mg/L	-0.00000379	0.0001474	0.10	0.0987	0.0983	0.103	0.085 to 0.115	98.7	70 to 130	0.406	20
BA05863	Lead, Total	mg/L	0.00000303	0.0001474	0.10	0.0993	0.102	0.102	0.085 to 0.115	99.3	70 to 130	2.68	20
BA05863	Thallium, Total	mg/L	-0.00000172	0.0001474	0.10	0.0997	0.106	0.105	0.085 to 0.115	99.7	70 to 130	6.13	20
BA05863	Barium, Total	mg/L	0.0000153	0.0002	0.10	0.324	0.326	0.0955	0.085 to 0.115	90.0	70 to 130	0.615	20
BA05863	Lithium, Total	mg/L	0.000116	0.0154	0.20	0.247	0.247	0.198	0.17 to 0.23	111	70 to 130	0.00	20
BA05863	Boron, Total	mg/L	0.00282	0.0650254	1.00	1.09	1.09	1.01	0.85 to 1.15	101	70 to 130	0.00	20
BA05863	Calcium, Total	mg/L	-0.0154	0.1518	5.00	11.5	11.4	5.21	4.25 to 5.75	106	70 to 130	0.873	20
BA05863	Cobalt, Total	mg/L	-0.00000297	0.0001474	0.10	0.0983	0.0986	0.0997	0.085 to 0.115	98.3	70 to 130	0.305	20
BA05863	Antimony, Total	mg/L	0.000225	0.00066	0.10	0.0976	0.0986	0.0956	0.085 to 0.115	97.6	70 to 130	1.02	20

Comments:

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/25/20 13:00
Customer ID:
Delivery Date: 3/26/20 11:12

Description: Gorgas Ash Pond - MW-18V

Laboratory ID Number: BA05863

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA05865	Fluoride	mg/L	0.0102	0.05	2.50	2.57	0.0126	2.57	2.25 to 2.75	103	80 to 120	0.00	20
BA05864	Solids, Dissolved	mg/L	0.0000	25			333	49.0	40 to 60			0.301	5
BA05865	Chloride	mg/L	-0.029	0.50	10.0	10.6	0.193	9.97	9 to 11	106	80 to 120	0.00	20
BA05865	Sulfate	mg/L	-0.483	0.50	20.0	19.1	-0.344	19.4	18 to 22	95.5	80 to 120	0.00	20

Comments:

Reported: 4/14/2020
Version: 3.1
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-32H

Location Code: WMWGORAP
Collected: 3/24/20 10:20
Customer ID:
Submittal Date: 3/26/20 11:13

Laboratory ID Number: BA05864

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	3/30/20 13:30	3/31/20 12:58		1.015	0.0492	mg/L	0.03	0.1	J
* Calcium, Total	3/30/20 13:30	3/31/20 12:58		1.015	2.62	mg/L	0.1	0.5	
* Lithium, Total	3/30/20 13:30	3/31/20 12:58		1.015	0.0428	mg/L	0.01	0.02	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/26/20 13:06	3/27/20 13:09		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	3/26/20 13:06	3/27/20 13:09		1.015	Not Detected	mg/L	0.001	0.005	U
* Barium, Total	3/26/20 13:06	3/27/20 13:09		1.015	0.0362	mg/L	0.002	0.01	
* Beryllium, Total	3/26/20 13:06	3/27/20 13:09		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	3/26/20 13:06	3/27/20 13:09		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	3/26/20 13:06	3/27/20 13:09		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	3/26/20 13:06	3/27/20 13:09		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	3/26/20 13:06	3/27/20 13:09		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	3/26/20 13:06	3/27/20 13:09		1.015	0.0826	mg/L	0.002	0.01	
* Selenium, Total	3/26/20 13:06	3/27/20 13:09		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	3/26/20 13:06	3/27/20 13:09		1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 245.1	***Analyst: GAS***								
* Mercury, Total by CVAA	3/31/20 10:03	4/1/20 11:59		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2540C	***Analyst: TJW***								
* Solids, Dissolved	3/27/20 14:25	4/1/20 15:12		1	331	mg/L		25	
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	3/30/20 10:58	3/30/20 10:58		2	20.5	mg/L	1.00	2	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	3/30/20 12:59	3/30/20 12:59		1	0.180	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E	***Analyst: JCC***								
* Sulfate	4/1/20 10:54	4/1/20 10:54		1	33.2	mg/L	0.50	1	
Analytical Method: Field Measurements	***Analyst: AWG***								
Conductivity	3/24/20 10:15	3/24/20 10:15			555.29	uS/cm			FA
pH	3/24/20 10:15	3/24/20 10:15			8.47	SU			FA
Temperature	3/24/20 10:15	3/24/20 10:15			17.89	C			FA
Turbidity	3/24/20 10:15	3/24/20 10:15			2.19	NTU			FA

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

Comments:

Reported: 4/14/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORAP
Sample Date: 3/24/20 10:20
Customer ID:
Delivery Date: 3/26/20 11:13

Description: Gorgas Ash Pond - MW-32H

Laboratory ID Number: BA05864

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA05866	Mercury, Total by CVAA	mg/L	-0.0000164	0.0005	0.004	0.00400	0.00422	0.00417	0.0034 to 0.0046	100	70 to 130	5.35	20
BA05870	Chromium, Total	mg/L	-0.0000169	0.00044	0.10	0.108	0.106	0.100	0.085 to 0.115	103	70 to 130	1.87	20
BA05870	Molybdenum, Total	mg/L	0.00000530	0.0001474	0.10	0.0958	0.0951	0.0949	0.085 to 0.115	95.8	70 to 130	0.733	20
BA05870	Beryllium, Total	mg/L	0.0000205	0.00088	0.10	0.0932	0.0916	0.0951	0.085 to 0.115	93.2	70 to 130	1.73	20
BA05870	Lithium, Total	mg/L	0.0000904	0.0154	0.20	0.309	0.309	0.196	0.17 to 0.23	107	70 to 130	0.00	20
BA05870	Arsenic, Total	mg/L	-0.0000108	0.0001474	0.10	0.103	0.101	0.107	0.085 to 0.115	103	70 to 130	1.96	20
BA05870	Cadmium, Total	mg/L	0.00000354	0.0001474	0.10	0.0995	0.0985	0.0973	0.085 to 0.115	99.5	70 to 130	1.01	20
BA05870	Lead, Total	mg/L	0.00000288	0.0001474	0.10	0.107	0.103	0.102	0.085 to 0.115	105	70 to 130	3.81	20
BA05870	Boron, Total	mg/L	0.00399	0.0650254	1.00	1.02	1.03	1.00	0.85 to 1.15	102	70 to 130	0.976	20
BA05870	Antimony, Total	mg/L	0.000146	0.00066	0.10	0.0860	0.0852	0.0907	0.085 to 0.115	86.0	70 to 130	0.935	20
BA05870	Barium, Total	mg/L	0.00000856	0.0002	0.10	0.973	0.961	0.0905	0.085 to 0.115	105	70 to 130	1.24	20
BA05870	Calcium, Total	mg/L	0.0276	0.1518	5.00	33.6	33.6	5.31	4.25 to 5.75	100	70 to 130	0.00	20
BA05870	Cobalt, Total	mg/L	0.00000093	0.0001474	0.10	0.101	0.0994	0.0960	0.085 to 0.115	98.9	70 to 130	1.60	20
BA05870	Selenium, Total	mg/L	0.0000662	0.00066	0.10	0.0998	0.101	0.111	0.085 to 0.115	99.8	70 to 130	1.20	20
BA05870	Thallium, Total	mg/L	-0.00000362	0.0001474	0.10	0.102	0.105	0.106	0.085 to 0.115	102	70 to 130	2.90	20

Comments:

Reported: 4/14/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/24/20 10:20
Customer ID:
Delivery Date: 3/26/20 11:13

Description: Gorgas Ash Pond - MW-32H

Laboratory ID Number: BA05864

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA05864	Solids, Dissolved	mg/L	0.0000	25			333	49.0	40 to 60			0.301	5
BA05865	Chloride	mg/L	-0.029	0.50	10.0	10.6	0.193	9.97	9 to 11	106	80 to 120	0.00	20
BA05865	Fluoride	mg/L	0.0102	0.05	2.50	2.57	0.0126	2.57	2.25 to 2.75	103	80 to 120	0.00	20
BA05865	Sulfate	mg/L	-0.483	0.50	20.0	19.1	-0.344	19.4	18 to 22	95.5	80 to 120	0.00	20

Comments:

Reported: 4/14/2020
Version: 3.1
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond Field Blank

Location Code: WMWGORAPFB
Collected: 3/24/20 11:25
Customer ID:
Submittal Date: 3/26/20 11:13

Laboratory ID Number: BA05865

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	3/30/20 13:30	3/31/20 13:01		1.015	Not Detected	mg/L	0.03	0.1	U
* Calcium, Total	3/30/20 13:30	3/31/20 13:01		1.015	Not Detected	mg/L	0.1	0.5	U
* Lithium, Total	3/30/20 13:30	3/31/20 13:01		1.015	Not Detected	mg/L	0.01	0.02	U
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/26/20 13:06	3/27/20 13:12		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	3/26/20 13:06	3/27/20 13:12		1.015	Not Detected	mg/L	0.001	0.005	U
* Barium, Total	3/26/20 13:06	3/27/20 13:12		1.015	Not Detected	mg/L	0.002	0.01	U
* Beryllium, Total	3/26/20 13:06	3/27/20 13:12		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	3/26/20 13:06	3/27/20 13:12		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	3/26/20 13:06	3/27/20 13:12		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	3/26/20 13:06	3/27/20 13:12		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	3/26/20 13:06	3/27/20 13:12		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	3/26/20 13:06	3/27/20 13:12		1.015	Not Detected	mg/L	0.002	0.01	U
* Selenium, Total	3/26/20 13:06	3/27/20 13:12		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	3/26/20 13:06	3/27/20 13:12		1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 245.1	***Analyst: GAS***								
* Mercury, Total by CVAA	3/31/20 10:03	4/1/20 12:01		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2540C	***Analyst: TJW***								
* Solids, Dissolved	3/27/20 14:25	4/1/20 15:12		1	Not Detected	mg/L		25	U
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	3/30/20 10:52	3/30/20 10:52		1	Not Detected	mg/L	0.50	1	U
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	3/30/20 13:00	3/30/20 13:00		1	Not Detected	mg/L	0.06	0.1	U
Analytical Method: SM4500SO4 E	***Analyst: JCC***								
* Sulfate	4/1/20 10:58	4/1/20 10:58		1	Not Detected	mg/L	0.50	1	U

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

Comments:

Reported: 4/14/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORAPFB
Sample Date: 3/24/20 11:25
Customer ID:
Delivery Date: 3/26/20 11:13

Description: Gorgas Ash Pond Field Blank

Laboratory ID Number: BA05865

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA05870	Chromium, Total	mg/L	-0.0000169	0.00044	0.10	0.108	0.106	0.100	0.085 to 0.115	103	70 to 130	1.87	20
BA05870	Molybdenum, Total	mg/L	0.00000530	0.0001474	0.10	0.0958	0.0951	0.0949	0.085 to 0.115	95.8	70 to 130	0.733	20
BA05866	Mercury, Total by CVAA	mg/L	-0.0000164	0.0005	0.004	0.00400	0.00422	0.00417	0.0034 to 0.0046	100	70 to 130	5.35	20
BA05870	Beryllium, Total	mg/L	0.0000205	0.00088	0.10	0.0932	0.0916	0.0951	0.085 to 0.115	93.2	70 to 130	1.73	20
BA05870	Lithium, Total	mg/L	0.0000904	0.0154	0.20	0.309	0.309	0.196	0.17 to 0.23	107	70 to 130	0.00	20
BA05870	Boron, Total	mg/L	0.00399	0.0650254	1.00	1.02	1.03	1.00	0.85 to 1.15	102	70 to 130	0.976	20
BA05870	Antimony, Total	mg/L	0.000146	0.00066	0.10	0.0860	0.0852	0.0907	0.085 to 0.115	86.0	70 to 130	0.935	20
BA05870	Arsenic, Total	mg/L	-0.0000108	0.0001474	0.10	0.103	0.101	0.107	0.085 to 0.115	103	70 to 130	1.96	20
BA05870	Cadmium, Total	mg/L	0.00000354	0.0001474	0.10	0.0995	0.0985	0.0973	0.085 to 0.115	99.5	70 to 130	1.01	20
BA05870	Lead, Total	mg/L	0.00000288	0.0001474	0.10	0.107	0.103	0.102	0.085 to 0.115	105	70 to 130	3.81	20
BA05870	Barium, Total	mg/L	0.00000856	0.0002	0.10	0.973	0.961	0.0905	0.085 to 0.115	105	70 to 130	1.24	20
BA05870	Calcium, Total	mg/L	0.0276	0.1518	5.00	33.6	33.6	5.31	4.25 to 5.75	100	70 to 130	0.00	20
BA05870	Cobalt, Total	mg/L	0.00000093	0.0001474	0.10	0.101	0.0994	0.0960	0.085 to 0.115	98.9	70 to 130	1.60	20
BA05870	Selenium, Total	mg/L	0.0000662	0.00066	0.10	0.0998	0.101	0.111	0.085 to 0.115	99.8	70 to 130	1.20	20
BA05870	Thallium, Total	mg/L	-0.00000362	0.0001474	0.10	0.102	0.105	0.106	0.085 to 0.115	102	70 to 130	2.90	20

Comments:

Reported: 4/14/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Customer Account: WMWGORAPFB
Sample Date: 3/24/20 11:25
Customer ID:
Delivery Date: 3/26/20 11:13

Description: Gorgas Ash Pond Field Blank

Laboratory ID Number: BA05865

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA05864	Solids, Dissolved	mg/L	0.0000	25			333	49.0	40 to 60			0.301	5
BA05865	Fluoride	mg/L	0.0102	0.05	2.50	2.57	0.0126	2.57	2.25 to 2.75	103	80 to 120	0.00	20
BA05865	Chloride	mg/L	-0.029	0.50	10.0	10.6	0.193	9.97	9 to 11	106	80 to 120	0.00	20
BA05865	Sulfate	mg/L	-0.483	0.50	20.0	19.1	-0.344	19.4	18 to 22	95.5	80 to 120	0.00	20

Comments:

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - PZ-22

Location Code: WMWGORAP
Collected: 3/24/20 11:40
Customer ID:
Submittal Date: 3/26/20 11:13

Laboratory ID Number: BA05866

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	3/30/20 13:30	3/31/20 13:04		1.015	0.0521	mg/L	0.03	0.1	J
* Calcium, Total	3/30/20 13:30	3/31/20 13:04		1.015	19.3	mg/L	0.1	0.5	
* Lithium, Total	3/30/20 13:30	3/31/20 13:04		1.015	0.0734	mg/L	0.01	0.02	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/26/20 13:06	3/27/20 13:15		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	3/26/20 13:06	3/27/20 13:15		1.015	0.00367	mg/L	0.001	0.005	J
* Barium, Total	3/26/20 13:06	3/27/20 13:15		1.015	0.104	mg/L	0.002	0.01	
* Beryllium, Total	3/26/20 13:06	3/27/20 13:15		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	3/26/20 13:06	3/27/20 13:15		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	3/26/20 13:06	3/27/20 13:15		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	3/26/20 13:06	3/27/20 13:15		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	3/26/20 13:06	3/27/20 13:15		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	3/26/20 13:06	3/27/20 13:15		1.015	0.00333	mg/L	0.002	0.01	J
* Selenium, Total	3/26/20 13:06	3/27/20 13:15		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	3/26/20 13:06	3/27/20 13:15		1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 245.1	***Analyst: GAS***								
* Mercury, Total by CVAA	3/31/20 10:03	4/1/20 12:03		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2540C	***Analyst: TJW***								
* Solids, Dissolved	3/27/20 14:25	4/1/20 15:12		1	412	mg/L		25	
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	3/30/20 11:09	3/30/20 11:09		1	2.53	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	3/30/20 13:11	3/30/20 13:11		1	0.387	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E	***Analyst: JCC***								
* Sulfate	4/1/20 11:20	4/1/20 11:20		4	70.1	mg/L	2.00	4	
Analytical Method: Field Measurements	***Analyst: AWG***								
Conductivity	3/24/20 11:35	3/24/20 11:35			660.33	uS/cm			FA
pH	3/24/20 11:35	3/24/20 11:35			7.77	SU			FA
Temperature	3/24/20 11:35	3/24/20 11:35			17.74	C			FA
Turbidity	3/24/20 11:35	3/24/20 11:35			7.39	NTU			FA

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

Comments:

Reported: 4/14/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORAP
Sample Date: 3/24/20 11:40
Customer ID:
Delivery Date: 3/26/20 11:13

Description: Gorgas Ash Pond - PZ-22

Laboratory ID Number: BA05866

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA05870	Chromium, Total	mg/L	-0.0000169	0.00044	0.10	0.108	0.106	0.100	0.085 to 0.115	103	70 to 130	1.87	20
BA05866	Mercury, Total by CVAA	mg/L	-0.0000164	0.0005	0.004	0.00400	0.00422	0.00417	0.0034 to 0.0046	100	70 to 130	5.35	20
BA05870	Molybdenum, Total	mg/L	0.00000530	0.0001474	0.10	0.0958	0.0951	0.0949	0.085 to 0.115	95.8	70 to 130	0.733	20
BA05870	Beryllium, Total	mg/L	0.0000205	0.00088	0.10	0.0932	0.0916	0.0951	0.085 to 0.115	93.2	70 to 130	1.73	20
BA05870	Lithium, Total	mg/L	0.0000904	0.0154	0.20	0.309	0.309	0.196	0.17 to 0.23	107	70 to 130	0.00	20
BA05870	Boron, Total	mg/L	0.00399	0.0650254	1.00	1.02	1.03	1.00	0.85 to 1.15	102	70 to 130	0.976	20
BA05870	Antimony, Total	mg/L	0.000146	0.00066	0.10	0.0860	0.0852	0.0907	0.085 to 0.115	86.0	70 to 130	0.935	20
BA05870	Arsenic, Total	mg/L	-0.0000108	0.0001474	0.10	0.103	0.101	0.107	0.085 to 0.115	103	70 to 130	1.96	20
BA05870	Cadmium, Total	mg/L	0.00000354	0.0001474	0.10	0.0995	0.0985	0.0973	0.085 to 0.115	99.5	70 to 130	1.01	20
BA05870	Lead, Total	mg/L	0.00000288	0.0001474	0.10	0.107	0.103	0.102	0.085 to 0.115	105	70 to 130	3.81	20
BA05870	Barium, Total	mg/L	0.00000856	0.0002	0.10	0.973	0.961	0.0905	0.085 to 0.115	105	70 to 130	1.24	20
BA05870	Calcium, Total	mg/L	0.0276	0.1518	5.00	33.6	33.6	5.31	4.25 to 5.75	100	70 to 130	0.00	20
BA05870	Cobalt, Total	mg/L	0.00000093	0.0001474	0.10	0.101	0.0994	0.0960	0.085 to 0.115	98.9	70 to 130	1.60	20
BA05870	Selenium, Total	mg/L	0.0000662	0.00066	0.10	0.0998	0.101	0.111	0.085 to 0.115	99.8	70 to 130	1.20	20
BA05870	Thallium, Total	mg/L	-0.00000362	0.0001474	0.10	0.102	0.105	0.106	0.085 to 0.115	102	70 to 130	2.90	20

Comments:

Reported: 4/14/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/24/20 11:40
Customer ID:
Delivery Date: 3/26/20 11:13

Description: Gorgas Ash Pond - PZ-22

Laboratory ID Number: BA05866

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA05861	Solids, Dissolved	mg/L	0.0000	25			796	49.0	40 to 60			3.78	5
BA05871	Fluoride	mg/L	0.00546	0.05	2.50	2.69	0.128	2.56	2.25 to 2.75	102	80 to 120	0.778	20
BA05871	Chloride	mg/L	0.0144	0.50	10.0	12.7	2.61	10.0	9 to 11	100	80 to 120	3.39	20
BA05871	Sulfate	mg/L	-0.385	0.50	20.0	22.4	3.73	19.9	18 to 22	93.8	80 to 120	2.44	20

Comments:

Reported: 4/14/2020
Version: 3.1
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - PZ-22 DUP

Location Code: WMWGORAP
Collected: 3/24/20 11:40
Customer ID:
Submittal Date: 3/26/20 11:13

Laboratory ID Number: BA05867

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	3/30/20 13:30	3/31/20 13:07		1.015	0.0507	mg/L	0.03	0.1	J
* Calcium, Total	3/30/20 13:30	3/31/20 13:07		1.015	20.2	mg/L	0.1	0.5	
* Lithium, Total	3/30/20 13:30	3/31/20 13:07		1.015	0.0740	mg/L	0.01	0.02	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/26/20 13:06	3/27/20 13:17		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	3/26/20 13:06	3/27/20 13:17		1.015	0.00372	mg/L	0.001	0.005	J
* Barium, Total	3/26/20 13:06	3/27/20 13:17		1.015	0.109	mg/L	0.002	0.01	
* Beryllium, Total	3/26/20 13:06	3/27/20 13:17		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	3/26/20 13:06	3/27/20 13:17		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	3/26/20 13:06	3/27/20 13:17		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	3/26/20 13:06	3/27/20 13:17		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	3/26/20 13:06	3/27/20 13:17		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	3/26/20 13:06	3/27/20 13:17		1.015	0.00334	mg/L	0.002	0.01	J
* Selenium, Total	3/26/20 13:06	3/27/20 13:17		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	3/26/20 13:06	3/27/20 13:17		1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 245.1	***Analyst: GAS***								
* Mercury, Total by CVAA	3/31/20 10:03	4/1/20 12:24		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2540C	***Analyst: TJW***								
* Solids, Dissolved	3/27/20 14:25	4/1/20 15:12		1	409	mg/L		25	
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	3/30/20 11:10	3/30/20 11:10		1	2.70	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	3/30/20 13:12	3/30/20 13:12		1	0.390	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E	***Analyst: JCC***								
* Sulfate	4/1/20 11:21	4/1/20 11:21		4	71.3	mg/L	2.00	4	
Analytical Method: Field Measurements	***Analyst: AWG***								
Conductivity	3/24/20 11:35	3/24/20 11:35			660.33	uS/cm			FA
pH	3/24/20 11:35	3/24/20 11:35			7.77	SU			FA
Temperature	3/24/20 11:35	3/24/20 11:35			17.74	C			FA
Turbidity	3/24/20 11:35	3/24/20 11:35			7.39	NTU			FA

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

Comments:

Reported: 4/14/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORAP
Sample Date: 3/24/20 11:40
Customer ID:
Delivery Date: 3/26/20 11:13

Description: Gorgas Ash Pond - PZ-22 DUP

Laboratory ID Number: BA05867

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA05870	Chromium, Total	mg/L	-0.0000169	0.00044	0.10	0.108	0.106	0.100	0.085 to 0.115	103	70 to 130	1.87	20
BA05870	Arsenic, Total	mg/L	-0.0000108	0.0001474	0.10	0.103	0.101	0.107	0.085 to 0.115	103	70 to 130	1.96	20
BA05870	Cadmium, Total	mg/L	0.00000354	0.0001474	0.10	0.0995	0.0985	0.0973	0.085 to 0.115	99.5	70 to 130	1.01	20
BA05870	Lead, Total	mg/L	0.00000288	0.0001474	0.10	0.107	0.103	0.102	0.085 to 0.115	105	70 to 130	3.81	20
BA05870	Molybdenum, Total	mg/L	0.00000530	0.0001474	0.10	0.0958	0.0951	0.0949	0.085 to 0.115	95.8	70 to 130	0.733	20
BA05870	Boron, Total	mg/L	0.00399	0.0650254	1.00	1.02	1.03	1.00	0.85 to 1.15	102	70 to 130	0.976	20
BA05870	Mercury, Total by CVAA	mg/L	-0.0000440	0.0005	0.004	0.00420	0.00420	0.00415	0.0034 to 0.0046	105	70 to 130	0.00	20
BA05870	Antimony, Total	mg/L	0.000146	0.00066	0.10	0.0860	0.0852	0.0907	0.085 to 0.115	86.0	70 to 130	0.935	20
BA05870	Barium, Total	mg/L	0.00000856	0.0002	0.10	0.973	0.961	0.0905	0.085 to 0.115	105	70 to 130	1.24	20
BA05870	Calcium, Total	mg/L	0.0276	0.1518	5.00	33.6	33.6	5.31	4.25 to 5.75	100	70 to 130	0.00	20
BA05870	Cobalt, Total	mg/L	0.00000093	0.0001474	0.10	0.101	0.0994	0.0960	0.085 to 0.115	98.9	70 to 130	1.60	20
BA05870	Selenium, Total	mg/L	0.0000662	0.00066	0.10	0.0998	0.101	0.111	0.085 to 0.115	99.8	70 to 130	1.20	20
BA05870	Thallium, Total	mg/L	-0.00000362	0.0001474	0.10	0.102	0.105	0.106	0.085 to 0.115	102	70 to 130	2.90	20
BA05870	Beryllium, Total	mg/L	0.0000205	0.00088	0.10	0.0932	0.0916	0.0951	0.085 to 0.115	93.2	70 to 130	1.73	20
BA05870	Lithium, Total	mg/L	0.0000904	0.0154	0.20	0.309	0.309	0.196	0.17 to 0.23	107	70 to 130	0.00	20

Comments:

Reported: 4/14/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/24/20 11:40
Customer ID:
Delivery Date: 3/26/20 11:13

Description: Gorgas Ash Pond - PZ-22 DUP

Laboratory ID Number: BA05867

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA05861	Solids, Dissolved	mg/L	0.0000	25			796	49.0	40 to 60			3.78	5
BA05871	Fluoride	mg/L	0.00546	0.05	2.50	2.69	0.128	2.56	2.25 to 2.75	102	80 to 120	0.778	20
BA05871	Chloride	mg/L	0.0144	0.50	10.0	12.7	2.61	10.0	9 to 11	100	80 to 120	3.39	20
BA05871	Sulfate	mg/L	-0.385	0.50	20.0	22.4	3.73	19.9	18 to 22	93.8	80 to 120	2.44	20

Comments:

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - PZ-16

Location Code: WMWGORAP
Collected: 3/24/20 12:48
Customer ID:
Submittal Date: 3/26/20 11:13

Laboratory ID Number: BA05868

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	3/30/20 13:30	3/31/20 13:10		1.015	0.0772	mg/L	0.03	0.1	J
* Calcium, Total	3/30/20 13:30	3/31/20 13:10		1.015	13.9	mg/L	0.1	0.5	
* Lithium, Total	3/30/20 13:30	3/31/20 13:10		1.015	0.0714	mg/L	0.01	0.02	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/26/20 13:06	3/27/20 13:20		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	3/26/20 13:06	3/27/20 13:20		1.015	Not Detected	mg/L	0.001	0.005	U
* Barium, Total	3/26/20 13:06	3/27/20 13:20		1.015	0.295	mg/L	0.002	0.01	
* Beryllium, Total	3/26/20 13:06	3/27/20 13:20		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	3/26/20 13:06	3/27/20 13:20		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	3/26/20 13:06	3/27/20 13:20		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	3/26/20 13:06	3/27/20 13:20		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	3/26/20 13:06	3/27/20 13:20		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	3/26/20 13:06	3/27/20 13:20		1.015	Not Detected	mg/L	0.002	0.01	U
* Selenium, Total	3/26/20 13:06	3/27/20 13:20		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	3/26/20 13:06	3/27/20 13:20		1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 245.1	***Analyst: GAS***								
* Mercury, Total by CVAA	3/31/20 10:03	4/1/20 12:26		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2540C	***Analyst: TJW***								
* Solids, Dissolved	3/27/20 14:25	4/1/20 15:12		1	381	mg/L		25	
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	3/30/20 11:11	3/30/20 11:11		1	5.72	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	3/30/20 13:14	3/30/20 13:14		1	0.228	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E	***Analyst: JCC***								
* Sulfate	4/1/20 11:12	4/1/20 11:12		1	27.7	mg/L	0.50	1	
Analytical Method: Field Measurements	***Analyst: AWG***								
Conductivity	3/24/20 12:44	3/24/20 12:44			610.89	uS/cm			FA
pH	3/24/20 12:44	3/24/20 12:44			7.89	SU			FA
Temperature	3/24/20 12:44	3/24/20 12:44			17.58	C			FA
Turbidity	3/24/20 12:44	3/24/20 12:44			5.76	NTU			FA

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

Comments:

Reported: 4/14/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORAP
Sample Date: 3/24/20 12:48
Customer ID:
Delivery Date: 3/26/20 11:13

Description: Gorgas Ash Pond - PZ-16

Laboratory ID Number: BA05868

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA05870	Chromium, Total	mg/L	-0.0000169	0.00044	0.10	0.108	0.106	0.100	0.085 to 0.115	103	70 to 130	1.87	20
BA05870	Beryllium, Total	mg/L	0.0000205	0.00088	0.10	0.0932	0.0916	0.0951	0.085 to 0.115	93.2	70 to 130	1.73	20
BA05870	Lithium, Total	mg/L	0.0000904	0.0154	0.20	0.309	0.309	0.196	0.17 to 0.23	107	70 to 130	0.00	20
BA05870	Molybdenum, Total	mg/L	0.00000530	0.0001474	0.10	0.0958	0.0951	0.0949	0.085 to 0.115	95.8	70 to 130	0.733	20
BA05870	Arsenic, Total	mg/L	-0.0000108	0.0001474	0.10	0.103	0.101	0.107	0.085 to 0.115	103	70 to 130	1.96	20
BA05870	Cadmium, Total	mg/L	0.00000354	0.0001474	0.10	0.0995	0.0985	0.0973	0.085 to 0.115	99.5	70 to 130	1.01	20
BA05870	Lead, Total	mg/L	0.00000288	0.0001474	0.10	0.107	0.103	0.102	0.085 to 0.115	105	70 to 130	3.81	20
BA05870	Boron, Total	mg/L	0.00399	0.0650254	1.00	1.02	1.03	1.00	0.85 to 1.15	102	70 to 130	0.976	20
BA05870	Mercury, Total by CVAA	mg/L	-0.0000440	0.0005	0.004	0.00420	0.00420	0.00415	0.0034 to 0.0046	105	70 to 130	0.00	20
BA05870	Antimony, Total	mg/L	0.000146	0.00066	0.10	0.0860	0.0852	0.0907	0.085 to 0.115	86.0	70 to 130	0.935	20
BA05870	Barium, Total	mg/L	0.00000856	0.0002	0.10	0.973	0.961	0.0905	0.085 to 0.115	105	70 to 130	1.24	20
BA05870	Calcium, Total	mg/L	0.0276	0.1518	5.00	33.6	33.6	5.31	4.25 to 5.75	100	70 to 130	0.00	20
BA05870	Cobalt, Total	mg/L	0.00000093	0.0001474	0.10	0.101	0.0994	0.0960	0.085 to 0.115	98.9	70 to 130	1.60	20
BA05870	Selenium, Total	mg/L	0.0000662	0.00066	0.10	0.0998	0.101	0.111	0.085 to 0.115	99.8	70 to 130	1.20	20
BA05870	Thallium, Total	mg/L	-0.00000362	0.0001474	0.10	0.102	0.105	0.106	0.085 to 0.115	102	70 to 130	2.90	20

Comments:

Reported: 4/14/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/24/20 12:48
Customer ID:
Delivery Date: 3/26/20 11:13

Description: Gorgas Ash Pond - PZ-16

Laboratory ID Number: BA05868

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA05861	Solids, Dissolved	mg/L	0.0000	25			796	49.0	40 to 60			3.78	5
BA05871	Fluoride	mg/L	0.00546	0.05	2.50	2.69	0.128	2.56	2.25 to 2.75	102	80 to 120	0.778	20
BA05871	Chloride	mg/L	0.0144	0.50	10.0	12.7	2.61	10.0	9 to 11	100	80 to 120	3.39	20
BA05871	Sulfate	mg/L	-0.385	0.50	20.0	22.4	3.73	19.9	18 to 22	93.8	80 to 120	2.44	20

Comments:

Reported: 4/14/2020
Version: 3.1
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-16D

Location Code: WMWGORAP
Collected: 3/24/20 13:45
Customer ID:
Submittal Date: 3/26/20 11:13

Laboratory ID Number: BA05869

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	3/30/20 13:30	3/31/20 13:13		1.015	Not Detected	mg/L	0.03	0.1	U
* Calcium, Total	3/30/20 13:30	3/31/20 13:13		1.015	34.1	mg/L	0.1	0.5	
* Lithium, Total	3/30/20 13:30	3/31/20 13:13		1.015	0.0350	mg/L	0.01	0.02	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/26/20 13:06	3/27/20 13:23		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	3/26/20 13:06	3/27/20 13:23		1.015	Not Detected	mg/L	0.001	0.005	U
* Barium, Total	3/26/20 13:06	3/27/20 13:23		1.015	0.323	mg/L	0.002	0.01	
* Beryllium, Total	3/26/20 13:06	3/27/20 13:23		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	3/26/20 13:06	3/27/20 13:23		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	3/26/20 13:06	3/27/20 13:23		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	3/26/20 13:06	3/27/20 13:23		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	3/26/20 13:06	3/27/20 13:23		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	3/26/20 13:06	3/27/20 13:23		1.015	Not Detected	mg/L	0.002	0.01	U
* Selenium, Total	3/26/20 13:06	3/27/20 13:23		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	3/26/20 13:06	3/27/20 13:23		1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 245.1	***Analyst: GAS***								
* Mercury, Total by CVAA	3/31/20 10:03	4/1/20 12:28		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2540C	***Analyst: TJW***								
* Solids, Dissolved	3/27/20 14:25	4/1/20 15:12		1	205	mg/L		25	
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	3/30/20 11:12	3/30/20 11:12		1	2.88	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	3/30/20 13:15	3/30/20 13:15		1	0.109	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E	***Analyst: JCC***								
* Sulfate	4/1/20 11:14	4/1/20 11:14		1	14.1	mg/L	0.50	1	
Analytical Method: Field Measurements	***Analyst: AWG***								
Conductivity	3/24/20 13:43	3/24/20 13:43			353.51	uS/cm			FA
pH	3/24/20 13:43	3/24/20 13:43			7.46	SU			FA
Temperature	3/24/20 13:43	3/24/20 13:43			19.40	C			FA
Turbidity	3/24/20 13:43	3/24/20 13:43			1.38	NTU			FA

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

Comments:

Reported: 4/14/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORAP
Sample Date: 3/24/20 13:45
Customer ID:
Delivery Date: 3/26/20 11:13

Description: Gorgas Ash Pond - MW-16D

Laboratory ID Number: BA05869

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA05870	Chromium, Total	mg/L	-0.0000169	0.00044	0.10	0.108	0.106	0.100	0.085 to 0.115	103	70 to 130	1.87	20
BA05870	Beryllium, Total	mg/L	0.0000205	0.00088	0.10	0.0932	0.0916	0.0951	0.085 to 0.115	93.2	70 to 130	1.73	20
BA05870	Lithium, Total	mg/L	0.0000904	0.0154	0.20	0.309	0.309	0.196	0.17 to 0.23	107	70 to 130	0.00	20
BA05870	Molybdenum, Total	mg/L	0.00000530	0.0001474	0.10	0.0958	0.0951	0.0949	0.085 to 0.115	95.8	70 to 130	0.733	20
BA05870	Barium, Total	mg/L	0.00000856	0.0002	0.10	0.973	0.961	0.0905	0.085 to 0.115	105	70 to 130	1.24	20
BA05870	Calcium, Total	mg/L	0.0276	0.1518	5.00	33.6	33.6	5.31	4.25 to 5.75	100	70 to 130	0.00	20
BA05870	Cobalt, Total	mg/L	0.00000093	0.0001474	0.10	0.101	0.0994	0.0960	0.085 to 0.115	98.9	70 to 130	1.60	20
BA05870	Selenium, Total	mg/L	0.0000662	0.00066	0.10	0.0998	0.101	0.111	0.085 to 0.115	99.8	70 to 130	1.20	20
BA05870	Thallium, Total	mg/L	-0.00000362	0.0001474	0.10	0.102	0.105	0.106	0.085 to 0.115	102	70 to 130	2.90	20
BA05870	Arsenic, Total	mg/L	-0.0000108	0.0001474	0.10	0.103	0.101	0.107	0.085 to 0.115	103	70 to 130	1.96	20
BA05870	Cadmium, Total	mg/L	0.00000354	0.0001474	0.10	0.0995	0.0985	0.0973	0.085 to 0.115	99.5	70 to 130	1.01	20
BA05870	Lead, Total	mg/L	0.00000288	0.0001474	0.10	0.107	0.103	0.102	0.085 to 0.115	105	70 to 130	3.81	20
BA05870	Boron, Total	mg/L	0.00399	0.0650254	1.00	1.02	1.03	1.00	0.85 to 1.15	102	70 to 130	0.976	20
BA05870	Mercury, Total by CVAA	mg/L	-0.0000440	0.0005	0.004	0.00420	0.00420	0.00415	0.0034 to 0.0046	105	70 to 130	0.00	20
BA05870	Antimony, Total	mg/L	0.000146	0.00066	0.10	0.0860	0.0852	0.0907	0.085 to 0.115	86.0	70 to 130	0.935	20

Comments:

Reported: 4/14/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/24/20 13:45
Customer ID:
Delivery Date: 3/26/20 11:13

Description: Gorgas Ash Pond - MW-16D

Laboratory ID Number: BA05869

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA05861	Solids, Dissolved	mg/L	0.0000	25			796	49.0	40 to 60			3.78	5
BA05871	Fluoride	mg/L	0.00546	0.05	2.50	2.69	0.128	2.56	2.25 to 2.75	102	80 to 120	0.778	20
BA05871	Chloride	mg/L	0.0144	0.50	10.0	12.7	2.61	10.0	9 to 11	100	80 to 120	3.39	20
BA05871	Sulfate	mg/L	-0.385	0.50	20.0	22.4	3.73	19.9	18 to 22	93.8	80 to 120	2.44	20

Comments:

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-26H

Location Code: WMWGORAP
Collected: 3/25/20 11:42
Customer ID:
Submittal Date: 3/26/20 11:13

Laboratory ID Number: BA05870

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	3/30/20 13:30	3/31/20 13:16		1.015	Not Detected	mg/L	0.03	0.1	U
* Calcium, Total	3/30/20 13:30	3/31/20 13:16		1.015	28.6	mg/L	0.1	0.5	
* Lithium, Total	3/30/20 13:30	3/31/20 13:16		1.015	0.0946	mg/L	0.01	0.02	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/26/20 13:06	3/27/20 13:25		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	3/26/20 13:06	3/27/20 13:25		1.015	Not Detected	mg/L	0.001	0.005	U
* Barium, Total	3/26/20 13:06	3/27/20 13:25		1.015	0.868	mg/L	0.002	0.01	
* Beryllium, Total	3/26/20 13:06	3/27/20 13:25		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	3/26/20 13:06	3/27/20 13:25		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	3/26/20 13:06	3/27/20 13:25		1.015	0.00547	mg/L	0.002	0.01	J
* Cobalt, Total	3/26/20 13:06	3/27/20 13:25		1.015	0.00207	mg/L	0.002	0.005	J
* Lead, Total	3/26/20 13:06	3/27/20 13:25		1.015	0.00190	mg/L	0.001	0.005	J
* Molybdenum, Total	3/26/20 13:06	3/27/20 13:25		1.015	Not Detected	mg/L	0.002	0.01	U
* Selenium, Total	3/26/20 13:06	3/27/20 13:25		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	3/26/20 13:06	3/27/20 13:25		1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 245.1	***Analyst: GAS***								
* Mercury, Total by CVAA	3/31/20 10:03	4/1/20 12:31		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2540C	***Analyst: TJW***								
* Solids, Dissolved	3/27/20 14:25	4/1/20 15:12		1	269	mg/L		25	
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	3/30/20 11:13	3/30/20 11:13		1	2.73	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	3/30/20 13:16	3/30/20 13:16		1	0.131	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E	***Analyst: JCC***								
* Sulfate	4/1/20 11:15	4/1/20 11:15		1	3.25	mg/L	0.50	1	
Analytical Method: Field Measurements	***Analyst: AWG***								
Conductivity	3/25/20 11:37	3/25/20 11:37			435.93	uS/cm			FA
pH	3/25/20 11:37	3/25/20 11:37			7.24	SU			FA
Temperature	3/25/20 11:37	3/25/20 11:37			19.31	C			FA
Turbidity	3/25/20 11:37	3/25/20 11:37			44.7	NTU			FA

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

Comments:

Reported: 4/14/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORAP
Sample Date: 3/25/20 11:42
Customer ID:
Delivery Date: 3/26/20 11:13

Description: Gorgas Ash Pond - MW-26H

Laboratory ID Number: BA05870

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA05870	Chromium, Total	mg/L	-0.0000169	0.00044	0.10	0.108	0.106	0.100	0.085 to 0.115	103	70 to 130	1.87	20
BA05870	Molybdenum, Total	mg/L	0.00000530	0.0001474	0.10	0.0958	0.0951	0.0949	0.085 to 0.115	95.8	70 to 130	0.733	20
BA05870	Beryllium, Total	mg/L	0.0000205	0.00088	0.10	0.0932	0.0916	0.0951	0.085 to 0.115	93.2	70 to 130	1.73	20
BA05870	Lithium, Total	mg/L	0.0000904	0.0154	0.20	0.309	0.309	0.196	0.17 to 0.23	107	70 to 130	0.00	20
BA05870	Boron, Total	mg/L	0.00399	0.0650254	1.00	1.02	1.03	1.00	0.85 to 1.15	102	70 to 130	0.976	20
BA05870	Mercury, Total by CVAA	mg/L	-0.0000440	0.0005	0.004	0.00420	0.00420	0.00415	0.0034 to 0.0046	105	70 to 130	0.00	20
BA05870	Antimony, Total	mg/L	0.000146	0.00066	0.10	0.0860	0.0852	0.0907	0.085 to 0.115	86.0	70 to 130	0.935	20
BA05870	Arsenic, Total	mg/L	-0.0000108	0.0001474	0.10	0.103	0.101	0.107	0.085 to 0.115	103	70 to 130	1.96	20
BA05870	Cadmium, Total	mg/L	0.00000354	0.0001474	0.10	0.0995	0.0985	0.0973	0.085 to 0.115	99.5	70 to 130	1.01	20
BA05870	Lead, Total	mg/L	0.00000288	0.0001474	0.10	0.107	0.103	0.102	0.085 to 0.115	105	70 to 130	3.81	20
BA05870	Barium, Total	mg/L	0.00000856	0.0002	0.10	0.973	0.961	0.0905	0.085 to 0.115	105	70 to 130	1.24	20
BA05870	Calcium, Total	mg/L	0.0276	0.1518	5.00	33.6	33.6	5.31	4.25 to 5.75	100	70 to 130	0.00	20
BA05870	Cobalt, Total	mg/L	0.00000093	0.0001474	0.10	0.101	0.0994	0.0960	0.085 to 0.115	98.9	70 to 130	1.60	20
BA05870	Selenium, Total	mg/L	0.0000662	0.00066	0.10	0.0998	0.101	0.111	0.085 to 0.115	99.8	70 to 130	1.20	20
BA05870	Thallium, Total	mg/L	-0.00000362	0.0001474	0.10	0.102	0.105	0.106	0.085 to 0.115	102	70 to 130	2.90	20

Comments:

Reported: 4/14/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/25/20 11:42
Customer ID:
Delivery Date: 3/26/20 11:13

Description: Gorgas Ash Pond - MW-26H

Laboratory ID Number: BA05870

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA05871	Chloride	mg/L	0.0144	0.50	10.0	12.7	2.61	10.0	9 to 11	100	80 to 120	3.39	20
BA05871	Sulfate	mg/L	-0.385	0.50	20.0	22.4	3.73	19.9	18 to 22	93.8	80 to 120	2.44	20
BA05861	Solids, Dissolved	mg/L	0.0000	25			796	49.0	40 to 60			3.78	5
BA05871	Fluoride	mg/L	0.00546	0.05	2.50	2.69	0.128	2.56	2.25 to 2.75	102	80 to 120	0.778	20

Comments:

Reported: 4/14/2020
Version: 3.1
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-26H DIS

Location Code: WMWGORAP
Collected: 3/25/20 11:42
Customer ID:
Submittal Date: 3/26/20 11:13

Laboratory ID Number: BA05871

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Boron, Dissolved	3/30/20 11:30	3/31/20 09:36		1.015	Not Detected	mg/L	0.03	0.1	U
* Calcium, Dissolved	3/30/20 11:30	3/31/20 09:36		1.015	27.9	mg/L	0.1	0.5	
* Lithium, Dissolved	3/30/20 11:30	3/31/20 09:36		1.015	0.0927	mg/L	0.01	0.02	
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	3/26/20 12:41	3/27/20 13:54		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Dissolved	3/26/20 12:41	3/27/20 13:54		1.015	Not Detected	mg/L	0.001	0.005	U
* Barium, Dissolved	3/26/20 12:41	3/27/20 13:54		1.015	0.797	mg/L	0.002	0.01	
* Beryllium, Dissolved	3/26/20 12:41	3/27/20 13:54		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Dissolved	3/26/20 12:41	3/27/20 13:54		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Dissolved	3/26/20 12:41	3/27/20 13:54		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Dissolved	3/26/20 12:41	3/27/20 13:54		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Dissolved	3/26/20 12:41	3/27/20 13:54		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Dissolved	3/26/20 12:41	3/27/20 13:54		1.015	Not Detected	mg/L	0.002	0.01	U
* Selenium, Dissolved	3/26/20 12:41	3/27/20 13:54		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Dissolved	3/26/20 12:41	3/27/20 13:54		1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 245.1	***Analyst: GAS***								
* Mercury, Dissolved by CVAA	3/31/20 10:03	4/1/20 12:50		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2540C	***Analyst: TJW***								
* Solids, Dissolved	3/27/20 14:25	4/1/20 15:12		1	264	mg/L		25	
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	3/30/20 11:15	3/30/20 11:15		1	2.70	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	3/30/20 13:17	3/30/20 13:17		1	0.129	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E	***Analyst: JCC***								
* Sulfate	4/1/20 11:16	4/1/20 11:16		1	3.64	mg/L	0.50	1	
Analytical Method: Field Measurements	***Analyst: AWG***								
Conductivity	3/25/20 11:37	3/25/20 11:37			435.93	uS/cm			FA
pH	3/25/20 11:37	3/25/20 11:37			7.24	SU			FA
Temperature	3/25/20 11:37	3/25/20 11:37			19.31	C			FA
Turbidity	3/25/20 11:37	3/25/20 11:37			44.7	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 4/13/2020

Reported: 4/14/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORAP
Sample Date: 3/25/20 11:42
Customer ID:
Delivery Date: 3/26/20 11:13

Description: Gorgas Ash Pond - MW-26H DIS

Laboratory ID Number: BA05871

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA05871	Lithium, Dissolved	mg/L	0.0000749	0.0154	0.20	0.311	0.314	0.197	0.17 to 0.23	109	70 to 130	0.960	20
BA05871	Boron, Dissolved	mg/L	0.00203	0.0650254	1.00	1.04	1.06	1.01	0.85 to 1.15	104	70 to 130	1.90	20
BA05871	Lead, Dissolved	mg/L	0.00000458	0.0001474	0.10	0.0981	0.0984	0.0998	0.085 to 0.115	98.1	70 to 130	0.305	20
BA05871	Cadmium, Dissolved	mg/L	0.0000112	0.0001474	0.10	0.0959	0.0981	0.0992	0.085 to 0.115	95.9	70 to 130	2.27	20
BA05871	Chromium, Dissolved	mg/L	-0.00000597	0.00044	0.10	0.0985	0.0991	0.102	0.085 to 0.115	98.5	70 to 130	0.607	20
BA05871	Antimony, Dissolved	mg/L	0.000215	0.00066	0.10	0.0911	0.0919	0.0907	0.085 to 0.115	91.1	70 to 130	0.874	20
BA05871	Selenium, Dissolved	mg/L	0.0000619	0.00066	0.10	0.101	0.103	0.102	0.085 to 0.115	101	70 to 130	1.96	20
BA05871	Beryllium, Dissolved	mg/L	0.0000303	0.00088	0.10	0.0923	0.0914	0.0918	0.085 to 0.115	92.3	70 to 130	0.980	20
BA05871	Thallium, Dissolved	mg/L	-0.00000316	0.0001474	0.10	0.100	0.0998	0.102	0.085 to 0.115	100	70 to 130	0.200	20
BA05871	Mercury, Dissolved by	mg/L	-0.0000329	0.0005	0.004	0.00426	0.00421	0.00422	0.0034 to 0.0046	106	70 to 130	1.18	20
BA05871	Molybdenum, Dissolved	mg/L	0.00000193	0.0001474	0.10	0.0973	0.0971	0.0989	0.085 to 0.115	97.3	70 to 130	0.206	20
BA05871	Calcium, Dissolved	mg/L	-0.0187	0.1518	5.00	33.0	33.1	5.11	4.25 to 5.75	102	70 to 130	0.303	20
BA05871	Cobalt, Dissolved	mg/L	-0.00000152	0.0001474	0.10	0.0948	0.0961	0.1000	0.085 to 0.115	94.8	70 to 130	1.36	20
BA05871	Arsenic, Dissolved	mg/L	-0.00000717	0.0001474	0.10	0.102	0.104	0.103	0.085 to 0.115	102	70 to 130	1.94	20
BA05871	Barium, Dissolved	mg/L	0.0000512	0.0002	0.10	0.883	0.889	0.0932	0.085 to 0.115	86.0	70 to 130	0.677	20

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 4/13/2020

Reported: 4/14/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/25/20 11:42
Customer ID:
Delivery Date: 3/26/20 11:13

Description: Gorgas Ash Pond - MW-26H DIS

Laboratory ID Number: BA05871

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA05871	Chloride	mg/L	0.0144	0.50	10.0	12.7	2.61	10.0	9 to 11	100	80 to 120	3.39	20
BA05871	Sulfate	mg/L	-0.385	0.50	20.0	22.4	3.73	19.9	18 to 22	93.8	80 to 120	2.44	20
BA05861	Solids, Dissolved	mg/L	0.0000	25			796	49.0	40 to 60			3.78	5
BA05871	Fluoride	mg/L	0.00546	0.05	2.50	2.69	0.128	2.56	2.25 to 2.75	102	80 to 120	0.778	20

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 4/13/2020

Reported: 4/14/2020
Version: 3.1
COA_CCR

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

Definitions

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

Alabama Power Lab & Field Services

☑ Field Complete ☐ Outside Lab

☑ Lab Complete

Lab ETA 03/19/2020 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 Ash Pond

Bottles

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

Comments: Dissolved set collected at MW-7

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-6S	3/17/20	11:30	4	Groundwater		BA05412
MW-6S Dup	03/17/2020	11:30	4	Sample Duplicate		BA05413
MW-6D	03/17/2020	12:40	4	Groundwater		BA05414
MW-23H	03/17/2020	13:53	4	Groundwater		BA05415
MW-7	03/17/2020	17:07	4	Groundwater		BA05416
MW-7 Dis	03/17/2020	17:07	4	Groundwater		BA05417
MW-41HD	03/18/2020	09:40	4	Groundwater		BA05418
MW-24H	03/18/2020	10:35	4	Groundwater		BA05419
MW-8	03/18/2020	11:43	4	Groundwater		BA05420
MW-12	03/18/2020	14:20	4	Groundwater		BA05421
MW-18	03/18/2020	16:32	4	Groundwater		BA05422

Relinquished By	Received By	Date/Time
[signature]	[signature]	03/19/2020 09:02

SmarTroll ID	7586-41444-5-3
Turbidity ID	4677-23342-4-1
Sample Event	1268

All metals and radiological bottles have pH < 2 ☑

Cooler Temp	0.0 degrees C
Thermometer ID	5408-27568-2-2
pH Strip ID	7901-43572-2-1

Chain of Custody
Groundwater
APC General Testing Laboratory

☑ Field Complete
☑ Lab Complete
☐ Outside Lab

Lab ETA: 03/19/2020 10:00

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

Bottles

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

Comments

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-17	3/16/20	13:41	4	Groundwater		BA05401
MW-28H	03/16/2020	14:57	4	Groundwater		BA05402
FB-1	03/16/2020	16:15	4	Field Blank		BA05403
MW-34HO	03/16/2020	16:52	4	Groundwater		BA05404
MW-35HO	03/17/2020	09:04	4	Groundwater		BA05405
MW-36H	03/17/2020	11:45	4	Groundwater		BA05406
MW-33HO	03/17/2020	13:48	4	Groundwater		BA05407
MW-30HA	03/18/2020	09:35	4	Groundwater		BA05408
MW-15V	03/18/2020	11:58	4	Groundwater		BA05409
MW-15	03/18/2020	14:03	4	Groundwater		BA05410
MW-21	03/18/2020	15:50	4	Groundwater		BA05411

Relinquished By	Received By	Date/Time
[signature]	[signature]	03/19/2020 09:03

SmarTroll ID	7586-41446-5-5
Turbidity ID	7081-38476-1-1
Sample Event	1268

All metals and radiological bottles have pH < 2 ☑

Cooler Temp	0.5 degrees C
Thermometer ID	5408-27568-2-2
pH Strip ID	7901-43572-2-1

Chain of Custody
Groundwater
APC General Testing Laboratory

✔ Field Complete
✔ Lab Complete
☐ Outside Lab

Lab ETA 03/19/2020 09:09

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Site Representative	John Pate	Requested By	Greg Dyer
Collector	Anthony Goggins	Location	Gorgas Ash Pond

Bottles

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

Comments

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
FB-4	3/18/20	13:45	4	Field Blank		BA05423
MW-31H	03/18/2020	14:35	4	Groundwater		BA05424

Relinquished By	Received By	Date/Time
		03/19/2020 09:11

SmarTroll ID	7586-41442-5-1
Turbidity ID	5160-25211-1-1
Sample Event	1268

All metals and radiological bottles have pH < 2 ✔

Cooler Temp	0.0 degrees C
Thermometer ID	5408-27568-2-2
pH Strip ID	7901-43572-2-1

Chain of Custody
Groundwater
APC General Testing Laboratory

✔ Field Complete
✔ Lab Complete
☐ Outside Lab

Lab ETA: 03/26/2020 10:00

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

Bottles

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

Comments

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-9V	03/23/2020	16:05	4	Groundwater		BA05846
MW-42H	03/24/2020	08:50	4	Groundwater		BA05847
MW-42H Dup	03/24/2020	08:50	4	Sample Duplicate		BA05848
MW-38H	03/24/2020	10:55	4	Groundwater		BA05849
MW-19	03/24/2020	14:25	4	Groundwater		BA05850
EB-1	03/24/2020	14:50	4	Equipment Blank		BA05851
MW-29H	03/25/2020	10:08	4	Groundwater		BA05852
MW-17V	03/25/2020	12:38	4	Groundwater		BA05853
FB-2	03/25/2020	13:20	4	Field Blank		BA05854

Relinquished By	Received By	Date/Time
		03/26/2020 09:05

SmarTroll ID	7586-41444-5-3
Turbidity ID	4677-23342-4-1
Sample Event	1268

All metals and radiological bottles have pH < 2 ✔

Cooler Temp	0.0 degrees C
Thermometer ID	5408-27568-2-2
pH Strip ID	7901-43572-2-1

Bottles/Pre-Preserved Bottles are provided by the GTL

7.1

Chain of Custody
Groundwater
APC General Testing Laboratory

☑ Field Complete ☐ Outside Lab
☑ Lab Complete

Lab ETA 03/26/2020 10:00

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

Bottles

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

Comments
Dissolved set collected on MW-12V.
1mL of HNO3 (#7111-38602-4-1) added to MW-43HO Hg bottle by LBM 3/26/20 @ 1030. LBM 3/26/20

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-21V	03/23/2020	17:14	4	Groundwater		BA05855
MW-12V	03/24/2020	11:32	4	Groundwater		BA05856
MW-12V dis	03/24/2020	11:32	4	Groundwater		BA05857
MW-25HA	03/24/2020	13:10	4	Groundwater		BA05858
MW-2	03/25/2020	08:32	4	Groundwater		BA05859
MW-43HO	03/25/2020	10:00	4	Groundwater		BA05860
PZ-18	03/25/2020	11:53	4	Groundwater		BA05861
PZ-18 dup	03/25/2020	11:53	4	Sample Duplicate		BA05862
MW-18V	03/25/2020	13:00	4	Groundwater		BA05863

Relinquished By	Received By	Date/Time
[signature]	[signature]	03/26/2020 09:06

SmarTroll ID	7586-41446-5-5	All metals and radiological bottles have pH < 2	☑
Turbidity ID	7081-38476-1-1	Cooler Temp	0.2 degrees C
Sample Event	1268	Thermometer ID	5408-27568-2-2
		pH Strip ID	7901-43572-2-1

Bottles/Pre-Preserved Bottles are provided by the GTL

7.1

Chain of Custody Groundwater

APC General Testing Laboratory

☑ Field Complete ☐ Outside Lab

☑ Lab Complete

Lab ETA 03/26/2020 09:00

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Site Representative	John Pate	Requested By	Greg Dyer
Collector	Anthony Goggins	Location	Gorgas Ash Pond

Bottles

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

Comments: Field filtered set collected MW-26H

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-32H	03/24/2020	10:20	4	Groundwater		BA05864
FB-3	03/24/2020	11:25	4	Field Blank		BA05865
PZ-22	03/24/2020	11:40	4	Groundwater		BA05866
PZ-22DUP	03/24/2020	11:40	4	Sample Duplicate		BA05867
PZ-16	03/24/2020	12:48	4	Groundwater		BA05868
MW-16D	03/24/2020	13:45	4	Groundwater		BA05869
MW-26H	03/25/2020	11:42	4	Groundwater		BA05870
MW-26H Dis	03/25/2020	11:42	4	Groundwater		BA05871

Relinquished By	Received By	Date/Time
		03/26/2020 09:18

SmarTroll ID	7586-41442-5-1
Turbidity ID	5160-26211-1-1
Sample Event	1268

All metals and radiological bottles have pH < 2 ☑

Cooler Temp	0.0 degrees C
Thermometer ID	5408-27568-2-2
pH Strip ID	7901-43572-2-1

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 03/19/2020 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 Ash Pond

Bottles

1	Radium	1 L	3	N/A	N/A	5	N/A	N/A	7	N/A	N/A
2	N/A	N/A	4	N/A	N/A	6	N/A	N/A	8	N/A	N/A

Comments: Dissolved set collected at MW-7. Radium MS/MSD collected at MW-6D

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-6S	3/17/20	11:30	1	Groundwater		BA05436
MW-6S Dup	03/17/2020	11:30	1	Sample Duplicate		BA05437
MW-6D	03/17/2020	12:40	3	Groundwater		BA05438
MW-23H	03/17/2020	13:53	1	Groundwater		BA05439
MW-7	03/17/2020	17:07	1	Groundwater		BA05440
MW-7 Dis	03/17/2020	17:07	1	Groundwater		BA05441
MW-41HD	03/18/2020	09:40	1	Groundwater		BA05442
MW-24H	03/18/2020	10:35	1	Groundwater		BA05443
MW-8	03/18/2020	11:43	1	Groundwater		BA05444
MW-12	03/18/2020	14:20	1	Groundwater		BA05445
MW-18	03/18/2020	16:32	1	Groundwater		BA05446

Relinquished By	Received By	Date/Time
		03/19/2020 09:02

SmarTroll ID	7586-41444-5-3
Turbidity ID	4677-23342-4-1
Sample Event	1268

All metals and radiological bottles have pH < 2 ✔

Cooler Temp	N/A
Thermometer ID	N/A
pH Strip ID	7901-43572-2-1

Chain of Custody
Groundwater
APC General Testing Laboratory

✔ Field Complete ✔ Outside Lab
✔ Lab Complete

Lab ETA 03/19/2020 10:00

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

Bottles

1	Radium	1 L	3	N/A	N/A	5	N/A	N/A	7	N/A	N/A
2	N/A	N/A	4	N/A	N/A	6	N/A	N/A	8	N/A	N/A

Comments

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-17	3/16/20	13:41	1	Groundwater		BA05425
MW-28H	03/16/2020	14:57	1	Groundwater		BA05426
FB-1	03/16/2020	16:15	1	Field Blank		BA05427
MW-34HO	03/16/2020	16:52	1	Groundwater		BA05428
MW-35HO	03/17/2020	09:04	1	Groundwater		BA05429
MW-36H	03/17/2020	11:45	1	Groundwater		BA05430
MW-33HO	03/17/2020	13:48	1	Groundwater		BA05431
MW-30HA	03/18/2020	09:35	1	Groundwater		BA05432
MW-15V	03/18/2020	11:58	1	Groundwater		BA05433
MW-15	03/18/2020	14:03	1	Groundwater		BA05434
MW-21	03/18/2020	15:50	1	Groundwater		BA05435

Relinquished By	Received By	Date/Time
[signature]	[signature]	03/19/2020 09:03

SmarTroll ID	7586-41446-5-5	All metals and radiological bottles have pH < 2	✔
Turbidity ID	7081-38476-1-1	Cooler Temp	N/A
Sample Event	1268	Thermometer ID	N/A
		pH Strip ID	7901-43572-2-1

Chain of Custody Groundwater

APC General Testing Laboratory

✔ Field Complete ✔ Outside Lab

✔ Lab Complete

Lab ETA 03/19/2020 09:09

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Site Representative	John Pate	Requested By	Greg Dyer
Collector	Anthony Goggins	Location	Gorgas Ash Pond

Bottles

1	Radium	1 L	3	N/A	N/A	5	N/A	N/A	7	N/A	N/A
2	N/A	N/A	4	N/A	N/A	6	N/A	N/A	8	N/A	N/A

Comments

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
FB-4	3/18/20	13:45	1	Field Blank		BA05447
MW-31H	03/18/2020	14:35	1	Groundwater		BA05448

Relinquished By	Received By	Date/Time
		03/19/2020 09:11

SmarTroll ID	7586-41442-5-1
Turbidity ID	5160-25211-1-1
Sample Event	1268

All metals and radiological bottles have pH < 2 ☐

Cooler Temp	N/A
Thermometer ID	N/A
pH Strip ID	7901-43572-2-1

Chain of Custody Groundwater

APC General Testing Laboratory

✔ Field Complete ✔ Outside Lab

✔ Lab Complete

Lab ETA 03/26/2020 10:00

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

Bottles

1	Radium	1 L	3	N/A	N/A	5	N/A	N/A	7	N/A	N/A
2	N/A	N/A	4	N/A	N/A	6	N/A	N/A	8	N/A	N/A

Comments: Dissolved set collected on MW-12V. Rad MS/MSD collected at MW-25HA.

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-21V	03/23/2020	17:14	1	Groundwater		BA05581
MW-12V	03/24/2020	11:32	1	Groundwater		BA05582
MW-12V dis	03/24/2020	11:32	1	Groundwater		BA05583
MW-25HA	03/24/2020	13:10	3	Groundwater		BA05584
MW-2	03/25/2020	08:32	1	Groundwater		BA05585
MW-43HO	03/25/2020	10:00	1	Groundwater		BA05586
PZ-18	03/25/2020	11:53	1	Groundwater		BA05587
PZ-18 dup	03/25/2020	11:53	1	Sample Duplicate		BA05588
MW-18V	03/25/2020	13:00	1	Groundwater		BA05589

Relinquished By	Received By	Date/Time
		03/26/2020 09:05

SmarTroll ID	7586-41446-5-5
Turbidity ID	7081-38476-1-1
Sample Event	1268

All metals and radiological bottles have pH < 2 ✔

Cooler Temp	N/A
Thermometer ID	N/A
pH Strip ID	7901-43572-2-1

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 03/26/2020 10:00

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

Bottles

1	Radium	1 L	3	N/A	N/A	5	N/A	N/A	7	N/A	N/A
2	N/A	N/A	4	N/A	N/A	6	N/A	N/A	8	N/A	N/A

Comments

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-9V	03/23/2020	16:05	1	Groundwater		BA05872
MW-42H	03/24/2020	08:50	1	Groundwater		BA05873
MW-42H Dup	03/24/2020	08:50	1	Sample Duplicate		BA05874
MW-38H	03/24/2020	10:55	1	Groundwater		BA05875
MW-19	03/24/2020	14:25	1	Groundwater		BA05876
EB-1	03/24/2020	14:50	1	Equipment Blank		BA05877
MW-29H	03/25/2020	10:08	1	Groundwater		BA05878
MW-17V	03/25/2020	12:38	1	Groundwater		BA05879
FB-2	03/25/2020	13:20	1	Field Blank		BA05880

Relinquished By	Received By	Date/Time
		03/26/2020 09:05

SmarTroll ID	7586-41444-5-3
Turbidity ID	4677-23342-4-1
Sample Event	1268

All metals and radiological bottles have pH < 2 ✔

Cooler Temp	N/A
Thermometer ID	N/A
pH Strip ID	7901-43572-2-1

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 03/26/2020 09:00

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Site Representative	John Pate	Requested By	Greg Dyer
Collector	Anthony Goggins	Location	Gorgas Ash Pond

Bottles

1	Radium	1 L	3	N/A	N/A	5	N/A	N/A	7	N/A	N/A
2	N/A	N/A	4	N/A	N/A	6	N/A	N/A	8	N/A	N/A

Comments: Matrix Spike And Duplicate collected PZ-16; Field filtered set collected MW-26H

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-32H	03/24/2020	10:20	1	Groundwater		BA05890
FB-3	03/24/2020	11:25	1	Field Blank		BA05891
PZ-22	03/24/2020	11:40	1	Groundwater		BA05892
PZ-22DUP	03/24/2020	11:40	1	Sample Duplicate		BA05893
PZ-16	03/24/2020	12:48	3	Groundwater		BA05894
MW-16D	03/24/2020	13:45	1	Groundwater		BA05895
MW-26H	03/25/2020	11:42	1	Groundwater		BA05896
MW-26H Dis	03/25/2020	11:42	1	Groundwater		BA05897

Relinquished By	Received By	Date/Time
		03/26/2020 09:17

SmarTroll ID	7586-41442-5-1
Turbidity ID	5160-26211-1-1
Sample Event	1268

All metals and radiological bottles have pH < 2 ✔

Cooler Temp	N/A
Thermometer ID	N/A
pH Strip ID	7901-43572-2-1

Bottles/Pre-Preserved Bottles are provided by the GTL

eurofins | Environment Testing TestAmerica

ANALYTICAL REPORT

Eurofins TestAmerica, Pensacola
3355 McLemore Drive
Pensacola, FL 32514
Tel: (850)474-1001

Laboratory Job ID: 400-186042-1
Laboratory Sample Delivery Group: Gorgas Ash Pond 1268
Client Project/Site: CCR Plant Gorgas

For:
Alabama Power General Test Laboratory
744 County Rd 87
GSC #8
Calera, Alabama 35040

Attn: Laura Midkiff

Authorized for release by:
4/29/2020 5:08:54 PM

Cheyenne Whitmire, Project Manager II
(850)471-6222
cheyenne.whitmire@testamericainc.com

LINKS

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The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Job ID: 400-186042-1

Laboratory: Eurofins TestAmerica, Pensacola

Narrative

Job Narrative
400-186042-1

RAD

Method 9315: Radium-226 Prep Batch 160-466598. Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. BA05892 PZ-22 (400-186042-45), BA05893 PZ-22 DUP (400-186042-46), BA05894 PZ-16 (400-186042-47), BA05894 PZ-16 (400-186042-47[MS]), BA05894 PZ-16 (400-186042-47[MSD]), BA05895 MW-16D (400-186042-48), BA05896 MW-26H (400-186042-49), BA05897 MW-26H DIS (400-186042-50), (LCS 160-466598/1-A) and (MB 160-466598/21-A)

Method 9315: Radium-226 Prep Batch 160-466543. Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. BA05433 MW-15V (400-186042-9), BA05434 MW-15 (400-186042-10), BA05435 MW-21 (400-186042-11), BA05436 MW-6S (400-186042-12), BA05437 MW-6S DUP (400-186042-13), BA05438 MW-6D (400-186042-14), BA05438 MW-6D (400-186042-14[MS]), BA05438 MW-6D (400-186042-14[MSD]), BA05439 MW-23H (400-186042-15), BA05440 MW-7 (400-186042-16), BA05441 MW-7 DIS (400-186042-17), BA05442 MW-41HD (400-186042-18), BA05443 MW-24H (400-186042-19), BA05444 MW-8 (400-186042-20), BA05445 MW-12 (400-186042-21), BA05446 MW-18 (400-186042-22), BA05447 FB-4 (400-186042-23), BA05448 MW-31H (400-186042-24), BA05872 MW-9V (400-186042-25), BA05873 MW-42H (400-186042-26), (LCS 160-466543/1-A) and (MB 160-466543/22-A)

Method 9315: Radium-226 Prep Batch 160-466586. Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. BA05874 MW-42H DUP (400-186042-27), BA05875 MW-38H (400-186042-28), BA05876 MW-19 (400-186042-29), BA05877 EB-1 (400-186042-30), BA05878 MW-29H (400-186042-31), BA05879 MW-17V (400-186042-32), BA05880 FB-2 (400-186042-33), BA05881 MW-21V (400-186042-34), BA05882 MW-12V (400-186042-35), BA05883 MW-12V DIS (400-186042-36), BA05884 MW-25HA (400-186042-37), BA05884 MW-25HA (400-186042-37[MS]), BA05884 MW-25HA (400-186042-37[MSD]), BA05885 MW-2 (400-186042-38), BA05886 MW-43HO (400-186042-39), BA05887 PZ-18 (400-186042-40), BA05888 PZ-18 DUP (400-186042-41), BA05889 MW-18V (400-186042-42), BA05890 MW-32H (400-186042-43), BA05891 FB-3 (400-186042-44), (LCS 160-466586/1-A) and (MB 160-466586/22-A)

Methods 9315: Radium-226 Prep Batch 160-466701. Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. BA05425 MW-17 (400-186042-1), BA05426 MW-28H (400-186042-2), BA05427 FB-1 (400-186042-3), BA05428 MW-34HO (400-186042-4), BA05429 MW-35HO (400-186042-5), BA05430 MW-36H (400-186042-6), BA05431 MW-33HO (400-186042-7), BA05432 MW-30HA (400-186042-8), (LCS 160-466701/1-A), (MB 160-466701/20-A), (440-263721-A-1-A), (440-263721-A-1-B MS) and (440-263721-A-1-C MSD)

Method 9320: Radium-228 Prep Batch 160-466601. The detection goal was not met for the following sample due to the presence of matrix interferences: BA05896 MW-26H (400-186042-49). See prep NCM 160-193363. Analytical results are reported with the detection limit achieved.

Method 9320: Ra-228 Prep Batch 160-466601. Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. BA05892 PZ-22 (400-186042-45), BA05893 PZ-22 DUP (400-186042-46), BA05894 PZ-16 (400-186042-47), BA05894 PZ-16 (400-186042-47[MS]), BA05894 PZ-16 (400-186042-47[MSD]), BA05895 MW-16D (400-186042-48), BA05896 MW-26H (400-186042-49), BA05897 MW-26H DIS (400-186042-50), (LCS 160-466601/1-A) and (MB 160-466601/21-A)

Method 9320: Ra-228 Prep Batch 160-466588. The detection goal was not met for the following sample due to the presence of matrix interferences: BA05882 MW-12V (400-186042-35). See Prep NCM 160-193359. Analytical results are reported with the detection limit achieved.

Method 9320: Ra-228 Prep Batch 160-466588. The detection goal was not met for the following sample due to insufficient sample available for analysis: BA05884 MW-25HA (400-186042-37). See Prep NCM 160-193360. Analytical results are reported with the

Job ID: 400-186042-1 (Continued)

Laboratory: Eurofins TestAmerica, Pensacola (Continued)

detection limit achieved.

Method 9320: Ra-228 Prep Batch 160-466588. Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. BA05874 MW-42H DUP (400-186042-27), BA05875 MW-38H (400-186042-28), BA05876 MW-19 (400-186042-29), BA05877 EB-1 (400-186042-30), BA05878 MW-29H (400-186042-31), BA05879 MW-17V (400-186042-32), BA05880 FB-2 (400-186042-33), BA05881 MW-21V (400-186042-34), BA05882 MW-12V (400-186042-35), BA05883 MW-12V DIS (400-186042-36), BA05884 MW-25HA (400-186042-37), BA05884 MW-25HA (400-186042-37[MS]), BA05884 MW-25HA (400-186042-37[MSD]), BA05886 MW-43HO (400-186042-39), BA05887 PZ-18 (400-186042-40), BA05888 PZ-18 DUP (400-186042-41), BA05889 MW-18V (400-186042-42), BA05890 MW-32H (400-186042-43), BA05891 FB-3 (400-186042-44), (LCS 160-466588/1-A) and (MB 160-466588/22-A)

Methods 9320: Radium-228 Prep Batch 160-466705. The following batch contained a method blank (MB) that had activity above the MDC/RL. The LCS, MS and MSD were all within limits. The data has been reported with this narrative. BA05425 MW-17 (400-186042-1), BA05426 MW-28H (400-186042-2), BA05427 FB-1 (400-186042-3), BA05428 MW-34HO (400-186042-4), BA05429 MW-35HO (400-186042-5), BA05430 MW-36H (400-186042-6), BA05431 MW-33HO (400-186042-7), BA05432 MW-30HA (400-186042-8), (LCS 160-466705/1-A), (MB 160-466705/20-A), (440-263721-A-1-D), (440-263721-A-1-E MS) and (440-263721-A-1-F MSD)

Methods 9320: Ra-228 Prep Batch 160-466705. Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. BA05425 MW-17 (400-186042-1), BA05426 MW-28H (400-186042-2), BA05427 FB-1 (400-186042-3), BA05428 MW-34HO (400-186042-4), BA05429 MW-35HO (400-186042-5), BA05430 MW-36H (400-186042-6), BA05431 MW-33HO (400-186042-7), BA05432 MW-30HA (400-186042-8), (LCS 160-466705/1-A), (MB 160-466705/20-A), (440-263721-A-1-D), (440-263721-A-1-E MS) and (440-263721-A-1-F MSD)

Methods 9320: Radium-228 Prep Batch 160-466705. The detection goal was not met for the following samples due to insufficient sample available for analysis: BA05425 MW-17 (400-186042-1), BA05426 MW-28H (400-186042-2), BA05427 FB-1 (400-186042-3), BA05428 MW-34HO (400-186042-4), BA05429 MW-35HO (400-186042-5), BA05430 MW-36H (400-186042-6), BA05431 MW-33HO (400-186042-7), BA05432 MW-30HA (400-186042-8), (LCS 160-466705/1-A), (MB 160-466705/20-A), (440-263721-A-1-D), (440-263721-A-1-E MS) and (440-263721-A-1-F MSD). The samples were prepared at a reduced aliquot due to limited volume; see prep NCM 160-193431. Due to limited volume, Job 400-186042 Samples 1-8 are unable to be re-extracted. Analytical results are reported with the detection limit achieved.

Method 9320: Radium-228 Prep Batch 160-466585. The following sample did not meet the requested limit (RL) due to the reduced sample volume attributed to the presence of matrix interferences (see prep NCM 160-193346). The data have been reported with this narrative. BA05440 MW-7 (400-186042-16).

Method 9320: Radium-228 Prep Batch 160-466585. Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. BA05433 MW-15V (400-186042-9), BA05434 MW-15 (400-186042-10), BA05435 MW-21 (400-186042-11), BA05436 MW-6S (400-186042-12), BA05437 MW-6S DUP (400-186042-13), BA05438 MW-6D (400-186042-14), BA05438 MW-6D (400-186042-14[MS]), BA05438 MW-6D (400-186042-14[MSD]), BA05439 MW-23H (400-186042-15), BA05440 MW-7 (400-186042-16), BA05441 MW-7 DIS (400-186042-17), BA05442 MW-41HD (400-186042-18), BA05443 MW-24H (400-186042-19), BA05444 MW-8 (400-186042-20), BA05445 MW-12 (400-186042-21), BA05446 MW-18 (400-186042-22), BA05447 FB-4 (400-186042-23), BA05448 MW-31H (400-186042-24), BA05872 MW-9V (400-186042-25), BA05873 MW-42H (400-186042-26), (LCS 160-466585/1-A) and (MB 160-466585/22-A)

Method 9320: Radium-228 Prep Batch 160-468668. The Method Blank (MB) had activity above the RL and MDC. The LCS, LCSD and RER were within passing limits. The data has been reported with this narrative. BA05885 MW-2 (400-186042-38), (LCS 160-468668/1-A), (LCSD 160-468668/2-A) and (MB 160-468668/4-A)

Method 9320: Radium-228 Prep Batch 160-468668. The detection goal was not met for the following sample due to limited volume due to re-prep: BA05885 MW-2 (400-186042-38). Analytical results are reported with the detection limit achieved.

Method 9320: Ra-228 Prep Batch 160-468668. Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water

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Laboratory: Eurofins TestAmerica, Pensacola (Continued)

Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. BA05885 MW-2 (400-186042-38), (LCS 160-468668/1-A), (LCSD 160-468668/2-A) and (MB 160-468668/4-A)

Method PrecSep_0: Radium 228 Prep Batch 160-466585. The following sample was prepared at a reduced aliquot due to cloudy appearance: BA05440 MW-7 (400-186042-16).

Method PrecSep_0: Radium 228 Prep Batch 160-466585. The following samples were prepared at a reduced aliquot due to limited volume: BA05433 MW-15V (400-186042-9), BA05434 MW-15 (400-186042-10), BA05435 MW-21 (400-186042-11), BA05436 MW-6S (400-186042-12), BA05437 MW-6S DUP (400-186042-13), BA05438 MW-6D (400-186042-14), BA05438 MW-6D (400-186042-14[MS]), BA05438 MW-6D (400-186042-14[MSD]), BA05439 MW-23H (400-186042-15), BA05440 MW-7 (400-186042-16), BA05441 MW-7 DIS (400-186042-17), BA05442 MW-41HD (400-186042-18), BA05443 MW-24H (400-186042-19), BA05444 MW-8 (400-186042-20), BA05445 MW-12 (400-186042-21), BA05446 MW-18 (400-186042-22), BA05447 FB-4 (400-186042-23), BA05448 MW-31H (400-186042-24), BA05872 MW-9V (400-186042-25) and BA05873 MW-42H (400-186042-26).

Method PrecSep_0: Radium 228 Prep Batch 160-466588. The following sample was prepared at a reduced aliquot due to slight black discoloration and cloudy appearance: BA05882 MW-12V (400-186042-35).

Method PrecSep_0: Radium 228 Prep Batch 160-466588. The following samples were prepared at a reduced aliquot due to limited volume: BA05874 MW-42H DUP (400-186042-27), BA05875 MW-38H (400-186042-28), BA05876 MW-19 (400-186042-29), BA05877 EB-1 (400-186042-30), BA05878 MW-29H (400-186042-31), BA05879 MW-17V (400-186042-32), BA05880 FB-2 (400-186042-33), BA05881 MW-21V (400-186042-34), BA05882 MW-12V (400-186042-35), BA05883 MW-12V DIS (400-186042-36), BA05884 MW-25HA (400-186042-37), BA05884 MW-25HA (400-186042-37[MS]), BA05884 MW-25HA (400-186042-37[MSD]), BA05885 MW-2 (400-186042-38), BA05886 MW-43HO (400-186042-39), BA05887 PZ-18 (400-186042-40), BA05888 PZ-18 DUP (400-186042-41), BA05889 MW-18V (400-186042-42), BA05890 MW-32H (400-186042-43) and BA05891 FB-3 (400-186042-44).

Method PrecSep_0: Radium 228 Prep Batch 160-466601. The following sample was prepared at a reduced aliquot due to cloudy appearance: BA05896 MW-26H (400-186042-49).

Method PrecSep_0: Radium 228 Prep Batch 160-466601. The following samples were prepared at a reduced aliquot due to limited volume: BA05892 PZ-22 (400-186042-45), BA05893 PZ-22 DUP (400-186042-46), BA05894 PZ-16 (400-186042-47), BA05894 PZ-16 (400-186042-47[MS]), BA05894 PZ-16 (400-186042-47[MSD]), BA05895 MW-16D (400-186042-48), BA05896 MW-26H (400-186042-49) and BA05897 MW-26H DIS (400-186042-50).

Method PrecSep_0: Radium 228 Prep Batch 160-466705. The following samples were prepared at a reduced aliquot due to limited volume: BA05425 MW-17 (400-186042-1), BA05426 MW-28H (400-186042-2), BA05427 FB-1 (400-186042-3), BA05428 MW-34HO (400-186042-4), BA05429 MW-35HO (400-186042-5), BA05430 MW-36H (400-186042-6), BA05431 MW-33HO (400-186042-7) and BA05432 MW-30HA (400-186042-8).Samples 160-37701-31,32,34,35 have a yellow discoloration.

Method PrecSep_0: Radium 228 Prep batch 160-468668. Insufficient sample volume was available to perform a sample duplicate for the following sample: BA05885 MW-2 (400-186042-38). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead to demonstrate batch precision.

Method PrecSep_0: Radium 228 Prep Batch 160-468668. The following sample was prepared at a reduced aliquot due to limited volume because of re-prep: BA05885 MW-2 (400-186042-38).

Method PrecSep-21: Radium 226 Prep Batch 160-466516. The following samples were prepared at a reduced aliquot due to limited volume: BA05425 MW-17 (400-186042-1), BA05426 MW-28H (400-186042-2), BA05427 FB-1 (400-186042-3), BA05428 MW-34HO (400-186042-4), BA05429 MW-35HO (400-186042-5), BA05430 MW-36H (400-186042-6), BA05431 MW-33HO (400-186042-7) and BA05432 MW-30HA (400-186042-8).

Method PrecSep-21: Radium 226 Prep Batch 160-466543. The following samples were prepared at a reduced aliquot due to limited volume: BA05433 MW-15V (400-186042-9), BA05434 MW-15 (400-186042-10), BA05435 MW-21 (400-186042-11), BA05436 MW-6S (400-186042-12), BA05437 MW-6S DUP (400-186042-13), BA05438 MW-6D (400-186042-14), BA05438 MW-6D (400-186042-14[MS]), BA05438 MW-6D (400-186042-14[MSD]), BA05439 MW-23H (400-186042-15), BA05440 MW-7 (400-186042-16), BA05441 MW-7 DIS

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Laboratory: Eurofins TestAmerica, Pensacola (Continued)

(400-186042-17), BA05442 MW-41HD (400-186042-18), BA05443 MW-24H (400-186042-19), BA05444 MW-8 (400-186042-20), BA05445 MW-12 (400-186042-21), BA05446 MW-18 (400-186042-22), BA05447 FB-4 (400-186042-23), BA05448 MW-31H (400-186042-24), BA05872 MW-9V (400-186042-25) and BA05873 MW-42H (400-186042-26).

Method PrecSep-21: Radium 226 Prep Batch 160-466543. The following sample was prepared at a reduced aliquot due to cloudy appearance: BA05440 MW-7 (400-186042-16).

Method PrecSep-21: Radium 226 Prep Batch 160-466586. The following sample was prepared at a reduced aliquot due to slight black discoloration and cloudy appearance: BA05882 MW-12V (400-186042-35).

Method PrecSep-21: Radium 226 Prep Batch 160-466586. The following samples were prepared at a reduced aliquot due to limited volume: BA05874 MW-42H DUP (400-186042-27), BA05875 MW-38H (400-186042-28), BA05876 MW-19 (400-186042-29), BA05877 EB-1 (400-186042-30), BA05878 MW-29H (400-186042-31), BA05879 MW-17V (400-186042-32), BA05880 FB-2 (400-186042-33), BA05881 MW-21V (400-186042-34), BA05882 MW-12V (400-186042-35), BA05883 MW-12V DIS (400-186042-36), BA05884 MW-25HA (400-186042-37), BA05884 MW-25HA (400-186042-37[MS]), BA05884 MW-25HA (400-186042-37[MSD]), BA05885 MW-2 (400-186042-38), BA05886 MW-43HO (400-186042-39), BA05887 PZ-18 (400-186042-40), BA05888 PZ-18 DUP (400-186042-41), BA05889 MW-18V (400-186042-42), BA05890 MW-32H (400-186042-43) and BA05891 FB-3 (400-186042-44).

Method PrecSep-21: Radium 226 Prep Batch 160-466598. The following samples were prepared at a reduced aliquot due to limited volume: BA05892 PZ-22 (400-186042-45), BA05893 PZ-22 DUP (400-186042-46), BA05894 PZ-16 (400-186042-47), BA05894 PZ-16 (400-186042-47[MS]), BA05894 PZ-16 (400-186042-47[MSD]), BA05895 MW-16D (400-186042-48), BA05896 MW-26H (400-186042-49) and BA05897 MW-26H DIS (400-186042-50).

Method PrecSep-21: Radium 226 Prep Batch 160-466598. The following sample was prepared at a reduced aliquot due to cloudy appearance: BA05896 MW-26H (400-186042-49).

Method PrecSep-21: Radium 226 Prep Batch 160-466701. The following samples were prepared at a reduced aliquot due to limited volume: BA05425 MW-17 (400-186042-1), BA05426 MW-28H (400-186042-2), BA05427 FB-1 (400-186042-3), BA05428 MW-34HO (400-186042-4), BA05429 MW-35HO (400-186042-5), BA05430 MW-36H (400-186042-6), BA05431 MW-33HO (400-186042-7) and BA05432 MW-30HA (400-186042-8).Samples 160-37701-31,32,34,35 have a yellow discoloration.

Method Summary

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-186042-1
SDG: Gorgas Ash Pond 1268

Method	Method Description	Protocol	Laboratory
9315	Radium-226 (GFPC)	SW846	TAL SL
9320	Radium-228 (GFPC)	SW846	TAL SL
Ra226_Ra228	Combined Radium-226 and Radium-228	TAL-STL	TAL SL
Ra226_Ra228 (D)	Combined Radium-226 and Radium-228	TAL-STL	TAL SL
PrecSep_0	Preparation, Precipitate Separation	None	TAL SL
PrecSep-21	Preparation, Precipitate Separation (21-Day In-Growth)	None	TAL SL

Protocol References:

None = None

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

TAL-STL = TestAmerica Laboratories, St. Louis, Facility Standard Operating Procedure.

Laboratory References:

TAL SL = Eurofins TestAmerica, St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

Sample Summary

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-186042-1
SDG: Gorgas Ash Pond 1268

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
400-186042-1	BA05425 MW-17	Water	03/16/20 13:41	03/30/20 14:49	
400-186042-2	BA05426 MW-28H	Water	03/16/20 14:57	03/30/20 14:49	
400-186042-3	BA05427 FB-1	Water	03/16/20 16:15	03/30/20 14:49	
400-186042-4	BA05428 MW-34HO	Water	03/16/20 16:52	03/30/20 14:49	
400-186042-5	BA05429 MW-35HO	Water	03/17/20 09:04	03/30/20 14:49	
400-186042-6	BA05430 MW-36H	Water	03/17/20 11:45	03/30/20 14:49	
400-186042-7	BA05431 MW-33HO	Water	03/17/20 13:48	03/30/20 14:49	
400-186042-8	BA05432 MW-30HA	Water	03/18/20 09:35	03/30/20 14:49	
400-186042-9	BA05433 MW-15V	Water	03/18/20 11:58	03/30/20 14:49	
400-186042-10	BA05434 MW-15	Water	03/18/20 14:03	03/30/20 14:49	
400-186042-11	BA05435 MW-21	Water	03/18/20 15:50	03/30/20 14:49	
400-186042-12	BA05436 MW-6S	Water	03/17/20 11:30	03/30/20 14:49	
400-186042-13	BA05437 MW-6S DUP	Water	03/17/20 11:30	03/30/20 14:49	
400-186042-14	BA05438 MW-6D	Water	03/17/20 12:40	03/30/20 14:49	
400-186042-15	BA05439 MW-23H	Water	03/17/20 13:53	03/30/20 14:49	
400-186042-16	BA05440 MW-7	Water	03/17/20 17:07	03/30/20 14:49	
400-186042-17	BA05441 MW-7 DIS	Water	03/17/20 17:07	03/30/20 14:49	
400-186042-18	BA05442 MW-41HD	Water	03/18/20 09:40	03/30/20 14:49	
400-186042-19	BA05443 MW-24H	Water	03/18/20 10:35	03/30/20 14:49	
400-186042-20	BA05444 MW-8	Water	03/18/20 11:43	03/30/20 14:49	
400-186042-21	BA05445 MW-12	Water	03/18/20 14:20	03/30/20 14:49	
400-186042-22	BA05446 MW-18	Water	03/18/20 16:32	03/30/20 14:49	
400-186042-23	BA05447 FB-4	Water	03/18/20 13:45	03/30/20 14:49	
400-186042-24	BA05448 MW-31H	Water	03/18/20 14:35	03/30/20 14:49	
400-186042-25	BA05872 MW-9V	Water	03/23/20 16:05	03/30/20 14:49	
400-186042-26	BA05873 MW-42H	Water	03/24/20 08:50	03/30/20 14:49	
400-186042-27	BA05874 MW-42H DUP	Water	03/24/20 08:50	03/30/20 14:49	
400-186042-28	BA05875 MW-38H	Water	03/24/20 10:55	03/30/20 14:49	
400-186042-29	BA05876 MW-19	Water	03/24/20 14:25	03/30/20 14:49	
400-186042-30	BA05877 EB-1	Water	03/24/20 14:50	03/30/20 14:49	
400-186042-31	BA05878 MW-29H	Water	03/25/20 10:08	03/30/20 14:49	
400-186042-32	BA05879 MW-17V	Water	03/25/20 12:38	03/30/20 14:49	
400-186042-33	BA05880 FB-2	Water	03/25/20 13:20	03/30/20 14:49	
400-186042-34	BA05881 MW-21V	Water	03/23/20 17:14	03/30/20 14:49	
400-186042-35	BA05882 MW-12V	Water	03/24/20 11:32	03/30/20 14:49	
400-186042-36	BA05883 MW-12V DIS	Water	03/24/20 11:32	03/30/20 14:49	
400-186042-37	BA05884 MW-25HA	Water	03/24/20 13:10	03/30/20 14:49	
400-186042-38	BA05885 MW-2	Water	03/25/20 08:32	03/30/20 14:49	
400-186042-39	BA05886 MW-43HO	Water	03/25/20 10:00	03/30/20 14:49	
400-186042-40	BA05887 PZ-18	Water	03/25/20 11:53	03/30/20 14:49	
400-186042-41	BA05888 PZ-18 DUP	Water	03/25/20 11:53	03/30/20 14:49	
400-186042-42	BA05889 MW-18V	Water	03/25/20 13:00	03/30/20 14:49	
400-186042-43	BA05890 MW-32H	Water	03/24/20 10:20	03/30/20 14:49	
400-186042-44	BA05891 FB-3	Water	03/24/20 11:25	03/30/20 14:49	
400-186042-45	BA05892 PZ-22	Water	03/24/20 11:40	03/30/20 14:49	
400-186042-46	BA05893 PZ-22 DUP	Water	03/24/20 11:40	03/30/20 14:49	
400-186042-47	BA05894 PZ-16	Water	03/24/20 12:48	03/30/20 14:49	
400-186042-48	BA05895 MW-16D	Water	03/24/20 13:45	03/30/20 14:49	
400-186042-49	BA05896 MW-26H	Water	03/25/20 11:42	03/30/20 14:49	
400-186042-50	BA05897 MW-26H DIS	Water	03/25/20 11:42	03/30/20 14:49	

Client Sample Results

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-186042-1
SDG: Gorgas Ash Pond 1268

Client Sample ID: BA05425 MW-17

Date Collected: 03/16/20 13:41
Date Received: 03/30/20 14:49

Lab Sample ID: 400-186042-1

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.278	U	0.227	0.228	1.00	0.335	pCi/L	04/06/20 07:59	04/29/20 06:41	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*93.0*		*40 - 110*	*04/06/20 07:59*	*04/29/20 06:41*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.0930	U G	0.834	0.834	1.00	1.50	pCi/L	04/06/20 08:15	04/20/20 13:39	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*93.0*		*40 - 110*	*04/06/20 08:15*	*04/20/20 13:39*	*1*
Y Carrier	*80.0*		*40 - 110*	*04/06/20 08:15*	*04/20/20 13:39*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.185	U	0.864	0.865	5.00	1.50	pCi/L		04/29/20 10:06	1

Client Sample Results

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-186042-1
SDG: Gorgas Ash Pond 1268

Client Sample ID: BA05426 MW-28H

Date Collected: 03/16/20 14:57
Date Received: 03/30/20 14:49

Lab Sample ID: 400-186042-2

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.0528	U	0.120	0.120	1.00	0.297	pCi/L	04/06/20 07:59	04/29/20 06:41	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*93.6*		*40 - 110*	*04/06/20 07:59*	*04/29/20 06:41*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.815	U G	0.763	0.767	1.00	1.23	pCi/L	04/06/20 08:15	04/20/20 13:39	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*93.6*		*40 - 110*	*04/06/20 08:15*	*04/20/20 13:39*	*1*
Y Carrier	*82.6*		*40 - 110*	*04/06/20 08:15*	*04/20/20 13:39*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.762	U	0.772	0.776	5.00	1.23	pCi/L		04/29/20 10:06	1

Client Sample Results

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-186042-1
SDG: Gorgas Ash Pond 1268

Client Sample ID: BA05427 FB-1

Date Collected: 03/16/20 16:15
Date Received: 03/30/20 14:49

Lab Sample ID: 400-186042-3

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0412	U	0.143	0.143	1.00	0.278	pCi/L	04/06/20 07:59	04/29/20 06:56	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*97.9*		*40 - 110*	*04/06/20 07:59*	*04/29/20 06:56*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.644	U G	0.774	0.777	1.00	1.28	pCi/L	04/06/20 08:15	04/20/20 13:39	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*97.9*		*40 - 110*	*04/06/20 08:15*	*04/20/20 13:39*	*1*
Y Carrier	*78.9*		*40 - 110*	*04/06/20 08:15*	*04/20/20 13:39*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.685	U	0.787	0.790	5.00	1.28	pCi/L		04/29/20 10:06	1

Client Sample Results

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-186042-1
SDG: Gorgas Ash Pond 1268

Client Sample ID: BA05428 MW-34HO

Date Collected: 03/16/20 16:52
Date Received: 03/30/20 14:49

Lab Sample ID: 400-186042-4

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0219	U	0.144	0.144	1.00	0.292	pCi/L	04/06/20 07:59	04/29/20 06:56	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*96.0*		*40 - 110*	*04/06/20 07:59*	*04/29/20 06:56*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.107	U G	0.817	0.817	1.00	1.48	pCi/L	04/06/20 08:15	04/20/20 13:39	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*96.0*		*40 - 110*	*04/06/20 08:15*	*04/20/20 13:39*	*1*
Y Carrier	*78.5*		*40 - 110*	*04/06/20 08:15*	*04/20/20 13:39*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	-0.0850	U	0.830	0.830	5.00	1.48	pCi/L		04/29/20 10:06	1

Client Sample Results

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-186042-1
SDG: Gorgas Ash Pond 1268

Client Sample ID: BA05429 MW-35HO

Date Collected: 03/17/20 09:04
Date Received: 03/30/20 14:49

Lab Sample ID: 400-186042-5

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.0502	U	0.114	0.114	1.00	0.282	pCi/L	04/06/20 07:59	04/29/20 06:56	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*95.1*		*40 - 110*	*04/06/20 07:59*	*04/29/20 06:56*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	**7.37**	**G**	1.41	1.57	1.00	1.67	pCi/L	04/06/20 08:15	04/20/20 13:42	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*95.1*		*40 - 110*	*04/06/20 08:15*	*04/20/20 13:42*	*1*
Y Carrier	*80.4*		*40 - 110*	*04/06/20 08:15*	*04/20/20 13:42*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**7.32**		1.41	1.57	5.00	1.67	pCi/L		04/29/20 10:06	1

Client Sample Results

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-186042-1
SDG: Gorgas Ash Pond 1268

Client Sample ID: BA05430 MW-36H

Date Collected: 03/17/20 11:45
Date Received: 03/30/20 14:49

Lab Sample ID: 400-186042-6

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0929	U	0.240	0.240	1.00	0.438	pCi/L	04/06/20 07:59	04/29/20 06:56	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*87.5*		*40 - 110*	*04/06/20 07:59*	*04/29/20 06:56*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	**4.24**	**G**	1.27	1.33	1.00	1.68	pCi/L	04/06/20 08:15	04/20/20 13:42	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*87.5*		*40 - 110*	*04/06/20 08:15*	*04/20/20 13:42*	*1*
Y Carrier	*77.0*		*40 - 110*	*04/06/20 08:15*	*04/20/20 13:42*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**4.33**		1.29	1.35	5.00	1.68	pCi/L		04/29/20 10:06	1

Client Sample Results

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-186042-1
SDG: Gorgas Ash Pond 1268

Client Sample ID: BA05431 MW-33HO

Date Collected: 03/17/20 13:48
Date Received: 03/30/20 14:49

Lab Sample ID: 400-186042-7

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**0.417**		0.255	0.257	1.00	0.331	pCi/L	04/06/20 07:59	04/29/20 06:56	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*91.7*		*40 - 110*	*04/06/20 07:59*	*04/29/20 06:56*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	1.73	U G	1.25	1.26	1.00	1.97	pCi/L	04/06/20 08:15	04/20/20 13:42	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*91.7*		*40 - 110*	*04/06/20 08:15*	*04/20/20 13:42*	*1*
Y Carrier	*74.8*		*40 - 110*	*04/06/20 08:15*	*04/20/20 13:42*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**2.14**		1.28	1.29	5.00	1.97	pCi/L		04/29/20 10:06	1

Client Sample Results

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-186042-1
SDG: Gorgas Ash Pond 1268

Client Sample ID: BA05432 MW-30HA

Date Collected: 03/18/20 09:35
Date Received: 03/30/20 14:49

Lab Sample ID: 400-186042-8

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0855	U	0.221	0.221	1.00	0.403	pCi/L	04/06/20 07:59	04/29/20 06:56	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*95.1*		*40 - 110*	*04/06/20 07:59*	*04/29/20 06:56*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	**2.17**	**G**	1.14	1.16	1.00	1.73	pCi/L	04/06/20 08:15	04/20/20 13:42	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*95.1*		*40 - 110*	*04/06/20 08:15*	*04/20/20 13:42*	*1*
Y Carrier	*77.8*		*40 - 110*	*04/06/20 08:15*	*04/20/20 13:42*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**2.26**		1.16	1.18	5.00	1.73	pCi/L		04/29/20 10:06	1

Client Sample Results

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-186042-1
SDG: Gorgas Ash Pond 1268

Client Sample ID: BA05433 MW-15V

Date Collected: 03/18/20 11:58
Date Received: 03/30/20 14:49

Lab Sample ID: 400-186042-9

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.214	U	0.157	0.158	1.00	0.223	pCi/L	04/03/20 06:19	04/28/20 04:56	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*67.6*		*40 - 110*	*04/03/20 06:19*	*04/28/20 04:56*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.352	U	0.440	0.441	1.00	0.728	pCi/L	04/03/20 07:01	04/23/20 07:29	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*67.6*		*40 - 110*	*04/03/20 07:01*	*04/23/20 07:29*	*1*
Y Carrier	*85.6*		*40 - 110*	*04/03/20 07:01*	*04/23/20 07:29*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.566	U	0.467	0.468	5.00	0.728	pCi/L		04/28/20 09:16	1

Client Sample Results

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-186042-1
SDG: Gorgas Ash Pond 1268

Client Sample ID: BA05434 MW-15

Date Collected: 03/18/20 14:03
Date Received: 03/30/20 14:49

Lab Sample ID: 400-186042-10

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.225	U	0.202	0.203	1.00	0.310	pCi/L	04/03/20 06:19	04/28/20 04:56	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*52.6*		*40 - 110*	*04/03/20 06:19*	*04/28/20 04:56*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.715	U	0.530	0.534	1.00	0.832	pCi/L	04/03/20 07:01	04/23/20 07:29	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*52.6*		*40 - 110*	*04/03/20 07:01*	*04/23/20 07:29*	*1*
Y Carrier	*88.2*		*40 - 110*	*04/03/20 07:01*	*04/23/20 07:29*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**0.939**		0.567	0.571	5.00	0.832	pCi/L		04/28/20 09:16	1

Client Sample Results

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-186042-1
SDG: Gorgas Ash Pond 1268

Client Sample ID: BA05435 MW-21

Date Collected: 03/18/20 15:50
Date Received: 03/30/20 14:49

Lab Sample ID: 400-186042-11

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**0.367**		0.181	0.184	1.00	0.221	pCi/L	04/03/20 06:19	04/28/20 04:56	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*75.2*		*40 - 110*	*04/03/20 06:19*	*04/28/20 04:56*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.364	U	0.386	0.387	1.00	0.631	pCi/L	04/03/20 07:01	04/23/20 07:29	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*75.2*		*40 - 110*	*04/03/20 07:01*	*04/23/20 07:29*	*1*
Y Carrier	*88.2*		*40 - 110*	*04/03/20 07:01*	*04/23/20 07:29*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**0.732**		0.426	0.429	5.00	0.631	pCi/L		04/28/20 09:16	1

Client Sample Results

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-186042-1
SDG: Gorgas Ash Pond 1268

Client Sample ID: BA05436 MW-6S

Date Collected: 03/17/20 11:30
Date Received: 03/30/20 14:49

Lab Sample ID: 400-186042-12

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0330	U	0.120	0.120	1.00	0.225	pCi/L	04/03/20 06:19	04/28/20 04:56	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*81.0*		*40 - 110*	*04/03/20 06:19*	*04/28/20 04:56*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.318	U	0.350	0.351	1.00	0.573	pCi/L	04/03/20 07:01	04/23/20 07:29	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*81.0*		*40 - 110*	*04/03/20 07:01*	*04/23/20 07:29*	*1*
Y Carrier	*84.9*		*40 - 110*	*04/03/20 07:01*	*04/23/20 07:29*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.351	U	0.370	0.371	5.00	0.573	pCi/L		04/28/20 09:16	1

Client Sample Results

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-186042-1
SDG: Gorgas Ash Pond 1268

Client Sample ID: BA05437 MW-6S DUP

Date Collected: 03/17/20 11:30
Date Received: 03/30/20 14:49

Lab Sample ID: 400-186042-13

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.132	U	0.125	0.126	1.00	0.190	pCi/L	04/03/20 06:19	04/28/20 04:57	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*71.6*		*40 - 110*	*04/03/20 06:19*	*04/28/20 04:57*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.598	U	0.429	0.432	1.00	0.673	pCi/L	04/03/20 07:01	04/23/20 07:29	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*71.6*		*40 - 110*	*04/03/20 07:01*	*04/23/20 07:29*	*1*
Y Carrier	*89.7*		*40 - 110*	*04/03/20 07:01*	*04/23/20 07:29*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**0.730**		0.447	0.450	5.00	0.673	pCi/L		04/28/20 09:16	1

Client Sample Results

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-186042-1
SDG: Gorgas Ash Pond 1268

Client Sample ID: BA05438 MW-6D

Date Collected: 03/17/20 12:40
Date Received: 03/30/20 14:49

Lab Sample ID: 400-186042-14

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.154	U	0.120	0.121	1.00	0.171	pCi/L	04/03/20 06:19	04/28/20 04:57	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*82.9*		*40 - 110*	*04/03/20 06:19*	*04/28/20 04:57*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	**0.475**		0.292	0.295	1.00	0.438	pCi/L	04/03/20 07:01	04/23/20 07:32	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*82.9*		*40 - 110*	*04/03/20 07:01*	*04/23/20 07:32*	*1*
Y Carrier	*88.2*		*40 - 110*	*04/03/20 07:01*	*04/23/20 07:32*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**0.629**		0.316	0.319	5.00	0.438	pCi/L		04/28/20 09:16	1

Client Sample Results

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-186042-1
SDG: Gorgas Ash Pond 1268

Client Sample ID: BA05439 MW-23H

Date Collected: 03/17/20 13:53
Date Received: 03/30/20 14:49

Lab Sample ID: 400-186042-15

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.185		0.129	0.130	1.00	0.178	pCi/L	04/03/20 06:19	04/28/20 04:57	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*79.5*		*40 - 110*	*04/03/20 06:19*	*04/28/20 04:57*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.804		0.344	0.352	1.00	0.476	pCi/L	04/03/20 07:01	04/23/20 07:33	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*79.5*		*40 - 110*	*04/03/20 07:01*	*04/23/20 07:33*	*1*
Y Carrier	*87.5*		*40 - 110*	*04/03/20 07:01*	*04/23/20 07:33*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.989		0.367	0.375	5.00	0.476	pCi/L		04/28/20 09:16	1

Client Sample Results

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-186042-1
SDG: Gorgas Ash Pond 1268

Client Sample ID: BA05440 MW-7

Date Collected: 03/17/20 17:07
Date Received: 03/30/20 14:49

Lab Sample ID: 400-186042-16

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.294	U	0.297	0.299	1.00	0.472	pCi/L	04/03/20 06:19	04/28/20 04:57	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*59.0*		*40 - 110*	*04/03/20 06:19*	*04/28/20 04:57*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.903	U G	0.677	0.682	1.00	1.06	pCi/L	04/03/20 07:01	04/23/20 07:33	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*59.0*		*40 - 110*	*04/03/20 07:01*	*04/23/20 07:33*	*1*
Y Carrier	*85.2*		*40 - 110*	*04/03/20 07:01*	*04/23/20 07:33*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**1.20**		0.739	0.745	5.00	1.06	pCi/L		04/28/20 09:16	1

Client Sample Results

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-186042-1
SDG: Gorgas Ash Pond 1268

Client Sample ID: BA05441 MW-7 DIS

Date Collected: 03/17/20 17:07
Date Received: 03/30/20 14:49

Lab Sample ID: 400-186042-17

Matrix: Water

Method: 9315 - Radium-226 (GFPC) - Dissolved

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0893	U	0.124	0.124	1.00	0.210	pCi/L	04/03/20 06:19	04/28/20 04:57	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*78.9*		*40 - 110*	*04/03/20 06:19*	*04/28/20 04:57*	*1*

Method: 9320 - Radium-228 (GFPC) - Dissolved

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.110	U	0.295	0.295	1.00	0.512	pCi/L	04/03/20 07:01	04/23/20 07:33	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*78.9*		*40 - 110*	*04/03/20 07:01*	*04/23/20 07:33*	*1*
Y Carrier	*88.6*		*40 - 110*	*04/03/20 07:01*	*04/23/20 07:33*	*1*

Method: Ra226_Ra228 (D) - Combined Radium-226 and Radium-228 - Dissolved

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.199	U	0.320	0.320	5.00	0.512	pCi/L		04/28/20 09:15	1

Client Sample Results

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-186042-1
SDG: Gorgas Ash Pond 1268

Client Sample ID: BA05442 MW-41HD

Date Collected: 03/18/20 09:40
Date Received: 03/30/20 14:49

Lab Sample ID: 400-186042-18

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0380	U	0.105	0.105	1.00	0.197	pCi/L	04/03/20 06:19	04/28/20 04:57	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*77.7*		*40 - 110*	*04/03/20 06:19*	*04/28/20 04:57*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	**0.602**		0.346	0.351	1.00	0.518	pCi/L	04/03/20 07:01	04/23/20 07:33	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*77.7*		*40 - 110*	*04/03/20 07:01*	*04/23/20 07:33*	*1*
Y Carrier	*87.1*		*40 - 110*	*04/03/20 07:01*	*04/23/20 07:33*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**0.640**		0.362	0.366	5.00	0.518	pCi/L		04/28/20 09:16	1

Client Sample Results

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-186042-1
SDG: Gorgas Ash Pond 1268

Client Sample ID: BA05443 MW-24H

Lab Sample ID: 400-186042-19

Date Collected: 03/18/20 10:35
Date Received: 03/30/20 14:49

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**0.313**		0.172	0.174	1.00	0.225	pCi/L	04/03/20 06:19	04/28/20 04:57	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*79.2*		*40 - 110*	*04/03/20 06:19*	*04/28/20 04:57*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.475	U	0.332	0.335	1.00	0.516	pCi/L	04/03/20 07:01	04/23/20 07:33	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*79.2*		*40 - 110*	*04/03/20 07:01*	*04/23/20 07:33*	*1*
Y Carrier	*90.5*		*40 - 110*	*04/03/20 07:01*	*04/23/20 07:33*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**0.788**		0.374	0.377	5.00	0.516	pCi/L		04/28/20 09:16	1

Client Sample Results

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-186042-1
SDG: Gorgas Ash Pond 1268

Client Sample ID: BA05444 MW-8

Lab Sample ID: 400-186042-20

Date Collected: 03/18/20 11:43
Date Received: 03/30/20 14:49

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.120	U	0.127	0.127	1.00	0.201	pCi/L	04/03/20 06:19	04/28/20 04:57	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*81.7*		*40 - 110*	*04/03/20 06:19*	*04/28/20 04:57*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.345	U	0.357	0.358	1.00	0.583	pCi/L	04/03/20 07:01	04/23/20 07:33	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*81.7*		*40 - 110*	*04/03/20 07:01*	*04/23/20 07:33*	*1*
Y Carrier	*86.7*		*40 - 110*	*04/03/20 07:01*	*04/23/20 07:33*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.465	U	0.379	0.380	5.00	0.583	pCi/L		04/28/20 09:16	1

Client Sample Results

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-186042-1
SDG: Gorgas Ash Pond 1268

Client Sample ID: BA05445 MW-12

Date Collected: 03/18/20 14:20
Date Received: 03/30/20 14:49

Lab Sample ID: 400-186042-21

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.194	U	0.156	0.157	1.00	0.232	pCi/L	04/03/20 06:19	04/28/20 04:57	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*77.4*		*40 - 110*	*04/03/20 06:19*	*04/28/20 04:57*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.411	U	0.339	0.342	1.00	0.539	pCi/L	04/03/20 07:01	04/23/20 07:33	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*77.4*		*40 - 110*	*04/03/20 07:01*	*04/23/20 07:33*	*1*
Y Carrier	*88.2*		*40 - 110*	*04/03/20 07:01*	*04/23/20 07:33*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**0.605**		0.373	0.376	5.00	0.539	pCi/L		04/28/20 09:16	1

Client Sample Results

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-186042-1
SDG: Gorgas Ash Pond 1268

Client Sample ID: BA05446 MW-18

Date Collected: 03/18/20 16:32
Date Received: 03/30/20 14:49

Lab Sample ID: 400-186042-22

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.201	U	0.152	0.153	1.00	0.221	pCi/L	04/03/20 06:19	04/28/20 04:57	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*82.6*		*40 - 110*	*04/03/20 06:19*	*04/28/20 04:57*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0801	U	0.322	0.322	1.00	0.564	pCi/L	04/03/20 07:01	04/23/20 07:33	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*82.6*		*40 - 110*	*04/03/20 07:01*	*04/23/20 07:33*	*1*
Y Carrier	*85.6*		*40 - 110*	*04/03/20 07:01*	*04/23/20 07:33*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.281	U	0.356	0.357	5.00	0.564	pCi/L		04/28/20 09:17	1

Client Sample Results

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-186042-1
SDG: Gorgas Ash Pond 1268

Client Sample ID: BA05447 FB-4

Lab Sample ID: 400-186042-23

Date Collected: 03/18/20 13:45
Date Received: 03/30/20 14:49

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0360	U	0.108	0.108	1.00	0.202	pCi/L	04/03/20 06:19	04/28/20 06:49	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*79.8*		*40 - 110*	*04/03/20 06:19*	*04/28/20 06:49*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.416	U	0.348	0.350	1.00	0.555	pCi/L	04/03/20 07:01	04/23/20 07:34	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*79.8*		*40 - 110*	*04/03/20 07:01*	*04/23/20 07:34*	*1*
Y Carrier	*86.0*		*40 - 110*	*04/03/20 07:01*	*04/23/20 07:34*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.452	U	0.364	0.366	5.00	0.555	pCi/L		04/28/20 09:17	1

Client Sample Results

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-186042-1
SDG: Gorgas Ash Pond 1268

Client Sample ID: BA05448 MW-31H

Lab Sample ID: 400-186042-24

Date Collected: 03/18/20 14:35
Date Received: 03/30/20 14:49

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.160	U	0.141	0.142	1.00	0.212	pCi/L	04/03/20 06:19	04/28/20 06:49	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*70.9*		*40 - 110*	*04/03/20 06:19*	*04/28/20 06:49*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.105	U	0.303	0.303	1.00	0.569	pCi/L	04/03/20 07:01	04/23/20 07:34	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*70.9*		*40 - 110*	*04/03/20 07:01*	*04/23/20 07:34*	*1*
Y Carrier	*90.5*		*40 - 110*	*04/03/20 07:01*	*04/23/20 07:34*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.0549	U	0.334	0.335	5.00	0.569	pCi/L		04/28/20 09:17	1

Client Sample Results

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-186042-1
SDG: Gorgas Ash Pond 1268

Client Sample ID: BA05872 MW-9V

Date Collected: 03/23/20 16:05
Date Received: 03/30/20 14:49

Lab Sample ID: 400-186042-25

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0952	U	0.137	0.138	1.00	0.234	pCi/L	04/03/20 06:19	04/28/20 06:49	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*71.9*		*40 - 110*	*04/03/20 06:19*	*04/28/20 06:49*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0608	U	0.383	0.383	1.00	0.677	pCi/L	04/03/20 07:01	04/23/20 07:34	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*71.9*		*40 - 110*	*04/03/20 07:01*	*04/23/20 07:34*	*1*
Y Carrier	*78.1*		*40 - 110*	*04/03/20 07:01*	*04/23/20 07:34*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.156	U	0.407	0.407	5.00	0.677	pCi/L		04/28/20 09:17	1

Client Sample Results

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-186042-1
SDG: Gorgas Ash Pond 1268

Client Sample ID: BA05873 MW-42H

Date Collected: 03/24/20 08:50
Date Received: 03/30/20 14:49

Lab Sample ID: 400-186042-26

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0912	U	0.124	0.124	1.00	0.208	pCi/L	04/03/20 06:19	04/28/20 06:49	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*80.1*		*40 - 110*	*04/03/20 06:19*	*04/28/20 06:49*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.00917	U	0.268	0.268	1.00	0.488	pCi/L	04/03/20 07:01	04/23/20 07:34	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*80.1*		*40 - 110*	*04/03/20 07:01*	*04/23/20 07:34*	*1*
Y Carrier	*88.2*		*40 - 110*	*04/03/20 07:01*	*04/23/20 07:34*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.0821	U	0.295	0.295	5.00	0.488	pCi/L		04/28/20 09:17	1

Client Sample Results

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-186042-1
SDG: Gorgas Ash Pond 1268

Client Sample ID: BA05874 MW-42H DUP

Lab Sample ID: 400-186042-27

Date Collected: 03/24/20 08:50
Matrix: Water
Date Received: 03/30/20 14:49

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**0.182**		0.111	0.112	1.00	0.143	pCi/L	04/03/20 07:07	04/28/20 06:51	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*89.9*		*40 - 110*	*04/03/20 07:07*	*04/28/20 06:51*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.246	U	0.330	0.331	1.00	0.549	pCi/L	04/03/20 07:37	04/21/20 16:32	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*89.9*		*40 - 110*	*04/03/20 07:37*	*04/21/20 16:32*	*1*
Y Carrier	*86.0*		*40 - 110*	*04/03/20 07:37*	*04/21/20 16:32*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.428	U	0.348	0.349	5.00	0.549	pCi/L		04/28/20 13:02	1

Client Sample Results

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-186042-1
SDG: Gorgas Ash Pond 1268

Client Sample ID: BA05875 MW-38H

Date Collected: 03/24/20 10:55
Date Received: 03/30/20 14:49

Lab Sample ID: 400-186042-28

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**0.208**		0.132	0.133	1.00	0.172	pCi/L	04/03/20 07:07	04/28/20 06:51	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*70.9*		*40 - 110*	*04/03/20 07:07*	*04/28/20 06:51*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.654	U	0.469	0.473	1.00	0.738	pCi/L	04/03/20 07:37	04/21/20 16:32	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*70.9*		*40 - 110*	*04/03/20 07:37*	*04/21/20 16:32*	*1*
Y Carrier	*89.0*		*40 - 110*	*04/03/20 07:37*	*04/21/20 16:32*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**0.862**		0.487	0.491	5.00	0.738	pCi/L		04/28/20 13:02	1

Client Sample Results

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-186042-1
SDG: Gorgas Ash Pond 1268

Client Sample ID: BA05876 MW-19

Date Collected: 03/24/20 14:25
Date Received: 03/30/20 14:49

Lab Sample ID: 400-186042-29

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.180	U	0.134	0.135	1.00	0.196	pCi/L	04/03/20 07:07	04/28/20 06:51	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*90.8*		*40 - 110*	*04/03/20 07:07*	*04/28/20 06:51*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	**0.893**		0.344	0.354	1.00	0.472	pCi/L	04/03/20 07:37	04/21/20 16:32	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*90.8*		*40 - 110*	*04/03/20 07:37*	*04/21/20 16:32*	*1*
Y Carrier	*90.8*		*40 - 110*	*04/03/20 07:37*	*04/21/20 16:32*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**1.07**		0.369	0.379	5.00	0.472	pCi/L		04/28/20 13:02	1

Client Sample Results

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-186042-1
SDG: Gorgas Ash Pond 1268

Client Sample ID: BA05877 EB-1

Date Collected: 03/24/20 14:50
Date Received: 03/30/20 14:49

Lab Sample ID: 400-186042-30

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0150	U	0.0796	0.0796	1.00	0.158	pCi/L	04/03/20 07:07	04/28/20 06:51	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*80.1*		*40 - 110*	*04/03/20 07:07*	*04/28/20 06:51*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.266	U	0.324	0.325	1.00	0.536	pCi/L	04/03/20 07:37	04/21/20 16:32	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*80.1*		*40 - 110*	*04/03/20 07:37*	*04/21/20 16:32*	*1*
Y Carrier	*93.1*		*40 - 110*	*04/03/20 07:37*	*04/21/20 16:32*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.281	U	0.334	0.335	5.00	0.536	pCi/L		04/28/20 13:02	1

Client Sample Results

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-186042-1
SDG: Gorgas Ash Pond 1268

Client Sample ID: BA05878 MW-29H

Date Collected: 03/25/20 10:08
Date Received: 03/30/20 14:49

Lab Sample ID: 400-186042-31

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0627	U	0.109	0.109	1.00	0.190	pCi/L	04/03/20 07:07	04/28/20 06:51	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*93.9*		*40 - 110*	*04/03/20 07:07*	*04/28/20 06:51*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.0267	U	0.258	0.258	1.00	0.469	pCi/L	04/03/20 07:37	04/21/20 16:32	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*93.9*		*40 - 110*	*04/03/20 07:37*	*04/21/20 16:32*	*1*
Y Carrier	*93.8*		*40 - 110*	*04/03/20 07:37*	*04/21/20 16:32*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.0360	U	0.280	0.280	5.00	0.469	pCi/L		04/28/20 13:02	1

Client Sample Results

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-186042-1
SDG: Gorgas Ash Pond 1268

Client Sample ID: BA05879 MW-17V

Date Collected: 03/25/20 12:38
Date Received: 03/30/20 14:49

Lab Sample ID: 400-186042-32

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.119	U	0.120	0.121	1.00	0.189	pCi/L	04/03/20 07:07	04/28/20 06:51	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*78.3*		*40 - 110*	*04/03/20 07:07*	*04/28/20 06:51*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.0532	U	0.331	0.331	1.00	0.602	pCi/L	04/03/20 07:37	04/21/20 16:32	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*78.3*		*40 - 110*	*04/03/20 07:37*	*04/21/20 16:32*	*1*
Y Carrier	*90.5*		*40 - 110*	*04/03/20 07:37*	*04/21/20 16:32*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.0656	U	0.352	0.352	5.00	0.602	pCi/L		04/28/20 13:02	1

Client Sample Results

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-186042-1
SDG: Gorgas Ash Pond 1268

Client Sample ID: BA05880 FB-2

Date Collected: 03/25/20 13:20
Date Received: 03/30/20 14:49

Lab Sample ID: 400-186042-33

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.00213	U	0.0742	0.0742	1.00	0.155	pCi/L	04/03/20 07:07	04/28/20 06:51	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*90.5*		*40 - 110*	*04/03/20 07:07*	*04/28/20 06:51*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.0221	U	0.242	0.242	1.00	0.439	pCi/L	04/03/20 07:37	04/21/20 16:32	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*90.5*		*40 - 110*	*04/03/20 07:37*	*04/21/20 16:32*	*1*
Y Carrier	*108*		*40 - 110*	*04/03/20 07:37*	*04/21/20 16:32*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	-0.0242	U	0.253	0.253	5.00	0.439	pCi/L		04/28/20 13:02	1

Client Sample Results

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-186042-1
SDG: Gorgas Ash Pond 1268

Client Sample ID: BA05881 MW-21V

Date Collected: 03/23/20 17:14
Date Received: 03/30/20 14:49

Lab Sample ID: 400-186042-34

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.264		0.133	0.135	1.00	0.168	pCi/L	04/03/20 07:07	04/28/20 06:51	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*98.2*		*40 - 110*	*04/03/20 07:07*	*04/28/20 06:51*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.718		0.333	0.340	1.00	0.485	pCi/L	04/03/20 07:37	04/21/20 16:32	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*98.2*		*40 - 110*	*04/03/20 07:37*	*04/21/20 16:32*	*1*
Y Carrier	*90.1*		*40 - 110*	*04/03/20 07:37*	*04/21/20 16:32*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.982		0.359	0.366	5.00	0.485	pCi/L		04/28/20 13:02	1

Client Sample Results

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-186042-1
SDG: Gorgas Ash Pond 1268

Client Sample ID: BA05882 MW-12V

Date Collected: 03/24/20 11:32
Date Received: 03/30/20 14:49

Lab Sample ID: 400-186042-35

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.360		0.231	0.233	1.00	0.309	pCi/L	04/03/20 07:07	04/28/20 06:51	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*69.4*		*40 - 110*	*04/03/20 07:07*	*04/28/20 06:51*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.517	U G	0.622	0.624	1.00	1.03	pCi/L	04/03/20 07:37	04/21/20 16:32	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*69.4*		*40 - 110*	*04/03/20 07:37*	*04/21/20 16:32*	*1*
Y Carrier	*83.7*		*40 - 110*	*04/03/20 07:37*	*04/21/20 16:32*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.877	U	0.664	0.666	5.00	1.03	pCi/L		04/28/20 13:02	1

Client Sample Results

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-186042-1
SDG: Gorgas Ash Pond 1268

Client Sample ID: BA05883 MW-12V DIS

Date Collected: 03/24/20 11:32
Date Received: 03/30/20 14:49

Lab Sample ID: 400-186042-36

Matrix: Water

Method: 9315 - Radium-226 (GFPC) - Dissolved

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**0.433**		0.163	0.168	1.00	0.177	pCi/L	04/03/20 07:07	04/28/20 06:51	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*93.6*		*40 - 110*	*04/03/20 07:07*	*04/28/20 06:51*	*1*

Method: 9320 - Radium-228 (GFPC) - Dissolved

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.248	U	0.302	0.303	1.00	0.500	pCi/L	04/03/20 07:37	04/21/20 16:32	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*93.6*		*40 - 110*	*04/03/20 07:37*	*04/21/20 16:32*	*1*
Y Carrier	*91.2*		*40 - 110*	*04/03/20 07:37*	*04/21/20 16:32*	*1*

Method: Ra226_Ra228 (D) - Combined Radium-226 and Radium-228 - Dissolved

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**0.681**		0.343	0.346	5.00	0.500	pCi/L		04/28/20 13:01	1

Client Sample Results

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-186042-1
SDG: Gorgas Ash Pond 1268

Client Sample ID: BA05884 MW-25HA

Date Collected: 03/24/20 13:10
Date Received: 03/30/20 14:49

Lab Sample ID: 400-186042-37

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.271	U	0.204	0.206	1.00	0.298	pCi/L	04/03/20 07:07	04/28/20 06:51	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*51.4*		*40 - 110*	*04/03/20 07:07*	*04/28/20 06:51*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.272	U G	0.775	0.775	1.00	1.43	pCi/L	04/03/20 07:37	04/21/20 16:32	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*51.4*		*40 - 110*	*04/03/20 07:37*	*04/21/20 16:32*	*1*
Y Carrier	*61.7*		*40 - 110*	*04/03/20 07:37*	*04/21/20 16:32*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	-0.00194	U	0.801	0.802	5.00	1.43	pCi/L		04/28/20 13:02	1

Client Sample Results

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-186042-1
SDG: Gorgas Ash Pond 1268

Client Sample ID: BA05885 MW-2

Date Collected: 03/25/20 08:32
Date Received: 03/30/20 14:49

Lab Sample ID: 400-186042-38

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.162	U	0.116	0.117	1.00	0.166	pCi/L	04/03/20 07:07	04/28/20 08:37	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*95.1*		*40 - 110*	*04/03/20 07:07*	*04/28/20 08:37*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	**3.83**	**G**	1.07	1.13	1.00	1.38	pCi/L	04/23/20 07:29	04/27/20 16:29	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*102*		*40 - 110*	*04/23/20 07:29*	*04/27/20 16:29*	*1*
Y Carrier	*69.2*		*40 - 110*	*04/23/20 07:29*	*04/27/20 16:29*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**4.00**		1.08	1.14	5.00	1.38	pCi/L		04/29/20 10:21	1

Client Sample Results

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-186042-1
SDG: Gorgas Ash Pond 1268

Client Sample ID: BA05886 MW-43HO

Lab Sample ID: 400-186042-39

Date Collected: 03/25/20 10:00
Matrix: Water
Date Received: 03/30/20 14:49

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.140	U	0.130	0.131	1.00	0.201	pCi/L	04/03/20 07:07	04/28/20 08:37	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*73.7*		*40 - 110*	*04/03/20 07:07*	*04/28/20 08:37*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.538	U	0.505	0.507	1.00	0.818	pCi/L	04/03/20 07:37	04/21/20 16:41	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*73.7*		*40 - 110*	*04/03/20 07:37*	*04/21/20 16:41*	*1*
Y Carrier	*89.7*		*40 - 110*	*04/03/20 07:37*	*04/21/20 16:41*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.678	U	0.521	0.524	5.00	0.818	pCi/L		04/28/20 13:02	1

Client Sample Results

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-186042-1
SDG: Gorgas Ash Pond 1268

Client Sample ID: BA05887 PZ-18

Date Collected: 03/25/20 11:53
Date Received: 03/30/20 14:49

Lab Sample ID: 400-186042-40

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0267	U	0.0969	0.0969	1.00	0.181	pCi/L	04/03/20 07:07	04/28/20 08:37	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*91.1*		*40 - 110*	*04/03/20 07:07*	*04/28/20 08:37*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.103	U	0.319	0.319	1.00	0.552	pCi/L	04/03/20 07:37	04/21/20 16:41	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*91.1*		*40 - 110*	*04/03/20 07:37*	*04/21/20 16:41*	*1*
Y Carrier	*93.1*		*40 - 110*	*04/03/20 07:37*	*04/21/20 16:41*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.130	U	0.333	0.333	5.00	0.552	pCi/L		04/28/20 13:02	1

Client Sample Results

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-186042-1
SDG: Gorgas Ash Pond 1268

Client Sample ID: BA05888 PZ-18 DUP

Date Collected: 03/25/20 11:53
Date Received: 03/30/20 14:49

Lab Sample ID: 400-186042-41

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0592	U	0.0897	0.0899	1.00	0.155	pCi/L	04/03/20 07:07	04/28/20 08:38	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*79.5*		*40 - 110*	*04/03/20 07:07*	*04/28/20 08:38*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.494	U	0.431	0.433	1.00	0.693	pCi/L	04/03/20 07:37	04/21/20 16:41	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*79.5*		*40 - 110*	*04/03/20 07:37*	*04/21/20 16:41*	*1*
Y Carrier	*93.8*		*40 - 110*	*04/03/20 07:37*	*04/21/20 16:41*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.554	U	0.440	0.442	5.00	0.693	pCi/L		04/28/20 13:02	1

Client Sample Results

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-186042-1
SDG: Gorgas Ash Pond 1268

Client Sample ID: BA05889 MW-18V

Date Collected: 03/25/20 13:00
Date Received: 03/30/20 14:49

Lab Sample ID: 400-186042-42

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0748	U	0.0879	0.0881	1.00	0.143	pCi/L	04/03/20 07:07	04/28/20 08:38	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*89.6*		*40 - 110*	*04/03/20 07:07*	*04/28/20 08:38*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.0783	U	0.371	0.371	1.00	0.666	pCi/L	04/03/20 07:37	04/21/20 16:41	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*89.6*		*40 - 110*	*04/03/20 07:37*	*04/21/20 16:41*	*1*
Y Carrier	*89.3*		*40 - 110*	*04/03/20 07:37*	*04/21/20 16:41*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	-0.00344	U	0.381	0.381	5.00	0.666	pCi/L		04/28/20 13:02	1

Client Sample Results

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-186042-1
SDG: Gorgas Ash Pond 1268

Client Sample ID: BA05890 MW-32H

Date Collected: 03/24/20 10:20
Date Received: 03/30/20 14:49

Lab Sample ID: 400-186042-43

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0633	U	0.0856	0.0858	1.00	0.144	pCi/L	04/03/20 07:07	04/28/20 08:38	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*86.9*		*40 - 110*	*04/03/20 07:07*	*04/28/20 08:38*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.249	U	0.358	0.358	1.00	0.599	pCi/L	04/03/20 07:37	04/21/20 16:41	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*86.9*		*40 - 110*	*04/03/20 07:37*	*04/21/20 16:41*	*1*
Y Carrier	*87.5*		*40 - 110*	*04/03/20 07:37*	*04/21/20 16:41*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.313	U	0.368	0.368	5.00	0.599	pCi/L		04/28/20 13:02	1

Client Sample Results

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-186042-1
SDG: Gorgas Ash Pond 1268

Client Sample ID: BA05891 FB-3

Date Collected: 03/24/20 11:25
Date Received: 03/30/20 14:49

Lab Sample ID: 400-186042-44

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0975	U	0.117	0.117	1.00	0.192	pCi/L	04/03/20 07:07	04/28/20 08:38	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*92.4*		*40 - 110*	*04/03/20 07:07*	*04/28/20 08:38*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0987	U	0.330	0.330	1.00	0.572	pCi/L	04/03/20 07:37	04/21/20 16:41	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*92.4*		*40 - 110*	*04/03/20 07:37*	*04/21/20 16:41*	*1*
Y Carrier	*90.5*		*40 - 110*	*04/03/20 07:37*	*04/21/20 16:41*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.196	U	0.350	0.350	5.00	0.572	pCi/L		04/28/20 13:02	1

Client Sample Results

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-186042-1
SDG: Gorgas Ash Pond 1268

Client Sample ID: BA05892 PZ-22

Date Collected: 03/24/20 11:40
Date Received: 03/30/20 14:49

Lab Sample ID: 400-186042-45

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**0.329**		0.140	0.143	1.00	0.154	pCi/L	04/03/20 08:51	04/27/20 05:30	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*91.1*		*40 - 110*	*04/03/20 08:51*	*04/27/20 05:30*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.550	U	0.390	0.393	1.00	0.600	pCi/L	04/03/20 09:16	04/20/20 13:53	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*91.1*		*40 - 110*	*04/03/20 09:16*	*04/20/20 13:53*	*1*
Y Carrier	*68.0*		*40 - 110*	*04/03/20 09:16*	*04/20/20 13:53*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**0.878**		0.414	0.418	5.00	0.600	pCi/L		04/27/20 10:24	1

Client Sample Results

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-186042-1
SDG: Gorgas Ash Pond 1268

Client Sample ID: BA05893 PZ-22 DUP

Date Collected: 03/24/20 11:40
Date Received: 03/30/20 14:49

Lab Sample ID: 400-186042-46

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**0.335**		0.168	0.170	1.00	0.207	pCi/L	04/03/20 08:51	04/27/20 05:30	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*73.1*		*40 - 110*	*04/03/20 08:51*	*04/27/20 05:30*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.461	U	0.475	0.477	1.00	0.772	pCi/L	04/03/20 09:16	04/20/20 13:53	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*73.1*		*40 - 110*	*04/03/20 09:16*	*04/20/20 13:53*	*1*
Y Carrier	*66.2*		*40 - 110*	*04/03/20 09:16*	*04/20/20 13:53*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**0.796**		0.504	0.506	5.00	0.772	pCi/L		04/27/20 10:24	1

Client Sample Results

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-186042-1
SDG: Gorgas Ash Pond 1268

Client Sample ID: BA05894 PZ-16

Date Collected: 03/24/20 12:48
Date Received: 03/30/20 14:49

Lab Sample ID: 400-186042-47

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.111	U	0.103	0.104	1.00	0.159	pCi/L	04/03/20 08:51	04/27/20 05:30	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*97.6*		*40 - 110*	*04/03/20 08:51*	*04/27/20 05:30*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	**0.737**		0.419	0.424	1.00	0.636	pCi/L	04/03/20 09:16	04/20/20 13:53	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*97.6*		*40 - 110*	*04/03/20 09:16*	*04/20/20 13:53*	*1*
Y Carrier	*79.3*		*40 - 110*	*04/03/20 09:16*	*04/20/20 13:53*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**0.847**		0.431	0.437	5.00	0.636	pCi/L		04/27/20 10:24	1

Client Sample Results

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-186042-1
SDG: Gorgas Ash Pond 1268

Client Sample ID: BA05895 MW-16D

Date Collected: 03/24/20 13:45
Date Received: 03/30/20 14:49

Lab Sample ID: 400-186042-48

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.142	U	0.105	0.106	1.00	0.146	pCi/L	04/03/20 08:51	04/27/20 05:30	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*87.2*		*40 - 110*	*04/03/20 08:51*	*04/27/20 05:30*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.494	U	0.395	0.398	1.00	0.624	pCi/L	04/03/20 09:16	04/20/20 13:53	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*87.2*		*40 - 110*	*04/03/20 09:16*	*04/20/20 13:53*	*1*
Y Carrier	*76.3*		*40 - 110*	*04/03/20 09:16*	*04/20/20 13:53*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**0.636**		0.409	0.412	5.00	0.624	pCi/L		04/27/20 10:24	1

Client Sample Results

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-186042-1
SDG: Gorgas Ash Pond 1268

Client Sample ID: BA05896 MW-26H

Lab Sample ID: 400-186042-49

Date Collected: 03/25/20 11:42
Date Received: 03/30/20 14:49
Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.325	U	0.271	0.272	1.00	0.394	pCi/L	04/03/20 08:51	04/27/20 05:30	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*44.0*		*40 - 110*	*04/03/20 08:51*	*04/27/20 05:30*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.382	U G	1.03	1.03	1.00	1.78	pCi/L	04/03/20 09:16	04/20/20 13:53	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*44.0*		*40 - 110*	*04/03/20 09:16*	*04/20/20 13:53*	*1*
Y Carrier	*80.0*		*40 - 110*	*04/03/20 09:16*	*04/20/20 13:53*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.707	U	1.07	1.07	5.00	1.78	pCi/L		04/27/20 10:24	1

Client Sample Results

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-186042-1
SDG: Gorgas Ash Pond 1268

Client Sample ID: BA05897 MW-26H DIS

Date Collected: 03/25/20 11:42
Date Received: 03/30/20 14:49

Lab Sample ID: 400-186042-50

Matrix: Water

Method: 9315 - Radium-226 (GFPC) - Dissolved

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.157	U	0.123	0.124	1.00	0.183	pCi/L	04/03/20 08:51	04/27/20 05:30	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*98.8*		*40 - 110*	*04/03/20 08:51*	*04/27/20 05:30*	*1*

Method: 9320 - Radium-228 (GFPC) - Dissolved

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	**0.974**		0.392	0.402	1.00	0.540	pCi/L	04/03/20 09:16	04/20/20 13:53	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*98.8*		*40 - 110*	*04/03/20 09:16*	*04/20/20 13:53*	*1*
Y Carrier	*76.6*		*40 - 110*	*04/03/20 09:16*	*04/20/20 13:53*	*1*

Method: Ra226_Ra228 (D) - Combined Radium-226 and Radium-228 - Dissolved

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**1.13**		0.411	0.421	5.00	0.540	pCi/L		04/27/20 10:27	1

Definitions/Glossary

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-186042-1
SDG: Gorgas Ash Pond 1268

Qualifiers

Rad

Qualifier	Qualifier Description
G	The Sample MDC is greater than the requested RL.
U	Result is less than the sample detection limit.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Lab Chronicle

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-186042-1
SDG: Gorgas Ash Pond 1268

Client Sample ID: BA05425 MW-17
Lab Sample ID: 400-186042-1

Date Collected: 03/16/20 13:41
Matrix: Water
Date Received: 03/30/20 14:49

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			466701	04/06/20 07:59	EJQ	TAL SL
Total/NA	Analysis	9315		1	469141	04/29/20 06:41	AJD	TAL SL
Total/NA	Prep	PrecSep_0			466705	04/06/20 08:15	EJQ	TAL SL
Total/NA	Analysis	9320		1	468146	04/20/20 13:39	KLS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	469153	04/29/20 10:06	SMP	TAL SL

Client Sample ID: BA05426 MW-28H
Lab Sample ID: 400-186042-2

Date Collected: 03/16/20 14:57
Matrix: Water
Date Received: 03/30/20 14:49

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			466701	04/06/20 07:59	EJQ	TAL SL
Total/NA	Analysis	9315		1	469141	04/29/20 06:41	AJD	TAL SL
Total/NA	Prep	PrecSep_0			466705	04/06/20 08:15	EJQ	TAL SL
Total/NA	Analysis	9320		1	468146	04/20/20 13:39	KLS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	469153	04/29/20 10:06	SMP	TAL SL

Client Sample ID: BA05427 FB-1
Lab Sample ID: 400-186042-3

Date Collected: 03/16/20 16:15
Matrix: Water
Date Received: 03/30/20 14:49

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			466701	04/06/20 07:59	EJQ	TAL SL
Total/NA	Analysis	9315		1	469145	04/29/20 06:56	CJQ	TAL SL
Total/NA	Prep	PrecSep_0			466705	04/06/20 08:15	EJQ	TAL SL
Total/NA	Analysis	9320		1	468146	04/20/20 13:39	KLS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	469153	04/29/20 10:06	SMP	TAL SL

Client Sample ID: BA05428 MW-34HO
Lab Sample ID: 400-186042-4

Date Collected: 03/16/20 16:52
Matrix: Water
Date Received: 03/30/20 14:49

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			466701	04/06/20 07:59	EJQ	TAL SL
Total/NA	Analysis	9315		1	469145	04/29/20 06:56	CJQ	TAL SL
Total/NA	Prep	PrecSep_0			466705	04/06/20 08:15	EJQ	TAL SL
Total/NA	Analysis	9320		1	468146	04/20/20 13:39	KLS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	469153	04/29/20 10:06	SMP	TAL SL

Lab Chronicle

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-186042-1
SDG: Gorgas Ash Pond 1268

Client Sample ID: BA05429 MW-35HO — Lab Sample ID: 400-186042-5

Date Collected: 03/17/20 09:04 — **Matrix: Water**
Date Received: 03/30/20 14:49

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			466701	04/06/20 07:59	EJQ	TAL SL
Total/NA	Analysis	9315		1	469145	04/29/20 06:56	CJQ	TAL SL
Total/NA	Prep	PrecSep_0			466705	04/06/20 08:15	EJQ	TAL SL
Total/NA	Analysis	9320		1	468134	04/20/20 13:42	KLS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	469153	04/29/20 10:06	SMP	TAL SL

Client Sample ID: BA05430 MW-36H — Lab Sample ID: 400-186042-6

Date Collected: 03/17/20 11:45 — **Matrix: Water**
Date Received: 03/30/20 14:49

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			466701	04/06/20 07:59	EJQ	TAL SL
Total/NA	Analysis	9315		1	469145	04/29/20 06:56	CJQ	TAL SL
Total/NA	Prep	PrecSep_0			466705	04/06/20 08:15	EJQ	TAL SL
Total/NA	Analysis	9320		1	468134	04/20/20 13:42	KLS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	469153	04/29/20 10:06	SMP	TAL SL

Client Sample ID: BA05431 MW-33HO — Lab Sample ID: 400-186042-7

Date Collected: 03/17/20 13:48 — **Matrix: Water**
Date Received: 03/30/20 14:49

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			466701	04/06/20 07:59	EJQ	TAL SL
Total/NA	Analysis	9315		1	469145	04/29/20 06:56	CJQ	TAL SL
Total/NA	Prep	PrecSep_0			466705	04/06/20 08:15	EJQ	TAL SL
Total/NA	Analysis	9320		1	468134	04/20/20 13:42	KLS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	469153	04/29/20 10:06	SMP	TAL SL

Client Sample ID: BA05432 MW-30HA — Lab Sample ID: 400-186042-8

Date Collected: 03/18/20 09:35 — **Matrix: Water**
Date Received: 03/30/20 14:49

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			466701	04/06/20 07:59	EJQ	TAL SL
Total/NA	Analysis	9315		1	469145	04/29/20 06:56	CJQ	TAL SL
Total/NA	Prep	PrecSep_0			466705	04/06/20 08:15	EJQ	TAL SL
Total/NA	Analysis	9320		1	468134	04/20/20 13:42	KLS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	469153	04/29/20 10:06	SMP	TAL SL

Lab Chronicle

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-186042-1
SDG: Gorgas Ash Pond 1268

Client Sample ID: BA05433 MW-15V
Lab Sample ID: 400-186042-9

Date Collected: 03/18/20 11:58
Matrix: Water
Date Received: 03/30/20 14:49

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			466543	04/03/20 06:19	RBR	TAL SL
Total/NA	Analysis	9315		1	469039	04/28/20 04:56	KLS	TAL SL
Total/NA	Prep	PrecSep_0			466585	04/03/20 07:01	RBR	TAL SL
Total/NA	Analysis	9320		1	468686	04/23/20 07:29	AJD	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	469042	04/28/20 09:16	SMP	TAL SL

Client Sample ID: BA05434 MW-15
Lab Sample ID: 400-186042-10

Date Collected: 03/18/20 14:03
Matrix: Water
Date Received: 03/30/20 14:49

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			466543	04/03/20 06:19	RBR	TAL SL
Total/NA	Analysis	9315		1	469039	04/28/20 04:56	KLS	TAL SL
Total/NA	Prep	PrecSep_0			466585	04/03/20 07:01	RBR	TAL SL
Total/NA	Analysis	9320		1	468686	04/23/20 07:29	AJD	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	469042	04/28/20 09:16	SMP	TAL SL

Client Sample ID: BA05435 MW-21
Lab Sample ID: 400-186042-11

Date Collected: 03/18/20 15:50
Matrix: Water
Date Received: 03/30/20 14:49

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			466543	04/03/20 06:19	RBR	TAL SL
Total/NA	Analysis	9315		1	469039	04/28/20 04:56	KLS	TAL SL
Total/NA	Prep	PrecSep_0			466585	04/03/20 07:01	RBR	TAL SL
Total/NA	Analysis	9320		1	468686	04/23/20 07:29	AJD	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	469042	04/28/20 09:16	SMP	TAL SL

Client Sample ID: BA05436 MW-6S
Lab Sample ID: 400-186042-12

Date Collected: 03/17/20 11:30
Matrix: Water
Date Received: 03/30/20 14:49

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			466543	04/03/20 06:19	RBR	TAL SL
Total/NA	Analysis	9315		1	469039	04/28/20 04:56	KLS	TAL SL
Total/NA	Prep	PrecSep_0			466585	04/03/20 07:01	RBR	TAL SL
Total/NA	Analysis	9320		1	468686	04/23/20 07:29	AJD	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	469042	04/28/20 09:16	SMP	TAL SL

Lab Chronicle

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-186042-1
SDG: Gorgas Ash Pond 1268

Client Sample ID: BA05437 MW-6S DUP
Lab Sample ID: 400-186042-13

Date Collected: 03/17/20 11:30
Matrix: Water
Date Received: 03/30/20 14:49

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			466543	04/03/20 06:19	RBR	TAL SL
Total/NA	Analysis	9315		1	469039	04/28/20 04:57	KLS	TAL SL
Total/NA	Prep	PrecSep_0			466585	04/03/20 07:01	RBR	TAL SL
Total/NA	Analysis	9320		1	468686	04/23/20 07:29	AJD	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	469042	04/28/20 09:16	SMP	TAL SL

Client Sample ID: BA05438 MW-6D
Lab Sample ID: 400-186042-14

Date Collected: 03/17/20 12:40
Matrix: Water
Date Received: 03/30/20 14:49

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			466543	04/03/20 06:19	RBR	TAL SL
Total/NA	Analysis	9315		1	469039	04/28/20 04:57	KLS	TAL SL
Total/NA	Prep	PrecSep_0			466585	04/03/20 07:01	RBR	TAL SL
Total/NA	Analysis	9320		1	468688	04/23/20 07:32	AJD	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	469042	04/28/20 09:16	SMP	TAL SL

Client Sample ID: BA05439 MW-23H
Lab Sample ID: 400-186042-15

Date Collected: 03/17/20 13:53
Matrix: Water
Date Received: 03/30/20 14:49

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			466543	04/03/20 06:19	RBR	TAL SL
Total/NA	Analysis	9315		1	469039	04/28/20 04:57	KLS	TAL SL
Total/NA	Prep	PrecSep_0			466585	04/03/20 07:01	RBR	TAL SL
Total/NA	Analysis	9320		1	468688	04/23/20 07:33	AJD	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	469042	04/28/20 09:16	SMP	TAL SL

Client Sample ID: BA05440 MW-7
Lab Sample ID: 400-186042-16

Date Collected: 03/17/20 17:07
Matrix: Water
Date Received: 03/30/20 14:49

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			466543	04/03/20 06:19	RBR	TAL SL
Total/NA	Analysis	9315		1	469039	04/28/20 04:57	KLS	TAL SL
Total/NA	Prep	PrecSep_0			466585	04/03/20 07:01	RBR	TAL SL
Total/NA	Analysis	9320		1	468688	04/23/20 07:33	AJD	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	469042	04/28/20 09:16	SMP	TAL SL

Lab Chronicle

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-186042-1
SDG: Gorgas Ash Pond 1268

Client Sample ID: BA05441 MW-7 DIS

Lab Sample ID: 400-186042-17
Date Collected: 03/17/20 17:07
Matrix: Water
Date Received: 03/30/20 14:49

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	PrecSep-21			466543	04/03/20 06:19	RBR	TAL SL
Dissolved	Analysis	9315		1	469039	04/28/20 04:57	KLS	TAL SL
Dissolved	Prep	PrecSep_0			466585	04/03/20 07:01	RBR	TAL SL
Dissolved	Analysis	9320		1	468688	04/23/20 07:33	AJD	TAL SL
Dissolved	Analysis	Ra226_Ra228 (D)		1	469041	04/28/20 09:15	SMP	TAL SL

Client Sample ID: BA05442 MW-41HD

Lab Sample ID: 400-186042-18
Date Collected: 03/18/20 09:40
Matrix: Water
Date Received: 03/30/20 14:49

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			466543	04/03/20 06:19	RBR	TAL SL
Total/NA	Analysis	9315		1	469039	04/28/20 04:57	KLS	TAL SL
Total/NA	Prep	PrecSep_0			466585	04/03/20 07:01	RBR	TAL SL
Total/NA	Analysis	9320		1	468688	04/23/20 07:33	AJD	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	469042	04/28/20 09:16	SMP	TAL SL

Client Sample ID: BA05443 MW-24H

Lab Sample ID: 400-186042-19
Date Collected: 03/18/20 10:35
Matrix: Water
Date Received: 03/30/20 14:49

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			466543	04/03/20 06:19	RBR	TAL SL
Total/NA	Analysis	9315		1	469039	04/28/20 04:57	KLS	TAL SL
Total/NA	Prep	PrecSep_0			466585	04/03/20 07:01	RBR	TAL SL
Total/NA	Analysis	9320		1	468688	04/23/20 07:33	AJD	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	469042	04/28/20 09:16	SMP	TAL SL

Client Sample ID: BA05444 MW-8

Lab Sample ID: 400-186042-20
Date Collected: 03/18/20 11:43
Matrix: Water
Date Received: 03/30/20 14:49

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			466543	04/03/20 06:19	RBR	TAL SL
Total/NA	Analysis	9315		1	469039	04/28/20 04:57	KLS	TAL SL
Total/NA	Prep	PrecSep_0			466585	04/03/20 07:01	RBR	TAL SL
Total/NA	Analysis	9320		1	468688	04/23/20 07:33	AJD	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	469042	04/28/20 09:16	SMP	TAL SL

Lab Chronicle

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-186042-1
SDG: Gorgas Ash Pond 1268

Client Sample ID: BA05445 MW-12

Lab Sample ID: 400-186042-21
Date Collected: 03/18/20 14:20
Matrix: Water
Date Received: 03/30/20 14:49

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			466543	04/03/20 06:19	RBR	TAL SL
Total/NA	Analysis	9315		1	469039	04/28/20 04:57	KLS	TAL SL
Total/NA	Prep	PrecSep_0			466585	04/03/20 07:01	RBR	TAL SL
Total/NA	Analysis	9320		1	468688	04/23/20 07:33	AJD	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	469042	04/28/20 09:16	SMP	TAL SL

Client Sample ID: BA05446 MW-18

Lab Sample ID: 400-186042-22
Date Collected: 03/18/20 16:32
Matrix: Water
Date Received: 03/30/20 14:49

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			466543	04/03/20 06:19	RBR	TAL SL
Total/NA	Analysis	9315		1	469039	04/28/20 04:57	KLS	TAL SL
Total/NA	Prep	PrecSep_0			466585	04/03/20 07:01	RBR	TAL SL
Total/NA	Analysis	9320		1	468688	04/23/20 07:33	AJD	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	469042	04/28/20 09:17	SMP	TAL SL

Client Sample ID: BA05447 FB-4

Lab Sample ID: 400-186042-23
Date Collected: 03/18/20 13:45
Matrix: Water
Date Received: 03/30/20 14:49

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			466543	04/03/20 06:19	RBR	TAL SL
Total/NA	Analysis	9315		1	469039	04/28/20 06:49	KLS	TAL SL
Total/NA	Prep	PrecSep_0			466585	04/03/20 07:01	RBR	TAL SL
Total/NA	Analysis	9320		1	468688	04/23/20 07:34	AJD	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	469042	04/28/20 09:17	SMP	TAL SL

Client Sample ID: BA05448 MW-31H

Lab Sample ID: 400-186042-24
Date Collected: 03/18/20 14:35
Matrix: Water
Date Received: 03/30/20 14:49

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			466543	04/03/20 06:19	RBR	TAL SL
Total/NA	Analysis	9315		1	469039	04/28/20 06:49	KLS	TAL SL
Total/NA	Prep	PrecSep_0			466585	04/03/20 07:01	RBR	TAL SL
Total/NA	Analysis	9320		1	468688	04/23/20 07:34	AJD	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	469042	04/28/20 09:17	SMP	TAL SL

Lab Chronicle

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-186042-1
SDG: Gorgas Ash Pond 1268

Client Sample ID: BA05872 MW-9V
Lab Sample ID: 400-186042-25

Date Collected: 03/23/20 16:05
Date Received: 03/30/20 14:49
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			466543	04/03/20 06:19	RBR	TAL SL
Total/NA	Analysis	9315		1	469039	04/28/20 06:49	KLS	TAL SL
Total/NA	Prep	PrecSep_0			466585	04/03/20 07:01	RBR	TAL SL
Total/NA	Analysis	9320		1	468688	04/23/20 07:34	AJD	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	469042	04/28/20 09:17	SMP	TAL SL

Client Sample ID: BA05873 MW-42H
Lab Sample ID: 400-186042-26

Date Collected: 03/24/20 08:50
Date Received: 03/30/20 14:49
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			466543	04/03/20 06:19	RBR	TAL SL
Total/NA	Analysis	9315		1	469039	04/28/20 06:49	KLS	TAL SL
Total/NA	Prep	PrecSep_0			466585	04/03/20 07:01	RBR	TAL SL
Total/NA	Analysis	9320		1	468688	04/23/20 07:34	AJD	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	469042	04/28/20 09:17	SMP	TAL SL

Client Sample ID: BA05874 MW-42H DUP
Lab Sample ID: 400-186042-27

Date Collected: 03/24/20 08:50
Date Received: 03/30/20 14:49
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			466586	04/03/20 07:07	RBR	TAL SL
Total/NA	Analysis	9315		1	469039	04/28/20 06:51	KLS	TAL SL
Total/NA	Prep	PrecSep_0			466588	04/03/20 07:37	RBR	TAL SL
Total/NA	Analysis	9320		1	468443	04/21/20 16:32	CJQ	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	469070	04/28/20 13:02	SMP	TAL SL

Client Sample ID: BA05875 MW-38H
Lab Sample ID: 400-186042-28

Date Collected: 03/24/20 10:55
Date Received: 03/30/20 14:49
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			466586	04/03/20 07:07	RBR	TAL SL
Total/NA	Analysis	9315		1	469039	04/28/20 06:51	KLS	TAL SL
Total/NA	Prep	PrecSep_0			466588	04/03/20 07:37	RBR	TAL SL
Total/NA	Analysis	9320		1	468443	04/21/20 16:32	CJQ	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	469070	04/28/20 13:02	SMP	TAL SL

Lab Chronicle

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-186042-1
SDG: Gorgas Ash Pond 1268

Client Sample ID: BA05876 MW-19

Lab Sample ID: 400-186042-29
Date Collected: 03/24/20 14:25
Matrix: Water
Date Received: 03/30/20 14:49

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			466586	04/03/20 07:07	RBR	TAL SL
Total/NA	Analysis	9315		1	469039	04/28/20 06:51	KLS	TAL SL
Total/NA	Prep	PrecSep_0			466588	04/03/20 07:37	RBR	TAL SL
Total/NA	Analysis	9320		1	468443	04/21/20 16:32	CJQ	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	469070	04/28/20 13:02	SMP	TAL SL

Client Sample ID: BA05877 EB-1

Lab Sample ID: 400-186042-30
Date Collected: 03/24/20 14:50
Matrix: Water
Date Received: 03/30/20 14:49

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			466586	04/03/20 07:07	RBR	TAL SL
Total/NA	Analysis	9315		1	469039	04/28/20 06:51	KLS	TAL SL
Total/NA	Prep	PrecSep_0			466588	04/03/20 07:37	RBR	TAL SL
Total/NA	Analysis	9320		1	468443	04/21/20 16:32	CJQ	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	469070	04/28/20 13:02	SMP	TAL SL

Client Sample ID: BA05878 MW-29H

Lab Sample ID: 400-186042-31
Date Collected: 03/25/20 10:08
Matrix: Water
Date Received: 03/30/20 14:49

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			466586	04/03/20 07:07	RBR	TAL SL
Total/NA	Analysis	9315		1	469039	04/28/20 06:51	KLS	TAL SL
Total/NA	Prep	PrecSep_0			466588	04/03/20 07:37	RBR	TAL SL
Total/NA	Analysis	9320		1	468443	04/21/20 16:32	CJQ	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	469070	04/28/20 13:02	SMP	TAL SL

Client Sample ID: BA05879 MW-17V

Lab Sample ID: 400-186042-32
Date Collected: 03/25/20 12:38
Matrix: Water
Date Received: 03/30/20 14:49

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			466586	04/03/20 07:07	RBR	TAL SL
Total/NA	Analysis	9315		1	469039	04/28/20 06:51	KLS	TAL SL
Total/NA	Prep	PrecSep_0			466588	04/03/20 07:37	RBR	TAL SL
Total/NA	Analysis	9320		1	468443	04/21/20 16:32	CJQ	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	469070	04/28/20 13:02	SMP	TAL SL

Lab Chronicle

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-186042-1
SDG: Gorgas Ash Pond 1268

Client Sample ID: BA05880 FB-2
Lab Sample ID: 400-186042-33

Date Collected: 03/25/20 13:20
Matrix: Water
Date Received: 03/30/20 14:49

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			466586	04/03/20 07:07	RBR	TAL SL
Total/NA	Analysis	9315		1	469039	04/28/20 06:51	KLS	TAL SL
Total/NA	Prep	PrecSep_0			466588	04/03/20 07:37	RBR	TAL SL
Total/NA	Analysis	9320		1	468443	04/21/20 16:32	CJQ	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	469070	04/28/20 13:02	SMP	TAL SL

Client Sample ID: BA05881 MW-21V
Lab Sample ID: 400-186042-34

Date Collected: 03/23/20 17:14
Matrix: Water
Date Received: 03/30/20 14:49

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			466586	04/03/20 07:07	RBR	TAL SL
Total/NA	Analysis	9315		1	469039	04/28/20 06:51	KLS	TAL SL
Total/NA	Prep	PrecSep_0			466588	04/03/20 07:37	RBR	TAL SL
Total/NA	Analysis	9320		1	468443	04/21/20 16:32	CJQ	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	469070	04/28/20 13:02	SMP	TAL SL

Client Sample ID: BA05882 MW-12V
Lab Sample ID: 400-186042-35

Date Collected: 03/24/20 11:32
Matrix: Water
Date Received: 03/30/20 14:49

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			466586	04/03/20 07:07	RBR	TAL SL
Total/NA	Analysis	9315		1	469039	04/28/20 06:51	KLS	TAL SL
Total/NA	Prep	PrecSep_0			466588	04/03/20 07:37	RBR	TAL SL
Total/NA	Analysis	9320		1	468443	04/21/20 16:32	CJQ	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	469070	04/28/20 13:02	SMP	TAL SL

Client Sample ID: BA05883 MW-12V DIS
Lab Sample ID: 400-186042-36

Date Collected: 03/24/20 11:32
Matrix: Water
Date Received: 03/30/20 14:49

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	PrecSep-21			466586	04/03/20 07:07	RBR	TAL SL
Dissolved	Analysis	9315		1	469039	04/28/20 06:51	KLS	TAL SL
Dissolved	Prep	PrecSep_0			466588	04/03/20 07:37	RBR	TAL SL
Dissolved	Analysis	9320		1	468443	04/21/20 16:32	CJQ	TAL SL
Dissolved	Analysis	Ra226_Ra228 (D)		1	469069	04/28/20 13:01	SMP	TAL SL

Lab Chronicle

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-186042-1
SDG: Gorgas Ash Pond 1268

Client Sample ID: BA05884 MW-25HA
Lab Sample ID: 400-186042-37

Date Collected: 03/24/20 13:10
Date Received: 03/30/20 14:49
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			466586	04/03/20 07:07	RBR	TAL SL
Total/NA	Analysis	9315		1	469039	04/28/20 06:51	KLS	TAL SL
Total/NA	Prep	PrecSep_0			466588	04/03/20 07:37	RBR	TAL SL
Total/NA	Analysis	9320		1	468443	04/21/20 16:32	CJQ	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	469070	04/28/20 13:02	SMP	TAL SL

Client Sample ID: BA05885 MW-2
Lab Sample ID: 400-186042-38

Date Collected: 03/25/20 08:32
Date Received: 03/30/20 14:49
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			466586	04/03/20 07:07	RBR	TAL SL
Total/NA	Analysis	9315		1	469039	04/28/20 08:37	KLS	TAL SL
Total/NA	Prep	PrecSep_0			468668	04/23/20 07:29	RBR	TAL SL
Total/NA	Analysis	9320		1	469016	04/27/20 16:29	CJQ	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	469157	04/29/20 10:21	SMP	TAL SL

Client Sample ID: BA05886 MW-43HO
Lab Sample ID: 400-186042-39

Date Collected: 03/25/20 10:00
Date Received: 03/30/20 14:49
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			466586	04/03/20 07:07	RBR	TAL SL
Total/NA	Analysis	9315		1	469039	04/28/20 08:37	KLS	TAL SL
Total/NA	Prep	PrecSep_0			466588	04/03/20 07:37	RBR	TAL SL
Total/NA	Analysis	9320		1	468448	04/21/20 16:41	CJQ	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	469070	04/28/20 13:02	SMP	TAL SL

Client Sample ID: BA05887 PZ-18
Lab Sample ID: 400-186042-40

Date Collected: 03/25/20 11:53
Date Received: 03/30/20 14:49
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			466586	04/03/20 07:07	RBR	TAL SL
Total/NA	Analysis	9315		1	469039	04/28/20 08:37	KLS	TAL SL
Total/NA	Prep	PrecSep_0			466588	04/03/20 07:37	RBR	TAL SL
Total/NA	Analysis	9320		1	468448	04/21/20 16:41	CJQ	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	469070	04/28/20 13:02	SMP	TAL SL

Lab Chronicle

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-186042-1
SDG: Gorgas Ash Pond 1268

Client Sample ID: BA05888 PZ-18 DUP
Lab Sample ID: 400-186042-41

Date Collected: 03/25/20 11:53
Matrix: Water
Date Received: 03/30/20 14:49

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			466586	04/03/20 07:07	RBR	TAL SL
Total/NA	Analysis	9315		1	469039	04/28/20 08:38	KLS	TAL SL
Total/NA	Prep	PrecSep_0			466588	04/03/20 07:37	RBR	TAL SL
Total/NA	Analysis	9320		1	468448	04/21/20 16:41	CJQ	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	469070	04/28/20 13:02	SMP	TAL SL

Client Sample ID: BA05889 MW-18V
Lab Sample ID: 400-186042-42

Date Collected: 03/25/20 13:00
Matrix: Water
Date Received: 03/30/20 14:49

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			466586	04/03/20 07:07	RBR	TAL SL
Total/NA	Analysis	9315		1	469039	04/28/20 08:38	KLS	TAL SL
Total/NA	Prep	PrecSep_0			466588	04/03/20 07:37	RBR	TAL SL
Total/NA	Analysis	9320		1	468448	04/21/20 16:41	CJQ	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	469070	04/28/20 13:02	SMP	TAL SL

Client Sample ID: BA05890 MW-32H
Lab Sample ID: 400-186042-43

Date Collected: 03/24/20 10:20
Matrix: Water
Date Received: 03/30/20 14:49

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			466586	04/03/20 07:07	RBR	TAL SL
Total/NA	Analysis	9315		1	469039	04/28/20 08:38	KLS	TAL SL
Total/NA	Prep	PrecSep_0			466588	04/03/20 07:37	RBR	TAL SL
Total/NA	Analysis	9320		1	468448	04/21/20 16:41	CJQ	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	469070	04/28/20 13:02	SMP	TAL SL

Client Sample ID: BA05891 FB-3
Lab Sample ID: 400-186042-44

Date Collected: 03/24/20 11:25
Matrix: Water
Date Received: 03/30/20 14:49

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			466586	04/03/20 07:07	RBR	TAL SL
Total/NA	Analysis	9315		1	469039	04/28/20 08:38	KLS	TAL SL
Total/NA	Prep	PrecSep_0			466588	04/03/20 07:37	RBR	TAL SL
Total/NA	Analysis	9320		1	468448	04/21/20 16:41	CJQ	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	469070	04/28/20 13:02	SMP	TAL SL

Lab Chronicle

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-186042-1
SDG: Gorgas Ash Pond 1268

Client Sample ID: BA05892 PZ-22
Lab Sample ID: 400-186042-45

Date Collected: 03/24/20 11:40
Date Received: 03/30/20 14:49
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			466598	04/03/20 08:51	RBR	TAL SL
Total/NA	Analysis	9315		1	468971	04/27/20 05:30	KLS	TAL SL
Total/NA	Prep	PrecSep_0			466601	04/03/20 09:16	RBR	TAL SL
Total/NA	Analysis	9320		1	468147	04/20/20 13:53	KLS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	468977	04/27/20 10:24	SMP	TAL SL

Client Sample ID: BA05893 PZ-22 DUP
Lab Sample ID: 400-186042-46

Date Collected: 03/24/20 11:40
Date Received: 03/30/20 14:49
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			466598	04/03/20 08:51	RBR	TAL SL
Total/NA	Analysis	9315		1	468971	04/27/20 05:30	KLS	TAL SL
Total/NA	Prep	PrecSep_0			466601	04/03/20 09:16	RBR	TAL SL
Total/NA	Analysis	9320		1	468147	04/20/20 13:53	KLS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	468977	04/27/20 10:24	SMP	TAL SL

Client Sample ID: BA05894 PZ-16
Lab Sample ID: 400-186042-47

Date Collected: 03/24/20 12:48
Date Received: 03/30/20 14:49
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			466598	04/03/20 08:51	RBR	TAL SL
Total/NA	Analysis	9315		1	468971	04/27/20 05:30	KLS	TAL SL
Total/NA	Prep	PrecSep_0			466601	04/03/20 09:16	RBR	TAL SL
Total/NA	Analysis	9320		1	468147	04/20/20 13:53	KLS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	468977	04/27/20 10:24	SMP	TAL SL

Client Sample ID: BA05895 MW-16D
Lab Sample ID: 400-186042-48

Date Collected: 03/24/20 13:45
Date Received: 03/30/20 14:49
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			466598	04/03/20 08:51	RBR	TAL SL
Total/NA	Analysis	9315		1	468971	04/27/20 05:30	KLS	TAL SL
Total/NA	Prep	PrecSep_0			466601	04/03/20 09:16	RBR	TAL SL
Total/NA	Analysis	9320		1	468147	04/20/20 13:53	KLS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	468977	04/27/20 10:24	SMP	TAL SL

Lab Chronicle

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-186042-1
SDG: Gorgas Ash Pond 1268

Client Sample ID: BA05896 MW-26H

Lab Sample ID: 400-186042-49

Date Collected: 03/25/20 11:42
Matrix: Water
Date Received: 03/30/20 14:49

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			466598	04/03/20 08:51	RBR	TAL SL
Total/NA	Analysis	9315		1	468971	04/27/20 05:30	KLS	TAL SL
Total/NA	Prep	PrecSep_0			466601	04/03/20 09:16	RBR	TAL SL
Total/NA	Analysis	9320		1	468147	04/20/20 13:53	KLS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	468977	04/27/20 10:24	SMP	TAL SL

Client Sample ID: BA05897 MW-26H DIS

Lab Sample ID: 400-186042-50

Date Collected: 03/25/20 11:42
Matrix: Water
Date Received: 03/30/20 14:49

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	PrecSep-21			466598	04/03/20 08:51	RBR	TAL SL
Dissolved	Analysis	9315		1	468971	04/27/20 05:30	KLS	TAL SL
Dissolved	Prep	PrecSep_0			466601	04/03/20 09:16	RBR	TAL SL
Dissolved	Analysis	9320		1	468147	04/20/20 13:53	KLS	TAL SL
Dissolved	Analysis	Ra226_Ra228 (D)		1	468979	04/27/20 10:27	SMP	TAL SL

Laboratory References:

TAL SL = Eurofins TestAmerica, St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

QC Association Summary

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-186042-1
SDG: Gorgas Ash Pond 1268

Rad

Prep Batch: 466543

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-186042-9	BA05433 MW-15V	Total/NA	Water	PrecSep-21	
400-186042-10	BA05434 MW-15	Total/NA	Water	PrecSep-21	
400-186042-11	BA05435 MW-21	Total/NA	Water	PrecSep-21	
400-186042-12	BA05436 MW-6S	Total/NA	Water	PrecSep-21	
400-186042-13	BA05437 MW-6S DUP	Total/NA	Water	PrecSep-21	
400-186042-14	BA05438 MW-6D	Total/NA	Water	PrecSep-21	
400-186042-15	BA05439 MW-23H	Total/NA	Water	PrecSep-21	
400-186042-16	BA05440 MW-7	Total/NA	Water	PrecSep-21	
400-186042-17	BA05441 MW-7 DIS	Dissolved	Water	PrecSep-21	
400-186042-18	BA05442 MW-41HD	Total/NA	Water	PrecSep-21	
400-186042-19	BA05443 MW-24H	Total/NA	Water	PrecSep-21	
400-186042-20	BA05444 MW-8	Total/NA	Water	PrecSep-21	
400-186042-21	BA05445 MW-12	Total/NA	Water	PrecSep-21	
400-186042-22	BA05446 MW-18	Total/NA	Water	PrecSep-21	
400-186042-23	BA05447 FB-4	Total/NA	Water	PrecSep-21	
400-186042-24	BA05448 MW-31H	Total/NA	Water	PrecSep-21	
400-186042-25	BA05872 MW-9V	Total/NA	Water	PrecSep-21	
400-186042-26	BA05873 MW-42H	Total/NA	Water	PrecSep-21	
MB 160-466543/22-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-466543/1-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
400-186042-14 MS	BA05438 MW-6D	Total/NA	Water	PrecSep-21	
400-186042-14 MSD	BA05438 MW-6D	Total/NA	Water	PrecSep-21	

Prep Batch: 466585

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-186042-9	BA05433 MW-15V	Total/NA	Water	PrecSep_0	
400-186042-10	BA05434 MW-15	Total/NA	Water	PrecSep_0	
400-186042-11	BA05435 MW-21	Total/NA	Water	PrecSep_0	
400-186042-12	BA05436 MW-6S	Total/NA	Water	PrecSep_0	
400-186042-13	BA05437 MW-6S DUP	Total/NA	Water	PrecSep_0	
400-186042-14	BA05438 MW-6D	Total/NA	Water	PrecSep_0	
400-186042-15	BA05439 MW-23H	Total/NA	Water	PrecSep_0	
400-186042-16	BA05440 MW-7	Total/NA	Water	PrecSep_0	
400-186042-17	BA05441 MW-7 DIS	Dissolved	Water	PrecSep_0	
400-186042-18	BA05442 MW-41HD	Total/NA	Water	PrecSep_0	
400-186042-19	BA05443 MW-24H	Total/NA	Water	PrecSep_0	
400-186042-20	BA05444 MW-8	Total/NA	Water	PrecSep_0	
400-186042-21	BA05445 MW-12	Total/NA	Water	PrecSep_0	
400-186042-22	BA05446 MW-18	Total/NA	Water	PrecSep_0	
400-186042-23	BA05447 FB-4	Total/NA	Water	PrecSep_0	
400-186042-24	BA05448 MW-31H	Total/NA	Water	PrecSep_0	
400-186042-25	BA05872 MW-9V	Total/NA	Water	PrecSep_0	
400-186042-26	BA05873 MW-42H	Total/NA	Water	PrecSep_0	
MB 160-466585/22-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-466585/1-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
400-186042-14 MS	BA05438 MW-6D	Total/NA	Water	PrecSep_0	
400-186042-14 MSD	BA05438 MW-6D	Total/NA	Water	PrecSep_0	

Prep Batch: 466586

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-186042-27	BA05874 MW-42H DUP	Total/NA	Water	PrecSep-21	

Rad (Continued)

Prep Batch: 466586 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-186042-28	BA05875 MW-38H	Total/NA	Water	PrecSep-21	
400-186042-29	BA05876 MW-19	Total/NA	Water	PrecSep-21	
400-186042-30	BA05877 EB-1	Total/NA	Water	PrecSep-21	
400-186042-31	BA05878 MW-29H	Total/NA	Water	PrecSep-21	
400-186042-32	BA05879 MW-17V	Total/NA	Water	PrecSep-21	
400-186042-33	BA05880 FB-2	Total/NA	Water	PrecSep-21	
400-186042-34	BA05881 MW-21V	Total/NA	Water	PrecSep-21	
400-186042-35	BA05882 MW-12V	Total/NA	Water	PrecSep-21	
400-186042-36	BA05883 MW-12V DIS	Dissolved	Water	PrecSep-21	
400-186042-37	BA05884 MW-25HA	Total/NA	Water	PrecSep-21	
400-186042-38	BA05885 MW-2	Total/NA	Water	PrecSep-21	
400-186042-39	BA05886 MW-43HO	Total/NA	Water	PrecSep-21	
400-186042-40	BA05887 PZ-18	Total/NA	Water	PrecSep-21	
400-186042-41	BA05888 PZ-18 DUP	Total/NA	Water	PrecSep-21	
400-186042-42	BA05889 MW-18V	Total/NA	Water	PrecSep-21	
400-186042-43	BA05890 MW-32H	Total/NA	Water	PrecSep-21	
400-186042-44	BA05891 FB-3	Total/NA	Water	PrecSep-21	
MB 160-466586/22-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-466586/1-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
400-186042-37 MS	BA05884 MW-25HA	Total/NA	Water	PrecSep-21	
400-186042-37 MSD	BA05884 MW-25HA	Total/NA	Water	PrecSep-21	

Prep Batch: 466588

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-186042-27	BA05874 MW-42H DUP	Total/NA	Water	PrecSep_0	
400-186042-28	BA05875 MW-38H	Total/NA	Water	PrecSep_0	
400-186042-29	BA05876 MW-19	Total/NA	Water	PrecSep_0	
400-186042-30	BA05877 EB-1	Total/NA	Water	PrecSep_0	
400-186042-31	BA05878 MW-29H	Total/NA	Water	PrecSep_0	
400-186042-32	BA05879 MW-17V	Total/NA	Water	PrecSep_0	
400-186042-33	BA05880 FB-2	Total/NA	Water	PrecSep_0	
400-186042-34	BA05881 MW-21V	Total/NA	Water	PrecSep_0	
400-186042-35	BA05882 MW-12V	Total/NA	Water	PrecSep_0	
400-186042-36	BA05883 MW-12V DIS	Dissolved	Water	PrecSep_0	
400-186042-37	BA05884 MW-25HA	Total/NA	Water	PrecSep_0	
400-186042-39	BA05886 MW-43HO	Total/NA	Water	PrecSep_0	
400-186042-40	BA05887 PZ-18	Total/NA	Water	PrecSep_0	
400-186042-41	BA05888 PZ-18 DUP	Total/NA	Water	PrecSep_0	
400-186042-42	BA05889 MW-18V	Total/NA	Water	PrecSep_0	
400-186042-43	BA05890 MW-32H	Total/NA	Water	PrecSep_0	
400-186042-44	BA05891 FB-3	Total/NA	Water	PrecSep_0	
MB 160-466588/22-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-466588/1-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
400-186042-37 MS	BA05884 MW-25HA	Total/NA	Water	PrecSep_0	
400-186042-37 MSD	BA05884 MW-25HA	Total/NA	Water	PrecSep_0	

Prep Batch: 466598

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-186042-45	BA05892 PZ-22	Total/NA	Water	PrecSep-21	
400-186042-46	BA05893 PZ-22 DUP	Total/NA	Water	PrecSep-21	
400-186042-47	BA05894 PZ-16	Total/NA	Water	PrecSep-21	

Rad (Continued)

Prep Batch: 466598 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-186042-48	BA05895 MW-16D	Total/NA	Water	PrecSep-21	
400-186042-49	BA05896 MW-26H	Total/NA	Water	PrecSep-21	
400-186042-50	BA05897 MW-26H DIS	Dissolved	Water	PrecSep-21	
MB 160-466598/21-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-466598/1-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
400-186042-47 MS	BA05894 PZ-16	Total/NA	Water	PrecSep-21	
400-186042-47 MSD	BA05894 PZ-16	Total/NA	Water	PrecSep-21	

Prep Batch: 466601

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-186042-45	BA05892 PZ-22	Total/NA	Water	PrecSep_0	
400-186042-46	BA05893 PZ-22 DUP	Total/NA	Water	PrecSep_0	
400-186042-47	BA05894 PZ-16	Total/NA	Water	PrecSep_0	
400-186042-48	BA05895 MW-16D	Total/NA	Water	PrecSep_0	
400-186042-49	BA05896 MW-26H	Total/NA	Water	PrecSep_0	
400-186042-50	BA05897 MW-26H DIS	Dissolved	Water	PrecSep_0	
MB 160-466601/21-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-466601/1-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
400-186042-47 MS	BA05894 PZ-16	Total/NA	Water	PrecSep_0	
400-186042-47 MSD	BA05894 PZ-16	Total/NA	Water	PrecSep_0	

Prep Batch: 466701

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-186042-1	BA05425 MW-17	Total/NA	Water	PrecSep-21	
400-186042-2	BA05426 MW-28H	Total/NA	Water	PrecSep-21	
400-186042-3	BA05427 FB-1	Total/NA	Water	PrecSep-21	
400-186042-4	BA05428 MW-34HO	Total/NA	Water	PrecSep-21	
400-186042-5	BA05429 MW-35HO	Total/NA	Water	PrecSep-21	
400-186042-6	BA05430 MW-36H	Total/NA	Water	PrecSep-21	
400-186042-7	BA05431 MW-33HO	Total/NA	Water	PrecSep-21	
400-186042-8	BA05432 MW-30HA	Total/NA	Water	PrecSep-21	
MB 160-466701/20-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-466701/1-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
440-263721-A-1-B MS	Matrix Spike	Total/NA	Water	PrecSep-21	
440-263721-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	PrecSep-21	

Prep Batch: 466705

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-186042-1	BA05425 MW-17	Total/NA	Water	PrecSep_0	
400-186042-2	BA05426 MW-28H	Total/NA	Water	PrecSep_0	
400-186042-3	BA05427 FB-1	Total/NA	Water	PrecSep_0	
400-186042-4	BA05428 MW-34HO	Total/NA	Water	PrecSep_0	
400-186042-5	BA05429 MW-35HO	Total/NA	Water	PrecSep_0	
400-186042-6	BA05430 MW-36H	Total/NA	Water	PrecSep_0	
400-186042-7	BA05431 MW-33HO	Total/NA	Water	PrecSep_0	
400-186042-8	BA05432 MW-30HA	Total/NA	Water	PrecSep_0	
MB 160-466705/20-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-466705/1-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
440-263721-A-1-E MS	Matrix Spike	Total/NA	Water	PrecSep_0	
440-263721-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Water	PrecSep_0	

QC Association Summary

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-186042-1
SDG: Gorgas Ash Pond 1268

Rad

Prep Batch: 468668

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-186042-38	BA05885 MW-2	Total/NA	Water	PrecSep_0	
MB 160-468668/4-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-468668/1-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
LCSD 160-468668/2-A	Lab Control Sample Dup	Total/NA	Water	PrecSep_0	

QC Sample Results

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-186042-1
SDG: Gorgas Ash Pond 1268

Method: 9315 - Radium-226 (GFPC)

Lab Sample ID: MB 160-466543/22-A
Matrix: Water
Analysis Batch: 469039

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 466543

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.1064	U	0.0926	0.0931	1.00	0.241	pCi/L	04/03/20 06:19	04/28/20 06:49	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*74.0*		*40 - 110*	*04/03/20 06:19*	*04/28/20 06:49*	*1*

Lab Sample ID: LCS 160-466543/1-A
Matrix: Water
Analysis Batch: 469039

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 466543

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-226			15.1	15.07		1.64	1.00	0.209	pCi/L	100	75 - 125		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*77.1*		*40 - 110*

Lab Sample ID: 400-186042-14 MS
Matrix: Water
Analysis Batch: 469039

Client Sample ID: BA05438 MW-6D
Prep Type: Total/NA
Prep Batch: 466543

Analyte	Sample Result	Sample Qual	Spike Added	MS Result	MS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-226	0.154	U	15.1	13.64		1.49	1.00	0.167	pCi/L	89	75 - 138		

Carrier	*MS %Yield*	*MS Qualifier*	*Limits*
Ba Carrier	*83.2*		*40 - 110*

Lab Sample ID: 400-186042-14 MSD
Matrix: Water
Analysis Batch: 469039

Client Sample ID: BA05438 MW-6D
Prep Type: Total/NA
Prep Batch: 466543

Analyte	Sample Result	Sample Qual	Spike Added	MSD Result	MSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits	RER	RER Limit
Radium-226	0.154	U	15.1	15.01		1.68	1.00	0.280	pCi/L	98	75 - 138	0.43	1

Carrier	*MSD %Yield*	*MSD Qualifier*	*Limits*
Ba Carrier	*67.9*		*40 - 110*

Lab Sample ID: MB 160-466586/22-A
Matrix: Water
Analysis Batch: 469039

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 466586

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.01226	U	0.0653	0.0653	1.00	0.130	pCi/L	04/03/20 07:07	04/28/20 08:38	1

Method: 9315 - Radium-226 (GFPC) (Continued)

Lab Sample ID: MB 160-466586/22-A
Matrix: Water
Analysis Batch: 469039

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 466586

Carrier	MB %Yield	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	101		40 - 110	04/03/20 07:07	04/28/20 08:38	1

Lab Sample ID: LCS 160-466586/1-A
Matrix: Water
Analysis Batch: 469039

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 466586

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits
Radium-226	15.1	12.29		1.37	1.00	0.170	pCi/L	81	75 - 125

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	71.9		40 - 110

Lab Sample ID: 400-186042-37 MS
Matrix: Water
Analysis Batch: 469039

Client Sample ID: BA05884 MW-25HA
Prep Type: Total/NA
Prep Batch: 466586

Analyte	Sample Result	Sample Qual	Spike Added	MS Result	MS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits
Radium-226	0.271	U	15.1	12.93		1.39	1.00	0.171	pCi/L	84	75 - 138

Carrier	MS %Yield	MS Qualifier	Limits
Ba Carrier	85.3		40 - 110

Lab Sample ID: 400-186042-37 MSD
Matrix: Water
Analysis Batch: 469039

Client Sample ID: BA05884 MW-25HA
Prep Type: Total/NA
Prep Batch: 466586

Analyte	Sample Result	Sample Qual	Spike Added	MSD Result	MSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits	RER	RER Limit
Radium-226	0.271	U	15.1	12.37		1.36	1.00	0.176	pCi/L	80	75 - 138	0.20	1

Carrier	MSD %Yield	MSD Qualifier	Limits
Ba Carrier	78.0		40 - 110

Lab Sample ID: MB 160-466598/21-A
Matrix: Water
Analysis Batch: 468971

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 466598

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.005051	U	0.0849	0.0849	1.00	0.172	pCi/L	04/03/20 08:51	04/27/20 07:47	1

Carrier	MB %Yield	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	69.1		40 - 110	04/03/20 08:51	04/27/20 07:47	1

Method: 9315 - Radium-226 (GFPC) (Continued)

Lab Sample ID: LCS 160-466598/1-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 468971 — **Prep Batch: 466598**

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-226			11.3	8.855		0.985	1.00	0.141	pCi/L	78	75 - 125		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*76.8*		*40 - 110*

Lab Sample ID: 400-186042-47 MS — **Client Sample ID: BA05894 PZ-16**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 468971 — **Prep Batch: 466598**

Analyte	Sample Result	Sample Qual	Spike Added	MS Result	MS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-226	0.111	U	15.1	11.93		1.28	1.00	0.171	pCi/L	78	75 - 138		

Carrier	*MS %Yield*	*MS Qualifier*	*Limits*
Ba Carrier	*98.2*		*40 - 110*

Lab Sample ID: 400-186042-47 MSD — **Client Sample ID: BA05894 PZ-16**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 468971 — **Prep Batch: 466598**

Analyte	Sample Result	Sample Qual	Spike Added	MSD Result	MSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits	RER	RER Limit
Radium-226	0.111	U	15.1	12.56		1.36	1.00	0.143	pCi/L	82	75 - 138	0.24	1

Carrier	*MSD %Yield*	*MSD Qualifier*	*Limits*
Ba Carrier	*87.5*		*40 - 110*

Lab Sample ID: MB 160-466701/20-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 469145 — **Prep Batch: 466701**

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.03608	U	0.0879	0.0880	1.00	0.162	pCi/L	04/06/20 07:59	04/29/20 06:56	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*85.0*		*40 - 110*	*04/06/20 07:59*	*04/29/20 06:56*	*1*

Lab Sample ID: LCS 160-466701/1-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 469141 — **Prep Batch: 466701**

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-226			15.1	11.41		1.21	1.00	0.114	pCi/L	75	75 - 125		

Method: 9315 - Radium-226 (GFPC) (Continued)

Lab Sample ID: LCS 160-466701/1-A
Matrix: Water
Analysis Batch: 469141

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 466701

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	99.1		40 - 110

Lab Sample ID: 440-263721-A-1-B MS
Matrix: Water
Analysis Batch: 469141

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 466701

Analyte	Sample Result	Sample Qual	Spike Added	MS Result	MS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits
Radium-226	0.0419	U	11.3	8.994		0.957	1.00	0.102	pCi/L	79	75 - 138

Carrier	MS %Yield	MS Qualifier	Limits
Ba Carrier	94.2		40 - 110

Lab Sample ID: 440-263721-A-1-C MSD
Matrix: Water
Analysis Batch: 469141

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 466701

Analyte	Sample Result	Sample Qual	Spike Added	MSD Result	MSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits	RER	RER Limit
Radium-226	0.0419	U	11.4	9.402		0.992	1.00	0.0985	pCi/L	82	75 - 138	0.21	1

Carrier	MSD %Yield	MSD Qualifier	Limits
Ba Carrier	95.4		40 - 110

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-466585/22-A
Matrix: Water
Analysis Batch: 468688

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 466585

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.2003	U	0.314	0.314	1.00	0.529	pCi/L	04/03/20 07:01	04/23/20 07:34	1

Carrier	MB %Yield	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	74.0		40 - 110	04/03/20 07:01	04/23/20 07:34	1
Y Carrier	88.2		40 - 110	04/03/20 07:01	04/23/20 07:34	1

Lab Sample ID: LCS 160-466585/1-A
Matrix: Water
Analysis Batch: 468686

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 466585

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits
Radium-228	11.9	13.86		1.63	1.00	0.620	pCi/L	117	75 - 125

Method: 9320 - Radium-228 (GFPC) (Continued)

Lab Sample ID: LCS 160-466585/1-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 468686 — **Prep Batch: 466585**

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	77.1		40 - 110
Y Carrier	87.9		40 - 110

Lab Sample ID: 400-186042-14 MS — **Client Sample ID: BA05438 MW-6D**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 468688 — **Prep Batch: 466585**

Analyte	Sample Result	Sample Qual	Spike Added	MS Result	MS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-228	0.475		11.9	12.83		1.50	1.00	0.579	pCi/L	104	45 - 150		

Carrier	MS %Yield	MS Qualifier	Limits
Ba Carrier	83.2		40 - 110
Y Carrier	87.5		40 - 110

Lab Sample ID: 400-186042-14 MSD — **Client Sample ID: BA05438 MW-6D**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 468688 — **Prep Batch: 466585**

Analyte	Sample Result	Sample Qual	Spike Added	MSD Result	MSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits	RER	RER Limit
Radium-228	0.475		11.9	11.71		1.45	1.00	0.577	pCi/L	95	45 - 150	0.38	1

Carrier	MSD %Yield	MSD Qualifier	Limits
Ba Carrier	67.9		40 - 110
Y Carrier	87.1		40 - 110

Lab Sample ID: MB 160-466588/22-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 468448 — **Prep Batch: 466588**

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.3822	U	0.353	0.355	1.00	0.571	pCi/L	04/03/20 07:37	04/21/20 16:41	1

Carrier	MB %Yield	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	101		40 - 110	04/03/20 07:37	04/21/20 16:41	1
Y Carrier	86.7		40 - 110	04/03/20 07:37	04/21/20 16:41	1

Lab Sample ID: LCS 160-466588/1-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 468443 — **Prep Batch: 466588**

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-228			11.9	12.49		1.55	1.00	0.716	pCi/L	105	75 - 125		

Method: 9320 - Radium-228 (GFPC) (Continued)

Lab Sample ID: LCS 160-466588/1-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 468443 — **Prep Batch: 466588**

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	71.9		40 - 110
Y Carrier	89.0		40 - 110

Lab Sample ID: 400-186042-37 MS — **Client Sample ID: BA05884 MW-25HA**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 468443 — **Prep Batch: 466588**

Analyte	Sample Result	Sample Qual	Spike Added	MS Result	MS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-228	-0.272	U G	11.9	9.898		1.26	1.00	0.525	pCi/L	83	45 - 150		

Carrier	MS %Yield	MS Qualifier	Limits
Ba Carrier	85.3		40 - 110
Y Carrier	85.6		40 - 110

Lab Sample ID: 400-186042-37 MSD — **Client Sample ID: BA05884 MW-25HA**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 468443 — **Prep Batch: 466588**

Analyte	Sample Result	Sample Qual	Spike Added	MSD Result	MSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits	RER	RER Limit
Radium-228	-0.272	U G	11.9	11.47		1.42	1.00	0.601	pCi/L	97	45 - 150	0.59	1

Carrier	MSD %Yield	MSD Qualifier	Limits
Ba Carrier	78.0		40 - 110
Y Carrier	87.5		40 - 110

Lab Sample ID: MB 160-466601/21-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 468147 — **Prep Batch: 466601**

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.5224	U	0.361	0.365	1.00	0.558	pCi/L	04/03/20 09:16	04/20/20 13:54	1

Carrier	MB %Yield	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	69.1		40 - 110	04/03/20 09:16	04/20/20 13:54	1
Y Carrier	78.5		40 - 110	04/03/20 09:16	04/20/20 13:54	1

Lab Sample ID: LCS 160-466601/1-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 468147 — **Prep Batch: 466601**

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-228			8.91	9.048		1.27	1.00	0.698	pCi/L	102	75 - 125		

Method: 9320 - Radium-228 (GFPC) (Continued)

Lab Sample ID: LCS 160-466601/1-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 468147 — **Prep Batch: 466601**

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	76.8		40 - 110
Y Carrier	56.8		40 - 110

Lab Sample ID: 400-186042-47 MS — **Client Sample ID: BA05894 PZ-16**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 468147 — **Prep Batch: 466601**

Analyte	Sample Result	Sample Qual	Spike Added	MS Result	MS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits
Radium-228	0.737		11.9	11.96		1.43	1.00	0.509	pCi/L	94	45 - 150

Carrier	MS %Yield	MS Qualifier	Limits
Ba Carrier	98.2		40 - 110
Y Carrier	79.6		40 - 110

Lab Sample ID: 400-186042-47 MSD — **Client Sample ID: BA05894 PZ-16**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 468147 — **Prep Batch: 466601**

Analyte	Sample Result	Sample Qual	Spike Added	MSD Result	MSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits	RER	RER Limit
Radium-228	0.737		11.9	12.72		1.54	1.00	0.545	pCi/L	101	45 - 150	0.26	1

Carrier	MSD %Yield	MSD Qualifier	Limits
Ba Carrier	87.5		40 - 110
Y Carrier	81.1		40 - 110

Lab Sample ID: MB 160-466705/20-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 468134 — **Prep Batch: 466705**

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	1.334		0.552	0.566	1.00	0.786	pCi/L	04/06/20 08:15	04/20/20 13:42	1

Carrier	MB %Yield	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	85.0		40 - 110	04/06/20 08:15	04/20/20 13:42	1
Y Carrier	69.5		40 - 110	04/06/20 08:15	04/20/20 13:42	1

Lab Sample ID: LCS 160-466705/1-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 468146 — **Prep Batch: 466705**

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits
Radium-228	11.9	11.04		1.35	1.00	0.598	pCi/L	93	75 - 125

Method: 9320 - Radium-228 (GFPC) (Continued)

Lab Sample ID: LCS 160-466705/1-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 468146 — **Prep Batch: 466705**

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	99.1		40 - 110
Y Carrier	80.0		40 - 110

Lab Sample ID: 440-263721-A-1-E MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 468146 — **Prep Batch: 466705**

Analyte	Sample Result	Sample Qual	Spike Added	MS Result	MS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits
Radium-228	0.707		8.91	9.282		1.11	1.00	0.412	pCi/L	96	45 - 150

Carrier	MS %Yield	MS Qualifier	Limits
Ba Carrier	94.2		40 - 110
Y Carrier	80.0		40 - 110

Lab Sample ID: 440-263721-A-1-F MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 468146 — **Prep Batch: 466705**

Analyte	Sample Result	Sample Qual	Spike Added	MSD Result	MSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits	RER	RER Limit
Radium-228	0.707		8.92	9.342		1.11	1.00	0.425	pCi/L	97	45 - 150	0.03	1

Carrier	MSD %Yield	MSD Qualifier	Limits
Ba Carrier	95.4		40 - 110
Y Carrier	81.9		40 - 110

Lab Sample ID: MB 160-468668/4-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 469016 — **Prep Batch: 468668**

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	3.244	G	1.04	1.09	1.00	1.39	pCi/L	04/23/20 07:29	04/27/20 16:29	1

Carrier	MB %Yield	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	94.8		40 - 110	04/23/20 07:29	04/27/20 16:29	1
Y Carrier	66.2		40 - 110	04/23/20 07:29	04/27/20 16:29	1

Lab Sample ID: LCS 160-468668/1-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 469016 — **Prep Batch: 468668**

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits
Radium-228	25.4	28.04		3.35	1.00	1.35	pCi/L	110	75 - 125

Method: 9320 - Radium-228 (GFPC) (Continued)

Lab Sample ID: LCS 160-468668/1-A
Matrix: Water
Analysis Batch: 469016

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 468668

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	84.5		40 - 110
Y Carrier	81.9		40 - 110

Lab Sample ID: LCSD 160-468668/2-A
Matrix: Water
Analysis Batch: 469016

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 468668

Analyte			Spike Added	LCSD Result	LCSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits	RER	RER Limit
Radium-228			25.4	25.66		3.12	1.00	1.27	pCi/L	101	75 - 125	0.37	1

Carrier	LCSD %Yield	LCSD Qualifier	Limits
Ba Carrier	94.2		40 - 110
Y Carrier	71.0		40 - 110

TestAmerica Pensacola
3355 McLemore Drive
Pensacola, FL 32514
Phone (850) 474-1001 Fax (850) 478-2671

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler: Dallas Gentry	Lab PM: Whitmire, Cheyenne R	Carrier Tracking No(s):	COC No: 400-56525-24537.1
Client Contact: Laura Midkif	Phone:	E-Mail: cheyenne.whitmire@testamericainc.com	State of Origin: Alabama	Page: Page 1 of 6
Company: Alabama Power General Test Laboratory		Accreditations Required (See note):		Job #:
Address: 744 County Rd 87 GSC#8	Due Date Requested:			
City: Calera	TAT Requested (days): Routine			
State, Zip: AL, 35040				
Phone: 205-664-6197	PO #:			
Email: lbmidkif@southernco.com	WO #:			
Project Name: CCR	Project #: 40007143			
Site: Gorgas Ash Pond 1268	SSOW#:			

Analysis Requested

400-186042 COC

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA
M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	SM 4500 F_C	SM 4500 Cl_E	SM 4500 SO4_E	9315_Ra226, 9320_Ra228, Ra226Ra228_GFPC	Total Number of containers	Special Instructions/Note:
			Preservation Code:									
BA05425	3/16/20	13:41	G	Water						X	1	MW-17
BA05426	3/16/20	14:57	G	Water						X	1	MW-28H
BA05427	3/16/20	16:15	G	Water						X	1	FB-1 (Field Blank)
BA05428	3/16/20	16:52	G	Water						X	1	MW-34HO
BA05429	3/17/20	09:04	G	Water						X	1	MW-35HO
BA05430	3/17/20	11:45	G	Water						X	1	MW-36H
BA05431	3/17/20	13:48	G	Water						X	1	MW-33HO
BA05432	3/18/20	09:35	G	Water						X	1	MW-30HA
BA05433	3/18/20	11:58	G	Water						X	1	MW-15V
BA05434	3/18/20	14:03	G	Water						X	1	MW-15
BA05435	3/18/20	15:50	G	Water						X	1	MW-21

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to TestAmerica Laboratories, Inc.

Possible Hazard Identification
Unconfirmed

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* ____ *Months*

Deliverable Requested: I, II, III, IV, Other (specify) 43599 Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:		Method of Shipment:	
Relinquished by: Laura Midkiff	Date/Time: 3/26/2020 14:00	Water APC	Received by:	Date/Time: 3/30/20 1449	Company: TA PEN
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by: 25.1°C, 26.0°C, 24.9°C	Date/Time:	Company
Custody Seals Intact:	Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:		

Ver: 09/20/2016

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Phone (850) 474-1001 Fax (850) 478-2671

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)
Client Contact: Laura Midkif
Company: Alabama Power General Test Laboratory
Address: 744 County Rd 87 GSC#8
City: Calera
State, Zip: AL, 35040
Phone: 205-664-6197
Email: lbmidkif@southernco.com
Project Name: CCR
Site: Gorgas Ash Pond 1268

Sampler: TJ Daugherty
Phone:
Due Date Requested:
TAT Requested (days): Routine
PO #:
WO #:
Project #: 40007143
SSOW#:

Lab PM: Whitmire, Cheyenne R
E-Mail: cheyenne.whitmire@testamericainc.com
Carrier Tracking No(s):
State of Origin: Alabama
Accreditations Required (See note):

COC No: 400-56525-24537.1
Page: Page 2 of 6
Job #:

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA
M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
Other:

Analysis Requested

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	SM 4500 F_C	SM 4500 Cl_E	SM 4500 SO4_E	9315_Ra226, 9320_Ra228, Ra226Ra228_GFPC	Total Number of containers	Special Instructions/Note:
			Preservation Code:									
BA05436	3/17/20	11:30	G	Water						X	1	MW-6S
BA05437	3/17/20	11:30	G	Water						X	1	MW-6S DUP (Samples Duplicate)
BA05438	3/17/20	12:40	G	Water		X				X	3	MW-6D
BA05439	3/17/20	13:53	G	Water						X	1	MW-23H
BA05440	3/17/20	17:07	G	Water						X	1	MW-7
BA05441	3/17/20	17:07	G	Water	X					X	1	MW-7 DIS
BA05442	3/18/20	09:40	G	Water						X	1	MW-41HD
BA05443	3/18/20	10:35	G	Water						X	1	MW-24H
BA05444	3/18/20	11:43	G	Water						X	1	MW-8
BA05445	3/18/20	14:20	G	Water						X	1	MW-12
BA05446	3/18/20	16:32	G	Water						X	1	MW-18

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to TestAmerica Laboratories, Inc.

Possible Hazard Identification
Unconfirmed

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*

Deliverable Requested: I, II, III, IV, Other (specify)
43599
Special Instructions/QC Requirements:

Empty Kit Relinquished by: Date: Time: Method of Shipment:

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
Laura Midkiff	3/26/2020 14:00	Water APC		3/30/20 1449	TAPEN

Custody Seals Intact: Custody Seal No.:
Cooler Temperature(s) °C and Other Remarks:

Ver: 09/20/2016

TestAmerica Pensacola
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Pensacola, FL 32514
Phone (850) 474-1001 Fax (850) 478-2671

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler: Anthony Goggins	Lab PM: Whitmire, Cheyenne R	Carrier Tracking No(s):	COC No: 400-56525-24537.1
Client Contact: Laura Midkif	Phone:	E-Mail: cheyenne.whitmire@testamericainc.com	State of Origin: Alabama	Page: Page 3 of 6
Company: Alabama Power General Test Laboratory		Accreditations Required (See note):		Job #:
Address: 744 County Rd 87 GSC#8	Due Date Requested:			
City: Calera	TAT Requested (days): Routine			
State, Zip: AL, 35040				
Phone: 205-664-6197	PO #:			
Email: lbmidkif@southernco.com	WO #:			
Project Name: CCR	Project #: 40007143			
Site: Gorgas Ash Pond 1268	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA
M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	SM 4500 F_C	SM 4500 CL_E	SM 4500 SO4_E	9315_Ra226, 9320_Ra228, Ra226Ra228_GFPC	Total Number of containers	Special Instructions/Note:
			Preservation Code:									
BA05447	3/18/20	13:45	G	Water						X	1	FB-4 (Field Blank)
BA05448	3/18/20	14:35	G	Water						X	1	MW-31H

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to TestAmerica Laboratories, Inc.

Possible Hazard Identification
Unconfirmed

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*

Deliverable Requested: I, II, III, IV, Other (specify) 43599 Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:		Method of Shipment:	
Relinquished by: Laura Midkiff	Date/Time: 3/26/2020 14:00	Company: Water APC	Received by:	Date/Time: 3/30/20 1449	Company: TA PEN
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Custody Seals Intact:	Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:		

Ver: 09/20/2016

TestAmerica Pensacola
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Pensacola, FL 32514
Phone (850) 474-1001 Fax (850) 478-2671

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler: TJ Daugherty	Lab PM: Whitmire, Cheyenne R	Carrier Tracking No(s):	COC No: 400-56525-24537.1
Client Contact: Laura Midkif	Phone:	E-Mail: cheyenne.whitmire@testamericainc.com	State of Origin: Alabama	Page: Page 4 of 6
Company: Alabama Power General Test Laboratory		Accreditations Required (See note):		Job #:
Address: 744 County Rd 87 GSC#8	Due Date Requested:			
City: Calera	TAT Requested (days): Routine			
State, Zip: AL, 35040				
Phone: 205-664-6197	PO #:			
Email: lbmidkif@southernco.com	WO #:			
Project Name: CCR	Project #: 40007143			
Site: Gorgas Ash Pond 1268	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=wasteoil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	SM 4500 F_C	SM 4500 Cl_E	SM 4500 SO4_E	9315_Ra226, 9320_Ra228, Ra226Ra228_GFPC	Total Number of containers	Special Instructions/Note:
			Preservation Code:									
BA05872	3/23/20	16:05	G	Water						X	1	MW-9V
BA05873	3/24/20	08:50	G	Water						X	1	MW-42H
BA05874	3/24/20	08:50	G	Water						X	1	MW-42H DUP (Sample Duplicate)
BA05875	3/24/20	10:55	G	Water						X	1	MW-38H
BA05876	3/24/20	14:25	G	Water						X	1	MW-19
BA05877	3/24/20	14:50	G	Water						X	1	EB-1 (Equipment Blank)
BA05878	3/25/20	10:08	G	Water						X	1	MW-29H
BA05879	3/25/20	12:38	G	Water						X	1	MW-17V
BA05880	3/25/20	13:20	G	Water						X	1	FB-2 (Field Blank)

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to TestAmerica Laboratories, Inc.

Possible Hazard Identification
Unconfirmed

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*

Deliverable Requested: I, II, III, IV, Other (specify) 43599 Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:		
Relinquished by: Laura Midkiff	Date/Time: 3/26/2020 14:00	Company: Water APC	Received by:	Date/Time: 3/30/20 1449	Company: TAPEN
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Custody Seals Intact:	Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:		

Ver: 09/20/2016

TestAmerica Pensacola
3355 McLemore Drive
Pensacola, FL 32514
Phone (850) 474-1001 Fax (850) 478-2671

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler: Dallas Gentry	Lab PM: Whitmire, Cheyenne R	Carrier Tracking No(s):	COC No: 400-56525-24537.1
Client Contact: Laura Midkif	Phone:	E-Mail: cheyenne.whitmire@testamericainc.com	State of Origin: Alabama	Page: Page 5 of 6
Company: Alabama Power General Test Laboratory		Accreditations Required (See note):		Job #:
Address: 744 County Rd 87 GSC#8	Due Date Requested:			
City: Calera	TAT Requested (days): Routine			
State, Zip: AL, 35040				
Phone: 205-664-6197	PO #:			
Email: lbmidkif@southernco.com	WO #:			
Project Name: CCR	Project #: 40007143			
Site: Gorgas Ash Pond 1268	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	SM 4500 F_C	SM 4500 Cl_E	SM 4500 SO4_E	9315_Ra226, 9320_Ra228, Ra226Ra228_GFPC	Total Number of containers	Special Instructions/Note:
			Preservation Code:									
BA05881	3/23/20	17:14	G	Water						X	1	MW-21V
BA05882	3/24/20	11:32	G	Water						X	1	MW-12V
BA05883	3/24/20	11:32	G	Water	X					X	1	MW-12V DIS
BA05884	3/24/20	13:10	G	Water		X				X	3	MW-25HA
BA05885	3/25/20	08:32	G	Water						X	1	MW-2
BA05886	3/25/20	10:00	G	Water						X	1	MW-43HO
BA05887	3/25/20	11:53	G	Water						X	1	PZ-18
BA05888	3/25/20	11:53	G	Water						X	1	PZ-18 DUP (Sample Duplicate)
BA05889	3/25/20	13:00	G	Water						X	1	MW-18V

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to TestAmerica Laboratories, Inc.

Possible Hazard Identification
Unconfirmed

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*

Deliverable Requested: I, II, III, IV, Other (specify) 43599 Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:		Method of Shipment:	
Relinquished by: Laura Midkiff	Date/Time: 3/26/2020 14:00	Water APC	Received by:	Date/Time: 3/30/20 1449	Company: TAPGW
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Custody Seals Intact:	Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:		

Ver: 09/20/2016

TestAmerica Pensacola
3355 McLemore Drive
Pensacola, FL 32514
Phone (850) 474-1001 Fax (850) 478-2671

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler: Anthony Goggins	Lab PM: Whitmire, Cheyenne R	Carrier Tracking No(s):	COC No: 400-56525-24537.1
Client Contact: Laura Midkif	Phone:	E-Mail: cheyenne.whitmire@testamericainc.com	State of Origin: Alabama	Page: Page 6 of 6
Company: Alabama Power General Test Laboratory		Accreditations Required (See note):		Job #:
Address: 744 County Rd 87 GSC#8	Due Date Requested:			
City: Calera	TAT Requested (days): Routine			
State, Zip: AL, 35040				
Phone: 205-664-6197	PO #:			
Email: lbmidkif@southernco.com	WO #:			
Project Name: CCR	Project #: 40007143			
Site: Gorgas Ash Pond 1268	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
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Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	SM 4500 F_C	SM 4500 Cl_E	SM 4500 SO4_E	9315_Ra226, 9320_Ra228, Ra226Ra228_GFPC	Total Number of containers	Special Instructions/Note:
			Preservation Code:									
BA05890	3/24/20	10:20	G	Water						X	1	MW-32H
BA05891	3/24/20	11:25	G	Water						X	1	FB-3 (Field Blank)
BA05892	3/24/20	11:40	G	Water						X	1	PZ-22
BA05893	3/24/20	11:40	G	Water						X	1	PZ-22 DUP (Sample Duplicate)
BA05894	3/24/20	12:48	G	Water		X				X	3	PZ-16
BA05895	3/24/20	13:45	G	Water						X	1	MW-16D
BA05896	3/25/20	11:42	G	Water						X	1	MW-26H
BA05897	3/25/20	11:42	G	Water	X					X	1	MW-26H DIS

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Relinquished by: Laura Midkiff	Date/Time: 3/26/2020 14:00	Water APC	Received by:	Date/Time: 3/30/20 1449	Company: TAPC
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Custody Seal No.: Cooler Temperature(s) °C and Other Remarks:

Ver: 09/20/2016

Login Sample Receipt Checklist

Client: Alabama Power General Test Laboratory

Job Number: 400-186042-1
SDG Number: Gorgas Ash Pond 1268

Login Number: 186042
List Number: 1
Creator: Perez, Trina M

List Source: Eurofins TestAmerica, Pensacola

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	N/A	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	25.1°C, 26.0°C, 24.9°C IR-9
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Accreditation/Certification Summary

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-186042-1
SDG: Gorgas Ash Pond 1268

Laboratory: Eurofins TestAmerica, Pensacola

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alabama	State	40150	07-01-20
ANAB	ISO/IEC 17025	L2471	02-23-23
Arizona	State	AZ0710	01-13-21
Arkansas DEQ	State	88-0689	09-01-20
California	State	2510	07-01-20
Florida	NELAP	E81010	06-30-20
Georgia	State	E81010(FL)	06-30-20
Illinois	NELAP	004586	10-09-20
Iowa	State	367	08-01-20
Kansas	NELAP	E-10253	08-16-20
Kentucky (UST)	State	53	06-30-20
Kentucky (WW)	State	KY98030	12-31-20
Louisiana	NELAP	30976	06-30-20
Louisiana (DW)	State	LA017	12-31-20
Maryland	State	233	09-30-20
Massachusetts	State	M-FL094	06-30-20
Michigan	State	9912	05-06-20
Minnesota	NELAP	012-999-481	12-31-20
New Jersey	NELAP	FL006	06-30-20
New York	NELAP	12115	04-01-21
North Carolina (WW/SW)	State	314	12-31-20
Oklahoma	State	9810-186	08-31-20
Pennsylvania	NELAP	68-00467	01-31-21
Rhode Island	State	LAO00307	12-30-20
South Carolina	State	96026002	06-30-20
Tennessee	State	TN02907	06-30-20
Texas	NELAP	T104704286	09-30-20
US Fish & Wildlife	US Federal Programs	058448	07-31-20
USDA	US Federal Programs	P330-18-00148	05-17-21
Virginia	NELAP	460166	06-14-20
Washington	State	C915	05-15-20
West Virginia DEP	State	136	06-30-20

Accreditation/Certification Summary

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-186042-1
SDG: Gorgas Ash Pond 1268

Laboratory: Eurofins TestAmerica, St. Louis

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
ANAB	Dept. of Defense ELAP	L2305	04-06-22
ANAB	Dept. of Energy	L2305.01	04-06-22
ANAB	ISO/IEC 17025	L2305	04-06-22
Arizona	State	AZ0813	12-08-20
California	Los Angeles County Sanitation Districts	10259	06-30-20
California	State	2886	06-30-20
Connecticut	State	PH-0241	03-31-21
Florida	NELAP	E87689	06-30-20
HI - RadChem Recognition	State	n/a	06-30-20
Illinois	NELAP	004553	11-30-20
Iowa	State	373	09-17-20
Kansas	NELAP	E-10236	10-31-20
Kentucky (DW)	State	KY90125	12-31-20
Louisiana	NELAP	04080	06-30-20
Louisiana (DW)	State	LA011	12-31-20
Maryland	State	310	09-30-20
MI - RadChem Recognition	State	9005	06-30-20
Missouri	State	780	06-30-22
Nevada	State	MO000542020-1	07-31-20
New Jersey	NELAP	MO002	06-30-20
New York	NELAP	11616	04-01-21
North Dakota	State	R-207	06-30-20
NRC	NRC	24-24817-01	12-31-22
Oklahoma	State	9997	08-31-20
Pennsylvania	NELAP	68-00540	02-28-21
South Carolina	State	85002001	06-30-20
Texas	NELAP	T104704193-19-13	07-31-20
US Fish & Wildlife	US Federal Programs	058448	07-31-20
USDA	US Federal Programs	P330-17-00028	03-11-23
Utah	NELAP	MO000542019-11	07-31-20
Virginia	NELAP	10310	06-14-20
Washington	State	C592	08-30-20
West Virginia DEP	State	381	10-31-20

Alabama Power Company
Plant Gorgas Ash Pond

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-15	3/18/2020 12:50	Conductivity	1362.02	uS/cm
GS-AP-MW-15	3/18/2020 12:50	DO	0.66	mg/L
GS-AP-MW-15	3/18/2020 12:50	Depth to Water Detail	83.03	ft
GS-AP-MW-15	3/18/2020 12:50	Oxidation Reduction Potention	-147.94	mv
GS-AP-MW-15	3/18/2020 12:50	pH	11.14	pH
GS-AP-MW-15	3/18/2020 12:50	Temperature	19.45	C
GS-AP-MW-15	3/18/2020 12:50	Turbidity	3.47	NTU
GS-AP-MW-15	3/18/2020 12:55	Conductivity	1636.07	uS/cm
GS-AP-MW-15	3/18/2020 12:55	DO	0.49	mg/L
GS-AP-MW-15	3/18/2020 12:55	Depth to Water Detail	83.47	ft
GS-AP-MW-15	3/18/2020 12:55	Oxidation Reduction Potention	-183.36	mv
GS-AP-MW-15	3/18/2020 12:55	pH	11.25	pH
GS-AP-MW-15	3/18/2020 12:55	Temperature	19.01	C
GS-AP-MW-15	3/18/2020 12:55	Turbidity	3.22	NTU
GS-AP-MW-15	3/18/2020 13:00	Conductivity	1663.51	uS/cm
GS-AP-MW-15	3/18/2020 13:00	DO	0.44	mg/L
GS-AP-MW-15	3/18/2020 13:00	Depth to Water Detail	83.91	ft
GS-AP-MW-15	3/18/2020 13:00	Oxidation Reduction Potention	-201.07	mv
GS-AP-MW-15	3/18/2020 13:00	pH	11.28	pH
GS-AP-MW-15	3/18/2020 13:00	Temperature	19.11	C
GS-AP-MW-15	3/18/2020 13:00	Turbidity	2.68	NTU
GS-AP-MW-15	3/18/2020 13:05	Conductivity	1645.01	uS/cm
GS-AP-MW-15	3/18/2020 13:05	DO	0.42	mg/L
GS-AP-MW-15	3/18/2020 13:05	Depth to Water Detail	84.81	ft
GS-AP-MW-15	3/18/2020 13:05	Oxidation Reduction Potention	-208.79	mv
GS-AP-MW-15	3/18/2020 13:05	pH	11.31	pH
GS-AP-MW-15	3/18/2020 13:05	Temperature	18.78	C
GS-AP-MW-15	3/18/2020 13:05	Turbidity	1.42	NTU
GS-AP-MW-15	3/18/2020 13:10	Conductivity	1636.02	uS/cm
GS-AP-MW-15	3/18/2020 13:10	DO	0.42	mg/L
GS-AP-MW-15	3/18/2020 13:10	Depth to Water Detail	85.35	ft
GS-AP-MW-15	3/18/2020 13:10	Oxidation Reduction Potention	-213.58	mv
GS-AP-MW-15	3/18/2020 13:10	pH	11.31	pH
GS-AP-MW-15	3/18/2020 13:10	Temperature	19.11	C
GS-AP-MW-15	3/18/2020 13:10	Turbidity	1.23	NTU
GS-AP-MW-15	3/18/2020 13:15	Conductivity	1618.69	uS/cm
GS-AP-MW-15	3/18/2020 13:15	DO	0.4	mg/L
GS-AP-MW-15	3/18/2020 13:15	Depth to Water Detail	85.94	ft
GS-AP-MW-15	3/18/2020 13:15	Oxidation Reduction Potention	-217.62	mv
GS-AP-MW-15	3/18/2020 13:15	pH	11.35	pH
GS-AP-MW-15	3/18/2020 13:15	Temperature	18.93	C
GS-AP-MW-15	3/18/2020 13:15	Turbidity	1.07	NTU
GS-AP-MW-15	3/18/2020 13:20	Conductivity	1610.8	uS/cm
GS-AP-MW-15	3/18/2020 13:20	DO	0.39	mg/L
GS-AP-MW-15	3/18/2020 13:20	Depth to Water Detail	86.41	ft
GS-AP-MW-15	3/18/2020 13:20	Oxidation Reduction Potention	-220.64	mv

Alabama Power Company
Plant Gorgas Ash Pond

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-15	3/18/2020 13:20	pH	11.37	pH
GS-AP-MW-15	3/18/2020 13:20	Temperature	18.81	C
GS-AP-MW-15	3/18/2020 13:20	Turbidity	1.11	NTU
GS-AP-MW-15	3/18/2020 13:25	Conductivity	1591.31	uS/cm
GS-AP-MW-15	3/18/2020 13:25	DO	0.37	mg/L
GS-AP-MW-15	3/18/2020 13:25	Depth to Water Detail	87.14	ft
GS-AP-MW-15	3/18/2020 13:25	Oxidation Reduction Potention	-222.74	mv
GS-AP-MW-15	3/18/2020 13:25	pH	11.39	pH
GS-AP-MW-15	3/18/2020 13:25	Temperature	18.91	C
GS-AP-MW-15	3/18/2020 13:25	Turbidity	1.14	NTU
GS-AP-MW-15	3/18/2020 13:30	Conductivity	1577.15	uS/cm
GS-AP-MW-15	3/18/2020 13:30	DO	0.35	mg/L
GS-AP-MW-15	3/18/2020 13:30	Depth to Water Detail	88.1	ft
GS-AP-MW-15	3/18/2020 13:30	Oxidation Reduction Potention	-226.58	mv
GS-AP-MW-15	3/18/2020 13:30	pH	11.41	pH
GS-AP-MW-15	3/18/2020 13:30	Temperature	18.78	C
GS-AP-MW-15	3/18/2020 13:30	Turbidity	2.24	NTU
GS-AP-MW-15	3/18/2020 13:35	Conductivity	1538.62	uS/cm
GS-AP-MW-15	3/18/2020 13:35	DO	0.23	mg/L
GS-AP-MW-15	3/18/2020 13:35	Depth to Water Detail	89.31	ft
GS-AP-MW-15	3/18/2020 13:35	Oxidation Reduction Potention	-235.41	mv
GS-AP-MW-15	3/18/2020 13:35	pH	11.43	pH
GS-AP-MW-15	3/18/2020 13:35	Temperature	18.1	C
GS-AP-MW-15	3/18/2020 13:35	Turbidity	1.67	NTU
GS-AP-MW-15	3/18/2020 13:40	Conductivity	1515.26	uS/cm
GS-AP-MW-15	3/18/2020 13:40	DO	0.22	mg/L
GS-AP-MW-15	3/18/2020 13:40	Depth to Water Detail	90.34	ft
GS-AP-MW-15	3/18/2020 13:40	Oxidation Reduction Potention	-239.51	mv
GS-AP-MW-15	3/18/2020 13:40	pH	11.38	pH
GS-AP-MW-15	3/18/2020 13:40	Temperature	19.2	C
GS-AP-MW-15	3/18/2020 13:40	Turbidity	1.44	NTU
GS-AP-MW-15	3/18/2020 13:45	Conductivity	1499.36	uS/cm
GS-AP-MW-15	3/18/2020 13:45	DO	0.28	mg/L
GS-AP-MW-15	3/18/2020 13:45	Depth to Water Detail	90.46	ft
GS-AP-MW-15	3/18/2020 13:45	Oxidation Reduction Potention	-236.83	mv
GS-AP-MW-15	3/18/2020 13:45	pH	11.44	pH
GS-AP-MW-15	3/18/2020 13:45	Temperature	19.04	C
GS-AP-MW-15	3/18/2020 13:45	Turbidity	3.21	NTU
GS-AP-MW-15	3/18/2020 13:50	Conductivity	1495.34	uS/cm
GS-AP-MW-15	3/18/2020 13:50	DO	0.31	mg/L
GS-AP-MW-15	3/18/2020 13:50	Depth to Water Detail	90.61	ft
GS-AP-MW-15	3/18/2020 13:50	Oxidation Reduction Potention	-238.45	mv
GS-AP-MW-15	3/18/2020 13:50	pH	11.46	pH
GS-AP-MW-15	3/18/2020 13:50	Temperature	18.93	C
GS-AP-MW-15	3/18/2020 13:50	Turbidity	3.17	NTU
GS-AP-MW-15	3/18/2020 13:55	Conductivity	1501.99	uS/cm

Alabama Power Company
Plant Gorgas Ash Pond

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-15	3/18/2020 13:55	DO	0.31	mg/L
GS-AP-MW-15	3/18/2020 13:55	Depth to Water Detail	90.78	ft
GS-AP-MW-15	3/18/2020 13:55	Oxidation Reduction Potention	-240.64	mv
GS-AP-MW-15	3/18/2020 13:55	pH	11.47	pH
GS-AP-MW-15	3/18/2020 13:55	Temperature	19.01	C
GS-AP-MW-15	3/18/2020 13:55	Turbidity	3.84	NTU
GS-AP-MW-15	3/18/2020 14:00	Conductivity	1444.85	uS/cm
GS-AP-MW-15	3/18/2020 14:00	DO	0.31	mg/L
GS-AP-MW-15	3/18/2020 14:00	Depth to Water Detail	90.89	ft
GS-AP-MW-15	3/18/2020 14:00	Oxidation Reduction Potention	-241.79	mv
GS-AP-MW-15	3/18/2020 14:00	pH	11.47	pH
GS-AP-MW-15	3/18/2020 14:00	Temperature	18.92	C
GS-AP-MW-15	3/18/2020 14:00	Turbidity	2.71	NTU

Alabama Power Company
Plant Gorgas Ash Pond

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-15V	3/18/2020 11:20	Conductivity	1207.24	uS/cm
GS-AP-MW-15V	3/18/2020 11:20	DO	0.98	mg/L
GS-AP-MW-15V	3/18/2020 11:20	Depth to Water Detail	144.03	ft
GS-AP-MW-15V	3/18/2020 11:20	Oxidation Reduction Potention	-99.94	mv
GS-AP-MW-15V	3/18/2020 11:20	pH	9.37	pH
GS-AP-MW-15V	3/18/2020 11:20	Temperature	19.41	C
GS-AP-MW-15V	3/18/2020 11:20	Turbidity	38.9	NTU
GS-AP-MW-15V	3/18/2020 11:25	Conductivity	1430.21	uS/cm
GS-AP-MW-15V	3/18/2020 11:25	DO	0.77	mg/L
GS-AP-MW-15V	3/18/2020 11:25	Depth to Water Detail	144.37	ft
GS-AP-MW-15V	3/18/2020 11:25	Oxidation Reduction Potention	-115.56	mv
GS-AP-MW-15V	3/18/2020 11:25	pH	9.93	pH
GS-AP-MW-15V	3/18/2020 11:25	Temperature	19.4	C
GS-AP-MW-15V	3/18/2020 11:25	Turbidity	20.7	NTU
GS-AP-MW-15V	3/18/2020 11:30	Conductivity	1576.12	uS/cm
GS-AP-MW-15V	3/18/2020 11:30	DO	0.56	mg/L
GS-AP-MW-15V	3/18/2020 11:30	Depth to Water Detail	144.67	ft
GS-AP-MW-15V	3/18/2020 11:30	Oxidation Reduction Potention	-130.41	mv
GS-AP-MW-15V	3/18/2020 11:30	pH	10.38	pH
GS-AP-MW-15V	3/18/2020 11:30	Temperature	19.47	C
GS-AP-MW-15V	3/18/2020 11:30	Turbidity	17.4	NTU
GS-AP-MW-15V	3/18/2020 11:35	Conductivity	1694.04	uS/cm
GS-AP-MW-15V	3/18/2020 11:35	DO	0.49	mg/L
GS-AP-MW-15V	3/18/2020 11:35	Depth to Water Detail	144.96	ft
GS-AP-MW-15V	3/18/2020 11:35	Oxidation Reduction Potention	-139.91	mv
GS-AP-MW-15V	3/18/2020 11:35	pH	10.77	pH
GS-AP-MW-15V	3/18/2020 11:35	Temperature	19.39	C
GS-AP-MW-15V	3/18/2020 11:35	Turbidity	13.6	NTU
GS-AP-MW-15V	3/18/2020 11:40	Conductivity	1758.58	uS/cm
GS-AP-MW-15V	3/18/2020 11:40	DO	0.47	mg/L
GS-AP-MW-15V	3/18/2020 11:40	Depth to Water Detail	145.19	ft
GS-AP-MW-15V	3/18/2020 11:40	Oxidation Reduction Potention	-146.56	mv
GS-AP-MW-15V	3/18/2020 11:40	pH	10.96	pH
GS-AP-MW-15V	3/18/2020 11:40	Temperature	19.48	C
GS-AP-MW-15V	3/18/2020 11:40	Turbidity	9.69	NTU
GS-AP-MW-15V	3/18/2020 11:45	Conductivity	1775.29	uS/cm
GS-AP-MW-15V	3/18/2020 11:45	DO	0.46	mg/L
GS-AP-MW-15V	3/18/2020 11:45	Depth to Water Detail	145.41	ft
GS-AP-MW-15V	3/18/2020 11:45	Oxidation Reduction Potention	-150.03	mv
GS-AP-MW-15V	3/18/2020 11:45	pH	10.98	pH
GS-AP-MW-15V	3/18/2020 11:45	Temperature	19.74	C
GS-AP-MW-15V	3/18/2020 11:45	Turbidity	9.25	NTU
GS-AP-MW-15V	3/18/2020 11:50	Conductivity	1763.66	uS/cm
GS-AP-MW-15V	3/18/2020 11:50	DO	0.46	mg/L
GS-AP-MW-15V	3/18/2020 11:50	Depth to Water Detail	145.54	ft
GS-AP-MW-15V	3/18/2020 11:50	Oxidation Reduction Potention	-152.23	mv

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-15V	3/18/2020 11:50	pH	10.96	pH
GS-AP-MW-15V	3/18/2020 11:50	Temperature	19.7	C
GS-AP-MW-15V	3/18/2020 11:50	Turbidity	7.27	NTU
GS-AP-MW-15V	3/18/2020 11:55	Conductivity	1735.33	uS/cm
GS-AP-MW-15V	3/18/2020 11:55	DO	0.44	mg/L
GS-AP-MW-15V	3/18/2020 11:55	Depth to Water Detail	145.67	ft
GS-AP-MW-15V	3/18/2020 11:55	Oxidation Reduction Potention	-152.62	mv
GS-AP-MW-15V	3/18/2020 11:55	pH	10.89	pH
GS-AP-MW-15V	3/18/2020 11:55	Temperature	19.8	C
GS-AP-MW-15V	3/18/2020 11:55	Turbidity	6.64	NTU

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-17	3/16/2020 12:44	Conductivity	832.92	uS/cm
GS-AP-MW-17	3/16/2020 12:44	DO	5	mg/L
GS-AP-MW-17	3/16/2020 12:44	Depth to Water Detail	172.84	ft
GS-AP-MW-17	3/16/2020 12:44	Oxidation Reduction Potention	-76.22	mv
GS-AP-MW-17	3/16/2020 12:44	pH	7.66	pH
GS-AP-MW-17	3/16/2020 12:44	Temperature	18.19	C
GS-AP-MW-17	3/16/2020 12:44	Turbidity	2.91	NTU
GS-AP-MW-17	3/16/2020 12:49	Conductivity	910.11	uS/cm
GS-AP-MW-17	3/16/2020 12:49	DO	1.91	mg/L
GS-AP-MW-17	3/16/2020 12:49	Depth to Water Detail	172.84	ft
GS-AP-MW-17	3/16/2020 12:49	Oxidation Reduction Potention	-154.9	mv
GS-AP-MW-17	3/16/2020 12:49	pH	7.99	pH
GS-AP-MW-17	3/16/2020 12:49	Temperature	18.27	C
GS-AP-MW-17	3/16/2020 12:49	Turbidity	1.53	NTU
GS-AP-MW-17	3/16/2020 12:54	Conductivity	951.06	uS/cm
GS-AP-MW-17	3/16/2020 12:54	DO	1.1	mg/L
GS-AP-MW-17	3/16/2020 12:54	Depth to Water Detail	172.84	ft
GS-AP-MW-17	3/16/2020 12:54	Oxidation Reduction Potention	-161.54	mv
GS-AP-MW-17	3/16/2020 12:54	pH	8.24	pH
GS-AP-MW-17	3/16/2020 12:54	Temperature	18.06	C
GS-AP-MW-17	3/16/2020 12:54	Turbidity	4.11	NTU
GS-AP-MW-17	3/16/2020 12:59	Conductivity	939.69	uS/cm
GS-AP-MW-17	3/16/2020 12:59	DO	0.97	mg/L
GS-AP-MW-17	3/16/2020 12:59	Depth to Water Detail	172.84	ft
GS-AP-MW-17	3/16/2020 12:59	Oxidation Reduction Potention	-156.83	mv
GS-AP-MW-17	3/16/2020 12:59	pH	8.31	pH
GS-AP-MW-17	3/16/2020 12:59	Temperature	18.25	C
GS-AP-MW-17	3/16/2020 12:59	Turbidity	2.28	NTU
GS-AP-MW-17	3/16/2020 13:04	Conductivity	913.87	uS/cm
GS-AP-MW-17	3/16/2020 13:04	DO	0.39	mg/L
GS-AP-MW-17	3/16/2020 13:04	Depth to Water Detail	172.84	ft
GS-AP-MW-17	3/16/2020 13:04	Oxidation Reduction Potention	-164.94	mv
GS-AP-MW-17	3/16/2020 13:04	pH	8.35	pH
GS-AP-MW-17	3/16/2020 13:04	Temperature	17.61	C
GS-AP-MW-17	3/16/2020 13:04	Turbidity	1.38	NTU
GS-AP-MW-17	3/16/2020 13:09	Conductivity	911.81	uS/cm
GS-AP-MW-17	3/16/2020 13:09	DO	0.37	mg/L
GS-AP-MW-17	3/16/2020 13:09	Depth to Water Detail	172.84	ft
GS-AP-MW-17	3/16/2020 13:09	Oxidation Reduction Potention	-172.58	mv
GS-AP-MW-17	3/16/2020 13:09	pH	8.36	pH
GS-AP-MW-17	3/16/2020 13:09	Temperature	17.51	C
GS-AP-MW-17	3/16/2020 13:09	Turbidity	1.58	NTU
GS-AP-MW-17	3/16/2020 13:14	Conductivity	867.8	uS/cm
GS-AP-MW-17	3/16/2020 13:14	DO	0.31	mg/L
GS-AP-MW-17	3/16/2020 13:14	Depth to Water Detail	172.84	ft
GS-AP-MW-17	3/16/2020 13:14	Oxidation Reduction Potention	-178.55	mv

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-17	3/16/2020 13:14	pH	8.39	pH
GS-AP-MW-17	3/16/2020 13:14	Temperature	17.53	C
GS-AP-MW-17	3/16/2020 13:14	Turbidity	1.42	NTU
GS-AP-MW-17	3/16/2020 13:19	Conductivity	819.75	uS/cm
GS-AP-MW-17	3/16/2020 13:19	DO	0.3	mg/L
GS-AP-MW-17	3/16/2020 13:19	Depth to Water Detail	172.84	ft
GS-AP-MW-17	3/16/2020 13:19	Oxidation Reduction Potention	-180.27	mv
GS-AP-MW-17	3/16/2020 13:19	pH	8.4	pH
GS-AP-MW-17	3/16/2020 13:19	Temperature	17.49	C
GS-AP-MW-17	3/16/2020 13:19	Turbidity	1.21	NTU
GS-AP-MW-17	3/16/2020 13:24	Conductivity	790.9	uS/cm
GS-AP-MW-17	3/16/2020 13:24	DO	0.28	mg/L
GS-AP-MW-17	3/16/2020 13:24	Depth to Water Detail	172.84	ft
GS-AP-MW-17	3/16/2020 13:24	Oxidation Reduction Potention	-183.22	mv
GS-AP-MW-17	3/16/2020 13:24	pH	8.42	pH
GS-AP-MW-17	3/16/2020 13:24	Temperature	17.59	C
GS-AP-MW-17	3/16/2020 13:24	Turbidity	1.18	NTU
GS-AP-MW-17	3/16/2020 13:29	Conductivity	777.42	uS/cm
GS-AP-MW-17	3/16/2020 13:29	DO	0.5	mg/L
GS-AP-MW-17	3/16/2020 13:29	Depth to Water Detail	172.84	ft
GS-AP-MW-17	3/16/2020 13:29	Oxidation Reduction Potention	-173.53	mv
GS-AP-MW-17	3/16/2020 13:29	pH	8.43	pH
GS-AP-MW-17	3/16/2020 13:29	Temperature	18.39	C
GS-AP-MW-17	3/16/2020 13:29	Turbidity	1.46	NTU
GS-AP-MW-17	3/16/2020 13:34	Conductivity	760.85	uS/cm
GS-AP-MW-17	3/16/2020 13:34	DO	0.56	mg/L
GS-AP-MW-17	3/16/2020 13:34	Depth to Water Detail	172.84	ft
GS-AP-MW-17	3/16/2020 13:34	Oxidation Reduction Potention	-166.92	mv
GS-AP-MW-17	3/16/2020 13:34	pH	8.44	pH
GS-AP-MW-17	3/16/2020 13:34	Temperature	18.55	C
GS-AP-MW-17	3/16/2020 13:34	Turbidity	1.32	NTU
GS-AP-MW-17	3/16/2020 13:39	Conductivity	750.21	uS/cm
GS-AP-MW-17	3/16/2020 13:39	DO	0.6	mg/L
GS-AP-MW-17	3/16/2020 13:39	Depth to Water Detail	172.84	ft
GS-AP-MW-17	3/16/2020 13:39	Oxidation Reduction Potention	-161.14	mv
GS-AP-MW-17	3/16/2020 13:39	pH	8.45	pH
GS-AP-MW-17	3/16/2020 13:39	Temperature	18.79	C
GS-AP-MW-17	3/16/2020 13:39	Turbidity	1.19	NTU

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-21	3/18/2020 15:27	Conductivity	1154.24	uS/cm
GS-AP-MW-21	3/18/2020 15:27	DO	2.18	mg/L
GS-AP-MW-21	3/18/2020 15:27	Depth to Water Detail	158.43	ft
GS-AP-MW-21	3/18/2020 15:27	Oxidation Reduction Potention	-83.98	mv
GS-AP-MW-21	3/18/2020 15:27	pH	10.58	pH
GS-AP-MW-21	3/18/2020 15:27	Temperature	19.93	C
GS-AP-MW-21	3/18/2020 15:27	Turbidity	1.9	NTU
GS-AP-MW-21	3/18/2020 15:32	Conductivity	1586.61	uS/cm
GS-AP-MW-21	3/18/2020 15:32	DO	1.08	mg/L
GS-AP-MW-21	3/18/2020 15:32	Depth to Water Detail	158.43	ft
GS-AP-MW-21	3/18/2020 15:32	Oxidation Reduction Potention	-116.68	mv
GS-AP-MW-21	3/18/2020 15:32	pH	11.22	pH
GS-AP-MW-21	3/18/2020 15:32	Temperature	19.88	C
GS-AP-MW-21	3/18/2020 15:32	Turbidity	1.72	NTU
GS-AP-MW-21	3/18/2020 15:37	Conductivity	1731.81	uS/cm
GS-AP-MW-21	3/18/2020 15:37	DO	0.78	mg/L
GS-AP-MW-21	3/18/2020 15:37	Depth to Water Detail	158.43	ft
GS-AP-MW-21	3/18/2020 15:37	Oxidation Reduction Potention	-144.17	mv
GS-AP-MW-21	3/18/2020 15:37	pH	11.32	pH
GS-AP-MW-21	3/18/2020 15:37	Temperature	19.7	C
GS-AP-MW-21	3/18/2020 15:37	Turbidity	1.64	NTU
GS-AP-MW-21	3/18/2020 15:42	Conductivity	1752	uS/cm
GS-AP-MW-21	3/18/2020 15:42	DO	0.68	mg/L
GS-AP-MW-21	3/18/2020 15:42	Depth to Water Detail	158.43	ft
GS-AP-MW-21	3/18/2020 15:42	Oxidation Reduction Potention	-159.43	mv
GS-AP-MW-21	3/18/2020 15:42	pH	11.35	pH
GS-AP-MW-21	3/18/2020 15:42	Temperature	19.76	C
GS-AP-MW-21	3/18/2020 15:42	Turbidity	1.54	NTU
GS-AP-MW-21	3/18/2020 15:47	Conductivity	1740.42	uS/cm
GS-AP-MW-21	3/18/2020 15:47	DO	0.65	mg/L
GS-AP-MW-21	3/18/2020 15:47	Depth to Water Detail	158.43	ft
GS-AP-MW-21	3/18/2020 15:47	Oxidation Reduction Potention	-168.92	mv
GS-AP-MW-21	3/18/2020 15:47	pH	11.37	pH
GS-AP-MW-21	3/18/2020 15:47	Temperature	19.64	C
GS-AP-MW-21	3/18/2020 15:47	Turbidity	1.16	NTU

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-28H	3/16/2020 14:28	Conductivity	739.81	uS/cm
GS-AP-MW-28H	3/16/2020 14:28	DO	0.92	mg/L
GS-AP-MW-28H	3/16/2020 14:28	Depth to Water Detail	153.79	ft
GS-AP-MW-28H	3/16/2020 14:28	Oxidation Reduction Potention	-119.62	mv
GS-AP-MW-28H	3/16/2020 14:28	pH	7.73	pH
GS-AP-MW-28H	3/16/2020 14:28	Temperature	18.44	C
GS-AP-MW-28H	3/16/2020 14:28	Turbidity	9.24	NTU
GS-AP-MW-28H	3/16/2020 14:33	Conductivity	756.5	uS/cm
GS-AP-MW-28H	3/16/2020 14:33	DO	0.52	mg/L
GS-AP-MW-28H	3/16/2020 14:33	Depth to Water Detail	153.79	ft
GS-AP-MW-28H	3/16/2020 14:33	Oxidation Reduction Potention	-155.03	mv
GS-AP-MW-28H	3/16/2020 14:33	pH	7.86	pH
GS-AP-MW-28H	3/16/2020 14:33	Temperature	18.38	C
GS-AP-MW-28H	3/16/2020 14:33	Turbidity	9.06	NTU
GS-AP-MW-28H	3/16/2020 14:38	Conductivity	729.45	uS/cm
GS-AP-MW-28H	3/16/2020 14:38	DO	0.44	mg/L
GS-AP-MW-28H	3/16/2020 14:38	Depth to Water Detail	153.79	ft
GS-AP-MW-28H	3/16/2020 14:38	Oxidation Reduction Potention	-175.34	mv
GS-AP-MW-28H	3/16/2020 14:38	pH	8.06	pH
GS-AP-MW-28H	3/16/2020 14:38	Temperature	18.32	C
GS-AP-MW-28H	3/16/2020 14:38	Turbidity	6.53	NTU
GS-AP-MW-28H	3/16/2020 14:43	Conductivity	711.19	uS/cm
GS-AP-MW-28H	3/16/2020 14:43	DO	0.4	mg/L
GS-AP-MW-28H	3/16/2020 14:43	Depth to Water Detail	153.79	ft
GS-AP-MW-28H	3/16/2020 14:43	Oxidation Reduction Potention	-186.34	mv
GS-AP-MW-28H	3/16/2020 14:43	pH	8.19	pH
GS-AP-MW-28H	3/16/2020 14:43	Temperature	18.26	C
GS-AP-MW-28H	3/16/2020 14:43	Turbidity	4.71	NTU
GS-AP-MW-28H	3/16/2020 14:48	Conductivity	700.8	uS/cm
GS-AP-MW-28H	3/16/2020 14:48	DO	0.37	mg/L
GS-AP-MW-28H	3/16/2020 14:48	Depth to Water Detail	153.79	ft
GS-AP-MW-28H	3/16/2020 14:48	Oxidation Reduction Potention	-193.71	mv
GS-AP-MW-28H	3/16/2020 14:48	pH	8.26	pH
GS-AP-MW-28H	3/16/2020 14:48	Temperature	18.14	C
GS-AP-MW-28H	3/16/2020 14:48	Turbidity	4.08	NTU
GS-AP-MW-28H	3/16/2020 14:53	Conductivity	692.82	uS/cm
GS-AP-MW-28H	3/16/2020 14:53	DO	0.35	mg/L
GS-AP-MW-28H	3/16/2020 14:53	Depth to Water Detail	153.79	ft
GS-AP-MW-28H	3/16/2020 14:53	Oxidation Reduction Potention	-198.43	mv
GS-AP-MW-28H	3/16/2020 14:53	pH	8.31	pH
GS-AP-MW-28H	3/16/2020 14:53	Temperature	18.23	C
GS-AP-MW-28H	3/16/2020 14:53	Turbidity	4.11	NTU

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-30HA	3/18/2020 9:16	Conductivity	909.52	uS/cm
GS-AP-MW-30HA	3/18/2020 9:16	DO	0.74	mg/L
GS-AP-MW-30HA	3/18/2020 9:16	Depth to Water Detail	288.14	ft
GS-AP-MW-30HA	3/18/2020 9:16	Oxidation Reduction Potention	-118.58	mv
GS-AP-MW-30HA	3/18/2020 9:16	pH	7.15	pH
GS-AP-MW-30HA	3/18/2020 9:16	Temperature	17.87	C
GS-AP-MW-30HA	3/18/2020 9:16	Turbidity	4.86	NTU
GS-AP-MW-30HA	3/18/2020 9:21	Conductivity	948.82	uS/cm
GS-AP-MW-30HA	3/18/2020 9:21	DO	0.6	mg/L
GS-AP-MW-30HA	3/18/2020 9:21	Depth to Water Detail	288.18	ft
GS-AP-MW-30HA	3/18/2020 9:21	Oxidation Reduction Potention	-127.54	mv
GS-AP-MW-30HA	3/18/2020 9:21	pH	7.19	pH
GS-AP-MW-30HA	3/18/2020 9:21	Temperature	17.93	C
GS-AP-MW-30HA	3/18/2020 9:21	Turbidity	4.79	NTU
GS-AP-MW-30HA	3/18/2020 9:26	Conductivity	965.57	uS/cm
GS-AP-MW-30HA	3/18/2020 9:26	DO	0.54	mg/L
GS-AP-MW-30HA	3/18/2020 9:26	Depth to Water Detail	288.2	ft
GS-AP-MW-30HA	3/18/2020 9:26	Oxidation Reduction Potention	-140.62	mv
GS-AP-MW-30HA	3/18/2020 9:26	pH	7.19	pH
GS-AP-MW-30HA	3/18/2020 9:26	Temperature	17.9	C
GS-AP-MW-30HA	3/18/2020 9:26	Turbidity	3.99	NTU
GS-AP-MW-30HA	3/18/2020 9:31	Conductivity	963.86	uS/cm
GS-AP-MW-30HA	3/18/2020 9:31	DO	0.49	mg/L
GS-AP-MW-30HA	3/18/2020 9:31	Depth to Water Detail	288.21	ft
GS-AP-MW-30HA	3/18/2020 9:31	Oxidation Reduction Potention	-149.33	mv
GS-AP-MW-30HA	3/18/2020 9:31	pH	7.2	pH
GS-AP-MW-30HA	3/18/2020 9:31	Temperature	17.98	C
GS-AP-MW-30HA	3/18/2020 9:31	Turbidity	2.13	NTU

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-33HO	3/17/2020 12:55	Conductivity	1407.77	uS/cm
GS-AP-MW-33HO	3/17/2020 12:55	DO	1.03	mg/L
GS-AP-MW-33HO	3/17/2020 12:55	Depth to Water Detail	226.71	ft
GS-AP-MW-33HO	3/17/2020 12:55	Oxidation Reduction Potention	-292.79	mv
GS-AP-MW-33HO	3/17/2020 12:55	pH	7.64	pH
GS-AP-MW-33HO	3/17/2020 12:55	Temperature	19.19	C
GS-AP-MW-33HO	3/17/2020 12:55	Turbidity	9.9	NTU
GS-AP-MW-33HO	3/17/2020 13:00	Conductivity	1507.9	uS/cm
GS-AP-MW-33HO	3/17/2020 13:00	DO	0.72	mg/L
GS-AP-MW-33HO	3/17/2020 13:00	Depth to Water Detail	227.04	ft
GS-AP-MW-33HO	3/17/2020 13:00	Oxidation Reduction Potention	-309.16	mv
GS-AP-MW-33HO	3/17/2020 13:00	pH	7.65	pH
GS-AP-MW-33HO	3/17/2020 13:00	Temperature	19.04	C
GS-AP-MW-33HO	3/17/2020 13:00	Turbidity	9.7	NTU
GS-AP-MW-33HO	3/17/2020 13:05	Conductivity	1514.18	uS/cm
GS-AP-MW-33HO	3/17/2020 13:05	DO	0.58	mg/L
GS-AP-MW-33HO	3/17/2020 13:05	Depth to Water Detail	227.64	ft
GS-AP-MW-33HO	3/17/2020 13:05	Oxidation Reduction Potention	-316.82	mv
GS-AP-MW-33HO	3/17/2020 13:05	pH	7.65	pH
GS-AP-MW-33HO	3/17/2020 13:05	Temperature	19.12	C
GS-AP-MW-33HO	3/17/2020 13:05	Turbidity	7.58	NTU
GS-AP-MW-33HO	3/17/2020 13:10	Conductivity	1513.57	uS/cm
GS-AP-MW-33HO	3/17/2020 13:10	DO	0.52	mg/L
GS-AP-MW-33HO	3/17/2020 13:10	Depth to Water Detail	227.86	ft
GS-AP-MW-33HO	3/17/2020 13:10	Oxidation Reduction Potention	-319.87	mv
GS-AP-MW-33HO	3/17/2020 13:10	pH	7.66	pH
GS-AP-MW-33HO	3/17/2020 13:10	Temperature	19.01	C
GS-AP-MW-33HO	3/17/2020 13:10	Turbidity	6.24	NTU
GS-AP-MW-33HO	3/17/2020 13:15	Conductivity	1518.6	uS/cm
GS-AP-MW-33HO	3/17/2020 13:15	DO	0.48	mg/L
GS-AP-MW-33HO	3/17/2020 13:15	Depth to Water Detail	228.19	ft
GS-AP-MW-33HO	3/17/2020 13:15	Oxidation Reduction Potention	-323.35	mv
GS-AP-MW-33HO	3/17/2020 13:15	pH	7.66	pH
GS-AP-MW-33HO	3/17/2020 13:15	Temperature	19.16	C
GS-AP-MW-33HO	3/17/2020 13:15	Turbidity	6.32	NTU
GS-AP-MW-33HO	3/17/2020 13:20	Conductivity	1507.2	uS/cm
GS-AP-MW-33HO	3/17/2020 13:20	DO	0.45	mg/L
GS-AP-MW-33HO	3/17/2020 13:20	Depth to Water Detail	228.53	ft
GS-AP-MW-33HO	3/17/2020 13:20	Oxidation Reduction Potention	-324.01	mv
GS-AP-MW-33HO	3/17/2020 13:20	pH	7.66	pH
GS-AP-MW-33HO	3/17/2020 13:20	Temperature	18.92	C
GS-AP-MW-33HO	3/17/2020 13:20	Turbidity	5.63	NTU
GS-AP-MW-33HO	3/17/2020 13:25	Conductivity	1495.96	uS/cm
GS-AP-MW-33HO	3/17/2020 13:25	DO	0.43	mg/L
GS-AP-MW-33HO	3/17/2020 13:25	Depth to Water Detail	228.79	ft
GS-AP-MW-33HO	3/17/2020 13:25	Oxidation Reduction Potention	-325.69	mv

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-33HO	3/17/2020 13:25	pH	7.66	pH
GS-AP-MW-33HO	3/17/2020 13:25	Temperature	19.24	C
GS-AP-MW-33HO	3/17/2020 13:25	Turbidity	5.8	NTU
GS-AP-MW-33HO	3/17/2020 13:30	Conductivity	1486.92	uS/cm
GS-AP-MW-33HO	3/17/2020 13:30	DO	0.4	mg/L
GS-AP-MW-33HO	3/17/2020 13:30	Depth to Water Detail	229.07	ft
GS-AP-MW-33HO	3/17/2020 13:30	Oxidation Reduction Potention	-326.2	mv
GS-AP-MW-33HO	3/17/2020 13:30	pH	7.66	pH
GS-AP-MW-33HO	3/17/2020 13:30	Temperature	19.18	C
GS-AP-MW-33HO	3/17/2020 13:30	Turbidity	6.25	NTU
GS-AP-MW-33HO	3/17/2020 13:35	Conductivity	1467.49	uS/cm
GS-AP-MW-33HO	3/17/2020 13:35	DO	0.4	mg/L
GS-AP-MW-33HO	3/17/2020 13:35	Depth to Water Detail	229.37	ft
GS-AP-MW-33HO	3/17/2020 13:35	Oxidation Reduction Potention	-326.83	mv
GS-AP-MW-33HO	3/17/2020 13:35	pH	7.66	pH
GS-AP-MW-33HO	3/17/2020 13:35	Temperature	19.49	C
GS-AP-MW-33HO	3/17/2020 13:35	Turbidity	6.54	NTU
GS-AP-MW-33HO	3/17/2020 13:40	Conductivity	1450.79	uS/cm
GS-AP-MW-33HO	3/17/2020 13:40	DO	0.42	mg/L
GS-AP-MW-33HO	3/17/2020 13:40	Depth to Water Detail	229.49	ft
GS-AP-MW-33HO	3/17/2020 13:40	Oxidation Reduction Potention	-325.28	mv
GS-AP-MW-33HO	3/17/2020 13:40	pH	7.65	pH
GS-AP-MW-33HO	3/17/2020 13:40	Temperature	19.99	C
GS-AP-MW-33HO	3/17/2020 13:40	Turbidity	6.66	NTU
GS-AP-MW-33HO	3/17/2020 13:45	Conductivity	1453.18	uS/cm
GS-AP-MW-33HO	3/17/2020 13:45	DO	0.52	mg/L
GS-AP-MW-33HO	3/17/2020 13:45	Depth to Water Detail	229.54	ft
GS-AP-MW-33HO	3/17/2020 13:45	Oxidation Reduction Potention	-324.45	mv
GS-AP-MW-33HO	3/17/2020 13:45	pH	7.67	pH
GS-AP-MW-33HO	3/17/2020 13:45	Temperature	21.05	C
GS-AP-MW-33HO	3/17/2020 13:45	Turbidity	6.21	NTU

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-34HO	3/16/2020 15:53	Conductivity	4060.19	uS/cm
GS-AP-MW-34HO	3/16/2020 15:53	DO	0.95	mg/L
GS-AP-MW-34HO	3/16/2020 15:53	Depth to Water Detail	233.21	ft
GS-AP-MW-34HO	3/16/2020 15:53	Oxidation Reduction Potention	-243.55	mv
GS-AP-MW-34HO	3/16/2020 15:53	pH	6.93	pH
GS-AP-MW-34HO	3/16/2020 15:53	Temperature	19.76	C
GS-AP-MW-34HO	3/16/2020 15:53	Turbidity	2.1	NTU
GS-AP-MW-34HO	3/16/2020 15:58	Conductivity	4317.95	uS/cm
GS-AP-MW-34HO	3/16/2020 15:58	DO	0.67	mg/L
GS-AP-MW-34HO	3/16/2020 15:58	Depth to Water Detail	233.6	ft
GS-AP-MW-34HO	3/16/2020 15:58	Oxidation Reduction Potention	-247.64	mv
GS-AP-MW-34HO	3/16/2020 15:58	pH	6.96	pH
GS-AP-MW-34HO	3/16/2020 15:58	Temperature	20.23	C
GS-AP-MW-34HO	3/16/2020 15:58	Turbidity	0	NTU
GS-AP-MW-34HO	3/16/2020 16:03	Conductivity	4113.96	uS/cm
GS-AP-MW-34HO	3/16/2020 16:03	DO	0.67	mg/L
GS-AP-MW-34HO	3/16/2020 16:03	Depth to Water Detail	233.84	ft
GS-AP-MW-34HO	3/16/2020 16:03	Oxidation Reduction Potention	-261.09	mv
GS-AP-MW-34HO	3/16/2020 16:03	pH	7.06	pH
GS-AP-MW-34HO	3/16/2020 16:03	Temperature	21.18	C
GS-AP-MW-34HO	3/16/2020 16:03	Turbidity	625	NTU
GS-AP-MW-34HO	3/16/2020 16:08	Conductivity	4021.44	uS/cm
GS-AP-MW-34HO	3/16/2020 16:08	DO	0.69	mg/L
GS-AP-MW-34HO	3/16/2020 16:08	Depth to Water Detail	234.2	ft
GS-AP-MW-34HO	3/16/2020 16:08	Oxidation Reduction Potention	-265.99	mv
GS-AP-MW-34HO	3/16/2020 16:08	pH	7.11	pH
GS-AP-MW-34HO	3/16/2020 16:08	Temperature	23.48	C
GS-AP-MW-34HO	3/16/2020 16:08	Turbidity	0	NTU
GS-AP-MW-34HO	3/16/2020 16:13	Conductivity	3740	uS/cm
GS-AP-MW-34HO	3/16/2020 16:13	DO	0.58	mg/L
GS-AP-MW-34HO	3/16/2020 16:13	Depth to Water Detail	234.46	ft
GS-AP-MW-34HO	3/16/2020 16:13	Oxidation Reduction Potention	-277.29	mv
GS-AP-MW-34HO	3/16/2020 16:13	pH	7.22	pH
GS-AP-MW-34HO	3/16/2020 16:13	Temperature	21.69	C
GS-AP-MW-34HO	3/16/2020 16:13	Turbidity	0	NTU
GS-AP-MW-34HO	3/16/2020 16:18	Conductivity	3507.36	uS/cm
GS-AP-MW-34HO	3/16/2020 16:18	DO	0.36	mg/L
GS-AP-MW-34HO	3/16/2020 16:18	Depth to Water Detail	234.72	ft
GS-AP-MW-34HO	3/16/2020 16:18	Oxidation Reduction Potention	-289.19	mv
GS-AP-MW-34HO	3/16/2020 16:18	pH	7.31	pH
GS-AP-MW-34HO	3/16/2020 16:18	Temperature	19.16	C
GS-AP-MW-34HO	3/16/2020 16:18	Turbidity	5.92	NTU
GS-AP-MW-34HO	3/16/2020 16:23	Conductivity	3440	uS/cm
GS-AP-MW-34HO	3/16/2020 16:23	DO	0.4	mg/L
GS-AP-MW-34HO	3/16/2020 16:23	Depth to Water Detail	235.12	ft
GS-AP-MW-34HO	3/16/2020 16:23	Oxidation Reduction Potention	-289.54	mv

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-34HO	3/16/2020 16:23	pH	7.32	pH
GS-AP-MW-34HO	3/16/2020 16:23	Temperature	18.63	C
GS-AP-MW-34HO	3/16/2020 16:23	Turbidity	5.34	NTU
GS-AP-MW-34HO	3/16/2020 16:28	Conductivity	3461.26	uS/cm
GS-AP-MW-34HO	3/16/2020 16:28	DO	0.34	mg/L
GS-AP-MW-34HO	3/16/2020 16:28	Depth to Water Detail	235.44	ft
GS-AP-MW-34HO	3/16/2020 16:28	Oxidation Reduction Potention	-291.83	mv
GS-AP-MW-34HO	3/16/2020 16:28	pH	7.31	pH
GS-AP-MW-34HO	3/16/2020 16:28	Temperature	18.93	C
GS-AP-MW-34HO	3/16/2020 16:28	Turbidity	4.97	NTU
GS-AP-MW-34HO	3/16/2020 16:33	Conductivity	3496.57	uS/cm
GS-AP-MW-34HO	3/16/2020 16:33	DO	0.31	mg/L
GS-AP-MW-34HO	3/16/2020 16:33	Depth to Water Detail	235.92	ft
GS-AP-MW-34HO	3/16/2020 16:33	Oxidation Reduction Potention	-292.72	mv
GS-AP-MW-34HO	3/16/2020 16:33	pH	7.3	pH
GS-AP-MW-34HO	3/16/2020 16:33	Temperature	19.22	C
GS-AP-MW-34HO	3/16/2020 16:33	Turbidity	3.7	NTU
GS-AP-MW-34HO	3/16/2020 16:38	Conductivity	3475.64	uS/cm
GS-AP-MW-34HO	3/16/2020 16:38	DO	0.32	mg/L
GS-AP-MW-34HO	3/16/2020 16:38	Depth to Water Detail	236.11	ft
GS-AP-MW-34HO	3/16/2020 16:38	Oxidation Reduction Potention	-294.37	mv
GS-AP-MW-34HO	3/16/2020 16:38	pH	7.31	pH
GS-AP-MW-34HO	3/16/2020 16:38	Temperature	19.11	C
GS-AP-MW-34HO	3/16/2020 16:38	Turbidity	3.45	NTU
GS-AP-MW-34HO	3/16/2020 16:43	Conductivity	3418.73	uS/cm
GS-AP-MW-34HO	3/16/2020 16:43	DO	0.31	mg/L
GS-AP-MW-34HO	3/16/2020 16:43	Depth to Water Detail	236.25	ft
GS-AP-MW-34HO	3/16/2020 16:43	Oxidation Reduction Potention	-296.01	mv
GS-AP-MW-34HO	3/16/2020 16:43	pH	7.33	pH
GS-AP-MW-34HO	3/16/2020 16:43	Temperature	19.03	C
GS-AP-MW-34HO	3/16/2020 16:43	Turbidity	3.18	NTU
GS-AP-MW-34HO	3/16/2020 16:48	Conductivity	3377.22	uS/cm
GS-AP-MW-34HO	3/16/2020 16:48	DO	0.33	mg/L
GS-AP-MW-34HO	3/16/2020 16:48	Depth to Water Detail	236.38	ft
GS-AP-MW-34HO	3/16/2020 16:48	Oxidation Reduction Potention	-298.34	mv
GS-AP-MW-34HO	3/16/2020 16:48	pH	7.35	pH
GS-AP-MW-34HO	3/16/2020 16:48	Temperature	18.71	C
GS-AP-MW-34HO	3/16/2020 16:48	Turbidity	2.59	NTU

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-35HO	3/17/2020 8:30	Conductivity	811.99	uS/cm
GS-AP-MW-35HO	3/17/2020 8:30	DO	2.85	mg/L
GS-AP-MW-35HO	3/17/2020 8:30	Depth to Water Detail	246.86	ft
GS-AP-MW-35HO	3/17/2020 8:30	Oxidation Reduction Potention	-44.37	mv
GS-AP-MW-35HO	3/17/2020 8:30	pH	8.01	pH
GS-AP-MW-35HO	3/17/2020 8:30	Temperature	16.81	C
GS-AP-MW-35HO	3/17/2020 8:30	Turbidity	7.06	NTU
GS-AP-MW-35HO	3/17/2020 8:35	Conductivity	710.17	uS/cm
GS-AP-MW-35HO	3/17/2020 8:35	DO	2.33	mg/L
GS-AP-MW-35HO	3/17/2020 8:35	Depth to Water Detail	246.94	ft
GS-AP-MW-35HO	3/17/2020 8:35	Oxidation Reduction Potention	-66.6	mv
GS-AP-MW-35HO	3/17/2020 8:35	pH	8.15	pH
GS-AP-MW-35HO	3/17/2020 8:35	Temperature	16.84	C
GS-AP-MW-35HO	3/17/2020 8:35	Turbidity	8.69	NTU
GS-AP-MW-35HO	3/17/2020 8:40	Conductivity	668.48	uS/cm
GS-AP-MW-35HO	3/17/2020 8:40	DO	1.52	mg/L
GS-AP-MW-35HO	3/17/2020 8:40	Depth to Water Detail	247.08	ft
GS-AP-MW-35HO	3/17/2020 8:40	Oxidation Reduction Potention	-90.03	mv
GS-AP-MW-35HO	3/17/2020 8:40	pH	8.28	pH
GS-AP-MW-35HO	3/17/2020 8:40	Temperature	16.88	C
GS-AP-MW-35HO	3/17/2020 8:40	Turbidity	9.82	NTU
GS-AP-MW-35HO	3/17/2020 8:45	Conductivity	642.04	uS/cm
GS-AP-MW-35HO	3/17/2020 8:45	DO	1.11	mg/L
GS-AP-MW-35HO	3/17/2020 8:45	Depth to Water Detail	247.23	ft
GS-AP-MW-35HO	3/17/2020 8:45	Oxidation Reduction Potention	-105.77	mv
GS-AP-MW-35HO	3/17/2020 8:45	pH	8.33	pH
GS-AP-MW-35HO	3/17/2020 8:45	Temperature	16.98	C
GS-AP-MW-35HO	3/17/2020 8:45	Turbidity	7.68	NTU
GS-AP-MW-35HO	3/17/2020 8:50	Conductivity	624.41	uS/cm
GS-AP-MW-35HO	3/17/2020 8:50	DO	0.92	mg/L
GS-AP-MW-35HO	3/17/2020 8:50	Depth to Water Detail	247.41	ft
GS-AP-MW-35HO	3/17/2020 8:50	Oxidation Reduction Potention	-118.32	mv
GS-AP-MW-35HO	3/17/2020 8:50	pH	8.38	pH
GS-AP-MW-35HO	3/17/2020 8:50	Temperature	17.03	C
GS-AP-MW-35HO	3/17/2020 8:50	Turbidity	5.97	NTU
GS-AP-MW-35HO	3/17/2020 8:55	Conductivity	611.95	uS/cm
GS-AP-MW-35HO	3/17/2020 8:55	DO	0.86	mg/L
GS-AP-MW-35HO	3/17/2020 8:55	Depth to Water Detail	247.5	ft
GS-AP-MW-35HO	3/17/2020 8:55	Oxidation Reduction Potention	-122.7	mv
GS-AP-MW-35HO	3/17/2020 8:55	pH	8.36	pH
GS-AP-MW-35HO	3/17/2020 8:55	Temperature	17.1	C
GS-AP-MW-35HO	3/17/2020 8:55	Turbidity	4.69	NTU
GS-AP-MW-35HO	3/17/2020 9:00	Conductivity	597.97	uS/cm
GS-AP-MW-35HO	3/17/2020 9:00	DO	0.82	mg/L
GS-AP-MW-35HO	3/17/2020 9:00	Depth to Water Detail	247.57	ft
GS-AP-MW-35HO	3/17/2020 9:00	Oxidation Reduction Potention	-128.06	mv

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-35HO	3/17/2020 9:00	pH	8.4	pH
GS-AP-MW-35HO	3/17/2020 9:00	Temperature	17.06	C
GS-AP-MW-35HO	3/17/2020 9:00	Turbidity	3.84	NTU

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-36H	3/17/2020 10:27	Conductivity	579.76	uS/cm
GS-AP-MW-36H	3/17/2020 10:27	DO	1.94	mg/L
GS-AP-MW-36H	3/17/2020 10:27	Depth to Water Detail	225.91	ft
GS-AP-MW-36H	3/17/2020 10:27	Oxidation Reduction Potention	-3.52	mv
GS-AP-MW-36H	3/17/2020 10:27	pH	8.15	pH
GS-AP-MW-36H	3/17/2020 10:27	Temperature	18.19	C
GS-AP-MW-36H	3/17/2020 10:27	Turbidity	1.9	NTU
GS-AP-MW-36H	3/17/2020 10:32	Conductivity	545.95	uS/cm
GS-AP-MW-36H	3/17/2020 10:32	DO	1.12	mg/L
GS-AP-MW-36H	3/17/2020 10:32	Depth to Water Detail	226.51	ft
GS-AP-MW-36H	3/17/2020 10:32	Oxidation Reduction Potention	-27.44	mv
GS-AP-MW-36H	3/17/2020 10:32	pH	8.34	pH
GS-AP-MW-36H	3/17/2020 10:32	Temperature	18.04	C
GS-AP-MW-36H	3/17/2020 10:32	Turbidity	1.56	NTU
GS-AP-MW-36H	3/17/2020 10:37	Conductivity	535.74	uS/cm
GS-AP-MW-36H	3/17/2020 10:37	DO	0.8	mg/L
GS-AP-MW-36H	3/17/2020 10:37	Depth to Water Detail	227.43	ft
GS-AP-MW-36H	3/17/2020 10:37	Oxidation Reduction Potention	-43.89	mv
GS-AP-MW-36H	3/17/2020 10:37	pH	8.37	pH
GS-AP-MW-36H	3/17/2020 10:37	Temperature	18.08	C
GS-AP-MW-36H	3/17/2020 10:37	Turbidity	1.33	NTU
GS-AP-MW-36H	3/17/2020 10:42	Conductivity	539.43	uS/cm
GS-AP-MW-36H	3/17/2020 10:42	DO	0.67	mg/L
GS-AP-MW-36H	3/17/2020 10:42	Depth to Water Detail	227.95	ft
GS-AP-MW-36H	3/17/2020 10:42	Oxidation Reduction Potention	-64.19	mv
GS-AP-MW-36H	3/17/2020 10:42	pH	8.42	pH
GS-AP-MW-36H	3/17/2020 10:42	Temperature	18.08	C
GS-AP-MW-36H	3/17/2020 10:42	Turbidity	1.22	NTU
GS-AP-MW-36H	3/17/2020 10:47	Conductivity	542.19	uS/cm
GS-AP-MW-36H	3/17/2020 10:47	DO	0.59	mg/L
GS-AP-MW-36H	3/17/2020 10:47	Depth to Water Detail	228.41	ft
GS-AP-MW-36H	3/17/2020 10:47	Oxidation Reduction Potention	-76.9	mv
GS-AP-MW-36H	3/17/2020 10:47	pH	8.39	pH
GS-AP-MW-36H	3/17/2020 10:47	Temperature	18.23	C
GS-AP-MW-36H	3/17/2020 10:47	Turbidity	1.13	NTU
GS-AP-MW-36H	3/17/2020 10:52	Conductivity	539.75	uS/cm
GS-AP-MW-36H	3/17/2020 10:52	DO	0.51	mg/L
GS-AP-MW-36H	3/17/2020 10:52	Depth to Water Detail	229.02	ft
GS-AP-MW-36H	3/17/2020 10:52	Oxidation Reduction Potention	-92.85	mv
GS-AP-MW-36H	3/17/2020 10:52	pH	8.44	pH
GS-AP-MW-36H	3/17/2020 10:52	Temperature	18.13	C
GS-AP-MW-36H	3/17/2020 10:52	Turbidity	1.18	NTU
GS-AP-MW-36H	3/17/2020 10:57	Conductivity	539.1	uS/cm
GS-AP-MW-36H	3/17/2020 10:57	DO	0.49	mg/L
GS-AP-MW-36H	3/17/2020 10:57	Depth to Water Detail	229.37	ft
GS-AP-MW-36H	3/17/2020 10:57	Oxidation Reduction Potention	-99.86	mv

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-36H	3/17/2020 10:57	pH	8.4	pH
GS-AP-MW-36H	3/17/2020 10:57	Temperature	18.17	C
GS-AP-MW-36H	3/17/2020 10:57	Turbidity	1.29	NTU
GS-AP-MW-36H	3/17/2020 11:02	Conductivity	532.77	uS/cm
GS-AP-MW-36H	3/17/2020 11:02	DO	0.47	mg/L
GS-AP-MW-36H	3/17/2020 11:02	Depth to Water Detail	229.75	ft
GS-AP-MW-36H	3/17/2020 11:02	Oxidation Reduction Potention	-108.99	mv
GS-AP-MW-36H	3/17/2020 11:02	pH	8.44	pH
GS-AP-MW-36H	3/17/2020 11:02	Temperature	18.06	C
GS-AP-MW-36H	3/17/2020 11:02	Turbidity	1.08	NTU
GS-AP-MW-36H	3/17/2020 11:07	Conductivity	530.15	uS/cm
GS-AP-MW-36H	3/17/2020 11:07	DO	0.45	mg/L
GS-AP-MW-36H	3/17/2020 11:07	Depth to Water Detail	230.04	ft
GS-AP-MW-36H	3/17/2020 11:07	Oxidation Reduction Potention	-115.26	mv
GS-AP-MW-36H	3/17/2020 11:07	pH	8.44	pH
GS-AP-MW-36H	3/17/2020 11:07	Temperature	18.09	C
GS-AP-MW-36H	3/17/2020 11:07	Turbidity	0.99	NTU
GS-AP-MW-36H	3/17/2020 11:12	Conductivity	526.97	uS/cm
GS-AP-MW-36H	3/17/2020 11:12	DO	0.43	mg/L
GS-AP-MW-36H	3/17/2020 11:12	Depth to Water Detail	230.38	ft
GS-AP-MW-36H	3/17/2020 11:12	Oxidation Reduction Potention	-119.6	mv
GS-AP-MW-36H	3/17/2020 11:12	pH	8.44	pH
GS-AP-MW-36H	3/17/2020 11:12	Temperature	17.99	C
GS-AP-MW-36H	3/17/2020 11:12	Turbidity	1.22	NTU
GS-AP-MW-36H	3/17/2020 11:17	Conductivity	530.87	uS/cm
GS-AP-MW-36H	3/17/2020 11:17	DO	0.44	mg/L
GS-AP-MW-36H	3/17/2020 11:17	Depth to Water Detail	230.57	ft
GS-AP-MW-36H	3/17/2020 11:17	Oxidation Reduction Potention	-123.48	mv
GS-AP-MW-36H	3/17/2020 11:17	pH	8.45	pH
GS-AP-MW-36H	3/17/2020 11:17	Temperature	18.02	C
GS-AP-MW-36H	3/17/2020 11:17	Turbidity	1.07	NTU
GS-AP-MW-36H	3/17/2020 11:22	Conductivity	537.33	uS/cm
GS-AP-MW-36H	3/17/2020 11:22	DO	0.46	mg/L
GS-AP-MW-36H	3/17/2020 11:22	Depth to Water Detail	230.71	ft
GS-AP-MW-36H	3/17/2020 11:22	Oxidation Reduction Potention	-126.65	mv
GS-AP-MW-36H	3/17/2020 11:22	pH	8.44	pH
GS-AP-MW-36H	3/17/2020 11:22	Temperature	18.03	C
GS-AP-MW-36H	3/17/2020 11:22	Turbidity	1.26	NTU
GS-AP-MW-36H	3/17/2020 11:27	Conductivity	540.23	uS/cm
GS-AP-MW-36H	3/17/2020 11:27	DO	0.42	mg/L
GS-AP-MW-36H	3/17/2020 11:27	Depth to Water Detail	230.94	ft
GS-AP-MW-36H	3/17/2020 11:27	Oxidation Reduction Potention	-131.28	mv
GS-AP-MW-36H	3/17/2020 11:27	pH	8.45	pH
GS-AP-MW-36H	3/17/2020 11:27	Temperature	18	C
GS-AP-MW-36H	3/17/2020 11:27	Turbidity	1.06	NTU
GS-AP-MW-36H	3/17/2020 11:32	Conductivity	542.66	uS/cm

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-36H	3/17/2020 11:32	DO	0.41	mg/L
GS-AP-MW-36H	3/17/2020 11:32	Depth to Water Detail	231.07	ft
GS-AP-MW-36H	3/17/2020 11:32	Oxidation Reduction Potention	-134.64	mv
GS-AP-MW-36H	3/17/2020 11:32	pH	8.44	pH
GS-AP-MW-36H	3/17/2020 11:32	Temperature	18.06	C
GS-AP-MW-36H	3/17/2020 11:32	Turbidity	1.04	NTU
GS-AP-MW-36H	3/17/2020 11:37	Conductivity	547.78	uS/cm
GS-AP-MW-36H	3/17/2020 11:37	DO	0.42	mg/L
GS-AP-MW-36H	3/17/2020 11:37	Depth to Water Detail	231.24	ft
GS-AP-MW-36H	3/17/2020 11:37	Oxidation Reduction Potention	-136.67	mv
GS-AP-MW-36H	3/17/2020 11:37	pH	8.45	pH
GS-AP-MW-36H	3/17/2020 11:37	Temperature	18.22	C
GS-AP-MW-36H	3/17/2020 11:37	Turbidity	1.02	NTU
GS-AP-MW-36H	3/17/2020 11:42	Conductivity	555.93	uS/cm
GS-AP-MW-36H	3/17/2020 11:42	DO	0.42	mg/L
GS-AP-MW-36H	3/17/2020 11:42	Depth to Water Detail	231.34	ft
GS-AP-MW-36H	3/17/2020 11:42	Oxidation Reduction Potention	-138.64	mv
GS-AP-MW-36H	3/17/2020 11:42	pH	8.44	pH
GS-AP-MW-36H	3/17/2020 11:42	Temperature	18.28	C
GS-AP-MW-36H	3/17/2020 11:42	Turbidity	1.16	NTU

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-6D	3/17/2020 12:20	Conductivity	493.78	uS/cm
GS-AP-MW-6D	3/17/2020 12:20	DO	0.15	mg/L
GS-AP-MW-6D	3/17/2020 12:20	Depth to Water Detail	11.22	ft
GS-AP-MW-6D	3/17/2020 12:20	Oxidation Reduction Potention	-152.47	mv
GS-AP-MW-6D	3/17/2020 12:20	pH	7.4	pH
GS-AP-MW-6D	3/17/2020 12:20	Temperature	16.34	C
GS-AP-MW-6D	3/17/2020 12:20	Turbidity	1.47	NTU
GS-AP-MW-6D	3/17/2020 12:25	Conductivity	495.94	uS/cm
GS-AP-MW-6D	3/17/2020 12:25	DO	0.12	mg/L
GS-AP-MW-6D	3/17/2020 12:25	Depth to Water Detail	11.26	ft
GS-AP-MW-6D	3/17/2020 12:25	Oxidation Reduction Potention	-167.56	mv
GS-AP-MW-6D	3/17/2020 12:25	pH	7.4	pH
GS-AP-MW-6D	3/17/2020 12:25	Temperature	16.41	C
GS-AP-MW-6D	3/17/2020 12:25	Turbidity	1.33	NTU
GS-AP-MW-6D	3/17/2020 12:30	Conductivity	497.39	uS/cm
GS-AP-MW-6D	3/17/2020 12:30	DO	0.12	mg/L
GS-AP-MW-6D	3/17/2020 12:30	Depth to Water Detail	11.31	ft
GS-AP-MW-6D	3/17/2020 12:30	Oxidation Reduction Potention	-175.95	mv
GS-AP-MW-6D	3/17/2020 12:30	pH	7.38	pH
GS-AP-MW-6D	3/17/2020 12:30	Temperature	16.52	C
GS-AP-MW-6D	3/17/2020 12:30	Turbidity	0.98	NTU
GS-AP-MW-6D	3/17/2020 12:35	Conductivity	496.35	uS/cm
GS-AP-MW-6D	3/17/2020 12:35	DO	0.12	mg/L
GS-AP-MW-6D	3/17/2020 12:35	Depth to Water Detail	11.31	ft
GS-AP-MW-6D	3/17/2020 12:35	Oxidation Reduction Potention	-184.37	mv
GS-AP-MW-6D	3/17/2020 12:35	pH	7.39	pH
GS-AP-MW-6D	3/17/2020 12:35	Temperature	16.59	C
GS-AP-MW-6D	3/17/2020 12:35	Turbidity	1.28	NTU

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-6S	3/17/2020 10:22	Conductivity	512.16	uS/cm
GS-AP-MW-6S	3/17/2020 10:22	DO	0.12	mg/L
GS-AP-MW-6S	3/17/2020 10:22	Depth to Water Detail	16.86	ft
GS-AP-MW-6S	3/17/2020 10:22	Oxidation Reduction Potention	-112.67	mv
GS-AP-MW-6S	3/17/2020 10:22	pH	6.84	pH
GS-AP-MW-6S	3/17/2020 10:22	Temperature	15.56	C
GS-AP-MW-6S	3/17/2020 10:22	Turbidity	38.3	NTU
GS-AP-MW-6S	3/17/2020 10:27	Conductivity	503.71	uS/cm
GS-AP-MW-6S	3/17/2020 10:27	DO	0.1	mg/L
GS-AP-MW-6S	3/17/2020 10:27	Depth to Water Detail	16.86	ft
GS-AP-MW-6S	3/17/2020 10:27	Oxidation Reduction Potention	-106.62	mv
GS-AP-MW-6S	3/17/2020 10:27	pH	6.84	pH
GS-AP-MW-6S	3/17/2020 10:27	Temperature	15.56	C
GS-AP-MW-6S	3/17/2020 10:27	Turbidity	28.2	NTU
GS-AP-MW-6S	3/17/2020 10:32	Conductivity	511.83	uS/cm
GS-AP-MW-6S	3/17/2020 10:32	DO	0.15	mg/L
GS-AP-MW-6S	3/17/2020 10:32	Depth to Water Detail	16.86	ft
GS-AP-MW-6S	3/17/2020 10:32	Oxidation Reduction Potention	-99.22	mv
GS-AP-MW-6S	3/17/2020 10:32	pH	6.83	pH
GS-AP-MW-6S	3/17/2020 10:32	Temperature	15.53	C
GS-AP-MW-6S	3/17/2020 10:32	Turbidity	23.8	NTU
GS-AP-MW-6S	3/17/2020 10:37	Conductivity	489.45	uS/cm
GS-AP-MW-6S	3/17/2020 10:37	DO	0.43	mg/L
GS-AP-MW-6S	3/17/2020 10:37	Depth to Water Detail	16.86	ft
GS-AP-MW-6S	3/17/2020 10:37	Oxidation Reduction Potention	-87.49	mv
GS-AP-MW-6S	3/17/2020 10:37	pH	6.84	pH
GS-AP-MW-6S	3/17/2020 10:37	Temperature	15.47	C
GS-AP-MW-6S	3/17/2020 10:37	Turbidity	13.4	NTU
GS-AP-MW-6S	3/17/2020 10:42	Conductivity	475.72	uS/cm
GS-AP-MW-6S	3/17/2020 10:42	DO	0.81	mg/L
GS-AP-MW-6S	3/17/2020 10:42	Depth to Water Detail	16.86	ft
GS-AP-MW-6S	3/17/2020 10:42	Oxidation Reduction Potention	-78.52	mv
GS-AP-MW-6S	3/17/2020 10:42	pH	6.85	pH
GS-AP-MW-6S	3/17/2020 10:42	Temperature	15.46	C
GS-AP-MW-6S	3/17/2020 10:42	Turbidity	11.5	NTU
GS-AP-MW-6S	3/17/2020 10:47	Conductivity	465.1	uS/cm
GS-AP-MW-6S	3/17/2020 10:47	DO	1.39	mg/L
GS-AP-MW-6S	3/17/2020 10:47	Depth to Water Detail	16.86	ft
GS-AP-MW-6S	3/17/2020 10:47	Oxidation Reduction Potention	-66.35	mv
GS-AP-MW-6S	3/17/2020 10:47	pH	6.86	pH
GS-AP-MW-6S	3/17/2020 10:47	Temperature	15.44	C
GS-AP-MW-6S	3/17/2020 10:47	Turbidity	11.9	NTU
GS-AP-MW-6S	3/17/2020 10:52	Conductivity	455.09	uS/cm
GS-AP-MW-6S	3/17/2020 10:52	DO	1.97	mg/L
GS-AP-MW-6S	3/17/2020 10:52	Depth to Water Detail	16.86	ft
GS-AP-MW-6S	3/17/2020 10:52	Oxidation Reduction Potention	-56.78	mv

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-6S	3/17/2020 10:52	pH	6.88	pH
GS-AP-MW-6S	3/17/2020 10:52	Temperature	15.44	C
GS-AP-MW-6S	3/17/2020 10:52	Turbidity	7.89	NTU
GS-AP-MW-6S	3/17/2020 10:57	Conductivity	449.12	uS/cm
GS-AP-MW-6S	3/17/2020 10:57	DO	2.39	mg/L
GS-AP-MW-6S	3/17/2020 10:57	Depth to Water Detail	16.86	ft
GS-AP-MW-6S	3/17/2020 10:57	Oxidation Reduction Potention	-49.85	mv
GS-AP-MW-6S	3/17/2020 10:57	pH	6.88	pH
GS-AP-MW-6S	3/17/2020 10:57	Temperature	15.4	C
GS-AP-MW-6S	3/17/2020 10:57	Turbidity	11.6	NTU
GS-AP-MW-6S	3/17/2020 11:02	Conductivity	454.12	uS/cm
GS-AP-MW-6S	3/17/2020 11:02	DO	2.6	mg/L
GS-AP-MW-6S	3/17/2020 11:02	Depth to Water Detail	16.86	ft
GS-AP-MW-6S	3/17/2020 11:02	Oxidation Reduction Potention	-47.71	mv
GS-AP-MW-6S	3/17/2020 11:02	pH	6.89	pH
GS-AP-MW-6S	3/17/2020 11:02	Temperature	15.42	C
GS-AP-MW-6S	3/17/2020 11:02	Turbidity	6.23	NTU
GS-AP-MW-6S	3/17/2020 11:07	Conductivity	446.68	uS/cm
GS-AP-MW-6S	3/17/2020 11:07	DO	2.93	mg/L
GS-AP-MW-6S	3/17/2020 11:07	Depth to Water Detail	16.86	ft
GS-AP-MW-6S	3/17/2020 11:07	Oxidation Reduction Potention	-43.91	mv
GS-AP-MW-6S	3/17/2020 11:07	pH	6.9	pH
GS-AP-MW-6S	3/17/2020 11:07	Temperature	15.34	C
GS-AP-MW-6S	3/17/2020 11:07	Turbidity	5.74	NTU
GS-AP-MW-6S	3/17/2020 11:12	Conductivity	439.62	uS/cm
GS-AP-MW-6S	3/17/2020 11:12	DO	3.12	mg/L
GS-AP-MW-6S	3/17/2020 11:12	Depth to Water Detail	16.86	ft
GS-AP-MW-6S	3/17/2020 11:12	Oxidation Reduction Potention	-43.04	mv
GS-AP-MW-6S	3/17/2020 11:12	pH	6.91	pH
GS-AP-MW-6S	3/17/2020 11:12	Temperature	15.32	C
GS-AP-MW-6S	3/17/2020 11:12	Turbidity	4.23	NTU
GS-AP-MW-6S	3/17/2020 11:17	Conductivity	498.25	uS/cm
GS-AP-MW-6S	3/17/2020 11:17	DO	3.23	mg/L
GS-AP-MW-6S	3/17/2020 11:17	Depth to Water Detail	16.86	ft
GS-AP-MW-6S	3/17/2020 11:17	Oxidation Reduction Potention	-43.03	mv
GS-AP-MW-6S	3/17/2020 11:17	pH	6.92	pH
GS-AP-MW-6S	3/17/2020 11:17	Temperature	15.32	C
GS-AP-MW-6S	3/17/2020 11:17	Turbidity	4.45	NTU
GS-AP-MW-6S	3/17/2020 11:22	Conductivity	496.82	uS/cm
GS-AP-MW-6S	3/17/2020 11:22	DO	3.34	mg/L
GS-AP-MW-6S	3/17/2020 11:22	Depth to Water Detail	16.86	ft
GS-AP-MW-6S	3/17/2020 11:22	Oxidation Reduction Potention	-42.1	mv
GS-AP-MW-6S	3/17/2020 11:22	pH	6.92	pH
GS-AP-MW-6S	3/17/2020 11:22	Temperature	15.36	C
GS-AP-MW-6S	3/17/2020 11:22	Turbidity	4.54	NTU
GS-AP-MW-6S	3/17/2020 11:27	Conductivity	493.38	uS/cm

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-6S	3/17/2020 11:27	DO	3.47	mg/L
GS-AP-MW-6S	3/17/2020 11:27	Depth to Water Detail	16.86	ft
GS-AP-MW-6S	3/17/2020 11:27	Oxidation Reduction Potention	-41.81	mv
GS-AP-MW-6S	3/17/2020 11:27	pH	6.92	pH
GS-AP-MW-6S	3/17/2020 11:27	Temperature	15.34	C
GS-AP-MW-6S	3/17/2020 11:27	Turbidity	3.82	NTU

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-7	3/17/2020 15:04	Conductivity	524.79	uS/cm
GS-AP-MW-7	3/17/2020 15:04	DO	0.45	mg/L
GS-AP-MW-7	3/17/2020 15:04	Depth to Water Detail	10.47	ft
GS-AP-MW-7	3/17/2020 15:04	Oxidation Reduction Potention	-193.49	mv
GS-AP-MW-7	3/17/2020 15:04	pH	7.57	pH
GS-AP-MW-7	3/17/2020 15:04	Temperature	16.89	C
GS-AP-MW-7	3/17/2020 15:04	Turbidity	3.97	NTU
GS-AP-MW-7	3/17/2020 15:09	Conductivity	524.98	uS/cm
GS-AP-MW-7	3/17/2020 15:09	DO	0.36	mg/L
GS-AP-MW-7	3/17/2020 15:09	Depth to Water Detail	10.53	ft
GS-AP-MW-7	3/17/2020 15:09	Oxidation Reduction Potention	-187.11	mv
GS-AP-MW-7	3/17/2020 15:09	pH	7.53	pH
GS-AP-MW-7	3/17/2020 15:09	Temperature	16.95	C
GS-AP-MW-7	3/17/2020 15:09	Turbidity	17.4	NTU
GS-AP-MW-7	3/17/2020 15:14	Conductivity	524.6	uS/cm
GS-AP-MW-7	3/17/2020 15:14	DO	0.32	mg/L
GS-AP-MW-7	3/17/2020 15:14	Depth to Water Detail	10.68	ft
GS-AP-MW-7	3/17/2020 15:14	Oxidation Reduction Potention	-184.33	mv
GS-AP-MW-7	3/17/2020 15:14	pH	7.51	pH
GS-AP-MW-7	3/17/2020 15:14	Temperature	17	C
GS-AP-MW-7	3/17/2020 15:14	Turbidity	26.2	NTU
GS-AP-MW-7	3/17/2020 15:19	Conductivity	524.45	uS/cm
GS-AP-MW-7	3/17/2020 15:19	DO	0.31	mg/L
GS-AP-MW-7	3/17/2020 15:19	Depth to Water Detail	10.68	ft
GS-AP-MW-7	3/17/2020 15:19	Oxidation Reduction Potention	-183.03	mv
GS-AP-MW-7	3/17/2020 15:19	pH	7.53	pH
GS-AP-MW-7	3/17/2020 15:19	Temperature	16.96	C
GS-AP-MW-7	3/17/2020 15:19	Turbidity	33.4	NTU
GS-AP-MW-7	3/17/2020 15:24	Conductivity	524.46	uS/cm
GS-AP-MW-7	3/17/2020 15:24	DO	0.3	mg/L
GS-AP-MW-7	3/17/2020 15:24	Depth to Water Detail	10.71	ft
GS-AP-MW-7	3/17/2020 15:24	Oxidation Reduction Potention	-183.09	mv
GS-AP-MW-7	3/17/2020 15:24	pH	7.54	pH
GS-AP-MW-7	3/17/2020 15:24	Temperature	17.01	C
GS-AP-MW-7	3/17/2020 15:24	Turbidity	38.69	NTU
GS-AP-MW-7	3/17/2020 15:29	Conductivity	524.03	uS/cm
GS-AP-MW-7	3/17/2020 15:29	DO	0.31	mg/L
GS-AP-MW-7	3/17/2020 15:29	Depth to Water Detail	10.74	ft
GS-AP-MW-7	3/17/2020 15:29	Oxidation Reduction Potention	-183.68	mv
GS-AP-MW-7	3/17/2020 15:29	pH	7.57	pH
GS-AP-MW-7	3/17/2020 15:29	Temperature	17.01	C
GS-AP-MW-7	3/17/2020 15:29	Turbidity	35.3	NTU
GS-AP-MW-7	3/17/2020 15:34	Conductivity	524.25	uS/cm
GS-AP-MW-7	3/17/2020 15:34	DO	0.3	mg/L
GS-AP-MW-7	3/17/2020 15:34	Depth to Water Detail	10.78	ft
GS-AP-MW-7	3/17/2020 15:34	Oxidation Reduction Potention	-184.22	mv

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-7	3/17/2020 15:34	pH	7.59	pH
GS-AP-MW-7	3/17/2020 15:34	Temperature	17	C
GS-AP-MW-7	3/17/2020 15:34	Turbidity	46.6	NTU
GS-AP-MW-7	3/17/2020 15:39	Conductivity	524.36	uS/cm
GS-AP-MW-7	3/17/2020 15:39	DO	0.31	mg/L
GS-AP-MW-7	3/17/2020 15:39	Depth to Water Detail	10.82	ft
GS-AP-MW-7	3/17/2020 15:39	Oxidation Reduction Potention	-185.13	mv
GS-AP-MW-7	3/17/2020 15:39	pH	7.61	pH
GS-AP-MW-7	3/17/2020 15:39	Temperature	17.02	C
GS-AP-MW-7	3/17/2020 15:39	Turbidity	38.2	NTU
GS-AP-MW-7	3/17/2020 15:44	Conductivity	524.2	uS/cm
GS-AP-MW-7	3/17/2020 15:44	DO	0.3	mg/L
GS-AP-MW-7	3/17/2020 15:44	Depth to Water Detail	10.88	ft
GS-AP-MW-7	3/17/2020 15:44	Oxidation Reduction Potention	-185.58	mv
GS-AP-MW-7	3/17/2020 15:44	pH	7.63	pH
GS-AP-MW-7	3/17/2020 15:44	Temperature	17	C
GS-AP-MW-7	3/17/2020 15:44	Turbidity	43.92	NTU
GS-AP-MW-7	3/17/2020 15:49	Conductivity	523.99	uS/cm
GS-AP-MW-7	3/17/2020 15:49	DO	0.3	mg/L
GS-AP-MW-7	3/17/2020 15:49	Depth to Water Detail	10.88	ft
GS-AP-MW-7	3/17/2020 15:49	Oxidation Reduction Potention	-186.11	mv
GS-AP-MW-7	3/17/2020 15:49	pH	7.64	pH
GS-AP-MW-7	3/17/2020 15:49	Temperature	17.02	C
GS-AP-MW-7	3/17/2020 15:49	Turbidity	46.5	NTU
GS-AP-MW-7	3/17/2020 15:54	Conductivity	524.82	uS/cm
GS-AP-MW-7	3/17/2020 15:54	DO	0.31	mg/L
GS-AP-MW-7	3/17/2020 15:54	Depth to Water Detail	10.91	ft
GS-AP-MW-7	3/17/2020 15:54	Oxidation Reduction Potention	-186.7	mv
GS-AP-MW-7	3/17/2020 15:54	pH	7.65	pH
GS-AP-MW-7	3/17/2020 15:54	Temperature	17.01	C
GS-AP-MW-7	3/17/2020 15:54	Turbidity	38.4	NTU
GS-AP-MW-7	3/17/2020 15:59	Conductivity	523.71	uS/cm
GS-AP-MW-7	3/17/2020 15:59	DO	0.31	mg/L
GS-AP-MW-7	3/17/2020 15:59	Depth to Water Detail	10.94	ft
GS-AP-MW-7	3/17/2020 15:59	Oxidation Reduction Potention	-187.17	mv
GS-AP-MW-7	3/17/2020 15:59	pH	7.67	pH
GS-AP-MW-7	3/17/2020 15:59	Temperature	16.97	C
GS-AP-MW-7	3/17/2020 15:59	Turbidity	41.8	NTU
GS-AP-MW-7	3/17/2020 16:04	Conductivity	524.16	uS/cm
GS-AP-MW-7	3/17/2020 16:04	DO	0.31	mg/L
GS-AP-MW-7	3/17/2020 16:04	Depth to Water Detail	10.94	ft
GS-AP-MW-7	3/17/2020 16:04	Oxidation Reduction Potention	-187.97	mv
GS-AP-MW-7	3/17/2020 16:04	pH	7.68	pH
GS-AP-MW-7	3/17/2020 16:04	Temperature	16.95	C
GS-AP-MW-7	3/17/2020 16:04	Turbidity	45.4	NTU
GS-AP-MW-7	3/17/2020 16:09	Conductivity	524.07	uS/cm

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-7	3/17/2020 16:09	DO	0.3	mg/L
GS-AP-MW-7	3/17/2020 16:09	Depth to Water Detail	10.94	ft
GS-AP-MW-7	3/17/2020 16:09	Oxidation Reduction Potention	-188.77	mv
GS-AP-MW-7	3/17/2020 16:09	pH	7.69	pH
GS-AP-MW-7	3/17/2020 16:09	Temperature	17.06	C
GS-AP-MW-7	3/17/2020 16:09	Turbidity	40.7	NTU
GS-AP-MW-7	3/17/2020 16:14	Conductivity	524.07	uS/cm
GS-AP-MW-7	3/17/2020 16:14	DO	0.31	mg/L
GS-AP-MW-7	3/17/2020 16:14	Depth to Water Detail	10.94	ft
GS-AP-MW-7	3/17/2020 16:14	Oxidation Reduction Potention	-188.47	mv
GS-AP-MW-7	3/17/2020 16:14	pH	7.69	pH
GS-AP-MW-7	3/17/2020 16:14	Temperature	17	C
GS-AP-MW-7	3/17/2020 16:14	Turbidity	35.3	NTU
GS-AP-MW-7	3/17/2020 16:19	Conductivity	524.28	uS/cm
GS-AP-MW-7	3/17/2020 16:19	DO	0.31	mg/L
GS-AP-MW-7	3/17/2020 16:19	Depth to Water Detail	10.94	ft
GS-AP-MW-7	3/17/2020 16:19	Oxidation Reduction Potention	-188.61	mv
GS-AP-MW-7	3/17/2020 16:19	pH	7.69	pH
GS-AP-MW-7	3/17/2020 16:19	Temperature	17.01	C
GS-AP-MW-7	3/17/2020 16:19	Turbidity	31.6	NTU
GS-AP-MW-7	3/17/2020 16:24	Conductivity	523.6	uS/cm
GS-AP-MW-7	3/17/2020 16:24	DO	0.31	mg/L
GS-AP-MW-7	3/17/2020 16:24	Depth to Water Detail	10.94	ft
GS-AP-MW-7	3/17/2020 16:24	Oxidation Reduction Potention	-188.63	mv
GS-AP-MW-7	3/17/2020 16:24	pH	7.7	pH
GS-AP-MW-7	3/17/2020 16:24	Temperature	17	C
GS-AP-MW-7	3/17/2020 16:24	Turbidity	41.1	NTU
GS-AP-MW-7	3/17/2020 16:29	Conductivity	524.21	uS/cm
GS-AP-MW-7	3/17/2020 16:29	DO	0.32	mg/L
GS-AP-MW-7	3/17/2020 16:29	Depth to Water Detail	10.94	ft
GS-AP-MW-7	3/17/2020 16:29	Oxidation Reduction Potention	-189.31	mv
GS-AP-MW-7	3/17/2020 16:29	pH	7.7	pH
GS-AP-MW-7	3/17/2020 16:29	Temperature	16.91	C
GS-AP-MW-7	3/17/2020 16:29	Turbidity	43.5	NTU
GS-AP-MW-7	3/17/2020 16:34	Conductivity	524.25	uS/cm
GS-AP-MW-7	3/17/2020 16:34	DO	0.3	mg/L
GS-AP-MW-7	3/17/2020 16:34	Depth to Water Detail	10.94	ft
GS-AP-MW-7	3/17/2020 16:34	Oxidation Reduction Potention	-189.81	mv
GS-AP-MW-7	3/17/2020 16:34	pH	7.71	pH
GS-AP-MW-7	3/17/2020 16:34	Temperature	16.95	C
GS-AP-MW-7	3/17/2020 16:34	Turbidity	39.8	NTU
GS-AP-MW-7	3/17/2020 16:39	Conductivity	524.38	uS/cm
GS-AP-MW-7	3/17/2020 16:39	DO	0.31	mg/L
GS-AP-MW-7	3/17/2020 16:39	Depth to Water Detail	10.94	ft
GS-AP-MW-7	3/17/2020 16:39	Oxidation Reduction Potention	-190.16	mv
GS-AP-MW-7	3/17/2020 16:39	pH	7.71	pH

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-7	3/17/2020 16:39	Temperature	16.96	C
GS-AP-MW-7	3/17/2020 16:39	Turbidity	31	NTU
GS-AP-MW-7	3/17/2020 16:44	Conductivity	524.21	uS/cm
GS-AP-MW-7	3/17/2020 16:44	DO	0.3	mg/L
GS-AP-MW-7	3/17/2020 16:44	Depth to Water Detail	10.94	ft
GS-AP-MW-7	3/17/2020 16:44	Oxidation Reduction Potention	-189.61	mv
GS-AP-MW-7	3/17/2020 16:44	pH	7.7	pH
GS-AP-MW-7	3/17/2020 16:44	Temperature	17.02	C
GS-AP-MW-7	3/17/2020 16:44	Turbidity	40	NTU
GS-AP-MW-7	3/17/2020 16:49	Conductivity	525.22	uS/cm
GS-AP-MW-7	3/17/2020 16:49	DO	0.3	mg/L
GS-AP-MW-7	3/17/2020 16:49	Depth to Water Detail	10.94	ft
GS-AP-MW-7	3/17/2020 16:49	Oxidation Reduction Potention	-189.95	mv
GS-AP-MW-7	3/17/2020 16:49	pH	7.71	pH
GS-AP-MW-7	3/17/2020 16:49	Temperature	17	C
GS-AP-MW-7	3/17/2020 16:49	Turbidity	41.3	NTU
GS-AP-MW-7	3/17/2020 16:54	Conductivity	523.76	uS/cm
GS-AP-MW-7	3/17/2020 16:54	DO	0.31	mg/L
GS-AP-MW-7	3/17/2020 16:54	Depth to Water Detail	10.94	ft
GS-AP-MW-7	3/17/2020 16:54	Oxidation Reduction Potention	-190.29	mv
GS-AP-MW-7	3/17/2020 16:54	pH	7.71	pH
GS-AP-MW-7	3/17/2020 16:54	Temperature	16.93	C
GS-AP-MW-7	3/17/2020 16:54	Turbidity	48.4	NTU
GS-AP-MW-7	3/17/2020 16:59	Conductivity	524.45	uS/cm
GS-AP-MW-7	3/17/2020 16:59	DO	0.31	mg/L
GS-AP-MW-7	3/17/2020 16:59	Depth to Water Detail	10.94	ft
GS-AP-MW-7	3/17/2020 16:59	Oxidation Reduction Potention	-190.72	mv
GS-AP-MW-7	3/17/2020 16:59	pH	7.72	pH
GS-AP-MW-7	3/17/2020 16:59	Temperature	16.88	C
GS-AP-MW-7	3/17/2020 16:59	Turbidity	49.1	NTU
GS-AP-MW-7	3/17/2020 17:04	Conductivity	524.28	uS/cm
GS-AP-MW-7	3/17/2020 17:04	DO	0.31	mg/L
GS-AP-MW-7	3/17/2020 17:04	Depth to Water Detail	10.94	ft
GS-AP-MW-7	3/17/2020 17:04	Oxidation Reduction Potention	-190.7	mv
GS-AP-MW-7	3/17/2020 17:04	pH	7.72	pH
GS-AP-MW-7	3/17/2020 17:04	Temperature	16.89	C
GS-AP-MW-7	3/17/2020 17:04	Turbidity	48.91	NTU

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-8	3/18/2020 11:14	Conductivity	131.2	uS/cm
GS-AP-MW-8	3/18/2020 11:14	DO	1.48	mg/L
GS-AP-MW-8	3/18/2020 11:14	Depth to Water Detail	43.6	ft
GS-AP-MW-8	3/18/2020 11:14	Oxidation Reduction Potention	141.56	mv
GS-AP-MW-8	3/18/2020 11:14	pH	5.81	pH
GS-AP-MW-8	3/18/2020 11:14	Temperature	19.65	C
GS-AP-MW-8	3/18/2020 11:14	Turbidity	10.92	NTU
GS-AP-MW-8	3/18/2020 11:19	Conductivity	131.03	uS/cm
GS-AP-MW-8	3/18/2020 11:19	DO	1.2	mg/L
GS-AP-MW-8	3/18/2020 11:19	Depth to Water Detail	43.74	ft
GS-AP-MW-8	3/18/2020 11:19	Oxidation Reduction Potention	155.07	mv
GS-AP-MW-8	3/18/2020 11:19	pH	5.81	pH
GS-AP-MW-8	3/18/2020 11:19	Temperature	19.81	C
GS-AP-MW-8	3/18/2020 11:19	Turbidity	5.37	NTU
GS-AP-MW-8	3/18/2020 11:24	Conductivity	131.08	uS/cm
GS-AP-MW-8	3/18/2020 11:24	DO	1.11	mg/L
GS-AP-MW-8	3/18/2020 11:24	Depth to Water Detail	43.86	ft
GS-AP-MW-8	3/18/2020 11:24	Oxidation Reduction Potention	163.3	mv
GS-AP-MW-8	3/18/2020 11:24	pH	5.81	pH
GS-AP-MW-8	3/18/2020 11:24	Temperature	19.76	C
GS-AP-MW-8	3/18/2020 11:24	Turbidity	3.85	NTU
GS-AP-MW-8	3/18/2020 11:29	Conductivity	131.01	uS/cm
GS-AP-MW-8	3/18/2020 11:29	DO	1.06	mg/L
GS-AP-MW-8	3/18/2020 11:29	Depth to Water Detail	44.11	ft
GS-AP-MW-8	3/18/2020 11:29	Oxidation Reduction Potention	168.21	mv
GS-AP-MW-8	3/18/2020 11:29	pH	5.82	pH
GS-AP-MW-8	3/18/2020 11:29	Temperature	19.9	C
GS-AP-MW-8	3/18/2020 11:29	Turbidity	2.7	NTU
GS-AP-MW-8	3/18/2020 11:34	Conductivity	130.95	uS/cm
GS-AP-MW-8	3/18/2020 11:34	DO	1.02	mg/L
GS-AP-MW-8	3/18/2020 11:34	Depth to Water Detail	44.19	ft
GS-AP-MW-8	3/18/2020 11:34	Oxidation Reduction Potention	175.09	mv
GS-AP-MW-8	3/18/2020 11:34	pH	5.82	pH
GS-AP-MW-8	3/18/2020 11:34	Temperature	19.53	C
GS-AP-MW-8	3/18/2020 11:34	Turbidity	2.23	NTU
GS-AP-MW-8	3/18/2020 11:39	Conductivity	130.76	uS/cm
GS-AP-MW-8	3/18/2020 11:39	DO	1	mg/L
GS-AP-MW-8	3/18/2020 11:39	Depth to Water Detail	44.28	ft
GS-AP-MW-8	3/18/2020 11:39	Oxidation Reduction Potention	179.23	mv
GS-AP-MW-8	3/18/2020 11:39	pH	5.81	pH
GS-AP-MW-8	3/18/2020 11:39	Temperature	19.51	C
GS-AP-MW-8	3/18/2020 11:39	Turbidity	2.11	NTU

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-12	3/18/2020 12:53	Conductivity	389.87	uS/cm
GS-AP-MW-12	3/18/2020 12:53	DO	0.67	mg/L
GS-AP-MW-12	3/18/2020 12:53	Depth to Water Detail	72.98	ft
GS-AP-MW-12	3/18/2020 12:53	Oxidation Reduction Potention	-148.71	mv
GS-AP-MW-12	3/18/2020 12:53	pH	7.4	pH
GS-AP-MW-12	3/18/2020 12:53	Temperature	18.61	C
GS-AP-MW-12	3/18/2020 12:53	Turbidity	9.16	NTU
GS-AP-MW-12	3/18/2020 12:58	Conductivity	384.66	uS/cm
GS-AP-MW-12	3/18/2020 12:58	DO	0.39	mg/L
GS-AP-MW-12	3/18/2020 12:58	Depth to Water Detail	73.94	ft
GS-AP-MW-12	3/18/2020 12:58	Oxidation Reduction Potention	-145.04	mv
GS-AP-MW-12	3/18/2020 12:58	pH	7.36	pH
GS-AP-MW-12	3/18/2020 12:58	Temperature	18.62	C
GS-AP-MW-12	3/18/2020 12:58	Turbidity	4.97	NTU
GS-AP-MW-12	3/18/2020 13:03	Conductivity	381.42	uS/cm
GS-AP-MW-12	3/18/2020 13:03	DO	0.31	mg/L
GS-AP-MW-12	3/18/2020 13:03	Depth to Water Detail	75.21	ft
GS-AP-MW-12	3/18/2020 13:03	Oxidation Reduction Potention	-147.55	mv
GS-AP-MW-12	3/18/2020 13:03	pH	7.44	pH
GS-AP-MW-12	3/18/2020 13:03	Temperature	18.55	C
GS-AP-MW-12	3/18/2020 13:03	Turbidity	12.56	NTU
GS-AP-MW-12	3/18/2020 13:08	Conductivity	378.46	uS/cm
GS-AP-MW-12	3/18/2020 13:08	DO	0.3	mg/L
GS-AP-MW-12	3/18/2020 13:08	Depth to Water Detail	75.94	ft
GS-AP-MW-12	3/18/2020 13:08	Oxidation Reduction Potention	-151.62	mv
GS-AP-MW-12	3/18/2020 13:08	pH	7.52	pH
GS-AP-MW-12	3/18/2020 13:08	Temperature	18.63	C
GS-AP-MW-12	3/18/2020 13:08	Turbidity	8.89	NTU
GS-AP-MW-12	3/18/2020 13:13	Conductivity	376.46	uS/cm
GS-AP-MW-12	3/18/2020 13:13	DO	0.29	mg/L
GS-AP-MW-12	3/18/2020 13:13	Depth to Water Detail	76.93	ft
GS-AP-MW-12	3/18/2020 13:13	Oxidation Reduction Potention	-156.44	mv
GS-AP-MW-12	3/18/2020 13:13	pH	7.59	pH
GS-AP-MW-12	3/18/2020 13:13	Temperature	18.82	C
GS-AP-MW-12	3/18/2020 13:13	Turbidity	5.99	NTU
GS-AP-MW-12	3/18/2020 13:18	Conductivity	373.92	uS/cm
GS-AP-MW-12	3/18/2020 13:18	DO	0.3	mg/L
GS-AP-MW-12	3/18/2020 13:18	Depth to Water Detail	77.58	ft
GS-AP-MW-12	3/18/2020 13:18	Oxidation Reduction Potention	-159.65	mv
GS-AP-MW-12	3/18/2020 13:18	pH	7.66	pH
GS-AP-MW-12	3/18/2020 13:18	Temperature	18.5	C
GS-AP-MW-12	3/18/2020 13:18	Turbidity	6	NTU
GS-AP-MW-12	3/18/2020 13:23	Conductivity	372.29	uS/cm
GS-AP-MW-12	3/18/2020 13:23	DO	0.3	mg/L
GS-AP-MW-12	3/18/2020 13:23	Depth to Water Detail	78.28	ft
GS-AP-MW-12	3/18/2020 13:23	Oxidation Reduction Potention	-162.94	mv

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-12	3/18/2020 13:23	pH	7.71	pH
GS-AP-MW-12	3/18/2020 13:23	Temperature	18.52	C
GS-AP-MW-12	3/18/2020 13:23	Turbidity	8.14	NTU
GS-AP-MW-12	3/18/2020 13:28	Conductivity	371.06	uS/cm
GS-AP-MW-12	3/18/2020 13:28	DO	0.3	mg/L
GS-AP-MW-12	3/18/2020 13:28	Depth to Water Detail	78.88	ft
GS-AP-MW-12	3/18/2020 13:28	Oxidation Reduction Potention	-165.83	mv
GS-AP-MW-12	3/18/2020 13:28	pH	7.76	pH
GS-AP-MW-12	3/18/2020 13:28	Temperature	18.6	C
GS-AP-MW-12	3/18/2020 13:28	Turbidity	8.21	NTU
GS-AP-MW-12	3/18/2020 13:33	Conductivity	368.57	uS/cm
GS-AP-MW-12	3/18/2020 13:33	DO	0.3	mg/L
GS-AP-MW-12	3/18/2020 13:33	Depth to Water Detail	79.31	ft
GS-AP-MW-12	3/18/2020 13:33	Oxidation Reduction Potention	-168.4	mv
GS-AP-MW-12	3/18/2020 13:33	pH	7.81	pH
GS-AP-MW-12	3/18/2020 13:33	Temperature	18.62	C
GS-AP-MW-12	3/18/2020 13:33	Turbidity	6.83	NTU
GS-AP-MW-12	3/18/2020 13:38	Conductivity	367.44	uS/cm
GS-AP-MW-12	3/18/2020 13:38	DO	0.3	mg/L
GS-AP-MW-12	3/18/2020 13:38	Depth to Water Detail	79.77	ft
GS-AP-MW-12	3/18/2020 13:38	Oxidation Reduction Potention	-166.64	mv
GS-AP-MW-12	3/18/2020 13:38	pH	7.79	pH
GS-AP-MW-12	3/18/2020 13:38	Temperature	18.62	C
GS-AP-MW-12	3/18/2020 13:38	Turbidity	5.88	NTU
GS-AP-MW-12	3/18/2020 13:43	Conductivity	365.77	uS/cm
GS-AP-MW-12	3/18/2020 13:43	DO	0.31	mg/L
GS-AP-MW-12	3/18/2020 13:43	Depth to Water Detail	80.24	ft
GS-AP-MW-12	3/18/2020 13:43	Oxidation Reduction Potention	-161.31	mv
GS-AP-MW-12	3/18/2020 13:43	pH	7.75	pH
GS-AP-MW-12	3/18/2020 13:43	Temperature	18.52	C
GS-AP-MW-12	3/18/2020 13:43	Turbidity	3.73	NTU
GS-AP-MW-12	3/18/2020 13:48	Conductivity	366.73	uS/cm
GS-AP-MW-12	3/18/2020 13:48	DO	0.31	mg/L
GS-AP-MW-12	3/18/2020 13:48	Depth to Water Detail	80.64	ft
GS-AP-MW-12	3/18/2020 13:48	Oxidation Reduction Potention	-156.89	mv
GS-AP-MW-12	3/18/2020 13:48	pH	7.7	pH
GS-AP-MW-12	3/18/2020 13:48	Temperature	18.55	C
GS-AP-MW-12	3/18/2020 13:48	Turbidity	3.88	NTU
GS-AP-MW-12	3/18/2020 13:53	Conductivity	365.1	uS/cm
GS-AP-MW-12	3/18/2020 13:53	DO	0.32	mg/L
GS-AP-MW-12	3/18/2020 13:53	Depth to Water Detail	80.93	ft
GS-AP-MW-12	3/18/2020 13:53	Oxidation Reduction Potention	-153.34	mv
GS-AP-MW-12	3/18/2020 13:53	pH	7.66	pH
GS-AP-MW-12	3/18/2020 13:53	Temperature	18.74	C
GS-AP-MW-12	3/18/2020 13:53	Turbidity	3.25	NTU
GS-AP-MW-12	3/18/2020 13:58	Conductivity	364.22	uS/cm

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-12	3/18/2020 13:58	DO	0.31	mg/L
GS-AP-MW-12	3/18/2020 13:58	Depth to Water Detail	81.14	ft
GS-AP-MW-12	3/18/2020 13:58	Oxidation Reduction Potention	-151.01	mv
GS-AP-MW-12	3/18/2020 13:58	pH	7.64	pH
GS-AP-MW-12	3/18/2020 13:58	Temperature	18.55	C
GS-AP-MW-12	3/18/2020 13:58	Turbidity	3.01	NTU
GS-AP-MW-12	3/18/2020 14:03	Conductivity	364.85	uS/cm
GS-AP-MW-12	3/18/2020 14:03	DO	0.32	mg/L
GS-AP-MW-12	3/18/2020 14:03	Depth to Water Detail	81.44	ft
GS-AP-MW-12	3/18/2020 14:03	Oxidation Reduction Potention	-148.56	mv
GS-AP-MW-12	3/18/2020 14:03	pH	7.6	pH
GS-AP-MW-12	3/18/2020 14:03	Temperature	18.9	C
GS-AP-MW-12	3/18/2020 14:03	Turbidity	3.08	NTU
GS-AP-MW-12	3/18/2020 14:08	Conductivity	362.89	uS/cm
GS-AP-MW-12	3/18/2020 14:08	DO	0.31	mg/L
GS-AP-MW-12	3/18/2020 14:08	Depth to Water Detail	81.72	ft
GS-AP-MW-12	3/18/2020 14:08	Oxidation Reduction Potention	-145.17	mv
GS-AP-MW-12	3/18/2020 14:08	pH	7.56	pH
GS-AP-MW-12	3/18/2020 14:08	Temperature	18.67	C
GS-AP-MW-12	3/18/2020 14:08	Turbidity	1.83	NTU
GS-AP-MW-12	3/18/2020 14:13	Conductivity	361.79	uS/cm
GS-AP-MW-12	3/18/2020 14:13	DO	0.32	mg/L
GS-AP-MW-12	3/18/2020 14:13	Depth to Water Detail	81.81	ft
GS-AP-MW-12	3/18/2020 14:13	Oxidation Reduction Potention	-145.15	mv
GS-AP-MW-12	3/18/2020 14:13	pH	7.57	pH
GS-AP-MW-12	3/18/2020 14:13	Temperature	18.49	C
GS-AP-MW-12	3/18/2020 14:13	Turbidity	2.1	NTU
GS-AP-MW-12	3/18/2020 14:18	Conductivity	362.88	uS/cm
GS-AP-MW-12	3/18/2020 14:18	DO	0.32	mg/L
GS-AP-MW-12	3/18/2020 14:18	Depth to Water Detail	81.98	ft
GS-AP-MW-12	3/18/2020 14:18	Oxidation Reduction Potention	-144.01	mv
GS-AP-MW-12	3/18/2020 14:18	pH	7.56	pH
GS-AP-MW-12	3/18/2020 14:18	Temperature	18.51	C
GS-AP-MW-12	3/18/2020 14:18	Turbidity	2.05	NTU

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-18	3/18/2020 15:49	Conductivity	968.14	uS/cm
GS-AP-MW-18	3/18/2020 15:49	DO	0.19	mg/L
GS-AP-MW-18	3/18/2020 15:49	Depth to Water Detail	43.6	ft
GS-AP-MW-18	3/18/2020 15:49	Oxidation Reduction Potention	-93.34	mv
GS-AP-MW-18	3/18/2020 15:49	pH	6.82	pH
GS-AP-MW-18	3/18/2020 15:49	Temperature	17.07	C
GS-AP-MW-18	3/18/2020 15:49	Turbidity	20.8	NTU
GS-AP-MW-18	3/18/2020 15:54	Conductivity	973.62	uS/cm
GS-AP-MW-18	3/18/2020 15:54	DO	0.23	mg/L
GS-AP-MW-18	3/18/2020 15:54	Depth to Water Detail	43.96	ft
GS-AP-MW-18	3/18/2020 15:54	Oxidation Reduction Potention	-87.02	mv
GS-AP-MW-18	3/18/2020 15:54	pH	6.78	pH
GS-AP-MW-18	3/18/2020 15:54	Temperature	16.7	C
GS-AP-MW-18	3/18/2020 15:54	Turbidity	12	NTU
GS-AP-MW-18	3/18/2020 15:59	Conductivity	969.31	uS/cm
GS-AP-MW-18	3/18/2020 15:59	DO	0.17	mg/L
GS-AP-MW-18	3/18/2020 15:59	Depth to Water Detail	44.03	ft
GS-AP-MW-18	3/18/2020 15:59	Oxidation Reduction Potention	-95.48	mv
GS-AP-MW-18	3/18/2020 15:59	pH	6.78	pH
GS-AP-MW-18	3/18/2020 15:59	Temperature	16.7	C
GS-AP-MW-18	3/18/2020 15:59	Turbidity	12.1	NTU
GS-AP-MW-18	3/18/2020 16:04	Conductivity	960.1	uS/cm
GS-AP-MW-18	3/18/2020 16:04	DO	0.16	mg/L
GS-AP-MW-18	3/18/2020 16:04	Depth to Water Detail	44.09	ft
GS-AP-MW-18	3/18/2020 16:04	Oxidation Reduction Potention	-103.93	mv
GS-AP-MW-18	3/18/2020 16:04	pH	6.81	pH
GS-AP-MW-18	3/18/2020 16:04	Temperature	16.72	C
GS-AP-MW-18	3/18/2020 16:04	Turbidity	8.37	NTU
GS-AP-MW-18	3/18/2020 16:09	Conductivity	953.38	uS/cm
GS-AP-MW-18	3/18/2020 16:09	DO	0.16	mg/L
GS-AP-MW-18	3/18/2020 16:09	Depth to Water Detail	44.09	ft
GS-AP-MW-18	3/18/2020 16:09	Oxidation Reduction Potention	-110.91	mv
GS-AP-MW-18	3/18/2020 16:09	pH	6.84	pH
GS-AP-MW-18	3/18/2020 16:09	Temperature	16.76	C
GS-AP-MW-18	3/18/2020 16:09	Turbidity	9.71	NTU
GS-AP-MW-18	3/18/2020 16:14	Conductivity	946.37	uS/cm
GS-AP-MW-18	3/18/2020 16:14	DO	0.16	mg/L
GS-AP-MW-18	3/18/2020 16:14	Depth to Water Detail	44.09	ft
GS-AP-MW-18	3/18/2020 16:14	Oxidation Reduction Potention	-117.98	mv
GS-AP-MW-18	3/18/2020 16:14	pH	6.89	pH
GS-AP-MW-18	3/18/2020 16:14	Temperature	16.75	C
GS-AP-MW-18	3/18/2020 16:14	Turbidity	7.68	NTU
GS-AP-MW-18	3/18/2020 16:19	Conductivity	938.3	uS/cm
GS-AP-MW-18	3/18/2020 16:19	DO	0.15	mg/L
GS-AP-MW-18	3/18/2020 16:19	Depth to Water Detail	44.09	ft
GS-AP-MW-18	3/18/2020 16:19	Oxidation Reduction Potention	-123.47	mv

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-18	3/18/2020 16:19	pH	6.92	pH
GS-AP-MW-18	3/18/2020 16:19	Temperature	16.69	C
GS-AP-MW-18	3/18/2020 16:19	Turbidity	10.04	NTU
GS-AP-MW-18	3/18/2020 16:24	Conductivity	927.1	uS/cm
GS-AP-MW-18	3/18/2020 16:24	DO	0.15	mg/L
GS-AP-MW-18	3/18/2020 16:24	Depth to Water Detail	44.09	ft
GS-AP-MW-18	3/18/2020 16:24	Oxidation Reduction Potention	-129.59	mv
GS-AP-MW-18	3/18/2020 16:24	pH	6.96	pH
GS-AP-MW-18	3/18/2020 16:24	Temperature	16.67	C
GS-AP-MW-18	3/18/2020 16:24	Turbidity	11.13	NTU
GS-AP-MW-18	3/18/2020 16:29	Conductivity	922.27	uS/cm
GS-AP-MW-18	3/18/2020 16:29	DO	0.15	mg/L
GS-AP-MW-18	3/18/2020 16:29	Depth to Water Detail	44.09	ft
GS-AP-MW-18	3/18/2020 16:29	Oxidation Reduction Potention	-134.06	mv
GS-AP-MW-18	3/18/2020 16:29	pH	6.99	pH
GS-AP-MW-18	3/18/2020 16:29	Temperature	16.71	C
GS-AP-MW-18	3/18/2020 16:29	Turbidity	9.22	NTU

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-23H	3/17/2020 13:34	Conductivity	825.39	uS/cm
GS-AP-MW-23H	3/17/2020 13:34	DO	0.2	mg/L
GS-AP-MW-23H	3/17/2020 13:34	Depth to Water Detail	29.03	ft
GS-AP-MW-23H	3/17/2020 13:34	Oxidation Reduction Potention	-38.87	mv
GS-AP-MW-23H	3/17/2020 13:34	pH	5.93	pH
GS-AP-MW-23H	3/17/2020 13:34	Temperature	18.04	C
GS-AP-MW-23H	3/17/2020 13:34	Turbidity	2.91	NTU
GS-AP-MW-23H	3/17/2020 13:39	Conductivity	824.17	uS/cm
GS-AP-MW-23H	3/17/2020 13:39	DO	0.17	mg/L
GS-AP-MW-23H	3/17/2020 13:39	Depth to Water Detail	29.03	ft
GS-AP-MW-23H	3/17/2020 13:39	Oxidation Reduction Potention	-35.99	mv
GS-AP-MW-23H	3/17/2020 13:39	pH	5.91	pH
GS-AP-MW-23H	3/17/2020 13:39	Temperature	18.09	C
GS-AP-MW-23H	3/17/2020 13:39	Turbidity	1.82	NTU
GS-AP-MW-23H	3/17/2020 13:44	Conductivity	825.37	uS/cm
GS-AP-MW-23H	3/17/2020 13:44	DO	0.15	mg/L
GS-AP-MW-23H	3/17/2020 13:44	Depth to Water Detail	29.03	ft
GS-AP-MW-23H	3/17/2020 13:44	Oxidation Reduction Potention	-36.12	mv
GS-AP-MW-23H	3/17/2020 13:44	pH	5.93	pH
GS-AP-MW-23H	3/17/2020 13:44	Temperature	18.08	C
GS-AP-MW-23H	3/17/2020 13:44	Turbidity	1.61	NTU
GS-AP-MW-23H	3/17/2020 13:49	Conductivity	827.1	uS/cm
GS-AP-MW-23H	3/17/2020 13:49	DO	0.15	mg/L
GS-AP-MW-23H	3/17/2020 13:49	Depth to Water Detail	29.03	ft
GS-AP-MW-23H	3/17/2020 13:49	Oxidation Reduction Potention	-37.21	mv
GS-AP-MW-23H	3/17/2020 13:49	pH	5.95	pH
GS-AP-MW-23H	3/17/2020 13:49	Temperature	18.05	C
GS-AP-MW-23H	3/17/2020 13:49	Turbidity	1.71	NTU

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-24H	3/18/2020 10:17	Conductivity	420.57	uS/cm
GS-AP-MW-24H	3/18/2020 10:17	DO	0.11	mg/L
GS-AP-MW-24H	3/18/2020 10:17	Depth to Water Detail	6.24	ft
GS-AP-MW-24H	3/18/2020 10:17	Oxidation Reduction Potention	-108.74	mv
GS-AP-MW-24H	3/18/2020 10:17	pH	7.06	pH
GS-AP-MW-24H	3/18/2020 10:17	Temperature	17.53	C
GS-AP-MW-24H	3/18/2020 10:17	Turbidity	4.03	NTU
GS-AP-MW-24H	3/18/2020 10:22	Conductivity	420.42	uS/cm
GS-AP-MW-24H	3/18/2020 10:22	DO	0.1	mg/L
GS-AP-MW-24H	3/18/2020 10:22	Depth to Water Detail	6.36	ft
GS-AP-MW-24H	3/18/2020 10:22	Oxidation Reduction Potention	-108.22	mv
GS-AP-MW-24H	3/18/2020 10:22	pH	7.04	pH
GS-AP-MW-24H	3/18/2020 10:22	Temperature	17.58	C
GS-AP-MW-24H	3/18/2020 10:22	Turbidity	4.16	NTU
GS-AP-MW-24H	3/18/2020 10:27	Conductivity	419.97	uS/cm
GS-AP-MW-24H	3/18/2020 10:27	DO	0.1	mg/L
GS-AP-MW-24H	3/18/2020 10:27	Depth to Water Detail	6.44	ft
GS-AP-MW-24H	3/18/2020 10:27	Oxidation Reduction Potention	-104.74	mv
GS-AP-MW-24H	3/18/2020 10:27	pH	6.99	pH
GS-AP-MW-24H	3/18/2020 10:27	Temperature	17.6	C
GS-AP-MW-24H	3/18/2020 10:27	Turbidity	4.77	NTU
GS-AP-MW-24H	3/18/2020 10:32	Conductivity	421.28	uS/cm
GS-AP-MW-24H	3/18/2020 10:32	DO	0.1	mg/L
GS-AP-MW-24H	3/18/2020 10:32	Depth to Water Detail	6.44	ft
GS-AP-MW-24H	3/18/2020 10:32	Oxidation Reduction Potention	-105.27	mv
GS-AP-MW-24H	3/18/2020 10:32	pH	7	pH
GS-AP-MW-24H	3/18/2020 10:32	Temperature	17.68	C
GS-AP-MW-24H	3/18/2020 10:32	Turbidity	4.51	NTU

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-41HD	3/18/2020 9:21	Conductivity	479.77	uS/cm
GS-AP-MW-41HD	3/18/2020 9:21	DO	0.19	mg/L
GS-AP-MW-41HD	3/18/2020 9:21	Depth to Water Detail	2.96	ft
GS-AP-MW-41HD	3/18/2020 9:21	Oxidation Reduction Potention	-25	mv
GS-AP-MW-41HD	3/18/2020 9:21	pH	7.17	pH
GS-AP-MW-41HD	3/18/2020 9:21	Temperature	15.94	C
GS-AP-MW-41HD	3/18/2020 9:21	Turbidity	13.2	NTU
GS-AP-MW-41HD	3/18/2020 9:26	Conductivity	477.22	uS/cm
GS-AP-MW-41HD	3/18/2020 9:26	DO	0.15	mg/L
GS-AP-MW-41HD	3/18/2020 9:26	Depth to Water Detail	3.09	ft
GS-AP-MW-41HD	3/18/2020 9:26	Oxidation Reduction Potention	-26.04	mv
GS-AP-MW-41HD	3/18/2020 9:26	pH	7.18	pH
GS-AP-MW-41HD	3/18/2020 9:26	Temperature	16.06	C
GS-AP-MW-41HD	3/18/2020 9:26	Turbidity	3.08	NTU
GS-AP-MW-41HD	3/18/2020 9:31	Conductivity	476.82	uS/cm
GS-AP-MW-41HD	3/18/2020 9:31	DO	0.14	mg/L
GS-AP-MW-41HD	3/18/2020 9:31	Depth to Water Detail	3.27	ft
GS-AP-MW-41HD	3/18/2020 9:31	Oxidation Reduction Potention	-28.88	mv
GS-AP-MW-41HD	3/18/2020 9:31	pH	7.21	pH
GS-AP-MW-41HD	3/18/2020 9:31	Temperature	16.14	C
GS-AP-MW-41HD	3/18/2020 9:31	Turbidity	2.58	NTU
GS-AP-MW-41HD	3/18/2020 9:36	Conductivity	476.11	uS/cm
GS-AP-MW-41HD	3/18/2020 9:36	DO	0.14	mg/L
GS-AP-MW-41HD	3/18/2020 9:36	Depth to Water Detail	3.29	ft
GS-AP-MW-41HD	3/18/2020 9:36	Oxidation Reduction Potention	-27.76	mv
GS-AP-MW-41HD	3/18/2020 9:36	pH	7.2	pH
GS-AP-MW-41HD	3/18/2020 9:36	Temperature	16.15	C
GS-AP-MW-41HD	3/18/2020 9:36	Turbidity	2.45	NTU

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-2	3/25/2020 8:08	Conductivity	553.47	uS/cm
GS-AP-MW-2	3/25/2020 8:08	DO	2.12	mg/L
GS-AP-MW-2	3/25/2020 8:08	Depth to Water Detail	146.55	ft
GS-AP-MW-2	3/25/2020 8:08	Oxidation Reduction Potention	-103.12	mv
GS-AP-MW-2	3/25/2020 8:08	pH	8.91	pH
GS-AP-MW-2	3/25/2020 8:08	Temperature	16.82	C
GS-AP-MW-2	3/25/2020 8:08	Turbidity	1.89	NTU
GS-AP-MW-2	3/25/2020 8:13	Conductivity	545.67	uS/cm
GS-AP-MW-2	3/25/2020 8:13	DO	1.11	mg/L
GS-AP-MW-2	3/25/2020 8:13	Depth to Water Detail	146.55	ft
GS-AP-MW-2	3/25/2020 8:13	Oxidation Reduction Potention	-126.08	mv
GS-AP-MW-2	3/25/2020 8:13	pH	9.14	pH
GS-AP-MW-2	3/25/2020 8:13	Temperature	16.81	C
GS-AP-MW-2	3/25/2020 8:13	Turbidity	1.76	NTU
GS-AP-MW-2	3/25/2020 8:18	Conductivity	540.61	uS/cm
GS-AP-MW-2	3/25/2020 8:18	DO	0.87	mg/L
GS-AP-MW-2	3/25/2020 8:18	Depth to Water Detail	146.55	ft
GS-AP-MW-2	3/25/2020 8:18	Oxidation Reduction Potention	-134.93	mv
GS-AP-MW-2	3/25/2020 8:18	pH	9.22	pH
GS-AP-MW-2	3/25/2020 8:18	Temperature	16.85	C
GS-AP-MW-2	3/25/2020 8:18	Turbidity	1.64	NTU
GS-AP-MW-2	3/25/2020 8:23	Conductivity	539.67	uS/cm
GS-AP-MW-2	3/25/2020 8:23	DO	0.77	mg/L
GS-AP-MW-2	3/25/2020 8:23	Depth to Water Detail	146.55	ft
GS-AP-MW-2	3/25/2020 8:23	Oxidation Reduction Potention	-143.04	mv
GS-AP-MW-2	3/25/2020 8:23	pH	9.26	pH
GS-AP-MW-2	3/25/2020 8:23	Temperature	16.84	C
GS-AP-MW-2	3/25/2020 8:23	Turbidity	1.51	NTU
GS-AP-MW-2	3/25/2020 8:28	Conductivity	536.55	uS/cm
GS-AP-MW-2	3/25/2020 8:28	DO	0.74	mg/L
GS-AP-MW-2	3/25/2020 8:28	Depth to Water Detail	146.55	ft
GS-AP-MW-2	3/25/2020 8:28	Oxidation Reduction Potention	-150.15	mv
GS-AP-MW-2	3/25/2020 8:28	pH	9.29	pH
GS-AP-MW-2	3/25/2020 8:28	Temperature	16.85	C
GS-AP-MW-2	3/25/2020 8:28	Turbidity	1.47	NTU

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-12V	3/24/2020 8:48	Conductivity	969.76	uS/cm
GS-AP-MW-12V	3/24/2020 8:48	DO	0.75	mg/L
GS-AP-MW-12V	3/24/2020 8:48	Depth to Water Detail	91.76	ft
GS-AP-MW-12V	3/24/2020 8:48	Oxidation Reduction Potention	-181.8	mv
GS-AP-MW-12V	3/24/2020 8:48	pH	11.56	pH
GS-AP-MW-12V	3/24/2020 8:48	Temperature	17.48	C
GS-AP-MW-12V	3/24/2020 8:48	Turbidity	31.6	NTU
GS-AP-MW-12V	3/24/2020 8:53	Conductivity	937.1	uS/cm
GS-AP-MW-12V	3/24/2020 8:53	DO	0.58	mg/L
GS-AP-MW-12V	3/24/2020 8:53	Depth to Water Detail	93.01	ft
GS-AP-MW-12V	3/24/2020 8:53	Oxidation Reduction Potention	-218.78	mv
GS-AP-MW-12V	3/24/2020 8:53	pH	11.58	pH
GS-AP-MW-12V	3/24/2020 8:53	Temperature	17.48	C
GS-AP-MW-12V	3/24/2020 8:53	Turbidity	29.4	NTU
GS-AP-MW-12V	3/24/2020 8:58	Conductivity	838.94	uS/cm
GS-AP-MW-12V	3/24/2020 8:58	DO	0.55	mg/L
GS-AP-MW-12V	3/24/2020 8:58	Depth to Water Detail	94.24	ft
GS-AP-MW-12V	3/24/2020 8:58	Oxidation Reduction Potention	-227.29	mv
GS-AP-MW-12V	3/24/2020 8:58	pH	11.55	pH
GS-AP-MW-12V	3/24/2020 8:58	Temperature	17.53	C
GS-AP-MW-12V	3/24/2020 8:58	Turbidity	48.1	NTU
GS-AP-MW-12V	3/24/2020 9:03	Conductivity	707.35	uS/cm
GS-AP-MW-12V	3/24/2020 9:03	DO	0.52	mg/L
GS-AP-MW-12V	3/24/2020 9:03	Depth to Water Detail	95.46	ft
GS-AP-MW-12V	3/24/2020 9:03	Oxidation Reduction Potention	-231.54	mv
GS-AP-MW-12V	3/24/2020 9:03	pH	11.5	pH
GS-AP-MW-12V	3/24/2020 9:03	Temperature	17.55	C
GS-AP-MW-12V	3/24/2020 9:03	Turbidity	61	NTU
GS-AP-MW-12V	3/24/2020 9:08	Conductivity	581.05	uS/cm
GS-AP-MW-12V	3/24/2020 9:08	DO	0.49	mg/L
GS-AP-MW-12V	3/24/2020 9:08	Depth to Water Detail	96.34	ft
GS-AP-MW-12V	3/24/2020 9:08	Oxidation Reduction Potention	-234.33	mv
GS-AP-MW-12V	3/24/2020 9:08	pH	11.43	pH
GS-AP-MW-12V	3/24/2020 9:08	Temperature	17.6	C
GS-AP-MW-12V	3/24/2020 9:08	Turbidity	62.8	NTU
GS-AP-MW-12V	3/24/2020 9:13	Conductivity	477.86	uS/cm
GS-AP-MW-12V	3/24/2020 9:13	DO	0.49	mg/L
GS-AP-MW-12V	3/24/2020 9:13	Depth to Water Detail	97.2	ft
GS-AP-MW-12V	3/24/2020 9:13	Oxidation Reduction Potention	-235.32	mv
GS-AP-MW-12V	3/24/2020 9:13	pH	11.33	pH
GS-AP-MW-12V	3/24/2020 9:13	Temperature	17.65	C
GS-AP-MW-12V	3/24/2020 9:13	Turbidity	70.1	NTU
GS-AP-MW-12V	3/24/2020 9:18	Conductivity	431.78	uS/cm
GS-AP-MW-12V	3/24/2020 9:18	DO	0.52	mg/L
GS-AP-MW-12V	3/24/2020 9:18	Depth to Water Detail	97.82	ft
GS-AP-MW-12V	3/24/2020 9:18	Oxidation Reduction Potention	-234.96	mv

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-12V	3/24/2020 9:18	pH	11.23	pH
GS-AP-MW-12V	3/24/2020 9:18	Temperature	17.72	C
GS-AP-MW-12V	3/24/2020 9:18	Turbidity	77.1	NTU
GS-AP-MW-12V	3/24/2020 9:23	Conductivity	334.35	uS/cm
GS-AP-MW-12V	3/24/2020 9:23	DO	0.64	mg/L
GS-AP-MW-12V	3/24/2020 9:23	Depth to Water Detail	98.16	ft
GS-AP-MW-12V	3/24/2020 9:23	Oxidation Reduction Potention	-224.41	mv
GS-AP-MW-12V	3/24/2020 9:23	pH	11.04	pH
GS-AP-MW-12V	3/24/2020 9:23	Temperature	17.89	C
GS-AP-MW-12V	3/24/2020 9:23	Turbidity	20	NTU
GS-AP-MW-12V	3/24/2020 9:28	Conductivity	262.44	uS/cm
GS-AP-MW-12V	3/24/2020 9:28	DO	0.79	mg/L
GS-AP-MW-12V	3/24/2020 9:28	Depth to Water Detail	98.51	ft
GS-AP-MW-12V	3/24/2020 9:28	Oxidation Reduction Potention	-213.8	mv
GS-AP-MW-12V	3/24/2020 9:28	pH	10.81	pH
GS-AP-MW-12V	3/24/2020 9:28	Temperature	18.04	C
GS-AP-MW-12V	3/24/2020 9:28	Turbidity	96	NTU
GS-AP-MW-12V	3/24/2020 9:33	Conductivity	210.38	uS/cm
GS-AP-MW-12V	3/24/2020 9:33	DO	0.65	mg/L
GS-AP-MW-12V	3/24/2020 9:33	Depth to Water Detail	98.91	ft
GS-AP-MW-12V	3/24/2020 9:33	Oxidation Reduction Potention	-214.99	mv
GS-AP-MW-12V	3/24/2020 9:33	pH	10.2	pH
GS-AP-MW-12V	3/24/2020 9:33	Temperature	17.65	C
GS-AP-MW-12V	3/24/2020 9:33	Turbidity	47	NTU
GS-AP-MW-12V	3/24/2020 9:38	Conductivity	230.56	uS/cm
GS-AP-MW-12V	3/24/2020 9:38	DO	0.58	mg/L
GS-AP-MW-12V	3/24/2020 9:38	Depth to Water Detail	99.42	ft
GS-AP-MW-12V	3/24/2020 9:38	Oxidation Reduction Potention	-219.72	mv
GS-AP-MW-12V	3/24/2020 9:38	pH	10.25	pH
GS-AP-MW-12V	3/24/2020 9:38	Temperature	17.73	C
GS-AP-MW-12V	3/24/2020 9:38	Turbidity	55	NTU
GS-AP-MW-12V	3/24/2020 9:43	Conductivity	229.4	uS/cm
GS-AP-MW-12V	3/24/2020 9:43	DO	0.57	mg/L
GS-AP-MW-12V	3/24/2020 9:43	Depth to Water Detail	100.04	ft
GS-AP-MW-12V	3/24/2020 9:43	Oxidation Reduction Potention	-222.71	mv
GS-AP-MW-12V	3/24/2020 9:43	pH	10.26	pH
GS-AP-MW-12V	3/24/2020 9:43	Temperature	17.71	C
GS-AP-MW-12V	3/24/2020 9:43	Turbidity	30	NTU
GS-AP-MW-12V	3/24/2020 9:48	Conductivity	218.44	uS/cm
GS-AP-MW-12V	3/24/2020 9:48	DO	0.57	mg/L
GS-AP-MW-12V	3/24/2020 9:48	Depth to Water Detail	100.45	ft
GS-AP-MW-12V	3/24/2020 9:48	Oxidation Reduction Potention	-223.74	mv
GS-AP-MW-12V	3/24/2020 9:48	pH	10.13	pH
GS-AP-MW-12V	3/24/2020 9:48	Temperature	17.73	C
GS-AP-MW-12V	3/24/2020 9:48	Turbidity	38	NTU
GS-AP-MW-12V	3/24/2020 9:53	Conductivity	213	uS/cm

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-12V	3/24/2020 9:53	DO	0.57	mg/L
GS-AP-MW-12V	3/24/2020 9:53	Depth to Water Detail	100.84	ft
GS-AP-MW-12V	3/24/2020 9:53	Oxidation Reduction Potention	-220.88	mv
GS-AP-MW-12V	3/24/2020 9:53	pH	9.97	pH
GS-AP-MW-12V	3/24/2020 9:53	Temperature	17.76	C
GS-AP-MW-12V	3/24/2020 9:53	Turbidity	44	NTU
GS-AP-MW-12V	3/24/2020 9:58	Conductivity	206.01	uS/cm
GS-AP-MW-12V	3/24/2020 9:58	DO	0.58	mg/L
GS-AP-MW-12V	3/24/2020 9:58	Depth to Water Detail	101.19	ft
GS-AP-MW-12V	3/24/2020 9:58	Oxidation Reduction Potention	-218.64	mv
GS-AP-MW-12V	3/24/2020 9:58	pH	9.88	pH
GS-AP-MW-12V	3/24/2020 9:58	Temperature	17.76	C
GS-AP-MW-12V	3/24/2020 9:58	Turbidity	32	NTU
GS-AP-MW-12V	3/24/2020 10:03	Conductivity	206.65	uS/cm
GS-AP-MW-12V	3/24/2020 10:03	DO	0.58	mg/L
GS-AP-MW-12V	3/24/2020 10:03	Depth to Water Detail	101.52	ft
GS-AP-MW-12V	3/24/2020 10:03	Oxidation Reduction Potention	-214.53	mv
GS-AP-MW-12V	3/24/2020 10:03	pH	9.69	pH
GS-AP-MW-12V	3/24/2020 10:03	Temperature	17.76	C
GS-AP-MW-12V	3/24/2020 10:03	Turbidity	40	NTU
GS-AP-MW-12V	3/24/2020 10:08	Conductivity	210.1	uS/cm
GS-AP-MW-12V	3/24/2020 10:08	DO	0.6	mg/L
GS-AP-MW-12V	3/24/2020 10:08	Depth to Water Detail	101.81	ft
GS-AP-MW-12V	3/24/2020 10:08	Oxidation Reduction Potention	-210.74	mv
GS-AP-MW-12V	3/24/2020 10:08	pH	9.53	pH
GS-AP-MW-12V	3/24/2020 10:08	Temperature	17.73	C
GS-AP-MW-12V	3/24/2020 10:08	Turbidity	35	NTU
GS-AP-MW-12V	3/24/2020 10:13	Conductivity	233.65	uS/cm
GS-AP-MW-12V	3/24/2020 10:13	DO	0.6	mg/L
GS-AP-MW-12V	3/24/2020 10:13	Depth to Water Detail	102.12	ft
GS-AP-MW-12V	3/24/2020 10:13	Oxidation Reduction Potention	-211.32	mv
GS-AP-MW-12V	3/24/2020 10:13	pH	9.53	pH
GS-AP-MW-12V	3/24/2020 10:13	Temperature	17.81	C
GS-AP-MW-12V	3/24/2020 10:13	Turbidity	52	NTU
GS-AP-MW-12V	3/24/2020 10:18	Conductivity	228.28	uS/cm
GS-AP-MW-12V	3/24/2020 10:18	DO	0.65	mg/L
GS-AP-MW-12V	3/24/2020 10:18	Depth to Water Detail	102.18	ft
GS-AP-MW-12V	3/24/2020 10:18	Oxidation Reduction Potention	-206.84	mv
GS-AP-MW-12V	3/24/2020 10:18	pH	9.38	pH
GS-AP-MW-12V	3/24/2020 10:18	Temperature	17.89	C
GS-AP-MW-12V	3/24/2020 10:18	Turbidity	49	NTU
GS-AP-MW-12V	3/24/2020 10:23	Conductivity	247.2	uS/cm
GS-AP-MW-12V	3/24/2020 10:23	DO	0.69	mg/L
GS-AP-MW-12V	3/24/2020 10:23	Depth to Water Detail	102.21	ft
GS-AP-MW-12V	3/24/2020 10:23	Oxidation Reduction Potention	-206.49	mv
GS-AP-MW-12V	3/24/2020 10:23	pH	9.09	pH

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-12V	3/24/2020 10:23	Temperature	17.84	C
GS-AP-MW-12V	3/24/2020 10:23	Turbidity	35	NTU
GS-AP-MW-12V	3/24/2020 10:28	Conductivity	257.91	uS/cm
GS-AP-MW-12V	3/24/2020 10:28	DO	0.68	mg/L
GS-AP-MW-12V	3/24/2020 10:28	Depth to Water Detail	102.29	ft
GS-AP-MW-12V	3/24/2020 10:28	Oxidation Reduction Potention	-221.98	mv
GS-AP-MW-12V	3/24/2020 10:28	pH	8.87	pH
GS-AP-MW-12V	3/24/2020 10:28	Temperature	17.91	C
GS-AP-MW-12V	3/24/2020 10:28	Turbidity	30	NTU
GS-AP-MW-12V	3/24/2020 10:33	Conductivity	262.27	uS/cm
GS-AP-MW-12V	3/24/2020 10:33	DO	0.67	mg/L
GS-AP-MW-12V	3/24/2020 10:33	Depth to Water Detail	102.33	ft
GS-AP-MW-12V	3/24/2020 10:33	Oxidation Reduction Potention	-226.61	mv
GS-AP-MW-12V	3/24/2020 10:33	pH	8.71	pH
GS-AP-MW-12V	3/24/2020 10:33	Temperature	17.91	C
GS-AP-MW-12V	3/24/2020 10:33	Turbidity	23	NTU
GS-AP-MW-12V	3/24/2020 10:38	Conductivity	269.43	uS/cm
GS-AP-MW-12V	3/24/2020 10:38	DO	0.7	mg/L
GS-AP-MW-12V	3/24/2020 10:38	Depth to Water Detail	102.41	ft
GS-AP-MW-12V	3/24/2020 10:38	Oxidation Reduction Potention	-225.71	mv
GS-AP-MW-12V	3/24/2020 10:38	pH	8.55	pH
GS-AP-MW-12V	3/24/2020 10:38	Temperature	17.96	C
GS-AP-MW-12V	3/24/2020 10:38	Turbidity	27	NTU
GS-AP-MW-12V	3/24/2020 10:43	Conductivity	275	uS/cm
GS-AP-MW-12V	3/24/2020 10:43	DO	0.73	mg/L
GS-AP-MW-12V	3/24/2020 10:43	Depth to Water Detail	102.46	ft
GS-AP-MW-12V	3/24/2020 10:43	Oxidation Reduction Potention	-220.77	mv
GS-AP-MW-12V	3/24/2020 10:43	pH	8.42	pH
GS-AP-MW-12V	3/24/2020 10:43	Temperature	17.99	C
GS-AP-MW-12V	3/24/2020 10:43	Turbidity	20	NTU
GS-AP-MW-12V	3/24/2020 10:48	Conductivity	280.12	uS/cm
GS-AP-MW-12V	3/24/2020 10:48	DO	0.74	mg/L
GS-AP-MW-12V	3/24/2020 10:48	Depth to Water Detail	102.5	ft
GS-AP-MW-12V	3/24/2020 10:48	Oxidation Reduction Potention	-207.7	mv
GS-AP-MW-12V	3/24/2020 10:48	pH	8.26	pH
GS-AP-MW-12V	3/24/2020 10:48	Temperature	18.11	C
GS-AP-MW-12V	3/24/2020 10:48	Turbidity	39	NTU
GS-AP-MW-12V	3/24/2020 10:53	Conductivity	314.57	uS/cm
GS-AP-MW-12V	3/24/2020 10:53	DO	0.74	mg/L
GS-AP-MW-12V	3/24/2020 10:53	Depth to Water Detail	102.58	ft
GS-AP-MW-12V	3/24/2020 10:53	Oxidation Reduction Potention	-199.7	mv
GS-AP-MW-12V	3/24/2020 10:53	pH	8.16	pH
GS-AP-MW-12V	3/24/2020 10:53	Temperature	18.08	C
GS-AP-MW-12V	3/24/2020 10:53	Turbidity	29	NTU
GS-AP-MW-12V	3/24/2020 10:58	Conductivity	314.73	uS/cm
GS-AP-MW-12V	3/24/2020 10:58	DO	0.75	mg/L

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-12V	3/24/2020 10:58	Depth to Water Detail	102.66	ft
GS-AP-MW-12V	3/24/2020 10:58	Oxidation Reduction Potention	-193.29	mv
GS-AP-MW-12V	3/24/2020 10:58	pH	8.08	pH
GS-AP-MW-12V	3/24/2020 10:58	Temperature	18.06	C
GS-AP-MW-12V	3/24/2020 10:58	Turbidity	81.7	NTU
GS-AP-MW-12V	3/24/2020 11:03	Conductivity	314.36	uS/cm
GS-AP-MW-12V	3/24/2020 11:03	DO	0.78	mg/L
GS-AP-MW-12V	3/24/2020 11:03	Depth to Water Detail	102.72	ft
GS-AP-MW-12V	3/24/2020 11:03	Oxidation Reduction Potention	-190.91	mv
GS-AP-MW-12V	3/24/2020 11:03	pH	8.06	pH
GS-AP-MW-12V	3/24/2020 11:03	Temperature	18.05	C
GS-AP-MW-12V	3/24/2020 11:03	Turbidity	81.9	NTU
GS-AP-MW-12V	3/24/2020 11:08	Conductivity	316.82	uS/cm
GS-AP-MW-12V	3/24/2020 11:08	DO	0.79	mg/L
GS-AP-MW-12V	3/24/2020 11:08	Depth to Water Detail	102.74	ft
GS-AP-MW-12V	3/24/2020 11:08	Oxidation Reduction Potention	-182.21	mv
GS-AP-MW-12V	3/24/2020 11:08	pH	7.98	pH
GS-AP-MW-12V	3/24/2020 11:08	Temperature	18.16	C
GS-AP-MW-12V	3/24/2020 11:08	Turbidity	70.7	NTU
GS-AP-MW-12V	3/24/2020 11:13	Conductivity	316.48	uS/cm
GS-AP-MW-12V	3/24/2020 11:13	DO	0.76	mg/L
GS-AP-MW-12V	3/24/2020 11:13	Depth to Water Detail	102.82	ft
GS-AP-MW-12V	3/24/2020 11:13	Oxidation Reduction Potention	-179.97	mv
GS-AP-MW-12V	3/24/2020 11:13	pH	7.96	pH
GS-AP-MW-12V	3/24/2020 11:13	Temperature	18.24	C
GS-AP-MW-12V	3/24/2020 11:13	Turbidity	72.5	NTU
GS-AP-MW-12V	3/24/2020 11:18	Conductivity	313.13	uS/cm
GS-AP-MW-12V	3/24/2020 11:18	DO	0.79	mg/L
GS-AP-MW-12V	3/24/2020 11:18	Depth to Water Detail	102.86	ft
GS-AP-MW-12V	3/24/2020 11:18	Oxidation Reduction Potention	-174.2	mv
GS-AP-MW-12V	3/24/2020 11:18	pH	7.89	pH
GS-AP-MW-12V	3/24/2020 11:18	Temperature	18.31	C
GS-AP-MW-12V	3/24/2020 11:18	Turbidity	63.6	NTU
GS-AP-MW-12V	3/24/2020 11:23	Conductivity	313.04	uS/cm
GS-AP-MW-12V	3/24/2020 11:23	DO	0.77	mg/L
GS-AP-MW-12V	3/24/2020 11:23	Depth to Water Detail	102.92	ft
GS-AP-MW-12V	3/24/2020 11:23	Oxidation Reduction Potention	-170.03	mv
GS-AP-MW-12V	3/24/2020 11:23	pH	7.86	pH
GS-AP-MW-12V	3/24/2020 11:23	Temperature	18.34	C
GS-AP-MW-12V	3/24/2020 11:23	Turbidity	66.9	NTU
GS-AP-MW-12V	3/24/2020 11:28	Conductivity	315.14	uS/cm
GS-AP-MW-12V	3/24/2020 11:28	DO	0.76	mg/L
GS-AP-MW-12V	3/24/2020 11:28	Depth to Water Detail	103.01	ft
GS-AP-MW-12V	3/24/2020 11:28	Oxidation Reduction Potention	-165.35	mv
GS-AP-MW-12V	3/24/2020 11:28	pH	7.8	pH
GS-AP-MW-12V	3/24/2020 11:28	Temperature	18.3	C

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-12V	3/24/2020 11:28	Turbidity	67.8	NTU

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-18V	3/25/2020 12:47	Conductivity	447.54	uS/cm
GS-AP-MW-18V	3/25/2020 12:47	DO	0.91	mg/L
GS-AP-MW-18V	3/25/2020 12:47	Depth to Water Detail	109.44	ft
GS-AP-MW-18V	3/25/2020 12:47	Oxidation Reduction Potention	-159.12	mv
GS-AP-MW-18V	3/25/2020 12:47	pH	8.08	pH
GS-AP-MW-18V	3/25/2020 12:47	Temperature	19.31	C
GS-AP-MW-18V	3/25/2020 12:47	Turbidity	2.69	NTU
GS-AP-MW-18V	3/25/2020 12:56	Conductivity	447.72	uS/cm
GS-AP-MW-18V	3/25/2020 12:56	DO	0.82	mg/L
GS-AP-MW-18V	3/25/2020 12:56	Depth to Water Detail	110.14	ft
GS-AP-MW-18V	3/25/2020 12:56	Oxidation Reduction Potention	-159.35	mv
GS-AP-MW-18V	3/25/2020 12:56	pH	8.19	pH
GS-AP-MW-18V	3/25/2020 12:56	Temperature	19.34	C
GS-AP-MW-18V	3/25/2020 12:56	Turbidity	2.11	NTU

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-21V	3/23/2020 15:20	Conductivity	6049.36	uS/cm
GS-AP-MW-21V	3/23/2020 15:20	DO	1.09	mg/L
GS-AP-MW-21V	3/23/2020 15:20	Depth to Water Detail	169.48	ft
GS-AP-MW-21V	3/23/2020 15:20	Oxidation Reduction Potention	-147.89	mv
GS-AP-MW-21V	3/23/2020 15:20	pH	7.75	pH
GS-AP-MW-21V	3/23/2020 15:20	Temperature	18.36	C
GS-AP-MW-21V	3/23/2020 15:20	Turbidity	5.91	NTU
GS-AP-MW-21V	3/23/2020 15:25	Conductivity	6183.23	uS/cm
GS-AP-MW-21V	3/23/2020 15:25	DO	0.8	mg/L
GS-AP-MW-21V	3/23/2020 15:25	Depth to Water Detail	170.17	ft
GS-AP-MW-21V	3/23/2020 15:25	Oxidation Reduction Potention	-174.62	mv
GS-AP-MW-21V	3/23/2020 15:25	pH	7.84	pH
GS-AP-MW-21V	3/23/2020 15:25	Temperature	18.29	C
GS-AP-MW-21V	3/23/2020 15:25	Turbidity	8.01	NTU
GS-AP-MW-21V	3/23/2020 15:30	Conductivity	6215.8	uS/cm
GS-AP-MW-21V	3/23/2020 15:30	DO	0.67	mg/L
GS-AP-MW-21V	3/23/2020 15:30	Depth to Water Detail	170.79	ft
GS-AP-MW-21V	3/23/2020 15:30	Oxidation Reduction Potention	-189.02	mv
GS-AP-MW-21V	3/23/2020 15:30	pH	7.88	pH
GS-AP-MW-21V	3/23/2020 15:30	Temperature	18.33	C
GS-AP-MW-21V	3/23/2020 15:30	Turbidity	7	NTU
GS-AP-MW-21V	3/23/2020 15:35	Conductivity	6234.52	uS/cm
GS-AP-MW-21V	3/23/2020 15:35	DO	0.62	mg/L
GS-AP-MW-21V	3/23/2020 15:35	Depth to Water Detail	171.44	ft
GS-AP-MW-21V	3/23/2020 15:35	Oxidation Reduction Potention	-197.97	mv
GS-AP-MW-21V	3/23/2020 15:35	pH	7.89	pH
GS-AP-MW-21V	3/23/2020 15:35	Temperature	18.21	C
GS-AP-MW-21V	3/23/2020 15:35	Turbidity	5.09	NTU
GS-AP-MW-21V	3/23/2020 15:40	Conductivity	6236.97	uS/cm
GS-AP-MW-21V	3/23/2020 15:40	DO	0.57	mg/L
GS-AP-MW-21V	3/23/2020 15:40	Depth to Water Detail	172.01	ft
GS-AP-MW-21V	3/23/2020 15:40	Oxidation Reduction Potention	-203.35	mv
GS-AP-MW-21V	3/23/2020 15:40	pH	7.9	pH
GS-AP-MW-21V	3/23/2020 15:40	Temperature	18.2	C
GS-AP-MW-21V	3/23/2020 15:40	Turbidity	4.58	NTU
GS-AP-MW-21V	3/23/2020 15:45	Conductivity	6233.41	uS/cm
GS-AP-MW-21V	3/23/2020 15:45	DO	0.57	mg/L
GS-AP-MW-21V	3/23/2020 15:45	Depth to Water Detail	172.56	ft
GS-AP-MW-21V	3/23/2020 15:45	Oxidation Reduction Potention	-207.2	mv
GS-AP-MW-21V	3/23/2020 15:45	pH	7.9	pH
GS-AP-MW-21V	3/23/2020 15:45	Temperature	18.15	C
GS-AP-MW-21V	3/23/2020 15:45	Turbidity	4.53	NTU
GS-AP-MW-21V	3/23/2020 15:50	Conductivity	6214.81	uS/cm
GS-AP-MW-21V	3/23/2020 15:50	DO	0.55	mg/L
GS-AP-MW-21V	3/23/2020 15:50	Depth to Water Detail	173.03	ft
GS-AP-MW-21V	3/23/2020 15:50	Oxidation Reduction Potention	-210.69	mv

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-21V	3/23/2020 15:50	pH	7.9	pH
GS-AP-MW-21V	3/23/2020 15:50	Temperature	18.27	C
GS-AP-MW-21V	3/23/2020 15:50	Turbidity	3.79	NTU
GS-AP-MW-21V	3/23/2020 15:55	Conductivity	6207.95	uS/cm
GS-AP-MW-21V	3/23/2020 15:55	DO	0.54	mg/L
GS-AP-MW-21V	3/23/2020 15:55	Depth to Water Detail	173.66	ft
GS-AP-MW-21V	3/23/2020 15:55	Oxidation Reduction Potention	-212.9	mv
GS-AP-MW-21V	3/23/2020 15:55	pH	7.9	pH
GS-AP-MW-21V	3/23/2020 15:55	Temperature	18.18	C
GS-AP-MW-21V	3/23/2020 15:55	Turbidity	3.49	NTU
GS-AP-MW-21V	3/23/2020 16:00	Conductivity	6191.37	uS/cm
GS-AP-MW-21V	3/23/2020 16:00	DO	0.54	mg/L
GS-AP-MW-21V	3/23/2020 16:00	Depth to Water Detail	174.15	ft
GS-AP-MW-21V	3/23/2020 16:00	Oxidation Reduction Potention	-215.47	mv
GS-AP-MW-21V	3/23/2020 16:00	pH	7.9	pH
GS-AP-MW-21V	3/23/2020 16:00	Temperature	18.15	C
GS-AP-MW-21V	3/23/2020 16:00	Turbidity	4.02	NTU
GS-AP-MW-21V	3/23/2020 16:05	Conductivity	6168.4	uS/cm
GS-AP-MW-21V	3/23/2020 16:05	DO	0.54	mg/L
GS-AP-MW-21V	3/23/2020 16:05	Depth to Water Detail	174.69	ft
GS-AP-MW-21V	3/23/2020 16:05	Oxidation Reduction Potention	-216.08	mv
GS-AP-MW-21V	3/23/2020 16:05	pH	7.9	pH
GS-AP-MW-21V	3/23/2020 16:05	Temperature	18.14	C
GS-AP-MW-21V	3/23/2020 16:05	Turbidity	3.5	NTU
GS-AP-MW-21V	3/23/2020 16:10	Conductivity	6149.17	uS/cm
GS-AP-MW-21V	3/23/2020 16:10	DO	0.56	mg/L
GS-AP-MW-21V	3/23/2020 16:10	Depth to Water Detail	175.21	ft
GS-AP-MW-21V	3/23/2020 16:10	Oxidation Reduction Potention	-218.09	mv
GS-AP-MW-21V	3/23/2020 16:10	pH	7.91	pH
GS-AP-MW-21V	3/23/2020 16:10	Temperature	18.11	C
GS-AP-MW-21V	3/23/2020 16:10	Turbidity	2.91	NTU
GS-AP-MW-21V	3/23/2020 16:15	Conductivity	6114.56	uS/cm
GS-AP-MW-21V	3/23/2020 16:15	DO	0.57	mg/L
GS-AP-MW-21V	3/23/2020 16:15	Depth to Water Detail	175.63	ft
GS-AP-MW-21V	3/23/2020 16:15	Oxidation Reduction Potention	-217.59	mv
GS-AP-MW-21V	3/23/2020 16:15	pH	7.91	pH
GS-AP-MW-21V	3/23/2020 16:15	Temperature	18.15	C
GS-AP-MW-21V	3/23/2020 16:15	Turbidity	2.58	NTU
GS-AP-MW-21V	3/23/2020 16:20	Conductivity	6081.66	uS/cm
GS-AP-MW-21V	3/23/2020 16:20	DO	0.55	mg/L
GS-AP-MW-21V	3/23/2020 16:20	Depth to Water Detail	176.16	ft
GS-AP-MW-21V	3/23/2020 16:20	Oxidation Reduction Potention	-218.63	mv
GS-AP-MW-21V	3/23/2020 16:20	pH	7.91	pH
GS-AP-MW-21V	3/23/2020 16:20	Temperature	18.18	C
GS-AP-MW-21V	3/23/2020 16:20	Turbidity	3.74	NTU
GS-AP-MW-21V	3/23/2020 16:25	Conductivity	6026.85	uS/cm

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-21V	3/23/2020 16:25	DO	0.55	mg/L
GS-AP-MW-21V	3/23/2020 16:25	Depth to Water Detail	176.47	ft
GS-AP-MW-21V	3/23/2020 16:25	Oxidation Reduction Potention	-219.19	mv
GS-AP-MW-21V	3/23/2020 16:25	pH	7.91	pH
GS-AP-MW-21V	3/23/2020 16:25	Temperature	18.16	C
GS-AP-MW-21V	3/23/2020 16:25	Turbidity	3.38	NTU
GS-AP-MW-21V	3/23/2020 16:30	Conductivity	5971.45	uS/cm
GS-AP-MW-21V	3/23/2020 16:30	DO	0.54	mg/L
GS-AP-MW-21V	3/23/2020 16:30	Depth to Water Detail	176.94	ft
GS-AP-MW-21V	3/23/2020 16:30	Oxidation Reduction Potention	-219.95	mv
GS-AP-MW-21V	3/23/2020 16:30	pH	7.91	pH
GS-AP-MW-21V	3/23/2020 16:30	Temperature	18.22	C
GS-AP-MW-21V	3/23/2020 16:30	Turbidity	3.44	NTU
GS-AP-MW-21V	3/23/2020 16:35	Conductivity	5897.56	uS/cm
GS-AP-MW-21V	3/23/2020 16:35	DO	0.52	mg/L
GS-AP-MW-21V	3/23/2020 16:35	Depth to Water Detail	177.3	ft
GS-AP-MW-21V	3/23/2020 16:35	Oxidation Reduction Potention	-220.38	mv
GS-AP-MW-21V	3/23/2020 16:35	pH	7.91	pH
GS-AP-MW-21V	3/23/2020 16:35	Temperature	18.26	C
GS-AP-MW-21V	3/23/2020 16:35	Turbidity	2.97	NTU
GS-AP-MW-21V	3/23/2020 16:40	Conductivity	5863.64	uS/cm
GS-AP-MW-21V	3/23/2020 16:40	DO	0.55	mg/L
GS-AP-MW-21V	3/23/2020 16:40	Depth to Water Detail	177.78	ft
GS-AP-MW-21V	3/23/2020 16:40	Oxidation Reduction Potention	-220.52	mv
GS-AP-MW-21V	3/23/2020 16:40	pH	7.92	pH
GS-AP-MW-21V	3/23/2020 16:40	Temperature	18.2	C
GS-AP-MW-21V	3/23/2020 16:40	Turbidity	2.76	NTU
GS-AP-MW-21V	3/23/2020 16:45	Conductivity	5807.28	uS/cm
GS-AP-MW-21V	3/23/2020 16:45	DO	0.54	mg/L
GS-AP-MW-21V	3/23/2020 16:45	Depth to Water Detail	178.14	ft
GS-AP-MW-21V	3/23/2020 16:45	Oxidation Reduction Potention	-220.98	mv
GS-AP-MW-21V	3/23/2020 16:45	pH	7.92	pH
GS-AP-MW-21V	3/23/2020 16:45	Temperature	18.16	C
GS-AP-MW-21V	3/23/2020 16:45	Turbidity	2.4	NTU
GS-AP-MW-21V	3/23/2020 16:50	Conductivity	5749.08	uS/cm
GS-AP-MW-21V	3/23/2020 16:50	DO	0.54	mg/L
GS-AP-MW-21V	3/23/2020 16:50	Depth to Water Detail	178.48	ft
GS-AP-MW-21V	3/23/2020 16:50	Oxidation Reduction Potention	-221.13	mv
GS-AP-MW-21V	3/23/2020 16:50	pH	7.92	pH
GS-AP-MW-21V	3/23/2020 16:50	Temperature	18.16	C
GS-AP-MW-21V	3/23/2020 16:50	Turbidity	2.66	NTU
GS-AP-MW-21V	3/23/2020 16:55	Conductivity	5685.94	uS/cm
GS-AP-MW-21V	3/23/2020 16:55	DO	0.53	mg/L
GS-AP-MW-21V	3/23/2020 16:55	Depth to Water Detail	178.71	ft
GS-AP-MW-21V	3/23/2020 16:55	Oxidation Reduction Potention	-222.04	mv
GS-AP-MW-21V	3/23/2020 16:55	pH	7.92	pH

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-21V	3/23/2020 16:55	Temperature	18.25	C
GS-AP-MW-21V	3/23/2020 16:55	Turbidity	3.09	NTU
GS-AP-MW-21V	3/23/2020 17:00	Conductivity	5656.11	uS/cm
GS-AP-MW-21V	3/23/2020 17:00	DO	0.53	mg/L
GS-AP-MW-21V	3/23/2020 17:00	Depth to Water Detail	178.98	ft
GS-AP-MW-21V	3/23/2020 17:00	Oxidation Reduction Potention	-221.43	mv
GS-AP-MW-21V	3/23/2020 17:00	pH	7.93	pH
GS-AP-MW-21V	3/23/2020 17:00	Temperature	18.19	C
GS-AP-MW-21V	3/23/2020 17:00	Turbidity	2.59	NTU
GS-AP-MW-21V	3/23/2020 17:05	Conductivity	5596.79	uS/cm
GS-AP-MW-21V	3/23/2020 17:05	DO	0.52	mg/L
GS-AP-MW-21V	3/23/2020 17:05	Depth to Water Detail	179.11	ft
GS-AP-MW-21V	3/23/2020 17:05	Oxidation Reduction Potention	-222.42	mv
GS-AP-MW-21V	3/23/2020 17:05	pH	7.93	pH
GS-AP-MW-21V	3/23/2020 17:05	Temperature	18.2	C
GS-AP-MW-21V	3/23/2020 17:05	Turbidity	2.9	NTU
GS-AP-MW-21V	3/23/2020 17:10	Conductivity	5570.92	uS/cm
GS-AP-MW-21V	3/23/2020 17:10	DO	0.53	mg/L
GS-AP-MW-21V	3/23/2020 17:10	Depth to Water Detail	179.23	ft
GS-AP-MW-21V	3/23/2020 17:10	Oxidation Reduction Potention	-221.93	mv
GS-AP-MW-21V	3/23/2020 17:10	pH	7.93	pH
GS-AP-MW-21V	3/23/2020 17:10	Temperature	18.13	C
GS-AP-MW-21V	3/23/2020 17:10	Turbidity	2.8	NTU

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-25HA	3/24/2020 12:31	Conductivity	947.99	uS/cm
GS-AP-MW-25HA	3/24/2020 12:31	DO	1.01	mg/L
GS-AP-MW-25HA	3/24/2020 12:31	Depth to Water Detail	176.15	ft
GS-AP-MW-25HA	3/24/2020 12:31	Oxidation Reduction Potention	-106.92	mv
GS-AP-MW-25HA	3/24/2020 12:31	pH	8.52	pH
GS-AP-MW-25HA	3/24/2020 12:31	Temperature	19.34	C
GS-AP-MW-25HA	3/24/2020 12:31	Turbidity	19.2	NTU
GS-AP-MW-25HA	3/24/2020 12:36	Conductivity	1056.36	uS/cm
GS-AP-MW-25HA	3/24/2020 12:36	DO	0.82	mg/L
GS-AP-MW-25HA	3/24/2020 12:36	Depth to Water Detail	176.28	ft
GS-AP-MW-25HA	3/24/2020 12:36	Oxidation Reduction Potention	-125.82	mv
GS-AP-MW-25HA	3/24/2020 12:36	pH	8.62	pH
GS-AP-MW-25HA	3/24/2020 12:36	Temperature	19.38	C
GS-AP-MW-25HA	3/24/2020 12:36	Turbidity	15.4	NTU
GS-AP-MW-25HA	3/24/2020 12:41	Conductivity	1256.94	uS/cm
GS-AP-MW-25HA	3/24/2020 12:41	DO	0.66	mg/L
GS-AP-MW-25HA	3/24/2020 12:41	Depth to Water Detail	176.37	ft
GS-AP-MW-25HA	3/24/2020 12:41	Oxidation Reduction Potention	-151.19	mv
GS-AP-MW-25HA	3/24/2020 12:41	pH	8.62	pH
GS-AP-MW-25HA	3/24/2020 12:41	Temperature	19.39	C
GS-AP-MW-25HA	3/24/2020 12:41	Turbidity	16.5	NTU
GS-AP-MW-25HA	3/24/2020 12:46	Conductivity	1347.61	uS/cm
GS-AP-MW-25HA	3/24/2020 12:46	DO	0.59	mg/L
GS-AP-MW-25HA	3/24/2020 12:46	Depth to Water Detail	176.49	ft
GS-AP-MW-25HA	3/24/2020 12:46	Oxidation Reduction Potention	-164.71	mv
GS-AP-MW-25HA	3/24/2020 12:46	pH	8.63	pH
GS-AP-MW-25HA	3/24/2020 12:46	Temperature	19.13	C
GS-AP-MW-25HA	3/24/2020 12:46	Turbidity	14.4	NTU
GS-AP-MW-25HA	3/24/2020 12:51	Conductivity	1404.91	uS/cm
GS-AP-MW-25HA	3/24/2020 12:51	DO	0.54	mg/L
GS-AP-MW-25HA	3/24/2020 12:51	Depth to Water Detail	176.55	ft
GS-AP-MW-25HA	3/24/2020 12:51	Oxidation Reduction Potention	-173.63	mv
GS-AP-MW-25HA	3/24/2020 12:51	pH	8.63	pH
GS-AP-MW-25HA	3/24/2020 12:51	Temperature	18.93	C
GS-AP-MW-25HA	3/24/2020 12:51	Turbidity	12.4	NTU
GS-AP-MW-25HA	3/24/2020 12:56	Conductivity	1425.59	uS/cm
GS-AP-MW-25HA	3/24/2020 12:56	DO	0.5	mg/L
GS-AP-MW-25HA	3/24/2020 12:56	Depth to Water Detail	176.59	ft
GS-AP-MW-25HA	3/24/2020 12:56	Oxidation Reduction Potention	-180.88	mv
GS-AP-MW-25HA	3/24/2020 12:56	pH	8.64	pH
GS-AP-MW-25HA	3/24/2020 12:56	Temperature	19.17	C
GS-AP-MW-25HA	3/24/2020 12:56	Turbidity	10.22	NTU
GS-AP-MW-25HA	3/24/2020 13:01	Conductivity	1443.51	uS/cm
GS-AP-MW-25HA	3/24/2020 13:01	DO	0.49	mg/L
GS-AP-MW-25HA	3/24/2020 13:01	Depth to Water Detail	176.59	ft
GS-AP-MW-25HA	3/24/2020 13:01	Oxidation Reduction Potention	-187.41	mv

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-25HA	3/24/2020 13:01	pH	8.66	pH
GS-AP-MW-25HA	3/24/2020 13:01	Temperature	19.09	C
GS-AP-MW-25HA	3/24/2020 13:01	Turbidity	8.52	NTU
GS-AP-MW-25HA	3/24/2020 13:06	Conductivity	1450.68	uS/cm
GS-AP-MW-25HA	3/24/2020 13:06	DO	0.54	mg/L
GS-AP-MW-25HA	3/24/2020 13:06	Depth to Water Detail	176.59	ft
GS-AP-MW-25HA	3/24/2020 13:06	Oxidation Reduction Potention	-191.05	mv
GS-AP-MW-25HA	3/24/2020 13:06	pH	8.67	pH
GS-AP-MW-25HA	3/24/2020 13:06	Temperature	19.49	C
GS-AP-MW-25HA	3/24/2020 13:06	Turbidity	8.74	NTU

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-43HO	3/25/2020 9:27	Conductivity	1309.52	uS/cm
GS-AP-MW-43HO	3/25/2020 9:27	DO	1.46	mg/L
GS-AP-MW-43HO	3/25/2020 9:27	Depth to Water Detail	150.45	ft
GS-AP-MW-43HO	3/25/2020 9:27	Oxidation Reduction Potention	-257.7	mv
GS-AP-MW-43HO	3/25/2020 9:27	pH	8.2	pH
GS-AP-MW-43HO	3/25/2020 9:27	Temperature	17.12	C
GS-AP-MW-43HO	3/25/2020 9:27	Turbidity	6.98	NTU
GS-AP-MW-43HO	3/25/2020 9:32	Conductivity	1350.86	uS/cm
GS-AP-MW-43HO	3/25/2020 9:32	DO	1.2	mg/L
GS-AP-MW-43HO	3/25/2020 9:32	Depth to Water Detail	150.64	ft
GS-AP-MW-43HO	3/25/2020 9:32	Oxidation Reduction Potention	-277.48	mv
GS-AP-MW-43HO	3/25/2020 9:32	pH	8.29	pH
GS-AP-MW-43HO	3/25/2020 9:32	Temperature	17.11	C
GS-AP-MW-43HO	3/25/2020 9:32	Turbidity	5.92	NTU
GS-AP-MW-43HO	3/25/2020 9:37	Conductivity	1401.36	uS/cm
GS-AP-MW-43HO	3/25/2020 9:37	DO	1.19	mg/L
GS-AP-MW-43HO	3/25/2020 9:37	Depth to Water Detail	150.9	ft
GS-AP-MW-43HO	3/25/2020 9:37	Oxidation Reduction Potention	-285.95	mv
GS-AP-MW-43HO	3/25/2020 9:37	pH	8.29	pH
GS-AP-MW-43HO	3/25/2020 9:37	Temperature	17.15	C
GS-AP-MW-43HO	3/25/2020 9:37	Turbidity	4.75	NTU
GS-AP-MW-43HO	3/25/2020 9:42	Conductivity	1355.16	uS/cm
GS-AP-MW-43HO	3/25/2020 9:42	DO	1.12	mg/L
GS-AP-MW-43HO	3/25/2020 9:42	Depth to Water Detail	151.06	ft
GS-AP-MW-43HO	3/25/2020 9:42	Oxidation Reduction Potention	-289.39	mv
GS-AP-MW-43HO	3/25/2020 9:42	pH	8.28	pH
GS-AP-MW-43HO	3/25/2020 9:42	Temperature	17.1	C
GS-AP-MW-43HO	3/25/2020 9:42	Turbidity	3.62	NTU
GS-AP-MW-43HO	3/25/2020 9:47	Conductivity	1267.24	uS/cm
GS-AP-MW-43HO	3/25/2020 9:47	DO	1.09	mg/L
GS-AP-MW-43HO	3/25/2020 9:47	Depth to Water Detail	151.19	ft
GS-AP-MW-43HO	3/25/2020 9:47	Oxidation Reduction Potention	-293.85	mv
GS-AP-MW-43HO	3/25/2020 9:47	pH	8.26	pH
GS-AP-MW-43HO	3/25/2020 9:47	Temperature	17.15	C
GS-AP-MW-43HO	3/25/2020 9:47	Turbidity	3.6	NTU
GS-AP-MW-43HO	3/25/2020 9:52	Conductivity	1290.94	uS/cm
GS-AP-MW-43HO	3/25/2020 9:52	DO	1.1	mg/L
GS-AP-MW-43HO	3/25/2020 9:52	Depth to Water Detail	151.27	ft
GS-AP-MW-43HO	3/25/2020 9:52	Oxidation Reduction Potention	-295.78	mv
GS-AP-MW-43HO	3/25/2020 9:52	pH	8.24	pH
GS-AP-MW-43HO	3/25/2020 9:52	Temperature	17.14	C
GS-AP-MW-43HO	3/25/2020 9:52	Turbidity	3.29	NTU
GS-AP-MW-43HO	3/25/2020 9:57	Conductivity	1270.87	uS/cm
GS-AP-MW-43HO	3/25/2020 9:57	DO	1.09	mg/L
GS-AP-MW-43HO	3/25/2020 9:57	Depth to Water Detail	151.35	ft
GS-AP-MW-43HO	3/25/2020 9:57	Oxidation Reduction Potention	-298.74	mv

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-43HO	3/25/2020 9:57	pH	8.24	pH
GS-AP-MW-43HO	3/25/2020 9:57	Temperature	17.15	C
GS-AP-MW-43HO	3/25/2020 9:57	Turbidity	2.96	NTU

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-PZ-18	3/25/2020 11:14	Conductivity	1923.92	uS/cm
GS-AP-PZ-18	3/25/2020 11:14	DO	0.36	mg/L
GS-AP-PZ-18	3/25/2020 11:14	Depth to Water Detail	105.78	ft
GS-AP-PZ-18	3/25/2020 11:14	Oxidation Reduction Potention	-120.27	mv
GS-AP-PZ-18	3/25/2020 11:14	pH	6.93	pH
GS-AP-PZ-18	3/25/2020 11:14	Temperature	17.21	C
GS-AP-PZ-18	3/25/2020 11:14	Turbidity	33.2	NTU
GS-AP-PZ-18	3/25/2020 11:19	Conductivity	1620.53	uS/cm
GS-AP-PZ-18	3/25/2020 11:19	DO	0.27	mg/L
GS-AP-PZ-18	3/25/2020 11:19	Depth to Water Detail	105.78	ft
GS-AP-PZ-18	3/25/2020 11:19	Oxidation Reduction Potention	-106.84	mv
GS-AP-PZ-18	3/25/2020 11:19	pH	6.79	pH
GS-AP-PZ-18	3/25/2020 11:19	Temperature	17.27	C
GS-AP-PZ-18	3/25/2020 11:19	Turbidity	18.6	NTU
GS-AP-PZ-18	3/25/2020 11:24	Conductivity	1503.33	uS/cm
GS-AP-PZ-18	3/25/2020 11:24	DO	0.24	mg/L
GS-AP-PZ-18	3/25/2020 11:24	Depth to Water Detail	105.78	ft
GS-AP-PZ-18	3/25/2020 11:24	Oxidation Reduction Potention	-100.06	mv
GS-AP-PZ-18	3/25/2020 11:24	pH	6.73	pH
GS-AP-PZ-18	3/25/2020 11:24	Temperature	17.32	C
GS-AP-PZ-18	3/25/2020 11:24	Turbidity	12.5	NTU
GS-AP-PZ-18	3/25/2020 11:29	Conductivity	1460.19	uS/cm
GS-AP-PZ-18	3/25/2020 11:29	DO	0.21	mg/L
GS-AP-PZ-18	3/25/2020 11:29	Depth to Water Detail	105.78	ft
GS-AP-PZ-18	3/25/2020 11:29	Oxidation Reduction Potention	-96.23	mv
GS-AP-PZ-18	3/25/2020 11:29	pH	6.71	pH
GS-AP-PZ-18	3/25/2020 11:29	Temperature	17.34	C
GS-AP-PZ-18	3/25/2020 11:29	Turbidity	8.96	NTU
GS-AP-PZ-18	3/25/2020 11:34	Conductivity	1403.1	uS/cm
GS-AP-PZ-18	3/25/2020 11:34	DO	0.2	mg/L
GS-AP-PZ-18	3/25/2020 11:34	Depth to Water Detail	105.78	ft
GS-AP-PZ-18	3/25/2020 11:34	Oxidation Reduction Potention	-96.52	mv
GS-AP-PZ-18	3/25/2020 11:34	pH	6.71	pH
GS-AP-PZ-18	3/25/2020 11:34	Temperature	17.42	C
GS-AP-PZ-18	3/25/2020 11:34	Turbidity	6.74	NTU
GS-AP-PZ-18	3/25/2020 11:39	Conductivity	1358.23	uS/cm
GS-AP-PZ-18	3/25/2020 11:39	DO	0.19	mg/L
GS-AP-PZ-18	3/25/2020 11:39	Depth to Water Detail	105.78	ft
GS-AP-PZ-18	3/25/2020 11:39	Oxidation Reduction Potention	-99.42	mv
GS-AP-PZ-18	3/25/2020 11:39	pH	6.75	pH
GS-AP-PZ-18	3/25/2020 11:39	Temperature	17.21	C
GS-AP-PZ-18	3/25/2020 11:39	Turbidity	6.18	NTU
GS-AP-PZ-18	3/25/2020 11:44	Conductivity	1337.25	uS/cm
GS-AP-PZ-18	3/25/2020 11:44	DO	0.19	mg/L
GS-AP-PZ-18	3/25/2020 11:44	Depth to Water Detail	105.78	ft
GS-AP-PZ-18	3/25/2020 11:44	Oxidation Reduction Potention	-102.16	mv

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-PZ-18	3/25/2020 11:44	pH	6.78	pH
GS-AP-PZ-18	3/25/2020 11:44	Temperature	17.19	C
GS-AP-PZ-18	3/25/2020 11:44	Turbidity	4.64	NTU
GS-AP-PZ-18	3/25/2020 11:49	Conductivity	1317.79	uS/cm
GS-AP-PZ-18	3/25/2020 11:49	DO	0.26	mg/L
GS-AP-PZ-18	3/25/2020 11:49	Depth to Water Detail	105.78	ft
GS-AP-PZ-18	3/25/2020 11:49	Oxidation Reduction Potention	-102.62	mv
GS-AP-PZ-18	3/25/2020 11:49	pH	6.8	pH
GS-AP-PZ-18	3/25/2020 11:49	Temperature	17.28	C
GS-AP-PZ-18	3/25/2020 11:49	Turbidity	4.49	NTU

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-9V	3/23/2020 14:22	Conductivity	1290.29	uS/cm
GS-AP-MW-9V	3/23/2020 14:22	DO	0.37	mg/L
GS-AP-MW-9V	3/23/2020 14:22	Depth to Water Detail	56.53	ft
GS-AP-MW-9V	3/23/2020 14:22	Oxidation Reduction Potention	-191.77	mv
GS-AP-MW-9V	3/23/2020 14:22	pH	7.28	pH
GS-AP-MW-9V	3/23/2020 14:22	Temperature	17.76	C
GS-AP-MW-9V	3/23/2020 14:22	Turbidity	3.37	NTU
GS-AP-MW-9V	3/23/2020 14:27	Conductivity	1013.49	uS/cm
GS-AP-MW-9V	3/23/2020 14:27	DO	0.33	mg/L
GS-AP-MW-9V	3/23/2020 14:27	Depth to Water Detail	57.66	ft
GS-AP-MW-9V	3/23/2020 14:27	Oxidation Reduction Potention	-212.25	mv
GS-AP-MW-9V	3/23/2020 14:27	pH	7.24	pH
GS-AP-MW-9V	3/23/2020 14:27	Temperature	17.83	C
GS-AP-MW-9V	3/23/2020 14:27	Turbidity	3.48	NTU
GS-AP-MW-9V	3/23/2020 14:32	Conductivity	802.25	uS/cm
GS-AP-MW-9V	3/23/2020 14:32	DO	0.33	mg/L
GS-AP-MW-9V	3/23/2020 14:32	Depth to Water Detail	58.81	ft
GS-AP-MW-9V	3/23/2020 14:32	Oxidation Reduction Potention	-213.7	mv
GS-AP-MW-9V	3/23/2020 14:32	pH	7.17	pH
GS-AP-MW-9V	3/23/2020 14:32	Temperature	17.95	C
GS-AP-MW-9V	3/23/2020 14:32	Turbidity	2.75	NTU
GS-AP-MW-9V	3/23/2020 14:37	Conductivity	714.15	uS/cm
GS-AP-MW-9V	3/23/2020 14:37	DO	0.32	mg/L
GS-AP-MW-9V	3/23/2020 14:37	Depth to Water Detail	59.71	ft
GS-AP-MW-9V	3/23/2020 14:37	Oxidation Reduction Potention	-218.88	mv
GS-AP-MW-9V	3/23/2020 14:37	pH	7.14	pH
GS-AP-MW-9V	3/23/2020 14:37	Temperature	17.92	C
GS-AP-MW-9V	3/23/2020 14:37	Turbidity	1.96	NTU
GS-AP-MW-9V	3/23/2020 14:42	Conductivity	649.59	uS/cm
GS-AP-MW-9V	3/23/2020 14:42	DO	0.33	mg/L
GS-AP-MW-9V	3/23/2020 14:42	Depth to Water Detail	60.44	ft
GS-AP-MW-9V	3/23/2020 14:42	Oxidation Reduction Potention	-226.42	mv
GS-AP-MW-9V	3/23/2020 14:42	pH	7.12	pH
GS-AP-MW-9V	3/23/2020 14:42	Temperature	17.87	C
GS-AP-MW-9V	3/23/2020 14:42	Turbidity	2.63	NTU
GS-AP-MW-9V	3/23/2020 14:47	Conductivity	606.74	uS/cm
GS-AP-MW-9V	3/23/2020 14:47	DO	0.34	mg/L
GS-AP-MW-9V	3/23/2020 14:47	Depth to Water Detail	61.04	ft
GS-AP-MW-9V	3/23/2020 14:47	Oxidation Reduction Potention	-231.63	mv
GS-AP-MW-9V	3/23/2020 14:47	pH	7.07	pH
GS-AP-MW-9V	3/23/2020 14:47	Temperature	17.86	C
GS-AP-MW-9V	3/23/2020 14:47	Turbidity	1.5	NTU
GS-AP-MW-9V	3/23/2020 14:52	Conductivity	555.38	uS/cm
GS-AP-MW-9V	3/23/2020 14:52	DO	0.33	mg/L
GS-AP-MW-9V	3/23/2020 14:52	Depth to Water Detail	61.66	ft
GS-AP-MW-9V	3/23/2020 14:52	Oxidation Reduction Potention	-237.09	mv

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-9V	3/23/2020 14:52	pH	7.06	pH
GS-AP-MW-9V	3/23/2020 14:52	Temperature	17.81	C
GS-AP-MW-9V	3/23/2020 14:52	Turbidity	1.53	NTU
GS-AP-MW-9V	3/23/2020 14:57	Conductivity	524.27	uS/cm
GS-AP-MW-9V	3/23/2020 14:57	DO	0.34	mg/L
GS-AP-MW-9V	3/23/2020 14:57	Depth to Water Detail	62.21	ft
GS-AP-MW-9V	3/23/2020 14:57	Oxidation Reduction Potention	-238.44	mv
GS-AP-MW-9V	3/23/2020 14:57	pH	7.05	pH
GS-AP-MW-9V	3/23/2020 14:57	Temperature	17.75	C
GS-AP-MW-9V	3/23/2020 14:57	Turbidity	1.71	NTU
GS-AP-MW-9V	3/23/2020 15:02	Conductivity	503.21	uS/cm
GS-AP-MW-9V	3/23/2020 15:02	DO	0.35	mg/L
GS-AP-MW-9V	3/23/2020 15:02	Depth to Water Detail	62.8	ft
GS-AP-MW-9V	3/23/2020 15:02	Oxidation Reduction Potention	-238.54	mv
GS-AP-MW-9V	3/23/2020 15:02	pH	7.04	pH
GS-AP-MW-9V	3/23/2020 15:02	Temperature	17.79	C
GS-AP-MW-9V	3/23/2020 15:02	Turbidity	1.41	NTU
GS-AP-MW-9V	3/23/2020 15:07	Conductivity	486.12	uS/cm
GS-AP-MW-9V	3/23/2020 15:07	DO	0.35	mg/L
GS-AP-MW-9V	3/23/2020 15:07	Depth to Water Detail	63.17	ft
GS-AP-MW-9V	3/23/2020 15:07	Oxidation Reduction Potention	-237.83	mv
GS-AP-MW-9V	3/23/2020 15:07	pH	7.03	pH
GS-AP-MW-9V	3/23/2020 15:07	Temperature	17.75	C
GS-AP-MW-9V	3/23/2020 15:07	Turbidity	1.48	NTU
GS-AP-MW-9V	3/23/2020 15:12	Conductivity	470.44	uS/cm
GS-AP-MW-9V	3/23/2020 15:12	DO	0.35	mg/L
GS-AP-MW-9V	3/23/2020 15:12	Depth to Water Detail	63.92	ft
GS-AP-MW-9V	3/23/2020 15:12	Oxidation Reduction Potention	-235.1	mv
GS-AP-MW-9V	3/23/2020 15:12	pH	6.98	pH
GS-AP-MW-9V	3/23/2020 15:12	Temperature	17.79	C
GS-AP-MW-9V	3/23/2020 15:12	Turbidity	1.5	NTU
GS-AP-MW-9V	3/23/2020 15:17	Conductivity	459.69	uS/cm
GS-AP-MW-9V	3/23/2020 15:17	DO	0.35	mg/L
GS-AP-MW-9V	3/23/2020 15:17	Depth to Water Detail	63.62	ft
GS-AP-MW-9V	3/23/2020 15:17	Oxidation Reduction Potention	-235.03	mv
GS-AP-MW-9V	3/23/2020 15:17	pH	6.99	pH
GS-AP-MW-9V	3/23/2020 15:17	Temperature	17.74	C
GS-AP-MW-9V	3/23/2020 15:17	Turbidity	1.67	NTU
GS-AP-MW-9V	3/23/2020 15:22	Conductivity	451.37	uS/cm
GS-AP-MW-9V	3/23/2020 15:22	DO	0.35	mg/L
GS-AP-MW-9V	3/23/2020 15:22	Depth to Water Detail	64.21	ft
GS-AP-MW-9V	3/23/2020 15:22	Oxidation Reduction Potention	-235.23	mv
GS-AP-MW-9V	3/23/2020 15:22	pH	6.99	pH
GS-AP-MW-9V	3/23/2020 15:22	Temperature	17.74	C
GS-AP-MW-9V	3/23/2020 15:22	Turbidity	1.57	NTU
GS-AP-MW-9V	3/23/2020 15:27	Conductivity	445.56	uS/cm

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-9V	3/23/2020 15:27	DO	0.35	mg/L
GS-AP-MW-9V	3/23/2020 15:27	Depth to Water Detail	64.61	ft
GS-AP-MW-9V	3/23/2020 15:27	Oxidation Reduction Potention	-235.3	mv
GS-AP-MW-9V	3/23/2020 15:27	pH	6.99	pH
GS-AP-MW-9V	3/23/2020 15:27	Temperature	17.73	C
GS-AP-MW-9V	3/23/2020 15:27	Turbidity	0.82	NTU
GS-AP-MW-9V	3/23/2020 15:32	Conductivity	439.52	uS/cm
GS-AP-MW-9V	3/23/2020 15:32	DO	0.35	mg/L
GS-AP-MW-9V	3/23/2020 15:32	Depth to Water Detail	64.84	ft
GS-AP-MW-9V	3/23/2020 15:32	Oxidation Reduction Potention	-235.31	mv
GS-AP-MW-9V	3/23/2020 15:32	pH	6.99	pH
GS-AP-MW-9V	3/23/2020 15:32	Temperature	17.73	C
GS-AP-MW-9V	3/23/2020 15:32	Turbidity	1.41	NTU
GS-AP-MW-9V	3/23/2020 15:37	Conductivity	434.61	uS/cm
GS-AP-MW-9V	3/23/2020 15:37	DO	0.36	mg/L
GS-AP-MW-9V	3/23/2020 15:37	Depth to Water Detail	65.06	ft
GS-AP-MW-9V	3/23/2020 15:37	Oxidation Reduction Potention	-234.56	mv
GS-AP-MW-9V	3/23/2020 15:37	pH	6.98	pH
GS-AP-MW-9V	3/23/2020 15:37	Temperature	17.74	C
GS-AP-MW-9V	3/23/2020 15:37	Turbidity	1.29	NTU
GS-AP-MW-9V	3/23/2020 15:42	Conductivity	430.74	uS/cm
GS-AP-MW-9V	3/23/2020 15:42	DO	0.36	mg/L
GS-AP-MW-9V	3/23/2020 15:42	Depth to Water Detail	65.24	ft
GS-AP-MW-9V	3/23/2020 15:42	Oxidation Reduction Potention	-232.8	mv
GS-AP-MW-9V	3/23/2020 15:42	pH	6.95	pH
GS-AP-MW-9V	3/23/2020 15:42	Temperature	17.77	C
GS-AP-MW-9V	3/23/2020 15:42	Turbidity	1.75	NTU
GS-AP-MW-9V	3/23/2020 15:47	Conductivity	427.47	uS/cm
GS-AP-MW-9V	3/23/2020 15:47	DO	0.35	mg/L
GS-AP-MW-9V	3/23/2020 15:47	Depth to Water Detail	65.51	ft
GS-AP-MW-9V	3/23/2020 15:47	Oxidation Reduction Potention	-233.7	mv
GS-AP-MW-9V	3/23/2020 15:47	pH	6.96	pH
GS-AP-MW-9V	3/23/2020 15:47	Temperature	17.71	C
GS-AP-MW-9V	3/23/2020 15:47	Turbidity	1.37	NTU
GS-AP-MW-9V	3/23/2020 15:52	Conductivity	425.26	uS/cm
GS-AP-MW-9V	3/23/2020 15:52	DO	0.52	mg/L
GS-AP-MW-9V	3/23/2020 15:52	Depth to Water Detail	65.51	ft
GS-AP-MW-9V	3/23/2020 15:52	Oxidation Reduction Potention	-230.8	mv
GS-AP-MW-9V	3/23/2020 15:52	pH	6.97	pH
GS-AP-MW-9V	3/23/2020 15:52	Temperature	17.91	C
GS-AP-MW-9V	3/23/2020 15:52	Turbidity	1.35	NTU
GS-AP-MW-9V	3/23/2020 15:57	Conductivity	414.32	uS/cm
GS-AP-MW-9V	3/23/2020 15:57	DO	0.55	mg/L
GS-AP-MW-9V	3/23/2020 15:57	Depth to Water Detail	65.51	ft
GS-AP-MW-9V	3/23/2020 15:57	Oxidation Reduction Potention	-231.21	mv
GS-AP-MW-9V	3/23/2020 15:57	pH	6.97	pH

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-9V	3/23/2020 15:57	Temperature	17.9	C
GS-AP-MW-9V	3/23/2020 15:57	Turbidity	1.32	NTU
GS-AP-MW-9V	3/23/2020 16:02	Conductivity	413.93	uS/cm
GS-AP-MW-9V	3/23/2020 16:02	DO	0.58	mg/L
GS-AP-MW-9V	3/23/2020 16:02	Depth to Water Detail	65.51	ft
GS-AP-MW-9V	3/23/2020 16:02	Oxidation Reduction Potention	-230.34	mv
GS-AP-MW-9V	3/23/2020 16:02	pH	6.97	pH
GS-AP-MW-9V	3/23/2020 16:02	Temperature	17.9	C
GS-AP-MW-9V	3/23/2020 16:02	Turbidity	1.21	NTU

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-42H	3/24/2020 8:31	Conductivity	1087.89	uS/cm
GS-AP-MW-42H	3/24/2020 8:31	DO	0.15	mg/L
GS-AP-MW-42H	3/24/2020 8:31	Depth to Water Detail	53.66	ft
GS-AP-MW-42H	3/24/2020 8:31	Oxidation Reduction Potention	9	mv
GS-AP-MW-42H	3/24/2020 8:31	pH	6.25	pH
GS-AP-MW-42H	3/24/2020 8:31	Temperature	17.56	C
GS-AP-MW-42H	3/24/2020 8:31	Turbidity	3.55	NTU
GS-AP-MW-42H	3/24/2020 8:36	Conductivity	1058.49	uS/cm
GS-AP-MW-42H	3/24/2020 8:36	DO	0.14	mg/L
GS-AP-MW-42H	3/24/2020 8:36	Depth to Water Detail	53.71	ft
GS-AP-MW-42H	3/24/2020 8:36	Oxidation Reduction Potention	3.68	mv
GS-AP-MW-42H	3/24/2020 8:36	pH	6.23	pH
GS-AP-MW-42H	3/24/2020 8:36	Temperature	17.56	C
GS-AP-MW-42H	3/24/2020 8:36	Turbidity	3.55	NTU
GS-AP-MW-42H	3/24/2020 8:41	Conductivity	1036.35	uS/cm
GS-AP-MW-42H	3/24/2020 8:41	DO	0.13	mg/L
GS-AP-MW-42H	3/24/2020 8:41	Depth to Water Detail	53.74	ft
GS-AP-MW-42H	3/24/2020 8:41	Oxidation Reduction Potention	-1.06	mv
GS-AP-MW-42H	3/24/2020 8:41	pH	6.25	pH
GS-AP-MW-42H	3/24/2020 8:41	Temperature	17.53	C
GS-AP-MW-42H	3/24/2020 8:41	Turbidity	2.78	NTU
GS-AP-MW-42H	3/24/2020 8:46	Conductivity	1089.07	uS/cm
GS-AP-MW-42H	3/24/2020 8:46	DO	0.13	mg/L
GS-AP-MW-42H	3/24/2020 8:46	Depth to Water Detail	53.74	ft
GS-AP-MW-42H	3/24/2020 8:46	Oxidation Reduction Potention	-4.07	mv
GS-AP-MW-42H	3/24/2020 8:46	pH	6.28	pH
GS-AP-MW-42H	3/24/2020 8:46	Temperature	17.52	C
GS-AP-MW-42H	3/24/2020 8:46	Turbidity	2.13	NTU

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-38H	3/24/2020 10:10	Conductivity	885.58	uS/cm
GS-AP-MW-38H	3/24/2020 10:10	DO	0.74	mg/L
GS-AP-MW-38H	3/24/2020 10:10	Depth to Water Detail	47.54	ft
GS-AP-MW-38H	3/24/2020 10:10	Oxidation Reduction Potention	-181.03	mv
GS-AP-MW-38H	3/24/2020 10:10	pH	7.8	pH
GS-AP-MW-38H	3/24/2020 10:10	Temperature	18.07	C
GS-AP-MW-38H	3/24/2020 10:10	Turbidity	19.7	NTU
GS-AP-MW-38H	3/24/2020 10:15	Conductivity	854.74	uS/cm
GS-AP-MW-38H	3/24/2020 10:15	DO	0.65	mg/L
GS-AP-MW-38H	3/24/2020 10:15	Depth to Water Detail	47.54	ft
GS-AP-MW-38H	3/24/2020 10:15	Oxidation Reduction Potention	-182.58	mv
GS-AP-MW-38H	3/24/2020 10:15	pH	7.84	pH
GS-AP-MW-38H	3/24/2020 10:15	Temperature	18.03	C
GS-AP-MW-38H	3/24/2020 10:15	Turbidity	13.1	NTU
GS-AP-MW-38H	3/24/2020 10:20	Conductivity	766.55	uS/cm
GS-AP-MW-38H	3/24/2020 10:20	DO	0.57	mg/L
GS-AP-MW-38H	3/24/2020 10:20	Depth to Water Detail	47.54	ft
GS-AP-MW-38H	3/24/2020 10:20	Oxidation Reduction Potention	-180.56	mv
GS-AP-MW-38H	3/24/2020 10:20	pH	7.88	pH
GS-AP-MW-38H	3/24/2020 10:20	Temperature	18.06	C
GS-AP-MW-38H	3/24/2020 10:20	Turbidity	12.1	NTU
GS-AP-MW-38H	3/24/2020 10:25	Conductivity	669.35	uS/cm
GS-AP-MW-38H	3/24/2020 10:25	DO	0.62	mg/L
GS-AP-MW-38H	3/24/2020 10:25	Depth to Water Detail	47.54	ft
GS-AP-MW-38H	3/24/2020 10:25	Oxidation Reduction Potention	-177.71	mv
GS-AP-MW-38H	3/24/2020 10:25	pH	7.93	pH
GS-AP-MW-38H	3/24/2020 10:25	Temperature	18.07	C
GS-AP-MW-38H	3/24/2020 10:25	Turbidity	12.66	NTU
GS-AP-MW-38H	3/24/2020 10:30	Conductivity	618.82	uS/cm
GS-AP-MW-38H	3/24/2020 10:30	DO	0.58	mg/L
GS-AP-MW-38H	3/24/2020 10:30	Depth to Water Detail	47.54	ft
GS-AP-MW-38H	3/24/2020 10:30	Oxidation Reduction Potention	-174.68	mv
GS-AP-MW-38H	3/24/2020 10:30	pH	7.94	pH
GS-AP-MW-38H	3/24/2020 10:30	Temperature	18.09	C
GS-AP-MW-38H	3/24/2020 10:30	Turbidity	7.29	NTU
GS-AP-MW-38H	3/24/2020 10:35	Conductivity	592.56	uS/cm
GS-AP-MW-38H	3/24/2020 10:35	DO	0.59	mg/L
GS-AP-MW-38H	3/24/2020 10:35	Depth to Water Detail	47.54	ft
GS-AP-MW-38H	3/24/2020 10:35	Oxidation Reduction Potention	-174.03	mv
GS-AP-MW-38H	3/24/2020 10:35	pH	7.96	pH
GS-AP-MW-38H	3/24/2020 10:35	Temperature	18.16	C
GS-AP-MW-38H	3/24/2020 10:35	Turbidity	6.94	NTU
GS-AP-MW-38H	3/24/2020 10:40	Conductivity	576.23	uS/cm
GS-AP-MW-38H	3/24/2020 10:40	DO	0.57	mg/L
GS-AP-MW-38H	3/24/2020 10:40	Depth to Water Detail	47.54	ft
GS-AP-MW-38H	3/24/2020 10:40	Oxidation Reduction Potention	-174.45	mv

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-38H	3/24/2020 10:40	pH	7.98	pH
GS-AP-MW-38H	3/24/2020 10:40	Temperature	18.15	C
GS-AP-MW-38H	3/24/2020 10:40	Turbidity	8.66	NTU
GS-AP-MW-38H	3/24/2020 10:45	Conductivity	562.07	uS/cm
GS-AP-MW-38H	3/24/2020 10:45	DO	0.62	mg/L
GS-AP-MW-38H	3/24/2020 10:45	Depth to Water Detail	47.54	ft
GS-AP-MW-38H	3/24/2020 10:45	Oxidation Reduction Potention	-173.57	mv
GS-AP-MW-38H	3/24/2020 10:45	pH	7.98	pH
GS-AP-MW-38H	3/24/2020 10:45	Temperature	18.32	C
GS-AP-MW-38H	3/24/2020 10:45	Turbidity	8.68	NTU
GS-AP-MW-38H	3/24/2020 10:50	Conductivity	550.85	uS/cm
GS-AP-MW-38H	3/24/2020 10:50	DO	0.64	mg/L
GS-AP-MW-38H	3/24/2020 10:50	Depth to Water Detail	47.54	ft
GS-AP-MW-38H	3/24/2020 10:50	Oxidation Reduction Potention	-172.83	mv
GS-AP-MW-38H	3/24/2020 10:50	pH	7.99	pH
GS-AP-MW-38H	3/24/2020 10:50	Temperature	18.41	C
GS-AP-MW-38H	3/24/2020 10:50	Turbidity	7.24	NTU

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-19	3/24/2020 14:05	Conductivity	508.65	uS/cm
GS-AP-MW-19	3/24/2020 14:05	DO	0.56	mg/L
GS-AP-MW-19	3/24/2020 14:05	Depth to Water Detail	110.84	ft
GS-AP-MW-19	3/24/2020 14:05	Oxidation Reduction Potention	-155.14	mv
GS-AP-MW-19	3/24/2020 14:05	pH	8.06	pH
GS-AP-MW-19	3/24/2020 14:05	Temperature	18.36	C
GS-AP-MW-19	3/24/2020 14:05	Turbidity	1.73	NTU
GS-AP-MW-19	3/24/2020 14:10	Conductivity	505.94	uS/cm
GS-AP-MW-19	3/24/2020 14:10	DO	0.35	mg/L
GS-AP-MW-19	3/24/2020 14:10	Depth to Water Detail	110.87	ft
GS-AP-MW-19	3/24/2020 14:10	Oxidation Reduction Potention	-172.29	mv
GS-AP-MW-19	3/24/2020 14:10	pH	8.01	pH
GS-AP-MW-19	3/24/2020 14:10	Temperature	18.43	C
GS-AP-MW-19	3/24/2020 14:10	Turbidity	1.09	NTU
GS-AP-MW-19	3/24/2020 14:15	Conductivity	506.46	uS/cm
GS-AP-MW-19	3/24/2020 14:15	DO	0.32	mg/L
GS-AP-MW-19	3/24/2020 14:15	Depth to Water Detail	110.87	ft
GS-AP-MW-19	3/24/2020 14:15	Oxidation Reduction Potention	-176.34	mv
GS-AP-MW-19	3/24/2020 14:15	pH	7.96	pH
GS-AP-MW-19	3/24/2020 14:15	Temperature	18.25	C
GS-AP-MW-19	3/24/2020 14:15	Turbidity	1.01	NTU
GS-AP-MW-19	3/24/2020 14:20	Conductivity	505.87	uS/cm
GS-AP-MW-19	3/24/2020 14:20	DO	0.31	mg/L
GS-AP-MW-19	3/24/2020 14:20	Depth to Water Detail	110.87	ft
GS-AP-MW-19	3/24/2020 14:20	Oxidation Reduction Potention	-177.54	mv
GS-AP-MW-19	3/24/2020 14:20	pH	7.93	pH
GS-AP-MW-19	3/24/2020 14:20	Temperature	18.4	C
GS-AP-MW-19	3/24/2020 14:20	Turbidity	0.95	NTU

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-29H	3/25/2020 9:49	Conductivity	666.78	uS/cm
GS-AP-MW-29H	3/25/2020 9:49	DO	0.34	mg/L
GS-AP-MW-29H	3/25/2020 9:49	Depth to Water Detail	77.84	ft
GS-AP-MW-29H	3/25/2020 9:49	Oxidation Reduction Potention	-145.44	mv
GS-AP-MW-29H	3/25/2020 9:49	pH	7.49	pH
GS-AP-MW-29H	3/25/2020 9:49	Temperature	17.27	C
GS-AP-MW-29H	3/25/2020 9:49	Turbidity	6.67	NTU
GS-AP-MW-29H	3/25/2020 9:54	Conductivity	639.05	uS/cm
GS-AP-MW-29H	3/25/2020 9:54	DO	0.31	mg/L
GS-AP-MW-29H	3/25/2020 9:54	Depth to Water Detail	78.22	ft
GS-AP-MW-29H	3/25/2020 9:54	Oxidation Reduction Potention	-145.04	mv
GS-AP-MW-29H	3/25/2020 9:54	pH	7.47	pH
GS-AP-MW-29H	3/25/2020 9:54	Temperature	17.26	C
GS-AP-MW-29H	3/25/2020 9:54	Turbidity	3.25	NTU
GS-AP-MW-29H	3/25/2020 9:59	Conductivity	621.39	uS/cm
GS-AP-MW-29H	3/25/2020 9:59	DO	0.31	mg/L
GS-AP-MW-29H	3/25/2020 9:59	Depth to Water Detail	78.27	ft
GS-AP-MW-29H	3/25/2020 9:59	Oxidation Reduction Potention	-141.89	mv
GS-AP-MW-29H	3/25/2020 9:59	pH	7.45	pH
GS-AP-MW-29H	3/25/2020 9:59	Temperature	17.24	C
GS-AP-MW-29H	3/25/2020 9:59	Turbidity	2.46	NTU
GS-AP-MW-29H	3/25/2020 10:04	Conductivity	609.5	uS/cm
GS-AP-MW-29H	3/25/2020 10:04	DO	0.33	mg/L
GS-AP-MW-29H	3/25/2020 10:04	Depth to Water Detail	78.27	ft
GS-AP-MW-29H	3/25/2020 10:04	Oxidation Reduction Potention	-139.37	mv
GS-AP-MW-29H	3/25/2020 10:04	pH	7.45	pH
GS-AP-MW-29H	3/25/2020 10:04	Temperature	17.21	C
GS-AP-MW-29H	3/25/2020 10:04	Turbidity	2.49	NTU

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-17V	3/25/2020 12:18	Conductivity	561.47	uS/cm
GS-AP-MW-17V	3/25/2020 12:18	DO	0.46	mg/L
GS-AP-MW-17V	3/25/2020 12:18	Depth to Water Detail	124.88	ft
GS-AP-MW-17V	3/25/2020 12:18	Oxidation Reduction Potention	-158.68	mv
GS-AP-MW-17V	3/25/2020 12:18	pH	7.61	pH
GS-AP-MW-17V	3/25/2020 12:18	Temperature	19.59	C
GS-AP-MW-17V	3/25/2020 12:18	Turbidity	1.75	NTU
GS-AP-MW-17V	3/25/2020 12:23	Conductivity	557.89	uS/cm
GS-AP-MW-17V	3/25/2020 12:23	DO	0.54	mg/L
GS-AP-MW-17V	3/25/2020 12:23	Depth to Water Detail	125.04	ft
GS-AP-MW-17V	3/25/2020 12:23	Oxidation Reduction Potention	-157.7	mv
GS-AP-MW-17V	3/25/2020 12:23	pH	7.62	pH
GS-AP-MW-17V	3/25/2020 12:23	Temperature	19.67	C
GS-AP-MW-17V	3/25/2020 12:23	Turbidity	1.49	NTU
GS-AP-MW-17V	3/25/2020 12:28	Conductivity	555.42	uS/cm
GS-AP-MW-17V	3/25/2020 12:28	DO	0.56	mg/L
GS-AP-MW-17V	3/25/2020 12:28	Depth to Water Detail	125.14	ft
GS-AP-MW-17V	3/25/2020 12:28	Oxidation Reduction Potention	-158.15	mv
GS-AP-MW-17V	3/25/2020 12:28	pH	7.63	pH
GS-AP-MW-17V	3/25/2020 12:28	Temperature	19.38	C
GS-AP-MW-17V	3/25/2020 12:28	Turbidity	1.27	NTU
GS-AP-MW-17V	3/25/2020 12:33	Conductivity	538.31	uS/cm
GS-AP-MW-17V	3/25/2020 12:33	DO	0.57	mg/L
GS-AP-MW-17V	3/25/2020 12:33	Depth to Water Detail	125.29	ft
GS-AP-MW-17V	3/25/2020 12:33	Oxidation Reduction Potention	-156.64	mv
GS-AP-MW-17V	3/25/2020 12:33	pH	7.63	pH
GS-AP-MW-17V	3/25/2020 12:33	Temperature	19.37	C
GS-AP-MW-17V	3/25/2020 12:33	Turbidity	1.22	NTU

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-16D	3/24/2020 13:23	Conductivity	352.63	uS/cm
GS-AP-MW-16D	3/24/2020 13:23	DO	1.21	mg/L
GS-AP-MW-16D	3/24/2020 13:23	Depth to Water Detail	135.6	ft
GS-AP-MW-16D	3/24/2020 13:23	Oxidation Reduction Potention	-69.35	mv
GS-AP-MW-16D	3/24/2020 13:23	pH	7.4	pH
GS-AP-MW-16D	3/24/2020 13:23	Temperature	19.42	C
GS-AP-MW-16D	3/24/2020 13:23	Turbidity	2.17	NTU
GS-AP-MW-16D	3/24/2020 13:28	Conductivity	354.02	uS/cm
GS-AP-MW-16D	3/24/2020 13:28	DO	0.69	mg/L
GS-AP-MW-16D	3/24/2020 13:28	Depth to Water Detail	136	ft
GS-AP-MW-16D	3/24/2020 13:28	Oxidation Reduction Potention	-78.57	mv
GS-AP-MW-16D	3/24/2020 13:28	pH	7.43	pH
GS-AP-MW-16D	3/24/2020 13:28	Temperature	19.29	C
GS-AP-MW-16D	3/24/2020 13:28	Turbidity	2.38	NTU
GS-AP-MW-16D	3/24/2020 13:33	Conductivity	353.65	uS/cm
GS-AP-MW-16D	3/24/2020 13:33	DO	0.54	mg/L
GS-AP-MW-16D	3/24/2020 13:33	Depth to Water Detail	136.14	ft
GS-AP-MW-16D	3/24/2020 13:33	Oxidation Reduction Potention	-82.49	mv
GS-AP-MW-16D	3/24/2020 13:33	pH	7.45	pH
GS-AP-MW-16D	3/24/2020 13:33	Temperature	19.43	C
GS-AP-MW-16D	3/24/2020 13:33	Turbidity	1.51	NTU
GS-AP-MW-16D	3/24/2020 13:38	Conductivity	353.21	uS/cm
GS-AP-MW-16D	3/24/2020 13:38	DO	0.48	mg/L
GS-AP-MW-16D	3/24/2020 13:38	Depth to Water Detail	136.25	ft
GS-AP-MW-16D	3/24/2020 13:38	Oxidation Reduction Potention	-83.95	mv
GS-AP-MW-16D	3/24/2020 13:38	pH	7.45	pH
GS-AP-MW-16D	3/24/2020 13:38	Temperature	19.21	C
GS-AP-MW-16D	3/24/2020 13:38	Turbidity	1.47	NTU
GS-AP-MW-16D	3/24/2020 13:43	Conductivity	353.51	uS/cm
GS-AP-MW-16D	3/24/2020 13:43	DO	0.46	mg/L
GS-AP-MW-16D	3/24/2020 13:43	Depth to Water Detail	136.4	ft
GS-AP-MW-16D	3/24/2020 13:43	Oxidation Reduction Potention	-84.89	mv
GS-AP-MW-16D	3/24/2020 13:43	pH	7.46	pH
GS-AP-MW-16D	3/24/2020 13:43	Temperature	19.4	C
GS-AP-MW-16D	3/24/2020 13:43	Turbidity	1.38	NTU

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-26H	3/25/2020 9:27	Conductivity	551	uS/cm
GS-AP-MW-26H	3/25/2020 9:27	DO	1	mg/L
GS-AP-MW-26H	3/25/2020 9:27	Depth to Water Detail	97.23	ft
GS-AP-MW-26H	3/25/2020 9:27	Oxidation Reduction Potention	-116.63	mv
GS-AP-MW-26H	3/25/2020 9:27	pH	7.41	pH
GS-AP-MW-26H	3/25/2020 9:27	Temperature	18.29	C
GS-AP-MW-26H	3/25/2020 9:27	Turbidity	69.1	NTU
GS-AP-MW-26H	3/25/2020 9:32	Conductivity	591.71	uS/cm
GS-AP-MW-26H	3/25/2020 9:32	DO	0.4	mg/L
GS-AP-MW-26H	3/25/2020 9:32	Depth to Water Detail	97.55	ft
GS-AP-MW-26H	3/25/2020 9:32	Oxidation Reduction Potention	-146.17	mv
GS-AP-MW-26H	3/25/2020 9:32	pH	7.42	pH
GS-AP-MW-26H	3/25/2020 9:32	Temperature	18.46	C
GS-AP-MW-26H	3/25/2020 9:32	Turbidity	40.7	NTU
GS-AP-MW-26H	3/25/2020 9:37	Conductivity	513.72	uS/cm
GS-AP-MW-26H	3/25/2020 9:37	DO	0.33	mg/L
GS-AP-MW-26H	3/25/2020 9:37	Depth to Water Detail	98.44	ft
GS-AP-MW-26H	3/25/2020 9:37	Oxidation Reduction Potention	-136.5	mv
GS-AP-MW-26H	3/25/2020 9:37	pH	7.36	pH
GS-AP-MW-26H	3/25/2020 9:37	Temperature	18.65	C
GS-AP-MW-26H	3/25/2020 9:37	Turbidity	33.2	NTU
GS-AP-MW-26H	3/25/2020 9:42	Conductivity	474.73	uS/cm
GS-AP-MW-26H	3/25/2020 9:42	DO	0.32	mg/L
GS-AP-MW-26H	3/25/2020 9:42	Depth to Water Detail	98.8	ft
GS-AP-MW-26H	3/25/2020 9:42	Oxidation Reduction Potention	-124.87	mv
GS-AP-MW-26H	3/25/2020 9:42	pH	7.31	pH
GS-AP-MW-26H	3/25/2020 9:42	Temperature	18.71	C
GS-AP-MW-26H	3/25/2020 9:42	Turbidity	38.1	NTU
GS-AP-MW-26H	3/25/2020 9:47	Conductivity	456.65	uS/cm
GS-AP-MW-26H	3/25/2020 9:47	DO	0.41	mg/L
GS-AP-MW-26H	3/25/2020 9:47	Depth to Water Detail	99.8	ft
GS-AP-MW-26H	3/25/2020 9:47	Oxidation Reduction Potention	-119.01	mv
GS-AP-MW-26H	3/25/2020 9:47	pH	7.3	pH
GS-AP-MW-26H	3/25/2020 9:47	Temperature	18.95	C
GS-AP-MW-26H	3/25/2020 9:47	Turbidity	39.2	NTU
GS-AP-MW-26H	3/25/2020 9:52	Conductivity	438.89	uS/cm
GS-AP-MW-26H	3/25/2020 9:52	DO	0.43	mg/L
GS-AP-MW-26H	3/25/2020 9:52	Depth to Water Detail	100.3	ft
GS-AP-MW-26H	3/25/2020 9:52	Oxidation Reduction Potention	-114.94	mv
GS-AP-MW-26H	3/25/2020 9:52	pH	7.29	pH
GS-AP-MW-26H	3/25/2020 9:52	Temperature	18.84	C
GS-AP-MW-26H	3/25/2020 9:52	Turbidity	43.4	NTU
GS-AP-MW-26H	3/25/2020 9:57	Conductivity	450.94	uS/cm
GS-AP-MW-26H	3/25/2020 9:57	DO	0.47	mg/L
GS-AP-MW-26H	3/25/2020 9:57	Depth to Water Detail	100.8	ft
GS-AP-MW-26H	3/25/2020 9:57	Oxidation Reduction Potention	-109.86	mv

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-26H	3/25/2020 9:57	pH	7.28	pH
GS-AP-MW-26H	3/25/2020 9:57	Temperature	18.68	C
GS-AP-MW-26H	3/25/2020 9:57	Turbidity	41.8	NTU
GS-AP-MW-26H	3/25/2020 10:02	Conductivity	447.52	uS/cm
GS-AP-MW-26H	3/25/2020 10:02	DO	0.48	mg/L
GS-AP-MW-26H	3/25/2020 10:02	Depth to Water Detail	101.45	ft
GS-AP-MW-26H	3/25/2020 10:02	Oxidation Reduction Potention	-107.01	mv
GS-AP-MW-26H	3/25/2020 10:02	pH	7.24	pH
GS-AP-MW-26H	3/25/2020 10:02	Temperature	18.7	C
GS-AP-MW-26H	3/25/2020 10:02	Turbidity	48.4	NTU
GS-AP-MW-26H	3/25/2020 10:07	Conductivity	434.79	uS/cm
GS-AP-MW-26H	3/25/2020 10:07	DO	0.47	mg/L
GS-AP-MW-26H	3/25/2020 10:07	Depth to Water Detail	101.7	ft
GS-AP-MW-26H	3/25/2020 10:07	Oxidation Reduction Potention	-105.73	mv
GS-AP-MW-26H	3/25/2020 10:07	pH	7.26	pH
GS-AP-MW-26H	3/25/2020 10:07	Temperature	18.37	C
GS-AP-MW-26H	3/25/2020 10:07	Turbidity	45.3	NTU
GS-AP-MW-26H	3/25/2020 10:12	Conductivity	431.81	uS/cm
GS-AP-MW-26H	3/25/2020 10:12	DO	0.5	mg/L
GS-AP-MW-26H	3/25/2020 10:12	Depth to Water Detail	102.27	ft
GS-AP-MW-26H	3/25/2020 10:12	Oxidation Reduction Potention	-104.39	mv
GS-AP-MW-26H	3/25/2020 10:12	pH	7.26	pH
GS-AP-MW-26H	3/25/2020 10:12	Temperature	18.69	C
GS-AP-MW-26H	3/25/2020 10:12	Turbidity	46.6	NTU
GS-AP-MW-26H	3/25/2020 10:17	Conductivity	453.2	uS/cm
GS-AP-MW-26H	3/25/2020 10:17	DO	0.47	mg/L
GS-AP-MW-26H	3/25/2020 10:17	Depth to Water Detail	102.57	ft
GS-AP-MW-26H	3/25/2020 10:17	Oxidation Reduction Potention	-103.69	mv
GS-AP-MW-26H	3/25/2020 10:17	pH	7.26	pH
GS-AP-MW-26H	3/25/2020 10:17	Temperature	18.3	C
GS-AP-MW-26H	3/25/2020 10:17	Turbidity	51.5	NTU
GS-AP-MW-26H	3/25/2020 10:22	Conductivity	448.22	uS/cm
GS-AP-MW-26H	3/25/2020 10:22	DO	0.48	mg/L
GS-AP-MW-26H	3/25/2020 10:22	Depth to Water Detail	103.08	ft
GS-AP-MW-26H	3/25/2020 10:22	Oxidation Reduction Potention	-103.18	mv
GS-AP-MW-26H	3/25/2020 10:22	pH	7.26	pH
GS-AP-MW-26H	3/25/2020 10:22	Temperature	18.45	C
GS-AP-MW-26H	3/25/2020 10:22	Turbidity	57.7	NTU
GS-AP-MW-26H	3/25/2020 10:27	Conductivity	436.26	uS/cm
GS-AP-MW-26H	3/25/2020 10:27	DO	0.49	mg/L
GS-AP-MW-26H	3/25/2020 10:27	Depth to Water Detail	103.3	ft
GS-AP-MW-26H	3/25/2020 10:27	Oxidation Reduction Potention	-102.81	mv
GS-AP-MW-26H	3/25/2020 10:27	pH	7.26	pH
GS-AP-MW-26H	3/25/2020 10:27	Temperature	18.74	C
GS-AP-MW-26H	3/25/2020 10:27	Turbidity	53.7	NTU
GS-AP-MW-26H	3/25/2020 10:32	Conductivity	435.01	uS/cm

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-26H	3/25/2020 10:32	DO	0.48	mg/L
GS-AP-MW-26H	3/25/2020 10:32	Depth to Water Detail	103.7	ft
GS-AP-MW-26H	3/25/2020 10:32	Oxidation Reduction Potention	-102.56	mv
GS-AP-MW-26H	3/25/2020 10:32	pH	7.26	pH
GS-AP-MW-26H	3/25/2020 10:32	Temperature	18.78	C
GS-AP-MW-26H	3/25/2020 10:32	Turbidity	57.5	NTU
GS-AP-MW-26H	3/25/2020 10:37	Conductivity	433.18	uS/cm
GS-AP-MW-26H	3/25/2020 10:37	DO	0.52	mg/L
GS-AP-MW-26H	3/25/2020 10:37	Depth to Water Detail	104	ft
GS-AP-MW-26H	3/25/2020 10:37	Oxidation Reduction Potention	-100.59	mv
GS-AP-MW-26H	3/25/2020 10:37	pH	7.26	pH
GS-AP-MW-26H	3/25/2020 10:37	Temperature	18.84	C
GS-AP-MW-26H	3/25/2020 10:37	Turbidity	61.5	NTU
GS-AP-MW-26H	3/25/2020 10:42	Conductivity	449.6	uS/cm
GS-AP-MW-26H	3/25/2020 10:42	DO	0.5	mg/L
GS-AP-MW-26H	3/25/2020 10:42	Depth to Water Detail	104.2	ft
GS-AP-MW-26H	3/25/2020 10:42	Oxidation Reduction Potention	-97.47	mv
GS-AP-MW-26H	3/25/2020 10:42	pH	7.24	pH
GS-AP-MW-26H	3/25/2020 10:42	Temperature	18.39	C
GS-AP-MW-26H	3/25/2020 10:42	Turbidity	58.5	NTU
GS-AP-MW-26H	3/25/2020 10:47	Conductivity	448.29	uS/cm
GS-AP-MW-26H	3/25/2020 10:47	DO	0.53	mg/L
GS-AP-MW-26H	3/25/2020 10:47	Depth to Water Detail	104.52	ft
GS-AP-MW-26H	3/25/2020 10:47	Oxidation Reduction Potention	-97.13	mv
GS-AP-MW-26H	3/25/2020 10:47	pH	7.24	pH
GS-AP-MW-26H	3/25/2020 10:47	Temperature	18.25	C
GS-AP-MW-26H	3/25/2020 10:47	Turbidity	57.3	NTU
GS-AP-MW-26H	3/25/2020 10:52	Conductivity	440.81	uS/cm
GS-AP-MW-26H	3/25/2020 10:52	DO	0.54	mg/L
GS-AP-MW-26H	3/25/2020 10:52	Depth to Water Detail	104.65	ft
GS-AP-MW-26H	3/25/2020 10:52	Oxidation Reduction Potention	-97.17	mv
GS-AP-MW-26H	3/25/2020 10:52	pH	7.24	pH
GS-AP-MW-26H	3/25/2020 10:52	Temperature	18.84	C
GS-AP-MW-26H	3/25/2020 10:52	Turbidity	56	NTU
GS-AP-MW-26H	3/25/2020 10:57	Conductivity	434.93	uS/cm
GS-AP-MW-26H	3/25/2020 10:57	DO	0.49	mg/L
GS-AP-MW-26H	3/25/2020 10:57	Depth to Water Detail	105	ft
GS-AP-MW-26H	3/25/2020 10:57	Oxidation Reduction Potention	-96.65	mv
GS-AP-MW-26H	3/25/2020 10:57	pH	7.25	pH
GS-AP-MW-26H	3/25/2020 10:57	Temperature	18.35	C
GS-AP-MW-26H	3/25/2020 10:57	Turbidity	58.9	NTU
GS-AP-MW-26H	3/25/2020 11:02	Conductivity	428.36	uS/cm
GS-AP-MW-26H	3/25/2020 11:02	DO	0.52	mg/L
GS-AP-MW-26H	3/25/2020 11:02	Depth to Water Detail	105.2	ft
GS-AP-MW-26H	3/25/2020 11:02	Oxidation Reduction Potention	-95.75	mv
GS-AP-MW-26H	3/25/2020 11:02	pH	7.25	pH

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-26H	3/25/2020 11:02	Temperature	18.7	C
GS-AP-MW-26H	3/25/2020 11:02	Turbidity	49.9	NTU
GS-AP-MW-26H	3/25/2020 11:07	Conductivity	424.68	uS/cm
GS-AP-MW-26H	3/25/2020 11:07	DO	0.5	mg/L
GS-AP-MW-26H	3/25/2020 11:07	Depth to Water Detail	105.35	ft
GS-AP-MW-26H	3/25/2020 11:07	Oxidation Reduction Potention	-95.32	mv
GS-AP-MW-26H	3/25/2020 11:07	pH	7.25	pH
GS-AP-MW-26H	3/25/2020 11:07	Temperature	19.02	C
GS-AP-MW-26H	3/25/2020 11:07	Turbidity	54.5	NTU
GS-AP-MW-26H	3/25/2020 11:12	Conductivity	421.01	uS/cm
GS-AP-MW-26H	3/25/2020 11:12	DO	0.5	mg/L
GS-AP-MW-26H	3/25/2020 11:12	Depth to Water Detail	105.45	ft
GS-AP-MW-26H	3/25/2020 11:12	Oxidation Reduction Potention	-95.22	mv
GS-AP-MW-26H	3/25/2020 11:12	pH	7.25	pH
GS-AP-MW-26H	3/25/2020 11:12	Temperature	19.33	C
GS-AP-MW-26H	3/25/2020 11:12	Turbidity	57.4	NTU
GS-AP-MW-26H	3/25/2020 11:17	Conductivity	454.08	uS/cm
GS-AP-MW-26H	3/25/2020 11:17	DO	0.49	mg/L
GS-AP-MW-26H	3/25/2020 11:17	Depth to Water Detail	105.78	ft
GS-AP-MW-26H	3/25/2020 11:17	Oxidation Reduction Potention	-93.29	mv
GS-AP-MW-26H	3/25/2020 11:17	pH	7.22	pH
GS-AP-MW-26H	3/25/2020 11:17	Temperature	18.81	C
GS-AP-MW-26H	3/25/2020 11:17	Turbidity	55.4	NTU
GS-AP-MW-26H	3/25/2020 11:22	Conductivity	450.38	uS/cm
GS-AP-MW-26H	3/25/2020 11:22	DO	0.55	mg/L
GS-AP-MW-26H	3/25/2020 11:22	Depth to Water Detail	105.87	ft
GS-AP-MW-26H	3/25/2020 11:22	Oxidation Reduction Potention	-93.12	mv
GS-AP-MW-26H	3/25/2020 11:22	pH	7.23	pH
GS-AP-MW-26H	3/25/2020 11:22	Temperature	18.6	C
GS-AP-MW-26H	3/25/2020 11:22	Turbidity	44.2	NTU
GS-AP-MW-26H	3/25/2020 11:27	Conductivity	443.87	uS/cm
GS-AP-MW-26H	3/25/2020 11:27	DO	0.49	mg/L
GS-AP-MW-26H	3/25/2020 11:27	Depth to Water Detail	106.18	ft
GS-AP-MW-26H	3/25/2020 11:27	Oxidation Reduction Potention	-92.28	mv
GS-AP-MW-26H	3/25/2020 11:27	pH	7.23	pH
GS-AP-MW-26H	3/25/2020 11:27	Temperature	18.32	C
GS-AP-MW-26H	3/25/2020 11:27	Turbidity	47.5	NTU
GS-AP-MW-26H	3/25/2020 11:32	Conductivity	437.65	uS/cm
GS-AP-MW-26H	3/25/2020 11:32	DO	0.49	mg/L
GS-AP-MW-26H	3/25/2020 11:32	Depth to Water Detail	106.35	ft
GS-AP-MW-26H	3/25/2020 11:32	Oxidation Reduction Potention	-92.13	mv
GS-AP-MW-26H	3/25/2020 11:32	pH	7.23	pH
GS-AP-MW-26H	3/25/2020 11:32	Temperature	18.57	C
GS-AP-MW-26H	3/25/2020 11:32	Turbidity	47.4	NTU
GS-AP-MW-26H	3/25/2020 11:37	Conductivity	435.93	uS/cm
GS-AP-MW-26H	3/25/2020 11:37	DO	0.51	mg/L

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-26H	3/25/2020 11:37	Depth to Water Detail	106.38	ft
GS-AP-MW-26H	3/25/2020 11:37	Oxidation Reduction Potention	-92.92	mv
GS-AP-MW-26H	3/25/2020 11:37	pH	7.24	pH
GS-AP-MW-26H	3/25/2020 11:37	Temperature	19.31	C
GS-AP-MW-26H	3/25/2020 11:37	Turbidity	44.7	NTU

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-32H	3/24/2020 9:51	Conductivity	565.09	uS/cm
GS-AP-MW-32H	3/24/2020 9:51	DO	0.12	mg/L
GS-AP-MW-32H	3/24/2020 9:51	Depth to Water Detail	246.7	ft
GS-AP-MW-32H	3/24/2020 9:51	Oxidation Reduction Potention	-159.73	mv
GS-AP-MW-32H	3/24/2020 9:51	pH	8.43	pH
GS-AP-MW-32H	3/24/2020 9:51	Temperature	17.84	C
GS-AP-MW-32H	3/24/2020 9:51	Turbidity	2.79	NTU
GS-AP-MW-32H	3/24/2020 10:15	Conductivity	555.29	uS/cm
GS-AP-MW-32H	3/24/2020 10:15	DO	0.02	mg/L
GS-AP-MW-32H	3/24/2020 10:15	Depth to Water Detail	249.3	ft
GS-AP-MW-32H	3/24/2020 10:15	Oxidation Reduction Potention	-197.4	mv
GS-AP-MW-32H	3/24/2020 10:15	pH	8.47	pH
GS-AP-MW-32H	3/24/2020 10:15	Temperature	17.89	C
GS-AP-MW-32H	3/24/2020 10:15	Turbidity	2.19	NTU

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-PZ-16	3/24/2020 12:19	Conductivity	612.42	uS/cm
GS-AP-PZ-16	3/24/2020 12:19	DO	0.2	mg/L
GS-AP-PZ-16	3/24/2020 12:19	Depth to Water Detail	167.52	ft
GS-AP-PZ-16	3/24/2020 12:19	Oxidation Reduction Potention	-211.99	mv
GS-AP-PZ-16	3/24/2020 12:19	pH	8.65	pH
GS-AP-PZ-16	3/24/2020 12:19	Temperature	17.72	C
GS-AP-PZ-16	3/24/2020 12:19	Turbidity	7.78	NTU
GS-AP-PZ-16	3/24/2020 12:24	Conductivity	610.37	uS/cm
GS-AP-PZ-16	3/24/2020 12:24	DO	0.11	mg/L
GS-AP-PZ-16	3/24/2020 12:24	Depth to Water Detail	167.52	ft
GS-AP-PZ-16	3/24/2020 12:24	Oxidation Reduction Potention	-234.41	mv
GS-AP-PZ-16	3/24/2020 12:24	pH	8.46	pH
GS-AP-PZ-16	3/24/2020 12:24	Temperature	17.53	C
GS-AP-PZ-16	3/24/2020 12:24	Turbidity	5.64	NTU
GS-AP-PZ-16	3/24/2020 12:29	Conductivity	611.55	uS/cm
GS-AP-PZ-16	3/24/2020 12:29	DO	0.07	mg/L
GS-AP-PZ-16	3/24/2020 12:29	Depth to Water Detail	167.52	ft
GS-AP-PZ-16	3/24/2020 12:29	Oxidation Reduction Potention	-211.73	mv
GS-AP-PZ-16	3/24/2020 12:29	pH	8.16	pH
GS-AP-PZ-16	3/24/2020 12:29	Temperature	17.45	C
GS-AP-PZ-16	3/24/2020 12:29	Turbidity	5.21	NTU
GS-AP-PZ-16	3/24/2020 12:34	Conductivity	611.86	uS/cm
GS-AP-PZ-16	3/24/2020 12:34	DO	0.04	mg/L
GS-AP-PZ-16	3/24/2020 12:34	Depth to Water Detail	167.52	ft
GS-AP-PZ-16	3/24/2020 12:34	Oxidation Reduction Potention	-193.13	mv
GS-AP-PZ-16	3/24/2020 12:34	pH	7.98	pH
GS-AP-PZ-16	3/24/2020 12:34	Temperature	17.64	C
GS-AP-PZ-16	3/24/2020 12:34	Turbidity	5.41	NTU
GS-AP-PZ-16	3/24/2020 12:39	Conductivity	611.37	uS/cm
GS-AP-PZ-16	3/24/2020 12:39	DO	0.06	mg/L
GS-AP-PZ-16	3/24/2020 12:39	Depth to Water Detail	167.52	ft
GS-AP-PZ-16	3/24/2020 12:39	Oxidation Reduction Potention	-184.89	mv
GS-AP-PZ-16	3/24/2020 12:39	pH	7.9	pH
GS-AP-PZ-16	3/24/2020 12:39	Temperature	17.58	C
GS-AP-PZ-16	3/24/2020 12:39	Turbidity	4.95	NTU
GS-AP-PZ-16	3/24/2020 12:44	Conductivity	610.89	uS/cm
GS-AP-PZ-16	3/24/2020 12:44	DO	0.03	mg/L
GS-AP-PZ-16	3/24/2020 12:44	Depth to Water Detail	167.52	ft
GS-AP-PZ-16	3/24/2020 12:44	Oxidation Reduction Potention	-186.37	mv
GS-AP-PZ-16	3/24/2020 12:44	pH	7.89	pH
GS-AP-PZ-16	3/24/2020 12:44	Temperature	17.58	C
GS-AP-PZ-16	3/24/2020 12:44	Turbidity	5.76	NTU

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-PZ-22	3/24/2020 11:10	Conductivity	689.14	uS/cm
GS-AP-PZ-22	3/24/2020 11:10	DO	0.25	mg/L
GS-AP-PZ-22	3/24/2020 11:10	Depth to Water Detail	237.82	ft
GS-AP-PZ-22	3/24/2020 11:10	Oxidation Reduction Potention	-224.1	mv
GS-AP-PZ-22	3/24/2020 11:10	pH	8.43	pH
GS-AP-PZ-22	3/24/2020 11:10	Temperature	17.44	C
GS-AP-PZ-22	3/24/2020 11:10	Turbidity	10.65	NTU
GS-AP-PZ-22	3/24/2020 11:15	Conductivity	685.41	uS/cm
GS-AP-PZ-22	3/24/2020 11:15	DO	0.14	mg/L
GS-AP-PZ-22	3/24/2020 11:15	Depth to Water Detail	237.82	ft
GS-AP-PZ-22	3/24/2020 11:15	Oxidation Reduction Potention	-222.3	mv
GS-AP-PZ-22	3/24/2020 11:15	pH	8.18	pH
GS-AP-PZ-22	3/24/2020 11:15	Temperature	17.71	C
GS-AP-PZ-22	3/24/2020 11:15	Turbidity	8.33	NTU
GS-AP-PZ-22	3/24/2020 11:20	Conductivity	677.12	uS/cm
GS-AP-PZ-22	3/24/2020 11:20	DO	0.1	mg/L
GS-AP-PZ-22	3/24/2020 11:20	Depth to Water Detail	237.82	ft
GS-AP-PZ-22	3/24/2020 11:20	Oxidation Reduction Potention	-213.78	mv
GS-AP-PZ-22	3/24/2020 11:20	pH	8.05	pH
GS-AP-PZ-22	3/24/2020 11:20	Temperature	17.69	C
GS-AP-PZ-22	3/24/2020 11:20	Turbidity	11	NTU
GS-AP-PZ-22	3/24/2020 11:25	Conductivity	670.3	uS/cm
GS-AP-PZ-22	3/24/2020 11:25	DO	0.07	mg/L
GS-AP-PZ-22	3/24/2020 11:25	Depth to Water Detail	237.82	ft
GS-AP-PZ-22	3/24/2020 11:25	Oxidation Reduction Potention	-199.79	mv
GS-AP-PZ-22	3/24/2020 11:25	pH	7.89	pH
GS-AP-PZ-22	3/24/2020 11:25	Temperature	17.63	C
GS-AP-PZ-22	3/24/2020 11:25	Turbidity	15.4	NTU
GS-AP-PZ-22	3/24/2020 11:30	Conductivity	664.53	uS/cm
GS-AP-PZ-22	3/24/2020 11:30	DO	0.05	mg/L
GS-AP-PZ-22	3/24/2020 11:30	Depth to Water Detail	237.82	ft
GS-AP-PZ-22	3/24/2020 11:30	Oxidation Reduction Potention	-189.13	mv
GS-AP-PZ-22	3/24/2020 11:30	pH	7.77	pH
GS-AP-PZ-22	3/24/2020 11:30	Temperature	17.7	C
GS-AP-PZ-22	3/24/2020 11:30	Turbidity	13.8	NTU
GS-AP-PZ-22	3/24/2020 11:35	Conductivity	660.33	uS/cm
GS-AP-PZ-22	3/24/2020 11:35	DO	0.04	mg/L
GS-AP-PZ-22	3/24/2020 11:35	Depth to Water Detail	237.82	ft
GS-AP-PZ-22	3/24/2020 11:35	Oxidation Reduction Potention	-186.94	mv
GS-AP-PZ-22	3/24/2020 11:35	pH	7.77	pH
GS-AP-PZ-22	3/24/2020 11:35	Temperature	17.74	C
GS-AP-PZ-22	3/24/2020 11:35	Turbidity	7.39	NTU

Alabama Power Company
Plant Gorgas Ash Pond

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-31H	3/18/2020 13:36	Conductivity	939.53	uS/cm
GS-AP-MW-31H	3/18/2020 13:36	DO	0.18	mg/L
GS-AP-MW-31H	3/18/2020 13:36	Depth to Water Detail	234.7	ft
GS-AP-MW-31H	3/18/2020 13:36	Oxidation Reduction Potention	-193.7	mv
GS-AP-MW-31H	3/18/2020 13:36	pH	8.51	pH
GS-AP-MW-31H	3/18/2020 13:36	Temperature	18.57	C
GS-AP-MW-31H	3/18/2020 13:36	Turbidity	13.6	NTU
GS-AP-MW-31H	3/18/2020 13:41	Conductivity	880.65	uS/cm
GS-AP-MW-31H	3/18/2020 13:41	DO	0.12	mg/L
GS-AP-MW-31H	3/18/2020 13:41	Depth to Water Detail	234.7	ft
GS-AP-MW-31H	3/18/2020 13:41	Oxidation Reduction Potention	-208.97	mv
GS-AP-MW-31H	3/18/2020 13:41	pH	8.58	pH
GS-AP-MW-31H	3/18/2020 13:41	Temperature	18.69	C
GS-AP-MW-31H	3/18/2020 13:41	Turbidity	11.8	NTU
GS-AP-MW-31H	3/18/2020 13:46	Conductivity	815.73	uS/cm
GS-AP-MW-31H	3/18/2020 13:46	DO	0.09	mg/L
GS-AP-MW-31H	3/18/2020 13:46	Depth to Water Detail	234.9	ft
GS-AP-MW-31H	3/18/2020 13:46	Oxidation Reduction Potention	-218.37	mv
GS-AP-MW-31H	3/18/2020 13:46	pH	8.64	pH
GS-AP-MW-31H	3/18/2020 13:46	Temperature	18.59	C
GS-AP-MW-31H	3/18/2020 13:46	Turbidity	12.3	NTU
GS-AP-MW-31H	3/18/2020 13:51	Conductivity	752.33	uS/cm
GS-AP-MW-31H	3/18/2020 13:51	DO	0.06	mg/L
GS-AP-MW-31H	3/18/2020 13:51	Depth to Water Detail	235.13	ft
GS-AP-MW-31H	3/18/2020 13:51	Oxidation Reduction Potention	-225.29	mv
GS-AP-MW-31H	3/18/2020 13:51	pH	8.67	pH
GS-AP-MW-31H	3/18/2020 13:51	Temperature	18.64	C
GS-AP-MW-31H	3/18/2020 13:51	Turbidity	11.7	NTU
GS-AP-MW-31H	3/18/2020 13:56	Conductivity	692.6	uS/cm
GS-AP-MW-31H	3/18/2020 13:56	DO	0.04	mg/L
GS-AP-MW-31H	3/18/2020 13:56	Depth to Water Detail	235.4	ft
GS-AP-MW-31H	3/18/2020 13:56	Oxidation Reduction Potention	-230.86	mv
GS-AP-MW-31H	3/18/2020 13:56	pH	8.69	pH
GS-AP-MW-31H	3/18/2020 13:56	Temperature	18.54	C
GS-AP-MW-31H	3/18/2020 13:56	Turbidity	11.45	NTU
GS-AP-MW-31H	3/18/2020 14:01	Conductivity	655.38	uS/cm
GS-AP-MW-31H	3/18/2020 14:01	DO	0.03	mg/L
GS-AP-MW-31H	3/18/2020 14:01	Depth to Water Detail	235.5	ft
GS-AP-MW-31H	3/18/2020 14:01	Oxidation Reduction Potention	-236.46	mv
GS-AP-MW-31H	3/18/2020 14:01	pH	8.72	pH
GS-AP-MW-31H	3/18/2020 14:01	Temperature	18.5	C
GS-AP-MW-31H	3/18/2020 14:01	Turbidity	11.07	NTU
GS-AP-MW-31H	3/18/2020 14:06	Conductivity	614.37	uS/cm
GS-AP-MW-31H	3/18/2020 14:06	DO	0.01	mg/L
GS-AP-MW-31H	3/18/2020 14:06	Depth to Water Detail	235.7	ft
GS-AP-MW-31H	3/18/2020 14:06	Oxidation Reduction Potention	-240.66	mv

Alabama Power Company
Plant Gorgas Ash Pond

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-31H	3/18/2020 14:06	pH	8.73	pH
GS-AP-MW-31H	3/18/2020 14:06	Temperature	18.44	C
GS-AP-MW-31H	3/18/2020 14:06	Turbidity	9.99	NTU
GS-AP-MW-31H	3/18/2020 14:11	Conductivity	585.94	uS/cm
GS-AP-MW-31H	3/18/2020 14:11	DO	0.01	mg/L
GS-AP-MW-31H	3/18/2020 14:11	Depth to Water Detail	235.85	ft
GS-AP-MW-31H	3/18/2020 14:11	Oxidation Reduction Potention	-244.73	mv
GS-AP-MW-31H	3/18/2020 14:11	pH	8.73	pH
GS-AP-MW-31H	3/18/2020 14:11	Temperature	18.33	C
GS-AP-MW-31H	3/18/2020 14:11	Turbidity	8.92	NTU
GS-AP-MW-31H	3/18/2020 14:16	Conductivity	570.96	uS/cm
GS-AP-MW-31H	3/18/2020 14:16	DO	0	mg/L
GS-AP-MW-31H	3/18/2020 14:16	Depth to Water Detail	236.05	ft
GS-AP-MW-31H	3/18/2020 14:16	Oxidation Reduction Potention	-248.34	mv
GS-AP-MW-31H	3/18/2020 14:16	pH	8.74	pH
GS-AP-MW-31H	3/18/2020 14:16	Temperature	18.54	C
GS-AP-MW-31H	3/18/2020 14:16	Turbidity	8.77	NTU
GS-AP-MW-31H	3/18/2020 14:21	Conductivity	538.46	uS/cm
GS-AP-MW-31H	3/18/2020 14:21	DO	0	mg/L
GS-AP-MW-31H	3/18/2020 14:21	Depth to Water Detail	236.15	ft
GS-AP-MW-31H	3/18/2020 14:21	Oxidation Reduction Potention	-252.32	mv
GS-AP-MW-31H	3/18/2020 14:21	pH	8.76	pH
GS-AP-MW-31H	3/18/2020 14:21	Temperature	18.63	C
GS-AP-MW-31H	3/18/2020 14:21	Turbidity	7.8	NTU
GS-AP-MW-31H	3/18/2020 14:26	Conductivity	528.52	uS/cm
GS-AP-MW-31H	3/18/2020 14:26	DO	0	mg/L
GS-AP-MW-31H	3/18/2020 14:26	Depth to Water Detail	236.25	ft
GS-AP-MW-31H	3/18/2020 14:26	Oxidation Reduction Potention	-255.37	mv
GS-AP-MW-31H	3/18/2020 14:26	pH	8.76	pH
GS-AP-MW-31H	3/18/2020 14:26	Temperature	18.45	C
GS-AP-MW-31H	3/18/2020 14:26	Turbidity	8.29	NTU
GS-AP-MW-31H	3/18/2020 14:31	Conductivity	537.97	uS/cm
GS-AP-MW-31H	3/18/2020 14:31	DO	0	mg/L
GS-AP-MW-31H	3/18/2020 14:31	Depth to Water Detail	236.41	ft
GS-AP-MW-31H	3/18/2020 14:31	Oxidation Reduction Potention	-255.4	mv
GS-AP-MW-31H	3/18/2020 14:31	pH	8.73	pH
GS-AP-MW-31H	3/18/2020 14:31	Temperature	18.22	C
GS-AP-MW-31H	3/18/2020 14:31	Turbidity	8.45	NTU

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 Ash Pond

2020 Event 1 Resample

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

Purge water from well MW-34HO had a black tint to it but turbidity levels were less than 5 NTU before sampling. The flow-through cell was noticed to have a black residue on the inside after sampling wells MW-33HO and MW-30HA.

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 : WMWGORAP_1277

Project/Site : Gorgas Ash Pond
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

June 08, 2020

Dear Dustin Brooks,

Enclosed are the analytical results for sample(s) received by the laboratory on May 14, 2020.
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, 2020

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: 2020.06.08 14:51:06 -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: 2020.06.08 15:40:29 -05'00'

NELAP ACCREDITED TNI LABORATORY

REPORT OF LABORATORY ANALYSIS

**This Certificate states the physical and/or chemical characteristics of the sample as submitted.
This document shall not be reproduced, except in full, without written consent from
Alabama Power's General Test Laboratory.**

Alabama Power Lab & Field SERVICES

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

Case Narrative

Alabama Power

Metals ICP

Gorgas Ash Pond

WMWGORAP_1277

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 are NIST/ISO/IEC/Guide 34 traceable and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BA08752	673511	WMWGORAP_1277
BA08753	673511	WMWGORAP_1277
BA08754	673511	WMWGORAP_1277
BA08755	673511	WMWGORAP_1277
BA08756	673511	WMWGORAP_1277
BA08757	673511	WMWGORAP_1277
BA08758	673511	WMWGORAP_1277
BA08759	673511	WMWGORAP_1277
BA08760	673511	WMWGORAP_1277
BA08761	673511	WMWGORAP_1277
BA08762	673512	WMWGORAP_1277
BA08763	673512	WMWGORAP_1277

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
BA08755	Calcium	10.15
BA08756	Calcium	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

Metals ICPMS

Gorgas Ash Pond

WMWGORAP_1277

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 are NIST/ISO/IEC/Guide 34 traceable and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BA08752	673332	WMWGORAP_1277
BA08753	673332	WMWGORAP_1277
BA08754	673332	WMWGORAP_1277
BA08755	673332	WMWGORAP_1277
BA08756	673332	WMWGORAP_1277
BA08757	673332	WMWGORAP_1277
BA08758	673332	WMWGORAP_1277
BA08759	673332	WMWGORAP_1277
BA08760	673332	WMWGORAP_1277
BA08761	673332	WMWGORAP_1277
BA08762	673333	WMWGORAP_1277
BA08763	673333	WMWGORAP_1277

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. 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 Ash Pond

WMWGORAP_1277

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 are NIST/ISO/IEC/Guide 34 traceable and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BA08752	673220	WMWGORAP_1277
BA08753	673220	WMWGORAP_1277
BA08754	673220	WMWGORAP_1277
BA08755	673220	WMWGORAP_1277
BA08756	673220	WMWGORAP_1277
BA08757	673220	WMWGORAP_1277
BA08758	673220	WMWGORAP_1277
BA08759	673220	WMWGORAP_1277
BA08760	673220	WMWGORAP_1277
BA08761	673220	WMWGORAP_1277
BA08762	673221	WMWGORAP_1277
BA08763	673221	WMWGORAP_1277

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.

TDS

Gorgas Ash Pond

WMWGORAP_1277

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 are NIST/ISO/IEC/Guide 34 traceable and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BA08752	673215	WMWGORAP_1277
BA08753	673215	WMWGORAP_1277
BA08754	673215	WMWGORAP_1277
BA08755	673215	WMWGORAP_1277
BA08756	673215	WMWGORAP_1277
BA08757	673215	WMWGORAP_1277
BA08758	673215	WMWGORAP_1277
BA08759	673215	WMWGORAP_1277
BA08760	673215	WMWGORAP_1277
BA08761	673215	WMWGORAP_1277
BA08762	673216	WMWGORAP_1277
BA08763	673216	WMWGORAP_1277

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:
  - BA08752
  - BA08758
  - BA08763

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

Case Narrative

Alabama Power

Anions

Gorgas Ash Pond

WMWGORAP_1277

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 are NIST/ISO/IEC/Guide 34 traceable and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BA08752	673429, 673431, & 673733	WMWGORAP_1277
BA08753	673429, 673431, & 673733	WMWGORAP_1277
BA08754	673429, 673431, & 673733	WMWGORAP_1277
BA08755	673429, 673431, & 673733	WMWGORAP_1277
BA08756	673429, 673431, & 673733	WMWGORAP_1277
BA08757	673429, 673431, & 673733	WMWGORAP_1277
BA08758	673429, 673431, & 673733	WMWGORAP_1277
BA08759	673429, 673431, & 673733	WMWGORAP_1277
BA08760	673429, 673431, & 673733	WMWGORAP_1277
BA08761	673429, 673431, & 673733	WMWGORAP_1277
BA08762	673430, 673432, & 673491	WMWGORAP_1277
BA08763	673430, 673432, & 673491	WMWGORAP_1277

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
BA08754	Sulfate	2
BA08755	Chloride & Sulfate	10 & 50
BA08756	Chloride & Sulfate	10 & 50
BA08759	Chloride & Sulfate	2 & 2
BA08760	Chloride & Sulfate	5 & 3
BA08761	Sulfate	16

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

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond Equipment Blank

Location Code: WMWGORAPEB
Collected: 5/12/20 09:15
Customer ID:
Submittal Date: 5/14/20 11:17

Laboratory ID Number: BA08752

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	5/19/20 10:45	5/20/20 09:51		1.015	Not Detected	mg/L	0.03	0.1	U
* Calcium, Total	5/19/20 10:45	5/20/20 09:51		1.015	Not Detected	mg/L	0.1	0.5	U
* Lithium, Total	5/19/20 10:45	5/20/20 09:51		1.015	Not Detected	mg/L	0.01	0.02	U
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	5/15/20 11:00	5/18/20 09:47		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	5/15/20 11:00	5/18/20 09:47		1.015	Not Detected	mg/L	0.001	0.005	U
* Barium, Total	5/15/20 11:00	5/18/20 09:47		1.015	Not Detected	mg/L	0.002	0.01	U
* Beryllium, Total	5/15/20 11:00	5/18/20 09:47		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	5/15/20 11:00	5/18/20 09:47		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	5/15/20 11:00	5/18/20 09:47		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	5/15/20 11:00	5/18/20 09:47		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	5/15/20 11:00	5/18/20 09:47		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	5/15/20 11:00	5/18/20 09:47		1.015	Not Detected	mg/L	0.002	0.01	U
* Selenium, Total	5/15/20 11:00	5/18/20 09:47		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	5/15/20 11:00	5/18/20 09:47		1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 245.1	***Analyst: GAS***								
* Mercury, Total by CVAA	5/18/20 10:40	5/19/20 11:20		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2540C	***Analyst: TJW***								
* Solids, Dissolved	5/15/20 14:20	5/19/20 10:16		1	Not Detected	mg/L		25	U
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	5/19/20 11:08	5/19/20 11:08		1	Not Detected	mg/L	0.50	1	U
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	5/19/20 14:17	5/19/20 14:17		1	Not Detected	mg/L	0.06	0.1	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	5/26/20 13:04	5/26/20 13:04		1	Not Detected	mg/L	0.50	1	U

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

Comments:

Reported: 6/8/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORAPEB
Sample Date: 5/12/20 09:15
Customer ID:
Delivery Date: 5/14/20 11:17

Description: Gorgas Ash Pond Equipment Blank

Laboratory ID Number: BA08752

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA08761	Arsenic, Total	mg/L	0.00000505	0.0001474	0.10	0.109	0.107	0.109	0.085 to 0.115	101	70 to 130	1.85	20
BA08761	Molybdenum, Total	mg/L	0.0000156	0.0001474	0.10	0.103	0.102	0.0987	0.085 to 0.115	97.8	70 to 130	0.976	20
BA08761	Boron, Total	mg/L	-0.00194	0.0650254	1.00	1.11	1.14	0.991	0.85 to 1.15	104	70 to 130	2.67	20
BA08761	Selenium, Total	mg/L	0.000128	0.00066	0.10	0.0848	0.0860	0.107	0.085 to 0.115	84.8	70 to 130	1.41	20
BA08761	Barium, Total	mg/L	0.0000144	0.0002	0.10	0.174	0.174	0.104	0.085 to 0.115	92.1	70 to 130	0.00	20
BA08761	Beryllium, Total	mg/L	0.0000147	0.00088	0.10	0.0966	0.0943	0.0935	0.085 to 0.115	96.6	70 to 130	2.41	20
BA08761	Chromium, Total	mg/L	0.00000372	0.00044	0.10	0.0976	0.0994	0.104	0.085 to 0.115	97.6	70 to 130	1.83	20
BA08761	Calcium, Total	mg/L	0.00230	0.1518	5.00	39.8	40.5	5.05	4.25 to 5.75	90.0	70 to 130	1.74	20
BA08761	Mercury, Total by CVAA	mg/L	0.0000554	0.0005	0.004	0.00323	0.00335	0.00360	0.0034 to 0.0046	80.8	70 to 130	3.65	20
BA08761	Antimony, Total	mg/L	0.000250	0.00066	0.10	0.0963	0.0941	0.100	0.085 to 0.115	96.3	70 to 130	2.31	20
BA08761	Cadmium, Total	mg/L	-0.00000391	0.0001474	0.10	0.0979	0.0986	0.0996	0.085 to 0.115	97.9	70 to 130	0.712	20
BA08761	Cobalt, Total	mg/L	-0.0000539	0.0001474	0.10	0.101	0.102	0.106	0.085 to 0.115	101	70 to 130	0.985	20
BA08761	Lithium, Total	mg/L	-0.000386	0.0154	0.200	0.278	0.282	0.193	0.17 to 0.23	112	70 to 130	1.43	20
BA08761	Lead, Total	mg/L	-0.00000355	0.0001474	0.10	0.103	0.104	0.107	0.085 to 0.115	103	70 to 130	0.966	20
BA08761	Thallium, Total	mg/L	-0.0000662	0.0001474	0.10	0.0994	0.101	0.103	0.085 to 0.115	99.4	70 to 130	1.60	20

Comments:

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

Batch QC Summary

Customer Account: WMWGORAPEB
Sample Date: 5/12/20 09:15
Customer ID:
Delivery Date: 5/14/20 11:17

Description: Gorgas Ash Pond Equipment Blank

Laboratory ID Number: BA08752

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA08761	Solids, Dissolved	mg/L	2.00	25			634	54.0	40 to 60			0.795	5
BA08761	Chloride	mg/L	-0.0143	0.50	10.0	14.8	4.35	10.5	9 to 11	106	80 to 120	2.56	20
BA08761	Fluoride	mg/L	0.0319	0.05	2.50	3.56	0.814	2.74	2.25 to 2.75	109	80 to 120	2.31	20
BA08761	Sulfate	mg/L	-0.302	0.50	320	514	199	20.3	18 to 22	100	80 to 120	2.54	20

Comments:

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-28H

Location Code: WMWGORAP
Collected: 5/12/20 10:50
Customer ID:
Submittal Date: 5/14/20 11:17

Laboratory ID Number: BA08753

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	5/19/20 10:45	5/20/20 09:54		1.015	0.0719	mg/L	0.03	0.1	J
* Calcium, Total	5/19/20 10:45	5/20/20 09:54		1.015	2.83	mg/L	0.1	0.5	
* Lithium, Total	5/19/20 10:45	5/20/20 09:54		1.015	0.0569	mg/L	0.01	0.02	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	5/15/20 11:00	5/18/20 09:49		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	5/15/20 11:00	5/18/20 09:49		1.015	0.00135	mg/L	0.001	0.005	J
* Barium, Total	5/15/20 11:00	5/18/20 09:49		1.015	0.0436	mg/L	0.002	0.01	
* Beryllium, Total	5/15/20 11:00	5/18/20 09:49		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	5/15/20 11:00	5/18/20 09:49		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	5/15/20 11:00	5/18/20 09:49		1.015	0.00281	mg/L	0.002	0.01	J
* Cobalt, Total	5/15/20 11:00	5/18/20 09:49		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	5/15/20 11:00	5/18/20 09:49		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	5/15/20 11:00	5/18/20 09:49		1.015	0.00644	mg/L	0.002	0.01	J
* Selenium, Total	5/15/20 11:00	5/18/20 09:49		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	5/15/20 11:00	5/18/20 09:49		1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 245.1	***Analyst: GAS***								
* Mercury, Total by CVAA	5/18/20 10:40	5/19/20 11:24		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2540C	***Analyst: TJW***								
* Solids, Dissolved	5/15/20 14:20	5/19/20 10:16		1	464	mg/L		25	
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	5/19/20 11:10	5/19/20 11:10		1	12.7	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	5/19/20 14:18	5/19/20 14:18		1	0.195	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	5/26/20 13:05	5/26/20 13:05		1	14.3	mg/L	0.50	1	
Analytical Method: Field Measurements	***Analyst: AWG***								
Conductivity	5/12/20 10:47	5/12/20 10:47			721.84	uS/cm			FA
pH	5/12/20 10:47	5/12/20 10:47			8.35	SU			FA
Temperature	5/12/20 10:47	5/12/20 10:47			19.53	C			FA
Turbidity	5/12/20 10:47	5/12/20 10:47			7.6	NTU			FA

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

Comments:

Reported: 6/8/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORAP
Sample Date: 5/12/20 10:50
Customer ID:
Delivery Date: 5/14/20 11:17

Description: Gorgas Ash Pond - MW-28H

Laboratory ID Number: BA08753

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA08761	Arsenic, Total	mg/L	0.00000505	0.0001474	0.10	0.109	0.107	0.109	0.085 to 0.115	101	70 to 130	1.85	20
BA08761	Boron, Total	mg/L	-0.00194	0.0650254	1.00	1.11	1.14	0.991	0.85 to 1.15	104	70 to 130	2.67	20
BA08761	Selenium, Total	mg/L	0.000128	0.00066	0.10	0.0848	0.0860	0.107	0.085 to 0.115	84.8	70 to 130	1.41	20
BA08761	Barium, Total	mg/L	0.0000144	0.0002	0.10	0.174	0.174	0.104	0.085 to 0.115	92.1	70 to 130	0.00	20
BA08761	Beryllium, Total	mg/L	0.0000147	0.00088	0.10	0.0966	0.0943	0.0935	0.085 to 0.115	96.6	70 to 130	2.41	20
BA08761	Chromium, Total	mg/L	0.00000372	0.00044	0.10	0.0976	0.0994	0.104	0.085 to 0.115	97.6	70 to 130	1.83	20
BA08761	Cadmium, Total	mg/L	-0.00000391	0.0001474	0.10	0.0979	0.0986	0.0996	0.085 to 0.115	97.9	70 to 130	0.712	20
BA08761	Cobalt, Total	mg/L	-0.0000539	0.0001474	0.10	0.101	0.102	0.106	0.085 to 0.115	101	70 to 130	0.985	20
BA08761	Lithium, Total	mg/L	-0.000386	0.0154	0.200	0.278	0.282	0.193	0.17 to 0.23	112	70 to 130	1.43	20
BA08761	Lead, Total	mg/L	-0.00000355	0.0001474	0.10	0.103	0.104	0.107	0.085 to 0.115	103	70 to 130	0.966	20
BA08761	Thallium, Total	mg/L	-0.0000662	0.0001474	0.10	0.0994	0.101	0.103	0.085 to 0.115	99.4	70 to 130	1.60	20
BA08761	Calcium, Total	mg/L	0.00230	0.1518	5.00	39.8	40.5	5.05	4.25 to 5.75	90.0	70 to 130	1.74	20
BA08761	Mercury, Total by CVAA	mg/L	0.0000554	0.0005	0.004	0.00323	0.00335	0.00360	0.0034 to 0.0046	80.8	70 to 130	3.65	20
BA08761	Antimony, Total	mg/L	0.000250	0.00066	0.10	0.0963	0.0941	0.100	0.085 to 0.115	96.3	70 to 130	2.31	20
BA08761	Molybdenum, Total	mg/L	0.0000156	0.0001474	0.10	0.103	0.102	0.0987	0.085 to 0.115	97.8	70 to 130	0.976	20

Comments:

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 5/12/20 10:50
Customer ID:
Delivery Date: 5/14/20 11:17

Description: Gorgas Ash Pond - MW-28H

Laboratory ID Number: BA08753

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA08761	Solids, Dissolved	mg/L	2.00	25			634	54.0	40 to 60			0.795	5
BA08761	Sulfate	mg/L	-0.302	0.50	320	514	199	20.3	18 to 22	100	80 to 120	2.54	20
BA08761	Chloride	mg/L	-0.0143	0.50	10.0	14.8	4.35	10.5	9 to 11	106	80 to 120	2.56	20
BA08761	Fluoride	mg/L	0.0319	0.05	2.50	3.56	0.814	2.74	2.25 to 2.75	109	80 to 120	2.31	20

Comments:

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-17

Location Code: WMWGORAP
Collected: 5/12/20 12:12
Customer ID:
Submittal Date: 5/14/20 11:17

Laboratory ID Number: BA08754

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	5/19/20 10:45	5/20/20 09:57		1.015	0.0862	mg/L	0.03	0.1	J
* Calcium, Total	5/19/20 10:45	5/20/20 09:57		1.015	2.95	mg/L	0.1	0.5	
* Lithium, Total	5/19/20 10:45	5/20/20 09:57		1.015	0.0602	mg/L	0.01	0.02	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	5/15/20 11:00	5/18/20 09:52		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	5/15/20 11:00	5/18/20 09:52		1.015	0.00326	mg/L	0.001	0.005	J
* Barium, Total	5/15/20 11:00	5/18/20 09:52		1.015	0.0941	mg/L	0.002	0.01	
* Beryllium, Total	5/15/20 11:00	5/18/20 09:52		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	5/15/20 11:00	5/18/20 09:52		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	5/15/20 11:00	5/18/20 09:52		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	5/15/20 11:00	5/18/20 09:52		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	5/15/20 11:00	5/18/20 09:52		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	5/15/20 11:00	5/18/20 09:52		1.015	0.00436	mg/L	0.002	0.01	J
* Selenium, Total	5/15/20 11:00	5/18/20 09:52		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	5/15/20 11:00	5/18/20 09:52		1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 245.1	***Analyst: GAS***								
* Mercury, Total by CVAA	5/18/20 10:40	5/19/20 11:26		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2540C	***Analyst: TJW***								
* Solids, Dissolved	5/15/20 14:20	5/19/20 10:16		1	493	mg/L		25	
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	5/19/20 11:11	5/19/20 11:11		1	9.16	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	5/19/20 14:19	5/19/20 14:19		1	0.263	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	5/26/20 13:06	5/26/20 13:06		2	44.4	mg/L	1.00	2	
Analytical Method: Field Measurements	***Analyst: AWG***								
Conductivity	5/12/20 12:09	5/12/20 12:09			894.85	uS/cm			FA
pH	5/12/20 12:09	5/12/20 12:09			8.42	SU			FA
Temperature	5/12/20 12:09	5/12/20 12:09			19.18	C			FA
Turbidity	5/12/20 12:09	5/12/20 12:09			0.76	NTU			FA

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

Comments:

Reported: 6/8/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORAP
Sample Date: 5/12/20 12:12
Customer ID:
Delivery Date: 5/14/20 11:17

Description: Gorgas Ash Pond - MW-17

Laboratory ID Number: BA08754

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA08761	Arsenic, Total	mg/L	0.00000505	0.0001474	0.10	0.109	0.107	0.109	0.085 to 0.115	101	70 to 130	1.85	20
BA08761	Molybdenum, Total	mg/L	0.0000156	0.0001474	0.10	0.103	0.102	0.0987	0.085 to 0.115	97.8	70 to 130	0.976	20
BA08761	Boron, Total	mg/L	-0.00194	0.0650254	1.00	1.11	1.14	0.991	0.85 to 1.15	104	70 to 130	2.67	20
BA08761	Selenium, Total	mg/L	0.000128	0.00066	0.10	0.0848	0.0860	0.107	0.085 to 0.115	84.8	70 to 130	1.41	20
BA08761	Calcium, Total	mg/L	0.00230	0.1518	5.00	39.8	40.5	5.05	4.25 to 5.75	90.0	70 to 130	1.74	20
BA08761	Mercury, Total by CVAA	mg/L	0.0000554	0.0005	0.004	0.00323	0.00335	0.00360	0.0034 to 0.0046	80.8	70 to 130	3.65	20
BA08761	Antimony, Total	mg/L	0.000250	0.00066	0.10	0.0963	0.0941	0.100	0.085 to 0.115	96.3	70 to 130	2.31	20
BA08761	Barium, Total	mg/L	0.0000144	0.0002	0.10	0.174	0.174	0.104	0.085 to 0.115	92.1	70 to 130	0.00	20
BA08761	Beryllium, Total	mg/L	0.0000147	0.00088	0.10	0.0966	0.0943	0.0935	0.085 to 0.115	96.6	70 to 130	2.41	20
BA08761	Chromium, Total	mg/L	0.00000372	0.00044	0.10	0.0976	0.0994	0.104	0.085 to 0.115	97.6	70 to 130	1.83	20
BA08761	Cadmium, Total	mg/L	-0.00000391	0.0001474	0.10	0.0979	0.0986	0.0996	0.085 to 0.115	97.9	70 to 130	0.712	20
BA08761	Cobalt, Total	mg/L	-0.0000539	0.0001474	0.10	0.101	0.102	0.106	0.085 to 0.115	101	70 to 130	0.985	20
BA08761	Lithium, Total	mg/L	-0.000386	0.0154	0.200	0.278	0.282	0.193	0.17 to 0.23	112	70 to 130	1.43	20
BA08761	Lead, Total	mg/L	-0.00000355	0.0001474	0.10	0.103	0.104	0.107	0.085 to 0.115	103	70 to 130	0.966	20
BA08761	Thallium, Total	mg/L	-0.0000662	0.0001474	0.10	0.0994	0.101	0.103	0.085 to 0.115	99.4	70 to 130	1.60	20

Comments:

Reported: 6/8/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 5/12/20 12:12
Customer ID:
Delivery Date: 5/14/20 11:17

Description: Gorgas Ash Pond - MW-17

Laboratory ID Number: BA08754

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA08761	Solids, Dissolved	mg/L	2.00	25			634	54.0	40 to 60			0.795	5
BA08761	Sulfate	mg/L	-0.302	0.50	320	514	199	20.3	18 to 22	100	80 to 120	2.54	20
BA08761	Chloride	mg/L	-0.0143	0.50	10.0	14.8	4.35	10.5	9 to 11	106	80 to 120	2.56	20
BA08761	Fluoride	mg/L	0.0319	0.05	2.50	3.56	0.814	2.74	2.25 to 2.75	109	80 to 120	2.31	20

Comments:

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-34HO

Location Code: WMWGORAP
Collected: 5/12/20 13:46
Customer ID:
Submittal Date: 5/14/20 11:17

Laboratory ID Number: BA08755

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	5/19/20 10:45	5/20/20 10:00		1.015	0.0929	mg/L	0.03	0.1	J
* Calcium, Total	5/19/20 10:45	5/20/20 12:05		10.15	80.4	mg/L	1.015	5.075	
* Lithium, Total	5/19/20 10:45	5/20/20 10:00		1.015	0.180	mg/L	0.01	0.02	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	5/15/20 11:00	5/18/20 09:55		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	5/15/20 11:00	5/18/20 09:55		1.015	0.00668	mg/L	0.001	0.005	
* Barium, Total	5/15/20 11:00	5/18/20 09:55		1.015	0.0379	mg/L	0.002	0.01	
* Beryllium, Total	5/15/20 11:00	5/18/20 09:55		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	5/15/20 11:00	5/18/20 09:55		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	5/15/20 11:00	5/18/20 09:55		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	5/15/20 11:00	5/18/20 09:55		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	5/15/20 11:00	5/18/20 09:55		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	5/15/20 11:00	5/18/20 09:55		1.015	0.00880	mg/L	0.002	0.01	J
* Selenium, Total	5/15/20 11:00	5/18/20 09:55		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	5/15/20 11:00	5/18/20 09:55		1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 245.1	***Analyst: GAS***								
* Mercury, Total by CVAA	5/18/20 10:40	5/19/20 11:29		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2540C	***Analyst: TJW***								
* Solids, Dissolved	5/15/20 14:20	5/19/20 10:16		1	2440	mg/L		178.6	
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	5/19/20 11:12	5/19/20 11:12		10	148	mg/L	5.00	10	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	5/19/20 14:20	5/19/20 14:20		1	0.370	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	5/26/20 13:08	5/26/20 13:08		50	1330	mg/L	25.00	50	
Analytical Method: Field Measurements	***Analyst: AWG***								
Conductivity	5/12/20 13:42	5/12/20 13:42			3587.61	uS/cm			FA
pH	5/12/20 13:42	5/12/20 13:42			7.44	SU			FA
Temperature	5/12/20 13:42	5/12/20 13:42			21.80	C			FA
Turbidity	5/12/20 13:42	5/12/20 13:42			4.63	NTU			FA

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

Comments:

Reported: 6/8/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORAP
Sample Date: 5/12/20 13:46
Customer ID:
Delivery Date: 5/14/20 11:17

Description: Gorgas Ash Pond - MW-34HO

Laboratory ID Number: BA08755

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA08761	Arsenic, Total	mg/L	0.00000505	0.0001474	0.10	0.109	0.107	0.109	0.085 to 0.115	101	70 to 130	1.85	20
BA08761	Molybdenum, Total	mg/L	0.0000156	0.0001474	0.10	0.103	0.102	0.0987	0.085 to 0.115	97.8	70 to 130	0.976	20
BA08761	Boron, Total	mg/L	-0.00194	0.0650254	1.00	1.11	1.14	0.991	0.85 to 1.15	104	70 to 130	2.67	20
BA08761	Selenium, Total	mg/L	0.000128	0.00066	0.10	0.0848	0.0860	0.107	0.085 to 0.115	84.8	70 to 130	1.41	20
BA08761	Calcium, Total	mg/L	0.00230	0.1518	5.00	39.8	40.5	5.05	4.25 to 5.75	90.0	70 to 130	1.74	20
BA08761	Mercury, Total by CVAA	mg/L	0.0000554	0.0005	0.004	0.00323	0.00335	0.00360	0.0034 to 0.0046	80.8	70 to 130	3.65	20
BA08761	Antimony, Total	mg/L	0.000250	0.00066	0.10	0.0963	0.0941	0.100	0.085 to 0.115	96.3	70 to 130	2.31	20
BA08761	Cadmium, Total	mg/L	-0.00000391	0.0001474	0.10	0.0979	0.0986	0.0996	0.085 to 0.115	97.9	70 to 130	0.712	20
BA08761	Cobalt, Total	mg/L	-0.0000539	0.0001474	0.10	0.101	0.102	0.106	0.085 to 0.115	101	70 to 130	0.985	20
BA08761	Lithium, Total	mg/L	-0.000386	0.0154	0.200	0.278	0.282	0.193	0.17 to 0.23	112	70 to 130	1.43	20
BA08761	Lead, Total	mg/L	-0.00000355	0.0001474	0.10	0.103	0.104	0.107	0.085 to 0.115	103	70 to 130	0.966	20
BA08761	Thallium, Total	mg/L	-0.0000662	0.0001474	0.10	0.0994	0.101	0.103	0.085 to 0.115	99.4	70 to 130	1.60	20
BA08761	Barium, Total	mg/L	0.0000144	0.0002	0.10	0.174	0.174	0.104	0.085 to 0.115	92.1	70 to 130	0.00	20
BA08761	Beryllium, Total	mg/L	0.0000147	0.00088	0.10	0.0966	0.0943	0.0935	0.085 to 0.115	96.6	70 to 130	2.41	20
BA08761	Chromium, Total	mg/L	0.00000372	0.00044	0.10	0.0976	0.0994	0.104	0.085 to 0.115	97.6	70 to 130	1.83	20

Comments:

Reported: 6/8/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 5/12/20 13:46
Customer ID:
Delivery Date: 5/14/20 11:17

Description: Gorgas Ash Pond - MW-34HO

Laboratory ID Number: BA08755

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA08761	Sulfate	mg/L	-0.302	0.50	320	514	199	20.3	18 to 22	100	80 to 120	2.54	20
BA08761	Solids, Dissolved	mg/L	2.00	25			634	54.0	40 to 60			0.795	5
BA08761	Chloride	mg/L	-0.0143	0.50	10.0	14.8	4.35	10.5	9 to 11	106	80 to 120	2.56	20
BA08761	Fluoride	mg/L	0.0319	0.05	2.50	3.56	0.814	2.74	2.25 to 2.75	109	80 to 120	2.31	20

Comments:

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-34HO DUP

Location Code: WMWGORAP
Collected: 5/12/20 13:46
Customer ID:
Submittal Date: 5/14/20 11:17

Laboratory ID Number: BA08756

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	5/19/20 10:45	5/20/20 10:03		1.015	0.0928	mg/L	0.03	0.1	J
* Calcium, Total	5/19/20 10:45	5/20/20 12:08		10.15	80.0	mg/L	1.015	5.075	
* Lithium, Total	5/19/20 10:45	5/20/20 10:03		1.015	0.175	mg/L	0.01	0.02	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	5/15/20 11:00	5/18/20 09:57		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	5/15/20 11:00	5/18/20 09:57		1.015	0.00682	mg/L	0.001	0.005	
* Barium, Total	5/15/20 11:00	5/18/20 09:57		1.015	0.0386	mg/L	0.002	0.01	
* Beryllium, Total	5/15/20 11:00	5/18/20 09:57		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	5/15/20 11:00	5/18/20 09:57		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	5/15/20 11:00	5/18/20 09:57		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	5/15/20 11:00	5/18/20 09:57		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	5/15/20 11:00	5/18/20 09:57		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	5/15/20 11:00	5/18/20 09:57		1.015	0.0107	mg/L	0.002	0.01	
* Selenium, Total	5/15/20 11:00	5/18/20 09:57		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	5/15/20 11:00	5/18/20 09:57		1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 245.1	***Analyst: GAS***								
* Mercury, Total by CVAA	5/18/20 10:40	5/19/20 11:31		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2540C	***Analyst: TJW***								
* Solids, Dissolved	5/15/20 14:20	5/19/20 10:16		1	2510	mg/L		178.6	
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	5/19/20 11:13	5/19/20 11:13		10	153	mg/L	5.00	10	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	5/19/20 14:21	5/19/20 14:21		1	0.366	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	5/26/20 13:09	5/26/20 13:09		50	1350	mg/L	25.00	50	
Analytical Method: Field Measurements	***Analyst: AWG***								
Conductivity	5/12/20 13:42	5/12/20 13:42			3587.61	uS/cm			FA
pH	5/12/20 13:42	5/12/20 13:42			7.44	SU			FA
Temperature	5/12/20 13:42	5/12/20 13:42			21.80	C			FA
Turbidity	5/12/20 13:42	5/12/20 13:42			4.63	NTU			FA

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

Comments:

Reported: 6/8/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORAP
Sample Date: 5/12/20 13:46
Customer ID:
Delivery Date: 5/14/20 11:17

Description: Gorgas Ash Pond - MW-34HO DUP

Laboratory ID Number: BA08756

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA08761	Arsenic, Total	mg/L	0.00000505	0.0001474	0.10	0.109	0.107	0.109	0.085 to 0.115	101	70 to 130	1.85	20
BA08761	Molybdenum, Total	mg/L	0.0000156	0.0001474	0.10	0.103	0.102	0.0987	0.085 to 0.115	97.8	70 to 130	0.976	20
BA08761	Boron, Total	mg/L	-0.00194	0.0650254	1.00	1.11	1.14	0.991	0.85 to 1.15	104	70 to 130	2.67	20
BA08761	Selenium, Total	mg/L	0.000128	0.00066	0.10	0.0848	0.0860	0.107	0.085 to 0.115	84.8	70 to 130	1.41	20
BA08761	Barium, Total	mg/L	0.0000144	0.0002	0.10	0.174	0.174	0.104	0.085 to 0.115	92.1	70 to 130	0.00	20
BA08761	Beryllium, Total	mg/L	0.0000147	0.00088	0.10	0.0966	0.0943	0.0935	0.085 to 0.115	96.6	70 to 130	2.41	20
BA08761	Chromium, Total	mg/L	0.00000372	0.00044	0.10	0.0976	0.0994	0.104	0.085 to 0.115	97.6	70 to 130	1.83	20
BA08761	Calcium, Total	mg/L	0.00230	0.1518	5.00	39.8	40.5	5.05	4.25 to 5.75	90.0	70 to 130	1.74	20
BA08761	Mercury, Total by CVAA	mg/L	0.0000554	0.0005	0.004	0.00323	0.00335	0.00360	0.0034 to 0.0046	80.8	70 to 130	3.65	20
BA08761	Antimony, Total	mg/L	0.000250	0.00066	0.10	0.0963	0.0941	0.100	0.085 to 0.115	96.3	70 to 130	2.31	20
BA08761	Cadmium, Total	mg/L	-0.00000391	0.0001474	0.10	0.0979	0.0986	0.0996	0.085 to 0.115	97.9	70 to 130	0.712	20
BA08761	Cobalt, Total	mg/L	-0.0000539	0.0001474	0.10	0.101	0.102	0.106	0.085 to 0.115	101	70 to 130	0.985	20
BA08761	Lithium, Total	mg/L	-0.000386	0.0154	0.200	0.278	0.282	0.193	0.17 to 0.23	112	70 to 130	1.43	20
BA08761	Lead, Total	mg/L	-0.00000355	0.0001474	0.10	0.103	0.104	0.107	0.085 to 0.115	103	70 to 130	0.966	20
BA08761	Thallium, Total	mg/L	-0.0000662	0.0001474	0.10	0.0994	0.101	0.103	0.085 to 0.115	99.4	70 to 130	1.60	20

Comments:

Reported: 6/8/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 5/12/20 13:46
Customer ID:
Delivery Date: 5/14/20 11:17

Description: Gorgas Ash Pond - MW-34HO DUP

Laboratory ID Number: BA08756

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA08761	Solids, Dissolved	mg/L	2.00	25			634	54.0	40 to 60			0.795	5
BA08761	Sulfate	mg/L	-0.302	0.50	320	514	199	20.3	18 to 22	100	80 to 120	2.54	20
BA08761	Chloride	mg/L	-0.0143	0.50	10.0	14.8	4.35	10.5	9 to 11	106	80 to 120	2.56	20
BA08761	Fluoride	mg/L	0.0319	0.05	2.50	3.56	0.814	2.74	2.25 to 2.75	109	80 to 120	2.31	20

Comments:

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-35HO

Location Code: WMWGORAP
Collected: 5/12/20 15:52
Customer ID:
Submittal Date: 5/14/20 11:17

Laboratory ID Number: BA08757

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	5/19/20 10:45	5/20/20 10:06		1.015	Not Detected	mg/L	0.03	0.1	U
* Calcium, Total	5/19/20 10:45	5/20/20 10:06		1.015	3.04	mg/L	0.1	0.5	
* Lithium, Total	5/19/20 10:45	5/20/20 10:06		1.015	0.0693	mg/L	0.01	0.02	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	5/15/20 11:00	5/18/20 10:00		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	5/15/20 11:00	5/18/20 10:00		1.015	Not Detected	mg/L	0.001	0.005	U
* Barium, Total	5/15/20 11:00	5/18/20 10:00		1.015	0.0472	mg/L	0.002	0.01	
* Beryllium, Total	5/15/20 11:00	5/18/20 10:00		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	5/15/20 11:00	5/18/20 10:00		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	5/15/20 11:00	5/18/20 10:00		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	5/15/20 11:00	5/18/20 10:00		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	5/15/20 11:00	5/18/20 10:00		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	5/15/20 11:00	5/18/20 10:00		1.015	Not Detected	mg/L	0.002	0.01	U
* Selenium, Total	5/15/20 11:00	5/18/20 10:00		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	5/15/20 11:00	5/18/20 10:00		1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 245.1	***Analyst: GAS***								
* Mercury, Total by CVAA	5/18/20 10:40	5/19/20 11:33		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2540C	***Analyst: TJW***								
* Solids, Dissolved	5/15/20 14:20	5/19/20 10:16		1	311	mg/L		25	
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	5/19/20 11:14	5/19/20 11:14		1	14.5	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	5/19/20 14:23	5/19/20 14:23		1	0.167	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	5/26/20 13:10	5/26/20 13:10		1	22.6	mg/L	0.50	1	
Analytical Method: Field Measurements	***Analyst: AWG***								
Conductivity	5/12/20 15:49	5/12/20 15:49			510.05	uS/cm			FA
pH	5/12/20 15:49	5/12/20 15:49			8.46	SU			FA
Temperature	5/12/20 15:49	5/12/20 15:49			18.72	C			FA
Turbidity	5/12/20 15:49	5/12/20 15:49			1.84	NTU			FA

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

Comments:

Reported: 6/8/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORAP
Sample Date: 5/12/20 15:52
Customer ID:
Delivery Date: 5/14/20 11:17

Description: Gorgas Ash Pond - MW-35HO

Laboratory ID Number: BA08757

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA08761	Arsenic, Total	mg/L	0.00000505	0.0001474	0.10	0.109	0.107	0.109	0.085 to 0.115	101	70 to 130	1.85	20
BA08761	Molybdenum, Total	mg/L	0.0000156	0.0001474	0.10	0.103	0.102	0.0987	0.085 to 0.115	97.8	70 to 130	0.976	20
BA08761	Boron, Total	mg/L	-0.00194	0.0650254	1.00	1.11	1.14	0.991	0.85 to 1.15	104	70 to 130	2.67	20
BA08761	Selenium, Total	mg/L	0.000128	0.00066	0.10	0.0848	0.0860	0.107	0.085 to 0.115	84.8	70 to 130	1.41	20
BA08761	Barium, Total	mg/L	0.0000144	0.0002	0.10	0.174	0.174	0.104	0.085 to 0.115	92.1	70 to 130	0.00	20
BA08761	Beryllium, Total	mg/L	0.0000147	0.00088	0.10	0.0966	0.0943	0.0935	0.085 to 0.115	96.6	70 to 130	2.41	20
BA08761	Chromium, Total	mg/L	0.00000372	0.00044	0.10	0.0976	0.0994	0.104	0.085 to 0.115	97.6	70 to 130	1.83	20
BA08761	Calcium, Total	mg/L	0.00230	0.1518	5.00	39.8	40.5	5.05	4.25 to 5.75	90.0	70 to 130	1.74	20
BA08761	Mercury, Total by CVAA	mg/L	0.0000554	0.0005	0.004	0.00323	0.00335	0.00360	0.0034 to 0.0046	80.8	70 to 130	3.65	20
BA08761	Antimony, Total	mg/L	0.000250	0.00066	0.10	0.0963	0.0941	0.100	0.085 to 0.115	96.3	70 to 130	2.31	20
BA08761	Cadmium, Total	mg/L	-0.00000391	0.0001474	0.10	0.0979	0.0986	0.0996	0.085 to 0.115	97.9	70 to 130	0.712	20
BA08761	Cobalt, Total	mg/L	-0.0000539	0.0001474	0.10	0.101	0.102	0.106	0.085 to 0.115	101	70 to 130	0.985	20
BA08761	Lithium, Total	mg/L	-0.000386	0.0154	0.200	0.278	0.282	0.193	0.17 to 0.23	112	70 to 130	1.43	20
BA08761	Lead, Total	mg/L	-0.00000355	0.0001474	0.10	0.103	0.104	0.107	0.085 to 0.115	103	70 to 130	0.966	20
BA08761	Thallium, Total	mg/L	-0.0000662	0.0001474	0.10	0.0994	0.101	0.103	0.085 to 0.115	99.4	70 to 130	1.60	20

Comments:

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 5/12/20 15:52
Customer ID:
Delivery Date: 5/14/20 11:17

Description: Gorgas Ash Pond - MW-35HO

Laboratory ID Number: BA08757

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA08761	Sulfate	mg/L	-0.302	0.50	320	514	199	20.3	18 to 22	100	80 to 120	2.54	20
BA08761	Solids, Dissolved	mg/L	2.00	25			634	54.0	40 to 60			0.795	5
BA08761	Chloride	mg/L	-0.0143	0.50	10.0	14.8	4.35	10.5	9 to 11	106	80 to 120	2.56	20
BA08761	Fluoride	mg/L	0.0319	0.05	2.50	3.56	0.814	2.74	2.25 to 2.75	109	80 to 120	2.31	20

Comments:

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond Field Blank

Location Code: WMWGORAPFB
Collected: 5/13/20 09:10
Customer ID:
Submittal Date: 5/14/20 11:17

Laboratory ID Number: BA08758

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	5/19/20 10:45	5/20/20 10:09		1.015	Not Detected	mg/L	0.03	0.1	U
* Calcium, Total	5/19/20 10:45	5/20/20 10:09		1.015	Not Detected	mg/L	0.1	0.5	U
* Lithium, Total	5/19/20 10:45	5/20/20 10:09		1.015	Not Detected	mg/L	0.01	0.02	U
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	5/15/20 11:00	5/18/20 10:02		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	5/15/20 11:00	5/18/20 10:02		1.015	Not Detected	mg/L	0.001	0.005	U
* Barium, Total	5/15/20 11:00	5/18/20 10:02		1.015	Not Detected	mg/L	0.002	0.01	U
* Beryllium, Total	5/15/20 11:00	5/18/20 10:02		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	5/15/20 11:00	5/18/20 10:02		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	5/15/20 11:00	5/18/20 10:02		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	5/15/20 11:00	5/18/20 10:02		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	5/15/20 11:00	5/18/20 10:02		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	5/15/20 11:00	5/18/20 10:02		1.015	Not Detected	mg/L	0.002	0.01	U
* Selenium, Total	5/15/20 11:00	5/18/20 10:02		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	5/15/20 11:00	5/18/20 10:02		1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 245.1	***Analyst: GAS***								
* Mercury, Total by CVAA	5/18/20 10:40	5/19/20 11:36		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2540C	***Analyst: TJW***								
* Solids, Dissolved	5/15/20 14:20	5/19/20 10:16		1	Not Detected	mg/L		25	U
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	5/19/20 11:16	5/19/20 11:16		1	Not Detected	mg/L	0.50	1	U
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	5/19/20 14:24	5/19/20 14:24		1	Not Detected	mg/L	0.06	0.1	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	5/26/20 13:11	5/26/20 13:11		1	Not Detected	mg/L	0.50	1	U

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

Comments:

Reported: 6/8/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORAPFB
Sample Date: 5/13/20 09:10
Customer ID:
Delivery Date: 5/14/20 11:17

Description: Gorgas Ash Pond Field Blank

Laboratory ID Number: BA08758

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA08761	Arsenic, Total	mg/L	0.00000505	0.0001474	0.10	0.109	0.107	0.109	0.085 to 0.115	101	70 to 130	1.85	20
BA08761	Molybdenum, Total	mg/L	0.0000156	0.0001474	0.10	0.103	0.102	0.0987	0.085 to 0.115	97.8	70 to 130	0.976	20
BA08761	Boron, Total	mg/L	-0.00194	0.0650254	1.00	1.11	1.14	0.991	0.85 to 1.15	104	70 to 130	2.67	20
BA08761	Selenium, Total	mg/L	0.000128	0.00066	0.10	0.0848	0.0860	0.107	0.085 to 0.115	84.8	70 to 130	1.41	20
BA08761	Barium, Total	mg/L	0.0000144	0.0002	0.10	0.174	0.174	0.104	0.085 to 0.115	92.1	70 to 130	0.00	20
BA08761	Beryllium, Total	mg/L	0.0000147	0.00088	0.10	0.0966	0.0943	0.0935	0.085 to 0.115	96.6	70 to 130	2.41	20
BA08761	Chromium, Total	mg/L	0.00000372	0.00044	0.10	0.0976	0.0994	0.104	0.085 to 0.115	97.6	70 to 130	1.83	20
BA08761	Calcium, Total	mg/L	0.00230	0.1518	5.00	39.8	40.5	5.05	4.25 to 5.75	90.0	70 to 130	1.74	20
BA08761	Mercury, Total by CVAA	mg/L	0.0000554	0.0005	0.004	0.00323	0.00335	0.00360	0.0034 to 0.0046	80.8	70 to 130	3.65	20
BA08761	Antimony, Total	mg/L	0.000250	0.00066	0.10	0.0963	0.0941	0.100	0.085 to 0.115	96.3	70 to 130	2.31	20
BA08761	Cadmium, Total	mg/L	-0.00000391	0.0001474	0.10	0.0979	0.0986	0.0996	0.085 to 0.115	97.9	70 to 130	0.712	20
BA08761	Cobalt, Total	mg/L	-0.0000539	0.0001474	0.10	0.101	0.102	0.106	0.085 to 0.115	101	70 to 130	0.985	20
BA08761	Lithium, Total	mg/L	-0.000386	0.0154	0.200	0.278	0.282	0.193	0.17 to 0.23	112	70 to 130	1.43	20
BA08761	Lead, Total	mg/L	-0.00000355	0.0001474	0.10	0.103	0.104	0.107	0.085 to 0.115	103	70 to 130	0.966	20
BA08761	Thallium, Total	mg/L	-0.0000662	0.0001474	0.10	0.0994	0.101	0.103	0.085 to 0.115	99.4	70 to 130	1.60	20

Comments:

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

Batch QC Summary

Customer Account: WMWGORAPFB
Sample Date: 5/13/20 09:10
Customer ID:
Delivery Date: 5/14/20 11:17

Description: Gorgas Ash Pond Field Blank

Laboratory ID Number: BA08758

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA08761	Sulfate	mg/L	-0.302	0.50	320	514	199	20.3	18 to 22	100	80 to 120	2.54	20
BA08761	Chloride	mg/L	-0.0143	0.50	10.0	14.8	4.35	10.5	9 to 11	106	80 to 120	2.56	20
BA08761	Fluoride	mg/L	0.0319	0.05	2.50	3.56	0.814	2.74	2.25 to 2.75	109	80 to 120	2.31	20
BA08761	Solids, Dissolved	mg/L	2.00	25			634	54.0	40 to 60			0.795	5

Comments:

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-36H

Location Code: WMWGORAP
Collected: 5/13/20 10:40
Customer ID:
Submittal Date: 5/14/20 11:17

Laboratory ID Number: BA08759

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	5/19/20 10:45	5/20/20 10:12		1.015	0.0359	mg/L	0.03	0.1	J
* Calcium, Total	5/19/20 10:45	5/20/20 10:12		1.015	2.93	mg/L	0.1	0.5	
* Lithium, Total	5/19/20 10:45	5/20/20 10:12		1.015	0.0337	mg/L	0.01	0.02	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	5/15/20 11:00	5/18/20 10:05		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	5/15/20 11:00	5/18/20 10:05		1.015	0.00122	mg/L	0.001	0.005	J
* Barium, Total	5/15/20 11:00	5/18/20 10:05		1.015	0.0300	mg/L	0.002	0.01	
* Beryllium, Total	5/15/20 11:00	5/18/20 10:05		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	5/15/20 11:00	5/18/20 10:05		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	5/15/20 11:00	5/18/20 10:05		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	5/15/20 11:00	5/18/20 10:05		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	5/15/20 11:00	5/18/20 10:05		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	5/15/20 11:00	5/18/20 10:05		1.015	0.00475	mg/L	0.002	0.01	J
* Selenium, Total	5/15/20 11:00	5/18/20 10:05		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	5/15/20 11:00	5/18/20 10:05		1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 245.1	***Analyst: GAS***								
* Mercury, Total by CVAA	5/18/20 10:40	5/19/20 11:38		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2540C	***Analyst: TJW***								
* Solids, Dissolved	5/15/20 14:20	5/19/20 10:16		1	333	mg/L		25	
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	5/19/20 11:17	5/19/20 11:17		2	27.2	mg/L	1.00	2	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	5/19/20 14:25	5/19/20 14:25		1	0.224	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	5/26/20 13:12	5/26/20 13:12		2	47.8	mg/L	1.00	2	
Analytical Method: Field Measurements	***Analyst: AWG***								
Conductivity	5/13/20 10:37	5/13/20 10:37			492.41	uS/cm			FA
pH	5/13/20 10:37	5/13/20 10:37			8.52	SU			FA
Temperature	5/13/20 10:37	5/13/20 10:37			18.52	C			FA
Turbidity	5/13/20 10:37	5/13/20 10:37			0.69	NTU			FA

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

Comments:

Reported: 6/8/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORAP
Sample Date: 5/13/20 10:40
Customer ID:
Delivery Date: 5/14/20 11:17

Description: Gorgas Ash Pond - MW-36H

Laboratory ID Number: BA08759

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA08761	Arsenic, Total	mg/L	0.00000505	0.0001474	0.10	0.109	0.107	0.109	0.085 to 0.115	101	70 to 130	1.85	20
BA08761	Molybdenum, Total	mg/L	0.0000156	0.0001474	0.10	0.103	0.102	0.0987	0.085 to 0.115	97.8	70 to 130	0.976	20
BA08761	Boron, Total	mg/L	-0.00194	0.0650254	1.00	1.11	1.14	0.991	0.85 to 1.15	104	70 to 130	2.67	20
BA08761	Selenium, Total	mg/L	0.000128	0.00066	0.10	0.0848	0.0860	0.107	0.085 to 0.115	84.8	70 to 130	1.41	20
BA08761	Calcium, Total	mg/L	0.00230	0.1518	5.00	39.8	40.5	5.05	4.25 to 5.75	90.0	70 to 130	1.74	20
BA08761	Mercury, Total by CVAA	mg/L	0.0000554	0.0005	0.004	0.00323	0.00335	0.00360	0.0034 to 0.0046	80.8	70 to 130	3.65	20
BA08761	Antimony, Total	mg/L	0.000250	0.00066	0.10	0.0963	0.0941	0.100	0.085 to 0.115	96.3	70 to 130	2.31	20
BA08761	Cadmium, Total	mg/L	-0.00000391	0.0001474	0.10	0.0979	0.0986	0.0996	0.085 to 0.115	97.9	70 to 130	0.712	20
BA08761	Cobalt, Total	mg/L	-0.0000539	0.0001474	0.10	0.101	0.102	0.106	0.085 to 0.115	101	70 to 130	0.985	20
BA08761	Lithium, Total	mg/L	-0.000386	0.0154	0.200	0.278	0.282	0.193	0.17 to 0.23	112	70 to 130	1.43	20
BA08761	Lead, Total	mg/L	-0.00000355	0.0001474	0.10	0.103	0.104	0.107	0.085 to 0.115	103	70 to 130	0.966	20
BA08761	Thallium, Total	mg/L	-0.0000662	0.0001474	0.10	0.0994	0.101	0.103	0.085 to 0.115	99.4	70 to 130	1.60	20
BA08761	Barium, Total	mg/L	0.0000144	0.0002	0.10	0.174	0.174	0.104	0.085 to 0.115	92.1	70 to 130	0.00	20
BA08761	Beryllium, Total	mg/L	0.0000147	0.00088	0.10	0.0966	0.0943	0.0935	0.085 to 0.115	96.6	70 to 130	2.41	20
BA08761	Chromium, Total	mg/L	0.00000372	0.00044	0.10	0.0976	0.0994	0.104	0.085 to 0.115	97.6	70 to 130	1.83	20

Comments:

Reported: 6/8/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 5/13/20 10:40
Customer ID:
Delivery Date: 5/14/20 11:17

Description: Gorgas Ash Pond - MW-36H

Laboratory ID Number: BA08759

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA08761	Sulfate	mg/L	-0.302	0.50	320	514	199	20.3	18 to 22	100	80 to 120	2.54	20
BA08761	Solids, Dissolved	mg/L	2.00	25			634	54.0	40 to 60			0.795	5
BA08761	Chloride	mg/L	-0.0143	0.50	10.0	14.8	4.35	10.5	9 to 11	106	80 to 120	2.56	20
BA08761	Fluoride	mg/L	0.0319	0.05	2.50	3.56	0.814	2.74	2.25 to 2.75	109	80 to 120	2.31	20

Comments:

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-33HO

Location Code: WMWGORAP
Collected: 5/13/20 14:15
Customer ID:
Submittal Date: 5/14/20 11:17

Laboratory ID Number: BA08760

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	5/19/20 10:45	5/20/20 10:15		1.015	0.0409	mg/L	0.03	0.1	J
* Calcium, Total	5/19/20 10:45	5/20/20 10:15		1.015	25.2	mg/L	0.1	0.5	
* Lithium, Total	5/19/20 10:45	5/20/20 10:15		1.015	0.0455	mg/L	0.01	0.02	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	5/15/20 11:00	5/18/20 10:08		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	5/15/20 11:00	5/18/20 10:08		1.015	0.00308	mg/L	0.001	0.005	J
* Barium, Total	5/15/20 11:00	5/18/20 10:08		1.015	0.324	mg/L	0.002	0.01	
* Beryllium, Total	5/15/20 11:00	5/18/20 10:08		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	5/15/20 11:00	5/18/20 10:08		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	5/15/20 11:00	5/18/20 10:08		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	5/15/20 11:00	5/18/20 10:08		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	5/15/20 11:00	5/18/20 10:08		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	5/15/20 11:00	5/18/20 10:08		1.015	0.00626	mg/L	0.002	0.01	J
* Selenium, Total	5/15/20 11:00	5/18/20 10:08		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	5/15/20 11:00	5/18/20 10:08		1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 245.1	***Analyst: GAS***								
* Mercury, Total by CVAA	5/18/20 10:40	5/19/20 11:41		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2540C	***Analyst: TJW***								
* Solids, Dissolved	5/15/20 14:20	5/19/20 10:16		1	457	mg/L		25	
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	5/19/20 11:18	5/19/20 11:18		5	63.3	mg/L	2.50	5	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	5/19/20 14:26	5/19/20 14:26		1	0.191	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	5/26/20 13:14	5/26/20 13:14		3	60.0	mg/L	1.50	3	
Analytical Method: Field Measurements	***Analyst: AWG***								
Conductivity	5/13/20 14:11	5/13/20 14:11			773.62	uS/cm			FA
pH	5/13/20 14:11	5/13/20 14:11			7.70	SU			FA
Temperature	5/13/20 14:11	5/13/20 14:11			19.91	C			FA
Turbidity	5/13/20 14:11	5/13/20 14:11			1.19	NTU			FA

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

Comments:

Reported: 6/8/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORAP
Sample Date: 5/13/20 14:15
Customer ID:
Delivery Date: 5/14/20 11:17

Description: Gorgas Ash Pond - MW-33HO

Laboratory ID Number: BA08760

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA08761	Arsenic, Total	mg/L	0.00000505	0.0001474	0.10	0.109	0.107	0.109	0.085 to 0.115	101	70 to 130	1.85	20
BA08761	Molybdenum, Total	mg/L	0.0000156	0.0001474	0.10	0.103	0.102	0.0987	0.085 to 0.115	97.8	70 to 130	0.976	20
BA08761	Boron, Total	mg/L	-0.00194	0.0650254	1.00	1.11	1.14	0.991	0.85 to 1.15	104	70 to 130	2.67	20
BA08761	Selenium, Total	mg/L	0.000128	0.00066	0.10	0.0848	0.0860	0.107	0.085 to 0.115	84.8	70 to 130	1.41	20
BA08761	Calcium, Total	mg/L	0.00230	0.1518	5.00	39.8	40.5	5.05	4.25 to 5.75	90.0	70 to 130	1.74	20
BA08761	Mercury, Total by CVAA	mg/L	0.0000554	0.0005	0.004	0.00323	0.00335	0.00360	0.0034 to 0.0046	80.8	70 to 130	3.65	20
BA08761	Antimony, Total	mg/L	0.000250	0.00066	0.10	0.0963	0.0941	0.100	0.085 to 0.115	96.3	70 to 130	2.31	20
BA08761	Barium, Total	mg/L	0.0000144	0.0002	0.10	0.174	0.174	0.104	0.085 to 0.115	92.1	70 to 130	0.00	20
BA08761	Beryllium, Total	mg/L	0.0000147	0.00088	0.10	0.0966	0.0943	0.0935	0.085 to 0.115	96.6	70 to 130	2.41	20
BA08761	Chromium, Total	mg/L	0.00000372	0.00044	0.10	0.0976	0.0994	0.104	0.085 to 0.115	97.6	70 to 130	1.83	20
BA08761	Cadmium, Total	mg/L	-0.00000391	0.0001474	0.10	0.0979	0.0986	0.0996	0.085 to 0.115	97.9	70 to 130	0.712	20
BA08761	Cobalt, Total	mg/L	-0.0000539	0.0001474	0.10	0.101	0.102	0.106	0.085 to 0.115	101	70 to 130	0.985	20
BA08761	Lithium, Total	mg/L	-0.000386	0.0154	0.200	0.278	0.282	0.193	0.17 to 0.23	112	70 to 130	1.43	20
BA08761	Lead, Total	mg/L	-0.00000355	0.0001474	0.10	0.103	0.104	0.107	0.085 to 0.115	103	70 to 130	0.966	20
BA08761	Thallium, Total	mg/L	-0.0000662	0.0001474	0.10	0.0994	0.101	0.103	0.085 to 0.115	99.4	70 to 130	1.60	20

Comments:

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 5/13/20 14:15
Customer ID:
Delivery Date: 5/14/20 11:17

Description: Gorgas Ash Pond - MW-33HO

Laboratory ID Number: BA08760

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA08761	Sulfate	mg/L	-0.302	0.50	320	514	199	20.3	18 to 22	100	80 to 120	2.54	20
BA08761	Solids, Dissolved	mg/L	2.00	25			634	54.0	40 to 60			0.795	5
BA08761	Chloride	mg/L	-0.0143	0.50	10.0	14.8	4.35	10.5	9 to 11	106	80 to 120	2.56	20
BA08761	Fluoride	mg/L	0.0319	0.05	2.50	3.56	0.814	2.74	2.25 to 2.75	109	80 to 120	2.31	20

Comments:

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-30HA

Location Code: WMWGORAP
Collected: 5/13/20 15:35
Customer ID:
Submittal Date: 5/14/20 11:17

Laboratory ID Number: BA08761

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	5/19/20 10:45	5/20/20 10:18		1.015	0.0747	mg/L	0.03	0.1	J
* Calcium, Total	5/19/20 10:45	5/20/20 10:18		1.015	35.3	mg/L	0.1	0.5	
* Lithium, Total	5/19/20 10:45	5/20/20 10:18		1.015	0.0536	mg/L	0.01	0.02	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	5/15/20 11:00	5/18/20 10:10		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	5/15/20 11:00	5/18/20 10:10		1.015	0.00779	mg/L	0.001	0.005	
* Barium, Total	5/15/20 11:00	5/18/20 10:10		1.015	0.0819	mg/L	0.002	0.01	
* Beryllium, Total	5/15/20 11:00	5/18/20 10:10		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	5/15/20 11:00	5/18/20 10:10		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	5/15/20 11:00	5/18/20 10:10		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	5/15/20 11:00	5/18/20 10:10		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	5/15/20 11:00	5/18/20 10:10		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	5/15/20 11:00	5/18/20 10:10		1.015	0.00519	mg/L	0.002	0.01	J
* Selenium, Total	5/15/20 11:00	5/18/20 10:10		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	5/15/20 11:00	5/18/20 10:10		1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 245.1	***Analyst: GAS***								
* Mercury, Total by CVAA	5/18/20 10:40	5/19/20 11:43		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2540C	***Analyst: TJW***								
* Solids, Dissolved	5/15/20 14:20	5/19/20 10:16		1	624	mg/L		50	
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	5/19/20 11:19	5/19/20 11:19		1	4.24	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	5/19/20 14:27	5/19/20 14:27		1	0.833	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	5/26/20 13:15	5/26/20 13:15		16	194	mg/L	8.00	16	
Analytical Method: Field Measurements	***Analyst: AWG***								
Conductivity	5/13/20 15:32	5/13/20 15:32			980.49	uS/cm			FA
pH	5/13/20 15:32	5/13/20 15:32			7.27	SU			FA
Temperature	5/13/20 15:32	5/13/20 15:32			17.87	C			FA
Turbidity	5/13/20 15:32	5/13/20 15:32			1.26	NTU			FA

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

Comments:

Reported: 6/8/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORAP
Sample Date: 5/13/20 15:35
Customer ID:
Delivery Date: 5/14/20 11:17

Description: Gorgas Ash Pond - MW-30HA

Laboratory ID Number: BA08761

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA08761	Arsenic, Total	mg/L	0.00000505	0.0001474	0.10	0.109	0.107	0.109	0.085 to 0.115	101	70 to 130	1.85	20
BA08761	Molybdenum, Total	mg/L	0.0000156	0.0001474	0.10	0.103	0.102	0.0987	0.085 to 0.115	97.8	70 to 130	0.976	20
BA08761	Barium, Total	mg/L	0.0000144	0.0002	0.10	0.174	0.174	0.104	0.085 to 0.115	92.1	70 to 130	0.00	20
BA08761	Beryllium, Total	mg/L	0.0000147	0.00088	0.10	0.0966	0.0943	0.0935	0.085 to 0.115	96.6	70 to 130	2.41	20
BA08761	Chromium, Total	mg/L	0.00000372	0.00044	0.10	0.0976	0.0994	0.104	0.085 to 0.115	97.6	70 to 130	1.83	20
BA08761	Boron, Total	mg/L	-0.00194	0.0650254	1.00	1.11	1.14	0.991	0.85 to 1.15	104	70 to 130	2.67	20
BA08761	Selenium, Total	mg/L	0.000128	0.00066	0.10	0.0848	0.0860	0.107	0.085 to 0.115	84.8	70 to 130	1.41	20
BA08761	Calcium, Total	mg/L	0.00230	0.1518	5.00	39.8	40.5	5.05	4.25 to 5.75	90.0	70 to 130	1.74	20
BA08761	Mercury, Total by CVAA	mg/L	0.0000554	0.0005	0.004	0.00323	0.00335	0.00360	0.0034 to 0.0046	80.8	70 to 130	3.65	20
BA08761	Antimony, Total	mg/L	0.000250	0.00066	0.10	0.0963	0.0941	0.100	0.085 to 0.115	96.3	70 to 130	2.31	20
BA08761	Cadmium, Total	mg/L	-0.00000391	0.0001474	0.10	0.0979	0.0986	0.0996	0.085 to 0.115	97.9	70 to 130	0.712	20
BA08761	Cobalt, Total	mg/L	-0.0000539	0.0001474	0.10	0.101	0.102	0.106	0.085 to 0.115	101	70 to 130	0.985	20
BA08761	Lithium, Total	mg/L	-0.000386	0.0154	0.200	0.278	0.282	0.193	0.17 to 0.23	112	70 to 130	1.43	20
BA08761	Lead, Total	mg/L	-0.00000355	0.0001474	0.10	0.103	0.104	0.107	0.085 to 0.115	103	70 to 130	0.966	20
BA08761	Thallium, Total	mg/L	-0.0000662	0.0001474	0.10	0.0994	0.101	0.103	0.085 to 0.115	99.4	70 to 130	1.60	20

Comments:

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 5/13/20 15:35
Customer ID:
Delivery Date: 5/14/20 11:17

Description: Gorgas Ash Pond - MW-30HA

Laboratory ID Number: BA08761

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA08761	Sulfate	mg/L	-0.302	0.50	320	514	199	20.3	18 to 22	100	80 to 120	2.54	20
BA08761	Solids, Dissolved	mg/L	2.00	25			634	54.0	40 to 60			0.795	5
BA08761	Chloride	mg/L	-0.0143	0.50	10.0	14.8	4.35	10.5	9 to 11	106	80 to 120	2.56	20
BA08761	Fluoride	mg/L	0.0319	0.05	2.50	3.56	0.814	2.74	2.25 to 2.75	109	80 to 120	2.31	20

Comments:

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-2

Location Code: WMWGORAP
Collected: 5/13/20 16:25
Customer ID:
Submittal Date: 5/14/20 11:17

Laboratory ID Number: BA08762

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	5/19/20 10:45	5/20/20 11:07		1.015	0.154	mg/L	0.03	0.1	
* Calcium, Total	5/19/20 10:45	5/20/20 11:07		1.015	0.493	mg/L	0.1	0.5	J
* Lithium, Total	5/19/20 10:45	5/20/20 11:07		1.015	0.0409	mg/L	0.01	0.02	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	5/15/20 11:00	5/18/20 10:26		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	5/15/20 11:00	5/18/20 10:26		1.015	Not Detected	mg/L	0.001	0.005	U
* Barium, Total	5/15/20 11:00	5/18/20 10:26		1.015	0.0528	mg/L	0.002	0.01	
* Beryllium, Total	5/15/20 11:00	5/18/20 10:26		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	5/15/20 11:00	5/18/20 10:26		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	5/15/20 11:00	5/18/20 10:26		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	5/15/20 11:00	5/18/20 10:26		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	5/15/20 11:00	5/18/20 10:26		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	5/15/20 11:00	5/18/20 10:26		1.015	0.00224	mg/L	0.002	0.01	J
* Selenium, Total	5/15/20 11:00	5/18/20 10:26		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	5/15/20 11:00	5/18/20 10:26		1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 245.1	***Analyst: GAS***								
* Mercury, Total by CVAA	5/18/20 10:40	5/19/20 11:59		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2540C	***Analyst: TJW***								
* Solids, Dissolved	5/15/20 14:20	5/19/20 10:16		1	328	mg/L		25	
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	5/19/20 11:33	5/19/20 11:33		1	8.25	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	5/19/20 14:42	5/19/20 14:42		1	0.777	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	5/26/20 13:31	5/26/20 13:31		1	33.6	mg/L	0.50	1	
Analytical Method: Field Measurements	***Analyst: AWG***								
Conductivity	5/13/20 16:22	5/13/20 16:22			525.92	uS/cm			FA
pH	5/13/20 16:22	5/13/20 16:22			9.43	SU			FA
Temperature	5/13/20 16:22	5/13/20 16:22			17.62	C			FA
Turbidity	5/13/20 16:22	5/13/20 16:22			1.53	NTU			FA

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

Comments:

Reported: 6/8/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORAP
Sample Date: 5/13/20 16:25
Customer ID:
Delivery Date: 5/14/20 11:17

Description: Gorgas Ash Pond - MW-2

Laboratory ID Number: BA08762

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA08763	Molybdenum, Total	mg/L	0.0000156	0.0001474	0.10	0.0977	0.0972	0.0987	0.085 to 0.115	97.7	70 to 130	0.513	20
BA08763	Selenium, Total	mg/L	0.000128	0.00066	0.10	0.103	0.0974	0.107	0.085 to 0.115	103	70 to 130	5.59	20
BA08763	Thallium, Total	mg/L	-0.0000662	0.0001474	0.10	0.105	0.105	0.103	0.085 to 0.115	105	70 to 130	0.00	20
BA08763	Beryllium, Total	mg/L	0.0000147	0.00088	0.10	0.0974	0.0973	0.0935	0.085 to 0.115	97.4	70 to 130	0.103	20
BA08763	Chromium, Total	mg/L	0.00000372	0.00044	0.10	0.103	0.102	0.104	0.085 to 0.115	103	70 to 130	0.976	20
BA08763	Mercury, Total by CVAA	mg/L	0.0000521	0.0005	0.004	0.00342	0.00301	0.00355	0.0034 to 0.0046	85.5	70 to 130	12.8	20
BA08763	Arsenic, Total	mg/L	0.00000505	0.0001474	0.10	0.104	0.102	0.109	0.085 to 0.115	104	70 to 130	1.94	20
BA08763	Cadmium, Total	mg/L	-0.00000391	0.0001474	0.10	0.0989	0.0984	0.0996	0.085 to 0.115	98.9	70 to 130	0.507	20
BA08763	Lead, Total	mg/L	-0.00000355	0.0001474	0.10	0.108	0.106	0.107	0.085 to 0.115	108	70 to 130	1.87	20
BA08763	Antimony, Total	mg/L	0.000250	0.00066	0.10	0.0982	0.0961	0.100	0.085 to 0.115	98.2	70 to 130	2.16	20
BA08763	Calcium, Total	mg/L	0.00230	0.1518	5.00	5.01	5.05	5.05	4.25 to 5.75	100	70 to 130	0.795	20
BA08763	Barium, Total	mg/L	0.0000144	0.0002	0.10	0.0962	0.0952	0.104	0.085 to 0.115	96.2	70 to 130	1.04	20
BA08763	Boron, Total	mg/L	-0.00194	0.0650254	1.00	1.01	1.02	0.991	0.85 to 1.15	101	70 to 130	0.985	20
BA08763	Cobalt, Total	mg/L	-0.0000539	0.0001474	0.10	0.106	0.105	0.106	0.085 to 0.115	106	70 to 130	0.948	20
BA08763	Lithium, Total	mg/L	-0.000386	0.0154	0.20	0.194	0.195	0.193	0.17 to 0.23	97.0	70 to 130	0.514	20

Comments:

Reported: 6/8/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 5/13/20 16:25
Customer ID:
Delivery Date: 5/14/20 11:17

Description: Gorgas Ash Pond - MW-2

Laboratory ID Number: BA08762

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA08763	Chloride	mg/L	0.00263	0.50	10.0	9.85	0.191	10.5	9 to 11	98.5	80 to 120	0.00	20
BA08763	Fluoride	mg/L	0.0327	0.05	2.50	2.61	0.0275	2.73	2.25 to 2.75	104	80 to 120	0.00	20
BA08762	Solids, Dissolved	mg/L	2.00	25			331	54.0	40 to 60			0.455	5
BA08763	Sulfate	mg/L	-0.250	0.50	20.0	19.4	-0.416	20.2	18 to 22	97.0	80 to 120	0.00	20

Comments:

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond Equipment Blank

Location Code: WMWGORAPEB
Collected: 5/13/20 17:55
Customer ID:
Submittal Date: 5/14/20 11:17

Laboratory ID Number: BA08763

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	5/19/20 10:45	5/20/20 11:10		1.015	Not Detected	mg/L	0.03	0.1	U
* Calcium, Total	5/19/20 10:45	5/20/20 11:10		1.015	Not Detected	mg/L	0.1	0.5	U
* Lithium, Total	5/19/20 10:45	5/20/20 11:10		1.015	Not Detected	mg/L	0.01	0.02	U
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	5/15/20 11:00	5/18/20 10:29		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	5/15/20 11:00	5/18/20 10:29		1.015	Not Detected	mg/L	0.001	0.005	U
* Barium, Total	5/15/20 11:00	5/18/20 10:29		1.015	Not Detected	mg/L	0.002	0.01	U
* Beryllium, Total	5/15/20 11:00	5/18/20 10:29		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	5/15/20 11:00	5/18/20 10:29		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	5/15/20 11:00	5/18/20 10:29		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	5/15/20 11:00	5/18/20 10:29		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	5/15/20 11:00	5/18/20 10:29		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	5/15/20 11:00	5/18/20 10:29		1.015	Not Detected	mg/L	0.002	0.01	U
* Selenium, Total	5/15/20 11:00	5/18/20 10:29		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	5/15/20 11:00	5/18/20 10:29		1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 245.1	***Analyst: GAS***								
* Mercury, Total by CVAA	5/18/20 10:40	5/19/20 12:02		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2540C	***Analyst: TJW***								
* Solids, Dissolved	5/15/20 14:20	5/19/20 10:16		1	Not Detected	mg/L		25	U
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	5/19/20 11:34	5/19/20 11:34		1	Not Detected	mg/L	0.50	1	U
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	5/19/20 14:43	5/19/20 14:43		1	Not Detected	mg/L	0.06	0.1	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	5/26/20 13:32	5/26/20 13:32		1	Not Detected	mg/L	0.50	1	U

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

Comments:

Reported: 6/8/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORAPEB
Sample Date: 5/13/20 17:55
Customer ID:
Delivery Date: 5/14/20 11:17

Description: Gorgas Ash Pond Equipment Blank

Laboratory ID Number: BA08763

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA08763	Thallium, Total	mg/L	-0.0000662	0.0001474	0.10	0.105	0.105	0.103	0.085 to 0.115	105	70 to 130	0.00	20
BA08763	Molybdenum, Total	mg/L	0.0000156	0.0001474	0.10	0.0977	0.0972	0.0987	0.085 to 0.115	97.7	70 to 130	0.513	20
BA08763	Calcium, Total	mg/L	0.00230	0.1518	5.00	5.01	5.05	5.05	4.25 to 5.75	100	70 to 130	0.795	20
BA08763	Selenium, Total	mg/L	0.000128	0.00066	0.10	0.103	0.0974	0.107	0.085 to 0.115	103	70 to 130	5.59	20
BA08763	Beryllium, Total	mg/L	0.0000147	0.00088	0.10	0.0974	0.0973	0.0935	0.085 to 0.115	97.4	70 to 130	0.103	20
BA08763	Chromium, Total	mg/L	0.00000372	0.00044	0.10	0.103	0.102	0.104	0.085 to 0.115	103	70 to 130	0.976	20
BA08763	Mercury, Total by CVAA	mg/L	0.0000521	0.0005	0.004	0.00342	0.00301	0.00355	0.0034 to 0.0046	85.5	70 to 130	12.8	20
BA08763	Arsenic, Total	mg/L	0.00000505	0.0001474	0.10	0.104	0.102	0.109	0.085 to 0.115	104	70 to 130	1.94	20
BA08763	Cadmium, Total	mg/L	-0.00000391	0.0001474	0.10	0.0989	0.0984	0.0996	0.085 to 0.115	98.9	70 to 130	0.507	20
BA08763	Lead, Total	mg/L	-0.00000355	0.0001474	0.10	0.108	0.106	0.107	0.085 to 0.115	108	70 to 130	1.87	20
BA08763	Antimony, Total	mg/L	0.000250	0.00066	0.10	0.0982	0.0961	0.100	0.085 to 0.115	98.2	70 to 130	2.16	20
BA08763	Barium, Total	mg/L	0.0000144	0.0002	0.10	0.0962	0.0952	0.104	0.085 to 0.115	96.2	70 to 130	1.04	20
BA08763	Boron, Total	mg/L	-0.00194	0.0650254	1.00	1.01	1.02	0.991	0.85 to 1.15	101	70 to 130	0.985	20
BA08763	Cobalt, Total	mg/L	-0.0000539	0.0001474	0.10	0.106	0.105	0.106	0.085 to 0.115	106	70 to 130	0.948	20
BA08763	Lithium, Total	mg/L	-0.000386	0.0154	0.20	0.194	0.195	0.193	0.17 to 0.23	97.0	70 to 130	0.514	20

Comments:

Reported: 6/8/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Customer Account: WMWGORAPEB
Sample Date: 5/13/20 17:55
Customer ID:
Delivery Date: 5/14/20 11:17

Description: Gorgas Ash Pond Equipment Blank

Laboratory ID Number: BA08763

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA08763	Chloride	mg/L	0.00263	0.50	10.0	9.85	0.191	10.5	9 to 11	98.5	80 to 120	0.00	20
BA08763	Fluoride	mg/L	0.0327	0.05	2.50	2.61	0.0275	2.73	2.25 to 2.75	104	80 to 120	0.00	20
BA08762	Solids, Dissolved	mg/L	2.00	25			331	54.0	40 to 60			0.455	5
BA08763	Sulfate	mg/L	-0.250	0.50	20.0	19.4	-0.416	20.2	18 to 22	97.0	80 to 120	0.00	20

Comments:

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

Definitions

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 05/14/2020 09:33

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Site Representative	John Pate	Requested By	Greg Dyer
Collector	Anthony Goggins	Location	Gorgas Ash Pond

Bottles

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

Comments: 1mL HNO3 (#7692-42052-2-1) added to Hg bottle of MW-17 by LBM on 5/14/20 @1055. LBM 5/14/20

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
EB-1	05/12/2020	09:15	4	Equipment Blank		BA08752
MW-28H	05/12/2020	10:50	4	Groundwater		BA08753
MW-17	05/12/2020	12:12	4	Groundwater		BA08754
MW-34HO	05/12/2020	13:46	4	Groundwater		BA08755
MW-34HO DUP	05/12/2020	13:46	4	Sample Duplicate		BA08756
MW-35HO	05/12/2020	15:52	4	Groundwater		BA08757
FB-1	05/13/2020	09:10	4	Field Blank		BA08758
MW-36H	05/13/2020	10:40	4	Groundwater		BA08759
MW-33HO	05/13/2020	14:15	4	Groundwater		BA08760
MW-30HA	05/13/2020	15:35	4	Groundwater		BA08761
MW-2	05/13/2020	16:25	4	Groundwater		BA08762
EB-2	05/13/2020	17:55	4	Equipment Blank		BA08763

Relinquished By	Received By	Date/Time
		05/14/2020 09:59

SmarTroll ID	7586-41442-5-1
Turbidity ID	5160-26211-1-1
Sample Event	1277

All metals and radiological bottles have pH < 2 ☑

Cooler Temp	0.0 degrees C
Thermometer ID	5408-27568-2-2
pH Strip ID	7901-43573-2-2

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 05/14/2020 09:33

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Site Representative	John Pate	Requested By	Greg Dyer
Collector	Anthony Goggins	Location	Gorgas Ash Pond

Bottles

1	Radium	1 L	3	N/A	N/A	5	N/A	N/A	7	N/A	N/A
2	N/A	N/A	4	N/A	N/A	6	N/A	N/A	8	N/A	N/A

Comments: Matrix Spike & Matrix Spike Duplicate collected @ MW-36H

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
EB-1	05/12/2020	09:15	1	Equipment Blank		BA08764
MW-28H	05/12/2020	10:50	1	Groundwater		BA08765
MW-17	05/12/2020	12:12	1	Groundwater		BA08766
MW-34HO	05/12/2020	13:46	1	Groundwater		BA08767
MW-34HO DUP	05/12/2020	13:46	1	Sample Duplicate		BA08768
MW-35HO	05/12/2020	15:52	1	Groundwater		BA08769
FB-1	05/13/2020	09:10	1	Field Blank		BA08770
MW-36H	05/13/2020	10:40	3	Groundwater		BA08771
MW-33HO	05/13/2020	14:15	1	Groundwater		BA08772
MW-30HA	05/13/2020	15:35	1	Groundwater		BA08773
MW-2	05/13/2020	16:25	1	Groundwater		BA08774
EB-2	05/13/2020	17:55	1	Equipment Blank		BA08775

Relinquished By	Received By	Date/Time
		05/14/2020 10:00

SmarTroll ID	7586-41442-5-1
Turbidity ID	5160-26211-1-1
Sample Event	1277

All metals and radiological bottles have pH < 2 ✔

Cooler Temp	N/A
Thermometer ID	N/A
pH Strip ID	7901-43573-2-2

Bottles/Pre-Preserved Bottles are provided by the GTL

7.1

eurofins | Environment Testing America

ANALYTICAL REPORT

Eurofins TestAmerica, Pensacola
3355 McLemore Drive
Pensacola, FL 32514
Tel: (850)474-1001

Laboratory Job ID: 400-188180-1
Laboratory SDG: Gorgas Pond Recollection 1277
Client Project/Site: CCR Plant Gorgas

For:
Alabama Power General Test Laboratory
744 County Rd 87
GSC #8
Calera, Alabama 35040

Attn: Laura Midkiff

Authorized for release by:
6/18/2020 6:48:36 PM

Cheyenne Whitmire, Project Manager II
(850)471-6222
cheyenne.whitmire@testamericainc.com

LINKS

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The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Job ID: 400-188180-1

Laboratory: Eurofins TestAmerica, Pensacola

Narrative

Job Narrative
400-188180-1

RAD

Method 9315: Radium-226 Prep Batch 160-471105. Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. BA08764 EB-1 (400-188180-1), BA08765 MW-28H (400-188180-2), BA08766 MW-17 (400-188180-3), BA08767 MW-34HO (400-188180-4), BA08768 MW-34HO DUP (400-188180-5), BA08769 MW-35HO (400-188180-6), BA08770 FB-1 (400-188180-7), BA08771 MW-36H (400-188180-8), BA08771 MW-36H (400-188180-8[MS]), BA08771 MW-36H (400-188180-8[MSD]), BA08772 MW-33HO (400-188180-9), BA08773 MW-30HA (400-188180-10), (LCS 160-471105/1-A) and (MB 160-471105/22-A)

Method 9315: Radium-226 Prep Batch 160-471108. Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. BA08774 MW-2 (400-188180-11), BA08775 EB-2 (400-188180-12), (LCS 160-471108/1-A), (MB 160-471108/7-A), (160-38105-D-1-A) and (160-38105-E-1-A DU)

Method 9320: Ra-228 Prep Batch 160-471106. Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. BA08764 EB-1 (400-188180-1), BA08765 MW-28H (400-188180-2), BA08766 MW-17 (400-188180-3), BA08767 MW-34HO (400-188180-4), BA08768 MW-34HO DUP (400-188180-5), BA08769 MW-35HO (400-188180-6), BA08770 FB-1 (400-188180-7), BA08771 MW-36H (400-188180-8), BA08771 MW-36H (400-188180-8[MS]), BA08771 MW-36H (400-188180-8[MSD]), BA08772 MW-33HO (400-188180-9), BA08773 MW-30HA (400-188180-10), (LCS 160-471106/1-A) and (MB 160-471106/22-A)

Method 9320: Radium 228 Prep Batch 160- 471109. Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. BA08774 MW-2 (400-188180-11), BA08775 EB-2 (400-188180-12), (LCS 160-471109/1-A), (MB 160-471109/7-A), (160-38105-D-1-B) and (160-38105-E-1-B DU).

Method PrecSep_0: Radium 228 Prep Batch 160-471106. The following samples were prepared at a reduced aliquot to insure sufficient volume remains if needed for analysis: BA08764 EB-1 (400-188180-1), BA08765 MW-28H (400-188180-2), BA08766 MW-17 (400-188180-3), BA08767 MW-34HO (400-188180-4), BA08768 MW-34HO DUP (400-188180-5), BA08769 MW-35HO (400-188180-6), BA08770 FB-1 (400-188180-7), BA08771 MW-36H (400-188180-8), BA08771 MW-36H (400-188180-8[MS]), BA08771 MW-36H (400-188180-8[MSD]), BA08772 MW-33HO (400-188180-9) and BA08773 MW-30HA (400-188180-10).

Method PrecSep_0: Radium 228 Prep Batch 160-471109. The following samples were prepared at a reduced aliquot to insure sufficient volume remains if needed for analysis: BA08774 MW-2 (400-188180-11) and BA08775 EB-2 (400-188180-12).

Method PrecSep-21: Radium 226 Prep Batch 160-471105. The following samples were prepared at a reduced aliquot to insure sufficient volume remains if needed for analysis: BA08764 EB-1 (400-188180-1), BA08765 MW-28H (400-188180-2), BA08766 MW-17 (400-188180-3), BA08767 MW-34HO (400-188180-4), BA08768 MW-34HO DUP (400-188180-5), BA08769 MW-35HO (400-188180-6), BA08770 FB-1 (400-188180-7), BA08771 MW-36H (400-188180-8), BA08771 MW-36H (400-188180-8[MS]), BA08771 MW-36H (400-188180-8[MSD]), BA08772 MW-33HO (400-188180-9) and BA08773 MW-30HA (400-188180-10).

Method PrecSep-21: Radium 226 Prep Batch 160-471108. The following samples were prepared at a reduced aliquot to insure sufficient volume remains if needed for analysis: BA08774 MW-2 (400-188180-11) and BA08775 EB-2 (400-188180-12).

Method Summary

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-188180-1
SDG: Gorgas Pond Recollection 1277

Method	Method Description	Protocol	Laboratory
9315	Radium-226 (GFPC)	SW846	TAL SL
9320	Radium-228 (GFPC)	SW846	TAL SL
Ra226_Ra228	Combined Radium-226 and Radium-228	TAL-STL	TAL SL
PrecSep_0	Preparation, Precipitate Separation	None	TAL SL
PrecSep-21	Preparation, Precipitate Separation (21-Day In-Growth)	None	TAL SL

Protocol References:

None = None

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

TAL-STL = TestAmerica Laboratories, St. Louis, Facility Standard Operating Procedure.

Laboratory References:

TAL SL = Eurofins TestAmerica, St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

Sample Summary

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-188180-1
SDG: Gorgas Pond Recollection 1277

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
400-188180-1	BA08764 EB-1	Water	05/12/20 09:15	05/18/20 14:15	
400-188180-2	BA08765 MW-28H	Water	05/12/20 10:50	05/18/20 14:15	
400-188180-3	BA08766 MW-17	Water	05/12/20 12:12	05/18/20 14:15	
400-188180-4	BA08767 MW-34HO	Water	05/12/20 13:46	05/18/20 14:15	
400-188180-5	BA08768 MW-34HO DUP	Water	05/12/20 13:46	05/18/20 14:15	
400-188180-6	BA08769 MW-35HO	Water	05/12/20 15:52	05/18/20 14:15	
400-188180-7	BA08770 FB-1	Water	05/13/20 09:10	05/18/20 14:15	
400-188180-8	BA08771 MW-36H	Water	05/13/20 10:40	05/18/20 14:15	
400-188180-9	BA08772 MW-33HO	Water	05/13/20 14:15	05/18/20 14:15	
400-188180-10	BA08773 MW-30HA	Water	05/13/20 15:35	05/18/20 14:15	
400-188180-11	BA08774 MW-2	Water	05/13/20 16:25	05/18/20 14:15	
400-188180-12	BA08775 EB-2	Water	05/13/20 17:55	05/18/20 14:15	

Client Sample Results

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-188180-1
SDG: Gorgas Pond Recollection 1277

Client Sample ID: BA08764 EB-1

Date Collected: 05/12/20 09:15
Date Received: 05/18/20 14:15

Lab Sample ID: 400-188180-1

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.0606	U	0.0797	0.0799	1.00	0.196	pCi/L	05/21/20 15:03	06/12/20 04:42	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*78.3*		*40 - 110*	*05/21/20 15:03*	*06/12/20 04:42*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.0329	U	0.319	0.319	1.00	0.580	pCi/L	05/21/20 15:30	06/04/20 15:02	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*78.3*		*40 - 110*	*05/21/20 15:30*	*06/04/20 15:02*	*1*
Y Carrier	*80.7*		*40 - 110*	*05/21/20 15:30*	*06/04/20 15:02*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	-0.0935	U	0.329	0.329	5.00	0.580	pCi/L		06/12/20 08:24	1

Client Sample Results

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-188180-1
SDG: Gorgas Pond Recollection 1277

Client Sample ID: BA08765 MW-28H

Date Collected: 05/12/20 10:50
Date Received: 05/18/20 14:15

Lab Sample ID: 400-188180-2

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.152		0.104	0.105	1.00	0.132	pCi/L	05/21/20 15:03	06/12/20 04:49	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*70.6*		*40 - 110*	*05/21/20 15:03*	*06/12/20 04:49*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.272	U	0.393	0.394	1.00	0.659	pCi/L	05/21/20 15:30	06/04/20 15:02	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*70.6*		*40 - 110*	*05/21/20 15:30*	*06/04/20 15:02*	*1*
Y Carrier	*78.1*		*40 - 110*	*05/21/20 15:30*	*06/04/20 15:02*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.425	U	0.407	0.408	5.00	0.659	pCi/L		06/12/20 08:24	1

Client Sample Results

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-188180-1
SDG: Gorgas Pond Recollection 1277

Client Sample ID: BA08766 MW-17

Date Collected: 05/12/20 12:12
Date Received: 05/18/20 14:15

Lab Sample ID: 400-188180-3

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.0139	U	0.0509	0.0509	1.00	0.125	pCi/L	05/21/20 15:03	06/12/20 04:49	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*85.5*		*40 - 110*	*05/21/20 15:03*	*06/12/20 04:49*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0478	U	0.308	0.308	1.00	0.543	pCi/L	05/21/20 15:30	06/04/20 15:02	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*85.5*		*40 - 110*	*05/21/20 15:30*	*06/04/20 15:02*	*1*
Y Carrier	*82.2*		*40 - 110*	*05/21/20 15:30*	*06/04/20 15:02*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.0339	U	0.312	0.312	5.00	0.543	pCi/L		06/12/20 08:24	1

Client Sample Results

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-188180-1
SDG: Gorgas Pond Recollection 1277

Client Sample ID: BA08767 MW-34HO

Date Collected: 05/12/20 13:46
Date Received: 05/18/20 14:15

Lab Sample ID: 400-188180-4

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.114	U	0.0909	0.0915	1.00	0.123	pCi/L	05/21/20 15:03	06/12/20 04:49	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*74.8*		*40 - 110*	*05/21/20 15:03*	*06/12/20 04:49*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.232	U	0.331	0.331	1.00	0.554	pCi/L	05/21/20 15:30	06/04/20 15:02	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*74.8*		*40 - 110*	*05/21/20 15:30*	*06/04/20 15:02*	*1*
Y Carrier	*84.1*		*40 - 110*	*05/21/20 15:30*	*06/04/20 15:02*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.345	U	0.343	0.343	5.00	0.554	pCi/L		06/12/20 08:24	1

Client Sample Results

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-188180-1
SDG: Gorgas Pond Recollection 1277

Client Sample ID: BA08768 MW-34HO DUP

Lab Sample ID: 400-188180-5

Date Collected: 05/12/20 13:46
Matrix: Water
Date Received: 05/18/20 14:15

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.0590	U	0.127	0.127	1.00	0.279	pCi/L	05/21/20 15:03	06/12/20 04:49	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*54.0*		*40 - 110*	*05/21/20 15:03*	*06/12/20 04:49*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.166	U	0.531	0.532	1.00	0.925	pCi/L	05/21/20 15:30	06/04/20 15:02	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*54.0*		*40 - 110*	*05/21/20 15:30*	*06/04/20 15:02*	*1*
Y Carrier	*75.1*		*40 - 110*	*05/21/20 15:30*	*06/04/20 15:02*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.108	U	0.546	0.547	5.00	0.925	pCi/L		06/12/20 08:24	1

Client Sample Results

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-188180-1
SDG: Gorgas Pond Recollection 1277

Client Sample ID: BA08769 MW-35HO

Date Collected: 05/12/20 15:52
Date Received: 05/18/20 14:15

Lab Sample ID: 400-188180-6

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0497	U	0.0822	0.0823	1.00	0.144	pCi/L	05/21/20 15:03	06/12/20 04:49	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*81.0*		*40 - 110*	*05/21/20 15:03*	*06/12/20 04:49*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	**0.974**		0.447	0.456	1.00	0.650	pCi/L	05/21/20 15:30	06/04/20 15:02	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*81.0*		*40 - 110*	*05/21/20 15:30*	*06/04/20 15:02*	*1*
Y Carrier	*74.8*		*40 - 110*	*05/21/20 15:30*	*06/04/20 15:02*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**1.02**		0.454	0.463	5.00	0.650	pCi/L		06/12/20 08:24	1

Client Sample Results

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-188180-1
SDG: Gorgas Pond Recollection 1277

Client Sample ID: BA08770 FB-1

Date Collected: 05/13/20 09:10
Date Received: 05/18/20 14:15

Lab Sample ID: 400-188180-7

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.00454	U	0.0631	0.0631	1.00	0.141	pCi/L	05/21/20 15:03	06/12/20 04:49	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*79.5*		*40 - 110*	*05/21/20 15:03*	*06/12/20 04:49*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.525	U	0.426	0.429	1.00	0.681	pCi/L	05/21/20 15:30	06/04/20 14:58	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*79.5*		*40 - 110*	*05/21/20 15:30*	*06/04/20 14:58*	*1*
Y Carrier	*83.7*		*40 - 110*	*05/21/20 15:30*	*06/04/20 14:58*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.521	U	0.431	0.434	5.00	0.681	pCi/L		06/12/20 08:24	1

Client Sample Results

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-188180-1
SDG: Gorgas Pond Recollection 1277

Client Sample ID: BA08771 MW-36H

Lab Sample ID: 400-188180-8

Date Collected: 05/13/20 10:40
Matrix: Water
Date Received: 05/18/20 14:15

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.129	U	0.110	0.111	1.00	0.167	pCi/L	05/21/20 15:03	06/12/20 04:49	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*86.9*		*40 - 110*	*05/21/20 15:03*	*06/12/20 04:49*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.355	U	0.312	0.313	1.00	0.610	pCi/L	05/21/20 15:30	06/04/20 14:58	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*86.9*		*40 - 110*	*05/21/20 15:30*	*06/04/20 14:58*	*1*
Y Carrier	*81.5*		*40 - 110*	*05/21/20 15:30*	*06/04/20 14:58*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	-0.225	U	0.331	0.332	5.00	0.610	pCi/L		06/12/20 08:24	1

Client Sample Results

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-188180-1
SDG: Gorgas Pond Recollection 1277

Client Sample ID: BA08772 MW-33HO

Date Collected: 05/13/20 14:15
Date Received: 05/18/20 14:15

Lab Sample ID: 400-188180-9

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.270		0.115	0.118	1.00	0.105	pCi/L	05/21/20 15:03	06/12/20 04:50	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*88.1*		*40 - 110*	*05/21/20 15:03*	*06/12/20 04:50*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.145	U	0.330	0.331	1.00	0.567	pCi/L	05/21/20 15:30	06/04/20 14:58	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*88.1*		*40 - 110*	*05/21/20 15:30*	*06/04/20 14:58*	*1*
Y Carrier	*79.3*		*40 - 110*	*05/21/20 15:30*	*06/04/20 14:58*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.415	U	0.349	0.351	5.00	0.567	pCi/L		06/12/20 08:24	1

Client Sample Results

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-188180-1
SDG: Gorgas Pond Recollection 1277

Client Sample ID: BA08773 MW-30HA

Date Collected: 05/13/20 15:35
Date Received: 05/18/20 14:15

Lab Sample ID: 400-188180-10

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**0.214**		0.110	0.112	1.00	0.118	pCi/L	05/21/20 15:03	06/12/20 04:50	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*80.7*		*40 - 110*	*05/21/20 15:03*	*06/12/20 04:50*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.390	U	0.345	0.347	1.00	0.554	pCi/L	05/21/20 15:30	06/04/20 14:58	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*80.7*		*40 - 110*	*05/21/20 15:30*	*06/04/20 14:58*	*1*
Y Carrier	*86.7*		*40 - 110*	*05/21/20 15:30*	*06/04/20 14:58*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**0.604**		0.362	0.365	5.00	0.554	pCi/L		06/12/20 08:24	1

Client Sample Results

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-188180-1
SDG: Gorgas Pond Recollection 1277

Client Sample ID: BA08774 MW-2

Date Collected: 05/13/20 16:25
Date Received: 05/18/20 14:15

Lab Sample ID: 400-188180-11

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.129	U	0.243	0.243	1.00	0.432	pCi/L	05/21/20 17:11	06/16/20 22:27	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*84.3*		*40 - 110*	*05/21/20 17:11*	*06/16/20 22:27*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.160	U	0.363	0.363	1.00	0.623	pCi/L	05/21/20 17:17	06/16/20 13:20	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*84.3*		*40 - 110*	*05/21/20 17:17*	*06/16/20 13:20*	*1*
Y Carrier	*81.1*		*40 - 110*	*05/21/20 17:17*	*06/16/20 13:20*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.289	U	0.437	0.437	5.00	0.623	pCi/L		06/17/20 12:27	1

Client Sample Results

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-188180-1
SDG: Gorgas Pond Recollection 1277

Client Sample ID: BA08775 EB-2

Date Collected: 05/13/20 17:55
Date Received: 05/18/20 14:15

Lab Sample ID: 400-188180-12

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.0880	U	0.240	0.241	1.00	0.517	pCi/L	05/21/20 17:11	06/16/20 22:27	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*83.7*		*40 - 110*	*05/21/20 17:11*	*06/16/20 22:27*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.111	U	0.335	0.335	1.00	0.580	pCi/L	05/21/20 17:17	06/16/20 13:20	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*83.7*		*40 - 110*	*05/21/20 17:17*	*06/16/20 13:20*	*1*
Y Carrier	*93.5*		*40 - 110*	*05/21/20 17:17*	*06/16/20 13:20*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.0227	U	0.412	0.413	5.00	0.580	pCi/L		06/17/20 12:27	1

Definitions/Glossary

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-188180-1
SDG: Gorgas Pond Recollection 1277

Qualifiers

Rad

Qualifier	Qualifier Description
U	Result is less than the sample detection limit.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Lab Chronicle

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-188180-1
SDG: Gorgas Pond Recollection 1277

Client Sample ID: BA08764 EB-1
Lab Sample ID: 400-188180-1

Date Collected: 05/12/20 09:15
Date Received: 05/18/20 14:15
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			471105	05/21/20 15:03	MNH	TAL SL
Total/NA	Analysis	9315		1	473204	06/12/20 04:42	KLS	TAL SL
Total/NA	Prep	PrecSep_0			471106	05/21/20 15:30	MNH	TAL SL
Total/NA	Analysis	9320		1	471995	06/04/20 15:02	AJD	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	473223	06/12/20 08:24	SMP	TAL SL

Client Sample ID: BA08765 MW-28H
Lab Sample ID: 400-188180-2

Date Collected: 05/12/20 10:50
Date Received: 05/18/20 14:15
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			471105	05/21/20 15:03	MNH	TAL SL
Total/NA	Analysis	9315		1	473203	06/12/20 04:49	KLS	TAL SL
Total/NA	Prep	PrecSep_0			471106	05/21/20 15:30	MNH	TAL SL
Total/NA	Analysis	9320		1	471995	06/04/20 15:02	AJD	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	473223	06/12/20 08:24	SMP	TAL SL

Client Sample ID: BA08766 MW-17
Lab Sample ID: 400-188180-3

Date Collected: 05/12/20 12:12
Date Received: 05/18/20 14:15
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			471105	05/21/20 15:03	MNH	TAL SL
Total/NA	Analysis	9315		1	473203	06/12/20 04:49	KLS	TAL SL
Total/NA	Prep	PrecSep_0			471106	05/21/20 15:30	MNH	TAL SL
Total/NA	Analysis	9320		1	471995	06/04/20 15:02	AJD	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	473223	06/12/20 08:24	SMP	TAL SL

Client Sample ID: BA08767 MW-34HO
Lab Sample ID: 400-188180-4

Date Collected: 05/12/20 13:46
Date Received: 05/18/20 14:15
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			471105	05/21/20 15:03	MNH	TAL SL
Total/NA	Analysis	9315		1	473203	06/12/20 04:49	KLS	TAL SL
Total/NA	Prep	PrecSep_0			471106	05/21/20 15:30	MNH	TAL SL
Total/NA	Analysis	9320		1	471995	06/04/20 15:02	AJD	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	473223	06/12/20 08:24	SMP	TAL SL

Lab Chronicle

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-188180-1
SDG: Gorgas Pond Recollection 1277

Client Sample ID: BA08768 MW-34HO DUP

Lab Sample ID: 400-188180-5
Date Collected: 05/12/20 13:46
Matrix: Water
Date Received: 05/18/20 14:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			471105	05/21/20 15:03	MNH	TAL SL
Total/NA	Analysis	9315		1	473203	06/12/20 04:49	KLS	TAL SL
Total/NA	Prep	PrecSep_0			471106	05/21/20 15:30	MNH	TAL SL
Total/NA	Analysis	9320		1	471995	06/04/20 15:02	AJD	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	473223	06/12/20 08:24	SMP	TAL SL

Client Sample ID: BA08769 MW-35HO

Lab Sample ID: 400-188180-6
Date Collected: 05/12/20 15:52
Matrix: Water
Date Received: 05/18/20 14:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			471105	05/21/20 15:03	MNH	TAL SL
Total/NA	Analysis	9315		1	473203	06/12/20 04:49	KLS	TAL SL
Total/NA	Prep	PrecSep_0			471106	05/21/20 15:30	MNH	TAL SL
Total/NA	Analysis	9320		1	471995	06/04/20 15:02	AJD	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	473223	06/12/20 08:24	SMP	TAL SL

Client Sample ID: BA08770 FB-1

Lab Sample ID: 400-188180-7
Date Collected: 05/13/20 09:10
Matrix: Water
Date Received: 05/18/20 14:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			471105	05/21/20 15:03	MNH	TAL SL
Total/NA	Analysis	9315		1	473203	06/12/20 04:49	KLS	TAL SL
Total/NA	Prep	PrecSep_0			471106	05/21/20 15:30	MNH	TAL SL
Total/NA	Analysis	9320		1	472403	06/04/20 14:58	CJQ	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	473223	06/12/20 08:24	SMP	TAL SL

Client Sample ID: BA08771 MW-36H

Lab Sample ID: 400-188180-8
Date Collected: 05/13/20 10:40
Matrix: Water
Date Received: 05/18/20 14:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			471105	05/21/20 15:03	MNH	TAL SL
Total/NA	Analysis	9315		1	473203	06/12/20 04:49	KLS	TAL SL
Total/NA	Prep	PrecSep_0			471106	05/21/20 15:30	MNH	TAL SL
Total/NA	Analysis	9320		1	472403	06/04/20 14:58	CJQ	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	473223	06/12/20 08:24	SMP	TAL SL

Lab Chronicle

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-188180-1
SDG: Gorgas Pond Recollection 1277

Client Sample ID: BA08772 MW-33HO
Lab Sample ID: 400-188180-9

Date Collected: 05/13/20 14:15
Date Received: 05/18/20 14:15
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			471105	05/21/20 15:03	MNH	TAL SL
Total/NA	Analysis	9315		1	473203	06/12/20 04:50	KLS	TAL SL
Total/NA	Prep	PrecSep_0			471106	05/21/20 15:30	MNH	TAL SL
Total/NA	Analysis	9320		1	472403	06/04/20 14:58	CJQ	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	473223	06/12/20 08:24	SMP	TAL SL

Client Sample ID: BA08773 MW-30HA
Lab Sample ID: 400-188180-10

Date Collected: 05/13/20 15:35
Date Received: 05/18/20 14:15
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			471105	05/21/20 15:03	MNH	TAL SL
Total/NA	Analysis	9315		1	473203	06/12/20 04:50	KLS	TAL SL
Total/NA	Prep	PrecSep_0			471106	05/21/20 15:30	MNH	TAL SL
Total/NA	Analysis	9320		1	472403	06/04/20 14:58	CJQ	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	473223	06/12/20 08:24	SMP	TAL SL

Client Sample ID: BA08774 MW-2
Lab Sample ID: 400-188180-11

Date Collected: 05/13/20 16:25
Date Received: 05/18/20 14:15
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			471108	05/21/20 17:11	MNH	TAL SL
Total/NA	Analysis	9315		1	473663	06/16/20 22:27	AJD	TAL SL
Total/NA	Prep	PrecSep_0			471109	05/21/20 17:17	MNH	TAL SL
Total/NA	Analysis	9320		1	473661	06/16/20 13:20	RJD	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	473707	06/17/20 12:27	SMP	TAL SL

Client Sample ID: BA08775 EB-2
Lab Sample ID: 400-188180-12

Date Collected: 05/13/20 17:55
Date Received: 05/18/20 14:15
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			471108	05/21/20 17:11	MNH	TAL SL
Total/NA	Analysis	9315		1	473663	06/16/20 22:27	AJD	TAL SL
Total/NA	Prep	PrecSep_0			471109	05/21/20 17:17	MNH	TAL SL
Total/NA	Analysis	9320		1	473661	06/16/20 13:20	RJD	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	473707	06/17/20 12:27	SMP	TAL SL

Laboratory References:

TAL SL = Eurofins TestAmerica, St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

QC Association Summary

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-188180-1
SDG: Gorgas Pond Recollection 1277

Rad

Prep Batch: 471105

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-188180-1	BA08764 EB-1	Total/NA	Water	PrecSep-21	
400-188180-2	BA08765 MW-28H	Total/NA	Water	PrecSep-21	
400-188180-3	BA08766 MW-17	Total/NA	Water	PrecSep-21	
400-188180-4	BA08767 MW-34HO	Total/NA	Water	PrecSep-21	
400-188180-5	BA08768 MW-34HO DUP	Total/NA	Water	PrecSep-21	
400-188180-6	BA08769 MW-35HO	Total/NA	Water	PrecSep-21	
400-188180-7	BA08770 FB-1	Total/NA	Water	PrecSep-21	
400-188180-8	BA08771 MW-36H	Total/NA	Water	PrecSep-21	
400-188180-9	BA08772 MW-33HO	Total/NA	Water	PrecSep-21	
400-188180-10	BA08773 MW-30HA	Total/NA	Water	PrecSep-21	
MB 160-471105/22-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-471105/1-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
400-188180-8 MS	BA08771 MW-36H	Total/NA	Water	PrecSep-21	
400-188180-8 MSD	BA08771 MW-36H	Total/NA	Water	PrecSep-21	

Prep Batch: 471106

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-188180-1	BA08764 EB-1	Total/NA	Water	PrecSep_0	
400-188180-2	BA08765 MW-28H	Total/NA	Water	PrecSep_0	
400-188180-3	BA08766 MW-17	Total/NA	Water	PrecSep_0	
400-188180-4	BA08767 MW-34HO	Total/NA	Water	PrecSep_0	
400-188180-5	BA08768 MW-34HO DUP	Total/NA	Water	PrecSep_0	
400-188180-6	BA08769 MW-35HO	Total/NA	Water	PrecSep_0	
400-188180-7	BA08770 FB-1	Total/NA	Water	PrecSep_0	
400-188180-8	BA08771 MW-36H	Total/NA	Water	PrecSep_0	
400-188180-9	BA08772 MW-33HO	Total/NA	Water	PrecSep_0	
400-188180-10	BA08773 MW-30HA	Total/NA	Water	PrecSep_0	
MB 160-471106/22-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-471106/1-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
400-188180-8 MS	BA08771 MW-36H	Total/NA	Water	PrecSep_0	
400-188180-8 MSD	BA08771 MW-36H	Total/NA	Water	PrecSep_0	

Prep Batch: 471108

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-188180-11	BA08774 MW-2	Total/NA	Water	PrecSep-21	
400-188180-12	BA08775 EB-2	Total/NA	Water	PrecSep-21	
MB 160-471108/7-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-471108/1-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
160-38105-E-1-A DU	Duplicate	Total/NA	Water	PrecSep-21	

Prep Batch: 471109

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-188180-11	BA08774 MW-2	Total/NA	Water	PrecSep_0	
400-188180-12	BA08775 EB-2	Total/NA	Water	PrecSep_0	
MB 160-471109/7-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-471109/1-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
160-38105-E-1-B DU	Duplicate	Total/NA	Water	PrecSep_0	

QC Sample Results

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-188180-1
SDG: Gorgas Pond Recollection 1277

Method: 9315 - Radium-226 (GFPC)

Lab Sample ID: MB 160-471105/22-A
Matrix: Water
Analysis Batch: 473203

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 471105

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.08984	U	0.0816	0.0820	1.00	0.119	pCi/L	05/21/20 15:03	06/12/20 04:50	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*84.9*		*40 - 110*	*05/21/20 15:03*	*06/12/20 04:50*	*1*

Lab Sample ID: LCS 160-471105/1-A
Matrix: Water
Analysis Batch: 473204

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 471105

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-226			15.1	13.83		1.49	1.00	0.173	pCi/L	91	75 - 125		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*77.2*		*40 - 110*

Lab Sample ID: 400-188180-8 MS
Matrix: Water
Analysis Batch: 473203

Client Sample ID: BA08771 MW-36H
Prep Type: Total/NA
Prep Batch: 471105

Analyte	Sample Result	Sample Qual	Spike Added	MS Result	MS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-226	0.129	U	15.1	13.11		1.39	1.00	0.121	pCi/L	86	75 - 138		

Carrier	*MS %Yield*	*MS Qualifier*	*Limits*
Ba Carrier	*86.9*		*40 - 110*

Lab Sample ID: 400-188180-8 MSD
Matrix: Water
Analysis Batch: 473203

Client Sample ID: BA08771 MW-36H
Prep Type: Total/NA
Prep Batch: 471105

Analyte	Sample Result	Sample Qual	Spike Added	MSD Result	MSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits	RER	RER Limit
Radium-226	0.129	U	15.1	12.97		1.37	1.00	0.104	pCi/L	85	75 - 138	0.05	1

Carrier	*MSD %Yield*	*MSD Qualifier*	*Limits*
Ba Carrier	*88.4*		*40 - 110*

Lab Sample ID: MB 160-471108/7-A
Matrix: Water
Analysis Batch: 473663

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 471108

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.02185	U	0.130	0.130	1.00	0.292	pCi/L	05/21/20 17:11	06/16/20 22:28	1

Method: 9315 - Radium-226 (GFPC) (Continued)

Lab Sample ID: MB 160-471108/7-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 473663 — **Prep Batch: 471108**

Carrier	MB %Yield	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	91.7		40 - 110	05/21/20 17:11	06/16/20 22:28	1

Lab Sample ID: LCS 160-471108/1-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 473663 — **Prep Batch: 471108**

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-226			11.3	10.39		1.32	1.00	0.301	pCi/L	92	75 - 125		

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	91.1		40 - 110

Lab Sample ID: 160-38105-E-1-A DU — **Client Sample ID: Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 473663 — **Prep Batch: 471108**

Analyte	Sample Result	Sample Qual		DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit			RER	RER Limit
Radium-226	0.286	U		0.4467		0.266	1.00	0.343	pCi/L			0.30	1

Carrier	DU %Yield	DU Qualifier	Limits
Ba Carrier	74.8		40 - 110

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-471106/22-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 472403 — **Prep Batch: 471106**

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.002976	U	0.348	0.348	1.00	0.618	pCi/L	05/21/20 15:30	06/04/20 14:58	1

Carrier	MB %Yield	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	84.9		40 - 110	05/21/20 15:30	06/04/20 14:58	1
Y Carrier	86.4		40 - 110	05/21/20 15:30	06/04/20 14:58	1

Lab Sample ID: LCS 160-471106/1-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 471995 — **Prep Batch: 471106**

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-228			11.7	13.32		1.63	1.00	0.709	pCi/L	114	75 - 125		

Method: 9320 - Radium-228 (GFPC) (Continued)

Lab Sample ID: LCS 160-471106/1-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 471995 — **Prep Batch: 471106**

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	77.2		40 - 110
Y Carrier	71.8		40 - 110

Lab Sample ID: 400-188180-8 MS — **Client Sample ID: BA08771 MW-36H**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 472403 — **Prep Batch: 471106**

Analyte	Sample Result	Sample Qual	Spike Added	MS Result	MS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-228	-0.355	U	11.7	11.97		1.43	1.00	0.653	pCi/L	102	45 - 150		

Carrier	MS %Yield	MS Qualifier	Limits
Ba Carrier	86.9		40 - 110
Y Carrier	82.2		40 - 110

Lab Sample ID: 400-188180-8 MSD — **Client Sample ID: BA08771 MW-36H**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 472403 — **Prep Batch: 471106**

Analyte	Sample Result	Sample Qual	Spike Added	MSD Result	MSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits	RER	RER Limit
Radium-228	-0.355	U	11.7	12.10		1.43	1.00	0.628	pCi/L	103	45 - 150	0.04	1

Carrier	MSD %Yield	MSD Qualifier	Limits
Ba Carrier	88.4		40 - 110
Y Carrier	83.0		40 - 110

Lab Sample ID: MB 160-471109/7-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 473662 — **Prep Batch: 471109**

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.1913	U	0.220	0.221	1.00	0.362	pCi/L	05/21/20 17:17	06/16/20 13:23	1

Carrier	MB %Yield	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	91.7		40 - 110	05/21/20 17:17	06/16/20 13:23	1
Y Carrier	84.9		40 - 110	05/21/20 17:17	06/16/20 13:23	1

Lab Sample ID: LCS 160-471109/1-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 473661 — **Prep Batch: 471109**

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-228			8.75	8.915		1.08	1.00	0.457	pCi/L	102	75 - 125		

Method: 9320 - Radium-228 (GFPC) (Continued)

Lab Sample ID: LCS 160-471109/1-A
Matrix: Water
Analysis Batch: 473661

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 471109

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*91.1*		*40 - 110*
Y Carrier	*80.7*		*40 - 110*

Lab Sample ID: 160-38105-E-1-B DU
Matrix: Water
Analysis Batch: 473662

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 471109

Analyte	Sample Result	Sample Qual		DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit			RER	RER Limit
Radium-228	0.538			0.2303	U	0.254	1.00	0.415	pCi/L			0.53	1

Carrier	*DU %Yield*	*DU Qualifier*	*Limits*
Ba Carrier	*74.8*		*40 - 110*
Y Carrier	*84.5*		*40 - 110*

TestAmerica Pensacola
3355 McLemore Drive
Pensacola, FL 32514
Phone (850) 474-1001 Fax (850) 478-2671

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler: Anthony Goggins	Lab PM: Whitmire, Cheyenne R	Carrier Tracking No(s):	COC No: 400-56525-24537.1
Client Contact: Laura Midkif	Phone:	E-Mail: cheyenne.whitmire@testamericainc.com	State of Origin: Alabama	Page: Page 1 of 1
Company: Alabama Power General Test Laboratory		Accreditations Required (See note):		Job #:
Address: 744 County Rd 87 GSC#8	Due Date Requested:			
City: Calera	TAT Requested (days): Routine			
State, Zip: AL, 35040				
Phone: 205-664-6197	PO #:			
Email: lbmidkif@southernco.com	WO #:			
Project Name: CCR	Project #: 40007143			
Site: Gorgas Ash Pond Recollection 1277	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA
M - Hexane, N - None, O - AshNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
Other:

400-188180 COC

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=soil/sed, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	SM 4500 F_C	SM 4500 Cl_E	SM 4500 SO4_E	9315_Ra226, 9320_Ra228, Ra226/Ra228_GFPC	Total Number of containers	Special Instructions/Note:
			Preservation Code:									
BA08764	5/12/20	09:15	G	Water						X	1	EB-1 (Equipment Blank)
BA08765	5/12/20	10:50	G	Water						X	1	MW-28H
BA08766	5/12/20	12:12	G	Water						X	1	MW-17
BA08767	5/12/20	13:46	G	Water						X	1	MW-34HO
BA08768	5/12/20	13:46	G	Water						X	1	MW-34HO DUP (Sample Duplicate)
BA08769	5/12/20	15:52	G	Water						X	1	MW-35HO
BA08770	5/13/20	09:10	G	Water						X	1	FB-1 (Field Blank)
BA08771	5/13/20	10:40	G	Water		X				X	3	MW-36H
BA08772	5/13/20	14:15	G	Water						X	1	MW-33HO
BA08773	5/13/20	15:35	G	Water						X	1	MW-30HA
BA08774	5/13/20	16:25	G	Water						X	1	MW-2
BA08775	5/13/20	17:55	G	Water						X	1	EB-2 (Equipment Blank)

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to TestAmerica Laboratories, Inc.

Possible Hazard Identification
Unconfirmed

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*

Deliverable Requested: I, II, III, IV, Other (specify) 43599 Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:		
Relinquished by: Laura Midkiff	Date/Time: 5/15/2020 10:00	Water APC	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 5-18-20 14:15	Company
Custody Seals Intact:	Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:		

Ver: 09/20/2016

25.7 c IR

Login Sample Receipt Checklist

Client: Alabama Power General Test Laboratory

Job Number: 400-188180-1
SDG Number: Gorgas Pond Recollection 1277

Login Number: 188180
List Number: 1
Creator: Perez, Trina M

List Source: Eurofins TestAmerica, Pensacola

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	N/A	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	25.7°C IR-7
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Alabama Power General Test Laboratory

Job Number: 400-188180-1
SDG Number: Gorgas Pond Recollection 1277

Login Number: 188180
List Number: 2
Creator: Mazariegos, Leonel A

List Source: Eurofins TestAmerica, St. Louis
List Creation: 05/20/20 04:32 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	N/A	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Accreditation/Certification Summary

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-188180-1
SDG: Gorgas Pond Recollection 1277

Laboratory: Eurofins TestAmerica, Pensacola

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alabama	State	40150	07-01-20
ANAB	ISO/IEC 17025	L2471	02-23-23
Arizona	State	AZ0710	01-13-21
Arkansas DEQ	State	88-0689	09-01-20
California	State	2510	07-01-20
Florida	NELAP	E81010	06-30-20
Georgia	State	E81010(FL)	06-30-20
Illinois	NELAP	004586	10-09-20
Iowa	State	367	08-01-20
Kansas	NELAP	E-10253	08-16-20
Kentucky (UST)	State	53	06-30-20
Kentucky (WW)	State	KY98030	12-31-20
Louisiana	NELAP	30976	06-30-20
Louisiana (DW)	State	LA017	12-31-20
Maryland	State	233	09-30-20
Massachusetts	State	M-FL094	06-30-20
Michigan	State	9912	06-30-20
Minnesota	NELAP	012-999-481	12-31-20
New Jersey	NELAP	FL006	06-30-20
New York	NELAP	12115	04-01-21
North Carolina (WW/SW)	State	314	12-31-20
Oklahoma	State	9810-186	08-31-20
Pennsylvania	NELAP	68-00467	01-31-21
Rhode Island	State	LAO00307	12-30-20
South Carolina	State	96026002	06-30-20
Tennessee	State	TN02907	06-30-20
Texas	NELAP	T104704286	09-30-20
US Fish & Wildlife	US Federal Programs	058448	07-31-20
USDA	US Federal Programs	P330-18-00148	05-17-21
Virginia	NELAP	460166	06-14-21
Washington	State	C915	05-15-21
West Virginia DEP	State	136	06-30-20

Accreditation/Certification Summary

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-188180-1
SDG: Gorgas Pond Recollection 1277

Laboratory: Eurofins TestAmerica, St. Louis

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	20-001	05-06-22
ANAB	Dept. of Defense ELAP	L2305	04-06-22
ANAB	Dept. of Energy	L2305.01	04-06-22
ANAB	ISO/IEC 17025	L2305	04-06-22
Arizona	State	AZ0813	12-08-20
California	Los Angeles County Sanitation Districts	10259	06-30-20
California	State	2886	06-30-20
Connecticut	State	PH-0241	03-31-21
Florida	NELAP	E87689	06-30-20
HI - RadChem Recognition	State	n/a	06-30-20
Illinois	NELAP	004553	11-30-20
Iowa	State	373	09-17-20
Kansas	NELAP	E-10236	10-31-20
Kentucky (DW)	State	KY90125	12-31-20
Louisiana	NELAP	04080	06-30-20
Louisiana (DW)	State	LA011	12-31-20
Maryland	State	310	09-30-20
MI - RadChem Recognition	State	9005	06-30-20
Missouri	State	780	06-30-22
Nevada	State	MO000542020-1	07-31-20
New Jersey	NELAP	MO002	06-30-20
New York	NELAP	11616	04-01-21
North Dakota	State	R-207	06-30-20
NRC	NRC	24-24817-01	12-31-22
Oklahoma	State	9997	08-31-20
Pennsylvania	NELAP	68-00540	02-28-21
South Carolina	State	85002001	06-30-20
Texas	NELAP	T104704193-19-13	07-31-20
US Fish & Wildlife	US Federal Programs	058448	07-31-20
USDA	US Federal Programs	P330-17-00028	03-11-23
Utah	NELAP	MO000542019-11	07-31-20
Virginia	NELAP	10310	06-14-21
Washington	State	C592	08-30-20
West Virginia DEP	State	381	10-31-20

Alabama Power Company
Plant Gorgas Ash Pond

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-2	5/13/2020 16:07	Conductivity	545.13	uS/cm
GS-AP-MW-2	5/13/2020 16:07	DO	0.25	mg/L
GS-AP-MW-2	5/13/2020 16:07	Depth to Water Detail	148.3	ft
GS-AP-MW-2	5/13/2020 16:07	Oxidation Reduction Potention	-216.3	mv
GS-AP-MW-2	5/13/2020 16:07	pH	9.4	pH
GS-AP-MW-2	5/13/2020 16:07	Temperature	17.79	C
GS-AP-MW-2	5/13/2020 16:07	Turbidity	1.53	NTU
GS-AP-MW-2	5/13/2020 16:12	Conductivity	542.82	uS/cm
GS-AP-MW-2	5/13/2020 16:12	DO	0.16	mg/L
GS-AP-MW-2	5/13/2020 16:12	Depth to Water Detail	148.42	ft
GS-AP-MW-2	5/13/2020 16:12	Oxidation Reduction Potention	-229.43	mv
GS-AP-MW-2	5/13/2020 16:12	pH	9.4	pH
GS-AP-MW-2	5/13/2020 16:12	Temperature	17.58	C
GS-AP-MW-2	5/13/2020 16:12	Turbidity	1.45	NTU
GS-AP-MW-2	5/13/2020 16:17	Conductivity	535.59	uS/cm
GS-AP-MW-2	5/13/2020 16:17	DO	0.14	mg/L
GS-AP-MW-2	5/13/2020 16:17	Depth to Water Detail	148.55	ft
GS-AP-MW-2	5/13/2020 16:17	Oxidation Reduction Potention	-235.68	mv
GS-AP-MW-2	5/13/2020 16:17	pH	9.4	pH
GS-AP-MW-2	5/13/2020 16:17	Temperature	17.34	C
GS-AP-MW-2	5/13/2020 16:17	Turbidity	1.4	NTU
GS-AP-MW-2	5/13/2020 16:22	Conductivity	525.92	uS/cm
GS-AP-MW-2	5/13/2020 16:22	DO	0.11	mg/L
GS-AP-MW-2	5/13/2020 16:22	Depth to Water Detail	148.55	ft
GS-AP-MW-2	5/13/2020 16:22	Oxidation Reduction Potention	-241.21	mv
GS-AP-MW-2	5/13/2020 16:22	pH	9.43	pH
GS-AP-MW-2	5/13/2020 16:22	Temperature	17.62	C
GS-AP-MW-2	5/13/2020 16:22	Turbidity	1.53	NTU

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-17	5/12/2020 11:39	Conductivity	811.33	uS/cm
GS-AP-MW-17	5/12/2020 11:39	DO	5.14	mg/L
GS-AP-MW-17	5/12/2020 11:39	Depth to Water Detail	177.25	ft
GS-AP-MW-17	5/12/2020 11:39	Oxidation Reduction Potention	-132.4	mv
GS-AP-MW-17	5/12/2020 11:39	pH	7.65	pH
GS-AP-MW-17	5/12/2020 11:39	Temperature	19.24	C
GS-AP-MW-17	5/12/2020 11:39	Turbidity	1.21	NTU
GS-AP-MW-17	5/12/2020 11:44	Conductivity	951.23	uS/cm
GS-AP-MW-17	5/12/2020 11:44	DO	1.26	mg/L
GS-AP-MW-17	5/12/2020 11:44	Depth to Water Detail	177.25	ft
GS-AP-MW-17	5/12/2020 11:44	Oxidation Reduction Potention	-178.66	mv
GS-AP-MW-17	5/12/2020 11:44	pH	8.15	pH
GS-AP-MW-17	5/12/2020 11:44	Temperature	19.43	C
GS-AP-MW-17	5/12/2020 11:44	Turbidity	1.59	NTU
GS-AP-MW-17	5/12/2020 11:49	Conductivity	945.37	uS/cm
GS-AP-MW-17	5/12/2020 11:49	DO	0.74	mg/L
GS-AP-MW-17	5/12/2020 11:49	Depth to Water Detail	177.25	ft
GS-AP-MW-17	5/12/2020 11:49	Oxidation Reduction Potention	-171.62	mv
GS-AP-MW-17	5/12/2020 11:49	pH	8.34	pH
GS-AP-MW-17	5/12/2020 11:49	Temperature	19.18	C
GS-AP-MW-17	5/12/2020 11:49	Turbidity	1.6	NTU
GS-AP-MW-17	5/12/2020 11:54	Conductivity	937.44	uS/cm
GS-AP-MW-17	5/12/2020 11:54	DO	0.6	mg/L
GS-AP-MW-17	5/12/2020 11:54	Depth to Water Detail	177.25	ft
GS-AP-MW-17	5/12/2020 11:54	Oxidation Reduction Potention	-168.09	mv
GS-AP-MW-17	5/12/2020 11:54	pH	8.37	pH
GS-AP-MW-17	5/12/2020 11:54	Temperature	19.43	C
GS-AP-MW-17	5/12/2020 11:54	Turbidity	0.72	NTU
GS-AP-MW-17	5/12/2020 11:59	Conductivity	927.32	uS/cm
GS-AP-MW-17	5/12/2020 11:59	DO	0.55	mg/L
GS-AP-MW-17	5/12/2020 11:59	Depth to Water Detail	177.25	ft
GS-AP-MW-17	5/12/2020 11:59	Oxidation Reduction Potention	-167.04	mv
GS-AP-MW-17	5/12/2020 11:59	pH	8.4	pH
GS-AP-MW-17	5/12/2020 11:59	Temperature	19.2	C
GS-AP-MW-17	5/12/2020 11:59	Turbidity	0.99	NTU
GS-AP-MW-17	5/12/2020 12:04	Conductivity	915.65	uS/cm
GS-AP-MW-17	5/12/2020 12:04	DO	0.5	mg/L
GS-AP-MW-17	5/12/2020 12:04	Depth to Water Detail	177.25	ft
GS-AP-MW-17	5/12/2020 12:04	Oxidation Reduction Potention	-166.51	mv
GS-AP-MW-17	5/12/2020 12:04	pH	8.42	pH
GS-AP-MW-17	5/12/2020 12:04	Temperature	19.26	C
GS-AP-MW-17	5/12/2020 12:04	Turbidity	0.84	NTU
GS-AP-MW-17	5/12/2020 12:09	Conductivity	894.85	uS/cm
GS-AP-MW-17	5/12/2020 12:09	DO	0.49	mg/L
GS-AP-MW-17	5/12/2020 12:09	Depth to Water Detail	177.25	ft
GS-AP-MW-17	5/12/2020 12:09	Oxidation Reduction Potention	-166.1	mv

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-17	5/12/2020 12:09	pH	8.42	pH
GS-AP-MW-17	5/12/2020 12:09	Temperature	19.18	C
GS-AP-MW-17	5/12/2020 12:09	Turbidity	0.76	NTU

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-28H	5/12/2020 9:57	Conductivity	788.27	uS/cm
GS-AP-MW-28H	5/12/2020 9:57	DO	2.07	mg/L
GS-AP-MW-28H	5/12/2020 9:57	Depth to Water Detail	159.1	ft
GS-AP-MW-28H	5/12/2020 9:57	Oxidation Reduction Potention	-103.97	mv
GS-AP-MW-28H	5/12/2020 9:57	pH	8.02	pH
GS-AP-MW-28H	5/12/2020 9:57	Temperature	19.26	C
GS-AP-MW-28H	5/12/2020 9:57	Turbidity	19.4	NTU
GS-AP-MW-28H	5/12/2020 10:02	Conductivity	781.49	uS/cm
GS-AP-MW-28H	5/12/2020 10:02	DO	1.04	mg/L
GS-AP-MW-28H	5/12/2020 10:02	Depth to Water Detail	159.1	ft
GS-AP-MW-28H	5/12/2020 10:02	Oxidation Reduction Potention	-139.17	mv
GS-AP-MW-28H	5/12/2020 10:02	pH	8.08	pH
GS-AP-MW-28H	5/12/2020 10:02	Temperature	19.18	C
GS-AP-MW-28H	5/12/2020 10:02	Turbidity	18	NTU
GS-AP-MW-28H	5/12/2020 10:07	Conductivity	766.2	uS/cm
GS-AP-MW-28H	5/12/2020 10:07	DO	0.79	mg/L
GS-AP-MW-28H	5/12/2020 10:07	Depth to Water Detail	159.1	ft
GS-AP-MW-28H	5/12/2020 10:07	Oxidation Reduction Potention	-149.95	mv
GS-AP-MW-28H	5/12/2020 10:07	pH	8.13	pH
GS-AP-MW-28H	5/12/2020 10:07	Temperature	19.16	C
GS-AP-MW-28H	5/12/2020 10:07	Turbidity	15.4	NTU
GS-AP-MW-28H	5/12/2020 10:12	Conductivity	753.78	uS/cm
GS-AP-MW-28H	5/12/2020 10:12	DO	0.62	mg/L
GS-AP-MW-28H	5/12/2020 10:12	Depth to Water Detail	159.1	ft
GS-AP-MW-28H	5/12/2020 10:12	Oxidation Reduction Potention	-152.65	mv
GS-AP-MW-28H	5/12/2020 10:12	pH	8.19	pH
GS-AP-MW-28H	5/12/2020 10:12	Temperature	19.5	C
GS-AP-MW-28H	5/12/2020 10:12	Turbidity	14.8	NTU
GS-AP-MW-28H	5/12/2020 10:17	Conductivity	744.61	uS/cm
GS-AP-MW-28H	5/12/2020 10:17	DO	0.6	mg/L
GS-AP-MW-28H	5/12/2020 10:17	Depth to Water Detail	159.1	ft
GS-AP-MW-28H	5/12/2020 10:17	Oxidation Reduction Potention	-156.66	mv
GS-AP-MW-28H	5/12/2020 10:17	pH	8.24	pH
GS-AP-MW-28H	5/12/2020 10:17	Temperature	19.41	C
GS-AP-MW-28H	5/12/2020 10:17	Turbidity	13.3	NTU
GS-AP-MW-28H	5/12/2020 10:22	Conductivity	739.41	uS/cm
GS-AP-MW-28H	5/12/2020 10:22	DO	0.51	mg/L
GS-AP-MW-28H	5/12/2020 10:22	Depth to Water Detail	159.1	ft
GS-AP-MW-28H	5/12/2020 10:22	Oxidation Reduction Potention	-158.57	mv
GS-AP-MW-28H	5/12/2020 10:22	pH	8.25	pH
GS-AP-MW-28H	5/12/2020 10:22	Temperature	19.22	C
GS-AP-MW-28H	5/12/2020 10:22	Turbidity	12.1	NTU
GS-AP-MW-28H	5/12/2020 10:27	Conductivity	731.33	uS/cm
GS-AP-MW-28H	5/12/2020 10:27	DO	0.44	mg/L
GS-AP-MW-28H	5/12/2020 10:27	Depth to Water Detail	159.1	ft
GS-AP-MW-28H	5/12/2020 10:27	Oxidation Reduction Potention	-161.38	mv

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-28H	5/12/2020 10:27	pH	8.28	pH
GS-AP-MW-28H	5/12/2020 10:27	Temperature	19.63	C
GS-AP-MW-28H	5/12/2020 10:27	Turbidity	11.34	NTU
GS-AP-MW-28H	5/12/2020 10:32	Conductivity	730.62	uS/cm
GS-AP-MW-28H	5/12/2020 10:32	DO	0.46	mg/L
GS-AP-MW-28H	5/12/2020 10:32	Depth to Water Detail	159.1	ft
GS-AP-MW-28H	5/12/2020 10:32	Oxidation Reduction Potention	-165.18	mv
GS-AP-MW-28H	5/12/2020 10:32	pH	8.3	pH
GS-AP-MW-28H	5/12/2020 10:32	Temperature	19.62	C
GS-AP-MW-28H	5/12/2020 10:32	Turbidity	10.51	NTU
GS-AP-MW-28H	5/12/2020 10:37	Conductivity	730.54	uS/cm
GS-AP-MW-28H	5/12/2020 10:37	DO	0.47	mg/L
GS-AP-MW-28H	5/12/2020 10:37	Depth to Water Detail	159.1	ft
GS-AP-MW-28H	5/12/2020 10:37	Oxidation Reduction Potention	-164.46	mv
GS-AP-MW-28H	5/12/2020 10:37	pH	8.3	pH
GS-AP-MW-28H	5/12/2020 10:37	Temperature	19.62	C
GS-AP-MW-28H	5/12/2020 10:37	Turbidity	10.46	NTU
GS-AP-MW-28H	5/12/2020 10:42	Conductivity	721.92	uS/cm
GS-AP-MW-28H	5/12/2020 10:42	DO	0.51	mg/L
GS-AP-MW-28H	5/12/2020 10:42	Depth to Water Detail	159.1	ft
GS-AP-MW-28H	5/12/2020 10:42	Oxidation Reduction Potention	-160.8	mv
GS-AP-MW-28H	5/12/2020 10:42	pH	8.29	pH
GS-AP-MW-28H	5/12/2020 10:42	Temperature	19.59	C
GS-AP-MW-28H	5/12/2020 10:42	Turbidity	8.9	NTU
GS-AP-MW-28H	5/12/2020 10:47	Conductivity	721.84	uS/cm
GS-AP-MW-28H	5/12/2020 10:47	DO	0.44	mg/L
GS-AP-MW-28H	5/12/2020 10:47	Depth to Water Detail	159.1	ft
GS-AP-MW-28H	5/12/2020 10:47	Oxidation Reduction Potention	-168.63	mv
GS-AP-MW-28H	5/12/2020 10:47	pH	8.35	pH
GS-AP-MW-28H	5/12/2020 10:47	Temperature	19.53	C
GS-AP-MW-28H	5/12/2020 10:47	Turbidity	7.6	NTU

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Plant Gorgas Ash Pond

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-30HA	5/13/2020 15:12	Conductivity	789.84	uS/cm
GS-AP-MW-30HA	5/13/2020 15:12	DO	0.27	mg/L
GS-AP-MW-30HA	5/13/2020 15:12	Depth to Water Detail	294.53	ft
GS-AP-MW-30HA	5/13/2020 15:12	Oxidation Reduction Potention	-258.29	mv
GS-AP-MW-30HA	5/13/2020 15:12	pH	7.23	pH
GS-AP-MW-30HA	5/13/2020 15:12	Temperature	18.4	C
GS-AP-MW-30HA	5/13/2020 15:12	Turbidity	1.3	NTU
GS-AP-MW-30HA	5/13/2020 15:17	Conductivity	933.53	uS/cm
GS-AP-MW-30HA	5/13/2020 15:17	DO	0.03	mg/L
GS-AP-MW-30HA	5/13/2020 15:17	Depth to Water Detail	294.53	ft
GS-AP-MW-30HA	5/13/2020 15:17	Oxidation Reduction Potention	-221.78	mv
GS-AP-MW-30HA	5/13/2020 15:17	pH	7.24	pH
GS-AP-MW-30HA	5/13/2020 15:17	Temperature	17.98	C
GS-AP-MW-30HA	5/13/2020 15:17	Turbidity	6.17	NTU
GS-AP-MW-30HA	5/13/2020 15:22	Conductivity	951.45	uS/cm
GS-AP-MW-30HA	5/13/2020 15:22	DO	0	mg/L
GS-AP-MW-30HA	5/13/2020 15:22	Depth to Water Detail	294.53	ft
GS-AP-MW-30HA	5/13/2020 15:22	Oxidation Reduction Potention	-239.81	mv
GS-AP-MW-30HA	5/13/2020 15:22	pH	7.28	pH
GS-AP-MW-30HA	5/13/2020 15:22	Temperature	18.3	C
GS-AP-MW-30HA	5/13/2020 15:22	Turbidity	3.09	NTU
GS-AP-MW-30HA	5/13/2020 15:27	Conductivity	965.79	uS/cm
GS-AP-MW-30HA	5/13/2020 15:27	DO	0	mg/L
GS-AP-MW-30HA	5/13/2020 15:27	Depth to Water Detail	294.53	ft
GS-AP-MW-30HA	5/13/2020 15:27	Oxidation Reduction Potention	-273.13	mv
GS-AP-MW-30HA	5/13/2020 15:27	pH	7.29	pH
GS-AP-MW-30HA	5/13/2020 15:27	Temperature	18.07	C
GS-AP-MW-30HA	5/13/2020 15:27	Turbidity	1.58	NTU
GS-AP-MW-30HA	5/13/2020 15:32	Conductivity	980.49	uS/cm
GS-AP-MW-30HA	5/13/2020 15:32	DO	0	mg/L
GS-AP-MW-30HA	5/13/2020 15:32	Depth to Water Detail	294.53	ft
GS-AP-MW-30HA	5/13/2020 15:32	Oxidation Reduction Potention	-298.89	mv
GS-AP-MW-30HA	5/13/2020 15:32	pH	7.27	pH
GS-AP-MW-30HA	5/13/2020 15:32	Temperature	17.87	C
GS-AP-MW-30HA	5/13/2020 15:32	Turbidity	1.26	NTU

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-33HO	5/13/2020 11:46	Conductivity	1202.96	uS/cm
GS-AP-MW-33HO	5/13/2020 11:46	DO	1.23	mg/L
GS-AP-MW-33HO	5/13/2020 11:46	Depth to Water Detail	230.2	ft
GS-AP-MW-33HO	5/13/2020 11:46	Oxidation Reduction Potention	-178.52	mv
GS-AP-MW-33HO	5/13/2020 11:46	pH	8.02	pH
GS-AP-MW-33HO	5/13/2020 11:46	Temperature	19.08	C
GS-AP-MW-33HO	5/13/2020 11:46	Turbidity	1.66	NTU
GS-AP-MW-33HO	5/13/2020 11:51	Conductivity	1186.99	uS/cm
GS-AP-MW-33HO	5/13/2020 11:51	DO	0.37	mg/L
GS-AP-MW-33HO	5/13/2020 11:51	Depth to Water Detail	230.7	ft
GS-AP-MW-33HO	5/13/2020 11:51	Oxidation Reduction Potention	-282.4	mv
GS-AP-MW-33HO	5/13/2020 11:51	pH	7.89	pH
GS-AP-MW-33HO	5/13/2020 11:51	Temperature	18.86	C
GS-AP-MW-33HO	5/13/2020 11:51	Turbidity	2.33	NTU
GS-AP-MW-33HO	5/13/2020 11:56	Conductivity	1111.7	uS/cm
GS-AP-MW-33HO	5/13/2020 11:56	DO	0.25	mg/L
GS-AP-MW-33HO	5/13/2020 11:56	Depth to Water Detail	231.12	ft
GS-AP-MW-33HO	5/13/2020 11:56	Oxidation Reduction Potention	-301.62	mv
GS-AP-MW-33HO	5/13/2020 11:56	pH	7.74	pH
GS-AP-MW-33HO	5/13/2020 11:56	Temperature	18.99	C
GS-AP-MW-33HO	5/13/2020 11:56	Turbidity	3.32	NTU
GS-AP-MW-33HO	5/13/2020 12:01	Conductivity	1069.88	uS/cm
GS-AP-MW-33HO	5/13/2020 12:01	DO	0.24	mg/L
GS-AP-MW-33HO	5/13/2020 12:01	Depth to Water Detail	231.75	ft
GS-AP-MW-33HO	5/13/2020 12:01	Oxidation Reduction Potention	-311.42	mv
GS-AP-MW-33HO	5/13/2020 12:01	pH	7.73	pH
GS-AP-MW-33HO	5/13/2020 12:01	Temperature	19.06	C
GS-AP-MW-33HO	5/13/2020 12:01	Turbidity	2.82	NTU
GS-AP-MW-33HO	5/13/2020 12:06	Conductivity	1049.41	uS/cm
GS-AP-MW-33HO	5/13/2020 12:06	DO	0.21	mg/L
GS-AP-MW-33HO	5/13/2020 12:06	Depth to Water Detail	232.08	ft
GS-AP-MW-33HO	5/13/2020 12:06	Oxidation Reduction Potention	-316.07	mv
GS-AP-MW-33HO	5/13/2020 12:06	pH	7.71	pH
GS-AP-MW-33HO	5/13/2020 12:06	Temperature	18.77	C
GS-AP-MW-33HO	5/13/2020 12:06	Turbidity	2.33	NTU
GS-AP-MW-33HO	5/13/2020 12:11	Conductivity	1032.31	uS/cm
GS-AP-MW-33HO	5/13/2020 12:11	DO	0.18	mg/L
GS-AP-MW-33HO	5/13/2020 12:11	Depth to Water Detail	232.7	ft
GS-AP-MW-33HO	5/13/2020 12:11	Oxidation Reduction Potention	-318.37	mv
GS-AP-MW-33HO	5/13/2020 12:11	pH	7.69	pH
GS-AP-MW-33HO	5/13/2020 12:11	Temperature	18.61	C
GS-AP-MW-33HO	5/13/2020 12:11	Turbidity	1.84	NTU
GS-AP-MW-33HO	5/13/2020 12:16	Conductivity	1021.13	uS/cm
GS-AP-MW-33HO	5/13/2020 12:16	DO	0.16	mg/L
GS-AP-MW-33HO	5/13/2020 12:16	Depth to Water Detail	233.15	ft
GS-AP-MW-33HO	5/13/2020 12:16	Oxidation Reduction Potention	-320.97	mv

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-33HO	5/13/2020 12:16	pH	7.71	pH
GS-AP-MW-33HO	5/13/2020 12:16	Temperature	18.71	C
GS-AP-MW-33HO	5/13/2020 12:16	Turbidity	1.54	NTU
GS-AP-MW-33HO	5/13/2020 12:21	Conductivity	1009.53	uS/cm
GS-AP-MW-33HO	5/13/2020 12:21	DO	0.15	mg/L
GS-AP-MW-33HO	5/13/2020 12:21	Depth to Water Detail	233.85	ft
GS-AP-MW-33HO	5/13/2020 12:21	Oxidation Reduction Potention	-321.5	mv
GS-AP-MW-33HO	5/13/2020 12:21	pH	7.71	pH
GS-AP-MW-33HO	5/13/2020 12:21	Temperature	18.6	C
GS-AP-MW-33HO	5/13/2020 12:21	Turbidity	1.59	NTU
GS-AP-MW-33HO	5/13/2020 12:26	Conductivity	1002.09	uS/cm
GS-AP-MW-33HO	5/13/2020 12:26	DO	0.13	mg/L
GS-AP-MW-33HO	5/13/2020 12:26	Depth to Water Detail	234.18	ft
GS-AP-MW-33HO	5/13/2020 12:26	Oxidation Reduction Potention	-321.4	mv
GS-AP-MW-33HO	5/13/2020 12:26	pH	7.7	pH
GS-AP-MW-33HO	5/13/2020 12:26	Temperature	18.48	C
GS-AP-MW-33HO	5/13/2020 12:26	Turbidity	1.89	NTU
GS-AP-MW-33HO	5/13/2020 12:31	Conductivity	983.75	uS/cm
GS-AP-MW-33HO	5/13/2020 12:31	DO	0.12	mg/L
GS-AP-MW-33HO	5/13/2020 12:31	Depth to Water Detail	234.6	ft
GS-AP-MW-33HO	5/13/2020 12:31	Oxidation Reduction Potention	-322.93	mv
GS-AP-MW-33HO	5/13/2020 12:31	pH	7.71	pH
GS-AP-MW-33HO	5/13/2020 12:31	Temperature	18.71	C
GS-AP-MW-33HO	5/13/2020 12:31	Turbidity	2.04	NTU
GS-AP-MW-33HO	5/13/2020 12:36	Conductivity	996.81	uS/cm
GS-AP-MW-33HO	5/13/2020 12:36	DO	0.12	mg/L
GS-AP-MW-33HO	5/13/2020 12:36	Depth to Water Detail	235	ft
GS-AP-MW-33HO	5/13/2020 12:36	Oxidation Reduction Potention	-322.85	mv
GS-AP-MW-33HO	5/13/2020 12:36	pH	7.71	pH
GS-AP-MW-33HO	5/13/2020 12:36	Temperature	18.6	C
GS-AP-MW-33HO	5/13/2020 12:36	Turbidity	2.32	NTU
GS-AP-MW-33HO	5/13/2020 12:41	Conductivity	984.59	uS/cm
GS-AP-MW-33HO	5/13/2020 12:41	DO	0.12	mg/L
GS-AP-MW-33HO	5/13/2020 12:41	Depth to Water Detail	235.45	ft
GS-AP-MW-33HO	5/13/2020 12:41	Oxidation Reduction Potention	-323.49	mv
GS-AP-MW-33HO	5/13/2020 12:41	pH	7.71	pH
GS-AP-MW-33HO	5/13/2020 12:41	Temperature	18.55	C
GS-AP-MW-33HO	5/13/2020 12:41	Turbidity	1.87	NTU
GS-AP-MW-33HO	5/13/2020 12:46	Conductivity	976.9	uS/cm
GS-AP-MW-33HO	5/13/2020 12:46	DO	0.1	mg/L
GS-AP-MW-33HO	5/13/2020 12:46	Depth to Water Detail	235.95	ft
GS-AP-MW-33HO	5/13/2020 12:46	Oxidation Reduction Potention	-323.95	mv
GS-AP-MW-33HO	5/13/2020 12:46	pH	7.71	pH
GS-AP-MW-33HO	5/13/2020 12:46	Temperature	18.74	C
GS-AP-MW-33HO	5/13/2020 12:46	Turbidity	1.7	NTU
GS-AP-MW-33HO	5/13/2020 12:51	Conductivity	971.71	uS/cm

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-33HO	5/13/2020 12:51	DO	0.1	mg/L
GS-AP-MW-33HO	5/13/2020 12:51	Depth to Water Detail	236.5	ft
GS-AP-MW-33HO	5/13/2020 12:51	Oxidation Reduction Potention	-325.12	mv
GS-AP-MW-33HO	5/13/2020 12:51	pH	7.72	pH
GS-AP-MW-33HO	5/13/2020 12:51	Temperature	18.77	C
GS-AP-MW-33HO	5/13/2020 12:51	Turbidity	1.63	NTU
GS-AP-MW-33HO	5/13/2020 12:56	Conductivity	960.02	uS/cm
GS-AP-MW-33HO	5/13/2020 12:56	DO	0.1	mg/L
GS-AP-MW-33HO	5/13/2020 12:56	Depth to Water Detail	236.96	ft
GS-AP-MW-33HO	5/13/2020 12:56	Oxidation Reduction Potention	-325.44	mv
GS-AP-MW-33HO	5/13/2020 12:56	pH	7.71	pH
GS-AP-MW-33HO	5/13/2020 12:56	Temperature	18.71	C
GS-AP-MW-33HO	5/13/2020 12:56	Turbidity	1.74	NTU
GS-AP-MW-33HO	5/13/2020 13:01	Conductivity	963.13	uS/cm
GS-AP-MW-33HO	5/13/2020 13:01	DO	0.1	mg/L
GS-AP-MW-33HO	5/13/2020 13:01	Depth to Water Detail	237.35	ft
GS-AP-MW-33HO	5/13/2020 13:01	Oxidation Reduction Potention	-325.03	mv
GS-AP-MW-33HO	5/13/2020 13:01	pH	7.7	pH
GS-AP-MW-33HO	5/13/2020 13:01	Temperature	18.6	C
GS-AP-MW-33HO	5/13/2020 13:01	Turbidity	1.6	NTU
GS-AP-MW-33HO	5/13/2020 13:06	Conductivity	949.58	uS/cm
GS-AP-MW-33HO	5/13/2020 13:06	DO	0.1	mg/L
GS-AP-MW-33HO	5/13/2020 13:06	Depth to Water Detail	237.65	ft
GS-AP-MW-33HO	5/13/2020 13:06	Oxidation Reduction Potention	-327.23	mv
GS-AP-MW-33HO	5/13/2020 13:06	pH	7.71	pH
GS-AP-MW-33HO	5/13/2020 13:06	Temperature	18.9	C
GS-AP-MW-33HO	5/13/2020 13:06	Turbidity	1.69	NTU
GS-AP-MW-33HO	5/13/2020 13:11	Conductivity	937.56	uS/cm
GS-AP-MW-33HO	5/13/2020 13:11	DO	0.1	mg/L
GS-AP-MW-33HO	5/13/2020 13:11	Depth to Water Detail	238.1	ft
GS-AP-MW-33HO	5/13/2020 13:11	Oxidation Reduction Potention	-327.25	mv
GS-AP-MW-33HO	5/13/2020 13:11	pH	7.71	pH
GS-AP-MW-33HO	5/13/2020 13:11	Temperature	18.86	C
GS-AP-MW-33HO	5/13/2020 13:11	Turbidity	1.41	NTU
GS-AP-MW-33HO	5/13/2020 13:16	Conductivity	955.56	uS/cm
GS-AP-MW-33HO	5/13/2020 13:16	DO	0.09	mg/L
GS-AP-MW-33HO	5/13/2020 13:16	Depth to Water Detail	238.45	ft
GS-AP-MW-33HO	5/13/2020 13:16	Oxidation Reduction Potention	-327.16	mv
GS-AP-MW-33HO	5/13/2020 13:16	pH	7.69	pH
GS-AP-MW-33HO	5/13/2020 13:16	Temperature	18.66	C
GS-AP-MW-33HO	5/13/2020 13:16	Turbidity	1.48	NTU
GS-AP-MW-33HO	5/13/2020 13:21	Conductivity	940.74	uS/cm
GS-AP-MW-33HO	5/13/2020 13:21	DO	0.08	mg/L
GS-AP-MW-33HO	5/13/2020 13:21	Depth to Water Detail	238.85	ft
GS-AP-MW-33HO	5/13/2020 13:21	Oxidation Reduction Potention	-329.76	mv
GS-AP-MW-33HO	5/13/2020 13:21	pH	7.7	pH

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-33HO	5/13/2020 13:21	Temperature	19.08	C
GS-AP-MW-33HO	5/13/2020 13:21	Turbidity	1.26	NTU
GS-AP-MW-33HO	5/13/2020 13:26	Conductivity	911.48	uS/cm
GS-AP-MW-33HO	5/13/2020 13:26	DO	0.09	mg/L
GS-AP-MW-33HO	5/13/2020 13:26	Depth to Water Detail	239.1	ft
GS-AP-MW-33HO	5/13/2020 13:26	Oxidation Reduction Potention	-328.6	mv
GS-AP-MW-33HO	5/13/2020 13:26	pH	7.7	pH
GS-AP-MW-33HO	5/13/2020 13:26	Temperature	19.12	C
GS-AP-MW-33HO	5/13/2020 13:26	Turbidity	1.3	NTU
GS-AP-MW-33HO	5/13/2020 13:31	Conductivity	911.57	uS/cm
GS-AP-MW-33HO	5/13/2020 13:31	DO	0.09	mg/L
GS-AP-MW-33HO	5/13/2020 13:31	Depth to Water Detail	239.51	ft
GS-AP-MW-33HO	5/13/2020 13:31	Oxidation Reduction Potention	-329.51	mv
GS-AP-MW-33HO	5/13/2020 13:31	pH	7.7	pH
GS-AP-MW-33HO	5/13/2020 13:31	Temperature	18.89	C
GS-AP-MW-33HO	5/13/2020 13:31	Turbidity	1.24	NTU
GS-AP-MW-33HO	5/13/2020 13:36	Conductivity	913.05	uS/cm
GS-AP-MW-33HO	5/13/2020 13:36	DO	0.08	mg/L
GS-AP-MW-33HO	5/13/2020 13:36	Depth to Water Detail	239.75	ft
GS-AP-MW-33HO	5/13/2020 13:36	Oxidation Reduction Potention	-330	mv
GS-AP-MW-33HO	5/13/2020 13:36	pH	7.7	pH
GS-AP-MW-33HO	5/13/2020 13:36	Temperature	19.42	C
GS-AP-MW-33HO	5/13/2020 13:36	Turbidity	1.76	NTU
GS-AP-MW-33HO	5/13/2020 13:41	Conductivity	886.01	uS/cm
GS-AP-MW-33HO	5/13/2020 13:41	DO	0.09	mg/L
GS-AP-MW-33HO	5/13/2020 13:41	Depth to Water Detail	240.03	ft
GS-AP-MW-33HO	5/13/2020 13:41	Oxidation Reduction Potention	-329.41	mv
GS-AP-MW-33HO	5/13/2020 13:41	pH	7.7	pH
GS-AP-MW-33HO	5/13/2020 13:41	Temperature	19.26	C
GS-AP-MW-33HO	5/13/2020 13:41	Turbidity	1.56	NTU
GS-AP-MW-33HO	5/13/2020 13:46	Conductivity	868.37	uS/cm
GS-AP-MW-33HO	5/13/2020 13:46	DO	0.09	mg/L
GS-AP-MW-33HO	5/13/2020 13:46	Depth to Water Detail	240.24	ft
GS-AP-MW-33HO	5/13/2020 13:46	Oxidation Reduction Potention	-328.46	mv
GS-AP-MW-33HO	5/13/2020 13:46	pH	7.69	pH
GS-AP-MW-33HO	5/13/2020 13:46	Temperature	19.04	C
GS-AP-MW-33HO	5/13/2020 13:46	Turbidity	1.93	NTU
GS-AP-MW-33HO	5/13/2020 13:51	Conductivity	840.65	uS/cm
GS-AP-MW-33HO	5/13/2020 13:51	DO	0.09	mg/L
GS-AP-MW-33HO	5/13/2020 13:51	Depth to Water Detail	240.5	ft
GS-AP-MW-33HO	5/13/2020 13:51	Oxidation Reduction Potention	-323.37	mv
GS-AP-MW-33HO	5/13/2020 13:51	pH	7.61	pH
GS-AP-MW-33HO	5/13/2020 13:51	Temperature	19.33	C
GS-AP-MW-33HO	5/13/2020 13:51	Turbidity	1.13	NTU
GS-AP-MW-33HO	5/13/2020 13:56	Conductivity	809.7	uS/cm
GS-AP-MW-33HO	5/13/2020 13:56	DO	0.09	mg/L

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-33HO	5/13/2020 13:56	Depth to Water Detail	240.73	ft
GS-AP-MW-33HO	5/13/2020 13:56	Oxidation Reduction Potention	-328.5	mv
GS-AP-MW-33HO	5/13/2020 13:56	pH	7.7	pH
GS-AP-MW-33HO	5/13/2020 13:56	Temperature	18.98	C
GS-AP-MW-33HO	5/13/2020 13:56	Turbidity	1.09	NTU
GS-AP-MW-33HO	5/13/2020 14:01	Conductivity	784.04	uS/cm
GS-AP-MW-33HO	5/13/2020 14:01	DO	0.1	mg/L
GS-AP-MW-33HO	5/13/2020 14:01	Depth to Water Detail	240.86	ft
GS-AP-MW-33HO	5/13/2020 14:01	Oxidation Reduction Potention	-325.9	mv
GS-AP-MW-33HO	5/13/2020 14:01	pH	7.7	pH
GS-AP-MW-33HO	5/13/2020 14:01	Temperature	19.48	C
GS-AP-MW-33HO	5/13/2020 14:01	Turbidity	1.13	NTU
GS-AP-MW-33HO	5/13/2020 14:06	Conductivity	788.07	uS/cm
GS-AP-MW-33HO	5/13/2020 14:06	DO	0.13	mg/L
GS-AP-MW-33HO	5/13/2020 14:06	Depth to Water Detail	240.78	ft
GS-AP-MW-33HO	5/13/2020 14:06	Oxidation Reduction Potention	-320.89	mv
GS-AP-MW-33HO	5/13/2020 14:06	pH	7.66	pH
GS-AP-MW-33HO	5/13/2020 14:06	Temperature	19.75	C
GS-AP-MW-33HO	5/13/2020 14:06	Turbidity	1.06	NTU
GS-AP-MW-33HO	5/13/2020 14:11	Conductivity	773.62	uS/cm
GS-AP-MW-33HO	5/13/2020 14:11	DO	0.13	mg/L
GS-AP-MW-33HO	5/13/2020 14:11	Depth to Water Detail	240.78	ft
GS-AP-MW-33HO	5/13/2020 14:11	Oxidation Reduction Potention	-322.96	mv
GS-AP-MW-33HO	5/13/2020 14:11	pH	7.7	pH
GS-AP-MW-33HO	5/13/2020 14:11	Temperature	19.91	C
GS-AP-MW-33HO	5/13/2020 14:11	Turbidity	1.19	NTU

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-34HO	5/12/2020 13:02	Conductivity	3351.49	uS/cm
GS-AP-MW-34HO	5/12/2020 13:02	DO	1.68	mg/L
GS-AP-MW-34HO	5/12/2020 13:02	Depth to Water Detail	237.82	ft
GS-AP-MW-34HO	5/12/2020 13:02	Oxidation Reduction Potention	66.15	mv
GS-AP-MW-34HO	5/12/2020 13:02	pH	6.63	pH
GS-AP-MW-34HO	5/12/2020 13:02	Temperature	19.53	C
GS-AP-MW-34HO	5/12/2020 13:02	Turbidity	5.29	NTU
GS-AP-MW-34HO	5/12/2020 13:07	Conductivity	3388.32	uS/cm
GS-AP-MW-34HO	5/12/2020 13:07	DO	0.14	mg/L
GS-AP-MW-34HO	5/12/2020 13:07	Depth to Water Detail	239.18	ft
GS-AP-MW-34HO	5/12/2020 13:07	Oxidation Reduction Potention	-241.78	mv
GS-AP-MW-34HO	5/12/2020 13:07	pH	7.32	pH
GS-AP-MW-34HO	5/12/2020 13:07	Temperature	19.17	C
GS-AP-MW-34HO	5/12/2020 13:07	Turbidity	2.66	NTU
GS-AP-MW-34HO	5/12/2020 13:12	Conductivity	4327.9	uS/cm
GS-AP-MW-34HO	5/12/2020 13:12	DO	0.06	mg/L
GS-AP-MW-34HO	5/12/2020 13:12	Depth to Water Detail	240.4	ft
GS-AP-MW-34HO	5/12/2020 13:12	Oxidation Reduction Potention	-292.21	mv
GS-AP-MW-34HO	5/12/2020 13:12	pH	7.3	pH
GS-AP-MW-34HO	5/12/2020 13:12	Temperature	19.27	C
GS-AP-MW-34HO	5/12/2020 13:12	Turbidity	4.44	NTU
GS-AP-MW-34HO	5/12/2020 13:17	Conductivity	4007.03	uS/cm
GS-AP-MW-34HO	5/12/2020 13:17	DO	0.02	mg/L
GS-AP-MW-34HO	5/12/2020 13:17	Depth to Water Detail	241.9	ft
GS-AP-MW-34HO	5/12/2020 13:17	Oxidation Reduction Potention	-310.84	mv
GS-AP-MW-34HO	5/12/2020 13:17	pH	7.36	pH
GS-AP-MW-34HO	5/12/2020 13:17	Temperature	19.07	C
GS-AP-MW-34HO	5/12/2020 13:17	Turbidity	6.77	NTU
GS-AP-MW-34HO	5/12/2020 13:22	Conductivity	3692.46	uS/cm
GS-AP-MW-34HO	5/12/2020 13:22	DO	0.03	mg/L
GS-AP-MW-34HO	5/12/2020 13:22	Depth to Water Detail	242.98	ft
GS-AP-MW-34HO	5/12/2020 13:22	Oxidation Reduction Potention	-321.25	mv
GS-AP-MW-34HO	5/12/2020 13:22	pH	7.44	pH
GS-AP-MW-34HO	5/12/2020 13:22	Temperature	19.26	C
GS-AP-MW-34HO	5/12/2020 13:22	Turbidity	6.8	NTU
GS-AP-MW-34HO	5/12/2020 13:27	Conductivity	3586.72	uS/cm
GS-AP-MW-34HO	5/12/2020 13:27	DO	0.04	mg/L
GS-AP-MW-34HO	5/12/2020 13:27	Depth to Water Detail	243.62	ft
GS-AP-MW-34HO	5/12/2020 13:27	Oxidation Reduction Potention	-327.11	mv
GS-AP-MW-34HO	5/12/2020 13:27	pH	7.46	pH
GS-AP-MW-34HO	5/12/2020 13:27	Temperature	19.22	C
GS-AP-MW-34HO	5/12/2020 13:27	Turbidity	5.71	NTU
GS-AP-MW-34HO	5/12/2020 13:32	Conductivity	3588.3	uS/cm
GS-AP-MW-34HO	5/12/2020 13:32	DO	0.03	mg/L
GS-AP-MW-34HO	5/12/2020 13:32	Depth to Water Detail	243.65	ft
GS-AP-MW-34HO	5/12/2020 13:32	Oxidation Reduction Potention	-327.65	mv

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-34HO	5/12/2020 13:32	pH	7.47	pH
GS-AP-MW-34HO	5/12/2020 13:32	Temperature	20.09	C
GS-AP-MW-34HO	5/12/2020 13:32	Turbidity	5.01	NTU
GS-AP-MW-34HO	5/12/2020 13:37	Conductivity	3577.26	uS/cm
GS-AP-MW-34HO	5/12/2020 13:37	DO	0.01	mg/L
GS-AP-MW-34HO	5/12/2020 13:37	Depth to Water Detail	243.7	ft
GS-AP-MW-34HO	5/12/2020 13:37	Oxidation Reduction Potention	-331.63	mv
GS-AP-MW-34HO	5/12/2020 13:37	pH	7.46	pH
GS-AP-MW-34HO	5/12/2020 13:37	Temperature	20.52	C
GS-AP-MW-34HO	5/12/2020 13:37	Turbidity	5	NTU
GS-AP-MW-34HO	5/12/2020 13:42	Conductivity	3587.61	uS/cm
GS-AP-MW-34HO	5/12/2020 13:42	DO	0	mg/L
GS-AP-MW-34HO	5/12/2020 13:42	Depth to Water Detail	243.72	ft
GS-AP-MW-34HO	5/12/2020 13:42	Oxidation Reduction Potention	-335.97	mv
GS-AP-MW-34HO	5/12/2020 13:42	pH	7.44	pH
GS-AP-MW-34HO	5/12/2020 13:42	Temperature	21.8	C
GS-AP-MW-34HO	5/12/2020 13:42	Turbidity	4.63	NTU

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-35HO	5/12/2020 14:59	Conductivity	552.86	uS/cm
GS-AP-MW-35HO	5/12/2020 14:59	DO	0.18	mg/L
GS-AP-MW-35HO	5/12/2020 14:59	Depth to Water Detail	251.85	ft
GS-AP-MW-35HO	5/12/2020 14:59	Oxidation Reduction Potention	-224.47	mv
GS-AP-MW-35HO	5/12/2020 14:59	pH	8.21	pH
GS-AP-MW-35HO	5/12/2020 14:59	Temperature	18.52	C
GS-AP-MW-35HO	5/12/2020 14:59	Turbidity	11.37	NTU
GS-AP-MW-35HO	5/12/2020 15:04	Conductivity	545.96	uS/cm
GS-AP-MW-35HO	5/12/2020 15:04	DO	0.14	mg/L
GS-AP-MW-35HO	5/12/2020 15:04	Depth to Water Detail	252.05	ft
GS-AP-MW-35HO	5/12/2020 15:04	Oxidation Reduction Potention	-227.92	mv
GS-AP-MW-35HO	5/12/2020 15:04	pH	8.24	pH
GS-AP-MW-35HO	5/12/2020 15:04	Temperature	18.24	C
GS-AP-MW-35HO	5/12/2020 15:04	Turbidity	8.07	NTU
GS-AP-MW-35HO	5/12/2020 15:09	Conductivity	535	uS/cm
GS-AP-MW-35HO	5/12/2020 15:09	DO	0.11	mg/L
GS-AP-MW-35HO	5/12/2020 15:09	Depth to Water Detail	252.53	ft
GS-AP-MW-35HO	5/12/2020 15:09	Oxidation Reduction Potention	-229.37	mv
GS-AP-MW-35HO	5/12/2020 15:09	pH	8.27	pH
GS-AP-MW-35HO	5/12/2020 15:09	Temperature	18.21	C
GS-AP-MW-35HO	5/12/2020 15:09	Turbidity	5.02	NTU
GS-AP-MW-35HO	5/12/2020 15:14	Conductivity	531.51	uS/cm
GS-AP-MW-35HO	5/12/2020 15:14	DO	0.1	mg/L
GS-AP-MW-35HO	5/12/2020 15:14	Depth to Water Detail	253.08	ft
GS-AP-MW-35HO	5/12/2020 15:14	Oxidation Reduction Potention	-233.85	mv
GS-AP-MW-35HO	5/12/2020 15:14	pH	8.29	pH
GS-AP-MW-35HO	5/12/2020 15:14	Temperature	18.1	C
GS-AP-MW-35HO	5/12/2020 15:14	Turbidity	4.37	NTU
GS-AP-MW-35HO	5/12/2020 15:19	Conductivity	531.57	uS/cm
GS-AP-MW-35HO	5/12/2020 15:19	DO	0.08	mg/L
GS-AP-MW-35HO	5/12/2020 15:19	Depth to Water Detail	253.58	ft
GS-AP-MW-35HO	5/12/2020 15:19	Oxidation Reduction Potention	-234.21	mv
GS-AP-MW-35HO	5/12/2020 15:19	pH	8.31	pH
GS-AP-MW-35HO	5/12/2020 15:19	Temperature	18	C
GS-AP-MW-35HO	5/12/2020 15:19	Turbidity	3.39	NTU
GS-AP-MW-35HO	5/12/2020 15:24	Conductivity	531.35	uS/cm
GS-AP-MW-35HO	5/12/2020 15:24	DO	0.06	mg/L
GS-AP-MW-35HO	5/12/2020 15:24	Depth to Water Detail	253.98	ft
GS-AP-MW-35HO	5/12/2020 15:24	Oxidation Reduction Potention	-240.2	mv
GS-AP-MW-35HO	5/12/2020 15:24	pH	8.34	pH
GS-AP-MW-35HO	5/12/2020 15:24	Temperature	18.02	C
GS-AP-MW-35HO	5/12/2020 15:24	Turbidity	5.1	NTU
GS-AP-MW-35HO	5/12/2020 15:29	Conductivity	526.47	uS/cm
GS-AP-MW-35HO	5/12/2020 15:29	DO	0.05	mg/L
GS-AP-MW-35HO	5/12/2020 15:29	Depth to Water Detail	254.5	ft
GS-AP-MW-35HO	5/12/2020 15:29	Oxidation Reduction Potention	-241.82	mv

Alabama Power Company
Plant Gorgas Ash Pond

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-35HO	5/12/2020 15:29	pH	8.35	pH
GS-AP-MW-35HO	5/12/2020 15:29	Temperature	17.9	C
GS-AP-MW-35HO	5/12/2020 15:29	Turbidity	2.9	NTU
GS-AP-MW-35HO	5/12/2020 15:34	Conductivity	519.78	uS/cm
GS-AP-MW-35HO	5/12/2020 15:34	DO	0.04	mg/L
GS-AP-MW-35HO	5/12/2020 15:34	Depth to Water Detail	255.1	ft
GS-AP-MW-35HO	5/12/2020 15:34	Oxidation Reduction Potention	-242.33	mv
GS-AP-MW-35HO	5/12/2020 15:34	pH	8.39	pH
GS-AP-MW-35HO	5/12/2020 15:34	Temperature	17.96	C
GS-AP-MW-35HO	5/12/2020 15:34	Turbidity	2.07	NTU
GS-AP-MW-35HO	5/12/2020 15:39	Conductivity	515.55	uS/cm
GS-AP-MW-35HO	5/12/2020 15:39	DO	0.06	mg/L
GS-AP-MW-35HO	5/12/2020 15:39	Depth to Water Detail	255.1	ft
GS-AP-MW-35HO	5/12/2020 15:39	Oxidation Reduction Potention	-244.67	mv
GS-AP-MW-35HO	5/12/2020 15:39	pH	8.41	pH
GS-AP-MW-35HO	5/12/2020 15:39	Temperature	18.4	C
GS-AP-MW-35HO	5/12/2020 15:39	Turbidity	1.81	NTU
GS-AP-MW-35HO	5/12/2020 15:44	Conductivity	512.63	uS/cm
GS-AP-MW-35HO	5/12/2020 15:44	DO	0.08	mg/L
GS-AP-MW-35HO	5/12/2020 15:44	Depth to Water Detail	255.1	ft
GS-AP-MW-35HO	5/12/2020 15:44	Oxidation Reduction Potention	-243.66	mv
GS-AP-MW-35HO	5/12/2020 15:44	pH	8.43	pH
GS-AP-MW-35HO	5/12/2020 15:44	Temperature	18.77	C
GS-AP-MW-35HO	5/12/2020 15:44	Turbidity	2.04	NTU
GS-AP-MW-35HO	5/12/2020 15:49	Conductivity	510.05	uS/cm
GS-AP-MW-35HO	5/12/2020 15:49	DO	0.09	mg/L
GS-AP-MW-35HO	5/12/2020 15:49	Depth to Water Detail	255.1	ft
GS-AP-MW-35HO	5/12/2020 15:49	Oxidation Reduction Potention	-246.03	mv
GS-AP-MW-35HO	5/12/2020 15:49	pH	8.46	pH
GS-AP-MW-35HO	5/12/2020 15:49	Temperature	18.72	C
GS-AP-MW-35HO	5/12/2020 15:49	Turbidity	1.84	NTU

Alabama Power Company
Plant Gorgas Ash Pond

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-36H	5/13/2020 9:12	Conductivity	581.62	uS/cm
GS-AP-MW-36H	5/13/2020 9:12	DO	0.69	mg/L
GS-AP-MW-36H	5/13/2020 9:12	Depth to Water Detail	227.95	ft
GS-AP-MW-36H	5/13/2020 9:12	Oxidation Reduction Potention	-59.65	mv
GS-AP-MW-36H	5/13/2020 9:12	pH	8.09	pH
GS-AP-MW-36H	5/13/2020 9:12	Temperature	18.24	C
GS-AP-MW-36H	5/13/2020 9:12	Turbidity	0.78	NTU
GS-AP-MW-36H	5/13/2020 9:17	Conductivity	540.11	uS/cm
GS-AP-MW-36H	5/13/2020 9:17	DO	0.52	mg/L
GS-AP-MW-36H	5/13/2020 9:17	Depth to Water Detail	228.83	ft
GS-AP-MW-36H	5/13/2020 9:17	Oxidation Reduction Potention	-109.39	mv
GS-AP-MW-36H	5/13/2020 9:17	pH	8.28	pH
GS-AP-MW-36H	5/13/2020 9:17	Temperature	18.29	C
GS-AP-MW-36H	5/13/2020 9:17	Turbidity	1.09	NTU
GS-AP-MW-36H	5/13/2020 9:22	Conductivity	514.88	uS/cm
GS-AP-MW-36H	5/13/2020 9:22	DO	0.43	mg/L
GS-AP-MW-36H	5/13/2020 9:22	Depth to Water Detail	229.62	ft
GS-AP-MW-36H	5/13/2020 9:22	Oxidation Reduction Potention	-122.96	mv
GS-AP-MW-36H	5/13/2020 9:22	pH	8.42	pH
GS-AP-MW-36H	5/13/2020 9:22	Temperature	18.43	C
GS-AP-MW-36H	5/13/2020 9:22	Turbidity	0.87	NTU
GS-AP-MW-36H	5/13/2020 9:27	Conductivity	508.22	uS/cm
GS-AP-MW-36H	5/13/2020 9:27	DO	0.36	mg/L
GS-AP-MW-36H	5/13/2020 9:27	Depth to Water Detail	230.2	ft
GS-AP-MW-36H	5/13/2020 9:27	Oxidation Reduction Potention	-134.71	mv
GS-AP-MW-36H	5/13/2020 9:27	pH	8.48	pH
GS-AP-MW-36H	5/13/2020 9:27	Temperature	18.48	C
GS-AP-MW-36H	5/13/2020 9:27	Turbidity	0.75	NTU
GS-AP-MW-36H	5/13/2020 9:32	Conductivity	507.37	uS/cm
GS-AP-MW-36H	5/13/2020 9:32	DO	0.35	mg/L
GS-AP-MW-36H	5/13/2020 9:32	Depth to Water Detail	230.65	ft
GS-AP-MW-36H	5/13/2020 9:32	Oxidation Reduction Potention	-140.78	mv
GS-AP-MW-36H	5/13/2020 9:32	pH	8.49	pH
GS-AP-MW-36H	5/13/2020 9:32	Temperature	18.42	C
GS-AP-MW-36H	5/13/2020 9:32	Turbidity	0.69	NTU
GS-AP-MW-36H	5/13/2020 9:37	Conductivity	507.27	uS/cm
GS-AP-MW-36H	5/13/2020 9:37	DO	0.33	mg/L
GS-AP-MW-36H	5/13/2020 9:37	Depth to Water Detail	231.3	ft
GS-AP-MW-36H	5/13/2020 9:37	Oxidation Reduction Potention	-141.16	mv
GS-AP-MW-36H	5/13/2020 9:37	pH	8.44	pH
GS-AP-MW-36H	5/13/2020 9:37	Temperature	18.6	C
GS-AP-MW-36H	5/13/2020 9:37	Turbidity	0.63	NTU
GS-AP-MW-36H	5/13/2020 9:42	Conductivity	509.16	uS/cm
GS-AP-MW-36H	5/13/2020 9:42	DO	0.32	mg/L
GS-AP-MW-36H	5/13/2020 9:42	Depth to Water Detail	231.65	ft
GS-AP-MW-36H	5/13/2020 9:42	Oxidation Reduction Potention	-148.92	mv

Alabama Power Company
Plant Gorgas Ash Pond

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-36H	5/13/2020 9:42	pH	8.51	pH
GS-AP-MW-36H	5/13/2020 9:42	Temperature	18.62	C
GS-AP-MW-36H	5/13/2020 9:42	Turbidity	0.6	NTU
GS-AP-MW-36H	5/13/2020 9:47	Conductivity	506.52	uS/cm
GS-AP-MW-36H	5/13/2020 9:47	DO	0.29	mg/L
GS-AP-MW-36H	5/13/2020 9:47	Depth to Water Detail	232.25	ft
GS-AP-MW-36H	5/13/2020 9:47	Oxidation Reduction Potention	-150.81	mv
GS-AP-MW-36H	5/13/2020 9:47	pH	8.52	pH
GS-AP-MW-36H	5/13/2020 9:47	Temperature	18.53	C
GS-AP-MW-36H	5/13/2020 9:47	Turbidity	0.6	NTU
GS-AP-MW-36H	5/13/2020 9:52	Conductivity	501.87	uS/cm
GS-AP-MW-36H	5/13/2020 9:52	DO	0.27	mg/L
GS-AP-MW-36H	5/13/2020 9:52	Depth to Water Detail	232.55	ft
GS-AP-MW-36H	5/13/2020 9:52	Oxidation Reduction Potention	-150.34	mv
GS-AP-MW-36H	5/13/2020 9:52	pH	8.48	pH
GS-AP-MW-36H	5/13/2020 9:52	Temperature	18.47	C
GS-AP-MW-36H	5/13/2020 9:52	Turbidity	0.69	NTU
GS-AP-MW-36H	5/13/2020 9:57	Conductivity	498.06	uS/cm
GS-AP-MW-36H	5/13/2020 9:57	DO	0.27	mg/L
GS-AP-MW-36H	5/13/2020 9:57	Depth to Water Detail	232.95	ft
GS-AP-MW-36H	5/13/2020 9:57	Oxidation Reduction Potention	-154.76	mv
GS-AP-MW-36H	5/13/2020 9:57	pH	8.52	pH
GS-AP-MW-36H	5/13/2020 9:57	Temperature	18.67	C
GS-AP-MW-36H	5/13/2020 9:57	Turbidity	0.58	NTU
GS-AP-MW-36H	5/13/2020 10:02	Conductivity	494.17	uS/cm
GS-AP-MW-36H	5/13/2020 10:02	DO	0.26	mg/L
GS-AP-MW-36H	5/13/2020 10:02	Depth to Water Detail	233.3	ft
GS-AP-MW-36H	5/13/2020 10:02	Oxidation Reduction Potention	-157.36	mv
GS-AP-MW-36H	5/13/2020 10:02	pH	8.52	pH
GS-AP-MW-36H	5/13/2020 10:02	Temperature	18.74	C
GS-AP-MW-36H	5/13/2020 10:02	Turbidity	0.66	NTU
GS-AP-MW-36H	5/13/2020 10:07	Conductivity	490.48	uS/cm
GS-AP-MW-36H	5/13/2020 10:07	DO	0.23	mg/L
GS-AP-MW-36H	5/13/2020 10:07	Depth to Water Detail	233.72	ft
GS-AP-MW-36H	5/13/2020 10:07	Oxidation Reduction Potention	-158.32	mv
GS-AP-MW-36H	5/13/2020 10:07	pH	8.51	pH
GS-AP-MW-36H	5/13/2020 10:07	Temperature	18.43	C
GS-AP-MW-36H	5/13/2020 10:07	Turbidity	0.67	NTU
GS-AP-MW-36H	5/13/2020 10:12	Conductivity	482.93	uS/cm
GS-AP-MW-36H	5/13/2020 10:12	DO	0.22	mg/L
GS-AP-MW-36H	5/13/2020 10:12	Depth to Water Detail	233.98	ft
GS-AP-MW-36H	5/13/2020 10:12	Oxidation Reduction Potention	-161.13	mv
GS-AP-MW-36H	5/13/2020 10:12	pH	8.52	pH
GS-AP-MW-36H	5/13/2020 10:12	Temperature	18.54	C
GS-AP-MW-36H	5/13/2020 10:12	Turbidity	0.66	NTU
GS-AP-MW-36H	5/13/2020 10:17	Conductivity	484.85	uS/cm

Alabama Power Company
Plant Gorgas Ash Pond

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-36H	5/13/2020 10:17	DO	0.24	mg/L
GS-AP-MW-36H	5/13/2020 10:17	Depth to Water Detail	234.3	ft
GS-AP-MW-36H	5/13/2020 10:17	Oxidation Reduction Potention	-162.32	mv
GS-AP-MW-36H	5/13/2020 10:17	pH	8.52	pH
GS-AP-MW-36H	5/13/2020 10:17	Temperature	18.51	C
GS-AP-MW-36H	5/13/2020 10:17	Turbidity	0.63	NTU
GS-AP-MW-36H	5/13/2020 10:22	Conductivity	484.22	uS/cm
GS-AP-MW-36H	5/13/2020 10:22	DO	0.24	mg/L
GS-AP-MW-36H	5/13/2020 10:22	Depth to Water Detail	234.6	ft
GS-AP-MW-36H	5/13/2020 10:22	Oxidation Reduction Potention	-162.99	mv
GS-AP-MW-36H	5/13/2020 10:22	pH	8.51	pH
GS-AP-MW-36H	5/13/2020 10:22	Temperature	18.6	C
GS-AP-MW-36H	5/13/2020 10:22	Turbidity	0.67	NTU
GS-AP-MW-36H	5/13/2020 10:27	Conductivity	487.85	uS/cm
GS-AP-MW-36H	5/13/2020 10:27	DO	0.23	mg/L
GS-AP-MW-36H	5/13/2020 10:27	Depth to Water Detail	234.85	ft
GS-AP-MW-36H	5/13/2020 10:27	Oxidation Reduction Potention	-160.58	mv
GS-AP-MW-36H	5/13/2020 10:27	pH	8.47	pH
GS-AP-MW-36H	5/13/2020 10:27	Temperature	18.77	C
GS-AP-MW-36H	5/13/2020 10:27	Turbidity	0.68	NTU
GS-AP-MW-36H	5/13/2020 10:32	Conductivity	488.27	uS/cm
GS-AP-MW-36H	5/13/2020 10:32	DO	0.24	mg/L
GS-AP-MW-36H	5/13/2020 10:32	Depth to Water Detail	234.98	ft
GS-AP-MW-36H	5/13/2020 10:32	Oxidation Reduction Potention	-165.04	mv
GS-AP-MW-36H	5/13/2020 10:32	pH	8.53	pH
GS-AP-MW-36H	5/13/2020 10:32	Temperature	18.68	C
GS-AP-MW-36H	5/13/2020 10:32	Turbidity	0.66	NTU
GS-AP-MW-36H	5/13/2020 10:37	Conductivity	492.41	uS/cm
GS-AP-MW-36H	5/13/2020 10:37	DO	0.23	mg/L
GS-AP-MW-36H	5/13/2020 10:37	Depth to Water Detail	235.15	ft
GS-AP-MW-36H	5/13/2020 10:37	Oxidation Reduction Potention	-166.04	mv
GS-AP-MW-36H	5/13/2020 10:37	pH	8.52	pH
GS-AP-MW-36H	5/13/2020 10:37	Temperature	18.52	C
GS-AP-MW-36H	5/13/2020 10:37	Turbidity	0.69	NTU

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 Ash Pond

MW-6V 2020

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 : WMWGORAP_1298

Project/Site : Gorgas Ash Pond
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

September 16, 2020

Dear Dustin Brooks,

Enclosed are the analytical results for sample(s) received by the laboratory on September 09, 2020.
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: 2020.09.16 14:01:13 -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: 2020.09.17 09:48:36 -05'00'

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

Case Narrative

Alabama Power

Total Metals ICP

Gorgas Ash Pond

WMWGORAP_1298

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
BA16821	681846	WMWGORAP_1298
BA16822	681846	WMWGORAP_1298
BA16823	681846	WMWGORAP_1298
BA16824	681846	WMWGORAP_1298

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
BA16821	Na	10.15
BA16822	Na	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 Ash Pond

WMWGORAP_1298

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
BA16821	681837	WMWGORAP_1298
BA16822	681837	WMWGORAP_1298

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 Ash Pond

WMWGORAP_1298

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
BA16821	681876	WMWGORAP_1298
BA16822	681876	WMWGORAP_1298
BA16823	681876	WMWGORAP_1298
BA16824	681876	WMWGORAP_1298

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. 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 Ash Pond

WMWGORAP_1298

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
BA16821	681861	WMWGORAP_1298
BA16822	681861	WMWGORAP_1298

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. 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 Ash Pond

WMWGORAP_1298

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
BA16821	681822	WMWGORAP_1298
BA16822	681822	WMWGORAP_1298
BA16823	681822	WMWGORAP_1298
BA16824	681822	WMWGORAP_1298

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 (LCS) criteria were met with passing results.
- 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.

TDS

Gorgas Ash Pond

WMWGORAP_1298

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
BA16821	681725	WMWGORAP_1298
BA16822	681725	WMWGORAP_1298
BA16823	681725	WMWGORAP_1298
BA16824	681725	WMWGORAP_1298

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:
    - BA16823
    - BA16824

Case Narrative

Anions

Gorgas Ash Pond

WMWGORAP_1298

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
BA16821	681779, 681883, & 681780	WMWGORAP_1298
BA16822	681779, 681883, & 681780	WMWGORAP_1298
BA16823	681779, 681883, & 681780	WMWGORAP_1298
BA16824	681779, 681883, & 681780	WMWGORAP_1298

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
BA16821	Chloride	8
BA16822	Chloride	8

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

Alkalinity

Gorgas Ash Pond

WMWGORAP_1298

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
BA16821	682113 & 682114	WMWGORAP_1298
BA16822	682113 & 682114	WMWGORAP_1298

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 Ash Pond - MW-6V

Location Code: WMWGORAP
Collected: 9/8/20 14:10
Customer ID:
Submittal Date: 9/9/20 10:20

Laboratory ID Number: BA16821

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	9/8/20 15:00	9/9/20 14:58		1.015	0.0974	mg/L	0.03	0.1	J
* Calcium, Total	9/8/20 15:00	9/9/20 14:58		1.015	1.80	mg/L	0.1	0.5	
* Iron, Total	9/8/20 15:00	9/9/20 14:58		1.015	0.195	mg/L	0.02	0.05	
* Lithium, Total	9/8/20 15:00	9/9/20 14:58		1.015	0.138	mg/L	0.01	0.02	
* Magnesium, Total	9/8/20 15:00	9/9/20 14:58		1.015	0.553	mg/L	0.1	0.5	
* Sodium, Total	9/8/20 15:00	9/9/20 15:15		10.15	339	mg/L	1.015	5.075	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Iron, Dissolved	9/9/20 10:57	9/9/20 12:35		1	0.0282	mg/L	0.02	0.05	J
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	9/9/20 10:55	9/9/20 15:01		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	9/9/20 10:55	9/9/20 15:01		1.015	Not Detected	mg/L	0.001	0.005	U
* Barium, Total	9/9/20 10:55	9/9/20 15:01		1.015	0.164	mg/L	0.002	0.01	
* Beryllium, Total	9/9/20 10:55	9/9/20 15:01		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	9/9/20 10:55	9/9/20 15:01		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	9/9/20 10:55	9/9/20 15:01		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	9/9/20 10:55	9/9/20 15:01		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	9/9/20 10:55	9/9/20 15:01		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	9/9/20 10:55	9/9/20 15:01		1.015	0.00317	mg/L	0.002	0.01	J
* Potassium, Total	9/9/20 10:55	9/9/20 15:01		1.015	2.16	mg/L	0.3	2.5	J
* Manganese, Total	9/9/20 10:55	9/9/20 15:01		1.015	0.0172	mg/L	0.001	0.005	
* Selenium, Total	9/9/20 10:55	9/9/20 15:01		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	9/9/20 10:55	9/9/20 15:01		1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Manganese, Dissolved	9/9/20 12:15	9/9/20 13:07		1.015	0.0149	mg/L	0.001	0.005	
Analytical Method: EPA 245.1	***Analyst: GAS***								
* Mercury, Total by CVAA	9/10/20 07:55	9/10/20 12:35		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2320 B	***Analyst: JAG***								
Alkalinity, Total as CaCO3	9/10/20 11:40	9/10/20 11:50		1	649	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: TJW***								
* Solids, Dissolved	9/9/20 13:30	9/10/20 13:35		1	810	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 9/16/20

Reported: 9/16/2020
Version: 3.1
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-6V

Location Code: WMWGORAP
Collected: 9/8/20 14:10
Customer ID:
Submittal Date: 9/9/20 10:20

Laboratory ID Number: BA16821

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 4500CO2 D		***Analyst: JAG***							
Bicarbonate Alkalinity, (calc.)	9/10/20 11:40	9/10/20 11:50		1	614	mg/L			
Carbonate Alkalinity, (calc.)	9/10/20 11:40	9/10/20 11:50		1	34.8	mg/L			
Analytical Method: SM4500Cl E		***Analyst: JCC***							
* Chloride	9/9/20 11:56	9/9/20 11:56		8	50.4	mg/L	4.00	8	
Analytical Method: SM4500F G 2017		***Analyst: JCC***							
* Fluoride	9/10/20 09:26	9/10/20 09:26		1	4.46	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E 2011		***Analyst: JCC***							
* Sulfate	9/9/20 11:05	9/9/20 11:05		1	9.06	mg/L	0.50	1	
Analytical Method: Field Measurements		***Analyst: TJD***							
Conductivity	9/8/20 14:05	9/8/20 14:05			1136.43	uS/cm			FA
pH	9/8/20 14:05	9/8/20 14:05			8.67	SU			FA
Temperature	9/8/20 14:05	9/8/20 14:05			21.69	C			FA
Turbidity	9/8/20 14:05	9/8/20 14:05			5.84	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 9/16/20

Reported: 9/16/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORAP
Sample Date: 9/8/20 14:10
Customer ID:
Delivery Date: 9/9/20 10:20

Description: Gorgas Ash Pond - MW-6V

Laboratory ID Number: BA16821

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA16822	Manganese, Dissolved	mg/L	-0.0000027	0.0001474	0.10	0.122	0.122	0.112	0.085 to 0.115	107	70 to 130	0.00	20
BA16824	Chromium, Total	mg/L	-0.0000144	0.00044	0.10	0.113	0.113	0.114	0.085 to 0.115	113	70 to 130	0.00	20
BA16824	Calcium, Total	mg/L	-0.00502	0.1518	5.00	4.92	4.88	5.01	4.25 to 5.75	98.4	70 to 130	0.816	20
BA16824	Boron, Total	mg/L	-0.000400	0.0650254	1.00	0.961	0.958	0.982	0.85 to 1.15	96.1	70 to 130	0.313	20
BA16824	Magnesium, Total	mg/L	-0.0000798	0.0462	5.00	4.86	4.83	4.92	4.25 to 5.75	97.2	70 to 130	0.619	20
BA16824	Selenium, Total	mg/L	0.0000046	0.001	0.10	0.110	0.109	0.109	0.085 to 0.115	110	70 to 130	0.913	20
BA16824	Barium, Total	mg/L	-0.0000048	0.0002	0.10	0.116	0.114	0.111	0.085 to 0.115	116	70 to 130	1.74	20
BA16824	Beryllium, Total	mg/L	0.0000263	0.00088	0.10	0.113	0.108	0.110	0.085 to 0.115	113	70 to 130	4.52	20
BA16824	Cobalt, Total	mg/L	-0.0000041	0.0001474	0.10	0.114	0.114	0.115	0.085 to 0.115	114	70 to 130	0.00	20
BA16824	Iron, Total	mg/L	0.000311	0.0176	0.2	0.194	0.192	0.197	0.17 to 0.23	97.0	70 to 130	1.04	20
BA16824	Manganese, Total	mg/L	0.0000103	0.0001474	0.10	0.112	0.113	0.113	0.085 to 0.115	112	70 to 130	0.889	20
BA16824	Sodium, Total	mg/L	-0.000388	0.044	5.00	4.78	4.73	4.83	4.25 to 5.75	95.6	70 to 130	1.05	20
BA16824	Arsenic, Total	mg/L	0.0000096	0.0001474	0.10	0.113	0.112	0.112	0.085 to 0.115	113	70 to 130	0.889	20
BA16824	Mercury, Total by CVAA	mg/L	-0.00000377	0.0005	0.004	0.00389	0.00394	0.00387	0.0034 to 0.0046	97.2	70 to 130	1.28	20
BA16824	Potassium, Total	mg/L	0.0340	0.3674	10.0	11.1	11.1	11.4	8.5 to 11.5	111	70 to 130	0.00	20
BA16824	Antimony, Total	mg/L	0.000224	0.001	0.10	0.109	0.110	0.106	0.085 to 0.115	109	70 to 130	0.913	20
BA16822	Iron, Dissolved	mg/L	0.000323	0.0176	0.2	0.230	0.231	0.205	0.17 to 0.23	103	70 to 130	0.434	20
BA16824	Cadmium, Total	mg/L	0.0000039	0.0001474	0.10	0.110	0.110	0.109	0.085 to 0.115	110	70 to 130	0.00	20
BA16824	Lithium, Total	mg/L	-0.000174	0.0154	0.20	0.187	0.185	0.189	0.17 to 0.23	93.5	70 to 130	1.08	20
BA16824	Lead, Total	mg/L	0.0000059	0.0001474	0.10	0.112	0.113	0.113	0.085 to 0.115	112	70 to 130	0.889	20
BA16824	Thallium, Total	mg/L	0.0000100	0.0001474	0.10	0.109	0.110	0.110	0.085 to 0.115	109	70 to 130	0.913	20
BA16824	Molybdenum, Total	mg/L	0.0000115	0.0001474	0.10	0.113	0.111	0.110	0.085 to 0.115	113	70 to 130	1.79	20

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 9/16/20

Reported: 9/16/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/8/20 14:10
Customer ID:
Delivery Date: 9/9/20 10:20

Description: Gorgas Ash Pond - MW-6V

Laboratory ID Number: BA16821

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA16824	Chloride	mg/L	0.0288	0.50	10.0	9.80	0.154	9.99	9 to 11	98.0	80 to 120	0.00	20
BA16824	Sulfate	mg/L	-0.318	0.50	20.0	19.3	-0.409	19.6	18 to 22	96.5	80 to 120	0.00	20
BA16824	Fluoride	mg/L	0.0365	0.05	2.50	2.61	0.0331	2.58	2.25 to 2.75	104	80 to 120	0.00	20
BA16822	Solids, Dissolved	mg/L	-1.00	25			850	51.0	40 to 60			0.176	5
BA16822	Alkalinity, Total as CaCO3	mg/L					639	50.0	45.0 to 55.0			0.294	10

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 9/16/20

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-6V DUP

Location Code: WMWGORAP
Collected: 9/8/20 14:10
Customer ID:
Submittal Date: 9/9/20 10:20

Laboratory ID Number: BA16822

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	9/8/20 15:00	9/9/20 15:01		1.015	0.0954	mg/L	0.03	0.1	J
* Calcium, Total	9/8/20 15:00	9/9/20 15:01		1.015	1.76	mg/L	0.1	0.5	
* Iron, Total	9/8/20 15:00	9/9/20 15:01		1.015	0.196	mg/L	0.02	0.05	
* Lithium, Total	9/8/20 15:00	9/9/20 15:01		1.015	0.137	mg/L	0.01	0.02	
* Magnesium, Total	9/8/20 15:00	9/9/20 15:01		1.015	0.537	mg/L	0.1	0.5	
* Sodium, Total	9/8/20 15:00	9/9/20 15:18		10.15	334	mg/L	1.015	5.075	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Iron, Dissolved	9/9/20 10:57	9/9/20 12:38		1	0.0248	mg/L	0.02	0.05	J
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	9/9/20 10:55	9/9/20 15:04		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	9/9/20 10:55	9/9/20 15:04		1.015	Not Detected	mg/L	0.001	0.005	U
* Barium, Total	9/9/20 10:55	9/9/20 15:04		1.015	0.164	mg/L	0.002	0.01	
* Beryllium, Total	9/9/20 10:55	9/9/20 15:04		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	9/9/20 10:55	9/9/20 15:04		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	9/9/20 10:55	9/9/20 15:04		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	9/9/20 10:55	9/9/20 15:04		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	9/9/20 10:55	9/9/20 15:04		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	9/9/20 10:55	9/9/20 15:04		1.015	0.00308	mg/L	0.002	0.01	J
* Potassium, Total	9/9/20 10:55	9/9/20 15:04		1.015	2.07	mg/L	0.3	2.5	J
* Manganese, Total	9/9/20 10:55	9/9/20 15:04		1.015	0.0173	mg/L	0.001	0.005	
* Selenium, Total	9/9/20 10:55	9/9/20 15:04		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	9/9/20 10:55	9/9/20 15:04		1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Manganese, Dissolved	9/9/20 12:15	9/9/20 13:10		1.015	0.0150	mg/L	0.001	0.005	
Analytical Method: EPA 245.1	***Analyst: GAS***								
* Mercury, Total by CVAA	9/10/20 07:55	9/10/20 12:37		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2320 B	***Analyst: JAG***								
Alkalinity, Total as CaCO3	9/10/20 11:40	9/10/20 11:50		1	640	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: TJW***								
* Solids, Dissolved	9/9/20 13:30	9/10/20 13:35		1	853	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 9/16/20

Reported: 9/16/2020
Version: 3.1
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-6V DUP

Location Code: WMWGORAP
Collected: 9/8/20 14:10
Customer ID:
Submittal Date: 9/9/20 10:20

Laboratory ID Number: BA16822

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 4500CO2 D		***Analyst: JAG***							
Bicarbonate Alkalinity, (calc.)	9/10/20 11:40	9/10/20 11:50		1	607	mg/L			
Carbonate Alkalinity, (calc.)	9/10/20 11:40	9/10/20 11:50		1	33.6	mg/L			
Analytical Method: SM4500Cl E		***Analyst: JCC***							
* Chloride	9/9/20 11:58	9/9/20 11:58		8	51.2	mg/L	4.00	8	
Analytical Method: SM4500F G 2017		***Analyst: JCC***							
* Fluoride	9/10/20 09:27	9/10/20 09:27		1	4.40	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E 2011		***Analyst: JCC***							
* Sulfate	9/9/20 11:06	9/9/20 11:06		1	9.08	mg/L	0.50	1	
Analytical Method: Field Measurements		***Analyst: TJD***							
Conductivity	9/8/20 14:05	9/8/20 14:05			1136.43	uS/cm			FA
pH	9/8/20 14:05	9/8/20 14:05			8.67	SU			FA
Temperature	9/8/20 14:05	9/8/20 14:05			21.69	C			FA
Turbidity	9/8/20 14:05	9/8/20 14:05			5.84	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 9/16/20

Reported: 9/16/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORAP
Sample Date: 9/8/20 14:10
Customer ID:
Delivery Date: 9/9/20 10:20

Description: Gorgas Ash Pond - MW-6V DUP

Laboratory ID Number: BA16822

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA16822	Manganese, Dissolved	mg/L	-0.0000027	0.0001474	0.10	0.122	0.122	0.112	0.085 to 0.115	107	70 to 130	0.00	20
BA16824	Molybdenum, Total	mg/L	0.0000115	0.0001474	0.10	0.113	0.111	0.110	0.085 to 0.115	113	70 to 130	1.79	20
BA16824	Chromium, Total	mg/L	-0.0000144	0.00044	0.10	0.113	0.113	0.114	0.085 to 0.115	113	70 to 130	0.00	20
BA16824	Calcium, Total	mg/L	-0.00502	0.1518	5.00	4.92	4.88	5.01	4.25 to 5.75	98.4	70 to 130	0.816	20
BA16824	Arsenic, Total	mg/L	0.0000096	0.0001474	0.10	0.113	0.112	0.112	0.085 to 0.115	113	70 to 130	0.889	20
BA16824	Mercury, Total by CVAA	mg/L	-0.00000377	0.0005	0.004	0.00389	0.00394	0.00387	0.0034 to 0.0046	97.2	70 to 130	1.28	20
BA16824	Potassium, Total	mg/L	0.0340	0.3674	10.0	11.1	11.1	11.4	8.5 to 11.5	111	70 to 130	0.00	20
BA16824	Antimony, Total	mg/L	0.000224	0.001	0.10	0.109	0.110	0.106	0.085 to 0.115	109	70 to 130	0.913	20
BA16824	Boron, Total	mg/L	-0.000400	0.0650254	1.00	0.961	0.958	0.982	0.85 to 1.15	96.1	70 to 130	0.313	20
BA16824	Magnesium, Total	mg/L	-0.0000798	0.0462	5.00	4.86	4.83	4.92	4.25 to 5.75	97.2	70 to 130	0.619	20
BA16824	Selenium, Total	mg/L	0.0000046	0.001	0.10	0.110	0.109	0.109	0.085 to 0.115	110	70 to 130	0.913	20
BA16824	Barium, Total	mg/L	-0.0000048	0.0002	0.10	0.116	0.114	0.111	0.085 to 0.115	116	70 to 130	1.74	20
BA16824	Beryllium, Total	mg/L	0.0000263	0.00088	0.10	0.113	0.108	0.110	0.085 to 0.115	113	70 to 130	4.52	20
BA16824	Cobalt, Total	mg/L	-0.0000041	0.0001474	0.10	0.114	0.114	0.115	0.085 to 0.115	114	70 to 130	0.00	20
BA16824	Iron, Total	mg/L	0.000311	0.0176	0.2	0.194	0.192	0.197	0.17 to 0.23	97.0	70 to 130	1.04	20
BA16824	Manganese, Total	mg/L	0.0000103	0.0001474	0.10	0.112	0.113	0.113	0.085 to 0.115	112	70 to 130	0.889	20
BA16824	Sodium, Total	mg/L	-0.000388	0.044	5.00	4.78	4.73	4.83	4.25 to 5.75	95.6	70 to 130	1.05	20
BA16822	Iron, Dissolved	mg/L	0.000323	0.0176	0.2	0.230	0.231	0.205	0.17 to 0.23	103	70 to 130	0.434	20
BA16824	Cadmium, Total	mg/L	0.0000039	0.0001474	0.10	0.110	0.110	0.109	0.085 to 0.115	110	70 to 130	0.00	20
BA16824	Lithium, Total	mg/L	-0.000174	0.0154	0.20	0.187	0.185	0.189	0.17 to 0.23	93.5	70 to 130	1.08	20
BA16824	Lead, Total	mg/L	0.0000059	0.0001474	0.10	0.112	0.113	0.113	0.085 to 0.115	112	70 to 130	0.889	20
BA16824	Thallium, Total	mg/L	0.0000100	0.0001474	0.10	0.109	0.110	0.110	0.085 to 0.115	109	70 to 130	0.913	20

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 9/16/20

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/8/20 14:10
Customer ID:
Delivery Date: 9/9/20 10:20

Description: Gorgas Ash Pond - MW-6V DUP

Laboratory ID Number: BA16822

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA16824	Chloride	mg/L	0.0288	0.50	10.0	9.80	0.154	9.99	9 to 11	98.0	80 to 120	0.00	20
BA16824	Sulfate	mg/L	-0.318	0.50	20.0	19.3	-0.409	19.6	18 to 22	96.5	80 to 120	0.00	20
BA16824	Fluoride	mg/L	0.0365	0.05	2.50	2.61	0.0331	2.58	2.25 to 2.75	104	80 to 120	0.00	20
BA16822	Solids, Dissolved	mg/L	-1.00	25			850	51.0	40 to 60			0.176	5
BA16822	Alkalinity, Total as CaCO3	mg/L					639	50.0	45.0 to 55.0			0.294	10

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 9/16/20

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond Field Blank-1

Location Code: WMWGORAPFB
Collected: 9/8/20 16:30
Customer ID:
Submittal Date: 9/9/20 10:20

Laboratory ID Number: BA16823

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	9/8/20 15:00	9/9/20 15:04		1.015	Not Detected	mg/L	0.03	0.1	U
* Calcium, Total	9/8/20 15:00	9/9/20 15:04		1.015	Not Detected	mg/L	0.1	0.5	U
* Iron, Total	9/8/20 15:00	9/9/20 15:04		1.015	Not Detected	mg/L	0.02	0.05	U
* Lithium, Total	9/8/20 15:00	9/9/20 15:04		1.015	Not Detected	mg/L	0.01	0.02	U
* Magnesium, Total	9/8/20 15:00	9/9/20 15:04		1.015	Not Detected	mg/L	0.1	0.5	U
* Sodium, Total	9/8/20 15:00	9/9/20 15:04		1.015	Not Detected	mg/L	0.1	0.5	U
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	9/9/20 10:55	9/9/20 15:07		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	9/9/20 10:55	9/9/20 15:07		1.015	Not Detected	mg/L	0.001	0.005	U
* Barium, Total	9/9/20 10:55	9/9/20 15:07		1.015	Not Detected	mg/L	0.002	0.01	U
* Beryllium, Total	9/9/20 10:55	9/9/20 15:07		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	9/9/20 10:55	9/9/20 15:07		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	9/9/20 10:55	9/9/20 15:07		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	9/9/20 10:55	9/9/20 15:07		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	9/9/20 10:55	9/9/20 15:07		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	9/9/20 10:55	9/9/20 15:07		1.015	Not Detected	mg/L	0.002	0.01	U
* Manganese, Total	9/9/20 10:55	9/9/20 15:07		1.015	Not Detected	mg/L	0.001	0.005	U
* Potassium, Total	9/9/20 10:55	9/9/20 15:07		1.015	Not Detected	mg/L	0.3	2.5	U
* Selenium, Total	9/9/20 10:55	9/9/20 15:07		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	9/9/20 10:55	9/9/20 15:07		1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 245.1	***Analyst: GAS***								
* Mercury, Total by CVAA	9/10/20 07:55	9/10/20 12:40		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2540C	***Analyst: TJW***								
* Solids, Dissolved	9/9/20 13:30	9/10/20 13:35		1	Not Detected	mg/L		25	U
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	9/9/20 11:52	9/9/20 11:52		1	Not Detected	mg/L	0.50	1	U
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	9/10/20 09:28	9/10/20 09:28		1	Not Detected	mg/L	0.06	0.1	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	9/9/20 11:07	9/9/20 11:07		1	Not Detected	mg/L	0.50	1	U

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

Comments:

Reported: 9/16/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORAPFB
Sample Date: 9/8/20 16:30
Customer ID:
Delivery Date: 9/9/20 10:20

Description: Gorgas Ash Pond Field Blank-1

Laboratory ID Number: BA16823

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA16824	Calcium, Total	mg/L	-0.00502	0.1518	5.00	4.92	4.88	5.01	4.25 to 5.75	98.4	70 to 130	0.816	20
BA16824	Molybdenum, Total	mg/L	0.0000115	0.0001474	0.10	0.113	0.111	0.110	0.085 to 0.115	113	70 to 130	1.79	20
BA16824	Cadmium, Total	mg/L	0.0000039	0.0001474	0.10	0.110	0.110	0.109	0.085 to 0.115	110	70 to 130	0.00	20
BA16824	Lithium, Total	mg/L	-0.000174	0.0154	0.20	0.187	0.185	0.189	0.17 to 0.23	93.5	70 to 130	1.08	20
BA16824	Lead, Total	mg/L	0.0000059	0.0001474	0.10	0.112	0.113	0.113	0.085 to 0.115	112	70 to 130	0.889	20
BA16824	Thallium, Total	mg/L	0.0000100	0.0001474	0.10	0.109	0.110	0.110	0.085 to 0.115	109	70 to 130	0.913	20
BA16824	Arsenic, Total	mg/L	0.0000096	0.0001474	0.10	0.113	0.112	0.112	0.085 to 0.115	113	70 to 130	0.889	20
BA16824	Mercury, Total by CVAA	mg/L	-0.00000377	0.0005	0.004	0.00389	0.00394	0.00387	0.0034 to 0.0046	97.2	70 to 130	1.28	20
BA16824	Potassium, Total	mg/L	0.0340	0.3674	10.0	11.1	11.1	11.4	8.5 to 11.5	111	70 to 130	0.00	20
BA16824	Antimony, Total	mg/L	0.000224	0.001	0.10	0.109	0.110	0.106	0.085 to 0.115	109	70 to 130	0.913	20
BA16824	Barium, Total	mg/L	-0.0000048	0.0002	0.10	0.116	0.114	0.111	0.085 to 0.115	116	70 to 130	1.74	20
BA16824	Beryllium, Total	mg/L	0.0000263	0.00088	0.10	0.113	0.108	0.110	0.085 to 0.115	113	70 to 130	4.52	20
BA16824	Cobalt, Total	mg/L	-0.0000041	0.0001474	0.10	0.114	0.114	0.115	0.085 to 0.115	114	70 to 130	0.00	20
BA16824	Iron, Total	mg/L	0.000311	0.0176	0.2	0.194	0.192	0.197	0.17 to 0.23	97.0	70 to 130	1.04	20
BA16824	Manganese, Total	mg/L	0.0000103	0.0001474	0.10	0.112	0.113	0.113	0.085 to 0.115	112	70 to 130	0.889	20
BA16824	Sodium, Total	mg/L	-0.000388	0.044	5.00	4.78	4.73	4.83	4.25 to 5.75	95.6	70 to 130	1.05	20
BA16824	Boron, Total	mg/L	-0.000400	0.0650254	1.00	0.961	0.958	0.982	0.85 to 1.15	96.1	70 to 130	0.313	20
BA16824	Magnesium, Total	mg/L	-0.0000798	0.0462	5.00	4.86	4.83	4.92	4.25 to 5.75	97.2	70 to 130	0.619	20
BA16824	Selenium, Total	mg/L	0.0000046	0.001	0.10	0.110	0.109	0.109	0.085 to 0.115	110	70 to 130	0.913	20
BA16824	Chromium, Total	mg/L	-0.0000144	0.00044	0.10	0.113	0.113	0.114	0.085 to 0.115	113	70 to 130	0.00	20

Comments:

Reported: 9/16/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Customer Account: WMWGORAPFB
Sample Date: 9/8/20 16:30
Customer ID:
Delivery Date: 9/9/20 10:20

Description: Gorgas Ash Pond Field Blank-1

Laboratory ID Number: BA16823

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA16824	Sulfate	mg/L	-0.318	0.50	20.0	19.3	-0.409	19.6	18 to 22	96.5	80 to 120	0.00	20
BA16824	Chloride	mg/L	0.0288	0.50	10.0	9.80	0.154	9.99	9 to 11	98.0	80 to 120	0.00	20
BA16822	Solids, Dissolved	mg/L	-1.00	25			850	51.0	40 to 60			0.176	5
BA16824	Fluoride	mg/L	0.0365	0.05	2.50	2.61	0.0331	2.58	2.25 to 2.75	104	80 to 120	0.00	20

Comments:

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond Equipment Blank-1

Location Code: WMWGORAPEB
Collected: 9/8/20 16:45
Customer ID:
Submittal Date: 9/9/20 10:20

Laboratory ID Number: BA16824

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	9/8/20 15:00	9/9/20 15:07		1.015	Not Detected	mg/L	0.03	0.1	U
* Calcium, Total	9/8/20 15:00	9/9/20 15:07		1.015	Not Detected	mg/L	0.1	0.5	U
* Iron, Total	9/8/20 15:00	9/9/20 15:07		1.015	Not Detected	mg/L	0.02	0.05	U
* Lithium, Total	9/8/20 15:00	9/9/20 15:07		1.015	Not Detected	mg/L	0.01	0.02	U
* Magnesium, Total	9/8/20 15:00	9/9/20 15:07		1.015	Not Detected	mg/L	0.1	0.5	U
* Sodium, Total	9/8/20 15:00	9/9/20 15:07		1.015	Not Detected	mg/L	0.1	0.5	U
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	9/9/20 10:55	9/9/20 15:09		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	9/9/20 10:55	9/9/20 15:09		1.015	Not Detected	mg/L	0.001	0.005	U
* Barium, Total	9/9/20 10:55	9/9/20 15:09		1.015	Not Detected	mg/L	0.002	0.01	U
* Beryllium, Total	9/9/20 10:55	9/9/20 15:09		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	9/9/20 10:55	9/9/20 15:09		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	9/9/20 10:55	9/9/20 15:09		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	9/9/20 10:55	9/9/20 15:09		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	9/9/20 10:55	9/9/20 15:09		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	9/9/20 10:55	9/9/20 15:09		1.015	Not Detected	mg/L	0.002	0.01	U
* Manganese, Total	9/9/20 10:55	9/9/20 15:09		1.015	Not Detected	mg/L	0.001	0.005	U
* Potassium, Total	9/9/20 10:55	9/9/20 15:09		1.015	Not Detected	mg/L	0.3	2.5	U
* Selenium, Total	9/9/20 10:55	9/9/20 15:09		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	9/9/20 10:55	9/9/20 15:09		1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 245.1	***Analyst: GAS***								
* Mercury, Total by CVAA	9/10/20 07:55	9/10/20 12:42		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2540C	***Analyst: TJW***								
* Solids, Dissolved	9/9/20 13:30	9/10/20 13:35		1	Not Detected	mg/L		25	U
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	9/9/20 11:53	9/9/20 11:53		1	Not Detected	mg/L	0.50	1	U
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	9/10/20 09:30	9/10/20 09:30		1	Not Detected	mg/L	0.06	0.1	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	9/9/20 11:09	9/9/20 11:09		1	Not Detected	mg/L	0.50	1	U

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

Comments:

Reported: 9/16/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORAPEB
Sample Date: 9/8/20 16:45
Customer ID:
Delivery Date: 9/9/20 10:20

Description: Gorgas Ash Pond Equipment Blank-1

Laboratory ID Number: BA16824

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA16824	Chromium, Total	mg/L	-0.0000144	0.00044	0.10	0.113	0.113	0.114	0.085 to 0.115	113	70 to 130	0.00	20
BA16824	Molybdenum, Total	mg/L	0.0000115	0.0001474	0.10	0.113	0.111	0.110	0.085 to 0.115	113	70 to 130	1.79	20
BA16824	Calcium, Total	mg/L	-0.00502	0.1518	5.00	4.92	4.88	5.01	4.25 to 5.75	98.4	70 to 130	0.816	20
BA16824	Arsenic, Total	mg/L	0.0000096	0.0001474	0.10	0.113	0.112	0.112	0.085 to 0.115	113	70 to 130	0.889	20
BA16824	Mercury, Total by CVAA	mg/L	-0.00000377	0.0005	0.004	0.00389	0.00394	0.00387	0.0034 to 0.0046	97.2	70 to 130	1.28	20
BA16824	Potassium, Total	mg/L	0.0340	0.3674	10.0	11.1	11.1	11.4	8.5 to 11.5	111	70 to 130	0.00	20
BA16824	Antimony, Total	mg/L	0.000224	0.001	0.10	0.109	0.110	0.106	0.085 to 0.115	109	70 to 130	0.913	20
BA16824	Boron, Total	mg/L	-0.000400	0.0650254	1.00	0.961	0.958	0.982	0.85 to 1.15	96.1	70 to 130	0.313	20
BA16824	Magnesium, Total	mg/L	-0.0000798	0.0462	5.00	4.86	4.83	4.92	4.25 to 5.75	97.2	70 to 130	0.619	20
BA16824	Selenium, Total	mg/L	0.0000046	0.001	0.10	0.110	0.109	0.109	0.085 to 0.115	110	70 to 130	0.913	20
BA16824	Cadmium, Total	mg/L	0.0000039	0.0001474	0.10	0.110	0.110	0.109	0.085 to 0.115	110	70 to 130	0.00	20
BA16824	Lithium, Total	mg/L	-0.000174	0.0154	0.20	0.187	0.185	0.189	0.17 to 0.23	93.5	70 to 130	1.08	20
BA16824	Lead, Total	mg/L	0.0000059	0.0001474	0.10	0.112	0.113	0.113	0.085 to 0.115	112	70 to 130	0.889	20
BA16824	Thallium, Total	mg/L	0.0000100	0.0001474	0.10	0.109	0.110	0.110	0.085 to 0.115	109	70 to 130	0.913	20
BA16824	Barium, Total	mg/L	-0.0000048	0.0002	0.10	0.116	0.114	0.111	0.085 to 0.115	116	70 to 130	1.74	20
BA16824	Beryllium, Total	mg/L	0.0000263	0.00088	0.10	0.113	0.108	0.110	0.085 to 0.115	113	70 to 130	4.52	20
BA16824	Cobalt, Total	mg/L	-0.0000041	0.0001474	0.10	0.114	0.114	0.115	0.085 to 0.115	114	70 to 130	0.00	20
BA16824	Iron, Total	mg/L	0.000311	0.0176	0.2	0.194	0.192	0.197	0.17 to 0.23	97.0	70 to 130	1.04	20
BA16824	Manganese, Total	mg/L	0.0000103	0.0001474	0.10	0.112	0.113	0.113	0.085 to 0.115	112	70 to 130	0.889	20
BA16824	Sodium, Total	mg/L	-0.000388	0.044	5.00	4.78	4.73	4.83	4.25 to 5.75	95.6	70 to 130	1.05	20

Comments:

Reported: 9/16/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Customer Account: WMWGORAPEB
Sample Date: 9/8/20 16:45
Customer ID:
Delivery Date: 9/9/20 10:20

Description: Gorgas Ash Pond Equipment Blank-1

Laboratory ID Number: BA16824

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA16824	Chloride	mg/L	0.0288	0.50	10.0	9.80	0.154	9.99	9 to 11	98.0	80 to 120	0.00	20
BA16822	Solids, Dissolved	mg/L	-1.00	25			850	51.0	40 to 60			0.176	5
BA16824	Fluoride	mg/L	0.0365	0.05	2.50	2.61	0.0331	2.58	2.25 to 2.75	104	80 to 120	0.00	20
BA16824	Sulfate	mg/L	-0.318	0.50	20.0	19.3	-0.409	19.6	18 to 22	96.5	80 to 120	0.00	20

Comments:

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

Definitions

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 09/09/2020 11:00

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

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-6V	09/08/2020	14:10	6	Groundwater		BA16821
MW-6V Dup	09/08/2020	14:10	6	Sample Duplicate		BA16822
FB-1	09/08/2020	16:30	4	Field Blank		BA16823
EB-1	09/08/2020	16:45	4	Equipment Blank		BA16824

Relinquished By	Received By	Date/Time
[signature]	[signature]	09/09/2020 08:25

SmarTroll ID	7586-41444-5-3
Turbidity ID	4677-23342-4-1
Sample Event	1298

All metals and radiological bottles have pH < 2 ☑

Cooler Temp	0.1 degrees C
Thermometer ID	5408-27568-2-2
pH Strip ID	8129-45507-2-2

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 09/09/2020 11:00

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

Bottles

1	Radium	500 mL	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-6V

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-6V	09/08/2020	14:10	3	Groundwater		BA16825
MW-6V Dup	09/08/2020	14:10	1	Sample Duplicate		BA16826
FB-1	09/08/2020	16:30	1	Field Blank		BA16827
EB-1	09/08/2020	16:45	1	Equipment Blank		BA16828

Relinquished By	Received By	Date/Time
		09/09/2020 08:25

SmarTroll ID	7586-41444-5-3
Turbidity ID	4677-23342-4-1
Sample Event	1298

All metals and radiological bottles have pH < 2 ✔

Cooler Temp	N/A
Thermometer ID	N/A
pH Strip ID	8129-45507-2-2

Bottles/Pre-Preserved Bottles are provided by the GTL

7.1

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ANALYTICAL REPORT

Eurofins TestAmerica, Pensacola
3355 McLemore Drive
Pensacola, FL 32514
Tel: (850)474-1001

Laboratory Job ID: 400-193526-1
Laboratory Sample Delivery Group: Gorgas Ash Pond 1298
Client Project/Site: CCR Plant Gorgas

For:
Alabama Power General Test Laboratory
744 County Rd 87
GSC #8
Calera, Alabama 35040

Attn: Laura Midkiff

Authorized for release by:
12/1/2020 3:10:44 PM

Cheyenne Whitmire, Project Manager II
(850)471-6222
Cheyenne.Whitmire@Eurofinset.com

LINKS

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The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Job ID: 400-193526-1

Laboratory: Eurofins TestAmerica, Pensacola

Narrative

Job Narrative
400-193526-1

RAD

Method 9315: Radium-226 prep batch 160-486958. The following samples did not meet the requested limit (RL) due to the reduced sample volume (insufficient volume due to re-analysis). The method blank (MB) and laboratory control sample (LCS) were also run at the reduced aliquot following NELAC guidance to match the nominal volume of client samples in the prep batch. The data have been reported with this narrative. (LCS 160-486958/2-A) and (MB 160-486958/1-A)

Method 9315: Radium-226 prep batch 160-486958. Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. BA 16825 MW-6V (400-193526-1), BA 16825 MW-6V (400-193526-1[MS]), BA 16825 MW-6V (400-193526-1[MSD]), BA 16826 MW-6V DUP (400-193526-2), BA 16827 FB-1 (400-193526-3), BA 16828 EB-1 (400-193526-4), (LCS 160-486958/2-A) and (MB 160-486958/1-A)

Method 9320: prep batch 160-484054. Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. BA 16825 MW-6V (400-193526-1), BA 16825 MW-6V (400-193526-1[MS]), BA 16825 MW-6V (400-193526-1[MSD]), BA 16826 MW-6V DUP (400-193526-2), BA 16827 FB-1 (400-193526-3) and BA 16828 EB-1 (400-193526-4)

Method PrecSep_0: Radium 228 Prep Batch 160-484054. The following samples were prepared at a reduced aliquot to insure sufficient volume remains if needed for reanalysis: BA 16825 MW-6V (400-193526-1), BA 16825 MW-6V (400-193526-1[MS]), BA 16825 MW-6V (400-193526-1[MSD]), BA 16826 MW-6V DUP (400-193526-2), BA 16827 FB-1 (400-193526-3) and BA 16828 EB-1 (400-193526-4).

Method PrecSep-21: Radium 226 Prep Batch 160-484048. The following samples were prepared at a reduced aliquot to insure sufficient volume remains if needed for reanalysis: BA 16825 MW-6V (400-193526-1), BA 16825 MW-6V (400-193526-1[MS]), BA 16825 MW-6V (400-193526-1[MSD]), BA 16826 MW-6V DUP (400-193526-2), BA 16827 FB-1 (400-193526-3) and BA 16828 EB-1 (400-193526-4). Sample 180-111375-1 was prepared at a reduced aliquot due to gray discoloration and a cloudy appearance:

Method PrecSep-21: Radium 226 Prep Batch 160-486958. The following samples were prepared at a reduced aliquot to insure sufficient volume remains if needed for reanalysis: BA 16825 MW-6V (400-193526-1), BA 16825 MW-6V (400-193526-1[MS]), BA 16825 MW-6V (400-193526-1[MSD]), BA 16826 MW-6V DUP (400-193526-2), BA 16827 FB-1 (400-193526-3) and BA 16828 EB-1 (400-193526-4).

Method Summary

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-193526-1
SDG: Gorgas Ash Pond 1298

Method	Method Description	Protocol	Laboratory
9315	Radium-226 (GFPC)	SW846	TAL SL
9320	Radium-228 (GFPC)	SW846	TAL SL
Ra226_Ra228	Combined Radium-226 and Radium-228	TAL-STL	TAL SL
PrecSep_0	Preparation, Precipitate Separation	None	TAL SL
PrecSep-21	Preparation, Precipitate Separation (21-Day In-Growth)	None	TAL SL

Protocol References:

None = None

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

TAL-STL = TestAmerica Laboratories, St. Louis, Facility Standard Operating Procedure.

Laboratory References:

TAL SL = Eurofins TestAmerica, St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

Sample Summary

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-193526-1
SDG: Gorgas Ash Pond 1298

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
400-193526-1	BA 16825 MW-6V	Water	09/08/20 14:10	09/23/20 10:29	
400-193526-2	BA 16826 MW-6V DUP	Water	09/08/20 14:10	09/23/20 10:29	
400-193526-3	BA 16827 FB-1	Water	09/08/20 16:30	09/23/20 10:29	
400-193526-4	BA 16828 EB-1	Water	09/08/20 16:45	09/23/20 10:29	

Client Sample Results

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-193526-1
SDG: Gorgas Ash Pond 1298

Client Sample ID: BA 16825 MW-6V

Lab Sample ID: 400-193526-1

Date Collected: 09/08/20 14:10
Matrix: Water
Date Received: 09/23/20 10:29

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.0870	U	0.446	0.446	1.00	0.977	pCi/L	10/27/20 11:44	11/20/20 14:56	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*66.3*		*40 - 110*	*10/27/20 11:44*	*11/20/20 14:56*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0492	U	0.418	0.418	1.00	0.746	pCi/L	09/29/20 09:17	10/22/20 12:53	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*90.2*		*40 - 110*	*09/29/20 09:17*	*10/22/20 12:53*	*1*
Y Carrier	*57.6*		*40 - 110*	*09/29/20 09:17*	*10/22/20 12:53*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	-0.0377	U	0.611	0.611	5.00	0.977	pCi/L		11/30/20 22:08	1

Client Sample Results

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-193526-1
SDG: Gorgas Ash Pond 1298

Client Sample ID: BA 16826 MW-6V DUP

Lab Sample ID: 400-193526-2
Matrix: Water

Date Collected: 09/08/20 14:10
Date Received: 09/23/20 10:29

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0866	U	0.408	0.408	1.00	0.811	pCi/L	10/27/20 11:44	11/20/20 14:58	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*66.0*		*40 - 110*	*10/27/20 11:44*	*11/20/20 14:58*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.237	U	0.301	0.301	1.00	0.582	pCi/L	09/29/20 09:17	10/22/20 12:54	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*92.0*		*40 - 110*	*09/29/20 09:17*	*10/22/20 12:54*	*1*
Y Carrier	*78.9*		*40 - 110*	*09/29/20 09:17*	*10/22/20 12:54*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	-0.150	U	0.507	0.507	5.00	0.811	pCi/L		11/30/20 22:08	1

Client Sample Results

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-193526-1
SDG: Gorgas Ash Pond 1298

Client Sample ID: BA 16827 FB-1

Date Collected: 09/08/20 16:30
Date Received: 09/23/20 10:29

Lab Sample ID: 400-193526-3

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.0235	U	0.302	0.302	1.00	0.688	pCi/L	10/27/20 11:44	11/20/20 14:59	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*70.1*		*40 - 110*	*10/27/20 11:44*	*11/20/20 14:59*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.157	U	0.376	0.376	1.00	0.646	pCi/L	09/29/20 09:17	10/22/20 12:54	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*85.5*		*40 - 110*	*09/29/20 09:17*	*10/22/20 12:54*	*1*
Y Carrier	*80.0*		*40 - 110*	*09/29/20 09:17*	*10/22/20 12:54*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.133	U	0.482	0.482	5.00	0.688	pCi/L		11/30/20 22:08	1

Client Sample Results

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-193526-1
SDG: Gorgas Ash Pond 1298

Client Sample ID: BA 16828 EB-1

Date Collected: 09/08/20 16:45
Date Received: 09/23/20 10:29

Lab Sample ID: 400-193526-4

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.200	U	0.448	0.448	1.00	0.825	pCi/L	10/27/20 11:44	11/20/20 14:59	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*65.1*		*40 - 110*	*10/27/20 11:44*	*11/20/20 14:59*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.0795	U	0.345	0.345	1.00	0.626	pCi/L	09/29/20 09:17	10/22/20 12:54	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*86.4*		*40 - 110*	*09/29/20 09:17*	*10/22/20 12:54*	*1*
Y Carrier	*85.2*		*40 - 110*	*09/29/20 09:17*	*10/22/20 12:54*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.120	U	0.565	0.565	5.00	0.825	pCi/L		11/30/20 22:08	1

Definitions/Glossary

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-193526-1
SDG: Gorgas Ash Pond 1298

Qualifiers

Rad

Qualifier	Qualifier Description
G	The Sample MDC is greater than the requested RL.
U	Result is less than the sample detection limit.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Lab Chronicle

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-193526-1
SDG: Gorgas Ash Pond 1298

Client Sample ID: BA 16825 MW-6V — Lab Sample ID: 400-193526-1

Date Collected: 09/08/20 14:10 — **Matrix: Water**
Date Received: 09/23/20 10:29

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			486958	10/27/20 11:44	MNH	TAL SL
Total/NA	Analysis	9315		1	489829	11/20/20 14:56	CMM	TAL SL
Total/NA	Prep	PrecSep_0			484054	09/29/20 09:17	AVB	TAL SL
Total/NA	Analysis	9320		1	486603	10/22/20 12:53	CMM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	490591	11/30/20 22:08	SCB	TAL SL

Client Sample ID: BA 16826 MW-6V DUP — Lab Sample ID: 400-193526-2

Date Collected: 09/08/20 14:10 — **Matrix: Water**
Date Received: 09/23/20 10:29

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			486958	10/27/20 11:44	MNH	TAL SL
Total/NA	Analysis	9315		1	489829	11/20/20 14:58	CMM	TAL SL
Total/NA	Prep	PrecSep_0			484054	09/29/20 09:17	AVB	TAL SL
Total/NA	Analysis	9320		1	486603	10/22/20 12:54	CMM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	490591	11/30/20 22:08	SCB	TAL SL

Client Sample ID: BA 16827 FB-1 — Lab Sample ID: 400-193526-3

Date Collected: 09/08/20 16:30 — **Matrix: Water**
Date Received: 09/23/20 10:29

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			486958	10/27/20 11:44	MNH	TAL SL
Total/NA	Analysis	9315		1	489829	11/20/20 14:59	CMM	TAL SL
Total/NA	Prep	PrecSep_0			484054	09/29/20 09:17	AVB	TAL SL
Total/NA	Analysis	9320		1	486603	10/22/20 12:54	CMM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	490591	11/30/20 22:08	SCB	TAL SL

Client Sample ID: BA 16828 EB-1 — Lab Sample ID: 400-193526-4

Date Collected: 09/08/20 16:45 — **Matrix: Water**
Date Received: 09/23/20 10:29

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			486958	10/27/20 11:44	MNH	TAL SL
Total/NA	Analysis	9315		1	489829	11/20/20 14:59	CMM	TAL SL
Total/NA	Prep	PrecSep_0			484054	09/29/20 09:17	AVB	TAL SL
Total/NA	Analysis	9320		1	486603	10/22/20 12:54	CMM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	490591	11/30/20 22:08	SCB	TAL SL

Laboratory References:

TAL SL = Eurofins TestAmerica, St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

QC Association Summary

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-193526-1
SDG: Gorgas Ash Pond 1298

Rad

Prep Batch: 484054

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-193526-1	BA 16825 MW-6V	Total/NA	Water	PrecSep_0	
400-193526-2	BA 16826 MW-6V DUP	Total/NA	Water	PrecSep_0	
400-193526-3	BA 16827 FB-1	Total/NA	Water	PrecSep_0	
400-193526-4	BA 16828 EB-1	Total/NA	Water	PrecSep_0	
MB 160-484054/24-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-484054/1-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
400-193526-1 MS	BA 16825 MW-6V	Total/NA	Water	PrecSep_0	
400-193526-1 MSD	BA 16825 MW-6V	Total/NA	Water	PrecSep_0	

Prep Batch: 486958

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-193526-1	BA 16825 MW-6V	Total/NA	Water	PrecSep-21	
400-193526-2	BA 16826 MW-6V DUP	Total/NA	Water	PrecSep-21	
400-193526-3	BA 16827 FB-1	Total/NA	Water	PrecSep-21	
400-193526-4	BA 16828 EB-1	Total/NA	Water	PrecSep-21	
MB 160-486958/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-486958/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
400-193526-1 MS	BA 16825 MW-6V	Total/NA	Water	PrecSep-21	
400-193526-1 MSD	BA 16825 MW-6V	Total/NA	Water	PrecSep-21	

QC Sample Results

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-193526-1
SDG: Gorgas Ash Pond 1298

Method: 9315 - Radium-226 (GFPC)

Lab Sample ID: MB 160-486958/1-A
Matrix: Water
Analysis Batch: 489829

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 486958

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.06992	U G	0.548	0.548	1.00	1.07	pCi/L	10/27/20 11:44	11/20/20 13:05	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*63.6*		*40 - 110*	*10/27/20 11:44*	*11/20/20 13:05*	*1*

Lab Sample ID: LCS 160-486958/2-A
Matrix: Water
Analysis Batch: 489829

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 486958

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-226			32.4	33.46		4.40	1.00	1.09	pCi/L	103	75 - 125		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*52.2*		*40 - 110*

Lab Sample ID: 400-193526-1 MS
Matrix: Water
Analysis Batch: 489829

Client Sample ID: BA 16825 MW-6V
Prep Type: Total/NA
Prep Batch: 486958

Analyte	Sample Result	Sample Qual	Spike Added	MS Result	MS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-226	-0.0870	U	34.6	32.68		4.17	1.00	0.809	pCi/L	94	75 - 138		

Carrier	*MS %Yield*	*MS Qualifier*	*Limits*
Ba Carrier	*63.3*		*40 - 110*

Lab Sample ID: 400-193526-1 MSD
Matrix: Water
Analysis Batch: 489829

Client Sample ID: BA 16825 MW-6V
Prep Type: Total/NA
Prep Batch: 486958

Analyte	Sample Result	Sample Qual	Spike Added	MSD Result	MSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits	RER	RER Limit
Radium-226	-0.0870	U	35.5	35.76		4.37	1.00	0.749	pCi/L	101	75 - 138	0.36	1

Carrier	*MSD %Yield*	*MSD Qualifier*	*Limits*
Ba Carrier	*71.0*		*40 - 110*

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-484054/24-A
Matrix: Water
Analysis Batch: 486603

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 484054

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.09363	U	0.381	0.381	1.00	0.666	pCi/L	09/29/20 09:17	10/22/20 12:55	1

Method: 9320 - Radium-228 (GFPC) (Continued)

Carrier	MB %Yield	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	82.0		40 - 110	09/29/20 09:17	10/22/20 12:55	1
Y Carrier	80.4		40 - 110	09/29/20 09:17	10/22/20 12:55	1

Lab Sample ID: LCS 160-484054/1-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 486604 — **Prep Batch: 484054**

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-228			10.3	11.08		1.35	1.00	0.516	pCi/L	108	75 - 125		

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	95.0		40 - 110
Y Carrier	78.1		40 - 110

Lab Sample ID: 400-193526-1 MS — **Client Sample ID: BA 16825 MW-6V**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 486603 — **Prep Batch: 484054**

Analyte	Sample Result	Sample Qual	Spike Added	MS Result	MS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-228	0.0492	U	10.3	11.18		1.36	1.00	0.520	pCi/L	108	45 - 150		

Carrier	MS %Yield	MS Qualifier	Limits
Ba Carrier	92.0		40 - 110
Y Carrier	80.0		40 - 110

Lab Sample ID: 400-193526-1 MSD — **Client Sample ID: BA 16825 MW-6V**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 486603 — **Prep Batch: 484054**

Analyte	Sample Result	Sample Qual	Spike Added	MSD Result	MSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits	RER	RER Limit
Radium-228	0.0492	U	10.3	10.83		1.38	1.00	0.640	pCi/L	105	45 - 150	0.13	1

Carrier	MSD %Yield	MSD Qualifier	Limits
Ba Carrier	81.4		40 - 110
Y Carrier	78.5		40 - 110

TestAmerica Pensacola
3355 McLemore Drive
Pensacola, FL 32514
Phone (850) 474-1001 Fax (850) 478-2671

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler: TJ Daugherty	Lab PM: Whitmire, Cheyenne R	Carrier Tracking No(s):	COC No: 400-56525-24537.1
Client Contact: Laura Midkif	Phone:	E-Mail: cheyenne.whitmire@testamericainc.com	State of Origin: Alabama	Page: Page 1 of 1
Company: Alabama Power General Test Laboratory		Accreditations Required (See note):		Job #
Address: 744 County Rd 87 GSC#8	Due Date Requested:			
City: Calera	TAT Requested (days): Routine			
State, Zip: AL, 35040				
Phone: 205-664-6197	PO #: APC67309-0001			
Email: lbmidkif@southernco.com	WO #:			
Project Name: CCR	Project #: 40007143			
Site: Gorgas Ash Pond 1298	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA
M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
Other:

400-193526 COC

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (Wwater, Ssolid, Owaste/oil, BTtissue, AAir)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	SM 4500 F_C	SM 4500 CL_E	SM 4500 SO4_E	9315_Ra226, 9320_Ra228, Ra226Ra228_GFPC	Total Number of containers	Special Instructions/Note:
			Preservation Code:									
BA16825	9/8/20	14:10	G	Water		X				X	3	MW-6V
BA16826	9/8/20	14:10	G	Water						X	1	MW-6V DUP (Sample Duplicate)
BA16827	9/8/20	16:30	G	Water						X	1	FB-1 (Field Blank)
BA16828	9/8/20	16:45	G	Water						X	1	EB-1 (Equipment Blank)

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to TestAmerica Laboratories, Inc.

Possible Hazard Identification *Unconfirmed*	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*** ☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify)	4404B Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:		
Relinquished by: Laura Midkiff	Date/Time: 09/10/2020 1605	Company: Water APC	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	0	Company	Received by:	Date/Time: 9-23-20/1029	Company: ETA.
Custody Seals Intact:			Cooler Temperature(s) °C and Other Remarks:		

23.7°C IR9

Ver: 09/20/2016

Login Sample Receipt Checklist

Client: Alabama Power General Test Laboratory

Job Number: 400-193526-1
SDG Number: Gorgas Ash Pond 1298

Login Number: 193526
List Number: 1
Creator: Whitley, Adrian

List Source: Eurofins TestAmerica, Pensacola

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	N/A	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	23.7C IR9
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Alabama Power General Test Laboratory

Job Number: 400-193526-1
SDG Number: Gorgas Ash Pond 1298

Login Number: 193526
List Number: 2
Creator: Mazariegos, Leonel A

List Source: Eurofins TestAmerica, St. Louis
List Creation: 09/25/20 09:39 AM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	N/A	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Accreditation/Certification Summary

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-193526-1
SDG: Gorgas Ash Pond 1298

Laboratory: Eurofins TestAmerica, St. Louis

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	20-001	05-06-22
ANAB	Dept. of Defense ELAP	L2305	04-06-22
ANAB	Dept. of Energy	L2305.01	04-06-22
ANAB	ISO/IEC 17025	L2305	04-06-22
Arizona	State	AZ0813	12-08-20
California	Los Angeles County Sanitation Districts	10259	06-30-21
California	State	2886	06-30-21
Connecticut	State	PH-0241	03-31-21
Florida	NELAP	E87689	06-30-21
HI - RadChem Recognition	State	n/a	06-30-21
Illinois	NELAP	004553	11-30-20
Iowa	State	373	11-30-20
Kentucky (DW)	State	KY90125	12-31-20
Louisiana	NELAP	04080	06-30-21
Louisiana (DW)	State	LA011	12-31-20
Maryland	State	310	09-30-21
MI - RadChem Recognition	State	9005	06-30-21
Missouri	State	780	06-30-22
Nevada	State	MO000542020-1	07-31-21
New Jersey	NELAP	MO002	06-30-21
New York	NELAP	11616	04-01-21
North Dakota	State	R-207	06-30-21
NRC	NRC	24-24817-01	12-31-22
Oklahoma	State	9997	08-31-21
Oregon	NELAP	4157	09-01-21
Pennsylvania	NELAP	68-00540	02-28-21
South Carolina	State	85002001	06-30-21
Texas	NELAP	T104704193-19-13	07-31-21
US Fish & Wildlife	US Federal Programs	058448	07-31-21
USDA	US Federal Programs	P330-17-00028	03-11-23
Utah	NELAP	MO000542019-11	07-31-21
Virginia	NELAP	10310	06-14-21
Washington	State	C592	08-30-21
West Virginia DEP	State	381	10-31-21

Alabama Power Company
Plant Gorgas Ash Pond

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-6V	9/8/2020 13:40	Conductivity	1344.82	uS/cm
GS-AP-MW-6V	9/8/2020 13:40	DO	0.31	mg/L
GS-AP-MW-6V	9/8/2020 13:40	Depth to Water Detail	77.61	ft
GS-AP-MW-6V	9/8/2020 13:40	Oxidation Reduction Potention	115.77	mv
GS-AP-MW-6V	9/8/2020 13:40	pH	8.71	pH
GS-AP-MW-6V	9/8/2020 13:40	Temperature	21.62	C
GS-AP-MW-6V	9/8/2020 13:40	Turbidity	4.68	NTU
GS-AP-MW-6V	9/8/2020 13:45	Conductivity	1261.22	uS/cm
GS-AP-MW-6V	9/8/2020 13:45	DO	0.27	mg/L
GS-AP-MW-6V	9/8/2020 13:45	Depth to Water Detail	77.71	ft
GS-AP-MW-6V	9/8/2020 13:45	Oxidation Reduction Potention	92.93	mv
GS-AP-MW-6V	9/8/2020 13:45	pH	8.72	pH
GS-AP-MW-6V	9/8/2020 13:45	Temperature	21.52	C
GS-AP-MW-6V	9/8/2020 13:45	Turbidity	4.71	NTU
GS-AP-MW-6V	9/8/2020 13:50	Conductivity	1142.32	uS/cm
GS-AP-MW-6V	9/8/2020 13:50	DO	0.26	mg/L
GS-AP-MW-6V	9/8/2020 13:50	Depth to Water Detail	77.82	ft
GS-AP-MW-6V	9/8/2020 13:50	Oxidation Reduction Potention	87.71	mv
GS-AP-MW-6V	9/8/2020 13:50	pH	8.72	pH
GS-AP-MW-6V	9/8/2020 13:50	Temperature	21.67	C
GS-AP-MW-6V	9/8/2020 13:50	Turbidity	4.4	NTU
GS-AP-MW-6V	9/8/2020 13:55	Conductivity	1094.71	uS/cm
GS-AP-MW-6V	9/8/2020 13:55	DO	0.26	mg/L
GS-AP-MW-6V	9/8/2020 13:55	Depth to Water Detail	77.89	ft
GS-AP-MW-6V	9/8/2020 13:55	Oxidation Reduction Potention	68.23	mv
GS-AP-MW-6V	9/8/2020 13:55	pH	8.67	pH
GS-AP-MW-6V	9/8/2020 13:55	Temperature	21.7	C
GS-AP-MW-6V	9/8/2020 13:55	Turbidity	10.93	NTU
GS-AP-MW-6V	9/8/2020 14:00	Conductivity	1137	uS/cm
GS-AP-MW-6V	9/8/2020 14:00	DO	0.29	mg/L
GS-AP-MW-6V	9/8/2020 14:00	Depth to Water Detail	77.93	ft
GS-AP-MW-6V	9/8/2020 14:00	Oxidation Reduction Potention	56.78	mv
GS-AP-MW-6V	9/8/2020 14:00	pH	8.6	pH
GS-AP-MW-6V	9/8/2020 14:00	Temperature	21.74	C
GS-AP-MW-6V	9/8/2020 14:00	Turbidity	10.14	NTU
GS-AP-MW-6V	9/8/2020 14:05	Conductivity	1136.43	uS/cm
GS-AP-MW-6V	9/8/2020 14:05	DO	0.33	mg/L
GS-AP-MW-6V	9/8/2020 14:05	Depth to Water Detail	78.02	ft
GS-AP-MW-6V	9/8/2020 14:05	Oxidation Reduction Potention	53.79	mv
GS-AP-MW-6V	9/8/2020 14:05	pH	8.67	pH
GS-AP-MW-6V	9/8/2020 14:05	Temperature	21.69	C
GS-AP-MW-6V	9/8/2020 14:05	Turbidity	5.84	NTU

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 Ash Pond

MW-44HO (Salter Well)

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 : WMWGORAP_1296

Project/Site : Gorgas Ash Pond
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

October 01, 2020

Dear Dustin Brooks,

Enclosed are the analytical results for sample(s) received by the laboratory on August 27, 2020.
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: 2020.10.01 13:05:57 -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: 2020.10.01 14:07:13 -05'00'

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

Case Narrative

Alabama Power

Total Metals ICP

Gorgas Ash Pond

WMWGORAP_1296

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
BA16150	681646	WMWGORAP_1296
BA16151	681646	WMWGORAP_1296
BA16152	681646	WMWGORAP_1296
BA16153	681646	WMWGORAP_1296

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
BA16151	Sodium	10.15
BA16152	Sodium	10.15

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

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

Case Narrative

Alabama Power

Dissolved Metals ICP

Gorgas Ash Pond

WMWGORAP_1296

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
BA16151	681590	WMWGORAP_1296
BA16152	681590	WMWGORAP_1296

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 Ash Pond

WMWGORAP_1296

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
BA16150	681362	WMWGORAP_1296
BA16151	681362	WMWGORAP_1296
BA16152	681362	WMWGORAP_1296
BA16153	681362	WMWGORAP_1296

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. 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 Ash Pond

WMWGORAP_1296

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
BA16151	680892	WMWGORAP_1296
BA16152	680892	WMWGORAP_1296

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. 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 Ash Pond

WMWGORAP_1296

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
BA16150	681027	WMWGORAP_1296
BA16151	681027	WMWGORAP_1296
BA16152	681027	WMWGORAP_1296
BA16153	681027	WMWGORAP_1296

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 (LCS) criteria were met with passing results.
- 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.

TDS

Gorgas Ash Pond

WMWGORAP_1296

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
BA16150	681045	WMWGORAP_1296
BA16151	681045	WMWGORAP_1296
BA16152	681045	WMWGORAP_1296
BA16153	681045	WMWGORAP_1296

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:
    - BA16150
    - BA16153

Anions

Gorgas Ash Pond

WMWGORAP_1296

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
BA16150	681073, 681078, & 681548	WMWGORAP_1296
BA16151	681073, 681078, & 681548	WMWGORAP_1296
BA16152	681073, 681078, & 681548	WMWGORAP_1296
BA16153	681073, 681078, & 681548	WMWGORAP_1296

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
BA16151	Chloride	2
BA16152	Chloride	2

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

Alkalinity

Gorgas Ash Pond

WMWGORAP_1296

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
BA16151	681224 & 681225	WMWGORAP_1296
BA16152	681224 & 681225	WMWGORAP_1296

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 Ash Pond Field Blank-1

Location Code: WMWGORAPFB
Collected: 8/27/20 09:55
Customer ID:
Submittal Date: 8/27/20 15:33

Laboratory ID Number: BA16150

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	9/8/20 15:00	9/9/20 13:14		1.015	Not Detected	mg/L	0.03	0.1	U
* Calcium, Total	9/8/20 15:00	9/9/20 13:14		1.015	Not Detected	mg/L	0.1	0.5	U
* Iron, Total	9/8/20 15:00	9/9/20 13:14		1.015	Not Detected	mg/L	0.02	0.05	U
* Lithium, Total	9/8/20 15:00	9/9/20 13:14		1.015	Not Detected	mg/L	0.01	0.02	U
* Magnesium, Total	9/8/20 15:00	9/9/20 13:14		1.015	Not Detected	mg/L	0.1	0.5	U
* Sodium, Total	9/8/20 15:00	9/9/20 13:14		1.015	Not Detected	mg/L	0.1	0.5	U
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	8/28/20 09:20	8/28/20 14:03		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	8/28/20 09:20	8/28/20 14:03		1.015	Not Detected	mg/L	0.001	0.005	U
* Barium, Total	8/28/20 09:20	8/28/20 14:03		1.015	Not Detected	mg/L	0.002	0.01	U
* Beryllium, Total	8/28/20 09:20	8/28/20 14:03		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	8/28/20 09:20	8/28/20 14:03		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	8/28/20 09:20	8/28/20 14:03		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	8/28/20 09:20	8/28/20 14:03		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	8/28/20 09:20	8/28/20 14:03		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	8/28/20 09:20	8/28/20 14:03		1.015	Not Detected	mg/L	0.002	0.01	U
* Manganese, Total	8/28/20 09:20	8/28/20 14:03		1.015	Not Detected	mg/L	0.001	0.005	U
* Potassium, Total	8/28/20 09:20	8/28/20 14:03		1.015	Not Detected	mg/L	0.3	2.5	U
* Selenium, Total	8/28/20 09:20	8/28/20 14:03		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	8/28/20 09:20	8/28/20 14:03		1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 245.1	***Analyst: GAS***								
* Mercury, Total by CVAA	9/1/20 12:21	9/2/20 09:26		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2540C	***Analyst: TJW***								
* Solids, Dissolved	8/31/20 15:35	9/3/20 11:35		1	Not Detected	mg/L		25	U
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	8/31/20 11:46	8/31/20 11:46		1	Not Detected	mg/L	0.50	1	U
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	8/31/20 14:12	8/31/20 14:12		1	Not Detected	mg/L	0.06	0.1	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	9/3/20 14:01	9/3/20 14:01		1	Not Detected	mg/L	0.50	1	U

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

Comments:

Reported: 10/1/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORAPFB
Sample Date: 8/27/20 09:55
Customer ID:
Delivery Date: 8/27/20 15:33

Description: Gorgas Ash Pond Field Blank-1

Laboratory ID Number: BA16150

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA16153	Molybdenum, Total	mg/L	0.0000033	0.0001474	0.10	0.101	0.100	0.0990	0.085 to 0.115	101	70 to 130	0.995	20
BA16153	Sodium, Total	mg/L	-0.000218	0.044	5.00	4.99	5.00	5.02	4.25 to 5.75	99.8	70 to 130	0.200	20
BA16153	Magnesium, Total	mg/L	-0.000526	0.0462	5.00	5.05	5.07	5.09	4.25 to 5.75	101	70 to 130	0.395	20
BA16153	Manganese, Total	mg/L	0.0000251	0.0001474	0.10	0.103	0.104	0.104	0.085 to 0.115	103	70 to 130	0.966	20
BA16153	Lead, Total	mg/L	0.0000103	0.0001474	0.10	0.105	0.104	0.103	0.085 to 0.115	105	70 to 130	0.957	20
BA16153	Arsenic, Total	mg/L	0.0000016	0.0001474	0.10	0.104	0.104	0.108	0.085 to 0.115	104	70 to 130	0.00	20
BA16153	Lithium, Total	mg/L	0.0000181	0.0154	0.20	0.193	0.194	0.194	0.17 to 0.23	96.5	70 to 130	0.517	20
BA16153	Cadmium, Total	mg/L	0.0000000	0.0001474	0.10	0.0975	0.101	0.0978	0.085 to 0.115	97.5	70 to 130	3.53	20
BA16153	Cobalt, Total	mg/L	-0.0000027	0.0001474	0.10	0.101	0.101	0.102	0.085 to 0.115	101	70 to 130	0.00	20
BA16153	Mercury, Total by CVAA	mg/L	0.0000797	0.0005	0.004	0.00397	0.00396	0.00395	0.0034 to 0.0046	99.2	70 to 130	0.252	20
BA16153	Thallium, Total	mg/L	-0.0000028	0.0001474	0.10	0.102	0.102	0.0997	0.085 to 0.115	102	70 to 130	0.00	20
BA16153	Barium, Total	mg/L	-0.0000093	0.0002	0.10	0.0985	0.0987	0.0984	0.085 to 0.115	98.5	70 to 130	0.203	20
BA16153	Beryllium, Total	mg/L	0.0000282	0.00088	0.10	0.0942	0.0975	0.0993	0.085 to 0.115	94.2	70 to 130	3.44	20
BA16153	Boron, Total	mg/L	0.000356	0.0650254	1.00	0.987	1.00	0.994	0.85 to 1.15	98.7	70 to 130	1.31	20
BA16153	Calcium, Total	mg/L	-0.00445	0.1518	5.00	5.09	5.12	5.12	4.25 to 5.75	102	70 to 130	0.588	20
BA16153	Chromium, Total	mg/L	-0.0000015	0.00044	0.10	0.102	0.103	0.104	0.085 to 0.115	102	70 to 130	0.976	20
BA16153	Potassium, Total	mg/L	0.0110	0.3674	10.0	10.0	10.1	10.4	8.5 to 11.5	100	70 to 130	0.995	20
BA16153	Antimony, Total	mg/L	0.000215	0.001	0.10	0.0963	0.0963	0.0953	0.085 to 0.115	96.3	70 to 130	0.00	20
BA16153	Iron, Total	mg/L	0.000112	0.0176	0.2	0.200	0.201	0.201	0.17 to 0.23	100	70 to 130	0.499	20
BA16153	Selenium, Total	mg/L	-0.0000358	0.001	0.10	0.102	0.101	0.108	0.085 to 0.115	102	70 to 130	0.985	20

Comments:

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

Batch QC Summary

Customer Account: WMWGORAPFB
Sample Date: 8/27/20 09:55
Customer ID:
Delivery Date: 8/27/20 15:33

Description: Gorgas Ash Pond Field Blank-1

Laboratory ID Number: BA16150

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA16153	Chloride	mg/L	0.0712	0.50	10.0	9.76	0.102	9.87	9 to 11	97.6	80 to 120	0.00	20
BA16153	Sulfate	mg/L	-0.277	0.50	20.0	22.2	-0.423	19.8	18 to 22	111	80 to 120	0.00	20
BA16152	Solids, Dissolved	mg/L	-2.00	25			434	49.0	40 to 60			0.463	5
BA16153	Fluoride	mg/L	0.00505	0.05	2.50	2.58	0.00855	2.49	2.25 to 2.75	103	80 to 120	0.00	20

Comments:

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-44HO

Location Code: WMWGORAP
Collected: 8/27/20 11:58
Customer ID:
Submittal Date: 8/27/20 15:33

Laboratory ID Number: BA16151

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	9/8/20 15:00	9/9/20 13:17		1.015	0.0366	mg/L	0.03	0.1	J
* Calcium, Total	9/8/20 15:00	9/9/20 13:17		1.015	2.89	mg/L	0.1	0.5	
* Iron, Total	9/8/20 15:00	9/9/20 13:17		1.015	0.443	mg/L	0.02	0.05	
* Lithium, Total	9/8/20 15:00	9/9/20 13:17		1.015	0.0411	mg/L	0.01	0.02	
* Magnesium, Total	9/8/20 15:00	9/9/20 13:17		1.015	0.732	mg/L	0.1	0.5	
* Sodium, Total	9/8/20 15:00	9/9/20 14:38		10.15	159	mg/L	1.015	5.075	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Iron, Dissolved	9/8/20 14:00	9/9/20 12:10		1.015	Not Detected	mg/L	0.02	0.05	U
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	8/28/20 09:20	8/28/20 14:06		1.015	0.00130	mg/L	0.0008	0.003	J
* Arsenic, Total	8/28/20 09:20	8/28/20 14:06		1.015	0.00321	mg/L	0.001	0.005	J
* Barium, Total	8/28/20 09:20	8/28/20 14:06		1.015	0.0867	mg/L	0.002	0.01	
* Beryllium, Total	8/28/20 09:20	8/28/20 14:06		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	8/28/20 09:20	8/28/20 14:06		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	8/28/20 09:20	8/28/20 14:06		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	8/28/20 09:20	8/28/20 14:06		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	8/28/20 09:20	8/28/20 14:06		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	8/28/20 09:20	8/28/20 14:06		1.015	0.00710	mg/L	0.002	0.01	J
* Potassium, Total	8/28/20 09:20	8/28/20 14:06		1.015	1.13	mg/L	0.3	2.5	J
* Manganese, Total	8/28/20 09:20	8/28/20 14:06		1.015	0.00775	mg/L	0.001	0.005	
* Selenium, Total	8/28/20 09:20	8/28/20 14:06		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	8/28/20 09:20	8/28/20 14:06		1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Manganese, Dissolved	8/28/20 10:15	8/28/20 14:21		1.015	0.00365	mg/L	0.001	0.005	J
Analytical Method: EPA 245.1	***Analyst: GAS***								
* Mercury, Total by CVAA	9/1/20 12:21	9/2/20 09:28		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2320 B	***Analyst: JAG***								
Alkalinity, Total as CaCO3	9/2/20 10:20	9/2/20 10:35		1	322	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: TJW***								
* Solids, Dissolved	8/31/20 15:35	9/3/20 11:35		1	435	mg/L		25	

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

Comments: Th client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 9/30/2020

Reported: 10/1/2020
Version: 3.1
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-44HO

Location Code: WMWGORAP
Collected: 8/27/20 11:58
Customer ID:
Submittal Date: 8/27/20 15:33

Laboratory ID Number: BA16151

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 4500CO2 D		***Analyst: JAG***							
Bicarbonate Alkalinity, (calc.)	9/2/20 10:20	9/2/20 10:35		1	298	mg/L			
Carbonate Alkalinity, (calc.)	9/2/20 10:20	9/2/20 10:35		1	23.3	mg/L			
Analytical Method: SM4500Cl E		***Analyst: JCC***							
* Chloride	8/31/20 11:51	8/31/20 11:51		2	27.1	mg/L	1.00	2	
Analytical Method: SM4500F G 2017		***Analyst: JCC***							
* Fluoride	8/31/20 14:14	8/31/20 14:14		1	0.174	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E 2011		***Analyst: JCC***							
* Sulfate	9/3/20 14:02	9/3/20 14:02		1	33.5	mg/L	0.50	1	
Analytical Method: Field Measurements		***Analyst: AWG***							
Conductivity	8/27/20 11:54	8/27/20 11:54			733.57	uS/cm			FA
pH	8/27/20 11:54	8/27/20 11:54			8.90	SU			FA
Temperature	8/27/20 11:54	8/27/20 11:54			21.73	C			FA
Turbidity	8/27/20 11:54	8/27/20 11:54			7.87	NTU			FA

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

Comments: Th client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 9/30/2020

Reported: 10/1/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORAP
Sample Date: 8/27/20 11:58
Customer ID:
Delivery Date: 8/27/20 15:33

Description: Gorgas Ash Pond - MW-44HO

Laboratory ID Number: BA16151

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA16153	Sodium, Total	mg/L	-0.000218	0.044	5.00	4.99	5.00	5.02	4.25 to 5.75	99.8	70 to 130	0.200	20
BA16153	Magnesium, Total	mg/L	-0.000526	0.0462	5.00	5.05	5.07	5.09	4.25 to 5.75	101	70 to 130	0.395	20
BA16153	Manganese, Total	mg/L	0.0000251	0.0001474	0.10	0.103	0.104	0.104	0.085 to 0.115	103	70 to 130	0.966	20
BA16153	Lead, Total	mg/L	0.0000103	0.0001474	0.10	0.105	0.104	0.103	0.085 to 0.115	105	70 to 130	0.957	20
BA16152	Iron, Dissolved	mg/L	0.000379	0.0176	0.2	0.215	0.213	0.212	0.17 to 0.23	108	70 to 130	0.935	20
BA16153	Molybdenum, Total	mg/L	0.0000033	0.0001474	0.10	0.101	0.100	0.0990	0.085 to 0.115	101	70 to 130	0.995	20
BA16152	Manganese, Dissolved	mg/L	-0.0000271	0.0001474	0.10	0.104	0.101	0.105	0.085 to 0.115	100	70 to 130	2.93	20
BA16153	Arsenic, Total	mg/L	0.0000016	0.0001474	0.10	0.104	0.104	0.108	0.085 to 0.115	104	70 to 130	0.00	20
BA16153	Lithium, Total	mg/L	0.0000181	0.0154	0.20	0.193	0.194	0.194	0.17 to 0.23	96.5	70 to 130	0.517	20
BA16153	Cadmium, Total	mg/L	0.0000000	0.0001474	0.10	0.0975	0.101	0.0978	0.085 to 0.115	97.5	70 to 130	3.53	20
BA16153	Cobalt, Total	mg/L	-0.0000027	0.0001474	0.10	0.101	0.101	0.102	0.085 to 0.115	101	70 to 130	0.00	20
BA16153	Mercury, Total by CVAA	mg/L	0.0000797	0.0005	0.004	0.00397	0.00396	0.00395	0.0034 to 0.0046	99.2	70 to 130	0.252	20
BA16153	Thallium, Total	mg/L	-0.0000028	0.0001474	0.10	0.102	0.102	0.0997	0.085 to 0.115	102	70 to 130	0.00	20
BA16153	Barium, Total	mg/L	-0.0000093	0.0002	0.10	0.0985	0.0987	0.0984	0.085 to 0.115	98.5	70 to 130	0.203	20
BA16153	Beryllium, Total	mg/L	0.0000282	0.00088	0.10	0.0942	0.0975	0.0993	0.085 to 0.115	94.2	70 to 130	3.44	20
BA16153	Boron, Total	mg/L	0.000356	0.0650254	1.00	0.987	1.00	0.994	0.85 to 1.15	98.7	70 to 130	1.31	20
BA16153	Calcium, Total	mg/L	-0.00445	0.1518	5.00	5.09	5.12	5.12	4.25 to 5.75	102	70 to 130	0.588	20
BA16153	Chromium, Total	mg/L	-0.0000015	0.00044	0.10	0.102	0.103	0.104	0.085 to 0.115	102	70 to 130	0.976	20
BA16153	Potassium, Total	mg/L	0.0110	0.3674	10.0	10.0	10.1	10.4	8.5 to 11.5	100	70 to 130	0.995	20
BA16153	Antimony, Total	mg/L	0.000215	0.001	0.10	0.0963	0.0963	0.0953	0.085 to 0.115	96.3	70 to 130	0.00	20
BA16153	Iron, Total	mg/L	0.000112	0.0176	0.2	0.200	0.201	0.201	0.17 to 0.23	100	70 to 130	0.499	20
BA16153	Selenium, Total	mg/L	-0.0000358	0.001	0.10	0.102	0.101	0.108	0.085 to 0.115	102	70 to 130	0.985	20

Comments: Th client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 9/30/2020

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 8/27/20 11:58
Customer ID:
Delivery Date: 8/27/20 15:33

Description: Gorgas Ash Pond - MW-44HO

Laboratory ID Number: BA16151

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA16152	Alkalinity, Total as CaCO3	mg/L					318	50.6	45.0 to 55.0			0.00	10
BA16153	Sulfate	mg/L	-0.277	0.50	20.0	22.2	-0.423	19.8	18 to 22	111	80 to 120	0.00	20
BA16153	Chloride	mg/L	0.0712	0.50	10.0	9.76	0.102	9.87	9 to 11	97.6	80 to 120	0.00	20
BA16152	Solids, Dissolved	mg/L	-2.00	25			434	49.0	40 to 60			0.463	5
BA16153	Fluoride	mg/L	0.00505	0.05	2.50	2.58	0.00855	2.49	2.25 to 2.75	103	80 to 120	0.00	20

Comments: Th client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 9/30/2020

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-44HO DUP

Location Code: WMWGORAP
Collected: 8/27/20 11:58
Customer ID:
Submittal Date: 8/27/20 15:33

Laboratory ID Number: BA16152

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	9/8/20 15:00	9/9/20 13:20		1.015	0.0365	mg/L	0.03	0.1	J
* Calcium, Total	9/8/20 15:00	9/9/20 13:20		1.015	2.80	mg/L	0.1	0.5	
* Iron, Total	9/8/20 15:00	9/9/20 13:20		1.015	0.424	mg/L	0.02	0.05	
* Lithium, Total	9/8/20 15:00	9/9/20 13:20		1.015	0.0414	mg/L	0.01	0.02	
* Magnesium, Total	9/8/20 15:00	9/9/20 13:20		1.015	0.727	mg/L	0.1	0.5	
* Sodium, Total	9/8/20 15:00	9/9/20 14:41		10.15	163	mg/L	1.015	5.075	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Iron, Dissolved	9/8/20 14:00	9/9/20 12:13		1.015	Not Detected	mg/L	0.02	0.05	U
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	8/28/20 09:20	8/28/20 14:09		1.015	0.00149	mg/L	0.0008	0.003	J
* Arsenic, Total	8/28/20 09:20	8/28/20 14:09		1.015	0.00310	mg/L	0.001	0.005	J
* Barium, Total	8/28/20 09:20	8/28/20 14:09		1.015	0.0876	mg/L	0.002	0.01	
* Beryllium, Total	8/28/20 09:20	8/28/20 14:09		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	8/28/20 09:20	8/28/20 14:09		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	8/28/20 09:20	8/28/20 14:09		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	8/28/20 09:20	8/28/20 14:09		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	8/28/20 09:20	8/28/20 14:09		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	8/28/20 09:20	8/28/20 14:09		1.015	0.00734	mg/L	0.002	0.01	J
* Potassium, Total	8/28/20 09:20	8/28/20 14:09		1.015	1.09	mg/L	0.3	2.5	J
* Manganese, Total	8/28/20 09:20	8/28/20 14:09		1.015	0.00669	mg/L	0.001	0.005	
* Selenium, Total	8/28/20 09:20	8/28/20 14:09		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	8/28/20 09:20	8/28/20 14:09		1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Manganese, Dissolved	8/28/20 10:15	8/28/20 14:24		1.015	0.00356	mg/L	0.001	0.005	J
Analytical Method: EPA 245.1	***Analyst: GAS***								
* Mercury, Total by CVAA	9/1/20 12:21	9/2/20 09:31		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2320 B	***Analyst: JAG***								
Alkalinity, Total as CaCO3	9/2/20 10:20	9/2/20 10:35		1	318	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: TJW***								
* Solids, Dissolved	8/31/20 15:35	9/3/20 11:35		1	430	mg/L		25	

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

Comments: Th client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 9/30/2020

Reported: 10/1/2020
Version: 3.1
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-44HO DUP

Location Code: WMWGORAP
Collected: 8/27/20 11:58
Customer ID:
Submittal Date: 8/27/20 15:33

Laboratory ID Number: BA16152

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 4500CO2 D		***Analyst: JAG***							
Bicarbonate Alkalinity, (calc.)	9/2/20 10:20	9/2/20 10:35		1	294	mg/L			
Carbonate Alkalinity, (calc.)	9/2/20 10:20	9/2/20 10:35		1	24.0	mg/L			
Analytical Method: SM4500Cl E		***Analyst: JCC***							
* Chloride	8/31/20 11:52	8/31/20 11:52		2	26.7	mg/L	1.00	2	
Analytical Method: SM4500F G 2017		***Analyst: JCC***							
* Fluoride	8/31/20 14:15	8/31/20 14:15		1	0.155	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E 2011		***Analyst: JCC***							
* Sulfate	9/3/20 14:03	9/3/20 14:03		1	33.7	mg/L	0.50	1	
Analytical Method: Field Measurements		***Analyst: AWG***							
Conductivity	8/27/20 11:54	8/27/20 11:54			733.57	uS/cm			FA
pH	8/27/20 11:54	8/27/20 11:54			8.90	SU			FA
Temperature	8/27/20 11:54	8/27/20 11:54			21.73	C			FA
Turbidity	8/27/20 11:54	8/27/20 11:54			7.87	NTU			FA

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

Comments: Th client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 9/30/2020

Reported: 10/1/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORAP
Sample Date: 8/27/20 11:58
Customer ID:
Delivery Date: 8/27/20 15:33

Description: Gorgas Ash Pond - MW-44HO DUP

Laboratory ID Number: BA16152

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA16153	Sodium, Total	mg/L	-0.000218	0.044	5.00	4.99	5.00	5.02	4.25 to 5.75	99.8	70 to 130	0.200	20
BA16153	Magnesium, Total	mg/L	-0.000526	0.0462	5.00	5.05	5.07	5.09	4.25 to 5.75	101	70 to 130	0.395	20
BA16153	Manganese, Total	mg/L	0.0000251	0.0001474	0.10	0.103	0.104	0.104	0.085 to 0.115	103	70 to 130	0.966	20
BA16153	Lead, Total	mg/L	0.0000103	0.0001474	0.10	0.105	0.104	0.103	0.085 to 0.115	105	70 to 130	0.957	20
BA16152	Manganese, Dissolved	mg/L	-0.0000271	0.0001474	0.10	0.104	0.101	0.105	0.085 to 0.115	100	70 to 130	2.93	20
BA16153	Arsenic, Total	mg/L	0.0000016	0.0001474	0.10	0.104	0.104	0.108	0.085 to 0.115	104	70 to 130	0.00	20
BA16153	Lithium, Total	mg/L	0.0000181	0.0154	0.20	0.193	0.194	0.194	0.17 to 0.23	96.5	70 to 130	0.517	20
BA16153	Cadmium, Total	mg/L	0.0000000	0.0001474	0.10	0.0975	0.101	0.0978	0.085 to 0.115	97.5	70 to 130	3.53	20
BA16153	Cobalt, Total	mg/L	-0.0000027	0.0001474	0.10	0.101	0.101	0.102	0.085 to 0.115	101	70 to 130	0.00	20
BA16153	Mercury, Total by CVAA	mg/L	0.0000797	0.0005	0.004	0.00397	0.00396	0.00395	0.0034 to 0.0046	99.2	70 to 130	0.252	20
BA16153	Thallium, Total	mg/L	-0.0000028	0.0001474	0.10	0.102	0.102	0.0997	0.085 to 0.115	102	70 to 130	0.00	20
BA16152	Iron, Dissolved	mg/L	0.000379	0.0176	0.2	0.215	0.213	0.212	0.17 to 0.23	108	70 to 130	0.935	20
BA16153	Molybdenum, Total	mg/L	0.0000033	0.0001474	0.10	0.101	0.100	0.0990	0.085 to 0.115	101	70 to 130	0.995	20
BA16153	Iron, Total	mg/L	0.000112	0.0176	0.2	0.200	0.201	0.201	0.17 to 0.23	100	70 to 130	0.499	20
BA16153	Selenium, Total	mg/L	-0.0000358	0.001	0.10	0.102	0.101	0.108	0.085 to 0.115	102	70 to 130	0.985	20
BA16153	Barium, Total	mg/L	-0.0000093	0.0002	0.10	0.0985	0.0987	0.0984	0.085 to 0.115	98.5	70 to 130	0.203	20
BA16153	Beryllium, Total	mg/L	0.0000282	0.00088	0.10	0.0942	0.0975	0.0993	0.085 to 0.115	94.2	70 to 130	3.44	20
BA16153	Boron, Total	mg/L	0.000356	0.0650254	1.00	0.987	1.00	0.994	0.85 to 1.15	98.7	70 to 130	1.31	20
BA16153	Calcium, Total	mg/L	-0.00445	0.1518	5.00	5.09	5.12	5.12	4.25 to 5.75	102	70 to 130	0.588	20
BA16153	Chromium, Total	mg/L	-0.0000015	0.00044	0.10	0.102	0.103	0.104	0.085 to 0.115	102	70 to 130	0.976	20
BA16153	Potassium, Total	mg/L	0.0110	0.3674	10.0	10.0	10.1	10.4	8.5 to 11.5	100	70 to 130	0.995	20
BA16153	Antimony, Total	mg/L	0.000215	0.001	0.10	0.0963	0.0963	0.0953	0.085 to 0.115	96.3	70 to 130	0.00	20

Comments: Th client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 9/30/2020

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 8/27/20 11:58
Customer ID:
Delivery Date: 8/27/20 15:33

Description: Gorgas Ash Pond - MW-44HO DUP

Laboratory ID Number: BA16152

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA16152	Alkalinity, Total as CaCO3	mg/L					318	50.6	45.0 to 55.0			0.00	10
BA16153	Sulfate	mg/L	-0.277	0.50	20.0	22.2	-0.423	19.8	18 to 22	111	80 to 120	0.00	20
BA16153	Chloride	mg/L	0.0712	0.50	10.0	9.76	0.102	9.87	9 to 11	97.6	80 to 120	0.00	20
BA16152	Solids, Dissolved	mg/L	-2.00	25			434	49.0	40 to 60			0.463	5
BA16153	Fluoride	mg/L	0.00505	0.05	2.50	2.58	0.00855	2.49	2.25 to 2.75	103	80 to 120	0.00	20

Comments: Th client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 9/30/2020

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond Equipment Blank-1

Location Code: WMWGORAPEB
Collected: 8/27/20 13:25
Customer ID:
Submittal Date: 8/27/20 15:33

Laboratory ID Number: BA16153

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	9/8/20 15:00	9/9/20 13:23		1.015	Not Detected	mg/L	0.03	0.1	U
* Calcium, Total	9/8/20 15:00	9/9/20 13:23		1.015	Not Detected	mg/L	0.1	0.5	U
* Iron, Total	9/8/20 15:00	9/9/20 13:23		1.015	Not Detected	mg/L	0.02	0.05	U
* Lithium, Total	9/8/20 15:00	9/9/20 13:23		1.015	Not Detected	mg/L	0.01	0.02	U
* Magnesium, Total	9/8/20 15:00	9/9/20 13:23		1.015	Not Detected	mg/L	0.1	0.5	U
* Sodium, Total	9/8/20 15:00	9/9/20 13:23		1.015	Not Detected	mg/L	0.1	0.5	U
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	8/28/20 09:20	8/28/20 14:12		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	8/28/20 09:20	8/28/20 14:12		1.015	Not Detected	mg/L	0.001	0.005	U
* Barium, Total	8/28/20 09:20	8/28/20 14:12		1.015	Not Detected	mg/L	0.002	0.01	U
* Beryllium, Total	8/28/20 09:20	8/28/20 14:12		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	8/28/20 09:20	8/28/20 14:12		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	8/28/20 09:20	8/28/20 14:12		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	8/28/20 09:20	8/28/20 14:12		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	8/28/20 09:20	8/28/20 14:12		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	8/28/20 09:20	8/28/20 14:12		1.015	Not Detected	mg/L	0.002	0.01	U
* Manganese, Total	8/28/20 09:20	8/28/20 14:12		1.015	Not Detected	mg/L	0.001	0.005	U
* Potassium, Total	8/28/20 09:20	8/28/20 14:12		1.015	Not Detected	mg/L	0.3	2.5	U
* Selenium, Total	8/28/20 09:20	8/28/20 14:12		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	8/28/20 09:20	8/28/20 14:12		1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 245.1	***Analyst: GAS***								
* Mercury, Total by CVAA	9/1/20 12:21	9/2/20 09:33		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2540C	***Analyst: TJW***								
* Solids, Dissolved	8/31/20 15:35	9/3/20 11:35		1	Not Detected	mg/L		25	U
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	8/31/20 11:47	8/31/20 11:47		1	Not Detected	mg/L	0.50	1	U
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	8/31/20 14:16	8/31/20 14:16		1	Not Detected	mg/L	0.06	0.1	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	9/3/20 14:05	9/3/20 14:05		1	Not Detected	mg/L	0.50	1	U

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

Comments:

Reported: 10/1/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORAPEB
Sample Date: 8/27/20 13:25
Customer ID:
Delivery Date: 8/27/20 15:33

Description: Gorgas Ash Pond Equipment Blank-1

Laboratory ID Number: BA16153

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA16153	Sodium, Total	mg/L	-0.000218	0.044	5.00	4.99	5.00	5.02	4.25 to 5.75	99.8	70 to 130	0.200	20
BA16153	Molybdenum, Total	mg/L	0.0000033	0.0001474	0.10	0.101	0.100	0.0990	0.085 to 0.115	101	70 to 130	0.995	20
BA16153	Magnesium, Total	mg/L	-0.000526	0.0462	5.00	5.05	5.07	5.09	4.25 to 5.75	101	70 to 130	0.395	20
BA16153	Manganese, Total	mg/L	0.0000251	0.0001474	0.10	0.103	0.104	0.104	0.085 to 0.115	103	70 to 130	0.966	20
BA16153	Lead, Total	mg/L	0.0000103	0.0001474	0.10	0.105	0.104	0.103	0.085 to 0.115	105	70 to 130	0.957	20
BA16153	Arsenic, Total	mg/L	0.0000016	0.0001474	0.10	0.104	0.104	0.108	0.085 to 0.115	104	70 to 130	0.00	20
BA16153	Lithium, Total	mg/L	0.0000181	0.0154	0.20	0.193	0.194	0.194	0.17 to 0.23	96.5	70 to 130	0.517	20
BA16153	Barium, Total	mg/L	-0.0000093	0.0002	0.10	0.0985	0.0987	0.0984	0.085 to 0.115	98.5	70 to 130	0.203	20
BA16153	Beryllium, Total	mg/L	0.0000282	0.00088	0.10	0.0942	0.0975	0.0993	0.085 to 0.115	94.2	70 to 130	3.44	20
BA16153	Boron, Total	mg/L	0.000356	0.0650254	1.00	0.987	1.00	0.994	0.85 to 1.15	98.7	70 to 130	1.31	20
BA16153	Calcium, Total	mg/L	-0.00445	0.1518	5.00	5.09	5.12	5.12	4.25 to 5.75	102	70 to 130	0.588	20
BA16153	Chromium, Total	mg/L	-0.0000015	0.00044	0.10	0.102	0.103	0.104	0.085 to 0.115	102	70 to 130	0.976	20
BA16153	Potassium, Total	mg/L	0.0110	0.3674	10.0	10.0	10.1	10.4	8.5 to 11.5	100	70 to 130	0.995	20
BA16153	Antimony, Total	mg/L	0.000215	0.001	0.10	0.0963	0.0963	0.0953	0.085 to 0.115	96.3	70 to 130	0.00	20
BA16153	Cadmium, Total	mg/L	0.0000000	0.0001474	0.10	0.0975	0.101	0.0978	0.085 to 0.115	97.5	70 to 130	3.53	20
BA16153	Cobalt, Total	mg/L	-0.0000027	0.0001474	0.10	0.101	0.101	0.102	0.085 to 0.115	101	70 to 130	0.00	20
BA16153	Mercury, Total by CVAA	mg/L	0.0000797	0.0005	0.004	0.00397	0.00396	0.00395	0.0034 to 0.0046	99.2	70 to 130	0.252	20
BA16153	Thallium, Total	mg/L	-0.0000028	0.0001474	0.10	0.102	0.102	0.0997	0.085 to 0.115	102	70 to 130	0.00	20
BA16153	Iron, Total	mg/L	0.000112	0.0176	0.2	0.200	0.201	0.201	0.17 to 0.23	100	70 to 130	0.499	20
BA16153	Selenium, Total	mg/L	-0.0000358	0.001	0.10	0.102	0.101	0.108	0.085 to 0.115	102	70 to 130	0.985	20

Comments:

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

Batch QC Summary

Customer Account: WMWGORAPEB
Sample Date: 8/27/20 13:25
Customer ID:
Delivery Date: 8/27/20 15:33

Description: Gorgas Ash Pond Equipment Blank-1

Laboratory ID Number: BA16153

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA16153	Sulfate	mg/L	-0.277	0.50	20.0	22.2	-0.423	19.8	18 to 22	111	80 to 120	0.00	20
BA16153	Chloride	mg/L	0.0712	0.50	10.0	9.76	0.102	9.87	9 to 11	97.6	80 to 120	0.00	20
BA16152	Solids, Dissolved	mg/L	-2.00	25			434	49.0	40 to 60			0.463	5
BA16153	Fluoride	mg/L	0.00505	0.05	2.50	2.58	0.00855	2.49	2.25 to 2.75	103	80 to 120	0.00	20

Comments:

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

Definitions

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 08/27/2020 15:08

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Site Representative	John Pate	Requested By	Greg Dyer
Collector	Anthony Goggins	Location	Gorgas Ash Pond

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
FB-1	08/27/2020	09:55	4	Field Blank		BA16150
MW-44HO	08/27/2020	11:58	6	Groundwater		BA16151
MW-44HO DUP	08/27/2020	11:58	6	Sample Duplicate		BA16152
EB-1	08/27/2020	13:25	4	Equipment Blank		BA16153

Relinquished By	Received By	Date/Time
		08/27/2020 15:19

SmarTroll ID	7586-41443-5-2
Turbidity ID	5160-26211-1-1
Sample Event	1296

All metals and radiological bottles have pH < 2 ✔

Cooler Temp	0.2 degrees C
Thermometer ID	5408-27568-2-2
pH Strip ID	8129-45506-2-1

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 08/27/2020 15:08

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Site Representative	John Pate	Requested By	Greg Dyer
Collector	Anthony Goggins	Location	Gorgas Ash Pond

Bottles

1	Radium	1 L	3	N/A	N/A	5	N/A	N/A	7	N/A	N/A
2	N/A	N/A	4	N/A	N/A	6	N/A	N/A	8	N/A	N/A

Comments: MS and MSD collected at MW-44HO

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
FB-1	08/27/2020	09:55	1	Field Blank		BA16154
MW-44HO	08/27/2020	11:58	3	Groundwater		BA16155
MW-44HO DUP	08/27/2020	11:58	1	Sample Duplicate		BA16156
EB-1	08/27/2020	13:25	1	Equipment Blank		BA16157

Relinquished By	Received By	Date/Time
		08/27/2020 15:15

SmarTroll ID	7586-41443-5-2
Turbidity ID	5160-26211-1-1
Sample Event	1296

All metals and radiological bottles have pH < 2 ✔

Cooler Temp	N/A
Thermometer ID	N/A
pH Strip ID	8129-45506-2-1

Bottles/Pre-Preserved Bottles are provided by the GTL

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ANALYTICAL REPORT

Eurofins TestAmerica, Pensacola
3355 McLemore Drive
Pensacola, FL 32514
Tel: (850)474-1001

Laboratory Job ID: 400-192723-1
Laboratory Sample Delivery Group: Gorgas Ash Pond 1296
Client Project/Site: CCR Plant Gorgas

For:
Alabama Power General Test Laboratory
744 County Rd 87
GSC #8
Calera, Alabama 35040

Attn: Laura Midkiff

Authorized for release by:
10/7/2020 7:13:18 PM

Cheyenne Whitmire, Project Manager II
(850)471-6222
Cheyenne.Whitmire@Eurofinset.com

LINKS

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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Job ID: 400-192723-1

Laboratory: Eurofins TestAmerica, Pensacola

Narrative

Job Narrative
400-192723-1

RAD

Method 9315: Radium-226 prep batch 160-481469. Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. BA16154 FB-1 (400-192723-1), BA16155 MW-44HO (400-192723-2), BA16155 MW-44HO (400-192723-2[MS]), BA16155 MW-44HO (400-192723-2[MSD]), BA16156 MW-44HO DUP (400-192723-3), BA16157 EB-1 (400-192723-4), (LCS 160-481469/1-A) and (MB 160-481469/23-A)

Method 9320: Radium-228 prep batch 160-481471. Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. BA16154 FB-1 (400-192723-1), BA16155 MW-44HO (400-192723-2), BA16155 MW-44HO (400-192723-2[MS]), BA16155 MW-44HO (400-192723-2[MSD]), BA16156 MW-44HO DUP (400-192723-3), BA16157 EB-1 (400-192723-4), (LCS 160-481471/1-A) and (MB 160-481471/23-A)

Method PrecSep_0: Radium 228 Prep Batch 160-481271. The following samples were prepared at a reduced aliquot to insure sufficient volume remains if needed for analysis: BA16154 FB-1 (400-192723-1), BA16155 MW-44HO (400-192723-2), BA16155 MW-44HO (400-192723-2[MS]), BA16155 MW-44HO (400-192723-2[MSD]), BA16156 MW-44HO DUP (400-192723-3) and BA16157 EB-1 (400-192723-4).

Method PrecSep-21: Radium 226 Prep Batch 160-481469. The following samples were prepared at a reduced aliquot to insure sufficient volume remains if needed for analysis: BA16154 FB-1 (400-192723-1), BA16155 MW-44HO (400-192723-2), BA16155 MW-44HO (400-192723-2[MS]), BA16155 MW-44HO (400-192723-2[MSD]), BA16156 MW-44HO DUP (400-192723-3) and BA16157 EB-1 (400-192723-4).

Method Summary

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-192723-1
SDG: Gorgas Ash Pond 1296

Method	Method Description	Protocol	Laboratory
9315	Radium-226 (GFPC)	SW846	TAL SL
9320	Radium-228 (GFPC)	SW846	TAL SL
Ra226_Ra228	Combined Radium-226 and Radium-228	TAL-STL	TAL SL
PrecSep_0	Preparation, Precipitate Separation	None	TAL SL
PrecSep-21	Preparation, Precipitate Separation (21-Day In-Growth)	None	TAL SL

Protocol References:

None = None

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

TAL-STL = TestAmerica Laboratories, St. Louis, Facility Standard Operating Procedure.

Laboratory References:

TAL SL = Eurofins TestAmerica, St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

Sample Summary

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-192723-1
SDG: Gorgas Ash Pond 1296

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
400-192723-1	BA16154 FB-1	Water	08/27/20 09:55	08/31/20 09:01	
400-192723-2	BA16155 MW-44HO	Water	08/27/20 11:58	08/31/20 09:01	
400-192723-3	BA16156 MW-44HO DUP	Water	08/27/20 11:58	08/31/20 09:01	
400-192723-4	BA16157 EB-1	Water	08/27/20 13:25	08/31/20 09:01	

Client Sample Results

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-192723-1
SDG: Gorgas Ash Pond 1296

Client Sample ID: BA16154 FB-1

Date Collected: 08/27/20 09:55
Date Received: 08/31/20 09:01

Lab Sample ID: 400-192723-1

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.178	U	0.184	0.184	1.00	0.287	pCi/L	09/02/20 18:46	09/25/20 14:22	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*85.9*		*40 - 110*	*09/02/20 18:46*	*09/25/20 14:22*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.536	U	0.413	0.416	1.00	0.651	pCi/L	09/02/20 19:11	09/24/20 11:27	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*85.9*		*40 - 110*	*09/02/20 19:11*	*09/24/20 11:27*	*1*
Y Carrier	*79.6*		*40 - 110*	*09/02/20 19:11*	*09/24/20 11:27*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**0.714**		0.452	0.455	5.00	0.651	pCi/L		09/29/20 20:32	1

Client Sample Results

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-192723-1
SDG: Gorgas Ash Pond 1296

Client Sample ID: BA16155 MW-44HO

Date Collected: 08/27/20 11:58
Date Received: 08/31/20 09:01

Lab Sample ID: 400-192723-2

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0571	U	0.151	0.151	1.00	0.286	pCi/L	09/02/20 18:46	09/25/20 14:23	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*84.7*		*40 - 110*	*09/02/20 18:46*	*09/25/20 14:23*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	**0.741**		0.441	0.446	1.00	0.673	pCi/L	09/02/20 19:11	09/24/20 11:27	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*84.7*		*40 - 110*	*09/02/20 19:11*	*09/24/20 11:27*	*1*
Y Carrier	*82.6*		*40 - 110*	*09/02/20 19:11*	*09/24/20 11:27*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**0.798**		0.466	0.471	5.00	0.673	pCi/L		09/29/20 20:32	1

Client Sample Results

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-192723-1
SDG: Gorgas Ash Pond 1296

Client Sample ID: BA16156 MW-44HO DUP

Lab Sample ID: 400-192723-3

Date Collected: 08/27/20 11:58
Matrix: Water
Date Received: 08/31/20 09:01

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0784	U	0.145	0.145	1.00	0.261	pCi/L	09/02/20 18:46	09/25/20 14:23	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*89.3*		*40 - 110*	*09/02/20 18:46*	*09/25/20 14:23*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.122	U	0.347	0.347	1.00	0.600	pCi/L	09/02/20 19:11	09/24/20 11:28	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*89.3*		*40 - 110*	*09/02/20 19:11*	*09/24/20 11:28*	*1*
Y Carrier	*84.1*		*40 - 110*	*09/02/20 19:11*	*09/24/20 11:28*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.201	U	0.376	0.376	5.00	0.600	pCi/L		09/29/20 20:32	1

Client Sample Results

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-192723-1
SDG: Gorgas Ash Pond 1296

Client Sample ID: BA16157 EB-1

Date Collected: 08/27/20 13:25
Date Received: 08/31/20 09:01

Lab Sample ID: 400-192723-4

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.000	U	0.128	0.128	1.00	0.279	pCi/L	09/02/20 18:46	09/25/20 14:23	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*81.0*		*40 - 110*	*09/02/20 18:46*	*09/25/20 14:23*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.288	U	0.442	0.443	1.00	0.742	pCi/L	09/02/20 19:11	09/24/20 11:28	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*81.0*		*40 - 110*	*09/02/20 19:11*	*09/24/20 11:28*	*1*
Y Carrier	*82.6*		*40 - 110*	*09/02/20 19:11*	*09/24/20 11:28*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.288	U	0.460	0.461	5.00	0.742	pCi/L		09/29/20 20:32	1

Definitions/Glossary

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-192723-1
SDG: Gorgas Ash Pond 1296

Qualifiers

Rad

Qualifier	Qualifier Description
U	Result is less than the sample detection limit.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Lab Chronicle

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-192723-1
SDG: Gorgas Ash Pond 1296

Client Sample ID: BA16154 FB-1 — Lab Sample ID: 400-192723-1

Date Collected: 08/27/20 09:55 — **Matrix: Water**
Date Received: 08/31/20 09:01

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			481469	09/02/20 18:46	AVB	TAL SL
Total/NA	Analysis	9315		1	483637	09/25/20 14:22	SCB	TAL SL
Total/NA	Prep	PrecSep_0			481471	09/02/20 19:11	AVB	TAL SL
Total/NA	Analysis	9320		1	483516	09/24/20 11:27	SCB	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	484265	09/29/20 20:32	GRW	TAL SL

Client Sample ID: BA16155 MW-44HO — Lab Sample ID: 400-192723-2

Date Collected: 08/27/20 11:58 — **Matrix: Water**
Date Received: 08/31/20 09:01

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			481469	09/02/20 18:46	AVB	TAL SL
Total/NA	Analysis	9315		1	483637	09/25/20 14:23	SCB	TAL SL
Total/NA	Prep	PrecSep_0			481471	09/02/20 19:11	AVB	TAL SL
Total/NA	Analysis	9320		1	483516	09/24/20 11:27	SCB	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	484265	09/29/20 20:32	GRW	TAL SL

Client Sample ID: BA16156 MW-44HO DUP — Lab Sample ID: 400-192723-3

Date Collected: 08/27/20 11:58 — **Matrix: Water**
Date Received: 08/31/20 09:01

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			481469	09/02/20 18:46	AVB	TAL SL
Total/NA	Analysis	9315		1	483637	09/25/20 14:23	SCB	TAL SL
Total/NA	Prep	PrecSep_0			481471	09/02/20 19:11	AVB	TAL SL
Total/NA	Analysis	9320		1	483516	09/24/20 11:28	SCB	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	484265	09/29/20 20:32	GRW	TAL SL

Client Sample ID: BA16157 EB-1 — Lab Sample ID: 400-192723-4

Date Collected: 08/27/20 13:25 — **Matrix: Water**
Date Received: 08/31/20 09:01

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			481469	09/02/20 18:46	AVB	TAL SL
Total/NA	Analysis	9315		1	483637	09/25/20 14:23	SCB	TAL SL
Total/NA	Prep	PrecSep_0			481471	09/02/20 19:11	AVB	TAL SL
Total/NA	Analysis	9320		1	483516	09/24/20 11:28	SCB	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	484265	09/29/20 20:32	GRW	TAL SL

Laboratory References:

TAL SL = Eurofins TestAmerica, St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

QC Association Summary

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-192723-1
SDG: Gorgas Ash Pond 1296

Rad

Prep Batch: 481469

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-192723-1	BA16154 FB-1	Total/NA	Water	PrecSep-21	
400-192723-2	BA16155 MW-44HO	Total/NA	Water	PrecSep-21	
400-192723-3	BA16156 MW-44HO DUP	Total/NA	Water	PrecSep-21	
400-192723-4	BA16157 EB-1	Total/NA	Water	PrecSep-21	
MB 160-481469/23-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-481469/1-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
400-192723-2 MS	BA16155 MW-44HO	Total/NA	Water	PrecSep-21	
400-192723-2 MSD	BA16155 MW-44HO	Total/NA	Water	PrecSep-21	

Prep Batch: 481471

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-192723-1	BA16154 FB-1	Total/NA	Water	PrecSep_0	
400-192723-2	BA16155 MW-44HO	Total/NA	Water	PrecSep_0	
400-192723-3	BA16156 MW-44HO DUP	Total/NA	Water	PrecSep_0	
400-192723-4	BA16157 EB-1	Total/NA	Water	PrecSep_0	
MB 160-481471/23-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-481471/1-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
400-192723-2 MS	BA16155 MW-44HO	Total/NA	Water	PrecSep_0	
400-192723-2 MSD	BA16155 MW-44HO	Total/NA	Water	PrecSep_0	

QC Sample Results

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-192723-1
SDG: Gorgas Ash Pond 1296

Method: 9315 - Radium-226 (GFPC)

Lab Sample ID: MB 160-481469/23-A
Matrix: Water
Analysis Batch: 483637

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 481469

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.004751	U	0.132	0.132	1.00	0.285	pCi/L	09/02/20 18:46	09/25/20 14:23	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*78.6*		*40 - 110*	*09/02/20 18:46*	*09/25/20 14:23*	*1*

Lab Sample ID: LCS 160-481469/1-A
Matrix: Water
Analysis Batch: 483637

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 481469

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-226			15.1	15.33		1.81	1.00	0.248	pCi/L	101	75 - 125		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*89.9*		*40 - 110*

Lab Sample ID: 400-192723-2 MS
Matrix: Water
Analysis Batch: 483637

Client Sample ID: BA16155 MW-44HO
Prep Type: Total/NA
Prep Batch: 481469

Analyte	Sample Result	Sample Qual	Spike Added	MS Result	MS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-226	0.0571	U	15.1	13.90		1.65	1.00	0.239	pCi/L	92	75 - 138		

Carrier	*MS %Yield*	*MS Qualifier*	*Limits*
Ba Carrier	*90.8*		*40 - 110*

Lab Sample ID: 400-192723-2 MSD
Matrix: Water
Analysis Batch: 483637

Client Sample ID: BA16155 MW-44HO
Prep Type: Total/NA
Prep Batch: 481469

Analyte	Sample Result	Sample Qual	Spike Added	MSD Result	MSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits	RER	RER Limit
Radium-226	0.0571	U	15.1	13.74		1.66	1.00	0.264	pCi/L	90	75 - 138	0.05	1

Carrier	*MSD %Yield*	*MSD Qualifier*	*Limits*
Ba Carrier	*82.9*		*40 - 110*

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-481471/23-A
Matrix: Water
Analysis Batch: 483509

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 481471

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.4063	U	0.395	0.396	1.00	0.639	pCi/L	09/02/20 19:11	09/24/20 11:30	1

Method: 9320 - Radium-228 (GFPC) (Continued)

Carrier	MB %Yield	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	78.6		40 - 110	09/02/20 19:11	09/24/20 11:30	1
Y Carrier	84.5		40 - 110	09/02/20 19:11	09/24/20 11:30	1

Lab Sample ID: LCS 160-481471/1-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 483512 — **Prep Batch: 481471**

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-228			10.4	11.08		1.39	1.00	0.684	pCi/L	107	75 - 125		

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	89.9		40 - 110
Y Carrier	77.8		40 - 110

Lab Sample ID: 400-192723-2 MS — **Client Sample ID: BA16155 MW-44HO**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 483516 — **Prep Batch: 481471**

Analyte	Sample Result	Sample Qual	Spike Added	MS Result	MS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-228	0.741		10.4	10.36		1.29	1.00	0.593	pCi/L	93	45 - 150		

Carrier	MS %Yield	MS Qualifier	Limits
Ba Carrier	90.8		40 - 110
Y Carrier	83.0		40 - 110

Lab Sample ID: 400-192723-2 MSD — **Client Sample ID: BA16155 MW-44HO**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 483516 — **Prep Batch: 481471**

Analyte	Sample Result	Sample Qual	Spike Added	MSD Result	MSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits	RER	RER Limit
Radium-228	0.741		10.4	10.13		1.31	1.00	0.685	pCi/L	90	45 - 150	0.09	1

Carrier	MSD %Yield	MSD Qualifier	Limits
Ba Carrier	82.9		40 - 110
Y Carrier	83.0		40 - 110

TestAmerica Pensacola
3355 McLemore Drive
Pensacola, FL 32514
Phone (850) 474-1001 Fax (850) 478-2671

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler: Anthony Goggins	Lab PM: Whitmire, Cheyenne R	Carrier Tracking No(s):	COC No: 400-56525-24537.1
Client Contact: Laura Midkif	Phone:	E-Mail: cheyenne.whitmire@testamericainc.com	State of Origin: Alabama	Page: Page 1 of 1
Company: Alabama Power General Test Laboratory		Accreditations Required (See note):		Job #:
Address: 744 County Rd 87 GSC#8	Due Date Requested:			
City: Calera	TAT Requested (days): Routine			
State, Zip: AL, 35040				
Phone: 205-664-6197	PO #:			
Email: lbmidkif@southernco.com	WO #:			
Project Name: CCR	Project #: 40007143			
Site: Gorgas Ash Pond 1296	SSOW#:			

Analysis Requested

400-192723 COC

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (Wwater, Ssolid, Owaste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	SM 4500 F_C	SM 4500 Cl_E	SM 4500 SO4_E	9315_Ra226, 9320_Ra228, Ra226Ra228_GFPC	Total Number of containers	Special Instructions/Note:
			Preservation Code:									
BA16154	8/27/20	09:55	G	Water						X	1	FB-1 (Field Blank)
BA16155	8/27/20	11:58	G	Water		X				X	3	MW-44HO
BA16156	8/27/20	11:58	G	Water						X	1	MW-44HO DUP (Sample Duplocate)
BA16157	8/27/20	13:25	G	Water						X	1	EB-1 (Equipment Blank)

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to TestAmerica Laboratories, Inc.

Possible Hazard Identification
Unconfirmed

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*

Deliverable Requested: I, II, III, IV, Other (specify) 44048 Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:		
Relinquished by: Laura Midkiff	Date/Time: 08/27/2020 15:45	Company: Water APC	Received by: [illegible]	Date/Time: 8-31-20 9a	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Custody Seal No.: Cooler Temperature(s) °C and Other Remarks: 27.1°C IR7

Ver: 09/20/2016

Login Sample Receipt Checklist

Client: Alabama Power General Test Laboratory

Job Number: 400-192723-1
SDG Number: Gorgas Ash Pond 1296

Login Number: 192723
List Number: 1
Creator: Hinrichsen, Megan E

List Source: Eurofins TestAmerica, Pensacola

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	N/A	Thermal preservation not required.
Cooler Temperature is acceptable.	N/A	
Cooler Temperature is recorded.	True	27.1°C IR-7
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Alabama Power General Test Laboratory

Job Number: 400-192723-1
SDG Number: Gorgas Ash Pond 1296

Login Number: 192723
List Number: 2
Creator: Boyd, Jacob C

List Source: Eurofins TestAmerica, St. Louis
List Creation: 09/01/20 03:01 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	N/A	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Accreditation/Certification Summary

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-192723-1
SDG: Gorgas Ash Pond 1296

Laboratory: Eurofins TestAmerica, St. Louis

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	20-001	05-06-22
ANAB	Dept. of Defense ELAP	L2305	04-06-22
ANAB	Dept. of Energy	L2305.01	04-06-22
ANAB	ISO/IEC 17025	L2305	04-06-22
Arizona	State	AZ0813	12-08-20
California	Los Angeles County Sanitation Districts	10259	06-30-21
California	State	2886	06-30-21
Connecticut	State	PH-0241	03-31-21
Florida	NELAP	E87689	06-30-21
HI - RadChem Recognition	State	n/a	06-30-21
Illinois	NELAP	004553	11-30-20
Kansas	NELAP	E-10236	10-31-20
Kentucky (DW)	State	KY90125	12-31-20
Louisiana	NELAP	04080	07-01-21
Louisiana (DW)	State	LA011	12-31-20
Maryland	State	310	09-30-21
MI - RadChem Recognition	State	9005	06-30-21
Missouri	State	780	06-30-22
Nevada	State	MO000542020-1	07-31-21
New Jersey	NELAP	MO002	06-30-21
New York	NELAP	11616	04-01-21
North Dakota	State	R-207	06-30-21
NRC	NRC	24-24817-01	12-31-22
Oklahoma	State	9997	08-31-21
Oregon	NELAP	4157	09-01-21
Pennsylvania	NELAP	68-00540	02-28-21
Texas	NELAP	T104704193-19-13	07-31-21
US Fish & Wildlife	US Federal Programs	058448	07-31-21
USDA	US Federal Programs	P330-17-00028	03-11-23
Utah	NELAP	MO000542019-11	07-31-21
Virginia	NELAP	10310	06-14-21
Virginia	NELAP	10310	06-14-21
Washington	State	C592	08-30-21
West Virginia DEP	State	381	10-31-21

Alabama Power Company
Plant Gorgas Ash Pond

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-44HO	8/27/2020 10:04	Conductivity	879.06	uS/cm
GS-AP-MW-44HO	8/27/2020 10:04	DO	2.48	mg/L
GS-AP-MW-44HO	8/27/2020 10:04	Depth to Water Detail	144.09	ft
GS-AP-MW-44HO	8/27/2020 10:04	Oxidation Reduction Potention	-139.78	mv
GS-AP-MW-44HO	8/27/2020 10:04	pH	8.79	pH
GS-AP-MW-44HO	8/27/2020 10:04	Temperature	22.28	C
GS-AP-MW-44HO	8/27/2020 10:04	Turbidity	48.4	NTU
GS-AP-MW-44HO	8/27/2020 10:09	Conductivity	924.26	uS/cm
GS-AP-MW-44HO	8/27/2020 10:09	DO	1.83	mg/L
GS-AP-MW-44HO	8/27/2020 10:09	Depth to Water Detail	144.09	ft
GS-AP-MW-44HO	8/27/2020 10:09	Oxidation Reduction Potention	-157.81	mv
GS-AP-MW-44HO	8/27/2020 10:09	pH	8.8	pH
GS-AP-MW-44HO	8/27/2020 10:09	Temperature	22.07	C
GS-AP-MW-44HO	8/27/2020 10:09	Turbidity	40	NTU
GS-AP-MW-44HO	8/27/2020 10:14	Conductivity	946.32	uS/cm
GS-AP-MW-44HO	8/27/2020 10:14	DO	1.57	mg/L
GS-AP-MW-44HO	8/27/2020 10:14	Depth to Water Detail	144.9	ft
GS-AP-MW-44HO	8/27/2020 10:14	Oxidation Reduction Potention	-165.66	mv
GS-AP-MW-44HO	8/27/2020 10:14	pH	8.78	pH
GS-AP-MW-44HO	8/27/2020 10:14	Temperature	21.93	C
GS-AP-MW-44HO	8/27/2020 10:14	Turbidity	34.8	NTU
GS-AP-MW-44HO	8/27/2020 10:19	Conductivity	990.54	uS/cm
GS-AP-MW-44HO	8/27/2020 10:19	DO	1.37	mg/L
GS-AP-MW-44HO	8/27/2020 10:19	Depth to Water Detail	145.45	ft
GS-AP-MW-44HO	8/27/2020 10:19	Oxidation Reduction Potention	-172.07	mv
GS-AP-MW-44HO	8/27/2020 10:19	pH	8.78	pH
GS-AP-MW-44HO	8/27/2020 10:19	Temperature	21.83	C
GS-AP-MW-44HO	8/27/2020 10:19	Turbidity	32.1	NTU
GS-AP-MW-44HO	8/27/2020 10:24	Conductivity	1009.78	uS/cm
GS-AP-MW-44HO	8/27/2020 10:24	DO	1.29	mg/L
GS-AP-MW-44HO	8/27/2020 10:24	Depth to Water Detail	145.68	ft
GS-AP-MW-44HO	8/27/2020 10:24	Oxidation Reduction Potention	-175.35	mv
GS-AP-MW-44HO	8/27/2020 10:24	pH	8.78	pH
GS-AP-MW-44HO	8/27/2020 10:24	Temperature	21.85	C
GS-AP-MW-44HO	8/27/2020 10:24	Turbidity	31.1	NTU
GS-AP-MW-44HO	8/27/2020 10:29	Conductivity	1027.17	uS/cm
GS-AP-MW-44HO	8/27/2020 10:29	DO	1.22	mg/L
GS-AP-MW-44HO	8/27/2020 10:29	Depth to Water Detail	145.98	ft
GS-AP-MW-44HO	8/27/2020 10:29	Oxidation Reduction Potention	-177.79	mv
GS-AP-MW-44HO	8/27/2020 10:29	pH	8.77	pH
GS-AP-MW-44HO	8/27/2020 10:29	Temperature	21.82	C
GS-AP-MW-44HO	8/27/2020 10:29	Turbidity	30.6	NTU
GS-AP-MW-44HO	8/27/2020 10:34	Conductivity	1046.86	uS/cm
GS-AP-MW-44HO	8/27/2020 10:34	DO	1.14	mg/L
GS-AP-MW-44HO	8/27/2020 10:34	Depth to Water Detail	146.32	ft
GS-AP-MW-44HO	8/27/2020 10:34	Oxidation Reduction Potention	-179.95	mv

Alabama Power Company
Plant Gorgas Ash Pond

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-44HO	8/27/2020 10:34	pH	8.77	pH
GS-AP-MW-44HO	8/27/2020 10:34	Temperature	21.75	C
GS-AP-MW-44HO	8/27/2020 10:34	Turbidity	27.8	NTU
GS-AP-MW-44HO	8/27/2020 10:39	Conductivity	1043	uS/cm
GS-AP-MW-44HO	8/27/2020 10:39	DO	1.13	mg/L
GS-AP-MW-44HO	8/27/2020 10:39	Depth to Water Detail	146.65	ft
GS-AP-MW-44HO	8/27/2020 10:39	Oxidation Reduction Potention	-181.09	mv
GS-AP-MW-44HO	8/27/2020 10:39	pH	8.77	pH
GS-AP-MW-44HO	8/27/2020 10:39	Temperature	21.91	C
GS-AP-MW-44HO	8/27/2020 10:39	Turbidity	25.8	NTU
GS-AP-MW-44HO	8/27/2020 10:44	Conductivity	1037.63	uS/cm
GS-AP-MW-44HO	8/27/2020 10:44	DO	1.07	mg/L
GS-AP-MW-44HO	8/27/2020 10:44	Depth to Water Detail	146.95	ft
GS-AP-MW-44HO	8/27/2020 10:44	Oxidation Reduction Potention	-183.21	mv
GS-AP-MW-44HO	8/27/2020 10:44	pH	8.77	pH
GS-AP-MW-44HO	8/27/2020 10:44	Temperature	21.69	C
GS-AP-MW-44HO	8/27/2020 10:44	Turbidity	22.8	NTU
GS-AP-MW-44HO	8/27/2020 10:49	Conductivity	1013.37	uS/cm
GS-AP-MW-44HO	8/27/2020 10:49	DO	1.03	mg/L
GS-AP-MW-44HO	8/27/2020 10:49	Depth to Water Detail	147.21	ft
GS-AP-MW-44HO	8/27/2020 10:49	Oxidation Reduction Potention	-185.03	mv
GS-AP-MW-44HO	8/27/2020 10:49	pH	8.76	pH
GS-AP-MW-44HO	8/27/2020 10:49	Temperature	21.46	C
GS-AP-MW-44HO	8/27/2020 10:49	Turbidity	22.3	NTU
GS-AP-MW-44HO	8/27/2020 10:54	Conductivity	967.88	uS/cm
GS-AP-MW-44HO	8/27/2020 10:54	DO	0.98	mg/L
GS-AP-MW-44HO	8/27/2020 10:54	Depth to Water Detail	147.6	ft
GS-AP-MW-44HO	8/27/2020 10:54	Oxidation Reduction Potention	-188.62	mv
GS-AP-MW-44HO	8/27/2020 10:54	pH	8.79	pH
GS-AP-MW-44HO	8/27/2020 10:54	Temperature	21.32	C
GS-AP-MW-44HO	8/27/2020 10:54	Turbidity	17.3	NTU
GS-AP-MW-44HO	8/27/2020 10:59	Conductivity	912.93	uS/cm
GS-AP-MW-44HO	8/27/2020 10:59	DO	0.98	mg/L
GS-AP-MW-44HO	8/27/2020 10:59	Depth to Water Detail	147.92	ft
GS-AP-MW-44HO	8/27/2020 10:59	Oxidation Reduction Potention	-192.2	mv
GS-AP-MW-44HO	8/27/2020 10:59	pH	8.83	pH
GS-AP-MW-44HO	8/27/2020 10:59	Temperature	21.32	C
GS-AP-MW-44HO	8/27/2020 10:59	Turbidity	12.9	NTU
GS-AP-MW-44HO	8/27/2020 11:04	Conductivity	869.5	uS/cm
GS-AP-MW-44HO	8/27/2020 11:04	DO	0.96	mg/L
GS-AP-MW-44HO	8/27/2020 11:04	Depth to Water Detail	148.1	ft
GS-AP-MW-44HO	8/27/2020 11:04	Oxidation Reduction Potention	-194.56	mv
GS-AP-MW-44HO	8/27/2020 11:04	pH	8.84	pH
GS-AP-MW-44HO	8/27/2020 11:04	Temperature	21.47	C
GS-AP-MW-44HO	8/27/2020 11:04	Turbidity	11.3	NTU
GS-AP-MW-44HO	8/27/2020 11:09	Conductivity	835.58	uS/cm

Alabama Power Company
Plant Gorgas Ash Pond

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-44HO	8/27/2020 11:09	DO	0.94	mg/L
GS-AP-MW-44HO	8/27/2020 11:09	Depth to Water Detail	148.45	ft
GS-AP-MW-44HO	8/27/2020 11:09	Oxidation Reduction Potention	-195.74	mv
GS-AP-MW-44HO	8/27/2020 11:09	pH	8.86	pH
GS-AP-MW-44HO	8/27/2020 11:09	Temperature	21.31	C
GS-AP-MW-44HO	8/27/2020 11:09	Turbidity	11.28	NTU
GS-AP-MW-44HO	8/27/2020 11:14	Conductivity	809.32	uS/cm
GS-AP-MW-44HO	8/27/2020 11:14	DO	0.89	mg/L
GS-AP-MW-44HO	8/27/2020 11:14	Depth to Water Detail	148.66	ft
GS-AP-MW-44HO	8/27/2020 11:14	Oxidation Reduction Potention	-198.27	mv
GS-AP-MW-44HO	8/27/2020 11:14	pH	8.87	pH
GS-AP-MW-44HO	8/27/2020 11:14	Temperature	21.18	C
GS-AP-MW-44HO	8/27/2020 11:14	Turbidity	11.14	NTU
GS-AP-MW-44HO	8/27/2020 11:19	Conductivity	795.06	uS/cm
GS-AP-MW-44HO	8/27/2020 11:19	DO	0.87	mg/L
GS-AP-MW-44HO	8/27/2020 11:19	Depth to Water Detail	148.93	ft
GS-AP-MW-44HO	8/27/2020 11:19	Oxidation Reduction Potention	-199.94	mv
GS-AP-MW-44HO	8/27/2020 11:19	pH	8.87	pH
GS-AP-MW-44HO	8/27/2020 11:19	Temperature	21.61	C
GS-AP-MW-44HO	8/27/2020 11:19	Turbidity	10.05	NTU
GS-AP-MW-44HO	8/27/2020 11:24	Conductivity	780.31	uS/cm
GS-AP-MW-44HO	8/27/2020 11:24	DO	0.86	mg/L
GS-AP-MW-44HO	8/27/2020 11:24	Depth to Water Detail	149.27	ft
GS-AP-MW-44HO	8/27/2020 11:24	Oxidation Reduction Potention	-201.36	mv
GS-AP-MW-44HO	8/27/2020 11:24	pH	8.88	pH
GS-AP-MW-44HO	8/27/2020 11:24	Temperature	21.55	C
GS-AP-MW-44HO	8/27/2020 11:24	Turbidity	10.22	NTU
GS-AP-MW-44HO	8/27/2020 11:29	Conductivity	769.29	uS/cm
GS-AP-MW-44HO	8/27/2020 11:29	DO	0.88	mg/L
GS-AP-MW-44HO	8/27/2020 11:29	Depth to Water Detail	149.43	ft
GS-AP-MW-44HO	8/27/2020 11:29	Oxidation Reduction Potention	-199.97	mv
GS-AP-MW-44HO	8/27/2020 11:29	pH	8.85	pH
GS-AP-MW-44HO	8/27/2020 11:29	Temperature	21.44	C
GS-AP-MW-44HO	8/27/2020 11:29	Turbidity	11.01	NTU
GS-AP-MW-44HO	8/27/2020 11:34	Conductivity	754.04	uS/cm
GS-AP-MW-44HO	8/27/2020 11:34	DO	0.88	mg/L
GS-AP-MW-44HO	8/27/2020 11:34	Depth to Water Detail	149.52	ft
GS-AP-MW-44HO	8/27/2020 11:34	Oxidation Reduction Potention	-200.94	mv
GS-AP-MW-44HO	8/27/2020 11:34	pH	8.86	pH
GS-AP-MW-44HO	8/27/2020 11:34	Temperature	21.74	C
GS-AP-MW-44HO	8/27/2020 11:34	Turbidity	9.63	NTU
GS-AP-MW-44HO	8/27/2020 11:39	Conductivity	746.73	uS/cm
GS-AP-MW-44HO	8/27/2020 11:39	DO	0.87	mg/L
GS-AP-MW-44HO	8/27/2020 11:39	Depth to Water Detail	149.75	ft
GS-AP-MW-44HO	8/27/2020 11:39	Oxidation Reduction Potention	-202.05	mv
GS-AP-MW-44HO	8/27/2020 11:39	pH	8.88	pH

Alabama Power Company
Plant Gorgas Ash Pond

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-44HO	8/27/2020 11:39	Temperature	21.6	C
GS-AP-MW-44HO	8/27/2020 11:39	Turbidity	9.4	NTU
GS-AP-MW-44HO	8/27/2020 11:44	Conductivity	737.88	uS/cm
GS-AP-MW-44HO	8/27/2020 11:44	DO	0.87	mg/L
GS-AP-MW-44HO	8/27/2020 11:44	Depth to Water Detail	149.94	ft
GS-AP-MW-44HO	8/27/2020 11:44	Oxidation Reduction Potention	-203.93	mv
GS-AP-MW-44HO	8/27/2020 11:44	pH	8.89	pH
GS-AP-MW-44HO	8/27/2020 11:44	Temperature	21.7	C
GS-AP-MW-44HO	8/27/2020 11:44	Turbidity	9.44	NTU
GS-AP-MW-44HO	8/27/2020 11:49	Conductivity	737.42	uS/cm
GS-AP-MW-44HO	8/27/2020 11:49	DO	0.86	mg/L
GS-AP-MW-44HO	8/27/2020 11:49	Depth to Water Detail	150.06	ft
GS-AP-MW-44HO	8/27/2020 11:49	Oxidation Reduction Potention	-203.64	mv
GS-AP-MW-44HO	8/27/2020 11:49	pH	8.89	pH
GS-AP-MW-44HO	8/27/2020 11:49	Temperature	21.81	C
GS-AP-MW-44HO	8/27/2020 11:49	Turbidity	8.34	NTU
GS-AP-MW-44HO	8/27/2020 11:54	Conductivity	733.57	uS/cm
GS-AP-MW-44HO	8/27/2020 11:54	DO	0.89	mg/L
GS-AP-MW-44HO	8/27/2020 11:54	Depth to Water Detail	150.2	ft
GS-AP-MW-44HO	8/27/2020 11:54	Oxidation Reduction Potention	-203.89	mv
GS-AP-MW-44HO	8/27/2020 11:54	pH	8.9	pH
GS-AP-MW-44HO	8/27/2020 11:54	Temperature	21.73	C
GS-AP-MW-44HO	8/27/2020 11:54	Turbidity	7.87	NTU

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 Ash Pond

2020 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).

Turbidity levels less than 10 NTU were not able to be achieved after extended pumping for wells MW-7, MW-12V & MW-26H. A complete sample set for totals analysis was collected followed by a field filtered set for dissolved analysis. Matrix interferences in the groundwater caused erratic and unreliable turbidity readings. These readings were recorded as >10 NTU as an estimation. The below qualifier was used for MW-7, MW-12V & MW-26H turbidity readings:

- F – Water Field Group (WFG) qualifier; see comments for more information

Due to low yield, wells MW-18V and MW-32H were sampled using the Minimal Purge Method, as defined in the SAP.

Discharge water from MW-34HO had a black tint with tiny black particles prior to sampling.

Per customer request, APC EA WFS will, from this event forward, change the well nomenclature of MW-43HO to MW-43H.

All pH field readings, except for the final reading, for well MW-16S were qualified due to pH readings falling outside of the bracketed calibration range. The below qualifier was used:

- Q – Estimated reported value exceeded calibration range

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 : WMWGORAP_1303

Project/Site : Gorgas Ash Pond
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 03, 2020

Dear Dustin Brooks,

Enclosed are the analytical results for sample(s) received by the laboratory between September 18, 2020 and September 24, 2020. 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: 2020.11.03 13:02:00 -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: 2020.11.03 16:17:56 -06'00'

NELAP ACCREDITED TNI LABORATORY

REPORT OF LABORATORY ANALYSIS

This Certificate states the physical and/or chemical characteristics of the sample as submitted. This document shall not be reproduced, except in full, without written consent from Alabama Power's General Test Laboratory.

Alabama Power 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 Ash Pond

WMWGORAP_1303

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
BA17551	683002	WMWGORAP_1303
BA17552	683002	WMWGORAP_1303
BA17554	683002	WMWGORAP_1303
BA17555	683002	WMWGORAP_1303
BA17556	683002	WMWGORAP_1303
BA17557	683002	WMWGORAP_1303
BA17558	683002	WMWGORAP_1303
BA17559	683002	WMWGORAP_1303
BA17560	683002	WMWGORAP_1303
BA17561	683002	WMWGORAP_1303
BA17562	683003	WMWGORAP_1303
BA17563	683003	WMWGORAP_1303
BA17564	683003	WMWGORAP_1303
BA17565	683003	WMWGORAP_1303
BA17776	684128	WMWGORAP_1303
BA17777	684128	WMWGORAP_1303
BA17778	684128	WMWGORAP_1303
BA17779	684128	WMWGORAP_1303
BA17780	684128	WMWGORAP_1303
BA17781	684128	WMWGORAP_1303
BA17782	684128	WMWGORAP_1303
BA17783	684128	WMWGORAP_1303
BA17784	684128	WMWGORAP_1303
BA17785	684128	WMWGORAP_1303
BA17786	684129	WMWGORAP_1303
BA17787	684129	WMWGORAP_1303
BA17788	684129	WMWGORAP_1303
BA17789	684129	WMWGORAP_1303
BA17790	684129	WMWGORAP_1303
BA17791	684129	WMWGORAP_1303
BA17792	684129	WMWGORAP_1303

BA17793	684129	WMWGORAP_1303
BA17794	684129	WMWGORAP_1303
BA17795	684129	WMWGORAP_1303
BA17797	684130	WMWGORAP_1303
BA17798	684130	WMWGORAP_1303
BA17898	684130	WMWGORAP_1303
BA17899	684130	WMWGORAP_1303
BA17900	684130	WMWGORAP_1303
BA17902	684130	WMWGORAP_1303
BA17903	684130	WMWGORAP_1303
BA17904	684130	WMWGORAP_1303
BA17905	684130	WMWGORAP_1303
BA17906	684130	WMWGORAP_1303
BA17907	684131	WMWGORAP_1303
BA17908	684131	WMWGORAP_1303
BA17909	684131	WMWGORAP_1303

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:
  - BA17561 Sodium MS/MSD spike level was less than 30% of sample concentration.
  - BA17785 Sodium MS/MSD spike level was less than 30% of sample concentration.
  - BA17906 Calcium MS/MSD spike level was less than 30% of sample concentration.
  - BA17909 Calcium and Sodium MS/MSD spike levels were less than 30% of sample concentrations.
- A matrix spike and matrix spike duplicate were digested and analyzed with each ICP batch. All acceptance criteria for precision were met.

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

Sample ID	Analyte	Dilution Factor
BA17551	Sodium	10.15
BA17552	Sodium, Iron	10.15
BA17554	Calcium	10.15
BA17555	Calcium	10.15
BA17556	Calcium	10.15
BA17557	Calcium, Iron	20.3
BA17558	Calcium	10.15
BA17559	Calcium	10.15
BA17561	Sodium	10.15
BA17562	Sodium	10.15
BA17563	Sodium	10.15
BA17564	Sodium	10.15
BA17565	Sodium	10.15
BA17776	Sodium	10.15
BA17777	Sodium	10.15
BA17779	Sodium	10.15
BA17780	Sodium	10.15
BA17781	Sodium	10.15
BA17782	Sodium	10.15
BA17783	Sodium	10.15

BA17784	Iron, Sodium	10.15
BA17785	Iron, Sodium	10.15
BA17786	Sodium	10.15
BA17788	Sodium	10.15
BA17790	Calcium, Magnesium, Iron	10.15
BA17791	Calcium, Magnesium	10.15
BA17792	Sodium	10.15
BA17793	Calcium, Sodium	10.15
BA17795	Iron, Sodium	10.15
BA17797	Calcium, Sodium, Magnesium	10.15
BA17798	Calcium	10.15
BA17898	Sodium	10.15
BA17899	Sodium	10.15
BA17900	Calcium	10.15
BA17902	Calcium	10.15
BA17903	Sodium	10.15
BA17906	Sodium	10.15
BA17907	Sodium	10.15
BA17908	Sodium	10.15
BA17909	Calcium & Sodium	10.15 & 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 Ash Pond

WMWGORAP_1303

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
BA17551	683125	WMWGORAP_1303
BA17552	683125	WMWGORAP_1303
BA17553	683125	WMWGORAP_1303
BA17554	683125	WMWGORAP_1303
BA17555	683125	WMWGORAP_1303
BA17556	683125	WMWGORAP_1303
BA17557	683125	WMWGORAP_1303
BA17558	683125	WMWGORAP_1303
BA17559	683125	WMWGORAP_1303
BA17561	683125	WMWGORAP_1303
BA17562	683126	WMWGORAP_1303
BA17563	683126	WMWGORAP_1303
BA17564	683126	WMWGORAP_1303
BA17565	683126	WMWGORAP_1303
BA17776	683831	WMWGORAP_1303
BA17777	683831	WMWGORAP_1303
BA17779	683831	WMWGORAP_1303
BA17780	683831	WMWGORAP_1303
BA17781	683831	WMWGORAP_1303
BA17782	683831	WMWGORAP_1303
BA17783	683831	WMWGORAP_1303
BA17784	683831	WMWGORAP_1303
BA17785	683831	WMWGORAP_1303
BA17786	683831	WMWGORAP_1303
BA17788	683832	WMWGORAP_1303
BA17789	683832	WMWGORAP_1303
BA17790	683832	WMWGORAP_1303
BA17791	683832	WMWGORAP_1303
BA17792	683832	WMWGORAP_1303
BA17793	683832	WMWGORAP_1303
BA17794	683832	WMWGORAP_1303

BA17795	683832	WMWGORAP_1303
BA17796	683832	WMWGORAP_1303
BA17797	683832	WMWGORAP_1303
BA17798	683833	WMWGORAP_1303
BA17898	683833	WMWGORAP_1303
BA17899	683833	WMWGORAP_1303
BA17900	683833	WMWGORAP_1303
BA17901	683833	WMWGORAP_1303
BA17902	683833	WMWGORAP_1303
BA17903	683833	WMWGORAP_1303
BA17906	683833	WMWGORAP_1303
BA17907	683833	WMWGORAP_1303
BA17908	683833	WMWGORAP_1303
BA17909	683834	WMWGORAP_1303

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:
    - Batch #683125 Sodium MS/MSD spike level was less than 30% of the sample concentration.
    - Batch #683832 Magnesium MS/MSD spike level was less than 30% of the sample concentration.
- 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
BA17553	Sodium	101.5
BA17557	Iron	101.5
BA17784	Iron	10.15
BA17785	Iron	10.15
BA17796	Sodium	10.15

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

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

Case Narrative

Alabama Power

Total Metals ICPMS

Gorgas Ash Pond

WMWGORAP_1303

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
BA17551	683900	WMWGORAP_1303
BA17552	683900	WMWGORAP_1303
BA17554	683900	WMWGORAP_1303
BA17555	683900	WMWGORAP_1303
BA17556	683900	WMWGORAP_1303
BA17557	683900	WMWGORAP_1303
BA17558	683900	WMWGORAP_1303
BA17559	683900	WMWGORAP_1303
BA17560	683900	WMWGORAP_1303
BA17561	683900	WMWGORAP_1303
BA17562	683901	WMWGORAP_1303
BA17563	683901	WMWGORAP_1303
BA17564	683901	WMWGORAP_1303
BA17565	683901	WMWGORAP_1303
BA17776	683901	WMWGORAP_1303
BA17777	683901	WMWGORAP_1303
BA17778	683901	WMWGORAP_1303
BA17779	683901	WMWGORAP_1303
BA17780	683901	WMWGORAP_1303
BA17781	683901	WMWGORAP_1303
BA17782	683902	WMWGORAP_1303
BA17783	683902	WMWGORAP_1303
BA17784	683902	WMWGORAP_1303
BA17785	683902	WMWGORAP_1303
BA17786	683902	WMWGORAP_1303
BA17787	683902	WMWGORAP_1303
BA17788	683902	WMWGORAP_1303
BA17789	683902	WMWGORAP_1303
BA17790	683902	WMWGORAP_1303
BA17791	683902	WMWGORAP_1303
BA17792	683903	WMWGORAP_1303

BA17793	683903	WMWGORAP_1303
BA17794	683903	WMWGORAP_1303
BA17795	683903	WMWGORAP_1303
BA17797	683903	WMWGORAP_1303
BA17798	683903	WMWGORAP_1303
BA17898	683903	WMWGORAP_1303
BA17899	683903	WMWGORAP_1303
BA17900	683903	WMWGORAP_1303
BA17902	683903	WMWGORAP_1303
BA17903	683904	WMWGORAP_1303
BA17904	683904	WMWGORAP_1303
BA17905	683904	WMWGORAP_1303
BA17906	683904	WMWGORAP_1303
BA17907	683904	WMWGORAP_1303
BA17908	683904	WMWGORAP_1303
BA17909	683904	WMWGORAP_1303

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:
    - BA17561 & BA17781 Selenium MS/MSD recoveries failed. Serial dilutions and post digestion spikes were performed. Matrix issues are suspected.
    - BA17791 Manganese MS/MSD spike level was less than 30% of sample concentration.
    - BA17909 Potassium MS/MSD spike level was less than 30% of sample concentration.
- A matrix spike and matrix spike duplicate were digested and analyzed with each ICPMS batch. All acceptance criteria for precision were met.

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

Sample ID	Analyte	Dilution Factor
BA17557	Manganese	5.075
BA17900	Barium	5.075
BA17909	Potassium	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 Ash Pond

WMWGORAP_1303

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
BA17551	683643	WMWGORAP_1303
BA17552	683643	WMWGORAP_1303
BA17553	683651	WMWGORAP_1303
BA17554	683643	WMWGORAP_1303
BA17555	683643	WMWGORAP_1303
BA17556	683643	WMWGORAP_1303
BA17557	683643	WMWGORAP_1303
BA17558	683643	WMWGORAP_1303
BA17559	683643	WMWGORAP_1303
BA17561	683643	WMWGORAP_1303
BA17562	683643	WMWGORAP_1303
BA17563	683644	WMWGORAP_1303
BA17564	683644	WMWGORAP_1303
BA17565	683644	WMWGORAP_1303
BA17776	683644	WMWGORAP_1303
BA17777	683644	WMWGORAP_1303
BA17779	683644	WMWGORAP_1303
BA17780	683644	WMWGORAP_1303
BA17781	683644	WMWGORAP_1303
BA17782	683644	WMWGORAP_1303
BA17783	683644	WMWGORAP_1303
BA17784	683645	WMWGORAP_1303
BA17785	683645	WMWGORAP_1303
BA17786	683645	WMWGORAP_1303
BA17788	683645	WMWGORAP_1303
BA17789	683645	WMWGORAP_1303
BA17790	683645	WMWGORAP_1303
BA17791	683645	WMWGORAP_1303
BA17792	683645	WMWGORAP_1303
BA17793	683645	WMWGORAP_1303
BA17794	683645	WMWGORAP_1303

BA17795	683646	WMWGORAP_1303
BA17796	683651	WMWGORAP_1303
BA17797	683646	WMWGORAP_1303
BA17798	683646	WMWGORAP_1303
BA17898	683646	WMWGORAP_1303
BA17899	683646	WMWGORAP_1303
BA17900	683646	WMWGORAP_1303
BA17901	683651	WMWGORAP_1303
BA17902	683646	WMWGORAP_1303
BA17903	683646	WMWGORAP_1303
BA17906	683646	WMWGORAP_1303
BA17907	683646	WMWGORAP_1303
BA17908	683651	WMWGORAP_1303
BA17909	683651	WMWGORAP_1303

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
BA17557	Mn	5.075
BA17901	Ba	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

Total Mercury

Gorgas Ash Pond

WMWGORAP_1303

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
BA17551	682758	WMWGORAP_1303
BA17552	682758	WMWGORAP_1303
BA17554	682758	WMWGORAP_1303
BA17555	682758	WMWGORAP_1303
BA17556	682758	WMWGORAP_1303
BA17557	682758	WMWGORAP_1303
BA17558	682758	WMWGORAP_1303
BA17559	682758	WMWGORAP_1303
BA17560	682758	WMWGORAP_1303
BA17561	682758	WMWGORAP_1303
BA17562	682759	WMWGORAP_1303
BA17563	682759	WMWGORAP_1303
BA17564	682759	WMWGORAP_1303
BA17565	682759	WMWGORAP_1303
BA17776	683380	WMWGORAP_1303
BA17777	683380	WMWGORAP_1303
BA17778	683380	WMWGORAP_1303
BA17779	683380	WMWGORAP_1303
BA17780	683380	WMWGORAP_1303
BA17781	683380	WMWGORAP_1303
BA17782	683380	WMWGORAP_1303
BA17783	683380	WMWGORAP_1303
BA17784	683380	WMWGORAP_1303
BA17785	683380	WMWGORAP_1303
BA17786	683381	WMWGORAP_1303
BA17787	683381	WMWGORAP_1303
BA17788	683381	WMWGORAP_1303
BA17789	683381	WMWGORAP_1303
BA17790	683381	WMWGORAP_1303
BA17791	683381	WMWGORAP_1303
BA17792	683381	WMWGORAP_1303

BA17793	683381	WMWGORAP_1303
BA17794	683381	WMWGORAP_1303
BA17795	683381	WMWGORAP_1303
BA17797	683382	WMWGORAP_1303
BA17798	683382	WMWGORAP_1303
BA17898	683382	WMWGORAP_1303
BA17899	683382	WMWGORAP_1303
BA17900	683382	WMWGORAP_1303
BA17902	683382	WMWGORAP_1303
BA17903	683382	WMWGORAP_1303
BA17904	683382	WMWGORAP_1303
BA17905	683382	WMWGORAP_1303
BA17906	683382	WMWGORAP_1303
BA17907	683915	WMWGORAP_1303
BA17908	683915	WMWGORAP_1303
BA17909	683915	WMWGORAP_1303

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 with passing results.
- 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

Dissolved Mercury

Gorgas Ash Pond

WMWGORAP_1303

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
BA17553	682760	WMWGORAP_1303
BA17796	683916	WMWGORAP_1303
BA17901	683916	WMWGORAP_1303

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

General Quality Control Procedures:

- Prior to sample analysis, an initial calibration verification (ICV) was analyzed and all criteria were met.
- Following the ICV, an initial calibration blank (ICB) was analyzed and was below the method detection limit for the requested analyte.
- All continued calibration verification (CCV) were within the acceptance criteria for the requested analyte.
- All continued calibration blanks (CCB) were below the limit of quantitation for the requested analyte.
- 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 with passing results.
- 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.

TDS

Gorgas Ash Pond

WMWGORAP_1303

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
BA17551	682726	WMWGORAP_1303
BA17552	682726	WMWGORAP_1303
BA17553	682726	WMWGORAP_1303
BA17554	682726	WMWGORAP_1303
BA17555	682726	WMWGORAP_1303
BA17556	682726	WMWGORAP_1303
BA17557	682726	WMWGORAP_1303
BA17558	682726	WMWGORAP_1303
BA17559	682726	WMWGORAP_1303
BA17560	682726	WMWGORAP_1303
BA17561	682728	WMWGORAP_1303
BA17562	682728	WMWGORAP_1303
BA17563	682728	WMWGORAP_1303
BA17564	682728	WMWGORAP_1303
BA17565	682728	WMWGORAP_1303
BA17776	682852	WMWGORAP_1303
BA17777	682852	WMWGORAP_1303
BA17778	682852	WMWGORAP_1303
BA17779	682852	WMWGORAP_1303
BA17780	682852	WMWGORAP_1303
BA17781	682852	WMWGORAP_1303
BA17782	682853	WMWGORAP_1303
BA17783	682969	WMWGORAP_1303
BA17784	682969	WMWGORAP_1303
BA17785	682969	WMWGORAP_1303
BA17786	682969	WMWGORAP_1303
BA17787	682969	WMWGORAP_1303
BA17788	682853	WMWGORAP_1303
BA17789	682853	WMWGORAP_1303
BA17790	682853	WMWGORAP_1303
BA17791	682853	WMWGORAP_1303

BA17792	682853	WMWGORAP_1303
BA17793	682969	WMWGORAP_1303
BA17794	682853	WMWGORAP_1303
BA17795	682853	WMWGORAP_1303
BA17796	682853	WMWGORAP_1303
BA17797	682853	WMWGORAP_1303
BA17798	682969	WMWGORAP_1303
BA17898	682969	WMWGORAP_1303
BA17899	682969	WMWGORAP_1303
BA17900	682970	WMWGORAP_1303
BA17901	682970	WMWGORAP_1303
BA17902	682970	WMWGORAP_1303
BA17903	682970	WMWGORAP_1303
BA17904	682970	WMWGORAP_1303
BA17905	682970	WMWGORAP_1303
BA17906	682970	WMWGORAP_1303
BA17907	682970	WMWGORAP_1303
BA17908	682970	WMWGORAP_1303
BA17909	682970	WMWGORAP_1303

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:
    - BA17560
    - BA17778
    - BA17787
    - BA17904
    - BA17905

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

Case Narrative

Alabama Power

Anions

Gorgas Ash Pond

WMWGORAP_1303

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
BA17551	683049, 683140, & 682793	WMWGORAP_1303
BA17552	683049, 683140, & 682793	WMWGORAP_1303
BA17553	683049, 683140, & 682793	WMWGORAP_1303
BA17554	683049, 683140, & 682793	WMWGORAP_1303
BA17555	683049, 683140, & 682793	WMWGORAP_1303
BA17556	683049, 683140, & 682793	WMWGORAP_1303
BA17557	683049, 683140, & 682793	WMWGORAP_1303
BA17558	683049, 683140, & 682793	WMWGORAP_1303
BA17559	683049, 683140, & 682793	WMWGORAP_1303
BA17560	683049, 683140, & 682793	WMWGORAP_1303
BA17561	683050, 683141, & 682794	WMWGORAP_1303
BA17562	683050, 683141, & 682794	WMWGORAP_1303
BA17563	683050, 683141, & 682794	WMWGORAP_1303
BA17564	683050, 683141, & 682794	WMWGORAP_1303
BA17565	683050, 683141, & 682794	WMWGORAP_1303
BA17776	683050, 683141, & 682918	WMWGORAP_1303
BA17777	683050, 683141, & 682918	WMWGORAP_1303
BA17778	683050, 683141, & 682918	WMWGORAP_1303
BA17779	683050, 683141, & 682918	WMWGORAP_1303
BA17780	683050, 683141, & 682918	WMWGORAP_1303
BA17781	683051, 683142, & 682918	WMWGORAP_1303
BA17782	683051, 683142, & 682918	WMWGORAP_1303
BA17783	683051, 683142, & 682918	WMWGORAP_1303
BA17784	683051, 683142, & 682918	WMWGORAP_1303
BA17785	683051, 683142, & 682918	WMWGORAP_1303
BA17786	683051, 683142, & 682919	WMWGORAP_1303
BA17787	683051, 683142, & 682919	WMWGORAP_1303
BA17788	683051, 683142, & 682919	WMWGORAP_1303
BA17789	683051, 683142, & 682919	WMWGORAP_1303
BA17790	683051, 683142, & 682919	WMWGORAP_1303
BA17791	683052, 683143, & 682919	WMWGORAP_1303

BA17792	683052, 683143, & 682919	WMWGORAP_1303
BA17793	683052, 683143, & 682919	WMWGORAP_1303
BA17794	683052, 683143, & 682919	WMWGORAP_1303
BA17795	683052, 683143, & 682919	WMWGORAP_1303
BA17796	683052, 683143, & 682920	WMWGORAP_1303
BA17797	683052, 683143, & 682920	WMWGORAP_1303
BA17798	683052, 683143, & 682920	WMWGORAP_1303
BA17898	683052, 683143, & 682927	WMWGORAP_1303
BA17899	683052, 683143, & 682927	WMWGORAP_1303
BA17900	683053, 683144, & 682927	WMWGORAP_1303
BA17901	683053, 683144, & 682927	WMWGORAP_1303
BA17902	683053, 683144, & 682927	WMWGORAP_1303
BA17903	683053, 683144, & 682927	WMWGORAP_1303
BA17904	683053, 683144, & 682927	WMWGORAP_1303
BA17905	683053, 683144, & 682927	WMWGORAP_1303
BA17906	683053, 683144, & 682927	WMWGORAP_1303
BA17907	683053, 683144, & 682927	WMWGORAP_1303
BA17908	683053, 683144, & 682928	WMWGORAP_1303
BA17909	683053, 683144, & 682928	WMWGORAP_1303

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 high standard of the calibration curve:

Sample ID	Analyte	Dilution Factor
BA17551	Chloride	8
BA17552	Sulfate	8
BA17553	Sulfate	8
BA17554	Sulfate	8
BA17555	Sulfate	8
BA17556	Sulfate	4
BA17557	Sulfate	50
BA17558	Sulfate	8
BA17561	Chloride & Sulfate	3 & 10
BA17564	Sulfate	4
BA17565	Chloride & Sulfate	3 & 4
BA17776	Chloride & Sulfate	16 & 20
BA17777	Sulfate	8
BA17779	Chloride	2
BA17780	Sulfate	8
BA17781	Chloride	2
BA17782	Chloride & Sulfate	8 & 16
BA17784	Sulfate	16
BA17785	Sulfate	25
BA17790	Sulfate	25
BA17791	Sulfate	25
BA17797	Chloride & Sulfate	2 & 32
BA17898	Chloride	2
BA17899	Sulfate	4
BA17903	Chloride & Sulfate	5 & 16
BA17906	Sulfate	5
BA17909	Chloride & Sulfate	100 & 50

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 Ash Pond

WMWGORAP_1303

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
BA17551	683211 & 683212	WMWGORAP_1303
BA17552	683211 & 683212	WMWGORAP_1303
BA17553	683211 & 683212	WMWGORAP_1303
BA17554	683211 & 683212	WMWGORAP_1303
BA17555	683211 & 683212	WMWGORAP_1303
BA17556	683211 & 683212	WMWGORAP_1303
BA17557	683211 & 683212	WMWGORAP_1303
BA17558	683211 & 683212	WMWGORAP_1303
BA17559	683211 & 683212	WMWGORAP_1303
BA17561	683211 & 683212	WMWGORAP_1303
BA17562	683211 & 683212	WMWGORAP_1303
BA17563	683211 & 683212	WMWGORAP_1303
BA17564	683211 & 683212	WMWGORAP_1303
BA17565	683211 & 683212	WMWGORAP_1303
BA17776	683211 & 683212	WMWGORAP_1303
BA17777	683211 & 683212	WMWGORAP_1303
BA17779	683211 & 683212	WMWGORAP_1303
BA17780	683211 & 683212	WMWGORAP_1303
BA17781	683211 & 683212	WMWGORAP_1303
BA17782	683211 & 683212	WMWGORAP_1303
BA17783	683732 & 683733	WMWGORAP_1303
BA17784	683732 & 683733	WMWGORAP_1303
BA17785	683732 & 683733	WMWGORAP_1303
BA17786	683732 & 683733	WMWGORAP_1303
BA17788	683732 & 683733	WMWGORAP_1303
BA17789	683732 & 683733	WMWGORAP_1303
BA17790	683732 & 683733	WMWGORAP_1303
BA17791	683732 & 683733	WMWGORAP_1303
BA17792	683732 & 683733	WMWGORAP_1303
BA17793	683732 & 683733	WMWGORAP_1303
BA17794	683732 & 683733	WMWGORAP_1303

BA17795	683732 & 683733	WMWGORAP_1303
BA17796	683732 & 683733	WMWGORAP_1303
BA17797	683732 & 683733	WMWGORAP_1303
BA17798	683732 & 683733	WMWGORAP_1303
BA17898	683732 & 683733	WMWGORAP_1303
BA17899	683732 & 683733	WMWGORAP_1303
BA17900	683732 & 683733	WMWGORAP_1303
BA17901	683732 & 683733	WMWGORAP_1303
BA17902	683732 & 683733	WMWGORAP_1303
BA17903	683779 & 683780	WMWGORAP_1303
BA17906	683779 & 683780	WMWGORAP_1303
BA17907	683779 & 683780	WMWGORAP_1303
BA17908	683779 & 683780	WMWGORAP_1303
BA17909	683779 & 683780	WMWGORAP_1303

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 Ash Pond - MW-6V

Location Code: WMWGORAP
Collected: 9/15/20 15:35
Customer ID:
Submittal Date: 9/18/20 10:33

Laboratory ID Number: BA17551

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	9/23/20 10:35	9/24/20 10:46		1.015	0.0974	mg/L	0.03	0.1	J
* Calcium, Total	9/23/20 10:35	9/24/20 10:46		1.015	1.74	mg/L	0.1	0.5	
* Iron, Total	9/23/20 10:35	9/24/20 10:46		1.015	0.155	mg/L	0.02	0.05	
* Lithium, Total	9/23/20 10:35	9/24/20 10:46		1.015	0.136	mg/L	0.01	0.02	
* Magnesium, Total	9/23/20 10:35	9/24/20 10:46		1.015	0.517	mg/L	0.1	0.5	
* Sodium, Total	9/23/20 10:35	9/24/20 11:14		10.15	369	mg/L	1.015	5.075	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Iron, Dissolved	9/23/20 11:20	9/23/20 12:48		1.015	0.0296	mg/L	0.02	0.05	J
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	9/28/20 11:12	9/29/20 17:47		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	9/28/20 11:12	9/29/20 17:47		1.015	Not Detected	mg/L	0.001	0.005	U
* Barium, Total	9/28/20 11:12	10/1/20 12:17		1.015	0.160	mg/L	0.002	0.01	
* Beryllium, Total	9/28/20 11:12	9/29/20 17:47		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	9/28/20 11:12	9/29/20 17:47		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	9/28/20 11:12	9/29/20 17:47		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	9/28/20 11:12	9/29/20 17:47		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	9/28/20 11:12	9/29/20 17:47		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	9/28/20 11:12	9/29/20 17:47		1.015	0.00256	mg/L	0.002	0.01	J
* Potassium, Total	9/28/20 11:12	9/29/20 17:47		1.015	1.72	mg/L	0.3	2.5	J
* Manganese, Total	9/28/20 11:12	9/29/20 17:47		1.015	0.0148	mg/L	0.001	0.005	
* Selenium, Total	9/28/20 11:12	9/29/20 17:47		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	9/28/20 11:12	9/29/20 17:47		1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Manganese, Dissolved	9/28/20 09:17	9/29/20 13:04		1.015	0.0134	mg/L	0.001	0.005	
Analytical Method: EPA 245.1	***Analyst: GAS***								
* Mercury, Total by CVAA	9/22/20 09:37	9/22/20 13:18		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2320 B	***Analyst: JAG***								
Alkalinity, Total as CaCO3	9/29/20 10:00	9/29/20 11:20		1	754	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: TJW***								
* Solids, Dissolved	9/21/20 13:00	9/23/20 08:40		1	857	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 10/16/20

Reported: 11/3/2020
Version: 3.1
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-6V

Location Code: WMWGORAP
Collected: 9/15/20 15:35
Customer ID:
Submittal Date: 9/18/20 10:33

Laboratory ID Number: BA17551

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 4500CO2 D		***Analyst: JAG***							
Bicarbonate Alkalinity, (calc.)	9/29/20 10:00	9/29/20 11:20		1	717	mg/L			
Carbonate Alkalinity, (calc.)	9/29/20 10:00	9/29/20 11:20		1	37.0	mg/L			
Analytical Method: SM4500Cl E		***Analyst: JCC***							
* Chloride	9/25/20 12:54	9/25/20 12:54		8	49.8	mg/L	4.00	8	
Analytical Method: SM4500F G 2017		***Analyst: JCC***							
* Fluoride	9/28/20 11:39	9/28/20 11:39		1	4.59	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E 2011		***Analyst: JCC***							
* Sulfate	9/22/20 09:03	9/22/20 09:03		1	7.02	mg/L	0.50	1	
Analytical Method: Field Measurements		***Analyst: TJD***							
Conductivity	9/15/20 15:32	9/15/20 15:32			1402.40	uS/cm			FA
pH	9/15/20 15:32	9/15/20 15:32			8.76	SU			FA
Temperature	9/15/20 15:32	9/15/20 15:32			21.26	C			FA
Turbidity	9/15/20 15:32	9/15/20 15:32			7.49	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 10/16/20

Reported: 11/3/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORAP
Sample Date: 9/15/20 15:35
Customer ID:
Delivery Date: 9/18/20 10:33

Description: Gorgas Ash Pond - MW-6V

Laboratory ID Number: BA17551

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA17561	Chromium, Total	mg/L	-0.0000021	0.00044	0.100	0.104	0.103	0.104	0.085 to 0.115	104	70 to 130	0.966	20
BA17561	Cadmium, Total	mg/L	0.0000028	0.0001474	0.100	0.0997	0.101	0.0989	0.085 to 0.115	99.7	70 to 130	1.30	20
BA17561	Molybdenum, Total	mg/L	0.0000186	0.0001474	0.100	0.122	0.124	0.106	0.085 to 0.115	104	70 to 130	1.63	20
BA17561	Magnesium, Total	mg/L	-0.00154	0.0462	5.00	5.55	5.63	5.05	4.25 to 5.75	97.9	70 to 130	1.43	20
BA17562	Manganese, Dissolved	mg/L	-0.0000116	0.0001474	0.10	0.107	0.113	0.101	0.085 to 0.115	100	70 to 130	5.45	20
BA17561	Manganese, Total	mg/L	0.0000202	0.0001474	0.100	0.106	0.107	0.0986	0.085 to 0.115	97.8	70 to 130	0.939	20
BA17561	Thallium, Total	mg/L	0.0000071	0.0001474	0.100	0.105	0.106	0.101	0.085 to 0.115	105	70 to 130	0.948	20
BA17561	Cobalt, Total	mg/L	-0.0000107	0.0001474	0.100	0.106	0.106	0.106	0.085 to 0.115	106	70 to 130	0.00	20
BA17561	Mercury, Total by CVAA	mg/L	0.0000122	0.0005	0.004	0.00418	0.00415	0.00429	0.0034 to 0.0046	104	70 to 130	0.720	20
BA17561	Selenium, Total	mg/L	0.0000507	0.001	0.100	0.0296	0.0314	0.102	0.085 to 0.115	23.2	70 to 130	5.90	20
BA17561	Arsenic, Total	mg/L	0.0000142	0.0001474	0.100	0.115	0.115	0.105	0.085 to 0.115	106	70 to 130	0.00	20
BA17561	Barium, Total	mg/L	0.0000099	0.0002	0.10	0.251	0.258	0.0989	0.085 to 0.115	87.0	70 to 130	2.75	20
BA17561	Antimony, Total	mg/L	0.000175	0.001	0.100	0.103	0.104	0.101	0.085 to 0.115	103	70 to 130	0.966	20
BA17561	Beryllium, Total	mg/L	0.0000018	0.00088	0.100	0.101	0.0997	0.0983	0.085 to 0.115	101	70 to 130	1.30	20
BA17561	Calcium, Total	mg/L	-0.00348	0.1518	5.00	6.97	7.03	5.05	4.25 to 5.75	99.6	70 to 130	0.857	20
BA17561	Lithium, Total	mg/L	0.000168	0.0154	0.20	0.272	0.276	0.196	0.17 to 0.23	114	70 to 130	1.46	20
BA17561	Sodium, Total	mg/L	0.000705	0.044	5.00	374	372	4.91	4.25 to 5.75	0.00	70 to 130	0.536	20
BA17561	Boron, Total	mg/L	-0.000998	0.0650254	1.00	1.14	1.16	1.00	0.85 to 1.15	100	70 to 130	1.74	20
BA17561	Iron, Dissolved	mg/L	0.000233	0.0176	0.2	0.235	0.236	0.215	0.17 to 0.23	106	70 to 130	0.425	20
BA17561	Iron, Total	mg/L	0.0000713	0.0176	0.2	0.280	0.283	0.203	0.17 to 0.23	97.4	70 to 130	1.07	20
BA17561	Potassium, Total	mg/L	-0.0108	0.3674	10.0	10.9	10.8	9.84	8.5 to 11.5	96.0	70 to 130	0.922	20
BA17561	Lead, Total	mg/L	0.000002	0.0001474	0.100	0.109	0.110	0.106	0.085 to 0.115	109	70 to 130	0.913	20

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 10/16/20

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/15/20 15:35
Customer ID:
Delivery Date: 9/18/20 10:33

Description: Gorgas Ash Pond - MW-6V

Laboratory ID Number: BA17551

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA17560	Fluoride	mg/L	0.0166	0.05	2.50	2.66	0.019	2.56	2.25 to 2.75	106	80 to 120	0.00	20
BA17782	Alkalinity, Total as CaCO3	mg/L					340	53.1	45.0 to 55.0			0.295	10
BA17560	Chloride	mg/L	0.000598	0.50	10.0	10.0	-0.0118	10.6	9 to 11	100	80 to 120	0.00	20
BA17559	Solids, Dissolved	mg/L	-1.00	25			248	55.0	40 to 60			0.402	5
BA17560	Sulfate	mg/L	-0.533	0.50	20.0	18.7	-0.577	20.0	18 to 22	93.5	80 to 120	0.00	20

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 10/16/20

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-7

Location Code: WMWGORAP
Collected: 9/16/20 11:50
Customer ID:
Submittal Date: 9/18/20 10:33

Laboratory ID Number: BA17552

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	9/23/20 10:35	9/24/20 10:49		1.015	1.54	mg/L	0.03	0.1	
* Calcium, Total	9/23/20 10:35	9/24/20 10:49		1.015	12.2	mg/L	0.1	0.5	
* Iron, Total	9/23/20 10:35	9/24/20 11:17		10.15	7.20	mg/L	0.203	0.5075	
* Lithium, Total	9/23/20 10:35	9/24/20 10:49		1.015	0.160	mg/L	0.01	0.02	
* Magnesium, Total	9/23/20 10:35	9/24/20 10:49		1.015	5.16	mg/L	0.1	0.5	
* Sodium, Total	9/23/20 10:35	9/24/20 11:17		10.15	105	mg/L	1.015	5.075	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Iron, Dissolved	9/23/20 11:20	9/23/20 12:51		1.015	0.227	mg/L	0.02	0.05	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	9/28/20 11:12	9/29/20 17:50		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	9/28/20 11:12	9/29/20 17:50		1.015	0.282	mg/L	0.001	0.005	
* Barium, Total	9/28/20 11:12	10/1/20 12:23		1.015	0.124	mg/L	0.002	0.01	
* Beryllium, Total	9/28/20 11:12	9/29/20 17:50		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	9/28/20 11:12	9/29/20 17:50		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	9/28/20 11:12	9/29/20 17:50		1.015	0.00482	mg/L	0.002	0.01	J
* Cobalt, Total	9/28/20 11:12	9/29/20 17:50		1.015	0.00301	mg/L	0.002	0.005	J
* Lead, Total	9/28/20 11:12	9/29/20 17:50		1.015	0.00295	mg/L	0.001	0.005	J
* Molybdenum, Total	9/28/20 11:12	9/29/20 17:50		1.015	0.215	mg/L	0.002	0.01	
* Potassium, Total	9/28/20 11:12	9/29/20 17:50		1.015	1.53	mg/L	0.3	2.5	J
* Manganese, Total	9/28/20 11:12	9/29/20 17:50		1.015	0.110	mg/L	0.001	0.005	
* Selenium, Total	9/28/20 11:12	9/29/20 17:50		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	9/28/20 11:12	9/29/20 17:50		1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Manganese, Dissolved	9/28/20 09:17	9/29/20 13:06		1.015	0.0374	mg/L	0.001	0.005	
Analytical Method: EPA 245.1	***Analyst: GAS***								
* Mercury, Total by CVAA	9/22/20 09:37	9/22/20 13:20		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2320 B	***Analyst: JAG***								
Alkalinity, Total as CaCO3	9/29/20 10:00	9/29/20 11:20		1	119	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: TJW***								
* Solids, Dissolved	9/21/20 13:00	9/23/20 08:40		1	351	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. Matrix interferences in the groundwater caused erratic and unreliable turbidity values and were recorded as >10 NTU as an estimation. A dissolved set was collected. LBM 11/03/2020

Reported: 11/3/2020
Version: 3.1
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-7

Location Code: WMWGORAP
Collected: 9/16/20 11:50
Customer ID:
Submittal Date: 9/18/20 10:33

Laboratory ID Number: BA17552

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 4500CO2 D		***Analyst: JAG***							
Bicarbonate Alkalinity, (calc.)	9/29/20 10:00	9/29/20 11:20		1	118	mg/L			
Carbonate Alkalinity, (calc.)	9/29/20 10:00	9/29/20 11:20		1	0.67	mg/L			
Analytical Method: SM4500Cl E		***Analyst: JCC***							
* Chloride	9/25/20 12:44	9/25/20 12:44		1	6.17	mg/L	0.50	1	
Analytical Method: SM4500F G 2017		***Analyst: JCC***							
* Fluoride	9/28/20 11:40	9/28/20 11:40		1	0.126	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E 2011		***Analyst: JCC***							
* Sulfate	9/22/20 09:04	9/22/20 09:04		8	131	mg/L	4.00	8	
Analytical Method: Field Measurements		***Analyst: TJD***							
Conductivity	9/16/20 11:43	9/16/20 11:43			527.64	uS/cm			FA
pH	9/16/20 11:43	9/16/20 11:43			7.74	SU			FA
Temperature	9/16/20 11:43	9/16/20 11:43			18.35	C			FA
Turbidity	9/16/20 11:43	9/16/20 11:43			>10	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 interferences in the groundwater caused erratic and unreliable turbidity values and were recorded as >10 NTU as an estimation. A dissolved set was collected. LBM 11/03/2020

Reported: 11/3/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORAP
Sample Date: 9/16/20 11:50
Customer ID:
Delivery Date: 9/18/20 10:33

Description: Gorgas Ash Pond - MW-7

Laboratory ID Number: BA17552

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA17561	Chromium, Total	mg/L	-0.0000021	0.00044	0.100	0.104	0.103	0.104	0.085 to 0.115	104	70 to 130	0.966	20
BA17561	Cadmium, Total	mg/L	0.0000028	0.0001474	0.100	0.0997	0.101	0.0989	0.085 to 0.115	99.7	70 to 130	1.30	20
BA17561	Molybdenum, Total	mg/L	0.0000186	0.0001474	0.100	0.122	0.124	0.106	0.085 to 0.115	104	70 to 130	1.63	20
BA17561	Arsenic, Total	mg/L	0.0000142	0.0001474	0.100	0.115	0.115	0.105	0.085 to 0.115	106	70 to 130	0.00	20
BA17561	Barium, Total	mg/L	0.0000099	0.0002	0.10	0.251	0.258	0.0989	0.085 to 0.115	87.0	70 to 130	2.75	20
BA17561	Antimony, Total	mg/L	0.000175	0.001	0.100	0.103	0.104	0.101	0.085 to 0.115	103	70 to 130	0.966	20
BA17561	Magnesium, Total	mg/L	-0.00154	0.0462	5.00	5.55	5.63	5.05	4.25 to 5.75	97.9	70 to 130	1.43	20
BA17562	Manganese, Dissolved	mg/L	-0.0000116	0.0001474	0.10	0.107	0.113	0.101	0.085 to 0.115	100	70 to 130	5.45	20
BA17561	Boron, Total	mg/L	-0.000998	0.0650254	1.00	1.14	1.16	1.00	0.85 to 1.15	100	70 to 130	1.74	20
BA17561	Iron, Dissolved	mg/L	0.000233	0.0176	0.2	0.235	0.236	0.215	0.17 to 0.23	106	70 to 130	0.425	20
BA17561	Iron, Total	mg/L	0.0000713	0.0176	0.2	0.280	0.283	0.203	0.17 to 0.23	97.4	70 to 130	1.07	20
BA17561	Potassium, Total	mg/L	-0.0108	0.3674	10.0	10.9	10.8	9.84	8.5 to 11.5	96.0	70 to 130	0.922	20
BA17561	Lead, Total	mg/L	0.000002	0.0001474	0.100	0.109	0.110	0.106	0.085 to 0.115	109	70 to 130	0.913	20
BA17561	Manganese, Total	mg/L	0.0000202	0.0001474	0.100	0.106	0.107	0.0986	0.085 to 0.115	97.8	70 to 130	0.939	20
BA17561	Thallium, Total	mg/L	0.0000071	0.0001474	0.100	0.105	0.106	0.101	0.085 to 0.115	105	70 to 130	0.948	20
BA17561	Beryllium, Total	mg/L	0.0000018	0.00088	0.100	0.101	0.0997	0.0983	0.085 to 0.115	101	70 to 130	1.30	20
BA17561	Calcium, Total	mg/L	-0.00348	0.1518	5.00	6.97	7.03	5.05	4.25 to 5.75	99.6	70 to 130	0.857	20
BA17561	Lithium, Total	mg/L	0.000168	0.0154	0.20	0.272	0.276	0.196	0.17 to 0.23	114	70 to 130	1.46	20
BA17561	Sodium, Total	mg/L	0.000705	0.044	5.00	374	372	4.91	4.25 to 5.75	0.00	70 to 130	0.536	20
BA17561	Cobalt, Total	mg/L	-0.0000107	0.0001474	0.100	0.106	0.106	0.106	0.085 to 0.115	106	70 to 130	0.00	20
BA17561	Mercury, Total by CVAA	mg/L	0.0000122	0.0005	0.004	0.00418	0.00415	0.00429	0.0034 to 0.0046	104	70 to 130	0.720	20
BA17561	Selenium, Total	mg/L	0.0000507	0.001	0.100	0.0296	0.0314	0.102	0.085 to 0.115	23.2	70 to 130	5.90	20

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
Matrix interferences in the groundwater caused erratic and unreliable turbidity values and were recorded as >10 NTU as an estimation.
A dissolved set was collected. LBM 11/03/2020

Reported: 11/3/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/16/20 11:50
Customer ID:
Delivery Date: 9/18/20 10:33

Description: Gorgas Ash Pond - MW-7

Laboratory ID Number: BA17552

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA17782	Alkalinity, Total as CaCO3	mg/L					340	53.1	45.0 to 55.0			0.295	10
BA17560	Chloride	mg/L	0.000598	0.50	10.0	10.0	-0.0118	10.6	9 to 11	100	80 to 120	0.00	20
BA17560	Fluoride	mg/L	0.0166	0.05	2.50	2.66	0.019	2.56	2.25 to 2.75	106	80 to 120	0.00	20
BA17559	Solids, Dissolved	mg/L	-1.00	25			248	55.0	40 to 60			0.402	5
BA17560	Sulfate	mg/L	-0.533	0.50	20.0	18.7	-0.577	20.0	18 to 22	93.5	80 to 120	0.00	20

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified. Matrix interferences in the groundwater caused erratic and unreliable turbidity values and were recorded as >10 NTU as an estimation. A dissolved set was collected. LBM 11/03/2020

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-7 DIS

Location Code: WMWGORAP
Collected: 9/16/20 11:50
Customer ID:
Submittal Date: 9/18/20 10:33

Laboratory ID Number: BA17553

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7		***Analyst: RDA***							
* Boron, Dissolved	9/23/20 11:20	9/23/20 12:54		1.015	1.60	mg/L	0.03	0.1	
* Calcium, Dissolved	9/23/20 11:20	9/23/20 12:54		1.015	12.6	mg/L	0.1	0.5	
* Iron, Dissolved	9/23/20 11:20	9/23/20 12:54		1.015	0.216	mg/L	0.02	0.05	
* Lithium, Dissolved	9/23/20 11:20	9/23/20 14:59		1.015	0.168	mg/L	0.01	0.02	
* Magnesium, Dissolved	9/23/20 11:20	9/23/20 14:59		1.015	4.47	mg/L	0.1	0.5	
* Sodium, Dissolved	9/23/20 11:20	9/23/20 14:07		101.5	105	mg/L	10.15	50.75	
Analytical Method: EPA 200.8		***Analyst: DLJ***							
* Antimony, Dissolved	9/28/20 09:17	9/29/20 15:59		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Dissolved	9/28/20 09:17	9/29/20 15:59		1.015	Not Detected	mg/L	0.001	0.005	U
* Barium, Dissolved	9/28/20 09:17	9/29/20 15:59		1.015	0.336	mg/L	0.002	0.01	
* Beryllium, Dissolved	9/28/20 09:17	9/29/20 15:59		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Dissolved	9/28/20 09:17	9/29/20 15:59		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Dissolved	9/28/20 09:17	9/29/20 15:59		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Dissolved	9/28/20 09:17	9/29/20 15:59		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Dissolved	9/28/20 09:17	9/29/20 15:59		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Dissolved	9/28/20 09:17	9/29/20 15:59		1.015	0.00701	mg/L	0.002	0.01	J
* Manganese, Dissolved	9/28/20 09:17	9/29/20 15:59		1.015	0.0503	mg/L	0.001	0.005	
* Potassium, Dissolved	9/28/20 09:17	9/29/20 15:59		1.015	2.45	mg/L	0.3	2.5	J
* Selenium, Dissolved	9/28/20 09:17	9/29/20 15:59		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Dissolved	9/28/20 09:17	9/29/20 15:59		1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 245.1		***Analyst: GAS***							
* Mercury, Dissolved by CVAA	9/22/20 09:37	9/22/20 14:19		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2320 B		***Analyst: JAG***							
Alkalinity, Total as CaCO3	9/29/20 10:00	9/29/20 11:20		1	117	mg/L		0.1	
Analytical Method: SM 2540C		***Analyst: TJW***							
* Solids, Dissolved	9/21/20 13:00	9/23/20 08:40		1	337	mg/L		25	
Analytical Method: SM 4500CO2 D		***Analyst: JAG***							
Bicarbonate Alkalinity, (calc.)	9/29/20 10:00	9/29/20 11:20		1	116	mg/L			
Carbonate Alkalinity, (calc.)	9/29/20 10:00	9/29/20 11:20		1	0.71	mg/L			

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 interferences in the groundwater caused erratic and unreliable turbidity values and were recorded as >10 NTU as an estimation. A dissolved set was collected. LBM 11/03/2020

Reported: 11/3/2020
Version: 3.1
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-7 DIS

Location Code: WMWGORAP
Collected: 9/16/20 11:50
Customer ID:
Submittal Date: 9/18/20 10:33

Laboratory ID Number: BA17553

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E		***Analyst: JCC***							
* Chloride	9/25/20 12:45	9/25/20 12:45		1	6.39	mg/L	0.50	1	
Analytical Method: SM4500F G 2017		***Analyst: JCC***							
* Fluoride	9/28/20 11:41	9/28/20 11:41		1	0.123	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E 2011		***Analyst: JCC***							
* Sulfate	9/22/20 09:05	9/22/20 09:05		8	131	mg/L	4.00	8	
Analytical Method: Field Measurements		***Analyst: TJD***							
Conductivity	9/16/20 11:43	9/16/20 11:43			527.64	uS/cm			FA
pH	9/16/20 11:43	9/16/20 11:43			7.74	SU			FA
Temperature	9/16/20 11:43	9/16/20 11:43			18.35	C			FA
Turbidity	9/16/20 11:43	9/16/20 11:43			>10	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 interferences in the groundwater caused erratic and unreliable turbidity values and were recorded as >10 NTU as an estimation. A dissolved set was collected. LBM 11/03/2020

Reported: 11/3/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORAP
Sample Date: 9/16/20 11:50
Customer ID:
Delivery Date: 9/18/20 10:33

Description: Gorgas Ash Pond - MW-7 DIS

Laboratory ID Number: BA17553

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA17561	Calcium, Dissolved	mg/L	0.00238	0.1518	5.00	7.62	7.65	5.49	4.25 to 5.75	109	70 to 130	0.393	20
BA17901	Molybdenum, Dissolved	mg/L	0.0000136	0.0001474	0.10	0.115	0.115	0.114	0.085 to 0.115	111	70 to 130	0.00	20
BA17901	Chromium, Dissolved	mg/L	0.0000804	0.00044	0.10	0.110	0.108	0.109	0.085 to 0.115	110	70 to 130	1.83	20
BA17901	Potassium, Dissolved	mg/L	0.00369	0.3674	10.0	16.0	16.0	10.8	8.5 to 11.5	106	70 to 130	0.00	20
BA17561	Boron, Dissolved	mg/L	-0.00710	0.0650254	1.00	1.18	1.18	1.04	0.85 to 1.15	104	70 to 130	0.00	20
BA17561	Iron, Dissolved	mg/L	0.000233	0.0176	0.2	0.235	0.236	0.215	0.17 to 0.23	106	70 to 130	0.425	20
BA17561	Sodium, Dissolved	mg/L	0.00135	0.044	5.00	378	382	5.42	4.25 to 5.75	-180	70 to 130	1.05	20
BA17901	Barium, Dissolved	mg/L	0.0000274	0.0002	0.100	1.36	1.38	0.112	0.085 to 0.115	100	70 to 130	1.46	20
BA17901	Beryllium, Dissolved	mg/L	0.0000008	0.00088	0.10	0.0953	0.0949	0.0943	0.085 to 0.115	95.3	70 to 130	0.421	20
BA17901	Manganese, Dissolved	mg/L	0.0000149	0.0001474	0.10	0.141	0.145	0.106	0.085 to 0.115	102	70 to 130	2.80	20
BA17901	Thallium, Dissolved	mg/L	-0.0000031	0.0001474	0.10	0.104	0.110	0.109	0.085 to 0.115	104	70 to 130	5.61	20
BA17561	Magnesium, Dissolved	mg/L	0.00759	0.0462	5.00	6.34	6.40	5.60	4.25 to 5.75	112	70 to 130	0.942	20
BA17901	Lead, Dissolved	mg/L	-0.0000090	0.0001474	0.10	0.112	0.113	0.108	0.085 to 0.115	112	70 to 130	0.889	20
BA17901	Selenium, Dissolved	mg/L	0.0000113	0.001	0.10	0.113	0.111	0.112	0.085 to 0.115	113	70 to 130	1.79	20
BA17553	Mercury, Dissolved by	mg/L	0.0000142	0.0005	0.004	0.00415	0.00402	0.00431	0.0034 to 0.0046	104	70 to 130	3.18	20
BA17561	Lithium, Dissolved	mg/L	0.000192	0.0154	0.20	0.277	0.280	0.228	0.17 to 0.23	116	70 to 130	1.08	20
BA17901	Cobalt, Dissolved	mg/L	-0.0000225	0.0001474	0.10	0.113	0.112	0.113	0.085 to 0.115	113	70 to 130	0.889	20
BA17901	Arsenic, Dissolved	mg/L	-0.0000019	0.0001474	0.10	0.114	0.113	0.112	0.085 to 0.115	113	70 to 130	0.881	20
BA17901	Cadmium, Dissolved	mg/L	0.0000032	0.0001474	0.10	0.113	0.114	0.113	0.085 to 0.115	113	70 to 130	0.881	20
BA17901	Antimony, Dissolved	mg/L	0.000142	0.001	0.10	0.102	0.105	0.102	0.085 to 0.115	101	70 to 130	2.90	20

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified. Matrix interferences in the groundwater caused erratic and unreliable turbidity values and were recorded as >10 NTU as an estimation. A dissolved set was collected. LBM 11/03/2020

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/16/20 11:50
Customer ID:
Delivery Date: 9/18/20 10:33

Description: Gorgas Ash Pond - MW-7 DIS

Laboratory ID Number: BA17553

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA17782	Alkalinity, Total as CaCO3	mg/L					340	53.1	45.0 to 55.0			0.295	10
BA17560	Fluoride	mg/L	0.0166	0.05	2.50	2.66	0.019	2.56	2.25 to 2.75	106	80 to 120	0.00	20
BA17560	Chloride	mg/L	0.000598	0.50	10.0	10.0	-0.0118	10.6	9 to 11	100	80 to 120	0.00	20
BA17559	Solids, Dissolved	mg/L	-1.00	25			248	55.0	40 to 60			0.402	5
BA17560	Sulfate	mg/L	-0.533	0.50	20.0	18.7	-0.577	20.0	18 to 22	93.5	80 to 120	0.00	20

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified. Matrix interferences in the groundwater caused erratic and unreliable turbidity values and were recorded as >10 NTU as an estimation. A dissolved set was collected. LBM 11/03/2020

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-6S

Location Code: WMWGORAP
Collected: 9/16/20 14:33
Customer ID:
Submittal Date: 9/18/20 10:33

Laboratory ID Number: BA17554

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	9/23/20 10:35	9/24/20 10:52		1.015	0.800	mg/L	0.03	0.1	
* Calcium, Total	9/23/20 10:35	9/24/20 11:20		10.15	55.9	mg/L	1.015	5.075	
* Iron, Total	9/23/20 10:35	9/24/20 10:52		1.015	2.85	mg/L	0.02	0.05	
* Lithium, Total	9/23/20 10:35	9/24/20 10:52		1.015	0.0660	mg/L	0.01	0.02	
* Magnesium, Total	9/23/20 10:35	9/24/20 10:52		1.015	16.2	mg/L	0.1	0.5	
* Sodium, Total	9/23/20 10:35	9/24/20 10:52		1.015	6.41	mg/L	0.1	0.5	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Iron, Dissolved	9/23/20 11:20	9/23/20 12:57		1.015	2.78	mg/L	0.02	0.05	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	9/28/20 11:12	9/29/20 17:53		1.015	0.000948	mg/L	0.0008	0.003	J
* Arsenic, Total	9/28/20 11:12	9/29/20 17:53		1.015	0.00611	mg/L	0.001	0.005	
* Barium, Total	9/28/20 11:12	10/1/20 12:26		1.015	0.0682	mg/L	0.002	0.01	
* Beryllium, Total	9/28/20 11:12	9/29/20 17:53		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	9/28/20 11:12	9/29/20 17:53		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	9/28/20 11:12	9/29/20 17:53		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	9/28/20 11:12	9/29/20 17:53		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	9/28/20 11:12	9/29/20 17:53		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	9/28/20 11:12	9/29/20 17:53		1.015	0.0427	mg/L	0.002	0.01	
* Potassium, Total	9/28/20 11:12	9/29/20 17:53		1.015	4.03	mg/L	0.3	2.5	
* Manganese, Total	9/28/20 11:12	9/29/20 17:53		1.015	1.23	mg/L	0.001	0.005	
* Selenium, Total	9/28/20 11:12	9/29/20 17:53		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	9/28/20 11:12	9/29/20 17:53		1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Manganese, Dissolved	9/28/20 09:17	9/29/20 13:09		1.015	1.25	mg/L	0.001	0.005	
Analytical Method: EPA 245.1	***Analyst: GAS***								
* Mercury, Total by CVAA	9/22/20 09:37	9/22/20 13:22		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2320 B	***Analyst: JAG***								
Alkalinity, Total as CaCO3	9/29/20 10:00	9/29/20 11:20		1	84.4	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: TJW***								
* Solids, Dissolved	9/21/20 13:00	9/23/20 08:40		1	269	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 10/16/20

Reported: 11/3/2020
Version: 3.1
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-6S

Location Code: WMWGORAP
Collected: 9/16/20 14:33
Customer ID:
Submittal Date: 9/18/20 10:33

Laboratory ID Number: BA17554

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 4500CO2 D		***Analyst: JAG***							
Bicarbonate Alkalinity, (calc.)	9/29/20 10:00	9/29/20 11:20		1	84.3	mg/L			
Carbonate Alkalinity, (calc.)	9/29/20 10:00	9/29/20 11:20		1	0.08	mg/L			
Analytical Method: SM4500Cl E		***Analyst: JCC***							
* Chloride	9/25/20 12:46	9/25/20 12:46		1	14.6	mg/L	0.50	1	
Analytical Method: SM4500F G 2017		***Analyst: JCC***							
* Fluoride	9/28/20 11:42	9/28/20 11:42		1	0.308	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E 2011		***Analyst: JCC***							
* Sulfate	9/22/20 09:06	9/22/20 09:06		8	115	mg/L	4.00	8	
Analytical Method: Field Measurements		***Analyst: TJD***							
Conductivity	9/16/20 14:30	9/16/20 14:30			427.21	uS/cm			FA
pH	9/16/20 14:30	9/16/20 14:30			6.93	SU			FA
Temperature	9/16/20 14:30	9/16/20 14:30			23.47	C			FA
Turbidity	9/16/20 14:30	9/16/20 14:30			4.14	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 10/16/20

Reported: 11/3/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORAP
Sample Date: 9/16/20 14:33
Customer ID:
Delivery Date: 9/18/20 10:33

Description: Gorgas Ash Pond - MW-6S

Laboratory ID Number: BA17554

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA17561	Chromium, Total	mg/L	-0.0000021	0.00044	0.100	0.104	0.103	0.104	0.085 to 0.115	104	70 to 130	0.966	20
BA17561	Arsenic, Total	mg/L	0.0000142	0.0001474	0.100	0.115	0.115	0.105	0.085 to 0.115	106	70 to 130	0.00	20
BA17561	Barium, Total	mg/L	0.0000099	0.0002	0.10	0.251	0.258	0.0989	0.085 to 0.115	87.0	70 to 130	2.75	20
BA17561	Antimony, Total	mg/L	0.000175	0.001	0.100	0.103	0.104	0.101	0.085 to 0.115	103	70 to 130	0.966	20
BA17561	Magnesium, Total	mg/L	-0.00154	0.0462	5.00	5.55	5.63	5.05	4.25 to 5.75	97.9	70 to 130	1.43	20
BA17562	Manganese, Dissolved	mg/L	-0.0000116	0.0001474	0.10	0.107	0.113	0.101	0.085 to 0.115	100	70 to 130	5.45	20
BA17561	Manganese, Total	mg/L	0.0000202	0.0001474	0.100	0.106	0.107	0.0986	0.085 to 0.115	97.8	70 to 130	0.939	20
BA17561	Thallium, Total	mg/L	0.0000071	0.0001474	0.100	0.105	0.106	0.101	0.085 to 0.115	105	70 to 130	0.948	20
BA17561	Boron, Total	mg/L	-0.000998	0.0650254	1.00	1.14	1.16	1.00	0.85 to 1.15	100	70 to 130	1.74	20
BA17561	Iron, Dissolved	mg/L	0.000233	0.0176	0.2	0.235	0.236	0.215	0.17 to 0.23	106	70 to 130	0.425	20
BA17561	Iron, Total	mg/L	0.0000713	0.0176	0.2	0.280	0.283	0.203	0.17 to 0.23	97.4	70 to 130	1.07	20
BA17561	Potassium, Total	mg/L	-0.0108	0.3674	10.0	10.9	10.8	9.84	8.5 to 11.5	96.0	70 to 130	0.922	20
BA17561	Lead, Total	mg/L	0.000002	0.0001474	0.100	0.109	0.110	0.106	0.085 to 0.115	109	70 to 130	0.913	20
BA17561	Beryllium, Total	mg/L	0.0000018	0.00088	0.100	0.101	0.0997	0.0983	0.085 to 0.115	101	70 to 130	1.30	20
BA17561	Calcium, Total	mg/L	-0.00348	0.1518	5.00	6.97	7.03	5.05	4.25 to 5.75	99.6	70 to 130	0.857	20
BA17561	Lithium, Total	mg/L	0.000168	0.0154	0.20	0.272	0.276	0.196	0.17 to 0.23	114	70 to 130	1.46	20
BA17561	Sodium, Total	mg/L	0.000705	0.044	5.00	374	372	4.91	4.25 to 5.75	0.00	70 to 130	0.536	20
BA17561	Cadmium, Total	mg/L	0.0000028	0.0001474	0.100	0.0997	0.101	0.0989	0.085 to 0.115	99.7	70 to 130	1.30	20
BA17561	Molybdenum, Total	mg/L	0.0000186	0.0001474	0.100	0.122	0.124	0.106	0.085 to 0.115	104	70 to 130	1.63	20
BA17561	Cobalt, Total	mg/L	-0.0000107	0.0001474	0.100	0.106	0.106	0.106	0.085 to 0.115	106	70 to 130	0.00	20
BA17561	Mercury, Total by CVAA	mg/L	0.0000122	0.0005	0.004	0.00418	0.00415	0.00429	0.0034 to 0.0046	104	70 to 130	0.720	20
BA17561	Selenium, Total	mg/L	0.0000507	0.001	0.100	0.0296	0.0314	0.102	0.085 to 0.115	23.2	70 to 130	5.90	20

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 10/16/20

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/16/20 14:33
Customer ID:
Delivery Date: 9/18/20 10:33

Description: Gorgas Ash Pond - MW-6S

Laboratory ID Number: BA17554

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA17782	Alkalinity, Total as CaCO3	mg/L					340	53.1	45.0 to 55.0			0.295	10
BA17560	Chloride	mg/L	0.000598	0.50	10.0	10.0	-0.0118	10.6	9 to 11	100	80 to 120	0.00	20
BA17560	Fluoride	mg/L	0.0166	0.05	2.50	2.66	0.019	2.56	2.25 to 2.75	106	80 to 120	0.00	20
BA17559	Solids, Dissolved	mg/L	-1.00	25			248	55.0	40 to 60			0.402	5
BA17560	Sulfate	mg/L	-0.533	0.50	20.0	18.7	-0.577	20.0	18 to 22	93.5	80 to 120	0.00	20

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 10/16/20

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-6S DUP

Location Code: WMWGORAP
Collected: 9/16/20 14:33
Customer ID:
Submittal Date: 9/18/20 10:33

Laboratory ID Number: BA17555

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	9/23/20 10:35	9/24/20 10:55		1.015	0.800	mg/L	0.03	0.1	
* Calcium, Total	9/23/20 10:35	9/24/20 11:23		10.15	55.4	mg/L	1.015	5.075	
* Iron, Total	9/23/20 10:35	9/24/20 10:55		1.015	2.82	mg/L	0.02	0.05	
* Lithium, Total	9/23/20 10:35	9/24/20 10:55		1.015	0.0658	mg/L	0.01	0.02	
* Magnesium, Total	9/23/20 10:35	9/24/20 10:55		1.015	16.2	mg/L	0.1	0.5	
* Sodium, Total	9/23/20 10:35	9/24/20 10:55		1.015	6.43	mg/L	0.1	0.5	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Iron, Dissolved	9/23/20 11:20	9/23/20 13:00		1.015	2.62	mg/L	0.02	0.05	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	9/28/20 11:12	9/29/20 17:55		1.015	0.000896	mg/L	0.0008	0.003	J
* Arsenic, Total	9/28/20 11:12	9/29/20 17:55		1.015	0.00605	mg/L	0.001	0.005	
* Barium, Total	9/28/20 11:12	10/1/20 12:29		1.015	0.0696	mg/L	0.002	0.01	
* Beryllium, Total	9/28/20 11:12	9/29/20 17:55		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	9/28/20 11:12	9/29/20 17:55		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	9/28/20 11:12	9/29/20 17:55		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	9/28/20 11:12	9/29/20 17:55		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	9/28/20 11:12	9/29/20 17:55		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	9/28/20 11:12	9/29/20 17:55		1.015	0.0409	mg/L	0.002	0.01	
* Potassium, Total	9/28/20 11:12	9/29/20 17:55		1.015	4.06	mg/L	0.3	2.5	
* Manganese, Total	9/28/20 11:12	9/29/20 17:55		1.015	1.19	mg/L	0.001	0.005	
* Selenium, Total	9/28/20 11:12	9/29/20 17:55		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	9/28/20 11:12	9/29/20 17:55		1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Manganese, Dissolved	9/28/20 09:17	9/29/20 13:12		1.015	1.24	mg/L	0.001	0.005	
Analytical Method: EPA 245.1	***Analyst: GAS***								
* Mercury, Total by CVAA	9/22/20 09:37	9/22/20 13:25		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2320 B	***Analyst: JAG***								
Alkalinity, Total as CaCO3	9/29/20 10:00	9/29/20 11:20		1	78.3	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: TJW***								
* Solids, Dissolved	9/21/20 13:00	9/23/20 08:40		1	276	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 10/16/20

Reported: 11/3/2020
Version: 3.1
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-6S DUP

Location Code: WMWGORAP
Collected: 9/16/20 14:33
Customer ID:
Submittal Date: 9/18/20 10:33

Laboratory ID Number: BA17555

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 4500CO2 D		***Analyst: JAG***							
Bicarbonate Alkalinity, (calc.)	9/29/20 10:00	9/29/20 11:20		1	78.2	mg/L			
Carbonate Alkalinity, (calc.)	9/29/20 10:00	9/29/20 11:20		1	0.08	mg/L			
Analytical Method: SM4500Cl E		***Analyst: JCC***							
* Chloride	9/25/20 12:48	9/25/20 12:48		1	14.7	mg/L	0.50	1	
Analytical Method: SM4500F G 2017		***Analyst: JCC***							
* Fluoride	9/28/20 11:43	9/28/20 11:43		1	0.304	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E 2011		***Analyst: JCC***							
* Sulfate	9/22/20 09:07	9/22/20 09:07		8	115	mg/L	4.00	8	
Analytical Method: Field Measurements		***Analyst: TJD***							
Conductivity	9/16/20 14:30	9/16/20 14:30			427.21	uS/cm			FA
pH	9/16/20 14:30	9/16/20 14:30			6.93	SU			FA
Temperature	9/16/20 14:30	9/16/20 14:30			23.47	C			FA
Turbidity	9/16/20 14:30	9/16/20 14:30			4.14	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 10/16/20

Reported: 11/3/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORAP
Sample Date: 9/16/20 14:33
Customer ID:
Delivery Date: 9/18/20 10:33

Description: Gorgas Ash Pond - MW-6S DUP

Laboratory ID Number: BA17555

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA17561	Chromium, Total	mg/L	-0.0000021	0.00044	0.100	0.104	0.103	0.104	0.085 to 0.115	104	70 to 130	0.966	20
BA17561	Manganese, Total	mg/L	0.0000202	0.0001474	0.100	0.106	0.107	0.0986	0.085 to 0.115	97.8	70 to 130	0.939	20
BA17561	Thallium, Total	mg/L	0.0000071	0.0001474	0.100	0.105	0.106	0.101	0.085 to 0.115	105	70 to 130	0.948	20
BA17561	Cobalt, Total	mg/L	-0.0000107	0.0001474	0.100	0.106	0.106	0.106	0.085 to 0.115	106	70 to 130	0.00	20
BA17561	Mercury, Total by CVAA	mg/L	0.0000122	0.0005	0.004	0.00418	0.00415	0.00429	0.0034 to 0.0046	104	70 to 130	0.720	20
BA17561	Selenium, Total	mg/L	0.0000507	0.001	0.100	0.0296	0.0314	0.102	0.085 to 0.115	23.2	70 to 130	5.90	20
BA17561	Cadmium, Total	mg/L	0.0000028	0.0001474	0.100	0.0997	0.101	0.0989	0.085 to 0.115	99.7	70 to 130	1.30	20
BA17561	Molybdenum, Total	mg/L	0.0000186	0.0001474	0.100	0.122	0.124	0.106	0.085 to 0.115	104	70 to 130	1.63	20
BA17561	Arsenic, Total	mg/L	0.0000142	0.0001474	0.100	0.115	0.115	0.105	0.085 to 0.115	106	70 to 130	0.00	20
BA17561	Barium, Total	mg/L	0.0000099	0.0002	0.10	0.251	0.258	0.0989	0.085 to 0.115	87.0	70 to 130	2.75	20
BA17561	Antimony, Total	mg/L	0.000175	0.001	0.100	0.103	0.104	0.101	0.085 to 0.115	103	70 to 130	0.966	20
BA17561	Magnesium, Total	mg/L	-0.00154	0.0462	5.00	5.55	5.63	5.05	4.25 to 5.75	97.9	70 to 130	1.43	20
BA17562	Manganese, Dissolved	mg/L	-0.0000116	0.0001474	0.10	0.107	0.113	0.101	0.085 to 0.115	100	70 to 130	5.45	20
BA17561	Boron, Total	mg/L	-0.000998	0.0650254	1.00	1.14	1.16	1.00	0.85 to 1.15	100	70 to 130	1.74	20
BA17561	Iron, Dissolved	mg/L	0.000233	0.0176	0.2	0.235	0.236	0.215	0.17 to 0.23	106	70 to 130	0.425	20
BA17561	Iron, Total	mg/L	0.0000713	0.0176	0.2	0.280	0.283	0.203	0.17 to 0.23	97.4	70 to 130	1.07	20
BA17561	Potassium, Total	mg/L	-0.0108	0.3674	10.0	10.9	10.8	9.84	8.5 to 11.5	96.0	70 to 130	0.922	20
BA17561	Lead, Total	mg/L	0.000002	0.0001474	0.100	0.109	0.110	0.106	0.085 to 0.115	109	70 to 130	0.913	20
BA17561	Beryllium, Total	mg/L	0.0000018	0.00088	0.100	0.101	0.0997	0.0983	0.085 to 0.115	101	70 to 130	1.30	20
BA17561	Calcium, Total	mg/L	-0.00348	0.1518	5.00	6.97	7.03	5.05	4.25 to 5.75	99.6	70 to 130	0.857	20
BA17561	Lithium, Total	mg/L	0.000168	0.0154	0.20	0.272	0.276	0.196	0.17 to 0.23	114	70 to 130	1.46	20
BA17561	Sodium, Total	mg/L	0.000705	0.044	5.00	374	372	4.91	4.25 to 5.75	0.00	70 to 130	0.536	20

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 10/16/20

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/16/20 14:33
Customer ID:
Delivery Date: 9/18/20 10:33

Description: Gorgas Ash Pond - MW-6S DUP

Laboratory ID Number: BA17555

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA17782	Alkalinity, Total as CaCO3	mg/L					340	53.1	45.0 to 55.0			0.295	10
BA17560	Fluoride	mg/L	0.0166	0.05	2.50	2.66	0.019	2.56	2.25 to 2.75	106	80 to 120	0.00	20
BA17560	Chloride	mg/L	0.000598	0.50	10.0	10.0	-0.0118	10.6	9 to 11	100	80 to 120	0.00	20
BA17559	Solids, Dissolved	mg/L	-1.00	25			248	55.0	40 to 60			0.402	5
BA17560	Sulfate	mg/L	-0.533	0.50	20.0	18.7	-0.577	20.0	18 to 22	93.5	80 to 120	0.00	20

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 10/16/20

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-6D

Location Code: WMWGORAP
Collected: 9/17/20 09:35
Customer ID:
Submittal Date: 9/18/20 10:33

Laboratory ID Number: BA17556

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	9/23/20 10:35	9/24/20 10:58		1.015	1.22	mg/L	0.03	0.1	
* Calcium, Total	9/23/20 10:35	9/24/20 11:41		10.15	61.5	mg/L	1.015	5.075	
* Iron, Total	9/23/20 10:35	9/24/20 10:58		1.015	0.0276	mg/L	0.02	0.05	J
* Lithium, Total	9/23/20 10:35	9/24/20 10:58		1.015	0.299	mg/L	0.01	0.02	
* Magnesium, Total	9/23/20 10:35	9/24/20 10:58		1.015	15.9	mg/L	0.1	0.5	
* Sodium, Total	9/23/20 10:35	9/24/20 10:58		1.015	28.3	mg/L	0.1	0.5	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Iron, Dissolved	9/23/20 11:20	9/23/20 13:03		1.015	0.0207	mg/L	0.02	0.05	J
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	9/28/20 11:12	9/29/20 17:58		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	9/28/20 11:12	9/29/20 17:58		1.015	0.0931	mg/L	0.001	0.005	
* Barium, Total	9/28/20 11:12	10/1/20 12:31		1.015	0.378	mg/L	0.002	0.01	
* Beryllium, Total	9/28/20 11:12	9/29/20 17:58		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	9/28/20 11:12	9/29/20 17:58		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	9/28/20 11:12	9/29/20 17:58		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	9/28/20 11:12	9/29/20 17:58		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	9/28/20 11:12	9/29/20 17:58		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	9/28/20 11:12	9/29/20 17:58		1.015	0.00924	mg/L	0.002	0.01	J
* Potassium, Total	9/28/20 11:12	9/29/20 17:58		1.015	2.27	mg/L	0.3	2.5	J
* Manganese, Total	9/28/20 11:12	9/29/20 17:58		1.015	0.163	mg/L	0.001	0.005	
* Selenium, Total	9/28/20 11:12	9/29/20 17:58		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	9/28/20 11:12	9/29/20 17:58		1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Manganese, Dissolved	9/28/20 09:17	9/29/20 13:14		1.015	0.169	mg/L	0.001	0.005	
Analytical Method: EPA 245.1	***Analyst: GAS***								
* Mercury, Total by CVAA	9/22/20 09:37	9/22/20 13:27		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2320 B	***Analyst: JAG***								
Alkalinity, Total as CaCO3	9/29/20 10:00	9/29/20 11:20		1	187	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: TJW***								
* Solids, Dissolved	9/21/20 13:00	9/23/20 08:40		1	314	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 10/16/20

Reported: 11/3/2020
Version: 3.1
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-6D

Location Code: WMWGORAP
Collected: 9/17/20 09:35
Customer ID:
Submittal Date: 9/18/20 10:33

Laboratory ID Number: BA17556

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 4500CO2 D		***Analyst: JAG***							
Bicarbonate Alkalinity, (calc.)	9/29/20 10:00	9/29/20 11:20		1	186	mg/L			
Carbonate Alkalinity, (calc.)	9/29/20 10:00	9/29/20 11:20		1	0.61	mg/L			
Analytical Method: SM4500Cl E		***Analyst: JCC***							
* Chloride	9/25/20 12:49	9/25/20 12:49		1	10.5	mg/L	0.50	1	
Analytical Method: SM4500F G 2017		***Analyst: JCC***							
* Fluoride	9/28/20 11:45	9/28/20 11:45		1	0.133	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E 2011		***Analyst: JCC***							
* Sulfate	9/22/20 09:09	9/22/20 09:09		4	65.1	mg/L	2.00	4	
Analytical Method: Field Measurements		***Analyst: TJD***							
Conductivity	9/17/20 09:33	9/17/20 09:33			502.97	uS/cm			FA
pH	9/17/20 09:33	9/17/20 09:33			7.41	SU			FA
Temperature	9/17/20 09:33	9/17/20 09:33			20.58	C			FA
Turbidity	9/17/20 09:33	9/17/20 09:33			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 10/16/20

Reported: 11/3/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORAP
Sample Date: 9/17/20 09:35
Customer ID:
Delivery Date: 9/18/20 10:33

Description: Gorgas Ash Pond - MW-6D

Laboratory ID Number: BA17556

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA17561	Chromium, Total	mg/L	-0.0000021	0.00044	0.100	0.104	0.103	0.104	0.085 to 0.115	104	70 to 130	0.966	20
BA17561	Cadmium, Total	mg/L	0.0000028	0.0001474	0.100	0.0997	0.101	0.0989	0.085 to 0.115	99.7	70 to 130	1.30	20
BA17561	Molybdenum, Total	mg/L	0.0000186	0.0001474	0.100	0.122	0.124	0.106	0.085 to 0.115	104	70 to 130	1.63	20
BA17561	Magnesium, Total	mg/L	-0.00154	0.0462	5.00	5.55	5.63	5.05	4.25 to 5.75	97.9	70 to 130	1.43	20
BA17562	Manganese, Dissolved	mg/L	-0.0000116	0.0001474	0.10	0.107	0.113	0.101	0.085 to 0.115	100	70 to 130	5.45	20
BA17561	Arsenic, Total	mg/L	0.0000142	0.0001474	0.100	0.115	0.115	0.105	0.085 to 0.115	106	70 to 130	0.00	20
BA17561	Barium, Total	mg/L	0.0000099	0.0002	0.10	0.251	0.258	0.0989	0.085 to 0.115	87.0	70 to 130	2.75	20
BA17561	Antimony, Total	mg/L	0.000175	0.001	0.100	0.103	0.104	0.101	0.085 to 0.115	103	70 to 130	0.966	20
BA17561	Manganese, Total	mg/L	0.0000202	0.0001474	0.100	0.106	0.107	0.0986	0.085 to 0.115	97.8	70 to 130	0.939	20
BA17561	Thallium, Total	mg/L	0.0000071	0.0001474	0.100	0.105	0.106	0.101	0.085 to 0.115	105	70 to 130	0.948	20
BA17561	Beryllium, Total	mg/L	0.0000018	0.00088	0.100	0.101	0.0997	0.0983	0.085 to 0.115	101	70 to 130	1.30	20
BA17561	Calcium, Total	mg/L	-0.00348	0.1518	5.00	6.97	7.03	5.05	4.25 to 5.75	99.6	70 to 130	0.857	20
BA17561	Lithium, Total	mg/L	0.000168	0.0154	0.20	0.272	0.276	0.196	0.17 to 0.23	114	70 to 130	1.46	20
BA17561	Sodium, Total	mg/L	0.000705	0.044	5.00	374	372	4.91	4.25 to 5.75	0.00	70 to 130	0.536	20
BA17561	Boron, Total	mg/L	-0.000998	0.0650254	1.00	1.14	1.16	1.00	0.85 to 1.15	100	70 to 130	1.74	20
BA17561	Iron, Dissolved	mg/L	0.000233	0.0176	0.2	0.235	0.236	0.215	0.17 to 0.23	106	70 to 130	0.425	20
BA17561	Iron, Total	mg/L	0.0000713	0.0176	0.2	0.280	0.283	0.203	0.17 to 0.23	97.4	70 to 130	1.07	20
BA17561	Potassium, Total	mg/L	-0.0108	0.3674	10.0	10.9	10.8	9.84	8.5 to 11.5	96.0	70 to 130	0.922	20
BA17561	Lead, Total	mg/L	0.000002	0.0001474	0.100	0.109	0.110	0.106	0.085 to 0.115	109	70 to 130	0.913	20
BA17561	Cobalt, Total	mg/L	-0.0000107	0.0001474	0.100	0.106	0.106	0.106	0.085 to 0.115	106	70 to 130	0.00	20
BA17561	Mercury, Total by CVAA	mg/L	0.0000122	0.0005	0.004	0.00418	0.00415	0.00429	0.0034 to 0.0046	104	70 to 130	0.720	20
BA17561	Selenium, Total	mg/L	0.0000507	0.001	0.100	0.0296	0.0314	0.102	0.085 to 0.115	23.2	70 to 130	5.90	20

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 10/16/20

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/17/20 09:35
Customer ID:
Delivery Date: 9/18/20 10:33

Description: Gorgas Ash Pond - MW-6D

Laboratory ID Number: BA17556

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA17782	Alkalinity, Total as CaCO3	mg/L					340	53.1	45.0 to 55.0			0.295	10
BA17560	Chloride	mg/L	0.000598	0.50	10.0	10.0	-0.0118	10.6	9 to 11	100	80 to 120	0.00	20
BA17560	Fluoride	mg/L	0.0166	0.05	2.50	2.66	0.019	2.56	2.25 to 2.75	106	80 to 120	0.00	20
BA17559	Solids, Dissolved	mg/L	-1.00	25			248	55.0	40 to 60			0.402	5
BA17560	Sulfate	mg/L	-0.533	0.50	20.0	18.7	-0.577	20.0	18 to 22	93.5	80 to 120	0.00	20

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 10/16/20

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-23H

Location Code: WMWGORAP
Collected: 9/17/20 11:25
Customer ID:
Submittal Date: 9/18/20 10:33

Laboratory ID Number: BA17557

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	9/23/20 10:35	9/24/20 11:00		1.015	0.0637	mg/L	0.03	0.1	J
* Calcium, Total	9/23/20 10:35	9/24/20 11:44		20.3	87.2	mg/L	2.03	10.15	
* Iron, Total	9/23/20 10:35	9/24/20 11:44		20.3	49.3	mg/L	0.406	1.015	
* Lithium, Total	9/23/20 10:35	9/24/20 11:00		1.015	0.0333	mg/L	0.01	0.02	
* Magnesium, Total	9/23/20 10:35	9/24/20 11:00		1.015	36.7	mg/L	0.1	0.5	
* Sodium, Total	9/23/20 10:35	9/24/20 11:00		1.015	17.5	mg/L	0.1	0.5	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Iron, Dissolved	9/23/20 11:20	9/23/20 14:10		101.5	48.3	mg/L	2.03	5.075	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	9/28/20 11:12	9/29/20 18:00		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	9/28/20 11:12	9/29/20 18:00		1.015	0.0579	mg/L	0.001	0.005	
* Barium, Total	9/28/20 11:12	10/1/20 12:34		1.015	0.0146	mg/L	0.002	0.01	
* Beryllium, Total	9/28/20 11:12	9/29/20 18:00		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	9/28/20 11:12	9/29/20 18:00		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	9/28/20 11:12	9/29/20 18:00		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	9/28/20 11:12	9/29/20 18:00		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	9/28/20 11:12	9/29/20 18:00		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	9/28/20 11:12	9/29/20 18:00		1.015	Not Detected	mg/L	0.002	0.01	U
* Potassium, Total	9/28/20 11:12	9/29/20 18:00		1.015	1.52	mg/L	0.3	2.5	J
* Manganese, Total	9/28/20 11:12	10/1/20 15:52		5.075	1.61	mg/L	0.005075	0.025375	
* Selenium, Total	9/28/20 11:12	9/29/20 18:00		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	9/28/20 11:12	9/29/20 18:00		1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Manganese, Dissolved	9/28/20 09:17	10/1/20 11:53		5.075	1.51	mg/L	0.005075	0.025375	
Analytical Method: EPA 245.1	***Analyst: GAS***								
* Mercury, Total by CVAA	9/22/20 09:37	9/22/20 13:29		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2320 B	***Analyst: JAG***								
Alkalinity, Total as CaCO3	9/29/20 10:00	9/29/20 11:20		1	91.8	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: TJW***								
* Solids, Dissolved	9/21/20 13:00	9/23/20 08:40		1	648	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 10/16/20

Reported: 11/3/2020
Version: 3.1
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-23H

Location Code: WMWGORAP
Collected: 9/17/20 11:25
Customer ID:
Submittal Date: 9/18/20 10:33

Laboratory ID Number: BA17557

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 4500CO2 D		***Analyst: JAG***							
Bicarbonate Alkalinity, (calc.)	9/29/20 10:00	9/29/20 11:20		1	91.8	mg/L			
Carbonate Alkalinity, (calc.)	9/29/20 10:00	9/29/20 11:20		1	0.01	mg/L			
Analytical Method: SM4500Cl E		***Analyst: JCC***							
* Chloride	9/25/20 12:50	9/25/20 12:50		1	1.92	mg/L	0.50	1	
Analytical Method: SM4500F G 2017		***Analyst: JCC***							
* Fluoride	9/28/20 11:46	9/28/20 11:46		1	0.117	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E 2011		***Analyst: JCC***							
* Sulfate	9/22/20 09:10	9/22/20 09:10		50	361	mg/L	25.00	50	
Analytical Method: Field Measurements		***Analyst: TJD***							
Conductivity	9/17/20 11:20	9/17/20 11:20			825.61	uS/cm			FA
pH	9/17/20 11:20	9/17/20 11:20			5.74	SU			FA
Temperature	9/17/20 11:20	9/17/20 11:20			18.35	C			FA
Turbidity	9/17/20 11:20	9/17/20 11:20			2.47	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 10/16/20

Reported: 11/3/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORAP
Sample Date: 9/17/20 11:25
Customer ID:
Delivery Date: 9/18/20 10:33

Description: Gorgas Ash Pond - MW-23H

Laboratory ID Number: BA17557

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA17561	Chromium, Total	mg/L	-0.0000021	0.00044	0.100	0.104	0.103	0.104	0.085 to 0.115	104	70 to 130	0.966	20
BA17561	Cobalt, Total	mg/L	-0.0000107	0.0001474	0.100	0.106	0.106	0.106	0.085 to 0.115	106	70 to 130	0.00	20
BA17561	Mercury, Total by CVAA	mg/L	0.0000122	0.0005	0.004	0.00418	0.00415	0.00429	0.0034 to 0.0046	104	70 to 130	0.720	20
BA17561	Selenium, Total	mg/L	0.0000507	0.001	0.100	0.0296	0.0314	0.102	0.085 to 0.115	23.2	70 to 130	5.90	20
BA17561	Cadmium, Total	mg/L	0.0000028	0.0001474	0.100	0.0997	0.101	0.0989	0.085 to 0.115	99.7	70 to 130	1.30	20
BA17561	Molybdenum, Total	mg/L	0.0000186	0.0001474	0.100	0.122	0.124	0.106	0.085 to 0.115	104	70 to 130	1.63	20
BA17561	Manganese, Total	mg/L	0.0000202	0.0001474	0.100	0.106	0.107	0.0986	0.085 to 0.115	97.8	70 to 130	0.939	20
BA17561	Thallium, Total	mg/L	0.0000071	0.0001474	0.100	0.105	0.106	0.101	0.085 to 0.115	105	70 to 130	0.948	20
BA17561	Arsenic, Total	mg/L	0.0000142	0.0001474	0.100	0.115	0.115	0.105	0.085 to 0.115	106	70 to 130	0.00	20
BA17561	Barium, Total	mg/L	0.0000099	0.0002	0.10	0.251	0.258	0.0989	0.085 to 0.115	87.0	70 to 130	2.75	20
BA17561	Antimony, Total	mg/L	0.000175	0.001	0.100	0.103	0.104	0.101	0.085 to 0.115	103	70 to 130	0.966	20
BA17561	Magnesium, Total	mg/L	-0.00154	0.0462	5.00	5.55	5.63	5.05	4.25 to 5.75	97.9	70 to 130	1.43	20
BA17562	Manganese, Dissolved	mg/L	-0.0000116	0.0001474	0.10	0.107	0.113	0.101	0.085 to 0.115	100	70 to 130	5.45	20
BA17561	Boron, Total	mg/L	-0.000998	0.0650254	1.00	1.14	1.16	1.00	0.85 to 1.15	100	70 to 130	1.74	20
BA17561	Iron, Dissolved	mg/L	0.000233	0.0176	0.2	0.235	0.236	0.215	0.17 to 0.23	106	70 to 130	0.425	20
BA17561	Iron, Total	mg/L	0.0000713	0.0176	0.2	0.280	0.283	0.203	0.17 to 0.23	97.4	70 to 130	1.07	20
BA17561	Potassium, Total	mg/L	-0.0108	0.3674	10.0	10.9	10.8	9.84	8.5 to 11.5	96.0	70 to 130	0.922	20
BA17561	Lead, Total	mg/L	0.000002	0.0001474	0.100	0.109	0.110	0.106	0.085 to 0.115	109	70 to 130	0.913	20
BA17561	Beryllium, Total	mg/L	0.0000018	0.00088	0.100	0.101	0.0997	0.0983	0.085 to 0.115	101	70 to 130	1.30	20
BA17561	Calcium, Total	mg/L	-0.00348	0.1518	5.00	6.97	7.03	5.05	4.25 to 5.75	99.6	70 to 130	0.857	20
BA17561	Lithium, Total	mg/L	0.000168	0.0154	0.20	0.272	0.276	0.196	0.17 to 0.23	114	70 to 130	1.46	20
BA17561	Sodium, Total	mg/L	0.000705	0.044	5.00	374	372	4.91	4.25 to 5.75	0.00	70 to 130	0.536	20

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 10/16/20

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/17/20 11:25
Customer ID:
Delivery Date: 9/18/20 10:33

Description: Gorgas Ash Pond - MW-23H

Laboratory ID Number: BA17557

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA17782	Alkalinity, Total as CaCO3	mg/L					340	53.1	45.0 to 55.0			0.295	10
BA17560	Fluoride	mg/L	0.0166	0.05	2.50	2.66	0.019	2.56	2.25 to 2.75	106	80 to 120	0.00	20
BA17560	Chloride	mg/L	0.000598	0.50	10.0	10.0	-0.0118	10.6	9 to 11	100	80 to 120	0.00	20
BA17559	Solids, Dissolved	mg/L	-1.00	25			248	55.0	40 to 60			0.402	5
BA17560	Sulfate	mg/L	-0.533	0.50	20.0	18.7	-0.577	20.0	18 to 22	93.5	80 to 120	0.00	20

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 10/16/20

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-41HD

Location Code: WMWGORAP
Collected: 9/17/20 13:05
Customer ID:
Submittal Date: 9/18/20 10:33

Laboratory ID Number: BA17558

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	9/23/20 10:35	9/24/20 11:03		1.015	1.42	mg/L	0.03	0.1	
* Calcium, Total	9/23/20 10:35	9/24/20 11:47		10.15	61.1	mg/L	1.015	5.075	
* Iron, Total	9/23/20 10:35	9/24/20 11:03		1.015	0.0464	mg/L	0.02	0.05	J
* Lithium, Total	9/23/20 10:35	9/24/20 11:03		1.015	0.341	mg/L	0.01	0.02	
* Magnesium, Total	9/23/20 10:35	9/24/20 11:03		1.015	18.1	mg/L	0.1	0.5	
* Sodium, Total	9/23/20 10:35	9/24/20 11:03		1.015	17.3	mg/L	0.1	0.5	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Iron, Dissolved	9/23/20 11:20	9/23/20 13:09		1.015	Not Detected	mg/L	0.02	0.05	U
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	9/28/20 11:12	9/29/20 18:03		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	9/28/20 11:12	9/29/20 18:03		1.015	0.00160	mg/L	0.001	0.005	J
* Barium, Total	9/28/20 11:12	10/1/20 12:36		1.015	0.0414	mg/L	0.002	0.01	
* Beryllium, Total	9/28/20 11:12	9/29/20 18:03		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	9/28/20 11:12	9/29/20 18:03		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	9/28/20 11:12	9/29/20 18:03		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	9/28/20 11:12	9/29/20 18:03		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	9/28/20 11:12	9/29/20 18:03		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	9/28/20 11:12	9/29/20 18:03		1.015	0.0260	mg/L	0.002	0.01	
* Potassium, Total	9/28/20 11:12	9/29/20 18:03		1.015	1.61	mg/L	0.3	2.5	J
* Manganese, Total	9/28/20 11:12	9/29/20 18:03		1.015	0.459	mg/L	0.001	0.005	
* Selenium, Total	9/28/20 11:12	9/29/20 18:03		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	9/28/20 11:12	9/29/20 18:03		1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Manganese, Dissolved	9/28/20 09:17	9/29/20 13:20		1.015	0.477	mg/L	0.001	0.005	
Analytical Method: EPA 245.1	***Analyst: GAS***								
* Mercury, Total by CVAA	9/22/20 09:37	9/22/20 13:32		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2320 B	***Analyst: JAG***								
Alkalinity, Total as CaCO3	9/29/20 10:00	9/29/20 11:20		1	135	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: TJW***								
* Solids, Dissolved	9/21/20 13:00	9/23/20 08:40		1	318	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 10/16/20

Reported: 11/3/2020
Version: 3.1
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-41HD

Location Code: WMWGORAP
Collected: 9/17/20 13:05
Customer ID:
Submittal Date: 9/18/20 10:33

Laboratory ID Number: BA17558

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 4500CO2 D		***Analyst: JAG***							
Bicarbonate Alkalinity, (calc.)	9/29/20 10:00	9/29/20 11:20		1	135	mg/L			
Carbonate Alkalinity, (calc.)	9/29/20 10:00	9/29/20 11:20		1	0.37	mg/L			
Analytical Method: SM4500Cl E		***Analyst: JCC***							
* Chloride	9/25/20 12:51	9/25/20 12:51		1	6.63	mg/L	0.50	1	
Analytical Method: SM4500F G 2017		***Analyst: JCC***							
* Fluoride	9/28/20 11:47	9/28/20 11:47		1	0.160	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E 2011		***Analyst: JCC***							
* Sulfate	9/22/20 09:11	9/22/20 09:11		8	105	mg/L	4.00	8	
Analytical Method: Field Measurements		***Analyst: TJD***							
Conductivity	9/17/20 13:00	9/17/20 13:00			474.23	uS/cm			FA
pH	9/17/20 13:00	9/17/20 13:00			7.22	SU			FA
Temperature	9/17/20 13:00	9/17/20 13:00			18.88	C			FA
Turbidity	9/17/20 13:00	9/17/20 13:00			1.47	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 10/16/20

Reported: 11/3/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORAP
Sample Date: 9/17/20 13:05
Customer ID:
Delivery Date: 9/18/20 10:33

Description: Gorgas Ash Pond - MW-41HD

Laboratory ID Number: BA17558

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA17561	Chromium, Total	mg/L	-0.0000021	0.00044	0.100	0.104	0.103	0.104	0.085 to 0.115	104	70 to 130	0.966	20
BA17561	Magnesium, Total	mg/L	-0.00154	0.0462	5.00	5.55	5.63	5.05	4.25 to 5.75	97.9	70 to 130	1.43	20
BA17562	Manganese, Dissolved	mg/L	-0.0000116	0.0001474	0.10	0.107	0.113	0.101	0.085 to 0.115	100	70 to 130	5.45	20
BA17561	Arsenic, Total	mg/L	0.0000142	0.0001474	0.100	0.115	0.115	0.105	0.085 to 0.115	106	70 to 130	0.00	20
BA17561	Barium, Total	mg/L	0.0000099	0.0002	0.10	0.251	0.258	0.0989	0.085 to 0.115	87.0	70 to 130	2.75	20
BA17561	Antimony, Total	mg/L	0.000175	0.001	0.100	0.103	0.104	0.101	0.085 to 0.115	103	70 to 130	0.966	20
BA17561	Manganese, Total	mg/L	0.0000202	0.0001474	0.100	0.106	0.107	0.0986	0.085 to 0.115	97.8	70 to 130	0.939	20
BA17561	Thallium, Total	mg/L	0.0000071	0.0001474	0.100	0.105	0.106	0.101	0.085 to 0.115	105	70 to 130	0.948	20
BA17561	Boron, Total	mg/L	-0.000998	0.0650254	1.00	1.14	1.16	1.00	0.85 to 1.15	100	70 to 130	1.74	20
BA17561	Iron, Dissolved	mg/L	0.000233	0.0176	0.2	0.235	0.236	0.215	0.17 to 0.23	106	70 to 130	0.425	20
BA17561	Iron, Total	mg/L	0.0000713	0.0176	0.2	0.280	0.283	0.203	0.17 to 0.23	97.4	70 to 130	1.07	20
BA17561	Potassium, Total	mg/L	-0.0108	0.3674	10.0	10.9	10.8	9.84	8.5 to 11.5	96.0	70 to 130	0.922	20
BA17561	Lead, Total	mg/L	0.000002	0.0001474	0.100	0.109	0.110	0.106	0.085 to 0.115	109	70 to 130	0.913	20
BA17561	Cadmium, Total	mg/L	0.0000028	0.0001474	0.100	0.0997	0.101	0.0989	0.085 to 0.115	99.7	70 to 130	1.30	20
BA17561	Molybdenum, Total	mg/L	0.0000186	0.0001474	0.100	0.122	0.124	0.106	0.085 to 0.115	104	70 to 130	1.63	20
BA17561	Beryllium, Total	mg/L	0.0000018	0.00088	0.100	0.101	0.0997	0.0983	0.085 to 0.115	101	70 to 130	1.30	20
BA17561	Calcium, Total	mg/L	-0.00348	0.1518	5.00	6.97	7.03	5.05	4.25 to 5.75	99.6	70 to 130	0.857	20
BA17561	Lithium, Total	mg/L	0.000168	0.0154	0.20	0.272	0.276	0.196	0.17 to 0.23	114	70 to 130	1.46	20
BA17561	Sodium, Total	mg/L	0.000705	0.044	5.00	374	372	4.91	4.25 to 5.75	0.00	70 to 130	0.536	20
BA17561	Cobalt, Total	mg/L	-0.0000107	0.0001474	0.100	0.106	0.106	0.106	0.085 to 0.115	106	70 to 130	0.00	20
BA17561	Mercury, Total by CVAA	mg/L	0.0000122	0.0005	0.004	0.00418	0.00415	0.00429	0.0034 to 0.0046	104	70 to 130	0.720	20
BA17561	Selenium, Total	mg/L	0.0000507	0.001	0.100	0.0296	0.0314	0.102	0.085 to 0.115	23.2	70 to 130	5.90	20

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 10/16/20

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/17/20 13:05
Customer ID:
Delivery Date: 9/18/20 10:33

Description: Gorgas Ash Pond - MW-41HD

Laboratory ID Number: BA17558

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA17782	Alkalinity, Total as CaCO3	mg/L					340	53.1	45.0 to 55.0			0.295	10
BA17560	Chloride	mg/L	0.000598	0.50	10.0	10.0	-0.0118	10.6	9 to 11	100	80 to 120	0.00	20
BA17560	Fluoride	mg/L	0.0166	0.05	2.50	2.66	0.019	2.56	2.25 to 2.75	106	80 to 120	0.00	20
BA17559	Solids, Dissolved	mg/L	-1.00	25			248	55.0	40 to 60			0.402	5
BA17560	Sulfate	mg/L	-0.533	0.50	20.0	18.7	-0.577	20.0	18 to 22	93.5	80 to 120	0.00	20

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 10/16/20

Reported: 11/3/2020
Version: 3.1
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-24H

Location Code: WMWGORAP
Collected: 9/17/20 14:20
Customer ID:
Submittal Date: 9/18/20 10:33

Laboratory ID Number: BA17559

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	9/23/20 10:35	9/24/20 11:06		1.015	0.0690	mg/L	0.03	0.1	J
* Calcium, Total	9/23/20 10:35	9/24/20 11:50		10.15	45.5	mg/L	1.015	5.075	
* Iron, Total	9/23/20 10:35	9/24/20 11:06		1.015	1.99	mg/L	0.02	0.05	
* Lithium, Total	9/23/20 10:35	9/24/20 11:06		1.015	0.0237	mg/L	0.01	0.02	
* Magnesium, Total	9/23/20 10:35	9/24/20 11:06		1.015	13.6	mg/L	0.1	0.5	
* Sodium, Total	9/23/20 10:35	9/24/20 11:06		1.015	29.7	mg/L	0.1	0.5	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Iron, Dissolved	9/23/20 11:20	9/23/20 13:11		1.015	2.01	mg/L	0.02	0.05	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	9/28/20 11:12	9/29/20 18:06		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	9/28/20 11:12	9/29/20 18:06		1.015	Not Detected	mg/L	0.001	0.005	U
* Barium, Total	9/28/20 11:12	10/1/20 12:39		1.015	0.988	mg/L	0.002	0.01	
* Beryllium, Total	9/28/20 11:12	9/29/20 18:06		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	9/28/20 11:12	9/29/20 18:06		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	9/28/20 11:12	9/29/20 18:06		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	9/28/20 11:12	9/29/20 18:06		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	9/28/20 11:12	9/29/20 18:06		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	9/28/20 11:12	9/29/20 18:06		1.015	Not Detected	mg/L	0.002	0.01	U
* Potassium, Total	9/28/20 11:12	9/29/20 18:06		1.015	1.54	mg/L	0.3	2.5	J
* Manganese, Total	9/28/20 11:12	9/29/20 18:06		1.015	0.0973	mg/L	0.001	0.005	
* Selenium, Total	9/28/20 11:12	9/29/20 18:06		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	9/28/20 11:12	9/29/20 18:06		1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Manganese, Dissolved	9/28/20 09:17	9/29/20 13:22		1.015	0.101	mg/L	0.001	0.005	
Analytical Method: EPA 245.1	***Analyst: GAS***								
* Mercury, Total by CVAA	9/22/20 09:37	9/22/20 13:34		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2320 B	***Analyst: JAG***								
Alkalinity, Total as CaCO3	9/29/20 10:00	9/29/20 11:20		1	219	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: TJW***								
* Solids, Dissolved	9/21/20 13:00	9/23/20 08:40		1	250	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 10/16/20

Reported: 11/3/2020
Version: 3.1
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-24H

Location Code: WMWGORAP
Collected: 9/17/20 14:20
Customer ID:
Submittal Date: 9/18/20 10:33

Laboratory ID Number: BA17559

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 4500CO2 D		***Analyst: JAG***							
Bicarbonate Alkalinity, (calc.)	9/29/20 10:00	9/29/20 11:20		1	219	mg/L			
Carbonate Alkalinity, (calc.)	9/29/20 10:00	9/29/20 11:20		1	0.30	mg/L			
Analytical Method: SM4500Cl E		***Analyst: JCC***							
* Chloride	9/25/20 12:52	9/25/20 12:52		1	3.19	mg/L	0.50	1	
Analytical Method: SM4500F G 2017		***Analyst: JCC***							
* Fluoride	9/28/20 11:48	9/28/20 11:48		1	0.217	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E 2011		***Analyst: JCC***							
* Sulfate	9/22/20 09:12	9/22/20 09:12		1	6.70	mg/L	0.50	1	
Analytical Method: Field Measurements		***Analyst: TJD***							
Conductivity	9/17/20 14:15	9/17/20 14:15			405.22	uS/cm			FA
pH	9/17/20 14:15	9/17/20 14:15			7.02	SU			FA
Temperature	9/17/20 14:15	9/17/20 14:15			19.33	C			FA
Turbidity	9/17/20 14:15	9/17/20 14:15			2.78	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 10/16/20

Reported: 11/3/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORAP
Sample Date: 9/17/20 14:20
Customer ID:
Delivery Date: 9/18/20 10:33

Description: Gorgas Ash Pond - MW-24H

Laboratory ID Number: BA17559

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA17561	Chromium, Total	mg/L	-0.0000021	0.00044	0.100	0.104	0.103	0.104	0.085 to 0.115	104	70 to 130	0.966	20
BA17561	Magnesium, Total	mg/L	-0.00154	0.0462	5.00	5.55	5.63	5.05	4.25 to 5.75	97.9	70 to 130	1.43	20
BA17562	Manganese, Dissolved	mg/L	-0.0000116	0.0001474	0.10	0.107	0.113	0.101	0.085 to 0.115	100	70 to 130	5.45	20
BA17561	Manganese, Total	mg/L	0.0000202	0.0001474	0.100	0.106	0.107	0.0986	0.085 to 0.115	97.8	70 to 130	0.939	20
BA17561	Thallium, Total	mg/L	0.0000071	0.0001474	0.100	0.105	0.106	0.101	0.085 to 0.115	105	70 to 130	0.948	20
BA17561	Cadmium, Total	mg/L	0.0000028	0.0001474	0.100	0.0997	0.101	0.0989	0.085 to 0.115	99.7	70 to 130	1.30	20
BA17561	Molybdenum, Total	mg/L	0.0000186	0.0001474	0.100	0.122	0.124	0.106	0.085 to 0.115	104	70 to 130	1.63	20
BA17561	Boron, Total	mg/L	-0.000998	0.0650254	1.00	1.14	1.16	1.00	0.85 to 1.15	100	70 to 130	1.74	20
BA17561	Iron, Dissolved	mg/L	0.000233	0.0176	0.2	0.235	0.236	0.215	0.17 to 0.23	106	70 to 130	0.425	20
BA17561	Iron, Total	mg/L	0.0000713	0.0176	0.2	0.280	0.283	0.203	0.17 to 0.23	97.4	70 to 130	1.07	20
BA17561	Potassium, Total	mg/L	-0.0108	0.3674	10.0	10.9	10.8	9.84	8.5 to 11.5	96.0	70 to 130	0.922	20
BA17561	Lead, Total	mg/L	0.000002	0.0001474	0.100	0.109	0.110	0.106	0.085 to 0.115	109	70 to 130	0.913	20
BA17561	Arsenic, Total	mg/L	0.0000142	0.0001474	0.100	0.115	0.115	0.105	0.085 to 0.115	106	70 to 130	0.00	20
BA17561	Barium, Total	mg/L	0.0000099	0.0002	0.10	0.251	0.258	0.0989	0.085 to 0.115	87.0	70 to 130	2.75	20
BA17561	Antimony, Total	mg/L	0.000175	0.001	0.100	0.103	0.104	0.101	0.085 to 0.115	103	70 to 130	0.966	20
BA17561	Cobalt, Total	mg/L	-0.0000107	0.0001474	0.100	0.106	0.106	0.106	0.085 to 0.115	106	70 to 130	0.00	20
BA17561	Mercury, Total by CVAA	mg/L	0.0000122	0.0005	0.004	0.00418	0.00415	0.00429	0.0034 to 0.0046	104	70 to 130	0.720	20
BA17561	Selenium, Total	mg/L	0.0000507	0.001	0.100	0.0296	0.0314	0.102	0.085 to 0.115	23.2	70 to 130	5.90	20
BA17561	Beryllium, Total	mg/L	0.0000018	0.00088	0.100	0.101	0.0997	0.0983	0.085 to 0.115	101	70 to 130	1.30	20
BA17561	Calcium, Total	mg/L	-0.00348	0.1518	5.00	6.97	7.03	5.05	4.25 to 5.75	99.6	70 to 130	0.857	20
BA17561	Lithium, Total	mg/L	0.000168	0.0154	0.20	0.272	0.276	0.196	0.17 to 0.23	114	70 to 130	1.46	20
BA17561	Sodium, Total	mg/L	0.000705	0.044	5.00	374	372	4.91	4.25 to 5.75	0.00	70 to 130	0.536	20

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 10/16/20

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/17/20 14:20
Customer ID:
Delivery Date: 9/18/20 10:33

Description: Gorgas Ash Pond - MW-24H

Laboratory ID Number: BA17559

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA17782	Alkalinity, Total as CaCO3	mg/L					340	53.1	45.0 to 55.0			0.295	10
BA17560	Fluoride	mg/L	0.0166	0.05	2.50	2.66	0.019	2.56	2.25 to 2.75	106	80 to 120	0.00	20
BA17560	Chloride	mg/L	0.000598	0.50	10.0	10.0	-0.0118	10.6	9 to 11	100	80 to 120	0.00	20
BA17559	Solids, Dissolved	mg/L	-1.00	25			248	55.0	40 to 60			0.402	5
BA17560	Sulfate	mg/L	-0.533	0.50	20.0	18.7	-0.577	20.0	18 to 22	93.5	80 to 120	0.00	20

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 10/16/20

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond Field Blank-1

Location Code: WMWGORAPFB
Collected: 9/17/20 14:45
Customer ID:
Submittal Date: 9/18/20 10:33

Laboratory ID Number: BA17560

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	9/23/20 10:35	9/24/20 11:09		1.015	Not Detected	mg/L	0.03	0.1	U
* Calcium, Total	9/23/20 10:35	9/24/20 11:09		1.015	Not Detected	mg/L	0.1	0.5	U
* Iron, Total	9/23/20 10:35	9/24/20 11:09		1.015	Not Detected	mg/L	0.02	0.05	U
* Lithium, Total	9/23/20 10:35	9/24/20 11:09		1.015	Not Detected	mg/L	0.01	0.02	U
* Magnesium, Total	9/23/20 10:35	9/24/20 11:09		1.015	Not Detected	mg/L	0.1	0.5	U
* Sodium, Total	9/23/20 10:35	9/24/20 11:09		1.015	Not Detected	mg/L	0.1	0.5	U
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	9/28/20 11:12	9/29/20 18:08		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	9/28/20 11:12	9/29/20 18:08		1.015	Not Detected	mg/L	0.001	0.005	U
* Barium, Total	9/28/20 11:12	10/1/20 12:42		1.015	Not Detected	mg/L	0.002	0.01	U
* Beryllium, Total	9/28/20 11:12	9/29/20 18:08		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	9/28/20 11:12	9/29/20 18:08		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	9/28/20 11:12	9/29/20 18:08		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	9/28/20 11:12	9/29/20 18:08		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	9/28/20 11:12	9/29/20 18:08		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	9/28/20 11:12	9/29/20 18:08		1.015	Not Detected	mg/L	0.002	0.01	U
* Manganese, Total	9/28/20 11:12	9/29/20 18:08		1.015	Not Detected	mg/L	0.001	0.005	U
* Potassium, Total	9/28/20 11:12	9/29/20 18:08		1.015	Not Detected	mg/L	0.3	2.5	U
* Selenium, Total	9/28/20 11:12	9/29/20 18:08		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	9/28/20 11:12	9/29/20 18:08		1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 245.1	***Analyst: GAS***								
* Mercury, Total by CVAA	9/22/20 09:37	9/22/20 13:36		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2540C	***Analyst: TJW***								
* Solids, Dissolved	9/21/20 13:00	9/23/20 08:40		1	Not Detected	mg/L		25	U
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	9/25/20 12:55	9/25/20 12:55		1	Not Detected	mg/L	0.50	1	U
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	9/28/20 11:49	9/28/20 11:49		1	Not Detected	mg/L	0.06	0.1	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	9/22/20 09:13	9/22/20 09:13		1	Not Detected	mg/L	0.50	1	U

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

Comments:

Reported: 11/3/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORAPFB
Sample Date: 9/17/20 14:45
Customer ID:
Delivery Date: 9/18/20 10:33

Description: Gorgas Ash Pond Field Blank-1

Laboratory ID Number: BA17560

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA17561	Magnesium, Total	mg/L	-0.00154	0.0462	5.00	5.55	5.63	5.05	4.25 to 5.75	97.9	70 to 130	1.43	20
BA17561	Chromium, Total	mg/L	-0.0000021	0.00044	0.100	0.104	0.103	0.104	0.085 to 0.115	104	70 to 130	0.966	20
BA17561	Cadmium, Total	mg/L	0.0000028	0.0001474	0.100	0.0997	0.101	0.0989	0.085 to 0.115	99.7	70 to 130	1.30	20
BA17561	Molybdenum, Total	mg/L	0.0000186	0.0001474	0.100	0.122	0.124	0.106	0.085 to 0.115	104	70 to 130	1.63	20
BA17561	Arsenic, Total	mg/L	0.0000142	0.0001474	0.100	0.115	0.115	0.105	0.085 to 0.115	106	70 to 130	0.00	20
BA17561	Barium, Total	mg/L	0.0000099	0.0002	0.10	0.251	0.258	0.0989	0.085 to 0.115	87.0	70 to 130	2.75	20
BA17561	Antimony, Total	mg/L	0.000175	0.001	0.100	0.103	0.104	0.101	0.085 to 0.115	103	70 to 130	0.966	20
BA17561	Manganese, Total	mg/L	0.0000202	0.0001474	0.100	0.106	0.107	0.0986	0.085 to 0.115	97.8	70 to 130	0.939	20
BA17561	Thallium, Total	mg/L	0.0000071	0.0001474	0.100	0.105	0.106	0.101	0.085 to 0.115	105	70 to 130	0.948	20
BA17561	Boron, Total	mg/L	-0.000998	0.0650254	1.00	1.14	1.16	1.00	0.85 to 1.15	100	70 to 130	1.74	20
BA17561	Iron, Total	mg/L	0.0000713	0.0176	0.2	0.280	0.283	0.203	0.17 to 0.23	97.4	70 to 130	1.07	20
BA17561	Potassium, Total	mg/L	-0.0108	0.3674	10.0	10.9	10.8	9.84	8.5 to 11.5	96.0	70 to 130	0.922	20
BA17561	Lead, Total	mg/L	0.000002	0.0001474	0.100	0.109	0.110	0.106	0.085 to 0.115	109	70 to 130	0.913	20
BA17561	Beryllium, Total	mg/L	0.0000018	0.00088	0.100	0.101	0.0997	0.0983	0.085 to 0.115	101	70 to 130	1.30	20
BA17561	Calcium, Total	mg/L	-0.00348	0.1518	5.00	6.97	7.03	5.05	4.25 to 5.75	99.6	70 to 130	0.857	20
BA17561	Lithium, Total	mg/L	0.000168	0.0154	0.20	0.272	0.276	0.196	0.17 to 0.23	114	70 to 130	1.46	20
BA17561	Sodium, Total	mg/L	0.000705	0.044	5.00	374	372	4.91	4.25 to 5.75	0.00	70 to 130	0.536	20
BA17561	Cobalt, Total	mg/L	-0.0000107	0.0001474	0.100	0.106	0.106	0.106	0.085 to 0.115	106	70 to 130	0.00	20
BA17561	Mercury, Total by CVAA	mg/L	0.0000122	0.0005	0.004	0.00418	0.00415	0.00429	0.0034 to 0.0046	104	70 to 130	0.720	20
BA17561	Selenium, Total	mg/L	0.0000507	0.001	0.100	0.0296	0.0314	0.102	0.085 to 0.115	23.2	70 to 130	5.90	20

Comments:

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

Batch QC Summary

Customer Account: WMWGORAPFB
Sample Date: 9/17/20 14:45
Customer ID:
Delivery Date: 9/18/20 10:33

Description: Gorgas Ash Pond Field Blank-1

Laboratory ID Number: BA17560

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA17560	Chloride	mg/L	0.000598	0.50	10.0	10.0	-0.0118	10.6	9 to 11	100	80 to 120	0.00	20
BA17560	Fluoride	mg/L	0.0166	0.05	2.50	2.66	0.019	2.56	2.25 to 2.75	106	80 to 120	0.00	20
BA17559	Solids, Dissolved	mg/L	-1.00	25			248	55.0	40 to 60			0.402	5
BA17560	Sulfate	mg/L	-0.533	0.50	20.0	18.7	-0.577	20.0	18 to 22	93.5	80 to 120	0.00	20

Comments:

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-25HA

Location Code: WMWGORAP
Collected: 9/17/20 09:08
Customer ID:
Submittal Date: 9/18/20 10:33

Laboratory ID Number: BA17561

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	9/23/20 10:35	9/24/20 11:12		1.015	0.138	mg/L	0.03	0.1	
* Calcium, Total	9/23/20 10:35	9/24/20 11:12		1.015	1.99	mg/L	0.1	0.5	
* Iron, Total	9/23/20 10:35	9/24/20 11:12		1.015	0.0853	mg/L	0.02	0.05	
* Lithium, Total	9/23/20 10:35	9/24/20 11:12		1.015	0.0449	mg/L	0.01	0.02	
* Magnesium, Total	9/23/20 10:35	9/24/20 11:12		1.015	0.655	mg/L	0.1	0.5	
* Sodium, Total	9/23/20 10:35	9/24/20 11:53		10.15	374	mg/L	1.015	5.075	RA
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Iron, Dissolved	9/23/20 11:20	9/23/20 13:14		1.015	0.0229	mg/L	0.02	0.05	J
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	9/28/20 11:12	9/29/20 18:11		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	9/28/20 11:12	9/29/20 18:11		1.015	0.00904	mg/L	0.001	0.005	
* Barium, Total	9/28/20 11:12	10/1/20 12:44		1.015	0.164	mg/L	0.002	0.01	
* Beryllium, Total	9/28/20 11:12	9/29/20 18:11		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	9/28/20 11:12	9/29/20 18:11		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	9/28/20 11:12	9/29/20 18:11		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	9/28/20 11:12	9/29/20 18:11		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	9/28/20 11:12	9/29/20 18:11		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	9/28/20 11:12	9/29/20 18:11		1.015	0.0182	mg/L	0.002	0.01	
* Potassium, Total	9/28/20 11:12	9/29/20 18:11		1.015	1.30	mg/L	0.3	2.5	J
* Manganese, Total	9/28/20 11:12	9/29/20 18:11		1.015	0.00818	mg/L	0.001	0.005	
* Selenium, Total	9/28/20 11:12	9/29/20 18:11		1.015	0.00636	mg/L	0.002	0.01	J
* Thallium, Total	9/28/20 11:12	9/29/20 18:11		1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Manganese, Dissolved	9/28/20 09:17	9/29/20 13:25		1.015	0.00746	mg/L	0.001	0.005	
Analytical Method: EPA 245.1	***Analyst: GAS***								
* Mercury, Total by CVAA	9/22/20 09:37	9/22/20 13:39		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2320 B	***Analyst: JAG***								
Alkalinity, Total as CaCO3	9/29/20 10:00	9/29/20 11:20		1	638	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: TJW***								
* Solids, Dissolved	9/21/20 13:00	9/23/20 08:40		1	960	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. Selenium MS & MSD recovery was outside of acceptable limits. Serial Dilution test and post digestion spike was performed. Matrix issue is suspected. LBM 10/16/20

Reported: 11/3/2020
Version: 3.1
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-25HA

Location Code: WMWGORAP
Collected: 9/17/20 09:08
Customer ID:
Submittal Date: 9/18/20 10:33

Laboratory ID Number: BA17561

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 4500CO2 D		***Analyst: JAG***							
Bicarbonate Alkalinity, (calc.)	9/29/20 10:00	9/29/20 11:20		1	600	mg/L			
Carbonate Alkalinity, (calc.)	9/29/20 10:00	9/29/20 11:20		1	38.1	mg/L			
Analytical Method: SM4500Cl E		***Analyst: JCC***							
* Chloride	9/25/20 13:20	9/25/20 13:20		3	38.3	mg/L	1.50	3	
Analytical Method: SM4500F G 2017		***Analyst: JCC***							
* Fluoride	9/28/20 12:00	9/28/20 12:00		1	1.93	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E 2011		***Analyst: JCC***							
* Sulfate	9/22/20 10:07	9/22/20 10:07		10	173	mg/L	5.00	10	
Analytical Method: Field Measurements		***Analyst: DKG***							
Conductivity	9/17/20 09:05	9/17/20 09:05			1481.12	uS/cm			FA
pH	9/17/20 09:05	9/17/20 09:05			8.83	SU			FA
Temperature	9/17/20 09:05	9/17/20 09:05			19.44	C			FA
Turbidity	9/17/20 09:05	9/17/20 09:05			3.01	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. Selenium MS & MSD recovery was outside of acceptable limits. Serial Dilution test and post digestion spike was performed. Matrix issue is suspected. LBM 10/16/20

Reported: 11/3/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORAP
Sample Date: 9/17/20 09:08
Customer ID:
Delivery Date: 9/18/20 10:33

Description: Gorgas Ash Pond - MW-25HA

Laboratory ID Number: BA17561

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA17561	Chromium, Total	mg/L	-0.0000021	0.00044	0.100	0.104	0.103	0.104	0.085 to 0.115	104	70 to 130	0.966	20
BA17561	Magnesium, Total	mg/L	-0.00154	0.0462	5.00	5.55	5.63	5.05	4.25 to 5.75	97.9	70 to 130	1.43	20
BA17562	Manganese, Dissolved	mg/L	-0.0000116	0.0001474	0.10	0.107	0.113	0.101	0.085 to 0.115	100	70 to 130	5.45	20
BA17561	Manganese, Total	mg/L	0.0000202	0.0001474	0.100	0.106	0.107	0.0986	0.085 to 0.115	97.8	70 to 130	0.939	20
BA17561	Thallium, Total	mg/L	0.0000071	0.0001474	0.100	0.105	0.106	0.101	0.085 to 0.115	105	70 to 130	0.948	20
BA17561	Cadmium, Total	mg/L	0.0000028	0.0001474	0.100	0.0997	0.101	0.0989	0.085 to 0.115	99.7	70 to 130	1.30	20
BA17561	Molybdenum, Total	mg/L	0.0000186	0.0001474	0.100	0.122	0.124	0.106	0.085 to 0.115	104	70 to 130	1.63	20
BA17561	Cobalt, Total	mg/L	-0.0000107	0.0001474	0.100	0.106	0.106	0.106	0.085 to 0.115	106	70 to 130	0.00	20
BA17561	Mercury, Total by CVAA	mg/L	0.0000122	0.0005	0.004	0.00418	0.00415	0.00429	0.0034 to 0.0046	104	70 to 130	0.720	20
BA17561	Selenium, Total	mg/L	0.0000507	0.001	0.100	0.0296	0.0314	0.102	0.085 to 0.115	23.2	70 to 130	5.90	20
BA17561	Arsenic, Total	mg/L	0.0000142	0.0001474	0.100	0.115	0.115	0.105	0.085 to 0.115	106	70 to 130	0.00	20
BA17561	Barium, Total	mg/L	0.0000099	0.0002	0.10	0.251	0.258	0.0989	0.085 to 0.115	87.0	70 to 130	2.75	20
BA17561	Antimony, Total	mg/L	0.000175	0.001	0.100	0.103	0.104	0.101	0.085 to 0.115	103	70 to 130	0.966	20
BA17561	Boron, Total	mg/L	-0.000998	0.0650254	1.00	1.14	1.16	1.00	0.85 to 1.15	100	70 to 130	1.74	20
BA17561	Iron, Dissolved	mg/L	0.000233	0.0176	0.2	0.235	0.236	0.215	0.17 to 0.23	106	70 to 130	0.425	20
BA17561	Iron, Total	mg/L	0.0000713	0.0176	0.2	0.280	0.283	0.203	0.17 to 0.23	97.4	70 to 130	1.07	20
BA17561	Potassium, Total	mg/L	-0.0108	0.3674	10.0	10.9	10.8	9.84	8.5 to 11.5	96.0	70 to 130	0.922	20
BA17561	Lead, Total	mg/L	0.000002	0.0001474	0.100	0.109	0.110	0.106	0.085 to 0.115	109	70 to 130	0.913	20
BA17561	Beryllium, Total	mg/L	0.0000018	0.00088	0.100	0.101	0.0997	0.0983	0.085 to 0.115	101	70 to 130	1.30	20
BA17561	Calcium, Total	mg/L	-0.00348	0.1518	5.00	6.97	7.03	5.05	4.25 to 5.75	99.6	70 to 130	0.857	20
BA17561	Lithium, Total	mg/L	0.000168	0.0154	0.20	0.272	0.276	0.196	0.17 to 0.23	114	70 to 130	1.46	20
BA17561	Sodium, Total	mg/L	0.000705	0.044	5.00	374	372	4.91	4.25 to 5.75	0.00	70 to 130	0.536	20

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified. Selenium MS & MSD recovery was outside of acceptable limits. Serial Dilution test and post digestion spike was performed. Matrix issue is suspected. LBM 10/16/20

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/17/20 09:08
Customer ID:
Delivery Date: 9/18/20 10:33

Description: Gorgas Ash Pond - MW-25HA

Laboratory ID Number: BA17561

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA17565	Sulfate	mg/L	-0.560	0.50	80.0	129	51.2	20.8	18 to 22	98.5	80 to 120	1.97	20
BA17780	Chloride	mg/L	-0.0119	0.50	10.0	14.0	3.62	10.6	9 to 11	106	80 to 120	4.81	20
BA17782	Alkalinity, Total as CaCO3	mg/L					340	53.1	45.0 to 55.0			0.295	10
BA17565	Solids, Dissolved	mg/L	-1.00	25			347	55.0	40 to 60			0.144	5
BA17780	Fluoride	mg/L	0.0208	0.05	2.50	3.59	0.865	2.60	2.25 to 2.75	109	80 to 120	0.806	20

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified. Selenium MS & MSD recovery was outside of acceptable limits. Serial Dilution test and post digestion spike was performed. Matrix issue is suspected. LBM 10/16/20

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - PZ-16

Location Code: WMWGORAP
Collected: 9/17/20 11:55
Customer ID:
Submittal Date: 9/18/20 10:33

Laboratory ID Number: BA17562

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	9/23/20 10:35	9/24/20 11:28		1.015	0.0824	mg/L	0.03	0.1	J
* Calcium, Total	9/23/20 10:35	9/24/20 11:28		1.015	9.69	mg/L	0.1	0.5	
* Iron, Total	9/23/20 10:35	9/24/20 11:28		1.015	0.169	mg/L	0.02	0.05	
* Lithium, Total	9/23/20 10:35	9/24/20 11:28		1.015	0.0730	mg/L	0.01	0.02	
* Magnesium, Total	9/23/20 10:35	9/24/20 11:28		1.015	2.69	mg/L	0.1	0.5	
* Sodium, Total	9/23/20 10:35	9/24/20 12:02		10.15	152	mg/L	1.015	5.075	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Iron, Dissolved	9/23/20 11:20	9/23/20 13:29		1.015	0.0800	mg/L	0.02	0.05	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	9/28/20 11:12	9/29/20 18:27		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	9/28/20 11:12	9/29/20 18:27		1.015	Not Detected	mg/L	0.001	0.005	U
* Barium, Total	9/28/20 11:12	10/1/20 13:01		1.015	0.223	mg/L	0.002	0.01	
* Beryllium, Total	9/28/20 11:12	9/29/20 18:27		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	9/28/20 11:12	9/29/20 18:27		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	9/28/20 11:12	9/29/20 18:27		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	9/28/20 11:12	9/29/20 18:27		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	9/28/20 11:12	9/29/20 18:27		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	9/28/20 11:12	9/29/20 18:27		1.015	0.00241	mg/L	0.002	0.01	J
* Potassium, Total	9/28/20 11:12	9/29/20 18:27		1.015	2.77	mg/L	0.3	2.5	
* Manganese, Total	9/28/20 11:12	9/29/20 18:27		1.015	0.00725	mg/L	0.001	0.005	
* Selenium, Total	9/28/20 11:12	9/29/20 18:27		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	9/28/20 11:12	9/29/20 18:27		1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Manganese, Dissolved	9/28/20 09:17	9/29/20 13:28		1.015	0.00671	mg/L	0.001	0.005	
Analytical Method: EPA 245.1	***Analyst: GAS***								
* Mercury, Total by CVAA	9/22/20 09:37	9/22/20 13:55		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2320 B	***Analyst: JAG***								
Alkalinity, Total as CaCO3	9/29/20 10:00	9/29/20 11:20		1	321	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: TJW***								
* Solids, Dissolved	9/21/20 13:00	9/23/20 08:40		1	387	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 10/16/20

Reported: 11/3/2020
Version: 3.1
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - PZ-16

Location Code: WMWGORAP
Collected: 9/17/20 11:55
Customer ID:
Submittal Date: 9/18/20 10:33

Laboratory ID Number: BA17562

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 4500CO2 D		***Analyst: JAG***							
Bicarbonate Alkalinity, (calc.)	9/29/20 10:00	9/29/20 11:20		1	303	mg/L			
Carbonate Alkalinity, (calc.)	9/29/20 10:00	9/29/20 11:20		1	17.6	mg/L			
Analytical Method: SM4500Cl E		***Analyst: JCC***							
* Chloride	9/25/20 13:09	9/25/20 13:09		1	6.57	mg/L	0.50	1	
Analytical Method: SM4500F G 2017		***Analyst: JCC***							
* Fluoride	9/28/20 12:01	9/28/20 12:01		1	0.237	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E 2011		***Analyst: JCC***							
* Sulfate	9/22/20 10:08	9/22/20 10:08		1	15.2	mg/L	0.50	1	
Analytical Method: Field Measurements		***Analyst: DKG***							
Conductivity	9/17/20 11:52	9/17/20 11:52			607.69	uS/cm			FA
pH	9/17/20 11:52	9/17/20 11:52			9.15	SU			FA
Temperature	9/17/20 11:52	9/17/20 11:52			21.15	C			FA
Turbidity	9/17/20 11:52	9/17/20 11:52			2.17	NTU			FA

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

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 10/16/20

Reported: 11/3/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORAP
Sample Date: 9/17/20 11:55
Customer ID:
Delivery Date: 9/18/20 10:33

Description: Gorgas Ash Pond - PZ-16

Laboratory ID Number: BA17562

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA17781	Chromium, Total	mg/L	-0.0000021	0.00044	0.100	0.108	0.107	0.104	0.085 to 0.115	108	70 to 130	0.930	20
BA17781	Thallium, Total	mg/L	0.0000071	0.0001474	0.100	0.104	0.102	0.101	0.085 to 0.115	104	70 to 130	1.94	20
BA17565	Lithium, Total	mg/L	0.000168	0.0154	0.20	0.247	0.246	0.196	0.17 to 0.23	106	70 to 130	0.406	20
BA17565	Magnesium, Total	mg/L	-0.00154	0.0462	5.00	5.81	5.74	5.05	4.25 to 5.75	98.3	70 to 130	1.21	20
BA17565	Iron, Dissolved	mg/L	0.000233	0.0176	0.2	0.230	0.229	0.215	0.17 to 0.23	115	70 to 130	0.436	20
BA17781	Arsenic, Total	mg/L	0.0000142	0.0001474	0.100	0.108	0.107	0.105	0.085 to 0.115	108	70 to 130	0.930	20
BA17781	Potassium, Total	mg/L	-0.0108	0.3674	10.0	11.2	11.1	9.84	8.5 to 11.5	102	70 to 130	0.897	20
BA17781	Manganese, Total	mg/L	0.0000202	0.0001474	0.100	0.109	0.112	0.0986	0.085 to 0.115	99.8	70 to 130	2.71	20
BA17565	Mercury, Total by CVAA	mg/L	0.0000109	0.0005	0.004	0.00423	0.00419	0.00436	0.0034 to 0.0046	106	70 to 130	0.950	20
BA17781	Beryllium, Total	mg/L	0.0000018	0.00088	0.100	0.100	0.101	0.0983	0.085 to 0.115	100	70 to 130	0.995	20
BA17565	Iron, Total	mg/L	0.0000713	0.0176	0.2	0.240	0.238	0.203	0.17 to 0.23	98.0	70 to 130	0.837	20
BA17565	Sodium, Total	mg/L	0.000705	0.044	5.00	131	131	4.91	4.25 to 5.75	80.0	70 to 130	0.00	20
BA17781	Barium, Total	mg/L	0.0000099	0.0002	0.10	0.190	0.200	0.0989	0.085 to 0.115	98.4	70 to 130	5.13	20
BA17781	Selenium, Total	mg/L	0.0000507	0.001	0.100	0.0197	0.0200	0.102	0.085 to 0.115	19.7	70 to 130	1.51	20
BA17562	Manganese, Dissolved	mg/L	-0.0000116	0.0001474	0.10	0.107	0.113	0.101	0.085 to 0.115	100	70 to 130	5.45	20
BA17565	Calcium, Total	mg/L	-0.00348	0.1518	5.00	9.04	8.92	5.05	4.25 to 5.75	98.4	70 to 130	1.34	20
BA17781	Cadmium, Total	mg/L	0.0000028	0.0001474	0.100	0.105	0.104	0.0989	0.085 to 0.115	105	70 to 130	0.957	20
BA17781	Molybdenum, Total	mg/L	0.0000186	0.0001474	0.100	0.114	0.112	0.106	0.085 to 0.115	110	70 to 130	1.77	20
BA17781	Lead, Total	mg/L	0.000002	0.0001474	0.100	0.108	0.108	0.106	0.085 to 0.115	108	70 to 130	0.00	20
BA17781	Antimony, Total	mg/L	0.000175	0.001	0.100	0.102	0.104	0.101	0.085 to 0.115	102	70 to 130	1.94	20
BA17565	Boron, Total	mg/L	-0.000998	0.0650254	1.00	1.03	1.02	1.00	0.85 to 1.15	99.6	70 to 130	0.976	20
BA17781	Cobalt, Total	mg/L	-0.0000107	0.0001474	0.100	0.113	0.110	0.106	0.085 to 0.115	113	70 to 130	2.69	20

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 10/16/20

Reported: 11/3/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/17/20 11:55
Customer ID:
Delivery Date: 9/18/20 10:33

Description: Gorgas Ash Pond - PZ-16

Laboratory ID Number: BA17562

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA17565	Sulfate	mg/L	-0.560	0.50	80.0	129	51.2	20.8	18 to 22	98.5	80 to 120	1.97	20
BA17780	Chloride	mg/L	-0.0119	0.50	10.0	14.0	3.62	10.6	9 to 11	106	80 to 120	4.81	20
BA17782	Alkalinity, Total as CaCO3	mg/L					340	53.1	45.0 to 55.0			0.295	10
BA17565	Solids, Dissolved	mg/L	-1.00	25			347	55.0	40 to 60			0.144	5
BA17780	Fluoride	mg/L	0.0208	0.05	2.50	3.59	0.865	2.60	2.25 to 2.75	109	80 to 120	0.806	20

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 10/16/20

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - PZ-16 DUP

Location Code: WMWGORAP
Collected: 9/17/20 11:55
Customer ID:
Submittal Date: 9/18/20 10:33

Laboratory ID Number: BA17563

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	9/23/20 10:35	9/24/20 11:31		1.015	0.0828	mg/L	0.03	0.1	J
* Calcium, Total	9/23/20 10:35	9/24/20 11:31		1.015	9.78	mg/L	0.1	0.5	
* Iron, Total	9/23/20 10:35	9/24/20 11:31		1.015	0.174	mg/L	0.02	0.05	
* Lithium, Total	9/23/20 10:35	9/24/20 11:31		1.015	0.0741	mg/L	0.01	0.02	
* Magnesium, Total	9/23/20 10:35	9/24/20 11:31		1.015	2.68	mg/L	0.1	0.5	
* Sodium, Total	9/23/20 10:35	9/24/20 12:05		10.15	151	mg/L	1.015	5.075	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Iron, Dissolved	9/23/20 11:20	9/23/20 13:32		1.015	0.0791	mg/L	0.02	0.05	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	9/28/20 11:12	9/29/20 18:29		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	9/28/20 11:12	9/29/20 18:29		1.015	Not Detected	mg/L	0.001	0.005	U
* Barium, Total	9/28/20 11:12	10/1/20 13:04		1.015	0.228	mg/L	0.002	0.01	
* Beryllium, Total	9/28/20 11:12	9/29/20 18:29		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	9/28/20 11:12	9/29/20 18:29		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	9/28/20 11:12	9/29/20 18:29		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	9/28/20 11:12	9/29/20 18:29		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	9/28/20 11:12	9/29/20 18:29		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	9/28/20 11:12	9/29/20 18:29		1.015	0.00251	mg/L	0.002	0.01	J
* Potassium, Total	9/28/20 11:12	9/29/20 18:29		1.015	2.88	mg/L	0.3	2.5	
* Manganese, Total	9/28/20 11:12	9/29/20 18:29		1.015	0.00707	mg/L	0.001	0.005	
* Selenium, Total	9/28/20 11:12	9/29/20 18:29		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	9/28/20 11:12	9/29/20 18:29		1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Manganese, Dissolved	9/28/20 09:17	9/29/20 13:43		1.015	0.00696	mg/L	0.001	0.005	
Analytical Method: EPA 245.1	***Analyst: GAS***								
* Mercury, Total by CVAA	9/22/20 09:37	9/22/20 13:58		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2320 B	***Analyst: JAG***								
Alkalinity, Total as CaCO3	9/29/20 10:00	9/29/20 11:20		1	333	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: TJW***								
* Solids, Dissolved	9/21/20 13:00	9/23/20 08:40		1	384	mg/L		25	

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

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 10/16/20

Reported: 11/3/2020
Version: 3.1
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - PZ-16 DUP

Location Code: WMWGORAP
Collected: 9/17/20 11:55
Customer ID:
Submittal Date: 9/18/20 10:33

Laboratory ID Number: BA17563

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 4500CO2 D		***Analyst: JAG***							
Bicarbonate Alkalinity, (calc.)	9/29/20 10:00	9/29/20 11:20		1	315	mg/L			
Carbonate Alkalinity, (calc.)	9/29/20 10:00	9/29/20 11:20		1	17.4	mg/L			
Analytical Method: SM4500Cl E		***Analyst: JCC***							
* Chloride	9/25/20 13:10	9/25/20 13:10		1	6.54	mg/L	0.50	1	
Analytical Method: SM4500F G 2017		***Analyst: JCC***							
* Fluoride	9/28/20 12:03	9/28/20 12:03		1	0.227	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E 2011		***Analyst: JCC***							
* Sulfate	9/22/20 10:10	9/22/20 10:10		1	15.2	mg/L	0.50	1	
Analytical Method: Field Measurements		***Analyst: DKG***							
Conductivity	9/17/20 11:52	9/17/20 11:52			607.69	uS/cm			FA
pH	9/17/20 11:52	9/17/20 11:52			9.15	SU			FA
Temperature	9/17/20 11:52	9/17/20 11:52			21.15	C			FA
Turbidity	9/17/20 11:52	9/17/20 11:52			2.17	NTU			FA

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

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 10/16/20

Reported: 11/3/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORAP
Sample Date: 9/17/20 11:55
Customer ID:
Delivery Date: 9/18/20 10:33

Description: Gorgas Ash Pond - PZ-16 DUP

Laboratory ID Number: BA17563

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA17781	Chromium, Total	mg/L	-0.0000021	0.00044	0.100	0.108	0.107	0.104	0.085 to 0.115	108	70 to 130	0.930	20
BA17781	Thallium, Total	mg/L	0.0000071	0.0001474	0.100	0.104	0.102	0.101	0.085 to 0.115	104	70 to 130	1.94	20
BA17783	Manganese, Dissolved	mg/L	-0.0000116	0.0001474	0.10	0.118	0.109	0.101	0.085 to 0.115	105	70 to 130	7.93	20
BA17565	Boron, Total	mg/L	-0.000998	0.0650254	1.00	1.03	1.02	1.00	0.85 to 1.15	99.6	70 to 130	0.976	20
BA17781	Cobalt, Total	mg/L	-0.0000107	0.0001474	0.100	0.113	0.110	0.106	0.085 to 0.115	113	70 to 130	2.69	20
BA17565	Lithium, Total	mg/L	0.000168	0.0154	0.20	0.247	0.246	0.196	0.17 to 0.23	106	70 to 130	0.406	20
BA17565	Magnesium, Total	mg/L	-0.00154	0.0462	5.00	5.81	5.74	5.05	4.25 to 5.75	98.3	70 to 130	1.21	20
BA17565	Iron, Dissolved	mg/L	0.000233	0.0176	0.2	0.230	0.229	0.215	0.17 to 0.23	115	70 to 130	0.436	20
BA17781	Arsenic, Total	mg/L	0.0000142	0.0001474	0.100	0.108	0.107	0.105	0.085 to 0.115	108	70 to 130	0.930	20
BA17781	Potassium, Total	mg/L	-0.0108	0.3674	10.0	11.2	11.1	9.84	8.5 to 11.5	102	70 to 130	0.897	20
BA17781	Manganese, Total	mg/L	0.0000202	0.0001474	0.100	0.109	0.112	0.0986	0.085 to 0.115	99.8	70 to 130	2.71	20
BA17565	Iron, Total	mg/L	0.0000713	0.0176	0.2	0.240	0.238	0.203	0.17 to 0.23	98.0	70 to 130	0.837	20
BA17565	Sodium, Total	mg/L	0.000705	0.044	5.00	131	131	4.91	4.25 to 5.75	80.0	70 to 130	0.00	20
BA17781	Barium, Total	mg/L	0.0000099	0.0002	0.10	0.190	0.200	0.0989	0.085 to 0.115	98.4	70 to 130	5.13	20
BA17781	Selenium, Total	mg/L	0.0000507	0.001	0.100	0.0197	0.0200	0.102	0.085 to 0.115	19.7	70 to 130	1.51	20
BA17565	Mercury, Total by CVAA	mg/L	0.0000109	0.0005	0.004	0.00423	0.00419	0.00436	0.0034 to 0.0046	106	70 to 130	0.950	20
BA17781	Beryllium, Total	mg/L	0.0000018	0.00088	0.100	0.100	0.101	0.0983	0.085 to 0.115	100	70 to 130	0.995	20
BA17565	Calcium, Total	mg/L	-0.00348	0.1518	5.00	9.04	8.92	5.05	4.25 to 5.75	98.4	70 to 130	1.34	20
BA17781	Cadmium, Total	mg/L	0.0000028	0.0001474	0.100	0.105	0.104	0.0989	0.085 to 0.115	105	70 to 130	0.957	20
BA17781	Molybdenum, Total	mg/L	0.0000186	0.0001474	0.100	0.114	0.112	0.106	0.085 to 0.115	110	70 to 130	1.77	20
BA17781	Lead, Total	mg/L	0.000002	0.0001474	0.100	0.108	0.108	0.106	0.085 to 0.115	108	70 to 130	0.00	20
BA17781	Antimony, Total	mg/L	0.000175	0.001	0.100	0.102	0.104	0.101	0.085 to 0.115	102	70 to 130	1.94	20

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 10/16/20

Reported: 11/3/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/17/20 11:55
Customer ID:
Delivery Date: 9/18/20 10:33

Description: Gorgas Ash Pond - PZ-16 DUP

Laboratory ID Number: BA17563

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA17565	Sulfate	mg/L	-0.560	0.50	80.0	129	51.2	20.8	18 to 22	98.5	80 to 120	1.97	20
BA17780	Chloride	mg/L	-0.0119	0.50	10.0	14.0	3.62	10.6	9 to 11	106	80 to 120	4.81	20
BA17782	Alkalinity, Total as CaCO3	mg/L					340	53.1	45.0 to 55.0			0.295	10
BA17565	Solids, Dissolved	mg/L	-1.00	25			347	55.0	40 to 60			0.144	5
BA17780	Fluoride	mg/L	0.0208	0.05	2.50	3.59	0.865	2.60	2.25 to 2.75	109	80 to 120	0.806	20

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 10/16/20

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - PZ-22

Location Code: WMWGORAP
Collected: 9/17/20 13:07
Customer ID:
Submittal Date: 9/18/20 10:33

Laboratory ID Number: BA17564

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	9/23/20 10:35	9/24/20 11:34		1.015	0.0454	mg/L	0.03	0.1	J
* Calcium, Total	9/23/20 10:35	9/24/20 11:34		1.015	12.6	mg/L	0.1	0.5	
* Iron, Total	9/23/20 10:35	9/24/20 11:34		1.015	2.05	mg/L	0.02	0.05	
* Lithium, Total	9/23/20 10:35	9/24/20 11:34		1.015	0.0862	mg/L	0.01	0.02	
* Magnesium, Total	9/23/20 10:35	9/24/20 11:34		1.015	7.56	mg/L	0.1	0.5	
* Sodium, Total	9/23/20 10:35	9/24/20 12:20		10.15	158	mg/L	1.015	5.075	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Iron, Dissolved	9/23/20 11:20	9/23/20 13:35		1.015	2.63	mg/L	0.02	0.05	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	9/28/20 11:12	9/29/20 18:32		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	9/28/20 11:12	9/29/20 18:32		1.015	0.00387	mg/L	0.001	0.005	J
* Barium, Total	9/28/20 11:12	10/1/20 13:07		1.015	0.109	mg/L	0.002	0.01	
* Beryllium, Total	9/28/20 11:12	9/29/20 18:32		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	9/28/20 11:12	9/29/20 18:32		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	9/28/20 11:12	9/29/20 18:32		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	9/28/20 11:12	9/29/20 18:32		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	9/28/20 11:12	9/29/20 18:32		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	9/28/20 11:12	9/29/20 18:32		1.015	0.00357	mg/L	0.002	0.01	J
* Potassium, Total	9/28/20 11:12	9/29/20 18:32		1.015	6.10	mg/L	0.3	2.5	
* Manganese, Total	9/28/20 11:12	9/29/20 18:32		1.015	0.0459	mg/L	0.001	0.005	
* Selenium, Total	9/28/20 11:12	9/29/20 18:32		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	9/28/20 11:12	9/29/20 18:32		1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Manganese, Dissolved	9/28/20 09:17	9/29/20 13:46		1.015	0.0571	mg/L	0.001	0.005	
Analytical Method: EPA 245.1	***Analyst: GAS***								
* Mercury, Total by CVAA	9/22/20 09:37	9/22/20 14:00		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2320 B	***Analyst: JAG***								
Alkalinity, Total as CaCO3	9/29/20 10:00	9/29/20 11:20		1	328	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: TJW***								
* Solids, Dissolved	9/21/20 13:00	9/23/20 08:40		1	438	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 10/16/20

Reported: 11/3/2020
Version: 3.1
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - PZ-22

Location Code: WMWGORAP
Collected: 9/17/20 13:07
Customer ID:
Submittal Date: 9/18/20 10:33

Laboratory ID Number: BA17564

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 4500CO2 D		***Analyst: JAG***							
Bicarbonate Alkalinity, (calc.)	9/29/20 10:00	9/29/20 11:20		1	324	mg/L			
Carbonate Alkalinity, (calc.)	9/29/20 10:00	9/29/20 11:20		1	3.92	mg/L			
Analytical Method: SM4500Cl E		***Analyst: JCC***							
* Chloride	9/25/20 13:11	9/25/20 13:11		1	2.46	mg/L	0.50	1	
Analytical Method: SM4500F G 2017		***Analyst: JCC***							
* Fluoride	9/28/20 12:04	9/28/20 12:04		1	0.402	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E 2011		***Analyst: JCC***							
* Sulfate	9/22/20 10:11	9/22/20 10:11		4	79.9	mg/L	2.00	4	
Analytical Method: Field Measurements		***Analyst: DKG***							
Conductivity	9/17/20 13:04	9/17/20 13:04			646.98	uS/cm			FA
pH	9/17/20 13:04	9/17/20 13:04			8.81	SU			FA
Temperature	9/17/20 13:04	9/17/20 13:04			20.48	C			FA
Turbidity	9/17/20 13:04	9/17/20 13:04			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.
LBM 10/16/20

Reported: 11/3/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORAP
Sample Date: 9/17/20 13:07
Customer ID:
Delivery Date: 9/18/20 10:33

Description: Gorgas Ash Pond - PZ-22

Laboratory ID Number: BA17564

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA17781	Chromium, Total	mg/L	-0.0000021	0.00044	0.100	0.108	0.107	0.104	0.085 to 0.115	108	70 to 130	0.930	20
BA17781	Thallium, Total	mg/L	0.0000071	0.0001474	0.100	0.104	0.102	0.101	0.085 to 0.115	104	70 to 130	1.94	20
BA17783	Manganese, Dissolved	mg/L	-0.0000116	0.0001474	0.10	0.118	0.109	0.101	0.085 to 0.115	105	70 to 130	7.93	20
BA17565	Mercury, Total by CVAA	mg/L	0.0000109	0.0005	0.004	0.00423	0.00419	0.00436	0.0034 to 0.0046	106	70 to 130	0.950	20
BA17781	Beryllium, Total	mg/L	0.0000018	0.00088	0.100	0.100	0.101	0.0983	0.085 to 0.115	100	70 to 130	0.995	20
BA17565	Lithium, Total	mg/L	0.000168	0.0154	0.20	0.247	0.246	0.196	0.17 to 0.23	106	70 to 130	0.406	20
BA17565	Magnesium, Total	mg/L	-0.00154	0.0462	5.00	5.81	5.74	5.05	4.25 to 5.75	98.3	70 to 130	1.21	20
BA17565	Calcium, Total	mg/L	-0.00348	0.1518	5.00	9.04	8.92	5.05	4.25 to 5.75	98.4	70 to 130	1.34	20
BA17781	Cadmium, Total	mg/L	0.0000028	0.0001474	0.100	0.105	0.104	0.0989	0.085 to 0.115	105	70 to 130	0.957	20
BA17781	Molybdenum, Total	mg/L	0.0000186	0.0001474	0.100	0.114	0.112	0.106	0.085 to 0.115	110	70 to 130	1.77	20
BA17781	Lead, Total	mg/L	0.000002	0.0001474	0.100	0.108	0.108	0.106	0.085 to 0.115	108	70 to 130	0.00	20
BA17781	Antimony, Total	mg/L	0.000175	0.001	0.100	0.102	0.104	0.101	0.085 to 0.115	102	70 to 130	1.94	20
BA17565	Iron, Dissolved	mg/L	0.000233	0.0176	0.2	0.230	0.229	0.215	0.17 to 0.23	115	70 to 130	0.436	20
BA17781	Arsenic, Total	mg/L	0.0000142	0.0001474	0.100	0.108	0.107	0.105	0.085 to 0.115	108	70 to 130	0.930	20
BA17781	Potassium, Total	mg/L	-0.0108	0.3674	10.0	11.2	11.1	9.84	8.5 to 11.5	102	70 to 130	0.897	20
BA17781	Manganese, Total	mg/L	0.0000202	0.0001474	0.100	0.109	0.112	0.0986	0.085 to 0.115	99.8	70 to 130	2.71	20
BA17565	Iron, Total	mg/L	0.0000713	0.0176	0.2	0.240	0.238	0.203	0.17 to 0.23	98.0	70 to 130	0.837	20
BA17565	Sodium, Total	mg/L	0.000705	0.044	5.00	131	131	4.91	4.25 to 5.75	80.0	70 to 130	0.00	20
BA17781	Barium, Total	mg/L	0.0000099	0.0002	0.10	0.190	0.200	0.0989	0.085 to 0.115	98.4	70 to 130	5.13	20
BA17781	Selenium, Total	mg/L	0.0000507	0.001	0.100	0.0197	0.0200	0.102	0.085 to 0.115	19.7	70 to 130	1.51	20
BA17565	Boron, Total	mg/L	-0.000998	0.0650254	1.00	1.03	1.02	1.00	0.85 to 1.15	99.6	70 to 130	0.976	20
BA17781	Cobalt, Total	mg/L	-0.0000107	0.0001474	0.100	0.113	0.110	0.106	0.085 to 0.115	113	70 to 130	2.69	20

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 10/16/20

Reported: 11/3/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/17/20 13:07
Customer ID:
Delivery Date: 9/18/20 10:33

Description: Gorgas Ash Pond - PZ-22

Laboratory ID Number: BA17564

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA17565	Sulfate	mg/L	-0.560	0.50	80.0	129	51.2	20.8	18 to 22	98.5	80 to 120	1.97	20
BA17780	Chloride	mg/L	-0.0119	0.50	10.0	14.0	3.62	10.6	9 to 11	106	80 to 120	4.81	20
BA17782	Alkalinity, Total as CaCO3	mg/L					340	53.1	45.0 to 55.0			0.295	10
BA17565	Solids, Dissolved	mg/L	-1.00	25			347	55.0	40 to 60			0.144	5
BA17780	Fluoride	mg/L	0.0208	0.05	2.50	3.59	0.865	2.60	2.25 to 2.75	109	80 to 120	0.806	20

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 10/16/20

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-36H

Location Code: WMWGORAP
Collected: 9/17/20 15:01
Customer ID:
Submittal Date: 9/18/20 10:33

Laboratory ID Number: BA17565

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	9/23/20 10:35	9/24/20 11:37		1.015	0.0345	mg/L	0.03	0.1	J
* Calcium, Total	9/23/20 10:35	9/24/20 11:37		1.015	4.12	mg/L	0.1	0.5	
* Iron, Total	9/23/20 10:35	9/24/20 11:37		1.015	0.0440	mg/L	0.02	0.05	J
* Lithium, Total	9/23/20 10:35	9/24/20 11:37		1.015	0.0350	mg/L	0.01	0.02	
* Magnesium, Total	9/23/20 10:35	9/24/20 11:37		1.015	0.896	mg/L	0.1	0.5	
* Sodium, Total	9/23/20 10:35	9/24/20 12:23		10.15	127	mg/L	1.015	5.075	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Iron, Dissolved	9/23/20 11:20	9/23/20 13:38		1.015	Not Detected	mg/L	0.02	0.05	U
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	9/28/20 11:12	9/29/20 18:35		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	9/28/20 11:12	9/29/20 18:35		1.015	0.00130	mg/L	0.001	0.005	J
* Barium, Total	9/28/20 11:12	10/1/20 13:09		1.015	0.0378	mg/L	0.002	0.01	
* Beryllium, Total	9/28/20 11:12	9/29/20 18:35		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	9/28/20 11:12	9/29/20 18:35		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	9/28/20 11:12	9/29/20 18:35		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	9/28/20 11:12	9/29/20 18:35		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	9/28/20 11:12	9/29/20 18:35		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	9/28/20 11:12	9/29/20 18:35		1.015	0.0105	mg/L	0.002	0.01	
* Potassium, Total	9/28/20 11:12	9/29/20 18:35		1.015	7.43	mg/L	0.3	2.5	
* Manganese, Total	9/28/20 11:12	9/29/20 18:35		1.015	0.00735	mg/L	0.001	0.005	
* Selenium, Total	9/28/20 11:12	9/29/20 18:35		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	9/28/20 11:12	9/29/20 18:35		1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Manganese, Dissolved	9/28/20 09:17	9/29/20 13:49		1.015	0.00735	mg/L	0.001	0.005	
Analytical Method: EPA 245.1	***Analyst: GAS***								
* Mercury, Total by CVAA	9/22/20 09:37	9/22/20 14:03		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2320 B	***Analyst: JAG***								
Alkalinity, Total as CaCO3	9/29/20 10:00	9/29/20 11:20		1	202	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: TJW***								
* Solids, Dissolved	9/21/20 13:00	9/23/20 08:40		1	348	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 10/16/20

Reported: 11/3/2020
Version: 3.1
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-36H

Location Code: WMWGORAP
Collected: 9/17/20 15:01
Customer ID:
Submittal Date: 9/18/20 10:33

Laboratory ID Number: BA17565

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 4500CO2 D		***Analyst: JAG***							
Bicarbonate Alkalinity, (calc.)	9/29/20 10:00	9/29/20 11:20		1	197	mg/L			
Carbonate Alkalinity, (calc.)	9/29/20 10:00	9/29/20 11:20		1	4.76	mg/L			
Analytical Method: SM4500Cl E		***Analyst: JCC***							
* Chloride	9/25/20 13:21	9/25/20 13:21		3	38.5	mg/L	1.50	3	
Analytical Method: SM4500F G 2017		***Analyst: JCC***							
* Fluoride	9/28/20 12:05	9/28/20 12:05		1	0.209	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E 2011		***Analyst: JCC***							
* Sulfate	9/22/20 10:12	9/22/20 10:12		4	50.2	mg/L	2.00	4	
Analytical Method: Field Measurements		***Analyst: DKG***							
Conductivity	9/17/20 14:58	9/17/20 14:58			561.02	uS/cm			FA
pH	9/17/20 14:58	9/17/20 14:58			8.18	SU			FA
Temperature	9/17/20 14:58	9/17/20 14:58			22.22	C			FA
Turbidity	9/17/20 14:58	9/17/20 14:58			0.93	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 10/16/20

Reported: 11/3/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORAP
Sample Date: 9/17/20 15:01
Customer ID:
Delivery Date: 9/18/20 10:33

Description: Gorgas Ash Pond - MW-36H

Laboratory ID Number: BA17565

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA17781	Chromium, Total	mg/L	-0.0000021	0.00044	0.100	0.108	0.107	0.104	0.085 to 0.115	108	70 to 130	0.930	20
BA17565	Boron, Total	mg/L	-0.000998	0.0650254	1.00	1.03	1.02	1.00	0.85 to 1.15	99.6	70 to 130	0.976	20
BA17781	Cobalt, Total	mg/L	-0.0000107	0.0001474	0.100	0.113	0.110	0.106	0.085 to 0.115	113	70 to 130	2.69	20
BA17565	Lithium, Total	mg/L	0.000168	0.0154	0.20	0.247	0.246	0.196	0.17 to 0.23	106	70 to 130	0.406	20
BA17565	Magnesium, Total	mg/L	-0.00154	0.0462	5.00	5.81	5.74	5.05	4.25 to 5.75	98.3	70 to 130	1.21	20
BA17565	Iron, Dissolved	mg/L	0.000233	0.0176	0.2	0.230	0.229	0.215	0.17 to 0.23	115	70 to 130	0.436	20
BA17781	Arsenic, Total	mg/L	0.0000142	0.0001474	0.100	0.108	0.107	0.105	0.085 to 0.115	108	70 to 130	0.930	20
BA17781	Potassium, Total	mg/L	-0.0108	0.3674	10.0	11.2	11.1	9.84	8.5 to 11.5	102	70 to 130	0.897	20
BA17781	Manganese, Total	mg/L	0.0000202	0.0001474	0.100	0.109	0.112	0.0986	0.085 to 0.115	99.8	70 to 130	2.71	20
BA17565	Iron, Total	mg/L	0.0000713	0.0176	0.2	0.240	0.238	0.203	0.17 to 0.23	98.0	70 to 130	0.837	20
BA17565	Sodium, Total	mg/L	0.000705	0.044	5.00	131	131	4.91	4.25 to 5.75	80.0	70 to 130	0.00	20
BA17781	Barium, Total	mg/L	0.0000099	0.0002	0.10	0.190	0.200	0.0989	0.085 to 0.115	98.4	70 to 130	5.13	20
BA17781	Selenium, Total	mg/L	0.0000507	0.001	0.100	0.0197	0.0200	0.102	0.085 to 0.115	19.7	70 to 130	1.51	20
BA17781	Thallium, Total	mg/L	0.0000071	0.0001474	0.100	0.104	0.102	0.101	0.085 to 0.115	104	70 to 130	1.94	20
BA17783	Manganese, Dissolved	mg/L	-0.0000116	0.0001474	0.10	0.118	0.109	0.101	0.085 to 0.115	105	70 to 130	7.93	20
BA17565	Mercury, Total by CVAA	mg/L	0.0000109	0.0005	0.004	0.00423	0.00419	0.00436	0.0034 to 0.0046	106	70 to 130	0.950	20
BA17781	Beryllium, Total	mg/L	0.0000018	0.00088	0.100	0.100	0.101	0.0983	0.085 to 0.115	100	70 to 130	0.995	20
BA17565	Calcium, Total	mg/L	-0.00348	0.1518	5.00	9.04	8.92	5.05	4.25 to 5.75	98.4	70 to 130	1.34	20
BA17781	Cadmium, Total	mg/L	0.0000028	0.0001474	0.100	0.105	0.104	0.0989	0.085 to 0.115	105	70 to 130	0.957	20
BA17781	Molybdenum, Total	mg/L	0.0000186	0.0001474	0.100	0.114	0.112	0.106	0.085 to 0.115	110	70 to 130	1.77	20
BA17781	Lead, Total	mg/L	0.000002	0.0001474	0.100	0.108	0.108	0.106	0.085 to 0.115	108	70 to 130	0.00	20
BA17781	Antimony, Total	mg/L	0.000175	0.001	0.100	0.102	0.104	0.101	0.085 to 0.115	102	70 to 130	1.94	20

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 10/16/20

Reported: 11/3/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/17/20 15:01
Customer ID:
Delivery Date: 9/18/20 10:33

Description: Gorgas Ash Pond - MW-36H

Laboratory ID Number: BA17565

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA17565	Sulfate	mg/L	-0.560	0.50	80.0	129	51.2	20.8	18 to 22	98.5	80 to 120	1.97	20
BA17780	Chloride	mg/L	-0.0119	0.50	10.0	14.0	3.62	10.6	9 to 11	106	80 to 120	4.81	20
BA17782	Alkalinity, Total as CaCO3	mg/L					340	53.1	45.0 to 55.0			0.295	10
BA17565	Solids, Dissolved	mg/L	-1.00	25			347	55.0	40 to 60			0.144	5
BA17780	Fluoride	mg/L	0.0208	0.05	2.50	3.59	0.865	2.60	2.25 to 2.75	109	80 to 120	0.806	20

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 10/16/20

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-15V

Location Code: WMWGORAP
Collected: 9/21/20 11:18
Customer ID:
Submittal Date: 9/23/20 09:35

Laboratory ID Number: BA17776

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	10/5/20 10:25	10/7/20 11:33		1.015	0.0712	mg/L	0.03	0.1	J
* Calcium, Total	10/5/20 10:25	10/7/20 11:33		1.015	8.20	mg/L	0.1	0.5	
* Iron, Total	10/5/20 10:25	10/7/20 11:33		1.015	0.104	mg/L	0.02	0.05	
* Lithium, Total	10/5/20 10:25	10/7/20 11:33		1.015	0.116	mg/L	0.01	0.02	
* Magnesium, Total	10/5/20 10:25	10/7/20 11:33		1.015	3.43	mg/L	0.1	0.5	
* Sodium, Total	10/5/20 10:25	10/7/20 12:11		10.15	343	mg/L	1.015	5.075	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Iron, Dissolved	10/5/20 11:33	10/6/20 09:58		1.015	Not Detected	mg/L	0.02	0.05	U
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	9/28/20 11:12	9/29/20 18:37		1.015	0.00280	mg/L	0.0008	0.003	J
* Arsenic, Total	9/28/20 11:12	9/29/20 18:37		1.015	0.0167	mg/L	0.001	0.005	
* Barium, Total	9/28/20 11:12	10/1/20 13:12		1.015	0.180	mg/L	0.002	0.01	
* Beryllium, Total	9/28/20 11:12	9/29/20 18:37		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	9/28/20 11:12	9/29/20 18:37		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	9/28/20 11:12	9/29/20 18:37		1.015	0.00239	mg/L	0.002	0.01	J
* Cobalt, Total	9/28/20 11:12	9/29/20 18:37		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	9/28/20 11:12	9/29/20 18:37		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	9/28/20 11:12	9/29/20 18:37		1.015	0.0538	mg/L	0.002	0.01	
* Potassium, Total	9/28/20 11:12	9/29/20 18:37		1.015	25.2	mg/L	0.3	2.5	
* Manganese, Total	9/28/20 11:12	9/29/20 18:37		1.015	0.00280	mg/L	0.001	0.005	J
* Selenium, Total	9/28/20 11:12	9/29/20 18:37		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	9/28/20 11:12	9/29/20 18:37		1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Manganese, Dissolved	9/28/20 09:17	9/29/20 13:52		1.015	Not Detected	mg/L	0.001	0.005	U
Analytical Method: EPA 245.1	***Analyst: GAS***								
* Mercury, Total by CVAA	9/30/20 12:24	10/2/20 09:57		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2320 B	***Analyst: JAG***								
Alkalinity, Total as CaCO3	9/29/20 10:00	9/29/20 11:20		1	204	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: TJW***								
* Solids, Dissolved	9/23/20 12:59	9/25/20 10:00		1	1090	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 10/16/20

Reported: 11/3/2020
Version: 3.1
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-15V

Location Code: WMWGORAP
Collected: 9/21/20 11:18
Customer ID:
Submittal Date: 9/23/20 09:35

Laboratory ID Number: BA17776

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 4500CO2 D		***Analyst: JAG***							
Bicarbonate Alkalinity, (calc.)	9/29/20 10:00	9/29/20 11:20		1	112	mg/L			
Carbonate Alkalinity, (calc.)	9/29/20 10:00	9/29/20 11:20		1	87.7	mg/L			
Analytical Method: SM4500Cl E		***Analyst: JCC***							
* Chloride	9/25/20 13:22	9/25/20 13:22		16	171	mg/L	8.00	16	
Analytical Method: SM4500F G 2017		***Analyst: JCC***							
* Fluoride	9/28/20 12:06	9/28/20 12:06		1	0.372	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E 2011		***Analyst: JCC***							
* Sulfate	9/24/20 10:45	9/24/20 10:45		20	348	mg/L	10.00	20	
Analytical Method: Field Measurements		***Analyst: DKG***							
Conductivity	9/21/20 11:15	9/21/20 11:15			1858.90	uS/cm			FA
pH	9/21/20 11:15	9/21/20 11:15			10.07	SU			FA
Temperature	9/21/20 11:15	9/21/20 11:15			19.89	C			FA
Turbidity	9/21/20 11:15	9/21/20 11:15			5.91	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 10/16/20

Reported: 11/3/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORAP
Sample Date: 9/21/20 11:18
Customer ID:
Delivery Date: 9/23/20 09:35

Description: Gorgas Ash Pond - MW-15V

Laboratory ID Number: BA17776

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA17781	Cobalt, Total	mg/L	-0.0000107	0.0001474	0.100	0.113	0.110	0.106	0.085 to 0.115	113	70 to 130	2.69	20
BA17781	Thallium, Total	mg/L	0.0000071	0.0001474	0.100	0.104	0.102	0.101	0.085 to 0.115	104	70 to 130	1.94	20
BA17783	Manganese, Dissolved	mg/L	-0.0000116	0.0001474	0.10	0.118	0.109	0.101	0.085 to 0.115	105	70 to 130	7.93	20
BA17785	Magnesium, Total	mg/L	-0.00102	0.0462	5.00	13.8	14.1	5.14	4.25 to 5.75	92.0	70 to 130	2.15	20
BA17781	Chromium, Total	mg/L	-0.0000021	0.00044	0.100	0.108	0.107	0.104	0.085 to 0.115	108	70 to 130	0.930	20
BA17785	Lithium, Total	mg/L	-0.0000202	0.0154	0.20	0.289	0.293	0.193	0.17 to 0.23	104	70 to 130	1.37	20
BA17786	Iron, Dissolved	mg/L	0.000118	0.0176	0.2	0.282	0.280	0.194	0.17 to 0.23	91.4	70 to 130	0.712	20
BA17781	Barium, Total	mg/L	0.0000099	0.0002	0.10	0.190	0.200	0.0989	0.085 to 0.115	98.4	70 to 130	5.13	20
BA17781	Selenium, Total	mg/L	0.0000507	0.001	0.100	0.0197	0.0200	0.102	0.085 to 0.115	19.7	70 to 130	1.51	20
BA17785	Boron, Total	mg/L	0.0000373	0.0650254	1.00	1.05	1.08	1.01	0.85 to 1.15	99.0	70 to 130	2.82	20
BA17781	Arsenic, Total	mg/L	0.0000142	0.0001474	0.100	0.108	0.107	0.105	0.085 to 0.115	108	70 to 130	0.930	20
BA17781	Potassium, Total	mg/L	-0.0108	0.3674	10.0	11.2	11.1	9.84	8.5 to 11.5	102	70 to 130	0.897	20
BA17781	Manganese, Total	mg/L	0.0000202	0.0001474	0.100	0.109	0.112	0.0986	0.085 to 0.115	99.8	70 to 130	2.71	20
BA17785	Calcium, Total	mg/L	0.00161	0.1518	5.00	30.5	30.9	5.09	4.25 to 5.75	80.0	70 to 130	1.30	20
BA17781	Beryllium, Total	mg/L	0.0000018	0.00088	0.100	0.100	0.101	0.0983	0.085 to 0.115	100	70 to 130	0.995	20
BA17785	Mercury, Total by CVAA	mg/L	0.0000646	0.0005	0.004	0.00393	0.00384	0.00392	0.0034 to 0.0046	98.2	70 to 130	2.32	20
BA17785	Sodium, Total	mg/L	0.000602	0.044	5.00	203	207	5.15	4.25 to 5.75	20.0	70 to 130	1.95	20
BA17781	Cadmium, Total	mg/L	0.0000028	0.0001474	0.100	0.105	0.104	0.0989	0.085 to 0.115	105	70 to 130	0.957	20
BA17781	Molybdenum, Total	mg/L	0.0000186	0.0001474	0.100	0.114	0.112	0.106	0.085 to 0.115	110	70 to 130	1.77	20
BA17781	Lead, Total	mg/L	0.000002	0.0001474	0.100	0.108	0.108	0.106	0.085 to 0.115	108	70 to 130	0.00	20
BA17781	Antimony, Total	mg/L	0.000175	0.001	0.100	0.102	0.104	0.101	0.085 to 0.115	102	70 to 130	1.94	20
BA17785	Iron, Total	mg/L	0.000157	0.0176	0.2	9.36	9.39	0.202	0.17 to 0.23	70.0	70 to 130	0.320	20

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 10/16/20

Reported: 11/3/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/21/20 11:18
Customer ID:
Delivery Date: 9/23/20 09:35

Description: Gorgas Ash Pond - MW-15V

Laboratory ID Number: BA17776

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA17780	Chloride	mg/L	-0.0119	0.50	10.0	14.0	3.62	10.6	9 to 11	106	80 to 120	4.81	20
BA17782	Alkalinity, Total as CaCO3	mg/L					340	53.1	45.0 to 55.0			0.295	10
BA17785	Sulfate	mg/L	-0.553	0.50	500	716	252	19.5	18 to 22	94.8	80 to 120	4.05	20
BA17780	Fluoride	mg/L	0.0208	0.05	2.50	3.59	0.865	2.60	2.25 to 2.75	109	80 to 120	0.806	20
BA17781	Solids, Dissolved	mg/L	-2.00	25			312	57.0	40 to 60			2.30	5

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 10/16/20

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-17

Location Code: WMWGORAP
Collected: 9/21/20 12:48
Customer ID:
Submittal Date: 9/23/20 09:35

Laboratory ID Number: BA17777

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	10/5/20 10:25	10/7/20 11:37		1.015	0.102	mg/L	0.03	0.1	
* Calcium, Total	10/5/20 10:25	10/7/20 11:37		1.015	3.73	mg/L	0.1	0.5	
* Iron, Total	10/5/20 10:25	10/7/20 11:37		1.015	0.0607	mg/L	0.02	0.05	
* Lithium, Total	10/5/20 10:25	10/7/20 11:37		1.015	0.0579	mg/L	0.01	0.02	
* Magnesium, Total	10/5/20 10:25	10/7/20 11:37		1.015	1.20	mg/L	0.1	0.5	
* Sodium, Total	10/5/20 10:25	10/7/20 12:14		10.15	240	mg/L	1.015	5.075	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Iron, Dissolved	10/5/20 11:33	10/6/20 10:01		1.015	0.0233	mg/L	0.02	0.05	J
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	9/28/20 11:12	9/29/20 18:40		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	9/28/20 11:12	9/29/20 18:40		1.015	0.00550	mg/L	0.001	0.005	
* Barium, Total	9/28/20 11:12	10/1/20 13:14		1.015	0.128	mg/L	0.002	0.01	
* Beryllium, Total	9/28/20 11:12	9/29/20 18:40		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	9/28/20 11:12	9/29/20 18:40		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	9/28/20 11:12	9/29/20 18:40		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	9/28/20 11:12	9/29/20 18:40		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	9/28/20 11:12	9/29/20 18:40		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	9/28/20 11:12	9/29/20 18:40		1.015	0.00776	mg/L	0.002	0.01	J
* Potassium, Total	9/28/20 11:12	9/29/20 18:40		1.015	1.06	mg/L	0.3	2.5	J
* Manganese, Total	9/28/20 11:12	9/29/20 18:40		1.015	0.00871	mg/L	0.001	0.005	
* Selenium, Total	9/28/20 11:12	9/29/20 18:40		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	9/28/20 11:12	9/29/20 18:40		1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Manganese, Dissolved	9/28/20 09:17	9/29/20 13:54		1.015	0.00822	mg/L	0.001	0.005	
Analytical Method: EPA 245.1	***Analyst: GAS***								
* Mercury, Total by CVAA	9/30/20 12:24	10/2/20 10:00		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2320 B	***Analyst: JAG***								
Alkalinity, Total as CaCO3	9/29/20 10:00	9/29/20 11:20		1	386	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: TJW***								
* Solids, Dissolved	9/23/20 12:59	9/25/20 10:00		1	658	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 10/16/20

Reported: 11/3/2020
Version: 3.1
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-17

Location Code: WMWGORAP
Collected: 9/21/20 12:48
Customer ID:
Submittal Date: 9/23/20 09:35

Laboratory ID Number: BA17777

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 4500CO2 D		***Analyst: JAG***							
Bicarbonate Alkalinity, (calc.)	9/29/20 10:00	9/29/20 11:20		1	375	mg/L			
Carbonate Alkalinity, (calc.)	9/29/20 10:00	9/29/20 11:20		1	10.7	mg/L			
Analytical Method: SM4500Cl E		***Analyst: JCC***							
* Chloride	9/25/20 13:15	9/25/20 13:15		1	13.8	mg/L	0.50	1	
Analytical Method: SM4500F G 2017		***Analyst: JCC***							
* Fluoride	9/28/20 12:08	9/28/20 12:08		1	0.371	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E 2011		***Analyst: JCC***							
* Sulfate	9/24/20 10:47	9/24/20 10:47		8	104	mg/L	4.00	8	
Analytical Method: Field Measurements		***Analyst: DKG***							
Conductivity	9/21/20 12:45	9/21/20 12:45			1024.09	uS/cm			FA
pH	9/21/20 12:45	9/21/20 12:45			8.22	SU			FA
Temperature	9/21/20 12:45	9/21/20 12:45			21.20	C			FA
Turbidity	9/21/20 12:45	9/21/20 12:45			0.63	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 10/16/20

Reported: 11/3/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORAP
Sample Date: 9/21/20 12:48
Customer ID:
Delivery Date: 9/23/20 09:35

Description: Gorgas Ash Pond - MW-17

Laboratory ID Number: BA17777

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA17781	Cobalt, Total	mg/L	-0.0000107	0.0001474	0.100	0.113	0.110	0.106	0.085 to 0.115	113	70 to 130	2.69	20
BA17781	Barium, Total	mg/L	0.0000099	0.0002	0.10	0.190	0.200	0.0989	0.085 to 0.115	98.4	70 to 130	5.13	20
BA17781	Selenium, Total	mg/L	0.0000507	0.001	0.100	0.0197	0.0200	0.102	0.085 to 0.115	19.7	70 to 130	1.51	20
BA17785	Boron, Total	mg/L	0.0000373	0.0650254	1.00	1.05	1.08	1.01	0.85 to 1.15	99.0	70 to 130	2.82	20
BA17781	Cadmium, Total	mg/L	0.0000028	0.0001474	0.100	0.105	0.104	0.0989	0.085 to 0.115	105	70 to 130	0.957	20
BA17781	Molybdenum, Total	mg/L	0.0000186	0.0001474	0.100	0.114	0.112	0.106	0.085 to 0.115	110	70 to 130	1.77	20
BA17781	Lead, Total	mg/L	0.000002	0.0001474	0.100	0.108	0.108	0.106	0.085 to 0.115	108	70 to 130	0.00	20
BA17781	Antimony, Total	mg/L	0.000175	0.001	0.100	0.102	0.104	0.101	0.085 to 0.115	102	70 to 130	1.94	20
BA17785	Iron, Total	mg/L	0.000157	0.0176	0.2	9.36	9.39	0.202	0.17 to 0.23	70.0	70 to 130	0.320	20
BA17781	Thallium, Total	mg/L	0.0000071	0.0001474	0.100	0.104	0.102	0.101	0.085 to 0.115	104	70 to 130	1.94	20
BA17783	Manganese, Dissolved	mg/L	-0.0000116	0.0001474	0.10	0.118	0.109	0.101	0.085 to 0.115	105	70 to 130	7.93	20
BA17785	Magnesium, Total	mg/L	-0.00102	0.0462	5.00	13.8	14.1	5.14	4.25 to 5.75	92.0	70 to 130	2.15	20
BA17781	Arsenic, Total	mg/L	0.0000142	0.0001474	0.100	0.108	0.107	0.105	0.085 to 0.115	108	70 to 130	0.930	20
BA17781	Potassium, Total	mg/L	-0.0108	0.3674	10.0	11.2	11.1	9.84	8.5 to 11.5	102	70 to 130	0.897	20
BA17781	Manganese, Total	mg/L	0.0000202	0.0001474	0.100	0.109	0.112	0.0986	0.085 to 0.115	99.8	70 to 130	2.71	20
BA17785	Calcium, Total	mg/L	0.00161	0.1518	5.00	30.5	30.9	5.09	4.25 to 5.75	80.0	70 to 130	1.30	20
BA17781	Chromium, Total	mg/L	-0.0000021	0.00044	0.100	0.108	0.107	0.104	0.085 to 0.115	108	70 to 130	0.930	20
BA17785	Lithium, Total	mg/L	-0.0000202	0.0154	0.20	0.289	0.293	0.193	0.17 to 0.23	104	70 to 130	1.37	20
BA17786	Iron, Dissolved	mg/L	0.000118	0.0176	0.2	0.282	0.280	0.194	0.17 to 0.23	91.4	70 to 130	0.712	20
BA17781	Beryllium, Total	mg/L	0.0000018	0.00088	0.100	0.100	0.101	0.0983	0.085 to 0.115	100	70 to 130	0.995	20
BA17785	Mercury, Total by CVAA	mg/L	0.0000646	0.0005	0.004	0.00393	0.00384	0.00392	0.0034 to 0.0046	98.2	70 to 130	2.32	20
BA17785	Sodium, Total	mg/L	0.000602	0.044	5.00	203	207	5.15	4.25 to 5.75	20.0	70 to 130	1.95	20

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 10/16/20

Reported: 11/3/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/21/20 12:48
Customer ID:
Delivery Date: 9/23/20 09:35

Description: Gorgas Ash Pond - MW-17

Laboratory ID Number: BA17777

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA17780	Chloride	mg/L	-0.0119	0.50	10.0	14.0	3.62	10.6	9 to 11	106	80 to 120	4.81	20
BA17782	Alkalinity, Total as CaCO3	mg/L					340	53.1	45.0 to 55.0			0.295	10
BA17785	Sulfate	mg/L	-0.553	0.50	500	716	252	19.5	18 to 22	94.8	80 to 120	4.05	20
BA17780	Fluoride	mg/L	0.0208	0.05	2.50	3.59	0.865	2.60	2.25 to 2.75	109	80 to 120	0.806	20
BA17781	Solids, Dissolved	mg/L	-2.00	25			312	57.0	40 to 60			2.30	5

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 10/16/20

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond Field Blank-2

Location Code: WMWGORAPFB
Collected: 9/21/20 14:15
Customer ID:
Submittal Date: 9/23/20 09:35

Laboratory ID Number: BA17778

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	10/5/20 10:25	10/7/20 11:40		1.015	Not Detected	mg/L	0.03	0.1	U
* Calcium, Total	10/5/20 10:25	10/7/20 11:40		1.015	Not Detected	mg/L	0.1	0.5	U
* Iron, Total	10/5/20 10:25	10/7/20 11:40		1.015	Not Detected	mg/L	0.02	0.05	U
* Lithium, Total	10/5/20 10:25	10/7/20 11:40		1.015	Not Detected	mg/L	0.01	0.02	U
* Magnesium, Total	10/5/20 10:25	10/7/20 11:40		1.015	Not Detected	mg/L	0.1	0.5	U
* Sodium, Total	10/5/20 10:25	10/7/20 11:40		1.015	Not Detected	mg/L	0.1	0.5	U
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	9/28/20 11:12	9/29/20 18:43		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	9/28/20 11:12	9/29/20 18:43		1.015	Not Detected	mg/L	0.001	0.005	U
* Barium, Total	9/28/20 11:12	10/1/20 13:17		1.015	Not Detected	mg/L	0.002	0.01	U
* Beryllium, Total	9/28/20 11:12	9/29/20 18:43		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	9/28/20 11:12	9/29/20 18:43		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	9/28/20 11:12	9/29/20 18:43		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	9/28/20 11:12	9/29/20 18:43		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	9/28/20 11:12	9/29/20 18:43		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	9/28/20 11:12	9/29/20 18:43		1.015	Not Detected	mg/L	0.002	0.01	U
* Manganese, Total	9/28/20 11:12	9/29/20 18:43		1.015	Not Detected	mg/L	0.001	0.005	U
* Potassium, Total	9/28/20 11:12	9/29/20 18:43		1.015	Not Detected	mg/L	0.3	2.5	U
* Selenium, Total	9/28/20 11:12	9/29/20 18:43		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	9/28/20 11:12	9/29/20 18:43		1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 245.1	***Analyst: GAS***								
* Mercury, Total by CVAA	9/30/20 12:24	10/2/20 10:02		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2540C	***Analyst: TJW***								
* Solids, Dissolved	9/23/20 12:59	9/25/20 10:00		1	Not Detected	mg/L		25	U
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	9/25/20 13:16	9/25/20 13:16		1	Not Detected	mg/L	0.50	1	U
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	9/28/20 12:09	9/28/20 12:09		1	Not Detected	mg/L	0.06	0.1	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	9/24/20 10:48	9/24/20 10:48		1	Not Detected	mg/L	0.50	1	U

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

Comments:

Reported: 11/3/2020
Version: 3.1
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Alabama Power
General Test Laboratory
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Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGORAPFB
Sample Date: 9/21/20 14:15
Customer ID:
Delivery Date: 9/23/20 09:35

Description: Gorgas Ash Pond Field Blank-2

Laboratory ID Number: BA17778

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA17781	Cobalt, Total	mg/L	-0.0000107	0.0001474	0.100	0.113	0.110	0.106	0.085 to 0.115	113	70 to 130	2.69	20
BA17781	Thallium, Total	mg/L	0.0000071	0.0001474	0.100	0.104	0.102	0.101	0.085 to 0.115	104	70 to 130	1.94	20
BA17785	Magnesium, Total	mg/L	-0.00102	0.0462	5.00	13.8	14.1	5.14	4.25 to 5.75	92.0	70 to 130	2.15	20
BA17781	Chromium, Total	mg/L	-0.0000021	0.00044	0.100	0.108	0.107	0.104	0.085 to 0.115	108	70 to 130	0.930	20
BA17785	Lithium, Total	mg/L	-0.0000202	0.0154	0.20	0.289	0.293	0.193	0.17 to 0.23	104	70 to 130	1.37	20
BA17781	Cadmium, Total	mg/L	0.0000028	0.0001474	0.100	0.105	0.104	0.0989	0.085 to 0.115	105	70 to 130	0.957	20
BA17781	Molybdenum, Total	mg/L	0.0000186	0.0001474	0.100	0.114	0.112	0.106	0.085 to 0.115	110	70 to 130	1.77	20
BA17781	Lead, Total	mg/L	0.000002	0.0001474	0.100	0.108	0.108	0.106	0.085 to 0.115	108	70 to 130	0.00	20
BA17781	Antimony, Total	mg/L	0.000175	0.001	0.100	0.102	0.104	0.101	0.085 to 0.115	102	70 to 130	1.94	20
BA17785	Iron, Total	mg/L	0.000157	0.0176	0.2	9.36	9.39	0.202	0.17 to 0.23	70.0	70 to 130	0.320	20
BA17781	Arsenic, Total	mg/L	0.0000142	0.0001474	0.100	0.108	0.107	0.105	0.085 to 0.115	108	70 to 130	0.930	20
BA17781	Potassium, Total	mg/L	-0.0108	0.3674	10.0	11.2	11.1	9.84	8.5 to 11.5	102	70 to 130	0.897	20
BA17781	Manganese, Total	mg/L	0.0000202	0.0001474	0.100	0.109	0.112	0.0986	0.085 to 0.115	99.8	70 to 130	2.71	20
BA17785	Calcium, Total	mg/L	0.00161	0.1518	5.00	30.5	30.9	5.09	4.25 to 5.75	80.0	70 to 130	1.30	20
BA17781	Beryllium, Total	mg/L	0.0000018	0.00088	0.100	0.100	0.101	0.0983	0.085 to 0.115	100	70 to 130	0.995	20
BA17785	Mercury, Total by CVAA	mg/L	0.0000646	0.0005	0.004	0.00393	0.00384	0.00392	0.0034 to 0.0046	98.2	70 to 130	2.32	20
BA17785	Sodium, Total	mg/L	0.000602	0.044	5.00	203	207	5.15	4.25 to 5.75	20.0	70 to 130	1.95	20
BA17781	Barium, Total	mg/L	0.0000099	0.0002	0.10	0.190	0.200	0.0989	0.085 to 0.115	98.4	70 to 130	5.13	20
BA17781	Selenium, Total	mg/L	0.0000507	0.001	0.100	0.0197	0.0200	0.102	0.085 to 0.115	19.7	70 to 130	1.51	20
BA17785	Boron, Total	mg/L	0.0000373	0.0650254	1.00	1.05	1.08	1.01	0.85 to 1.15	99.0	70 to 130	2.82	20

Comments:

Reported: 11/3/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Customer Account: WMWGORAPFB
Sample Date: 9/21/20 14:15
Customer ID:
Delivery Date: 9/23/20 09:35

Description: Gorgas Ash Pond Field Blank-2

Laboratory ID Number: BA17778

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA17780	Chloride	mg/L	-0.0119	0.50	10.0	14.0	3.62	10.6	9 to 11	106	80 to 120	4.81	20
BA17785	Sulfate	mg/L	-0.553	0.50	500	716	252	19.5	18 to 22	94.8	80 to 120	4.05	20
BA17780	Fluoride	mg/L	0.0208	0.05	2.50	3.59	0.865	2.60	2.25 to 2.75	109	80 to 120	0.806	20
BA17781	Solids, Dissolved	mg/L	-2.00	25			312	57.0	40 to 60			2.30	5

Comments:

Reported: 11/3/2020
Version: 3.1
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-32H

Location Code: WMWGORAP
Collected: 9/21/20 14:42
Customer ID:
Submittal Date: 9/23/20 09:36

Laboratory ID Number: BA17779

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	10/5/20 10:25	10/7/20 11:44		1.015	0.0455	mg/L	0.03	0.1	J
* Calcium, Total	10/5/20 10:25	10/7/20 11:44		1.015	3.00	mg/L	0.1	0.5	
* Iron, Total	10/5/20 10:25	10/7/20 11:44		1.015	0.0650	mg/L	0.02	0.05	
* Lithium, Total	10/5/20 10:25	10/7/20 11:44		1.015	0.0421	mg/L	0.01	0.02	
* Magnesium, Total	10/5/20 10:25	10/7/20 11:44		1.015	0.515	mg/L	0.1	0.5	
* Sodium, Total	10/5/20 10:25	10/7/20 12:17		10.15	145	mg/L	1.015	5.075	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Iron, Dissolved	10/5/20 11:33	10/6/20 10:04		1.015	0.0228	mg/L	0.02	0.05	J
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	9/28/20 11:12	9/29/20 18:45		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	9/28/20 11:12	9/29/20 18:45		1.015	Not Detected	mg/L	0.001	0.005	U
* Barium, Total	9/28/20 11:12	10/1/20 13:20		1.015	0.0396	mg/L	0.002	0.01	
* Beryllium, Total	9/28/20 11:12	9/29/20 18:45		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	9/28/20 11:12	9/29/20 18:45		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	9/28/20 11:12	9/29/20 18:45		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	9/28/20 11:12	9/29/20 18:45		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	9/28/20 11:12	9/29/20 18:45		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	9/28/20 11:12	9/29/20 18:45		1.015	0.0896	mg/L	0.002	0.01	
* Potassium, Total	9/28/20 11:12	9/29/20 18:45		1.015	3.16	mg/L	0.3	2.5	
* Manganese, Total	9/28/20 11:12	9/29/20 18:45		1.015	0.00663	mg/L	0.001	0.005	
* Selenium, Total	9/28/20 11:12	9/29/20 18:45		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	9/28/20 11:12	9/29/20 18:45		1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Manganese, Dissolved	9/28/20 09:17	9/29/20 13:57		1.015	0.00638	mg/L	0.001	0.005	
Analytical Method: EPA 245.1	***Analyst: GAS***								
* Mercury, Total by CVAA	9/30/20 12:24	10/2/20 10:05		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2320 B	***Analyst: JAG***								
Alkalinity, Total as CaCO3	9/29/20 10:00	9/29/20 11:20		1	239	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: TJW***								
* Solids, Dissolved	9/23/20 12:59	9/25/20 10:00		1	357	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 10/16/20

Reported: 11/3/2020
Version: 3.1
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-32H

Location Code: WMWGORAP
Collected: 9/21/20 14:42
Customer ID:
Submittal Date: 9/23/20 09:36

Laboratory ID Number: BA17779

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 4500CO2 D		***Analyst: JAG***							
Bicarbonate Alkalinity, (calc.)	9/29/20 10:00	9/29/20 11:20		1	233	mg/L			
Carbonate Alkalinity, (calc.)	9/29/20 10:00	9/29/20 11:20		1	6.16	mg/L			
Analytical Method: SM4500Cl E		***Analyst: JCC***							
* Chloride	9/25/20 13:26	9/25/20 13:26		2	28.2	mg/L	1.00	2	
Analytical Method: SM4500F G 2017		***Analyst: JCC***							
* Fluoride	9/28/20 12:10	9/28/20 12:10		1	0.202	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E 2011		***Analyst: JCC***							
* Sulfate	9/24/20 10:49	9/24/20 10:49		1	38.7	mg/L	0.50	1	
Analytical Method: Field Measurements		***Analyst: DKG***							
Conductivity	9/21/20 14:40	9/21/20 14:40			606.19	uS/cm			FA
pH	9/21/20 14:40	9/21/20 14:40			8.15	SU			FA
Temperature	9/21/20 14:40	9/21/20 14:40			20.98	C			FA
Turbidity	9/21/20 14:40	9/21/20 14:40			1.65	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.
LBM 10/16/20

Reported: 11/3/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORAP
Sample Date: 9/21/20 14:42
Customer ID:
Delivery Date: 9/23/20 09:36

Description: Gorgas Ash Pond - MW-32H

Laboratory ID Number: BA17779

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA17781	Cobalt, Total	mg/L	-0.0000107	0.0001474	0.100	0.113	0.110	0.106	0.085 to 0.115	113	70 to 130	2.69	20
BA17781	Chromium, Total	mg/L	-0.0000021	0.00044	0.100	0.108	0.107	0.104	0.085 to 0.115	108	70 to 130	0.930	20
BA17785	Lithium, Total	mg/L	-0.0000202	0.0154	0.20	0.289	0.293	0.193	0.17 to 0.23	104	70 to 130	1.37	20
BA17786	Iron, Dissolved	mg/L	0.000118	0.0176	0.2	0.282	0.280	0.194	0.17 to 0.23	91.4	70 to 130	0.712	20
BA17781	Beryllium, Total	mg/L	0.0000018	0.00088	0.100	0.100	0.101	0.0983	0.085 to 0.115	100	70 to 130	0.995	20
BA17785	Mercury, Total by CVAA	mg/L	0.0000646	0.0005	0.004	0.00393	0.00384	0.00392	0.0034 to 0.0046	98.2	70 to 130	2.32	20
BA17785	Sodium, Total	mg/L	0.000602	0.044	5.00	203	207	5.15	4.25 to 5.75	20.0	70 to 130	1.95	20
BA17781	Cadmium, Total	mg/L	0.0000028	0.0001474	0.100	0.105	0.104	0.0989	0.085 to 0.115	105	70 to 130	0.957	20
BA17781	Molybdenum, Total	mg/L	0.0000186	0.0001474	0.100	0.114	0.112	0.106	0.085 to 0.115	110	70 to 130	1.77	20
BA17781	Lead, Total	mg/L	0.000002	0.0001474	0.100	0.108	0.108	0.106	0.085 to 0.115	108	70 to 130	0.00	20
BA17781	Antimony, Total	mg/L	0.000175	0.001	0.100	0.102	0.104	0.101	0.085 to 0.115	102	70 to 130	1.94	20
BA17785	Iron, Total	mg/L	0.000157	0.0176	0.2	9.36	9.39	0.202	0.17 to 0.23	70.0	70 to 130	0.320	20
BA17781	Thallium, Total	mg/L	0.0000071	0.0001474	0.100	0.104	0.102	0.101	0.085 to 0.115	104	70 to 130	1.94	20
BA17783	Manganese, Dissolved	mg/L	-0.0000116	0.0001474	0.10	0.118	0.109	0.101	0.085 to 0.115	105	70 to 130	7.93	20
BA17785	Magnesium, Total	mg/L	-0.00102	0.0462	5.00	13.8	14.1	5.14	4.25 to 5.75	92.0	70 to 130	2.15	20
BA17781	Arsenic, Total	mg/L	0.0000142	0.0001474	0.100	0.108	0.107	0.105	0.085 to 0.115	108	70 to 130	0.930	20
BA17781	Potassium, Total	mg/L	-0.0108	0.3674	10.0	11.2	11.1	9.84	8.5 to 11.5	102	70 to 130	0.897	20
BA17781	Manganese, Total	mg/L	0.0000202	0.0001474	0.100	0.109	0.112	0.0986	0.085 to 0.115	99.8	70 to 130	2.71	20
BA17785	Calcium, Total	mg/L	0.00161	0.1518	5.00	30.5	30.9	5.09	4.25 to 5.75	80.0	70 to 130	1.30	20
BA17781	Barium, Total	mg/L	0.0000099	0.0002	0.10	0.190	0.200	0.0989	0.085 to 0.115	98.4	70 to 130	5.13	20
BA17781	Selenium, Total	mg/L	0.0000507	0.001	0.100	0.0197	0.0200	0.102	0.085 to 0.115	19.7	70 to 130	1.51	20
BA17785	Boron, Total	mg/L	0.0000373	0.0650254	1.00	1.05	1.08	1.01	0.85 to 1.15	99.0	70 to 130	2.82	20

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 10/16/20

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/21/20 14:42
Customer ID:
Delivery Date: 9/23/20 09:36

Description: Gorgas Ash Pond - MW-32H

Laboratory ID Number: BA17779

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA17780	Chloride	mg/L	-0.0119	0.50	10.0	14.0	3.62	10.6	9 to 11	106	80 to 120	4.81	20
BA17782	Alkalinity, Total as CaCO3	mg/L					340	53.1	45.0 to 55.0			0.295	10
BA17785	Sulfate	mg/L	-0.553	0.50	500	716	252	19.5	18 to 22	94.8	80 to 120	4.05	20
BA17780	Fluoride	mg/L	0.0208	0.05	2.50	3.59	0.865	2.60	2.25 to 2.75	109	80 to 120	0.806	20
BA17781	Solids, Dissolved	mg/L	-2.00	25			312	57.0	40 to 60			2.30	5

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 10/16/20

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-30HA

Location Code: WMWGORAP
Collected: 9/21/20 16:28
Customer ID:
Submittal Date: 9/23/20 09:36

Laboratory ID Number: BA17780

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	10/5/20 10:25	10/7/20 11:47		1.015	0.0814	mg/L	0.03	0.1	J
* Calcium, Total	10/5/20 10:25	10/7/20 11:47		1.015	29.4	mg/L	0.1	0.5	
* Iron, Total	10/5/20 10:25	10/7/20 11:47		1.015	1.95	mg/L	0.02	0.05	
* Lithium, Total	10/5/20 10:25	10/7/20 11:47		1.015	0.0494	mg/L	0.01	0.02	
* Magnesium, Total	10/5/20 10:25	10/7/20 11:47		1.015	6.02	mg/L	0.1	0.5	
* Sodium, Total	10/5/20 10:25	10/7/20 12:21		10.15	200	mg/L	1.015	5.075	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Iron, Dissolved	10/5/20 11:33	10/6/20 10:07		1.015	1.80	mg/L	0.02	0.05	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	9/28/20 11:12	9/29/20 18:48		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	9/28/20 11:12	9/29/20 18:48		1.015	0.00551	mg/L	0.001	0.005	
* Barium, Total	9/28/20 11:12	10/1/20 13:22		1.015	0.0811	mg/L	0.002	0.01	
* Beryllium, Total	9/28/20 11:12	9/29/20 18:48		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	9/28/20 11:12	9/29/20 18:48		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	9/28/20 11:12	9/29/20 18:48		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	9/28/20 11:12	9/29/20 18:48		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	9/28/20 11:12	9/29/20 18:48		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	9/28/20 11:12	9/29/20 18:48		1.015	0.00254	mg/L	0.002	0.01	J
* Potassium, Total	9/28/20 11:12	9/29/20 18:48		1.015	5.21	mg/L	0.3	2.5	
* Manganese, Total	9/28/20 11:12	9/29/20 18:48		1.015	0.171	mg/L	0.001	0.005	
* Selenium, Total	9/28/20 11:12	9/29/20 18:48		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	9/28/20 11:12	9/29/20 18:48		1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Manganese, Dissolved	9/28/20 09:17	9/29/20 14:00		1.015	0.177	mg/L	0.001	0.005	
Analytical Method: EPA 245.1	***Analyst: GAS***								
* Mercury, Total by CVAA	9/30/20 12:24	10/2/20 10:07		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2320 B	***Analyst: JAG***								
Alkalinity, Total as CaCO3	9/29/20 10:00	9/29/20 11:20		1	368	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: TJW***								
* Solids, Dissolved	9/23/20 12:59	9/25/20 10:00		1	592	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 10/16/20

Reported: 11/3/2020
Version: 3.1
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-30HA

Location Code: WMWGORAP
Collected: 9/21/20 16:28
Customer ID:
Submittal Date: 9/23/20 09:36

Laboratory ID Number: BA17780

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 4500CO2 D		***Analyst: JAG***							
Bicarbonate Alkalinity, (calc.)	9/29/20 10:00	9/29/20 11:20		1	367	mg/L			
Carbonate Alkalinity, (calc.)	9/29/20 10:00	9/29/20 11:20		1	1.09	mg/L			
Analytical Method: SM4500Cl E		***Analyst: JCC***							
* Chloride	9/25/20 13:19	9/25/20 13:19		1	3.45	mg/L	0.50	1	
Analytical Method: SM4500F G 2017		***Analyst: JCC***							
* Fluoride	9/28/20 12:11	9/28/20 12:11		1	0.872	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E 2011		***Analyst: JCC***							
* Sulfate	9/24/20 10:50	9/24/20 10:50		8	128	mg/L	4.00	8	
Analytical Method: Field Measurements		***Analyst: DKG***							
Conductivity	9/21/20 16:25	9/21/20 16:25			960.45	uS/cm			FA
pH	9/21/20 16:25	9/21/20 16:25			7.56	SU			FA
Temperature	9/21/20 16:25	9/21/20 16:25			20.96	C			FA
Turbidity	9/21/20 16:25	9/21/20 16:25			0.36	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 10/16/20

Reported: 11/3/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORAP
Sample Date: 9/21/20 16:28
Customer ID:
Delivery Date: 9/23/20 09:36

Description: Gorgas Ash Pond - MW-30HA

Laboratory ID Number: BA17780

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA17781	Cobalt, Total	mg/L	-0.0000107	0.0001474	0.100	0.113	0.110	0.106	0.085 to 0.115	113	70 to 130	2.69	20
BA17781	Thallium, Total	mg/L	0.0000071	0.0001474	0.100	0.104	0.102	0.101	0.085 to 0.115	104	70 to 130	1.94	20
BA17783	Manganese, Dissolved	mg/L	-0.0000116	0.0001474	0.10	0.118	0.109	0.101	0.085 to 0.115	105	70 to 130	7.93	20
BA17785	Magnesium, Total	mg/L	-0.00102	0.0462	5.00	13.8	14.1	5.14	4.25 to 5.75	92.0	70 to 130	2.15	20
BA17781	Arsenic, Total	mg/L	0.0000142	0.0001474	0.100	0.108	0.107	0.105	0.085 to 0.115	108	70 to 130	0.930	20
BA17781	Potassium, Total	mg/L	-0.0108	0.3674	10.0	11.2	11.1	9.84	8.5 to 11.5	102	70 to 130	0.897	20
BA17781	Manganese, Total	mg/L	0.0000202	0.0001474	0.100	0.109	0.112	0.0986	0.085 to 0.115	99.8	70 to 130	2.71	20
BA17785	Calcium, Total	mg/L	0.00161	0.1518	5.00	30.5	30.9	5.09	4.25 to 5.75	80.0	70 to 130	1.30	20
BA17781	Chromium, Total	mg/L	-0.0000021	0.00044	0.100	0.108	0.107	0.104	0.085 to 0.115	108	70 to 130	0.930	20
BA17785	Lithium, Total	mg/L	-0.0000202	0.0154	0.20	0.289	0.293	0.193	0.17 to 0.23	104	70 to 130	1.37	20
BA17786	Iron, Dissolved	mg/L	0.000118	0.0176	0.2	0.282	0.280	0.194	0.17 to 0.23	91.4	70 to 130	0.712	20
BA17781	Barium, Total	mg/L	0.0000099	0.0002	0.10	0.190	0.200	0.0989	0.085 to 0.115	98.4	70 to 130	5.13	20
BA17781	Selenium, Total	mg/L	0.0000507	0.001	0.100	0.0197	0.0200	0.102	0.085 to 0.115	19.7	70 to 130	1.51	20
BA17785	Boron, Total	mg/L	0.0000373	0.0650254	1.00	1.05	1.08	1.01	0.85 to 1.15	99.0	70 to 130	2.82	20
BA17781	Beryllium, Total	mg/L	0.0000018	0.00088	0.100	0.100	0.101	0.0983	0.085 to 0.115	100	70 to 130	0.995	20
BA17785	Mercury, Total by CVAA	mg/L	0.0000646	0.0005	0.004	0.00393	0.00384	0.00392	0.0034 to 0.0046	98.2	70 to 130	2.32	20
BA17785	Sodium, Total	mg/L	0.000602	0.044	5.00	203	207	5.15	4.25 to 5.75	20.0	70 to 130	1.95	20
BA17781	Cadmium, Total	mg/L	0.0000028	0.0001474	0.100	0.105	0.104	0.0989	0.085 to 0.115	105	70 to 130	0.957	20
BA17781	Molybdenum, Total	mg/L	0.0000186	0.0001474	0.100	0.114	0.112	0.106	0.085 to 0.115	110	70 to 130	1.77	20
BA17781	Lead, Total	mg/L	0.000002	0.0001474	0.100	0.108	0.108	0.106	0.085 to 0.115	108	70 to 130	0.00	20
BA17781	Antimony, Total	mg/L	0.000175	0.001	0.100	0.102	0.104	0.101	0.085 to 0.115	102	70 to 130	1.94	20
BA17785	Iron, Total	mg/L	0.000157	0.0176	0.2	9.36	9.39	0.202	0.17 to 0.23	70.0	70 to 130	0.320	20

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 10/16/20

Reported: 11/3/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/21/20 16:28
Customer ID:
Delivery Date: 9/23/20 09:36

Description: Gorgas Ash Pond - MW-30HA

Laboratory ID Number: BA17780

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA17780	Chloride	mg/L	-0.0119	0.50	10.0	14.0	3.62	10.6	9 to 11	106	80 to 120	4.81	20
BA17780	Fluoride	mg/L	0.0208	0.05	2.50	3.59	0.865	2.60	2.25 to 2.75	109	80 to 120	0.806	20
BA17781	Solids, Dissolved	mg/L	-2.00	25			312	57.0	40 to 60			2.30	5
BA17782	Alkalinity, Total as CaCO3	mg/L					340	53.1	45.0 to 55.0			0.295	10
BA17785	Sulfate	mg/L	-0.553	0.50	500	716	252	19.5	18 to 22	94.8	80 to 120	4.05	20

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 10/16/20

Reported: 11/3/2020
Version: 3.1
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-31H

Location Code: WMWGORAP
Collected: 9/22/20 10:04
Customer ID:
Submittal Date: 9/23/20 09:36

Laboratory ID Number: BA17781

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	10/5/20 10:25	10/7/20 11:50		1.015	Not Detected	mg/L	0.03	0.1	U
* Calcium, Total	10/5/20 10:25	10/7/20 11:50		1.015	5.31	mg/L	0.1	0.5	
* Iron, Total	10/5/20 10:25	10/7/20 11:50		1.015	0.116	mg/L	0.02	0.05	
* Lithium, Total	10/5/20 10:25	10/7/20 11:50		1.015	0.0357	mg/L	0.01	0.02	
* Magnesium, Total	10/5/20 10:25	10/7/20 11:50		1.015	1.63	mg/L	0.1	0.5	
* Sodium, Total	10/5/20 10:25	10/7/20 12:24		10.15	118	mg/L	1.015	5.075	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Iron, Dissolved	10/5/20 11:33	10/6/20 10:10		1.015	Not Detected	mg/L	0.02	0.05	U
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	9/28/20 11:12	9/29/20 18:51		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	9/28/20 11:12	9/29/20 18:51		1.015	Not Detected	mg/L	0.001	0.005	U
* Barium, Total	9/28/20 11:12	10/1/20 13:25		1.015	0.0916	mg/L	0.002	0.01	
* Beryllium, Total	9/28/20 11:12	9/29/20 18:51		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	9/28/20 11:12	9/29/20 18:51		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	9/28/20 11:12	9/29/20 18:51		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	9/28/20 11:12	9/29/20 18:51		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	9/28/20 11:12	9/29/20 18:51		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	9/28/20 11:12	9/29/20 18:51		1.015	0.00438	mg/L	0.002	0.01	J
* Potassium, Total	9/28/20 11:12	9/29/20 18:51		1.015	0.982	mg/L	0.3	2.5	J
* Manganese, Total	9/28/20 11:12	9/29/20 18:51		1.015	0.00919	mg/L	0.001	0.005	
* Selenium, Total	9/28/20 11:12	9/29/20 18:51		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	9/28/20 11:12	9/29/20 18:51		1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Manganese, Dissolved	9/28/20 09:17	9/29/20 14:03		1.015	0.00745	mg/L	0.001	0.005	
Analytical Method: EPA 245.1	***Analyst: GAS***								
* Mercury, Total by CVAA	9/30/20 12:24	10/2/20 10:09		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2320 B	***Analyst: JAG***								
Alkalinity, Total as CaCO3	9/29/20 10:00	9/29/20 11:20		1	211	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: TJW***								
* Solids, Dissolved	9/23/20 12:59	9/25/20 10:00		1	298	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. Selenium MS & MSD recovery was outside of acceptable limits. Serial Dilution test and post digestion spike was performed. Matrix issue is suspected. LBM 10/16/20

Reported: 11/3/2020
Version: 3.1
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-31H

Location Code: WMWGORAP
Collected: 9/22/20 10:04
Customer ID:
Submittal Date: 9/23/20 09:36

Laboratory ID Number: BA17781

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 4500CO2 D		***Analyst: JAG***							
Bicarbonate Alkalinity, (calc.)	9/29/20 10:00	9/29/20 11:20		1	200	mg/L			
Carbonate Alkalinity, (calc.)	9/29/20 10:00	9/29/20 11:20		1	10.6	mg/L			
Analytical Method: SM4500Cl E		***Analyst: JCC***							
* Chloride	9/25/20 13:49	9/25/20 13:49		2	27.3	mg/L	1.00	2	
Analytical Method: SM4500F G 2017		***Analyst: JCC***							
* Fluoride	9/28/20 12:24	9/28/20 12:24		1	0.148	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E 2011		***Analyst: JCC***							
* Sulfate	9/24/20 10:51	9/24/20 10:51		1	22.1	mg/L	0.50	1	
Analytical Method: Field Measurements		***Analyst: DKG***							
Conductivity	9/22/20 10:00	9/22/20 10:00			446.36	uS/cm			FA
pH	9/22/20 10:00	9/22/20 10:00			8.76	SU			FA
Temperature	9/22/20 10:00	9/22/20 10:00			17.92	C			FA
Turbidity	9/22/20 10:00	9/22/20 10:00			2.77	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. Selenium MS & MSD recovery was outside of acceptable limits. Serial Dilution test and post digestion spike was performed. Matrix issue is suspected. LBM 10/16/20

Reported: 11/3/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORAP
Sample Date: 9/22/20 10:04
Customer ID:
Delivery Date: 9/23/20 09:36

Description: Gorgas Ash Pond - MW-31H

Laboratory ID Number: BA17781

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA17781	Cobalt, Total	mg/L	-0.0000107	0.0001474	0.100	0.113	0.110	0.106	0.085 to 0.115	113	70 to 130	2.69	20
BA17781	Thallium, Total	mg/L	0.0000071	0.0001474	0.100	0.104	0.102	0.101	0.085 to 0.115	104	70 to 130	1.94	20
BA17783	Manganese, Dissolved	mg/L	-0.0000116	0.0001474	0.10	0.118	0.109	0.101	0.085 to 0.115	105	70 to 130	7.93	20
BA17785	Magnesium, Total	mg/L	-0.00102	0.0462	5.00	13.8	14.1	5.14	4.25 to 5.75	92.0	70 to 130	2.15	20
BA17781	Cadmium, Total	mg/L	0.0000028	0.0001474	0.100	0.105	0.104	0.0989	0.085 to 0.115	105	70 to 130	0.957	20
BA17781	Molybdenum, Total	mg/L	0.0000186	0.0001474	0.100	0.114	0.112	0.106	0.085 to 0.115	110	70 to 130	1.77	20
BA17781	Lead, Total	mg/L	0.000002	0.0001474	0.100	0.108	0.108	0.106	0.085 to 0.115	108	70 to 130	0.00	20
BA17781	Antimony, Total	mg/L	0.000175	0.001	0.100	0.102	0.104	0.101	0.085 to 0.115	102	70 to 130	1.94	20
BA17785	Iron, Total	mg/L	0.000157	0.0176	0.2	9.36	9.39	0.202	0.17 to 0.23	70.0	70 to 130	0.320	20
BA17781	Chromium, Total	mg/L	-0.0000021	0.00044	0.100	0.108	0.107	0.104	0.085 to 0.115	108	70 to 130	0.930	20
BA17785	Lithium, Total	mg/L	-0.0000202	0.0154	0.20	0.289	0.293	0.193	0.17 to 0.23	104	70 to 130	1.37	20
BA17786	Iron, Dissolved	mg/L	0.000118	0.0176	0.2	0.282	0.280	0.194	0.17 to 0.23	91.4	70 to 130	0.712	20
BA17781	Beryllium, Total	mg/L	0.0000018	0.00088	0.100	0.100	0.101	0.0983	0.085 to 0.115	100	70 to 130	0.995	20
BA17785	Mercury, Total by CVAA	mg/L	0.0000646	0.0005	0.004	0.00393	0.00384	0.00392	0.0034 to 0.0046	98.2	70 to 130	2.32	20
BA17785	Sodium, Total	mg/L	0.000602	0.044	5.00	203	207	5.15	4.25 to 5.75	20.0	70 to 130	1.95	20
BA17781	Barium, Total	mg/L	0.0000099	0.0002	0.10	0.190	0.200	0.0989	0.085 to 0.115	98.4	70 to 130	5.13	20
BA17781	Selenium, Total	mg/L	0.0000507	0.001	0.100	0.0197	0.0200	0.102	0.085 to 0.115	19.7	70 to 130	1.51	20
BA17785	Boron, Total	mg/L	0.0000373	0.0650254	1.00	1.05	1.08	1.01	0.85 to 1.15	99.0	70 to 130	2.82	20
BA17781	Arsenic, Total	mg/L	0.0000142	0.0001474	0.100	0.108	0.107	0.105	0.085 to 0.115	108	70 to 130	0.930	20
BA17781	Potassium, Total	mg/L	-0.0108	0.3674	10.0	11.2	11.1	9.84	8.5 to 11.5	102	70 to 130	0.897	20
BA17781	Manganese, Total	mg/L	0.0000202	0.0001474	0.100	0.109	0.112	0.0986	0.085 to 0.115	99.8	70 to 130	2.71	20
BA17785	Calcium, Total	mg/L	0.00161	0.1518	5.00	30.5	30.9	5.09	4.25 to 5.75	80.0	70 to 130	1.30	20

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified. Selenium MS & MSD recovery was outside of acceptable limits. Serial Dilution test and post digestion spike was performed. Matrix issue is suspected. LBM 10/16/20

Reported: 11/3/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/22/20 10:04
Customer ID:
Delivery Date: 9/23/20 09:36

Description: Gorgas Ash Pond - MW-31H

Laboratory ID Number: BA17781

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA17790	Fluoride	mg/L	0.0227	0.05	2.50	2.72	0.122	2.58	2.25 to 2.75	104	80 to 120	0.823	20
BA17782	Alkalinity, Total as CaCO3	mg/L					340	53.1	45.0 to 55.0			0.295	10
BA17785	Sulfate	mg/L	-0.553	0.50	500	716	252	19.5	18 to 22	94.8	80 to 120	4.05	20
BA17781	Solids, Dissolved	mg/L	-2.00	25			312	57.0	40 to 60			2.30	5
BA17790	Chloride	mg/L	0.00869	0.50	10.0	17.1	7.16	10.6	9 to 11	100	80 to 120	1.26	20

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified. Selenium MS & MSD recovery was outside of acceptable limits. Serial Dilution test and post digestion spike was performed. Matrix issue is suspected. LBM 10/16/20

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-43H

Location Code: WMWGORAP
Collected: 9/22/20 11:30
Customer ID:
Submittal Date: 9/23/20 09:36

Laboratory ID Number: BA17782

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	10/5/20 10:25	10/7/20 11:54		1.015	0.120	mg/L	0.03	0.1	
* Calcium, Total	10/5/20 10:25	10/7/20 11:54		1.015	2.82	mg/L	0.1	0.5	
* Iron, Total	10/5/20 10:25	10/7/20 11:54		1.015	0.134	mg/L	0.02	0.05	
* Lithium, Total	10/5/20 10:25	10/7/20 11:54		1.015	0.0587	mg/L	0.01	0.02	
* Magnesium, Total	10/5/20 10:25	10/7/20 11:54		1.015	0.699	mg/L	0.1	0.5	
* Sodium, Total	10/5/20 10:25	10/7/20 12:27		10.15	327	mg/L	1.015	5.075	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Iron, Dissolved	10/5/20 11:33	10/6/20 10:13		1.015	Not Detected	mg/L	0.02	0.05	U
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	9/28/20 11:12	9/29/20 19:12		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	9/28/20 11:12	9/29/20 19:12		1.015	0.00390	mg/L	0.001	0.005	J
* Barium, Total	9/28/20 11:12	10/1/20 13:53		1.015	0.0921	mg/L	0.002	0.01	
* Beryllium, Total	9/28/20 11:12	9/29/20 19:12		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	9/28/20 11:12	9/29/20 19:12		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	9/28/20 11:12	9/29/20 19:12		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	9/28/20 11:12	9/29/20 19:12		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	9/28/20 11:12	9/29/20 19:12		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	9/28/20 11:12	9/29/20 19:12		1.015	Not Detected	mg/L	0.002	0.01	U
* Potassium, Total	9/28/20 11:12	9/29/20 19:12		1.015	1.12	mg/L	0.3	2.5	J
* Manganese, Total	9/28/20 11:12	9/29/20 19:12		1.015	0.00547	mg/L	0.001	0.005	
* Selenium, Total	9/28/20 11:12	9/29/20 19:12		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	9/28/20 11:12	9/29/20 19:12		1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Manganese, Dissolved	9/28/20 09:17	9/29/20 14:05		1.015	0.00359	mg/L	0.001	0.005	J
Analytical Method: EPA 245.1	***Analyst: GAS***								
* Mercury, Total by CVAA	9/30/20 12:24	10/2/20 10:12		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2320 B	***Analyst: JAG***								
Alkalinity, Total as CaCO3	9/29/20 10:00	9/29/20 11:20		1	339	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: TJW***								
* Solids, Dissolved	9/23/20 12:59	9/25/20 10:00		1	910	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 10/16/20

Reported: 11/3/2020
Version: 3.1
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-43H

Location Code: WMWGORAP
Collected: 9/22/20 11:30
Customer ID:
Submittal Date: 9/23/20 09:36

Laboratory ID Number: BA17782

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 4500CO2 D		***Analyst: JAG***							
Bicarbonate Alkalinity, (calc.)	9/29/20 10:00	9/29/20 11:20		1	326	mg/L			
Carbonate Alkalinity, (calc.)	9/29/20 10:00	9/29/20 11:20		1	12.8	mg/L			
Analytical Method: SM4500Cl E		***Analyst: JCC***							
* Chloride	9/25/20 13:50	9/25/20 13:50		8	78.0	mg/L	4.00	8	
Analytical Method: SM4500F G 2017		***Analyst: JCC***							
* Fluoride	9/28/20 12:23	9/28/20 12:23		1	0.216	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E 2011		***Analyst: JCC***							
* Sulfate	9/24/20 10:53	9/24/20 10:53		16	269	mg/L	8.00	16	
Analytical Method: Field Measurements		***Analyst: DKG***							
Conductivity	9/22/20 11:27	9/22/20 11:27			1333.27	uS/cm			FA
pH	9/22/20 11:27	9/22/20 11:27			8.66	SU			FA
Temperature	9/22/20 11:27	9/22/20 11:27			18.92	C			FA
Turbidity	9/22/20 11:27	9/22/20 11:27			2.86	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 10/16/20

Reported: 11/3/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORAP
Sample Date: 9/22/20 11:30
Customer ID:
Delivery Date: 9/23/20 09:36

Description: Gorgas Ash Pond - MW-43H

Laboratory ID Number: BA17782

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA17791	Arsenic, Total	mg/L	0.0000107	0.0001474	0.100	0.115	0.115	0.109	0.085 to 0.115	106	70 to 130	0.00	20
BA17785	Calcium, Total	mg/L	0.00161	0.1518	5.00	30.5	30.9	5.09	4.25 to 5.75	80.0	70 to 130	1.30	20
BA17785	Boron, Total	mg/L	0.0000373	0.0650254	1.00	1.05	1.08	1.01	0.85 to 1.15	99.0	70 to 130	2.82	20
BA17791	Barium, Total	mg/L	-0.0000107	0.0002	0.10	0.122	0.125	0.105	0.085 to 0.115	98.3	70 to 130	2.43	20
BA17783	Manganese, Dissolved	mg/L	-0.0000116	0.0001474	0.10	0.118	0.109	0.101	0.085 to 0.115	105	70 to 130	7.93	20
BA17785	Magnesium, Total	mg/L	-0.00102	0.0462	5.00	13.8	14.1	5.14	4.25 to 5.75	92.0	70 to 130	2.15	20
BA17785	Lithium, Total	mg/L	-0.0000202	0.0154	0.20	0.289	0.293	0.193	0.17 to 0.23	104	70 to 130	1.37	20
BA17786	Iron, Dissolved	mg/L	0.000118	0.0176	0.2	0.282	0.280	0.194	0.17 to 0.23	91.4	70 to 130	0.712	20
BA17785	Iron, Total	mg/L	0.000157	0.0176	0.2	9.36	9.39	0.202	0.17 to 0.23	70.0	70 to 130	0.320	20
BA17791	Cobalt, Total	mg/L	-0.0000107	0.0001474	0.100	0.104	0.106	0.109	0.085 to 0.115	104	70 to 130	1.90	20
BA17791	Potassium, Total	mg/L	0.000035	0.3674	10.0	11.7	12.0	10.2	8.5 to 11.5	95.0	70 to 130	2.53	20
BA17791	Manganese, Total	mg/L	0.0000162	0.0001474	0.100	1.11	1.12	0.101	0.085 to 0.115	-20.0	70 to 130	0.897	20
BA17791	Selenium, Total	mg/L	0.0000583	0.001	0.100	0.101	0.103	0.105	0.085 to 0.115	101	70 to 130	1.96	20
BA17785	Mercury, Total by CVAA	mg/L	0.0000646	0.0005	0.004	0.00393	0.00384	0.00392	0.0034 to 0.0046	98.2	70 to 130	2.32	20
BA17785	Sodium, Total	mg/L	0.000602	0.044	5.00	203	207	5.15	4.25 to 5.75	20.0	70 to 130	1.95	20
BA17791	Beryllium, Total	mg/L	0.000003	0.00088	0.100	0.0966	0.0940	0.0992	0.085 to 0.115	96.6	70 to 130	2.73	20
BA17791	Cadmium, Total	mg/L	0.00000	0.0001474	0.100	0.0996	0.0994	0.104	0.085 to 0.115	99.6	70 to 130	0.201	20
BA17791	Chromium, Total	mg/L	0.0000326	0.00044	0.100	0.103	0.105	0.106	0.085 to 0.115	103	70 to 130	1.92	20
BA17791	Lead, Total	mg/L	0.0000065	0.0001474	0.100	0.106	0.107	0.109	0.085 to 0.115	106	70 to 130	0.939	20
BA17791	Thallium, Total	mg/L	0.0000087	0.0001474	0.100	0.104	0.106	0.105	0.085 to 0.115	104	70 to 130	1.90	20
BA17791	Molybdenum, Total	mg/L	0.0000171	0.0001474	0.100	0.108	0.108	0.107	0.085 to 0.115	108	70 to 130	0.00	20
BA17791	Antimony, Total	mg/L	0.000272	0.001	0.100	0.104	0.104	0.101	0.085 to 0.115	104	70 to 130	0.00	20

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 10/16/20

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/22/20 11:30
Customer ID:
Delivery Date: 9/23/20 09:36

Description: Gorgas Ash Pond - MW-43H

Laboratory ID Number: BA17782

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA17790	Fluoride	mg/L	0.0227	0.05	2.50	2.72	0.122	2.58	2.25 to 2.75	104	80 to 120	0.823	20
BA17782	Alkalinity, Total as CaCO3	mg/L					340	53.1	45.0 to 55.0			0.295	10
BA17785	Sulfate	mg/L	-0.553	0.50	500	716	252	19.5	18 to 22	94.8	80 to 120	4.05	20
BA17790	Chloride	mg/L	0.00869	0.50	10.0	17.1	7.16	10.6	9 to 11	100	80 to 120	1.26	20
BA17797	Solids, Dissolved	mg/L	-2.00	25			1290	57.0	40 to 60			0.769	5

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 10/16/20

Reported: 11/3/2020
Version: 3.1
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-28H

Location Code: WMWGORAP
Collected: 9/22/20 13:04
Customer ID:
Submittal Date: 9/23/20 09:36

Laboratory ID Number: BA17783

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	10/5/20 10:25	10/7/20 11:57		1.015	0.0728	mg/L	0.03	0.1	J
* Calcium, Total	10/5/20 10:25	10/7/20 11:57		1.015	2.37	mg/L	0.1	0.5	
* Iron, Total	10/5/20 10:25	10/7/20 11:57		1.015	0.285	mg/L	0.02	0.05	
* Lithium, Total	10/5/20 10:25	10/7/20 11:57		1.015	0.0574	mg/L	0.01	0.02	
* Magnesium, Total	10/5/20 10:25	10/7/20 11:57		1.015	0.651	mg/L	0.1	0.5	
* Sodium, Total	10/5/20 10:25	10/7/20 12:31		10.15	200	mg/L	1.015	5.075	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Iron, Dissolved	10/5/20 11:33	10/6/20 10:16		1.015	0.101	mg/L	0.02	0.05	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	9/28/20 11:12	9/29/20 19:14		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	9/28/20 11:12	9/29/20 19:14		1.015	0.00112	mg/L	0.001	0.005	J
* Barium, Total	9/28/20 11:12	10/1/20 13:56		1.015	0.0385	mg/L	0.002	0.01	
* Beryllium, Total	9/28/20 11:12	9/29/20 19:14		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	9/28/20 11:12	9/29/20 19:14		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	9/28/20 11:12	9/29/20 19:14		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	9/28/20 11:12	9/29/20 19:14		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	9/28/20 11:12	9/29/20 19:14		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	9/28/20 11:12	9/29/20 19:14		1.015	0.00616	mg/L	0.002	0.01	J
* Potassium, Total	9/28/20 11:12	9/29/20 19:14		1.015	1.59	mg/L	0.3	2.5	J
* Manganese, Total	9/28/20 11:12	9/29/20 19:14		1.015	0.0145	mg/L	0.001	0.005	
* Selenium, Total	9/28/20 11:12	9/29/20 19:14		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	9/28/20 11:12	9/29/20 19:14		1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Manganese, Dissolved	9/28/20 09:17	9/29/20 14:08		1.015	0.0126	mg/L	0.001	0.005	
Analytical Method: EPA 245.1	***Analyst: GAS***								
* Mercury, Total by CVAA	9/30/20 12:24	10/2/20 10:14		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2320 B	***Analyst: JAG***								
Alkalinity, Total as CaCO3	10/1/20 13:25	10/1/20 14:30		1	345	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: TJW***								
* Solids, Dissolved	9/25/20 13:30	9/29/20 08:00		1	456	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 10/16/20

Reported: 11/3/2020
Version: 3.1
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-28H

Location Code: WMWGORAP
Collected: 9/22/20 13:04
Customer ID:
Submittal Date: 9/23/20 09:36

Laboratory ID Number: BA17783

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 4500CO2 D		***Analyst: JAG***							
Bicarbonate Alkalinity, (calc.)	10/1/20 13:25	10/1/20 14:30		1	336	mg/L			
Carbonate Alkalinity, (calc.)	10/1/20 13:25	10/1/20 14:30		1	9.10	mg/L			
Analytical Method: SM4500Cl E		***Analyst: JCC***							
* Chloride	9/25/20 13:39	9/25/20 13:39		1	12.2	mg/L	0.50	1	
Analytical Method: SM4500F G 2017		***Analyst: JCC***							
* Fluoride	9/28/20 12:26	9/28/20 12:26		1	0.181	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E 2011		***Analyst: JCC***							
* Sulfate	9/24/20 10:54	9/24/20 10:54		1	10.5	mg/L	0.50	1	
Analytical Method: Field Measurements		***Analyst: DKG***							
Conductivity	9/22/20 13:01	9/22/20 13:01			692.86	uS/cm			FA
pH	9/22/20 13:01	9/22/20 13:01			8.24	SU			FA
Temperature	9/22/20 13:01	9/22/20 13:01			18.97	C			FA
Turbidity	9/22/20 13:01	9/22/20 13:01			2.97	NTU			FA

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

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 10/16/20

Reported: 11/3/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORAP
Sample Date: 9/22/20 13:04
Customer ID:
Delivery Date: 9/23/20 09:36

Description: Gorgas Ash Pond - MW-28H

Laboratory ID Number: BA17783

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA17791	Arsenic, Total	mg/L	0.0000107	0.0001474	0.100	0.115	0.115	0.109	0.085 to 0.115	106	70 to 130	0.00	20
BA17785	Calcium, Total	mg/L	0.00161	0.1518	5.00	30.5	30.9	5.09	4.25 to 5.75	80.0	70 to 130	1.30	20
BA17785	Lithium, Total	mg/L	-0.0000202	0.0154	0.20	0.289	0.293	0.193	0.17 to 0.23	104	70 to 130	1.37	20
BA17786	Iron, Dissolved	mg/L	0.000118	0.0176	0.2	0.282	0.280	0.194	0.17 to 0.23	91.4	70 to 130	0.712	20
BA17791	Molybdenum, Total	mg/L	0.0000171	0.0001474	0.100	0.108	0.108	0.107	0.085 to 0.115	108	70 to 130	0.00	20
BA17791	Antimony, Total	mg/L	0.000272	0.001	0.100	0.104	0.104	0.101	0.085 to 0.115	104	70 to 130	0.00	20
BA17785	Iron, Total	mg/L	0.000157	0.0176	0.2	9.36	9.39	0.202	0.17 to 0.23	70.0	70 to 130	0.320	20
BA17791	Cobalt, Total	mg/L	-0.0000107	0.0001474	0.100	0.104	0.106	0.109	0.085 to 0.115	104	70 to 130	1.90	20
BA17791	Potassium, Total	mg/L	0.000035	0.3674	10.0	11.7	12.0	10.2	8.5 to 11.5	95.0	70 to 130	2.53	20
BA17791	Manganese, Total	mg/L	0.0000162	0.0001474	0.100	1.11	1.12	0.101	0.085 to 0.115	-20.0	70 to 130	0.897	20
BA17791	Selenium, Total	mg/L	0.0000583	0.001	0.100	0.101	0.103	0.105	0.085 to 0.115	101	70 to 130	1.96	20
BA17783	Manganese, Dissolved	mg/L	-0.0000116	0.0001474	0.10	0.118	0.109	0.101	0.085 to 0.115	105	70 to 130	7.93	20
BA17785	Magnesium, Total	mg/L	-0.00102	0.0462	5.00	13.8	14.1	5.14	4.25 to 5.75	92.0	70 to 130	2.15	20
BA17785	Mercury, Total by CVAA	mg/L	0.0000646	0.0005	0.004	0.00393	0.00384	0.00392	0.0034 to 0.0046	98.2	70 to 130	2.32	20
BA17785	Sodium, Total	mg/L	0.000602	0.044	5.00	203	207	5.15	4.25 to 5.75	20.0	70 to 130	1.95	20
BA17791	Beryllium, Total	mg/L	0.000003	0.00088	0.100	0.0966	0.0940	0.0992	0.085 to 0.115	96.6	70 to 130	2.73	20
BA17791	Cadmium, Total	mg/L	0.00000	0.0001474	0.100	0.0996	0.0994	0.104	0.085 to 0.115	99.6	70 to 130	0.201	20
BA17791	Chromium, Total	mg/L	0.0000326	0.00044	0.100	0.103	0.105	0.106	0.085 to 0.115	103	70 to 130	1.92	20
BA17791	Lead, Total	mg/L	0.0000065	0.0001474	0.100	0.106	0.107	0.109	0.085 to 0.115	106	70 to 130	0.939	20
BA17791	Thallium, Total	mg/L	0.0000087	0.0001474	0.100	0.104	0.106	0.105	0.085 to 0.115	104	70 to 130	1.90	20
BA17785	Boron, Total	mg/L	0.0000373	0.0650254	1.00	1.05	1.08	1.01	0.85 to 1.15	99.0	70 to 130	2.82	20
BA17791	Barium, Total	mg/L	-0.0000107	0.0002	0.10	0.122	0.125	0.105	0.085 to 0.115	98.3	70 to 130	2.43	20

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 10/16/20

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/22/20 13:04
Customer ID:
Delivery Date: 9/23/20 09:36

Description: Gorgas Ash Pond - MW-28H

Laboratory ID Number: BA17783

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA17790	Fluoride	mg/L	0.0227	0.05	2.50	2.72	0.122	2.58	2.25 to 2.75	104	80 to 120	0.823	20
BA17899	Solids, Dissolved	mg/L	-1.00	25			431	50.0	40 to 60			0.116	5
BA17785	Sulfate	mg/L	-0.553	0.50	500	716	252	19.5	18 to 22	94.8	80 to 120	4.05	20
BA17902	Alkalinity, Total as CaCO3	mg/L					200	51.0	45.0 to 55.0			0.501	10
BA17790	Chloride	mg/L	0.00869	0.50	10.0	17.1	7.16	10.6	9 to 11	100	80 to 120	1.26	20

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 10/16/20

Reported: 11/3/2020
Version: 3.1
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - PZ-18

Location Code: WMWGORAP
Collected: 9/22/20 15:28
Customer ID:
Submittal Date: 9/23/20 09:36

Laboratory ID Number: BA17784

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	10/5/20 10:25	10/7/20 12:00		1.015	0.0603	mg/L	0.03	0.1	J
* Calcium, Total	10/5/20 10:25	10/7/20 12:00		1.015	26.2	mg/L	0.1	0.5	
* Iron, Total	10/5/20 10:25	10/7/20 12:34		10.15	8.91	mg/L	0.203	0.5075	
* Lithium, Total	10/5/20 10:25	10/7/20 12:00		1.015	0.0789	mg/L	0.01	0.02	
* Magnesium, Total	10/5/20 10:25	10/7/20 12:00		1.015	9.09	mg/L	0.1	0.5	
* Sodium, Total	10/5/20 10:25	10/7/20 12:34		10.15	194	mg/L	1.015	5.075	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Iron, Dissolved	10/5/20 11:33	10/6/20 12:58		10.15	8.33	mg/L	0.203	0.5075	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	9/28/20 11:12	9/29/20 19:17		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	9/28/20 11:12	9/29/20 19:17		1.015	0.0119	mg/L	0.001	0.005	
* Barium, Total	9/28/20 11:12	10/1/20 13:59		1.015	0.0432	mg/L	0.002	0.01	
* Beryllium, Total	9/28/20 11:12	9/29/20 19:17		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	9/28/20 11:12	9/29/20 19:17		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	9/28/20 11:12	9/29/20 19:17		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	9/28/20 11:12	9/29/20 19:17		1.015	0.00226	mg/L	0.002	0.005	J
* Lead, Total	9/28/20 11:12	9/29/20 19:17		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	9/28/20 11:12	9/29/20 19:17		1.015	0.00496	mg/L	0.002	0.01	J
* Potassium, Total	9/28/20 11:12	9/29/20 19:17		1.015	2.31	mg/L	0.3	2.5	J
* Manganese, Total	9/28/20 11:12	9/29/20 19:17		1.015	0.138	mg/L	0.001	0.005	
* Selenium, Total	9/28/20 11:12	9/29/20 19:17		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	9/28/20 11:12	9/29/20 19:17		1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Manganese, Dissolved	9/28/20 09:17	9/29/20 14:29		1.015	0.140	mg/L	0.001	0.005	
Analytical Method: EPA 245.1	***Analyst: GAS***								
* Mercury, Total by CVAA	9/30/20 12:24	10/2/20 10:16		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2320 B	***Analyst: JAG***								
Alkalinity, Total as CaCO3	10/1/20 13:25	10/1/20 14:30		1	232	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: TJW***								
* Solids, Dissolved	9/25/20 13:30	9/29/20 08:00		1	648	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 10/16/20

Reported: 11/3/2020
Version: 3.1
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - PZ-18

Location Code: WMWGORAP
Collected: 9/22/20 15:28
Customer ID:
Submittal Date: 9/23/20 09:36

Laboratory ID Number: BA17784

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 4500CO2 D		***Analyst: JAG***							
Bicarbonate Alkalinity, (calc.)	10/1/20 13:25	10/1/20 14:30		1	232	mg/L			
Carbonate Alkalinity, (calc.)	10/1/20 13:25	10/1/20 14:30		1	0.32	mg/L			
Analytical Method: SM4500Cl E		***Analyst: JCC***							
* Chloride	9/25/20 13:41	9/25/20 13:41		1	2.73	mg/L	0.50	1	
Analytical Method: SM4500F G 2017		***Analyst: JCC***							
* Fluoride	9/28/20 12:27	9/28/20 12:27		1	0.392	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E 2011		***Analyst: JCC***							
* Sulfate	9/24/20 10:55	9/24/20 10:55		16	245	mg/L	8.00	16	
Analytical Method: Field Measurements		***Analyst: DKG***							
Conductivity	9/22/20 15:25	9/22/20 15:25			1094.45	uS/cm			FA
pH	9/22/20 15:25	9/22/20 15:25			7.00	SU			FA
Temperature	9/22/20 15:25	9/22/20 15:25			17.90	C			FA
Turbidity	9/22/20 15:25	9/22/20 15:25			2.24	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 10/16/20

Reported: 11/3/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORAP
Sample Date: 9/22/20 15:28
Customer ID:
Delivery Date: 9/23/20 09:36

Description: Gorgas Ash Pond - PZ-18

Laboratory ID Number: BA17784

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA17785	Magnesium, Total	mg/L	-0.00102	0.0462	5.00	13.8	14.1	5.14	4.25 to 5.75	92.0	70 to 130	2.15	20
BA17785	Calcium, Total	mg/L	0.00161	0.1518	5.00	30.5	30.9	5.09	4.25 to 5.75	80.0	70 to 130	1.30	20
BA17791	Arsenic, Total	mg/L	0.0000107	0.0001474	0.100	0.115	0.115	0.109	0.085 to 0.115	106	70 to 130	0.00	20
BA17794	Manganese, Dissolved	mg/L	-0.0000068	0.0001474	0.10	0.506	0.519	0.103	0.085 to 0.115	92.0	70 to 130	2.54	20
BA17785	Boron, Total	mg/L	0.0000373	0.0650254	1.00	1.05	1.08	1.01	0.85 to 1.15	99.0	70 to 130	2.82	20
BA17791	Barium, Total	mg/L	-0.0000107	0.0002	0.10	0.122	0.125	0.105	0.085 to 0.115	98.3	70 to 130	2.43	20
BA17785	Lithium, Total	mg/L	-0.0000202	0.0154	0.20	0.289	0.293	0.193	0.17 to 0.23	104	70 to 130	1.37	20
BA17786	Iron, Dissolved	mg/L	0.000118	0.0176	0.2	0.282	0.280	0.194	0.17 to 0.23	91.4	70 to 130	0.712	20
BA17785	Iron, Total	mg/L	0.000157	0.0176	0.2	9.36	9.39	0.202	0.17 to 0.23	70.0	70 to 130	0.320	20
BA17791	Cobalt, Total	mg/L	-0.0000107	0.0001474	0.100	0.104	0.106	0.109	0.085 to 0.115	104	70 to 130	1.90	20
BA17791	Potassium, Total	mg/L	0.000035	0.3674	10.0	11.7	12.0	10.2	8.5 to 11.5	95.0	70 to 130	2.53	20
BA17791	Manganese, Total	mg/L	0.0000162	0.0001474	0.100	1.11	1.12	0.101	0.085 to 0.115	-20.0	70 to 130	0.897	20
BA17791	Selenium, Total	mg/L	0.0000583	0.001	0.100	0.101	0.103	0.105	0.085 to 0.115	101	70 to 130	1.96	20
BA17791	Molybdenum, Total	mg/L	0.0000171	0.0001474	0.100	0.108	0.108	0.107	0.085 to 0.115	108	70 to 130	0.00	20
BA17791	Antimony, Total	mg/L	0.000272	0.001	0.100	0.104	0.104	0.101	0.085 to 0.115	104	70 to 130	0.00	20
BA17785	Mercury, Total by CVAA	mg/L	0.0000646	0.0005	0.004	0.00393	0.00384	0.00392	0.0034 to 0.0046	98.2	70 to 130	2.32	20
BA17785	Sodium, Total	mg/L	0.000602	0.044	5.00	203	207	5.15	4.25 to 5.75	20.0	70 to 130	1.95	20
BA17791	Beryllium, Total	mg/L	0.000003	0.00088	0.100	0.0966	0.0940	0.0992	0.085 to 0.115	96.6	70 to 130	2.73	20
BA17791	Cadmium, Total	mg/L	0.00000	0.0001474	0.100	0.0996	0.0994	0.104	0.085 to 0.115	99.6	70 to 130	0.201	20
BA17791	Chromium, Total	mg/L	0.0000326	0.00044	0.100	0.103	0.105	0.106	0.085 to 0.115	103	70 to 130	1.92	20
BA17791	Lead, Total	mg/L	0.0000065	0.0001474	0.100	0.106	0.107	0.109	0.085 to 0.115	106	70 to 130	0.939	20
BA17791	Thallium, Total	mg/L	0.0000087	0.0001474	0.100	0.104	0.106	0.105	0.085 to 0.115	104	70 to 130	1.90	20

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 10/16/20

Reported: 11/3/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/22/20 15:28
Customer ID:
Delivery Date: 9/23/20 09:36

Description: Gorgas Ash Pond - PZ-18

Laboratory ID Number: BA17784

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA17790	Fluoride	mg/L	0.0227	0.05	2.50	2.72	0.122	2.58	2.25 to 2.75	104	80 to 120	0.823	20
BA17899	Solids, Dissolved	mg/L	-1.00	25			431	50.0	40 to 60			0.116	5
BA17790	Chloride	mg/L	0.00869	0.50	10.0	17.1	7.16	10.6	9 to 11	100	80 to 120	1.26	20
BA17785	Sulfate	mg/L	-0.553	0.50	500	716	252	19.5	18 to 22	94.8	80 to 120	4.05	20
BA17902	Alkalinity, Total as CaCO3	mg/L					200	51.0	45.0 to 55.0			0.501	10

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 10/16/20

Reported: 11/3/2020
Version: 3.1
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - PZ-18 DUP

Location Code: WMWGORAP
Collected: 9/22/20 15:28
Customer ID:
Submittal Date: 9/23/20 09:36

Laboratory ID Number: BA17785

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	10/5/20 10:25	10/7/20 12:04		1.015	0.0605	mg/L	0.03	0.1	J
* Calcium, Total	10/5/20 10:25	10/7/20 12:04		1.015	26.5	mg/L	0.1	0.5	
* Iron, Total	10/5/20 10:25	10/7/20 12:38		10.15	9.22	mg/L	0.203	0.5075	
* Lithium, Total	10/5/20 10:25	10/7/20 12:04		1.015	0.0805	mg/L	0.01	0.02	
* Magnesium, Total	10/5/20 10:25	10/7/20 12:04		1.015	9.20	mg/L	0.1	0.5	
* Sodium, Total	10/5/20 10:25	10/7/20 12:38		10.15	202	mg/L	1.015	5.075	RA
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Iron, Dissolved	10/5/20 11:33	10/6/20 13:00		10.15	8.58	mg/L	0.203	0.5075	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	9/28/20 11:12	9/29/20 19:20		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	9/28/20 11:12	9/29/20 19:20		1.015	0.0117	mg/L	0.001	0.005	
* Barium, Total	9/28/20 11:12	10/1/20 14:01		1.015	0.0435	mg/L	0.002	0.01	
* Beryllium, Total	9/28/20 11:12	9/29/20 19:20		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	9/28/20 11:12	9/29/20 19:20		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	9/28/20 11:12	9/29/20 19:20		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	9/28/20 11:12	9/29/20 19:20		1.015	0.00225	mg/L	0.002	0.005	J
* Lead, Total	9/28/20 11:12	9/29/20 19:20		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	9/28/20 11:12	9/29/20 19:20		1.015	0.00521	mg/L	0.002	0.01	J
* Potassium, Total	9/28/20 11:12	9/29/20 19:20		1.015	2.35	mg/L	0.3	2.5	J
* Manganese, Total	9/28/20 11:12	9/29/20 19:20		1.015	0.137	mg/L	0.001	0.005	
* Selenium, Total	9/28/20 11:12	9/29/20 19:20		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	9/28/20 11:12	9/29/20 19:20		1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Manganese, Dissolved	9/28/20 09:17	9/29/20 14:32		1.015	0.140	mg/L	0.001	0.005	
Analytical Method: EPA 245.1	***Analyst: GAS***								
* Mercury, Total by CVAA	9/30/20 12:24	10/2/20 10:19		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2320 B	***Analyst: JAG***								
Alkalinity, Total as CaCO3	10/1/20 13:25	10/1/20 14:30		1	243	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: TJW***								
* Solids, Dissolved	9/25/20 13:30	9/29/20 08:00		1	638	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 10/16/20

Reported: 11/3/2020
Version: 3.1
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - PZ-18 DUP

Location Code: WMWGORAP
Collected: 9/22/20 15:28
Customer ID:
Submittal Date: 9/23/20 09:36

Laboratory ID Number: BA17785

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 4500CO2 D		***Analyst: JAG***							
Bicarbonate Alkalinity, (calc.)	10/1/20 13:25	10/1/20 14:30		1	243	mg/L			
Carbonate Alkalinity, (calc.)	10/1/20 13:25	10/1/20 14:30		1	0.33	mg/L			
Analytical Method: SM4500Cl E		***Analyst: JCC***							
* Chloride	9/25/20 13:42	9/25/20 13:42		1	2.63	mg/L	0.50	1	
Analytical Method: SM4500F G 2017		***Analyst: JCC***							
* Fluoride	9/28/20 12:28	9/28/20 12:28		1	0.389	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E 2011		***Analyst: JCC***							
* Sulfate	9/24/20 10:56	9/24/20 10:56		25	242	mg/L	12.50	25	
Analytical Method: Field Measurements		***Analyst: DKG***							
Conductivity	9/22/20 15:25	9/22/20 15:25			1094.45	uS/cm			FA
pH	9/22/20 15:25	9/22/20 15:25			7.00	SU			FA
Temperature	9/22/20 15:25	9/22/20 15:25			17.90	C			FA
Turbidity	9/22/20 15:25	9/22/20 15:25			2.24	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 10/16/20

Reported: 11/3/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORAP
Sample Date: 9/22/20 15:28
Customer ID:
Delivery Date: 9/23/20 09:36

Description: Gorgas Ash Pond - PZ-18 DUP

Laboratory ID Number: BA17785

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA17785	Magnesium, Total	mg/L	-0.00102	0.0462	5.00	13.8	14.1	5.14	4.25 to 5.75	92.0	70 to 130	2.15	20
BA17785	Calcium, Total	mg/L	0.00161	0.1518	5.00	30.5	30.9	5.09	4.25 to 5.75	80.0	70 to 130	1.30	20
BA17791	Arsenic, Total	mg/L	0.0000107	0.0001474	0.100	0.115	0.115	0.109	0.085 to 0.115	106	70 to 130	0.00	20
BA17794	Manganese, Dissolved	mg/L	-0.0000068	0.0001474	0.10	0.506	0.519	0.103	0.085 to 0.115	92.0	70 to 130	2.54	20
BA17791	Molybdenum, Total	mg/L	0.0000171	0.0001474	0.100	0.108	0.108	0.107	0.085 to 0.115	108	70 to 130	0.00	20
BA17791	Antimony, Total	mg/L	0.000272	0.001	0.100	0.104	0.104	0.101	0.085 to 0.115	104	70 to 130	0.00	20
BA17785	Lithium, Total	mg/L	-0.0000202	0.0154	0.20	0.289	0.293	0.193	0.17 to 0.23	104	70 to 130	1.37	20
BA17786	Iron, Dissolved	mg/L	0.000118	0.0176	0.2	0.282	0.280	0.194	0.17 to 0.23	91.4	70 to 130	0.712	20
BA17785	Mercury, Total by CVAA	mg/L	0.0000646	0.0005	0.004	0.00393	0.00384	0.00392	0.0034 to 0.0046	98.2	70 to 130	2.32	20
BA17785	Sodium, Total	mg/L	0.000602	0.044	5.00	203	207	5.15	4.25 to 5.75	20.0	70 to 130	1.95	20
BA17791	Beryllium, Total	mg/L	0.000003	0.00088	0.100	0.0966	0.0940	0.0992	0.085 to 0.115	96.6	70 to 130	2.73	20
BA17791	Cadmium, Total	mg/L	0.00000	0.0001474	0.100	0.0996	0.0994	0.104	0.085 to 0.115	99.6	70 to 130	0.201	20
BA17791	Chromium, Total	mg/L	0.0000326	0.00044	0.100	0.103	0.105	0.106	0.085 to 0.115	103	70 to 130	1.92	20
BA17791	Lead, Total	mg/L	0.0000065	0.0001474	0.100	0.106	0.107	0.109	0.085 to 0.115	106	70 to 130	0.939	20
BA17791	Thallium, Total	mg/L	0.0000087	0.0001474	0.100	0.104	0.106	0.105	0.085 to 0.115	104	70 to 130	1.90	20
BA17785	Boron, Total	mg/L	0.0000373	0.0650254	1.00	1.05	1.08	1.01	0.85 to 1.15	99.0	70 to 130	2.82	20
BA17791	Barium, Total	mg/L	-0.0000107	0.0002	0.10	0.122	0.125	0.105	0.085 to 0.115	98.3	70 to 130	2.43	20
BA17785	Iron, Total	mg/L	0.000157	0.0176	0.2	9.36	9.39	0.202	0.17 to 0.23	70.0	70 to 130	0.320	20
BA17791	Cobalt, Total	mg/L	-0.0000107	0.0001474	0.100	0.104	0.106	0.109	0.085 to 0.115	104	70 to 130	1.90	20
BA17791	Potassium, Total	mg/L	0.000035	0.3674	10.0	11.7	12.0	10.2	8.5 to 11.5	95.0	70 to 130	2.53	20
BA17791	Manganese, Total	mg/L	0.0000162	0.0001474	0.100	1.11	1.12	0.101	0.085 to 0.115	-20.0	70 to 130	0.897	20
BA17791	Selenium, Total	mg/L	0.0000583	0.001	0.100	0.101	0.103	0.105	0.085 to 0.115	101	70 to 130	1.96	20

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 10/16/20

Reported: 11/3/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/22/20 15:28
Customer ID:
Delivery Date: 9/23/20 09:36

Description: Gorgas Ash Pond - PZ-18 DUP

Laboratory ID Number: BA17785

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA17790	Fluoride	mg/L	0.0227	0.05	2.50	2.72	0.122	2.58	2.25 to 2.75	104	80 to 120	0.823	20
BA17899	Solids, Dissolved	mg/L	-1.00	25			431	50.0	40 to 60			0.116	5
BA17790	Chloride	mg/L	0.00869	0.50	10.0	17.1	7.16	10.6	9 to 11	100	80 to 120	1.26	20
BA17785	Sulfate	mg/L	-0.553	0.50	500	716	252	19.5	18 to 22	94.8	80 to 120	4.05	20
BA17902	Alkalinity, Total as CaCO3	mg/L					200	51.0	45.0 to 55.0			0.501	10

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 10/16/20

Reported: 11/3/2020
Version: 3.1
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-18V

Location Code: WMWGORAP
Collected: 9/22/20 16:28
Customer ID:
Submittal Date: 9/23/20 09:36

Laboratory ID Number: BA17786

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	10/5/20 10:25	10/7/20 12:20		1.015	0.0769	mg/L	0.03	0.1	J
* Calcium, Total	10/5/20 10:25	10/7/20 12:20		1.015	5.12	mg/L	0.1	0.5	
* Iron, Total	10/5/20 10:25	10/7/20 12:20		1.015	0.167	mg/L	0.02	0.05	
* Lithium, Total	10/5/20 10:25	10/7/20 12:20		1.015	0.0254	mg/L	0.01	0.02	
* Magnesium, Total	10/5/20 10:25	10/7/20 12:20		1.015	1.63	mg/L	0.1	0.5	
* Sodium, Total	10/5/20 10:25	10/7/20 13:13		10.15	125	mg/L	1.015	5.075	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Iron, Dissolved	10/5/20 11:33	10/6/20 10:24		1.015	0.0993	mg/L	0.02	0.05	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	9/28/20 11:12	9/29/20 19:22		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	9/28/20 11:12	9/29/20 19:22		1.015	0.00654	mg/L	0.001	0.005	
* Barium, Total	9/28/20 11:12	10/1/20 14:04		1.015	0.253	mg/L	0.002	0.01	
* Beryllium, Total	9/28/20 11:12	9/29/20 19:22		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	9/28/20 11:12	9/29/20 19:22		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	9/28/20 11:12	9/29/20 19:22		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	9/28/20 11:12	9/29/20 19:22		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	9/28/20 11:12	9/29/20 19:22		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	9/28/20 11:12	9/29/20 19:22		1.015	0.0248	mg/L	0.002	0.01	
* Potassium, Total	9/28/20 11:12	9/29/20 19:22		1.015	1.24	mg/L	0.3	2.5	J
* Manganese, Total	9/28/20 11:12	9/29/20 19:22		1.015	0.0242	mg/L	0.001	0.005	
* Selenium, Total	9/28/20 11:12	9/29/20 19:22		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	9/28/20 11:12	9/29/20 19:22		1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Manganese, Dissolved	9/28/20 09:17	9/29/20 14:34		1.015	0.0252	mg/L	0.001	0.005	
Analytical Method: EPA 245.1	***Analyst: GAS***								
* Mercury, Total by CVAA	9/30/20 12:24	10/2/20 10:35		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2320 B	***Analyst: JAG***								
Alkalinity, Total as CaCO3	10/1/20 13:25	10/1/20 14:30		1	253	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: TJW***								
* Solids, Dissolved	9/25/20 13:30	9/29/20 08:00		1	290	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 10/16/20

Reported: 11/3/2020
Version: 3.1
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-18V

Location Code: WMWGORAP
Collected: 9/22/20 16:28
Customer ID:
Submittal Date: 9/23/20 09:36

Laboratory ID Number: BA17786

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 4500CO2 D		***Analyst: JAG***							
Bicarbonate Alkalinity, (calc.)	10/1/20 13:25	10/1/20 14:30		1	245	mg/L			
Carbonate Alkalinity, (calc.)	10/1/20 13:25	10/1/20 14:30		1	7.46	mg/L			
Analytical Method: SM4500Cl E		***Analyst: JCC***							
* Chloride	9/25/20 13:43	9/25/20 13:43		1	5.57	mg/L	0.50	1	
Analytical Method: SM4500F G 2017		***Analyst: JCC***							
* Fluoride	9/28/20 12:29	9/28/20 12:29		1	0.368	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E 2011		***Analyst: JCC***							
* Sulfate	9/24/20 11:07	9/24/20 11:07		1	14.4	mg/L	0.50	1	
Analytical Method: Field Measurements		***Analyst: DKG***							
Conductivity	9/22/20 16:24	9/22/20 16:24			365.12	uS/cm			FA
pH	9/22/20 16:24	9/22/20 16:24			8.35	SU			FA
Temperature	9/22/20 16:24	9/22/20 16:24			19.51	C			FA
Turbidity	9/22/20 16:24	9/22/20 16:24			1.89	NTU			FA

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

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 10/16/20

Reported: 11/3/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORAP
Sample Date: 9/22/20 16:28
Customer ID:
Delivery Date: 9/23/20 09:36

Description: Gorgas Ash Pond - MW-18V

Laboratory ID Number: BA17786

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA17786	Iron, Dissolved	mg/L	0.000118	0.0176	0.2	0.282	0.280	0.194	0.17 to 0.23	91.4	70 to 130	0.712	20
BA17795	Mercury, Total by CVAA	mg/L	0.0000514	0.0005	0.004	0.00388	0.00385	0.00393	0.0034 to 0.0046	97.0	70 to 130	0.776	20
BA17791	Barium, Total	mg/L	-0.0000107	0.0002	0.10	0.122	0.125	0.105	0.085 to 0.115	98.3	70 to 130	2.43	20
BA17791	Arsenic, Total	mg/L	0.0000107	0.0001474	0.100	0.115	0.115	0.109	0.085 to 0.115	106	70 to 130	0.00	20
BA17794	Manganese, Dissolved	mg/L	-0.0000068	0.0001474	0.10	0.506	0.519	0.103	0.085 to 0.115	92.0	70 to 130	2.54	20
BA17795	Iron, Total	mg/L	0.000157	0.0176	0.2	10.3	10.3	0.202	0.17 to 0.23	100	70 to 130	0.00	20
BA17795	Magnesium, Total	mg/L	-0.00102	0.0462	5.00	17.7	17.7	5.14	4.25 to 5.75	100	70 to 130	0.00	20
BA17791	Cobalt, Total	mg/L	-0.0000107	0.0001474	0.100	0.104	0.106	0.109	0.085 to 0.115	104	70 to 130	1.90	20
BA17791	Potassium, Total	mg/L	0.000035	0.3674	10.0	11.7	12.0	10.2	8.5 to 11.5	95.0	70 to 130	2.53	20
BA17791	Manganese, Total	mg/L	0.0000162	0.0001474	0.100	1.11	1.12	0.101	0.085 to 0.115	-20.0	70 to 130	0.897	20
BA17791	Selenium, Total	mg/L	0.0000583	0.001	0.100	0.101	0.103	0.105	0.085 to 0.115	101	70 to 130	1.96	20
BA17795	Sodium, Total	mg/L	0.000602	0.044	5.00	77.9	77.7	5.15	4.25 to 5.75	100	70 to 130	0.257	20
BA17791	Beryllium, Total	mg/L	0.000003	0.00088	0.100	0.0966	0.0940	0.0992	0.085 to 0.115	96.6	70 to 130	2.73	20
BA17791	Cadmium, Total	mg/L	0.00000	0.0001474	0.100	0.0996	0.0994	0.104	0.085 to 0.115	99.6	70 to 130	0.201	20
BA17791	Chromium, Total	mg/L	0.0000326	0.00044	0.100	0.103	0.105	0.106	0.085 to 0.115	103	70 to 130	1.92	20
BA17791	Lead, Total	mg/L	0.0000065	0.0001474	0.100	0.106	0.107	0.109	0.085 to 0.115	106	70 to 130	0.939	20
BA17791	Thallium, Total	mg/L	0.0000087	0.0001474	0.100	0.104	0.106	0.105	0.085 to 0.115	104	70 to 130	1.90	20
BA17795	Boron, Total	mg/L	0.0000373	0.0650254	1.00	1.03	1.02	1.01	0.85 to 1.15	99.7	70 to 130	0.976	20
BA17791	Molybdenum, Total	mg/L	0.0000171	0.0001474	0.100	0.108	0.108	0.107	0.085 to 0.115	108	70 to 130	0.00	20
BA17791	Antimony, Total	mg/L	0.000272	0.001	0.100	0.104	0.104	0.101	0.085 to 0.115	104	70 to 130	0.00	20
BA17795	Calcium, Total	mg/L	0.00161	0.1518	5.00	32.3	32.2	5.09	4.25 to 5.75	94.0	70 to 130	0.310	20
BA17795	Lithium, Total	mg/L	-0.0000202	0.0154	0.20	0.295	0.294	0.193	0.17 to 0.23	99.6	70 to 130	0.340	20

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 10/16/20

Reported: 11/3/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/22/20 16:28
Customer ID:
Delivery Date: 9/23/20 09:36

Description: Gorgas Ash Pond - MW-18V

Laboratory ID Number: BA17786

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA17790	Fluoride	mg/L	0.0227	0.05	2.50	2.72	0.122	2.58	2.25 to 2.75	104	80 to 120	0.823	20
BA17899	Solids, Dissolved	mg/L	-1.00	25			431	50.0	40 to 60			0.116	5
BA17790	Chloride	mg/L	0.00869	0.50	10.0	17.1	7.16	10.6	9 to 11	100	80 to 120	1.26	20
BA17902	Alkalinity, Total as CaCO3	mg/L					200	51.0	45.0 to 55.0			0.501	10
BA17795	Sulfate	mg/L	-0.595	0.50	20.0	23.1	4.68	19.5	18 to 22	92.8	80 to 120	3.04	20

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 10/16/20

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond Field Blank-3

Location Code: WMWGORAPFB
Collected: 9/22/20 17:20
Customer ID:
Submittal Date: 9/23/20 09:36

Laboratory ID Number: BA17787

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	10/5/20 10:25	10/7/20 12:24		1.015	Not Detected	mg/L	0.03	0.1	U
* Calcium, Total	10/5/20 10:25	10/7/20 12:24		1.015	Not Detected	mg/L	0.1	0.5	U
* Iron, Total	10/5/20 10:25	10/7/20 12:24		1.015	Not Detected	mg/L	0.02	0.05	U
* Lithium, Total	10/5/20 10:25	10/7/20 12:24		1.015	Not Detected	mg/L	0.01	0.02	U
* Magnesium, Total	10/5/20 10:25	10/7/20 12:24		1.015	Not Detected	mg/L	0.1	0.5	U
* Sodium, Total	10/5/20 10:25	10/7/20 12:24		1.015	Not Detected	mg/L	0.1	0.5	U
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	9/28/20 11:12	9/29/20 19:25		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	9/28/20 11:12	9/29/20 19:25		1.015	Not Detected	mg/L	0.001	0.005	U
* Barium, Total	9/28/20 11:12	10/1/20 14:09		1.015	Not Detected	mg/L	0.002	0.01	U
* Beryllium, Total	9/28/20 11:12	9/29/20 19:25		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	9/28/20 11:12	9/29/20 19:25		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	9/28/20 11:12	9/29/20 19:25		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	9/28/20 11:12	9/29/20 19:25		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	9/28/20 11:12	9/29/20 19:25		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	9/28/20 11:12	9/29/20 19:25		1.015	Not Detected	mg/L	0.002	0.01	U
* Manganese, Total	9/28/20 11:12	9/29/20 19:25		1.015	Not Detected	mg/L	0.001	0.005	U
* Potassium, Total	9/28/20 11:12	9/29/20 19:25		1.015	Not Detected	mg/L	0.3	2.5	U
* Selenium, Total	9/28/20 11:12	9/29/20 19:25		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	9/28/20 11:12	9/29/20 19:25		1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 245.1	***Analyst: GAS***								
* Mercury, Total by CVAA	9/30/20 12:24	10/2/20 10:38		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2540C	***Analyst: TJW***								
* Solids, Dissolved	9/25/20 13:30	9/29/20 08:00		1	Not Detected	mg/L		25	U
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	9/25/20 13:44	9/25/20 13:44		1	Not Detected	mg/L	0.50	1	U
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	9/28/20 12:31	9/28/20 12:31		1	Not Detected	mg/L	0.06	0.1	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	9/24/20 11:08	9/24/20 11:08		1	Not Detected	mg/L	0.50	1	U

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

Comments:

Reported: 11/3/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORAPFB
Sample Date: 9/22/20 17:20
Customer ID:
Delivery Date: 9/23/20 09:36

Description: Gorgas Ash Pond Field Blank-3

Laboratory ID Number: BA17787

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA17795	Mercury, Total by CVAA	mg/L	0.0000514	0.0005	0.004	0.00388	0.00385	0.00393	0.0034 to 0.0046	97.0	70 to 130	0.776	20
BA17791	Barium, Total	mg/L	-0.0000107	0.0002	0.10	0.122	0.125	0.105	0.085 to 0.115	98.3	70 to 130	2.43	20
BA17791	Arsenic, Total	mg/L	0.0000107	0.0001474	0.100	0.115	0.115	0.109	0.085 to 0.115	106	70 to 130	0.00	20
BA17795	Iron, Total	mg/L	0.000157	0.0176	0.2	10.3	10.3	0.202	0.17 to 0.23	100	70 to 130	0.00	20
BA17795	Magnesium, Total	mg/L	-0.00102	0.0462	5.00	17.7	17.7	5.14	4.25 to 5.75	100	70 to 130	0.00	20
BA17791	Molybdenum, Total	mg/L	0.0000171	0.0001474	0.100	0.108	0.108	0.107	0.085 to 0.115	108	70 to 130	0.00	20
BA17791	Antimony, Total	mg/L	0.000272	0.001	0.100	0.104	0.104	0.101	0.085 to 0.115	104	70 to 130	0.00	20
BA17795	Calcium, Total	mg/L	0.00161	0.1518	5.00	32.3	32.2	5.09	4.25 to 5.75	94.0	70 to 130	0.310	20
BA17795	Lithium, Total	mg/L	-0.0000202	0.0154	0.20	0.295	0.294	0.193	0.17 to 0.23	99.6	70 to 130	0.340	20
BA17791	Cobalt, Total	mg/L	-0.0000107	0.0001474	0.100	0.104	0.106	0.109	0.085 to 0.115	104	70 to 130	1.90	20
BA17791	Potassium, Total	mg/L	0.000035	0.3674	10.0	11.7	12.0	10.2	8.5 to 11.5	95.0	70 to 130	2.53	20
BA17791	Manganese, Total	mg/L	0.0000162	0.0001474	0.100	1.11	1.12	0.101	0.085 to 0.115	-20.0	70 to 130	0.897	20
BA17791	Selenium, Total	mg/L	0.0000583	0.001	0.100	0.101	0.103	0.105	0.085 to 0.115	101	70 to 130	1.96	20
BA17795	Sodium, Total	mg/L	0.000602	0.044	5.00	77.9	77.7	5.15	4.25 to 5.75	100	70 to 130	0.257	20
BA17791	Beryllium, Total	mg/L	0.000003	0.00088	0.100	0.0966	0.0940	0.0992	0.085 to 0.115	96.6	70 to 130	2.73	20
BA17791	Cadmium, Total	mg/L	0.00000	0.0001474	0.100	0.0996	0.0994	0.104	0.085 to 0.115	99.6	70 to 130	0.201	20
BA17791	Chromium, Total	mg/L	0.0000326	0.00044	0.100	0.103	0.105	0.106	0.085 to 0.115	103	70 to 130	1.92	20
BA17791	Lead, Total	mg/L	0.0000065	0.0001474	0.100	0.106	0.107	0.109	0.085 to 0.115	106	70 to 130	0.939	20
BA17791	Thallium, Total	mg/L	0.0000087	0.0001474	0.100	0.104	0.106	0.105	0.085 to 0.115	104	70 to 130	1.90	20
BA17795	Boron, Total	mg/L	0.0000373	0.0650254	1.00	1.03	1.02	1.01	0.85 to 1.15	99.7	70 to 130	0.976	20

Comments:

Reported: 11/3/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Customer Account: WMWGORAPFB
Sample Date: 9/22/20 17:20
Customer ID:
Delivery Date: 9/23/20 09:36

Description: Gorgas Ash Pond Field Blank-3

Laboratory ID Number: BA17787

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA17899	Solids, Dissolved	mg/L	-1.00	25			431	50.0	40 to 60			0.116	5
BA17795	Sulfate	mg/L	-0.595	0.50	20.0	23.1	4.68	19.5	18 to 22	92.8	80 to 120	3.04	20
BA17790	Chloride	mg/L	0.00869	0.50	10.0	17.1	7.16	10.6	9 to 11	100	80 to 120	1.26	20
BA17790	Fluoride	mg/L	0.0227	0.05	2.50	2.72	0.122	2.58	2.25 to 2.75	104	80 to 120	0.823	20

Comments:

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-16S

Location Code: WMWGORAP
Collected: 9/21/20 15:45
Customer ID:
Submittal Date: 9/23/20 09:36

Laboratory ID Number: BA17788

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	10/5/20 10:25	10/7/20 12:27		1.015	0.0777	mg/L	0.03	0.1	J
* Calcium, Total	10/5/20 10:25	10/7/20 12:27		1.015	10.9	mg/L	0.1	0.5	
* Iron, Total	10/5/20 10:25	10/7/20 12:27		1.015	0.136	mg/L	0.02	0.05	
* Lithium, Total	10/5/20 10:25	10/7/20 12:27		1.015	0.0740	mg/L	0.01	0.02	
* Magnesium, Total	10/5/20 10:25	10/7/20 12:27		1.015	Not Detected	mg/L	0.1	0.5	U
* Sodium, Total	10/5/20 10:25	10/7/20 13:16		10.15	188	mg/L	1.015	5.075	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Iron, Dissolved	10/5/20 11:33	10/6/20 10:41		1.015	0.0378	mg/L	0.02	0.05	J
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	9/28/20 11:12	9/29/20 19:28		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	9/28/20 11:12	9/29/20 19:28		1.015	0.00174	mg/L	0.001	0.005	J
* Barium, Total	9/28/20 11:12	10/1/20 14:12		1.015	0.0766	mg/L	0.002	0.01	
* Beryllium, Total	9/28/20 11:12	9/29/20 19:28		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	9/28/20 11:12	9/29/20 19:28		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	9/28/20 11:12	9/29/20 19:28		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	9/28/20 11:12	9/29/20 19:28		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	9/28/20 11:12	9/29/20 19:28		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	9/28/20 11:12	9/29/20 19:28		1.015	0.0410	mg/L	0.002	0.01	
* Potassium, Total	9/28/20 11:12	9/29/20 19:28		1.015	1.47	mg/L	0.3	2.5	J
* Manganese, Total	9/28/20 11:12	9/29/20 19:28		1.015	0.00177	mg/L	0.001	0.005	J
* Selenium, Total	9/28/20 11:12	9/29/20 19:28		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	9/28/20 11:12	9/29/20 19:28		1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Manganese, Dissolved	9/28/20 09:17	9/29/20 14:37		1.015	Not Detected	mg/L	0.001	0.005	U
Analytical Method: EPA 245.1	***Analyst: GAS***								
* Mercury, Total by CVAA	9/30/20 12:24	10/2/20 10:40		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2320 B	***Analyst: JAG***								
Alkalinity, Total as CaCO3	10/1/20 13:25	10/1/20 14:30		1	391	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: TJW***								
* Solids, Dissolved	9/23/20 12:59	9/25/20 10:00		1	426	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 10/16/20

Reported: 11/3/2020
Version: 3.1
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-16S

Location Code: WMWGORAP
Collected: 9/21/20 15:45
Customer ID:
Submittal Date: 9/23/20 09:36

Laboratory ID Number: BA17788

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 4500CO2 D		***Analyst: JAG***							
Bicarbonate Alkalinity, (calc.)	10/1/20 13:25	10/1/20 14:30		1	215	mg/L			
Carbonate Alkalinity, (calc.)	10/1/20 13:25	10/1/20 14:30		1	172	mg/L			
Analytical Method: SM4500Cl E		***Analyst: JCC***							
* Chloride	9/25/20 13:45	9/25/20 13:45		1	5.42	mg/L	0.50	1	
Analytical Method: SM4500F G 2017		***Analyst: JCC***							
* Fluoride	9/28/20 12:32	9/28/20 12:32		1	0.572	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E 2011		***Analyst: JCC***							
* Sulfate	9/24/20 11:10	9/24/20 11:10		1	2.95	mg/L	0.50	1	
Analytical Method: Field Measurements		***Analyst: AWG***							
Conductivity	9/21/20 15:42	9/21/20 15:42			602.80	uS/cm			FA
pH	9/21/20 15:42	9/21/20 15:42			9.99	SU			FA
Temperature	9/21/20 15:42	9/21/20 15:42			18.32	C			FA
Turbidity	9/21/20 15:42	9/21/20 15:42			9.01	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 10/16/20

Reported: 11/3/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORAP
Sample Date: 9/21/20 15:45
Customer ID:
Delivery Date: 9/23/20 09:36

Description: Gorgas Ash Pond - MW-16S

Laboratory ID Number: BA17788

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA17795	Mercury, Total by CVAA	mg/L	0.0000514	0.0005	0.004	0.00388	0.00385	0.00393	0.0034 to 0.0046	97.0	70 to 130	0.776	20
BA17791	Arsenic, Total	mg/L	0.0000107	0.0001474	0.100	0.115	0.115	0.109	0.085 to 0.115	106	70 to 130	0.00	20
BA17794	Manganese, Dissolved	mg/L	-0.0000068	0.0001474	0.10	0.506	0.519	0.103	0.085 to 0.115	92.0	70 to 130	2.54	20
BA17795	Iron, Total	mg/L	0.000157	0.0176	0.2	10.3	10.3	0.202	0.17 to 0.23	100	70 to 130	0.00	20
BA17795	Magnesium, Total	mg/L	-0.00102	0.0462	5.00	17.7	17.7	5.14	4.25 to 5.75	100	70 to 130	0.00	20
BA17791	Barium, Total	mg/L	-0.0000107	0.0002	0.10	0.122	0.125	0.105	0.085 to 0.115	98.3	70 to 130	2.43	20
BA17797	Iron, Dissolved	mg/L	0.000118	0.0176	0.2	2.38	2.34	0.194	0.17 to 0.23	95.0	70 to 130	1.69	20
BA17791	Cobalt, Total	mg/L	-0.0000107	0.0001474	0.100	0.104	0.106	0.109	0.085 to 0.115	104	70 to 130	1.90	20
BA17791	Potassium, Total	mg/L	0.000035	0.3674	10.0	11.7	12.0	10.2	8.5 to 11.5	95.0	70 to 130	2.53	20
BA17791	Manganese, Total	mg/L	0.0000162	0.0001474	0.100	1.11	1.12	0.101	0.085 to 0.115	-20.0	70 to 130	0.897	20
BA17791	Selenium, Total	mg/L	0.0000583	0.001	0.100	0.101	0.103	0.105	0.085 to 0.115	101	70 to 130	1.96	20
BA17795	Sodium, Total	mg/L	0.000602	0.044	5.00	77.9	77.7	5.15	4.25 to 5.75	100	70 to 130	0.257	20
BA17791	Beryllium, Total	mg/L	0.000003	0.00088	0.100	0.0966	0.0940	0.0992	0.085 to 0.115	96.6	70 to 130	2.73	20
BA17791	Cadmium, Total	mg/L	0.00000	0.0001474	0.100	0.0996	0.0994	0.104	0.085 to 0.115	99.6	70 to 130	0.201	20
BA17791	Chromium, Total	mg/L	0.0000326	0.00044	0.100	0.103	0.105	0.106	0.085 to 0.115	103	70 to 130	1.92	20
BA17791	Lead, Total	mg/L	0.0000065	0.0001474	0.100	0.106	0.107	0.109	0.085 to 0.115	106	70 to 130	0.939	20
BA17791	Thallium, Total	mg/L	0.0000087	0.0001474	0.100	0.104	0.106	0.105	0.085 to 0.115	104	70 to 130	1.90	20
BA17795	Boron, Total	mg/L	0.0000373	0.0650254	1.00	1.03	1.02	1.01	0.85 to 1.15	99.7	70 to 130	0.976	20
BA17791	Molybdenum, Total	mg/L	0.0000171	0.0001474	0.100	0.108	0.108	0.107	0.085 to 0.115	108	70 to 130	0.00	20
BA17791	Antimony, Total	mg/L	0.000272	0.001	0.100	0.104	0.104	0.101	0.085 to 0.115	104	70 to 130	0.00	20
BA17795	Calcium, Total	mg/L	0.00161	0.1518	5.00	32.3	32.2	5.09	4.25 to 5.75	94.0	70 to 130	0.310	20
BA17795	Lithium, Total	mg/L	-0.0000202	0.0154	0.20	0.295	0.294	0.193	0.17 to 0.23	99.6	70 to 130	0.340	20

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 10/16/20

Reported: 11/3/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/21/20 15:45
Customer ID:
Delivery Date: 9/23/20 09:36

Description: Gorgas Ash Pond - MW-16S

Laboratory ID Number: BA17788

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA17790	Fluoride	mg/L	0.0227	0.05	2.50	2.72	0.122	2.58	2.25 to 2.75	104	80 to 120	0.823	20
BA17902	Alkalinity, Total as CaCO3	mg/L					200	51.0	45.0 to 55.0			0.501	10
BA17795	Sulfate	mg/L	-0.595	0.50	20.0	23.1	4.68	19.5	18 to 22	92.8	80 to 120	3.04	20
BA17790	Chloride	mg/L	0.00869	0.50	10.0	17.1	7.16	10.6	9 to 11	100	80 to 120	1.26	20
BA17797	Solids, Dissolved	mg/L	-2.00	25			1290	57.0	40 to 60			0.769	5

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 10/16/20

Reported: 11/3/2020
Version: 3.1
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-16D

Location Code: WMWGORAP
Collected: 9/22/20 09:18
Customer ID:
Submittal Date: 9/23/20 09:36

Laboratory ID Number: BA17789

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	10/5/20 10:25	10/7/20 12:30		1.015	Not Detected	mg/L	0.03	0.1	U
* Calcium, Total	10/5/20 10:25	10/7/20 12:30		1.015	32.0	mg/L	0.1	0.5	
* Iron, Total	10/5/20 10:25	10/7/20 12:30		1.015	0.195	mg/L	0.02	0.05	
* Lithium, Total	10/5/20 10:25	10/7/20 12:30		1.015	0.0343	mg/L	0.01	0.02	
* Magnesium, Total	10/5/20 10:25	10/7/20 12:30		1.015	11.9	mg/L	0.1	0.5	
* Sodium, Total	10/5/20 10:25	10/7/20 12:30		1.015	28.7	mg/L	0.1	0.5	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Iron, Dissolved	10/5/20 11:33	10/6/20 10:44		1.015	0.166	mg/L	0.02	0.05	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	9/28/20 11:12	9/29/20 19:30		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	9/28/20 11:12	9/29/20 19:30		1.015	Not Detected	mg/L	0.001	0.005	U
* Barium, Total	9/28/20 11:12	10/1/20 14:15		1.015	0.342	mg/L	0.002	0.01	
* Beryllium, Total	9/28/20 11:12	9/29/20 19:30		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	9/28/20 11:12	9/29/20 19:30		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	9/28/20 11:12	9/29/20 19:30		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	9/28/20 11:12	9/29/20 19:30		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	9/28/20 11:12	9/29/20 19:30		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	9/28/20 11:12	9/29/20 19:30		1.015	Not Detected	mg/L	0.002	0.01	U
* Potassium, Total	9/28/20 11:12	9/29/20 19:30		1.015	1.42	mg/L	0.3	2.5	J
* Manganese, Total	9/28/20 11:12	9/29/20 19:30		1.015	0.0100	mg/L	0.001	0.005	
* Selenium, Total	9/28/20 11:12	9/29/20 19:30		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	9/28/20 11:12	9/29/20 19:30		1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Manganese, Dissolved	9/28/20 09:17	9/29/20 14:40		1.015	0.0110	mg/L	0.001	0.005	
Analytical Method: EPA 245.1	***Analyst: GAS***								
* Mercury, Total by CVAA	9/30/20 12:24	10/2/20 10:42		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2320 B	***Analyst: JAG***								
Alkalinity, Total as CaCO3	10/1/20 13:25	10/1/20 14:30		1	192	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: TJW***								
* Solids, Dissolved	9/23/20 12:59	9/25/20 10:00		1	218	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 10/16/20

Reported: 11/3/2020
Version: 3.1
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-16D

Location Code: WMWGORAP
Collected: 9/22/20 09:18
Customer ID:
Submittal Date: 9/23/20 09:36

Laboratory ID Number: BA17789

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 4500CO2 D		***Analyst: JAG***							
Bicarbonate Alkalinity, (calc.)	10/1/20 13:25	10/1/20 14:30		1	191	mg/L			
Carbonate Alkalinity, (calc.)	10/1/20 13:25	10/1/20 14:30		1	0.92	mg/L			
Analytical Method: SM4500Cl E		***Analyst: JCC***							
* Chloride	9/25/20 13:47	9/25/20 13:47		1	2.94	mg/L	0.50	1	
Analytical Method: SM4500F G 2017		***Analyst: JCC***							
* Fluoride	9/28/20 12:33	9/28/20 12:33		1	0.123	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E 2011		***Analyst: JCC***							
* Sulfate	9/24/20 11:11	9/24/20 11:11		1	13.6	mg/L	0.50	1	
Analytical Method: Field Measurements		***Analyst: AWG***							
Conductivity	9/22/20 09:14	9/22/20 09:14			331.72	uS/cm			FA
pH	9/22/20 09:14	9/22/20 09:14			7.52	SU			FA
Temperature	9/22/20 09:14	9/22/20 09:14			17.66	C			FA
Turbidity	9/22/20 09:14	9/22/20 09:14			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 10/16/20

Reported: 11/3/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORAP
Sample Date: 9/22/20 09:18
Customer ID:
Delivery Date: 9/23/20 09:36

Description: Gorgas Ash Pond - MW-16D

Laboratory ID Number: BA17789

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA17795	Mercury, Total by CVAA	mg/L	0.0000514	0.0005	0.004	0.00388	0.00385	0.00393	0.0034 to 0.0046	97.0	70 to 130	0.776	20
BA17791	Arsenic, Total	mg/L	0.0000107	0.0001474	0.100	0.115	0.115	0.109	0.085 to 0.115	106	70 to 130	0.00	20
BA17794	Manganese, Dissolved	mg/L	-0.0000068	0.0001474	0.10	0.506	0.519	0.103	0.085 to 0.115	92.0	70 to 130	2.54	20
BA17795	Iron, Total	mg/L	0.000157	0.0176	0.2	10.3	10.3	0.202	0.17 to 0.23	100	70 to 130	0.00	20
BA17795	Magnesium, Total	mg/L	-0.00102	0.0462	5.00	17.7	17.7	5.14	4.25 to 5.75	100	70 to 130	0.00	20
BA17791	Cobalt, Total	mg/L	-0.0000107	0.0001474	0.100	0.104	0.106	0.109	0.085 to 0.115	104	70 to 130	1.90	20
BA17791	Potassium, Total	mg/L	0.000035	0.3674	10.0	11.7	12.0	10.2	8.5 to 11.5	95.0	70 to 130	2.53	20
BA17791	Manganese, Total	mg/L	0.0000162	0.0001474	0.100	1.11	1.12	0.101	0.085 to 0.115	-20.0	70 to 130	0.897	20
BA17791	Selenium, Total	mg/L	0.0000583	0.001	0.100	0.101	0.103	0.105	0.085 to 0.115	101	70 to 130	1.96	20
BA17795	Sodium, Total	mg/L	0.000602	0.044	5.00	77.9	77.7	5.15	4.25 to 5.75	100	70 to 130	0.257	20
BA17791	Barium, Total	mg/L	-0.0000107	0.0002	0.10	0.122	0.125	0.105	0.085 to 0.115	98.3	70 to 130	2.43	20
BA17797	Iron, Dissolved	mg/L	0.000118	0.0176	0.2	2.38	2.34	0.194	0.17 to 0.23	95.0	70 to 130	1.69	20
BA17791	Molybdenum, Total	mg/L	0.0000171	0.0001474	0.100	0.108	0.108	0.107	0.085 to 0.115	108	70 to 130	0.00	20
BA17791	Antimony, Total	mg/L	0.000272	0.001	0.100	0.104	0.104	0.101	0.085 to 0.115	104	70 to 130	0.00	20
BA17795	Calcium, Total	mg/L	0.00161	0.1518	5.00	32.3	32.2	5.09	4.25 to 5.75	94.0	70 to 130	0.310	20
BA17795	Lithium, Total	mg/L	-0.0000202	0.0154	0.20	0.295	0.294	0.193	0.17 to 0.23	99.6	70 to 130	0.340	20
BA17791	Beryllium, Total	mg/L	0.000003	0.00088	0.100	0.0966	0.0940	0.0992	0.085 to 0.115	96.6	70 to 130	2.73	20
BA17791	Cadmium, Total	mg/L	0.00000	0.0001474	0.100	0.0996	0.0994	0.104	0.085 to 0.115	99.6	70 to 130	0.201	20
BA17791	Chromium, Total	mg/L	0.0000326	0.00044	0.100	0.103	0.105	0.106	0.085 to 0.115	103	70 to 130	1.92	20
BA17791	Lead, Total	mg/L	0.0000065	0.0001474	0.100	0.106	0.107	0.109	0.085 to 0.115	106	70 to 130	0.939	20
BA17791	Thallium, Total	mg/L	0.0000087	0.0001474	0.100	0.104	0.106	0.105	0.085 to 0.115	104	70 to 130	1.90	20
BA17795	Boron, Total	mg/L	0.0000373	0.0650254	1.00	1.03	1.02	1.01	0.85 to 1.15	99.7	70 to 130	0.976	20

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 10/16/20

Reported: 11/3/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/22/20 09:18
Customer ID:
Delivery Date: 9/23/20 09:36

Description: Gorgas Ash Pond - MW-16D

Laboratory ID Number: BA17789

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA17790	Fluoride	mg/L	0.0227	0.05	2.50	2.72	0.122	2.58	2.25 to 2.75	104	80 to 120	0.823	20
BA17902	Alkalinity, Total as CaCO3	mg/L					200	51.0	45.0 to 55.0			0.501	10
BA17795	Sulfate	mg/L	-0.595	0.50	20.0	23.1	4.68	19.5	18 to 22	92.8	80 to 120	3.04	20
BA17790	Chloride	mg/L	0.00869	0.50	10.0	17.1	7.16	10.6	9 to 11	100	80 to 120	1.26	20
BA17797	Solids, Dissolved	mg/L	-2.00	25			1290	57.0	40 to 60			0.769	5

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 10/16/20

Reported: 11/3/2020
Version: 3.1
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-42H

Location Code: WMWGORAP
Collected: 9/22/20 10:50
Customer ID:
Submittal Date: 9/23/20 09:36

Laboratory ID Number: BA17790

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	10/5/20 10:25	10/7/20 12:34		1.015	0.0469	mg/L	0.03	0.1	J
* Calcium, Total	10/5/20 10:25	10/7/20 13:20		10.15	142	mg/L	1.015	5.075	
* Iron, Total	10/5/20 10:25	10/7/20 13:20		10.15	4.37	mg/L	0.203	0.5075	
* Lithium, Total	10/5/20 10:25	10/7/20 12:34		1.015	0.0333	mg/L	0.01	0.02	
* Magnesium, Total	10/5/20 10:25	10/7/20 13:20		10.15	54.8	mg/L	1.015	5.075	
* Sodium, Total	10/5/20 10:25	10/7/20 12:34		1.015	27.9	mg/L	0.1	0.5	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Iron, Dissolved	10/5/20 11:33	10/6/20 10:47		1.015	3.47	mg/L	0.02	0.05	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	9/28/20 11:12	10/1/20 14:17		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	9/28/20 11:12	10/1/20 14:17		1.015	0.00912	mg/L	0.001	0.005	
* Barium, Total	9/28/20 11:12	10/1/20 14:17		1.015	0.0237	mg/L	0.002	0.01	
* Beryllium, Total	9/28/20 11:12	10/1/20 14:17		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	9/28/20 11:12	10/1/20 14:17		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	9/28/20 11:12	10/1/20 14:17		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	9/28/20 11:12	10/1/20 14:17		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	9/28/20 11:12	10/1/20 14:17		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	9/28/20 11:12	10/1/20 14:17		1.015	Not Detected	mg/L	0.002	0.01	U
* Potassium, Total	9/28/20 11:12	10/1/20 14:17		1.015	2.29	mg/L	0.3	2.5	J
* Manganese, Total	9/28/20 11:12	10/1/20 14:17		1.015	1.11	mg/L	0.001	0.005	
* Selenium, Total	9/28/20 11:12	10/1/20 14:17		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	9/28/20 11:12	10/1/20 14:17		1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Manganese, Dissolved	9/28/20 09:17	9/29/20 14:42		1.015	1.07	mg/L	0.001	0.005	
Analytical Method: EPA 245.1	***Analyst: GAS***								
* Mercury, Total by CVAA	9/30/20 12:24	10/2/20 10:45		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2320 B	***Analyst: JAG***								
Alkalinity, Total as CaCO3	10/1/20 13:25	10/1/20 14:30		1	194	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: TJW***								
* Solids, Dissolved	9/23/20 12:59	9/25/20 10:00		1	800	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 10/16/20

Reported: 11/3/2020
Version: 3.1
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-42H

Location Code: WMWGORAP
Collected: 9/22/20 10:50
Customer ID:
Submittal Date: 9/23/20 09:36

Laboratory ID Number: BA17790

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 4500CO2 D		***Analyst: JAG***							
Bicarbonate Alkalinity, (calc.)	10/1/20 13:25	10/1/20 14:30		1	194	mg/L			
Carbonate Alkalinity, (calc.)	10/1/20 13:25	10/1/20 14:30		1	0.09	mg/L			
Analytical Method: SM4500Cl E		***Analyst: JCC***							
* Chloride	9/25/20 13:48	9/25/20 13:48		1	7.07	mg/L	0.50	1	
Analytical Method: SM4500F G 2017		***Analyst: JCC***							
* Fluoride	9/28/20 12:34	9/28/20 12:34		1	0.121	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E 2011		***Analyst: JCC***							
* Sulfate	9/24/20 11:18	9/24/20 11:18		25	372	mg/L	12.50	25	
Analytical Method: Field Measurements		***Analyst: AWG***							
Conductivity	9/22/20 10:46	9/22/20 10:46			861.97	uS/cm			FA
pH	9/22/20 10:46	9/22/20 10:46			6.51	SU			FA
Temperature	9/22/20 10:46	9/22/20 10:46			17.91	C			FA
Turbidity	9/22/20 10:46	9/22/20 10:46			8.42	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 10/16/20

Reported: 11/3/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORAP
Sample Date: 9/22/20 10:50
Customer ID:
Delivery Date: 9/23/20 09:36

Description: Gorgas Ash Pond - MW-42H

Laboratory ID Number: BA17790

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA17795	Mercury, Total by CVAA	mg/L	0.0000514	0.0005	0.004	0.00388	0.00385	0.00393	0.0034 to 0.0046	97.0	70 to 130	0.776	20
BA17791	Arsenic, Total	mg/L	0.0000107	0.0001474	0.100	0.115	0.115	0.109	0.085 to 0.115	106	70 to 130	0.00	20
BA17794	Manganese, Dissolved	mg/L	-0.0000068	0.0001474	0.10	0.506	0.519	0.103	0.085 to 0.115	92.0	70 to 130	2.54	20
BA17795	Iron, Total	mg/L	0.000157	0.0176	0.2	10.3	10.3	0.202	0.17 to 0.23	100	70 to 130	0.00	20
BA17795	Magnesium, Total	mg/L	-0.00102	0.0462	5.00	17.7	17.7	5.14	4.25 to 5.75	100	70 to 130	0.00	20
BA17791	Barium, Total	mg/L	-0.0000107	0.0002	0.10	0.122	0.125	0.105	0.085 to 0.115	98.3	70 to 130	2.43	20
BA17797	Iron, Dissolved	mg/L	0.000118	0.0176	0.2	2.38	2.34	0.194	0.17 to 0.23	95.0	70 to 130	1.69	20
BA17791	Molybdenum, Total	mg/L	0.0000171	0.0001474	0.100	0.108	0.108	0.107	0.085 to 0.115	108	70 to 130	0.00	20
BA17791	Antimony, Total	mg/L	0.000272	0.001	0.100	0.104	0.104	0.101	0.085 to 0.115	104	70 to 130	0.00	20
BA17795	Calcium, Total	mg/L	0.00161	0.1518	5.00	32.3	32.2	5.09	4.25 to 5.75	94.0	70 to 130	0.310	20
BA17795	Lithium, Total	mg/L	-0.0000202	0.0154	0.20	0.295	0.294	0.193	0.17 to 0.23	99.6	70 to 130	0.340	20
BA17791	Beryllium, Total	mg/L	0.000003	0.00088	0.100	0.0966	0.0940	0.0992	0.085 to 0.115	96.6	70 to 130	2.73	20
BA17791	Cadmium, Total	mg/L	0.00000	0.0001474	0.100	0.0996	0.0994	0.104	0.085 to 0.115	99.6	70 to 130	0.201	20
BA17791	Chromium, Total	mg/L	0.0000326	0.00044	0.100	0.103	0.105	0.106	0.085 to 0.115	103	70 to 130	1.92	20
BA17791	Lead, Total	mg/L	0.0000065	0.0001474	0.100	0.106	0.107	0.109	0.085 to 0.115	106	70 to 130	0.939	20
BA17791	Thallium, Total	mg/L	0.0000087	0.0001474	0.100	0.104	0.106	0.105	0.085 to 0.115	104	70 to 130	1.90	20
BA17795	Boron, Total	mg/L	0.0000373	0.0650254	1.00	1.03	1.02	1.01	0.85 to 1.15	99.7	70 to 130	0.976	20
BA17791	Cobalt, Total	mg/L	-0.0000107	0.0001474	0.100	0.104	0.106	0.109	0.085 to 0.115	104	70 to 130	1.90	20
BA17791	Potassium, Total	mg/L	0.000035	0.3674	10.0	11.7	12.0	10.2	8.5 to 11.5	95.0	70 to 130	2.53	20
BA17791	Manganese, Total	mg/L	0.0000162	0.0001474	0.100	1.11	1.12	0.101	0.085 to 0.115	-20.0	70 to 130	0.897	20
BA17791	Selenium, Total	mg/L	0.0000583	0.001	0.100	0.101	0.103	0.105	0.085 to 0.115	101	70 to 130	1.96	20
BA17795	Sodium, Total	mg/L	0.000602	0.044	5.00	77.9	77.7	5.15	4.25 to 5.75	100	70 to 130	0.257	20

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 10/16/20

Reported: 11/3/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/22/20 10:50
Customer ID:
Delivery Date: 9/23/20 09:36

Description: Gorgas Ash Pond - MW-42H

Laboratory ID Number: BA17790

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA17790	Fluoride	mg/L	0.0227	0.05	2.50	2.72	0.122	2.58	2.25 to 2.75	104	80 to 120	0.823	20
BA17902	Alkalinity, Total as CaCO3	mg/L					200	51.0	45.0 to 55.0			0.501	10
BA17795	Sulfate	mg/L	-0.595	0.50	20.0	23.1	4.68	19.5	18 to 22	92.8	80 to 120	3.04	20
BA17790	Chloride	mg/L	0.00869	0.50	10.0	17.1	7.16	10.6	9 to 11	100	80 to 120	1.26	20
BA17797	Solids, Dissolved	mg/L	-2.00	25			1290	57.0	40 to 60			0.769	5

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 10/16/20

Reported: 11/3/2020
Version: 3.1
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-42H DUP

Location Code: WMWGORAP
Collected: 9/22/20 10:50
Customer ID:
Submittal Date: 9/23/20 09:36

Laboratory ID Number: BA17791

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	10/5/20 10:25	10/7/20 12:37		1.015	0.0478	mg/L	0.03	0.1	J
* Calcium, Total	10/5/20 10:25	10/7/20 13:23		10.15	143	mg/L	1.015	5.075	
* Iron, Total	10/5/20 10:25	10/7/20 12:37		1.015	4.04	mg/L	0.02	0.05	
* Lithium, Total	10/5/20 10:25	10/7/20 12:37		1.015	0.0335	mg/L	0.01	0.02	
* Magnesium, Total	10/5/20 10:25	10/7/20 13:23		10.15	54.8	mg/L	1.015	5.075	
* Sodium, Total	10/5/20 10:25	10/7/20 12:37		1.015	28.1	mg/L	0.1	0.5	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Iron, Dissolved	10/5/20 11:33	10/6/20 10:50		1.015	3.39	mg/L	0.02	0.05	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	9/28/20 11:12	10/1/20 14:20		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	9/28/20 11:12	10/1/20 14:20		1.015	0.00893	mg/L	0.001	0.005	
* Barium, Total	9/28/20 11:12	10/1/20 14:20		1.015	0.0237	mg/L	0.002	0.01	
* Beryllium, Total	9/28/20 11:12	10/1/20 14:20		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	9/28/20 11:12	10/1/20 14:20		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	9/28/20 11:12	10/1/20 14:20		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	9/28/20 11:12	10/1/20 14:20		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	9/28/20 11:12	10/1/20 14:20		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	9/28/20 11:12	10/1/20 14:20		1.015	Not Detected	mg/L	0.002	0.01	U
* Potassium, Total	9/28/20 11:12	10/1/20 14:20		1.015	2.20	mg/L	0.3	2.5	J
* Manganese, Total	9/28/20 11:12	10/1/20 14:20		1.015	1.13	mg/L	0.001	0.005	RA
* Selenium, Total	9/28/20 11:12	10/1/20 14:20		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	9/28/20 11:12	10/1/20 14:20		1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Manganese, Dissolved	9/28/20 09:17	9/29/20 14:45		1.015	1.06	mg/L	0.001	0.005	
Analytical Method: EPA 245.1	***Analyst: GAS***								
* Mercury, Total by CVAA	9/30/20 12:24	10/2/20 10:47		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2320 B	***Analyst: JAG***								
Alkalinity, Total as CaCO3	10/1/20 13:25	10/1/20 14:30		1	183	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: TJW***								
* Solids, Dissolved	9/23/20 12:59	9/25/20 10:00		1	802	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 10/16/20

Reported: 11/3/2020
Version: 3.1
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-42H DUP

Location Code: WMWGORAP
Collected: 9/22/20 10:50
Customer ID:
Submittal Date: 9/23/20 09:36

Laboratory ID Number: BA17791

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 4500CO2 D		***Analyst: JAG***							
Bicarbonate Alkalinity, (calc.)	10/1/20 13:25	10/1/20 14:30		1	183	mg/L			
Carbonate Alkalinity, (calc.)	10/1/20 13:25	10/1/20 14:30		1	0.08	mg/L			
Analytical Method: SM4500Cl E		***Analyst: JCC***							
* Chloride	9/25/20 14:04	9/25/20 14:04		1	7.29	mg/L	0.50	1	
Analytical Method: SM4500F G 2017		***Analyst: JCC***							
* Fluoride	9/28/20 12:45	9/28/20 12:45		1	0.141	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E 2011		***Analyst: JCC***							
* Sulfate	9/24/20 11:19	9/24/20 11:19		25	371	mg/L	12.50	25	
Analytical Method: Field Measurements		***Analyst: AWG***							
Conductivity	9/22/20 10:46	9/22/20 10:46			861.97	uS/cm			FA
pH	9/22/20 10:46	9/22/20 10:46			6.51	SU			FA
Temperature	9/22/20 10:46	9/22/20 10:46			17.91	C			FA
Turbidity	9/22/20 10:46	9/22/20 10:46			8.42	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 10/16/20

Reported: 11/3/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORAP
Sample Date: 9/22/20 10:50
Customer ID:
Delivery Date: 9/23/20 09:36

Description: Gorgas Ash Pond - MW-42H DUP

Laboratory ID Number: BA17791

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA17795	Mercury, Total by CVAA	mg/L	0.0000514	0.0005	0.004	0.00388	0.00385	0.00393	0.0034 to 0.0046	97.0	70 to 130	0.776	20
BA17791	Barium, Total	mg/L	-0.0000107	0.0002	0.10	0.122	0.125	0.105	0.085 to 0.115	98.3	70 to 130	2.43	20
BA17797	Iron, Dissolved	mg/L	0.000118	0.0176	0.2	2.38	2.34	0.194	0.17 to 0.23	95.0	70 to 130	1.69	20
BA17791	Cobalt, Total	mg/L	-0.0000107	0.0001474	0.100	0.104	0.106	0.109	0.085 to 0.115	104	70 to 130	1.90	20
BA17791	Potassium, Total	mg/L	0.000035	0.3674	10.0	11.7	12.0	10.2	8.5 to 11.5	95.0	70 to 130	2.53	20
BA17791	Manganese, Total	mg/L	0.0000162	0.0001474	0.100	1.11	1.12	0.101	0.085 to 0.115	-20.0	70 to 130	0.897	20
BA17791	Selenium, Total	mg/L	0.0000583	0.001	0.100	0.101	0.103	0.105	0.085 to 0.115	101	70 to 130	1.96	20
BA17795	Sodium, Total	mg/L	0.000602	0.044	5.00	77.9	77.7	5.15	4.25 to 5.75	100	70 to 130	0.257	20
BA17791	Molybdenum, Total	mg/L	0.0000171	0.0001474	0.100	0.108	0.108	0.107	0.085 to 0.115	108	70 to 130	0.00	20
BA17791	Antimony, Total	mg/L	0.000272	0.001	0.100	0.104	0.104	0.101	0.085 to 0.115	104	70 to 130	0.00	20
BA17795	Calcium, Total	mg/L	0.00161	0.1518	5.00	32.3	32.2	5.09	4.25 to 5.75	94.0	70 to 130	0.310	20
BA17795	Lithium, Total	mg/L	-0.0000202	0.0154	0.20	0.295	0.294	0.193	0.17 to 0.23	99.6	70 to 130	0.340	20
BA17791	Arsenic, Total	mg/L	0.0000107	0.0001474	0.100	0.115	0.115	0.109	0.085 to 0.115	106	70 to 130	0.00	20
BA17794	Manganese, Dissolved	mg/L	-0.0000068	0.0001474	0.10	0.506	0.519	0.103	0.085 to 0.115	92.0	70 to 130	2.54	20
BA17795	Iron, Total	mg/L	0.000157	0.0176	0.2	10.3	10.3	0.202	0.17 to 0.23	100	70 to 130	0.00	20
BA17795	Magnesium, Total	mg/L	-0.00102	0.0462	5.00	17.7	17.7	5.14	4.25 to 5.75	100	70 to 130	0.00	20
BA17791	Beryllium, Total	mg/L	0.000003	0.00088	0.100	0.0966	0.0940	0.0992	0.085 to 0.115	96.6	70 to 130	2.73	20
BA17791	Cadmium, Total	mg/L	0.00000	0.0001474	0.100	0.0996	0.0994	0.104	0.085 to 0.115	99.6	70 to 130	0.201	20
BA17791	Chromium, Total	mg/L	0.0000326	0.00044	0.100	0.103	0.105	0.106	0.085 to 0.115	103	70 to 130	1.92	20
BA17791	Lead, Total	mg/L	0.0000065	0.0001474	0.100	0.106	0.107	0.109	0.085 to 0.115	106	70 to 130	0.939	20
BA17791	Thallium, Total	mg/L	0.0000087	0.0001474	0.100	0.104	0.106	0.105	0.085 to 0.115	104	70 to 130	1.90	20
BA17795	Boron, Total	mg/L	0.0000373	0.0650254	1.00	1.03	1.02	1.01	0.85 to 1.15	99.7	70 to 130	0.976	20

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 10/16/20

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/22/20 10:50
Customer ID:
Delivery Date: 9/23/20 09:36

Description: Gorgas Ash Pond - MW-42H DUP

Laboratory ID Number: BA17791

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA17899	Chloride	mg/L	-0.0208	0.50	10.0	22.5	13.3	10.7	9 to 11	93.0	80 to 120	0.755	20
BA17899	Fluoride	mg/L	0.0211	0.05	2.50	2.87	0.20	2.62	2.25 to 2.75	107	80 to 120	1.01	20
BA17902	Alkalinity, Total as CaCO3	mg/L					200	51.0	45.0 to 55.0			0.501	10
BA17795	Sulfate	mg/L	-0.595	0.50	20.0	23.1	4.68	19.5	18 to 22	92.8	80 to 120	3.04	20
BA17797	Solids, Dissolved	mg/L	-2.00	25			1290	57.0	40 to 60			0.769	5

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 10/16/20

Reported: 11/3/2020
Version: 3.1
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-2

Location Code: WMWGORAP
Collected: 9/22/20 12:37
Customer ID:
Submittal Date: 9/23/20 09:36

Laboratory ID Number: BA17792

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	10/5/20 10:25	10/7/20 12:40		1.015	0.133	mg/L	0.03	0.1	
* Calcium, Total	10/5/20 10:25	10/7/20 12:40		1.015	0.503	mg/L	0.1	0.5	
* Iron, Total	10/5/20 10:25	10/7/20 12:40		1.015	0.0574	mg/L	0.02	0.05	
* Lithium, Total	10/5/20 10:25	10/7/20 12:40		1.015	0.0395	mg/L	0.01	0.02	
* Magnesium, Total	10/5/20 10:25	10/7/20 12:40		1.015	0.139	mg/L	0.1	0.5	J
* Sodium, Total	10/5/20 10:25	10/7/20 13:27		10.15	142	mg/L	1.015	5.075	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Iron, Dissolved	10/5/20 11:33	10/6/20 10:55		1.015	Not Detected	mg/L	0.02	0.05	U
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	9/28/20 11:12	9/29/20 19:51		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	9/28/20 11:12	9/29/20 19:51		1.015	Not Detected	mg/L	0.001	0.005	U
* Barium, Total	9/28/20 11:12	10/1/20 14:36		1.015	0.0563	mg/L	0.002	0.01	
* Beryllium, Total	9/28/20 11:12	9/29/20 19:51		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	9/28/20 11:12	9/29/20 19:51		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	9/28/20 11:12	9/29/20 19:51		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	9/28/20 11:12	9/29/20 19:51		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	9/28/20 11:12	9/29/20 19:51		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	9/28/20 11:12	9/29/20 19:51		1.015	0.00308	mg/L	0.002	0.01	J
* Potassium, Total	9/28/20 11:12	9/29/20 19:51		1.015	0.419	mg/L	0.3	2.5	J
* Manganese, Total	9/28/20 11:12	9/29/20 19:51		1.015	0.00109	mg/L	0.001	0.005	J
* Selenium, Total	9/28/20 11:12	9/29/20 19:51		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	9/28/20 11:12	9/29/20 19:51		1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Manganese, Dissolved	9/28/20 09:17	9/29/20 14:48		1.015	Not Detected	mg/L	0.001	0.005	U
Analytical Method: EPA 245.1	***Analyst: GAS***								
* Mercury, Total by CVAA	9/30/20 12:24	10/2/20 10:49		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2320 B	***Analyst: JAG***								
Alkalinity, Total as CaCO3	10/1/20 13:25	10/1/20 14:30		1	291	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: TJW***								
* Solids, Dissolved	9/23/20 12:59	9/25/20 10:00		1	318	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 10/16/20

Reported: 11/3/2020
Version: 3.1
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-2

Location Code: WMWGORAP
Collected: 9/22/20 12:37
Customer ID:
Submittal Date: 9/23/20 09:36

Laboratory ID Number: BA17792

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 4500CO2 D		***Analyst: JAG***							
Bicarbonate Alkalinity, (calc.)	10/1/20 13:25	10/1/20 14:30		1	228	mg/L			
Carbonate Alkalinity, (calc.)	10/1/20 13:25	10/1/20 14:30		1	61.8	mg/L			
Analytical Method: SM4500Cl E		***Analyst: JCC***							
* Chloride	9/25/20 14:05	9/25/20 14:05		1	6.33	mg/L	0.50	1	
Analytical Method: SM4500F G 2017		***Analyst: JCC***							
* Fluoride	9/28/20 12:46	9/28/20 12:46		1	0.921	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E 2011		***Analyst: JCC***							
* Sulfate	9/24/20 11:14	9/24/20 11:14		1	21.5	mg/L	0.50	1	
Analytical Method: Field Measurements		***Analyst: AWG***							
Conductivity	9/22/20 12:33	9/22/20 12:33			510.12	uS/cm			FA
pH	9/22/20 12:33	9/22/20 12:33			9.41	SU			FA
Temperature	9/22/20 12:33	9/22/20 12:33			18.20	C			FA
Turbidity	9/22/20 12:33	9/22/20 12:33			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 10/16/20

Reported: 11/3/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORAP
Sample Date: 9/22/20 12:37
Customer ID:
Delivery Date: 9/23/20 09:36

Description: Gorgas Ash Pond - MW-2

Laboratory ID Number: BA17792

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA17902	Lead, Total	mg/L	0.0000065	0.0001474	0.100	0.103	0.105	0.109	0.085 to 0.115	103	70 to 130	1.92	20
BA17797	Iron, Dissolved	mg/L	0.000118	0.0176	0.2	2.38	2.34	0.194	0.17 to 0.23	95.0	70 to 130	1.69	20
BA17902	Potassium, Total	mg/L	0.000035	0.3674	10.0	10.6	10.9	10.2	8.5 to 11.5	92.5	70 to 130	2.79	20
BA17795	Mercury, Total by CVAA	mg/L	0.0000514	0.0005	0.004	0.00388	0.00385	0.00393	0.0034 to 0.0046	97.0	70 to 130	0.776	20
BA17902	Chromium, Total	mg/L	0.0000326	0.00044	0.100	0.101	0.104	0.106	0.085 to 0.115	101	70 to 130	2.93	20
BA17902	Thallium, Total	mg/L	0.0000087	0.0001474	0.100	0.0990	0.102	0.105	0.085 to 0.115	99.0	70 to 130	2.99	20
BA17795	Sodium, Total	mg/L	0.000602	0.044	5.00	77.9	77.7	5.15	4.25 to 5.75	100	70 to 130	0.257	20
BA17902	Cadmium, Total	mg/L	0.00000	0.0001474	0.100	0.0963	0.102	0.104	0.085 to 0.115	96.3	70 to 130	5.75	20
BA17902	Manganese, Total	mg/L	0.0000162	0.0001474	0.100	0.140	0.137	0.101	0.085 to 0.115	94.4	70 to 130	2.17	20
BA17902	Selenium, Total	mg/L	0.0000583	0.001	0.100	0.100	0.102	0.105	0.085 to 0.115	100	70 to 130	1.98	20
BA17794	Manganese, Dissolved	mg/L	-0.0000068	0.0001474	0.10	0.506	0.519	0.103	0.085 to 0.115	92.0	70 to 130	2.54	20
BA17795	Iron, Total	mg/L	0.000157	0.0176	0.2	10.3	10.3	0.202	0.17 to 0.23	100	70 to 130	0.00	20
BA17795	Magnesium, Total	mg/L	-0.00102	0.0462	5.00	17.7	17.7	5.14	4.25 to 5.75	100	70 to 130	0.00	20
BA17902	Cobalt, Total	mg/L	-0.0000107	0.0001474	0.100	0.102	0.104	0.109	0.085 to 0.115	102	70 to 130	1.94	20
BA17902	Molybdenum, Total	mg/L	0.0000171	0.0001474	0.100	0.109	0.114	0.107	0.085 to 0.115	103	70 to 130	4.48	20
BA17902	Arsenic, Total	mg/L	0.0000107	0.0001474	0.10	0.110	0.109	0.109	0.085 to 0.115	104	70 to 130	0.913	20
BA17902	Antimony, Total	mg/L	0.000272	0.001	0.100	0.102	0.102	0.101	0.085 to 0.115	100	70 to 130	0.00	20
BA17795	Boron, Total	mg/L	0.0000373	0.0650254	1.00	1.03	1.02	1.01	0.85 to 1.15	99.7	70 to 130	0.976	20
BA17902	Beryllium, Total	mg/L	0.000003	0.00088	0.100	0.0997	0.101	0.0992	0.085 to 0.115	99.7	70 to 130	1.30	20
BA17795	Calcium, Total	mg/L	0.00161	0.1518	5.00	32.3	32.2	5.09	4.25 to 5.75	94.0	70 to 130	0.310	20
BA17795	Lithium, Total	mg/L	-0.0000202	0.0154	0.20	0.295	0.294	0.193	0.17 to 0.23	99.6	70 to 130	0.340	20
BA17902	Barium, Total	mg/L	-0.0000107	0.0002	0.10	0.289	0.299	0.105	0.085 to 0.115	96.0	70 to 130	3.40	20

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 10/16/20

Reported: 11/3/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/22/20 12:37
Customer ID:
Delivery Date: 9/23/20 09:36

Description: Gorgas Ash Pond - MW-2

Laboratory ID Number: BA17792

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA17899	Chloride	mg/L	-0.0208	0.50	10.0	22.5	13.3	10.7	9 to 11	93.0	80 to 120	0.755	20
BA17899	Fluoride	mg/L	0.0211	0.05	2.50	2.87	0.20	2.62	2.25 to 2.75	107	80 to 120	1.01	20
BA17797	Solids, Dissolved	mg/L	-2.00	25			1290	57.0	40 to 60			0.769	5
BA17902	Alkalinity, Total as CaCO3	mg/L					200	51.0	45.0 to 55.0			0.501	10
BA17795	Sulfate	mg/L	-0.595	0.50	20.0	23.1	4.68	19.5	18 to 22	92.8	80 to 120	3.04	20

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 10/16/20

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-19

Location Code: WMWGORAP
Collected: 9/22/20 13:56
Customer ID:
Submittal Date: 9/23/20 09:36

Laboratory ID Number: BA17793

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	10/5/20 10:25	10/7/20 12:44		1.015	0.0370	mg/L	0.03	0.1	J
* Calcium, Total	10/5/20 10:25	10/7/20 13:30		10.15	46.9	mg/L	1.015	5.075	
* Iron, Total	10/5/20 10:25	10/7/20 12:44		1.015	0.287	mg/L	0.02	0.05	
* Lithium, Total	10/5/20 10:25	10/7/20 12:44		1.015	0.0435	mg/L	0.01	0.02	
* Magnesium, Total	10/5/20 10:25	10/7/20 12:44		1.015	13.4	mg/L	0.1	0.5	
* Sodium, Total	10/5/20 10:25	10/7/20 13:30		10.15	60.9	mg/L	1.015	5.075	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Iron, Dissolved	10/5/20 11:33	10/6/20 10:58		1.015	0.309	mg/L	0.02	0.05	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	9/28/20 11:12	9/29/20 19:54		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	9/28/20 11:12	9/29/20 19:54		1.015	0.00313	mg/L	0.001	0.005	J
* Barium, Total	9/28/20 11:12	10/1/20 14:38		1.015	0.337	mg/L	0.002	0.01	
* Beryllium, Total	9/28/20 11:12	9/29/20 19:54		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	9/28/20 11:12	9/29/20 19:54		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	9/28/20 11:12	9/29/20 19:54		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	9/28/20 11:12	9/29/20 19:54		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	9/28/20 11:12	9/29/20 19:54		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	9/28/20 11:12	9/29/20 19:54		1.015	0.00630	mg/L	0.002	0.01	J
* Potassium, Total	9/28/20 11:12	9/29/20 19:54		1.015	2.31	mg/L	0.3	2.5	J
* Manganese, Total	9/28/20 11:12	9/29/20 19:54		1.015	0.0208	mg/L	0.001	0.005	
* Selenium, Total	9/28/20 11:12	9/29/20 19:54		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	9/28/20 11:12	9/29/20 19:54		1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Manganese, Dissolved	9/28/20 09:17	9/29/20 14:50		1.015	0.0243	mg/L	0.001	0.005	
Analytical Method: EPA 245.1	***Analyst: GAS***								
* Mercury, Total by CVAA	9/30/20 12:24	10/2/20 10:52		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2320 B	***Analyst: JAG***								
Alkalinity, Total as CaCO3	10/1/20 13:25	10/1/20 14:30		1	296	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: TJW***								
* Solids, Dissolved	9/25/20 13:30	9/29/20 08:00		1	300	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 10/16/20

Reported: 11/3/2020
Version: 3.1
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-19

Location Code: WMWGORAP
Collected: 9/22/20 13:56
Customer ID:
Submittal Date: 9/23/20 09:36

Laboratory ID Number: BA17793

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 4500CO2 D		***Analyst: JAG***							
Bicarbonate Alkalinity, (calc.)	10/1/20 13:25	10/1/20 14:30		1	294	mg/L			
Carbonate Alkalinity, (calc.)	10/1/20 13:25	10/1/20 14:30		1	2.35	mg/L			
Analytical Method: SM4500Cl E		***Analyst: JCC***							
* Chloride	9/25/20 14:06	9/25/20 14:06		1	6.60	mg/L	0.50	1	
Analytical Method: SM4500F G 2017		***Analyst: JCC***							
* Fluoride	9/28/20 12:48	9/28/20 12:48		1	0.339	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E 2011		***Analyst: JCC***							
* Sulfate	9/24/20 11:16	9/24/20 11:16		1	16.9	mg/L	0.50	1	
Analytical Method: Field Measurements		***Analyst: AWG***							
Conductivity	9/22/20 13:53	9/22/20 13:53			470.98	uS/cm			FA
pH	9/22/20 13:53	9/22/20 13:53			8.17	SU			FA
Temperature	9/22/20 13:53	9/22/20 13:53			18.07	C			FA
Turbidity	9/22/20 13:53	9/22/20 13:53			0.53	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 10/16/20

Reported: 11/3/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORAP
Sample Date: 9/22/20 13:56
Customer ID:
Delivery Date: 9/23/20 09:36

Description: Gorgas Ash Pond - MW-19

Laboratory ID Number: BA17793

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA17902	Lead, Total	mg/L	0.0000065	0.0001474	0.100	0.103	0.105	0.109	0.085 to 0.115	103	70 to 130	1.92	20
BA17795	Mercury, Total by CVAA	mg/L	0.0000514	0.0005	0.004	0.00388	0.00385	0.00393	0.0034 to 0.0046	97.0	70 to 130	0.776	20
BA17902	Chromium, Total	mg/L	0.0000326	0.00044	0.100	0.101	0.104	0.106	0.085 to 0.115	101	70 to 130	2.93	20
BA17902	Thallium, Total	mg/L	0.0000087	0.0001474	0.100	0.0990	0.102	0.105	0.085 to 0.115	99.0	70 to 130	2.99	20
BA17797	Iron, Dissolved	mg/L	0.000118	0.0176	0.2	2.38	2.34	0.194	0.17 to 0.23	95.0	70 to 130	1.69	20
BA17902	Potassium, Total	mg/L	0.000035	0.3674	10.0	10.6	10.9	10.2	8.5 to 11.5	92.5	70 to 130	2.79	20
BA17795	Calcium, Total	mg/L	0.00161	0.1518	5.00	32.3	32.2	5.09	4.25 to 5.75	94.0	70 to 130	0.310	20
BA17795	Lithium, Total	mg/L	-0.0000202	0.0154	0.20	0.295	0.294	0.193	0.17 to 0.23	99.6	70 to 130	0.340	20
BA17902	Barium, Total	mg/L	-0.0000107	0.0002	0.10	0.289	0.299	0.105	0.085 to 0.115	96.0	70 to 130	3.40	20
BA17795	Sodium, Total	mg/L	0.000602	0.044	5.00	77.9	77.7	5.15	4.25 to 5.75	100	70 to 130	0.257	20
BA17902	Cadmium, Total	mg/L	0.00000	0.0001474	0.100	0.0963	0.102	0.104	0.085 to 0.115	96.3	70 to 130	5.75	20
BA17902	Manganese, Total	mg/L	0.0000162	0.0001474	0.100	0.140	0.137	0.101	0.085 to 0.115	94.4	70 to 130	2.17	20
BA17902	Selenium, Total	mg/L	0.0000583	0.001	0.100	0.100	0.102	0.105	0.085 to 0.115	100	70 to 130	1.98	20
BA17795	Boron, Total	mg/L	0.0000373	0.0650254	1.00	1.03	1.02	1.01	0.85 to 1.15	99.7	70 to 130	0.976	20
BA17902	Beryllium, Total	mg/L	0.000003	0.00088	0.100	0.0997	0.101	0.0992	0.085 to 0.115	99.7	70 to 130	1.30	20
BA17902	Arsenic, Total	mg/L	0.0000107	0.0001474	0.10	0.110	0.109	0.109	0.085 to 0.115	104	70 to 130	0.913	20
BA17902	Antimony, Total	mg/L	0.000272	0.001	0.100	0.102	0.102	0.101	0.085 to 0.115	100	70 to 130	0.00	20
BA17794	Manganese, Dissolved	mg/L	-0.0000068	0.0001474	0.10	0.506	0.519	0.103	0.085 to 0.115	92.0	70 to 130	2.54	20
BA17795	Iron, Total	mg/L	0.000157	0.0176	0.2	10.3	10.3	0.202	0.17 to 0.23	100	70 to 130	0.00	20
BA17795	Magnesium, Total	mg/L	-0.00102	0.0462	5.00	17.7	17.7	5.14	4.25 to 5.75	100	70 to 130	0.00	20
BA17902	Cobalt, Total	mg/L	-0.0000107	0.0001474	0.100	0.102	0.104	0.109	0.085 to 0.115	102	70 to 130	1.94	20
BA17902	Molybdenum, Total	mg/L	0.0000171	0.0001474	0.100	0.109	0.114	0.107	0.085 to 0.115	103	70 to 130	4.48	20

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 10/16/20

Reported: 11/3/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/22/20 13:56
Customer ID:
Delivery Date: 9/23/20 09:36

Description: Gorgas Ash Pond - MW-19

Laboratory ID Number: BA17793

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA17899	Fluoride	mg/L	0.0211	0.05	2.50	2.87	0.20	2.62	2.25 to 2.75	107	80 to 120	1.01	20
BA17795	Sulfate	mg/L	-0.595	0.50	20.0	23.1	4.68	19.5	18 to 22	92.8	80 to 120	3.04	20
BA17902	Alkalinity, Total as CaCO3	mg/L					200	51.0	45.0 to 55.0			0.501	10
BA17899	Chloride	mg/L	-0.0208	0.50	10.0	22.5	13.3	10.7	9 to 11	93.0	80 to 120	0.755	20
BA17899	Solids, Dissolved	mg/L	-1.00	25			431	50.0	40 to 60			0.116	5

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 10/16/20

Reported: 11/3/2020
Version: 3.1
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-8

Location Code: WMWGORAP
Collected: 9/21/20 12:08
Customer ID:
Submittal Date: 9/23/20 09:36

Laboratory ID Number: BA17794

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	10/5/20 10:25	10/7/20 12:47		1.015	Not Detected	mg/L	0.03	0.1	U
* Calcium, Total	10/5/20 10:25	10/7/20 12:47		1.015	5.19	mg/L	0.1	0.5	
* Iron, Total	10/5/20 10:25	10/7/20 12:47		1.015	0.492	mg/L	0.02	0.05	
* Lithium, Total	10/5/20 10:25	10/7/20 12:47		1.015	Not Detected	mg/L	0.01	0.02	U
* Magnesium, Total	10/5/20 10:25	10/7/20 12:47		1.015	6.67	mg/L	0.1	0.5	
* Sodium, Total	10/5/20 10:25	10/7/20 12:47		1.015	10.3	mg/L	0.1	0.5	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Iron, Dissolved	10/5/20 11:33	10/6/20 11:01		1.015	0.433	mg/L	0.02	0.05	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	9/28/20 11:12	9/29/20 19:56		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	9/28/20 11:12	9/29/20 19:56		1.015	Not Detected	mg/L	0.001	0.005	U
* Barium, Total	9/28/20 11:12	10/1/20 14:41		1.015	0.0260	mg/L	0.002	0.01	
* Beryllium, Total	9/28/20 11:12	9/29/20 19:56		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	9/28/20 11:12	9/29/20 19:56		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	9/28/20 11:12	9/29/20 19:56		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	9/28/20 11:12	9/29/20 19:56		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	9/28/20 11:12	9/29/20 19:56		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	9/28/20 11:12	9/29/20 19:56		1.015	Not Detected	mg/L	0.002	0.01	U
* Potassium, Total	9/28/20 11:12	9/29/20 19:56		1.015	0.762	mg/L	0.3	2.5	J
* Manganese, Total	9/28/20 11:12	9/29/20 19:56		1.015	0.378	mg/L	0.001	0.005	
* Selenium, Total	9/28/20 11:12	9/29/20 19:56		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	9/28/20 11:12	9/29/20 19:56		1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Manganese, Dissolved	9/28/20 09:17	9/29/20 14:53		1.015	0.414	mg/L	0.001	0.005	
Analytical Method: EPA 245.1	***Analyst: GAS***								
* Mercury, Total by CVAA	9/30/20 12:24	10/2/20 10:54		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2320 B	***Analyst: JAG***								
Alkalinity, Total as CaCO3	10/1/20 13:25	10/1/20 14:30		1	57.9	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: TJW***								
* Solids, Dissolved	9/23/20 12:59	9/25/20 10:00		1	94.0	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 10/16/20

Reported: 11/3/2020
Version: 3.1
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-8

Location Code: WMWGORAP
Collected: 9/21/20 12:08
Customer ID:
Submittal Date: 9/23/20 09:36

Laboratory ID Number: BA17794

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 4500CO2 D		***Analyst: JAG***							
Bicarbonate Alkalinity, (calc.)	10/1/20 13:25	10/1/20 14:30		1	57.9	mg/L			
Carbonate Alkalinity, (calc.)	10/1/20 13:25	10/1/20 14:30		1	0.01	mg/L			
Analytical Method: SM4500Cl E		***Analyst: JCC***							
* Chloride	9/25/20 14:08	9/25/20 14:08		1	3.22	mg/L	0.50	1	
Analytical Method: SM4500F G 2017		***Analyst: JCC***							
* Fluoride	9/28/20 12:49	9/28/20 12:49		1	0.125	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E 2011		***Analyst: JCC***							
* Sulfate	9/24/20 11:17	9/24/20 11:17		1	4.69	mg/L	0.50	1	
Analytical Method: Field Measurements		***Analyst: TJD***							
Conductivity	9/21/20 12:05	9/21/20 12:05			94.10	uS/cm			FA
pH	9/21/20 12:05	9/21/20 12:05			5.75	SU			FA
Temperature	9/21/20 12:05	9/21/20 12:05			20.34	C			FA
Turbidity	9/21/20 12:05	9/21/20 12:05			4.22	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 10/16/20

Reported: 11/3/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORAP
Sample Date: 9/21/20 12:08
Customer ID:
Delivery Date: 9/23/20 09:36

Description: Gorgas Ash Pond - MW-8

Laboratory ID Number: BA17794

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA17902	Lead, Total	mg/L	0.0000065	0.0001474	0.100	0.103	0.105	0.109	0.085 to 0.115	103	70 to 130	1.92	20
BA17795	Boron, Total	mg/L	0.0000373	0.0650254	1.00	1.03	1.02	1.01	0.85 to 1.15	99.7	70 to 130	0.976	20
BA17902	Beryllium, Total	mg/L	0.000003	0.00088	0.100	0.0997	0.101	0.0992	0.085 to 0.115	99.7	70 to 130	1.30	20
BA17902	Arsenic, Total	mg/L	0.0000107	0.0001474	0.10	0.110	0.109	0.109	0.085 to 0.115	104	70 to 130	0.913	20
BA17902	Antimony, Total	mg/L	0.000272	0.001	0.100	0.102	0.102	0.101	0.085 to 0.115	100	70 to 130	0.00	20
BA17795	Mercury, Total by CVAA	mg/L	0.0000514	0.0005	0.004	0.00388	0.00385	0.00393	0.0034 to 0.0046	97.0	70 to 130	0.776	20
BA17902	Chromium, Total	mg/L	0.0000326	0.00044	0.100	0.101	0.104	0.106	0.085 to 0.115	101	70 to 130	2.93	20
BA17902	Thallium, Total	mg/L	0.0000087	0.0001474	0.100	0.0990	0.102	0.105	0.085 to 0.115	99.0	70 to 130	2.99	20
BA17797	Iron, Dissolved	mg/L	0.000118	0.0176	0.2	2.38	2.34	0.194	0.17 to 0.23	95.0	70 to 130	1.69	20
BA17902	Potassium, Total	mg/L	0.000035	0.3674	10.0	10.6	10.9	10.2	8.5 to 11.5	92.5	70 to 130	2.79	20
BA17794	Manganese, Dissolved	mg/L	-0.0000068	0.0001474	0.10	0.506	0.519	0.103	0.085 to 0.115	92.0	70 to 130	2.54	20
BA17795	Iron, Total	mg/L	0.000157	0.0176	0.2	10.3	10.3	0.202	0.17 to 0.23	100	70 to 130	0.00	20
BA17795	Magnesium, Total	mg/L	-0.00102	0.0462	5.00	17.7	17.7	5.14	4.25 to 5.75	100	70 to 130	0.00	20
BA17902	Cobalt, Total	mg/L	-0.0000107	0.0001474	0.100	0.102	0.104	0.109	0.085 to 0.115	102	70 to 130	1.94	20
BA17902	Molybdenum, Total	mg/L	0.0000171	0.0001474	0.100	0.109	0.114	0.107	0.085 to 0.115	103	70 to 130	4.48	20
BA17795	Sodium, Total	mg/L	0.000602	0.044	5.00	77.9	77.7	5.15	4.25 to 5.75	100	70 to 130	0.257	20
BA17902	Cadmium, Total	mg/L	0.00000	0.0001474	0.100	0.0963	0.102	0.104	0.085 to 0.115	96.3	70 to 130	5.75	20
BA17902	Manganese, Total	mg/L	0.0000162	0.0001474	0.100	0.140	0.137	0.101	0.085 to 0.115	94.4	70 to 130	2.17	20
BA17902	Selenium, Total	mg/L	0.0000583	0.001	0.100	0.100	0.102	0.105	0.085 to 0.115	100	70 to 130	1.98	20
BA17795	Calcium, Total	mg/L	0.00161	0.1518	5.00	32.3	32.2	5.09	4.25 to 5.75	94.0	70 to 130	0.310	20
BA17795	Lithium, Total	mg/L	-0.0000202	0.0154	0.20	0.295	0.294	0.193	0.17 to 0.23	99.6	70 to 130	0.340	20
BA17902	Barium, Total	mg/L	-0.0000107	0.0002	0.10	0.289	0.299	0.105	0.085 to 0.115	96.0	70 to 130	3.40	20

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 10/16/20

Reported: 11/3/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/21/20 12:08
Customer ID:
Delivery Date: 9/23/20 09:36

Description: Gorgas Ash Pond - MW-8

Laboratory ID Number: BA17794

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA17899	Fluoride	mg/L	0.0211	0.05	2.50	2.87	0.20	2.62	2.25 to 2.75	107	80 to 120	1.01	20
BA17795	Sulfate	mg/L	-0.595	0.50	20.0	23.1	4.68	19.5	18 to 22	92.8	80 to 120	3.04	20
BA17797	Solids, Dissolved	mg/L	-2.00	25			1290	57.0	40 to 60			0.769	5
BA17899	Chloride	mg/L	-0.0208	0.50	10.0	22.5	13.3	10.7	9 to 11	93.0	80 to 120	0.755	20
BA17902	Alkalinity, Total as CaCO3	mg/L					200	51.0	45.0 to 55.0			0.501	10

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 10/16/20

Reported: 11/3/2020
Version: 3.1
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-26H

Location Code: WMWGORAP
Collected: 9/21/20 15:55
Customer ID:
Submittal Date: 9/23/20 09:36

Laboratory ID Number: BA17795

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	10/5/20 10:25	10/7/20 12:50		1.015	0.0334	mg/L	0.03	0.1	J
* Calcium, Total	10/5/20 10:25	10/7/20 12:50		1.015	27.6	mg/L	0.1	0.5	
* Iron, Total	10/5/20 10:25	10/7/20 13:33		10.15	10.1	mg/L	0.203	0.5075	
* Lithium, Total	10/5/20 10:25	10/7/20 12:50		1.015	0.0958	mg/L	0.01	0.02	
* Magnesium, Total	10/5/20 10:25	10/7/20 12:50		1.015	12.7	mg/L	0.1	0.5	
* Sodium, Total	10/5/20 10:25	10/7/20 13:33		10.15	72.9	mg/L	1.015	5.075	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Iron, Dissolved	10/5/20 11:33	10/6/20 11:04		1.015	1.13	mg/L	0.02	0.05	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	9/28/20 11:12	9/29/20 19:59		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	9/28/20 11:12	9/29/20 19:59		1.015	0.00143	mg/L	0.001	0.005	J
* Barium, Total	9/28/20 11:12	10/1/20 14:44		1.015	0.938	mg/L	0.002	0.01	
* Beryllium, Total	9/28/20 11:12	9/29/20 19:59		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	9/28/20 11:12	9/29/20 19:59		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	9/28/20 11:12	9/29/20 19:59		1.015	0.00804	mg/L	0.002	0.01	J
* Cobalt, Total	9/28/20 11:12	9/29/20 19:59		1.015	0.00357	mg/L	0.002	0.005	J
* Lead, Total	9/28/20 11:12	9/29/20 19:59		1.015	0.00309	mg/L	0.001	0.005	J
* Molybdenum, Total	9/28/20 11:12	9/29/20 19:59		1.015	Not Detected	mg/L	0.002	0.01	U
* Potassium, Total	9/28/20 11:12	9/29/20 19:59		1.015	3.00	mg/L	0.3	2.5	
* Manganese, Total	9/28/20 11:12	9/29/20 19:59		1.015	0.126	mg/L	0.001	0.005	
* Selenium, Total	9/28/20 11:12	9/29/20 19:59		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	9/28/20 11:12	9/29/20 19:59		1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Manganese, Dissolved	9/28/20 09:17	9/29/20 15:09		1.015	0.0201	mg/L	0.001	0.005	
Analytical Method: EPA 245.1	***Analyst: GAS***								
* Mercury, Total by CVAA	9/30/20 12:24	10/2/20 10:57		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2320 B	***Analyst: JAG***								
Alkalinity, Total as CaCO3	10/1/20 13:25	10/1/20 14:30		1	260	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: TJW***								
* Solids, Dissolved	9/23/20 12:59	9/25/20 10:00		1	287	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. Matrix interferences in the groundwater caused erratic and unreliable turbidity values and were recorded as >10 NTU as an estimation. A dissolved set was collected. LBM 11/03/2020

Reported: 11/3/2020
Version: 3.1
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-26H

Location Code: WMWGORAP
Collected: 9/21/20 15:55
Customer ID:
Submittal Date: 9/23/20 09:36

Laboratory ID Number: BA17795

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 4500CO2 D		***Analyst: JAG***							
Bicarbonate Alkalinity, (calc.)	10/1/20 13:25	10/1/20 14:30		1	259	mg/L			
Carbonate Alkalinity, (calc.)	10/1/20 13:25	10/1/20 14:30		1	0.66	mg/L			
Analytical Method: SM4500Cl E		***Analyst: JCC***							
* Chloride	9/25/20 14:09	9/25/20 14:09		1	3.25	mg/L	0.50	1	
Analytical Method: SM4500F G 2017		***Analyst: JCC***							
* Fluoride	9/28/20 12:50	9/28/20 12:50		1	0.151	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E 2011		***Analyst: JCC***							
* Sulfate	9/24/20 11:20	9/24/20 11:20		1	4.54	mg/L	0.50	1	
Analytical Method: Field Measurements		***Analyst: TJD***							
Conductivity	9/21/20 15:52	9/21/20 15:52			417.46	uS/cm			FA
pH	9/21/20 15:52	9/21/20 15:52			7.25	SU			FA
Temperature	9/21/20 15:52	9/21/20 15:52			20.38	C			FA
Turbidity	9/21/20 15:52	9/21/20 15:52			>10	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 interferences in the groundwater caused erratic and unreliable turbidity values and were recorded as >10 NTU as an estimation. A dissolved set was collected. LBM 11/03/2020

Reported: 11/3/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORAP
Sample Date: 9/21/20 15:55
Customer ID:
Delivery Date: 9/23/20 09:36

Description: Gorgas Ash Pond - MW-26H

Laboratory ID Number: BA17795

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA17902	Lead, Total	mg/L	0.0000065	0.0001474	0.100	0.103	0.105	0.109	0.085 to 0.115	103	70 to 130	1.92	20
BA17795	Iron, Total	mg/L	0.000157	0.0176	0.2	10.3	10.3	0.202	0.17 to 0.23	100	70 to 130	0.00	20
BA17795	Magnesium, Total	mg/L	-0.00102	0.0462	5.00	17.7	17.7	5.14	4.25 to 5.75	100	70 to 130	0.00	20
BA17902	Cobalt, Total	mg/L	-0.0000107	0.0001474	0.100	0.102	0.104	0.109	0.085 to 0.115	102	70 to 130	1.94	20
BA17902	Molybdenum, Total	mg/L	0.0000171	0.0001474	0.100	0.109	0.114	0.107	0.085 to 0.115	103	70 to 130	4.48	20
BA17795	Boron, Total	mg/L	0.0000373	0.0650254	1.00	1.03	1.02	1.01	0.85 to 1.15	99.7	70 to 130	0.976	20
BA17902	Beryllium, Total	mg/L	0.000003	0.00088	0.100	0.0997	0.101	0.0992	0.085 to 0.115	99.7	70 to 130	1.30	20
BA17795	Sodium, Total	mg/L	0.000602	0.044	5.00	77.9	77.7	5.15	4.25 to 5.75	100	70 to 130	0.257	20
BA17902	Cadmium, Total	mg/L	0.00000	0.0001474	0.100	0.0963	0.102	0.104	0.085 to 0.115	96.3	70 to 130	5.75	20
BA17902	Manganese, Total	mg/L	0.0000162	0.0001474	0.100	0.140	0.137	0.101	0.085 to 0.115	94.4	70 to 130	2.17	20
BA17902	Selenium, Total	mg/L	0.0000583	0.001	0.100	0.100	0.102	0.105	0.085 to 0.115	100	70 to 130	1.98	20
BA17795	Calcium, Total	mg/L	0.00161	0.1518	5.00	32.3	32.2	5.09	4.25 to 5.75	94.0	70 to 130	0.310	20
BA17795	Lithium, Total	mg/L	-0.0000202	0.0154	0.20	0.295	0.294	0.193	0.17 to 0.23	99.6	70 to 130	0.340	20
BA17902	Barium, Total	mg/L	-0.0000107	0.0002	0.10	0.289	0.299	0.105	0.085 to 0.115	96.0	70 to 130	3.40	20
BA17797	Iron, Dissolved	mg/L	0.000118	0.0176	0.2	2.38	2.34	0.194	0.17 to 0.23	95.0	70 to 130	1.69	20
BA17902	Potassium, Total	mg/L	0.000035	0.3674	10.0	10.6	10.9	10.2	8.5 to 11.5	92.5	70 to 130	2.79	20
BA17902	Arsenic, Total	mg/L	0.0000107	0.0001474	0.10	0.110	0.109	0.109	0.085 to 0.115	104	70 to 130	0.913	20
BA17902	Antimony, Total	mg/L	0.000272	0.001	0.100	0.102	0.102	0.101	0.085 to 0.115	100	70 to 130	0.00	20
BA17907	Manganese, Dissolved	mg/L	-0.0000068	0.0001474	0.10	0.110	0.107	0.103	0.085 to 0.115	110	70 to 130	2.76	20
BA17795	Mercury, Total by CVAA	mg/L	0.0000514	0.0005	0.004	0.00388	0.00385	0.00393	0.0034 to 0.0046	97.0	70 to 130	0.776	20
BA17902	Chromium, Total	mg/L	0.0000326	0.00044	0.100	0.101	0.104	0.106	0.085 to 0.115	101	70 to 130	2.93	20
BA17902	Thallium, Total	mg/L	0.0000087	0.0001474	0.100	0.0990	0.102	0.105	0.085 to 0.115	99.0	70 to 130	2.99	20

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
Matrix interferences in the groundwater caused erratic and unreliable turbidity values and were recorded as >10 NTU as an estimation.
A dissolved set was collected. LBM 11/03/2020

Reported: 11/3/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/21/20 15:55
Customer ID:
Delivery Date: 9/23/20 09:36

Description: Gorgas Ash Pond - MW-26H

Laboratory ID Number: BA17795

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA17899	Chloride	mg/L	-0.0208	0.50	10.0	22.5	13.3	10.7	9 to 11	93.0	80 to 120	0.755	20
BA17899	Fluoride	mg/L	0.0211	0.05	2.50	2.87	0.20	2.62	2.25 to 2.75	107	80 to 120	1.01	20
BA17902	Alkalinity, Total as CaCO3	mg/L					200	51.0	45.0 to 55.0			0.501	10
BA17795	Sulfate	mg/L	-0.595	0.50	20.0	23.1	4.68	19.5	18 to 22	92.8	80 to 120	3.04	20
BA17797	Solids, Dissolved	mg/L	-2.00	25			1290	57.0	40 to 60			0.769	5

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified. Matrix interferences in the groundwater caused erratic and unreliable turbidity values and were recorded as >10 NTU as an estimation. A dissolved set was collected. LBM 11/03/2020

Reported: 11/3/2020
Version: 3.1
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-26H DIS

Location Code: WMWGORAP
Collected: 9/21/20 15:55
Customer ID:
Submittal Date: 9/23/20 09:36

Laboratory ID Number: BA17796

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7		***Analyst: RDA***							
* Boron, Dissolved	10/5/20 11:33	10/6/20 11:07		1.015	Not Detected	mg/L	0.03	0.1	U
* Calcium, Dissolved	10/5/20 11:33	10/6/20 11:07		1.015	27.1	mg/L	0.1	0.5	
* Iron, Dissolved	10/5/20 11:33	10/6/20 11:07		1.015	1.02	mg/L	0.02	0.05	
* Lithium, Dissolved	10/5/20 11:33	10/6/20 11:07		1.015	0.0900	mg/L	0.01	0.02	
* Magnesium, Dissolved	10/5/20 11:33	10/6/20 11:07		1.015	11.7	mg/L	0.1	0.5	
* Sodium, Dissolved	10/5/20 11:33	10/6/20 13:03		10.15	67.3	mg/L	1.015	5.075	
Analytical Method: EPA 200.8		***Analyst: DLJ***							
* Antimony, Dissolved	9/28/20 09:17	10/6/20 14:48		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Dissolved	9/28/20 09:17	10/6/20 14:48		1.015	Not Detected	mg/L	0.001	0.005	U
* Barium, Dissolved	9/28/20 09:17	10/6/20 14:48		1.015	0.845	mg/L	0.002	0.01	
* Beryllium, Dissolved	9/28/20 09:17	10/6/20 14:48		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Dissolved	9/28/20 09:17	10/6/20 14:48		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Dissolved	9/28/20 09:17	10/6/20 14:48		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Dissolved	9/28/20 09:17	10/6/20 14:48		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Dissolved	9/28/20 09:17	10/6/20 14:48		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Dissolved	9/28/20 09:17	10/6/20 14:48		1.015	Not Detected	mg/L	0.002	0.01	U
* Manganese, Dissolved	9/28/20 09:17	10/6/20 14:48		1.015	0.0199	mg/L	0.001	0.005	
* Potassium, Dissolved	9/28/20 09:17	10/6/20 14:48		1.015	2.71	mg/L	0.3	2.5	
* Selenium, Dissolved	9/28/20 09:17	10/6/20 14:48		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Dissolved	9/28/20 09:17	10/6/20 14:48		1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 245.1		***Analyst: GAS***							
* Mercury, Dissolved by CVAA	10/6/20 08:20	10/6/20 12:58		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2320 B		***Analyst: JAG***							
Alkalinity, Total as CaCO3	10/1/20 13:25	10/1/20 14:30		1	266	mg/L		0.1	
Analytical Method: SM 2540C		***Analyst: TJW***							
* Solids, Dissolved	9/23/20 12:59	9/25/20 10:00		1	282	mg/L		25	
Analytical Method: SM 4500CO2 D		***Analyst: JAG***							
Bicarbonate Alkalinity, (calc.)	10/1/20 13:25	10/1/20 14:30		1	265	mg/L			
Carbonate Alkalinity, (calc.)	10/1/20 13:25	10/1/20 14:30		1	0.70	mg/L			

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 interferences in the groundwater caused erratic and unreliable turbidity values and were recorded as >10 NTU as an estimation. A dissolved set was collected. LBM 11/03/2020

Reported: 11/3/2020
Version: 3.1
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-26H DIS

Location Code: WMWGORAP
Collected: 9/21/20 15:55
Customer ID:
Submittal Date: 9/23/20 09:36

Laboratory ID Number: BA17796

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E		***Analyst: JCC***							
* Chloride	9/25/20 14:10	9/25/20 14:10		1	2.98	mg/L	0.50	1	
Analytical Method: SM4500F G 2017		***Analyst: JCC***							
* Fluoride	9/28/20 12:51	9/28/20 12:51		1	0.137	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E 2011		***Analyst: JCC***							
* Sulfate	9/24/20 11:39	9/24/20 11:39		1	5.98	mg/L	0.50	1	
Analytical Method: Field Measurements		***Analyst: TJD***							
Conductivity	9/21/20 15:52	9/21/20 15:52			417.46	uS/cm			FA
pH	9/21/20 15:52	9/21/20 15:52			7.25	SU			FA
Temperature	9/21/20 15:52	9/21/20 15:52			20.38	C			FA
Turbidity	9/21/20 15:52	9/21/20 15:52			>10	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 interferences in the groundwater caused erratic and unreliable turbidity values and were recorded as >10 NTU as an estimation. A dissolved set was collected. LBM 11/03/2020

Reported: 11/3/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORAP
Sample Date: 9/21/20 15:55
Customer ID:
Delivery Date: 9/23/20 09:36

Description: Gorgas Ash Pond - MW-26H DIS

Laboratory ID Number: BA17796

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA17901	Barium, Dissolved	mg/L	0.0000274	0.0002	0.100	1.36	1.38	0.112	0.085 to 0.115	100	70 to 130	1.46	20
BA17797	Boron, Dissolved	mg/L	0.000195	0.0650254	1.00	1.06	1.04	0.995	0.85 to 1.15	103	70 to 130	1.90	20
BA17901	Molybdenum, Dissolved	mg/L	0.0000136	0.0001474	0.10	0.115	0.115	0.114	0.085 to 0.115	111	70 to 130	0.00	20
BA17901	Arsenic, Dissolved	mg/L	-0.0000019	0.0001474	0.10	0.114	0.113	0.112	0.085 to 0.115	113	70 to 130	0.881	20
BA17901	Cadmium, Dissolved	mg/L	0.0000032	0.0001474	0.10	0.113	0.114	0.113	0.085 to 0.115	113	70 to 130	0.881	20
BA17901	Antimony, Dissolved	mg/L	0.000142	0.001	0.10	0.102	0.105	0.102	0.085 to 0.115	101	70 to 130	2.90	20
BA17797	Iron, Dissolved	mg/L	0.000118	0.0176	0.2	2.38	2.34	0.194	0.17 to 0.23	95.0	70 to 130	1.69	20
BA17901	Cobalt, Dissolved	mg/L	-0.0000225	0.0001474	0.10	0.113	0.112	0.113	0.085 to 0.115	113	70 to 130	0.889	20
BA17901	Beryllium, Dissolved	mg/L	0.0000008	0.00088	0.10	0.0953	0.0949	0.0943	0.085 to 0.115	95.3	70 to 130	0.421	20
BA17901	Manganese, Dissolved	mg/L	0.0000149	0.0001474	0.10	0.141	0.145	0.106	0.085 to 0.115	102	70 to 130	2.80	20
BA17901	Thallium, Dissolved	mg/L	-0.0000031	0.0001474	0.10	0.104	0.110	0.109	0.085 to 0.115	104	70 to 130	5.61	20
BA17797	Calcium, Dissolved	mg/L	0.000451	0.1518	5.00	188	190	4.97	4.25 to 5.75	80.0	70 to 130	1.06	20
BA17797	Lithium, Dissolved	mg/L	-0.000318	0.0154	0.20	0.267	0.260	0.190	0.17 to 0.23	111	70 to 130	2.66	20
BA17797	Magnesium, Dissolved	mg/L	0.000568	0.0462	5.00	103	101	5.02	4.25 to 5.75	146	70 to 130	1.96	20
BA17901	Chromium, Dissolved	mg/L	0.0000804	0.00044	0.10	0.110	0.108	0.109	0.085 to 0.115	110	70 to 130	1.83	20
BA17901	Mercury, Dissolved by	mg/L	-0.0000462	0.0005	0.004	0.00408	0.00407	0.00437	0.0034 to 0.0046	102	70 to 130	0.245	20
BA17901	Potassium, Dissolved	mg/L	0.00369	0.3674	10.0	16.0	16.0	10.8	8.5 to 11.5	106	70 to 130	0.00	20
BA17797	Sodium, Dissolved	mg/L	0.000430	0.044	5.00	70.1	69.2	4.98	4.25 to 5.75	128	70 to 130	1.29	20
BA17901	Lead, Dissolved	mg/L	-0.0000090	0.0001474	0.10	0.112	0.113	0.108	0.085 to 0.115	112	70 to 130	0.889	20
BA17901	Selenium, Dissolved	mg/L	0.0000113	0.001	0.10	0.113	0.111	0.112	0.085 to 0.115	113	70 to 130	1.79	20

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified. Matrix interferences in the groundwater caused erratic and unreliable turbidity values and were recorded as >10 NTU as an estimation. A dissolved set was collected. LBM 11/03/2020

Reported: 11/3/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/21/20 15:55
Customer ID:
Delivery Date: 9/23/20 09:36

Description: Gorgas Ash Pond - MW-26H DIS

Laboratory ID Number: BA17796

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA17899	Fluoride	mg/L	0.0211	0.05	2.50	2.87	0.20	2.62	2.25 to 2.75	107	80 to 120	1.01	20
BA17899	Chloride	mg/L	-0.0208	0.50	10.0	22.5	13.3	10.7	9 to 11	93.0	80 to 120	0.755	20
BA17798	Sulfate	mg/L	-0.490	0.50	20.0	39.1	21.1	19.3	18 to 22	89.5	80 to 120	0.473	20
BA17797	Solids, Dissolved	mg/L	-2.00	25			1290	57.0	40 to 60			0.769	5
BA17902	Alkalinity, Total as CaCO3	mg/L					200	51.0	45.0 to 55.0			0.501	10

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified. Matrix interferences in the groundwater caused erratic and unreliable turbidity values and were recorded as >10 NTU as an estimation. A dissolved set was collected. LBM 11/03/2020

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-40H

Location Code: WMWGORAP
Collected: 9/22/20 09:58
Customer ID:
Submittal Date: 9/23/20 09:36

Laboratory ID Number: BA17797

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	10/5/20 10:25	10/7/20 13:14		1.015	0.0326	mg/L	0.03	0.1	J
* Calcium, Total	10/5/20 10:25	10/7/20 13:44		10.15	205	mg/L	1.015	5.075	
* Iron, Total	10/5/20 10:25	10/7/20 13:14		1.015	2.17	mg/L	0.02	0.05	
* Lithium, Total	10/5/20 10:25	10/7/20 13:14		1.015	0.0405	mg/L	0.01	0.02	
* Magnesium, Total	10/5/20 10:25	10/7/20 13:44		10.15	98.4	mg/L	1.015	5.075	
* Sodium, Total	10/5/20 10:25	10/7/20 13:44		10.15	67.8	mg/L	1.015	5.075	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Iron, Dissolved	10/5/20 11:33	10/6/20 11:10		1.015	2.19	mg/L	0.02	0.05	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	9/28/20 11:12	9/29/20 20:02		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	9/28/20 11:12	9/29/20 20:02		1.015	0.00193	mg/L	0.001	0.005	J
* Barium, Total	9/28/20 11:12	10/1/20 14:46		1.015	0.0417	mg/L	0.002	0.01	
* Beryllium, Total	9/28/20 11:12	9/29/20 20:02		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	9/28/20 11:12	9/29/20 20:02		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	9/28/20 11:12	9/29/20 20:02		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	9/28/20 11:12	9/29/20 20:02		1.015	0.00270	mg/L	0.002	0.005	J
* Lead, Total	9/28/20 11:12	9/29/20 20:02		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	9/28/20 11:12	9/29/20 20:02		1.015	0.00293	mg/L	0.002	0.01	J
* Potassium, Total	9/28/20 11:12	9/29/20 20:02		1.015	6.91	mg/L	0.3	2.5	
* Manganese, Total	9/28/20 11:12	9/29/20 20:02		1.015	0.733	mg/L	0.001	0.005	
* Selenium, Total	9/28/20 11:12	9/29/20 20:02		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	9/28/20 11:12	9/29/20 20:02		1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Manganese, Dissolved	9/28/20 09:17	9/29/20 15:11		1.015	0.745	mg/L	0.001	0.005	
Analytical Method: EPA 245.1	***Analyst: GAS***								
* Mercury, Total by CVAA	9/30/20 12:24	10/2/20 11:13		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2320 B	***Analyst: JAG***								
Alkalinity, Total as CaCO3	10/1/20 13:25	10/1/20 14:30		1	263	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: TJW***								
* Solids, Dissolved	9/23/20 12:59	9/25/20 10:00		1	1310	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 10/16/20

Reported: 11/3/2020
Version: 3.1
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-40H

Location Code: WMWGORAP
Collected: 9/22/20 09:58
Customer ID:
Submittal Date: 9/23/20 09:36

Laboratory ID Number: BA17797

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 4500CO2 D		***Analyst: JAG***							
Bicarbonate Alkalinity, (calc.)	10/1/20 13:25	10/1/20 14:30		1	263	mg/L			
Carbonate Alkalinity, (calc.)	10/1/20 13:25	10/1/20 14:30		1	0.14	mg/L			
Analytical Method: SM4500Cl E		***Analyst: JCC***							
* Chloride	9/25/20 14:18	9/25/20 14:18		2	30.4	mg/L	1.00	2	
Analytical Method: SM4500F G 2017		***Analyst: JCC***							
* Fluoride	9/28/20 12:52	9/28/20 12:52		1	0.114	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E 2011		***Analyst: JCC***							
* Sulfate	9/24/20 11:40	9/24/20 11:40		32	626	mg/L	16.00	32	
Analytical Method: Field Measurements		***Analyst: TJD***							
Conductivity	9/22/20 09:53	9/22/20 09:53			1690.9	uS/cm			FA
pH	9/22/20 09:53	9/22/20 09:53			6.64	SU			FA
Temperature	9/22/20 09:53	9/22/20 09:53			18.88	C			FA
Turbidity	9/22/20 09:53	9/22/20 09:53			4.76	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 10/16/20

Reported: 11/3/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORAP
Sample Date: 9/22/20 09:58
Customer ID:
Delivery Date: 9/23/20 09:36

Description: Gorgas Ash Pond - MW-40H

Laboratory ID Number: BA17797

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA17902	Beryllium, Total	mg/L	0.000003	0.00088	0.100	0.0997	0.101	0.0992	0.085 to 0.115	99.7	70 to 130	1.30	20
BA17902	Cobalt, Total	mg/L	-0.0000107	0.0001474	0.100	0.102	0.104	0.109	0.085 to 0.115	102	70 to 130	1.94	20
BA17902	Molybdenum, Total	mg/L	0.0000171	0.0001474	0.100	0.109	0.114	0.107	0.085 to 0.115	103	70 to 130	4.48	20
BA17906	Iron, Total	mg/L	0.000757	0.0176	0.2	0.660	0.653	0.193	0.17 to 0.23	96.0	70 to 130	1.07	20
BA17902	Cadmium, Total	mg/L	0.00000	0.0001474	0.100	0.0963	0.102	0.104	0.085 to 0.115	96.3	70 to 130	5.75	20
BA17902	Manganese, Total	mg/L	0.0000162	0.0001474	0.100	0.140	0.137	0.101	0.085 to 0.115	94.4	70 to 130	2.17	20
BA17902	Selenium, Total	mg/L	0.0000583	0.001	0.100	0.100	0.102	0.105	0.085 to 0.115	100	70 to 130	1.98	20
BA17902	Lead, Total	mg/L	0.0000065	0.0001474	0.100	0.103	0.105	0.109	0.085 to 0.115	103	70 to 130	1.92	20
BA17906	Lithium, Total	mg/L	0.0000227	0.0154	0.20	0.285	0.284	0.184	0.17 to 0.23	97.8	70 to 130	0.351	20
BA17902	Barium, Total	mg/L	-0.0000107	0.0002	0.10	0.289	0.299	0.105	0.085 to 0.115	96.0	70 to 130	3.40	20
BA17906	Sodium, Total	mg/L	0.00118	0.044	5.00	99.2	99.7	4.80	4.25 to 5.75	116	70 to 130	0.503	20
BA17797	Iron, Dissolved	mg/L	0.000118	0.0176	0.2	2.38	2.34	0.194	0.17 to 0.23	95.0	70 to 130	1.69	20
BA17902	Potassium, Total	mg/L	0.000035	0.3674	10.0	10.6	10.9	10.2	8.5 to 11.5	92.5	70 to 130	2.79	20
BA17902	Chromium, Total	mg/L	0.0000326	0.00044	0.100	0.101	0.104	0.106	0.085 to 0.115	101	70 to 130	2.93	20
BA17902	Thallium, Total	mg/L	0.0000087	0.0001474	0.100	0.0990	0.102	0.105	0.085 to 0.115	99.0	70 to 130	2.99	20
BA17906	Boron, Total	mg/L	0.000485	0.0650254	1.00	1.45	1.45	0.973	0.85 to 1.15	95.9	70 to 130	0.00	20
BA17906	Magnesium, Total	mg/L	-0.00184	0.0462	5.00	15.1	14.9	4.88	4.25 to 5.75	98.0	70 to 130	1.33	20
BA17902	Arsenic, Total	mg/L	0.0000107	0.0001474	0.10	0.110	0.109	0.109	0.085 to 0.115	104	70 to 130	0.913	20
BA17902	Antimony, Total	mg/L	0.000272	0.001	0.100	0.102	0.102	0.101	0.085 to 0.115	100	70 to 130	0.00	20
BA17906	Calcium, Total	mg/L	0.000921	0.1518	5.00	49.2	49.6	4.86	4.25 to 5.75	208	70 to 130	0.810	20
BA17906	Mercury, Total by CVAA	mg/L	0.0000622	0.0005	0.004	0.00384	0.00386	0.00386	0.0034 to 0.0046	96.0	70 to 130	0.519	20
BA17907	Manganese, Dissolved	mg/L	-0.0000068	0.0001474	0.10	0.110	0.107	0.103	0.085 to 0.115	110	70 to 130	2.76	20

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 10/16/20

Reported: 11/3/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/22/20 09:58
Customer ID:
Delivery Date: 9/23/20 09:36

Description: Gorgas Ash Pond - MW-40H

Laboratory ID Number: BA17797

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA17899	Fluoride	mg/L	0.0211	0.05	2.50	2.87	0.20	2.62	2.25 to 2.75	107	80 to 120	1.01	20
BA17899	Chloride	mg/L	-0.0208	0.50	10.0	22.5	13.3	10.7	9 to 11	93.0	80 to 120	0.755	20
BA17798	Sulfate	mg/L	-0.490	0.50	20.0	39.1	21.1	19.3	18 to 22	89.5	80 to 120	0.473	20
BA17902	Alkalinity, Total as CaCO3	mg/L					200	51.0	45.0 to 55.0			0.501	10
BA17797	Solids, Dissolved	mg/L	-2.00	25			1290	57.0	40 to 60			0.769	5

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 10/16/20

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-9V

Location Code: WMWGORAP
Collected: 9/22/20 13:05
Customer ID:
Submittal Date: 9/23/20 09:36

Laboratory ID Number: BA17798

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	10/5/20 10:25	10/7/20 13:17		1.015	0.0348	mg/L	0.03	0.1	J
* Calcium, Total	10/5/20 10:25	10/7/20 13:47		10.15	45.3	mg/L	1.015	5.075	
* Iron, Total	10/5/20 10:25	10/7/20 13:17		1.015	0.400	mg/L	0.02	0.05	
* Lithium, Total	10/5/20 10:25	10/7/20 13:17		1.015	0.0293	mg/L	0.01	0.02	
* Magnesium, Total	10/5/20 10:25	10/7/20 13:17		1.015	14.2	mg/L	0.1	0.5	
* Sodium, Total	10/5/20 10:25	10/7/20 13:17		1.015	38.5	mg/L	0.1	0.5	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Iron, Dissolved	10/5/20 11:33	10/6/20 11:33		1.015	0.378	mg/L	0.02	0.05	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	9/28/20 11:12	9/29/20 20:04		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	9/28/20 11:12	9/29/20 20:04		1.015	Not Detected	mg/L	0.001	0.005	U
* Barium, Total	9/28/20 11:12	10/1/20 14:49		1.015	0.187	mg/L	0.002	0.01	
* Beryllium, Total	9/28/20 11:12	9/29/20 20:04		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	9/28/20 11:12	9/29/20 20:04		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	9/28/20 11:12	9/29/20 20:04		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	9/28/20 11:12	9/29/20 20:04		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	9/28/20 11:12	9/29/20 20:04		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	9/28/20 11:12	9/29/20 20:04		1.015	Not Detected	mg/L	0.002	0.01	U
* Potassium, Total	9/28/20 11:12	9/29/20 20:04		1.015	1.15	mg/L	0.3	2.5	J
* Manganese, Total	9/28/20 11:12	9/29/20 20:04		1.015	0.0341	mg/L	0.001	0.005	
* Selenium, Total	9/28/20 11:12	9/29/20 20:04		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	9/28/20 11:12	9/29/20 20:04		1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Manganese, Dissolved	9/28/20 09:17	9/29/20 15:14		1.015	0.0372	mg/L	0.001	0.005	
Analytical Method: EPA 245.1	***Analyst: GAS***								
* Mercury, Total by CVAA	9/30/20 12:24	10/2/20 11:16		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2320 B	***Analyst: JAG***								
Alkalinity, Total as CaCO3	10/1/20 13:25	10/1/20 14:30		1	254	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: TJW***								
* Solids, Dissolved	9/25/20 13:30	9/29/20 08:00		1	285	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 10/16/20

Reported: 11/3/2020
Version: 3.1
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-9V

Location Code: WMWGORAP
Collected: 9/22/20 13:05
Customer ID:
Submittal Date: 9/23/20 09:36

Laboratory ID Number: BA17798

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 4500CO2 D		***Analyst: JAG***							
Bicarbonate Alkalinity, (calc.)	10/1/20 13:25	10/1/20 14:30		1	254	mg/L			
Carbonate Alkalinity, (calc.)	10/1/20 13:25	10/1/20 14:30		1	0.35	mg/L			
Analytical Method: SM4500Cl E		***Analyst: JCC***							
* Chloride	9/25/20 14:12	9/25/20 14:12		1	7.57	mg/L	0.50	1	
Analytical Method: SM4500F G 2017		***Analyst: JCC***							
* Fluoride	9/28/20 12:54	9/28/20 12:54		1	0.174	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E 2011		***Analyst: JCC***							
* Sulfate	9/24/20 11:41	9/24/20 11:41		1	21.2	mg/L	0.50	1	
Analytical Method: Field Measurements		***Analyst: TJD***							
Conductivity	9/22/20 13:00	9/22/20 13:00			430.38	uS/cm			FA
pH	9/22/20 13:00	9/22/20 13:00			7.08	SU			FA
Temperature	9/22/20 13:00	9/22/20 13:00			19.07	C			FA
Turbidity	9/22/20 13:00	9/22/20 13:00			2.8	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 10/16/20

Reported: 11/3/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORAP
Sample Date: 9/22/20 13:05
Customer ID:
Delivery Date: 9/23/20 09:36

Description: Gorgas Ash Pond - MW-9V

Laboratory ID Number: BA17798

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA17902	Potassium, Total	mg/L	0.000035	0.3674	10.0	10.6	10.9	10.2	8.5 to 11.5	92.5	70 to 130	2.79	20
BA17902	Beryllium, Total	mg/L	0.000003	0.00088	0.100	0.0997	0.101	0.0992	0.085 to 0.115	99.7	70 to 130	1.30	20
BA17902	Lead, Total	mg/L	0.0000065	0.0001474	0.100	0.103	0.105	0.109	0.085 to 0.115	103	70 to 130	1.92	20
BA17906	Lithium, Total	mg/L	0.0000227	0.0154	0.20	0.285	0.284	0.184	0.17 to 0.23	97.8	70 to 130	0.351	20
BA17902	Cadmium, Total	mg/L	0.00000	0.0001474	0.100	0.0963	0.102	0.104	0.085 to 0.115	96.3	70 to 130	5.75	20
BA17902	Manganese, Total	mg/L	0.0000162	0.0001474	0.100	0.140	0.137	0.101	0.085 to 0.115	94.4	70 to 130	2.17	20
BA17902	Selenium, Total	mg/L	0.0000583	0.001	0.100	0.100	0.102	0.105	0.085 to 0.115	100	70 to 130	1.98	20
BA17902	Cobalt, Total	mg/L	-0.0000107	0.0001474	0.100	0.102	0.104	0.109	0.085 to 0.115	102	70 to 130	1.94	20
BA17902	Molybdenum, Total	mg/L	0.0000171	0.0001474	0.100	0.109	0.114	0.107	0.085 to 0.115	103	70 to 130	4.48	20
BA17906	Iron, Total	mg/L	0.000757	0.0176	0.2	0.660	0.653	0.193	0.17 to 0.23	96.0	70 to 130	1.07	20
BA17908	Iron, Dissolved	mg/L	0.000412	0.0176	0.2	1.48	1.47	0.190	0.17 to 0.23	90.0	70 to 130	0.678	20
BA17902	Chromium, Total	mg/L	0.0000326	0.00044	0.100	0.101	0.104	0.106	0.085 to 0.115	101	70 to 130	2.93	20
BA17902	Thallium, Total	mg/L	0.0000087	0.0001474	0.100	0.0990	0.102	0.105	0.085 to 0.115	99.0	70 to 130	2.99	20
BA17906	Boron, Total	mg/L	0.000485	0.0650254	1.00	1.45	1.45	0.973	0.85 to 1.15	95.9	70 to 130	0.00	20
BA17906	Magnesium, Total	mg/L	-0.00184	0.0462	5.00	15.1	14.9	4.88	4.25 to 5.75	98.0	70 to 130	1.33	20
BA17902	Arsenic, Total	mg/L	0.0000107	0.0001474	0.10	0.110	0.109	0.109	0.085 to 0.115	104	70 to 130	0.913	20
BA17902	Antimony, Total	mg/L	0.000272	0.001	0.100	0.102	0.102	0.101	0.085 to 0.115	100	70 to 130	0.00	20
BA17906	Calcium, Total	mg/L	0.000921	0.1518	5.00	49.2	49.6	4.86	4.25 to 5.75	208	70 to 130	0.810	20
BA17906	Mercury, Total by CVAA	mg/L	0.0000622	0.0005	0.004	0.00384	0.00386	0.00386	0.0034 to 0.0046	96.0	70 to 130	0.519	20
BA17907	Manganese, Dissolved	mg/L	-0.0000068	0.0001474	0.10	0.110	0.107	0.103	0.085 to 0.115	110	70 to 130	2.76	20
BA17902	Barium, Total	mg/L	-0.0000107	0.0002	0.10	0.289	0.299	0.105	0.085 to 0.115	96.0	70 to 130	3.40	20
BA17906	Sodium, Total	mg/L	0.00118	0.044	5.00	99.2	99.7	4.80	4.25 to 5.75	116	70 to 130	0.503	20

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 10/16/20

Reported: 11/3/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/22/20 13:05
Customer ID:
Delivery Date: 9/23/20 09:36

Description: Gorgas Ash Pond - MW-9V

Laboratory ID Number: BA17798

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA17899	Fluoride	mg/L	0.0211	0.05	2.50	2.87	0.20	2.62	2.25 to 2.75	107	80 to 120	1.01	20
BA17798	Sulfate	mg/L	-0.490	0.50	20.0	39.1	21.1	19.3	18 to 22	89.5	80 to 120	0.473	20
BA17902	Alkalinity, Total as CaCO3	mg/L					200	51.0	45.0 to 55.0			0.501	10
BA17899	Chloride	mg/L	-0.0208	0.50	10.0	22.5	13.3	10.7	9 to 11	93.0	80 to 120	0.755	20
BA17899	Solids, Dissolved	mg/L	-1.00	25			431	50.0	40 to 60			0.116	5

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 10/16/20

Reported: 11/3/2020
Version: 3.1
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-38H

Location Code: WMWGORAP
Collected: 9/22/20 15:10
Customer ID:
Submittal Date: 9/24/20 09:05

Laboratory ID Number: BA17898

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	10/5/20 10:25	10/7/20 13:20		1.015	0.0461	mg/L	0.03	0.1	J
* Calcium, Total	10/5/20 10:25	10/7/20 13:20		1.015	9.56	mg/L	0.1	0.5	
* Iron, Total	10/5/20 10:25	10/7/20 13:20		1.015	0.175	mg/L	0.02	0.05	
* Lithium, Total	10/5/20 10:25	10/7/20 13:20		1.015	0.0591	mg/L	0.01	0.02	
* Magnesium, Total	10/5/20 10:25	10/7/20 13:20		1.015	2.93	mg/L	0.1	0.5	
* Sodium, Total	10/5/20 10:25	10/7/20 13:50		10.15	131	mg/L	1.015	5.075	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Iron, Dissolved	10/5/20 11:33	10/6/20 11:36		1.015	0.0768	mg/L	0.02	0.05	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	9/28/20 11:12	9/29/20 20:07		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	9/28/20 11:12	9/29/20 20:07		1.015	0.00304	mg/L	0.001	0.005	J
* Barium, Total	9/28/20 11:12	10/1/20 14:51		1.015	0.319	mg/L	0.002	0.01	
* Beryllium, Total	9/28/20 11:12	9/29/20 20:07		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	9/28/20 11:12	9/29/20 20:07		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	9/28/20 11:12	9/29/20 20:07		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	9/28/20 11:12	9/29/20 20:07		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	9/28/20 11:12	9/29/20 20:07		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	9/28/20 11:12	9/29/20 20:07		1.015	0.00423	mg/L	0.002	0.01	J
* Potassium, Total	9/28/20 11:12	9/29/20 20:07		1.015	4.45	mg/L	0.3	2.5	
* Manganese, Total	9/28/20 11:12	9/29/20 20:07		1.015	0.0537	mg/L	0.001	0.005	
* Selenium, Total	9/28/20 11:12	9/29/20 20:07		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	9/28/20 11:12	9/29/20 20:07		1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Manganese, Dissolved	9/28/20 09:17	9/29/20 15:17		1.015	0.0556	mg/L	0.001	0.005	
Analytical Method: EPA 245.1	***Analyst: GAS***								
* Mercury, Total by CVAA	9/30/20 12:24	10/2/20 11:18		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2320 B	***Analyst: JAG***								
Alkalinity, Total as CaCO3	10/1/20 13:25	10/1/20 14:30		1	270	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: TJW***								
* Solids, Dissolved	9/25/20 13:30	9/29/20 08:00		1	339	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 10/16/20

Reported: 11/3/2020
Version: 3.1
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-38H

Location Code: WMWGORAP
Collected: 9/22/20 15:10
Customer ID:
Submittal Date: 9/24/20 09:05

Laboratory ID Number: BA17898

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 4500CO2 D		***Analyst: JAG***							
Bicarbonate Alkalinity, (calc.)	10/1/20 13:25	10/1/20 14:30		1	267	mg/L			
Carbonate Alkalinity, (calc.)	10/1/20 13:25	10/1/20 14:30		1	2.75	mg/L			
Analytical Method: SM4500Cl E		***Analyst: JCC***							
* Chloride	9/25/20 14:20	9/25/20 14:20		2	24.8	mg/L	1.00	2	
Analytical Method: SM4500F G 2017		***Analyst: JCC***							
* Fluoride	9/28/20 12:55	9/28/20 12:55		1	0.280	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E 2011		***Analyst: JCC***							
* Sulfate	9/24/20 14:36	9/24/20 14:36		1	27.0	mg/L	0.50	1	
Analytical Method: Field Measurements		***Analyst: TJD***							
Conductivity	9/22/20 15:05	9/22/20 15:05			606.59	uS/cm			FA
pH	9/22/20 15:05	9/22/20 15:05			7.96	SU			FA
Temperature	9/22/20 15:05	9/22/20 15:05			18.91	C			FA
Turbidity	9/22/20 15:05	9/22/20 15:05			3.9	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 10/16/20

Reported: 11/3/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORAP
Sample Date: 9/22/20 15:10
Customer ID:
Delivery Date: 9/24/20 09:05

Description: Gorgas Ash Pond - MW-38H

Laboratory ID Number: BA17898

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA17902	Potassium, Total	mg/L	0.000035	0.3674	10.0	10.6	10.9	10.2	8.5 to 11.5	92.5	70 to 130	2.79	20
BA17902	Beryllium, Total	mg/L	0.000003	0.00088	0.100	0.0997	0.101	0.0992	0.085 to 0.115	99.7	70 to 130	1.30	20
BA17902	Cadmium, Total	mg/L	0.00000	0.0001474	0.100	0.0963	0.102	0.104	0.085 to 0.115	96.3	70 to 130	5.75	20
BA17902	Manganese, Total	mg/L	0.0000162	0.0001474	0.100	0.140	0.137	0.101	0.085 to 0.115	94.4	70 to 130	2.17	20
BA17902	Selenium, Total	mg/L	0.0000583	0.001	0.100	0.100	0.102	0.105	0.085 to 0.115	100	70 to 130	1.98	20
BA17902	Cobalt, Total	mg/L	-0.0000107	0.0001474	0.100	0.102	0.104	0.109	0.085 to 0.115	102	70 to 130	1.94	20
BA17902	Molybdenum, Total	mg/L	0.0000171	0.0001474	0.100	0.109	0.114	0.107	0.085 to 0.115	103	70 to 130	4.48	20
BA17906	Iron, Total	mg/L	0.000757	0.0176	0.2	0.660	0.653	0.193	0.17 to 0.23	96.0	70 to 130	1.07	20
BA17908	Iron, Dissolved	mg/L	0.000412	0.0176	0.2	1.48	1.47	0.190	0.17 to 0.23	90.0	70 to 130	0.678	20
BA17902	Lead, Total	mg/L	0.0000065	0.0001474	0.100	0.103	0.105	0.109	0.085 to 0.115	103	70 to 130	1.92	20
BA17906	Lithium, Total	mg/L	0.0000227	0.0154	0.20	0.285	0.284	0.184	0.17 to 0.23	97.8	70 to 130	0.351	20
BA17902	Barium, Total	mg/L	-0.0000107	0.0002	0.10	0.289	0.299	0.105	0.085 to 0.115	96.0	70 to 130	3.40	20
BA17906	Sodium, Total	mg/L	0.00118	0.044	5.00	99.2	99.7	4.80	4.25 to 5.75	116	70 to 130	0.503	20
BA17902	Chromium, Total	mg/L	0.0000326	0.00044	0.100	0.101	0.104	0.106	0.085 to 0.115	101	70 to 130	2.93	20
BA17902	Thallium, Total	mg/L	0.0000087	0.0001474	0.100	0.0990	0.102	0.105	0.085 to 0.115	99.0	70 to 130	2.99	20
BA17906	Boron, Total	mg/L	0.000485	0.0650254	1.00	1.45	1.45	0.973	0.85 to 1.15	95.9	70 to 130	0.00	20
BA17906	Magnesium, Total	mg/L	-0.00184	0.0462	5.00	15.1	14.9	4.88	4.25 to 5.75	98.0	70 to 130	1.33	20
BA17902	Arsenic, Total	mg/L	0.0000107	0.0001474	0.10	0.110	0.109	0.109	0.085 to 0.115	104	70 to 130	0.913	20
BA17902	Antimony, Total	mg/L	0.000272	0.001	0.100	0.102	0.102	0.101	0.085 to 0.115	100	70 to 130	0.00	20
BA17906	Calcium, Total	mg/L	0.000921	0.1518	5.00	49.2	49.6	4.86	4.25 to 5.75	208	70 to 130	0.810	20
BA17906	Mercury, Total by CVAA	mg/L	0.0000622	0.0005	0.004	0.00384	0.00386	0.00386	0.0034 to 0.0046	96.0	70 to 130	0.519	20
BA17907	Manganese, Dissolved	mg/L	-0.0000068	0.0001474	0.10	0.110	0.107	0.103	0.085 to 0.115	110	70 to 130	2.76	20

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 10/16/20

Reported: 11/3/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/22/20 15:10
Customer ID:
Delivery Date: 9/24/20 09:05

Description: Gorgas Ash Pond - MW-38H

Laboratory ID Number: BA17898

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA17907	Sulfate	mg/L	-0.621	0.50	20.0	30.5	12.7	20.3	18 to 22	86.5	80 to 120	3.86	20
BA17899	Fluoride	mg/L	0.0211	0.05	2.50	2.87	0.20	2.62	2.25 to 2.75	107	80 to 120	1.01	20
BA17902	Alkalinity, Total as CaCO3	mg/L					200	51.0	45.0 to 55.0			0.501	10
BA17899	Chloride	mg/L	-0.0208	0.50	10.0	22.5	13.3	10.7	9 to 11	93.0	80 to 120	0.755	20
BA17899	Solids, Dissolved	mg/L	-1.00	25			431	50.0	40 to 60			0.116	5

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 10/16/20

Reported: 11/3/2020
Version: 3.1
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-29H

Location Code: WMWGORAP
Collected: 9/22/20 16:45
Customer ID:
Submittal Date: 9/24/20 09:05

Laboratory ID Number: BA17899

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	10/5/20 10:25	10/7/20 13:24		1.015	0.175	mg/L	0.03	0.1	
* Calcium, Total	10/5/20 10:25	10/7/20 13:24		1.015	28.1	mg/L	0.1	0.5	
* Iron, Total	10/5/20 10:25	10/7/20 13:24		1.015	0.362	mg/L	0.02	0.05	
* Lithium, Total	10/5/20 10:25	10/7/20 13:24		1.015	0.0586	mg/L	0.01	0.02	
* Magnesium, Total	10/5/20 10:25	10/7/20 13:24		1.015	9.72	mg/L	0.1	0.5	
* Sodium, Total	10/5/20 10:25	10/7/20 14:14		10.15	133	mg/L	1.015	5.075	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Iron, Dissolved	10/5/20 11:33	10/6/20 11:39		1.015	0.358	mg/L	0.02	0.05	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	9/28/20 11:12	9/29/20 20:10		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	9/28/20 11:12	9/29/20 20:10		1.015	0.00109	mg/L	0.001	0.005	J
* Barium, Total	9/28/20 11:12	10/1/20 14:54		1.015	0.499	mg/L	0.002	0.01	
* Beryllium, Total	9/28/20 11:12	9/29/20 20:10		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	9/28/20 11:12	9/29/20 20:10		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	9/28/20 11:12	9/29/20 20:10		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	9/28/20 11:12	9/29/20 20:10		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	9/28/20 11:12	9/29/20 20:10		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	9/28/20 11:12	9/29/20 20:10		1.015	0.0281	mg/L	0.002	0.01	
* Potassium, Total	9/28/20 11:12	9/29/20 20:10		1.015	1.81	mg/L	0.3	2.5	J
* Manganese, Total	9/28/20 11:12	9/29/20 20:10		1.015	0.0288	mg/L	0.001	0.005	
* Selenium, Total	9/28/20 11:12	9/29/20 20:10		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	9/28/20 11:12	9/29/20 20:10		1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Manganese, Dissolved	9/28/20 09:17	9/29/20 15:19		1.015	0.0314	mg/L	0.001	0.005	
Analytical Method: EPA 245.1	***Analyst: GAS***								
* Mercury, Total by CVAA	9/30/20 12:24	10/2/20 11:20		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2320 B	***Analyst: JAG***								
Alkalinity, Total as CaCO3	10/1/20 13:25	10/1/20 14:30		1	270	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: TJW***								
* Solids, Dissolved	9/25/20 13:30	9/29/20 08:00		1	430	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 10/16/20

Reported: 11/3/2020
Version: 3.1
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-29H

Location Code: WMWGORAP
Collected: 9/22/20 16:45
Customer ID:
Submittal Date: 9/24/20 09:05

Laboratory ID Number: BA17899

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 4500CO2 D		***Analyst: JAG***							
Bicarbonate Alkalinity, (calc.)	10/1/20 13:25	10/1/20 14:30		1	269	mg/L			
Carbonate Alkalinity, (calc.)	10/1/20 13:25	10/1/20 14:30		1	1.30	mg/L			
Analytical Method: SM4500Cl E		***Analyst: JCC***							
* Chloride	9/25/20 14:15	9/25/20 14:15		1	13.2	mg/L	0.50	1	
Analytical Method: SM4500F G 2017		***Analyst: JCC***							
* Fluoride	9/28/20 12:56	9/28/20 12:56		1	0.198	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E 2011		***Analyst: JCC***							
* Sulfate	9/24/20 14:50	9/24/20 14:50		4	81.6	mg/L	2.00	4	
Analytical Method: Field Measurements		***Analyst: TJD***							
Conductivity	9/22/20 16:42	9/22/20 16:42			616.77	uS/cm			FA
pH	9/22/20 16:42	9/22/20 16:42			7.42	SU			FA
Temperature	9/22/20 16:42	9/22/20 16:42			18.23	C			FA
Turbidity	9/22/20 16:42	9/22/20 16:42			2.86	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 10/16/20

Reported: 11/3/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORAP
Sample Date: 9/22/20 16:45
Customer ID:
Delivery Date: 9/24/20 09:05

Description: Gorgas Ash Pond - MW-29H

Laboratory ID Number: BA17899

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA17902	Potassium, Total	mg/L	0.000035	0.3674	10.0	10.6	10.9	10.2	8.5 to 11.5	92.5	70 to 130	2.79	20
BA17902	Beryllium, Total	mg/L	0.000003	0.00088	0.100	0.0997	0.101	0.0992	0.085 to 0.115	99.7	70 to 130	1.30	20
BA17902	Lead, Total	mg/L	0.0000065	0.0001474	0.100	0.103	0.105	0.109	0.085 to 0.115	103	70 to 130	1.92	20
BA17906	Lithium, Total	mg/L	0.0000227	0.0154	0.20	0.285	0.284	0.184	0.17 to 0.23	97.8	70 to 130	0.351	20
BA17902	Cobalt, Total	mg/L	-0.0000107	0.0001474	0.100	0.102	0.104	0.109	0.085 to 0.115	102	70 to 130	1.94	20
BA17902	Molybdenum, Total	mg/L	0.0000171	0.0001474	0.100	0.109	0.114	0.107	0.085 to 0.115	103	70 to 130	4.48	20
BA17906	Iron, Total	mg/L	0.000757	0.0176	0.2	0.660	0.653	0.193	0.17 to 0.23	96.0	70 to 130	1.07	20
BA17908	Iron, Dissolved	mg/L	0.000412	0.0176	0.2	1.48	1.47	0.190	0.17 to 0.23	90.0	70 to 130	0.678	20
BA17902	Barium, Total	mg/L	-0.0000107	0.0002	0.10	0.289	0.299	0.105	0.085 to 0.115	96.0	70 to 130	3.40	20
BA17906	Sodium, Total	mg/L	0.00118	0.044	5.00	99.2	99.7	4.80	4.25 to 5.75	116	70 to 130	0.503	20
BA17902	Chromium, Total	mg/L	0.0000326	0.00044	0.100	0.101	0.104	0.106	0.085 to 0.115	101	70 to 130	2.93	20
BA17902	Thallium, Total	mg/L	0.0000087	0.0001474	0.100	0.0990	0.102	0.105	0.085 to 0.115	99.0	70 to 130	2.99	20
BA17906	Boron, Total	mg/L	0.000485	0.0650254	1.00	1.45	1.45	0.973	0.85 to 1.15	95.9	70 to 130	0.00	20
BA17906	Magnesium, Total	mg/L	-0.00184	0.0462	5.00	15.1	14.9	4.88	4.25 to 5.75	98.0	70 to 130	1.33	20
BA17902	Arsenic, Total	mg/L	0.0000107	0.0001474	0.10	0.110	0.109	0.109	0.085 to 0.115	104	70 to 130	0.913	20
BA17902	Antimony, Total	mg/L	0.000272	0.001	0.100	0.102	0.102	0.101	0.085 to 0.115	100	70 to 130	0.00	20
BA17906	Calcium, Total	mg/L	0.000921	0.1518	5.00	49.2	49.6	4.86	4.25 to 5.75	208	70 to 130	0.810	20
BA17906	Mercury, Total by CVAA	mg/L	0.0000622	0.0005	0.004	0.00384	0.00386	0.00386	0.0034 to 0.0046	96.0	70 to 130	0.519	20
BA17907	Manganese, Dissolved	mg/L	-0.0000068	0.0001474	0.10	0.110	0.107	0.103	0.085 to 0.115	110	70 to 130	2.76	20
BA17902	Cadmium, Total	mg/L	0.00000	0.0001474	0.100	0.0963	0.102	0.104	0.085 to 0.115	96.3	70 to 130	5.75	20
BA17902	Manganese, Total	mg/L	0.0000162	0.0001474	0.100	0.140	0.137	0.101	0.085 to 0.115	94.4	70 to 130	2.17	20
BA17902	Selenium, Total	mg/L	0.0000583	0.001	0.100	0.100	0.102	0.105	0.085 to 0.115	100	70 to 130	1.98	20

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 10/16/20

Reported: 11/3/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/22/20 16:45
Customer ID:
Delivery Date: 9/24/20 09:05

Description: Gorgas Ash Pond - MW-29H

Laboratory ID Number: BA17899

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA17899	Fluoride	mg/L	0.0211	0.05	2.50	2.87	0.20	2.62	2.25 to 2.75	107	80 to 120	1.01	20
BA17902	Alkalinity, Total as CaCO3	mg/L					200	51.0	45.0 to 55.0			0.501	10
BA17907	Sulfate	mg/L	-0.621	0.50	20.0	30.5	12.7	20.3	18 to 22	86.5	80 to 120	3.86	20
BA17899	Chloride	mg/L	-0.0208	0.50	10.0	22.5	13.3	10.7	9 to 11	93.0	80 to 120	0.755	20
BA17899	Solids, Dissolved	mg/L	-1.00	25			431	50.0	40 to 60			0.116	5

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 10/16/20

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-12V

Location Code: WMWGORAP
Collected: 9/23/20 10:15
Customer ID:
Submittal Date: 9/24/20 09:05

Laboratory ID Number: BA17900

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	10/5/20 10:25	10/7/20 13:27		1.015	0.0322	mg/L	0.03	0.1	J
* Calcium, Total	10/5/20 10:25	10/7/20 14:17		10.15	44.8	mg/L	1.015	5.075	
* Iron, Total	10/5/20 10:25	10/7/20 13:27		1.015	3.62	mg/L	0.02	0.05	
* Lithium, Total	10/5/20 10:25	10/7/20 13:27		1.015	0.0409	mg/L	0.01	0.02	
* Magnesium, Total	10/5/20 10:25	10/7/20 13:27		1.015	9.90	mg/L	0.1	0.5	
* Sodium, Total	10/5/20 10:25	10/7/20 13:27		1.015	18.2	mg/L	0.1	0.5	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Iron, Dissolved	10/5/20 11:33	10/6/20 11:42		1.015	0.298	mg/L	0.02	0.05	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	9/28/20 11:12	9/29/20 20:12		1.015	0.00152	mg/L	0.0008	0.003	J
* Arsenic, Total	9/28/20 11:12	9/29/20 20:12		1.015	0.00176	mg/L	0.001	0.005	J
* Barium, Total	9/28/20 11:12	10/6/20 10:45		5.075	1.27	mg/L	0.01015	0.05075	
* Beryllium, Total	9/28/20 11:12	9/29/20 20:12		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	9/28/20 11:12	9/29/20 20:12		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	9/28/20 11:12	9/29/20 20:12		1.015	0.00362	mg/L	0.002	0.01	J
* Cobalt, Total	9/28/20 11:12	9/29/20 20:12		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	9/28/20 11:12	9/29/20 20:12		1.015	0.00140	mg/L	0.001	0.005	J
* Molybdenum, Total	9/28/20 11:12	9/29/20 20:12		1.015	0.00463	mg/L	0.002	0.01	J
* Potassium, Total	9/28/20 11:12	9/29/20 20:12		1.015	5.24	mg/L	0.3	2.5	
* Manganese, Total	9/28/20 11:12	9/29/20 20:12		1.015	0.0813	mg/L	0.001	0.005	
* Selenium, Total	9/28/20 11:12	9/29/20 20:12		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	9/28/20 11:12	9/29/20 20:12		1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Manganese, Dissolved	9/28/20 09:17	9/29/20 15:22		1.015	0.0362	mg/L	0.001	0.005	
Analytical Method: EPA 245.1	***Analyst: GAS***								
* Mercury, Total by CVAA	9/30/20 12:24	10/2/20 11:23		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2320 B	***Analyst: JAG***								
Alkalinity, Total as CaCO3	10/1/20 13:25	10/1/20 14:30		1	175	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: TJW***								
* Solids, Dissolved	9/25/20 13:30	9/29/20 08:00		1	195	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. Matrix interferences in the groundwater caused erratic and unreliable turbidity values and were recorded as >10 NTU as an estimation. A dissolved set was collected. LBM 11/03/2020

Reported: 11/3/2020
Version: 3.1
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-12V

Location Code: WMWGORAP
Collected: 9/23/20 10:15
Customer ID:
Submittal Date: 9/24/20 09:05

Laboratory ID Number: BA17900

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 4500CO2 D		***Analyst: JAG***							
Bicarbonate Alkalinity, (calc.)	10/1/20 13:25	10/1/20 14:30		1	173	mg/L			
Carbonate Alkalinity, (calc.)	10/1/20 13:25	10/1/20 14:30		1	2.19	mg/L			
Analytical Method: SM4500Cl E		***Analyst: JCC***							
* Chloride	9/25/20 14:29	9/25/20 14:29		1	4.63	mg/L	0.50	1	
Analytical Method: SM4500F G 2017		***Analyst: JCC***							
* Fluoride	9/28/20 13:07	9/28/20 13:07		1	0.176	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E 2011		***Analyst: JCC***							
* Sulfate	9/24/20 14:38	9/24/20 14:38		1	6.56	mg/L	0.50	1	
Analytical Method: Field Measurements		***Analyst: TJD***							
Conductivity	9/23/20 10:13	9/23/20 10:13			247.65	uS/cm			FA
pH	9/23/20 10:13	9/23/20 10:13			8.84	SU			FA
Temperature	9/23/20 10:13	9/23/20 10:13			19.02	C			FA
Turbidity	9/23/20 10:13	9/23/20 10:13			>10	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 interferences in the groundwater caused erratic and unreliable turbidity values and were recorded as >10 NTU as an estimation. A dissolved set was collected. LBM 11/03/2020

Reported: 11/3/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORAP
Sample Date: 9/23/20 10:15
Customer ID:
Delivery Date: 9/24/20 09:05

Description: Gorgas Ash Pond - MW-12V

Laboratory ID Number: BA17900

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA17902	Potassium, Total	mg/L	0.000035	0.3674	10.0	10.6	10.9	10.2	8.5 to 11.5	92.5	70 to 130	2.79	20
BA17902	Beryllium, Total	mg/L	0.000003	0.00088	0.100	0.0997	0.101	0.0992	0.085 to 0.115	99.7	70 to 130	1.30	20
BA17902	Lead, Total	mg/L	0.0000065	0.0001474	0.100	0.103	0.105	0.109	0.085 to 0.115	103	70 to 130	1.92	20
BA17906	Lithium, Total	mg/L	0.0000227	0.0154	0.20	0.285	0.284	0.184	0.17 to 0.23	97.8	70 to 130	0.351	20
BA17902	Chromium, Total	mg/L	0.0000326	0.00044	0.100	0.101	0.104	0.106	0.085 to 0.115	101	70 to 130	2.93	20
BA17902	Thallium, Total	mg/L	0.0000087	0.0001474	0.100	0.0990	0.102	0.105	0.085 to 0.115	99.0	70 to 130	2.99	20
BA17906	Boron, Total	mg/L	0.000485	0.0650254	1.00	1.45	1.45	0.973	0.85 to 1.15	95.9	70 to 130	0.00	20
BA17906	Magnesium, Total	mg/L	-0.00184	0.0462	5.00	15.1	14.9	4.88	4.25 to 5.75	98.0	70 to 130	1.33	20
BA17902	Cadmium, Total	mg/L	0.00000	0.0001474	0.100	0.0963	0.102	0.104	0.085 to 0.115	96.3	70 to 130	5.75	20
BA17902	Manganese, Total	mg/L	0.0000162	0.0001474	0.100	0.140	0.137	0.101	0.085 to 0.115	94.4	70 to 130	2.17	20
BA17902	Selenium, Total	mg/L	0.0000583	0.001	0.100	0.100	0.102	0.105	0.085 to 0.115	100	70 to 130	1.98	20
BA17902	Cobalt, Total	mg/L	-0.0000107	0.0001474	0.100	0.102	0.104	0.109	0.085 to 0.115	102	70 to 130	1.94	20
BA17902	Molybdenum, Total	mg/L	0.0000171	0.0001474	0.100	0.109	0.114	0.107	0.085 to 0.115	103	70 to 130	4.48	20
BA17906	Iron, Total	mg/L	0.000757	0.0176	0.2	0.660	0.653	0.193	0.17 to 0.23	96.0	70 to 130	1.07	20
BA17908	Iron, Dissolved	mg/L	0.000412	0.0176	0.2	1.48	1.47	0.190	0.17 to 0.23	90.0	70 to 130	0.678	20
BA17902	Arsenic, Total	mg/L	0.0000107	0.0001474	0.10	0.110	0.109	0.109	0.085 to 0.115	104	70 to 130	0.913	20
BA17902	Antimony, Total	mg/L	0.000272	0.001	0.100	0.102	0.102	0.101	0.085 to 0.115	100	70 to 130	0.00	20
BA17906	Calcium, Total	mg/L	0.000921	0.1518	5.00	49.2	49.6	4.86	4.25 to 5.75	208	70 to 130	0.810	20
BA17906	Mercury, Total by CVAA	mg/L	0.0000622	0.0005	0.004	0.00384	0.00386	0.00386	0.0034 to 0.0046	96.0	70 to 130	0.519	20
BA17907	Manganese, Dissolved	mg/L	-0.0000068	0.0001474	0.10	0.110	0.107	0.103	0.085 to 0.115	110	70 to 130	2.76	20
BA17902	Barium, Total	mg/L	-0.0000107	0.0002	0.10	0.289	0.299	0.105	0.085 to 0.115	96.0	70 to 130	3.40	20
BA17906	Sodium, Total	mg/L	0.00118	0.044	5.00	99.2	99.7	4.80	4.25 to 5.75	116	70 to 130	0.503	20

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
Matrix interferences in the groundwater caused erratic and unreliable turbidity values and were recorded as >10 NTU as an estimation.
A dissolved set was collected. LBM 11/03/2020

Reported: 11/3/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/23/20 10:15
Customer ID:
Delivery Date: 9/24/20 09:05

Description: Gorgas Ash Pond - MW-12V

Laboratory ID Number: BA17900

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA17909	Solids, Dissolved	mg/L	-1.00	25			3620	50.0	40 to 60			0.958	5
BA17909	Fluoride	mg/L	0.0182	0.05	2.50	3.31	0.677	2.61	2.25 to 2.75	107	80 to 120	5.46	20
BA17909	Chloride	mg/L	0.212	0.50	1000	2040	1080	10.7	9 to 11	94.0	80 to 120	1.83	20
BA17902	Alkalinity, Total as CaCO3	mg/L					200	51.0	45.0 to 55.0			0.501	10
BA17907	Sulfate	mg/L	-0.621	0.50	20.0	30.5	12.7	20.3	18 to 22	86.5	80 to 120	3.86	20

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified. Matrix interferences in the groundwater caused erratic and unreliable turbidity values and were recorded as >10 NTU as an estimation. A dissolved set was collected. LBM 11/03/2020

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-12V DIS

Location Code: WMWGORAP
Collected: 9/23/20 10:15
Customer ID:
Submittal Date: 9/24/20 09:05

Laboratory ID Number: BA17901

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7		***Analyst: RDA***							
* Boron, Dissolved	10/5/20 11:33	10/6/20 11:45		1.015	Not Detected	mg/L	0.03	0.1	U
* Calcium, Dissolved	10/5/20 11:33	10/6/20 11:45		1.015	40.1	mg/L	0.1	0.5	
* Iron, Dissolved	10/5/20 11:33	10/6/20 11:45		1.015	0.395	mg/L	0.02	0.05	
* Lithium, Dissolved	10/5/20 11:33	10/6/20 11:45		1.015	0.0387	mg/L	0.01	0.02	
* Magnesium, Dissolved	10/5/20 11:33	10/6/20 11:45		1.015	10.4	mg/L	0.1	0.5	
* Sodium, Dissolved	10/5/20 11:33	10/6/20 11:45		1.015	19.1	mg/L	0.1	0.5	
Analytical Method: EPA 200.8		***Analyst: DLJ***							
* Antimony, Dissolved	9/28/20 09:17	9/29/20 16:04		1.015	0.000821	mg/L	0.0008	0.003	J
* Arsenic, Dissolved	9/28/20 09:17	9/29/20 16:04		1.015	0.00133	mg/L	0.001	0.005	J
* Barium, Dissolved	9/28/20 09:17	10/1/20 11:56		5.075	1.26	mg/L	0.01015	0.05075	
* Beryllium, Dissolved	9/28/20 09:17	9/29/20 16:04		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Dissolved	9/28/20 09:17	9/29/20 16:04		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Dissolved	9/28/20 09:17	9/29/20 16:04		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Dissolved	9/28/20 09:17	9/29/20 16:04		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Dissolved	9/28/20 09:17	9/29/20 16:04		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Dissolved	9/28/20 09:17	9/29/20 16:04		1.015	0.00423	mg/L	0.002	0.01	J
* Manganese, Dissolved	9/28/20 09:17	9/29/20 16:04		1.015	0.0388	mg/L	0.001	0.005	
* Potassium, Dissolved	9/28/20 09:17	9/29/20 16:04		1.015	5.44	mg/L	0.3	2.5	
* Selenium, Dissolved	9/28/20 09:17	9/29/20 16:04		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Dissolved	9/28/20 09:17	9/29/20 16:04		1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 245.1		***Analyst: GAS***							
* Mercury, Dissolved by CVAA	10/6/20 08:20	10/6/20 13:00		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2320 B		***Analyst: JAG***							
Alkalinity, Total as CaCO3	10/1/20 13:25	10/1/20 14:30		1	192	mg/L		0.1	
Analytical Method: SM 2540C		***Analyst: TJW***							
* Solids, Dissolved	9/25/20 13:30	9/29/20 08:00		1	204	mg/L		25	
Analytical Method: SM 4500CO2 D		***Analyst: JAG***							
Bicarbonate Alkalinity, (calc.)	10/1/20 13:25	10/1/20 14:30		1	191	mg/L			
Carbonate Alkalinity, (calc.)	10/1/20 13:25	10/1/20 14:30		1	1.11	mg/L			

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 interferences in the groundwater caused erratic and unreliable turbidity values and were recorded as >10 NTU as an estimation. A dissolved set was collected. LBM 11/03/2020

Reported: 11/3/2020
Version: 3.1
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-12V DIS

Location Code: WMWGORAP
Collected: 9/23/20 10:15
Customer ID:
Submittal Date: 9/24/20 09:05

Laboratory ID Number: BA17901

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E		***Analyst: JCC***							
* Chloride	9/25/20 14:30	9/25/20 14:30		1	4.26	mg/L	0.50	1	
Analytical Method: SM4500F G 2017		***Analyst: JCC***							
* Fluoride	9/28/20 13:08	9/28/20 13:08		1	0.171	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E 2011		***Analyst: JCC***							
* Sulfate	9/24/20 14:40	9/24/20 14:40		1	0.953	mg/L	0.50	1	J
Analytical Method: Field Measurements		***Analyst: TJD***							
Conductivity	9/23/20 10:13	9/23/20 10:13			247.65	uS/cm			FA
pH	9/23/20 10:13	9/23/20 10:13			8.84	SU			FA
Temperature	9/23/20 10:13	9/23/20 10:13			19.02	C			FA
Turbidity	9/23/20 10:13	9/23/20 10:13			>10	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 interferences in the groundwater caused erratic and unreliable turbidity values and were recorded as >10 NTU as an estimation. A dissolved set was collected. LBM 11/03/2020

Reported: 11/3/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORAP
Sample Date: 9/23/20 10:15
Customer ID:
Delivery Date: 9/24/20 09:05

Description: Gorgas Ash Pond - MW-12V DIS

Laboratory ID Number: BA17901

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA17908	Iron, Dissolved	mg/L	0.000412	0.0176	0.2	1.48	1.47	0.190	0.17 to 0.23	90.0	70 to 130	0.678	20
BA17901	Cobalt, Dissolved	mg/L	-0.0000225	0.0001474	0.10	0.113	0.112	0.113	0.085 to 0.115	113	70 to 130	0.889	20
BA17901	Barium, Dissolved	mg/L	0.0000274	0.0002	0.100	1.36	1.38	0.112	0.085 to 0.115	100	70 to 130	1.46	20
BA17901	Chromium, Dissolved	mg/L	0.0000804	0.00044	0.10	0.110	0.108	0.109	0.085 to 0.115	110	70 to 130	1.83	20
BA17901	Mercury, Dissolved by	mg/L	-0.0000462	0.0005	0.004	0.00408	0.00407	0.00437	0.0034 to 0.0046	102	70 to 130	0.245	20
BA17901	Potassium, Dissolved	mg/L	0.00369	0.3674	10.0	16.0	16.0	10.8	8.5 to 11.5	106	70 to 130	0.00	20
BA17908	Lithium, Dissolved	mg/L	-0.000527	0.0154	0.20	0.252	0.249	0.185	0.17 to 0.23	97.9	70 to 130	1.20	20
BA17901	Lead, Dissolved	mg/L	-0.0000090	0.0001474	0.10	0.112	0.113	0.108	0.085 to 0.115	112	70 to 130	0.889	20
BA17901	Selenium, Dissolved	mg/L	0.0000113	0.001	0.10	0.113	0.111	0.112	0.085 to 0.115	113	70 to 130	1.79	20
BA17901	Beryllium, Dissolved	mg/L	0.0000008	0.00088	0.10	0.0953	0.0949	0.0943	0.085 to 0.115	95.3	70 to 130	0.421	20
BA17901	Manganese, Dissolved	mg/L	0.0000149	0.0001474	0.10	0.141	0.145	0.106	0.085 to 0.115	102	70 to 130	2.80	20
BA17901	Thallium, Dissolved	mg/L	-0.0000031	0.0001474	0.10	0.104	0.110	0.109	0.085 to 0.115	104	70 to 130	5.61	20
BA17908	Calcium, Dissolved	mg/L	0.00275	0.1518	5.00	33.3	33.1	4.85	4.25 to 5.75	92.0	70 to 130	0.602	20
BA17908	Sodium, Dissolved	mg/L	0.00313	0.044	5.00	109	108	4.84	4.25 to 5.75	100	70 to 130	0.922	20
BA17901	Arsenic, Dissolved	mg/L	-0.0000019	0.0001474	0.10	0.114	0.113	0.112	0.085 to 0.115	113	70 to 130	0.881	20
BA17901	Cadmium, Dissolved	mg/L	0.0000032	0.0001474	0.10	0.113	0.114	0.113	0.085 to 0.115	113	70 to 130	0.881	20
BA17901	Antimony, Dissolved	mg/L	0.000142	0.001	0.10	0.102	0.105	0.102	0.085 to 0.115	101	70 to 130	2.90	20
BA17901	Molybdenum, Dissolved	mg/L	0.0000136	0.0001474	0.10	0.115	0.115	0.114	0.085 to 0.115	111	70 to 130	0.00	20
BA17908	Boron, Dissolved	mg/L	0.0000675	0.0650254	1.00	1.00	0.999	0.967	0.85 to 1.15	95.4	70 to 130	0.100	20
BA17908	Magnesium, Dissolved	mg/L	0.00478	0.0462	5.00	15.9	15.8	4.82	4.25 to 5.75	96.0	70 to 130	0.631	20

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified. Matrix interferences in the groundwater caused erratic and unreliable turbidity values and were recorded as >10 NTU as an estimation. A dissolved set was collected. LBM 11/03/2020

Reported: 11/3/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/23/20 10:15
Customer ID:
Delivery Date: 9/24/20 09:05

Description: Gorgas Ash Pond - MW-12V DIS

Laboratory ID Number: BA17901

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA17909	Fluoride	mg/L	0.0182	0.05	2.50	3.31	0.677	2.61	2.25 to 2.75	107	80 to 120	5.46	20
BA17909	Solids, Dissolved	mg/L	-1.00	25			3620	50.0	40 to 60			0.958	5
BA17909	Chloride	mg/L	0.212	0.50	1000	2040	1080	10.7	9 to 11	94.0	80 to 120	1.83	20
BA17902	Alkalinity, Total as CaCO3	mg/L					200	51.0	45.0 to 55.0			0.501	10
BA17907	Sulfate	mg/L	-0.621	0.50	20.0	30.5	12.7	20.3	18 to 22	86.5	80 to 120	3.86	20

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified. Matrix interferences in the groundwater caused erratic and unreliable turbidity values and were recorded as >10 NTU as an estimation. A dissolved set was collected. LBM 11/03/2020

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-12

Location Code: WMWGORAP
Collected: 9/23/20 13:10
Customer ID:
Submittal Date: 9/24/20 09:05

Laboratory ID Number: BA17902

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	10/5/20 10:25	10/7/20 13:30		1.015	0.0446	mg/L	0.03	0.1	J
* Calcium, Total	10/5/20 10:25	10/7/20 14:21		10.15	45.9	mg/L	1.015	5.075	
* Iron, Total	10/5/20 10:25	10/7/20 13:30		1.015	0.496	mg/L	0.02	0.05	
* Lithium, Total	10/5/20 10:25	10/7/20 13:30		1.015	0.0279	mg/L	0.01	0.02	
* Magnesium, Total	10/5/20 10:25	10/7/20 13:30		1.015	12.0	mg/L	0.1	0.5	
* Sodium, Total	10/5/20 10:25	10/7/20 13:30		1.015	17.6	mg/L	0.1	0.5	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Iron, Dissolved	10/5/20 11:33	10/6/20 11:48		1.015	0.512	mg/L	0.02	0.05	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	9/28/20 11:12	9/29/20 20:15		1.015	0.00202	mg/L	0.0008	0.003	J
* Arsenic, Total	9/28/20 11:12	9/29/20 20:15		1.015	0.00616	mg/L	0.001	0.005	
* Barium, Total	9/28/20 11:12	10/1/20 14:59		1.015	0.193	mg/L	0.002	0.01	
* Beryllium, Total	9/28/20 11:12	9/29/20 20:15		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	9/28/20 11:12	9/29/20 20:15		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	9/28/20 11:12	9/29/20 20:15		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	9/28/20 11:12	9/29/20 20:15		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	9/28/20 11:12	9/29/20 20:15		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	9/28/20 11:12	9/29/20 20:15		1.015	0.00577	mg/L	0.002	0.01	J
* Potassium, Total	9/28/20 11:12	9/29/20 20:15		1.015	1.35	mg/L	0.3	2.5	J
* Manganese, Total	9/28/20 11:12	9/29/20 20:15		1.015	0.0456	mg/L	0.001	0.005	
* Selenium, Total	9/28/20 11:12	9/29/20 20:15		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	9/28/20 11:12	9/29/20 20:15		1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Manganese, Dissolved	9/28/20 09:17	9/29/20 15:25		1.015	0.0499	mg/L	0.001	0.005	
Analytical Method: EPA 245.1	***Analyst: GAS***								
* Mercury, Total by CVAA	9/30/20 12:24	10/2/20 11:25		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2320 B	***Analyst: JAG***								
Alkalinity, Total as CaCO3	10/1/20 13:25	10/1/20 14:30		1	199	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: TJW***								
* Solids, Dissolved	9/25/20 13:30	9/29/20 08:00		1	216	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 10/16/20

Reported: 11/3/2020
Version: 3.1
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-12

Location Code: WMWGORAP
Collected: 9/23/20 13:10
Customer ID:
Submittal Date: 9/24/20 09:05

Laboratory ID Number: BA17902

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 4500CO2 D		***Analyst: JAG***							
Bicarbonate Alkalinity, (calc.)	10/1/20 13:25	10/1/20 14:30		1	198	mg/L			
Carbonate Alkalinity, (calc.)	10/1/20 13:25	10/1/20 14:30		1	0.98	mg/L			
Analytical Method: SM4500Cl E		***Analyst: JCC***							
* Chloride	9/25/20 14:31	9/25/20 14:31		1	3.15	mg/L	0.50	1	
Analytical Method: SM4500F G 2017		***Analyst: JCC***							
* Fluoride	9/28/20 13:09	9/28/20 13:09		1	0.120	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E 2011		***Analyst: JCC***							
* Sulfate	9/24/20 14:41	9/24/20 14:41		1	19.1	mg/L	0.50	1	
Analytical Method: Field Measurements		***Analyst: TJD***							
Conductivity	9/23/20 13:06	9/23/20 13:06			324.73	uS/cm			FA
pH	9/23/20 13:06	9/23/20 13:06			8.30	SU			FA
Temperature	9/23/20 13:06	9/23/20 13:06			18.99	C			FA
Turbidity	9/23/20 13:06	9/23/20 13:06			1.5	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 10/16/20

Reported: 11/3/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORAP
Sample Date: 9/23/20 13:10
Customer ID:
Delivery Date: 9/24/20 09:05

Description: Gorgas Ash Pond - MW-12

Laboratory ID Number: BA17902

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA17902	Potassium, Total	mg/L	0.000035	0.3674	10.0	10.6	10.9	10.2	8.5 to 11.5	92.5	70 to 130	2.79	20
BA17902	Beryllium, Total	mg/L	0.000003	0.00088	0.100	0.0997	0.101	0.0992	0.085 to 0.115	99.7	70 to 130	1.30	20
BA17902	Cadmium, Total	mg/L	0.00000	0.0001474	0.100	0.0963	0.102	0.104	0.085 to 0.115	96.3	70 to 130	5.75	20
BA17902	Manganese, Total	mg/L	0.0000162	0.0001474	0.100	0.140	0.137	0.101	0.085 to 0.115	94.4	70 to 130	2.17	20
BA17902	Selenium, Total	mg/L	0.0000583	0.001	0.100	0.100	0.102	0.105	0.085 to 0.115	100	70 to 130	1.98	20
BA17902	Lead, Total	mg/L	0.0000065	0.0001474	0.100	0.103	0.105	0.109	0.085 to 0.115	103	70 to 130	1.92	20
BA17906	Lithium, Total	mg/L	0.0000227	0.0154	0.20	0.285	0.284	0.184	0.17 to 0.23	97.8	70 to 130	0.351	20
BA17902	Cobalt, Total	mg/L	-0.0000107	0.0001474	0.100	0.102	0.104	0.109	0.085 to 0.115	102	70 to 130	1.94	20
BA17902	Molybdenum, Total	mg/L	0.0000171	0.0001474	0.100	0.109	0.114	0.107	0.085 to 0.115	103	70 to 130	4.48	20
BA17906	Iron, Total	mg/L	0.000757	0.0176	0.2	0.660	0.653	0.193	0.17 to 0.23	96.0	70 to 130	1.07	20
BA17908	Iron, Dissolved	mg/L	0.000412	0.0176	0.2	1.48	1.47	0.190	0.17 to 0.23	90.0	70 to 130	0.678	20
BA17902	Barium, Total	mg/L	-0.0000107	0.0002	0.10	0.289	0.299	0.105	0.085 to 0.115	96.0	70 to 130	3.40	20
BA17906	Sodium, Total	mg/L	0.00118	0.044	5.00	99.2	99.7	4.80	4.25 to 5.75	116	70 to 130	0.503	20
BA17902	Arsenic, Total	mg/L	0.0000107	0.0001474	0.10	0.110	0.109	0.109	0.085 to 0.115	104	70 to 130	0.913	20
BA17902	Antimony, Total	mg/L	0.000272	0.001	0.100	0.102	0.102	0.101	0.085 to 0.115	100	70 to 130	0.00	20
BA17906	Calcium, Total	mg/L	0.000921	0.1518	5.00	49.2	49.6	4.86	4.25 to 5.75	208	70 to 130	0.810	20
BA17906	Mercury, Total by CVAA	mg/L	0.0000622	0.0005	0.004	0.00384	0.00386	0.00386	0.0034 to 0.0046	96.0	70 to 130	0.519	20
BA17907	Manganese, Dissolved	mg/L	-0.0000068	0.0001474	0.10	0.110	0.107	0.103	0.085 to 0.115	110	70 to 130	2.76	20
BA17902	Chromium, Total	mg/L	0.0000326	0.00044	0.100	0.101	0.104	0.106	0.085 to 0.115	101	70 to 130	2.93	20
BA17902	Thallium, Total	mg/L	0.0000087	0.0001474	0.100	0.0990	0.102	0.105	0.085 to 0.115	99.0	70 to 130	2.99	20
BA17906	Boron, Total	mg/L	0.000485	0.0650254	1.00	1.45	1.45	0.973	0.85 to 1.15	95.9	70 to 130	0.00	20
BA17906	Magnesium, Total	mg/L	-0.00184	0.0462	5.00	15.1	14.9	4.88	4.25 to 5.75	98.0	70 to 130	1.33	20

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 10/16/20

Reported: 11/3/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/23/20 13:10
Customer ID:
Delivery Date: 9/24/20 09:05

Description: Gorgas Ash Pond - MW-12

Laboratory ID Number: BA17902

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA17909	Solids, Dissolved	mg/L	-1.00	25			3620	50.0	40 to 60			0.958	5
BA17909	Chloride	mg/L	0.212	0.50	1000	2040	1080	10.7	9 to 11	94.0	80 to 120	1.83	20
BA17902	Alkalinity, Total as CaCO3	mg/L					200	51.0	45.0 to 55.0			0.501	10
BA17909	Fluoride	mg/L	0.0182	0.05	2.50	3.31	0.677	2.61	2.25 to 2.75	107	80 to 120	5.46	20
BA17907	Sulfate	mg/L	-0.621	0.50	20.0	30.5	12.7	20.3	18 to 22	86.5	80 to 120	3.86	20

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 10/16/20

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-21

Location Code: WMWGORAP
Collected: 9/23/20 16:15
Customer ID:
Submittal Date: 9/24/20 09:05

Laboratory ID Number: BA17903

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	10/5/20 10:25	10/7/20 13:34		1.015	0.0871	mg/L	0.03	0.1	J
* Calcium, Total	10/5/20 10:25	10/7/20 13:34		1.015	1.96	mg/L	0.1	0.5	
* Iron, Total	10/5/20 10:25	10/7/20 13:34		1.015	Not Detected	mg/L	0.02	0.05	U
* Lithium, Total	10/5/20 10:25	10/7/20 13:34		1.015	0.179	mg/L	0.01	0.02	
* Magnesium, Total	10/5/20 10:25	10/7/20 13:34		1.015	0.285	mg/L	0.1	0.5	J
* Sodium, Total	10/5/20 10:25	10/7/20 14:24		10.15	247	mg/L	1.015	5.075	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Iron, Dissolved	10/5/20 11:33	10/6/20 11:51		1.015	Not Detected	mg/L	0.02	0.05	U
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	9/28/20 11:12	9/29/20 20:36		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	9/28/20 11:12	9/29/20 20:36		1.015	Not Detected	mg/L	0.001	0.005	U
* Barium, Total	9/28/20 11:12	10/1/20 15:20		1.015	0.157	mg/L	0.002	0.01	
* Beryllium, Total	9/28/20 11:12	9/29/20 20:36		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	9/28/20 11:12	9/29/20 20:36		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	9/28/20 11:12	9/29/20 20:36		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	9/28/20 11:12	9/29/20 20:36		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	9/28/20 11:12	9/29/20 20:36		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	9/28/20 11:12	9/29/20 20:36		1.015	0.0404	mg/L	0.002	0.01	
* Potassium, Total	9/28/20 11:12	9/29/20 20:36		1.015	4.53	mg/L	0.3	2.5	
* Manganese, Total	9/28/20 11:12	9/29/20 20:36		1.015	Not Detected	mg/L	0.001	0.005	U
* Selenium, Total	9/28/20 11:12	9/29/20 20:36		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	9/28/20 11:12	9/29/20 20:36		1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Manganese, Dissolved	9/28/20 09:17	9/29/20 15:27		1.015	Not Detected	mg/L	0.001	0.005	U
Analytical Method: EPA 245.1	***Analyst: GAS***								
* Mercury, Total by CVAA	9/30/20 12:24	10/2/20 11:27		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2320 B	***Analyst: JAG***								
Alkalinity, Total as CaCO3	10/1/20 13:00	10/1/20 13:20		1	214	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: TJW***								
* Solids, Dissolved	9/25/20 13:30	9/29/20 08:00		1	642	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 10/16/20

Reported: 11/3/2020
Version: 3.1
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-21

Location Code: WMWGORAP
Collected: 9/23/20 16:15
Customer ID:
Submittal Date: 9/24/20 09:05

Laboratory ID Number: BA17903

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 4500CO2 D		***Analyst: JAG***							
Bicarbonate Alkalinity, (calc.)	10/1/20 13:00	10/1/20 13:20		1	61.0	mg/L			
Carbonate Alkalinity, (calc.)	10/1/20 13:00	10/1/20 13:20		1	141	mg/L			
Analytical Method: SM4500Cl E		***Analyst: JCC***							
* Chloride	9/25/20 14:41	9/25/20 14:41		5	56.9	mg/L	2.50	5	
Analytical Method: SM4500F G 2017		***Analyst: JCC***							
* Fluoride	9/28/20 13:11	9/28/20 13:11		1	0.208	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E 2011		***Analyst: JCC***							
* Sulfate	9/24/20 14:52	9/24/20 14:52		16	248	mg/L	8.00	16	
Analytical Method: Field Measurements		***Analyst: TJD***							
Conductivity	9/23/20 16:12	9/23/20 16:12			1124.19	uS/cm			FA
pH	9/23/20 16:12	9/23/20 16:12			10.71	SU			FA
Temperature	9/23/20 16:12	9/23/20 16:12			19.03	C			FA
Turbidity	9/23/20 16:12	9/23/20 16:12			1.47	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 10/16/20

Reported: 11/3/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORAP
Sample Date: 9/23/20 16:15
Customer ID:
Delivery Date: 9/24/20 09:05

Description: Gorgas Ash Pond - MW-21

Laboratory ID Number: BA17903

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA17909	Lead, Total	mg/L	0.000007	0.0001474	0.100	0.106	0.105	0.105	0.085 to 0.115	106	70 to 130	0.948	20
BA17906	Iron, Total	mg/L	0.000757	0.0176	0.2	0.660	0.653	0.193	0.17 to 0.23	96.0	70 to 130	1.07	20
BA17908	Iron, Dissolved	mg/L	0.000412	0.0176	0.2	1.48	1.47	0.190	0.17 to 0.23	90.0	70 to 130	0.678	20
BA17909	Cadmium, Total	mg/L	0.00000	0.0001474	0.100	0.0960	0.0977	0.104	0.085 to 0.115	96.0	70 to 130	1.76	20
BA17909	Potassium, Total	mg/L	0.0382	0.3674	10.0	194	198	9.69	8.5 to 11.5	10.0	70 to 130	2.04	20
BA17909	Antimony, Total	mg/L	0.000377	0.001	0.100	0.107	0.110	0.0990	0.085 to 0.115	107	70 to 130	2.76	20
BA17909	Arsenic, Total	mg/L	0.0000117	0.0001474	0.100	0.108	0.109	0.106	0.085 to 0.115	98.0	70 to 130	0.922	20
BA17909	Cobalt, Total	mg/L	-0.0000098	0.0001474	0.100	0.102	0.105	0.108	0.085 to 0.115	102	70 to 130	2.90	20
BA17906	Lithium, Total	mg/L	0.0000227	0.0154	0.20	0.285	0.284	0.184	0.17 to 0.23	97.8	70 to 130	0.351	20
BA17909	Manganese, Total	mg/L	0.0000196	0.0001474	0.100	0.148	0.154	0.0982	0.085 to 0.115	102	70 to 130	3.97	20
BA17909	Thallium, Total	mg/L	0.0000139	0.0001474	0.100	0.101	0.100	0.103	0.085 to 0.115	101	70 to 130	0.995	20
BA17906	Boron, Total	mg/L	0.000485	0.0650254	1.00	1.45	1.45	0.973	0.85 to 1.15	95.9	70 to 130	0.00	20
BA17906	Magnesium, Total	mg/L	-0.00184	0.0462	5.00	15.1	14.9	4.88	4.25 to 5.75	98.0	70 to 130	1.33	20
BA17909	Barium, Total	mg/L	-0.0000061	0.0002	0.10	0.154	0.150	0.106	0.085 to 0.115	110	70 to 130	2.63	20
BA17909	Chromium, Total	mg/L	0.000115	0.00044	0.100	0.0999	0.104	0.105	0.085 to 0.115	99.9	70 to 130	4.02	20
BA17906	Sodium, Total	mg/L	0.00118	0.044	5.00	99.2	99.7	4.80	4.25 to 5.75	116	70 to 130	0.503	20
BA17909	Molybdenum, Total	mg/L	0.0000274	0.0001474	0.100	0.215	0.219	0.108	0.085 to 0.115	95.0	70 to 130	1.84	20
BA17906	Calcium, Total	mg/L	0.000921	0.1518	5.00	49.2	49.6	4.86	4.25 to 5.75	208	70 to 130	0.810	20
BA17906	Mercury, Total by CVAA	mg/L	0.0000622	0.0005	0.004	0.00384	0.00386	0.00386	0.0034 to 0.0046	96.0	70 to 130	0.519	20
BA17907	Manganese, Dissolved	mg/L	-0.0000068	0.0001474	0.10	0.110	0.107	0.103	0.085 to 0.115	110	70 to 130	2.76	20
BA17909	Beryllium, Total	mg/L	0.0000025	0.00088	0.100	0.0869	0.0870	0.0970	0.085 to 0.115	86.9	70 to 130	0.115	20
BA17909	Selenium, Total	mg/L	0.000192	0.001	0.100	0.0914	0.0940	0.107	0.085 to 0.115	91.4	70 to 130	2.80	20

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 10/16/20

Reported: 11/3/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/23/20 16:15
Customer ID:
Delivery Date: 9/24/20 09:05

Description: Gorgas Ash Pond - MW-21

Laboratory ID Number: BA17903

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA17909	Solids, Dissolved	mg/L	-1.00	25			3620	50.0	40 to 60			0.958	5
BA17909	Fluoride	mg/L	0.0182	0.05	2.50	3.31	0.677	2.61	2.25 to 2.75	107	80 to 120	5.46	20
BA17909	Chloride	mg/L	0.212	0.50	1000	2040	1080	10.7	9 to 11	94.0	80 to 120	1.83	20
BA17909	Alkalinity, Total as CaCO3	mg/L					283	51.0	45.0 to 55.0			1.40	10
BA17907	Sulfate	mg/L	-0.621	0.50	20.0	30.5	12.7	20.3	18 to 22	86.5	80 to 120	3.86	20

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 10/16/20

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond Field Blank-4

Location Code: WMWGORAPFB
Collected: 9/23/20 17:00
Customer ID:
Submittal Date: 9/24/20 09:05

Laboratory ID Number: BA17904

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	10/5/20 10:25	10/7/20 13:37		1.015	Not Detected	mg/L	0.03	0.1	U
* Calcium, Total	10/5/20 10:25	10/7/20 13:37		1.015	Not Detected	mg/L	0.1	0.5	U
* Iron, Total	10/5/20 10:25	10/7/20 13:37		1.015	Not Detected	mg/L	0.02	0.05	U
* Lithium, Total	10/5/20 10:25	10/7/20 13:37		1.015	Not Detected	mg/L	0.01	0.02	U
* Magnesium, Total	10/5/20 10:25	10/7/20 13:37		1.015	Not Detected	mg/L	0.1	0.5	U
* Sodium, Total	10/5/20 10:25	10/7/20 13:37		1.015	Not Detected	mg/L	0.1	0.5	U
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	9/28/20 11:12	9/29/20 20:39		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	9/28/20 11:12	9/29/20 20:39		1.015	Not Detected	mg/L	0.001	0.005	U
* Barium, Total	9/28/20 11:12	10/1/20 15:23		1.015	Not Detected	mg/L	0.002	0.01	U
* Beryllium, Total	9/28/20 11:12	9/29/20 20:39		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	9/28/20 11:12	9/29/20 20:39		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	9/28/20 11:12	9/29/20 20:39		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	9/28/20 11:12	9/29/20 20:39		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	9/28/20 11:12	9/29/20 20:39		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	9/28/20 11:12	9/29/20 20:39		1.015	Not Detected	mg/L	0.002	0.01	U
* Manganese, Total	9/28/20 11:12	9/29/20 20:39		1.015	Not Detected	mg/L	0.001	0.005	U
* Potassium, Total	9/28/20 11:12	9/29/20 20:39		1.015	Not Detected	mg/L	0.3	2.5	U
* Selenium, Total	9/28/20 11:12	9/29/20 20:39		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	9/28/20 11:12	9/29/20 20:39		1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 245.1	***Analyst: GAS***								
* Mercury, Total by CVAA	9/30/20 12:24	10/2/20 11:30		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2540C	***Analyst: TJW***								
* Solids, Dissolved	9/25/20 13:30	9/29/20 08:00		1	Not Detected	mg/L		25	U
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	9/25/20 14:34	9/25/20 14:34		1	Not Detected	mg/L	0.50	1	U
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	9/28/20 13:12	9/28/20 13:12		1	Not Detected	mg/L	0.06	0.1	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	9/24/20 14:43	9/24/20 14:43		1	Not Detected	mg/L	0.50	1	U

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

Comments:

Reported: 11/3/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORAPFB
Sample Date: 9/23/20 17:00
Customer ID:
Delivery Date: 9/24/20 09:05

Description: Gorgas Ash Pond Field Blank-4

Laboratory ID Number: BA17904

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA17909	Lead, Total	mg/L	0.000007	0.0001474	0.100	0.106	0.105	0.105	0.085 to 0.115	106	70 to 130	0.948	20
BA17906	Lithium, Total	mg/L	0.0000227	0.0154	0.20	0.285	0.284	0.184	0.17 to 0.23	97.8	70 to 130	0.351	20
BA17909	Manganese, Total	mg/L	0.0000196	0.0001474	0.100	0.148	0.154	0.0982	0.085 to 0.115	102	70 to 130	3.97	20
BA17909	Thallium, Total	mg/L	0.0000139	0.0001474	0.100	0.101	0.100	0.103	0.085 to 0.115	101	70 to 130	0.995	20
BA17906	Calcium, Total	mg/L	0.000921	0.1518	5.00	49.2	49.6	4.86	4.25 to 5.75	208	70 to 130	0.810	20
BA17906	Mercury, Total by CVAA	mg/L	0.0000622	0.0005	0.004	0.00384	0.00386	0.00386	0.0034 to 0.0046	96.0	70 to 130	0.519	20
BA17909	Beryllium, Total	mg/L	0.0000025	0.00088	0.100	0.0869	0.0870	0.0970	0.085 to 0.115	86.9	70 to 130	0.115	20
BA17909	Selenium, Total	mg/L	0.000192	0.001	0.100	0.0914	0.0940	0.107	0.085 to 0.115	91.4	70 to 130	2.80	20
BA17906	Boron, Total	mg/L	0.000485	0.0650254	1.00	1.45	1.45	0.973	0.85 to 1.15	95.9	70 to 130	0.00	20
BA17906	Magnesium, Total	mg/L	-0.00184	0.0462	5.00	15.1	14.9	4.88	4.25 to 5.75	98.0	70 to 130	1.33	20
BA17909	Barium, Total	mg/L	-0.0000061	0.0002	0.10	0.154	0.150	0.106	0.085 to 0.115	110	70 to 130	2.63	20
BA17909	Chromium, Total	mg/L	0.000115	0.00044	0.100	0.0999	0.104	0.105	0.085 to 0.115	99.9	70 to 130	4.02	20
BA17909	Arsenic, Total	mg/L	0.0000117	0.0001474	0.100	0.108	0.109	0.106	0.085 to 0.115	98.0	70 to 130	0.922	20
BA17909	Cobalt, Total	mg/L	-0.0000098	0.0001474	0.100	0.102	0.105	0.108	0.085 to 0.115	102	70 to 130	2.90	20
BA17906	Sodium, Total	mg/L	0.00118	0.044	5.00	99.2	99.7	4.80	4.25 to 5.75	116	70 to 130	0.503	20
BA17909	Molybdenum, Total	mg/L	0.0000274	0.0001474	0.100	0.215	0.219	0.108	0.085 to 0.115	95.0	70 to 130	1.84	20
BA17906	Iron, Total	mg/L	0.000757	0.0176	0.2	0.660	0.653	0.193	0.17 to 0.23	96.0	70 to 130	1.07	20
BA17909	Cadmium, Total	mg/L	0.00000	0.0001474	0.100	0.0960	0.0977	0.104	0.085 to 0.115	96.0	70 to 130	1.76	20
BA17909	Potassium, Total	mg/L	0.0382	0.3674	10.0	194	198	9.69	8.5 to 11.5	10.0	70 to 130	2.04	20
BA17909	Antimony, Total	mg/L	0.000377	0.001	0.100	0.107	0.110	0.0990	0.085 to 0.115	107	70 to 130	2.76	20

Comments:

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

Batch QC Summary

Customer Account: WMWGORAPFB
Sample Date: 9/23/20 17:00
Customer ID:
Delivery Date: 9/24/20 09:05

Description: Gorgas Ash Pond Field Blank-4

Laboratory ID Number: BA17904

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA17909	Solids, Dissolved	mg/L	-1.00	25			3620	50.0	40 to 60			0.958	5
BA17909	Fluoride	mg/L	0.0182	0.05	2.50	3.31	0.677	2.61	2.25 to 2.75	107	80 to 120	5.46	20
BA17909	Chloride	mg/L	0.212	0.50	1000	2040	1080	10.7	9 to 11	94.0	80 to 120	1.83	20
BA17907	Sulfate	mg/L	-0.621	0.50	20.0	30.5	12.7	20.3	18 to 22	86.5	80 to 120	3.86	20

Comments:

Reported: 11/3/2020
Version: 3.1
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond Equipment Blank-1

Location Code: WMWGORAPEB
Collected: 9/23/20 17:10
Customer ID:
Submittal Date: 9/24/20 09:05

Laboratory ID Number: BA17905

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	10/5/20 10:25	10/7/20 13:40		1.015	Not Detected	mg/L	0.03	0.1	U
* Calcium, Total	10/5/20 10:25	10/7/20 13:40		1.015	Not Detected	mg/L	0.1	0.5	U
* Iron, Total	10/5/20 10:25	10/7/20 13:40		1.015	Not Detected	mg/L	0.02	0.05	U
* Lithium, Total	10/5/20 10:25	10/7/20 13:40		1.015	Not Detected	mg/L	0.01	0.02	U
* Magnesium, Total	10/5/20 10:25	10/7/20 13:40		1.015	Not Detected	mg/L	0.1	0.5	U
* Sodium, Total	10/5/20 10:25	10/7/20 13:40		1.015	Not Detected	mg/L	0.1	0.5	U
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	9/28/20 11:12	9/29/20 20:41		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	9/28/20 11:12	9/29/20 20:41		1.015	Not Detected	mg/L	0.001	0.005	U
* Barium, Total	9/28/20 11:12	10/1/20 15:26		1.015	Not Detected	mg/L	0.002	0.01	U
* Beryllium, Total	9/28/20 11:12	9/29/20 20:41		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	9/28/20 11:12	9/29/20 20:41		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	9/28/20 11:12	9/29/20 20:41		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	9/28/20 11:12	9/29/20 20:41		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	9/28/20 11:12	9/29/20 20:41		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	9/28/20 11:12	9/29/20 20:41		1.015	Not Detected	mg/L	0.002	0.01	U
* Manganese, Total	9/28/20 11:12	9/29/20 20:41		1.015	Not Detected	mg/L	0.001	0.005	U
* Potassium, Total	9/28/20 11:12	9/29/20 20:41		1.015	Not Detected	mg/L	0.3	2.5	U
* Selenium, Total	9/28/20 11:12	9/29/20 20:41		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	9/28/20 11:12	9/29/20 20:41		1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 245.1	***Analyst: GAS***								
* Mercury, Total by CVAA	9/30/20 12:24	10/2/20 11:32		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2540C	***Analyst: TJW***								
* Solids, Dissolved	9/25/20 13:30	9/29/20 08:00		1	Not Detected	mg/L		25	U
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	9/25/20 14:35	9/25/20 14:35		1	Not Detected	mg/L	0.50	1	U
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	9/28/20 13:13	9/28/20 13:13		1	Not Detected	mg/L	0.06	0.1	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	9/24/20 14:44	9/24/20 14:44		1	Not Detected	mg/L	0.50	1	U

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

Comments:

Reported: 11/3/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORAPEB
Sample Date: 9/23/20 17:10
Customer ID:
Delivery Date: 9/24/20 09:05

Description: Gorgas Ash Pond Equipment Blank-1

Laboratory ID Number: BA17905

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA17909	Lead, Total	mg/L	0.000007	0.0001474	0.100	0.106	0.105	0.105	0.085 to 0.115	106	70 to 130	0.948	20
BA17906	Iron, Total	mg/L	0.000757	0.0176	0.2	0.660	0.653	0.193	0.17 to 0.23	96.0	70 to 130	1.07	20
BA17909	Cadmium, Total	mg/L	0.00000	0.0001474	0.100	0.0960	0.0977	0.104	0.085 to 0.115	96.0	70 to 130	1.76	20
BA17909	Potassium, Total	mg/L	0.0382	0.3674	10.0	194	198	9.69	8.5 to 11.5	10.0	70 to 130	2.04	20
BA17909	Antimony, Total	mg/L	0.000377	0.001	0.100	0.107	0.110	0.0990	0.085 to 0.115	107	70 to 130	2.76	20
BA17906	Sodium, Total	mg/L	0.00118	0.044	5.00	99.2	99.7	4.80	4.25 to 5.75	116	70 to 130	0.503	20
BA17909	Molybdenum, Total	mg/L	0.0000274	0.0001474	0.100	0.215	0.219	0.108	0.085 to 0.115	95.0	70 to 130	1.84	20
BA17906	Lithium, Total	mg/L	0.0000227	0.0154	0.20	0.285	0.284	0.184	0.17 to 0.23	97.8	70 to 130	0.351	20
BA17909	Manganese, Total	mg/L	0.0000196	0.0001474	0.100	0.148	0.154	0.0982	0.085 to 0.115	102	70 to 130	3.97	20
BA17909	Thallium, Total	mg/L	0.0000139	0.0001474	0.100	0.101	0.100	0.103	0.085 to 0.115	101	70 to 130	0.995	20
BA17909	Arsenic, Total	mg/L	0.0000117	0.0001474	0.100	0.108	0.109	0.106	0.085 to 0.115	98.0	70 to 130	0.922	20
BA17909	Cobalt, Total	mg/L	-0.0000098	0.0001474	0.100	0.102	0.105	0.108	0.085 to 0.115	102	70 to 130	2.90	20
BA17906	Boron, Total	mg/L	0.000485	0.0650254	1.00	1.45	1.45	0.973	0.85 to 1.15	95.9	70 to 130	0.00	20
BA17906	Magnesium, Total	mg/L	-0.00184	0.0462	5.00	15.1	14.9	4.88	4.25 to 5.75	98.0	70 to 130	1.33	20
BA17909	Barium, Total	mg/L	-0.0000061	0.0002	0.10	0.154	0.150	0.106	0.085 to 0.115	110	70 to 130	2.63	20
BA17909	Chromium, Total	mg/L	0.000115	0.00044	0.100	0.0999	0.104	0.105	0.085 to 0.115	99.9	70 to 130	4.02	20
BA17906	Calcium, Total	mg/L	0.000921	0.1518	5.00	49.2	49.6	4.86	4.25 to 5.75	208	70 to 130	0.810	20
BA17906	Mercury, Total by CVAA	mg/L	0.0000622	0.0005	0.004	0.00384	0.00386	0.00386	0.0034 to 0.0046	96.0	70 to 130	0.519	20
BA17909	Beryllium, Total	mg/L	0.0000025	0.00088	0.100	0.0869	0.0870	0.0970	0.085 to 0.115	86.9	70 to 130	0.115	20
BA17909	Selenium, Total	mg/L	0.000192	0.001	0.100	0.0914	0.0940	0.107	0.085 to 0.115	91.4	70 to 130	2.80	20

Comments:

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

Batch QC Summary

Customer Account: WMWGORAPEB
Sample Date: 9/23/20 17:10
Customer ID:
Delivery Date: 9/24/20 09:05

Description: Gorgas Ash Pond Equipment Blank-1

Laboratory ID Number: BA17905

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA17909	Fluoride	mg/L	0.0182	0.05	2.50	3.31	0.677	2.61	2.25 to 2.75	107	80 to 120	5.46	20
BA17909	Solids, Dissolved	mg/L	-1.00	25			3620	50.0	40 to 60			0.958	5
BA17909	Chloride	mg/L	0.212	0.50	1000	2040	1080	10.7	9 to 11	94.0	80 to 120	1.83	20
BA17907	Sulfate	mg/L	-0.621	0.50	20.0	30.5	12.7	20.3	18 to 22	86.5	80 to 120	3.86	20

Comments:

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-18

Location Code: WMWGORAP
Collected: 9/23/20 18:05
Customer ID:
Submittal Date: 9/24/20 09:05

Laboratory ID Number: BA17906

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	10/5/20 10:25	10/7/20 13:44		1.015	0.491	mg/L	0.03	0.1	
* Calcium, Total	10/5/20 10:25	10/7/20 13:44		1.015	38.8	mg/L	0.1	0.5	RA
* Iron, Total	10/5/20 10:25	10/7/20 13:44		1.015	0.468	mg/L	0.02	0.05	
* Lithium, Total	10/5/20 10:25	10/7/20 13:44		1.015	0.0895	mg/L	0.01	0.02	
* Magnesium, Total	10/5/20 10:25	10/7/20 13:44		1.015	10.2	mg/L	0.1	0.5	
* Sodium, Total	10/5/20 10:25	10/7/20 14:28		10.15	93.4	mg/L	1.015	5.075	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Iron, Dissolved	10/5/20 11:33	10/6/20 11:53		1.015	0.370	mg/L	0.02	0.05	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	9/28/20 11:12	9/29/20 20:44		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	9/28/20 11:12	9/29/20 20:44		1.015	0.00873	mg/L	0.001	0.005	
* Barium, Total	9/28/20 11:12	10/1/20 15:28		1.015	0.0911	mg/L	0.002	0.01	
* Beryllium, Total	9/28/20 11:12	9/29/20 20:44		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	9/28/20 11:12	9/29/20 20:44		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	9/28/20 11:12	9/29/20 20:44		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	9/28/20 11:12	9/29/20 20:44		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	9/28/20 11:12	9/29/20 20:44		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	9/28/20 11:12	9/29/20 20:44		1.015	0.0440	mg/L	0.002	0.01	
* Potassium, Total	9/28/20 11:12	9/29/20 20:44		1.015	1.87	mg/L	0.3	2.5	J
* Manganese, Total	9/28/20 11:12	9/29/20 20:44		1.015	0.146	mg/L	0.001	0.005	
* Selenium, Total	9/28/20 11:12	9/29/20 20:44		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	9/28/20 11:12	9/29/20 20:44		1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Manganese, Dissolved	9/28/20 09:17	9/29/20 15:30		1.015	0.155	mg/L	0.001	0.005	
Analytical Method: EPA 245.1	***Analyst: GAS***								
* Mercury, Total by CVAA	9/30/20 12:24	10/2/20 11:34		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2320 B	***Analyst: JAG***								
Alkalinity, Total as CaCO3	10/1/20 13:00	10/1/20 13:20		1	274	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: TJW***								
* Solids, Dissolved	9/25/20 13:30	9/29/20 08:00		1	380	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 10/16/20

Reported: 11/3/2020
Version: 3.1
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-18

Location Code: WMWGORAP
Collected: 9/23/20 18:05
Customer ID:
Submittal Date: 9/24/20 09:05

Laboratory ID Number: BA17906

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 4500CO2 D		***Analyst: JAG***							
Bicarbonate Alkalinity, (calc.)	10/1/20 13:00	10/1/20 13:20		1	272	mg/L			
Carbonate Alkalinity, (calc.)	10/1/20 13:00	10/1/20 13:20		1	1.58	mg/L			
Analytical Method: SM4500Cl E		***Analyst: JCC***							
* Chloride	9/25/20 14:36	9/25/20 14:36		1	5.29	mg/L	0.50	1	
Analytical Method: SM4500F G 2017		***Analyst: JCC***							
* Fluoride	9/28/20 13:14	9/28/20 13:14		1	0.575	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E 2011		***Analyst: JCC***							
* Sulfate	9/24/20 14:53	9/24/20 14:53		5	88.9	mg/L	2.50	5	
Analytical Method: Field Measurements		***Analyst: TJD***							
Conductivity	9/23/20 18:03	9/23/20 18:03			541.36	uS/cm			FA
pH	9/23/20 18:03	9/23/20 18:03			7.54	SU			FA
Temperature	9/23/20 18:03	9/23/20 18:03			16.99	C			FA
Turbidity	9/23/20 18:03	9/23/20 18:03			2.93	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 10/16/20

Reported: 11/3/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORAP
Sample Date: 9/23/20 18:05
Customer ID:
Delivery Date: 9/24/20 09:05

Description: Gorgas Ash Pond - MW-18

Laboratory ID Number: BA17906

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA17909	Lead, Total	mg/L	0.000007	0.0001474	0.100	0.106	0.105	0.105	0.085 to 0.115	106	70 to 130	0.948	20
BA17909	Arsenic, Total	mg/L	0.0000117	0.0001474	0.100	0.108	0.109	0.106	0.085 to 0.115	98.0	70 to 130	0.922	20
BA17909	Cobalt, Total	mg/L	-0.0000098	0.0001474	0.100	0.102	0.105	0.108	0.085 to 0.115	102	70 to 130	2.90	20
BA17906	Lithium, Total	mg/L	0.0000227	0.0154	0.20	0.285	0.284	0.184	0.17 to 0.23	97.8	70 to 130	0.351	20
BA17909	Manganese, Total	mg/L	0.0000196	0.0001474	0.100	0.148	0.154	0.0982	0.085 to 0.115	102	70 to 130	3.97	20
BA17909	Thallium, Total	mg/L	0.0000139	0.0001474	0.100	0.101	0.100	0.103	0.085 to 0.115	101	70 to 130	0.995	20
BA17906	Iron, Total	mg/L	0.000757	0.0176	0.2	0.660	0.653	0.193	0.17 to 0.23	96.0	70 to 130	1.07	20
BA17908	Iron, Dissolved	mg/L	0.000412	0.0176	0.2	1.48	1.47	0.190	0.17 to 0.23	90.0	70 to 130	0.678	20
BA17909	Cadmium, Total	mg/L	0.00000	0.0001474	0.100	0.0960	0.0977	0.104	0.085 to 0.115	96.0	70 to 130	1.76	20
BA17909	Potassium, Total	mg/L	0.0382	0.3674	10.0	194	198	9.69	8.5 to 11.5	10.0	70 to 130	2.04	20
BA17909	Antimony, Total	mg/L	0.000377	0.001	0.100	0.107	0.110	0.0990	0.085 to 0.115	107	70 to 130	2.76	20
BA17906	Calcium, Total	mg/L	0.000921	0.1518	5.00	49.2	49.6	4.86	4.25 to 5.75	208	70 to 130	0.810	20
BA17906	Mercury, Total by CVAA	mg/L	0.0000622	0.0005	0.004	0.00384	0.00386	0.00386	0.0034 to 0.0046	96.0	70 to 130	0.519	20
BA17907	Manganese, Dissolved	mg/L	-0.0000068	0.0001474	0.10	0.110	0.107	0.103	0.085 to 0.115	110	70 to 130	2.76	20
BA17909	Beryllium, Total	mg/L	0.0000025	0.00088	0.100	0.0869	0.0870	0.0970	0.085 to 0.115	86.9	70 to 130	0.115	20
BA17909	Selenium, Total	mg/L	0.000192	0.001	0.100	0.0914	0.0940	0.107	0.085 to 0.115	91.4	70 to 130	2.80	20
BA17906	Boron, Total	mg/L	0.000485	0.0650254	1.00	1.45	1.45	0.973	0.85 to 1.15	95.9	70 to 130	0.00	20
BA17906	Magnesium, Total	mg/L	-0.00184	0.0462	5.00	15.1	14.9	4.88	4.25 to 5.75	98.0	70 to 130	1.33	20
BA17909	Barium, Total	mg/L	-0.0000061	0.0002	0.10	0.154	0.150	0.106	0.085 to 0.115	110	70 to 130	2.63	20
BA17909	Chromium, Total	mg/L	0.000115	0.00044	0.100	0.0999	0.104	0.105	0.085 to 0.115	99.9	70 to 130	4.02	20
BA17906	Sodium, Total	mg/L	0.00118	0.044	5.00	99.2	99.7	4.80	4.25 to 5.75	116	70 to 130	0.503	20
BA17909	Molybdenum, Total	mg/L	0.0000274	0.0001474	0.100	0.215	0.219	0.108	0.085 to 0.115	95.0	70 to 130	1.84	20

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 10/16/20

Reported: 11/3/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/23/20 18:05
Customer ID:
Delivery Date: 9/24/20 09:05

Description: Gorgas Ash Pond - MW-18

Laboratory ID Number: BA17906

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA17909	Solids, Dissolved	mg/L	-1.00	25			3620	50.0	40 to 60			0.958	5
BA17909	Fluoride	mg/L	0.0182	0.05	2.50	3.31	0.677	2.61	2.25 to 2.75	107	80 to 120	5.46	20
BA17909	Alkalinity, Total as CaCO3	mg/L					283	51.0	45.0 to 55.0			1.40	10
BA17909	Chloride	mg/L	0.212	0.50	1000	2040	1080	10.7	9 to 11	94.0	80 to 120	1.83	20
BA17907	Sulfate	mg/L	-0.621	0.50	20.0	30.5	12.7	20.3	18 to 22	86.5	80 to 120	3.86	20

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 10/16/20

Reported: 11/3/2020
Version: 3.1
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-15

Location Code: WMWGORAP
Collected: 9/23/20 11:37
Customer ID:
Submittal Date: 9/24/20 09:05

Laboratory ID Number: BA17907

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	10/5/20 10:25	10/7/20 14:01		1.015	0.0537	mg/L	0.03	0.1	J
* Calcium, Total	10/5/20 10:25	10/7/20 14:01		1.015	3.83	mg/L	0.1	0.5	
* Iron, Total	10/5/20 10:25	10/7/20 14:01		1.015	0.0770	mg/L	0.02	0.05	
* Lithium, Total	10/5/20 10:25	10/7/20 14:01		1.015	0.414	mg/L	0.01	0.02	
* Magnesium, Total	10/5/20 10:25	10/7/20 14:01		1.015	0.372	mg/L	0.1	0.5	J
* Sodium, Total	10/5/20 10:25	10/7/20 14:38		10.15	255	mg/L	1.015	5.075	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Iron, Dissolved	10/5/20 11:33	10/6/20 11:56		1.015	Not Detected	mg/L	0.02	0.05	U
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	9/28/20 11:12	9/29/20 20:47		1.015	0.000844	mg/L	0.0008	0.003	J
* Arsenic, Total	9/28/20 11:12	9/29/20 20:47		1.015	0.0165	mg/L	0.001	0.005	
* Barium, Total	9/28/20 11:12	10/1/20 15:31		1.015	0.119	mg/L	0.002	0.01	
* Beryllium, Total	9/28/20 11:12	9/29/20 20:47		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	9/28/20 11:12	9/29/20 20:47		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	9/28/20 11:12	9/29/20 20:47		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	9/28/20 11:12	9/29/20 20:47		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	9/28/20 11:12	9/29/20 20:47		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	9/28/20 11:12	9/29/20 20:47		1.015	0.0744	mg/L	0.002	0.01	
* Potassium, Total	9/28/20 11:12	9/29/20 20:47		1.015	10.4	mg/L	0.3	2.5	
* Manganese, Total	9/28/20 11:12	9/29/20 20:47		1.015	0.00123	mg/L	0.001	0.005	J
* Selenium, Total	9/28/20 11:12	9/29/20 20:47		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	9/28/20 11:12	9/29/20 20:47		1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Manganese, Dissolved	9/28/20 09:17	9/29/20 15:33		1.015	Not Detected	mg/L	0.001	0.005	U
Analytical Method: EPA 245.1	***Analyst: GAS***								
* Mercury, Total by CVAA	10/6/20 08:20	10/6/20 12:37		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2320 B	***Analyst: JAG***								
Alkalinity, Total as CaCO3	10/1/20 13:00	10/1/20 13:20		1	575	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: TJW***								
* Solids, Dissolved	9/25/20 13:30	9/29/20 08:00		1	600	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 10/16/20

Reported: 11/3/2020
Version: 3.1
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-15

Location Code: WMWGORAP
Collected: 9/23/20 11:37
Customer ID:
Submittal Date: 9/24/20 09:05

Laboratory ID Number: BA17907

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 4500CO2 D		***Analyst: JAG***							
Bicarbonate Alkalinity, (calc.)	10/1/20 13:00	10/1/20 13:20		1	3.08	mg/L			
Carbonate Alkalinity, (calc.)	10/1/20 13:00	10/1/20 13:20		1	210	mg/L			
Analytical Method: SM4500Cl E		***Analyst: JCC***							
* Chloride	9/25/20 14:37	9/25/20 14:37		1	6.00	mg/L	0.50	1	
Analytical Method: SM4500F G 2017		***Analyst: JCC***							
* Fluoride	9/28/20 13:15	9/28/20 13:15		1	0.452	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E 2011		***Analyst: JCC***							
* Sulfate	9/24/20 14:47	9/24/20 14:47		1	13.2	mg/L	0.50	1	
Analytical Method: Field Measurements		***Analyst: DKG***							
Conductivity	9/23/20 11:34	9/23/20 11:34			1435.59	uS/cm			FA
pH	9/23/20 11:34	9/23/20 11:34			11.89	SU			FA
Temperature	9/23/20 11:34	9/23/20 11:34			20.02	C			FA
Turbidity	9/23/20 11:34	9/23/20 11:34			1.13	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 10/16/20

Reported: 11/3/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORAP
Sample Date: 9/23/20 11:37
Customer ID:
Delivery Date: 9/24/20 09:05

Description: Gorgas Ash Pond - MW-15

Laboratory ID Number: BA17907

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA17909	Lead, Total	mg/L	0.000007	0.0001474	0.100	0.106	0.105	0.105	0.085 to 0.115	106	70 to 130	0.948	20
BA17909	Manganese, Total	mg/L	0.0000196	0.0001474	0.100	0.148	0.154	0.0982	0.085 to 0.115	102	70 to 130	3.97	20
BA17909	Thallium, Total	mg/L	0.0000139	0.0001474	0.100	0.101	0.100	0.103	0.085 to 0.115	101	70 to 130	0.995	20
BA17908	Iron, Dissolved	mg/L	0.000412	0.0176	0.2	1.48	1.47	0.190	0.17 to 0.23	90.0	70 to 130	0.678	20
BA17909	Cadmium, Total	mg/L	0.00000	0.0001474	0.100	0.0960	0.0977	0.104	0.085 to 0.115	96.0	70 to 130	1.76	20
BA17909	Potassium, Total	mg/L	0.0382	0.3674	10.0	194	198	9.69	8.5 to 11.5	10.0	70 to 130	2.04	20
BA17909	Antimony, Total	mg/L	0.000377	0.001	0.100	0.107	0.110	0.0990	0.085 to 0.115	107	70 to 130	2.76	20
BA17907	Manganese, Dissolved	mg/L	-0.0000068	0.0001474	0.10	0.110	0.107	0.103	0.085 to 0.115	110	70 to 130	2.76	20
BA17909	Beryllium, Total	mg/L	0.0000025	0.00088	0.100	0.0869	0.0870	0.0970	0.085 to 0.115	86.9	70 to 130	0.115	20
BA17909	Iron, Total	mg/L	0.000757	0.0176	0.2	0.317	0.316	0.193	0.17 to 0.23	95.0	70 to 130	0.316	20
BA17909	Selenium, Total	mg/L	0.000192	0.001	0.100	0.0914	0.0940	0.107	0.085 to 0.115	91.4	70 to 130	2.80	20
BA17909	Lithium, Total	mg/L	0.0000227	0.0154	0.20	0.372	0.359	0.184	0.17 to 0.23	118	70 to 130	3.56	20
BA17909	Molybdenum, Total	mg/L	0.0000274	0.0001474	0.100	0.215	0.219	0.108	0.085 to 0.115	95.0	70 to 130	1.84	20
BA17909	Arsenic, Total	mg/L	0.0000117	0.0001474	0.100	0.108	0.109	0.106	0.085 to 0.115	98.0	70 to 130	0.922	20
BA17909	Cobalt, Total	mg/L	-0.0000098	0.0001474	0.100	0.102	0.105	0.108	0.085 to 0.115	102	70 to 130	2.90	20
BA17909	Magnesium, Total	mg/L	-0.00184	0.0462	5.00	33.2	32.6	4.88	4.25 to 5.75	100	70 to 130	1.82	20
BA17909	Barium, Total	mg/L	-0.0000061	0.0002	0.10	0.154	0.150	0.106	0.085 to 0.115	110	70 to 130	2.63	20
BA17909	Chromium, Total	mg/L	0.000115	0.00044	0.100	0.0999	0.104	0.105	0.085 to 0.115	99.9	70 to 130	4.02	20
BA17909	Mercury, Total by CVAA	mg/L	-0.0000448	0.0005	0.004	0.00410	0.00414	0.00441	0.0034 to 0.0046	102	70 to 130	0.971	20
BA17909	Boron, Total	mg/L	0.000485	0.0650254	1.00	1.14	1.13	0.973	0.85 to 1.15	101	70 to 130	0.881	20
BA17909	Calcium, Total	mg/L	0.000921	0.1518	5.00	126	121	4.86	4.25 to 5.75	140	70 to 130	4.05	20
BA17909	Sodium, Total	mg/L	0.00118	0.044	5.00	995	1020	4.80	4.25 to 5.75	-500	70 to 130	2.48	20

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 10/16/20

Reported: 11/3/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/23/20 11:37
Customer ID:
Delivery Date: 9/24/20 09:05

Description: Gorgas Ash Pond - MW-15

Laboratory ID Number: BA17907

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA17909	Fluoride	mg/L	0.0182	0.05	2.50	3.31	0.677	2.61	2.25 to 2.75	107	80 to 120	5.46	20
BA17909	Solids, Dissolved	mg/L	-1.00	25			3620	50.0	40 to 60			0.958	5
BA17909	Alkalinity, Total as CaCO3	mg/L					283	51.0	45.0 to 55.0			1.40	10
BA17907	Sulfate	mg/L	-0.621	0.50	20.0	30.5	12.7	20.3	18 to 22	86.5	80 to 120	3.86	20
BA17909	Chloride	mg/L	0.212	0.50	1000	2040	1080	10.7	9 to 11	94.0	80 to 120	1.83	20

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 10/16/20

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-17V

Location Code: WMWGORAP
Collected: 9/23/20 13:49
Customer ID:
Submittal Date: 9/24/20 09:05

Laboratory ID Number: BA17908

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	10/5/20 10:25	10/7/20 14:04		1.015	0.0478	mg/L	0.03	0.1	J
* Calcium, Total	10/5/20 10:25	10/7/20 14:04		1.015	29.3	mg/L	0.1	0.5	
* Iron, Total	10/5/20 10:25	10/7/20 14:04		1.015	1.46	mg/L	0.02	0.05	
* Lithium, Total	10/5/20 10:25	10/7/20 14:04		1.015	0.0574	mg/L	0.01	0.02	
* Magnesium, Total	10/5/20 10:25	10/7/20 14:04		1.015	11.4	mg/L	0.1	0.5	
* Sodium, Total	10/5/20 10:25	10/7/20 14:41		10.15	108	mg/L	1.015	5.075	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Iron, Dissolved	10/5/20 11:33	10/6/20 11:59		1.015	1.30	mg/L	0.02	0.05	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	9/28/20 11:12	9/29/20 20:49		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	9/28/20 11:12	9/29/20 20:49		1.015	Not Detected	mg/L	0.001	0.005	U
* Barium, Total	9/28/20 11:12	10/1/20 15:34		1.015	0.299	mg/L	0.002	0.01	
* Beryllium, Total	9/28/20 11:12	9/29/20 20:49		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	9/28/20 11:12	9/29/20 20:49		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	9/28/20 11:12	9/29/20 20:49		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	9/28/20 11:12	9/29/20 20:49		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	9/28/20 11:12	9/29/20 20:49		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	9/28/20 11:12	9/29/20 20:49		1.015	0.00664	mg/L	0.002	0.01	J
* Potassium, Total	9/28/20 11:12	9/29/20 20:49		1.015	2.18	mg/L	0.3	2.5	J
* Manganese, Total	9/28/20 11:12	9/29/20 20:49		1.015	0.0474	mg/L	0.001	0.005	
* Selenium, Total	9/28/20 11:12	9/29/20 20:49		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	9/28/20 11:12	9/29/20 20:49		1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Manganese, Dissolved	9/28/20 09:17	9/29/20 15:54		1.015	0.0371	mg/L	0.001	0.005	
Analytical Method: EPA 245.1	***Analyst: GAS***								
* Mercury, Total by CVAA	10/6/20 08:20	10/6/20 12:39		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2320 B	***Analyst: JAG***								
Alkalinity, Total as CaCO3	10/1/20 13:00	10/1/20 13:20		1	325	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: TJW***								
* Solids, Dissolved	9/25/20 13:30	9/29/20 08:00		1	368	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 10/16/20

Reported: 11/3/2020
Version: 3.1
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-17V

Location Code: WMWGORAP
Collected: 9/23/20 13:49
Customer ID:
Submittal Date: 9/24/20 09:05

Laboratory ID Number: BA17908

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 4500CO2 D		***Analyst: JAG***							
Bicarbonate Alkalinity, (calc.)	10/1/20 13:00	10/1/20 13:20		1	323	mg/L			
Carbonate Alkalinity, (calc.)	10/1/20 13:00	10/1/20 13:20		1	1.96	mg/L			
Analytical Method: SM4500Cl E		***Analyst: JCC***							
* Chloride	9/25/20 14:38	9/25/20 14:38		1	3.74	mg/L	0.50	1	
Analytical Method: SM4500F G 2017		***Analyst: JCC***							
* Fluoride	9/28/20 13:17	9/28/20 13:17		1	0.278	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E 2011		***Analyst: JCC***							
* Sulfate	9/24/20 15:17	9/24/20 15:17		1	11.1	mg/L	0.50	1	
Analytical Method: Field Measurements		***Analyst: DKG***							
Conductivity	9/23/20 13:46	9/23/20 13:46			532.61	uS/cm			FA
pH	9/23/20 13:46	9/23/20 13:46			7.53	SU			FA
Temperature	9/23/20 13:46	9/23/20 13:46			19.56	C			FA
Turbidity	9/23/20 13:46	9/23/20 13:46			0.48	NTU			FA

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

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 10/16/20

Reported: 11/3/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORAP
Sample Date: 9/23/20 13:49
Customer ID:
Delivery Date: 9/24/20 09:05

Description: Gorgas Ash Pond - MW-17V

Laboratory ID Number: BA17908

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA17909	Lead, Total	mg/L	0.000007	0.0001474	0.100	0.106	0.105	0.105	0.085 to 0.115	106	70 to 130	0.948	20
BA17901	Manganese, Dissolved	mg/L	0.0000149	0.0001474	0.10	0.141	0.145	0.106	0.085 to 0.115	102	70 to 130	2.80	20
BA17909	Beryllium, Total	mg/L	0.0000025	0.00088	0.100	0.0869	0.0870	0.0970	0.085 to 0.115	86.9	70 to 130	0.115	20
BA17909	Iron, Total	mg/L	0.000757	0.0176	0.2	0.317	0.316	0.193	0.17 to 0.23	95.0	70 to 130	0.316	20
BA17909	Selenium, Total	mg/L	0.000192	0.001	0.100	0.0914	0.0940	0.107	0.085 to 0.115	91.4	70 to 130	2.80	20
BA17909	Boron, Total	mg/L	0.000485	0.0650254	1.00	1.14	1.13	0.973	0.85 to 1.15	101	70 to 130	0.881	20
BA17909	Calcium, Total	mg/L	0.000921	0.1518	5.00	126	121	4.86	4.25 to 5.75	140	70 to 130	4.05	20
BA17909	Sodium, Total	mg/L	0.00118	0.044	5.00	995	1020	4.80	4.25 to 5.75	-500	70 to 130	2.48	20
BA17909	Arsenic, Total	mg/L	0.0000117	0.0001474	0.100	0.108	0.109	0.106	0.085 to 0.115	98.0	70 to 130	0.922	20
BA17909	Cobalt, Total	mg/L	-0.0000098	0.0001474	0.100	0.102	0.105	0.108	0.085 to 0.115	102	70 to 130	2.90	20
BA17909	Magnesium, Total	mg/L	-0.00184	0.0462	5.00	33.2	32.6	4.88	4.25 to 5.75	100	70 to 130	1.82	20
BA17908	Iron, Dissolved	mg/L	0.000412	0.0176	0.2	1.48	1.47	0.190	0.17 to 0.23	90.0	70 to 130	0.678	20
BA17909	Cadmium, Total	mg/L	0.00000	0.0001474	0.100	0.0960	0.0977	0.104	0.085 to 0.115	96.0	70 to 130	1.76	20
BA17909	Potassium, Total	mg/L	0.0382	0.3674	10.0	194	198	9.69	8.5 to 11.5	10.0	70 to 130	2.04	20
BA17909	Antimony, Total	mg/L	0.000377	0.001	0.100	0.107	0.110	0.0990	0.085 to 0.115	107	70 to 130	2.76	20
BA17909	Barium, Total	mg/L	-0.0000061	0.0002	0.10	0.154	0.150	0.106	0.085 to 0.115	110	70 to 130	2.63	20
BA17909	Chromium, Total	mg/L	0.000115	0.00044	0.100	0.0999	0.104	0.105	0.085 to 0.115	99.9	70 to 130	4.02	20
BA17909	Mercury, Total by CVAA	mg/L	-0.0000448	0.0005	0.004	0.00410	0.00414	0.00441	0.0034 to 0.0046	102	70 to 130	0.971	20
BA17909	Manganese, Total	mg/L	0.0000196	0.0001474	0.100	0.148	0.154	0.0982	0.085 to 0.115	102	70 to 130	3.97	20
BA17909	Thallium, Total	mg/L	0.0000139	0.0001474	0.100	0.101	0.100	0.103	0.085 to 0.115	101	70 to 130	0.995	20
BA17909	Lithium, Total	mg/L	0.0000227	0.0154	0.20	0.372	0.359	0.184	0.17 to 0.23	118	70 to 130	3.56	20
BA17909	Molybdenum, Total	mg/L	0.0000274	0.0001474	0.100	0.215	0.219	0.108	0.085 to 0.115	95.0	70 to 130	1.84	20

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 10/16/20

Reported: 11/3/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/23/20 13:49
Customer ID:
Delivery Date: 9/24/20 09:05

Description: Gorgas Ash Pond - MW-17V

Laboratory ID Number: BA17908

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA17909	Chloride	mg/L	0.212	0.50	1000	2040	1080	10.7	9 to 11	94.0	80 to 120	1.83	20
BA17909	Sulfate	mg/L	-0.496	0.50	1000	2140	1140	20.1	18 to 22	102	80 to 120	1.77	20
BA17909	Fluoride	mg/L	0.0182	0.05	2.50	3.31	0.677	2.61	2.25 to 2.75	107	80 to 120	5.46	20
BA17909	Alkalinity, Total as CaCO3	mg/L					283	51.0	45.0 to 55.0			1.40	10
BA17909	Solids, Dissolved	mg/L	-1.00	25			3620	50.0	40 to 60			0.958	5

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 10/16/20

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-21V

Location Code: WMWGORAP
Collected: 9/23/20 16:37
Customer ID:
Submittal Date: 9/24/20 09:05

Laboratory ID Number: BA17909

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	10/5/20 10:25	10/7/20 14:07		1.015	0.126	mg/L	0.03	0.1	
* Calcium, Total	10/5/20 10:25	10/7/20 14:44		10.15	119	mg/L	1.015	5.075	RA
* Iron, Total	10/5/20 10:25	10/7/20 14:07		1.015	0.127	mg/L	0.02	0.05	
* Lithium, Total	10/5/20 10:25	10/7/20 14:07		1.015	0.137	mg/L	0.01	0.02	
* Magnesium, Total	10/5/20 10:25	10/7/20 14:07		1.015	28.2	mg/L	0.1	0.5	
* Sodium, Total	10/5/20 10:25	10/7/20 15:02		101.5	1020	mg/L	10.15	50.75	RA
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Iron, Dissolved	10/5/20 11:33	10/6/20 12:14		1.015	0.0989	mg/L	0.02	0.05	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	9/28/20 11:12	9/29/20 20:52		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	9/28/20 11:12	9/29/20 20:52		1.015	0.0100	mg/L	0.001	0.005	
* Barium, Total	9/28/20 11:12	10/1/20 15:36		1.015	0.0438	mg/L	0.002	0.01	
* Beryllium, Total	9/28/20 11:12	9/29/20 20:52		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	9/28/20 11:12	9/29/20 20:52		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	9/28/20 11:12	9/29/20 20:52		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	9/28/20 11:12	9/29/20 20:52		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	9/28/20 11:12	9/29/20 20:52		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	9/28/20 11:12	9/29/20 20:52		1.015	0.120	mg/L	0.002	0.01	
* Potassium, Total	9/28/20 11:12	10/1/20 15:55		5.075	193	mg/L	1.5225	12.6875	RA
* Manganese, Total	9/28/20 11:12	9/29/20 20:52		1.015	0.0458	mg/L	0.001	0.005	
* Selenium, Total	9/28/20 11:12	9/29/20 20:52		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	9/28/20 11:12	9/29/20 20:52		1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Manganese, Dissolved	9/28/20 09:17	9/29/20 15:56		1.015	0.0204	mg/L	0.001	0.005	
Analytical Method: EPA 245.1	***Analyst: GAS***								
* Mercury, Total by CVAA	10/6/20 08:20	10/6/20 12:42		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2320 B	***Analyst: JAG***								
Alkalinity, Total as CaCO3	10/1/20 13:00	10/1/20 13:20		1	287	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: TJW***								
* Solids, Dissolved	9/25/20 13:30	9/29/20 08:00		1	3690	mg/L		312.5	

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 10/16/20

Reported: 11/3/2020
Version: 3.1
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-21V

Location Code: WMWGORAP
Collected: 9/23/20 16:37
Customer ID:
Submittal Date: 9/24/20 09:05

Laboratory ID Number: BA17909

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 4500CO2 D		***Analyst: JAG***							
Bicarbonate Alkalinity, (calc.)	10/1/20 13:00	10/1/20 13:20		1	284	mg/L			
Carbonate Alkalinity, (calc.)	10/1/20 13:00	10/1/20 13:20		1	2.50	mg/L			
Analytical Method: SM4500Cl E		***Analyst: JCC***							
* Chloride	9/25/20 14:50	9/25/20 14:50		100	1100	mg/L	50.00	100	
Analytical Method: SM4500F G 2017		***Analyst: JCC***							
* Fluoride	9/28/20 13:18	9/28/20 13:18		1	0.641	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E 2011		***Analyst: JCC***							
* Sulfate	9/24/20 15:18	9/24/20 15:18		50	1120	mg/L	25.00	50	
Analytical Method: Field Measurements		***Analyst: DKG***							
Conductivity	9/23/20 16:34	9/23/20 16:34			4568.51	uS/cm			FA
pH	9/23/20 16:34	9/23/20 16:34			7.81	SU			FA
Temperature	9/23/20 16:34	9/23/20 16:34			22.01	C			FA
Turbidity	9/23/20 16:34	9/23/20 16:34			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 10/16/20

Reported: 11/3/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORAP
Sample Date: 9/23/20 16:37
Customer ID:
Delivery Date: 9/24/20 09:05

Description: Gorgas Ash Pond - MW-21V

Laboratory ID Number: BA17909

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA17909	Lead, Total	mg/L	0.000007	0.0001474	0.100	0.106	0.105	0.105	0.085 to 0.115	106	70 to 130	0.948	20
BA17909	Lithium, Total	mg/L	0.0000227	0.0154	0.20	0.372	0.359	0.184	0.17 to 0.23	118	70 to 130	3.56	20
BA17909	Molybdenum, Total	mg/L	0.0000274	0.0001474	0.100	0.215	0.219	0.108	0.085 to 0.115	95.0	70 to 130	1.84	20
BA17909	Cadmium, Total	mg/L	0.00000	0.0001474	0.100	0.0960	0.0977	0.104	0.085 to 0.115	96.0	70 to 130	1.76	20
BA17909	Potassium, Total	mg/L	0.0382	0.3674	10.0	194	198	9.69	8.5 to 11.5	10.0	70 to 130	2.04	20
BA17909	Antimony, Total	mg/L	0.000377	0.001	0.100	0.107	0.110	0.0990	0.085 to 0.115	107	70 to 130	2.76	20
BA17909	Barium, Total	mg/L	-0.0000061	0.0002	0.10	0.154	0.150	0.106	0.085 to 0.115	110	70 to 130	2.63	20
BA17909	Chromium, Total	mg/L	0.000115	0.00044	0.100	0.0999	0.104	0.105	0.085 to 0.115	99.9	70 to 130	4.02	20
BA17909	Mercury, Total by CVAA	mg/L	-0.0000448	0.0005	0.004	0.00410	0.00414	0.00441	0.0034 to 0.0046	102	70 to 130	0.971	20
BA17909	Manganese, Total	mg/L	0.0000196	0.0001474	0.100	0.148	0.154	0.0982	0.085 to 0.115	102	70 to 130	3.97	20
BA17909	Thallium, Total	mg/L	0.0000139	0.0001474	0.100	0.101	0.100	0.103	0.085 to 0.115	101	70 to 130	0.995	20
BA17901	Manganese, Dissolved	mg/L	0.0000149	0.0001474	0.10	0.141	0.145	0.106	0.085 to 0.115	102	70 to 130	2.80	20
BA17909	Beryllium, Total	mg/L	0.0000025	0.00088	0.100	0.0869	0.0870	0.0970	0.085 to 0.115	86.9	70 to 130	0.115	20
BA17909	Iron, Dissolved	mg/L	0.000412	0.0176	0.2	0.281	0.267	0.190	0.17 to 0.23	91.0	70 to 130	5.11	20
BA17909	Iron, Total	mg/L	0.000757	0.0176	0.2	0.317	0.316	0.193	0.17 to 0.23	95.0	70 to 130	0.316	20
BA17909	Selenium, Total	mg/L	0.000192	0.001	0.100	0.0914	0.0940	0.107	0.085 to 0.115	91.4	70 to 130	2.80	20
BA17909	Arsenic, Total	mg/L	0.0000117	0.0001474	0.100	0.108	0.109	0.106	0.085 to 0.115	98.0	70 to 130	0.922	20
BA17909	Cobalt, Total	mg/L	-0.0000098	0.0001474	0.100	0.102	0.105	0.108	0.085 to 0.115	102	70 to 130	2.90	20
BA17909	Magnesium, Total	mg/L	-0.00184	0.0462	5.00	33.2	32.6	4.88	4.25 to 5.75	100	70 to 130	1.82	20
BA17909	Boron, Total	mg/L	0.000485	0.0650254	1.00	1.14	1.13	0.973	0.85 to 1.15	101	70 to 130	0.881	20
BA17909	Calcium, Total	mg/L	0.000921	0.1518	5.00	126	121	4.86	4.25 to 5.75	140	70 to 130	4.05	20
BA17909	Sodium, Total	mg/L	0.00118	0.044	5.00	995	1020	4.80	4.25 to 5.75	-500	70 to 130	2.48	20

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 10/16/20

Reported: 11/3/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/23/20 16:37
Customer ID:
Delivery Date: 9/24/20 09:05

Description: Gorgas Ash Pond - MW-21V

Laboratory ID Number: BA17909

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA17909	Solids, Dissolved	mg/L	-1.00	25			3620	50.0	40 to 60			0.958	5
BA17909	Fluoride	mg/L	0.0182	0.05	2.50	3.31	0.677	2.61	2.25 to 2.75	107	80 to 120	5.46	20
BA17909	Chloride	mg/L	0.212	0.50	1000	2040	1080	10.7	9 to 11	94.0	80 to 120	1.83	20
BA17909	Alkalinity, Total as CaCO3	mg/L					283	51.0	45.0 to 55.0			1.40	10
BA17909	Sulfate	mg/L	-0.496	0.50	1000	2140	1140	20.1	18 to 22	102	80 to 120	1.77	20

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 10/16/20

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

Definitions

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.
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	Dallas Gentry	Location	Gorgas Ash Pond

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-25HA	09/17/2020	09:08	6	Groundwater		BA17561
PZ-16	09/17/2020	11:55	6	Groundwater		BA17562
PZ-16 dup	09/17/2020	11:55	6	Sample Duplicate		BA17563
PZ-22	09/17/2020	13:07	6	Groundwater		BA17564
MW-36H	09/17/2020	15:01	6	Groundwater		BA17565

Relinquished By	Received By	Date/Time
		09/18/2020 08:31

SmarTroll ID	7586-41442-5-1
Turbidity ID	7081-38476-1-1
Sample Event	1303

All metals and radiological bottles have pH < 2 ☑

Cooler Temp	0.2 degrees C
Thermometer ID	5408-27568-2-2
pH Strip ID	8129-45507-2-2

Bottles/Pre-Preserved Bottles are provided by the GTL

Chain of Custody
Groundwater
APC General Testing Laboratory

Alabama Power Lab & Field Services

☑ Field Complete ☐ Outside Lab

☑ Lab Complete

Lab ETA: 09/18/2020 10:00

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

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: Dissolved set collected @ MW-7. TJD Correcting bottle count for MW-7 Diss from 6 to 5. LBM 9/18/20
Updating name of MW-7 DISS to MW-7 DIS for COA report. LBM 11/2/20

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-6V	09/15/2020	15:35	6	Groundwater		BA17551
MW-7	09/16/2020	11:50	6	Groundwater		BA17552
MW-7 Dis	09/16/2020	11:50	5	Groundwater		BA17553
MW-6S	09/16/2020	14:33	6	Groundwater		BA17554
MW-6S Dup	09/16/2020	14:33	6	Sample Duplicate		BA17555
MW-6D	09/17/2020	09:35	6	Groundwater		BA17556
MW-23H	09/17/2020	11:25	6	Groundwater		BA17557
MW-41HD	09/17/2020	13:05	6	Groundwater		BA17558
MW-24H	09/17/2020	14:20	6	Groundwater		BA17559
FB-1	09/17/2020	14:45	4	Field Blank		BA17560

Relinquished By	Received By	Date/Time
		09/18/2020 09:05

SmarTroll ID	7586-41444-5-3
Turbidity ID	4677-23342-4-1
Sample Event	1303

All metals and radiological bottles have pH < 2 ☑

Cooler Temp	1.1 degrees C
Thermometer ID	5408-27568-2-2
pH Strip ID	8129-45507-2-2

Bottles/Pre-Preserved Bottles are provided by the GTL

7.1

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	TJ Daugherty	Location	Gorgas Ash Pond

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-8	09/21/2020	12:08	6	Groundwater		BA17794
MW-26H	09/21/2020	15:55	6	Groundwater		BA17795
MW-26H Dis	09/21/2020	15:55	5	Groundwater		BA17796
MW-40H	09/22/2020	09:58	6	Groundwater		BA17797
MW-9V	09/22/2020	13:05	6	Groundwater		BA17798

Relinquished By	Received By	Date/Time
		09/22/2020 14:44
		09/23/2020 09:04

SmarTroll ID	7586-41444-5-3
Turbidity ID	4677-23342-4-1
Sample Event	1303

All metals and radiological bottles have pH < 2 ✔

Cooler Temp	1.3 °C
Thermometer ID	7044-38281-2-1
pH Strip ID	7925-43756-2-2

Bottles/Pre-Preserved Bottles are provided by the GTL

7.1

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 Ash Pond

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: correcting Turbidity ID per collector request. LBM 9/28/20

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-15V	09/21/2020	11:18	6	Groundwater		BA17776
MW-17	09/21/2020	12:48	6	Groundwater		BA17777
FB-2	09/21/2020	14:15	4	Field Blank		BA17778
MW-32H	09/21/2020	14:42	6	Groundwater		BA17779
MW-30HA	09/21/2020	16:28	6	Groundwater		BA17780
MW-31H	09/22/2020	10:04	6	Groundwater		BA17781
MW-43H	09/22/2020	11:30	6	Groundwater		BA17782
MW-28H	09/22/2020	13:04	6	Groundwater		BA17783
PZ-18	09/22/2020	15:28	6	Groundwater		BA17784
PZ-18 dup	09/22/2020	15:28	6	Sample Duplicate		BA17785
MW-18V	09/22/2020	16:28	6	Groundwater		BA17786
FB-3	09/22/2020	17:20	4	Field Blank		BA17787

Relinquished By	Received By	Date/Time
[signature]	[signature]	09/23/2020 08:20

SmarTroll ID	7586-41442-5-1
Turbidity ID	7081-38476-1-1
Sample Event	1303

All metals and radiological bottles have pH < 2 ✔

Cooler Temp	1.5 °C
Thermometer ID	7044-38281-2-1
pH Strip ID	7925-43756-2-2

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	Anthony Goggins	Location	Gorgas Ash Pond

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-16S	09/21/2020	15:45	6	Groundwater		BA17788
MW-16D	09/22/2020	09:18	6	Groundwater		BA17789
MW-42H	09/22/2020	10:50	6	Groundwater		BA17790
MW42H DUP	09/22/2020	10:50	6	Sample Duplicate		BA17791
MW-2	09/22/2020	12:37	6	Groundwater		BA17792
MW-19	09/22/2020	13:56	6	Groundwater		BA17793

Relinquished By	Received By	Date/Time
		09/23/2020 09:03

SmarTroll ID	7586-41445-5-4
Turbidity ID	5160-26211-1-1
Sample Event	1303

All metals and radiological bottles have pH < 2 ✔

Cooler Temp	1.3 °C
Thermometer ID	7044-38281-2-1
pH Strip ID	7925-43756-2-2

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 Ash Pond

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-15	09/23/2020	11:37	6	Groundwater		BA17907
MW-17V	09/23/2020	13:49	6	Groundwater		BA17908
MW-21V	09/23/2020	16:37	6	Groundwater		BA17909

Relinquished By	Received By	Date/Time
[signature]	[signature]	09/24/2020 08:25

SmarTroll ID	7586-41442-5-1
Turbidity ID	7081-38476-1-1
Sample Event	1303

All metals and radiological bottles have pH < 2 ✔

Cooler Temp	1.1 °C
Thermometer ID	7044-38281-2-1
pH Strip ID	7925-43756-2-2

Bottles/Pre-Preserved Bottles are provided by the GTL

Chain of Custody
Groundwater
APC General Testing Laboratory

Alabama Power Lab & Field Services

☑ Field Complete ☐ Outside Lab

☑ Lab Complete

Lab ETA 09/24/2020 10:00

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

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: Dissolved set collected at MW-12V

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-38H	09/22/2020	15:10	6	Groundwater		BA17898
MW-29H	09/22/2020	16:45	6	Groundwater		BA17899
MW-12V	09/23/2020	10:15	6	Groundwater		BA17900
MW-12V Dis	09/23/2020	10:15	5	Groundwater		BA17901
MW-12	09/23/2020	13:10	6	Groundwater		BA17902
MW-21	09/23/2020	16:15	6	Groundwater		BA17903
FB-4	09/23/2020	17:00	4	Field Blank		BA17904
EB-1	09/23/2020	17:10	4	Equipment Blank		BA17905
MW-18	09/23/2020	18:05	6	Groundwater		BA17906

Relinquished By	Received By	Date/Time
[signature]	Brooke Caton	09/24/2020 08:24

SmarTroll ID	7586-41444-5-3
Turbidity ID	4677-23342-4-1
Sample Event	1303

All metals and radiological bottles have pH < 2 ☑

Cooler Temp	1.4 °C
Thermometer ID	7044-38281-2-1
pH Strip ID	7925-43756-2-2

Bottles/Pre-Preserved Bottles are provided by the GTL

7.1

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 Ash Pond

Bottles

1	Radium	1 L	3	N/A	N/A	5	N/A	N/A	7	N/A	N/A
2	N/A	N/A	4	N/A	N/A	6	N/A	N/A	8	N/A	N/A

Comments: Radium MS/MSD collected at PZ-22

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-25HA	09/17/2020	09:08	1	Groundwater		BA17576
PZ-16	09/17/2020	11:55	1	Groundwater		BA17577
PZ-16 dup	09/17/2020	11:55	1	Sample Duplicate		BA17578
PZ-22	09/17/2020	13:07	3	Groundwater		BA17579
MW-36H	09/17/2020	15:01	1	Groundwater		BA17580

Relinquished By	Received By	Date/Time
		09/18/2020 08:31

SmarTroll ID	7586-41442-5-1
Turbidity ID	7081-38476-1-1
Sample Event	1303

All metals and radiological bottles have pH < 2 ✔

Cooler Temp	N/A
Thermometer ID	N/A
pH Strip ID	8129-45507-2-2

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 09/18/2020 10:00

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

Bottles

1	Radium	1 L	3	N/A	N/A	5	N/A	N/A	7	N/A	N/A
2	N/A	N/A	4	N/A	N/A	6	N/A	N/A	8	N/A	N/A

Comments: Dissolved set collected @ MW-7. Radium MS/MSD collected @ MW-6D TJD

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-6V	09/15/2020	15:35	1	Groundwater		BA17566
MW-7	09/16/2020	11:50	1	Groundwater		BA17567
MW-7 Diss	09/16/2020	11:50	1	Groundwater		BA17568
MW-6S	09/16/2020	14:33	1	Groundwater		BA17569
MW-6S Dup	09/16/2020	14:33	1	Sample Duplicate		BA17570
MW-6D	09/17/2020	09:35	3	Groundwater		BA17571
MW-23H	09/17/2020	11:25	1	Groundwater		BA17572
MW-41HD	09/17/2020	13:05	1	Groundwater		BA17573
MW-24H	09/17/2020	14:20	1	Groundwater		BA17574
FB-1	09/17/2020	14:45	1	Field Blank		BA17575

Relinquished By	Received By	Date/Time
		09/18/2020 09:05

SmarTroll ID	7586-41444-5-3
Turbidity ID	4677-23342-4-1
Sample Event	1303

All metals and radiological bottles have pH < 2 ✔

Cooler Temp	N/A
Thermometer ID	N/A
pH Strip ID	8129-45507-2-2

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 Ash Pond

Bottles

1	Radium	1 L	3	N/A	N/A	5	N/A	N/A	7	N/A	N/A
2	N/A	N/A	4	N/A	N/A	6	N/A	N/A	8	N/A	N/A

Comments

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-8	09/21/2020	12:08	1	Groundwater		BA17817
MW-26H	09/21/2020	15:55	1	Groundwater		BA17818
MW-26H Dis	09/21/2020	15:55	1	Groundwater		BA17819
MW-40H	09/22/2020	09:58	1	Groundwater		BA17820
MW-9V	09/22/2020	13:05	1	Groundwater		BA17821

Relinquished By	Received By	Date/Time
		09/22/2020 14:46
		09/23/2020 09:04

SmarTroll ID	7586-41444-5-3
Turbidity ID	4677-23342-4-1
Sample Event	1303

All metals and radiological bottles have pH < 2 ✔

Cooler Temp	N/A
Thermometer ID	N/A
pH Strip ID	7925-43756-2-2

Bottles/Pre-Preserved Bottles are provided by the GTL

7.1

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 Ash Pond

Bottles

1	Radium	1 L	3	N/A	N/A	5	N/A	N/A	7	N/A	N/A
2	N/A	N/A	4	N/A	N/A	6	N/A	N/A	8	N/A	N/A

Comments: Correcting Turbidity ID per collector request. LBM 9/28/20

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-15V	09/21/2020	11:18	1	Groundwater		BA17799
MW-17	09/21/2020	12:48	1	Groundwater		BA17800
FB-2	09/21/2020	14:15	1	Field Blank		BA17801
MW-32H	09/21/2020	14:42	1	Groundwater		BA17802
MW-30HA	09/21/2020	16:28	1	Groundwater		BA17803
MW-31H	09/22/2020	10:04	1	Groundwater		BA17804
MW-43H	09/22/2020	11:30	1	Groundwater		BA17805
MW-28H	09/22/2020	13:04	1	Groundwater		BA17806
PZ-18	09/22/2020	15:28	1	Groundwater		BA17807
PZ-18 dup	09/22/2020	15:28	1	Sample Duplicate		BA17808
MW-18V	09/22/2020	16:28	1	Groundwater		BA17809
FB-3	09/22/2020	17:20	1	Field Blank		BA17810

Relinquished By	Received By	Date/Time
Dallas Gentry	Brooke Cotton	09/23/2020 08:20

SmarTroll ID	7586-41442-5-1
Turbidity ID	7081-38476-1-1
Sample Event	1303

All metals and radiological bottles have pH < 2 ☑

Cooler Temp	N/A
Thermometer ID	N/A
pH Strip ID	7925-43756-2-2

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	Anthony Goggins	Location	Gorgas Ash Pond

Bottles

1	Radium	1 L	3	N/A	N/A	5	N/A	N/A	7	N/A	N/A
2	N/A	N/A	4	N/A	N/A	6	N/A	N/A	8	N/A	N/A

Comments

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-16S	09/21/2020	15:45	1	Groundwater		BA17811
MW-16D	09/22/2020	09:18	1	Groundwater		BA17812
MW-42H	09/22/2020	10:50	1	Groundwater		BA17813
MW42H DUP	09/22/2020	10:50	1	Sample Duplicate		BA17814
MW-2	09/22/2020	12:37	1	Groundwater		BA17815
MW-19	09/22/2020	13:56	1	Groundwater		BA17816

Relinquished By	Received By	Date/Time
		09/23/2020 09:03

SmarTroll ID	7586-41445-5-4
Turbidity ID	5160-26211-1-1
Sample Event	1303

All metals and radiological bottles have pH < 2 ✔

Cooler Temp	N/A
Thermometer ID	N/A
pH Strip ID	7925-43756-2-2

Bottles/Pre-Preserved Bottles are provided by the GTL

7.1

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 Ash Pond

Bottles

1	Radium	1 L	3	N/A	N/A	5	N/A	N/A	7	N/A	N/A
2	N/A	N/A	4	N/A	N/A	6	N/A	N/A	8	N/A	N/A

Comments

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-15	09/23/2020	11:37	1	Groundwater		BA17919
MW-17V	09/23/2020	13:49	1	Groundwater		BA17920
MW-21V	09/23/2020	16:37	1	Groundwater		BA17921

Relinquished By	Received By	Date/Time
[signature]	[signature]	09/24/2020 08:25

SmarTroll ID	7586-41442-5-1
Turbidity ID	7081-38476-1-1
Sample Event	1303

All metals and radiological bottles have pH < 2 ✔

Cooler Temp	N/A
Thermometer ID	N/A
pH Strip ID	7925-43756-2-2

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 09/24/2020 10:00

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

Bottles

1	Radium	1 L	3	N/A	N/A	5	N/A	N/A	7	N/A	N/A
2	N/A	N/A	4	N/A	N/A	6	N/A	N/A	8	N/A	N/A

Comments: Dissolved set collected at MW-12V. Rad MS/MSD collected @ MW-18

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-38H	09/22/2020	15:10	1	Groundwater		BA17910
MW-29H	09/22/2020	16:45	1	Groundwater		BA17911
MW-12V	09/23/2020	10:15	1	Groundwater		BA17912
MW-12V Dis	09/23/2020	10:15	1	Groundwater		BA17913
MW-12	09/23/2020	13:10	1	Groundwater		BA17914
MW-21	09/23/2020	16:15	1	Groundwater		BA17915
FB-4	09/23/2020	17:00	1	Field Blank		BA17916
EB-1	09/23/2020	17:10	1	Equipment Blank		BA17917
MW-18	09/23/2020	18:05	3	Groundwater		BA17918

Relinquished By	Received By	Date/Time
[signature]	Brooke Caton	09/24/2020 08:24

SmarTroll ID	7586-41444-5-3
Turbidity ID	4677-23342-4-1
Sample Event	1303

All metals and radiological bottles have pH < 2 ✔

Cooler Temp	N/A
Thermometer ID	N/A
pH Strip ID	7925-43756-2-2

Bottles/Pre-Preserved Bottles are provided by the GTL

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ANALYTICAL REPORT

Eurofins TestAmerica, Pensacola
3355 McLemore Drive
Pensacola, FL 32514
Tel: (850)474-1001

Laboratory Job ID: 400-193810-1
Laboratory Sample Delivery Group: Gorgas Ash Pond 1303
Client Project/Site: CCR Plant Gorgas

For:
Alabama Power General Test Laboratory
744 County Rd 87
GSC #8
Calera, Alabama 35040

Attn: Laura Midkiff

Authorized for release by:
11/4/2020 6:47:03 PM

Cheyenne Whitmire, Project Manager II
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The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Job ID: 400-193810-1

Laboratory: Eurofins TestAmerica, Pensacola

Narrative

Job Narrative
400-193810-1

RAD

Method 9315: Ra-226 prep batch 160-484743. Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. BA17572 MW-23H (400-193810-7), BA17573 MW-41HD (400-193810-8), BA17574 MW-24H (400-193810-9), BA17575 FB-1 (400-193810-10), BA17576 MW-25HA (400-193810-11), BA17577 PZ-16 (400-193810-12), BA17578 PZ-16 DUP (400-193810-13), BA17579 PZ-22 (400-193810-14), BA17579 PZ-22 (400-193810-14[MS]), BA17579 PZ-22 (400-193810-14[MSD]), BA17580 MW-36H (400-193810-15), (LCS 160-484743/1-A) and (MB 160-484743/24-A)

Method 9315: Radium-226 prep batch 160-484729. Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. BA17799 MW-15V (400-193810-16), BA17800 MW-17 (400-193810-17), BA17801 FB-2 (400-193810-18), BA17802 MW-32H (400-193810-19), BA17803 MW-30HA (400-193810-20), BA17804 MW-31H (400-193810-21), BA17805 MW-43H (400-193810-22), BA17806 MW-28H (400-193810-23), BA17807 PZ-18 (400-193810-24), BA17808 PZ-18 DUP (400-193810-25), BA17809 MW-18V (400-193810-26), BA17810 FB-3 (400-193810-27), BA17811 MW-16S (400-193810-28), (LCS 160-484729/1-A), (LCSD 160-484729/2-A) and (MB 160-484729/23-A)

Method 9315: Radium-226 prep batch 160-485002. Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. BA17821 MW-9V (400-193810-38), BA17910 MW-38H (400-193810-39), BA17911 MW-29H (400-193810-40), BA17912 MW-12V (400-193810-41), BA17913 MW-12V DIS (400-193810-42), BA17914 MW-12 (400-193810-43), BA17915 MW-21 (400-193810-44), BA17916 FB-4 (400-193810-45), BA17917 EB-1 (400-193810-46), BA17918 MW-18 (400-193810-47), BA17918 MW-18 (400-193810-47[MS]), BA17918 MW-18 (400-193810-47[MSD]), BA17919 MW-15 (400-193810-48), BA17920 MW-17V (400-193810-49), BA17921 MW-21V (400-193810-50), (LCS 160-485002/1-A) and (MB 160-485002/23-A)

Method 9315: Radium-226 prep batch 160-484723. Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. BA17566 MW-6V (400-193810-1), BA17567 MW-7 (400-193810-2), BA17568 MW-7 DISS (400-193810-3), BA17569 MW-6S (400-193810-4), BA17570 MW-6S DUP (400-193810-5), BA17571 MW-6D (400-193810-6), BA17571 MW-6D (400-193810-6[MS]), BA17571 MW-6D (400-193810-6[MSD]), BA17812 MW-16D (400-193810-29), BA17813 MW-42H (400-193810-30), BA17814 MW-42H DUP (400-193810-31), BA17815 MW-2 (400-193810-32), BA17816 MW-19 (400-193810-33), BA17817 MW-8 (400-193810-34), BA17818 MW-26H (400-193810-35), BA17819 MW-26H DIS (400-193810-36), BA17820 MW-40H (400-193810-37), (LCS 160-484723/1-A) and (MB 160-484723/24-A)

Method 9320: Radium-228 prep batch 160-484744. The following sample exhibited a negative result greater in magnitude than the 3 sigma TPU. This occurrence was evaluated and determined to be random in nature. Sporadic occurrences such as this are statistically expected. No further action is required. BA17576 MW-25HA (400-193810-11)

Method 9320: Radium-228 prep batch 160-484744. Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. BA17572 MW-23H (400-193810-7), BA17573 MW-41HD (400-193810-8), BA17574 MW-24H (400-193810-9), BA17575 FB-1 (400-193810-10), BA17576 MW-25HA (400-193810-11), BA17577 PZ-16 (400-193810-12), BA17578 PZ-16 DUP (400-193810-13), BA17579 PZ-22 (400-193810-14), BA17579 PZ-22 (400-193810-14[MS]), BA17579 PZ-22 (400-193810-14[MSD]), BA17580 MW-36H (400-193810-15), (LCS 160-484744/1-A) and (MB 160-484744/24-A)

Method 9320: Radium-228 prep batch 160-484733. Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. BA17799 MW-15V (400-193810-16), BA17800 MW-17 (400-193810-17), BA17801 FB-2 (400-193810-18), BA17802 MW-32H (400-193810-19), BA17803 MW-30HA (400-193810-20), BA17804 MW-31H (400-193810-21), BA17805 MW-43H (400-193810-22), BA17806 MW-28H (400-193810-23), BA17807 PZ-18 (400-193810-24), BA17808 PZ-18 DUP (400-193810-25), BA17809 MW-18V (400-193810-26), BA17810 FB-3 (400-193810-27), BA17811 MW-16S (400-193810-28), (LCS 160-484733/1-A), (LCSD 160-484733/2-A) and (MB 160-484733/23-A)

Job ID: 400-193810-1 (Continued)

Laboratory: Eurofins TestAmerica, Pensacola (Continued)

Method 9320: Radium-228 prep batch 160-485003. Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. BA17821 MW-9V (400-193810-38), BA17910 MW-38H (400-193810-39), BA17911 MW-29H (400-193810-40), BA17912 MW-12V (400-193810-41), BA17913 MW-12V DIS (400-193810-42), BA17914 MW-12 (400-193810-43), BA17915 MW-21 (400-193810-44), BA17916 FB-4 (400-193810-45), BA17917 EB-1 (400-193810-46), BA17918 MW-18 (400-193810-47), BA17918 MW-18 (400-193810-47[MS]), BA17918 MW-18 (400-193810-47[MSD]), BA17919 MW-15 (400-193810-48), BA17920 MW-17V (400-193810-49), BA17921 MW-21V (400-193810-50), (LCS 160-485003/1-A) and (MB 160-485003/23-A)

Method 9320: Radium-228 prep batch 160-485003. The detection goal was not met for the following sample due to the presence of matrix interferences (See prep NCM 160-206804): BA17912 MW-12V (400-193810-41). Analytical results are reported with the detection limit achieved.

Method 9320: Radium-228 prep batch 160-484724. The detection goal was not met for the following sample due to the presence of matrix interferences (see prep NCM 160-204940): BA17567 MW-7 (400-193810-2). Analytical results are reported with the detection limit achieved.

Method 9320: Radium-228 prep batch 160-484724. Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. BA17566 MW-6V (400-193810-1), BA17567 MW-7 (400-193810-2), BA17568 MW-7 DISS (400-193810-3), BA17569 MW-6S (400-193810-4), BA17570 MW-6S DUP (400-193810-5), BA17571 MW-6D (400-193810-6), BA17571 MW-6D (400-193810-6[MS]), BA17571 MW-6D (400-193810-6[MSD]), BA17812 MW-16D (400-193810-29), BA17813 MW-42H (400-193810-30), BA17814 MW-42H DUP (400-193810-31), BA17815 MW-2 (400-193810-32), BA17816 MW-19 (400-193810-33), BA17817 MW-8 (400-193810-34), BA17818 MW-26H (400-193810-35), BA17819 MW-26H DIS (400-193810-36), BA17820 MW-40H (400-193810-37), (LCS 160-484724/1-A) and (MB 160-484724/24-A)

Method PrecSep_0: Radium 228 Prep Batch 160-484724. The following samples were prepared at a reduced aliquot to insure sufficient volume remains if needed for analysis: BA17566 MW-6V (400-193810-1), BA17567 MW-7 (400-193810-2), BA17568 MW-7 DISS (400-193810-3), BA17569 MW-6S (400-193810-4), BA17570 MW-6S DUP (400-193810-5), BA17571 MW-6D (400-193810-6), BA17571 MW-6D (400-193810-6[MS]), BA17571 MW-6D (400-193810-6[MSD]), BA17812 MW-16D (400-193810-29), BA17813 MW-42H (400-193810-30), BA17814 MW-42H DUP (400-193810-31), BA17815 MW-2 (400-193810-32), BA17816 MW-19 (400-193810-33), BA17817 MW-8 (400-193810-34), BA17818 MW-26H (400-193810-35), BA17819 MW-26H DIS (400-193810-36) and BA17820 MW-40H (400-193810-37).

Method PrecSep_0: Radium 228 Prep Batch 160-484724. Samples 400-193810-2 and 400-193810-35 were prepared at a further reduced aliquot due to gray discoloration and a cloudy appearance.

Method PrecSep_0: Radium 228 Prep Batch 160-484733. The following samples were prepared at a reduced aliquot to insure sufficient volume remains if needed for analysis: BA17799 MW-15V (400-193810-16), BA17800 MW-17 (400-193810-17), BA17801 FB-2 (400-193810-18), BA7802 MW-32H (400-193810-19), BA17803 MW-30HA (400-193810-20), BA17804 MW-31H (400-193810-21), BA17805 MW-43H (400-193810-22), BA17806 MW-28H (400-193810-23), BA17807 PZ-18 (400-193810-24), BA17808 PZ-18 DUP (400-193810-25), BA17809 MW-18V (400-193810-26), BA17810 FB-3 (400-193810-27) and BA17811 MW-16S (400-193810-28).

Method PrecSep_0: Radium 228 Prep Batch 160-484733. Insufficient sample volume was available to perform a sample duplicate for the following samples: BA17799 MW-15V (400-193810-16), BA17800 MW-17 (400-193810-17), BA17801 FB-2 (400-193810-18), BA17802 MW-32H (400-193810-19), BA17803 MW-30HA (400-193810-20), BA17804 MW-31H (400-193810-21), BA17805 MW-43H (400-193810-22), BA17806 MW-28H (400-193810-23), BA17807 PZ-18 (400-193810-24), BA17808 PZ-18 DUP (400-193810-25), BA17809 MW-18V (400-193810-26), BA17810 FB-3 (400-193810-27) and BA17811 MW-16S (400-193810-28). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead to demonstrate batch precision.

Method PrecSep_0: Radium 228 Prep Batch 160-484744. The following samples were prepared at a reduced aliquot to insure sufficient volume remains if needed for analysis: BA17572 MW-23H (400-193810-7), BA17573 MW-41HD (400-193810-8), BA17574 MW-24H (400-193810-9), BA17575 FB-1 (400-193810-10), BA17576 MW-25HA (400-193810-11), BA17577 PZ-16 (400-193810-12), BA17578 PZ-16 DUP (400-193810-13), BA17579 PZ-22 (400-193810-14), BA17579 PZ-22 (400-193810-14[MS]), BA17579 PZ-22

Job ID: 400-193810-1 (Continued)

Laboratory: Eurofins TestAmerica, Pensacola (Continued)

(400-193810-14[MSD]) and BA17580 MW-36H (400-193810-15).

Method PrecSep_0: Radium 228 Prep Batch 160-485003. The following samples were prepared at a reduced aliquot due to a cloudy appearance: BA17912 MW-12V (400-193810-41).

Method PrecSep_0: Radium 228 Prep Batch 160-485003. The following samples were prepared at a reduced aliquot to insure sufficient volume remains if needed for analysis: BA17821 MW-9V (400-193810-38), BA17910 MW-38H (400-193810-39), BA17911 MW-29H (400-193810-40), BA17912 MW-12V (400-193810-41), BA17913 MW-12V DIS (400-193810-42), BA17914 MW-12 (400-193810-43), BA17915 MW-21 (400-193810-44), BA17916 FB-4 (400-193810-45), BA17917 EB-1 (400-193810-46), BA17918 MW-18 (400-193810-47), BA17918 MW-18 (400-193810-47[MS]), BA17918 MW-18 (400-193810-47[MSD]), BA17919 MW-15 (400-193810-48), BA17920 MW-17V (400-193810-49) and BA17921 MW-21V (400-193810-50).

Method PrecSep-21: Radium 226 Prep Batch 160-484723. The following samples were prepared at a reduced aliquot to insure sufficient volume remains if needed for analysis: BA17566 MW-6V (400-193810-1), BA17567 MW-7 (400-193810-2), BA17568 MW-7 DISS (400-193810-3), BA17569 MW-6S (400-193810-4), BA17570 MW-6S DUP (400-193810-5), BA17571 MW-6D (400-193810-6), BA17571 MW-6D (400-193810-6[MS]), BA17571 MW-6D (400-193810-6[MSD]), BA17812 MW-16D (400-193810-29), BA17813 MW-42H (400-193810-30), BA17814 MW-42H DUP (400-193810-31), BA17815 MW-2 (400-193810-32), BA17816 MW-19 (400-193810-33), BA17817 MW-8 (400-193810-34), BA17818 MW-26H (400-193810-35), BA17819 MW-26H DIS (400-193810-36) and BA17820 MW-40H (400-193810-37).

Method PrecSep-21: Radium 226 Prep Batch 160-484723. Samples 400-193810-2 and 400-139810-35 were prepared at a reduced aliquot due to gray discoloration and a cloudy appearance.

Method PrecSep-21: Radium 226 Prep Batch 160-484729. Insufficient sample volume was available to perform a sample duplicate for the following samples: BA17799 MW-15V (400-193810-16), BA17800 MW-17 (400-193810-17), BA17801 FB-2 (400-193810-18), BA17802 MW-32H (400-193810-19), BA17803 MW-30HA (400-193810-20), BA17804 MW-31H (400-193810-21), BA17805 MW-43H (400-193810-22), BA17806 MW-28H (400-193810-23), BA17807 PZ-18 (400-193810-24), BA17808 PZ-18 DUP (400-193810-25), BA17809 MW-18V (400-193810-26), BA17810 FB-3 (400-193810-27) and BA17811 MW-16S (400-193810-28). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead to demonstrate batch precision.

Method PrecSep-21: Radium 226 Prep Batch 160-484729. The following samples were prepared at a reduced aliquot to insure sufficient volume remains if needed for analysis: BA17799 MW-15V (400-193810-16), BA17800 MW-17 (400-193810-17), BA17801 FB-2 (400-193810-18), BA17802 MW-32H (400-193810-19), BA17803 MW-30HA (400-193810-20), BA17804 MW-31H (400-193810-21), BA17805 MW-43H (400-193810-22), BA17806 MW-28H (400-193810-23), BA17807 PZ-18 (400-193810-24), BA17808 PZ-18 DUP (400-193810-25), BA17809 MW-18V (400-193810-26), BA17810 FB-3 (400-193810-27) and BA17811 MW-16S (400-193810-28).

Method PrecSep-21: Radium 226 Prep Batch 160-484743. The following samples were prepared at a reduced aliquot to insure sufficient volume remains if needed for analysis: BA17572 MW-23H (400-193810-7), BA17573 MW-41HD (400-193810-8), BA17574 MW-24H (400-193810-9), BA17575 FB-1 (400-193810-10), BA17576 MW-25HA (400-193810-11), BA17577 PZ-16 (400-193810-12), BA17578 PZ-16 DUP (400-193810-13), BA17579 PZ-22 (400-193810-14), BA17579 PZ-22 (400-193810-14[MS]), BA17579 PZ-22 (400-193810-14[MSD]) and BA17580 MW-36H (400-193810-15).

Method PrecSep-21: Radium 226 Prep Batch 160-485002. The following samples were prepared at a reduced aliquot to insure sufficient volume remains if needed for analysis: BA17821 MW-9V (400-193810-38), BA17910 MW-38H (400-193810-39), BA17911 MW-29H (400-193810-40), BA17912 MW-12V (400-193810-41), BA17913 MW-12V DIS (400-193810-42), BA17914 MW-12 (400-193810-43), BA17915 MW-21 (400-193810-44), BA17916 FB-4 (400-193810-45), BA17917 EB-1 (400-193810-46), BA17918 MW-18 (400-193810-47), BA17918 MW-18 (400-193810-47[MS]), BA17918 MW-18 (400-193810-47[MSD]), BA17919 MW-15 (400-193810-48), BA17920 MW-17V (400-193810-49) and BA17921 MW-21V (400-193810-50).

Method PrecSep-21: Radium 226 Prep Batch 160-485002: The following samples were prepared at a reduced aliquot due to a cloudy appearance: BA17912 MW-12V (400-193810-41).

Method Summary

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-193810-1
SDG: Gorgas Ash Pond 1303

Method	Method Description	Protocol	Laboratory
9315	Radium-226 (GFPC)	SW846	TAL SL
9320	Radium-228 (GFPC)	SW846	TAL SL
Ra226_Ra228	Combined Radium-226 and Radium-228	TAL-STL	TAL SL
Ra226_Ra228 (D)	Combined Radium-226 and Radium-228	TAL-STL	TAL SL
PrecSep_0	Preparation, Precipitate Separation	None	TAL SL
PrecSep-21	Preparation, Precipitate Separation (21-Day In-Growth)	None	TAL SL

Protocol References:

None = None

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

TAL-STL = TestAmerica Laboratories, St. Louis, Facility Standard Operating Procedure.

Laboratory References:

TAL SL = Eurofins TestAmerica, St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

Sample Summary

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-193810-1
SDG: Gorgas Ash Pond 1303

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
400-193810-1	BA17566 MW-6V	Water	09/15/20 15:35	09/30/20 12:40	
400-193810-2	BA17567 MW-7	Water	09/16/20 11:50	09/30/20 12:40	
400-193810-3	BA17568 MW-7 DISS	Water	09/16/20 11:50	09/30/20 12:40	
400-193810-4	BA17569 MW-6S	Water	09/16/20 14:33	09/30/20 12:40	
400-193810-5	BA17570 MW-6S DUP	Water	09/16/20 14:33	09/30/20 12:40	
400-193810-6	BA17571 MW-6D	Water	09/17/20 09:35	09/30/20 12:40	
400-193810-7	BA17572 MW-23H	Water	09/17/20 11:25	09/30/20 12:40	
400-193810-8	BA17573 MW-41HD	Water	09/17/20 13:05	09/30/20 12:40	
400-193810-9	BA17574 MW-24H	Water	09/17/20 14:20	09/30/20 12:40	
400-193810-10	BA17575 FB-1	Water	09/17/20 14:45	09/30/20 12:40	
400-193810-11	BA17576 MW-25HA	Water	09/17/20 09:08	09/30/20 12:40	
400-193810-12	BA17577 PZ-16	Water	09/17/20 11:55	09/30/20 12:40	
400-193810-13	BA17578 PZ-16 DUP	Water	09/17/20 11:55	09/30/20 12:40	
400-193810-14	BA17579 PZ-22	Water	09/17/20 13:07	09/30/20 12:40	
400-193810-15	BA17580 MW-36H	Water	09/17/20 15:01	09/30/20 12:40	
400-193810-16	BA17799 MW-15V	Water	09/21/20 11:18	09/30/20 12:40	
400-193810-17	BA17800 MW-17	Water	09/21/20 12:48	09/30/20 12:40	
400-193810-18	BA17801 FB-2	Water	09/21/20 14:15	09/30/20 12:40	
400-193810-19	BA17802 MW-32H	Water	09/21/20 14:42	09/30/20 12:40	
400-193810-20	BA17803 MW-30HA	Water	09/21/20 16:28	09/30/20 12:40	
400-193810-21	BA17804 MW-31H	Water	09/22/20 10:04	09/30/20 12:40	
400-193810-22	BA17805 MW-43H	Water	09/22/20 11:30	09/30/20 12:40	
400-193810-23	BA17806 MW-28H	Water	09/22/20 13:04	09/30/20 12:40	
400-193810-24	BA17807 PZ-18	Water	09/22/20 15:28	09/30/20 12:40	
400-193810-25	BA17808 PZ-18 DUP	Water	09/22/20 15:28	09/30/20 12:40	
400-193810-26	BA17809 MW-18V	Water	09/22/20 16:28	09/30/20 12:40	
400-193810-27	BA17810 FB-3	Water	09/22/20 17:20	09/30/20 12:40	
400-193810-28	BA17811 MW-16S	Water	09/21/20 15:45	09/30/20 12:40	
400-193810-29	BA17812 MW-16D	Water	09/22/20 09:18	09/30/20 12:40	
400-193810-30	BA17813 MW-42H	Water	09/22/20 10:50	09/30/20 12:40	
400-193810-31	BA17814 MW-42H DUP	Water	09/22/20 10:50	09/30/20 12:40	
400-193810-32	BA17815 MW-2	Water	09/22/20 12:37	09/30/20 12:40	
400-193810-33	BA17816 MW-19	Water	09/22/20 13:56	09/30/20 12:40	
400-193810-34	BA17817 MW-8	Water	09/21/20 12:08	09/30/20 12:40	
400-193810-35	BA17818 MW-26H	Water	09/21/20 15:55	09/30/20 12:40	
400-193810-36	BA17819 MW-26H DIS	Water	09/21/20 15:55	09/30/20 12:40	
400-193810-37	BA17820 MW-40H	Water	09/22/20 09:58	09/30/20 12:40	
400-193810-38	BA17821 MW-9V	Water	09/22/20 13:05	09/30/20 12:40	
400-193810-39	BA17910 MW-38H	Water	09/22/20 15:10	09/30/20 12:40	
400-193810-40	BA17911 MW-29H	Water	09/22/20 16:45	09/30/20 12:40	
400-193810-41	BA17912 MW-12V	Water	09/23/20 10:15	09/30/20 12:40	
400-193810-42	BA17913 MW-12V DIS	Water	09/23/20 10:15	09/30/20 12:40	
400-193810-43	BA17914 MW-12	Water	09/23/20 13:10	09/30/20 12:40	
400-193810-44	BA17915 MW-21	Water	09/23/20 16:15	09/30/20 12:40	
400-193810-45	BA17916 FB-4	Water	09/23/20 17:00	09/30/20 12:40	
400-193810-46	BA17917 EB-1	Water	09/23/20 17:10	09/30/20 12:40	
400-193810-47	BA17918 MW-18	Water	09/23/20 18:05	09/30/20 12:40	
400-193810-48	BA17919 MW-15	Water	09/23/20 11:37	09/30/20 12:40	
400-193810-49	BA17920 MW-17V	Water	09/23/20 13:49	09/30/20 12:40	
400-193810-50	BA17921 MW-21V	Water	09/23/20 16:37	09/30/20 12:40	

Client Sample Results

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-193810-1
SDG: Gorgas Ash Pond 1303

Client Sample ID: BA17566 MW-6V

Date Collected: 09/15/20 15:35
Date Received: 09/30/20 12:40

Lab Sample ID: 400-193810-1

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**0.738**		0.253	0.262	1.00	0.219	pCi/L	10/06/20 07:47	10/31/20 10:40	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*85.5*		*40 - 110*	*10/06/20 07:47*	*10/31/20 10:40*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.512	U	0.416	0.419	1.00	0.662	pCi/L	10/06/20 08:15	10/29/20 12:31	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*85.5*		*40 - 110*	*10/06/20 08:15*	*10/29/20 12:31*	*1*
Y Carrier	*76.3*		*40 - 110*	*10/06/20 08:15*	*10/29/20 12:31*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**1.25**		0.487	0.494	5.00	0.662	pCi/L		11/02/20 21:33	1

Client Sample Results

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-193810-1
SDG: Gorgas Ash Pond 1303

Client Sample ID: BA17567 MW-7

Date Collected: 09/16/20 11:50
Date Received: 09/30/20 12:40

Lab Sample ID: 400-193810-2

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.481		0.310	0.313	1.00	0.404	pCi/L	10/06/20 07:47	10/31/20 10:42	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*72.5*		*40 - 110*	*10/06/20 07:47*	*10/31/20 10:42*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	1.25	G	0.734	0.743	1.00	1.11	pCi/L	10/06/20 08:15	10/29/20 12:31	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*72.5*		*40 - 110*	*10/06/20 08:15*	*10/29/20 12:31*	*1*
Y Carrier	*78.1*		*40 - 110*	*10/06/20 08:15*	*10/29/20 12:31*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	1.74		0.797	0.806	5.00	1.11	pCi/L		11/02/20 21:33	1

Client Sample Results

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-193810-1
SDG: Gorgas Ash Pond 1303

Client Sample ID: BA17568 MW-7 DISS

Date Collected: 09/16/20 11:50
Date Received: 09/30/20 12:40

Lab Sample ID: 400-193810-3

Matrix: Water

Method: 9315 - Radium-226 (GFPC) - Dissolved

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.357		0.207	0.210	1.00	0.254	pCi/L	10/06/20 07:47	10/31/20 10:40	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*75.1*		*40 - 110*	*10/06/20 07:47*	*10/31/20 10:40*	*1*

Method: 9320 - Radium-228 (GFPC) - Dissolved

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.743	U	0.483	0.488	1.00	0.749	pCi/L	10/06/20 08:15	10/29/20 12:31	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*75.1*		*40 - 110*	*10/06/20 08:15*	*10/29/20 12:31*	*1*
Y Carrier	*79.6*		*40 - 110*	*10/06/20 08:15*	*10/29/20 12:31*	*1*

Method: Ra226_Ra228 (D) - Combined Radium-226 and Radium-228 - Dissolved

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	1.10		0.525	0.531	5.00	0.749	pCi/L		11/02/20 23:17	1

Client Sample Results

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-193810-1
SDG: Gorgas Ash Pond 1303

Client Sample ID: BA17569 MW-6S

Date Collected: 09/16/20 14:33
Date Received: 09/30/20 12:40

Lab Sample ID: 400-193810-4

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.265	U	0.258	0.259	1.00	0.406	pCi/L	10/06/20 07:47	10/31/20 10:42	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*63.9*		*40 - 110*	*10/06/20 07:47*	*10/31/20 10:42*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	**0.788**		0.506	0.511	1.00	0.773	pCi/L	10/06/20 08:15	10/29/20 12:31	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*63.9*		*40 - 110*	*10/06/20 08:15*	*10/29/20 12:31*	*1*
Y Carrier	*77.8*		*40 - 110*	*10/06/20 08:15*	*10/29/20 12:31*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**1.05**		0.568	0.573	5.00	0.773	pCi/L		11/02/20 21:33	1

Client Sample Results

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-193810-1
SDG: Gorgas Ash Pond 1303

Client Sample ID: BA17570 MW-6S DUP

Lab Sample ID: 400-193810-5

Date Collected: 09/16/20 14:33
Matrix: Water
Date Received: 09/30/20 12:40

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**0.462**		0.235	0.239	1.00	0.276	pCi/L	10/06/20 07:47	10/31/20 10:42	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*72.8*		*40 - 110*	*10/06/20 07:47*	*10/31/20 10:42*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.215	U	0.447	0.448	1.00	0.764	pCi/L	10/06/20 08:15	10/29/20 12:31	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*72.8*		*40 - 110*	*10/06/20 08:15*	*10/29/20 12:31*	*1*
Y Carrier	*79.3*		*40 - 110*	*10/06/20 08:15*	*10/29/20 12:31*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.677	U	0.505	0.508	5.00	0.764	pCi/L		11/02/20 21:33	1

Client Sample Results

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-193810-1
SDG: Gorgas Ash Pond 1303

Client Sample ID: BA17571 MW-6D

Lab Sample ID: 400-193810-6

Date Collected: 09/17/20 09:35
Matrix: Water
Date Received: 09/30/20 12:40

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.309		0.185	0.188	1.00	0.236	pCi/L	10/06/20 07:47	10/31/20 10:43	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*87.0*		*40 - 110*	*10/06/20 07:47*	*10/31/20 10:43*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0104	U	0.378	0.378	1.00	0.672	pCi/L	10/06/20 08:15	10/29/20 12:31	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*87.0*		*40 - 110*	*10/06/20 08:15*	*10/29/20 12:31*	*1*
Y Carrier	*77.0*		*40 - 110*	*10/06/20 08:15*	*10/29/20 12:31*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.320	U	0.421	0.422	5.00	0.672	pCi/L		11/02/20 21:33	1

Client Sample Results

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-193810-1
SDG: Gorgas Ash Pond 1303

Client Sample ID: BA17572 MW-23H

Date Collected: 09/17/20 11:25
Date Received: 09/30/20 12:40

Lab Sample ID: 400-193810-7

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0705	U	0.0935	0.0937	1.00	0.156	pCi/L	10/06/20 11:14	10/28/20 12:54	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*74.0*		*40 - 110*	*10/06/20 11:14*	*10/28/20 12:54*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.589	U	0.455	0.459	1.00	0.719	pCi/L	10/06/20 11:57	10/15/20 12:57	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*74.0*		*40 - 110*	*10/06/20 11:57*	*10/15/20 12:57*	*1*
Y Carrier	*84.5*		*40 - 110*	*10/06/20 11:57*	*10/15/20 12:57*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.660	U	0.465	0.468	5.00	0.719	pCi/L		11/02/20 19:07	1

Client Sample Results

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-193810-1
SDG: Gorgas Ash Pond 1303

Client Sample ID: BA17573 MW-41HD

Lab Sample ID: 400-193810-8

Date Collected: 09/17/20 13:05
Matrix: Water
Date Received: 09/30/20 12:40

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**0.288**		0.120	0.123	1.00	0.130	pCi/L	10/06/20 11:14	10/28/20 12:54	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*89.9*		*40 - 110*	*10/06/20 11:14*	*10/28/20 12:54*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.148	U	0.345	0.345	1.00	0.648	pCi/L	10/06/20 11:57	10/15/20 12:58	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*89.9*		*40 - 110*	*10/06/20 11:57*	*10/15/20 12:58*	*1*
Y Carrier	*75.1*		*40 - 110*	*10/06/20 11:57*	*10/15/20 12:58*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.140	U	0.365	0.366	5.00	0.648	pCi/L		11/02/20 19:07	1

Client Sample Results

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-193810-1
SDG: Gorgas Ash Pond 1303

Client Sample ID: BA17574 MW-24H

Lab Sample ID: 400-193810-9

Date Collected: 09/17/20 14:20
Matrix: Water
Date Received: 09/30/20 12:40

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.424		0.131	0.137	1.00	0.105	pCi/L	10/06/20 11:14	10/28/20 14:40	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*91.1*		*40 - 110*	*10/06/20 11:14*	*10/28/20 14:40*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.127	U	0.398	0.398	1.00	0.725	pCi/L	10/06/20 11:57	10/15/20 12:59	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*91.1*		*40 - 110*	*10/06/20 11:57*	*10/15/20 12:59*	*1*
Y Carrier	*77.8*		*40 - 110*	*10/06/20 11:57*	*10/15/20 12:59*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.298	U	0.419	0.421	5.00	0.725	pCi/L		11/02/20 19:07	1

Client Sample Results

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-193810-1
SDG: Gorgas Ash Pond 1303

Client Sample ID: BA17575 FB-1

Date Collected: 09/17/20 14:45
Date Received: 09/30/20 12:40

Lab Sample ID: 400-193810-10

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.164		0.0989	0.100	1.00	0.124	pCi/L	10/06/20 11:14	10/28/20 14:40	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*78.7*		*40 - 110*	*10/06/20 11:14*	*10/28/20 14:40*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.475	U	0.426	0.429	1.00	0.685	pCi/L	10/06/20 11:57	10/15/20 12:59	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*78.7*		*40 - 110*	*10/06/20 11:57*	*10/15/20 12:59*	*1*
Y Carrier	*82.2*		*40 - 110*	*10/06/20 11:57*	*10/15/20 12:59*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.639	U	0.437	0.441	5.00	0.685	pCi/L		11/02/20 19:07	1

Client Sample Results

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-193810-1
SDG: Gorgas Ash Pond 1303

Client Sample ID: BA17576 MW-25HA

Date Collected: 09/17/20 09:08
Date Received: 09/30/20 12:40

Lab Sample ID: 400-193810-11

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**0.146**		0.0900	0.0910	1.00	0.115	pCi/L	10/06/20 11:14	10/28/20 14:40	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*89.1*		*40 - 110*	*10/06/20 11:14*	*10/28/20 14:40*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.515	U	0.326	0.329	1.00	0.668	pCi/L	10/06/20 11:57	10/15/20 12:59	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*89.1*		*40 - 110*	*10/06/20 11:57*	*10/15/20 12:59*	*1*
Y Carrier	*82.6*		*40 - 110*	*10/06/20 11:57*	*10/15/20 12:59*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	-0.369	U	0.338	0.341	5.00	0.668	pCi/L		11/02/20 19:07	1

Client Sample Results

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-193810-1
SDG: Gorgas Ash Pond 1303

Client Sample ID: BA17577 PZ-16

Date Collected: 09/17/20 11:55
Date Received: 09/30/20 12:40

Lab Sample ID: 400-193810-12

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**0.264**		0.114	0.116	1.00	0.117	pCi/L	10/06/20 11:14	10/28/20 14:41	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*83.4*		*40 - 110*	*10/06/20 11:14*	*10/28/20 14:41*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.175	U	0.359	0.359	1.00	0.613	pCi/L	10/06/20 11:57	10/15/20 12:59	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*83.4*		*40 - 110*	*10/06/20 11:57*	*10/15/20 12:59*	*1*
Y Carrier	*85.6*		*40 - 110*	*10/06/20 11:57*	*10/15/20 12:59*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.438	U	0.377	0.377	5.00	0.613	pCi/L		11/02/20 19:07	1

Client Sample Results

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-193810-1
SDG: Gorgas Ash Pond 1303

Client Sample ID: BA17578 PZ-16 DUP

Date Collected: 09/17/20 11:55
Date Received: 09/30/20 12:40

Lab Sample ID: 400-193810-13

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.267		0.140	0.142	1.00	0.182	pCi/L	10/06/20 11:14	10/28/20 14:41	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*73.7*		*40 - 110*	*10/06/20 11:14*	*10/28/20 14:41*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.878		0.496	0.503	1.00	0.753	pCi/L	10/06/20 11:57	10/15/20 12:50	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*73.7*		*40 - 110*	*10/06/20 11:57*	*10/15/20 12:50*	*1*
Y Carrier	*83.4*		*40 - 110*	*10/06/20 11:57*	*10/15/20 12:50*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	1.15		0.515	0.523	5.00	0.753	pCi/L		11/02/20 19:07	1

Client Sample Results

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-193810-1
SDG: Gorgas Ash Pond 1303

Client Sample ID: BA17579 PZ-22

Date Collected: 09/17/20 13:07
Date Received: 09/30/20 12:40

Lab Sample ID: 400-193810-14

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**0.345**		0.129	0.133	1.00	0.126	pCi/L	10/06/20 11:14	10/28/20 14:41	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*82.0*		*40 - 110*	*10/06/20 11:14*	*10/28/20 14:41*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.551	U	0.465	0.468	1.00	0.744	pCi/L	10/06/20 11:57	10/15/20 12:50	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*82.0*		*40 - 110*	*10/06/20 11:57*	*10/15/20 12:50*	*1*
Y Carrier	*73.6*		*40 - 110*	*10/06/20 11:57*	*10/15/20 12:50*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**0.896**		0.483	0.487	5.00	0.744	pCi/L		11/02/20 19:07	1

Client Sample Results

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-193810-1
SDG: Gorgas Ash Pond 1303

Client Sample ID: BA17580 MW-36H

Lab Sample ID: 400-193810-15

Date Collected: 09/17/20 15:01
Matrix: Water
Date Received: 09/30/20 12:40

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0685	U	0.0771	0.0773	1.00	0.124	pCi/L	10/06/20 11:14	10/28/20 14:42	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*83.4*		*40 - 110*	*10/06/20 11:14*	*10/28/20 14:42*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.194	U	0.362	0.363	1.00	0.681	pCi/L	10/06/20 11:57	10/15/20 12:51	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*83.4*		*40 - 110*	*10/06/20 11:57*	*10/15/20 12:51*	*1*
Y Carrier	*80.0*		*40 - 110*	*10/06/20 11:57*	*10/15/20 12:51*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	-0.125	U	0.370	0.371	5.00	0.681	pCi/L		11/02/20 19:07	1

Client Sample Results

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-193810-1
SDG: Gorgas Ash Pond 1303

Client Sample ID: BA17799 MW-15V

Date Collected: 09/21/20 11:18
Date Received: 09/30/20 12:40

Lab Sample ID: 400-193810-16

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.106	U	0.183	0.183	1.00	0.324	pCi/L	10/06/20 08:55	10/29/20 12:20	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*79.0*		*40 - 110*	*10/06/20 08:55*	*10/29/20 12:20*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.389	U	0.455	0.456	1.00	0.749	pCi/L	10/06/20 09:18	10/28/20 12:21	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*79.0*		*40 - 110*	*10/06/20 09:18*	*10/28/20 12:21*	*1*
Y Carrier	*75.1*		*40 - 110*	*10/06/20 09:18*	*10/28/20 12:21*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.494	U	0.490	0.491	5.00	0.749	pCi/L		11/02/20 21:33	1

Client Sample Results

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-193810-1
SDG: Gorgas Ash Pond 1303

Client Sample ID: BA17800 MW-17

Date Collected: 09/21/20 12:48
Date Received: 09/30/20 12:40

Lab Sample ID: 400-193810-17

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0985	U	0.191	0.191	1.00	0.342	pCi/L	10/06/20 08:55	10/29/20 12:20	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*79.0*		*40 - 110*	*10/06/20 08:55*	*10/29/20 12:20*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.552	U	0.441	0.444	1.00	0.699	pCi/L	10/06/20 09:18	10/28/20 12:21	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*79.0*		*40 - 110*	*10/06/20 09:18*	*10/28/20 12:21*	*1*
Y Carrier	*75.9*		*40 - 110*	*10/06/20 09:18*	*10/28/20 12:21*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.651	U	0.481	0.483	5.00	0.699	pCi/L		11/02/20 21:35	1

Client Sample Results

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-193810-1
SDG: Gorgas Ash Pond 1303

Client Sample ID: BA17801 FB-2

Date Collected: 09/21/20 14:15
Date Received: 09/30/20 12:40

Lab Sample ID: 400-193810-18

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.133	U	0.190	0.190	1.00	0.323	pCi/L	10/06/20 08:55	10/29/20 12:20	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*79.3*		*40 - 110*	*10/06/20 08:55*	*10/29/20 12:20*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.0538	U	0.403	0.403	1.00	0.729	pCi/L	10/06/20 09:18	10/28/20 12:21	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*79.3*		*40 - 110*	*10/06/20 09:18*	*10/28/20 12:21*	*1*
Y Carrier	*75.5*		*40 - 110*	*10/06/20 09:18*	*10/28/20 12:21*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.0792	U	0.446	0.446	5.00	0.729	pCi/L		11/02/20 21:35	1

Client Sample Results

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-193810-1
SDG: Gorgas Ash Pond 1303

Client Sample ID: BA17802 MW-32H

Date Collected: 09/21/20 14:42
Date Received: 09/30/20 12:40

Lab Sample ID: 400-193810-19

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**0.341**		0.222	0.224	1.00	0.290	pCi/L	10/06/20 08:55	10/29/20 12:21	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*87.0*		*40 - 110*	*10/06/20 08:55*	*10/29/20 12:21*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.143	U	0.329	0.329	1.00	0.567	pCi/L	10/06/20 09:18	10/28/20 12:21	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*87.0*		*40 - 110*	*10/06/20 09:18*	*10/28/20 12:21*	*1*
Y Carrier	*79.6*		*40 - 110*	*10/06/20 09:18*	*10/28/20 12:21*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.484	U	0.397	0.398	5.00	0.567	pCi/L		11/02/20 21:35	1

Client Sample Results

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-193810-1
SDG: Gorgas Ash Pond 1303

Client Sample ID: BA17803 MW-30HA

Lab Sample ID: 400-193810-20

Date Collected: 09/21/20 16:28
Matrix: Water
Date Received: 09/30/20 12:40

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**0.599**		0.295	0.300	1.00	0.349	pCi/L	10/06/20 08:55	10/29/20 12:21	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*81.4*		*40 - 110*	*10/06/20 08:55*	*10/29/20 12:21*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.502	U	0.451	0.453	1.00	0.724	pCi/L	10/06/20 09:18	10/28/20 12:21	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*81.4*		*40 - 110*	*10/06/20 09:18*	*10/28/20 12:21*	*1*
Y Carrier	*72.5*		*40 - 110*	*10/06/20 09:18*	*10/28/20 12:21*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**1.10**		0.539	0.543	5.00	0.724	pCi/L		11/02/20 21:35	1

Client Sample Results

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-193810-1
SDG: Gorgas Ash Pond 1303

Client Sample ID: BA17804 MW-31H

Date Collected: 09/22/20 10:04
Date Received: 09/30/20 12:40

Lab Sample ID: 400-193810-21

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.186	U	0.220	0.220	1.00	0.358	pCi/L	10/06/20 08:55	10/29/20 12:21	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*81.1*		*40 - 110*	*10/06/20 08:55*	*10/29/20 12:21*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	**0.726**		0.464	0.469	1.00	0.713	pCi/L	10/06/20 09:18	10/28/20 12:21	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*81.1*		*40 - 110*	*10/06/20 09:18*	*10/28/20 12:21*	*1*
Y Carrier	*71.8*		*40 - 110*	*10/06/20 09:18*	*10/28/20 12:21*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**0.912**		0.514	0.518	5.00	0.713	pCi/L		11/02/20 21:35	1

Client Sample Results

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-193810-1
SDG: Gorgas Ash Pond 1303

Client Sample ID: BA17805 MW-43H

Date Collected: 09/22/20 11:30
Date Received: 09/30/20 12:40

Lab Sample ID: 400-193810-22

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.106	U	0.189	0.189	1.00	0.334	pCi/L	10/06/20 08:55	10/29/20 12:21	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*85.8*		*40 - 110*	*10/06/20 08:55*	*10/29/20 12:21*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.0593	U	0.376	0.376	1.00	0.679	pCi/L	10/06/20 09:18	10/28/20 12:22	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*85.8*		*40 - 110*	*10/06/20 09:18*	*10/28/20 12:22*	*1*
Y Carrier	*76.3*		*40 - 110*	*10/06/20 09:18*	*10/28/20 12:22*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.0466	U	0.421	0.421	5.00	0.679	pCi/L		11/02/20 21:35	1

Client Sample Results

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-193810-1
SDG: Gorgas Ash Pond 1303

Client Sample ID: BA17806 MW-28H

Date Collected: 09/22/20 13:04
Date Received: 09/30/20 12:40

Lab Sample ID: 400-193810-23

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.618		0.289	0.294	1.00	0.314	pCi/L	10/06/20 08:55	10/29/20 14:31	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*74.3*		*40 - 110*	*10/06/20 08:55*	*10/29/20 14:31*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.403	U	0.414	0.415	1.00	0.673	pCi/L	10/06/20 09:18	10/28/20 12:22	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*74.3*		*40 - 110*	*10/06/20 09:18*	*10/28/20 12:22*	*1*
Y Carrier	*76.3*		*40 - 110*	*10/06/20 09:18*	*10/28/20 12:22*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	1.02		0.505	0.509	5.00	0.673	pCi/L		11/02/20 21:35	1

Client Sample Results

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-193810-1
SDG: Gorgas Ash Pond 1303

Client Sample ID: BA17807 PZ-18

Date Collected: 09/22/20 15:28
Date Received: 09/30/20 12:40

Lab Sample ID: 400-193810-24

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**0.968**		0.347	0.358	1.00	0.316	pCi/L	10/06/20 08:55	10/29/20 14:31	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*73.1*		*40 - 110*	*10/06/20 08:55*	*10/29/20 14:31*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.00767	U	0.403	0.403	1.00	0.722	pCi/L	10/06/20 09:18	10/28/20 12:22	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*73.1*		*40 - 110*	*10/06/20 09:18*	*10/28/20 12:22*	*1*
Y Carrier	*83.0*		*40 - 110*	*10/06/20 09:18*	*10/28/20 12:22*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**0.960**		0.532	0.539	5.00	0.722	pCi/L		11/02/20 21:35	1

Client Sample Results

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-193810-1
SDG: Gorgas Ash Pond 1303

Client Sample ID: BA17808 PZ-18 DUP

Lab Sample ID: 400-193810-25

Date Collected: 09/22/20 15:28
Matrix: Water
Date Received: 09/30/20 12:40

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**0.496**		0.265	0.268	1.00	0.313	pCi/L	10/06/20 08:55	10/29/20 14:36	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*76.9*		*40 - 110*	*10/06/20 08:55*	*10/29/20 14:36*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.00723	U	0.392	0.392	1.00	0.701	pCi/L	10/06/20 09:18	10/28/20 12:22	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*76.9*		*40 - 110*	*10/06/20 09:18*	*10/28/20 12:22*	*1*
Y Carrier	*83.0*		*40 - 110*	*10/06/20 09:18*	*10/28/20 12:22*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.489	U	0.473	0.475	5.00	0.701	pCi/L		11/02/20 21:35	1

Client Sample Results

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-193810-1
SDG: Gorgas Ash Pond 1303

Client Sample ID: BA17809 MW-18V

Date Collected: 09/22/20 16:28
Date Received: 09/30/20 12:40

Lab Sample ID: 400-193810-26

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**0.650**		0.266	0.272	1.00	0.274	pCi/L	10/06/20 08:55	10/29/20 14:36	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*93.2*		*40 - 110*	*10/06/20 08:55*	*10/29/20 14:36*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.374	U	0.329	0.330	1.00	0.524	pCi/L	10/06/20 09:18	10/28/20 12:22	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*93.2*		*40 - 110*	*10/06/20 09:18*	*10/28/20 12:22*	*1*
Y Carrier	*75.5*		*40 - 110*	*10/06/20 09:18*	*10/28/20 12:22*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**1.02**		0.423	0.428	5.00	0.524	pCi/L		11/02/20 21:35	1

Client Sample Results

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-193810-1
SDG: Gorgas Ash Pond 1303

Client Sample ID: BA17810 FB-3

Date Collected: 09/22/20 17:20
Date Received: 09/30/20 12:40

Lab Sample ID: 400-193810-27

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.378		0.246	0.248	1.00	0.329	pCi/L	10/06/20 08:55	10/29/20 14:36	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*80.2*		*40 - 110*	*10/06/20 08:55*	*10/29/20 14:36*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.118	U	0.358	0.358	1.00	0.660	pCi/L	10/06/20 09:18	10/28/20 12:22	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*80.2*		*40 - 110*	*10/06/20 09:18*	*10/28/20 12:22*	*1*
Y Carrier	*83.4*		*40 - 110*	*10/06/20 09:18*	*10/28/20 12:22*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.260	U	0.434	0.436	5.00	0.660	pCi/L		11/02/20 21:35	1

Client Sample Results

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-193810-1
SDG: Gorgas Ash Pond 1303

Client Sample ID: BA17811 MW-16S

Date Collected: 09/21/20 15:45
Date Received: 09/30/20 12:40

Lab Sample ID: 400-193810-28

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.381		0.236	0.239	1.00	0.305	pCi/L	10/06/20 08:55	10/29/20 14:36	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*82.5*		*40 - 110*	*10/06/20 08:55*	*10/29/20 14:36*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0893	U	0.390	0.390	1.00	0.679	pCi/L	10/06/20 09:18	10/28/20 12:22	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*82.5*		*40 - 110*	*10/06/20 09:18*	*10/28/20 12:22*	*1*
Y Carrier	*81.5*		*40 - 110*	*10/06/20 09:18*	*10/28/20 12:22*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.470	U	0.456	0.457	5.00	0.679	pCi/L		11/02/20 21:35	1

Client Sample Results

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-193810-1
SDG: Gorgas Ash Pond 1303

Client Sample ID: BA17812 MW-16D

Lab Sample ID: 400-193810-29

Date Collected: 09/22/20 09:18
Matrix: Water
Date Received: 09/30/20 12:40

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.121	U	0.152	0.152	1.00	0.251	pCi/L	10/06/20 07:47	10/31/20 10:43	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*78.7*		*40 - 110*	*10/06/20 07:47*	*10/31/20 10:43*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.470	U	0.454	0.457	1.00	0.737	pCi/L	10/06/20 08:15	10/29/20 12:32	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*78.7*		*40 - 110*	*10/06/20 08:15*	*10/29/20 12:32*	*1*
Y Carrier	*79.3*		*40 - 110*	*10/06/20 08:15*	*10/29/20 12:32*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.590	U	0.479	0.482	5.00	0.737	pCi/L		11/02/20 21:33	1

Client Sample Results

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-193810-1
SDG: Gorgas Ash Pond 1303

Client Sample ID: BA17813 MW-42H

Lab Sample ID: 400-193810-30

Date Collected: 09/22/20 10:50
Matrix: Water
Date Received: 09/30/20 12:40

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**0.256**		0.184	0.185	1.00	0.254	pCi/L	10/06/20 07:47	10/31/20 10:43	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*80.5*		*40 - 110*	*10/06/20 07:47*	*10/31/20 10:43*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.104	U	0.366	0.366	1.00	0.637	pCi/L	10/06/20 08:15	10/29/20 12:33	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*80.5*		*40 - 110*	*10/06/20 08:15*	*10/29/20 12:33*	*1*
Y Carrier	*83.0*		*40 - 110*	*10/06/20 08:15*	*10/29/20 12:33*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.360	U	0.410	0.410	5.00	0.637	pCi/L		11/02/20 21:33	1

Client Sample Results

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-193810-1
SDG: Gorgas Ash Pond 1303

Client Sample ID: BA17814 MW-42H DUP

Lab Sample ID: 400-193810-31

Date Collected: 09/22/20 10:50
Matrix: Water
Date Received: 09/30/20 12:40

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.152	U	0.166	0.166	1.00	0.264	pCi/L	10/06/20 07:47	10/31/20 10:43	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*82.0*		*40 - 110*	*10/06/20 07:47*	*10/31/20 10:43*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	**0.648**		0.390	0.395	1.00	0.591	pCi/L	10/06/20 08:15	10/29/20 12:33	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*82.0*		*40 - 110*	*10/06/20 08:15*	*10/29/20 12:33*	*1*
Y Carrier	*84.1*		*40 - 110*	*10/06/20 08:15*	*10/29/20 12:33*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**0.800**		0.424	0.428	5.00	0.591	pCi/L		11/02/20 21:33	1

Client Sample Results

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-193810-1
SDG: Gorgas Ash Pond 1303

Client Sample ID: BA17815 MW-2

Date Collected: 09/22/20 12:37
Date Received: 09/30/20 12:40

Lab Sample ID: 400-193810-32

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**0.244**		0.174	0.175	1.00	0.239	pCi/L	10/06/20 07:47	10/31/20 10:44	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*86.7*		*40 - 110*	*10/06/20 07:47*	*10/31/20 10:44*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.468	U	0.389	0.391	1.00	0.621	pCi/L	10/06/20 08:15	10/29/20 12:33	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*86.7*		*40 - 110*	*10/06/20 08:15*	*10/29/20 12:33*	*1*
Y Carrier	*81.9*		*40 - 110*	*10/06/20 08:15*	*10/29/20 12:33*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**0.712**		0.426	0.428	5.00	0.621	pCi/L		11/02/20 21:33	1

Client Sample Results

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-193810-1
SDG: Gorgas Ash Pond 1303

Client Sample ID: BA17816 MW-19

Date Collected: 09/22/20 13:56
Date Received: 09/30/20 12:40

Lab Sample ID: 400-193810-33

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.731		0.252	0.260	1.00	0.228	pCi/L	10/06/20 07:47	10/31/20 10:44	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*88.5*		*40 - 110*	*10/06/20 07:47*	*10/31/20 10:44*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	1.36		0.440	0.458	1.00	0.582	pCi/L	10/06/20 08:15	10/29/20 12:33	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*88.5*		*40 - 110*	*10/06/20 08:15*	*10/29/20 12:33*	*1*
Y Carrier	*80.0*		*40 - 110*	*10/06/20 08:15*	*10/29/20 12:33*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	2.09		0.507	0.527	5.00	0.582	pCi/L		11/02/20 21:33	1

Client Sample Results

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-193810-1
SDG: Gorgas Ash Pond 1303

Client Sample ID: BA17817 MW-8

Date Collected: 09/21/20 12:08
Date Received: 09/30/20 12:40

Lab Sample ID: 400-193810-34

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.238	U	0.188	0.190	1.00	0.273	pCi/L	10/06/20 07:47	10/31/20 10:44	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*83.1*		*40 - 110*	*10/06/20 07:47*	*10/31/20 10:44*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	**1.01**		0.436	0.446	1.00	0.613	pCi/L	10/06/20 08:15	10/29/20 12:33	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*83.1*		*40 - 110*	*10/06/20 08:15*	*10/29/20 12:33*	*1*
Y Carrier	*77.0*		*40 - 110*	*10/06/20 08:15*	*10/29/20 12:33*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**1.25**		0.475	0.485	5.00	0.613	pCi/L		11/02/20 21:33	1

Client Sample Results

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-193810-1
SDG: Gorgas Ash Pond 1303

Client Sample ID: BA17818 MW-26H

Date Collected: 09/21/20 15:55
Date Received: 09/30/20 12:40

Lab Sample ID: 400-193810-35

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.829		0.372	0.379	1.00	0.425	pCi/L	10/06/20 07:47	10/31/20 10:44	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*82.0*		*40 - 110*	*10/06/20 07:47*	*10/31/20 10:44*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	1.22		0.626	0.636	1.00	0.926	pCi/L	10/06/20 08:15	10/29/20 12:33	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*82.0*		*40 - 110*	*10/06/20 08:15*	*10/29/20 12:33*	*1*
Y Carrier	*83.7*		*40 - 110*	*10/06/20 08:15*	*10/29/20 12:33*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	2.05		0.728	0.740	5.00	0.926	pCi/L		11/02/20 21:33	1

Client Sample Results

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-193810-1
SDG: Gorgas Ash Pond 1303

Client Sample ID: BA17819 MW-26H DIS

Date Collected: 09/21/20 15:55
Date Received: 09/30/20 12:40

Lab Sample ID: 400-193810-36

Matrix: Water

Method: 9315 - Radium-226 (GFPC) - Dissolved

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.431		0.217	0.221	1.00	0.260	pCi/L	10/06/20 07:47	10/31/20 10:44	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*87.9*		*40 - 110*	*10/06/20 07:47*	*10/31/20 10:44*	*1*

Method: 9320 - Radium-228 (GFPC) - Dissolved

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.863		0.394	0.402	1.00	0.569	pCi/L	10/06/20 08:15	10/29/20 12:34	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*87.9*		*40 - 110*	*10/06/20 08:15*	*10/29/20 12:34*	*1*
Y Carrier	*83.0*		*40 - 110*	*10/06/20 08:15*	*10/29/20 12:34*	*1*

Method: Ra226_Ra228 (D) - Combined Radium-226 and Radium-228 - Dissolved

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	1.29		0.450	0.459	5.00	0.569	pCi/L		11/02/20 23:17	1

Client Sample Results

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-193810-1
SDG: Gorgas Ash Pond 1303

Client Sample ID: BA17820 MW-40H

Lab Sample ID: 400-193810-37

Date Collected: 09/22/20 09:58
Matrix: Water
Date Received: 09/30/20 12:40

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.607		0.246	0.252	1.00	0.239	pCi/L	10/06/20 07:47	10/31/20 12:35	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*75.4*		*40 - 110*	*10/06/20 07:47*	*10/31/20 12:35*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	1.31		0.526	0.540	1.00	0.750	pCi/L	10/06/20 08:15	10/29/20 12:34	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*75.4*		*40 - 110*	*10/06/20 08:15*	*10/29/20 12:34*	*1*
Y Carrier	*82.2*		*40 - 110*	*10/06/20 08:15*	*10/29/20 12:34*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	1.91		0.581	0.596	5.00	0.750	pCi/L		11/02/20 21:33	1

Client Sample Results

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-193810-1
SDG: Gorgas Ash Pond 1303

Client Sample ID: BA17821 MW-9V

Date Collected: 09/22/20 13:05
Date Received: 09/30/20 12:40

Lab Sample ID: 400-193810-38

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.00389	U	0.122	0.122	1.00	0.257	pCi/L	10/07/20 07:00	10/31/20 12:36	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*77.5*		*40 - 110*	*10/07/20 07:00*	*10/31/20 12:36*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.533	U	0.477	0.480	1.00	0.767	pCi/L	10/07/20 07:54	10/29/20 12:35	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*77.5*		*40 - 110*	*10/07/20 07:54*	*10/29/20 12:35*	*1*
Y Carrier	*71.8*		*40 - 110*	*10/07/20 07:54*	*10/29/20 12:35*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.536	U	0.492	0.495	5.00	0.767	pCi/L		11/02/20 21:35	1

Client Sample Results

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-193810-1
SDG: Gorgas Ash Pond 1303

Client Sample ID: BA17910 MW-38H

Lab Sample ID: 400-193810-39

Date Collected: 09/22/20 15:10
Date Received: 09/30/20 12:40

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.198	U	0.160	0.161	1.00	0.231	pCi/L	10/07/20 07:00	10/31/20 12:37	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*87.6*		*40 - 110*	*10/07/20 07:00*	*10/31/20 12:37*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	**0.899**		0.433	0.440	1.00	0.633	pCi/L	10/07/20 07:54	10/29/20 12:35	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*87.6*		*40 - 110*	*10/07/20 07:54*	*10/29/20 12:35*	*1*
Y Carrier	*78.9*		*40 - 110*	*10/07/20 07:54*	*10/29/20 12:35*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**1.10**		0.462	0.469	5.00	0.633	pCi/L		11/02/20 21:35	1

Client Sample Results

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-193810-1
SDG: Gorgas Ash Pond 1303

Client Sample ID: BA17911 MW-29H

Date Collected: 09/22/20 16:45
Date Received: 09/30/20 12:40

Lab Sample ID: 400-193810-40

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.518		0.229	0.234	1.00	0.237	pCi/L	10/07/20 07:00	10/31/20 12:37	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*74.6*		*40 - 110*	*10/07/20 07:00*	*10/31/20 12:37*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0735	U	0.404	0.404	1.00	0.713	pCi/L	10/07/20 07:54	10/29/20 12:36	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*74.6*		*40 - 110*	*10/07/20 07:54*	*10/29/20 12:36*	*1*
Y Carrier	*77.0*		*40 - 110*	*10/07/20 07:54*	*10/29/20 12:36*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.591	U	0.464	0.467	5.00	0.713	pCi/L		11/02/20 21:35	1

Client Sample Results

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-193810-1
SDG: Gorgas Ash Pond 1303

Client Sample ID: BA17912 MW-12V

Date Collected: 09/23/20 10:15
Date Received: 09/30/20 12:40

Lab Sample ID: 400-193810-41

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**0.652**		0.317	0.322	1.00	0.350	pCi/L	10/07/20 07:00	10/31/20 12:37	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*78.1*		*40 - 110*	*10/07/20 07:00*	*10/31/20 12:37*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.724	U G	0.646	0.649	1.00	1.03	pCi/L	10/07/20 07:54	10/29/20 12:36	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*78.1*		*40 - 110*	*10/07/20 07:54*	*10/29/20 12:36*	*1*
Y Carrier	*74.8*		*40 - 110*	*10/07/20 07:54*	*10/29/20 12:36*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**1.38**		0.720	0.724	5.00	1.03	pCi/L		11/02/20 21:35	1

Client Sample Results

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-193810-1
SDG: Gorgas Ash Pond 1303

Client Sample ID: BA17913 MW-12V DIS

Date Collected: 09/23/20 10:15
Date Received: 09/30/20 12:40

Lab Sample ID: 400-193810-42

Matrix: Water

Method: 9315 - Radium-226 (GFPC) - Dissolved

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.518		0.229	0.233	1.00	0.243	pCi/L	10/07/20 07:00	10/31/20 12:37	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*80.5*		*40 - 110*	*10/07/20 07:00*	*10/31/20 12:37*	*1*

Method: 9320 - Radium-228 (GFPC) - Dissolved

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.586	U	0.453	0.456	1.00	0.715	pCi/L	10/07/20 07:54	10/29/20 12:36	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*80.5*		*40 - 110*	*10/07/20 07:54*	*10/29/20 12:36*	*1*
Y Carrier	*75.5*		*40 - 110*	*10/07/20 07:54*	*10/29/20 12:36*	*1*

Method: Ra226_Ra228 (D) - Combined Radium-226 and Radium-228 - Dissolved

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	1.10		0.508	0.512	5.00	0.715	pCi/L		11/02/20 23:17	1

Client Sample Results

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-193810-1
SDG: Gorgas Ash Pond 1303

Client Sample ID: BA17914 MW-12

Date Collected: 09/23/20 13:10
Date Received: 09/30/20 12:40

Lab Sample ID: 400-193810-43

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.356		0.213	0.215	1.00	0.271	pCi/L	10/07/20 07:00	10/31/20 12:37	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*73.4*		*40 - 110*	*10/07/20 07:00*	*10/31/20 12:37*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.455	U	0.511	0.513	1.00	0.840	pCi/L	10/07/20 07:54	10/29/20 12:36	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*73.4*		*40 - 110*	*10/07/20 07:54*	*10/29/20 12:36*	*1*
Y Carrier	*68.8*		*40 - 110*	*10/07/20 07:54*	*10/29/20 12:36*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.811	U	0.554	0.556	5.00	0.840	pCi/L		11/02/20 21:35	1

Client Sample Results

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-193810-1
SDG: Gorgas Ash Pond 1303

Client Sample ID: BA17915 MW-21

Date Collected: 09/23/20 16:15
Date Received: 09/30/20 12:40

Lab Sample ID: 400-193810-44

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.335		0.186	0.189	1.00	0.233	pCi/L	10/07/20 07:00	10/31/20 12:37	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*93.5*		*40 - 110*	*10/07/20 07:00*	*10/31/20 12:37*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.133	U	0.409	0.409	1.00	0.705	pCi/L	10/07/20 07:54	10/29/20 12:36	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*93.5*		*40 - 110*	*10/07/20 07:54*	*10/29/20 12:36*	*1*
Y Carrier	*75.5*		*40 - 110*	*10/07/20 07:54*	*10/29/20 12:36*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.468	U	0.449	0.451	5.00	0.705	pCi/L		11/02/20 21:35	1

Client Sample Results

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-193810-1
SDG: Gorgas Ash Pond 1303

Client Sample ID: BA17916 FB-4

Date Collected: 09/23/20 17:00
Date Received: 09/30/20 12:40

Lab Sample ID: 400-193810-45

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0621	U	0.131	0.131	1.00	0.240	pCi/L	10/07/20 07:00	10/31/20 12:38	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*84.6*		*40 - 110*	*10/07/20 07:00*	*10/31/20 12:38*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.000	U	0.390	0.390	1.00	0.699	pCi/L	10/07/20 07:54	10/29/20 12:36	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*84.6*		*40 - 110*	*10/07/20 07:54*	*10/29/20 12:36*	*1*
Y Carrier	*72.1*		*40 - 110*	*10/07/20 07:54*	*10/29/20 12:36*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.0621	U	0.411	0.411	5.00	0.699	pCi/L		11/02/20 21:35	1

Client Sample Results

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-193810-1
SDG: Gorgas Ash Pond 1303

Client Sample ID: BA17917 EB-1

Date Collected: 09/23/20 17:10
Date Received: 09/30/20 12:40

Lab Sample ID: 400-193810-46

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0356	U	0.117	0.117	1.00	0.227	pCi/L	10/07/20 07:00	10/31/20 12:39	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*87.0*		*40 - 110*	*10/07/20 07:00*	*10/31/20 12:39*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.151	U	0.415	0.415	1.00	0.714	pCi/L	10/07/20 07:54	10/29/20 12:36	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*87.0*		*40 - 110*	*10/07/20 07:54*	*10/29/20 12:36*	*1*
Y Carrier	*76.3*		*40 - 110*	*10/07/20 07:54*	*10/29/20 12:36*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.187	U	0.431	0.431	5.00	0.714	pCi/L		11/02/20 21:38	1

Client Sample Results

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-193810-1
SDG: Gorgas Ash Pond 1303

Client Sample ID: BA17918 MW-18

Date Collected: 09/23/20 18:05
Date Received: 09/30/20 12:40

Lab Sample ID: 400-193810-47

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0963	U	0.147	0.148	1.00	0.254	pCi/L	10/07/20 07:00	10/31/20 12:39	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*89.1*		*40 - 110*	*10/07/20 07:00*	*10/31/20 12:39*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	**0.792**		0.421	0.428	1.00	0.627	pCi/L	10/07/20 07:54	10/29/20 12:36	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*89.1*		*40 - 110*	*10/07/20 07:54*	*10/29/20 12:36*	*1*
Y Carrier	*75.5*		*40 - 110*	*10/07/20 07:54*	*10/29/20 12:36*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**0.888**		0.446	0.453	5.00	0.627	pCi/L		11/02/20 21:38	1

Client Sample Results

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-193810-1
SDG: Gorgas Ash Pond 1303

Client Sample ID: BA17919 MW-15

Date Collected: 09/23/20 11:37
Date Received: 09/30/20 12:40

Lab Sample ID: 400-193810-48

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**0.314**		0.174	0.176	1.00	0.204	pCi/L	10/07/20 07:00	10/31/20 14:35	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*89.1*		*40 - 110*	*10/07/20 07:00*	*10/31/20 14:35*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.233	U	0.385	0.386	1.00	0.650	pCi/L	10/07/20 07:54	10/29/20 12:41	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*89.1*		*40 - 110*	*10/07/20 07:54*	*10/29/20 12:41*	*1*
Y Carrier	*76.3*		*40 - 110*	*10/07/20 07:54*	*10/29/20 12:41*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.547	U	0.422	0.424	5.00	0.650	pCi/L		11/02/20 21:38	1

Client Sample Results

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-193810-1
SDG: Gorgas Ash Pond 1303

Client Sample ID: BA17920 MW-17V

Lab Sample ID: 400-193810-49

Date Collected: 09/23/20 13:49
Matrix: Water
Date Received: 09/30/20 12:40

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.148	U	0.157	0.157	1.00	0.246	pCi/L	10/07/20 07:00	10/31/20 14:36	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*75.1*		*40 - 110*	*10/07/20 07:00*	*10/31/20 14:36*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.394	U	0.449	0.450	1.00	0.738	pCi/L	10/07/20 07:54	10/29/20 12:41	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*75.1*		*40 - 110*	*10/07/20 07:54*	*10/29/20 12:41*	*1*
Y Carrier	*78.5*		*40 - 110*	*10/07/20 07:54*	*10/29/20 12:41*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.542	U	0.476	0.477	5.00	0.738	pCi/L		11/02/20 21:38	1

Client Sample Results

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-193810-1
SDG: Gorgas Ash Pond 1303

Client Sample ID: BA17921 MW-21V

Lab Sample ID: 400-193810-50

Date Collected: 09/23/20 16:37
Matrix: Water
Date Received: 09/30/20 12:40

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0842	U	0.123	0.123	1.00	0.210	pCi/L	10/07/20 07:00	10/31/20 14:36	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*94.1*		*40 - 110*	*10/07/20 07:00*	*10/31/20 14:36*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.479	U	0.394	0.396	1.00	0.629	pCi/L	10/07/20 07:54	10/29/20 12:42	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*94.1*		*40 - 110*	*10/07/20 07:54*	*10/29/20 12:42*	*1*
Y Carrier	*78.9*		*40 - 110*	*10/07/20 07:54*	*10/29/20 12:42*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.563	U	0.413	0.415	5.00	0.629	pCi/L		11/02/20 21:38	1

Definitions/Glossary

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-193810-1
SDG: Gorgas Ash Pond 1303

Qualifiers

Rad

Qualifier	Qualifier Description
G	The Sample MDC is greater than the requested RL.
U	Result is less than the sample detection limit.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Lab Chronicle

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-193810-1
SDG: Gorgas Ash Pond 1303

Client Sample ID: BA17566 MW-6V
Lab Sample ID: 400-193810-1

Date Collected: 09/15/20 15:35
Date Received: 09/30/20 12:40
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			484723	10/06/20 07:47	AVB	TAL SL
Total/NA	Analysis	9315		1	487612	10/31/20 10:40	FLC	TAL SL
Total/NA	Prep	PrecSep_0			484724	10/06/20 08:15	AVB	TAL SL
Total/NA	Analysis	9320		1	487300	10/29/20 12:31	SCB	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	487755	11/02/20 21:33	GRW	TAL SL

Client Sample ID: BA17567 MW-7
Lab Sample ID: 400-193810-2

Date Collected: 09/16/20 11:50
Date Received: 09/30/20 12:40
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			484723	10/06/20 07:47	AVB	TAL SL
Total/NA	Analysis	9315		1	487612	10/31/20 10:42	FLC	TAL SL
Total/NA	Prep	PrecSep_0			484724	10/06/20 08:15	AVB	TAL SL
Total/NA	Analysis	9320		1	487300	10/29/20 12:31	SCB	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	487755	11/02/20 21:33	GRW	TAL SL

Client Sample ID: BA17568 MW-7 DISS
Lab Sample ID: 400-193810-3

Date Collected: 09/16/20 11:50
Date Received: 09/30/20 12:40
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	PrecSep-21			484723	10/06/20 07:47	AVB	TAL SL
Dissolved	Analysis	9315		1	487612	10/31/20 10:40	FLC	TAL SL
Dissolved	Prep	PrecSep_0			484724	10/06/20 08:15	AVB	TAL SL
Dissolved	Analysis	9320		1	487300	10/29/20 12:31	SCB	TAL SL
Dissolved	Analysis	Ra226_Ra228 (D)		1	487765	11/02/20 23:17	SCB	TAL SL

Client Sample ID: BA17569 MW-6S
Lab Sample ID: 400-193810-4

Date Collected: 09/16/20 14:33
Date Received: 09/30/20 12:40
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			484723	10/06/20 07:47	AVB	TAL SL
Total/NA	Analysis	9315		1	487612	10/31/20 10:42	FLC	TAL SL
Total/NA	Prep	PrecSep_0			484724	10/06/20 08:15	AVB	TAL SL
Total/NA	Analysis	9320		1	487300	10/29/20 12:31	SCB	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	487755	11/02/20 21:33	GRW	TAL SL

Lab Chronicle

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-193810-1
SDG: Gorgas Ash Pond 1303

Client Sample ID: BA17570 MW-6S DUP — Lab Sample ID: 400-193810-5

Date Collected: 09/16/20 14:33 — **Matrix: Water**
Date Received: 09/30/20 12:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			484723	10/06/20 07:47	AVB	TAL SL
Total/NA	Analysis	9315		1	487612	10/31/20 10:42	FLC	TAL SL
Total/NA	Prep	PrecSep_0			484724	10/06/20 08:15	AVB	TAL SL
Total/NA	Analysis	9320		1	487300	10/29/20 12:31	SCB	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	487755	11/02/20 21:33	GRW	TAL SL

Client Sample ID: BA17571 MW-6D — Lab Sample ID: 400-193810-6

Date Collected: 09/17/20 09:35 — **Matrix: Water**
Date Received: 09/30/20 12:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			484723	10/06/20 07:47	AVB	TAL SL
Total/NA	Analysis	9315		1	487612	10/31/20 10:43	FLC	TAL SL
Total/NA	Prep	PrecSep_0			484724	10/06/20 08:15	AVB	TAL SL
Total/NA	Analysis	9320		1	487300	10/29/20 12:31	SCB	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	487755	11/02/20 21:33	GRW	TAL SL

Client Sample ID: BA17572 MW-23H — Lab Sample ID: 400-193810-7

Date Collected: 09/17/20 11:25 — **Matrix: Water**
Date Received: 09/30/20 12:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			484743	10/06/20 11:14	AVB	TAL SL
Total/NA	Analysis	9315		1	487030	10/28/20 12:54	SCB	TAL SL
Total/NA	Prep	PrecSep_0			484744	10/06/20 11:57	AVB	TAL SL
Total/NA	Analysis	9320		1	485907	10/15/20 12:57	FLC	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	487751	11/02/20 19:07	SCB	TAL SL

Client Sample ID: BA17573 MW-41HD — Lab Sample ID: 400-193810-8

Date Collected: 09/17/20 13:05 — **Matrix: Water**
Date Received: 09/30/20 12:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			484743	10/06/20 11:14	AVB	TAL SL
Total/NA	Analysis	9315		1	487030	10/28/20 12:54	SCB	TAL SL
Total/NA	Prep	PrecSep_0			484744	10/06/20 11:57	AVB	TAL SL
Total/NA	Analysis	9320		1	485907	10/15/20 12:58	FLC	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	487751	11/02/20 19:07	SCB	TAL SL

Lab Chronicle

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-193810-1
SDG: Gorgas Ash Pond 1303

Client Sample ID: BA17574 MW-24H
Lab Sample ID: 400-193810-9

Date Collected: 09/17/20 14:20
Matrix: Water
Date Received: 09/30/20 12:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			484743	10/06/20 11:14	AVB	TAL SL
Total/NA	Analysis	9315		1	487030	10/28/20 14:40	SCB	TAL SL
Total/NA	Prep	PrecSep_0			484744	10/06/20 11:57	AVB	TAL SL
Total/NA	Analysis	9320		1	485907	10/15/20 12:59	FLC	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	487751	11/02/20 19:07	SCB	TAL SL

Client Sample ID: BA17575 FB-1
Lab Sample ID: 400-193810-10

Date Collected: 09/17/20 14:45
Matrix: Water
Date Received: 09/30/20 12:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			484743	10/06/20 11:14	AVB	TAL SL
Total/NA	Analysis	9315		1	487030	10/28/20 14:40	SCB	TAL SL
Total/NA	Prep	PrecSep_0			484744	10/06/20 11:57	AVB	TAL SL
Total/NA	Analysis	9320		1	485907	10/15/20 12:59	FLC	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	487751	11/02/20 19:07	SCB	TAL SL

Client Sample ID: BA17576 MW-25HA
Lab Sample ID: 400-193810-11

Date Collected: 09/17/20 09:08
Matrix: Water
Date Received: 09/30/20 12:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			484743	10/06/20 11:14	AVB	TAL SL
Total/NA	Analysis	9315		1	487030	10/28/20 14:40	SCB	TAL SL
Total/NA	Prep	PrecSep_0			484744	10/06/20 11:57	AVB	TAL SL
Total/NA	Analysis	9320		1	485907	10/15/20 12:59	FLC	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	487751	11/02/20 19:07	SCB	TAL SL

Client Sample ID: BA17577 PZ-16
Lab Sample ID: 400-193810-12

Date Collected: 09/17/20 11:55
Matrix: Water
Date Received: 09/30/20 12:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			484743	10/06/20 11:14	AVB	TAL SL
Total/NA	Analysis	9315		1	487030	10/28/20 14:41	SCB	TAL SL
Total/NA	Prep	PrecSep_0			484744	10/06/20 11:57	AVB	TAL SL
Total/NA	Analysis	9320		1	485907	10/15/20 12:59	FLC	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	487751	11/02/20 19:07	SCB	TAL SL

Lab Chronicle

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-193810-1
SDG: Gorgas Ash Pond 1303

Client Sample ID: BA17578 PZ-16 DUP
Lab Sample ID: 400-193810-13

Date Collected: 09/17/20 11:55
Matrix: Water
Date Received: 09/30/20 12:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			484743	10/06/20 11:14	AVB	TAL SL
Total/NA	Analysis	9315		1	487030	10/28/20 14:41	SCB	TAL SL
Total/NA	Prep	PrecSep_0			484744	10/06/20 11:57	AVB	TAL SL
Total/NA	Analysis	9320		1	485729	10/15/20 12:50	FLC	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	487751	11/02/20 19:07	SCB	TAL SL

Client Sample ID: BA17579 PZ-22
Lab Sample ID: 400-193810-14

Date Collected: 09/17/20 13:07
Matrix: Water
Date Received: 09/30/20 12:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			484743	10/06/20 11:14	AVB	TAL SL
Total/NA	Analysis	9315		1	487030	10/28/20 14:41	SCB	TAL SL
Total/NA	Prep	PrecSep_0			484744	10/06/20 11:57	AVB	TAL SL
Total/NA	Analysis	9320		1	485729	10/15/20 12:50	FLC	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	487751	11/02/20 19:07	SCB	TAL SL

Client Sample ID: BA17580 MW-36H
Lab Sample ID: 400-193810-15

Date Collected: 09/17/20 15:01
Matrix: Water
Date Received: 09/30/20 12:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			484743	10/06/20 11:14	AVB	TAL SL
Total/NA	Analysis	9315		1	487030	10/28/20 14:42	SCB	TAL SL
Total/NA	Prep	PrecSep_0			484744	10/06/20 11:57	AVB	TAL SL
Total/NA	Analysis	9320		1	485729	10/15/20 12:51	FLC	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	487751	11/02/20 19:07	SCB	TAL SL

Client Sample ID: BA17799 MW-15V
Lab Sample ID: 400-193810-16

Date Collected: 09/21/20 11:18
Matrix: Water
Date Received: 09/30/20 12:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			484729	10/06/20 08:55	AVB	TAL SL
Total/NA	Analysis	9315		1	487277	10/29/20 12:20	SCB	TAL SL
Total/NA	Prep	PrecSep_0			484733	10/06/20 09:18	AVB	TAL SL
Total/NA	Analysis	9320		1	487055	10/28/20 12:21	SCB	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	487755	11/02/20 21:33	GRW	TAL SL

Lab Chronicle

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-193810-1
SDG: Gorgas Ash Pond 1303

Client Sample ID: BA17800 MW-17
Lab Sample ID: 400-193810-17

Date Collected: 09/21/20 12:48
Matrix: Water
Date Received: 09/30/20 12:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			484729	10/06/20 08:55	AVB	TAL SL
Total/NA	Analysis	9315		1	487277	10/29/20 12:20	SCB	TAL SL
Total/NA	Prep	PrecSep_0			484733	10/06/20 09:18	AVB	TAL SL
Total/NA	Analysis	9320		1	487055	10/28/20 12:21	SCB	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	487755	11/02/20 21:35	GRW	TAL SL

Client Sample ID: BA17801 FB-2
Lab Sample ID: 400-193810-18

Date Collected: 09/21/20 14:15
Matrix: Water
Date Received: 09/30/20 12:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			484729	10/06/20 08:55	AVB	TAL SL
Total/NA	Analysis	9315		1	487277	10/29/20 12:20	SCB	TAL SL
Total/NA	Prep	PrecSep_0			484733	10/06/20 09:18	AVB	TAL SL
Total/NA	Analysis	9320		1	487055	10/28/20 12:21	SCB	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	487755	11/02/20 21:35	GRW	TAL SL

Client Sample ID: BA17802 MW-32H
Lab Sample ID: 400-193810-19

Date Collected: 09/21/20 14:42
Matrix: Water
Date Received: 09/30/20 12:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			484729	10/06/20 08:55	AVB	TAL SL
Total/NA	Analysis	9315		1	487277	10/29/20 12:21	SCB	TAL SL
Total/NA	Prep	PrecSep_0			484733	10/06/20 09:18	AVB	TAL SL
Total/NA	Analysis	9320		1	487055	10/28/20 12:21	SCB	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	487755	11/02/20 21:35	GRW	TAL SL

Client Sample ID: BA17803 MW-30HA
Lab Sample ID: 400-193810-20

Date Collected: 09/21/20 16:28
Matrix: Water
Date Received: 09/30/20 12:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			484729	10/06/20 08:55	AVB	TAL SL
Total/NA	Analysis	9315		1	487277	10/29/20 12:21	SCB	TAL SL
Total/NA	Prep	PrecSep_0			484733	10/06/20 09:18	AVB	TAL SL
Total/NA	Analysis	9320		1	487055	10/28/20 12:21	SCB	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	487755	11/02/20 21:35	GRW	TAL SL

Lab Chronicle

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-193810-1
SDG: Gorgas Ash Pond 1303

Client Sample ID: BA17804 MW-31H — Lab Sample ID: 400-193810-21

Date Collected: 09/22/20 10:04 — **Matrix: Water**
Date Received: 09/30/20 12:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			484729	10/06/20 08:55	AVB	TAL SL
Total/NA	Analysis	9315		1	487277	10/29/20 12:21	SCB	TAL SL
Total/NA	Prep	PrecSep_0			484733	10/06/20 09:18	AVB	TAL SL
Total/NA	Analysis	9320		1	487055	10/28/20 12:21	SCB	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	487755	11/02/20 21:35	GRW	TAL SL

Client Sample ID: BA17805 MW-43H — Lab Sample ID: 400-193810-22

Date Collected: 09/22/20 11:30 — **Matrix: Water**
Date Received: 09/30/20 12:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			484729	10/06/20 08:55	AVB	TAL SL
Total/NA	Analysis	9315		1	487277	10/29/20 12:21	SCB	TAL SL
Total/NA	Prep	PrecSep_0			484733	10/06/20 09:18	AVB	TAL SL
Total/NA	Analysis	9320		1	487055	10/28/20 12:22	SCB	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	487755	11/02/20 21:35	GRW	TAL SL

Client Sample ID: BA17806 MW-28H — Lab Sample ID: 400-193810-23

Date Collected: 09/22/20 13:04 — **Matrix: Water**
Date Received: 09/30/20 12:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			484729	10/06/20 08:55	AVB	TAL SL
Total/NA	Analysis	9315		1	487277	10/29/20 14:31	SCB	TAL SL
Total/NA	Prep	PrecSep_0			484733	10/06/20 09:18	AVB	TAL SL
Total/NA	Analysis	9320		1	487055	10/28/20 12:22	SCB	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	487755	11/02/20 21:35	GRW	TAL SL

Client Sample ID: BA17807 PZ-18 — Lab Sample ID: 400-193810-24

Date Collected: 09/22/20 15:28 — **Matrix: Water**
Date Received: 09/30/20 12:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			484729	10/06/20 08:55	AVB	TAL SL
Total/NA	Analysis	9315		1	487277	10/29/20 14:31	SCB	TAL SL
Total/NA	Prep	PrecSep_0			484733	10/06/20 09:18	AVB	TAL SL
Total/NA	Analysis	9320		1	487055	10/28/20 12:22	SCB	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	487755	11/02/20 21:35	GRW	TAL SL

Lab Chronicle

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-193810-1
SDG: Gorgas Ash Pond 1303

Client Sample ID: BA17808 PZ-18 DUP
Lab Sample ID: 400-193810-25

Date Collected: 09/22/20 15:28
Matrix: Water
Date Received: 09/30/20 12:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			484729	10/06/20 08:55	AVB	TAL SL
Total/NA	Analysis	9315		1	487277	10/29/20 14:36	SCB	TAL SL
Total/NA	Prep	PrecSep_0			484733	10/06/20 09:18	AVB	TAL SL
Total/NA	Analysis	9320		1	487055	10/28/20 12:22	SCB	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	487755	11/02/20 21:35	GRW	TAL SL

Client Sample ID: BA17809 MW-18V
Lab Sample ID: 400-193810-26

Date Collected: 09/22/20 16:28
Matrix: Water
Date Received: 09/30/20 12:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			484729	10/06/20 08:55	AVB	TAL SL
Total/NA	Analysis	9315		1	487277	10/29/20 14:36	SCB	TAL SL
Total/NA	Prep	PrecSep_0			484733	10/06/20 09:18	AVB	TAL SL
Total/NA	Analysis	9320		1	487055	10/28/20 12:22	SCB	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	487755	11/02/20 21:35	GRW	TAL SL

Client Sample ID: BA17810 FB-3
Lab Sample ID: 400-193810-27

Date Collected: 09/22/20 17:20
Matrix: Water
Date Received: 09/30/20 12:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			484729	10/06/20 08:55	AVB	TAL SL
Total/NA	Analysis	9315		1	487277	10/29/20 14:36	SCB	TAL SL
Total/NA	Prep	PrecSep_0			484733	10/06/20 09:18	AVB	TAL SL
Total/NA	Analysis	9320		1	487055	10/28/20 12:22	SCB	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	487755	11/02/20 21:35	GRW	TAL SL

Client Sample ID: BA17811 MW-16S
Lab Sample ID: 400-193810-28

Date Collected: 09/21/20 15:45
Matrix: Water
Date Received: 09/30/20 12:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			484729	10/06/20 08:55	AVB	TAL SL
Total/NA	Analysis	9315		1	487277	10/29/20 14:36	SCB	TAL SL
Total/NA	Prep	PrecSep_0			484733	10/06/20 09:18	AVB	TAL SL
Total/NA	Analysis	9320		1	487055	10/28/20 12:22	SCB	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	487755	11/02/20 21:35	GRW	TAL SL

Lab Chronicle

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-193810-1
SDG: Gorgas Ash Pond 1303

Client Sample ID: BA17812 MW-16D
Lab Sample ID: 400-193810-29

Date Collected: 09/22/20 09:18
Date Received: 09/30/20 12:40
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			484723	10/06/20 07:47	AVB	TAL SL
Total/NA	Analysis	9315		1	487612	10/31/20 10:43	FLC	TAL SL
Total/NA	Prep	PrecSep_0			484724	10/06/20 08:15	AVB	TAL SL
Total/NA	Analysis	9320		1	487300	10/29/20 12:32	SCB	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	487755	11/02/20 21:33	GRW	TAL SL

Client Sample ID: BA17813 MW-42H
Lab Sample ID: 400-193810-30

Date Collected: 09/22/20 10:50
Date Received: 09/30/20 12:40
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			484723	10/06/20 07:47	AVB	TAL SL
Total/NA	Analysis	9315		1	487612	10/31/20 10:43	FLC	TAL SL
Total/NA	Prep	PrecSep_0			484724	10/06/20 08:15	AVB	TAL SL
Total/NA	Analysis	9320		1	487301	10/29/20 12:33	SCB	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	487755	11/02/20 21:33	GRW	TAL SL

Client Sample ID: BA17814 MW-42H DUP
Lab Sample ID: 400-193810-31

Date Collected: 09/22/20 10:50
Date Received: 09/30/20 12:40
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			484723	10/06/20 07:47	AVB	TAL SL
Total/NA	Analysis	9315		1	487612	10/31/20 10:43	FLC	TAL SL
Total/NA	Prep	PrecSep_0			484724	10/06/20 08:15	AVB	TAL SL
Total/NA	Analysis	9320		1	487301	10/29/20 12:33	SCB	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	487755	11/02/20 21:33	GRW	TAL SL

Client Sample ID: BA17815 MW-2
Lab Sample ID: 400-193810-32

Date Collected: 09/22/20 12:37
Date Received: 09/30/20 12:40
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			484723	10/06/20 07:47	AVB	TAL SL
Total/NA	Analysis	9315		1	487612	10/31/20 10:44	FLC	TAL SL
Total/NA	Prep	PrecSep_0			484724	10/06/20 08:15	AVB	TAL SL
Total/NA	Analysis	9320		1	487301	10/29/20 12:33	SCB	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	487755	11/02/20 21:33	GRW	TAL SL

Lab Chronicle

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-193810-1
SDG: Gorgas Ash Pond 1303

Client Sample ID: BA17816 MW-19
Lab Sample ID: 400-193810-33

Date Collected: 09/22/20 13:56
Date Received: 09/30/20 12:40
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			484723	10/06/20 07:47	AVB	TAL SL
Total/NA	Analysis	9315		1	487612	10/31/20 10:44	FLC	TAL SL
Total/NA	Prep	PrecSep_0			484724	10/06/20 08:15	AVB	TAL SL
Total/NA	Analysis	9320		1	487301	10/29/20 12:33	SCB	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	487755	11/02/20 21:33	GRW	TAL SL

Client Sample ID: BA17817 MW-8
Lab Sample ID: 400-193810-34

Date Collected: 09/21/20 12:08
Date Received: 09/30/20 12:40
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			484723	10/06/20 07:47	AVB	TAL SL
Total/NA	Analysis	9315		1	487612	10/31/20 10:44	FLC	TAL SL
Total/NA	Prep	PrecSep_0			484724	10/06/20 08:15	AVB	TAL SL
Total/NA	Analysis	9320		1	487301	10/29/20 12:33	SCB	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	487755	11/02/20 21:33	GRW	TAL SL

Client Sample ID: BA17818 MW-26H
Lab Sample ID: 400-193810-35

Date Collected: 09/21/20 15:55
Date Received: 09/30/20 12:40
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			484723	10/06/20 07:47	AVB	TAL SL
Total/NA	Analysis	9315		1	487612	10/31/20 10:44	FLC	TAL SL
Total/NA	Prep	PrecSep_0			484724	10/06/20 08:15	AVB	TAL SL
Total/NA	Analysis	9320		1	487301	10/29/20 12:33	SCB	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	487755	11/02/20 21:33	GRW	TAL SL

Client Sample ID: BA17819 MW-26H DIS
Lab Sample ID: 400-193810-36

Date Collected: 09/21/20 15:55
Date Received: 09/30/20 12:40
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	PrecSep-21			484723	10/06/20 07:47	AVB	TAL SL
Dissolved	Analysis	9315		1	487612	10/31/20 10:44	FLC	TAL SL
Dissolved	Prep	PrecSep_0			484724	10/06/20 08:15	AVB	TAL SL
Dissolved	Analysis	9320		1	487301	10/29/20 12:34	SCB	TAL SL
Dissolved	Analysis	Ra226_Ra228 (D)		1	487765	11/02/20 23:17	SCB	TAL SL

Lab Chronicle

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-193810-1
SDG: Gorgas Ash Pond 1303

Client Sample ID: BA17820 MW-40H — Lab Sample ID: 400-193810-37

Date Collected: 09/22/20 09:58 — **Matrix: Water**
Date Received: 09/30/20 12:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			484723	10/06/20 07:47	AVB	TAL SL
Total/NA	Analysis	9315		1	487612	10/31/20 12:35	FLC	TAL SL
Total/NA	Prep	PrecSep_0			484724	10/06/20 08:15	AVB	TAL SL
Total/NA	Analysis	9320		1	487301	10/29/20 12:34	SCB	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	487755	11/02/20 21:33	GRW	TAL SL

Client Sample ID: BA17821 MW-9V — Lab Sample ID: 400-193810-38

Date Collected: 09/22/20 13:05 — **Matrix: Water**
Date Received: 09/30/20 12:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			485002	10/07/20 07:00	AVB	TAL SL
Total/NA	Analysis	9315		1	487612	10/31/20 12:36	FLC	TAL SL
Total/NA	Prep	PrecSep_0			485003	10/07/20 07:54	AVB	TAL SL
Total/NA	Analysis	9320		1	487301	10/29/20 12:35	SCB	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	487755	11/02/20 21:35	GRW	TAL SL

Client Sample ID: BA17910 MW-38H — Lab Sample ID: 400-193810-39

Date Collected: 09/22/20 15:10 — **Matrix: Water**
Date Received: 09/30/20 12:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			485002	10/07/20 07:00	AVB	TAL SL
Total/NA	Analysis	9315		1	487612	10/31/20 12:37	FLC	TAL SL
Total/NA	Prep	PrecSep_0			485003	10/07/20 07:54	AVB	TAL SL
Total/NA	Analysis	9320		1	487301	10/29/20 12:35	SCB	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	487755	11/02/20 21:35	GRW	TAL SL

Client Sample ID: BA17911 MW-29H — Lab Sample ID: 400-193810-40

Date Collected: 09/22/20 16:45 — **Matrix: Water**
Date Received: 09/30/20 12:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			485002	10/07/20 07:00	AVB	TAL SL
Total/NA	Analysis	9315		1	487612	10/31/20 12:37	FLC	TAL SL
Total/NA	Prep	PrecSep_0			485003	10/07/20 07:54	AVB	TAL SL
Total/NA	Analysis	9320		1	487301	10/29/20 12:36	SCB	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	487755	11/02/20 21:35	GRW	TAL SL

Lab Chronicle

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-193810-1
SDG: Gorgas Ash Pond 1303

Client Sample ID: BA17912 MW-12V — Lab Sample ID: 400-193810-41

Date Collected: 09/23/20 10:15 — **Matrix: Water**
Date Received: 09/30/20 12:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			485002	10/07/20 07:00	AVB	TAL SL
Total/NA	Analysis	9315		1	487612	10/31/20 12:37	FLC	TAL SL
Total/NA	Prep	PrecSep_0			485003	10/07/20 07:54	AVB	TAL SL
Total/NA	Analysis	9320		1	487301	10/29/20 12:36	SCB	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	487755	11/02/20 21:35	GRW	TAL SL

Client Sample ID: BA17913 MW-12V DIS — Lab Sample ID: 400-193810-42

Date Collected: 09/23/20 10:15 — **Matrix: Water**
Date Received: 09/30/20 12:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	PrecSep-21			485002	10/07/20 07:00	AVB	TAL SL
Dissolved	Analysis	9315		1	487612	10/31/20 12:37	FLC	TAL SL
Dissolved	Prep	PrecSep_0			485003	10/07/20 07:54	AVB	TAL SL
Dissolved	Analysis	9320		1	487301	10/29/20 12:36	SCB	TAL SL
Dissolved	Analysis	Ra226_Ra228 (D)		1	487766	11/02/20 23:17	SCB	TAL SL

Client Sample ID: BA17914 MW-12 — Lab Sample ID: 400-193810-43

Date Collected: 09/23/20 13:10 — **Matrix: Water**
Date Received: 09/30/20 12:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			485002	10/07/20 07:00	AVB	TAL SL
Total/NA	Analysis	9315		1	487612	10/31/20 12:37	FLC	TAL SL
Total/NA	Prep	PrecSep_0			485003	10/07/20 07:54	AVB	TAL SL
Total/NA	Analysis	9320		1	487301	10/29/20 12:36	SCB	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	487755	11/02/20 21:35	GRW	TAL SL

Client Sample ID: BA17915 MW-21 — Lab Sample ID: 400-193810-44

Date Collected: 09/23/20 16:15 — **Matrix: Water**
Date Received: 09/30/20 12:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			485002	10/07/20 07:00	AVB	TAL SL
Total/NA	Analysis	9315		1	487612	10/31/20 12:37	FLC	TAL SL
Total/NA	Prep	PrecSep_0			485003	10/07/20 07:54	AVB	TAL SL
Total/NA	Analysis	9320		1	487301	10/29/20 12:36	SCB	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	487755	11/02/20 21:35	GRW	TAL SL

Lab Chronicle

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-193810-1
SDG: Gorgas Ash Pond 1303

Client Sample ID: BA17916 FB-4
Lab Sample ID: 400-193810-45

Date Collected: 09/23/20 17:00
Date Received: 09/30/20 12:40
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			485002	10/07/20 07:00	AVB	TAL SL
Total/NA	Analysis	9315		1	487612	10/31/20 12:38	FLC	TAL SL
Total/NA	Prep	PrecSep_0			485003	10/07/20 07:54	AVB	TAL SL
Total/NA	Analysis	9320		1	487301	10/29/20 12:36	SCB	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	487755	11/02/20 21:35	GRW	TAL SL

Client Sample ID: BA17917 EB-1
Lab Sample ID: 400-193810-46

Date Collected: 09/23/20 17:10
Date Received: 09/30/20 12:40
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			485002	10/07/20 07:00	AVB	TAL SL
Total/NA	Analysis	9315		1	487612	10/31/20 12:39	FLC	TAL SL
Total/NA	Prep	PrecSep_0			485003	10/07/20 07:54	AVB	TAL SL
Total/NA	Analysis	9320		1	487301	10/29/20 12:36	SCB	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	487755	11/02/20 21:38	GRW	TAL SL

Client Sample ID: BA17918 MW-18
Lab Sample ID: 400-193810-47

Date Collected: 09/23/20 18:05
Date Received: 09/30/20 12:40
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			485002	10/07/20 07:00	AVB	TAL SL
Total/NA	Analysis	9315		1	487612	10/31/20 12:39	FLC	TAL SL
Total/NA	Prep	PrecSep_0			485003	10/07/20 07:54	AVB	TAL SL
Total/NA	Analysis	9320		1	487301	10/29/20 12:36	SCB	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	487755	11/02/20 21:38	GRW	TAL SL

Client Sample ID: BA17919 MW-15
Lab Sample ID: 400-193810-48

Date Collected: 09/23/20 11:37
Date Received: 09/30/20 12:40
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			485002	10/07/20 07:00	AVB	TAL SL
Total/NA	Analysis	9315		1	487612	10/31/20 14:35	FLC	TAL SL
Total/NA	Prep	PrecSep_0			485003	10/07/20 07:54	AVB	TAL SL
Total/NA	Analysis	9320		1	487302	10/29/20 12:41	SCB	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	487755	11/02/20 21:38	GRW	TAL SL

Lab Chronicle

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-193810-1
SDG: Gorgas Ash Pond 1303

Client Sample ID: BA17920 MW-17V

Lab Sample ID: 400-193810-49

Date Collected: 09/23/20 13:49
Matrix: Water
Date Received: 09/30/20 12:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			485002	10/07/20 07:00	AVB	TAL SL
Total/NA	Analysis	9315		1	487612	10/31/20 14:36	FLC	TAL SL
Total/NA	Prep	PrecSep_0			485003	10/07/20 07:54	AVB	TAL SL
Total/NA	Analysis	9320		1	487302	10/29/20 12:41	SCB	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	487755	11/02/20 21:38	GRW	TAL SL

Client Sample ID: BA17921 MW-21V

Lab Sample ID: 400-193810-50

Date Collected: 09/23/20 16:37
Matrix: Water
Date Received: 09/30/20 12:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			485002	10/07/20 07:00	AVB	TAL SL
Total/NA	Analysis	9315		1	487612	10/31/20 14:36	FLC	TAL SL
Total/NA	Prep	PrecSep_0			485003	10/07/20 07:54	AVB	TAL SL
Total/NA	Analysis	9320		1	487302	10/29/20 12:42	SCB	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	487755	11/02/20 21:38	GRW	TAL SL

Laboratory References:

TAL SL = Eurofins TestAmerica, St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

QC Association Summary

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-193810-1
SDG: Gorgas Ash Pond 1303

Rad

Prep Batch: 484723

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-193810-1	BA17566 MW-6V	Total/NA	Water	PrecSep-21	
400-193810-2	BA17567 MW-7	Total/NA	Water	PrecSep-21	
400-193810-3	BA17568 MW-7 DISS	Dissolved	Water	PrecSep-21	
400-193810-4	BA17569 MW-6S	Total/NA	Water	PrecSep-21	
400-193810-5	BA17570 MW-6S DUP	Total/NA	Water	PrecSep-21	
400-193810-6	BA17571 MW-6D	Total/NA	Water	PrecSep-21	
400-193810-29	BA17812 MW-16D	Total/NA	Water	PrecSep-21	
400-193810-30	BA17813 MW-42H	Total/NA	Water	PrecSep-21	
400-193810-31	BA17814 MW-42H DUP	Total/NA	Water	PrecSep-21	
400-193810-32	BA17815 MW-2	Total/NA	Water	PrecSep-21	
400-193810-33	BA17816 MW-19	Total/NA	Water	PrecSep-21	
400-193810-34	BA17817 MW-8	Total/NA	Water	PrecSep-21	
400-193810-35	BA17818 MW-26H	Total/NA	Water	PrecSep-21	
400-193810-36	BA17819 MW-26H DIS	Dissolved	Water	PrecSep-21	
400-193810-37	BA17820 MW-40H	Total/NA	Water	PrecSep-21	
MB 160-484723/24-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-484723/1-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
400-193810-6 MS	BA17571 MW-6D	Total/NA	Water	PrecSep-21	
400-193810-6 MSD	BA17571 MW-6D	Total/NA	Water	PrecSep-21	

Prep Batch: 484724

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-193810-1	BA17566 MW-6V	Total/NA	Water	PrecSep_0	
400-193810-2	BA17567 MW-7	Total/NA	Water	PrecSep_0	
400-193810-3	BA17568 MW-7 DISS	Dissolved	Water	PrecSep_0	
400-193810-4	BA17569 MW-6S	Total/NA	Water	PrecSep_0	
400-193810-5	BA17570 MW-6S DUP	Total/NA	Water	PrecSep_0	
400-193810-6	BA17571 MW-6D	Total/NA	Water	PrecSep_0	
400-193810-29	BA17812 MW-16D	Total/NA	Water	PrecSep_0	
400-193810-30	BA17813 MW-42H	Total/NA	Water	PrecSep_0	
400-193810-31	BA17814 MW-42H DUP	Total/NA	Water	PrecSep_0	
400-193810-32	BA17815 MW-2	Total/NA	Water	PrecSep_0	
400-193810-33	BA17816 MW-19	Total/NA	Water	PrecSep_0	
400-193810-34	BA17817 MW-8	Total/NA	Water	PrecSep_0	
400-193810-35	BA17818 MW-26H	Total/NA	Water	PrecSep_0	
400-193810-36	BA17819 MW-26H DIS	Dissolved	Water	PrecSep_0	
400-193810-37	BA17820 MW-40H	Total/NA	Water	PrecSep_0	
MB 160-484724/24-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-484724/1-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
400-193810-6 MS	BA17571 MW-6D	Total/NA	Water	PrecSep_0	
400-193810-6 MSD	BA17571 MW-6D	Total/NA	Water	PrecSep_0	

Prep Batch: 484729

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-193810-16	BA17799 MW-15V	Total/NA	Water	PrecSep-21	
400-193810-17	BA17800 MW-17	Total/NA	Water	PrecSep-21	
400-193810-18	BA17801 FB-2	Total/NA	Water	PrecSep-21	
400-193810-19	BA17802 MW-32H	Total/NA	Water	PrecSep-21	
400-193810-20	BA17803 MW-30HA	Total/NA	Water	PrecSep-21	
400-193810-21	BA17804 MW-31H	Total/NA	Water	PrecSep-21	
400-193810-22	BA17805 MW-43H	Total/NA	Water	PrecSep-21	

Rad (Continued)

Prep Batch: 484729 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-193810-23	BA17806 MW-28H	Total/NA	Water	PrecSep-21	
400-193810-24	BA17807 PZ-18	Total/NA	Water	PrecSep-21	
400-193810-25	BA17808 PZ-18 DUP	Total/NA	Water	PrecSep-21	
400-193810-26	BA17809 MW-18V	Total/NA	Water	PrecSep-21	
400-193810-27	BA17810 FB-3	Total/NA	Water	PrecSep-21	
400-193810-28	BA17811 MW-16S	Total/NA	Water	PrecSep-21	
MB 160-484729/23-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-484729/1-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
LCSD 160-484729/2-A	Lab Control Sample Dup	Total/NA	Water	PrecSep-21	

Prep Batch: 484733

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-193810-16	BA17799 MW-15V	Total/NA	Water	PrecSep_0	
400-193810-17	BA17800 MW-17	Total/NA	Water	PrecSep_0	
400-193810-18	BA17801 FB-2	Total/NA	Water	PrecSep_0	
400-193810-19	BA17802 MW-32H	Total/NA	Water	PrecSep_0	
400-193810-20	BA17803 MW-30HA	Total/NA	Water	PrecSep_0	
400-193810-21	BA17804 MW-31H	Total/NA	Water	PrecSep_0	
400-193810-22	BA17805 MW-43H	Total/NA	Water	PrecSep_0	
400-193810-23	BA17806 MW-28H	Total/NA	Water	PrecSep_0	
400-193810-24	BA17807 PZ-18	Total/NA	Water	PrecSep_0	
400-193810-25	BA17808 PZ-18 DUP	Total/NA	Water	PrecSep_0	
400-193810-26	BA17809 MW-18V	Total/NA	Water	PrecSep_0	
400-193810-27	BA17810 FB-3	Total/NA	Water	PrecSep_0	
400-193810-28	BA17811 MW-16S	Total/NA	Water	PrecSep_0	
MB 160-484733/23-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-484733/1-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
LCSD 160-484733/2-A	Lab Control Sample Dup	Total/NA	Water	PrecSep_0	

Prep Batch: 484743

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-193810-7	BA17572 MW-23H	Total/NA	Water	PrecSep-21	
400-193810-8	BA17573 MW-41HD	Total/NA	Water	PrecSep-21	
400-193810-9	BA17574 MW-24H	Total/NA	Water	PrecSep-21	
400-193810-10	BA17575 FB-1	Total/NA	Water	PrecSep-21	
400-193810-11	BA17576 MW-25HA	Total/NA	Water	PrecSep-21	
400-193810-12	BA17577 PZ-16	Total/NA	Water	PrecSep-21	
400-193810-13	BA17578 PZ-16 DUP	Total/NA	Water	PrecSep-21	
400-193810-14	BA17579 PZ-22	Total/NA	Water	PrecSep-21	
400-193810-15	BA17580 MW-36H	Total/NA	Water	PrecSep-21	
MB 160-484743/24-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-484743/1-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
400-193810-14 MS	BA17579 PZ-22	Total/NA	Water	PrecSep-21	
400-193810-14 MSD	BA17579 PZ-22	Total/NA	Water	PrecSep-21	

Prep Batch: 484744

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-193810-7	BA17572 MW-23H	Total/NA	Water	PrecSep_0	
400-193810-8	BA17573 MW-41HD	Total/NA	Water	PrecSep_0	
400-193810-9	BA17574 MW-24H	Total/NA	Water	PrecSep_0	
400-193810-10	BA17575 FB-1	Total/NA	Water	PrecSep_0	

Rad (Continued)

Prep Batch: 484744 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-193810-11	BA17576 MW-25HA	Total/NA	Water	PrecSep_0	
400-193810-12	BA17577 PZ-16	Total/NA	Water	PrecSep_0	
400-193810-13	BA17578 PZ-16 DUP	Total/NA	Water	PrecSep_0	
400-193810-14	BA17579 PZ-22	Total/NA	Water	PrecSep_0	
400-193810-15	BA17580 MW-36H	Total/NA	Water	PrecSep_0	
MB 160-484744/24-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-484744/1-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
400-193810-14 MS	BA17579 PZ-22	Total/NA	Water	PrecSep_0	
400-193810-14 MSD	BA17579 PZ-22	Total/NA	Water	PrecSep_0	

Prep Batch: 485002

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-193810-38	BA17821 MW-9V	Total/NA	Water	PrecSep-21	
400-193810-39	BA17910 MW-38H	Total/NA	Water	PrecSep-21	
400-193810-40	BA17911 MW-29H	Total/NA	Water	PrecSep-21	
400-193810-41	BA17912 MW-12V	Total/NA	Water	PrecSep-21	
400-193810-42	BA17913 MW-12V DIS	Dissolved	Water	PrecSep-21	
400-193810-43	BA17914 MW-12	Total/NA	Water	PrecSep-21	
400-193810-44	BA17915 MW-21	Total/NA	Water	PrecSep-21	
400-193810-45	BA17916 FB-4	Total/NA	Water	PrecSep-21	
400-193810-46	BA17917 EB-1	Total/NA	Water	PrecSep-21	
400-193810-47	BA17918 MW-18	Total/NA	Water	PrecSep-21	
400-193810-48	BA17919 MW-15	Total/NA	Water	PrecSep-21	
400-193810-49	BA17920 MW-17V	Total/NA	Water	PrecSep-21	
400-193810-50	BA17921 MW-21V	Total/NA	Water	PrecSep-21	
MB 160-485002/23-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-485002/1-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
400-193810-47 MS	BA17918 MW-18	Total/NA	Water	PrecSep-21	
400-193810-47 MSD	BA17918 MW-18	Total/NA	Water	PrecSep-21	

Prep Batch: 485003

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-193810-38	BA17821 MW-9V	Total/NA	Water	PrecSep_0	
400-193810-39	BA17910 MW-38H	Total/NA	Water	PrecSep_0	
400-193810-40	BA17911 MW-29H	Total/NA	Water	PrecSep_0	
400-193810-41	BA17912 MW-12V	Total/NA	Water	PrecSep_0	
400-193810-42	BA17913 MW-12V DIS	Dissolved	Water	PrecSep_0	
400-193810-43	BA17914 MW-12	Total/NA	Water	PrecSep_0	
400-193810-44	BA17915 MW-21	Total/NA	Water	PrecSep_0	
400-193810-45	BA17916 FB-4	Total/NA	Water	PrecSep_0	
400-193810-46	BA17917 EB-1	Total/NA	Water	PrecSep_0	
400-193810-47	BA17918 MW-18	Total/NA	Water	PrecSep_0	
400-193810-48	BA17919 MW-15	Total/NA	Water	PrecSep_0	
400-193810-49	BA17920 MW-17V	Total/NA	Water	PrecSep_0	
400-193810-50	BA17921 MW-21V	Total/NA	Water	PrecSep_0	
MB 160-485003/23-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-485003/1-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
400-193810-47 MS	BA17918 MW-18	Total/NA	Water	PrecSep_0	
400-193810-47 MSD	BA17918 MW-18	Total/NA	Water	PrecSep_0	

Method: 9315 - Radium-226 (GFPC)

Lab Sample ID: MB 160-484723/24-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 487612 — **Prep Batch: 484723**

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.06655	U	0.130	0.130	1.00	0.237	pCi/L	10/06/20 07:47	10/31/20 12:35	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*80.2*		*40 - 110*	*10/06/20 07:47*	*10/31/20 12:35*	*1*

Lab Sample ID: LCS 160-484723/1-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 487344 — **Prep Batch: 484723**

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-226			15.1	13.08		1.68	1.00	0.372	pCi/L	86	75 - 125		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*74.6*		*40 - 110*

Lab Sample ID: 400-193810-6 MS — **Client Sample ID: BA17571 MW-6D**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 487612 — **Prep Batch: 484723**

Analyte	Sample Result	Sample Qual	Spike Added	MS Result	MS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-226	0.309		15.1	13.57		1.58	1.00	0.222	pCi/L	88	75 - 138		

Carrier	*MS %Yield*	*MS Qualifier*	*Limits*
Ba Carrier	*82.0*		*40 - 110*

Lab Sample ID: 400-193810-6 MSD — **Client Sample ID: BA17571 MW-6D**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 487612 — **Prep Batch: 484723**

Analyte	Sample Result	Sample Qual	Spike Added	MSD Result	MSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits	RER	RER Limit
Radium-226	0.309		15.1	12.67		1.51	1.00	0.234	pCi/L	82	75 - 138	0.29	1

Carrier	*MSD %Yield*	*MSD Qualifier*	*Limits*
Ba Carrier	*79.6*		*40 - 110*

Lab Sample ID: MB 160-484729/23-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 487277 — **Prep Batch: 484729**

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.1532	U	0.175	0.175	1.00	0.282	pCi/L	10/06/20 08:55	10/29/20 18:58	1

Method: 9315 - Radium-226 (GFPC) (Continued)

Lab Sample ID: MB 160-484729/23-A
Matrix: Water
Analysis Batch: 487277

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 484729

Carrier	MB %Yield	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	84.6		40 - 110	10/06/20 08:55	10/29/20 18:58	1

Lab Sample ID: LCS 160-484729/1-A
Matrix: Water
Analysis Batch: 487277

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 484729

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-226			15.1	12.36		1.51	1.00	0.255	pCi/L	82	75 - 125		

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	94.1		40 - 110

Lab Sample ID: LCSD 160-484729/2-A
Matrix: Water
Analysis Batch: 487277

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 484729

Analyte			Spike Added	LCSD Result	LCSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits	RER	RER Limit
Radium-226			15.1	13.62		1.73	1.00	0.340	pCi/L	90	75 - 125	0.39	1

Carrier	LCSD %Yield	LCSD Qualifier	Limits
Ba Carrier	72.2		40 - 110

Lab Sample ID: MB 160-484743/24-A
Matrix: Water
Analysis Batch: 487030

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 484743

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.1797		0.0967	0.0981	1.00	0.112	pCi/L	10/06/20 11:14	10/28/20 14:42	1

Carrier	MB %Yield	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	82.2		40 - 110	10/06/20 11:14	10/28/20 14:42	1

Lab Sample ID: LCS 160-484743/1-A
Matrix: Water
Analysis Batch: 487030

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 484743

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-226			15.1	14.45		1.49	1.00	0.118	pCi/L	96	75 - 125		

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	85.2		40 - 110

Method: 9315 - Radium-226 (GFPC) (Continued)

Lab Sample ID: 400-193810-14 MS — **Client Sample ID: BA17579 PZ-22**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 487030 — **Prep Batch: 484743**

Analyte	Sample Result	Sample Qual	Spike Added	MS Result	MS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits
Radium-226	0.345		15.1	12.98		1.37	1.00	0.124	pCi/L	84	75 - 138

Carrier	*MS %Yield*	*MS Qualifier*	*Limits*
Ba Carrier	*80.5*		*40 - 110*

Lab Sample ID: 400-193810-14 MSD — **Client Sample ID: BA17579 PZ-22**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 487030 — **Prep Batch: 484743**

Analyte	Sample Result	Sample Qual	Spike Added	MSD Result	MSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits	RER	RER Limit
Radium-226	0.345		15.1	14.32		1.49	1.00	0.166	pCi/L	92	75 - 138	0.47	1

Carrier	*MSD %Yield*	*MSD Qualifier*	*Limits*
Ba Carrier	*82.0*		*40 - 110*

Lab Sample ID: MB 160-485002/23-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 487612 — **Prep Batch: 485002**

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.2255		0.152	0.154	1.00	0.200	pCi/L	10/07/20 07:00	10/31/20 14:37	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*92.0*		*40 - 110*	*10/07/20 07:00*	*10/31/20 14:37*	*1*

Lab Sample ID: LCS 160-485002/1-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 487612 — **Prep Batch: 485002**

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits
Radium-226			15.1	13.46		1.56	1.00	0.226	pCi/L	89	75 - 125

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*87.6*		*40 - 110*

Lab Sample ID: 400-193810-47 MS — **Client Sample ID: BA17918 MW-18**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 487612 — **Prep Batch: 485002**

Analyte	Sample Result	Sample Qual	Spike Added	MS Result	MS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits
Radium-226	0.0963	U	15.1	14.18		1.63	1.00	0.265	pCi/L	93	75 - 138

Method: 9315 - Radium-226 (GFPC) (Continued)

Lab Sample ID: 400-193810-47 MS
Matrix: Water
Analysis Batch: 487612

Client Sample ID: BA17918 MW-18
Prep Type: Total/NA
Prep Batch: 485002

Carrier	MS %Yield	MS Qualifier	Limits
Ba Carrier	87.0		40 - 110

Lab Sample ID: 400-193810-47 MSD
Matrix: Water
Analysis Batch: 487612

Client Sample ID: BA17918 MW-18
Prep Type: Total/NA
Prep Batch: 485002

Analyte	Sample Result	Sample Qual	Spike Added	MSD Result	MSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits	RER	RER Limit
Radium-226	0.0963	U	15.1	14.24		1.66	1.00	0.274	pCi/L	94	75 - 138	0.02	1

Carrier	MSD %Yield	MSD Qualifier	Limits
Ba Carrier	81.1		40 - 110

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-484724/24-A
Matrix: Water
Analysis Batch: 487301

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 484724

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.3060	U	0.363	0.365	1.00	0.600	pCi/L	10/06/20 08:15	10/29/20 12:34	1

Carrier	MB %Yield	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	80.2		40 - 110	10/06/20 08:15	10/29/20 12:34	1
Y Carrier	83.7		40 - 110	10/06/20 08:15	10/29/20 12:34	1

Lab Sample ID: LCS 160-484724/1-A
Matrix: Water
Analysis Batch: 487300

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 484724

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-228			10.3	9.810		1.33	1.00	0.770	pCi/L	96	75 - 125		

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	74.6		40 - 110
Y Carrier	78.1		40 - 110

Lab Sample ID: 400-193810-6 MS
Matrix: Water
Analysis Batch: 487300

Client Sample ID: BA17571 MW-6D
Prep Type: Total/NA
Prep Batch: 484724

Analyte	Sample Result	Sample Qual	Spike Added	MS Result	MS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-228	0.0104	U	10.3	8.515		1.17	1.00	0.579	pCi/L	83	45 - 150		

Method: 9320 - Radium-228 (GFPC) (Continued)

Lab Sample ID: 400-193810-6 MS
Matrix: Water
Analysis Batch: 487300

Client Sample ID: BA17571 MW-6D
Prep Type: Total/NA
Prep Batch: 484724

Carrier	MS %Yield	MS Qualifier	Limits
Ba Carrier	82.0		40 - 110
Y Carrier	78.5		40 - 110

Lab Sample ID: 400-193810-6 MSD
Matrix: Water
Analysis Batch: 487300

Client Sample ID: BA17571 MW-6D
Prep Type: Total/NA
Prep Batch: 484724

Analyte	Sample Result	Sample Qual	Spike Added	MSD Result	MSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits	RER	RER Limit
Radium-228	0.0104	U	10.3	10.68		1.40	1.00	0.731	pCi/L	104	45 - 150	0.84	1

Carrier	MSD %Yield	MSD Qualifier	Limits
Ba Carrier	79.6		40 - 110
Y Carrier	76.3		40 - 110

Lab Sample ID: MB 160-484733/23-A
Matrix: Water
Analysis Batch: 487056

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 484733

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.1455	U	0.339	0.339	1.00	0.584	pCi/L	10/06/20 09:18	10/28/20 12:24	1

Carrier	MB %Yield	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	84.6		40 - 110	10/06/20 09:18	10/28/20 12:24	1
Y Carrier	80.7		40 - 110	10/06/20 09:18	10/28/20 12:24	1

Lab Sample ID: LCS 160-484733/1-A
Matrix: Water
Analysis Batch: 487055

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 484733

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-228			10.3	8.916		1.15	1.00	0.593	pCi/L	87	75 - 125		

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	94.1		40 - 110
Y Carrier	79.6		40 - 110

Lab Sample ID: LCSD 160-484733/2-A
Matrix: Water
Analysis Batch: 487055

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 484733

Analyte			Spike Added	LCSD Result	LCSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits	RER	RER Limit
Radium-228			10.3	10.26		1.45	1.00	0.885	pCi/L	100	75 - 125	0.52	1

Method: 9320 - Radium-228 (GFPC) (Continued)

Lab Sample ID: LCSD 160-484733/2-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 487055 — **Prep Batch: 484733**

Carrier	LCSD %Yield	LCSD Qualifier	Limits
Ba Carrier	72.2		40 - 110
Y Carrier	67.7		40 - 110

Lab Sample ID: MB 160-484744/24-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 485729 — **Prep Batch: 484744**

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.1025	U	0.357	0.357	1.00	0.624	pCi/L	10/06/20 11:57	10/15/20 12:51	1

Carrier	MB %Yield	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	82.2		40 - 110	10/06/20 11:57	10/15/20 12:51	1
Y Carrier	79.3		40 - 110	10/06/20 11:57	10/15/20 12:51	1

Lab Sample ID: LCS 160-484744/1-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 485907 — **Prep Batch: 484744**

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-228			10.3	10.33		1.33	1.00	0.594	pCi/L	100	75 - 125		

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	85.2		40 - 110
Y Carrier	80.0		40 - 110

Lab Sample ID: 400-193810-14 MS — **Client Sample ID: BA17579 PZ-22**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 485729 — **Prep Batch: 484744**

Analyte	Sample Result	Sample Qual	Spike Added	MS Result	MS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-228	0.551	U	10.3	9.908		1.32	1.00	0.735	pCi/L	91	45 - 150		

Carrier	MS %Yield	MS Qualifier	Limits
Ba Carrier	80.5		40 - 110
Y Carrier	78.1		40 - 110

Lab Sample ID: 400-193810-14 MSD — **Client Sample ID: BA17579 PZ-22**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 485729 — **Prep Batch: 484744**

Analyte	Sample Result	Sample Qual	Spike Added	MSD Result	MSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits	RER	RER Limit
Radium-228	0.551	U	10.3	10.23		1.32	1.00	0.646	pCi/L	94	45 - 150	0.12	1

Method: 9320 - Radium-228 (GFPC) (Continued)

Lab Sample ID: 400-193810-14 MSD — **Client Sample ID: BA17579 PZ-22**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 485729 — **Prep Batch: 484744**

Carrier	MSD %Yield	MSD Qualifier	Limits
Ba Carrier	82.0		40 - 110
Y Carrier	82.2		40 - 110

Lab Sample ID: MB 160-485003/23-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 487302 — **Prep Batch: 485003**

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.5643		0.355	0.359	1.00	0.542	pCi/L	10/07/20 07:54	10/29/20 12:42	1

Carrier	MB %Yield	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	92.0		40 - 110	10/07/20 07:54	10/29/20 12:42	1
Y Carrier	83.4		40 - 110	10/07/20 07:54	10/29/20 12:42	1

Lab Sample ID: LCS 160-485003/1-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 487301 — **Prep Batch: 485003**

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-228			10.3	10.99		1.38	1.00	0.585	pCi/L	107	75 - 125		

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	87.6		40 - 110
Y Carrier	76.3		40 - 110

Lab Sample ID: 400-193810-47 MS — **Client Sample ID: BA17918 MW-18**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 487302 — **Prep Batch: 485003**

Analyte	Sample Result	Sample Qual	Spike Added	MS Result	MS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-228	0.792		10.3	10.25		1.33	1.00	0.645	pCi/L	92	45 - 150		

Carrier	MS %Yield	MS Qualifier	Limits
Ba Carrier	87.0		40 - 110
Y Carrier	73.3		40 - 110

Lab Sample ID: 400-193810-47 MSD — **Client Sample ID: BA17918 MW-18**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 487302 — **Prep Batch: 485003**

Analyte	Sample Result	Sample Qual	Spike Added	MSD Result	MSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits	RER	RER Limit
Radium-228	0.792		10.3	11.06		1.44	1.00	0.689	pCi/L	100	45 - 150	0.29	1

Method: 9320 - Radium-228 (GFPC) (Continued)

Lab Sample ID: 400-193810-47 MSD
Matrix: Water
Analysis Batch: 487302

Client Sample ID: BA17918 MW-18
Prep Type: Total/NA
Prep Batch: 485003

Carrier	MSD %Yield	MSD Qualifier	Limits
Ba Carrier	81.1		40 - 110
Y Carrier	73.3		40 - 110

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Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

400-193810 COC

Client Information (Sub Contract Lab)	Sampler: TJ Daugherty	Lab PM: Whitmire, Cheyenne R	Carrier Tracking No(s):	COC No: 400-56525-24537.1
Client Contact: Laura Midkif	Phone:	E-Mail: cheyenne.whitmire@testamericainc.com	State of Origin: Alabama	Page: Page 1 of 7
Company: Alabama Power General Test Laboratory		Accreditations Required (See note):		Job #:
Address: 744 County Rd 87 GSC#8	Due Date Requested:			
City: Calera	TAT Requested (days): Routine			
State, Zip: AL, 35040				
Phone: 205-664-6197	PO #: APC67309-0001			
Email: lbmidkif@southernco.com	WO #:			
Project Name: CCR	Project #: 40007143			
Site: Gorgas Ash Pond 1303	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	SM 4500 F_C	SM 4500 CL_E	SM 4500 SO4_E	9315_Ra226, 9320_Ra228, Ra226Ra228_GFPC	Total Number of containers	Special Instructions/Note:
			Preservation Code:									
BA17566	9/15/20	15:35	G	Water						X	1	MW-6V
BA17567	9/16/20	11:50	G	Water						X	1	MW-7
BA17568	9/16/20	11:50	G	Water	x					X	1	MW-7 DISS
BA17569	9/16/20	14:33	G	Water						X	1	MW-6S
BA17570	9/16/20	14:33	G	Water						X	1	MW-6S DUP
BA17571	9/17/20	09:35	G	Water		X				X	3	MW-6D
BA17572	9/17/20	11:25	G	Water						X	1	MW-23H
BA17573	9/17/20	13:05	G	Water						X	1	MW-41HD
BA17574	9/17/20	14:20	G	Water						X	1	MW-24H
BA17575	9/17/20	14:45	G	Water						X	1	FB-1 (Field Blank)

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to TestAmerica Laboratories, Inc.

Possible Hazard Identification *Unconfirmed*	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*** ☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) 44048	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:		
Relinquished by: Laura Midkiff	Date/Time: 09/28/2020 1100	Water APC	Received by: Kathy Clancy	Date/Time: 9-30-20 1240	Company: EIA
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	0	Company	Received by:	Date/Time:	Company
Custody Seals Intact:			Cooler Temperature(s) °C and Other Remarks: 19.9, 20.7, 21.1°C IR9		

Ver: 09/20/2016

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Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler: Dallas Gentry	Lab PM: Whitmire, Cheyenne R	Carrier Tracking No(s):	COC No: 400-56525-24537.1
Client Contact: Laura Midkiff	Phone:	E-Mail: cheyenne.whitmire@testamericainc.com	State of Origin: Alabama	Page: Page 2 of 7
Company: Alabama Power General Test Laboratory		Accreditations Required (See note):		Job #:
Address: 744 County Rd 87 GSC#8	Due Date Requested:			
City: Calera	TAT Requested (days): Routine			
State, Zip: AL, 35040				
Phone: 205-664-6197	PO #: APC67309-0001			
Email: lbmidkif@southernco.com	WO #:			
Project Name: CCR	Project #: 40007143			
Site: Gorgas Ash Pond 1303	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	SM 4500 F_C	SM 4500 Cl_E	SM 4500 SO4_E	9315_Ra226, 9320_Ra228, Ra226Ra228_GFPC	Total Number of containers	Special Instructions/Note:
			Preservation Code:									
BA17576	9/17/20	09:08	G	Water						X	1	MW-25HA
BA17577	9/17/20	11:55	G	Water						X	1	PZ-16
BA17578	9/17/20	11:55	G	Water						X	1	PZ-16 DUP
BA17579	9/17/20	13:07	G	Water		x				X	3	PZ-22
BA17580	9/17/20	15:01	G	Water						X	1	MW-36H

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to TestAmerica Laboratories, Inc.

Possible Hazard Identification
Unconfirmed

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*

Deliverable Requested: I, II, III, IV, Other (specify) 44048 Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:		Method of Shipment:	
Relinquished by: Laura Midkiff	Date/Time: 09/28/2020 1100	Water APC	Received by: Keith R Avery	Date/Time: 9/30/20 1240	Company: EPA
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	0	Company	Received by:	Date/Time:	Company
Custody Seals Intact:			Cooler Temperature(s) °C and Other Remarks:		

Ver: 09/20/2016

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Pensacola, FL 32514
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Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler: Dallas Gentry	Lab PM: Whitmire, Cheyenne R	Carrier Tracking No(s):	COC No: 400-56525-24537.1
Client Contact: Laura Midkif	Phone:	E-Mail: cheyenne.whitmire@testamericainc.com	State of Origin: Alabama	Page: Page 3 of 7
Company: Alabama Power General Test Laboratory		Accreditations Required (See note):		Job #:
Address: 744 County Rd 87 GSC#8	Due Date Requested:			
City: Calera	TAT Requested (days): Routine			
State, Zip: AL, 35040				
Phone: 205-664-6197	PO #: APC67309-0001			
Email: lbmidkif@southernco.com	WO #:			
Project Name: CCR	Project #: 40007143			
Site: Gorgas Ash Pond 1303	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL; B - NaOH; C - Zn Acetate; D - Nitric Acid; E - NaHSO4; F - MeOH; G - Amchlor; H - Ascorbic Acid; I - Ice; J - DI Water; K - EDTA; L - EDA; M - Hexane; N - None; O - AsNaO2; P - Na2O4S; Q - Na2SO3; R - Na2S2O3; S - H2SO4; T - TSP Dodecahydrate; U - Acetone; V - MCAA; W - pH 4-5; Z - other (specify)
Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	SM 4500 F_C	SM 4500 CL_E	SM 4500 SO4_E	9315_Ra226, 9320_Ra228, Ra226/Ra228_GFPC	Total Number of containers	Special Instructions/Note:
			Preservation Code:									
BA17799	9/21/20	11:18	G	Water						X	1	MW-15V
BA17800	9/21/20	12:48	G	Water						X	1	MW-17
BA17801	9/21/20	14:15	G	Water						X	1	FB-2
BA17802	9/21/20	14:42	G	Water						X	1	MW-32H
BA17803	9/21/20	16:28	G	Water						X	1	MW-30HA
BA17804	9/22/20	10:04	G	Water						X	1	MW-31 11 RBM 9/28/20
BA17805	9/22/20	11:30	G	Water						X	1	MW-43H
BA17806	9/22/20	13:04	G	Water						X	1	MW-28H
BA17807	9/22/20	15:28	G	Water						X	1	PZ-18
BA17808	9/22/20	15:28	G	Water						X	1	PZ-18 DUP
BA17809	9/22/20	16:28	G	Water						X	1	MW-18V
BA17810	9/22/20	17:20	G	Water						X	1	FB-3

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to TestAmerica Laboratories, Inc.

Possible Hazard Identification *Unconfirmed*	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*** ☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify)	44048 Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:		
Relinquished by: Laura Midkiff	Date/Time: 09/28/2020 1100	Water APC	Received by: Kathy R Avery	Date/Time: 9.30.20 1240	Company: EIA
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	0	Company	Received by:	Date/Time:	Company
Custody Seals Intact:			Cooler Temperature(s) °C and Other Remarks:		

Ver: 09/20/2016

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Pensacola, FL 32514
Phone (850) 474-1001 Fax (850) 478-2671

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler: Anthony Goggins	Lab PM: Whitmire, Cheyenne R	Carrier Tracking No(s):	COC No: 400-56525-24537.1
Client Contact: Laura Midkif	Phone:	E-Mail: cheyenne.whitmire@testamericainc.com	State of Origin: Alabama	Page: Page 4 of 7
Company: Alabama Power General Test Laboratory		Accreditations Required (See note):		Job #:
Address: 744 County Rd 87 GSC#8	Due Date Requested:			
City: Calera	TAT Requested (days): Routine			
State, Zip: AL, 35040				
Phone: 205-664-6197	PO #: APC67309-0001			
Email: lbmidkif@southernco.com	WO #:			
Project Name: CCR	Project #: 40007143			
Site: Gorgas Ash Pond 1303	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	SM 4500 F_C	SM 4500 Cl_E	SM 4500 SO4_E	9315_Ra226, 9320_Ra228, Ra226/Ra228_GFPC	Total Number of containers	Special Instructions/Note:
			Preservation Code:									
BA17811	9/21/20	15:45	G	Water						X	1	MW-16S
BA17812	9/22/20	09:18	G	Water						X	1	MW-16D
BA17813	9/22/20	10:50	G	Water						X	1	MW-42H
BA17814	9/22/20	10:50	G	Water						X	1	MW-42H DUP
BA17815	9/22/20	12:37	G	Water						X	1	MW-2
BA17816	9/22/20	13:56	G	Water						X	1	MW-19

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to TestAmerica Laboratories, Inc.

Possible Hazard Identification
Unconfirmed

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*

Deliverable Requested: I, II, III, IV, Other (specify) 44048 Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:		
Relinquished by: Laura Midkiff	Date/Time: 09/28/2020 1100	Company: Water APC	Received by: [signature]	Date/Time: 9.30.20 1240	Company: ETA
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	0	Company	Received by:	Date/Time:	Company

Custody Seals Intact: | Cooler Temperature(s) °C and Other Remarks:

Ver: 09/20/2016

TestAmerica Pensacola
3355 McLemore Drive
Pensacola, FL 32514
Phone (850) 474-1001 Fax (850) 478-2671

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler: TJ Daugherty	Lab PM: Whitmire, Cheyenne R	Carrier Tracking No(s):	COC No: 400-56525-24537.1
Client Contact: Laura Midkif	Phone:	E-Mail: cheyenne.whitmire@testamericainc.com	State of Origin: Alabama	Page: Page 5 of 7
Company: Alabama Power General Test Laboratory		Accreditations Required (See note):		Job #:
Address: 744 County Rd 87 GSC#8	Due Date Requested:			
City: Calera	TAT Requested (days): Routine			
State, Zip: AL, 35040				
Phone: 205-664-6197	PO #: APC67309-0001			
Email: lbmidkif@southernco.com	WO #:			
Project Name: CCR	Project #: 40007143			
Site: Gorgas Ash Pond 1303	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (Wwater, Ssolid, Owaste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	SM 4500 F_C	SM 4500 CL_E	SM 4500 SO4_E	9315_Ra226, 9320_Ra228, Ra226/Ra228_GFPC	Total Number of containers	Special Instructions/Note:
			Preservation Code:									
BA17817	9/21/20	12:08	G	Water						X	1	MW-8
BA17818	9/21/20	15:55	G	Water						X	1	MW-26H
BA17819	9/21/20	15:55	G	Water	X					X	1	MW-26H DIS
BA17820	9/22/20	09:58	G	Water						X	1	MW-40H
BA17821	9/22/20	13:05	G	Water						X	1	MW-9V

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to TestAmerica Laboratories, Inc.

Possible Hazard Identification
Unconfirmed

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*

Deliverable Requested: I, II, III, IV, Other (specify) 44048 Special Instructions/QC Requirements:

Empty Kit Relinquished by: Date: Time: Method of Shipment:

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
Laura Midkiff	09/28/2020 1100	Water APC	Kathy R Clay	9-30-20 1240	EFA

Custody Seals Intact: Cooler Temperature(s) °C and Other Remarks:

Ver. 09/20/2016

TestAmerica Pensacola
3355 McLemore Drive
Pensacola, FL 32514
Phone (850) 474-1001 Fax (850) 478-2671

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler: TJ Daugherty	Lab PM: Whitmire, Cheyenne R	Carrier Tracking No(s):	COC No: 400-56525-24537.1
Client Contact: Laura Midkif	Phone:	E-Mail: cheyenne.whitmire@testamericainc.com	State of Origin: Alabama	Page: Page 6 of 7
Company: Alabama Power General Test Laboratory		Accreditations Required (See note):		Job #:
Address: 744 County Rd 87 GSC#8	Due Date Requested:			
City: Calera	TAT Requested (days): Routine			
State, Zip: AL, 35040				
Phone: 205-664-6197	PO #: APC67309-0001			
Email: lbmidkif@southernco.com	WO #:			
Project Name: CCR	Project #: 40007143			
Site: Gorgas Ash Pond 1303	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	SM 4500 F_C	SM 4500 Cl_E	SM 4500 SO4_E	9315_Ra226, 9320_Ra228, Ra226Ra228_GFPC	Total Number of containers	Special Instructions/Note:
			Preservation Code:									
BA17910	9/22/20	15:10	G	Water						X	1	MW-38H
BA17911	9/22/20	16:45	G	Water						X	1	MW-29H
BA17912	9/23/20	10:15	G	Water						X	1	MW-12V
BA17913	9/23/20	10:15	G	Water	X					X	1	MW-12V DIS
BA17914	9/23/20	13:10	G	Water						X	1	MW-12
BA17915	9/23/20	16:15	G	Water						X	1	MW-21
BA17916	9/23/20	17:00	G	Water						X	1	FB-4
BA17917	9/23/20	17:10	G	Water						X	1	EB-1
BA17918	9/23/20	18:05	G	Water		X				X	3	MW-18

RBM 9/28/20

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to TestAmerica Laboratories, Inc.

Possible Hazard Identification
Unconfirmed

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*

Deliverable Requested: I, II, III, IV, Other (specify) 44048 Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:		
Relinquished by: Laura Midkiff	Date/Time: 09/28/2020 1100	Water APC	Received by: Kathy Ramey	Date/Time: 9.30.20 1240	Company: EA
Relinquished by:	Date/Time:	Company:	Received by:	Date/Time:	Company
Relinquished by:	0	Company	Received by:	Date/Time:	Company
Custody Seals Intact:			Cooler Temperature(s) °C and Other Remarks:		

Ver: 09/20/2016

TestAmerica Pensacola
3355 McLemore Drive
Pensacola, FL 32514
Phone (850) 474-1001 Fax (850) 478-2671

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler: Dallas Gentry	Lab PM: Whitmire, Cheyenne R	Carrier Tracking No(s):	COC No: 400-56525-24537.1
Client Contact: Laura Midkif	Phone:	E-Mail: cheyenne.whitmire@testamericainc.com	State of Origin: Alabama	Page: Page 7 of 7
Company: Alabama Power General Test Laboratory		Accreditations Required (See note):		Job #:
Address: 744 County Rd 87 GSC#8	Due Date Requested:			
City: Calera	TAT Requested (days): Routine			
State, Zip: AL, 35040				
Phone: 205-664-6197	PO #: APC67309-0001			
Email: lbmidkif@southernco.com	WO #:			
Project Name: CCR	Project #: 40007143			
Site: Gorgas Ash Pond 1303	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	SM 4500 F_C	SM 4500 CL_E	SM 4500 SO4_E	9315_Ra226, 9320_Ra228, Ra226Ra228_GFPC	Total Number of containers	Special Instructions/Note:
			Preservation Code:									
BA17919	9/23/20	11:37	G	Water						X	1	MW-15
BA17920	9/23/20	13:49	G	Water						X	1	MW-17V
BA17921	9/23/20	16:37	G	Water						X	1	MW-21V

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to TestAmerica Laboratories, Inc.

Possible Hazard Identification *Unconfirmed*	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*** ☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify)	44048 Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:		
Relinquished by: Laura Midkiff	Date/Time: 09/28/2020 1100	Water APC	Received by: Kathy R Amey	Date/Time: 9-30-20 1240	Company: ETA
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	0	Company	Received by:	Date/Time:	Company
Custody Seals Intact:			Cooler Temperature(s) °C and Other Remarks:		

Ver: 09/20/2016

Login Sample Receipt Checklist

Client: Alabama Power General Test Laboratory

Job Number: 400-193810-1
SDG Number: Gorgas Ash Pond 1303

Login Number: 193810
List Number: 1
Creator: Stitz, Elizabeth H

List Source: Eurofins TestAmerica, Pensacola

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	N/A	Thermal preservation not required.
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	19.9, 21.1, 20.7°C IR 9
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Alabama Power General Test Laboratory

Job Number: 400-193810-1
SDG Number: Gorgas Ash Pond 1303

Login Number: 193810
List Number: 2
Creator: Korrinhizer, Micha L

List Source: Eurofins TestAmerica, St. Louis
List Creation: 10/04/20 07:40 AM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	N/A	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Accreditation/Certification Summary

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-193810-1
SDG: Gorgas Ash Pond 1303

Laboratory: Eurofins TestAmerica, St. Louis

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	20-001	05-06-22
ANAB	Dept. of Defense ELAP	L2305	04-06-22
ANAB	Dept. of Energy	L2305.01	04-06-22
ANAB	ISO/IEC 17025	L2305	04-06-22
Arizona	State	AZ0813	12-08-20
California	Los Angeles County Sanitation Districts	10259	06-30-21
California	State	2886	06-30-21
Connecticut	State	PH-0241	03-31-21
Florida	NELAP	E87689	06-30-21
HI - RadChem Recognition	State	n/a	06-30-21
Illinois	NELAP	004553	11-30-20
Iowa	State	373	12-01-20
Kentucky (DW)	State	KY90125	12-31-20
Louisiana	NELAP	04080	06-30-21
Louisiana (DW)	State	LA011	12-31-20
Maryland	State	310	09-30-21
MI - RadChem Recognition	State	9005	06-30-21
Missouri	State	780	06-30-22
Nevada	State	MO000542020-1	07-31-21
New Jersey	NELAP	MO002	06-30-21
New York	NELAP	11616	04-01-21
North Dakota	State	R-207	06-30-21
NRC	NRC	24-24817-01	12-31-22
Oklahoma	State	9997	08-31-21
Oregon	NELAP	4157	09-01-21
Pennsylvania	NELAP	68-00540	02-28-21
South Carolina	State	85002001	06-30-21
Texas	NELAP	T104704193-19-13	07-31-21
US Fish & Wildlife	US Federal Programs	058448	07-31-21
USDA	US Federal Programs	P330-17-00028	03-11-23
Utah	NELAP	MO000542019-11	07-31-21
Virginia	NELAP	10310	06-14-21
Washington	State	C592	08-30-21
West Virginia DEP	State	381	10-31-21

Alabama Power Company
Plant Gorgas Ash Pond

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-25HA	9/17/2020 8:15	Conductivity	1134.41	uS/cm
GS-AP-MW-25HA	9/17/2020 8:15	DO	0.4	mg/L
GS-AP-MW-25HA	9/17/2020 8:15	Depth to Water Detail	177.01	ft
GS-AP-MW-25HA	9/17/2020 8:15	Oxidation Reduction Potention	-157.42	mv
GS-AP-MW-25HA	9/17/2020 8:15	pH	8.66	pH
GS-AP-MW-25HA	9/17/2020 8:15	Temperature	19.29	C
GS-AP-MW-25HA	9/17/2020 8:15	Turbidity	3.21	NTU
GS-AP-MW-25HA	9/17/2020 8:20	Conductivity	1147.08	uS/cm
GS-AP-MW-25HA	9/17/2020 8:20	DO	0.22	mg/L
GS-AP-MW-25HA	9/17/2020 8:20	Depth to Water Detail	177.36	ft
GS-AP-MW-25HA	9/17/2020 8:20	Oxidation Reduction Potention	-203.16	mv
GS-AP-MW-25HA	9/17/2020 8:20	pH	8.83	pH
GS-AP-MW-25HA	9/17/2020 8:20	Temperature	19.25	C
GS-AP-MW-25HA	9/17/2020 8:20	Turbidity	3.87	NTU
GS-AP-MW-25HA	9/17/2020 8:25	Conductivity	1147	uS/cm
GS-AP-MW-25HA	9/17/2020 8:25	DO	0.17	mg/L
GS-AP-MW-25HA	9/17/2020 8:25	Depth to Water Detail	177.72	ft
GS-AP-MW-25HA	9/17/2020 8:25	Oxidation Reduction Potention	-215.81	mv
GS-AP-MW-25HA	9/17/2020 8:25	pH	8.86	pH
GS-AP-MW-25HA	9/17/2020 8:25	Temperature	19.11	C
GS-AP-MW-25HA	9/17/2020 8:25	Turbidity	3.2	NTU
GS-AP-MW-25HA	9/17/2020 8:30	Conductivity	1138.87	uS/cm
GS-AP-MW-25HA	9/17/2020 8:30	DO	0.09	mg/L
GS-AP-MW-25HA	9/17/2020 8:30	Depth to Water Detail	177.89	ft
GS-AP-MW-25HA	9/17/2020 8:30	Oxidation Reduction Potention	-217.98	mv
GS-AP-MW-25HA	9/17/2020 8:30	pH	8.84	pH
GS-AP-MW-25HA	9/17/2020 8:30	Temperature	19.25	C
GS-AP-MW-25HA	9/17/2020 8:30	Turbidity	4.34	NTU
GS-AP-MW-25HA	9/17/2020 8:35	Conductivity	1437.01	uS/cm
GS-AP-MW-25HA	9/17/2020 8:35	DO	0.06	mg/L
GS-AP-MW-25HA	9/17/2020 8:35	Depth to Water Detail	178.12	ft
GS-AP-MW-25HA	9/17/2020 8:35	Oxidation Reduction Potention	-215.36	mv
GS-AP-MW-25HA	9/17/2020 8:35	pH	8.83	pH
GS-AP-MW-25HA	9/17/2020 8:35	Temperature	19.26	C
GS-AP-MW-25HA	9/17/2020 8:35	Turbidity	4.62	NTU
GS-AP-MW-25HA	9/17/2020 8:40	Conductivity	1147.75	uS/cm
GS-AP-MW-25HA	9/17/2020 8:40	DO	0.04	mg/L
GS-AP-MW-25HA	9/17/2020 8:40	Depth to Water Detail	178.24	ft
GS-AP-MW-25HA	9/17/2020 8:40	Oxidation Reduction Potention	-212.43	mv
GS-AP-MW-25HA	9/17/2020 8:40	pH	8.82	pH
GS-AP-MW-25HA	9/17/2020 8:40	Temperature	19.23	C
GS-AP-MW-25HA	9/17/2020 8:40	Turbidity	4.53	NTU
GS-AP-MW-25HA	9/17/2020 8:45	Conductivity	1258.93	uS/cm
GS-AP-MW-25HA	9/17/2020 8:45	DO	0.03	mg/L
GS-AP-MW-25HA	9/17/2020 8:45	Depth to Water Detail	178.4	ft
GS-AP-MW-25HA	9/17/2020 8:45	Oxidation Reduction Potention	-208.58	mv

Alabama Power Company
Plant Gorgas Ash Pond

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-25HA	9/17/2020 8:45	pH	8.81	pH
GS-AP-MW-25HA	9/17/2020 8:45	Temperature	19.27	C
GS-AP-MW-25HA	9/17/2020 8:45	Turbidity	3.96	NTU
GS-AP-MW-25HA	9/17/2020 8:50	Conductivity	1284.67	uS/cm
GS-AP-MW-25HA	9/17/2020 8:50	DO	0.03	mg/L
GS-AP-MW-25HA	9/17/2020 8:50	Depth to Water Detail	178.51	ft
GS-AP-MW-25HA	9/17/2020 8:50	Oxidation Reduction Potention	-206.02	mv
GS-AP-MW-25HA	9/17/2020 8:50	pH	8.81	pH
GS-AP-MW-25HA	9/17/2020 8:50	Temperature	19.18	C
GS-AP-MW-25HA	9/17/2020 8:50	Turbidity	4.07	NTU
GS-AP-MW-25HA	9/17/2020 8:55	Conductivity	1440.34	uS/cm
GS-AP-MW-25HA	9/17/2020 8:55	DO	0.02	mg/L
GS-AP-MW-25HA	9/17/2020 8:55	Depth to Water Detail	178.66	ft
GS-AP-MW-25HA	9/17/2020 8:55	Oxidation Reduction Potention	-202.73	mv
GS-AP-MW-25HA	9/17/2020 8:55	pH	8.81	pH
GS-AP-MW-25HA	9/17/2020 8:55	Temperature	19.23	C
GS-AP-MW-25HA	9/17/2020 8:55	Turbidity	3.11	NTU
GS-AP-MW-25HA	9/17/2020 9:00	Conductivity	1455.47	uS/cm
GS-AP-MW-25HA	9/17/2020 9:00	DO	0.02	mg/L
GS-AP-MW-25HA	9/17/2020 9:00	Depth to Water Detail	178.78	ft
GS-AP-MW-25HA	9/17/2020 9:00	Oxidation Reduction Potention	-201.66	mv
GS-AP-MW-25HA	9/17/2020 9:00	pH	8.82	pH
GS-AP-MW-25HA	9/17/2020 9:00	Temperature	19.36	C
GS-AP-MW-25HA	9/17/2020 9:00	Turbidity	3.06	NTU
GS-AP-MW-25HA	9/17/2020 9:05	Conductivity	1481.12	uS/cm
GS-AP-MW-25HA	9/17/2020 9:05	DO	0.02	mg/L
GS-AP-MW-25HA	9/17/2020 9:05	Depth to Water Detail	178.85	ft
GS-AP-MW-25HA	9/17/2020 9:05	Oxidation Reduction Potention	-200.46	mv
GS-AP-MW-25HA	9/17/2020 9:05	pH	8.83	pH
GS-AP-MW-25HA	9/17/2020 9:05	Temperature	19.44	C
GS-AP-MW-25HA	9/17/2020 9:05	Turbidity	3.01	NTU

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-36H	9/17/2020 14:08	Conductivity	494.79	uS/cm
GS-AP-MW-36H	9/17/2020 14:08	DO	0.61	mg/L
GS-AP-MW-36H	9/17/2020 14:08	Depth to Water Detail	237.81	ft
GS-AP-MW-36H	9/17/2020 14:08	Oxidation Reduction Potention	-98.46	mv
GS-AP-MW-36H	9/17/2020 14:08	pH	7.31	pH
GS-AP-MW-36H	9/17/2020 14:08	Temperature	22.48	C
GS-AP-MW-36H	9/17/2020 14:08	Turbidity	2.77	NTU
GS-AP-MW-36H	9/17/2020 14:13	Conductivity	547.3	uS/cm
GS-AP-MW-36H	9/17/2020 14:13	DO	0.24	mg/L
GS-AP-MW-36H	9/17/2020 14:13	Depth to Water Detail	238.27	ft
GS-AP-MW-36H	9/17/2020 14:13	Oxidation Reduction Potention	-200.91	mv
GS-AP-MW-36H	9/17/2020 14:13	pH	7.7	pH
GS-AP-MW-36H	9/17/2020 14:13	Temperature	21.88	C
GS-AP-MW-36H	9/17/2020 14:13	Turbidity	2.03	NTU
GS-AP-MW-36H	9/17/2020 14:18	Conductivity	575.28	uS/cm
GS-AP-MW-36H	9/17/2020 14:18	DO	0.2	mg/L
GS-AP-MW-36H	9/17/2020 14:18	Depth to Water Detail	238.89	ft
GS-AP-MW-36H	9/17/2020 14:18	Oxidation Reduction Potention	-178.71	mv
GS-AP-MW-36H	9/17/2020 14:18	pH	7.93	pH
GS-AP-MW-36H	9/17/2020 14:18	Temperature	21.69	C
GS-AP-MW-36H	9/17/2020 14:18	Turbidity	1.77	NTU
GS-AP-MW-36H	9/17/2020 14:23	Conductivity	580.65	uS/cm
GS-AP-MW-36H	9/17/2020 14:23	DO	0.17	mg/L
GS-AP-MW-36H	9/17/2020 14:23	Depth to Water Detail	239.55	ft
GS-AP-MW-36H	9/17/2020 14:23	Oxidation Reduction Potention	-175.15	mv
GS-AP-MW-36H	9/17/2020 14:23	pH	8.07	pH
GS-AP-MW-36H	9/17/2020 14:23	Temperature	21.6	C
GS-AP-MW-36H	9/17/2020 14:23	Turbidity	1.94	NTU
GS-AP-MW-36H	9/17/2020 14:28	Conductivity	581.07	uS/cm
GS-AP-MW-36H	9/17/2020 14:28	DO	0.16	mg/L
GS-AP-MW-36H	9/17/2020 14:28	Depth to Water Detail	240.06	ft
GS-AP-MW-36H	9/17/2020 14:28	Oxidation Reduction Potention	-173.47	mv
GS-AP-MW-36H	9/17/2020 14:28	pH	8.11	pH
GS-AP-MW-36H	9/17/2020 14:28	Temperature	21.54	C
GS-AP-MW-36H	9/17/2020 14:28	Turbidity	1.9	NTU
GS-AP-MW-36H	9/17/2020 14:33	Conductivity	580.44	uS/cm
GS-AP-MW-36H	9/17/2020 14:33	DO	0.13	mg/L
GS-AP-MW-36H	9/17/2020 14:33	Depth to Water Detail	240.66	ft
GS-AP-MW-36H	9/17/2020 14:33	Oxidation Reduction Potention	-172.7	mv
GS-AP-MW-36H	9/17/2020 14:33	pH	8.13	pH
GS-AP-MW-36H	9/17/2020 14:33	Temperature	20.94	C
GS-AP-MW-36H	9/17/2020 14:33	Turbidity	1.43	NTU
GS-AP-MW-36H	9/17/2020 14:38	Conductivity	577.85	uS/cm
GS-AP-MW-36H	9/17/2020 14:38	DO	0.13	mg/L
GS-AP-MW-36H	9/17/2020 14:38	Depth to Water Detail	241.19	ft
GS-AP-MW-36H	9/17/2020 14:38	Oxidation Reduction Potention	-171.5	mv

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-36H	9/17/2020 14:38	pH	8.13	pH
GS-AP-MW-36H	9/17/2020 14:38	Temperature	21.25	C
GS-AP-MW-36H	9/17/2020 14:38	Turbidity	1.08	NTU
GS-AP-MW-36H	9/17/2020 14:43	Conductivity	574.36	uS/cm
GS-AP-MW-36H	9/17/2020 14:43	DO	0.12	mg/L
GS-AP-MW-36H	9/17/2020 14:43	Depth to Water Detail	241.69	ft
GS-AP-MW-36H	9/17/2020 14:43	Oxidation Reduction Potention	-170.91	mv
GS-AP-MW-36H	9/17/2020 14:43	pH	8.14	pH
GS-AP-MW-36H	9/17/2020 14:43	Temperature	20.86	C
GS-AP-MW-36H	9/17/2020 14:43	Turbidity	0.97	NTU
GS-AP-MW-36H	9/17/2020 14:48	Conductivity	570.94	uS/cm
GS-AP-MW-36H	9/17/2020 14:48	DO	0.14	mg/L
GS-AP-MW-36H	9/17/2020 14:48	Depth to Water Detail	242	ft
GS-AP-MW-36H	9/17/2020 14:48	Oxidation Reduction Potention	-169.52	mv
GS-AP-MW-36H	9/17/2020 14:48	pH	8.13	pH
GS-AP-MW-36H	9/17/2020 14:48	Temperature	21.77	C
GS-AP-MW-36H	9/17/2020 14:48	Turbidity	0.96	NTU
GS-AP-MW-36H	9/17/2020 14:53	Conductivity	568.37	uS/cm
GS-AP-MW-36H	9/17/2020 14:53	DO	0.21	mg/L
GS-AP-MW-36H	9/17/2020 14:53	Depth to Water Detail	242.16	ft
GS-AP-MW-36H	9/17/2020 14:53	Oxidation Reduction Potention	-159.21	mv
GS-AP-MW-36H	9/17/2020 14:53	pH	8.12	pH
GS-AP-MW-36H	9/17/2020 14:53	Temperature	23.75	C
GS-AP-MW-36H	9/17/2020 14:53	Turbidity	0.92	NTU
GS-AP-MW-36H	9/17/2020 14:58	Conductivity	561.02	uS/cm
GS-AP-MW-36H	9/17/2020 14:58	DO	0.18	mg/L
GS-AP-MW-36H	9/17/2020 14:58	Depth to Water Detail	242.23	ft
GS-AP-MW-36H	9/17/2020 14:58	Oxidation Reduction Potention	-164.2	mv
GS-AP-MW-36H	9/17/2020 14:58	pH	8.18	pH
GS-AP-MW-36H	9/17/2020 14:58	Temperature	22.22	C
GS-AP-MW-36H	9/17/2020 14:58	Turbidity	0.93	NTU

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-PZ-16	9/17/2020 11:17	Conductivity	545.3	uS/cm
GS-AP-PZ-16	9/17/2020 11:17	DO	4.28	mg/L
GS-AP-PZ-16	9/17/2020 11:17	Depth to Water Detail	185.66	ft
GS-AP-PZ-16	9/17/2020 11:17	Oxidation Reduction Potention	-43.98	mv
GS-AP-PZ-16	9/17/2020 11:17	pH	8.61	pH
GS-AP-PZ-16	9/17/2020 11:17	Temperature	21.64	C
GS-AP-PZ-16	9/17/2020 11:17	Turbidity	5.63	NTU
GS-AP-PZ-16	9/17/2020 11:22	Conductivity	556.51	uS/cm
GS-AP-PZ-16	9/17/2020 11:22	DO	0.73	mg/L
GS-AP-PZ-16	9/17/2020 11:22	Depth to Water Detail	185.66	ft
GS-AP-PZ-16	9/17/2020 11:22	Oxidation Reduction Potention	-144.12	mv
GS-AP-PZ-16	9/17/2020 11:22	pH	8.07	pH
GS-AP-PZ-16	9/17/2020 11:22	Temperature	20.02	C
GS-AP-PZ-16	9/17/2020 11:22	Turbidity	6.63	NTU
GS-AP-PZ-16	9/17/2020 11:27	Conductivity	604.35	uS/cm
GS-AP-PZ-16	9/17/2020 11:27	DO	0.34	mg/L
GS-AP-PZ-16	9/17/2020 11:27	Depth to Water Detail	185.66	ft
GS-AP-PZ-16	9/17/2020 11:27	Oxidation Reduction Potention	-166.64	mv
GS-AP-PZ-16	9/17/2020 11:27	pH	8.14	pH
GS-AP-PZ-16	9/17/2020 11:27	Temperature	19.32	C
GS-AP-PZ-16	9/17/2020 11:27	Turbidity	8.33	NTU
GS-AP-PZ-16	9/17/2020 11:32	Conductivity	604.01	uS/cm
GS-AP-PZ-16	9/17/2020 11:32	DO	0.21	mg/L
GS-AP-PZ-16	9/17/2020 11:32	Depth to Water Detail	185.66	ft
GS-AP-PZ-16	9/17/2020 11:32	Oxidation Reduction Potention	-177.06	mv
GS-AP-PZ-16	9/17/2020 11:32	pH	8.2	pH
GS-AP-PZ-16	9/17/2020 11:32	Temperature	20.66	C
GS-AP-PZ-16	9/17/2020 11:32	Turbidity	5.46	NTU
GS-AP-PZ-16	9/17/2020 11:37	Conductivity	599.45	uS/cm
GS-AP-PZ-16	9/17/2020 11:37	DO	0.14	mg/L
GS-AP-PZ-16	9/17/2020 11:37	Depth to Water Detail	185.66	ft
GS-AP-PZ-16	9/17/2020 11:37	Oxidation Reduction Potention	-226.01	mv
GS-AP-PZ-16	9/17/2020 11:37	pH	8.83	pH
GS-AP-PZ-16	9/17/2020 11:37	Temperature	18.3	C
GS-AP-PZ-16	9/17/2020 11:37	Turbidity	5.65	NTU
GS-AP-PZ-16	9/17/2020 11:42	Conductivity	604.99	uS/cm
GS-AP-PZ-16	9/17/2020 11:42	DO	0.11	mg/L
GS-AP-PZ-16	9/17/2020 11:42	Depth to Water Detail	185.66	ft
GS-AP-PZ-16	9/17/2020 11:42	Oxidation Reduction Potention	-231.21	mv
GS-AP-PZ-16	9/17/2020 11:42	pH	9.14	pH
GS-AP-PZ-16	9/17/2020 11:42	Temperature	18.51	C
GS-AP-PZ-16	9/17/2020 11:42	Turbidity	3.59	NTU
GS-AP-PZ-16	9/17/2020 11:47	Conductivity	607.44	uS/cm
GS-AP-PZ-16	9/17/2020 11:47	DO	0.13	mg/L
GS-AP-PZ-16	9/17/2020 11:47	Depth to Water Detail	185.66	ft
GS-AP-PZ-16	9/17/2020 11:47	Oxidation Reduction Potention	-220.51	mv

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-PZ-16	9/17/2020 11:47	pH	9.14	pH
GS-AP-PZ-16	9/17/2020 11:47	Temperature	19.27	C
GS-AP-PZ-16	9/17/2020 11:47	Turbidity	2.55	NTU
GS-AP-PZ-16	9/17/2020 11:52	Conductivity	607.69	uS/cm
GS-AP-PZ-16	9/17/2020 11:52	DO	0.2	mg/L
GS-AP-PZ-16	9/17/2020 11:52	Depth to Water Detail	185.66	ft
GS-AP-PZ-16	9/17/2020 11:52	Oxidation Reduction Potention	-205.46	mv
GS-AP-PZ-16	9/17/2020 11:52	pH	9.15	pH
GS-AP-PZ-16	9/17/2020 11:52	Temperature	21.15	C
GS-AP-PZ-16	9/17/2020 11:52	Turbidity	2.17	NTU

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-PZ-22	9/17/2020 12:44	Conductivity	634.57	uS/cm
GS-AP-PZ-22	9/17/2020 12:44	DO	0.56	mg/L
GS-AP-PZ-22	9/17/2020 12:44	Depth to Water Detail	255.79	ft
GS-AP-PZ-22	9/17/2020 12:44	Oxidation Reduction Potention	-198.39	mv
GS-AP-PZ-22	9/17/2020 12:44	pH	8.15	pH
GS-AP-PZ-22	9/17/2020 12:44	Temperature	21.21	C
GS-AP-PZ-22	9/17/2020 12:44	Turbidity	2.09	NTU
GS-AP-PZ-22	9/17/2020 12:49	Conductivity	655.36	uS/cm
GS-AP-PZ-22	9/17/2020 12:49	DO	0.19	mg/L
GS-AP-PZ-22	9/17/2020 12:49	Depth to Water Detail	255.79	ft
GS-AP-PZ-22	9/17/2020 12:49	Oxidation Reduction Potention	-239.15	mv
GS-AP-PZ-22	9/17/2020 12:49	pH	8.61	pH
GS-AP-PZ-22	9/17/2020 12:49	Temperature	20.27	C
GS-AP-PZ-22	9/17/2020 12:49	Turbidity	1.61	NTU
GS-AP-PZ-22	9/17/2020 12:54	Conductivity	665.81	uS/cm
GS-AP-PZ-22	9/17/2020 12:54	DO	0.17	mg/L
GS-AP-PZ-22	9/17/2020 12:54	Depth to Water Detail	255.79	ft
GS-AP-PZ-22	9/17/2020 12:54	Oxidation Reduction Potention	-220.26	mv
GS-AP-PZ-22	9/17/2020 12:54	pH	8.66	pH
GS-AP-PZ-22	9/17/2020 12:54	Temperature	20.56	C
GS-AP-PZ-22	9/17/2020 12:54	Turbidity	1.24	NTU
GS-AP-PZ-22	9/17/2020 12:59	Conductivity	669.49	uS/cm
GS-AP-PZ-22	9/17/2020 12:59	DO	0.15	mg/L
GS-AP-PZ-22	9/17/2020 12:59	Depth to Water Detail	255.79	ft
GS-AP-PZ-22	9/17/2020 12:59	Oxidation Reduction Potention	-217.6	mv
GS-AP-PZ-22	9/17/2020 12:59	pH	8.78	pH
GS-AP-PZ-22	9/17/2020 12:59	Temperature	20.21	C
GS-AP-PZ-22	9/17/2020 12:59	Turbidity	1.1	NTU
GS-AP-PZ-22	9/17/2020 13:04	Conductivity	646.98	uS/cm
GS-AP-PZ-22	9/17/2020 13:04	DO	0.12	mg/L
GS-AP-PZ-22	9/17/2020 13:04	Depth to Water Detail	255.79	ft
GS-AP-PZ-22	9/17/2020 13:04	Oxidation Reduction Potention	-224.73	mv
GS-AP-PZ-22	9/17/2020 13:04	pH	8.81	pH
GS-AP-PZ-22	9/17/2020 13:04	Temperature	20.48	C
GS-AP-PZ-22	9/17/2020 13:04	Turbidity	2.3	NTU

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-6V	9/15/2020 14:32	Conductivity	1250.88	uS/cm
GS-AP-MW-6V	9/15/2020 14:32	DO	0.34	mg/L
GS-AP-MW-6V	9/15/2020 14:32	Depth to Water Detail	75.18	ft
GS-AP-MW-6V	9/15/2020 14:32	Oxidation Reduction Potention	-128.83	mv
GS-AP-MW-6V	9/15/2020 14:32	pH	8.77	pH
GS-AP-MW-6V	9/15/2020 14:32	Temperature	21.25	C
GS-AP-MW-6V	9/15/2020 14:32	Turbidity	5.82	NTU
GS-AP-MW-6V	9/15/2020 14:37	Conductivity	1146.18	uS/cm
GS-AP-MW-6V	9/15/2020 14:37	DO	0.32	mg/L
GS-AP-MW-6V	9/15/2020 14:37	Depth to Water Detail	75.39	ft
GS-AP-MW-6V	9/15/2020 14:37	Oxidation Reduction Potention	-128.19	mv
GS-AP-MW-6V	9/15/2020 14:37	pH	8.77	pH
GS-AP-MW-6V	9/15/2020 14:37	Temperature	21.29	C
GS-AP-MW-6V	9/15/2020 14:37	Turbidity	5.52	NTU
GS-AP-MW-6V	9/15/2020 14:42	Conductivity	1133.73	uS/cm
GS-AP-MW-6V	9/15/2020 14:42	DO	0.31	mg/L
GS-AP-MW-6V	9/15/2020 14:42	Depth to Water Detail	75.58	ft
GS-AP-MW-6V	9/15/2020 14:42	Oxidation Reduction Potention	-126.7	mv
GS-AP-MW-6V	9/15/2020 14:42	pH	8.77	pH
GS-AP-MW-6V	9/15/2020 14:42	Temperature	21.33	C
GS-AP-MW-6V	9/15/2020 14:42	Turbidity	6.36	NTU
GS-AP-MW-6V	9/15/2020 14:47	Conductivity	1155.5	uS/cm
GS-AP-MW-6V	9/15/2020 14:47	DO	0.31	mg/L
GS-AP-MW-6V	9/15/2020 14:47	Depth to Water Detail	75.86	ft
GS-AP-MW-6V	9/15/2020 14:47	Oxidation Reduction Potention	-125.22	mv
GS-AP-MW-6V	9/15/2020 14:47	pH	8.75	pH
GS-AP-MW-6V	9/15/2020 14:47	Temperature	21.39	C
GS-AP-MW-6V	9/15/2020 14:47	Turbidity	6.87	NTU
GS-AP-MW-6V	9/15/2020 14:52	Conductivity	1328.88	uS/cm
GS-AP-MW-6V	9/15/2020 14:52	DO	0.33	mg/L
GS-AP-MW-6V	9/15/2020 14:52	Depth to Water Detail	76.13	ft
GS-AP-MW-6V	9/15/2020 14:52	Oxidation Reduction Potention	-124.27	mv
GS-AP-MW-6V	9/15/2020 14:52	pH	8.76	pH
GS-AP-MW-6V	9/15/2020 14:52	Temperature	21.4	C
GS-AP-MW-6V	9/15/2020 14:52	Turbidity	8.09	NTU
GS-AP-MW-6V	9/15/2020 14:57	Conductivity	1233.12	uS/cm
GS-AP-MW-6V	9/15/2020 14:57	DO	0.31	mg/L
GS-AP-MW-6V	9/15/2020 14:57	Depth to Water Detail	76.31	ft
GS-AP-MW-6V	9/15/2020 14:57	Oxidation Reduction Potention	-123.29	mv
GS-AP-MW-6V	9/15/2020 14:57	pH	8.76	pH
GS-AP-MW-6V	9/15/2020 14:57	Temperature	21.23	C
GS-AP-MW-6V	9/15/2020 14:57	Turbidity	6.01	NTU
GS-AP-MW-6V	9/15/2020 15:02	Conductivity	1136.21	uS/cm
GS-AP-MW-6V	9/15/2020 15:02	DO	0.33	mg/L
GS-AP-MW-6V	9/15/2020 15:02	Depth to Water Detail	76.69	ft
GS-AP-MW-6V	9/15/2020 15:02	Oxidation Reduction Potention	-123.01	mv

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-6V	9/15/2020 15:02	pH	8.77	pH
GS-AP-MW-6V	9/15/2020 15:02	Temperature	21.33	C
GS-AP-MW-6V	9/15/2020 15:02	Turbidity	6.11	NTU
GS-AP-MW-6V	9/15/2020 15:07	Conductivity	1096.67	uS/cm
GS-AP-MW-6V	9/15/2020 15:07	DO	0.31	mg/L
GS-AP-MW-6V	9/15/2020 15:07	Depth to Water Detail	76.91	ft
GS-AP-MW-6V	9/15/2020 15:07	Oxidation Reduction Potention	-122.69	mv
GS-AP-MW-6V	9/15/2020 15:07	pH	8.77	pH
GS-AP-MW-6V	9/15/2020 15:07	Temperature	21.45	C
GS-AP-MW-6V	9/15/2020 15:07	Turbidity	6.46	NTU
GS-AP-MW-6V	9/15/2020 15:12	Conductivity	1408.6	uS/cm
GS-AP-MW-6V	9/15/2020 15:12	DO	0.33	mg/L
GS-AP-MW-6V	9/15/2020 15:12	Depth to Water Detail	76.19	ft
GS-AP-MW-6V	9/15/2020 15:12	Oxidation Reduction Potention	-121.47	mv
GS-AP-MW-6V	9/15/2020 15:12	pH	8.78	pH
GS-AP-MW-6V	9/15/2020 15:12	Temperature	21.1	C
GS-AP-MW-6V	9/15/2020 15:12	Turbidity	7.7	NTU
GS-AP-MW-6V	9/15/2020 15:17	Conductivity	1408.87	uS/cm
GS-AP-MW-6V	9/15/2020 15:17	DO	0.33	mg/L
GS-AP-MW-6V	9/15/2020 15:17	Depth to Water Detail	76.42	ft
GS-AP-MW-6V	9/15/2020 15:17	Oxidation Reduction Potention	-119.39	mv
GS-AP-MW-6V	9/15/2020 15:17	pH	8.76	pH
GS-AP-MW-6V	9/15/2020 15:17	Temperature	21.2	C
GS-AP-MW-6V	9/15/2020 15:17	Turbidity	8.37	NTU
GS-AP-MW-6V	9/15/2020 15:22	Conductivity	1398.89	uS/cm
GS-AP-MW-6V	9/15/2020 15:22	DO	0.33	mg/L
GS-AP-MW-6V	9/15/2020 15:22	Depth to Water Detail	76.73	ft
GS-AP-MW-6V	9/15/2020 15:22	Oxidation Reduction Potention	-119.13	mv
GS-AP-MW-6V	9/15/2020 15:22	pH	8.77	pH
GS-AP-MW-6V	9/15/2020 15:22	Temperature	21.2	C
GS-AP-MW-6V	9/15/2020 15:22	Turbidity	8.73	NTU
GS-AP-MW-6V	9/15/2020 15:27	Conductivity	1410.27	uS/cm
GS-AP-MW-6V	9/15/2020 15:27	DO	0.38	mg/L
GS-AP-MW-6V	9/15/2020 15:27	Depth to Water Detail	76.86	ft
GS-AP-MW-6V	9/15/2020 15:27	Oxidation Reduction Potention	-118.45	mv
GS-AP-MW-6V	9/15/2020 15:27	pH	8.76	pH
GS-AP-MW-6V	9/15/2020 15:27	Temperature	21.49	C
GS-AP-MW-6V	9/15/2020 15:27	Turbidity	9.27	NTU
GS-AP-MW-6V	9/15/2020 15:32	Conductivity	1402.4	uS/cm
GS-AP-MW-6V	9/15/2020 15:32	DO	0.39	mg/L
GS-AP-MW-6V	9/15/2020 15:32	Depth to Water Detail	76.98	ft
GS-AP-MW-6V	9/15/2020 15:32	Oxidation Reduction Potention	-117.33	mv
GS-AP-MW-6V	9/15/2020 15:32	pH	8.76	pH
GS-AP-MW-6V	9/15/2020 15:32	Temperature	21.26	C
GS-AP-MW-6V	9/15/2020 15:32	Turbidity	7.49	NTU

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-7	9/16/2020 9:48	Conductivity	543.22	uS/cm
GS-AP-MW-7	9/16/2020 9:48	DO	0.76	mg/L
GS-AP-MW-7	9/16/2020 9:48	Depth to Water Detail	9.92	ft
GS-AP-MW-7	9/16/2020 9:48	Oxidation Reduction Potention	-7.94	mv
GS-AP-MW-7	9/16/2020 9:48	pH	7.69	pH
GS-AP-MW-7	9/16/2020 9:48	Temperature	19.1	C
GS-AP-MW-7	9/16/2020 9:48	Turbidity	27.9	NTU
GS-AP-MW-7	9/16/2020 9:53	Conductivity	541.03	uS/cm
GS-AP-MW-7	9/16/2020 9:53	DO	0.48	mg/L
GS-AP-MW-7	9/16/2020 9:53	Depth to Water Detail	10.02	ft
GS-AP-MW-7	9/16/2020 9:53	Oxidation Reduction Potention	-62.24	mv
GS-AP-MW-7	9/16/2020 9:53	pH	7.71	pH
GS-AP-MW-7	9/16/2020 9:53	Temperature	19.04	C
GS-AP-MW-7	9/16/2020 9:53	Turbidity	>10	NTU
GS-AP-MW-7	9/16/2020 9:58	Conductivity	539.33	uS/cm
GS-AP-MW-7	9/16/2020 9:58	DO	0.39	mg/L
GS-AP-MW-7	9/16/2020 9:58	Depth to Water Detail	10.03	ft
GS-AP-MW-7	9/16/2020 9:58	Oxidation Reduction Potention	-92.02	mv
GS-AP-MW-7	9/16/2020 9:58	pH	7.73	pH
GS-AP-MW-7	9/16/2020 9:58	Temperature	18.93	C
GS-AP-MW-7	9/16/2020 9:58	Turbidity	>10	NTU
GS-AP-MW-7	9/16/2020 10:03	Conductivity	537.64	uS/cm
GS-AP-MW-7	9/16/2020 10:03	DO	0.36	mg/L
GS-AP-MW-7	9/16/2020 10:03	Depth to Water Detail	10.03	ft
GS-AP-MW-7	9/16/2020 10:03	Oxidation Reduction Potention	-105.1	mv
GS-AP-MW-7	9/16/2020 10:03	pH	7.69	pH
GS-AP-MW-7	9/16/2020 10:03	Temperature	18.89	C
GS-AP-MW-7	9/16/2020 10:03	Turbidity	>10	NTU
GS-AP-MW-7	9/16/2020 10:08	Conductivity	536.29	uS/cm
GS-AP-MW-7	9/16/2020 10:08	DO	0.35	mg/L
GS-AP-MW-7	9/16/2020 10:08	Depth to Water Detail	10.03	ft
GS-AP-MW-7	9/16/2020 10:08	Oxidation Reduction Potention	-114.78	mv
GS-AP-MW-7	9/16/2020 10:08	pH	7.72	pH
GS-AP-MW-7	9/16/2020 10:08	Temperature	18.76	C
GS-AP-MW-7	9/16/2020 10:08	Turbidity	>10	NTU
GS-AP-MW-7	9/16/2020 10:13	Conductivity	535.81	uS/cm
GS-AP-MW-7	9/16/2020 10:13	DO	0.35	mg/L
GS-AP-MW-7	9/16/2020 10:13	Depth to Water Detail	10.03	ft
GS-AP-MW-7	9/16/2020 10:13	Oxidation Reduction Potention	-120.97	mv
GS-AP-MW-7	9/16/2020 10:13	pH	7.74	pH
GS-AP-MW-7	9/16/2020 10:13	Temperature	18.68	C
GS-AP-MW-7	9/16/2020 10:13	Turbidity	>10	NTU
GS-AP-MW-7	9/16/2020 10:18	Conductivity	535.31	uS/cm
GS-AP-MW-7	9/16/2020 10:18	DO	0.35	mg/L
GS-AP-MW-7	9/16/2020 10:18	Depth to Water Detail	10.03	ft
GS-AP-MW-7	9/16/2020 10:18	Oxidation Reduction Potention	-124.93	mv

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Plant Gorgas Ash Pond

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-7	9/16/2020 10:18	pH	7.74	pH
GS-AP-MW-7	9/16/2020 10:18	Temperature	18.67	C
GS-AP-MW-7	9/16/2020 10:18	Turbidity	>10	NTU
GS-AP-MW-7	9/16/2020 10:23	Conductivity	534.5	uS/cm
GS-AP-MW-7	9/16/2020 10:23	DO	0.35	mg/L
GS-AP-MW-7	9/16/2020 10:23	Depth to Water Detail	10.03	ft
GS-AP-MW-7	9/16/2020 10:23	Oxidation Reduction Potention	-125.86	mv
GS-AP-MW-7	9/16/2020 10:23	pH	7.7	pH
GS-AP-MW-7	9/16/2020 10:23	Temperature	18.64	C
GS-AP-MW-7	9/16/2020 10:23	Turbidity	>10	NTU
GS-AP-MW-7	9/16/2020 10:28	Conductivity	534.11	uS/cm
GS-AP-MW-7	9/16/2020 10:28	DO	0.35	mg/L
GS-AP-MW-7	9/16/2020 10:28	Depth to Water Detail	10.03	ft
GS-AP-MW-7	9/16/2020 10:28	Oxidation Reduction Potention	-129.25	mv
GS-AP-MW-7	9/16/2020 10:28	pH	7.72	pH
GS-AP-MW-7	9/16/2020 10:28	Temperature	18.59	C
GS-AP-MW-7	9/16/2020 10:28	Turbidity	>10	NTU
GS-AP-MW-7	9/16/2020 10:33	Conductivity	532.86	uS/cm
GS-AP-MW-7	9/16/2020 10:33	DO	0.35	mg/L
GS-AP-MW-7	9/16/2020 10:33	Depth to Water Detail	10.03	ft
GS-AP-MW-7	9/16/2020 10:33	Oxidation Reduction Potention	-132.25	mv
GS-AP-MW-7	9/16/2020 10:33	pH	7.73	pH
GS-AP-MW-7	9/16/2020 10:33	Temperature	18.53	C
GS-AP-MW-7	9/16/2020 10:33	Turbidity	>10	NTU
GS-AP-MW-7	9/16/2020 10:38	Conductivity	532.34	uS/cm
GS-AP-MW-7	9/16/2020 10:38	DO	0.35	mg/L
GS-AP-MW-7	9/16/2020 10:38	Depth to Water Detail	10.03	ft
GS-AP-MW-7	9/16/2020 10:38	Oxidation Reduction Potention	-134.45	mv
GS-AP-MW-7	9/16/2020 10:38	pH	7.74	pH
GS-AP-MW-7	9/16/2020 10:38	Temperature	18.48	C
GS-AP-MW-7	9/16/2020 10:38	Turbidity	>10	NTU
GS-AP-MW-7	9/16/2020 10:43	Conductivity	532.01	uS/cm
GS-AP-MW-7	9/16/2020 10:43	DO	0.35	mg/L
GS-AP-MW-7	9/16/2020 10:43	Depth to Water Detail	10.03	ft
GS-AP-MW-7	9/16/2020 10:43	Oxidation Reduction Potention	-136.37	mv
GS-AP-MW-7	9/16/2020 10:43	pH	7.74	pH
GS-AP-MW-7	9/16/2020 10:43	Temperature	18.49	C
GS-AP-MW-7	9/16/2020 10:43	Turbidity	>10	NTU
GS-AP-MW-7	9/16/2020 10:48	Conductivity	531.56	uS/cm
GS-AP-MW-7	9/16/2020 10:48	DO	0.35	mg/L
GS-AP-MW-7	9/16/2020 10:48	Depth to Water Detail	10.03	ft
GS-AP-MW-7	9/16/2020 10:48	Oxidation Reduction Potention	-135.58	mv
GS-AP-MW-7	9/16/2020 10:48	pH	7.71	pH
GS-AP-MW-7	9/16/2020 10:48	Temperature	18.45	C
GS-AP-MW-7	9/16/2020 10:48	Turbidity	>10	NTU
GS-AP-MW-7	9/16/2020 10:53	Conductivity	531.03	uS/cm

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-7	9/16/2020 10:53	DO	0.35	mg/L
GS-AP-MW-7	9/16/2020 10:53	Depth to Water Detail	10.03	ft
GS-AP-MW-7	9/16/2020 10:53	Oxidation Reduction Potention	-138.15	mv
GS-AP-MW-7	9/16/2020 10:53	pH	7.73	pH
GS-AP-MW-7	9/16/2020 10:53	Temperature	18.4	C
GS-AP-MW-7	9/16/2020 10:53	Turbidity	>10	NTU
GS-AP-MW-7	9/16/2020 10:58	Conductivity	530.79	uS/cm
GS-AP-MW-7	9/16/2020 10:58	DO	0.35	mg/L
GS-AP-MW-7	9/16/2020 10:58	Depth to Water Detail	10.03	ft
GS-AP-MW-7	9/16/2020 10:58	Oxidation Reduction Potention	-139.48	mv
GS-AP-MW-7	9/16/2020 10:58	pH	7.74	pH
GS-AP-MW-7	9/16/2020 10:58	Temperature	18.37	C
GS-AP-MW-7	9/16/2020 10:58	Turbidity	>10	NTU
GS-AP-MW-7	9/16/2020 11:03	Conductivity	530.42	uS/cm
GS-AP-MW-7	9/16/2020 11:03	DO	0.35	mg/L
GS-AP-MW-7	9/16/2020 11:03	Depth to Water Detail	10.03	ft
GS-AP-MW-7	9/16/2020 11:03	Oxidation Reduction Potention	-141.1	mv
GS-AP-MW-7	9/16/2020 11:03	pH	7.75	pH
GS-AP-MW-7	9/16/2020 11:03	Temperature	18.37	C
GS-AP-MW-7	9/16/2020 11:03	Turbidity	>10	NTU
GS-AP-MW-7	9/16/2020 11:08	Conductivity	530.09	uS/cm
GS-AP-MW-7	9/16/2020 11:08	DO	0.34	mg/L
GS-AP-MW-7	9/16/2020 11:08	Depth to Water Detail	10.03	ft
GS-AP-MW-7	9/16/2020 11:08	Oxidation Reduction Potention	-139.75	mv
GS-AP-MW-7	9/16/2020 11:08	pH	7.71	pH
GS-AP-MW-7	9/16/2020 11:08	Temperature	18.41	C
GS-AP-MW-7	9/16/2020 11:08	Turbidity	>10	NTU
GS-AP-MW-7	9/16/2020 11:13	Conductivity	530.13	uS/cm
GS-AP-MW-7	9/16/2020 11:13	DO	0.34	mg/L
GS-AP-MW-7	9/16/2020 11:13	Depth to Water Detail	10.03	ft
GS-AP-MW-7	9/16/2020 11:13	Oxidation Reduction Potention	-141.35	mv
GS-AP-MW-7	9/16/2020 11:13	pH	7.72	pH
GS-AP-MW-7	9/16/2020 11:13	Temperature	18.4	C
GS-AP-MW-7	9/16/2020 11:13	Turbidity	>10	NTU
GS-AP-MW-7	9/16/2020 11:18	Conductivity	529.49	uS/cm
GS-AP-MW-7	9/16/2020 11:18	DO	0.35	mg/L
GS-AP-MW-7	9/16/2020 11:18	Depth to Water Detail	10.03	ft
GS-AP-MW-7	9/16/2020 11:18	Oxidation Reduction Potention	-143.12	mv
GS-AP-MW-7	9/16/2020 11:18	pH	7.74	pH
GS-AP-MW-7	9/16/2020 11:18	Temperature	18.36	C
GS-AP-MW-7	9/16/2020 11:18	Turbidity	>10	NTU
GS-AP-MW-7	9/16/2020 11:23	Conductivity	529.23	uS/cm
GS-AP-MW-7	9/16/2020 11:23	DO	0.34	mg/L
GS-AP-MW-7	9/16/2020 11:23	Depth to Water Detail	10.03	ft
GS-AP-MW-7	9/16/2020 11:23	Oxidation Reduction Potention	-144.14	mv
GS-AP-MW-7	9/16/2020 11:23	pH	7.74	pH

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-7	9/16/2020 11:23	Temperature	18.39	C
GS-AP-MW-7	9/16/2020 11:23	Turbidity	>10	NTU
GS-AP-MW-7	9/16/2020 11:28	Conductivity	528.75	uS/cm
GS-AP-MW-7	9/16/2020 11:28	DO	0.35	mg/L
GS-AP-MW-7	9/16/2020 11:28	Depth to Water Detail	10.03	ft
GS-AP-MW-7	9/16/2020 11:28	Oxidation Reduction Potention	-145.11	mv
GS-AP-MW-7	9/16/2020 11:28	pH	7.75	pH
GS-AP-MW-7	9/16/2020 11:28	Temperature	18.38	C
GS-AP-MW-7	9/16/2020 11:28	Turbidity	>10	NTU
GS-AP-MW-7	9/16/2020 11:33	Conductivity	528.27	uS/cm
GS-AP-MW-7	9/16/2020 11:33	DO	0.34	mg/L
GS-AP-MW-7	9/16/2020 11:33	Depth to Water Detail	10.03	ft
GS-AP-MW-7	9/16/2020 11:33	Oxidation Reduction Potention	-143.09	mv
GS-AP-MW-7	9/16/2020 11:33	pH	7.7	pH
GS-AP-MW-7	9/16/2020 11:33	Temperature	18.41	C
GS-AP-MW-7	9/16/2020 11:33	Turbidity	>10	NTU
GS-AP-MW-7	9/16/2020 11:38	Conductivity	528	uS/cm
GS-AP-MW-7	9/16/2020 11:38	DO	0.35	mg/L
GS-AP-MW-7	9/16/2020 11:38	Depth to Water Detail	10.03	ft
GS-AP-MW-7	9/16/2020 11:38	Oxidation Reduction Potention	-145.23	mv
GS-AP-MW-7	9/16/2020 11:38	pH	7.73	pH
GS-AP-MW-7	9/16/2020 11:38	Temperature	18.41	C
GS-AP-MW-7	9/16/2020 11:38	Turbidity	>10	NTU
GS-AP-MW-7	9/16/2020 11:43	Conductivity	527.64	uS/cm
GS-AP-MW-7	9/16/2020 11:43	DO	0.35	mg/L
GS-AP-MW-7	9/16/2020 11:43	Depth to Water Detail	10.03	ft
GS-AP-MW-7	9/16/2020 11:43	Oxidation Reduction Potention	-146.41	mv
GS-AP-MW-7	9/16/2020 11:43	pH	7.74	pH
GS-AP-MW-7	9/16/2020 11:43	Temperature	18.35	C
GS-AP-MW-7	9/16/2020 11:43	Turbidity	>10	NTU

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-6S	9/16/2020 14:00	Conductivity	433.92	uS/cm
GS-AP-MW-6S	9/16/2020 14:00	DO	0.34	mg/L
GS-AP-MW-6S	9/16/2020 14:00	Depth to Water Detail	16.41	ft
GS-AP-MW-6S	9/16/2020 14:00	Oxidation Reduction Potention	-56.27	mv
GS-AP-MW-6S	9/16/2020 14:00	pH	6.92	pH
GS-AP-MW-6S	9/16/2020 14:00	Temperature	23.21	C
GS-AP-MW-6S	9/16/2020 14:00	Turbidity	13.4	NTU
GS-AP-MW-6S	9/16/2020 14:05	Conductivity	430.83	uS/cm
GS-AP-MW-6S	9/16/2020 14:05	DO	0.65	mg/L
GS-AP-MW-6S	9/16/2020 14:05	Depth to Water Detail	16.43	ft
GS-AP-MW-6S	9/16/2020 14:05	Oxidation Reduction Potention	-56.19	mv
GS-AP-MW-6S	9/16/2020 14:05	pH	6.91	pH
GS-AP-MW-6S	9/16/2020 14:05	Temperature	23.27	C
GS-AP-MW-6S	9/16/2020 14:05	Turbidity	11.06	NTU
GS-AP-MW-6S	9/16/2020 14:10	Conductivity	430.5	uS/cm
GS-AP-MW-6S	9/16/2020 14:10	DO	0.92	mg/L
GS-AP-MW-6S	9/16/2020 14:10	Depth to Water Detail	16.43	ft
GS-AP-MW-6S	9/16/2020 14:10	Oxidation Reduction Potention	-56.53	mv
GS-AP-MW-6S	9/16/2020 14:10	pH	6.93	pH
GS-AP-MW-6S	9/16/2020 14:10	Temperature	23.33	C
GS-AP-MW-6S	9/16/2020 14:10	Turbidity	5.27	NTU
GS-AP-MW-6S	9/16/2020 14:15	Conductivity	429.58	uS/cm
GS-AP-MW-6S	9/16/2020 14:15	DO	1.11	mg/L
GS-AP-MW-6S	9/16/2020 14:15	Depth to Water Detail	16.43	ft
GS-AP-MW-6S	9/16/2020 14:15	Oxidation Reduction Potention	-56.46	mv
GS-AP-MW-6S	9/16/2020 14:15	pH	6.94	pH
GS-AP-MW-6S	9/16/2020 14:15	Temperature	23.38	C
GS-AP-MW-6S	9/16/2020 14:15	Turbidity	6.09	NTU
GS-AP-MW-6S	9/16/2020 14:20	Conductivity	427.43	uS/cm
GS-AP-MW-6S	9/16/2020 14:20	DO	1.23	mg/L
GS-AP-MW-6S	9/16/2020 14:20	Depth to Water Detail	16.43	ft
GS-AP-MW-6S	9/16/2020 14:20	Oxidation Reduction Potention	-56.06	mv
GS-AP-MW-6S	9/16/2020 14:20	pH	6.95	pH
GS-AP-MW-6S	9/16/2020 14:20	Temperature	23.41	C
GS-AP-MW-6S	9/16/2020 14:20	Turbidity	5.01	NTU
GS-AP-MW-6S	9/16/2020 14:25	Conductivity	427.75	uS/cm
GS-AP-MW-6S	9/16/2020 14:25	DO	1.31	mg/L
GS-AP-MW-6S	9/16/2020 14:25	Depth to Water Detail	16.43	ft
GS-AP-MW-6S	9/16/2020 14:25	Oxidation Reduction Potention	-55.81	mv
GS-AP-MW-6S	9/16/2020 14:25	pH	6.95	pH
GS-AP-MW-6S	9/16/2020 14:25	Temperature	23.45	C
GS-AP-MW-6S	9/16/2020 14:25	Turbidity	5.35	NTU
GS-AP-MW-6S	9/16/2020 14:30	Conductivity	427.21	uS/cm
GS-AP-MW-6S	9/16/2020 14:30	DO	1.37	mg/L
GS-AP-MW-6S	9/16/2020 14:30	Depth to Water Detail	16.43	ft
GS-AP-MW-6S	9/16/2020 14:30	Oxidation Reduction Potention	-54.48	mv

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-6S	9/16/2020 14:30	pH	6.93	pH
GS-AP-MW-6S	9/16/2020 14:30	Temperature	23.47	C
GS-AP-MW-6S	9/16/2020 14:30	Turbidity	4.14	NTU

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-6D	9/17/2020 9:18	Conductivity	502	uS/cm
GS-AP-MW-6D	9/17/2020 9:18	DO	0.17	mg/L
GS-AP-MW-6D	9/17/2020 9:18	Depth to Water Detail	10.97	ft
GS-AP-MW-6D	9/17/2020 9:18	Oxidation Reduction Potention	-89.18	mv
GS-AP-MW-6D	9/17/2020 9:18	pH	7.37	pH
GS-AP-MW-6D	9/17/2020 9:18	Temperature	20.98	C
GS-AP-MW-6D	9/17/2020 9:18	Turbidity	1.3	NTU
GS-AP-MW-6D	9/17/2020 9:23	Conductivity	502.7	uS/cm
GS-AP-MW-6D	9/17/2020 9:23	DO	0.16	mg/L
GS-AP-MW-6D	9/17/2020 9:23	Depth to Water Detail	11.04	ft
GS-AP-MW-6D	9/17/2020 9:23	Oxidation Reduction Potention	-112.15	mv
GS-AP-MW-6D	9/17/2020 9:23	pH	7.4	pH
GS-AP-MW-6D	9/17/2020 9:23	Temperature	20.76	C
GS-AP-MW-6D	9/17/2020 9:23	Turbidity	0.75	NTU
GS-AP-MW-6D	9/17/2020 9:28	Conductivity	504.82	uS/cm
GS-AP-MW-6D	9/17/2020 9:28	DO	0.16	mg/L
GS-AP-MW-6D	9/17/2020 9:28	Depth to Water Detail	11.12	ft
GS-AP-MW-6D	9/17/2020 9:28	Oxidation Reduction Potention	-128.91	mv
GS-AP-MW-6D	9/17/2020 9:28	pH	7.41	pH
GS-AP-MW-6D	9/17/2020 9:28	Temperature	20.68	C
GS-AP-MW-6D	9/17/2020 9:28	Turbidity	0.71	NTU
GS-AP-MW-6D	9/17/2020 9:33	Conductivity	502.97	uS/cm
GS-AP-MW-6D	9/17/2020 9:33	DO	0.16	mg/L
GS-AP-MW-6D	9/17/2020 9:33	Depth to Water Detail	11.12	ft
GS-AP-MW-6D	9/17/2020 9:33	Oxidation Reduction Potention	-142.48	mv
GS-AP-MW-6D	9/17/2020 9:33	pH	7.41	pH
GS-AP-MW-6D	9/17/2020 9:33	Temperature	20.58	C
GS-AP-MW-6D	9/17/2020 9:33	Turbidity	1.01	NTU

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-23H	9/17/2020 11:05	Conductivity	827.18	uS/cm
GS-AP-MW-23H	9/17/2020 11:05	DO	0.62	mg/L
GS-AP-MW-23H	9/17/2020 11:05	Depth to Water Detail	28.85	ft
GS-AP-MW-23H	9/17/2020 11:05	Oxidation Reduction Potention	-17.39	mv
GS-AP-MW-23H	9/17/2020 11:05	pH	5.75	pH
GS-AP-MW-23H	9/17/2020 11:05	Temperature	18.31	C
GS-AP-MW-23H	9/17/2020 11:05	Turbidity	7.81	NTU
GS-AP-MW-23H	9/17/2020 11:10	Conductivity	820.65	uS/cm
GS-AP-MW-23H	9/17/2020 11:10	DO	0.74	mg/L
GS-AP-MW-23H	9/17/2020 11:10	Depth to Water Detail	28.89	ft
GS-AP-MW-23H	9/17/2020 11:10	Oxidation Reduction Potention	-12.21	mv
GS-AP-MW-23H	9/17/2020 11:10	pH	5.73	pH
GS-AP-MW-23H	9/17/2020 11:10	Temperature	18.38	C
GS-AP-MW-23H	9/17/2020 11:10	Turbidity	4.19	NTU
GS-AP-MW-23H	9/17/2020 11:15	Conductivity	826.38	uS/cm
GS-AP-MW-23H	9/17/2020 11:15	DO	0.66	mg/L
GS-AP-MW-23H	9/17/2020 11:15	Depth to Water Detail	28.91	ft
GS-AP-MW-23H	9/17/2020 11:15	Oxidation Reduction Potention	-10.69	mv
GS-AP-MW-23H	9/17/2020 11:15	pH	5.74	pH
GS-AP-MW-23H	9/17/2020 11:15	Temperature	18.4	C
GS-AP-MW-23H	9/17/2020 11:15	Turbidity	3.49	NTU
GS-AP-MW-23H	9/17/2020 11:20	Conductivity	825.61	uS/cm
GS-AP-MW-23H	9/17/2020 11:20	DO	0.55	mg/L
GS-AP-MW-23H	9/17/2020 11:20	Depth to Water Detail	28.91	ft
GS-AP-MW-23H	9/17/2020 11:20	Oxidation Reduction Potention	-9.79	mv
GS-AP-MW-23H	9/17/2020 11:20	pH	5.74	pH
GS-AP-MW-23H	9/17/2020 11:20	Temperature	18.35	C
GS-AP-MW-23H	9/17/2020 11:20	Turbidity	2.47	NTU

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-41HD	9/17/2020 12:40	Conductivity	476.75	uS/cm
GS-AP-MW-41HD	9/17/2020 12:40	DO	0.15	mg/L
GS-AP-MW-41HD	9/17/2020 12:40	Depth to Water Detail	4.41	ft
GS-AP-MW-41HD	9/17/2020 12:40	Oxidation Reduction Potention	-21.56	mv
GS-AP-MW-41HD	9/17/2020 12:40	pH	7.16	pH
GS-AP-MW-41HD	9/17/2020 12:40	Temperature	19.24	C
GS-AP-MW-41HD	9/17/2020 12:40	Turbidity	1.84	NTU
GS-AP-MW-41HD	9/17/2020 12:45	Conductivity	475.2	uS/cm
GS-AP-MW-41HD	9/17/2020 12:45	DO	0.15	mg/L
GS-AP-MW-41HD	9/17/2020 12:45	Depth to Water Detail	4.65	ft
GS-AP-MW-41HD	9/17/2020 12:45	Oxidation Reduction Potention	-19.04	mv
GS-AP-MW-41HD	9/17/2020 12:45	pH	7.15	pH
GS-AP-MW-41HD	9/17/2020 12:45	Temperature	19.11	C
GS-AP-MW-41HD	9/17/2020 12:45	Turbidity	1.33	NTU
GS-AP-MW-41HD	9/17/2020 12:50	Conductivity	474.97	uS/cm
GS-AP-MW-41HD	9/17/2020 12:50	DO	0.15	mg/L
GS-AP-MW-41HD	9/17/2020 12:50	Depth to Water Detail	4.93	ft
GS-AP-MW-41HD	9/17/2020 12:50	Oxidation Reduction Potention	-17.25	mv
GS-AP-MW-41HD	9/17/2020 12:50	pH	7.17	pH
GS-AP-MW-41HD	9/17/2020 12:50	Temperature	19.1	C
GS-AP-MW-41HD	9/17/2020 12:50	Turbidity	1.45	NTU
GS-AP-MW-41HD	9/17/2020 12:55	Conductivity	474.55	uS/cm
GS-AP-MW-41HD	9/17/2020 12:55	DO	0.16	mg/L
GS-AP-MW-41HD	9/17/2020 12:55	Depth to Water Detail	4.96	ft
GS-AP-MW-41HD	9/17/2020 12:55	Oxidation Reduction Potention	-17.46	mv
GS-AP-MW-41HD	9/17/2020 12:55	pH	7.2	pH
GS-AP-MW-41HD	9/17/2020 12:55	Temperature	18.95	C
GS-AP-MW-41HD	9/17/2020 12:55	Turbidity	1.37	NTU
GS-AP-MW-41HD	9/17/2020 13:00	Conductivity	474.23	uS/cm
GS-AP-MW-41HD	9/17/2020 13:00	DO	0.16	mg/L
GS-AP-MW-41HD	9/17/2020 13:00	Depth to Water Detail	4.96	ft
GS-AP-MW-41HD	9/17/2020 13:00	Oxidation Reduction Potention	-17.1	mv
GS-AP-MW-41HD	9/17/2020 13:00	pH	7.22	pH
GS-AP-MW-41HD	9/17/2020 13:00	Temperature	18.88	C
GS-AP-MW-41HD	9/17/2020 13:00	Turbidity	1.47	NTU

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-24H	9/17/2020 14:00	Conductivity	395.82	uS/cm
GS-AP-MW-24H	9/17/2020 14:00	DO	0.16	mg/L
GS-AP-MW-24H	9/17/2020 14:00	Depth to Water Detail	6.92	ft
GS-AP-MW-24H	9/17/2020 14:00	Oxidation Reduction Potention	-79.68	mv
GS-AP-MW-24H	9/17/2020 14:00	pH	7.02	pH
GS-AP-MW-24H	9/17/2020 14:00	Temperature	19.69	C
GS-AP-MW-24H	9/17/2020 14:00	Turbidity	3.46	NTU
GS-AP-MW-24H	9/17/2020 14:05	Conductivity	402.68	uS/cm
GS-AP-MW-24H	9/17/2020 14:05	DO	0.15	mg/L
GS-AP-MW-24H	9/17/2020 14:05	Depth to Water Detail	6.92	ft
GS-AP-MW-24H	9/17/2020 14:05	Oxidation Reduction Potention	-80.7	mv
GS-AP-MW-24H	9/17/2020 14:05	pH	7.01	pH
GS-AP-MW-24H	9/17/2020 14:05	Temperature	19.49	C
GS-AP-MW-24H	9/17/2020 14:05	Turbidity	3.13	NTU
GS-AP-MW-24H	9/17/2020 14:10	Conductivity	404.33	uS/cm
GS-AP-MW-24H	9/17/2020 14:10	DO	0.16	mg/L
GS-AP-MW-24H	9/17/2020 14:10	Depth to Water Detail	6.92	ft
GS-AP-MW-24H	9/17/2020 14:10	Oxidation Reduction Potention	-82.08	mv
GS-AP-MW-24H	9/17/2020 14:10	pH	7.01	pH
GS-AP-MW-24H	9/17/2020 14:10	Temperature	19.41	C
GS-AP-MW-24H	9/17/2020 14:10	Turbidity	3.29	NTU
GS-AP-MW-24H	9/17/2020 14:15	Conductivity	405.22	uS/cm
GS-AP-MW-24H	9/17/2020 14:15	DO	0.15	mg/L
GS-AP-MW-24H	9/17/2020 14:15	Depth to Water Detail	6.92	ft
GS-AP-MW-24H	9/17/2020 14:15	Oxidation Reduction Potention	-83.8	mv
GS-AP-MW-24H	9/17/2020 14:15	pH	7.02	pH
GS-AP-MW-24H	9/17/2020 14:15	Temperature	19.33	C
GS-AP-MW-24H	9/17/2020 14:15	Turbidity	2.78	NTU

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-2	9/22/2020 12:18	Conductivity	514.48	uS/cm
GS-AP-MW-2	9/22/2020 12:18	DO	0.97	mg/L
GS-AP-MW-2	9/22/2020 12:18	Depth to Water Detail	149.14	ft
GS-AP-MW-2	9/22/2020 12:18	Oxidation Reduction Potention	-211.88	mv
GS-AP-MW-2	9/22/2020 12:18	pH	9.27	pH
GS-AP-MW-2	9/22/2020 12:18	Temperature	18.18	C
GS-AP-MW-2	9/22/2020 12:18	Turbidity	5.37	NTU
GS-AP-MW-2	9/22/2020 12:23	Conductivity	517.41	uS/cm
GS-AP-MW-2	9/22/2020 12:23	DO	0.52	mg/L
GS-AP-MW-2	9/22/2020 12:23	Depth to Water Detail	149.14	ft
GS-AP-MW-2	9/22/2020 12:23	Oxidation Reduction Potention	-220.72	mv
GS-AP-MW-2	9/22/2020 12:23	pH	9.37	pH
GS-AP-MW-2	9/22/2020 12:23	Temperature	18.15	C
GS-AP-MW-2	9/22/2020 12:23	Turbidity	1.48	NTU
GS-AP-MW-2	9/22/2020 12:28	Conductivity	517.51	uS/cm
GS-AP-MW-2	9/22/2020 12:28	DO	0.42	mg/L
GS-AP-MW-2	9/22/2020 12:28	Depth to Water Detail	149.14	ft
GS-AP-MW-2	9/22/2020 12:28	Oxidation Reduction Potention	-225.29	mv
GS-AP-MW-2	9/22/2020 12:28	pH	9.39	pH
GS-AP-MW-2	9/22/2020 12:28	Temperature	18.07	C
GS-AP-MW-2	9/22/2020 12:28	Turbidity	1.78	NTU
GS-AP-MW-2	9/22/2020 12:33	Conductivity	510.12	uS/cm
GS-AP-MW-2	9/22/2020 12:33	DO	0.4	mg/L
GS-AP-MW-2	9/22/2020 12:33	Depth to Water Detail	149.14	ft
GS-AP-MW-2	9/22/2020 12:33	Oxidation Reduction Potention	-228.81	mv
GS-AP-MW-2	9/22/2020 12:33	pH	9.41	pH
GS-AP-MW-2	9/22/2020 12:33	Temperature	18.2	C
GS-AP-MW-2	9/22/2020 12:33	Turbidity	1.61	NTU

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-16D	9/22/2020 8:29	Conductivity	340.12	uS/cm
GS-AP-MW-16D	9/22/2020 8:29	DO	1.29	mg/L
GS-AP-MW-16D	9/22/2020 8:29	Depth to Water Detail	148.25	ft
GS-AP-MW-16D	9/22/2020 8:29	Oxidation Reduction Potention	-56.4	mv
GS-AP-MW-16D	9/22/2020 8:29	pH	7.48	pH
GS-AP-MW-16D	9/22/2020 8:29	Temperature	17.36	C
GS-AP-MW-16D	9/22/2020 8:29	Turbidity	0.53	NTU
GS-AP-MW-16D	9/22/2020 8:34	Conductivity	339.73	uS/cm
GS-AP-MW-16D	9/22/2020 8:34	DO	0.73	mg/L
GS-AP-MW-16D	9/22/2020 8:34	Depth to Water Detail	148.83	ft
GS-AP-MW-16D	9/22/2020 8:34	Oxidation Reduction Potention	-38.39	mv
GS-AP-MW-16D	9/22/2020 8:34	pH	7.5	pH
GS-AP-MW-16D	9/22/2020 8:34	Temperature	17.42	C
GS-AP-MW-16D	9/22/2020 8:34	Turbidity	0.42	NTU
GS-AP-MW-16D	9/22/2020 8:39	Conductivity	338.64	uS/cm
GS-AP-MW-16D	9/22/2020 8:39	DO	0.66	mg/L
GS-AP-MW-16D	9/22/2020 8:39	Depth to Water Detail	149.22	ft
GS-AP-MW-16D	9/22/2020 8:39	Oxidation Reduction Potention	-35.41	mv
GS-AP-MW-16D	9/22/2020 8:39	pH	7.51	pH
GS-AP-MW-16D	9/22/2020 8:39	Temperature	17.34	C
GS-AP-MW-16D	9/22/2020 8:39	Turbidity	0.41	NTU
GS-AP-MW-16D	9/22/2020 8:44	Conductivity	337.56	uS/cm
GS-AP-MW-16D	9/22/2020 8:44	DO	0.6	mg/L
GS-AP-MW-16D	9/22/2020 8:44	Depth to Water Detail	149.65	ft
GS-AP-MW-16D	9/22/2020 8:44	Oxidation Reduction Potention	-36.21	mv
GS-AP-MW-16D	9/22/2020 8:44	pH	7.51	pH
GS-AP-MW-16D	9/22/2020 8:44	Temperature	17.43	C
GS-AP-MW-16D	9/22/2020 8:44	Turbidity	0.32	NTU
GS-AP-MW-16D	9/22/2020 8:49	Conductivity	336.68	uS/cm
GS-AP-MW-16D	9/22/2020 8:49	DO	0.6	mg/L
GS-AP-MW-16D	9/22/2020 8:49	Depth to Water Detail	149.92	ft
GS-AP-MW-16D	9/22/2020 8:49	Oxidation Reduction Potention	-38.3	mv
GS-AP-MW-16D	9/22/2020 8:49	pH	7.52	pH
GS-AP-MW-16D	9/22/2020 8:49	Temperature	17.45	C
GS-AP-MW-16D	9/22/2020 8:49	Turbidity	0.53	NTU
GS-AP-MW-16D	9/22/2020 8:54	Conductivity	335.51	uS/cm
GS-AP-MW-16D	9/22/2020 8:54	DO	0.61	mg/L
GS-AP-MW-16D	9/22/2020 8:54	Depth to Water Detail	150.11	ft
GS-AP-MW-16D	9/22/2020 8:54	Oxidation Reduction Potention	-40.75	mv
GS-AP-MW-16D	9/22/2020 8:54	pH	7.52	pH
GS-AP-MW-16D	9/22/2020 8:54	Temperature	17.38	C
GS-AP-MW-16D	9/22/2020 8:54	Turbidity	0.4	NTU
GS-AP-MW-16D	9/22/2020 8:59	Conductivity	334.7	uS/cm
GS-AP-MW-16D	9/22/2020 8:59	DO	0.59	mg/L
GS-AP-MW-16D	9/22/2020 8:59	Depth to Water Detail	150.36	ft
GS-AP-MW-16D	9/22/2020 8:59	Oxidation Reduction Potention	-42.28	mv

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-16D	9/22/2020 8:59	pH	7.52	pH
GS-AP-MW-16D	9/22/2020 8:59	Temperature	17.52	C
GS-AP-MW-16D	9/22/2020 8:59	Turbidity	0.51	NTU
GS-AP-MW-16D	9/22/2020 9:04	Conductivity	333.5	uS/cm
GS-AP-MW-16D	9/22/2020 9:04	DO	0.64	mg/L
GS-AP-MW-16D	9/22/2020 9:04	Depth to Water Detail	150.55	ft
GS-AP-MW-16D	9/22/2020 9:04	Oxidation Reduction Potention	-43.95	mv
GS-AP-MW-16D	9/22/2020 9:04	pH	7.52	pH
GS-AP-MW-16D	9/22/2020 9:04	Temperature	17.49	C
GS-AP-MW-16D	9/22/2020 9:04	Turbidity	0.44	NTU
GS-AP-MW-16D	9/22/2020 9:09	Conductivity	332.28	uS/cm
GS-AP-MW-16D	9/22/2020 9:09	DO	0.61	mg/L
GS-AP-MW-16D	9/22/2020 9:09	Depth to Water Detail	150.66	ft
GS-AP-MW-16D	9/22/2020 9:09	Oxidation Reduction Potention	-44.32	mv
GS-AP-MW-16D	9/22/2020 9:09	pH	7.5	pH
GS-AP-MW-16D	9/22/2020 9:09	Temperature	17.55	C
GS-AP-MW-16D	9/22/2020 9:09	Turbidity	0.44	NTU
GS-AP-MW-16D	9/22/2020 9:14	Conductivity	331.72	uS/cm
GS-AP-MW-16D	9/22/2020 9:14	DO	0.63	mg/L
GS-AP-MW-16D	9/22/2020 9:14	Depth to Water Detail	150.79	ft
GS-AP-MW-16D	9/22/2020 9:14	Oxidation Reduction Potention	-45.4	mv
GS-AP-MW-16D	9/22/2020 9:14	pH	7.52	pH
GS-AP-MW-16D	9/22/2020 9:14	Temperature	17.66	C
GS-AP-MW-16D	9/22/2020 9:14	Turbidity	0.4	NTU

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-16S	9/21/2020 12:32	Conductivity	3783.12	uS/cm
GS-AP-MW-16S	9/21/2020 12:32	DO	1.23	mg/L
GS-AP-MW-16S	9/21/2020 12:32	Depth to Water Detail	60.9	ft
GS-AP-MW-16S	9/21/2020 12:32	Oxidation Reduction Potention	-192.54	mv
GS-AP-MW-16S	9/21/2020 12:32	pH	12.46	pH
GS-AP-MW-16S	9/21/2020 12:32	Temperature	18.8	C
GS-AP-MW-16S	9/21/2020 12:32	Turbidity	21.2	NTU
GS-AP-MW-16S	9/21/2020 12:37	Conductivity	3392.64	uS/cm
GS-AP-MW-16S	9/21/2020 12:37	DO	0.95	mg/L
GS-AP-MW-16S	9/21/2020 12:37	Depth to Water Detail	60.9	ft
GS-AP-MW-16S	9/21/2020 12:37	Oxidation Reduction Potention	-250.75	mv
GS-AP-MW-16S	9/21/2020 12:37	pH	12.42	pH
GS-AP-MW-16S	9/21/2020 12:37	Temperature	18.73	C
GS-AP-MW-16S	9/21/2020 12:37	Turbidity	14.9	NTU
GS-AP-MW-16S	9/21/2020 12:42	Conductivity	3001.72	uS/cm
GS-AP-MW-16S	9/21/2020 12:42	DO	0.73	mg/L
GS-AP-MW-16S	9/21/2020 12:42	Depth to Water Detail	61.2	ft
GS-AP-MW-16S	9/21/2020 12:42	Oxidation Reduction Potention	-279.72	mv
GS-AP-MW-16S	9/21/2020 12:42	pH	12.38	pH
GS-AP-MW-16S	9/21/2020 12:42	Temperature	18.71	C
GS-AP-MW-16S	9/21/2020 12:42	Turbidity	11.9	NTU
GS-AP-MW-16S	9/21/2020 12:47	Conductivity	2752.31	uS/cm
GS-AP-MW-16S	9/21/2020 12:47	DO	0.83	mg/L
GS-AP-MW-16S	9/21/2020 12:47	Depth to Water Detail	61.2	ft
GS-AP-MW-16S	9/21/2020 12:47	Oxidation Reduction Potention	-281.36	mv
GS-AP-MW-16S	9/21/2020 12:47	pH	12.34	pH
GS-AP-MW-16S	9/21/2020 12:47	Temperature	18.86	C
GS-AP-MW-16S	9/21/2020 12:47	Turbidity	11.9	NTU
GS-AP-MW-16S	9/21/2020 12:52	Conductivity	2580.77	uS/cm
GS-AP-MW-16S	9/21/2020 12:52	DO	1.15	mg/L
GS-AP-MW-16S	9/21/2020 12:52	Depth to Water Detail	61.2	ft
GS-AP-MW-16S	9/21/2020 12:52	Oxidation Reduction Potention	-276.93	mv
GS-AP-MW-16S	9/21/2020 12:52	pH	12.31	pH
GS-AP-MW-16S	9/21/2020 12:52	Temperature	18.84	C
GS-AP-MW-16S	9/21/2020 12:52	Turbidity	12.13	NTU
GS-AP-MW-16S	9/21/2020 12:57	Conductivity	2374.83	uS/cm
GS-AP-MW-16S	9/21/2020 12:57	DO	1.31	mg/L
GS-AP-MW-16S	9/21/2020 12:57	Depth to Water Detail	61.2	ft
GS-AP-MW-16S	9/21/2020 12:57	Oxidation Reduction Potention	-279.44	mv
GS-AP-MW-16S	9/21/2020 12:57	pH	12.27	pH
GS-AP-MW-16S	9/21/2020 12:57	Temperature	18.88	C
GS-AP-MW-16S	9/21/2020 12:57	Turbidity	9.46	NTU
GS-AP-MW-16S	9/21/2020 13:02	Conductivity	2160.32	uS/cm
GS-AP-MW-16S	9/21/2020 13:02	DO	1.59	mg/L
GS-AP-MW-16S	9/21/2020 13:02	Depth to Water Detail	61.2	ft
GS-AP-MW-16S	9/21/2020 13:02	Oxidation Reduction Potention	-279.73	mv

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-16S	9/21/2020 13:02	pH	12.23	pH
GS-AP-MW-16S	9/21/2020 13:02	Temperature	18.78	C
GS-AP-MW-16S	9/21/2020 13:02	Turbidity	10.24	NTU
GS-AP-MW-16S	9/21/2020 13:07	Conductivity	1948.35	uS/cm
GS-AP-MW-16S	9/21/2020 13:07	DO	1.76	mg/L
GS-AP-MW-16S	9/21/2020 13:07	Depth to Water Detail	61.2	ft
GS-AP-MW-16S	9/21/2020 13:07	Oxidation Reduction Potention	-281.72	mv
GS-AP-MW-16S	9/21/2020 13:07	pH	12.19	pH
GS-AP-MW-16S	9/21/2020 13:07	Temperature	18.81	C
GS-AP-MW-16S	9/21/2020 13:07	Turbidity	10.52	NTU
GS-AP-MW-16S	9/21/2020 13:12	Conductivity	1724.17	uS/cm
GS-AP-MW-16S	9/21/2020 13:12	DO	1.93	mg/L
GS-AP-MW-16S	9/21/2020 13:12	Depth to Water Detail	61.2	ft
GS-AP-MW-16S	9/21/2020 13:12	Oxidation Reduction Potention	-282.36	mv
GS-AP-MW-16S	9/21/2020 13:12	pH	12.14	pH
GS-AP-MW-16S	9/21/2020 13:12	Temperature	18.6	C
GS-AP-MW-16S	9/21/2020 13:12	Turbidity	11.38	NTU
GS-AP-MW-16S	9/21/2020 13:17	Conductivity	1499.11	uS/cm
GS-AP-MW-16S	9/21/2020 13:17	DO	1.98	mg/L
GS-AP-MW-16S	9/21/2020 13:17	Depth to Water Detail	61.2	ft
GS-AP-MW-16S	9/21/2020 13:17	Oxidation Reduction Potention	-283.4	mv
GS-AP-MW-16S	9/21/2020 13:17	pH	12.09	pH
GS-AP-MW-16S	9/21/2020 13:17	Temperature	18.51	C
GS-AP-MW-16S	9/21/2020 13:17	Turbidity	9.99	NTU
GS-AP-MW-16S	9/21/2020 13:22	Conductivity	1302.89	uS/cm
GS-AP-MW-16S	9/21/2020 13:22	DO	2.01	mg/L
GS-AP-MW-16S	9/21/2020 13:22	Depth to Water Detail	61.2	ft
GS-AP-MW-16S	9/21/2020 13:22	Oxidation Reduction Potention	-282.85	mv
GS-AP-MW-16S	9/21/2020 13:22	pH	12.03	pH
GS-AP-MW-16S	9/21/2020 13:22	Temperature	18.65	C
GS-AP-MW-16S	9/21/2020 13:22	Turbidity	9.96	NTU
GS-AP-MW-16S	9/21/2020 13:27	Conductivity	1195.8	uS/cm
GS-AP-MW-16S	9/21/2020 13:27	DO	2.01	mg/L
GS-AP-MW-16S	9/21/2020 13:27	Depth to Water Detail	61.2	ft
GS-AP-MW-16S	9/21/2020 13:27	Oxidation Reduction Potention	-282.56	mv
GS-AP-MW-16S	9/21/2020 13:27	pH	11.96	pH
GS-AP-MW-16S	9/21/2020 13:27	Temperature	18.74	C
GS-AP-MW-16S	9/21/2020 13:27	Turbidity	10.44	NTU
GS-AP-MW-16S	9/21/2020 13:32	Conductivity	1011.11	uS/cm
GS-AP-MW-16S	9/21/2020 13:32	DO	2.08	mg/L
GS-AP-MW-16S	9/21/2020 13:32	Depth to Water Detail	61.2	ft
GS-AP-MW-16S	9/21/2020 13:32	Oxidation Reduction Potention	-281.7	mv
GS-AP-MW-16S	9/21/2020 13:32	pH	11.89	pH
GS-AP-MW-16S	9/21/2020 13:32	Temperature	18.87	C
GS-AP-MW-16S	9/21/2020 13:32	Turbidity	10.66	NTU
GS-AP-MW-16S	9/21/2020 13:37	Conductivity	899.48	uS/cm

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-16S	9/21/2020 13:37	DO	2.03	mg/L
GS-AP-MW-16S	9/21/2020 13:37	Depth to Water Detail	61.2	ft
GS-AP-MW-16S	9/21/2020 13:37	Oxidation Reduction Potention	-280.92	mv
GS-AP-MW-16S	9/21/2020 13:37	pH	11.81	pH
GS-AP-MW-16S	9/21/2020 13:37	Temperature	18.82	C
GS-AP-MW-16S	9/21/2020 13:37	Turbidity	11.22	NTU
GS-AP-MW-16S	9/21/2020 13:42	Conductivity	928.24	uS/cm
GS-AP-MW-16S	9/21/2020 13:42	DO	2.15	mg/L
GS-AP-MW-16S	9/21/2020 13:42	Depth to Water Detail	61.2	ft
GS-AP-MW-16S	9/21/2020 13:42	Oxidation Reduction Potention	-277.31	mv
GS-AP-MW-16S	9/21/2020 13:42	pH	11.7	pH
GS-AP-MW-16S	9/21/2020 13:42	Temperature	18.83	C
GS-AP-MW-16S	9/21/2020 13:42	Turbidity	10.22	NTU
GS-AP-MW-16S	9/21/2020 13:47	Conductivity	835.82	uS/cm
GS-AP-MW-16S	9/21/2020 13:47	DO	2.17	mg/L
GS-AP-MW-16S	9/21/2020 13:47	Depth to Water Detail	61.2	ft
GS-AP-MW-16S	9/21/2020 13:47	Oxidation Reduction Potention	-273.97	mv
GS-AP-MW-16S	9/21/2020 13:47	pH	11.58	pH
GS-AP-MW-16S	9/21/2020 13:47	Temperature	18.72	C
GS-AP-MW-16S	9/21/2020 13:47	Turbidity	9.91	NTU
GS-AP-MW-16S	9/21/2020 13:52	Conductivity	766.35	uS/cm
GS-AP-MW-16S	9/21/2020 13:52	DO	2.36	mg/L
GS-AP-MW-16S	9/21/2020 13:52	Depth to Water Detail	61.2	ft
GS-AP-MW-16S	9/21/2020 13:52	Oxidation Reduction Potention	-269.88	mv
GS-AP-MW-16S	9/21/2020 13:52	pH	11.47	pH
GS-AP-MW-16S	9/21/2020 13:52	Temperature	18.59	C
GS-AP-MW-16S	9/21/2020 13:52	Turbidity	10.62	NTU
GS-AP-MW-16S	9/21/2020 13:57	Conductivity	698.67	uS/cm
GS-AP-MW-16S	9/21/2020 13:57	DO	2.47	mg/L
GS-AP-MW-16S	9/21/2020 13:57	Depth to Water Detail	61.2	ft
GS-AP-MW-16S	9/21/2020 13:57	Oxidation Reduction Potention	-267.08	mv
GS-AP-MW-16S	9/21/2020 13:57	pH	11.33	pH
GS-AP-MW-16S	9/21/2020 13:57	Temperature	18.58	C
GS-AP-MW-16S	9/21/2020 13:57	Turbidity	11.07	NTU
GS-AP-MW-16S	9/21/2020 14:02	Conductivity	647.68	uS/cm
GS-AP-MW-16S	9/21/2020 14:02	DO	2.54	mg/L
GS-AP-MW-16S	9/21/2020 14:02	Depth to Water Detail	61.2	ft
GS-AP-MW-16S	9/21/2020 14:02	Oxidation Reduction Potention	-263.59	mv
GS-AP-MW-16S	9/21/2020 14:02	pH	11.18	pH
GS-AP-MW-16S	9/21/2020 14:02	Temperature	18.65	C
GS-AP-MW-16S	9/21/2020 14:02	Turbidity	10.21	NTU
GS-AP-MW-16S	9/21/2020 14:07	Conductivity	592.62	uS/cm
GS-AP-MW-16S	9/21/2020 14:07	DO	2.35	mg/L
GS-AP-MW-16S	9/21/2020 14:07	Depth to Water Detail	61.2	ft
GS-AP-MW-16S	9/21/2020 14:07	Oxidation Reduction Potention	-259.62	mv
GS-AP-MW-16S	9/21/2020 14:07	pH	11.02	pH

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-16S	9/21/2020 14:07	Temperature	18.59	C
GS-AP-MW-16S	9/21/2020 14:07	Turbidity	10.34	NTU
GS-AP-MW-16S	9/21/2020 14:12	Conductivity	673.19	uS/cm
GS-AP-MW-16S	9/21/2020 14:12	DO	2.32	mg/L
GS-AP-MW-16S	9/21/2020 14:12	Depth to Water Detail	61.2	ft
GS-AP-MW-16S	9/21/2020 14:12	Oxidation Reduction Potention	-257.85	mv
GS-AP-MW-16S	9/21/2020 14:12	pH	10.87	pH
GS-AP-MW-16S	9/21/2020 14:12	Temperature	18.67	C
GS-AP-MW-16S	9/21/2020 14:12	Turbidity	10.63	NTU
GS-AP-MW-16S	9/21/2020 14:17	Conductivity	635.68	uS/cm
GS-AP-MW-16S	9/21/2020 14:17	DO	2.3	mg/L
GS-AP-MW-16S	9/21/2020 14:17	Depth to Water Detail	61.2	ft
GS-AP-MW-16S	9/21/2020 14:17	Oxidation Reduction Potention	-255.98	mv
GS-AP-MW-16S	9/21/2020 14:17	pH	10.74	pH
GS-AP-MW-16S	9/21/2020 14:17	Temperature	18.72	C
GS-AP-MW-16S	9/21/2020 14:17	Turbidity	11.48	NTU
GS-AP-MW-16S	9/21/2020 14:22	Conductivity	633.15	uS/cm
GS-AP-MW-16S	9/21/2020 14:22	DO	2.24	mg/L
GS-AP-MW-16S	9/21/2020 14:22	Depth to Water Detail	61.2	ft
GS-AP-MW-16S	9/21/2020 14:22	Oxidation Reduction Potention	-252.27	mv
GS-AP-MW-16S	9/21/2020 14:22	pH	10.62	pH
GS-AP-MW-16S	9/21/2020 14:22	Temperature	18.79	C
GS-AP-MW-16S	9/21/2020 14:22	Turbidity	10.27	NTU
GS-AP-MW-16S	9/21/2020 14:27	Conductivity	576.41	uS/cm
GS-AP-MW-16S	9/21/2020 14:27	DO	2.17	mg/L
GS-AP-MW-16S	9/21/2020 14:27	Depth to Water Detail	61.2	ft
GS-AP-MW-16S	9/21/2020 14:27	Oxidation Reduction Potention	-250.57	mv
GS-AP-MW-16S	9/21/2020 14:27	pH	10.54	pH
GS-AP-MW-16S	9/21/2020 14:27	Temperature	18.55	C
GS-AP-MW-16S	9/21/2020 14:27	Turbidity	9.56	NTU
GS-AP-MW-16S	9/21/2020 14:32	Conductivity	577.44	uS/cm
GS-AP-MW-16S	9/21/2020 14:32	DO	2.2	mg/L
GS-AP-MW-16S	9/21/2020 14:32	Depth to Water Detail	61.2	ft
GS-AP-MW-16S	9/21/2020 14:32	Oxidation Reduction Potention	-248.82	mv
GS-AP-MW-16S	9/21/2020 14:32	pH	10.47	pH
GS-AP-MW-16S	9/21/2020 14:32	Temperature	18.62	C
GS-AP-MW-16S	9/21/2020 14:32	Turbidity	9.24	NTU
GS-AP-MW-16S	9/21/2020 14:37	Conductivity	598.5	uS/cm
GS-AP-MW-16S	9/21/2020 14:37	DO	2.26	mg/L
GS-AP-MW-16S	9/21/2020 14:37	Depth to Water Detail	61.2	ft
GS-AP-MW-16S	9/21/2020 14:37	Oxidation Reduction Potention	-246.92	mv
GS-AP-MW-16S	9/21/2020 14:37	pH	10.41	pH
GS-AP-MW-16S	9/21/2020 14:37	Temperature	18.58	C
GS-AP-MW-16S	9/21/2020 14:37	Turbidity	9.79	NTU
GS-AP-MW-16S	9/21/2020 14:42	Conductivity	587.35	uS/cm
GS-AP-MW-16S	9/21/2020 14:42	DO	2.04	mg/L

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-16S	9/21/2020 14:42	Depth to Water Detail	61.2	ft
GS-AP-MW-16S	9/21/2020 14:42	Oxidation Reduction Potention	-247.2	mv
GS-AP-MW-16S	9/21/2020 14:42	pH	10.36	pH
GS-AP-MW-16S	9/21/2020 14:42	Temperature	18.75	C
GS-AP-MW-16S	9/21/2020 14:42	Turbidity	9.62	NTU
GS-AP-MW-16S	9/21/2020 14:47	Conductivity	571.45	uS/cm
GS-AP-MW-16S	9/21/2020 14:47	DO	2.12	mg/L
GS-AP-MW-16S	9/21/2020 14:47	Depth to Water Detail	61.2	ft
GS-AP-MW-16S	9/21/2020 14:47	Oxidation Reduction Potention	-244.7	mv
GS-AP-MW-16S	9/21/2020 14:47	pH	10.32	pH
GS-AP-MW-16S	9/21/2020 14:47	Temperature	18.76	C
GS-AP-MW-16S	9/21/2020 14:47	Turbidity	9.71	NTU
GS-AP-MW-16S	9/21/2020 14:52	Conductivity	602.34	uS/cm
GS-AP-MW-16S	9/21/2020 14:52	DO	2.25	mg/L
GS-AP-MW-16S	9/21/2020 14:52	Depth to Water Detail	61.2	ft
GS-AP-MW-16S	9/21/2020 14:52	Oxidation Reduction Potention	-243.01	mv
GS-AP-MW-16S	9/21/2020 14:52	pH	10.26	pH
GS-AP-MW-16S	9/21/2020 14:52	Temperature	18.81	C
GS-AP-MW-16S	9/21/2020 14:52	Turbidity	10.22	NTU
GS-AP-MW-16S	9/21/2020 14:57	Conductivity	577.95	uS/cm
GS-AP-MW-16S	9/21/2020 14:57	DO	2.09	mg/L
GS-AP-MW-16S	9/21/2020 14:57	Depth to Water Detail	61.2	ft
GS-AP-MW-16S	9/21/2020 14:57	Oxidation Reduction Potention	-241.81	mv
GS-AP-MW-16S	9/21/2020 14:57	pH	10.23	pH
GS-AP-MW-16S	9/21/2020 14:57	Temperature	18.85	C
GS-AP-MW-16S	9/21/2020 14:57	Turbidity	9.99	NTU
GS-AP-MW-16S	9/21/2020 15:02	Conductivity	556.99	uS/cm
GS-AP-MW-16S	9/21/2020 15:02	DO	2.15	mg/L
GS-AP-MW-16S	9/21/2020 15:02	Depth to Water Detail	61.2	ft
GS-AP-MW-16S	9/21/2020 15:02	Oxidation Reduction Potention	-240.62	mv
GS-AP-MW-16S	9/21/2020 15:02	pH	10.18	pH
GS-AP-MW-16S	9/21/2020 15:02	Temperature	18.78	C
GS-AP-MW-16S	9/21/2020 15:02	Turbidity	9.62	NTU
GS-AP-MW-16S	9/21/2020 15:07	Conductivity	646.61	uS/cm
GS-AP-MW-16S	9/21/2020 15:07	DO	2.14	mg/L
GS-AP-MW-16S	9/21/2020 15:07	Depth to Water Detail	61.2	ft
GS-AP-MW-16S	9/21/2020 15:07	Oxidation Reduction Potention	-239.8	mv
GS-AP-MW-16S	9/21/2020 15:07	pH	10.16	pH
GS-AP-MW-16S	9/21/2020 15:07	Temperature	18.43	C
GS-AP-MW-16S	9/21/2020 15:07	Turbidity	9.36	NTU
GS-AP-MW-16S	9/21/2020 15:12	Conductivity	638.3	uS/cm
GS-AP-MW-16S	9/21/2020 15:12	DO	1.94	mg/L
GS-AP-MW-16S	9/21/2020 15:12	Depth to Water Detail	61.2	ft
GS-AP-MW-16S	9/21/2020 15:12	Oxidation Reduction Potention	-241.6	mv
GS-AP-MW-16S	9/21/2020 15:12	pH	10.13	pH
GS-AP-MW-16S	9/21/2020 15:12	Temperature	18.52	C

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-16S	9/21/2020 15:12	Turbidity	9.59	NTU
GS-AP-MW-16S	9/21/2020 15:17	Conductivity	586.79	uS/cm
GS-AP-MW-16S	9/21/2020 15:17	DO	2.07	mg/L
GS-AP-MW-16S	9/21/2020 15:17	Depth to Water Detail	61.2	ft
GS-AP-MW-16S	9/21/2020 15:17	Oxidation Reduction Potention	-239.84	mv
GS-AP-MW-16S	9/21/2020 15:17	pH	10.1	pH
GS-AP-MW-16S	9/21/2020 15:17	Temperature	18.56	C
GS-AP-MW-16S	9/21/2020 15:17	Turbidity	9.81	NTU
GS-AP-MW-16S	9/21/2020 15:22	Conductivity	597.47	uS/cm
GS-AP-MW-16S	9/21/2020 15:22	DO	2.07	mg/L
GS-AP-MW-16S	9/21/2020 15:22	Depth to Water Detail	61.2	ft
GS-AP-MW-16S	9/21/2020 15:22	Oxidation Reduction Potention	-239.51	mv
GS-AP-MW-16S	9/21/2020 15:22	pH	10.09	pH
GS-AP-MW-16S	9/21/2020 15:22	Temperature	18.57	C
GS-AP-MW-16S	9/21/2020 15:22	Turbidity	9.77	NTU
GS-AP-MW-16S	9/21/2020 15:27	Conductivity	614.92	uS/cm
GS-AP-MW-16S	9/21/2020 15:27	DO	1.97	mg/L
GS-AP-MW-16S	9/21/2020 15:27	Depth to Water Detail	61.2	ft
GS-AP-MW-16S	9/21/2020 15:27	Oxidation Reduction Potention	-240.09	mv
GS-AP-MW-16S	9/21/2020 15:27	pH	10.06	pH
GS-AP-MW-16S	9/21/2020 15:27	Temperature	18.64	C
GS-AP-MW-16S	9/21/2020 15:27	Turbidity	8.77	NTU
GS-AP-MW-16S	9/21/2020 15:32	Conductivity	573.89	uS/cm
GS-AP-MW-16S	9/21/2020 15:32	DO	2.06	mg/L
GS-AP-MW-16S	9/21/2020 15:32	Depth to Water Detail	61.2	ft
GS-AP-MW-16S	9/21/2020 15:32	Oxidation Reduction Potention	-239.88	mv
GS-AP-MW-16S	9/21/2020 15:32	pH	10.03	pH
GS-AP-MW-16S	9/21/2020 15:32	Temperature	18.74	C
GS-AP-MW-16S	9/21/2020 15:32	Turbidity	8.76	NTU
GS-AP-MW-16S	9/21/2020 15:37	Conductivity	596.83	uS/cm
GS-AP-MW-16S	9/21/2020 15:37	DO	2.14	mg/L
GS-AP-MW-16S	9/21/2020 15:37	Depth to Water Detail	61.2	ft
GS-AP-MW-16S	9/21/2020 15:37	Oxidation Reduction Potention	-237.75	mv
GS-AP-MW-16S	9/21/2020 15:37	pH	10.01	pH
GS-AP-MW-16S	9/21/2020 15:37	Temperature	18.69	C
GS-AP-MW-16S	9/21/2020 15:37	Turbidity	9.79	NTU
GS-AP-MW-16S	9/21/2020 15:42	Conductivity	602.8	uS/cm
GS-AP-MW-16S	9/21/2020 15:42	DO	2.01	mg/L
GS-AP-MW-16S	9/21/2020 15:42	Depth to Water Detail	61.2	ft
GS-AP-MW-16S	9/21/2020 15:42	Oxidation Reduction Potention	-235.43	mv
GS-AP-MW-16S	9/21/2020 15:42	pH	9.99	pH
GS-AP-MW-16S	9/21/2020 15:42	Temperature	18.32	C
GS-AP-MW-16S	9/21/2020 15:42	Turbidity	9.01	NTU

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-19	9/22/2020 13:38	Conductivity	464.15	uS/cm
GS-AP-MW-19	9/22/2020 13:38	DO	0.43	mg/L
GS-AP-MW-19	9/22/2020 13:38	Depth to Water Detail	113.55	ft
GS-AP-MW-19	9/22/2020 13:38	Oxidation Reduction Potention	-187.71	mv
GS-AP-MW-19	9/22/2020 13:38	pH	8.19	pH
GS-AP-MW-19	9/22/2020 13:38	Temperature	17.79	C
GS-AP-MW-19	9/22/2020 13:38	Turbidity	0.8	NTU
GS-AP-MW-19	9/22/2020 13:43	Conductivity	462.44	uS/cm
GS-AP-MW-19	9/22/2020 13:43	DO	0.32	mg/L
GS-AP-MW-19	9/22/2020 13:43	Depth to Water Detail	113.55	ft
GS-AP-MW-19	9/22/2020 13:43	Oxidation Reduction Potention	-197.04	mv
GS-AP-MW-19	9/22/2020 13:43	pH	8.21	pH
GS-AP-MW-19	9/22/2020 13:43	Temperature	18	C
GS-AP-MW-19	9/22/2020 13:43	Turbidity	0.47	NTU
GS-AP-MW-19	9/22/2020 13:48	Conductivity	465.98	uS/cm
GS-AP-MW-19	9/22/2020 13:48	DO	0.31	mg/L
GS-AP-MW-19	9/22/2020 13:48	Depth to Water Detail	113.55	ft
GS-AP-MW-19	9/22/2020 13:48	Oxidation Reduction Potention	-200.2	mv
GS-AP-MW-19	9/22/2020 13:48	pH	8.21	pH
GS-AP-MW-19	9/22/2020 13:48	Temperature	18	C
GS-AP-MW-19	9/22/2020 13:48	Turbidity	0.47	NTU
GS-AP-MW-19	9/22/2020 13:53	Conductivity	470.98	uS/cm
GS-AP-MW-19	9/22/2020 13:53	DO	0.32	mg/L
GS-AP-MW-19	9/22/2020 13:53	Depth to Water Detail	113.55	ft
GS-AP-MW-19	9/22/2020 13:53	Oxidation Reduction Potention	-198.75	mv
GS-AP-MW-19	9/22/2020 13:53	pH	8.17	pH
GS-AP-MW-19	9/22/2020 13:53	Temperature	18.07	C
GS-AP-MW-19	9/22/2020 13:53	Turbidity	0.53	NTU

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-42H	9/22/2020 10:21	Conductivity	915.28	uS/cm
GS-AP-MW-42H	9/22/2020 10:21	DO	0.35	mg/L
GS-AP-MW-42H	9/22/2020 10:21	Depth to Water Detail	54	ft
GS-AP-MW-42H	9/22/2020 10:21	Oxidation Reduction Potention	5.52	mv
GS-AP-MW-42H	9/22/2020 10:21	pH	6.48	pH
GS-AP-MW-42H	9/22/2020 10:21	Temperature	17.94	C
GS-AP-MW-42H	9/22/2020 10:21	Turbidity	19.2	NTU
GS-AP-MW-42H	9/22/2020 10:26	Conductivity	904.79	uS/cm
GS-AP-MW-42H	9/22/2020 10:26	DO	0.28	mg/L
GS-AP-MW-42H	9/22/2020 10:26	Depth to Water Detail	54	ft
GS-AP-MW-42H	9/22/2020 10:26	Oxidation Reduction Potention	2.53	mv
GS-AP-MW-42H	9/22/2020 10:26	pH	6.49	pH
GS-AP-MW-42H	9/22/2020 10:26	Temperature	17.9	C
GS-AP-MW-42H	9/22/2020 10:26	Turbidity	16.9	NTU
GS-AP-MW-42H	9/22/2020 10:31	Conductivity	897.28	uS/cm
GS-AP-MW-42H	9/22/2020 10:31	DO	0.24	mg/L
GS-AP-MW-42H	9/22/2020 10:31	Depth to Water Detail	54	ft
GS-AP-MW-42H	9/22/2020 10:31	Oxidation Reduction Potention	0.75	mv
GS-AP-MW-42H	9/22/2020 10:31	pH	6.49	pH
GS-AP-MW-42H	9/22/2020 10:31	Temperature	17.91	C
GS-AP-MW-42H	9/22/2020 10:31	Turbidity	16.7	NTU
GS-AP-MW-42H	9/22/2020 10:36	Conductivity	888.23	uS/cm
GS-AP-MW-42H	9/22/2020 10:36	DO	0.22	mg/L
GS-AP-MW-42H	9/22/2020 10:36	Depth to Water Detail	54	ft
GS-AP-MW-42H	9/22/2020 10:36	Oxidation Reduction Potention	-4.72	mv
GS-AP-MW-42H	9/22/2020 10:36	pH	6.5	pH
GS-AP-MW-42H	9/22/2020 10:36	Temperature	17.93	C
GS-AP-MW-42H	9/22/2020 10:36	Turbidity	11.6	NTU
GS-AP-MW-42H	9/22/2020 10:41	Conductivity	872.6	uS/cm
GS-AP-MW-42H	9/22/2020 10:41	DO	0.21	mg/L
GS-AP-MW-42H	9/22/2020 10:41	Depth to Water Detail	54	ft
GS-AP-MW-42H	9/22/2020 10:41	Oxidation Reduction Potention	-7.84	mv
GS-AP-MW-42H	9/22/2020 10:41	pH	6.5	pH
GS-AP-MW-42H	9/22/2020 10:41	Temperature	17.94	C
GS-AP-MW-42H	9/22/2020 10:41	Turbidity	9.61	NTU
GS-AP-MW-42H	9/22/2020 10:46	Conductivity	861.97	uS/cm
GS-AP-MW-42H	9/22/2020 10:46	DO	0.2	mg/L
GS-AP-MW-42H	9/22/2020 10:46	Depth to Water Detail	54	ft
GS-AP-MW-42H	9/22/2020 10:46	Oxidation Reduction Potention	-8.88	mv
GS-AP-MW-42H	9/22/2020 10:46	pH	6.51	pH
GS-AP-MW-42H	9/22/2020 10:46	Temperature	17.91	C
GS-AP-MW-42H	9/22/2020 10:46	Turbidity	8.42	NTU

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-15	9/23/2020 10:59	Conductivity	1759.93	uS/cm
GS-AP-MW-15	9/23/2020 10:59	DO	0.12	mg/L
GS-AP-MW-15	9/23/2020 10:59	Depth to Water Detail	87.02	ft
GS-AP-MW-15	9/23/2020 10:59	Oxidation Reduction Potention	-243.48	mv
GS-AP-MW-15	9/23/2020 10:59	pH	11.82	pH
GS-AP-MW-15	9/23/2020 10:59	Temperature	18.22	C
GS-AP-MW-15	9/23/2020 10:59	Turbidity	4.59	NTU
GS-AP-MW-15	9/23/2020 11:04	Conductivity	1791.14	uS/cm
GS-AP-MW-15	9/23/2020 11:04	DO	0.1	mg/L
GS-AP-MW-15	9/23/2020 11:04	Depth to Water Detail	89.38	ft
GS-AP-MW-15	9/23/2020 11:04	Oxidation Reduction Potention	-259.86	mv
GS-AP-MW-15	9/23/2020 11:04	pH	11.85	pH
GS-AP-MW-15	9/23/2020 11:04	Temperature	18.05	C
GS-AP-MW-15	9/23/2020 11:04	Turbidity	2.17	NTU
GS-AP-MW-15	9/23/2020 11:09	Conductivity	1636.22	uS/cm
GS-AP-MW-15	9/23/2020 11:09	DO	0.1	mg/L
GS-AP-MW-15	9/23/2020 11:09	Depth to Water Detail	91.27	ft
GS-AP-MW-15	9/23/2020 11:09	Oxidation Reduction Potention	-263.4	mv
GS-AP-MW-15	9/23/2020 11:09	pH	11.88	pH
GS-AP-MW-15	9/23/2020 11:09	Temperature	18.05	C
GS-AP-MW-15	9/23/2020 11:09	Turbidity	1.43	NTU
GS-AP-MW-15	9/23/2020 11:14	Conductivity	1559.13	uS/cm
GS-AP-MW-15	9/23/2020 11:14	DO	0.17	mg/L
GS-AP-MW-15	9/23/2020 11:14	Depth to Water Detail	92.2	ft
GS-AP-MW-15	9/23/2020 11:14	Oxidation Reduction Potention	-258.16	mv
GS-AP-MW-15	9/23/2020 11:14	pH	11.87	pH
GS-AP-MW-15	9/23/2020 11:14	Temperature	19.24	C
GS-AP-MW-15	9/23/2020 11:14	Turbidity	1.15	NTU
GS-AP-MW-15	9/23/2020 11:19	Conductivity	1543.97	uS/cm
GS-AP-MW-15	9/23/2020 11:19	DO	0.19	mg/L
GS-AP-MW-15	9/23/2020 11:19	Depth to Water Detail	92.42	ft
GS-AP-MW-15	9/23/2020 11:19	Oxidation Reduction Potention	-255.59	mv
GS-AP-MW-15	9/23/2020 11:19	pH	11.9	pH
GS-AP-MW-15	9/23/2020 11:19	Temperature	19.57	C
GS-AP-MW-15	9/23/2020 11:19	Turbidity	1.11	NTU
GS-AP-MW-15	9/23/2020 11:24	Conductivity	1499.96	uS/cm
GS-AP-MW-15	9/23/2020 11:24	DO	0.25	mg/L
GS-AP-MW-15	9/23/2020 11:24	Depth to Water Detail	92.71	ft
GS-AP-MW-15	9/23/2020 11:24	Oxidation Reduction Potention	-251.05	mv
GS-AP-MW-15	9/23/2020 11:24	pH	11.9	pH
GS-AP-MW-15	9/23/2020 11:24	Temperature	19.63	C
GS-AP-MW-15	9/23/2020 11:24	Turbidity	2.03	NTU
GS-AP-MW-15	9/23/2020 11:29	Conductivity	1486.96	uS/cm
GS-AP-MW-15	9/23/2020 11:29	DO	0.29	mg/L
GS-AP-MW-15	9/23/2020 11:29	Depth to Water Detail	92.81	ft
GS-AP-MW-15	9/23/2020 11:29	Oxidation Reduction Potention	-247.79	mv

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-15	9/23/2020 11:29	pH	11.88	pH
GS-AP-MW-15	9/23/2020 11:29	Temperature	20.06	C
GS-AP-MW-15	9/23/2020 11:29	Turbidity	1.3	NTU
GS-AP-MW-15	9/23/2020 11:34	Conductivity	1435.59	uS/cm
GS-AP-MW-15	9/23/2020 11:34	DO	0.3	mg/L
GS-AP-MW-15	9/23/2020 11:34	Depth to Water Detail	92.85	ft
GS-AP-MW-15	9/23/2020 11:34	Oxidation Reduction Potention	-247.75	mv
GS-AP-MW-15	9/23/2020 11:34	pH	11.89	pH
GS-AP-MW-15	9/23/2020 11:34	Temperature	20.02	C
GS-AP-MW-15	9/23/2020 11:34	Turbidity	1.13	NTU

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-15V	9/21/2020 10:15	Conductivity	2008.95	uS/cm
GS-AP-MW-15V	9/21/2020 10:15	DO	1.56	mg/L
GS-AP-MW-15V	9/21/2020 10:15	Depth to Water Detail	156.1	ft
GS-AP-MW-15V	9/21/2020 10:15	Oxidation Reduction Potention	-121.58	mv
GS-AP-MW-15V	9/21/2020 10:15	pH	10.13	pH
GS-AP-MW-15V	9/21/2020 10:15	Temperature	19.88	C
GS-AP-MW-15V	9/21/2020 10:15	Turbidity	15.7	NTU
GS-AP-MW-15V	9/21/2020 10:20	Conductivity	2003.41	uS/cm
GS-AP-MW-15V	9/21/2020 10:20	DO	0.56	mg/L
GS-AP-MW-15V	9/21/2020 10:20	Depth to Water Detail	156.64	ft
GS-AP-MW-15V	9/21/2020 10:20	Oxidation Reduction Potention	-152.91	mv
GS-AP-MW-15V	9/21/2020 10:20	pH	10.14	pH
GS-AP-MW-15V	9/21/2020 10:20	Temperature	19.94	C
GS-AP-MW-15V	9/21/2020 10:20	Turbidity	52.2	NTU
GS-AP-MW-15V	9/21/2020 10:25	Conductivity	1974.34	uS/cm
GS-AP-MW-15V	9/21/2020 10:25	DO	0.35	mg/L
GS-AP-MW-15V	9/21/2020 10:25	Depth to Water Detail	156.97	ft
GS-AP-MW-15V	9/21/2020 10:25	Oxidation Reduction Potention	-171.87	mv
GS-AP-MW-15V	9/21/2020 10:25	pH	10.13	pH
GS-AP-MW-15V	9/21/2020 10:25	Temperature	19.83	C
GS-AP-MW-15V	9/21/2020 10:25	Turbidity	31.7	NTU
GS-AP-MW-15V	9/21/2020 10:30	Conductivity	1967.95	uS/cm
GS-AP-MW-15V	9/21/2020 10:30	DO	0.29	mg/L
GS-AP-MW-15V	9/21/2020 10:30	Depth to Water Detail	157.31	ft
GS-AP-MW-15V	9/21/2020 10:30	Oxidation Reduction Potention	-183.85	mv
GS-AP-MW-15V	9/21/2020 10:30	pH	10.13	pH
GS-AP-MW-15V	9/21/2020 10:30	Temperature	19.91	C
GS-AP-MW-15V	9/21/2020 10:30	Turbidity	21.7	NTU
GS-AP-MW-15V	9/21/2020 10:35	Conductivity	1961.62	uS/cm
GS-AP-MW-15V	9/21/2020 10:35	DO	0.24	mg/L
GS-AP-MW-15V	9/21/2020 10:35	Depth to Water Detail	157.6	ft
GS-AP-MW-15V	9/21/2020 10:35	Oxidation Reduction Potention	-191.97	mv
GS-AP-MW-15V	9/21/2020 10:35	pH	10.12	pH
GS-AP-MW-15V	9/21/2020 10:35	Temperature	19.72	C
GS-AP-MW-15V	9/21/2020 10:35	Turbidity	24.5	NTU
GS-AP-MW-15V	9/21/2020 10:40	Conductivity	1955.51	uS/cm
GS-AP-MW-15V	9/21/2020 10:40	DO	0.21	mg/L
GS-AP-MW-15V	9/21/2020 10:40	Depth to Water Detail	157.88	ft
GS-AP-MW-15V	9/21/2020 10:40	Oxidation Reduction Potention	-197.53	mv
GS-AP-MW-15V	9/21/2020 10:40	pH	10.12	pH
GS-AP-MW-15V	9/21/2020 10:40	Temperature	19.85	C
GS-AP-MW-15V	9/21/2020 10:40	Turbidity	17.2	NTU
GS-AP-MW-15V	9/21/2020 10:45	Conductivity	1952.81	uS/cm
GS-AP-MW-15V	9/21/2020 10:45	DO	0.21	mg/L
GS-AP-MW-15V	9/21/2020 10:45	Depth to Water Detail	158.12	ft
GS-AP-MW-15V	9/21/2020 10:45	Oxidation Reduction Potention	-200.97	mv

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-15V	9/21/2020 10:45	pH	10.12	pH
GS-AP-MW-15V	9/21/2020 10:45	Temperature	19.72	C
GS-AP-MW-15V	9/21/2020 10:45	Turbidity	15	NTU
GS-AP-MW-15V	9/21/2020 10:50	Conductivity	1962.69	uS/cm
GS-AP-MW-15V	9/21/2020 10:50	DO	0.2	mg/L
GS-AP-MW-15V	9/21/2020 10:50	Depth to Water Detail	158.3	ft
GS-AP-MW-15V	9/21/2020 10:50	Oxidation Reduction Potention	-202.87	mv
GS-AP-MW-15V	9/21/2020 10:50	pH	10.12	pH
GS-AP-MW-15V	9/21/2020 10:50	Temperature	19.83	C
GS-AP-MW-15V	9/21/2020 10:50	Turbidity	12.7	NTU
GS-AP-MW-15V	9/21/2020 10:55	Conductivity	1941.41	uS/cm
GS-AP-MW-15V	9/21/2020 10:55	DO	0.2	mg/L
GS-AP-MW-15V	9/21/2020 10:55	Depth to Water Detail	158.46	ft
GS-AP-MW-15V	9/21/2020 10:55	Oxidation Reduction Potention	-204.18	mv
GS-AP-MW-15V	9/21/2020 10:55	pH	10.11	pH
GS-AP-MW-15V	9/21/2020 10:55	Temperature	19.75	C
GS-AP-MW-15V	9/21/2020 10:55	Turbidity	11.1	NTU
GS-AP-MW-15V	9/21/2020 11:00	Conductivity	1931.8	uS/cm
GS-AP-MW-15V	9/21/2020 11:00	DO	0.19	mg/L
GS-AP-MW-15V	9/21/2020 11:00	Depth to Water Detail	158.62	ft
GS-AP-MW-15V	9/21/2020 11:00	Oxidation Reduction Potention	-205.33	mv
GS-AP-MW-15V	9/21/2020 11:00	pH	10.11	pH
GS-AP-MW-15V	9/21/2020 11:00	Temperature	19.85	C
GS-AP-MW-15V	9/21/2020 11:00	Turbidity	11.12	NTU
GS-AP-MW-15V	9/21/2020 11:05	Conductivity	1921.92	uS/cm
GS-AP-MW-15V	9/21/2020 11:05	DO	0.19	mg/L
GS-AP-MW-15V	9/21/2020 11:05	Depth to Water Detail	158.74	ft
GS-AP-MW-15V	9/21/2020 11:05	Oxidation Reduction Potention	-205.72	mv
GS-AP-MW-15V	9/21/2020 11:05	pH	10.1	pH
GS-AP-MW-15V	9/21/2020 11:05	Temperature	19.84	C
GS-AP-MW-15V	9/21/2020 11:05	Turbidity	9.22	NTU
GS-AP-MW-15V	9/21/2020 11:10	Conductivity	1894.51	uS/cm
GS-AP-MW-15V	9/21/2020 11:10	DO	0.18	mg/L
GS-AP-MW-15V	9/21/2020 11:10	Depth to Water Detail	158.86	ft
GS-AP-MW-15V	9/21/2020 11:10	Oxidation Reduction Potention	-206.83	mv
GS-AP-MW-15V	9/21/2020 11:10	pH	10.1	pH
GS-AP-MW-15V	9/21/2020 11:10	Temperature	19.96	C
GS-AP-MW-15V	9/21/2020 11:10	Turbidity	6.94	NTU
GS-AP-MW-15V	9/21/2020 11:15	Conductivity	1858.9	uS/cm
GS-AP-MW-15V	9/21/2020 11:15	DO	0.18	mg/L
GS-AP-MW-15V	9/21/2020 11:15	Depth to Water Detail	158.98	ft
GS-AP-MW-15V	9/21/2020 11:15	Oxidation Reduction Potention	-207.15	mv
GS-AP-MW-15V	9/21/2020 11:15	pH	10.07	pH
GS-AP-MW-15V	9/21/2020 11:15	Temperature	19.89	C
GS-AP-MW-15V	9/21/2020 11:15	Turbidity	5.91	NTU

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-17	9/21/2020 12:25	Conductivity	781.29	uS/cm
GS-AP-MW-17	9/21/2020 12:25	DO	3.81	mg/L
GS-AP-MW-17	9/21/2020 12:25	Depth to Water Detail	182.02	ft
GS-AP-MW-17	9/21/2020 12:25	Oxidation Reduction Potention	-102.22	mv
GS-AP-MW-17	9/21/2020 12:25	pH	7.49	pH
GS-AP-MW-17	9/21/2020 12:25	Temperature	21.72	C
GS-AP-MW-17	9/21/2020 12:25	Turbidity	2.26	NTU
GS-AP-MW-17	9/21/2020 12:30	Conductivity	911.22	uS/cm
GS-AP-MW-17	9/21/2020 12:30	DO	1.3	mg/L
GS-AP-MW-17	9/21/2020 12:30	Depth to Water Detail	182.02	ft
GS-AP-MW-17	9/21/2020 12:30	Oxidation Reduction Potention	-125.43	mv
GS-AP-MW-17	9/21/2020 12:30	pH	7.83	pH
GS-AP-MW-17	9/21/2020 12:30	Temperature	21.88	C
GS-AP-MW-17	9/21/2020 12:30	Turbidity	0.99	NTU
GS-AP-MW-17	9/21/2020 12:35	Conductivity	1012.03	uS/cm
GS-AP-MW-17	9/21/2020 12:35	DO	0.63	mg/L
GS-AP-MW-17	9/21/2020 12:35	Depth to Water Detail	182.02	ft
GS-AP-MW-17	9/21/2020 12:35	Oxidation Reduction Potention	-130.69	mv
GS-AP-MW-17	9/21/2020 12:35	pH	8.13	pH
GS-AP-MW-17	9/21/2020 12:35	Temperature	21.36	C
GS-AP-MW-17	9/21/2020 12:35	Turbidity	1.11	NTU
GS-AP-MW-17	9/21/2020 12:40	Conductivity	1030.16	uS/cm
GS-AP-MW-17	9/21/2020 12:40	DO	0.45	mg/L
GS-AP-MW-17	9/21/2020 12:40	Depth to Water Detail	182.02	ft
GS-AP-MW-17	9/21/2020 12:40	Oxidation Reduction Potention	-133.61	mv
GS-AP-MW-17	9/21/2020 12:40	pH	8.2	pH
GS-AP-MW-17	9/21/2020 12:40	Temperature	21.57	C
GS-AP-MW-17	9/21/2020 12:40	Turbidity	0.72	NTU
GS-AP-MW-17	9/21/2020 12:45	Conductivity	1024.09	uS/cm
GS-AP-MW-17	9/21/2020 12:45	DO	0.41	mg/L
GS-AP-MW-17	9/21/2020 12:45	Depth to Water Detail	182.02	ft
GS-AP-MW-17	9/21/2020 12:45	Oxidation Reduction Potention	-136.38	mv
GS-AP-MW-17	9/21/2020 12:45	pH	8.22	pH
GS-AP-MW-17	9/21/2020 12:45	Temperature	21.2	C
GS-AP-MW-17	9/21/2020 12:45	Turbidity	0.63	NTU

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-17V	9/23/2020 12:36	Conductivity	613.23	uS/cm
GS-AP-MW-17V	9/23/2020 12:36	DO	0.1	mg/L
GS-AP-MW-17V	9/23/2020 12:36	Depth to Water Detail	111.85	ft
GS-AP-MW-17V	9/23/2020 12:36	Oxidation Reduction Potention	-209.93	mv
GS-AP-MW-17V	9/23/2020 12:36	pH	7.43	pH
GS-AP-MW-17V	9/23/2020 12:36	Temperature	18.23	C
GS-AP-MW-17V	9/23/2020 12:36	Turbidity	1.5	NTU
GS-AP-MW-17V	9/23/2020 12:41	Conductivity	602.68	uS/cm
GS-AP-MW-17V	9/23/2020 12:41	DO	0.09	mg/L
GS-AP-MW-17V	9/23/2020 12:41	Depth to Water Detail	114	ft
GS-AP-MW-17V	9/23/2020 12:41	Oxidation Reduction Potention	-176.11	mv
GS-AP-MW-17V	9/23/2020 12:41	pH	7.2	pH
GS-AP-MW-17V	9/23/2020 12:41	Temperature	17.9	C
GS-AP-MW-17V	9/23/2020 12:41	Turbidity	4.45	NTU
GS-AP-MW-17V	9/23/2020 12:46	Conductivity	601.47	uS/cm
GS-AP-MW-17V	9/23/2020 12:46	DO	0.1	mg/L
GS-AP-MW-17V	9/23/2020 12:46	Depth to Water Detail	115.36	ft
GS-AP-MW-17V	9/23/2020 12:46	Oxidation Reduction Potention	-152.18	mv
GS-AP-MW-17V	9/23/2020 12:46	pH	7.12	pH
GS-AP-MW-17V	9/23/2020 12:46	Temperature	17.95	C
GS-AP-MW-17V	9/23/2020 12:46	Turbidity	0.8	NTU
GS-AP-MW-17V	9/23/2020 12:51	Conductivity	598.88	uS/cm
GS-AP-MW-17V	9/23/2020 12:51	DO	0.11	mg/L
GS-AP-MW-17V	9/23/2020 12:51	Depth to Water Detail	116.92	ft
GS-AP-MW-17V	9/23/2020 12:51	Oxidation Reduction Potention	-139.49	mv
GS-AP-MW-17V	9/23/2020 12:51	pH	7.11	pH
GS-AP-MW-17V	9/23/2020 12:51	Temperature	18	C
GS-AP-MW-17V	9/23/2020 12:51	Turbidity	0.85	NTU
GS-AP-MW-17V	9/23/2020 12:56	Conductivity	595.88	uS/cm
GS-AP-MW-17V	9/23/2020 12:56	DO	0.12	mg/L
GS-AP-MW-17V	9/23/2020 12:56	Depth to Water Detail	118.77	ft
GS-AP-MW-17V	9/23/2020 12:56	Oxidation Reduction Potention	-132.4	mv
GS-AP-MW-17V	9/23/2020 12:56	pH	7.1	pH
GS-AP-MW-17V	9/23/2020 12:56	Temperature	17.92	C
GS-AP-MW-17V	9/23/2020 12:56	Turbidity	0.76	NTU
GS-AP-MW-17V	9/23/2020 13:01	Conductivity	602.66	uS/cm
GS-AP-MW-17V	9/23/2020 13:01	DO	0.12	mg/L
GS-AP-MW-17V	9/23/2020 13:01	Depth to Water Detail	119.94	ft
GS-AP-MW-17V	9/23/2020 13:01	Oxidation Reduction Potention	-131.23	mv
GS-AP-MW-17V	9/23/2020 13:01	pH	7.11	pH
GS-AP-MW-17V	9/23/2020 13:01	Temperature	17.97	C
GS-AP-MW-17V	9/23/2020 13:01	Turbidity	1.76	NTU
GS-AP-MW-17V	9/23/2020 13:06	Conductivity	596.58	uS/cm
GS-AP-MW-17V	9/23/2020 13:06	DO	0.13	mg/L
GS-AP-MW-17V	9/23/2020 13:06	Depth to Water Detail	120.98	ft
GS-AP-MW-17V	9/23/2020 13:06	Oxidation Reduction Potention	-128.53	mv

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-17V	9/23/2020 13:06	pH	7.13	pH
GS-AP-MW-17V	9/23/2020 13:06	Temperature	17.82	C
GS-AP-MW-17V	9/23/2020 13:06	Turbidity	0.92	NTU
GS-AP-MW-17V	9/23/2020 13:11	Conductivity	586.82	uS/cm
GS-AP-MW-17V	9/23/2020 13:11	DO	0.12	mg/L
GS-AP-MW-17V	9/23/2020 13:11	Depth to Water Detail	122.54	ft
GS-AP-MW-17V	9/23/2020 13:11	Oxidation Reduction Potention	-127.83	mv
GS-AP-MW-17V	9/23/2020 13:11	pH	7.15	pH
GS-AP-MW-17V	9/23/2020 13:11	Temperature	17.93	C
GS-AP-MW-17V	9/23/2020 13:11	Turbidity	0.52	NTU
GS-AP-MW-17V	9/23/2020 13:16	Conductivity	601.75	uS/cm
GS-AP-MW-17V	9/23/2020 13:16	DO	0.13	mg/L
GS-AP-MW-17V	9/23/2020 13:16	Depth to Water Detail	123.88	ft
GS-AP-MW-17V	9/23/2020 13:16	Oxidation Reduction Potention	-126.68	mv
GS-AP-MW-17V	9/23/2020 13:16	pH	7.17	pH
GS-AP-MW-17V	9/23/2020 13:16	Temperature	18.09	C
GS-AP-MW-17V	9/23/2020 13:16	Turbidity	0.56	NTU
GS-AP-MW-17V	9/23/2020 13:21	Conductivity	590.48	uS/cm
GS-AP-MW-17V	9/23/2020 13:21	DO	0.18	mg/L
GS-AP-MW-17V	9/23/2020 13:21	Depth to Water Detail	123.98	ft
GS-AP-MW-17V	9/23/2020 13:21	Oxidation Reduction Potention	-126	mv
GS-AP-MW-17V	9/23/2020 13:21	pH	7.18	pH
GS-AP-MW-17V	9/23/2020 13:21	Temperature	19.67	C
GS-AP-MW-17V	9/23/2020 13:21	Turbidity	0.54	NTU
GS-AP-MW-17V	9/23/2020 13:26	Conductivity	591.44	uS/cm
GS-AP-MW-17V	9/23/2020 13:26	DO	0.22	mg/L
GS-AP-MW-17V	9/23/2020 13:26	Depth to Water Detail	124.04	ft
GS-AP-MW-17V	9/23/2020 13:26	Oxidation Reduction Potention	-130.31	mv
GS-AP-MW-17V	9/23/2020 13:26	pH	7.28	pH
GS-AP-MW-17V	9/23/2020 13:26	Temperature	20.07	C
GS-AP-MW-17V	9/23/2020 13:26	Turbidity	0.79	NTU
GS-AP-MW-17V	9/23/2020 13:31	Conductivity	574.03	uS/cm
GS-AP-MW-17V	9/23/2020 13:31	DO	0.29	mg/L
GS-AP-MW-17V	9/23/2020 13:31	Depth to Water Detail	124.11	ft
GS-AP-MW-17V	9/23/2020 13:31	Oxidation Reduction Potention	-140.59	mv
GS-AP-MW-17V	9/23/2020 13:31	pH	7.44	pH
GS-AP-MW-17V	9/23/2020 13:31	Temperature	19.05	C
GS-AP-MW-17V	9/23/2020 13:31	Turbidity	0.65	NTU
GS-AP-MW-17V	9/23/2020 13:36	Conductivity	556.27	uS/cm
GS-AP-MW-17V	9/23/2020 13:36	DO	0.27	mg/L
GS-AP-MW-17V	9/23/2020 13:36	Depth to Water Detail	124.22	ft
GS-AP-MW-17V	9/23/2020 13:36	Oxidation Reduction Potention	-142.5	mv
GS-AP-MW-17V	9/23/2020 13:36	pH	7.47	pH
GS-AP-MW-17V	9/23/2020 13:36	Temperature	19.43	C
GS-AP-MW-17V	9/23/2020 13:36	Turbidity	0.82	NTU
GS-AP-MW-17V	9/23/2020 13:41	Conductivity	545.43	uS/cm

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-17V	9/23/2020 13:41	DO	0.25	mg/L
GS-AP-MW-17V	9/23/2020 13:41	Depth to Water Detail	124.3	ft
GS-AP-MW-17V	9/23/2020 13:41	Oxidation Reduction Potention	-142.16	mv
GS-AP-MW-17V	9/23/2020 13:41	pH	7.49	pH
GS-AP-MW-17V	9/23/2020 13:41	Temperature	19.75	C
GS-AP-MW-17V	9/23/2020 13:41	Turbidity	0.58	NTU
GS-AP-MW-17V	9/23/2020 13:46	Conductivity	532.61	uS/cm
GS-AP-MW-17V	9/23/2020 13:46	DO	0.26	mg/L
GS-AP-MW-17V	9/23/2020 13:46	Depth to Water Detail	124.39	ft
GS-AP-MW-17V	9/23/2020 13:46	Oxidation Reduction Potention	-143.42	mv
GS-AP-MW-17V	9/23/2020 13:46	pH	7.53	pH
GS-AP-MW-17V	9/23/2020 13:46	Temperature	19.56	C
GS-AP-MW-17V	9/23/2020 13:46	Turbidity	0.48	NTU

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-18V	9/22/2020 16:15	Conductivity	371.06	uS/cm
GS-AP-MW-18V	9/22/2020 16:15	DO	0.06	mg/L
GS-AP-MW-18V	9/22/2020 16:15	Depth to Water Detail	121.49	ft
GS-AP-MW-18V	9/22/2020 16:15	Oxidation Reduction Potention	-253.37	mv
GS-AP-MW-18V	9/22/2020 16:15	pH	8.22	pH
GS-AP-MW-18V	9/22/2020 16:15	Temperature	19.81	C
GS-AP-MW-18V	9/22/2020 16:15	Turbidity	1.46	NTU
GS-AP-MW-18V	9/22/2020 16:24	Conductivity	365.12	uS/cm
GS-AP-MW-18V	9/22/2020 16:24	DO	0.06	mg/L
GS-AP-MW-18V	9/22/2020 16:24	Depth to Water Detail	122.39	ft
GS-AP-MW-18V	9/22/2020 16:24	Oxidation Reduction Potention	-239.9	mv
GS-AP-MW-18V	9/22/2020 16:24	pH	8.35	pH
GS-AP-MW-18V	9/22/2020 16:24	Temperature	19.51	C
GS-AP-MW-18V	9/22/2020 16:24	Turbidity	1.89	NTU

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-21V	9/23/2020 15:24	Conductivity	5558.31	uS/cm
GS-AP-MW-21V	9/23/2020 15:24	DO	0.21	mg/L
GS-AP-MW-21V	9/23/2020 15:24	Depth to Water Detail	179.87	ft
GS-AP-MW-21V	9/23/2020 15:24	Oxidation Reduction Potention	-148.98	mv
GS-AP-MW-21V	9/23/2020 15:24	pH	7.82	pH
GS-AP-MW-21V	9/23/2020 15:24	Temperature	18.32	C
GS-AP-MW-21V	9/23/2020 15:24	Turbidity	4.06	NTU
GS-AP-MW-21V	9/23/2020 15:29	Conductivity	5071.83	uS/cm
GS-AP-MW-21V	9/23/2020 15:29	DO	0.4	mg/L
GS-AP-MW-21V	9/23/2020 15:29	Depth to Water Detail	180.88	ft
GS-AP-MW-21V	9/23/2020 15:29	Oxidation Reduction Potention	-139.04	mv
GS-AP-MW-21V	9/23/2020 15:29	pH	7.8	pH
GS-AP-MW-21V	9/23/2020 15:29	Temperature	19.89	C
GS-AP-MW-21V	9/23/2020 15:29	Turbidity	2.35	NTU
GS-AP-MW-21V	9/23/2020 15:34	Conductivity	5034.77	uS/cm
GS-AP-MW-21V	9/23/2020 15:34	DO	0.43	mg/L
GS-AP-MW-21V	9/23/2020 15:34	Depth to Water Detail	181.59	ft
GS-AP-MW-21V	9/23/2020 15:34	Oxidation Reduction Potention	-131.41	mv
GS-AP-MW-21V	9/23/2020 15:34	pH	7.8	pH
GS-AP-MW-21V	9/23/2020 15:34	Temperature	20.14	C
GS-AP-MW-21V	9/23/2020 15:34	Turbidity	1.87	NTU
GS-AP-MW-21V	9/23/2020 15:39	Conductivity	5043.92	uS/cm
GS-AP-MW-21V	9/23/2020 15:39	DO	0.45	mg/L
GS-AP-MW-21V	9/23/2020 15:39	Depth to Water Detail	182.15	ft
GS-AP-MW-21V	9/23/2020 15:39	Oxidation Reduction Potention	-128.45	mv
GS-AP-MW-21V	9/23/2020 15:39	pH	7.8	pH
GS-AP-MW-21V	9/23/2020 15:39	Temperature	20.34	C
GS-AP-MW-21V	9/23/2020 15:39	Turbidity	1.32	NTU
GS-AP-MW-21V	9/23/2020 15:44	Conductivity	4926.95	uS/cm
GS-AP-MW-21V	9/23/2020 15:44	DO	0.59	mg/L
GS-AP-MW-21V	9/23/2020 15:44	Depth to Water Detail	182.54	ft
GS-AP-MW-21V	9/23/2020 15:44	Oxidation Reduction Potention	-123.66	mv
GS-AP-MW-21V	9/23/2020 15:44	pH	7.79	pH
GS-AP-MW-21V	9/23/2020 15:44	Temperature	20.88	C
GS-AP-MW-21V	9/23/2020 15:44	Turbidity	0.94	NTU
GS-AP-MW-21V	9/23/2020 15:49	Conductivity	4924.51	uS/cm
GS-AP-MW-21V	9/23/2020 15:49	DO	0.58	mg/L
GS-AP-MW-21V	9/23/2020 15:49	Depth to Water Detail	183.04	ft
GS-AP-MW-21V	9/23/2020 15:49	Oxidation Reduction Potention	-122.14	mv
GS-AP-MW-21V	9/23/2020 15:49	pH	7.8	pH
GS-AP-MW-21V	9/23/2020 15:49	Temperature	21.04	C
GS-AP-MW-21V	9/23/2020 15:49	Turbidity	0.91	NTU
GS-AP-MW-21V	9/23/2020 15:54	Conductivity	4936.54	uS/cm
GS-AP-MW-21V	9/23/2020 15:54	DO	0.56	mg/L
GS-AP-MW-21V	9/23/2020 15:54	Depth to Water Detail	183.46	ft
GS-AP-MW-21V	9/23/2020 15:54	Oxidation Reduction Potention	-122.2	mv

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-21V	9/23/2020 15:54	pH	7.8	pH
GS-AP-MW-21V	9/23/2020 15:54	Temperature	21.06	C
GS-AP-MW-21V	9/23/2020 15:54	Turbidity	0.76	NTU
GS-AP-MW-21V	9/23/2020 15:59	Conductivity	4863.82	uS/cm
GS-AP-MW-21V	9/23/2020 15:59	DO	0.56	mg/L
GS-AP-MW-21V	9/23/2020 15:59	Depth to Water Detail	183.91	ft
GS-AP-MW-21V	9/23/2020 15:59	Oxidation Reduction Potention	-125.27	mv
GS-AP-MW-21V	9/23/2020 15:59	pH	7.8	pH
GS-AP-MW-21V	9/23/2020 15:59	Temperature	20.87	C
GS-AP-MW-21V	9/23/2020 15:59	Turbidity	0.78	NTU
GS-AP-MW-21V	9/23/2020 16:04	Conductivity	4844.56	uS/cm
GS-AP-MW-21V	9/23/2020 16:04	DO	0.54	mg/L
GS-AP-MW-21V	9/23/2020 16:04	Depth to Water Detail	184.3	ft
GS-AP-MW-21V	9/23/2020 16:04	Oxidation Reduction Potention	-127.46	mv
GS-AP-MW-21V	9/23/2020 16:04	pH	7.8	pH
GS-AP-MW-21V	9/23/2020 16:04	Temperature	20.94	C
GS-AP-MW-21V	9/23/2020 16:04	Turbidity	0.68	NTU
GS-AP-MW-21V	9/23/2020 16:09	Conductivity	4821.62	uS/cm
GS-AP-MW-21V	9/23/2020 16:09	DO	0.52	mg/L
GS-AP-MW-21V	9/23/2020 16:09	Depth to Water Detail	184.71	ft
GS-AP-MW-21V	9/23/2020 16:09	Oxidation Reduction Potention	-130.58	mv
GS-AP-MW-21V	9/23/2020 16:09	pH	7.81	pH
GS-AP-MW-21V	9/23/2020 16:09	Temperature	20.74	C
GS-AP-MW-21V	9/23/2020 16:09	Turbidity	0.54	NTU
GS-AP-MW-21V	9/23/2020 16:14	Conductivity	4646.11	uS/cm
GS-AP-MW-21V	9/23/2020 16:14	DO	0.49	mg/L
GS-AP-MW-21V	9/23/2020 16:14	Depth to Water Detail	185.02	ft
GS-AP-MW-21V	9/23/2020 16:14	Oxidation Reduction Potention	-133.25	mv
GS-AP-MW-21V	9/23/2020 16:14	pH	7.81	pH
GS-AP-MW-21V	9/23/2020 16:14	Temperature	20.68	C
GS-AP-MW-21V	9/23/2020 16:14	Turbidity	0.68	NTU
GS-AP-MW-21V	9/23/2020 16:19	Conductivity	4614.84	uS/cm
GS-AP-MW-21V	9/23/2020 16:19	DO	0.49	mg/L
GS-AP-MW-21V	9/23/2020 16:19	Depth to Water Detail	185.13	ft
GS-AP-MW-21V	9/23/2020 16:19	Oxidation Reduction Potention	-135.52	mv
GS-AP-MW-21V	9/23/2020 16:19	pH	7.82	pH
GS-AP-MW-21V	9/23/2020 16:19	Temperature	20.53	C
GS-AP-MW-21V	9/23/2020 16:19	Turbidity	0.77	NTU
GS-AP-MW-21V	9/23/2020 16:24	Conductivity	4614.81	uS/cm
GS-AP-MW-21V	9/23/2020 16:24	DO	0.72	mg/L
GS-AP-MW-21V	9/23/2020 16:24	Depth to Water Detail	185.25	ft
GS-AP-MW-21V	9/23/2020 16:24	Oxidation Reduction Potention	-133.33	mv
GS-AP-MW-21V	9/23/2020 16:24	pH	7.81	pH
GS-AP-MW-21V	9/23/2020 16:24	Temperature	21.4	C
GS-AP-MW-21V	9/23/2020 16:24	Turbidity	1.02	NTU
GS-AP-MW-21V	9/23/2020 16:29	Conductivity	4591.12	uS/cm

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-21V	9/23/2020 16:29	DO	0.78	mg/L
GS-AP-MW-21V	9/23/2020 16:29	Depth to Water Detail	185.38	ft
GS-AP-MW-21V	9/23/2020 16:29	Oxidation Reduction Potention	-131.65	mv
GS-AP-MW-21V	9/23/2020 16:29	pH	7.81	pH
GS-AP-MW-21V	9/23/2020 16:29	Temperature	21.9	C
GS-AP-MW-21V	9/23/2020 16:29	Turbidity	0.82	NTU
GS-AP-MW-21V	9/23/2020 16:34	Conductivity	4568.51	uS/cm
GS-AP-MW-21V	9/23/2020 16:34	DO	0.8	mg/L
GS-AP-MW-21V	9/23/2020 16:34	Depth to Water Detail	185.51	ft
GS-AP-MW-21V	9/23/2020 16:34	Oxidation Reduction Potention	-130.42	mv
GS-AP-MW-21V	9/23/2020 16:34	pH	7.81	pH
GS-AP-MW-21V	9/23/2020 16:34	Temperature	22.01	C
GS-AP-MW-21V	9/23/2020 16:34	Turbidity	0.76	NTU

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-28H	9/22/2020 12:36	Conductivity	791.87	uS/cm
GS-AP-MW-28H	9/22/2020 12:36	DO	0.35	mg/L
GS-AP-MW-28H	9/22/2020 12:36	Depth to Water Detail	164	ft
GS-AP-MW-28H	9/22/2020 12:36	Oxidation Reduction Potention	-176.42	mv
GS-AP-MW-28H	9/22/2020 12:36	pH	7.74	pH
GS-AP-MW-28H	9/22/2020 12:36	Temperature	18.99	C
GS-AP-MW-28H	9/22/2020 12:36	Turbidity	7.66	NTU
GS-AP-MW-28H	9/22/2020 12:41	Conductivity	728.82	uS/cm
GS-AP-MW-28H	9/22/2020 12:41	DO	0.28	mg/L
GS-AP-MW-28H	9/22/2020 12:41	Depth to Water Detail	164	ft
GS-AP-MW-28H	9/22/2020 12:41	Oxidation Reduction Potention	-184.32	mv
GS-AP-MW-28H	9/22/2020 12:41	pH	8.03	pH
GS-AP-MW-28H	9/22/2020 12:41	Temperature	18.79	C
GS-AP-MW-28H	9/22/2020 12:41	Turbidity	3.98	NTU
GS-AP-MW-28H	9/22/2020 12:46	Conductivity	631.08	uS/cm
GS-AP-MW-28H	9/22/2020 12:46	DO	0.26	mg/L
GS-AP-MW-28H	9/22/2020 12:46	Depth to Water Detail	164	ft
GS-AP-MW-28H	9/22/2020 12:46	Oxidation Reduction Potention	-184.51	mv
GS-AP-MW-28H	9/22/2020 12:46	pH	8.13	pH
GS-AP-MW-28H	9/22/2020 12:46	Temperature	19.2	C
GS-AP-MW-28H	9/22/2020 12:46	Turbidity	3.16	NTU
GS-AP-MW-28H	9/22/2020 12:51	Conductivity	707.51	uS/cm
GS-AP-MW-28H	9/22/2020 12:51	DO	0.26	mg/L
GS-AP-MW-28H	9/22/2020 12:51	Depth to Water Detail	164	ft
GS-AP-MW-28H	9/22/2020 12:51	Oxidation Reduction Potention	-182.66	mv
GS-AP-MW-28H	9/22/2020 12:51	pH	8.18	pH
GS-AP-MW-28H	9/22/2020 12:51	Temperature	18.96	C
GS-AP-MW-28H	9/22/2020 12:51	Turbidity	3.2	NTU
GS-AP-MW-28H	9/22/2020 12:56	Conductivity	699.98	uS/cm
GS-AP-MW-28H	9/22/2020 12:56	DO	0.24	mg/L
GS-AP-MW-28H	9/22/2020 12:56	Depth to Water Detail	164	ft
GS-AP-MW-28H	9/22/2020 12:56	Oxidation Reduction Potention	-185.22	mv
GS-AP-MW-28H	9/22/2020 12:56	pH	8.22	pH
GS-AP-MW-28H	9/22/2020 12:56	Temperature	19.16	C
GS-AP-MW-28H	9/22/2020 12:56	Turbidity	3.1	NTU
GS-AP-MW-28H	9/22/2020 13:01	Conductivity	692.86	uS/cm
GS-AP-MW-28H	9/22/2020 13:01	DO	0.24	mg/L
GS-AP-MW-28H	9/22/2020 13:01	Depth to Water Detail	164	ft
GS-AP-MW-28H	9/22/2020 13:01	Oxidation Reduction Potention	-185.76	mv
GS-AP-MW-28H	9/22/2020 13:01	pH	8.24	pH
GS-AP-MW-28H	9/22/2020 13:01	Temperature	18.97	C
GS-AP-MW-28H	9/22/2020 13:01	Turbidity	2.97	NTU

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-30HA	9/21/2020 16:00	Conductivity	1083.17	uS/cm
GS-AP-MW-30HA	9/21/2020 16:00	DO	3.69	mg/L
GS-AP-MW-30HA	9/21/2020 16:00	Depth to Water Detail	305.85	ft
GS-AP-MW-30HA	9/21/2020 16:00	Oxidation Reduction Potention	82.41	mv
GS-AP-MW-30HA	9/21/2020 16:00	pH	7.42	pH
GS-AP-MW-30HA	9/21/2020 16:00	Temperature	22.73	C
GS-AP-MW-30HA	9/21/2020 16:00	Turbidity	2.7	NTU
GS-AP-MW-30HA	9/21/2020 16:05	Conductivity	1031.66	uS/cm
GS-AP-MW-30HA	9/21/2020 16:05	DO	1.47	mg/L
GS-AP-MW-30HA	9/21/2020 16:05	Depth to Water Detail	305.85	ft
GS-AP-MW-30HA	9/21/2020 16:05	Oxidation Reduction Potention	82.21	mv
GS-AP-MW-30HA	9/21/2020 16:05	pH	7.33	pH
GS-AP-MW-30HA	9/21/2020 16:05	Temperature	21.73	C
GS-AP-MW-30HA	9/21/2020 16:05	Turbidity	0.65	NTU
GS-AP-MW-30HA	9/21/2020 16:10	Conductivity	997.77	uS/cm
GS-AP-MW-30HA	9/21/2020 16:10	DO	0.56	mg/L
GS-AP-MW-30HA	9/21/2020 16:10	Depth to Water Detail	305.85	ft
GS-AP-MW-30HA	9/21/2020 16:10	Oxidation Reduction Potention	-145.18	mv
GS-AP-MW-30HA	9/21/2020 16:10	pH	7.4	pH
GS-AP-MW-30HA	9/21/2020 16:10	Temperature	21.44	C
GS-AP-MW-30HA	9/21/2020 16:10	Turbidity	0.58	NTU
GS-AP-MW-30HA	9/21/2020 16:15	Conductivity	960.93	uS/cm
GS-AP-MW-30HA	9/21/2020 16:15	DO	0.21	mg/L
GS-AP-MW-30HA	9/21/2020 16:15	Depth to Water Detail	305.85	ft
GS-AP-MW-30HA	9/21/2020 16:15	Oxidation Reduction Potention	-266.98	mv
GS-AP-MW-30HA	9/21/2020 16:15	pH	7.6	pH
GS-AP-MW-30HA	9/21/2020 16:15	Temperature	21.21	C
GS-AP-MW-30HA	9/21/2020 16:15	Turbidity	0.4	NTU
GS-AP-MW-30HA	9/21/2020 16:20	Conductivity	951.4	uS/cm
GS-AP-MW-30HA	9/21/2020 16:20	DO	0.12	mg/L
GS-AP-MW-30HA	9/21/2020 16:20	Depth to Water Detail	305.85	ft
GS-AP-MW-30HA	9/21/2020 16:20	Oxidation Reduction Potention	-300.49	mv
GS-AP-MW-30HA	9/21/2020 16:20	pH	7.68	pH
GS-AP-MW-30HA	9/21/2020 16:20	Temperature	21.11	C
GS-AP-MW-30HA	9/21/2020 16:20	Turbidity	0.3	NTU
GS-AP-MW-30HA	9/21/2020 16:25	Conductivity	960.45	uS/cm
GS-AP-MW-30HA	9/21/2020 16:25	DO	0.13	mg/L
GS-AP-MW-30HA	9/21/2020 16:25	Depth to Water Detail	305.85	ft
GS-AP-MW-30HA	9/21/2020 16:25	Oxidation Reduction Potention	-300.41	mv
GS-AP-MW-30HA	9/21/2020 16:25	pH	7.56	pH
GS-AP-MW-30HA	9/21/2020 16:25	Temperature	20.96	C
GS-AP-MW-30HA	9/21/2020 16:25	Turbidity	0.36	NTU

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-31H	9/22/2020 8:30	Conductivity	404.71	uS/cm
GS-AP-MW-31H	9/22/2020 8:30	DO	0.38	mg/L
GS-AP-MW-31H	9/22/2020 8:30	Depth to Water Detail	236.98	ft
GS-AP-MW-31H	9/22/2020 8:30	Oxidation Reduction Potention	-162.95	mv
GS-AP-MW-31H	9/22/2020 8:30	pH	7.82	pH
GS-AP-MW-31H	9/22/2020 8:30	Temperature	17.62	C
GS-AP-MW-31H	9/22/2020 8:30	Turbidity	2.9	NTU
GS-AP-MW-31H	9/22/2020 8:35	Conductivity	600.99	uS/cm
GS-AP-MW-31H	9/22/2020 8:35	DO	0.2	mg/L
GS-AP-MW-31H	9/22/2020 8:35	Depth to Water Detail	237.4	ft
GS-AP-MW-31H	9/22/2020 8:35	Oxidation Reduction Potention	-218.91	mv
GS-AP-MW-31H	9/22/2020 8:35	pH	8.34	pH
GS-AP-MW-31H	9/22/2020 8:35	Temperature	17.63	C
GS-AP-MW-31H	9/22/2020 8:35	Turbidity	5.39	NTU
GS-AP-MW-31H	9/22/2020 8:40	Conductivity	678.67	uS/cm
GS-AP-MW-31H	9/22/2020 8:40	DO	0.16	mg/L
GS-AP-MW-31H	9/22/2020 8:40	Depth to Water Detail	237.78	ft
GS-AP-MW-31H	9/22/2020 8:40	Oxidation Reduction Potention	-237.47	mv
GS-AP-MW-31H	9/22/2020 8:40	pH	8.47	pH
GS-AP-MW-31H	9/22/2020 8:40	Temperature	17.63	C
GS-AP-MW-31H	9/22/2020 8:40	Turbidity	6.46	NTU
GS-AP-MW-31H	9/22/2020 8:45	Conductivity	679.48	uS/cm
GS-AP-MW-31H	9/22/2020 8:45	DO	0.14	mg/L
GS-AP-MW-31H	9/22/2020 8:45	Depth to Water Detail	238.05	ft
GS-AP-MW-31H	9/22/2020 8:45	Oxidation Reduction Potention	-249.73	mv
GS-AP-MW-31H	9/22/2020 8:45	pH	8.54	pH
GS-AP-MW-31H	9/22/2020 8:45	Temperature	17.64	C
GS-AP-MW-31H	9/22/2020 8:45	Turbidity	5.24	NTU
GS-AP-MW-31H	9/22/2020 8:50	Conductivity	649.72	uS/cm
GS-AP-MW-31H	9/22/2020 8:50	DO	0.13	mg/L
GS-AP-MW-31H	9/22/2020 8:50	Depth to Water Detail	238.4	ft
GS-AP-MW-31H	9/22/2020 8:50	Oxidation Reduction Potention	-259.85	mv
GS-AP-MW-31H	9/22/2020 8:50	pH	8.57	pH
GS-AP-MW-31H	9/22/2020 8:50	Temperature	17.67	C
GS-AP-MW-31H	9/22/2020 8:50	Turbidity	3.31	NTU
GS-AP-MW-31H	9/22/2020 8:55	Conductivity	611.46	uS/cm
GS-AP-MW-31H	9/22/2020 8:55	DO	0.11	mg/L
GS-AP-MW-31H	9/22/2020 8:55	Depth to Water Detail	238.56	ft
GS-AP-MW-31H	9/22/2020 8:55	Oxidation Reduction Potention	-267.53	mv
GS-AP-MW-31H	9/22/2020 8:55	pH	8.6	pH
GS-AP-MW-31H	9/22/2020 8:55	Temperature	17.69	C
GS-AP-MW-31H	9/22/2020 8:55	Turbidity	2.54	NTU
GS-AP-MW-31H	9/22/2020 9:00	Conductivity	569.62	uS/cm
GS-AP-MW-31H	9/22/2020 9:00	DO	0.1	mg/L
GS-AP-MW-31H	9/22/2020 9:00	Depth to Water Detail	238.71	ft
GS-AP-MW-31H	9/22/2020 9:00	Oxidation Reduction Potention	-272.73	mv

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-31H	9/22/2020 9:00	pH	8.61	pH
GS-AP-MW-31H	9/22/2020 9:00	Temperature	17.68	C
GS-AP-MW-31H	9/22/2020 9:00	Turbidity	2.51	NTU
GS-AP-MW-31H	9/22/2020 9:05	Conductivity	539.82	uS/cm
GS-AP-MW-31H	9/22/2020 9:05	DO	0.09	mg/L
GS-AP-MW-31H	9/22/2020 9:05	Depth to Water Detail	238.94	ft
GS-AP-MW-31H	9/22/2020 9:05	Oxidation Reduction Potention	-276.17	mv
GS-AP-MW-31H	9/22/2020 9:05	pH	8.64	pH
GS-AP-MW-31H	9/22/2020 9:05	Temperature	17.69	C
GS-AP-MW-31H	9/22/2020 9:05	Turbidity	2.52	NTU
GS-AP-MW-31H	9/22/2020 9:10	Conductivity	501.4	uS/cm
GS-AP-MW-31H	9/22/2020 9:10	DO	0.09	mg/L
GS-AP-MW-31H	9/22/2020 9:10	Depth to Water Detail	239.07	ft
GS-AP-MW-31H	9/22/2020 9:10	Oxidation Reduction Potention	-278.03	mv
GS-AP-MW-31H	9/22/2020 9:10	pH	8.65	pH
GS-AP-MW-31H	9/22/2020 9:10	Temperature	17.69	C
GS-AP-MW-31H	9/22/2020 9:10	Turbidity	1.98	NTU
GS-AP-MW-31H	9/22/2020 9:15	Conductivity	532.55	uS/cm
GS-AP-MW-31H	9/22/2020 9:15	DO	0.09	mg/L
GS-AP-MW-31H	9/22/2020 9:15	Depth to Water Detail	239.18	ft
GS-AP-MW-31H	9/22/2020 9:15	Oxidation Reduction Potention	-281.23	mv
GS-AP-MW-31H	9/22/2020 9:15	pH	8.69	pH
GS-AP-MW-31H	9/22/2020 9:15	Temperature	17.73	C
GS-AP-MW-31H	9/22/2020 9:15	Turbidity	1.93	NTU
GS-AP-MW-31H	9/22/2020 9:20	Conductivity	499.48	uS/cm
GS-AP-MW-31H	9/22/2020 9:20	DO	0.09	mg/L
GS-AP-MW-31H	9/22/2020 9:20	Depth to Water Detail	239.31	ft
GS-AP-MW-31H	9/22/2020 9:20	Oxidation Reduction Potention	-282.17	mv
GS-AP-MW-31H	9/22/2020 9:20	pH	8.69	pH
GS-AP-MW-31H	9/22/2020 9:20	Temperature	17.77	C
GS-AP-MW-31H	9/22/2020 9:20	Turbidity	2.56	NTU
GS-AP-MW-31H	9/22/2020 9:25	Conductivity	477.56	uS/cm
GS-AP-MW-31H	9/22/2020 9:25	DO	0.08	mg/L
GS-AP-MW-31H	9/22/2020 9:25	Depth to Water Detail	239.38	ft
GS-AP-MW-31H	9/22/2020 9:25	Oxidation Reduction Potention	-284.72	mv
GS-AP-MW-31H	9/22/2020 9:25	pH	8.74	pH
GS-AP-MW-31H	9/22/2020 9:25	Temperature	17.76	C
GS-AP-MW-31H	9/22/2020 9:25	Turbidity	2.32	NTU
GS-AP-MW-31H	9/22/2020 9:30	Conductivity	461.42	uS/cm
GS-AP-MW-31H	9/22/2020 9:30	DO	0.08	mg/L
GS-AP-MW-31H	9/22/2020 9:30	Depth to Water Detail	239.46	ft
GS-AP-MW-31H	9/22/2020 9:30	Oxidation Reduction Potention	-282.9	mv
GS-AP-MW-31H	9/22/2020 9:30	pH	8.72	pH
GS-AP-MW-31H	9/22/2020 9:30	Temperature	17.79	C
GS-AP-MW-31H	9/22/2020 9:30	Turbidity	2.22	NTU
GS-AP-MW-31H	9/22/2020 9:35	Conductivity	444.38	uS/cm

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-31H	9/22/2020 9:35	DO	0.07	mg/L
GS-AP-MW-31H	9/22/2020 9:35	Depth to Water Detail	239.5	ft
GS-AP-MW-31H	9/22/2020 9:35	Oxidation Reduction Potention	-285.85	mv
GS-AP-MW-31H	9/22/2020 9:35	pH	8.76	pH
GS-AP-MW-31H	9/22/2020 9:35	Temperature	17.84	C
GS-AP-MW-31H	9/22/2020 9:35	Turbidity	2.39	NTU
GS-AP-MW-31H	9/22/2020 9:40	Conductivity	432.05	uS/cm
GS-AP-MW-31H	9/22/2020 9:40	DO	0.08	mg/L
GS-AP-MW-31H	9/22/2020 9:40	Depth to Water Detail	239.54	ft
GS-AP-MW-31H	9/22/2020 9:40	Oxidation Reduction Potention	-284.64	mv
GS-AP-MW-31H	9/22/2020 9:40	pH	8.74	pH
GS-AP-MW-31H	9/22/2020 9:40	Temperature	17.85	C
GS-AP-MW-31H	9/22/2020 9:40	Turbidity	2.31	NTU
GS-AP-MW-31H	9/22/2020 9:45	Conductivity	417.47	uS/cm
GS-AP-MW-31H	9/22/2020 9:45	DO	0.07	mg/L
GS-AP-MW-31H	9/22/2020 9:45	Depth to Water Detail	239.59	ft
GS-AP-MW-31H	9/22/2020 9:45	Oxidation Reduction Potention	-287.6	mv
GS-AP-MW-31H	9/22/2020 9:45	pH	8.78	pH
GS-AP-MW-31H	9/22/2020 9:45	Temperature	17.9	C
GS-AP-MW-31H	9/22/2020 9:45	Turbidity	2.18	NTU
GS-AP-MW-31H	9/22/2020 9:50	Conductivity	463.06	uS/cm
GS-AP-MW-31H	9/22/2020 9:50	DO	0.07	mg/L
GS-AP-MW-31H	9/22/2020 9:50	Depth to Water Detail	239.65	ft
GS-AP-MW-31H	9/22/2020 9:50	Oxidation Reduction Potention	-284.64	mv
GS-AP-MW-31H	9/22/2020 9:50	pH	8.75	pH
GS-AP-MW-31H	9/22/2020 9:50	Temperature	17.88	C
GS-AP-MW-31H	9/22/2020 9:50	Turbidity	2.26	NTU
GS-AP-MW-31H	9/22/2020 9:55	Conductivity	452.66	uS/cm
GS-AP-MW-31H	9/22/2020 9:55	DO	0.06	mg/L
GS-AP-MW-31H	9/22/2020 9:55	Depth to Water Detail	239.68	ft
GS-AP-MW-31H	9/22/2020 9:55	Oxidation Reduction Potention	-287.42	mv
GS-AP-MW-31H	9/22/2020 9:55	pH	8.8	pH
GS-AP-MW-31H	9/22/2020 9:55	Temperature	17.91	C
GS-AP-MW-31H	9/22/2020 9:55	Turbidity	1.84	NTU
GS-AP-MW-31H	9/22/2020 10:00	Conductivity	446.36	uS/cm
GS-AP-MW-31H	9/22/2020 10:00	DO	0.07	mg/L
GS-AP-MW-31H	9/22/2020 10:00	Depth to Water Detail	239.72	ft
GS-AP-MW-31H	9/22/2020 10:00	Oxidation Reduction Potention	-284.46	mv
GS-AP-MW-31H	9/22/2020 10:00	pH	8.76	pH
GS-AP-MW-31H	9/22/2020 10:00	Temperature	17.92	C
GS-AP-MW-31H	9/22/2020 10:00	Turbidity	2.77	NTU

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-32H	9/21/2020 14:22	Conductivity	603.02	uS/cm
GS-AP-MW-32H	9/21/2020 14:22	DO	0.8	mg/L
GS-AP-MW-32H	9/21/2020 14:22	Depth to Water Detail	259.09	ft
GS-AP-MW-32H	9/21/2020 14:22	Oxidation Reduction Potention	-122.85	mv
GS-AP-MW-32H	9/21/2020 14:22	pH	8.02	pH
GS-AP-MW-32H	9/21/2020 14:22	Temperature	21.34	C
GS-AP-MW-32H	9/21/2020 14:22	Turbidity	1.51	NTU
GS-AP-MW-32H	9/21/2020 14:40	Conductivity	606.19	uS/cm
GS-AP-MW-32H	9/21/2020 14:40	DO	0.41	mg/L
GS-AP-MW-32H	9/21/2020 14:40	Depth to Water Detail	260.69	ft
GS-AP-MW-32H	9/21/2020 14:40	Oxidation Reduction Potention	-141	mv
GS-AP-MW-32H	9/21/2020 14:40	pH	8.15	pH
GS-AP-MW-32H	9/21/2020 14:40	Temperature	20.98	C
GS-AP-MW-32H	9/21/2020 14:40	Turbidity	1.65	NTU

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-43H	9/22/2020 10:57	Conductivity	1260.98	uS/cm
GS-AP-MW-43H	9/22/2020 10:57	DO	0.73	mg/L
GS-AP-MW-43H	9/22/2020 10:57	Depth to Water Detail	151.74	ft
GS-AP-MW-43H	9/22/2020 10:57	Oxidation Reduction Potention	-280.72	mv
GS-AP-MW-43H	9/22/2020 10:57	pH	8.36	pH
GS-AP-MW-43H	9/22/2020 10:57	Temperature	18.86	C
GS-AP-MW-43H	9/22/2020 10:57	Turbidity	2.29	NTU
GS-AP-MW-43H	9/22/2020 11:02	Conductivity	1343.65	uS/cm
GS-AP-MW-43H	9/22/2020 11:02	DO	0.38	mg/L
GS-AP-MW-43H	9/22/2020 11:02	Depth to Water Detail	152.35	ft
GS-AP-MW-43H	9/22/2020 11:02	Oxidation Reduction Potention	-295.08	mv
GS-AP-MW-43H	9/22/2020 11:02	pH	8.56	pH
GS-AP-MW-43H	9/22/2020 11:02	Temperature	18.66	C
GS-AP-MW-43H	9/22/2020 11:02	Turbidity	1.93	NTU
GS-AP-MW-43H	9/22/2020 11:07	Conductivity	1366.42	uS/cm
GS-AP-MW-43H	9/22/2020 11:07	DO	0.36	mg/L
GS-AP-MW-43H	9/22/2020 11:07	Depth to Water Detail	152.62	ft
GS-AP-MW-43H	9/22/2020 11:07	Oxidation Reduction Potention	-292.03	mv
GS-AP-MW-43H	9/22/2020 11:07	pH	8.62	pH
GS-AP-MW-43H	9/22/2020 11:07	Temperature	18.7	C
GS-AP-MW-43H	9/22/2020 11:07	Turbidity	4.32	NTU
GS-AP-MW-43H	9/22/2020 11:12	Conductivity	1368.48	uS/cm
GS-AP-MW-43H	9/22/2020 11:12	DO	0.26	mg/L
GS-AP-MW-43H	9/22/2020 11:12	Depth to Water Detail	152.92	ft
GS-AP-MW-43H	9/22/2020 11:12	Oxidation Reduction Potention	-301.74	mv
GS-AP-MW-43H	9/22/2020 11:12	pH	8.63	pH
GS-AP-MW-43H	9/22/2020 11:12	Temperature	18.68	C
GS-AP-MW-43H	9/22/2020 11:12	Turbidity	4.46	NTU
GS-AP-MW-43H	9/22/2020 11:17	Conductivity	1353.39	uS/cm
GS-AP-MW-43H	9/22/2020 11:17	DO	0.22	mg/L
GS-AP-MW-43H	9/22/2020 11:17	Depth to Water Detail	153.02	ft
GS-AP-MW-43H	9/22/2020 11:17	Oxidation Reduction Potention	-304.69	mv
GS-AP-MW-43H	9/22/2020 11:17	pH	8.65	pH
GS-AP-MW-43H	9/22/2020 11:17	Temperature	18.76	C
GS-AP-MW-43H	9/22/2020 11:17	Turbidity	3.1	NTU
GS-AP-MW-43H	9/22/2020 11:22	Conductivity	1339.24	uS/cm
GS-AP-MW-43H	9/22/2020 11:22	DO	0.26	mg/L
GS-AP-MW-43H	9/22/2020 11:22	Depth to Water Detail	153.26	ft
GS-AP-MW-43H	9/22/2020 11:22	Oxidation Reduction Potention	-303.29	mv
GS-AP-MW-43H	9/22/2020 11:22	pH	8.65	pH
GS-AP-MW-43H	9/22/2020 11:22	Temperature	18.73	C
GS-AP-MW-43H	9/22/2020 11:22	Turbidity	3.14	NTU
GS-AP-MW-43H	9/22/2020 11:27	Conductivity	1333.27	uS/cm
GS-AP-MW-43H	9/22/2020 11:27	DO	0.24	mg/L
GS-AP-MW-43H	9/22/2020 11:27	Depth to Water Detail	153.3	ft
GS-AP-MW-43H	9/22/2020 11:27	Oxidation Reduction Potention	-303.21	mv

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-43H	9/22/2020 11:27	pH	8.66	pH
GS-AP-MW-43H	9/22/2020 11:27	Temperature	18.92	C
GS-AP-MW-43H	9/22/2020 11:27	Turbidity	2.86	NTU

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-PZ-18	9/22/2020 13:50	Conductivity	2450.96	uS/cm
GS-AP-PZ-18	9/22/2020 13:50	DO	0.14	mg/L
GS-AP-PZ-18	9/22/2020 13:50	Depth to Water Detail	125.97	ft
GS-AP-PZ-18	9/22/2020 13:50	Oxidation Reduction Potention	-158.2	mv
GS-AP-PZ-18	9/22/2020 13:50	pH	6.9	pH
GS-AP-PZ-18	9/22/2020 13:50	Temperature	17.93	C
GS-AP-PZ-18	9/22/2020 13:50	Turbidity	6.95	NTU
GS-AP-PZ-18	9/22/2020 13:55	Conductivity	2062.28	uS/cm
GS-AP-PZ-18	9/22/2020 13:55	DO	0.12	mg/L
GS-AP-PZ-18	9/22/2020 13:55	Depth to Water Detail	125.97	ft
GS-AP-PZ-18	9/22/2020 13:55	Oxidation Reduction Potention	-134.41	mv
GS-AP-PZ-18	9/22/2020 13:55	pH	6.66	pH
GS-AP-PZ-18	9/22/2020 13:55	Temperature	18.05	C
GS-AP-PZ-18	9/22/2020 13:55	Turbidity	5.53	NTU
GS-AP-PZ-18	9/22/2020 14:00	Conductivity	1744.36	uS/cm
GS-AP-PZ-18	9/22/2020 14:00	DO	0.09	mg/L
GS-AP-PZ-18	9/22/2020 14:00	Depth to Water Detail	125.97	ft
GS-AP-PZ-18	9/22/2020 14:00	Oxidation Reduction Potention	-125.65	mv
GS-AP-PZ-18	9/22/2020 14:00	pH	6.63	pH
GS-AP-PZ-18	9/22/2020 14:00	Temperature	18.09	C
GS-AP-PZ-18	9/22/2020 14:00	Turbidity	3.19	NTU
GS-AP-PZ-18	9/22/2020 14:05	Conductivity	1830.56	uS/cm
GS-AP-PZ-18	9/22/2020 14:05	DO	0.08	mg/L
GS-AP-PZ-18	9/22/2020 14:05	Depth to Water Detail	125.97	ft
GS-AP-PZ-18	9/22/2020 14:05	Oxidation Reduction Potention	-118.48	mv
GS-AP-PZ-18	9/22/2020 14:05	pH	6.6	pH
GS-AP-PZ-18	9/22/2020 14:05	Temperature	18.1	C
GS-AP-PZ-18	9/22/2020 14:05	Turbidity	2.07	NTU
GS-AP-PZ-18	9/22/2020 14:10	Conductivity	1630.14	uS/cm
GS-AP-PZ-18	9/22/2020 14:10	DO	0.07	mg/L
GS-AP-PZ-18	9/22/2020 14:10	Depth to Water Detail	125.97	ft
GS-AP-PZ-18	9/22/2020 14:10	Oxidation Reduction Potention	-113.26	mv
GS-AP-PZ-18	9/22/2020 14:10	pH	6.56	pH
GS-AP-PZ-18	9/22/2020 14:10	Temperature	18.07	C
GS-AP-PZ-18	9/22/2020 14:10	Turbidity	2.21	NTU
GS-AP-PZ-18	9/22/2020 14:15	Conductivity	1537.23	uS/cm
GS-AP-PZ-18	9/22/2020 14:15	DO	0.06	mg/L
GS-AP-PZ-18	9/22/2020 14:15	Depth to Water Detail	125.97	ft
GS-AP-PZ-18	9/22/2020 14:15	Oxidation Reduction Potention	-120.58	mv
GS-AP-PZ-18	9/22/2020 14:15	pH	6.56	pH
GS-AP-PZ-18	9/22/2020 14:15	Temperature	17.95	C
GS-AP-PZ-18	9/22/2020 14:15	Turbidity	1.71	NTU
GS-AP-PZ-18	9/22/2020 14:20	Conductivity	1426.78	uS/cm
GS-AP-PZ-18	9/22/2020 14:20	DO	0.06	mg/L
GS-AP-PZ-18	9/22/2020 14:20	Depth to Water Detail	125.97	ft
GS-AP-PZ-18	9/22/2020 14:20	Oxidation Reduction Potention	-126.32	mv

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-PZ-18	9/22/2020 14:20	pH	6.58	pH
GS-AP-PZ-18	9/22/2020 14:20	Temperature	17.97	C
GS-AP-PZ-18	9/22/2020 14:20	Turbidity	1.6	NTU
GS-AP-PZ-18	9/22/2020 14:25	Conductivity	1316.27	uS/cm
GS-AP-PZ-18	9/22/2020 14:25	DO	0.05	mg/L
GS-AP-PZ-18	9/22/2020 14:25	Depth to Water Detail	125.97	ft
GS-AP-PZ-18	9/22/2020 14:25	Oxidation Reduction Potention	-132.44	mv
GS-AP-PZ-18	9/22/2020 14:25	pH	6.63	pH
GS-AP-PZ-18	9/22/2020 14:25	Temperature	18.04	C
GS-AP-PZ-18	9/22/2020 14:25	Turbidity	2.08	NTU
GS-AP-PZ-18	9/22/2020 14:30	Conductivity	1525.06	uS/cm
GS-AP-PZ-18	9/22/2020 14:30	DO	0.05	mg/L
GS-AP-PZ-18	9/22/2020 14:30	Depth to Water Detail	125.97	ft
GS-AP-PZ-18	9/22/2020 14:30	Oxidation Reduction Potention	-135.16	mv
GS-AP-PZ-18	9/22/2020 14:30	pH	6.67	pH
GS-AP-PZ-18	9/22/2020 14:30	Temperature	17.99	C
GS-AP-PZ-18	9/22/2020 14:30	Turbidity	1.91	NTU
GS-AP-PZ-18	9/22/2020 14:35	Conductivity	1435.23	uS/cm
GS-AP-PZ-18	9/22/2020 14:35	DO	0.05	mg/L
GS-AP-PZ-18	9/22/2020 14:35	Depth to Water Detail	125.97	ft
GS-AP-PZ-18	9/22/2020 14:35	Oxidation Reduction Potention	-137.04	mv
GS-AP-PZ-18	9/22/2020 14:35	pH	6.72	pH
GS-AP-PZ-18	9/22/2020 14:35	Temperature	17.94	C
GS-AP-PZ-18	9/22/2020 14:35	Turbidity	2.01	NTU
GS-AP-PZ-18	9/22/2020 14:40	Conductivity	1369.48	uS/cm
GS-AP-PZ-18	9/22/2020 14:40	DO	0.04	mg/L
GS-AP-PZ-18	9/22/2020 14:40	Depth to Water Detail	125.97	ft
GS-AP-PZ-18	9/22/2020 14:40	Oxidation Reduction Potention	-138.49	mv
GS-AP-PZ-18	9/22/2020 14:40	pH	6.76	pH
GS-AP-PZ-18	9/22/2020 14:40	Temperature	17.97	C
GS-AP-PZ-18	9/22/2020 14:40	Turbidity	2.14	NTU
GS-AP-PZ-18	9/22/2020 14:45	Conductivity	1341.31	uS/cm
GS-AP-PZ-18	9/22/2020 14:45	DO	0.04	mg/L
GS-AP-PZ-18	9/22/2020 14:45	Depth to Water Detail	125.97	ft
GS-AP-PZ-18	9/22/2020 14:45	Oxidation Reduction Potention	-141.79	mv
GS-AP-PZ-18	9/22/2020 14:45	pH	6.79	pH
GS-AP-PZ-18	9/22/2020 14:45	Temperature	17.97	C
GS-AP-PZ-18	9/22/2020 14:45	Turbidity	2.22	NTU
GS-AP-PZ-18	9/22/2020 14:50	Conductivity	1266.6	uS/cm
GS-AP-PZ-18	9/22/2020 14:50	DO	0.04	mg/L
GS-AP-PZ-18	9/22/2020 14:50	Depth to Water Detail	125.97	ft
GS-AP-PZ-18	9/22/2020 14:50	Oxidation Reduction Potention	-144.51	mv
GS-AP-PZ-18	9/22/2020 14:50	pH	6.82	pH
GS-AP-PZ-18	9/22/2020 14:50	Temperature	18.04	C
GS-AP-PZ-18	9/22/2020 14:50	Turbidity	1.6	NTU
GS-AP-PZ-18	9/22/2020 14:55	Conductivity	1205.37	uS/cm

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-PZ-18	9/22/2020 14:55	DO	0.04	mg/L
GS-AP-PZ-18	9/22/2020 14:55	Depth to Water Detail	125.97	ft
GS-AP-PZ-18	9/22/2020 14:55	Oxidation Reduction Potention	-145.71	mv
GS-AP-PZ-18	9/22/2020 14:55	pH	6.86	pH
GS-AP-PZ-18	9/22/2020 14:55	Temperature	18	C
GS-AP-PZ-18	9/22/2020 14:55	Turbidity	1.63	NTU
GS-AP-PZ-18	9/22/2020 15:00	Conductivity	1136.73	uS/cm
GS-AP-PZ-18	9/22/2020 15:00	DO	0.04	mg/L
GS-AP-PZ-18	9/22/2020 15:00	Depth to Water Detail	125.97	ft
GS-AP-PZ-18	9/22/2020 15:00	Oxidation Reduction Potention	-146.41	mv
GS-AP-PZ-18	9/22/2020 15:00	pH	6.91	pH
GS-AP-PZ-18	9/22/2020 15:00	Temperature	17.94	C
GS-AP-PZ-18	9/22/2020 15:00	Turbidity	1.88	NTU
GS-AP-PZ-18	9/22/2020 15:05	Conductivity	1098.03	uS/cm
GS-AP-PZ-18	9/22/2020 15:05	DO	0.04	mg/L
GS-AP-PZ-18	9/22/2020 15:05	Depth to Water Detail	125.97	ft
GS-AP-PZ-18	9/22/2020 15:05	Oxidation Reduction Potention	-148.41	mv
GS-AP-PZ-18	9/22/2020 15:05	pH	6.93	pH
GS-AP-PZ-18	9/22/2020 15:05	Temperature	17.91	C
GS-AP-PZ-18	9/22/2020 15:05	Turbidity	2.1	NTU
GS-AP-PZ-18	9/22/2020 15:10	Conductivity	1189.67	uS/cm
GS-AP-PZ-18	9/22/2020 15:10	DO	0.04	mg/L
GS-AP-PZ-18	9/22/2020 15:10	Depth to Water Detail	125.97	ft
GS-AP-PZ-18	9/22/2020 15:10	Oxidation Reduction Potention	-150.34	mv
GS-AP-PZ-18	9/22/2020 15:10	pH	6.96	pH
GS-AP-PZ-18	9/22/2020 15:10	Temperature	18.01	C
GS-AP-PZ-18	9/22/2020 15:10	Turbidity	2.26	NTU
GS-AP-PZ-18	9/22/2020 15:15	Conductivity	1124.82	uS/cm
GS-AP-PZ-18	9/22/2020 15:15	DO	0.04	mg/L
GS-AP-PZ-18	9/22/2020 15:15	Depth to Water Detail	125.97	ft
GS-AP-PZ-18	9/22/2020 15:15	Oxidation Reduction Potention	-147.9	mv
GS-AP-PZ-18	9/22/2020 15:15	pH	6.98	pH
GS-AP-PZ-18	9/22/2020 15:15	Temperature	18.01	C
GS-AP-PZ-18	9/22/2020 15:15	Turbidity	1.91	NTU
GS-AP-PZ-18	9/22/2020 15:20	Conductivity	1097.08	uS/cm
GS-AP-PZ-18	9/22/2020 15:20	DO	0.03	mg/L
GS-AP-PZ-18	9/22/2020 15:20	Depth to Water Detail	125.97	ft
GS-AP-PZ-18	9/22/2020 15:20	Oxidation Reduction Potention	-147.66	mv
GS-AP-PZ-18	9/22/2020 15:20	pH	7	pH
GS-AP-PZ-18	9/22/2020 15:20	Temperature	17.99	C
GS-AP-PZ-18	9/22/2020 15:20	Turbidity	2.12	NTU
GS-AP-PZ-18	9/22/2020 15:25	Conductivity	1094.45	uS/cm
GS-AP-PZ-18	9/22/2020 15:25	DO	0.04	mg/L
GS-AP-PZ-18	9/22/2020 15:25	Depth to Water Detail	125.97	ft
GS-AP-PZ-18	9/22/2020 15:25	Oxidation Reduction Potention	-145.19	mv
GS-AP-PZ-18	9/22/2020 15:25	pH	7	pH

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-PZ-18	9/22/2020 15:25	Temperature	17.9	C
GS-AP-PZ-18	9/22/2020 15:25	Turbidity	2.24	NTU

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-8	9/21/2020 11:15	Conductivity	111.42	uS/cm
GS-AP-MW-8	9/21/2020 11:15	DO	1.96	mg/L
GS-AP-MW-8	9/21/2020 11:15	Depth to Water Detail	45.68	ft
GS-AP-MW-8	9/21/2020 11:15	Oxidation Reduction Potention	129.65	mv
GS-AP-MW-8	9/21/2020 11:15	pH	5.76	pH
GS-AP-MW-8	9/21/2020 11:15	Temperature	20.08	C
GS-AP-MW-8	9/21/2020 11:15	Turbidity	5.72	NTU
GS-AP-MW-8	9/21/2020 11:20	Conductivity	110.43	uS/cm
GS-AP-MW-8	9/21/2020 11:20	DO	1.98	mg/L
GS-AP-MW-8	9/21/2020 11:20	Depth to Water Detail	45.91	ft
GS-AP-MW-8	9/21/2020 11:20	Oxidation Reduction Potention	119.52	mv
GS-AP-MW-8	9/21/2020 11:20	pH	5.79	pH
GS-AP-MW-8	9/21/2020 11:20	Temperature	20.14	C
GS-AP-MW-8	9/21/2020 11:20	Turbidity	4.27	NTU
GS-AP-MW-8	9/21/2020 11:25	Conductivity	103.11	uS/cm
GS-AP-MW-8	9/21/2020 11:25	DO	2.06	mg/L
GS-AP-MW-8	9/21/2020 11:25	Depth to Water Detail	46.06	ft
GS-AP-MW-8	9/21/2020 11:25	Oxidation Reduction Potention	112.36	mv
GS-AP-MW-8	9/21/2020 11:25	pH	5.79	pH
GS-AP-MW-8	9/21/2020 11:25	Temperature	20.11	C
GS-AP-MW-8	9/21/2020 11:25	Turbidity	2.42	NTU
GS-AP-MW-8	9/21/2020 11:30	Conductivity	100.71	uS/cm
GS-AP-MW-8	9/21/2020 11:30	DO	2.09	mg/L
GS-AP-MW-8	9/21/2020 11:30	Depth to Water Detail	46.29	ft
GS-AP-MW-8	9/21/2020 11:30	Oxidation Reduction Potention	114.23	mv
GS-AP-MW-8	9/21/2020 11:30	pH	5.74	pH
GS-AP-MW-8	9/21/2020 11:30	Temperature	20.18	C
GS-AP-MW-8	9/21/2020 11:30	Turbidity	2.63	NTU
GS-AP-MW-8	9/21/2020 11:35	Conductivity	98.51	uS/cm
GS-AP-MW-8	9/21/2020 11:35	DO	2.11	mg/L
GS-AP-MW-8	9/21/2020 11:35	Depth to Water Detail	46.43	ft
GS-AP-MW-8	9/21/2020 11:35	Oxidation Reduction Potention	109.49	mv
GS-AP-MW-8	9/21/2020 11:35	pH	5.75	pH
GS-AP-MW-8	9/21/2020 11:35	Temperature	20.19	C
GS-AP-MW-8	9/21/2020 11:35	Turbidity	3.18	NTU
GS-AP-MW-8	9/21/2020 11:40	Conductivity	98.05	uS/cm
GS-AP-MW-8	9/21/2020 11:40	DO	2.08	mg/L
GS-AP-MW-8	9/21/2020 11:40	Depth to Water Detail	46.61	ft
GS-AP-MW-8	9/21/2020 11:40	Oxidation Reduction Potention	110.53	mv
GS-AP-MW-8	9/21/2020 11:40	pH	5.76	pH
GS-AP-MW-8	9/21/2020 11:40	Temperature	20.25	C
GS-AP-MW-8	9/21/2020 11:40	Turbidity	3.26	NTU
GS-AP-MW-8	9/21/2020 11:45	Conductivity	97.79	uS/cm
GS-AP-MW-8	9/21/2020 11:45	DO	2.02	mg/L
GS-AP-MW-8	9/21/2020 11:45	Depth to Water Detail	46.79	ft
GS-AP-MW-8	9/21/2020 11:45	Oxidation Reduction Potention	109.65	mv

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-8	9/21/2020 11:45	pH	5.77	pH
GS-AP-MW-8	9/21/2020 11:45	Temperature	20.22	C
GS-AP-MW-8	9/21/2020 11:45	Turbidity	4.14	NTU
GS-AP-MW-8	9/21/2020 11:50	Conductivity	97.29	uS/cm
GS-AP-MW-8	9/21/2020 11:50	DO	1.98	mg/L
GS-AP-MW-8	9/21/2020 11:50	Depth to Water Detail	46.99	ft
GS-AP-MW-8	9/21/2020 11:50	Oxidation Reduction Potention	118.8	mv
GS-AP-MW-8	9/21/2020 11:50	pH	5.77	pH
GS-AP-MW-8	9/21/2020 11:50	Temperature	20.22	C
GS-AP-MW-8	9/21/2020 11:50	Turbidity	3.83	NTU
GS-AP-MW-8	9/21/2020 11:55	Conductivity	96.43	uS/cm
GS-AP-MW-8	9/21/2020 11:55	DO	1.87	mg/L
GS-AP-MW-8	9/21/2020 11:55	Depth to Water Detail	47.12	ft
GS-AP-MW-8	9/21/2020 11:55	Oxidation Reduction Potention	120.17	mv
GS-AP-MW-8	9/21/2020 11:55	pH	5.78	pH
GS-AP-MW-8	9/21/2020 11:55	Temperature	20.5	C
GS-AP-MW-8	9/21/2020 11:55	Turbidity	4.09	NTU
GS-AP-MW-8	9/21/2020 12:00	Conductivity	95.57	uS/cm
GS-AP-MW-8	9/21/2020 12:00	DO	1.77	mg/L
GS-AP-MW-8	9/21/2020 12:00	Depth to Water Detail	47.3	ft
GS-AP-MW-8	9/21/2020 12:00	Oxidation Reduction Potention	119.38	mv
GS-AP-MW-8	9/21/2020 12:00	pH	5.74	pH
GS-AP-MW-8	9/21/2020 12:00	Temperature	20.32	C
GS-AP-MW-8	9/21/2020 12:00	Turbidity	4.25	NTU
GS-AP-MW-8	9/21/2020 12:05	Conductivity	94.1	uS/cm
GS-AP-MW-8	9/21/2020 12:05	DO	1.68	mg/L
GS-AP-MW-8	9/21/2020 12:05	Depth to Water Detail	47.41	ft
GS-AP-MW-8	9/21/2020 12:05	Oxidation Reduction Potention	117.41	mv
GS-AP-MW-8	9/21/2020 12:05	pH	5.75	pH
GS-AP-MW-8	9/21/2020 12:05	Temperature	20.34	C
GS-AP-MW-8	9/21/2020 12:05	Turbidity	4.22	NTU

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-26H	9/21/2020 13:57	Conductivity	499.22	uS/cm
GS-AP-MW-26H	9/21/2020 13:57	DO	1.39	mg/L
GS-AP-MW-26H	9/21/2020 13:57	Depth to Water Detail	96.94	ft
GS-AP-MW-26H	9/21/2020 13:57	Oxidation Reduction Potention	-67.06	mv
GS-AP-MW-26H	9/21/2020 13:57	pH	7.21	pH
GS-AP-MW-26H	9/21/2020 13:57	Temperature	21.63	C
GS-AP-MW-26H	9/21/2020 13:57	Turbidity	60.7	NTU
GS-AP-MW-26H	9/21/2020 14:02	Conductivity	623.95	uS/cm
GS-AP-MW-26H	9/21/2020 14:02	DO	0.67	mg/L
GS-AP-MW-26H	9/21/2020 14:02	Depth to Water Detail	97.72	ft
GS-AP-MW-26H	9/21/2020 14:02	Oxidation Reduction Potention	-116.63	mv
GS-AP-MW-26H	9/21/2020 14:02	pH	7.21	pH
GS-AP-MW-26H	9/21/2020 14:02	Temperature	21.39	C
GS-AP-MW-26H	9/21/2020 14:02	Turbidity	39.9	NTU
GS-AP-MW-26H	9/21/2020 14:07	Conductivity	521.22	uS/cm
GS-AP-MW-26H	9/21/2020 14:07	DO	0.54	mg/L
GS-AP-MW-26H	9/21/2020 14:07	Depth to Water Detail	99.19	ft
GS-AP-MW-26H	9/21/2020 14:07	Oxidation Reduction Potention	-118.42	mv
GS-AP-MW-26H	9/21/2020 14:07	pH	7.22	pH
GS-AP-MW-26H	9/21/2020 14:07	Temperature	21.23	C
GS-AP-MW-26H	9/21/2020 14:07	Turbidity	28.2	NTU
GS-AP-MW-26H	9/21/2020 14:12	Conductivity	469.48	uS/cm
GS-AP-MW-26H	9/21/2020 14:12	DO	0.55	mg/L
GS-AP-MW-26H	9/21/2020 14:12	Depth to Water Detail	99.86	ft
GS-AP-MW-26H	9/21/2020 14:12	Oxidation Reduction Potention	-115.41	mv
GS-AP-MW-26H	9/21/2020 14:12	pH	7.2	pH
GS-AP-MW-26H	9/21/2020 14:12	Temperature	20.91	C
GS-AP-MW-26H	9/21/2020 14:12	Turbidity	33.9	NTU
GS-AP-MW-26H	9/21/2020 14:17	Conductivity	426.66	uS/cm
GS-AP-MW-26H	9/21/2020 14:17	DO	0.58	mg/L
GS-AP-MW-26H	9/21/2020 14:17	Depth to Water Detail	100.49	ft
GS-AP-MW-26H	9/21/2020 14:17	Oxidation Reduction Potention	-112.75	mv
GS-AP-MW-26H	9/21/2020 14:17	pH	7.2	pH
GS-AP-MW-26H	9/21/2020 14:17	Temperature	20.99	C
GS-AP-MW-26H	9/21/2020 14:17	Turbidity	34.1	NTU
GS-AP-MW-26H	9/21/2020 14:22	Conductivity	402.49	uS/cm
GS-AP-MW-26H	9/21/2020 14:22	DO	0.63	mg/L
GS-AP-MW-26H	9/21/2020 14:22	Depth to Water Detail	100.84	ft
GS-AP-MW-26H	9/21/2020 14:22	Oxidation Reduction Potention	-110.2	mv
GS-AP-MW-26H	9/21/2020 14:22	pH	7.2	pH
GS-AP-MW-26H	9/21/2020 14:22	Temperature	20.84	C
GS-AP-MW-26H	9/21/2020 14:22	Turbidity	37.2	NTU
GS-AP-MW-26H	9/21/2020 14:27	Conductivity	391.26	uS/cm
GS-AP-MW-26H	9/21/2020 14:27	DO	0.64	mg/L
GS-AP-MW-26H	9/21/2020 14:27	Depth to Water Detail	101.21	ft
GS-AP-MW-26H	9/21/2020 14:27	Oxidation Reduction Potention	-109.47	mv

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-26H	9/21/2020 14:27	pH	7.21	pH
GS-AP-MW-26H	9/21/2020 14:27	Temperature	20.87	C
GS-AP-MW-26H	9/21/2020 14:27	Turbidity	40.9	NTU
GS-AP-MW-26H	9/21/2020 14:32	Conductivity	389.69	uS/cm
GS-AP-MW-26H	9/21/2020 14:32	DO	0.69	mg/L
GS-AP-MW-26H	9/21/2020 14:32	Depth to Water Detail	101.61	ft
GS-AP-MW-26H	9/21/2020 14:32	Oxidation Reduction Potention	-110.04	mv
GS-AP-MW-26H	9/21/2020 14:32	pH	7.22	pH
GS-AP-MW-26H	9/21/2020 14:32	Temperature	20.98	C
GS-AP-MW-26H	9/21/2020 14:32	Turbidity	66.2	NTU
GS-AP-MW-26H	9/21/2020 14:37	Conductivity	374.14	uS/cm
GS-AP-MW-26H	9/21/2020 14:37	DO	0.68	mg/L
GS-AP-MW-26H	9/21/2020 14:37	Depth to Water Detail	102.08	ft
GS-AP-MW-26H	9/21/2020 14:37	Oxidation Reduction Potention	-109.26	mv
GS-AP-MW-26H	9/21/2020 14:37	pH	7.23	pH
GS-AP-MW-26H	9/21/2020 14:37	Temperature	20.99	C
GS-AP-MW-26H	9/21/2020 14:37	Turbidity	58.3	NTU
GS-AP-MW-26H	9/21/2020 14:42	Conductivity	371.34	uS/cm
GS-AP-MW-26H	9/21/2020 14:42	DO	0.68	mg/L
GS-AP-MW-26H	9/21/2020 14:42	Depth to Water Detail	102.46	ft
GS-AP-MW-26H	9/21/2020 14:42	Oxidation Reduction Potention	-109.08	mv
GS-AP-MW-26H	9/21/2020 14:42	pH	7.24	pH
GS-AP-MW-26H	9/21/2020 14:42	Temperature	20.76	C
GS-AP-MW-26H	9/21/2020 14:42	Turbidity	64.8	NTU
GS-AP-MW-26H	9/21/2020 14:47	Conductivity	456.72	uS/cm
GS-AP-MW-26H	9/21/2020 14:47	DO	0.71	mg/L
GS-AP-MW-26H	9/21/2020 14:47	Depth to Water Detail	102.79	ft
GS-AP-MW-26H	9/21/2020 14:47	Oxidation Reduction Potention	-108.65	mv
GS-AP-MW-26H	9/21/2020 14:47	pH	7.24	pH
GS-AP-MW-26H	9/21/2020 14:47	Temperature	20.73	C
GS-AP-MW-26H	9/21/2020 14:47	Turbidity	>10	NTU
GS-AP-MW-26H	9/21/2020 14:52	Conductivity	424.86	uS/cm
GS-AP-MW-26H	9/21/2020 14:52	DO	0.73	mg/L
GS-AP-MW-26H	9/21/2020 14:52	Depth to Water Detail	103.11	ft
GS-AP-MW-26H	9/21/2020 14:52	Oxidation Reduction Potention	-108.82	mv
GS-AP-MW-26H	9/21/2020 14:52	pH	7.25	pH
GS-AP-MW-26H	9/21/2020 14:52	Temperature	20.96	C
GS-AP-MW-26H	9/21/2020 14:52	Turbidity	>10	NTU
GS-AP-MW-26H	9/21/2020 14:57	Conductivity	428.19	uS/cm
GS-AP-MW-26H	9/21/2020 14:57	DO	0.7	mg/L
GS-AP-MW-26H	9/21/2020 14:57	Depth to Water Detail	103.33	ft
GS-AP-MW-26H	9/21/2020 14:57	Oxidation Reduction Potention	-109.91	mv
GS-AP-MW-26H	9/21/2020 14:57	pH	7.27	pH
GS-AP-MW-26H	9/21/2020 14:57	Temperature	21.05	C
GS-AP-MW-26H	9/21/2020 14:57	Turbidity	>10	NTU
GS-AP-MW-26H	9/21/2020 15:02	Conductivity	406.81	uS/cm

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-26H	9/21/2020 15:02	DO	0.71	mg/L
GS-AP-MW-26H	9/21/2020 15:02	Depth to Water Detail	103.56	ft
GS-AP-MW-26H	9/21/2020 15:02	Oxidation Reduction Potention	-109.7	mv
GS-AP-MW-26H	9/21/2020 15:02	pH	7.27	pH
GS-AP-MW-26H	9/21/2020 15:02	Temperature	21.1	C
GS-AP-MW-26H	9/21/2020 15:02	Turbidity	>10	NTU
GS-AP-MW-26H	9/21/2020 15:07	Conductivity	397.28	uS/cm
GS-AP-MW-26H	9/21/2020 15:07	DO	0.7	mg/L
GS-AP-MW-26H	9/21/2020 15:07	Depth to Water Detail	103.91	ft
GS-AP-MW-26H	9/21/2020 15:07	Oxidation Reduction Potention	-110.48	mv
GS-AP-MW-26H	9/21/2020 15:07	pH	7.28	pH
GS-AP-MW-26H	9/21/2020 15:07	Temperature	21.06	C
GS-AP-MW-26H	9/21/2020 15:07	Turbidity	>10	NTU
GS-AP-MW-26H	9/21/2020 15:12	Conductivity	395.32	uS/cm
GS-AP-MW-26H	9/21/2020 15:12	DO	0.71	mg/L
GS-AP-MW-26H	9/21/2020 15:12	Depth to Water Detail	104.06	ft
GS-AP-MW-26H	9/21/2020 15:12	Oxidation Reduction Potention	-109.65	mv
GS-AP-MW-26H	9/21/2020 15:12	pH	7.27	pH
GS-AP-MW-26H	9/21/2020 15:12	Temperature	20.84	C
GS-AP-MW-26H	9/21/2020 15:12	Turbidity	>10	NTU
GS-AP-MW-26H	9/21/2020 15:17	Conductivity	392.78	uS/cm
GS-AP-MW-26H	9/21/2020 15:17	DO	0.69	mg/L
GS-AP-MW-26H	9/21/2020 15:17	Depth to Water Detail	104.46	ft
GS-AP-MW-26H	9/21/2020 15:17	Oxidation Reduction Potention	-109.33	mv
GS-AP-MW-26H	9/21/2020 15:17	pH	7.28	pH
GS-AP-MW-26H	9/21/2020 15:17	Temperature	20.5	C
GS-AP-MW-26H	9/21/2020 15:17	Turbidity	>10	NTU
GS-AP-MW-26H	9/21/2020 15:22	Conductivity	382.74	uS/cm
GS-AP-MW-26H	9/21/2020 15:22	DO	0.71	mg/L
GS-AP-MW-26H	9/21/2020 15:22	Depth to Water Detail	104.62	ft
GS-AP-MW-26H	9/21/2020 15:22	Oxidation Reduction Potention	-108.07	mv
GS-AP-MW-26H	9/21/2020 15:22	pH	7.27	pH
GS-AP-MW-26H	9/21/2020 15:22	Temperature	20.63	C
GS-AP-MW-26H	9/21/2020 15:22	Turbidity	>10	NTU
GS-AP-MW-26H	9/21/2020 15:27	Conductivity	466.79	uS/cm
GS-AP-MW-26H	9/21/2020 15:27	DO	0.71	mg/L
GS-AP-MW-26H	9/21/2020 15:27	Depth to Water Detail	104.79	ft
GS-AP-MW-26H	9/21/2020 15:27	Oxidation Reduction Potention	-107.21	mv
GS-AP-MW-26H	9/21/2020 15:27	pH	7.26	pH
GS-AP-MW-26H	9/21/2020 15:27	Temperature	20.59	C
GS-AP-MW-26H	9/21/2020 15:27	Turbidity	>10	NTU
GS-AP-MW-26H	9/21/2020 15:32	Conductivity	445.81	uS/cm
GS-AP-MW-26H	9/21/2020 15:32	DO	0.72	mg/L
GS-AP-MW-26H	9/21/2020 15:32	Depth to Water Detail	105.16	ft
GS-AP-MW-26H	9/21/2020 15:32	Oxidation Reduction Potention	-106.15	mv
GS-AP-MW-26H	9/21/2020 15:32	pH	7.25	pH

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-26H	9/21/2020 15:32	Temperature	20.65	C
GS-AP-MW-26H	9/21/2020 15:32	Turbidity	>10	NTU
GS-AP-MW-26H	9/21/2020 15:37	Conductivity	434.75	uS/cm
GS-AP-MW-26H	9/21/2020 15:37	DO	0.73	mg/L
GS-AP-MW-26H	9/21/2020 15:37	Depth to Water Detail	105.27	ft
GS-AP-MW-26H	9/21/2020 15:37	Oxidation Reduction Potention	-105.37	mv
GS-AP-MW-26H	9/21/2020 15:37	pH	7.25	pH
GS-AP-MW-26H	9/21/2020 15:37	Temperature	20.7	C
GS-AP-MW-26H	9/21/2020 15:37	Turbidity	>10	NTU
GS-AP-MW-26H	9/21/2020 15:42	Conductivity	427.04	uS/cm
GS-AP-MW-26H	9/21/2020 15:42	DO	0.73	mg/L
GS-AP-MW-26H	9/21/2020 15:42	Depth to Water Detail	105.42	ft
GS-AP-MW-26H	9/21/2020 15:42	Oxidation Reduction Potention	-104.32	mv
GS-AP-MW-26H	9/21/2020 15:42	pH	7.25	pH
GS-AP-MW-26H	9/21/2020 15:42	Temperature	20.76	C
GS-AP-MW-26H	9/21/2020 15:42	Turbidity	>10	NTU
GS-AP-MW-26H	9/21/2020 15:47	Conductivity	419.01	uS/cm
GS-AP-MW-26H	9/21/2020 15:47	DO	0.75	mg/L
GS-AP-MW-26H	9/21/2020 15:47	Depth to Water Detail	105.53	ft
GS-AP-MW-26H	9/21/2020 15:47	Oxidation Reduction Potention	-103.12	mv
GS-AP-MW-26H	9/21/2020 15:47	pH	7.25	pH
GS-AP-MW-26H	9/21/2020 15:47	Temperature	20.49	C
GS-AP-MW-26H	9/21/2020 15:47	Turbidity	>10	NTU
GS-AP-MW-26H	9/21/2020 15:52	Conductivity	417.46	uS/cm
GS-AP-MW-26H	9/21/2020 15:52	DO	0.74	mg/L
GS-AP-MW-26H	9/21/2020 15:52	Depth to Water Detail	105.6	ft
GS-AP-MW-26H	9/21/2020 15:52	Oxidation Reduction Potention	-103.05	mv
GS-AP-MW-26H	9/21/2020 15:52	pH	7.25	pH
GS-AP-MW-26H	9/21/2020 15:52	Temperature	20.38	C
GS-AP-MW-26H	9/21/2020 15:52	Turbidity	>10	NTU

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-40H	9/22/2020 9:33	Conductivity	1748.18	uS/cm
GS-AP-MW-40H	9/22/2020 9:33	DO	0.49	mg/L
GS-AP-MW-40H	9/22/2020 9:33	Depth to Water Detail	83.46	ft
GS-AP-MW-40H	9/22/2020 9:33	Oxidation Reduction Potention	-4.2	mv
GS-AP-MW-40H	9/22/2020 9:33	pH	6.67	pH
GS-AP-MW-40H	9/22/2020 9:33	Temperature	18.78	C
GS-AP-MW-40H	9/22/2020 9:33	Turbidity	15.1	NTU
GS-AP-MW-40H	9/22/2020 9:38	Conductivity	1730.38	uS/cm
GS-AP-MW-40H	9/22/2020 9:38	DO	0.43	mg/L
GS-AP-MW-40H	9/22/2020 9:38	Depth to Water Detail	83.52	ft
GS-AP-MW-40H	9/22/2020 9:38	Oxidation Reduction Potention	-31.2	mv
GS-AP-MW-40H	9/22/2020 9:38	pH	6.66	pH
GS-AP-MW-40H	9/22/2020 9:38	Temperature	18.82	C
GS-AP-MW-40H	9/22/2020 9:38	Turbidity	7.6	NTU
GS-AP-MW-40H	9/22/2020 9:43	Conductivity	1712.01	uS/cm
GS-AP-MW-40H	9/22/2020 9:43	DO	0.4	mg/L
GS-AP-MW-40H	9/22/2020 9:43	Depth to Water Detail	83.56	ft
GS-AP-MW-40H	9/22/2020 9:43	Oxidation Reduction Potention	-48.26	mv
GS-AP-MW-40H	9/22/2020 9:43	pH	6.65	pH
GS-AP-MW-40H	9/22/2020 9:43	Temperature	18.8	C
GS-AP-MW-40H	9/22/2020 9:43	Turbidity	6.19	NTU
GS-AP-MW-40H	9/22/2020 9:48	Conductivity	1704.83	uS/cm
GS-AP-MW-40H	9/22/2020 9:48	DO	0.4	mg/L
GS-AP-MW-40H	9/22/2020 9:48	Depth to Water Detail	83.61	ft
GS-AP-MW-40H	9/22/2020 9:48	Oxidation Reduction Potention	-58.57	mv
GS-AP-MW-40H	9/22/2020 9:48	pH	6.64	pH
GS-AP-MW-40H	9/22/2020 9:48	Temperature	18.8	C
GS-AP-MW-40H	9/22/2020 9:48	Turbidity	5.49	NTU
GS-AP-MW-40H	9/22/2020 9:53	Conductivity	1690.9	uS/cm
GS-AP-MW-40H	9/22/2020 9:53	DO	0.39	mg/L
GS-AP-MW-40H	9/22/2020 9:53	Depth to Water Detail	83.7	ft
GS-AP-MW-40H	9/22/2020 9:53	Oxidation Reduction Potention	-66.34	mv
GS-AP-MW-40H	9/22/2020 9:53	pH	6.64	pH
GS-AP-MW-40H	9/22/2020 9:53	Temperature	18.88	C
GS-AP-MW-40H	9/22/2020 9:53	Turbidity	4.76	NTU

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-9V	9/22/2020 11:35	Conductivity	1361.01	uS/cm
GS-AP-MW-9V	9/22/2020 11:35	DO	0.71	mg/L
GS-AP-MW-9V	9/22/2020 11:35	Depth to Water Detail	57.89	ft
GS-AP-MW-9V	9/22/2020 11:35	Oxidation Reduction Potention	-180.98	mv
GS-AP-MW-9V	9/22/2020 11:35	pH	7.33	pH
GS-AP-MW-9V	9/22/2020 11:35	Temperature	18.97	C
GS-AP-MW-9V	9/22/2020 11:35	Turbidity	4.06	NTU
GS-AP-MW-9V	9/22/2020 11:40	Conductivity	1336.94	uS/cm
GS-AP-MW-9V	9/22/2020 11:40	DO	0.59	mg/L
GS-AP-MW-9V	9/22/2020 11:40	Depth to Water Detail	58.56	ft
GS-AP-MW-9V	9/22/2020 11:40	Oxidation Reduction Potention	-211.68	mv
GS-AP-MW-9V	9/22/2020 11:40	pH	7.34	pH
GS-AP-MW-9V	9/22/2020 11:40	Temperature	18.92	C
GS-AP-MW-9V	9/22/2020 11:40	Turbidity	2.57	NTU
GS-AP-MW-9V	9/22/2020 11:45	Conductivity	1291.4	uS/cm
GS-AP-MW-9V	9/22/2020 11:45	DO	0.5	mg/L
GS-AP-MW-9V	9/22/2020 11:45	Depth to Water Detail	59.11	ft
GS-AP-MW-9V	9/22/2020 11:45	Oxidation Reduction Potention	-230.88	mv
GS-AP-MW-9V	9/22/2020 11:45	pH	7.35	pH
GS-AP-MW-9V	9/22/2020 11:45	Temperature	18.98	C
GS-AP-MW-9V	9/22/2020 11:45	Turbidity	2	NTU
GS-AP-MW-9V	9/22/2020 11:50	Conductivity	1193.82	uS/cm
GS-AP-MW-9V	9/22/2020 11:50	DO	0.46	mg/L
GS-AP-MW-9V	9/22/2020 11:50	Depth to Water Detail	59.64	ft
GS-AP-MW-9V	9/22/2020 11:50	Oxidation Reduction Potention	-242.61	mv
GS-AP-MW-9V	9/22/2020 11:50	pH	7.35	pH
GS-AP-MW-9V	9/22/2020 11:50	Temperature	19.03	C
GS-AP-MW-9V	9/22/2020 11:50	Turbidity	2.1	NTU
GS-AP-MW-9V	9/22/2020 11:55	Conductivity	1031.96	uS/cm
GS-AP-MW-9V	9/22/2020 11:55	DO	0.42	mg/L
GS-AP-MW-9V	9/22/2020 11:55	Depth to Water Detail	60.02	ft
GS-AP-MW-9V	9/22/2020 11:55	Oxidation Reduction Potention	-247.04	mv
GS-AP-MW-9V	9/22/2020 11:55	pH	7.34	pH
GS-AP-MW-9V	9/22/2020 11:55	Temperature	18.96	C
GS-AP-MW-9V	9/22/2020 11:55	Turbidity	2.61	NTU
GS-AP-MW-9V	9/22/2020 12:00	Conductivity	875.66	uS/cm
GS-AP-MW-9V	9/22/2020 12:00	DO	0.42	mg/L
GS-AP-MW-9V	9/22/2020 12:00	Depth to Water Detail	60.39	ft
GS-AP-MW-9V	9/22/2020 12:00	Oxidation Reduction Potention	-248.58	mv
GS-AP-MW-9V	9/22/2020 12:00	pH	7.32	pH
GS-AP-MW-9V	9/22/2020 12:00	Temperature	18.94	C
GS-AP-MW-9V	9/22/2020 12:00	Turbidity	2.16	NTU
GS-AP-MW-9V	9/22/2020 12:05	Conductivity	762.77	uS/cm
GS-AP-MW-9V	9/22/2020 12:05	DO	0.41	mg/L
GS-AP-MW-9V	9/22/2020 12:05	Depth to Water Detail	60.71	ft
GS-AP-MW-9V	9/22/2020 12:05	Oxidation Reduction Potention	-251.48	mv

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-9V	9/22/2020 12:05	pH	7.29	pH
GS-AP-MW-9V	9/22/2020 12:05	Temperature	18.83	C
GS-AP-MW-9V	9/22/2020 12:05	Turbidity	2.74	NTU
GS-AP-MW-9V	9/22/2020 12:10	Conductivity	689.13	uS/cm
GS-AP-MW-9V	9/22/2020 12:10	DO	0.43	mg/L
GS-AP-MW-9V	9/22/2020 12:10	Depth to Water Detail	60.96	ft
GS-AP-MW-9V	9/22/2020 12:10	Oxidation Reduction Potention	-255.09	mv
GS-AP-MW-9V	9/22/2020 12:10	pH	7.27	pH
GS-AP-MW-9V	9/22/2020 12:10	Temperature	18.86	C
GS-AP-MW-9V	9/22/2020 12:10	Turbidity	2.36	NTU
GS-AP-MW-9V	9/22/2020 12:15	Conductivity	632.64	uS/cm
GS-AP-MW-9V	9/22/2020 12:15	DO	0.45	mg/L
GS-AP-MW-9V	9/22/2020 12:15	Depth to Water Detail	61.21	ft
GS-AP-MW-9V	9/22/2020 12:15	Oxidation Reduction Potention	-256.27	mv
GS-AP-MW-9V	9/22/2020 12:15	pH	7.25	pH
GS-AP-MW-9V	9/22/2020 12:15	Temperature	18.92	C
GS-AP-MW-9V	9/22/2020 12:15	Turbidity	2.36	NTU
GS-AP-MW-9V	9/22/2020 12:20	Conductivity	590.71	uS/cm
GS-AP-MW-9V	9/22/2020 12:20	DO	0.49	mg/L
GS-AP-MW-9V	9/22/2020 12:20	Depth to Water Detail	61.34	ft
GS-AP-MW-9V	9/22/2020 12:20	Oxidation Reduction Potention	-255.94	mv
GS-AP-MW-9V	9/22/2020 12:20	pH	7.22	pH
GS-AP-MW-9V	9/22/2020 12:20	Temperature	18.88	C
GS-AP-MW-9V	9/22/2020 12:20	Turbidity	2.64	NTU
GS-AP-MW-9V	9/22/2020 12:25	Conductivity	558.18	uS/cm
GS-AP-MW-9V	9/22/2020 12:25	DO	0.52	mg/L
GS-AP-MW-9V	9/22/2020 12:25	Depth to Water Detail	61.54	ft
GS-AP-MW-9V	9/22/2020 12:25	Oxidation Reduction Potention	-256.6	mv
GS-AP-MW-9V	9/22/2020 12:25	pH	7.2	pH
GS-AP-MW-9V	9/22/2020 12:25	Temperature	18.95	C
GS-AP-MW-9V	9/22/2020 12:25	Turbidity	2.67	NTU
GS-AP-MW-9V	9/22/2020 12:30	Conductivity	528.49	uS/cm
GS-AP-MW-9V	9/22/2020 12:30	DO	0.55	mg/L
GS-AP-MW-9V	9/22/2020 12:30	Depth to Water Detail	61.69	ft
GS-AP-MW-9V	9/22/2020 12:30	Oxidation Reduction Potention	-255.15	mv
GS-AP-MW-9V	9/22/2020 12:30	pH	7.19	pH
GS-AP-MW-9V	9/22/2020 12:30	Temperature	18.9	C
GS-AP-MW-9V	9/22/2020 12:30	Turbidity	3.17	NTU
GS-AP-MW-9V	9/22/2020 12:35	Conductivity	503.6	uS/cm
GS-AP-MW-9V	9/22/2020 12:35	DO	0.58	mg/L
GS-AP-MW-9V	9/22/2020 12:35	Depth to Water Detail	61.81	ft
GS-AP-MW-9V	9/22/2020 12:35	Oxidation Reduction Potention	-252.46	mv
GS-AP-MW-9V	9/22/2020 12:35	pH	7.17	pH
GS-AP-MW-9V	9/22/2020 12:35	Temperature	18.89	C
GS-AP-MW-9V	9/22/2020 12:35	Turbidity	2.94	NTU
GS-AP-MW-9V	9/22/2020 12:40	Conductivity	484.01	uS/cm

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-9V	9/22/2020 12:40	DO	0.59	mg/L
GS-AP-MW-9V	9/22/2020 12:40	Depth to Water Detail	61.89	ft
GS-AP-MW-9V	9/22/2020 12:40	Oxidation Reduction Potention	-252.03	mv
GS-AP-MW-9V	9/22/2020 12:40	pH	7.15	pH
GS-AP-MW-9V	9/22/2020 12:40	Temperature	18.96	C
GS-AP-MW-9V	9/22/2020 12:40	Turbidity	3.08	NTU
GS-AP-MW-9V	9/22/2020 12:45	Conductivity	465.88	uS/cm
GS-AP-MW-9V	9/22/2020 12:45	DO	0.62	mg/L
GS-AP-MW-9V	9/22/2020 12:45	Depth to Water Detail	62.06	ft
GS-AP-MW-9V	9/22/2020 12:45	Oxidation Reduction Potention	-249.34	mv
GS-AP-MW-9V	9/22/2020 12:45	pH	7.11	pH
GS-AP-MW-9V	9/22/2020 12:45	Temperature	19.04	C
GS-AP-MW-9V	9/22/2020 12:45	Turbidity	3.13	NTU
GS-AP-MW-9V	9/22/2020 12:50	Conductivity	448.24	uS/cm
GS-AP-MW-9V	9/22/2020 12:50	DO	0.63	mg/L
GS-AP-MW-9V	9/22/2020 12:50	Depth to Water Detail	61.98	ft
GS-AP-MW-9V	9/22/2020 12:50	Oxidation Reduction Potention	-249.22	mv
GS-AP-MW-9V	9/22/2020 12:50	pH	7.11	pH
GS-AP-MW-9V	9/22/2020 12:50	Temperature	18.99	C
GS-AP-MW-9V	9/22/2020 12:50	Turbidity	2.68	NTU
GS-AP-MW-9V	9/22/2020 12:55	Conductivity	435.56	uS/cm
GS-AP-MW-9V	9/22/2020 12:55	DO	0.65	mg/L
GS-AP-MW-9V	9/22/2020 12:55	Depth to Water Detail	62.14	ft
GS-AP-MW-9V	9/22/2020 12:55	Oxidation Reduction Potention	-248.14	mv
GS-AP-MW-9V	9/22/2020 12:55	pH	7.1	pH
GS-AP-MW-9V	9/22/2020 12:55	Temperature	19	C
GS-AP-MW-9V	9/22/2020 12:55	Turbidity	2.93	NTU
GS-AP-MW-9V	9/22/2020 13:00	Conductivity	430.38	uS/cm
GS-AP-MW-9V	9/22/2020 13:00	DO	0.65	mg/L
GS-AP-MW-9V	9/22/2020 13:00	Depth to Water Detail	62.21	ft
GS-AP-MW-9V	9/22/2020 13:00	Oxidation Reduction Potention	-246.83	mv
GS-AP-MW-9V	9/22/2020 13:00	pH	7.08	pH
GS-AP-MW-9V	9/22/2020 13:00	Temperature	19.07	C
GS-AP-MW-9V	9/22/2020 13:00	Turbidity	2.8	NTU

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-38H	9/22/2020 14:30	Conductivity	1000.13	uS/cm
GS-AP-MW-38H	9/22/2020 14:30	DO	0.22	mg/L
GS-AP-MW-38H	9/22/2020 14:30	Depth to Water Detail	48.44	ft
GS-AP-MW-38H	9/22/2020 14:30	Oxidation Reduction Potention	-263.39	mv
GS-AP-MW-38H	9/22/2020 14:30	pH	7.75	pH
GS-AP-MW-38H	9/22/2020 14:30	Temperature	19.13	C
GS-AP-MW-38H	9/22/2020 14:30	Turbidity	9.28	NTU
GS-AP-MW-38H	9/22/2020 14:35	Conductivity	1003.9	uS/cm
GS-AP-MW-38H	9/22/2020 14:35	DO	0.19	mg/L
GS-AP-MW-38H	9/22/2020 14:35	Depth to Water Detail	48.44	ft
GS-AP-MW-38H	9/22/2020 14:35	Oxidation Reduction Potention	-262.13	mv
GS-AP-MW-38H	9/22/2020 14:35	pH	7.8	pH
GS-AP-MW-38H	9/22/2020 14:35	Temperature	18.97	C
GS-AP-MW-38H	9/22/2020 14:35	Turbidity	7.48	NTU
GS-AP-MW-38H	9/22/2020 14:40	Conductivity	889.78	uS/cm
GS-AP-MW-38H	9/22/2020 14:40	DO	0.19	mg/L
GS-AP-MW-38H	9/22/2020 14:40	Depth to Water Detail	48.44	ft
GS-AP-MW-38H	9/22/2020 14:40	Oxidation Reduction Potention	-259.58	mv
GS-AP-MW-38H	9/22/2020 14:40	pH	7.84	pH
GS-AP-MW-38H	9/22/2020 14:40	Temperature	18.97	C
GS-AP-MW-38H	9/22/2020 14:40	Turbidity	4.83	NTU
GS-AP-MW-38H	9/22/2020 14:45	Conductivity	784.29	uS/cm
GS-AP-MW-38H	9/22/2020 14:45	DO	0.19	mg/L
GS-AP-MW-38H	9/22/2020 14:45	Depth to Water Detail	48.44	ft
GS-AP-MW-38H	9/22/2020 14:45	Oxidation Reduction Potention	-257.97	mv
GS-AP-MW-38H	9/22/2020 14:45	pH	7.88	pH
GS-AP-MW-38H	9/22/2020 14:45	Temperature	19.1	C
GS-AP-MW-38H	9/22/2020 14:45	Turbidity	4.82	NTU
GS-AP-MW-38H	9/22/2020 14:50	Conductivity	718.37	uS/cm
GS-AP-MW-38H	9/22/2020 14:50	DO	0.19	mg/L
GS-AP-MW-38H	9/22/2020 14:50	Depth to Water Detail	48.44	ft
GS-AP-MW-38H	9/22/2020 14:50	Oxidation Reduction Potention	-256.33	mv
GS-AP-MW-38H	9/22/2020 14:50	pH	7.91	pH
GS-AP-MW-38H	9/22/2020 14:50	Temperature	19.08	C
GS-AP-MW-38H	9/22/2020 14:50	Turbidity	7.72	NTU
GS-AP-MW-38H	9/22/2020 14:55	Conductivity	630.62	uS/cm
GS-AP-MW-38H	9/22/2020 14:55	DO	0.19	mg/L
GS-AP-MW-38H	9/22/2020 14:55	Depth to Water Detail	48.44	ft
GS-AP-MW-38H	9/22/2020 14:55	Oxidation Reduction Potention	-252.1	mv
GS-AP-MW-38H	9/22/2020 14:55	pH	7.94	pH
GS-AP-MW-38H	9/22/2020 14:55	Temperature	19	C
GS-AP-MW-38H	9/22/2020 14:55	Turbidity	4.37	NTU
GS-AP-MW-38H	9/22/2020 15:00	Conductivity	636.41	uS/cm
GS-AP-MW-38H	9/22/2020 15:00	DO	0.2	mg/L
GS-AP-MW-38H	9/22/2020 15:00	Depth to Water Detail	48.44	ft
GS-AP-MW-38H	9/22/2020 15:00	Oxidation Reduction Potention	-252.68	mv

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-38H	9/22/2020 15:00	pH	7.94	pH
GS-AP-MW-38H	9/22/2020 15:00	Temperature	18.96	C
GS-AP-MW-38H	9/22/2020 15:00	Turbidity	4.16	NTU
GS-AP-MW-38H	9/22/2020 15:05	Conductivity	606.59	uS/cm
GS-AP-MW-38H	9/22/2020 15:05	DO	0.2	mg/L
GS-AP-MW-38H	9/22/2020 15:05	Depth to Water Detail	48.44	ft
GS-AP-MW-38H	9/22/2020 15:05	Oxidation Reduction Potention	-251.52	mv
GS-AP-MW-38H	9/22/2020 15:05	pH	7.96	pH
GS-AP-MW-38H	9/22/2020 15:05	Temperature	18.91	C
GS-AP-MW-38H	9/22/2020 15:05	Turbidity	3.9	NTU

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-29H	9/22/2020 16:27	Conductivity	646.44	uS/cm
GS-AP-MW-29H	9/22/2020 16:27	DO	0.36	mg/L
GS-AP-MW-29H	9/22/2020 16:27	Depth to Water Detail	92.22	ft
GS-AP-MW-29H	9/22/2020 16:27	Oxidation Reduction Potention	-123.84	mv
GS-AP-MW-29H	9/22/2020 16:27	pH	7.43	pH
GS-AP-MW-29H	9/22/2020 16:27	Temperature	18.52	C
GS-AP-MW-29H	9/22/2020 16:27	Turbidity	5.35	NTU
GS-AP-MW-29H	9/22/2020 16:32	Conductivity	630.62	uS/cm
GS-AP-MW-29H	9/22/2020 16:32	DO	0.27	mg/L
GS-AP-MW-29H	9/22/2020 16:32	Depth to Water Detail	92.61	ft
GS-AP-MW-29H	9/22/2020 16:32	Oxidation Reduction Potention	-139.74	mv
GS-AP-MW-29H	9/22/2020 16:32	pH	7.42	pH
GS-AP-MW-29H	9/22/2020 16:32	Temperature	18.44	C
GS-AP-MW-29H	9/22/2020 16:32	Turbidity	3.5	NTU
GS-AP-MW-29H	9/22/2020 16:37	Conductivity	621.73	uS/cm
GS-AP-MW-29H	9/22/2020 16:37	DO	0.26	mg/L
GS-AP-MW-29H	9/22/2020 16:37	Depth to Water Detail	92.67	ft
GS-AP-MW-29H	9/22/2020 16:37	Oxidation Reduction Potention	-146.93	mv
GS-AP-MW-29H	9/22/2020 16:37	pH	7.41	pH
GS-AP-MW-29H	9/22/2020 16:37	Temperature	18.28	C
GS-AP-MW-29H	9/22/2020 16:37	Turbidity	3.4	NTU
GS-AP-MW-29H	9/22/2020 16:42	Conductivity	616.77	uS/cm
GS-AP-MW-29H	9/22/2020 16:42	DO	0.27	mg/L
GS-AP-MW-29H	9/22/2020 16:42	Depth to Water Detail	92.83	ft
GS-AP-MW-29H	9/22/2020 16:42	Oxidation Reduction Potention	-149.72	mv
GS-AP-MW-29H	9/22/2020 16:42	pH	7.42	pH
GS-AP-MW-29H	9/22/2020 16:42	Temperature	18.23	C
GS-AP-MW-29H	9/22/2020 16:42	Turbidity	2.86	NTU

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-12V	9/23/2020 8:03	Conductivity	805.37	uS/cm
GS-AP-MW-12V	9/23/2020 8:03	DO	0.55	mg/L
GS-AP-MW-12V	9/23/2020 8:03	Depth to Water Detail	93.38	ft
GS-AP-MW-12V	9/23/2020 8:03	Oxidation Reduction Potention	-16.73	mv
GS-AP-MW-12V	9/23/2020 8:03	pH	11.5	pH
GS-AP-MW-12V	9/23/2020 8:03	Temperature	18.16	C
GS-AP-MW-12V	9/23/2020 8:03	Turbidity	>10	NTU
GS-AP-MW-12V	9/23/2020 8:08	Conductivity	864.23	uS/cm
GS-AP-MW-12V	9/23/2020 8:08	DO	0.41	mg/L
GS-AP-MW-12V	9/23/2020 8:08	Depth to Water Detail	93.83	ft
GS-AP-MW-12V	9/23/2020 8:08	Oxidation Reduction Potention	-103.38	mv
GS-AP-MW-12V	9/23/2020 8:08	pH	11.68	pH
GS-AP-MW-12V	9/23/2020 8:08	Temperature	18.13	C
GS-AP-MW-12V	9/23/2020 8:08	Turbidity	>10	NTU
GS-AP-MW-12V	9/23/2020 8:13	Conductivity	762.82	uS/cm
GS-AP-MW-12V	9/23/2020 8:13	DO	0.4	mg/L
GS-AP-MW-12V	9/23/2020 8:13	Depth to Water Detail	94.61	ft
GS-AP-MW-12V	9/23/2020 8:13	Oxidation Reduction Potention	-134.41	mv
GS-AP-MW-12V	9/23/2020 8:13	pH	11.7	pH
GS-AP-MW-12V	9/23/2020 8:13	Temperature	18.14	C
GS-AP-MW-12V	9/23/2020 8:13	Turbidity	>10	NTU
GS-AP-MW-12V	9/23/2020 8:18	Conductivity	661.29	uS/cm
GS-AP-MW-12V	9/23/2020 8:18	DO	0.39	mg/L
GS-AP-MW-12V	9/23/2020 8:18	Depth to Water Detail	95.24	ft
GS-AP-MW-12V	9/23/2020 8:18	Oxidation Reduction Potention	-148.72	mv
GS-AP-MW-12V	9/23/2020 8:18	pH	11.66	pH
GS-AP-MW-12V	9/23/2020 8:18	Temperature	18.19	C
GS-AP-MW-12V	9/23/2020 8:18	Turbidity	>10	NTU
GS-AP-MW-12V	9/23/2020 8:23	Conductivity	559.89	uS/cm
GS-AP-MW-12V	9/23/2020 8:23	DO	0.4	mg/L
GS-AP-MW-12V	9/23/2020 8:23	Depth to Water Detail	95.93	ft
GS-AP-MW-12V	9/23/2020 8:23	Oxidation Reduction Potention	-156.44	mv
GS-AP-MW-12V	9/23/2020 8:23	pH	11.62	pH
GS-AP-MW-12V	9/23/2020 8:23	Temperature	18.24	C
GS-AP-MW-12V	9/23/2020 8:23	Turbidity	>10	NTU
GS-AP-MW-12V	9/23/2020 8:28	Conductivity	512.47	uS/cm
GS-AP-MW-12V	9/23/2020 8:28	DO	0.42	mg/L
GS-AP-MW-12V	9/23/2020 8:28	Depth to Water Detail	96.51	ft
GS-AP-MW-12V	9/23/2020 8:28	Oxidation Reduction Potention	-159.77	mv
GS-AP-MW-12V	9/23/2020 8:28	pH	11.56	pH
GS-AP-MW-12V	9/23/2020 8:28	Temperature	18.39	C
GS-AP-MW-12V	9/23/2020 8:28	Turbidity	>10	NTU
GS-AP-MW-12V	9/23/2020 8:33	Conductivity	417.9	uS/cm
GS-AP-MW-12V	9/23/2020 8:33	DO	0.44	mg/L
GS-AP-MW-12V	9/23/2020 8:33	Depth to Water Detail	97.17	ft
GS-AP-MW-12V	9/23/2020 8:33	Oxidation Reduction Potention	-158.58	mv

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-12V	9/23/2020 8:33	pH	11.45	pH
GS-AP-MW-12V	9/23/2020 8:33	Temperature	18.47	C
GS-AP-MW-12V	9/23/2020 8:33	Turbidity	>10	NTU
GS-AP-MW-12V	9/23/2020 8:38	Conductivity	348.05	uS/cm
GS-AP-MW-12V	9/23/2020 8:38	DO	0.43	mg/L
GS-AP-MW-12V	9/23/2020 8:38	Depth to Water Detail	97.31	ft
GS-AP-MW-12V	9/23/2020 8:38	Oxidation Reduction Potention	-156.87	mv
GS-AP-MW-12V	9/23/2020 8:38	pH	11.35	pH
GS-AP-MW-12V	9/23/2020 8:38	Temperature	18.41	C
GS-AP-MW-12V	9/23/2020 8:38	Turbidity	>10	NTU
GS-AP-MW-12V	9/23/2020 8:43	Conductivity	292.59	uS/cm
GS-AP-MW-12V	9/23/2020 8:43	DO	0.44	mg/L
GS-AP-MW-12V	9/23/2020 8:43	Depth to Water Detail	97.76	ft
GS-AP-MW-12V	9/23/2020 8:43	Oxidation Reduction Potention	-155.29	mv
GS-AP-MW-12V	9/23/2020 8:43	pH	11.27	pH
GS-AP-MW-12V	9/23/2020 8:43	Temperature	18.49	C
GS-AP-MW-12V	9/23/2020 8:43	Turbidity	>10	NTU
GS-AP-MW-12V	9/23/2020 8:48	Conductivity	238.84	uS/cm
GS-AP-MW-12V	9/23/2020 8:48	DO	0.45	mg/L
GS-AP-MW-12V	9/23/2020 8:48	Depth to Water Detail	98.11	ft
GS-AP-MW-12V	9/23/2020 8:48	Oxidation Reduction Potention	-152.14	mv
GS-AP-MW-12V	9/23/2020 8:48	pH	11.15	pH
GS-AP-MW-12V	9/23/2020 8:48	Temperature	18.49	C
GS-AP-MW-12V	9/23/2020 8:48	Turbidity	>10	NTU
GS-AP-MW-12V	9/23/2020 8:53	Conductivity	258.17	uS/cm
GS-AP-MW-12V	9/23/2020 8:53	DO	0.46	mg/L
GS-AP-MW-12V	9/23/2020 8:53	Depth to Water Detail	98.45	ft
GS-AP-MW-12V	9/23/2020 8:53	Oxidation Reduction Potention	-148.1	mv
GS-AP-MW-12V	9/23/2020 8:53	pH	11.01	pH
GS-AP-MW-12V	9/23/2020 8:53	Temperature	18.41	C
GS-AP-MW-12V	9/23/2020 8:53	Turbidity	>10	NTU
GS-AP-MW-12V	9/23/2020 8:58	Conductivity	213.35	uS/cm
GS-AP-MW-12V	9/23/2020 8:58	DO	0.45	mg/L
GS-AP-MW-12V	9/23/2020 8:58	Depth to Water Detail	98.76	ft
GS-AP-MW-12V	9/23/2020 8:58	Oxidation Reduction Potention	-140.19	mv
GS-AP-MW-12V	9/23/2020 8:58	pH	10.73	pH
GS-AP-MW-12V	9/23/2020 8:58	Temperature	18.45	C
GS-AP-MW-12V	9/23/2020 8:58	Turbidity	>10	NTU
GS-AP-MW-12V	9/23/2020 9:03	Conductivity	192.04	uS/cm
GS-AP-MW-12V	9/23/2020 9:03	DO	0.46	mg/L
GS-AP-MW-12V	9/23/2020 9:03	Depth to Water Detail	99.02	ft
GS-AP-MW-12V	9/23/2020 9:03	Oxidation Reduction Potention	-138.25	mv
GS-AP-MW-12V	9/23/2020 9:03	pH	10.58	pH
GS-AP-MW-12V	9/23/2020 9:03	Temperature	18.42	C
GS-AP-MW-12V	9/23/2020 9:03	Turbidity	>10	NTU
GS-AP-MW-12V	9/23/2020 9:08	Conductivity	177.97	uS/cm

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-12V	9/23/2020 9:08	DO	0.45	mg/L
GS-AP-MW-12V	9/23/2020 9:08	Depth to Water Detail	99.24	ft
GS-AP-MW-12V	9/23/2020 9:08	Oxidation Reduction Potention	-134.49	mv
GS-AP-MW-12V	9/23/2020 9:08	pH	10.4	pH
GS-AP-MW-12V	9/23/2020 9:08	Temperature	18.39	C
GS-AP-MW-12V	9/23/2020 9:08	Turbidity	>10	NTU
GS-AP-MW-12V	9/23/2020 9:13	Conductivity	171.52	uS/cm
GS-AP-MW-12V	9/23/2020 9:13	DO	0.46	mg/L
GS-AP-MW-12V	9/23/2020 9:13	Depth to Water Detail	99.51	ft
GS-AP-MW-12V	9/23/2020 9:13	Oxidation Reduction Potention	-132.05	mv
GS-AP-MW-12V	9/23/2020 9:13	pH	10.25	pH
GS-AP-MW-12V	9/23/2020 9:13	Temperature	18.39	C
GS-AP-MW-12V	9/23/2020 9:13	Turbidity	>10	NTU
GS-AP-MW-12V	9/23/2020 9:18	Conductivity	164.77	uS/cm
GS-AP-MW-12V	9/23/2020 9:18	DO	0.46	mg/L
GS-AP-MW-12V	9/23/2020 9:18	Depth to Water Detail	99.69	ft
GS-AP-MW-12V	9/23/2020 9:18	Oxidation Reduction Potention	-128.87	mv
GS-AP-MW-12V	9/23/2020 9:18	pH	10.11	pH
GS-AP-MW-12V	9/23/2020 9:18	Temperature	18.47	C
GS-AP-MW-12V	9/23/2020 9:18	Turbidity	>10	NTU
GS-AP-MW-12V	9/23/2020 9:23	Conductivity	169.67	uS/cm
GS-AP-MW-12V	9/23/2020 9:23	DO	0.46	mg/L
GS-AP-MW-12V	9/23/2020 9:23	Depth to Water Detail	99.87	ft
GS-AP-MW-12V	9/23/2020 9:23	Oxidation Reduction Potention	-123.31	mv
GS-AP-MW-12V	9/23/2020 9:23	pH	9.9	pH
GS-AP-MW-12V	9/23/2020 9:23	Temperature	18.62	C
GS-AP-MW-12V	9/23/2020 9:23	Turbidity	>10	NTU
GS-AP-MW-12V	9/23/2020 9:28	Conductivity	173.78	uS/cm
GS-AP-MW-12V	9/23/2020 9:28	DO	0.47	mg/L
GS-AP-MW-12V	9/23/2020 9:28	Depth to Water Detail	100.01	ft
GS-AP-MW-12V	9/23/2020 9:28	Oxidation Reduction Potention	-121.98	mv
GS-AP-MW-12V	9/23/2020 9:28	pH	9.8	pH
GS-AP-MW-12V	9/23/2020 9:28	Temperature	18.92	C
GS-AP-MW-12V	9/23/2020 9:28	Turbidity	>10	NTU
GS-AP-MW-12V	9/23/2020 9:33	Conductivity	174.68	uS/cm
GS-AP-MW-12V	9/23/2020 9:33	DO	0.47	mg/L
GS-AP-MW-12V	9/23/2020 9:33	Depth to Water Detail	100.12	ft
GS-AP-MW-12V	9/23/2020 9:33	Oxidation Reduction Potention	-120.35	mv
GS-AP-MW-12V	9/23/2020 9:33	pH	9.71	pH
GS-AP-MW-12V	9/23/2020 9:33	Temperature	19.01	C
GS-AP-MW-12V	9/23/2020 9:33	Turbidity	>10	NTU
GS-AP-MW-12V	9/23/2020 9:38	Conductivity	173.38	uS/cm
GS-AP-MW-12V	9/23/2020 9:38	DO	0.48	mg/L
GS-AP-MW-12V	9/23/2020 9:38	Depth to Water Detail	100.23	ft
GS-AP-MW-12V	9/23/2020 9:38	Oxidation Reduction Potention	-119.59	mv
GS-AP-MW-12V	9/23/2020 9:38	pH	9.61	pH

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-12V	9/23/2020 9:38	Temperature	19.01	C
GS-AP-MW-12V	9/23/2020 9:38	Turbidity	>10	NTU
GS-AP-MW-12V	9/23/2020 9:43	Conductivity	176.74	uS/cm
GS-AP-MW-12V	9/23/2020 9:43	DO	0.49	mg/L
GS-AP-MW-12V	9/23/2020 9:43	Depth to Water Detail	100.46	ft
GS-AP-MW-12V	9/23/2020 9:43	Oxidation Reduction Potention	-117.66	mv
GS-AP-MW-12V	9/23/2020 9:43	pH	9.45	pH
GS-AP-MW-12V	9/23/2020 9:43	Temperature	19.17	C
GS-AP-MW-12V	9/23/2020 9:43	Turbidity	>10	NTU
GS-AP-MW-12V	9/23/2020 9:48	Conductivity	219.83	uS/cm
GS-AP-MW-12V	9/23/2020 9:48	DO	0.49	mg/L
GS-AP-MW-12V	9/23/2020 9:48	Depth to Water Detail	100.58	ft
GS-AP-MW-12V	9/23/2020 9:48	Oxidation Reduction Potention	-116.5	mv
GS-AP-MW-12V	9/23/2020 9:48	pH	9.31	pH
GS-AP-MW-12V	9/23/2020 9:48	Temperature	19.47	C
GS-AP-MW-12V	9/23/2020 9:48	Turbidity	>10	NTU
GS-AP-MW-12V	9/23/2020 9:53	Conductivity	222.39	uS/cm
GS-AP-MW-12V	9/23/2020 9:53	DO	0.54	mg/L
GS-AP-MW-12V	9/23/2020 9:53	Depth to Water Detail	100.66	ft
GS-AP-MW-12V	9/23/2020 9:53	Oxidation Reduction Potention	-108.94	mv
GS-AP-MW-12V	9/23/2020 9:53	pH	9.15	pH
GS-AP-MW-12V	9/23/2020 9:53	Temperature	19.31	C
GS-AP-MW-12V	9/23/2020 9:53	Turbidity	>10	NTU
GS-AP-MW-12V	9/23/2020 9:58	Conductivity	233.23	uS/cm
GS-AP-MW-12V	9/23/2020 9:58	DO	0.53	mg/L
GS-AP-MW-12V	9/23/2020 9:58	Depth to Water Detail	100.74	ft
GS-AP-MW-12V	9/23/2020 9:58	Oxidation Reduction Potention	-111.07	mv
GS-AP-MW-12V	9/23/2020 9:58	pH	9.06	pH
GS-AP-MW-12V	9/23/2020 9:58	Temperature	19.03	C
GS-AP-MW-12V	9/23/2020 9:58	Turbidity	>10	NTU
GS-AP-MW-12V	9/23/2020 10:03	Conductivity	241.86	uS/cm
GS-AP-MW-12V	9/23/2020 10:03	DO	0.53	mg/L
GS-AP-MW-12V	9/23/2020 10:03	Depth to Water Detail	100.79	ft
GS-AP-MW-12V	9/23/2020 10:03	Oxidation Reduction Potention	-110.81	mv
GS-AP-MW-12V	9/23/2020 10:03	pH	8.94	pH
GS-AP-MW-12V	9/23/2020 10:03	Temperature	19.13	C
GS-AP-MW-12V	9/23/2020 10:03	Turbidity	>10	NTU
GS-AP-MW-12V	9/23/2020 10:08	Conductivity	248.09	uS/cm
GS-AP-MW-12V	9/23/2020 10:08	DO	0.53	mg/L
GS-AP-MW-12V	9/23/2020 10:08	Depth to Water Detail	100.88	ft
GS-AP-MW-12V	9/23/2020 10:08	Oxidation Reduction Potention	-110.8	mv
GS-AP-MW-12V	9/23/2020 10:08	pH	8.88	pH
GS-AP-MW-12V	9/23/2020 10:08	Temperature	19.13	C
GS-AP-MW-12V	9/23/2020 10:08	Turbidity	>10	NTU
GS-AP-MW-12V	9/23/2020 10:13	Conductivity	247.65	uS/cm
GS-AP-MW-12V	9/23/2020 10:13	DO	0.55	mg/L

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-12V	9/23/2020 10:13	Depth to Water Detail	100.94	ft
GS-AP-MW-12V	9/23/2020 10:13	Oxidation Reduction Potention	-111.31	mv
GS-AP-MW-12V	9/23/2020 10:13	pH	8.84	pH
GS-AP-MW-12V	9/23/2020 10:13	Temperature	19.02	C
GS-AP-MW-12V	9/23/2020 10:13	Turbidity	>10	NTU

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-12	9/23/2020 11:51	Conductivity	344.09	uS/cm
GS-AP-MW-12	9/23/2020 11:51	DO	0.4	mg/L
GS-AP-MW-12	9/23/2020 11:51	Depth to Water Detail	74.78	ft
GS-AP-MW-12	9/23/2020 11:51	Oxidation Reduction Potention	-88.6	mv
GS-AP-MW-12	9/23/2020 11:51	pH	7.08	pH
GS-AP-MW-12	9/23/2020 11:51	Temperature	19.8	C
GS-AP-MW-12	9/23/2020 11:51	Turbidity	4.1	NTU
GS-AP-MW-12	9/23/2020 11:56	Conductivity	338.87	uS/cm
GS-AP-MW-12	9/23/2020 11:56	DO	0.3	mg/L
GS-AP-MW-12	9/23/2020 11:56	Depth to Water Detail	75.96	ft
GS-AP-MW-12	9/23/2020 11:56	Oxidation Reduction Potention	-108.65	mv
GS-AP-MW-12	9/23/2020 11:56	pH	6.99	pH
GS-AP-MW-12	9/23/2020 11:56	Temperature	19.5	C
GS-AP-MW-12	9/23/2020 11:56	Turbidity	2.01	NTU
GS-AP-MW-12	9/23/2020 12:01	Conductivity	339.32	uS/cm
GS-AP-MW-12	9/23/2020 12:01	DO	0.27	mg/L
GS-AP-MW-12	9/23/2020 12:01	Depth to Water Detail	77.06	ft
GS-AP-MW-12	9/23/2020 12:01	Oxidation Reduction Potention	-120.76	mv
GS-AP-MW-12	9/23/2020 12:01	pH	6.98	pH
GS-AP-MW-12	9/23/2020 12:01	Temperature	19.06	C
GS-AP-MW-12	9/23/2020 12:01	Turbidity	1.85	NTU
GS-AP-MW-12	9/23/2020 12:06	Conductivity	339.16	uS/cm
GS-AP-MW-12	9/23/2020 12:06	DO	0.27	mg/L
GS-AP-MW-12	9/23/2020 12:06	Depth to Water Detail	78.21	ft
GS-AP-MW-12	9/23/2020 12:06	Oxidation Reduction Potention	-127.31	mv
GS-AP-MW-12	9/23/2020 12:06	pH	6.99	pH
GS-AP-MW-12	9/23/2020 12:06	Temperature	18.98	C
GS-AP-MW-12	9/23/2020 12:06	Turbidity	1.79	NTU
GS-AP-MW-12	9/23/2020 12:11	Conductivity	338.72	uS/cm
GS-AP-MW-12	9/23/2020 12:11	DO	0.27	mg/L
GS-AP-MW-12	9/23/2020 12:11	Depth to Water Detail	79.24	ft
GS-AP-MW-12	9/23/2020 12:11	Oxidation Reduction Potention	-131.11	mv
GS-AP-MW-12	9/23/2020 12:11	pH	7.02	pH
GS-AP-MW-12	9/23/2020 12:11	Temperature	18.91	C
GS-AP-MW-12	9/23/2020 12:11	Turbidity	1.53	NTU
GS-AP-MW-12	9/23/2020 12:16	Conductivity	327.44	uS/cm
GS-AP-MW-12	9/23/2020 12:16	DO	0.27	mg/L
GS-AP-MW-12	9/23/2020 12:16	Depth to Water Detail	79.98	ft
GS-AP-MW-12	9/23/2020 12:16	Oxidation Reduction Potention	-168.41	mv
GS-AP-MW-12	9/23/2020 12:16	pH	7.6	pH
GS-AP-MW-12	9/23/2020 12:16	Temperature	18.95	C
GS-AP-MW-12	9/23/2020 12:16	Turbidity	2.01	NTU
GS-AP-MW-12	9/23/2020 12:21	Conductivity	313.51	uS/cm
GS-AP-MW-12	9/23/2020 12:21	DO	0.26	mg/L
GS-AP-MW-12	9/23/2020 12:21	Depth to Water Detail	80.83	ft
GS-AP-MW-12	9/23/2020 12:21	Oxidation Reduction Potention	-184.4	mv

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-12	9/23/2020 12:21	pH	8.73	pH
GS-AP-MW-12	9/23/2020 12:21	Temperature	19.1	C
GS-AP-MW-12	9/23/2020 12:21	Turbidity	2.03	NTU
GS-AP-MW-12	9/23/2020 12:26	Conductivity	312.96	uS/cm
GS-AP-MW-12	9/23/2020 12:26	DO	0.27	mg/L
GS-AP-MW-12	9/23/2020 12:26	Depth to Water Detail	81.32	ft
GS-AP-MW-12	9/23/2020 12:26	Oxidation Reduction Potention	-177.05	mv
GS-AP-MW-12	9/23/2020 12:26	pH	8.85	pH
GS-AP-MW-12	9/23/2020 12:26	Temperature	19.12	C
GS-AP-MW-12	9/23/2020 12:26	Turbidity	1.91	NTU
GS-AP-MW-12	9/23/2020 12:31	Conductivity	313.71	uS/cm
GS-AP-MW-12	9/23/2020 12:31	DO	0.27	mg/L
GS-AP-MW-12	9/23/2020 12:31	Depth to Water Detail	81.74	ft
GS-AP-MW-12	9/23/2020 12:31	Oxidation Reduction Potention	-168.38	mv
GS-AP-MW-12	9/23/2020 12:31	pH	8.8	pH
GS-AP-MW-12	9/23/2020 12:31	Temperature	19.11	C
GS-AP-MW-12	9/23/2020 12:31	Turbidity	1.95	NTU
GS-AP-MW-12	9/23/2020 12:36	Conductivity	316.38	uS/cm
GS-AP-MW-12	9/23/2020 12:36	DO	0.28	mg/L
GS-AP-MW-12	9/23/2020 12:36	Depth to Water Detail	82.34	ft
GS-AP-MW-12	9/23/2020 12:36	Oxidation Reduction Potention	-166.43	mv
GS-AP-MW-12	9/23/2020 12:36	pH	8.7	pH
GS-AP-MW-12	9/23/2020 12:36	Temperature	18.83	C
GS-AP-MW-12	9/23/2020 12:36	Turbidity	2.17	NTU
GS-AP-MW-12	9/23/2020 12:41	Conductivity	318.03	uS/cm
GS-AP-MW-12	9/23/2020 12:41	DO	0.27	mg/L
GS-AP-MW-12	9/23/2020 12:41	Depth to Water Detail	82.99	ft
GS-AP-MW-12	9/23/2020 12:41	Oxidation Reduction Potention	-172.52	mv
GS-AP-MW-12	9/23/2020 12:41	pH	8.6	pH
GS-AP-MW-12	9/23/2020 12:41	Temperature	18.85	C
GS-AP-MW-12	9/23/2020 12:41	Turbidity	1.75	NTU
GS-AP-MW-12	9/23/2020 12:46	Conductivity	319.43	uS/cm
GS-AP-MW-12	9/23/2020 12:46	DO	0.28	mg/L
GS-AP-MW-12	9/23/2020 12:46	Depth to Water Detail	82.31	ft
GS-AP-MW-12	9/23/2020 12:46	Oxidation Reduction Potention	-176.91	mv
GS-AP-MW-12	9/23/2020 12:46	pH	8.54	pH
GS-AP-MW-12	9/23/2020 12:46	Temperature	18.81	C
GS-AP-MW-12	9/23/2020 12:46	Turbidity	1.9	NTU
GS-AP-MW-12	9/23/2020 12:51	Conductivity	320.85	uS/cm
GS-AP-MW-12	9/23/2020 12:51	DO	0.28	mg/L
GS-AP-MW-12	9/23/2020 12:51	Depth to Water Detail	82.64	ft
GS-AP-MW-12	9/23/2020 12:51	Oxidation Reduction Potention	-183.6	mv
GS-AP-MW-12	9/23/2020 12:51	pH	8.47	pH
GS-AP-MW-12	9/23/2020 12:51	Temperature	18.78	C
GS-AP-MW-12	9/23/2020 12:51	Turbidity	1.65	NTU
GS-AP-MW-12	9/23/2020 12:56	Conductivity	322.39	uS/cm

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-12	9/23/2020 12:56	DO	0.28	mg/L
GS-AP-MW-12	9/23/2020 12:56	Depth to Water Detail	84.19	ft
GS-AP-MW-12	9/23/2020 12:56	Oxidation Reduction Potention	-189.38	mv
GS-AP-MW-12	9/23/2020 12:56	pH	8.4	pH
GS-AP-MW-12	9/23/2020 12:56	Temperature	18.75	C
GS-AP-MW-12	9/23/2020 12:56	Turbidity	1.57	NTU
GS-AP-MW-12	9/23/2020 13:01	Conductivity	323.24	uS/cm
GS-AP-MW-12	9/23/2020 13:01	DO	0.32	mg/L
GS-AP-MW-12	9/23/2020 13:01	Depth to Water Detail	84.19	ft
GS-AP-MW-12	9/23/2020 13:01	Oxidation Reduction Potention	-186.45	mv
GS-AP-MW-12	9/23/2020 13:01	pH	8.37	pH
GS-AP-MW-12	9/23/2020 13:01	Temperature	19.06	C
GS-AP-MW-12	9/23/2020 13:01	Turbidity	1.58	NTU
GS-AP-MW-12	9/23/2020 13:06	Conductivity	324.73	uS/cm
GS-AP-MW-12	9/23/2020 13:06	DO	0.34	mg/L
GS-AP-MW-12	9/23/2020 13:06	Depth to Water Detail	84.19	ft
GS-AP-MW-12	9/23/2020 13:06	Oxidation Reduction Potention	-185.88	mv
GS-AP-MW-12	9/23/2020 13:06	pH	8.3	pH
GS-AP-MW-12	9/23/2020 13:06	Temperature	18.99	C
GS-AP-MW-12	9/23/2020 13:06	Turbidity	1.5	NTU

Alabama Power Company
Plant Gorgas Ash Pond

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-21	9/23/2020 15:17	Conductivity	1186.93	uS/cm
GS-AP-MW-21	9/23/2020 15:17	DO	5.15	mg/L
GS-AP-MW-21	9/23/2020 15:17	Depth to Water Detail	166.06	ft
GS-AP-MW-21	9/23/2020 15:17	Oxidation Reduction Potention	-49.58	mv
GS-AP-MW-21	9/23/2020 15:17	pH	10.86	pH
GS-AP-MW-21	9/23/2020 15:17	Temperature	20.21	C
GS-AP-MW-21	9/23/2020 15:17	Turbidity	1.84	NTU
GS-AP-MW-21	9/23/2020 15:22	Conductivity	1393.62	uS/cm
GS-AP-MW-21	9/23/2020 15:22	DO	1.73	mg/L
GS-AP-MW-21	9/23/2020 15:22	Depth to Water Detail	166.24	ft
GS-AP-MW-21	9/23/2020 15:22	Oxidation Reduction Potention	-85.52	mv
GS-AP-MW-21	9/23/2020 15:22	pH	11.22	pH
GS-AP-MW-21	9/23/2020 15:22	Temperature	19.78	C
GS-AP-MW-21	9/23/2020 15:22	Turbidity	1.55	NTU
GS-AP-MW-21	9/23/2020 15:27	Conductivity	1471.05	uS/cm
GS-AP-MW-21	9/23/2020 15:27	DO	0.84	mg/L
GS-AP-MW-21	9/23/2020 15:27	Depth to Water Detail	166.33	ft
GS-AP-MW-21	9/23/2020 15:27	Oxidation Reduction Potention	-109.33	mv
GS-AP-MW-21	9/23/2020 15:27	pH	11.33	pH
GS-AP-MW-21	9/23/2020 15:27	Temperature	19.64	C
GS-AP-MW-21	9/23/2020 15:27	Turbidity	1.65	NTU
GS-AP-MW-21	9/23/2020 15:32	Conductivity	1475.17	uS/cm
GS-AP-MW-21	9/23/2020 15:32	DO	0.67	mg/L
GS-AP-MW-21	9/23/2020 15:32	Depth to Water Detail	166.38	ft
GS-AP-MW-21	9/23/2020 15:32	Oxidation Reduction Potention	-129.1	mv
GS-AP-MW-21	9/23/2020 15:32	pH	11.36	pH
GS-AP-MW-21	9/23/2020 15:32	Temperature	19.37	C
GS-AP-MW-21	9/23/2020 15:32	Turbidity	1.62	NTU
GS-AP-MW-21	9/23/2020 15:37	Conductivity	1450.83	uS/cm
GS-AP-MW-21	9/23/2020 15:37	DO	0.6	mg/L
GS-AP-MW-21	9/23/2020 15:37	Depth to Water Detail	166.41	ft
GS-AP-MW-21	9/23/2020 15:37	Oxidation Reduction Potention	-146.94	mv
GS-AP-MW-21	9/23/2020 15:37	pH	11.34	pH
GS-AP-MW-21	9/23/2020 15:37	Temperature	19.47	C
GS-AP-MW-21	9/23/2020 15:37	Turbidity	1.69	NTU
GS-AP-MW-21	9/23/2020 15:42	Conductivity	1395.94	uS/cm
GS-AP-MW-21	9/23/2020 15:42	DO	0.61	mg/L
GS-AP-MW-21	9/23/2020 15:42	Depth to Water Detail	166.41	ft
GS-AP-MW-21	9/23/2020 15:42	Oxidation Reduction Potention	-161.71	mv
GS-AP-MW-21	9/23/2020 15:42	pH	11.3	pH
GS-AP-MW-21	9/23/2020 15:42	Temperature	19.3	C
GS-AP-MW-21	9/23/2020 15:42	Turbidity	1.46	NTU
GS-AP-MW-21	9/23/2020 15:47	Conductivity	1322.25	uS/cm
GS-AP-MW-21	9/23/2020 15:47	DO	0.6	mg/L
GS-AP-MW-21	9/23/2020 15:47	Depth to Water Detail	166.41	ft
GS-AP-MW-21	9/23/2020 15:47	Oxidation Reduction Potention	-172.48	mv

Alabama Power Company
Plant Gorgas Ash Pond

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-21	9/23/2020 15:47	pH	11.23	pH
GS-AP-MW-21	9/23/2020 15:47	Temperature	19.19	C
GS-AP-MW-21	9/23/2020 15:47	Turbidity	1.64	NTU
GS-AP-MW-21	9/23/2020 15:52	Conductivity	1268.21	uS/cm
GS-AP-MW-21	9/23/2020 15:52	DO	0.59	mg/L
GS-AP-MW-21	9/23/2020 15:52	Depth to Water Detail	166.41	ft
GS-AP-MW-21	9/23/2020 15:52	Oxidation Reduction Potention	-177.58	mv
GS-AP-MW-21	9/23/2020 15:52	pH	11.12	pH
GS-AP-MW-21	9/23/2020 15:52	Temperature	19.3	C
GS-AP-MW-21	9/23/2020 15:52	Turbidity	1.46	NTU
GS-AP-MW-21	9/23/2020 15:57	Conductivity	1217.96	uS/cm
GS-AP-MW-21	9/23/2020 15:57	DO	0.6	mg/L
GS-AP-MW-21	9/23/2020 15:57	Depth to Water Detail	166.41	ft
GS-AP-MW-21	9/23/2020 15:57	Oxidation Reduction Potention	-179.55	mv
GS-AP-MW-21	9/23/2020 15:57	pH	11.01	pH
GS-AP-MW-21	9/23/2020 15:57	Temperature	19.25	C
GS-AP-MW-21	9/23/2020 15:57	Turbidity	1.36	NTU
GS-AP-MW-21	9/23/2020 16:02	Conductivity	1174.85	uS/cm
GS-AP-MW-21	9/23/2020 16:02	DO	0.6	mg/L
GS-AP-MW-21	9/23/2020 16:02	Depth to Water Detail	166.41	ft
GS-AP-MW-21	9/23/2020 16:02	Oxidation Reduction Potention	-176.45	mv
GS-AP-MW-21	9/23/2020 16:02	pH	10.91	pH
GS-AP-MW-21	9/23/2020 16:02	Temperature	19.19	C
GS-AP-MW-21	9/23/2020 16:02	Turbidity	1.33	NTU
GS-AP-MW-21	9/23/2020 16:07	Conductivity	1148.81	uS/cm
GS-AP-MW-21	9/23/2020 16:07	DO	0.6	mg/L
GS-AP-MW-21	9/23/2020 16:07	Depth to Water Detail	166.41	ft
GS-AP-MW-21	9/23/2020 16:07	Oxidation Reduction Potention	-173.71	mv
GS-AP-MW-21	9/23/2020 16:07	pH	10.8	pH
GS-AP-MW-21	9/23/2020 16:07	Temperature	19.2	C
GS-AP-MW-21	9/23/2020 16:07	Turbidity	1.32	NTU
GS-AP-MW-21	9/23/2020 16:12	Conductivity	1124.19	uS/cm
GS-AP-MW-21	9/23/2020 16:12	DO	0.62	mg/L
GS-AP-MW-21	9/23/2020 16:12	Depth to Water Detail	166.41	ft
GS-AP-MW-21	9/23/2020 16:12	Oxidation Reduction Potention	-171.55	mv
GS-AP-MW-21	9/23/2020 16:12	pH	10.71	pH
GS-AP-MW-21	9/23/2020 16:12	Temperature	19.03	C
GS-AP-MW-21	9/23/2020 16:12	Turbidity	1.47	NTU

Alabama Power Company
Plant Gorgas Ash Pond

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-18	9/23/2020 17:40	Conductivity	480.39	uS/cm
GS-AP-MW-18	9/23/2020 17:40	DO	0.16	mg/L
GS-AP-MW-18	9/23/2020 17:40	Depth to Water Detail	54.59	ft
GS-AP-MW-18	9/23/2020 17:40	Oxidation Reduction Potention	-176.1	mv
GS-AP-MW-18	9/23/2020 17:40	pH	7.67	pH
GS-AP-MW-18	9/23/2020 17:40	Temperature	17.22	C
GS-AP-MW-18	9/23/2020 17:40	Turbidity	10.44	NTU
GS-AP-MW-18	9/23/2020 17:45	Conductivity	479.39	uS/cm
GS-AP-MW-18	9/23/2020 17:45	DO	0.14	mg/L
GS-AP-MW-18	9/23/2020 17:45	Depth to Water Detail	54.69	ft
GS-AP-MW-18	9/23/2020 17:45	Oxidation Reduction Potention	-172.6	mv
GS-AP-MW-18	9/23/2020 17:45	pH	7.5	pH
GS-AP-MW-18	9/23/2020 17:45	Temperature	17.07	C
GS-AP-MW-18	9/23/2020 17:45	Turbidity	5.67	NTU
GS-AP-MW-18	9/23/2020 17:50	Conductivity	481.13	uS/cm
GS-AP-MW-18	9/23/2020 17:50	DO	0.14	mg/L
GS-AP-MW-18	9/23/2020 17:50	Depth to Water Detail	54.81	ft
GS-AP-MW-18	9/23/2020 17:50	Oxidation Reduction Potention	-176.34	mv
GS-AP-MW-18	9/23/2020 17:50	pH	7.48	pH
GS-AP-MW-18	9/23/2020 17:50	Temperature	17.05	C
GS-AP-MW-18	9/23/2020 17:50	Turbidity	3.72	NTU
GS-AP-MW-18	9/23/2020 17:53	Conductivity	523.82	uS/cm
GS-AP-MW-18	9/23/2020 17:53	DO	0.14	mg/L
GS-AP-MW-18	9/23/2020 17:53	Depth to Water Detail	54.89	ft
GS-AP-MW-18	9/23/2020 17:53	Oxidation Reduction Potention	-179.94	mv
GS-AP-MW-18	9/23/2020 17:53	pH	7.49	pH
GS-AP-MW-18	9/23/2020 17:53	Temperature	17.03	C
GS-AP-MW-18	9/23/2020 17:53	Turbidity	3.28	NTU
GS-AP-MW-18	9/23/2020 17:58	Conductivity	533.47	uS/cm
GS-AP-MW-18	9/23/2020 17:58	DO	0.14	mg/L
GS-AP-MW-18	9/23/2020 17:58	Depth to Water Detail	54.89	ft
GS-AP-MW-18	9/23/2020 17:58	Oxidation Reduction Potention	-185.9	mv
GS-AP-MW-18	9/23/2020 17:58	pH	7.52	pH
GS-AP-MW-18	9/23/2020 17:58	Temperature	17	C
GS-AP-MW-18	9/23/2020 17:58	Turbidity	3.22	NTU
GS-AP-MW-18	9/23/2020 18:03	Conductivity	541.36	uS/cm
GS-AP-MW-18	9/23/2020 18:03	DO	0.14	mg/L
GS-AP-MW-18	9/23/2020 18:03	Depth to Water Detail	54.89	ft
GS-AP-MW-18	9/23/2020 18:03	Oxidation Reduction Potention	-191.44	mv
GS-AP-MW-18	9/23/2020 18:03	pH	7.54	pH
GS-AP-MW-18	9/23/2020 18:03	Temperature	16.99	C
GS-AP-MW-18	9/23/2020 18:03	Turbidity	2.93	NTU

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 Ash Pond

MW-44HO (Salter Well) 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).

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 : WMWGORAP_1301

Project/Site : Gorgas Ash Pond
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

October 26, 2020

Dear Dustin Brooks,

Enclosed are the analytical results for sample(s) received by the laboratory on September 16, 2020.
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: 2020.10.26 11:36:55 -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: 2020.10.27 10:17:48 -05'00'

NELAP ACCREDITED TNI LABORATORY

REPORT OF LABORATORY ANALYSIS

This Certificate states the physical and/or chemical characteristics of the sample as submitted. This document shall not be reproduced, except in full, without written consent from Alabama Power's General Test Laboratory.

Alabama Power 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 Ash Pond

WMWGORAP_1301

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
BA17426	682982	WMWGORAP_1301
BA17427	682982	WMWGORAP_1301
BA17428	682982	WMWGORAP_1301
BA17429	682982	WMWGORAP_1301

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
BA17427	Sodium	10.15
BA17428	Sodium	10.15

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

Case Narrative

Dissolved Metals ICP

Gorgas Ash Pond

WMWGORAP_1301

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
BA17427	683092	WMWGORAP_1301
BA17428	683092	WMWGORAP_1301

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 Ash Pond

WMWGORAP_1301

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
BA17426	683029	WMWGORAP_1301
BA17427	683029	WMWGORAP_1301
BA17428	683029	WMWGORAP_1301
BA17429	683029	WMWGORAP_1301

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. 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 Ash Pond

WMWGORAP_1301

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
BA17427	683123	WMWGORAP_1301
BA17428	683123	WMWGORAP_1301

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

Case Narrative

Mercury

Gorgas Ash Pond

WMWGORAP_1301

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
BA17426	682830	WMWGORAP_1301
BA17427	682830	WMWGORAP_1301
BA17428	682830	WMWGORAP_1301
BA17429	682830	WMWGORAP_1301

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 with passing results.
- 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.

TDS

Gorgas Ash Pond

WMWGORAP_1301

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
BA17426	682576	WMWGORAP_1301
BA17427	682576	WMWGORAP_1301
BA17428	682576	WMWGORAP_1301
BA17429	682576	WMWGORAP_1301

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:
    - BA17426
    - BA17429

Anions

Gorgas Ash Pond

WMWGORAP_1301

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
BA17426	683047, 683138, & 682791	WMWGORAP_1301
BA17427	683047, 683138, & 682791	WMWGORAP_1301
BA17428	683047, 683138, & 682791	WMWGORAP_1301
BA17429	683047, 683138, & 682791	WMWGORAP_1301

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
BA17427	Chloride & Sulfate	3 & 5
BA17428	Chloride & Sulfate	3 & 5

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

Alkalinity

Gorgas Ash Pond

WMWGORAP_1301

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
BA17427	683064 & 683065	WMWGORAP_1301
BA17428	683064 & 683065	WMWGORAP_1301

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 Ash Pond Field Blank-1

Location Code: WMWGORAPFB
Collected: 9/15/20 11:15
Customer ID:
Submittal Date: 9/16/20 15:41

Laboratory ID Number: BA17426

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	9/23/20 10:35	9/24/20 09:33		1.015	Not Detected	mg/L	0.03	0.1	U
* Calcium, Total	9/23/20 10:35	9/24/20 09:33		1.015	Not Detected	mg/L	0.1	0.5	U
* Iron, Total	9/23/20 10:35	9/24/20 09:33		1.015	Not Detected	mg/L	0.02	0.05	U
* Lithium, Total	9/23/20 10:35	9/24/20 09:33		1.015	Not Detected	mg/L	0.01	0.02	U
* Magnesium, Total	9/23/20 10:35	9/24/20 09:33		1.015	Not Detected	mg/L	0.1	0.5	U
* Sodium, Total	9/23/20 10:35	9/24/20 09:33		1.015	Not Detected	mg/L	0.1	0.5	U
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	9/21/20 15:05	9/22/20 12:25		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	9/21/20 15:05	9/22/20 12:25		1.015	Not Detected	mg/L	0.001	0.005	U
* Barium, Total	9/21/20 15:05	9/22/20 12:25		1.015	Not Detected	mg/L	0.002	0.01	U
* Beryllium, Total	9/21/20 15:05	9/22/20 12:25		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	9/21/20 15:05	9/22/20 12:25		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	9/21/20 15:05	9/22/20 12:25		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	9/21/20 15:05	9/22/20 12:25		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	9/21/20 15:05	9/22/20 12:25		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	9/21/20 15:05	9/22/20 12:25		1.015	Not Detected	mg/L	0.002	0.01	U
* Manganese, Total	9/21/20 15:05	9/22/20 12:25		1.015	Not Detected	mg/L	0.001	0.005	U
* Potassium, Total	9/21/20 15:05	9/22/20 12:25		1.015	Not Detected	mg/L	0.3	2.5	U
* Selenium, Total	9/21/20 15:05	9/22/20 12:25		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	9/21/20 15:05	9/22/20 12:25		1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	9/23/20 13:27	9/24/20 10:32		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2540C	***Analyst: TJW***								
* Solids, Dissolved	9/18/20 14:55	9/21/20 15:30		1	Not Detected	mg/L		25	U
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	9/25/20 11:46	9/25/20 11:46		1	Not Detected	mg/L	0.50	1	U
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	9/28/20 10:46	9/28/20 10:46		1	Not Detected	mg/L	0.06	0.1	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	9/21/20 15:09	9/21/20 15:09		1	Not Detected	mg/L	0.50	1	U

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

Comments:

Reported: 10/26/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORAPFB
Sample Date: 9/15/20 11:15
Customer ID:
Delivery Date: 9/16/20 15:41

Description: Gorgas Ash Pond Field Blank-1

Laboratory ID Number: BA17426

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA17429	Selenium, Total	mg/L	0.0000419	0.001	0.10	0.108	0.107	0.107	0.085 to 0.115	108	70 to 130	0.930	20
BA17429	Molybdenum, Total	mg/L	0.0000045	0.0001474	0.10	0.107	0.107	0.103	0.085 to 0.115	107	70 to 130	0.00	20
BA17429	Lead, Total	mg/L	0.0000140	0.0001474	0.10	0.109	0.110	0.110	0.085 to 0.115	109	70 to 130	0.913	20
BA17429	Barium, Total	mg/L	-0.0000069	0.0002	0.10	0.102	0.104	0.101	0.085 to 0.115	102	70 to 130	1.94	20
BA17429	Boron, Total	mg/L	-0.000629	0.0650254	1.00	1.01	1.01	1.03	0.85 to 1.15	101	70 to 130	0.00	20
BA17429	Iron, Total	mg/L	0.000215	0.0176	0.2	0.205	0.206	0.209	0.17 to 0.23	102	70 to 130	0.487	20
BA17429	Cadmium, Total	mg/L	0.0000043	0.0001474	0.10	0.107	0.107	0.104	0.085 to 0.115	107	70 to 130	0.00	20
BA17429	Mercury, Total by CVAA	mg/L	0.00001	0.0005	0.004	0.00393	0.00394	0.00391	0.0034 to 0.0046	98.2	70 to 130	0.254	20
BA17429	Sodium, Total	mg/L	0.00105	0.044	5.00	4.98	5.02	5.14	4.25 to 5.75	99.6	70 to 130	0.800	20
BA17429	Beryllium, Total	mg/L	0.0000372	0.00088	0.10	0.106	0.110	0.105	0.085 to 0.115	106	70 to 130	3.70	20
BA17429	Magnesium, Total	mg/L	-0.00154	0.0462	5.00	5.09	5.14	5.23	4.25 to 5.75	102	70 to 130	0.978	20
BA17429	Manganese, Total	mg/L	0.0000114	0.0001474	0.10	0.107	0.112	0.107	0.085 to 0.115	107	70 to 130	4.57	20
BA17429	Chromium, Total	mg/L	0.0000677	0.00044	0.10	0.108	0.112	0.106	0.085 to 0.115	108	70 to 130	3.64	20
BA17429	Potassium, Total	mg/L	0.00250	0.3674	10.0	10.4	10.8	10.5	8.5 to 11.5	104	70 to 130	3.77	20
BA17429	Calcium, Total	mg/L	-0.00323	0.1518	5.00	5.10	5.14	5.20	4.25 to 5.75	102	70 to 130	0.781	20
BA17429	Lithium, Total	mg/L	-0.0000254	0.0154	0.20	0.196	0.197	0.200	0.17 to 0.23	98.0	70 to 130	0.509	20
BA17429	Antimony, Total	mg/L	0.000199	0.001	0.10	0.103	0.105	0.100	0.085 to 0.115	103	70 to 130	1.92	20
BA17429	Thallium, Total	mg/L	0.0000114	0.0001474	0.10	0.110	0.110	0.109	0.085 to 0.115	110	70 to 130	0.00	20
BA17429	Arsenic, Total	mg/L	0.0000155	0.0001474	0.10	0.108	0.110	0.110	0.085 to 0.115	108	70 to 130	1.83	20
BA17429	Cobalt, Total	mg/L	-0.0000115	0.0001474	0.10	0.110	0.113	0.105	0.085 to 0.115	110	70 to 130	2.69	20

Comments:

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

Batch QC Summary

Customer Account: WMWGORAPFB
Sample Date: 9/15/20 11:15
Customer ID:
Delivery Date: 9/16/20 15:41

Description: Gorgas Ash Pond Field Blank-1

Laboratory ID Number: BA17426

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA17429	Sulfate	mg/L	-0.340	0.50	20.0	18.4	-0.423	19.5	18 to 22	92.0	80 to 120	0.00	20
BA17429	Chloride	mg/L	-0.0183	0.50	10.0	10.6	0.066	10.6	9 to 11	106	80 to 120	0.00	20
BA17428	Solids, Dissolved	mg/L	0.0000	25			562	53.0	40 to 60			1.26	5
BA17429	Fluoride	mg/L	0.0247	0.05	2.50	2.51	0.0281	2.74	2.25 to 2.75	100	80 to 120	0.00	20

Comments:

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-44HO

Location Code: WMWGORAP
Collected: 9/15/20 12:21
Customer ID:
Submittal Date: 9/16/20 15:41

Laboratory ID Number: BA17427

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	9/23/20 10:35	9/24/20 09:36		1.015	0.0404	mg/L	0.03	0.1	J
* Calcium, Total	9/23/20 10:35	9/24/20 09:36		1.015	2.94	mg/L	0.1	0.5	
* Iron, Total	9/23/20 10:35	9/24/20 09:36		1.015	0.470	mg/L	0.02	0.05	
* Lithium, Total	9/23/20 10:35	9/24/20 09:36		1.015	0.0494	mg/L	0.01	0.02	
* Magnesium, Total	9/23/20 10:35	9/24/20 09:36		1.015	0.769	mg/L	0.1	0.5	
* Sodium, Total	9/23/20 10:35	9/24/20 10:55		10.15	221	mg/L	1.015	5.075	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Iron, Dissolved	9/23/20 11:20	9/23/20 12:06		1.015	Not Detected	mg/L	0.02	0.05	U
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	9/21/20 15:05	9/22/20 12:27		1.015	0.000819	mg/L	0.0008	0.003	J
* Arsenic, Total	9/21/20 15:05	9/22/20 12:27		1.015	0.00184	mg/L	0.001	0.005	J
* Barium, Total	9/21/20 15:05	9/22/20 12:27		1.015	0.0783	mg/L	0.002	0.01	
* Beryllium, Total	9/21/20 15:05	9/22/20 12:27		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	9/21/20 15:05	9/22/20 12:27		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	9/21/20 15:05	9/22/20 12:27		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	9/21/20 15:05	9/22/20 12:27		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	9/21/20 15:05	9/22/20 12:27		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	9/21/20 15:05	9/22/20 12:27		1.015	0.00858	mg/L	0.002	0.01	J
* Potassium, Total	9/21/20 15:05	9/22/20 12:27		1.015	1.27	mg/L	0.3	2.5	J
* Manganese, Total	9/21/20 15:05	9/22/20 12:27		1.015	0.00958	mg/L	0.001	0.005	
* Selenium, Total	9/21/20 15:05	9/22/20 12:27		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	9/21/20 15:05	9/22/20 12:27		1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Manganese, Dissolved	9/22/20 13:12	9/22/20 13:56		1.015	0.00372	mg/L	0.001	0.005	J
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	9/23/20 13:27	9/24/20 10:34		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2320 B	***Analyst: JAG***								
Alkalinity, Total as CaCO3	9/23/20 12:55	9/23/20 13:05		1	365	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: TJW***								
* Solids, Dissolved	9/18/20 14:55	9/21/20 15:30		1	564	mg/L		50	

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

Comments: The client submitted filtered samples for dissolved anaysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 10/22/20

Reported: 10/26/2020
Version: 3.1
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-44HO

Location Code: WMWGORAP
Collected: 9/15/20 12:21
Customer ID:
Submittal Date: 9/16/20 15:41

Laboratory ID Number: BA17427

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 4500CO2 D		***Analyst: JAG***							
Bicarbonate Alkalinity, (calc.)	9/23/20 12:55	9/23/20 13:05		1	340	mg/L			
Carbonate Alkalinity, (calc.)	9/23/20 12:55	9/23/20 13:05		1	24.8	mg/L			
Analytical Method: SM4500Cl E		***Analyst: JCC***							
* Chloride	9/25/20 11:53	9/25/20 11:53		3	36.2	mg/L	1.50	3	
Analytical Method: SM4500F G 2017		***Analyst: JCC***							
* Fluoride	9/28/20 10:47	9/28/20 10:47		1	0.221	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E 2011		***Analyst: JCC***							
* Sulfate	9/21/20 15:10	9/21/20 15:10		5	71.6	mg/L	2.50	5	
Analytical Method: Field Measurements		***Analyst: DKG***							
Conductivity	9/15/20 12:18	9/15/20 12:18			926.82	uS/cm			FA
pH	9/15/20 12:18	9/15/20 12:18			8.94	SU			FA
Temperature	9/15/20 12:18	9/15/20 12:18			19.08	C			FA
Turbidity	9/15/20 12:18	9/15/20 12:18			4.13	NTU			FA

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

Comments: The client submitted filtered samples for dissolved anaysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 10/22/20

Reported: 10/26/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORAP
Sample Date: 9/15/20 12:21
Customer ID:
Delivery Date: 9/16/20 15:41

Description: Gorgas Ash Pond - MW-44HO

Laboratory ID Number: BA17427

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA17428	Manganese, Dissolved	mg/L	-0.0000048	0.0001474	0.10	0.110	0.111	0.108	0.085 to 0.115	106	70 to 130	0.905	20
BA17429	Selenium, Total	mg/L	0.0000419	0.001	0.10	0.108	0.107	0.107	0.085 to 0.115	108	70 to 130	0.930	20
BA17429	Barium, Total	mg/L	-0.0000069	0.0002	0.10	0.102	0.104	0.101	0.085 to 0.115	102	70 to 130	1.94	20
BA17429	Boron, Total	mg/L	-0.000629	0.0650254	1.00	1.01	1.01	1.03	0.85 to 1.15	101	70 to 130	0.00	20
BA17429	Iron, Total	mg/L	0.000215	0.0176	0.2	0.205	0.206	0.209	0.17 to 0.23	102	70 to 130	0.487	20
BA17429	Cadmium, Total	mg/L	0.0000043	0.0001474	0.10	0.107	0.107	0.104	0.085 to 0.115	107	70 to 130	0.00	20
BA17429	Mercury, Total by CVAA	mg/L	0.00001	0.0005	0.004	0.00393	0.00394	0.00391	0.0034 to 0.0046	98.2	70 to 130	0.254	20
BA17429	Sodium, Total	mg/L	0.00105	0.044	5.00	4.98	5.02	5.14	4.25 to 5.75	99.6	70 to 130	0.800	20
BA17429	Molybdenum, Total	mg/L	0.0000045	0.0001474	0.10	0.107	0.107	0.103	0.085 to 0.115	107	70 to 130	0.00	20
BA17429	Lead, Total	mg/L	0.0000140	0.0001474	0.10	0.109	0.110	0.110	0.085 to 0.115	109	70 to 130	0.913	20
BA17429	Beryllium, Total	mg/L	0.0000372	0.00088	0.10	0.106	0.110	0.105	0.085 to 0.115	106	70 to 130	3.70	20
BA17429	Magnesium, Total	mg/L	-0.00154	0.0462	5.00	5.09	5.14	5.23	4.25 to 5.75	102	70 to 130	0.978	20
BA17429	Manganese, Total	mg/L	0.0000114	0.0001474	0.10	0.107	0.112	0.107	0.085 to 0.115	107	70 to 130	4.57	20
BA17429	Calcium, Total	mg/L	-0.00323	0.1518	5.00	5.10	5.14	5.20	4.25 to 5.75	102	70 to 130	0.781	20
BA17429	Lithium, Total	mg/L	-0.0000254	0.0154	0.20	0.196	0.197	0.200	0.17 to 0.23	98.0	70 to 130	0.509	20
BA17429	Antimony, Total	mg/L	0.000199	0.001	0.10	0.103	0.105	0.100	0.085 to 0.115	103	70 to 130	1.92	20
BA17429	Thallium, Total	mg/L	0.0000114	0.0001474	0.10	0.110	0.110	0.109	0.085 to 0.115	110	70 to 130	0.00	20
BA17429	Chromium, Total	mg/L	0.0000677	0.00044	0.10	0.108	0.112	0.106	0.085 to 0.115	108	70 to 130	3.64	20
BA17429	Potassium, Total	mg/L	0.00250	0.3674	10.0	10.4	10.8	10.5	8.5 to 11.5	104	70 to 130	3.77	20
BA17428	Iron, Dissolved	mg/L	0.0000450	0.0176	0.2	0.222	0.224	0.209	0.17 to 0.23	111	70 to 130	0.897	20
BA17429	Arsenic, Total	mg/L	0.0000155	0.0001474	0.10	0.108	0.110	0.110	0.085 to 0.115	108	70 to 130	1.83	20
BA17429	Cobalt, Total	mg/L	-0.0000115	0.0001474	0.10	0.110	0.113	0.105	0.085 to 0.115	110	70 to 130	2.69	20

Comments: The client submitted filtered samples for dissolved anaysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 10/22/20

Reported: 10/26/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/15/20 12:21
Customer ID:
Delivery Date: 9/16/20 15:41

Description: Gorgas Ash Pond - MW-44HO

Laboratory ID Number: BA17427

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA17429	Fluoride	mg/L	0.0247	0.05	2.50	2.51	0.0281	2.74	2.25 to 2.75	100	80 to 120	0.00	20
BA17429	Sulfate	mg/L	-0.340	0.50	20.0	18.4	-0.423	19.5	18 to 22	92.0	80 to 120	0.00	20
BA17428	Solids, Dissolved	mg/L	0.0000	25			562	53.0	40 to 60			1.26	5
BA17428	Alkalinity, Total as CaCO3	mg/L					363	50.7	45.0 to 55.0			1.37	10
BA17429	Chloride	mg/L	-0.0183	0.50	10.0	10.6	0.066	10.6	9 to 11	106	80 to 120	0.00	20

Comments: The client submitted filtered samples for dissolved anaysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 10/22/20

Reported: 10/26/2020
Version: 3.1
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-44HO DUP

Location Code: WMWGORAP
Collected: 9/15/20 12:21
Customer ID:
Submittal Date: 9/16/20 15:41

Laboratory ID Number: BA17428

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	9/23/20 10:35	9/24/20 09:39		1.015	0.0395	mg/L	0.03	0.1	J
* Calcium, Total	9/23/20 10:35	9/24/20 09:39		1.015	2.84	mg/L	0.1	0.5	
* Iron, Total	9/23/20 10:35	9/24/20 09:39		1.015	0.390	mg/L	0.02	0.05	
* Lithium, Total	9/23/20 10:35	9/24/20 09:39		1.015	0.0488	mg/L	0.01	0.02	
* Magnesium, Total	9/23/20 10:35	9/24/20 09:39		1.015	0.741	mg/L	0.1	0.5	
* Sodium, Total	9/23/20 10:35	9/24/20 10:58		10.15	214	mg/L	1.015	5.075	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Iron, Dissolved	9/23/20 11:20	9/23/20 12:09		1.015	Not Detected	mg/L	0.02	0.05	U
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	9/21/20 15:05	9/22/20 12:30		1.015	0.000848	mg/L	0.0008	0.003	J
* Arsenic, Total	9/21/20 15:05	9/22/20 12:30		1.015	0.00194	mg/L	0.001	0.005	J
* Barium, Total	9/21/20 15:05	9/22/20 12:30		1.015	0.0778	mg/L	0.002	0.01	
* Beryllium, Total	9/21/20 15:05	9/22/20 12:30		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	9/21/20 15:05	9/22/20 12:30		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	9/21/20 15:05	9/22/20 12:30		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	9/21/20 15:05	9/22/20 12:30		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	9/21/20 15:05	9/22/20 12:30		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	9/21/20 15:05	9/22/20 12:30		1.015	0.00878	mg/L	0.002	0.01	J
* Potassium, Total	9/21/20 15:05	9/22/20 12:30		1.015	1.21	mg/L	0.3	2.5	J
* Manganese, Total	9/21/20 15:05	9/22/20 12:30		1.015	0.00829	mg/L	0.001	0.005	
* Selenium, Total	9/21/20 15:05	9/22/20 12:30		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	9/21/20 15:05	9/22/20 12:30		1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Manganese, Dissolved	9/22/20 13:12	9/22/20 13:59		1.015	0.00360	mg/L	0.001	0.005	J
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	9/23/20 13:27	9/24/20 10:37		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2320 B	***Analyst: JAG***								
Alkalinity, Total as CaCO3	9/23/20 12:55	9/23/20 13:05		1	368	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: TJW***								
* Solids, Dissolved	9/18/20 14:55	9/21/20 15:30		1	548	mg/L		50	

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

Comments: The client submitted filtered samples for dissolved anaysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 10/22/20

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-44HO DUP

Location Code: WMWGORAP
Collected: 9/15/20 12:21
Customer ID:
Submittal Date: 9/16/20 15:41

Laboratory ID Number: BA17428

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 4500CO2 D		***Analyst: JAG***							
Bicarbonate Alkalinity, (calc.)	9/23/20 12:55	9/23/20 13:05		1	340	mg/L			
Carbonate Alkalinity, (calc.)	9/23/20 12:55	9/23/20 13:05		1	27.8	mg/L			
Analytical Method: SM4500Cl E		***Analyst: JCC***							
* Chloride	9/25/20 11:54	9/25/20 11:54		3	35.9	mg/L	1.50	3	
Analytical Method: SM4500F G 2017		***Analyst: JCC***							
* Fluoride	9/28/20 10:48	9/28/20 10:48		1	0.208	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E 2011		***Analyst: JCC***							
* Sulfate	9/21/20 15:11	9/21/20 15:11		5	72.5	mg/L	2.50	5	
Analytical Method: Field Measurements		***Analyst: DKG***							
Conductivity	9/15/20 12:18	9/15/20 12:18			926.82	uS/cm			FA
pH	9/15/20 12:18	9/15/20 12:18			8.94	SU			FA
Temperature	9/15/20 12:18	9/15/20 12:18			19.08	C			FA
Turbidity	9/15/20 12:18	9/15/20 12:18			4.13	NTU			FA

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORAP
Sample Date: 9/15/20 12:21
Customer ID:
Delivery Date: 9/16/20 15:41

Description: Gorgas Ash Pond - MW-44HO DUP

Laboratory ID Number: BA17428

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA17428	Manganese, Dissolved	mg/L	-0.0000048	0.0001474	0.10	0.110	0.111	0.108	0.085 to 0.115	106	70 to 130	0.905	20
BA17429	Selenium, Total	mg/L	0.0000419	0.001	0.10	0.108	0.107	0.107	0.085 to 0.115	108	70 to 130	0.930	20
BA17429	Cadmium, Total	mg/L	0.0000043	0.0001474	0.10	0.107	0.107	0.104	0.085 to 0.115	107	70 to 130	0.00	20
BA17429	Mercury, Total by CVAA	mg/L	0.00001	0.0005	0.004	0.00393	0.00394	0.00391	0.0034 to 0.0046	98.2	70 to 130	0.254	20
BA17429	Sodium, Total	mg/L	0.00105	0.044	5.00	4.98	5.02	5.14	4.25 to 5.75	99.6	70 to 130	0.800	20
BA17429	Beryllium, Total	mg/L	0.0000372	0.00088	0.10	0.106	0.110	0.105	0.085 to 0.115	106	70 to 130	3.70	20
BA17429	Magnesium, Total	mg/L	-0.00154	0.0462	5.00	5.09	5.14	5.23	4.25 to 5.75	102	70 to 130	0.978	20
BA17429	Manganese, Total	mg/L	0.0000114	0.0001474	0.10	0.107	0.112	0.107	0.085 to 0.115	107	70 to 130	4.57	20
BA17429	Molybdenum, Total	mg/L	0.0000045	0.0001474	0.10	0.107	0.107	0.103	0.085 to 0.115	107	70 to 130	0.00	20
BA17429	Lead, Total	mg/L	0.0000140	0.0001474	0.10	0.109	0.110	0.110	0.085 to 0.115	109	70 to 130	0.913	20
BA17429	Calcium, Total	mg/L	-0.00323	0.1518	5.00	5.10	5.14	5.20	4.25 to 5.75	102	70 to 130	0.781	20
BA17429	Lithium, Total	mg/L	-0.0000254	0.0154	0.20	0.196	0.197	0.200	0.17 to 0.23	98.0	70 to 130	0.509	20
BA17429	Antimony, Total	mg/L	0.000199	0.001	0.10	0.103	0.105	0.100	0.085 to 0.115	103	70 to 130	1.92	20
BA17429	Thallium, Total	mg/L	0.0000114	0.0001474	0.10	0.110	0.110	0.109	0.085 to 0.115	110	70 to 130	0.00	20
BA17429	Chromium, Total	mg/L	0.0000677	0.00044	0.10	0.108	0.112	0.106	0.085 to 0.115	108	70 to 130	3.64	20
BA17429	Potassium, Total	mg/L	0.00250	0.3674	10.0	10.4	10.8	10.5	8.5 to 11.5	104	70 to 130	3.77	20
BA17429	Barium, Total	mg/L	-0.0000069	0.0002	0.10	0.102	0.104	0.101	0.085 to 0.115	102	70 to 130	1.94	20
BA17429	Boron, Total	mg/L	-0.000629	0.0650254	1.00	1.01	1.01	1.03	0.85 to 1.15	101	70 to 130	0.00	20
BA17429	Iron, Total	mg/L	0.000215	0.0176	0.2	0.205	0.206	0.209	0.17 to 0.23	102	70 to 130	0.487	20
BA17428	Iron, Dissolved	mg/L	0.0000450	0.0176	0.2	0.222	0.224	0.209	0.17 to 0.23	111	70 to 130	0.897	20
BA17429	Arsenic, Total	mg/L	0.0000155	0.0001474	0.10	0.108	0.110	0.110	0.085 to 0.115	108	70 to 130	1.83	20
BA17429	Cobalt, Total	mg/L	-0.0000115	0.0001474	0.10	0.110	0.113	0.105	0.085 to 0.115	110	70 to 130	2.69	20

Comments: The client submitted filtered samples for dissolved anaysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 10/22/20

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/15/20 12:21
Customer ID:
Delivery Date: 9/16/20 15:41

Description: Gorgas Ash Pond - MW-44HO DUP

Laboratory ID Number: BA17428

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA17429	Fluoride	mg/L	0.0247	0.05	2.50	2.51	0.0281	2.74	2.25 to 2.75	100	80 to 120	0.00	20
BA17428	Solids, Dissolved	mg/L	0.0000	25			562	53.0	40 to 60			1.26	5
BA17429	Sulfate	mg/L	-0.340	0.50	20.0	18.4	-0.423	19.5	18 to 22	92.0	80 to 120	0.00	20
BA17428	Alkalinity, Total as CaCO3	mg/L					363	50.7	45.0 to 55.0			1.37	10
BA17429	Chloride	mg/L	-0.0183	0.50	10.0	10.6	0.066	10.6	9 to 11	106	80 to 120	0.00	20

Comments: The client submitted filtered samples for dissolved anaysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
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Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond Equipment Blank-1

Location Code: WMWGORAPEB
Collected: 9/15/20 13:10
Customer ID:
Submittal Date: 9/16/20 15:41

Laboratory ID Number: BA17429

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	9/23/20 10:35	9/24/20 09:42		1.015	Not Detected	mg/L	0.03	0.1	U
* Calcium, Total	9/23/20 10:35	9/24/20 09:42		1.015	Not Detected	mg/L	0.1	0.5	U
* Iron, Total	9/23/20 10:35	9/24/20 09:42		1.015	Not Detected	mg/L	0.02	0.05	U
* Lithium, Total	9/23/20 10:35	9/24/20 09:42		1.015	Not Detected	mg/L	0.01	0.02	U
* Magnesium, Total	9/23/20 10:35	9/24/20 09:42		1.015	Not Detected	mg/L	0.1	0.5	U
* Sodium, Total	9/23/20 10:35	9/24/20 09:42		1.015	Not Detected	mg/L	0.1	0.5	U
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	9/21/20 15:05	9/22/20 12:33		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	9/21/20 15:05	9/22/20 12:33		1.015	Not Detected	mg/L	0.001	0.005	U
* Barium, Total	9/21/20 15:05	9/22/20 12:33		1.015	Not Detected	mg/L	0.002	0.01	U
* Beryllium, Total	9/21/20 15:05	9/22/20 12:33		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	9/21/20 15:05	9/22/20 12:33		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	9/21/20 15:05	9/22/20 12:33		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	9/21/20 15:05	9/22/20 12:33		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	9/21/20 15:05	9/22/20 12:33		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	9/21/20 15:05	9/22/20 12:33		1.015	Not Detected	mg/L	0.002	0.01	U
* Manganese, Total	9/21/20 15:05	9/22/20 12:33		1.015	Not Detected	mg/L	0.001	0.005	U
* Potassium, Total	9/21/20 15:05	9/22/20 12:33		1.015	Not Detected	mg/L	0.3	2.5	U
* Selenium, Total	9/21/20 15:05	9/22/20 12:33		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	9/21/20 15:05	9/22/20 12:33		1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	9/23/20 13:27	9/24/20 10:39		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2540C	***Analyst: TJW***								
* Solids, Dissolved	9/18/20 14:55	9/21/20 15:30		1	Not Detected	mg/L		25	U
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	9/25/20 11:49	9/25/20 11:49		1	Not Detected	mg/L	0.50	1	U
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	9/28/20 10:49	9/28/20 10:49		1	Not Detected	mg/L	0.06	0.1	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	9/21/20 15:13	9/21/20 15:13		1	Not Detected	mg/L	0.50	1	U

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

Comments:

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COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORAPEB
Sample Date: 9/15/20 13:10
Customer ID:
Delivery Date: 9/16/20 15:41

Description: Gorgas Ash Pond Equipment Blank-1

Laboratory ID Number: BA17429

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA17429	Selenium, Total	mg/L	0.0000419	0.001	0.10	0.108	0.107	0.107	0.085 to 0.115	108	70 to 130	0.930	20
BA17429	Molybdenum, Total	mg/L	0.0000045	0.0001474	0.10	0.107	0.107	0.103	0.085 to 0.115	107	70 to 130	0.00	20
BA17429	Lead, Total	mg/L	0.0000140	0.0001474	0.10	0.109	0.110	0.110	0.085 to 0.115	109	70 to 130	0.913	20
BA17429	Chromium, Total	mg/L	0.0000677	0.00044	0.10	0.108	0.112	0.106	0.085 to 0.115	108	70 to 130	3.64	20
BA17429	Potassium, Total	mg/L	0.00250	0.3674	10.0	10.4	10.8	10.5	8.5 to 11.5	104	70 to 130	3.77	20
BA17429	Cadmium, Total	mg/L	0.0000043	0.0001474	0.10	0.107	0.107	0.104	0.085 to 0.115	107	70 to 130	0.00	20
BA17429	Mercury, Total by CVAA	mg/L	0.00001	0.0005	0.004	0.00393	0.00394	0.00391	0.0034 to 0.0046	98.2	70 to 130	0.254	20
BA17429	Sodium, Total	mg/L	0.00105	0.044	5.00	4.98	5.02	5.14	4.25 to 5.75	99.6	70 to 130	0.800	20
BA17429	Calcium, Total	mg/L	-0.00323	0.1518	5.00	5.10	5.14	5.20	4.25 to 5.75	102	70 to 130	0.781	20
BA17429	Lithium, Total	mg/L	-0.0000254	0.0154	0.20	0.196	0.197	0.200	0.17 to 0.23	98.0	70 to 130	0.509	20
BA17429	Antimony, Total	mg/L	0.000199	0.001	0.10	0.103	0.105	0.100	0.085 to 0.115	103	70 to 130	1.92	20
BA17429	Thallium, Total	mg/L	0.0000114	0.0001474	0.10	0.110	0.110	0.109	0.085 to 0.115	110	70 to 130	0.00	20
BA17429	Beryllium, Total	mg/L	0.0000372	0.00088	0.10	0.106	0.110	0.105	0.085 to 0.115	106	70 to 130	3.70	20
BA17429	Magnesium, Total	mg/L	-0.00154	0.0462	5.00	5.09	5.14	5.23	4.25 to 5.75	102	70 to 130	0.978	20
BA17429	Manganese, Total	mg/L	0.0000114	0.0001474	0.10	0.107	0.112	0.107	0.085 to 0.115	107	70 to 130	4.57	20
BA17429	Barium, Total	mg/L	-0.0000069	0.0002	0.10	0.102	0.104	0.101	0.085 to 0.115	102	70 to 130	1.94	20
BA17429	Boron, Total	mg/L	-0.000629	0.0650254	1.00	1.01	1.01	1.03	0.85 to 1.15	101	70 to 130	0.00	20
BA17429	Iron, Total	mg/L	0.000215	0.0176	0.2	0.205	0.206	0.209	0.17 to 0.23	102	70 to 130	0.487	20
BA17429	Arsenic, Total	mg/L	0.0000155	0.0001474	0.10	0.108	0.110	0.110	0.085 to 0.115	108	70 to 130	1.83	20
BA17429	Cobalt, Total	mg/L	-0.0000115	0.0001474	0.10	0.110	0.113	0.105	0.085 to 0.115	110	70 to 130	2.69	20

Comments:

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Calera, AL 35040

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Sample Date: 9/15/20 13:10
Customer ID:
Delivery Date: 9/16/20 15:41

Description: Gorgas Ash Pond Equipment Blank-1

Laboratory ID Number: BA17429

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA17429	Fluoride	mg/L	0.0247	0.05	2.50	2.51	0.0281	2.74	2.25 to 2.75	100	80 to 120	0.00	20
BA17429	Sulfate	mg/L	-0.340	0.50	20.0	18.4	-0.423	19.5	18 to 22	92.0	80 to 120	0.00	20
BA17428	Solids, Dissolved	mg/L	0.0000	25			562	53.0	40 to 60			1.26	5
BA17429	Chloride	mg/L	-0.0183	0.50	10.0	10.6	0.066	10.6	9 to 11	106	80 to 120	0.00	20

Comments:

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

Definitions

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	Dallas Gentry	Location	Gorgas Ash Pond

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
FB-1	09/15/2020	11:15	4	Field Blank		BA17426
MW-44HO	09/15/2020	12:21	6	Groundwater		BA17427
MW-44HO dup	09/15/2020	12:21	6	Sample Duplicate		BA17428
EB-1	09/15/2020	13:10	4	Equipment Blank		BA17429

Relinquished By	Received By	Date/Time
[signature]	[signature]	09/16/2020 14:50

SmarTroll ID	7586-41442-5-1
Turbidity ID	7081-38476-1-1
Sample Event	1301

All metals and radiological bottles have pH < 2 ☑

Cooler Temp	0.0 degrees C
Thermometer ID	5408-27568-2-2
pH Strip ID	8129-45507-2-2

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 Ash Pond

Bottles

1	Radium	1 L	3	N/A	N/A	5	N/A	N/A	7	N/A	N/A
2	N/A	N/A	4	N/A	N/A	6	N/A	N/A	8	N/A	N/A

Comments: Radium MS/MSD collected at MW-44HO

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
FB-1	09/15/2020	11:15	1	Field Blank		BA17436
MW-44HO	09/15/2020	12:21	3	Groundwater		BA17437
MW-44HO dup	09/15/2020	12:21	1	Sample Duplicate		BA17438
EB-1	09/15/2020	13:10	1	Equipment Blank		BA17439

Relinquished By	Received By	Date/Time
[signature]	[signature]	09/16/2020 14:49

SmarTroll ID	7586-41442-5-1
Turbidity ID	7081-38476-1-1
Sample Event	1301

All metals and radiological bottles have pH < 2 ✔

Cooler Temp	N/A
Thermometer ID	N/A
pH Strip ID	8129-45507-2-2

Bottles/Pre-Preserved Bottles are provided by the GTL

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ANALYTICAL REPORT

Eurofins TestAmerica, Pensacola
3355 McLemore Drive
Pensacola, FL 32514
Tel: (850)474-1001

Laboratory Job ID: 400-193484-1
Laboratory Sample Delivery Group: Gorgas Ash Pond 1301
Client Project/Site: CCR Plant Gorgas

For:
Alabama Power General Test Laboratory
744 County Rd 87
GSC #8
Calera, Alabama 35040

Attn: Laura Midkiff

Authorized for release by:
12/1/2020 3:08:32 PM

Cheyenne Whitmire, Project Manager II
(850)471-6222
Cheyenne.Whitmire@Eurofinset.com

LINKS

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The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Job ID: 400-193484-1

Laboratory: Eurofins TestAmerica, Pensacola

Narrative

Job Narrative
400-193484-1

RAD

Method 9315: Radium-226 prep batch 160-484059. Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. BA17436 FB-1 (400-193484-1), BA17437 MW-44HO (400-193484-2), BA17437 MW-44HO (400-193484-2[MS]), BA17437 MW-44HO (400-193484-2[MSD]), (LCS 160-484059/1-A) and (MB 160-484059/23-A)

Method 9315: Radium-226 prep batch 160-486958. The following sample(s) did not meet the requested limit (RL) due to the reduced sample volume (insufficient volume due to re-analysis). The method blank (MB) and laboratory control sample (LCS) were also run at the reduced aliquot following NELAC guidance to match the nominal volume of client samples in the prep batch. The data have been reported with this narrative. (400-193485-A-2-G), (LCS 160-486958/2-A) and (MB 160-486958/1-A)

Method 9315: Radium-226 prep batch 160-486958. Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. BA17438 MW-44HO DUP (400-193484-3), BA17439 EB-1 (400-193484-4), (LCS 160-486958/2-A), (MB 160-486958/1-A), (400-193485-A-2-G), (400-193485-A-2-H MS), (400-193485-A-2-I MSD), (400-193526-A-1-G), (400-193526-A-1-H MS) and (400-193526-A-1-I MSD)

Method 9320: prep batch 160-484054. Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. BA17438 MW-44HO DUP (400-193484-3), BA17439 EB-1 (400-193484-4), (400-193485-A-2-D), (400-193485-A-2-E MS) and (400-193485-A-2-F MSD)

Method 9320: Radium-226 prep batch 160-484064. Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. BA17436 FB-1 (400-193484-1), BA17437 MW-44HO (400-193484-2), BA17437 MW-44HO (400-193484-2[MS]), BA17437 MW-44HO (400-193484-2[MSD]), (LCS 160-484064/1-A) and (MB 160-484064/23-A)

Method PrecSep_0: Radium 228 Prep Batch 160-484054. The following samples were prepared at a reduced aliquot to insure sufficient volume remains if needed for reanalysis: BA17438 MW-44HO DUP (400-193484-3) and BA17439 EB-1 (400-193484-4).

Method PrecSep_0: Radium 228 Prep Batch 160-484064. The following samples were prepared at a reduced aliquot to insure sufficient volume remains if needed for reanalysis: BA17436 FB-1 (400-193484-1), BA17437 MW-44HO (400-193484-2), BA17437 MW-44HO (400-193484-2[MS]) and BA17437 MW-44HO (400-193484-2[MSD]).

Method PrecSep-21: Radium 226 Prep Batch 160-484048. The following samples were prepared at a reduced aliquot to insure sufficient volume remains if needed for reanalysis: BA17438 MW-44HO DUP (400-193484-3) and BA17439 EB-1 (400-193484-4).

Method PrecSep-21: Radium 226 Prep Batch 160-484059. The following samples were prepared at a reduced aliquot to insure sufficient volume remains if needed for reanalysis: BA17436 FB-1 (400-193484-1), BA17437 MW-44HO (400-193484-2), BA17437 MW-44HO (400-193484-2[MS]) and BA17437 MW-44HO (400-193484-2[MSD]).

Method PrecSep-21: Radium 226 Prep Batch 160-486958. The following samples were prepared at a reduced aliquot to insure sufficient volume remains if needed for reanalysis: BA17438 MW-44HO DUP (400-193484-3) and BA17439 EB-1 (400-193484-4).

Method Summary

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-193484-1
SDG: Gorgas Ash Pond 1301

Method	Method Description	Protocol	Laboratory
9315	Radium-226 (GFPC)	SW846	TAL SL
9320	Radium-228 (GFPC)	SW846	TAL SL
Ra226_Ra228	Combined Radium-226 and Radium-228	TAL-STL	TAL SL
PrecSep_0	Preparation, Precipitate Separation	None	TAL SL
PrecSep-21	Preparation, Precipitate Separation (21-Day In-Growth)	None	TAL SL

Protocol References:

None = None

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

TAL-STL = TestAmerica Laboratories, St. Louis, Facility Standard Operating Procedure.

Laboratory References:

TAL SL = Eurofins TestAmerica, St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

Sample Summary

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-193484-1
SDG: Gorgas Ash Pond 1301

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
400-193484-1	BA17436 FB-1	Water	09/15/20 11:15	09/22/20 12:00	
400-193484-2	BA17437 MW-44HO	Water	09/15/20 12:21	09/22/20 12:00	
400-193484-3	BA17438 MW-44HO DUP	Water	09/15/20 12:21	09/22/20 12:00	
400-193484-4	BA17439 EB-1	Water	09/15/20 13:10	09/22/20 12:00	

Client Sample Results

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-193484-1
SDG: Gorgas Ash Pond 1301

Client Sample ID: BA17436 FB-1

Date Collected: 09/15/20 11:15
Date Received: 09/22/20 12:00

Lab Sample ID: 400-193484-1

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.0985	U	0.152	0.152	1.00	0.352	pCi/L	09/29/20 10:15	10/24/20 20:52	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*86.7*		*40 - 110*	*09/29/20 10:15*	*10/24/20 20:52*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.0535	U	0.389	0.389	1.00	0.706	pCi/L	09/29/20 10:56	10/23/20 12:36	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*86.7*		*40 - 110*	*09/29/20 10:56*	*10/23/20 12:36*	*1*
Y Carrier	*76.6*		*40 - 110*	*09/29/20 10:56*	*10/23/20 12:36*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	-0.152	U	0.418	0.418	5.00	0.706	pCi/L		11/30/20 22:09	1

Client Sample Results

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-193484-1
SDG: Gorgas Ash Pond 1301

Client Sample ID: BA17437 MW-44HO

Date Collected: 09/15/20 12:21
Date Received: 09/22/20 12:00

Lab Sample ID: 400-193484-2

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.168	U	0.173	0.174	1.00	0.272	pCi/L	09/29/20 10:15	10/24/20 20:52	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*85.2*		*40 - 110*	*09/29/20 10:15*	*10/24/20 20:52*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.143	U	0.359	0.359	1.00	0.622	pCi/L	09/29/20 10:56	10/23/20 12:36	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*85.2*		*40 - 110*	*09/29/20 10:56*	*10/23/20 12:36*	*1*
Y Carrier	*78.9*		*40 - 110*	*09/29/20 10:56*	*10/23/20 12:36*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.311	U	0.399	0.399	5.00	0.622	pCi/L		11/30/20 22:09	1

Client Sample Results

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-193484-1
SDG: Gorgas Ash Pond 1301

Client Sample ID: BA17438 MW-44HO DUP

Lab Sample ID: 400-193484-3

Date Collected: 09/15/20 12:21
Matrix: Water
Date Received: 09/22/20 12:00

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.626	U	0.593	0.596	1.00	0.901	pCi/L	10/27/20 11:44	11/20/20 13:15	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*62.2*		*40 - 110*	*10/27/20 11:44*	*11/20/20 13:15*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.170	U	0.320	0.321	1.00	0.547	pCi/L	09/29/20 09:17	10/22/20 12:44	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*87.3*		*40 - 110*	*09/29/20 09:17*	*10/22/20 12:44*	*1*
Y Carrier	*75.5*		*40 - 110*	*09/29/20 09:17*	*10/22/20 12:44*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.795	U	0.674	0.677	5.00	0.901	pCi/L		11/30/20 22:08	1

Client Sample Results

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-193484-1
SDG: Gorgas Ash Pond 1301

Client Sample ID: BA17439 EB-1

Date Collected: 09/15/20 13:10
Date Received: 09/22/20 12:00

Lab Sample ID: 400-193484-4

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.184	U	0.493	0.494	1.00	0.920	pCi/L	10/27/20 11:44	11/20/20 13:15	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*70.4*		*40 - 110*	*10/27/20 11:44*	*11/20/20 13:15*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.369	U	0.386	0.388	1.00	0.630	pCi/L	09/29/20 09:17	10/22/20 12:44	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*87.0*		*40 - 110*	*09/29/20 09:17*	*10/22/20 12:44*	*1*
Y Carrier	*76.3*		*40 - 110*	*09/29/20 09:17*	*10/22/20 12:44*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.553	U	0.626	0.628	5.00	0.920	pCi/L		11/30/20 22:08	1

Definitions/Glossary

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-193484-1
SDG: Gorgas Ash Pond 1301

Qualifiers

Rad

Qualifier	Qualifier Description
G	The Sample MDC is greater than the requested RL.
U	Result is less than the sample detection limit.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Lab Chronicle

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-193484-1
SDG: Gorgas Ash Pond 1301

Client Sample ID: BA17436 FB-1 — Lab Sample ID: 400-193484-1

Date Collected: 09/15/20 11:15 — **Matrix: Water**
Date Received: 09/22/20 12:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			484059	09/29/20 10:15	AVB	TAL SL
Total/NA	Analysis	9315		1	486669	10/24/20 20:52	SCB	TAL SL
Total/NA	Prep	PrecSep_0			484064	09/29/20 10:56	AVB	TAL SL
Total/NA	Analysis	9320		1	486655	10/23/20 12:36	CMM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	490592	11/30/20 22:09	SCB	TAL SL

Client Sample ID: BA17437 MW-44HO — Lab Sample ID: 400-193484-2

Date Collected: 09/15/20 12:21 — **Matrix: Water**
Date Received: 09/22/20 12:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			484059	09/29/20 10:15	AVB	TAL SL
Total/NA	Analysis	9315		1	486669	10/24/20 20:52	SCB	TAL SL
Total/NA	Prep	PrecSep_0			484064	09/29/20 10:56	AVB	TAL SL
Total/NA	Analysis	9320		1	486655	10/23/20 12:36	CMM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	490592	11/30/20 22:09	SCB	TAL SL

Client Sample ID: BA17438 MW-44HO DUP — Lab Sample ID: 400-193484-3

Date Collected: 09/15/20 12:21 — **Matrix: Water**
Date Received: 09/22/20 12:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			486958	10/27/20 11:44	MNH	TAL SL
Total/NA	Analysis	9315		1	489829	11/20/20 13:15	CMM	TAL SL
Total/NA	Prep	PrecSep_0			484054	09/29/20 09:17	AVB	TAL SL
Total/NA	Analysis	9320		1	486604	10/22/20 12:44	FLC	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	490591	11/30/20 22:08	SCB	TAL SL

Client Sample ID: BA17439 EB-1 — Lab Sample ID: 400-193484-4

Date Collected: 09/15/20 13:10 — **Matrix: Water**
Date Received: 09/22/20 12:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			486958	10/27/20 11:44	MNH	TAL SL
Total/NA	Analysis	9315		1	489829	11/20/20 13:15	CMM	TAL SL
Total/NA	Prep	PrecSep_0			484054	09/29/20 09:17	AVB	TAL SL
Total/NA	Analysis	9320		1	486604	10/22/20 12:44	FLC	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	490591	11/30/20 22:08	SCB	TAL SL

Laboratory References:

TAL SL = Eurofins TestAmerica, St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

QC Association Summary

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-193484-1
SDG: Gorgas Ash Pond 1301

Rad

Prep Batch: 484054

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-193484-3	BA17438 MW-44HO DUP	Total/NA	Water	PrecSep_0	
400-193484-4	BA17439 EB-1	Total/NA	Water	PrecSep_0	
MB 160-484054/24-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-484054/1-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
400-193485-A-2-E MS	Matrix Spike	Total/NA	Water	PrecSep_0	
400-193485-A-2-F MSD	Matrix Spike Duplicate	Total/NA	Water	PrecSep_0	

Prep Batch: 484059

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-193484-1	BA17436 FB-1	Total/NA	Water	PrecSep-21	
400-193484-2	BA17437 MW-44HO	Total/NA	Water	PrecSep-21	
MB 160-484059/23-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-484059/1-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
400-193484-2 MS	BA17437 MW-44HO	Total/NA	Water	PrecSep-21	
400-193484-2 MSD	BA17437 MW-44HO	Total/NA	Water	PrecSep-21	

Prep Batch: 484064

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-193484-1	BA17436 FB-1	Total/NA	Water	PrecSep_0	
400-193484-2	BA17437 MW-44HO	Total/NA	Water	PrecSep_0	
MB 160-484064/23-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-484064/1-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
400-193484-2 MS	BA17437 MW-44HO	Total/NA	Water	PrecSep_0	
400-193484-2 MSD	BA17437 MW-44HO	Total/NA	Water	PrecSep_0	

Prep Batch: 486958

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-193484-3	BA17438 MW-44HO DUP	Total/NA	Water	PrecSep-21	
400-193484-4	BA17439 EB-1	Total/NA	Water	PrecSep-21	
MB 160-486958/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-486958/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
400-193485-A-2-H MS	Matrix Spike	Total/NA	Water	PrecSep-21	
400-193485-A-2-I MSD	Matrix Spike Duplicate	Total/NA	Water	PrecSep-21	
400-193526-A-1-I MSD	Matrix Spike Duplicate	Total/NA	Water	PrecSep-21	

QC Sample Results

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-193484-1
SDG: Gorgas Ash Pond 1301

Method: 9315 - Radium-226 (GFPC)

Lab Sample ID: MB 160-484059/23-A
Matrix: Water
Analysis Batch: 486669

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 484059

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.3071		0.163	0.166	1.00	0.190	pCi/L	09/29/20 10:15	10/24/20 20:53	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*83.1*		*40 - 110*	*09/29/20 10:15*	*10/24/20 20:53*	*1*

Lab Sample ID: LCS 160-484059/1-A
Matrix: Water
Analysis Batch: 486669

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 484059

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-226			11.3	10.22		1.21	1.00	0.182	pCi/L	90	75 - 125		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*89.1*		*40 - 110*

Lab Sample ID: 400-193484-2 MS
Matrix: Water
Analysis Batch: 486669

Client Sample ID: BA17437 MW-44HO
Prep Type: Total/NA
Prep Batch: 484059

Analyte	Sample Result	Sample Qual	Spike Added	MS Result	MS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-226	0.168	U	15.1	15.42		1.78	1.00	0.260	pCi/L	101	75 - 138		

Carrier	*MS %Yield*	*MS Qualifier*	*Limits*
Ba Carrier	*89.1*		*40 - 110*

Lab Sample ID: 400-193484-2 MSD
Matrix: Water
Analysis Batch: 486669

Client Sample ID: BA17437 MW-44HO
Prep Type: Total/NA
Prep Batch: 484059

Analyte	Sample Result	Sample Qual	Spike Added	MSD Result	MSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits	RER	RER Limit
Radium-226	0.168	U	15.1	14.92		1.74	1.00	0.244	pCi/L	97	75 - 138	0.14	1

Carrier	*MSD %Yield*	*MSD Qualifier*	*Limits*
Ba Carrier	*84.6*		*40 - 110*

Lab Sample ID: MB 160-486958/1-A
Matrix: Water
Analysis Batch: 489829

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 486958

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.06992	U G	0.548	0.548	1.00	1.07	pCi/L	10/27/20 11:44	11/20/20 13:05	1

Method: 9315 - Radium-226 (GFPC) (Continued)

Lab Sample ID: MB 160-486958/1-A
Matrix: Water
Analysis Batch: 489829

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 486958

Carrier	MB %Yield	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	63.6		40 - 110	10/27/20 11:44	11/20/20 13:05	1

Lab Sample ID: LCS 160-486958/2-A
Matrix: Water
Analysis Batch: 489829

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 486958

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-226			32.4	33.46		4.40	1.00	1.09	pCi/L	103	75 - 125		

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	52.2		40 - 110

Lab Sample ID: 400-193485-A-2-H MS
Matrix: Water
Analysis Batch: 489829

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 486958

Analyte	Sample Result	Sample Qual	Spike Added	MS Result	MS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-226	-0.253	U G	34.7	33.04		4.17	1.00	0.851	pCi/L	95	75 - 138		

Carrier	MS %Yield	MS Qualifier	Limits
Ba Carrier	70.7		40 - 110

Lab Sample ID: 400-193485-A-2-I MSD
Matrix: Water
Analysis Batch: 489826

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 486958

Analyte	Sample Result	Sample Qual	Spike Added	MSD Result	MSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits	RER	RER Limit
Radium-226	-0.253	U G	34.8	40.24		4.89	1.00	0.921	pCi/L	116	75 - 138	0.79	1

Carrier	MSD %Yield	MSD Qualifier	Limits
Ba Carrier	66.0		40 - 110

Lab Sample ID: 400-193526-A-1-I MSD
Matrix: Water
Analysis Batch: 489829

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 486958

Analyte	Sample Result	Sample Qual	Spike Added	MSD Result	MSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits	RER	RER Limit
Radium-226	-0.0870	U	35.5	35.76		4.37	1.00	0.749	pCi/L	101	75 - 138	0.36	1

Carrier	MSD %Yield	MSD Qualifier	Limits
Ba Carrier	71.0		40 - 110

QC Sample Results

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-193484-1
SDG: Gorgas Ash Pond 1301

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-484054/24-A
Matrix: Water
Analysis Batch: 486603

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 484054

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.09363	U	0.381	0.381	1.00	0.666	pCi/L	09/29/20 09:17	10/22/20 12:55	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*82.0*		*40 - 110*	*09/29/20 09:17*	*10/22/20 12:55*	*1*
Y Carrier	*80.4*		*40 - 110*	*09/29/20 09:17*	*10/22/20 12:55*	*1*

Lab Sample ID: LCS 160-484054/1-A
Matrix: Water
Analysis Batch: 486604

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 484054

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-228			10.3	11.08		1.35	1.00	0.516	pCi/L	108	75 - 125		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*95.0*		*40 - 110*
Y Carrier	*78.1*		*40 - 110*

Lab Sample ID: 400-193485-A-2-E MS
Matrix: Water
Analysis Batch: 486604

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 484054

Analyte	Sample Result	Sample Qual	Spike Added	MS Result	MS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-228	0.147	U	10.3	12.24		1.56	1.00	0.690	pCi/L	118	45 - 150		

Carrier	*MS %Yield*	*MS Qualifier*	*Limits*
Ba Carrier	*79.6*		*40 - 110*
Y Carrier	*71.8*		*40 - 110*

Lab Sample ID: 400-193485-A-2-F MSD
Matrix: Water
Analysis Batch: 486604

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 484054

Analyte	Sample Result	Sample Qual	Spike Added	MSD Result	MSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits	RER	RER Limit
Radium-228	0.147	U	10.3	14.87		1.88	1.00	0.877	pCi/L	143	45 - 150	0.77	1

Carrier	*MSD %Yield*	*MSD Qualifier*	*Limits*
Ba Carrier	*80.5*		*40 - 110*
Y Carrier	*60.2*		*40 - 110*

Method: 9320 - Radium-228 (GFPC) (Continued)

Lab Sample ID: MB 160-484064/23-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 486655 — **Prep Batch: 484064**

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.2103	U	0.361	0.362	1.00	0.609	pCi/L	09/29/20 10:56	10/23/20 12:36	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*83.1*		*40 - 110*	*09/29/20 10:56*	*10/23/20 12:36*	*1*
Y Carrier	*81.9*		*40 - 110*	*09/29/20 10:56*	*10/23/20 12:36*	*1*

Lab Sample ID: LCS 160-484064/1-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 486663 — **Prep Batch: 484064**

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-228			7.71	8.000		1.02	1.00	0.437	pCi/L	104	75 - 125		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*89.1*		*40 - 110*
Y Carrier	*74.4*		*40 - 110*

Lab Sample ID: 400-193484-2 MS — **Client Sample ID: BA17437 MW-44HO**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 486655 — **Prep Batch: 484064**

Analyte	Sample Result	Sample Qual	Spike Added	MS Result	MS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-228	0.143	U	10.3	10.46		1.34	1.00	0.660	pCi/L	100	45 - 150		

Carrier	*MS %Yield*	*MS Qualifier*	*Limits*
Ba Carrier	*89.1*		*40 - 110*
Y Carrier	*80.7*		*40 - 110*

Lab Sample ID: 400-193484-2 MSD — **Client Sample ID: BA17437 MW-44HO**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 486655 — **Prep Batch: 484064**

Analyte	Sample Result	Sample Qual	Spike Added	MSD Result	MSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits	RER	RER Limit
Radium-228	0.143	U	10.3	11.25		1.45	1.00	0.746	pCi/L	108	45 - 150	0.28	1

Carrier	*MSD %Yield*	*MSD Qualifier*	*Limits*
Ba Carrier	*84.6*		*40 - 110*
Y Carrier	*78.1*		*40 - 110*

TestAmerica Pensacola
3355 McLemore Drive
Pensacola, FL 32514
Phone (850) 474-1001 Fax (850) 478-2671

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler: Dallas Gentry	Lab PM: Whitmire, Cheyenne R	Carrier Tracking No(s):	COC No: 400-56525-24537.1
Client Contact: Laura Midkif	Phone:	E-Mail: cheyenne.whitmire@testamericainc.com	State of Origin: Alabama	Page: Page 1 of 1
Company: Alabama Power General Test Laboratory		Accreditations Required (See note):		Job #:
Address: 744 County Rd 87 GSC#8	Due Date Requested:			
City: Calera	TAT Requested (days): Routine			
State, Zip: AL, 35040				
Phone: 205-664-6197	PO #: APC67309-0001			
Email: lbmidkif@southernco.com	WO #:			
Project Name: CCR	Project #: 40007143			
Site: Gorgas Ash Pond 1301	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA
M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
Other:

400-193484 COC

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	SM 4500 F_C	SM 4500 Cl_E	SM 4500 SO4_E	9315_Ra226, 9320_Ra228, Ra226Ra228_GFPC	Total Number of containers	Special Instructions/Note:
			Preservation Code:									
BA17436	9/15/20	11:15	G	Water						X	1	FB-1 (Field Blank)
BA17437	9/15/20	12:21	G	Water		X				X	3	MW-44HO
BA17438	9/15/20	12:21	G	Water						X	1	MW-44HO DUP (Sample Duplicate)
BA17439	9/15/20	13:10	G	Water						X	1	EB-1 (Equipment Blank)

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to TestAmerica Laboratories, Inc.

Possible Hazard Identification
Unconfirmed

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*

Deliverable Requested: I, II, III, IV, Other (specify) 44048 Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:		Method of Shipment:	
Relinquished by: Laura Midkiff	Date/Time: 09/17/2020 1100	Company: Water APC	Received by: [signature]	Date/Time: 9/22/20 1310	Company: TAPE
Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 12:00	Company
Relinquished by:	0	Company	Received by:	Date/Time:	Company
Custody Seals Intact:			Cooler Temperature(s) °C and Other Remarks: 21.8C IRR		

Ver: 09/20/2016

Login Sample Receipt Checklist

Client: Alabama Power General Test Laboratory

Job Number: 400-193484-1
SDG Number: Gorgas Ash Pond 1301

Login Number: 193484
List Number: 1
Creator: Gore, Beija K

List Source: Eurofins TestAmerica, Pensacola

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	21.8 °C IR 9
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Alabama Power General Test Laboratory

Job Number: 400-193484-1
SDG Number: Gorgas Ash Pond 1301

Login Number: 193484
List Number: 2
Creator: Mazariegos, Leonel A

List Source: Eurofins TestAmerica, St. Louis
List Creation: 09/25/20 08:29 AM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	N/A	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Accreditation/Certification Summary

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-193484-1
SDG: Gorgas Ash Pond 1301

Laboratory: Eurofins TestAmerica, St. Louis

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	20-001	05-06-22
ANAB	Dept. of Defense ELAP	L2305	04-06-22
ANAB	Dept. of Energy	L2305.01	04-06-22
ANAB	ISO/IEC 17025	L2305	04-06-22
Arizona	State	AZ0813	12-08-20
California	Los Angeles County Sanitation Districts	10259	06-30-21
California	State	2886	06-30-21
Connecticut	State	PH-0241	03-31-21
Florida	NELAP	E87689	06-30-21
HI - RadChem Recognition	State	n/a	06-30-21
Illinois	NELAP	004553	11-30-20
Iowa	State	373	11-30-20
Kentucky (DW)	State	KY90125	12-31-20
Louisiana	NELAP	04080	06-30-21
Louisiana (DW)	State	LA011	12-31-20
Maryland	State	310	09-30-21
MI - RadChem Recognition	State	9005	06-30-21
Missouri	State	780	06-30-22
Nevada	State	MO000542020-1	07-31-21
New Jersey	NELAP	MO002	06-30-21
New York	NELAP	11616	04-01-21
North Dakota	State	R-207	06-30-21
NRC	NRC	24-24817-01	12-31-22
Oklahoma	State	9997	08-31-21
Oregon	NELAP	4157	09-01-21
Pennsylvania	NELAP	68-00540	02-28-21
South Carolina	State	85002001	06-30-21
Texas	NELAP	T104704193-19-13	07-31-21
US Fish & Wildlife	US Federal Programs	058448	07-31-21
USDA	US Federal Programs	P330-17-00028	03-11-23
Utah	NELAP	MO000542019-11	07-31-21
Virginia	NELAP	10310	06-14-21
Washington	State	C592	08-30-21
West Virginia DEP	State	381	10-31-21

Alabama Power Company
Plant Gorgas Ash Pond

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-44HO	9/15/2020 10:48	Conductivity	1816.42	uS/cm
GS-AP-MW-44HO	9/15/2020 10:48	DO	1.08	mg/L
GS-AP-MW-44HO	9/15/2020 10:48	Depth to Water Detail	145.41	ft
GS-AP-MW-44HO	9/15/2020 10:48	Oxidation Reduction Potention	-133.5	mv
GS-AP-MW-44HO	9/15/2020 10:48	pH	8.4	pH
GS-AP-MW-44HO	9/15/2020 10:48	Temperature	18.86	C
GS-AP-MW-44HO	9/15/2020 10:48	Turbidity	16.6	NTU
GS-AP-MW-44HO	9/15/2020 10:53	Conductivity	1329.77	uS/cm
GS-AP-MW-44HO	9/15/2020 10:53	DO	0.37	mg/L
GS-AP-MW-44HO	9/15/2020 10:53	Depth to Water Detail	146.71	ft
GS-AP-MW-44HO	9/15/2020 10:53	Oxidation Reduction Potention	-203.18	mv
GS-AP-MW-44HO	9/15/2020 10:53	pH	8.69	pH
GS-AP-MW-44HO	9/15/2020 10:53	Temperature	18.76	C
GS-AP-MW-44HO	9/15/2020 10:53	Turbidity	15.9	NTU
GS-AP-MW-44HO	9/15/2020 10:58	Conductivity	1283.84	uS/cm
GS-AP-MW-44HO	9/15/2020 10:58	DO	0.27	mg/L
GS-AP-MW-44HO	9/15/2020 10:58	Depth to Water Detail	147.96	ft
GS-AP-MW-44HO	9/15/2020 10:58	Oxidation Reduction Potention	-215.66	mv
GS-AP-MW-44HO	9/15/2020 10:58	pH	8.72	pH
GS-AP-MW-44HO	9/15/2020 10:58	Temperature	18.7	C
GS-AP-MW-44HO	9/15/2020 10:58	Turbidity	14.6	NTU
GS-AP-MW-44HO	9/15/2020 11:03	Conductivity	1231.83	uS/cm
GS-AP-MW-44HO	9/15/2020 11:03	DO	0.23	mg/L
GS-AP-MW-44HO	9/15/2020 11:03	Depth to Water Detail	149.08	ft
GS-AP-MW-44HO	9/15/2020 11:03	Oxidation Reduction Potention	-220.55	mv
GS-AP-MW-44HO	9/15/2020 11:03	pH	8.74	pH
GS-AP-MW-44HO	9/15/2020 11:03	Temperature	18.81	C
GS-AP-MW-44HO	9/15/2020 11:03	Turbidity	14.4	NTU
GS-AP-MW-44HO	9/15/2020 11:08	Conductivity	1207.52	uS/cm
GS-AP-MW-44HO	9/15/2020 11:08	DO	0.2	mg/L
GS-AP-MW-44HO	9/15/2020 11:08	Depth to Water Detail	150.06	ft
GS-AP-MW-44HO	9/15/2020 11:08	Oxidation Reduction Potention	-224.65	mv
GS-AP-MW-44HO	9/15/2020 11:08	pH	8.78	pH
GS-AP-MW-44HO	9/15/2020 11:08	Temperature	18.74	C
GS-AP-MW-44HO	9/15/2020 11:08	Turbidity	13.2	NTU
GS-AP-MW-44HO	9/15/2020 11:13	Conductivity	1158.95	uS/cm
GS-AP-MW-44HO	9/15/2020 11:13	DO	0.18	mg/L
GS-AP-MW-44HO	9/15/2020 11:13	Depth to Water Detail	151.15	ft
GS-AP-MW-44HO	9/15/2020 11:13	Oxidation Reduction Potention	-227.61	mv
GS-AP-MW-44HO	9/15/2020 11:13	pH	8.81	pH
GS-AP-MW-44HO	9/15/2020 11:13	Temperature	18.73	C
GS-AP-MW-44HO	9/15/2020 11:13	Turbidity	13.6	NTU
GS-AP-MW-44HO	9/15/2020 11:18	Conductivity	1130.22	uS/cm
GS-AP-MW-44HO	9/15/2020 11:18	DO	0.17	mg/L
GS-AP-MW-44HO	9/15/2020 11:18	Depth to Water Detail	152.16	ft
GS-AP-MW-44HO	9/15/2020 11:18	Oxidation Reduction Potention	-229.94	mv

Alabama Power Company
Plant Gorgas Ash Pond

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-44HO	9/15/2020 11:18	pH	8.83	pH
GS-AP-MW-44HO	9/15/2020 11:18	Temperature	18.74	C
GS-AP-MW-44HO	9/15/2020 11:18	Turbidity	13.18	NTU
GS-AP-MW-44HO	9/15/2020 11:23	Conductivity	1101.98	uS/cm
GS-AP-MW-44HO	9/15/2020 11:23	DO	0.15	mg/L
GS-AP-MW-44HO	9/15/2020 11:23	Depth to Water Detail	153.1	ft
GS-AP-MW-44HO	9/15/2020 11:23	Oxidation Reduction Potention	-232.55	mv
GS-AP-MW-44HO	9/15/2020 11:23	pH	8.85	pH
GS-AP-MW-44HO	9/15/2020 11:23	Temperature	18.75	C
GS-AP-MW-44HO	9/15/2020 11:23	Turbidity	12.97	NTU
GS-AP-MW-44HO	9/15/2020 11:28	Conductivity	1076.13	uS/cm
GS-AP-MW-44HO	9/15/2020 11:28	DO	0.15	mg/L
GS-AP-MW-44HO	9/15/2020 11:28	Depth to Water Detail	153.51	ft
GS-AP-MW-44HO	9/15/2020 11:28	Oxidation Reduction Potention	-231.65	mv
GS-AP-MW-44HO	9/15/2020 11:28	pH	8.85	pH
GS-AP-MW-44HO	9/15/2020 11:28	Temperature	19.08	C
GS-AP-MW-44HO	9/15/2020 11:28	Turbidity	12.12	NTU
GS-AP-MW-44HO	9/15/2020 11:33	Conductivity	1100.48	uS/cm
GS-AP-MW-44HO	9/15/2020 11:33	DO	0.14	mg/L
GS-AP-MW-44HO	9/15/2020 11:33	Depth to Water Detail	153.88	ft
GS-AP-MW-44HO	9/15/2020 11:33	Oxidation Reduction Potention	-232.78	mv
GS-AP-MW-44HO	9/15/2020 11:33	pH	8.86	pH
GS-AP-MW-44HO	9/15/2020 11:33	Temperature	19.07	C
GS-AP-MW-44HO	9/15/2020 11:33	Turbidity	11.92	NTU
GS-AP-MW-44HO	9/15/2020 11:38	Conductivity	1067.97	uS/cm
GS-AP-MW-44HO	9/15/2020 11:38	DO	0.13	mg/L
GS-AP-MW-44HO	9/15/2020 11:38	Depth to Water Detail	154.2	ft
GS-AP-MW-44HO	9/15/2020 11:38	Oxidation Reduction Potention	-234.34	mv
GS-AP-MW-44HO	9/15/2020 11:38	pH	8.87	pH
GS-AP-MW-44HO	9/15/2020 11:38	Temperature	19.1	C
GS-AP-MW-44HO	9/15/2020 11:38	Turbidity	11.16	NTU
GS-AP-MW-44HO	9/15/2020 11:43	Conductivity	1032.12	uS/cm
GS-AP-MW-44HO	9/15/2020 11:43	DO	0.13	mg/L
GS-AP-MW-44HO	9/15/2020 11:43	Depth to Water Detail	154.53	ft
GS-AP-MW-44HO	9/15/2020 11:43	Oxidation Reduction Potention	-234.94	mv
GS-AP-MW-44HO	9/15/2020 11:43	pH	8.88	pH
GS-AP-MW-44HO	9/15/2020 11:43	Temperature	19.04	C
GS-AP-MW-44HO	9/15/2020 11:43	Turbidity	7.28	NTU
GS-AP-MW-44HO	9/15/2020 11:48	Conductivity	1005.53	uS/cm
GS-AP-MW-44HO	9/15/2020 11:48	DO	0.12	mg/L
GS-AP-MW-44HO	9/15/2020 11:48	Depth to Water Detail	154.85	ft
GS-AP-MW-44HO	9/15/2020 11:48	Oxidation Reduction Potention	-235.67	mv
GS-AP-MW-44HO	9/15/2020 11:48	pH	8.88	pH
GS-AP-MW-44HO	9/15/2020 11:48	Temperature	19.03	C
GS-AP-MW-44HO	9/15/2020 11:48	Turbidity	6.78	NTU
GS-AP-MW-44HO	9/15/2020 11:53	Conductivity	974.93	uS/cm

Alabama Power Company
Plant Gorgas Ash Pond

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-44HO	9/15/2020 11:53	DO	0.11	mg/L
GS-AP-MW-44HO	9/15/2020 11:53	Depth to Water Detail	155.21	ft
GS-AP-MW-44HO	9/15/2020 11:53	Oxidation Reduction Potention	-236.24	mv
GS-AP-MW-44HO	9/15/2020 11:53	pH	8.89	pH
GS-AP-MW-44HO	9/15/2020 11:53	Temperature	19.02	C
GS-AP-MW-44HO	9/15/2020 11:53	Turbidity	5.76	NTU
GS-AP-MW-44HO	9/15/2020 11:58	Conductivity	956.69	uS/cm
GS-AP-MW-44HO	9/15/2020 11:58	DO	0.1	mg/L
GS-AP-MW-44HO	9/15/2020 11:58	Depth to Water Detail	155.47	ft
GS-AP-MW-44HO	9/15/2020 11:58	Oxidation Reduction Potention	-236.29	mv
GS-AP-MW-44HO	9/15/2020 11:58	pH	8.89	pH
GS-AP-MW-44HO	9/15/2020 11:58	Temperature	19.05	C
GS-AP-MW-44HO	9/15/2020 11:58	Turbidity	5.43	NTU
GS-AP-MW-44HO	9/15/2020 12:03	Conductivity	927.04	uS/cm
GS-AP-MW-44HO	9/15/2020 12:03	DO	0.1	mg/L
GS-AP-MW-44HO	9/15/2020 12:03	Depth to Water Detail	155.76	ft
GS-AP-MW-44HO	9/15/2020 12:03	Oxidation Reduction Potention	-236.99	mv
GS-AP-MW-44HO	9/15/2020 12:03	pH	8.9	pH
GS-AP-MW-44HO	9/15/2020 12:03	Temperature	19.04	C
GS-AP-MW-44HO	9/15/2020 12:03	Turbidity	4.84	NTU
GS-AP-MW-44HO	9/15/2020 12:08	Conductivity	918	uS/cm
GS-AP-MW-44HO	9/15/2020 12:08	DO	0.09	mg/L
GS-AP-MW-44HO	9/15/2020 12:08	Depth to Water Detail	156.04	ft
GS-AP-MW-44HO	9/15/2020 12:08	Oxidation Reduction Potention	-238.53	mv
GS-AP-MW-44HO	9/15/2020 12:08	pH	8.91	pH
GS-AP-MW-44HO	9/15/2020 12:08	Temperature	19.16	C
GS-AP-MW-44HO	9/15/2020 12:08	Turbidity	4.54	NTU
GS-AP-MW-44HO	9/15/2020 12:13	Conductivity	901.4	uS/cm
GS-AP-MW-44HO	9/15/2020 12:13	DO	0.1	mg/L
GS-AP-MW-44HO	9/15/2020 12:13	Depth to Water Detail	156.04	ft
GS-AP-MW-44HO	9/15/2020 12:13	Oxidation Reduction Potention	-238.07	mv
GS-AP-MW-44HO	9/15/2020 12:13	pH	8.92	pH
GS-AP-MW-44HO	9/15/2020 12:13	Temperature	19.52	C
GS-AP-MW-44HO	9/15/2020 12:13	Turbidity	3.89	NTU
GS-AP-MW-44HO	9/15/2020 12:18	Conductivity	926.82	uS/cm
GS-AP-MW-44HO	9/15/2020 12:18	DO	0.09	mg/L
GS-AP-MW-44HO	9/15/2020 12:18	Depth to Water Detail	156.04	ft
GS-AP-MW-44HO	9/15/2020 12:18	Oxidation Reduction Potention	-239.06	mv
GS-AP-MW-44HO	9/15/2020 12:18	pH	8.94	pH
GS-AP-MW-44HO	9/15/2020 12:18	Temperature	19.08	C
GS-AP-MW-44HO	9/15/2020 12:18	Turbidity	4.13	NTU

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 Ash Pond

MW-33HO, MW-34HO & MW-35HO

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

Light rain showers were present in the area while pumping and sampling well MW-35HO.

Field quality control procedures were performed as follows:

- Blanks and Sample Duplicates were collected as described in the SAP.
    - Field Blank 1 (FB-1) had results greater than the reporting limit (RL) for Total Fluoride.

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

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

Analytical Report

Alabama Power

Sample Group : WMWGORAP_1302

Project/Site : Gorgas Ash Pond
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

October 26, 2020

Dear Dustin Brooks,

Enclosed are the analytical results for sample(s) received by the laboratory on September 16, 2020.
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: 2020.10.26 12:03:08 -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: 2020.10.28 13:13:24 -05'00'

NELAP ACCREDITED TNI LABORATORY

REPORT OF LABORATORY ANALYSIS

This Certificate states the physical and/or chemical characteristics of the sample as submitted. This document shall not be reproduced, except in full, without written consent from Alabama Power's General Test Laboratory.

Alabama Power 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 Ash Pond

WMWGORAP_1302

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
BA17430	682989	WMWGORAP_1302
BA17431	682989	WMWGORAP_1302
BA17432	682989	WMWGORAP_1302
BA17433	682989	WMWGORAP_1302
BA17434	682989	WMWGORAP_1302
BA17435	682989	WMWGORAP_1302

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
BA17431	Sodium	10.15
BA17432	Sodium & Calcium	101.5 & 10.15
BA17433	Sodium & Calcium	101.5 & 10.15
BA17434	Sodium	10.15

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

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

Case Narrative

Alabama Power

Dissolved Metals ICP

Gorgas Ash Pond

WMWGORAP_1302

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
BA17431	683094	WMWGORAP_1302
BA17432	683094	WMWGORAP_1302
BA17433	683094	WMWGORAP_1302
BA17434	683094	WMWGORAP_1302

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 Ash Pond

WMWGORAP_1302

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
BA17430	683043	WMWGORAP_1302
BA17431	683043	WMWGORAP_1302
BA17432	683043	WMWGORAP_1302
BA17433	683043	WMWGORAP_1302
BA17434	683043	WMWGORAP_1302
BA17435	683043	WMWGORAP_1302

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. 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 Ash Pond

WMWGORAP_1302

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
BA17431	683203	WMWGORAP_1302
BA17432	683203	WMWGORAP_1302
BA17433	683203	WMWGORAP_1302
BA17434	683203	WMWGORAP_1302

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

Case Narrative

Mercury

Gorgas Ash Pond

WMWGORAP_1302

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
BA17430	682757	WMWGORAP_1302
BA17431	682757	WMWGORAP_1302
BA17432	682757	WMWGORAP_1302
BA17433	682757	WMWGORAP_1302
BA17434	682757	WMWGORAP_1302
BA17435	682757	WMWGORAP_1302

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 with passing results.
- 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.

Case Narrative

TDS

Gorgas Ash Pond

WMWGORAP_1302

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
BA17430	682577	WMWGORAP_1302
BA17431	682577	WMWGORAP_1302
BA17432	682577	WMWGORAP_1302
BA17433	682577	WMWGORAP_1302
BA17434	682577	WMWGORAP_1302
BA17435	682577	WMWGORAP_1302

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:
    - BA17430
    - BA17435

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

Case Narrative

Alabama Power

Anions

Gorgas Ash Pond

WMWGORAP_1302

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
BA17430	683048, 683139, & 682792	WMWGORAP_1302
BA17431	683048, 683139, & 682792	WMWGORAP_1302
BA17432	683048, 683139, & 682792	WMWGORAP_1302
BA17433	683048, 683139, & 682792	WMWGORAP_1302
BA17434	683048, 683139, & 682792	WMWGORAP_1302
BA17435	683048, 683139, & 682792	WMWGORAP_1302

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
BA17431	Chloride & Sulfate	10 & 8
BA17432	Chloride & Sulfate	20 & 50
BA17433	Chloride & Sulfate	20 & 50
BA17434	Chloride	2

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

Alkalinity

Gorgas Ash Pond

WMWGORAP_1302

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
BA17431	683134 & 683135	WMWGORAP_1302
BA17432	683134 & 683135	WMWGORAP_1302
BA17433	683134 & 683135	WMWGORAP_1302
BA17434	683134 & 683135	WMWGORAP_1302

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 Ash Pond Field Blank-1

Location Code: WMWGORAPFB
Collected: 9/15/20 14:00
Customer ID:
Submittal Date: 9/16/20 15:41

Laboratory ID Number: BA17430

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	9/23/20 10:35	9/24/20 10:10		1.015	Not Detected	mg/L	0.03	0.1	U
* Calcium, Total	9/23/20 10:35	9/24/20 10:10		1.015	Not Detected	mg/L	0.1	0.5	U
* Iron, Total	9/23/20 10:35	9/24/20 10:10		1.015	Not Detected	mg/L	0.02	0.05	U
* Lithium, Total	9/23/20 10:35	9/24/20 10:10		1.015	Not Detected	mg/L	0.01	0.02	U
* Magnesium, Total	9/23/20 10:35	9/24/20 10:10		1.015	Not Detected	mg/L	0.1	0.5	U
* Sodium, Total	9/23/20 10:35	9/24/20 10:10		1.015	Not Detected	mg/L	0.1	0.5	U
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	9/21/20 15:15	9/22/20 12:54		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	9/21/20 15:15	9/22/20 12:54		1.015	Not Detected	mg/L	0.001	0.005	U
* Barium, Total	9/21/20 15:15	9/22/20 12:54		1.015	Not Detected	mg/L	0.002	0.01	U
* Beryllium, Total	9/21/20 15:15	9/22/20 12:54		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	9/21/20 15:15	9/22/20 12:54		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	9/21/20 15:15	9/22/20 12:54		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	9/21/20 15:15	9/22/20 12:54		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	9/21/20 15:15	9/22/20 12:54		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	9/21/20 15:15	9/22/20 12:54		1.015	Not Detected	mg/L	0.002	0.01	U
* Manganese, Total	9/21/20 15:15	9/22/20 12:54		1.015	Not Detected	mg/L	0.001	0.005	U
* Potassium, Total	9/21/20 15:15	9/22/20 12:54		1.015	Not Detected	mg/L	0.3	2.5	U
* Selenium, Total	9/21/20 15:15	9/22/20 12:54		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	9/21/20 15:15	9/22/20 12:54		1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 245.1	***Analyst: GAS***								
* Mercury, Total by CVAA	9/22/20 09:37	9/22/20 12:49		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2540C	***Analyst: TJW***								
* Solids, Dissolved	9/18/20 14:55	9/21/20 15:30		1	Not Detected	mg/L		25	U
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	9/25/20 12:24	9/25/20 12:24		1	Not Detected	mg/L	0.50	1	U
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	9/28/20 11:20	9/28/20 11:20		1	0.167	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	9/21/20 15:39	9/21/20 15:39		1	Not Detected	mg/L	0.50	1	U

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

Comments:

Reported: 10/26/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORAPFB
Sample Date: 9/15/20 14:00
Customer ID:
Delivery Date: 9/16/20 15:41

Description: Gorgas Ash Pond Field Blank-1

Laboratory ID Number: BA17430

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA17435	Cadmium, Total	mg/L	0.0000000	0.0001474	0.10	0.107	0.106	0.105	0.085 to 0.115	107	70 to 130	0.939	20
BA17435	Mercury, Total by CVAA	mg/L	0.0000170	0.0005	0.004	0.00439	0.00434	0.00443	0.0034 to 0.0046	110	70 to 130	1.15	20
BA17435	Selenium, Total	mg/L	0.000110	0.001	0.10	0.108	0.108	0.105	0.085 to 0.115	108	70 to 130	0.00	20
BA17435	Magnesium, Total	mg/L	-0.00154	0.0462	5.00	5.04	5.03	5.23	4.25 to 5.75	101	70 to 130	0.199	20
BA17435	Antimony, Total	mg/L	0.000230	0.001	0.10	0.106	0.105	0.104	0.085 to 0.115	106	70 to 130	0.948	20
BA17435	Arsenic, Total	mg/L	0.0000235	0.0001474	0.10	0.110	0.111	0.108	0.085 to 0.115	110	70 to 130	0.905	20
BA17435	Calcium, Total	mg/L	-0.00323	0.1518	5.00	5.06	5.04	5.20	4.25 to 5.75	101	70 to 130	0.396	20
BA17435	Boron, Total	mg/L	-0.000629	0.0650254	1.00	1.01	1.00	1.03	0.85 to 1.15	101	70 to 130	0.995	20
BA17435	Cobalt, Total	mg/L	-0.0000127	0.0001474	0.10	0.112	0.112	0.110	0.085 to 0.115	112	70 to 130	0.00	20
BA17435	Potassium, Total	mg/L	0.00287	0.3674	10.0	10.6	10.7	10.4	8.5 to 11.5	106	70 to 130	0.939	20
BA17435	Iron, Total	mg/L	0.000215	0.0176	0.2	0.203	0.201	0.209	0.17 to 0.23	102	70 to 130	0.990	20
BA17435	Lithium, Total	mg/L	-0.0000254	0.0154	0.20	0.194	0.194	0.200	0.17 to 0.23	97.0	70 to 130	0.00	20
BA17435	Manganese, Total	mg/L	0.0000064	0.0001474	0.10	0.110	0.110	0.108	0.085 to 0.115	110	70 to 130	0.00	20
BA17435	Sodium, Total	mg/L	0.00105	0.044	5.00	4.92	4.91	5.14	4.25 to 5.75	98.4	70 to 130	0.203	20
BA17435	Barium, Total	mg/L	-0.0000064	0.0002	0.10	0.102	0.103	0.107	0.085 to 0.115	102	70 to 130	0.976	20
BA17435	Molybdenum, Total	mg/L	0.0000047	0.0001474	0.10	0.107	0.107	0.107	0.085 to 0.115	107	70 to 130	0.00	20
BA17435	Beryllium, Total	mg/L	0.0000439	0.00088	0.10	0.0993	0.103	0.107	0.085 to 0.115	99.3	70 to 130	3.66	20
BA17435	Lead, Total	mg/L	0.0000113	0.0001474	0.10	0.108	0.111	0.111	0.085 to 0.115	108	70 to 130	2.74	20
BA17435	Chromium, Total	mg/L	0.0000595	0.00044	0.10	0.110	0.110	0.108	0.085 to 0.115	110	70 to 130	0.00	20
BA17435	Thallium, Total	mg/L	0.0000108	0.0001474	0.10	0.112	0.115	0.112	0.085 to 0.115	112	70 to 130	2.64	20

Comments:

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

Batch QC Summary

Customer Account: WMWGORAPFB
Sample Date: 9/15/20 14:00
Customer ID:
Delivery Date: 9/16/20 15:41

Description: Gorgas Ash Pond Field Blank-1

Laboratory ID Number: BA17430

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA17435	Chloride	mg/L	-0.0382	0.50	10.0	9.95	0.0163	10.6	9 to 11	99.5	80 to 120	0.00	20
BA17434	Solids, Dissolved	mg/L	0.0000	25			326	53.0	40 to 60			0.00	5
BA17435	Fluoride	mg/L	0.0229	0.05	2.50	2.60	0.0213	2.55	2.25 to 2.75	104	80 to 120	0.00	20
BA17435	Sulfate	mg/L	-0.407	0.50	20.0	18.5	-0.472	19.5	18 to 22	92.5	80 to 120	0.00	20

Comments:

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-33HO

Location Code: WMWGORAP
Collected: 9/15/20 14:46
Customer ID:
Submittal Date: 9/16/20 15:41

Laboratory ID Number: BA17431

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	9/23/20 10:35	9/24/20 10:13		1.015	0.0425	mg/L	0.03	0.1	J
* Calcium, Total	9/23/20 10:35	9/24/20 10:13		1.015	29.5	mg/L	0.1	0.5	
* Iron, Total	9/23/20 10:35	9/24/20 10:13		1.015	0.0343	mg/L	0.02	0.05	J
* Lithium, Total	9/23/20 10:35	9/24/20 10:13		1.015	0.0479	mg/L	0.01	0.02	
* Magnesium, Total	9/23/20 10:35	9/24/20 10:13		1.015	10.5	mg/L	0.1	0.5	
* Sodium, Total	9/23/20 10:35	9/24/20 11:03		10.15	144	mg/L	1.015	5.075	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Iron, Dissolved	9/23/20 11:20	9/23/20 12:18		1.015	0.0202	mg/L	0.02	0.05	J
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	9/21/20 15:15	9/22/20 12:57		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	9/21/20 15:15	9/22/20 12:57		1.015	0.00275	mg/L	0.001	0.005	J
* Barium, Total	9/21/20 15:15	9/22/20 12:57		1.015	0.469	mg/L	0.002	0.01	
* Beryllium, Total	9/21/20 15:15	9/22/20 12:57		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	9/21/20 15:15	9/22/20 12:57		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	9/21/20 15:15	9/22/20 12:57		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	9/21/20 15:15	9/22/20 12:57		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	9/21/20 15:15	9/22/20 12:57		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	9/21/20 15:15	9/22/20 12:57		1.015	0.00496	mg/L	0.002	0.01	J
* Potassium, Total	9/21/20 15:15	9/22/20 12:57		1.015	10.6	mg/L	0.3	2.5	
* Manganese, Total	9/21/20 15:15	9/22/20 12:57		1.015	0.0563	mg/L	0.001	0.005	
* Selenium, Total	9/21/20 15:15	9/22/20 12:57		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	9/21/20 15:15	9/22/20 12:57		1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Manganese, Dissolved	9/22/20 11:56	9/22/20 14:15		1.015	0.0530	mg/L	0.001	0.005	
Analytical Method: EPA 245.1	***Analyst: GAS***								
* Mercury, Total by CVAA	9/22/20 09:37	9/22/20 12:52		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2320 B	***Analyst: JAG***								
Alkalinity, Total as CaCO3	9/23/20 13:10	9/23/20 13:30		1	232	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: TJW***								
* Solids, Dissolved	9/18/20 14:55	9/21/20 15:30		1	538	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 10/16/20

Reported: 10/26/2020
Version: 3.1
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-33HO

Location Code: WMWGORAP
Collected: 9/15/20 14:46
Customer ID:
Submittal Date: 9/16/20 15:41

Laboratory ID Number: BA17431

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 4500CO2 D		***Analyst: JAG***							
Bicarbonate Alkalinity, (calc.)	9/23/20 13:10	9/23/20 13:30		1	231	mg/L			
Carbonate Alkalinity, (calc.)	9/23/20 13:10	9/23/20 13:30		1	0.95	mg/L			
Analytical Method: SM4500Cl E		***Analyst: JCC***							
* Chloride	9/25/20 12:25	9/25/20 12:25		10	75.6	mg/L	5.00	10	
Analytical Method: SM4500F G 2017		***Analyst: JCC***							
* Fluoride	9/28/20 11:21	9/28/20 11:21		1	0.188	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E 2011		***Analyst: JCC***							
* Sulfate	9/21/20 15:40	9/21/20 15:40		8	98.6	mg/L	4.00	8	
Analytical Method: Field Measurements		***Analyst: DKG***							
Conductivity	9/15/20 14:43	9/15/20 14:43			898.65	uS/cm			FA
pH	9/15/20 14:43	9/15/20 14:43			7.66	SU			FA
Temperature	9/15/20 14:43	9/15/20 14:43			21.78	C			FA
Turbidity	9/15/20 14:43	9/15/20 14:43			0.62	NTU			FA

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

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 10/16/20

Reported: 10/26/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORAP
Sample Date: 9/15/20 14:46
Customer ID:
Delivery Date: 9/16/20 15:41

Description: Gorgas Ash Pond - MW-33HO

Laboratory ID Number: BA17431

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA17435	Chromium, Total	mg/L	0.0000595	0.00044	0.10	0.110	0.110	0.108	0.085 to 0.115	110	70 to 130	0.00	20
BA17435	Thallium, Total	mg/L	0.0000108	0.0001474	0.10	0.112	0.115	0.112	0.085 to 0.115	112	70 to 130	2.64	20
BA17435	Cadmium, Total	mg/L	0.0000000	0.0001474	0.10	0.107	0.106	0.105	0.085 to 0.115	107	70 to 130	0.939	20
BA17435	Mercury, Total by CVAA	mg/L	0.0000170	0.0005	0.004	0.00439	0.00434	0.00443	0.0034 to 0.0046	110	70 to 130	1.15	20
BA17435	Selenium, Total	mg/L	0.000110	0.001	0.10	0.108	0.108	0.105	0.085 to 0.115	108	70 to 130	0.00	20
BA17435	Magnesium, Total	mg/L	-0.00154	0.0462	5.00	5.04	5.03	5.23	4.25 to 5.75	101	70 to 130	0.199	20
BA17435	Antimony, Total	mg/L	0.000230	0.001	0.10	0.106	0.105	0.104	0.085 to 0.115	106	70 to 130	0.948	20
BA17434	Manganese, Dissolved	mg/L	0.0000119	0.0001474	0.10	0.120	0.117	0.108	0.085 to 0.115	110	70 to 130	2.53	20
BA17435	Boron, Total	mg/L	-0.000629	0.0650254	1.00	1.01	1.00	1.03	0.85 to 1.15	101	70 to 130	0.995	20
BA17435	Cobalt, Total	mg/L	-0.0000127	0.0001474	0.10	0.112	0.112	0.110	0.085 to 0.115	112	70 to 130	0.00	20
BA17435	Potassium, Total	mg/L	0.00287	0.3674	10.0	10.6	10.7	10.4	8.5 to 11.5	106	70 to 130	0.939	20
BA17435	Arsenic, Total	mg/L	0.0000235	0.0001474	0.10	0.110	0.111	0.108	0.085 to 0.115	110	70 to 130	0.905	20
BA17435	Calcium, Total	mg/L	-0.00323	0.1518	5.00	5.06	5.04	5.20	4.25 to 5.75	101	70 to 130	0.396	20
BA17435	Beryllium, Total	mg/L	0.0000439	0.00088	0.10	0.0993	0.103	0.107	0.085 to 0.115	99.3	70 to 130	3.66	20
BA17435	Lead, Total	mg/L	0.0000113	0.0001474	0.10	0.108	0.111	0.111	0.085 to 0.115	108	70 to 130	2.74	20
BA17434	Iron, Dissolved	mg/L	0.0000450	0.0176	0.2	0.224	0.225	0.209	0.17 to 0.23	112	70 to 130	0.445	20
BA17435	Barium, Total	mg/L	-0.0000064	0.0002	0.10	0.102	0.103	0.107	0.085 to 0.115	102	70 to 130	0.976	20
BA17435	Molybdenum, Total	mg/L	0.0000047	0.0001474	0.10	0.107	0.107	0.107	0.085 to 0.115	107	70 to 130	0.00	20
BA17435	Iron, Total	mg/L	0.000215	0.0176	0.2	0.203	0.201	0.209	0.17 to 0.23	102	70 to 130	0.990	20
BA17435	Lithium, Total	mg/L	-0.0000254	0.0154	0.20	0.194	0.194	0.200	0.17 to 0.23	97.0	70 to 130	0.00	20
BA17435	Manganese, Total	mg/L	0.0000064	0.0001474	0.10	0.110	0.110	0.108	0.085 to 0.115	110	70 to 130	0.00	20
BA17435	Sodium, Total	mg/L	0.00105	0.044	5.00	4.92	4.91	5.14	4.25 to 5.75	98.4	70 to 130	0.203	20

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 10/16/20

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/15/20 14:46
Customer ID:
Delivery Date: 9/16/20 15:41

Description: Gorgas Ash Pond - MW-33HO

Laboratory ID Number: BA17431

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA17435	Chloride	mg/L	-0.0382	0.50	10.0	9.95	0.0163	10.6	9 to 11	99.5	80 to 120	0.00	20
BA17434	Alkalinity, Total as CaCO3	mg/L					231	50.7	45.0 to 55.0			0.00	10
BA17435	Fluoride	mg/L	0.0229	0.05	2.50	2.60	0.0213	2.55	2.25 to 2.75	104	80 to 120	0.00	20
BA17435	Sulfate	mg/L	-0.407	0.50	20.0	18.5	-0.472	19.5	18 to 22	92.5	80 to 120	0.00	20
BA17434	Solids, Dissolved	mg/L	0.0000	25			326	53.0	40 to 60			0.00	5

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 10/16/20

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-34HO

Location Code: WMWGORAP
Collected: 9/16/20 09:56
Customer ID:
Submittal Date: 9/16/20 15:41

Laboratory ID Number: BA17432

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	9/23/20 10:35	9/24/20 10:16		1.015	0.0874	mg/L	0.03	0.1	J
* Calcium, Total	9/23/20 10:35	9/24/20 11:05		10.15	86.9	mg/L	1.015	5.075	
* Iron, Total	9/23/20 10:35	9/24/20 10:16		1.015	1.43	mg/L	0.02	0.05	
* Lithium, Total	9/23/20 10:35	9/24/20 10:16		1.015	0.180	mg/L	0.01	0.02	
* Magnesium, Total	9/23/20 10:35	9/24/20 10:16		1.015	22.8	mg/L	0.1	0.5	
* Sodium, Total	9/23/20 10:35	9/24/20 11:35		101.5	741	mg/L	10.15	50.75	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Iron, Dissolved	9/23/20 11:20	9/23/20 12:21		1.015	1.69	mg/L	0.02	0.05	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	9/21/20 15:15	9/22/20 12:59		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	9/21/20 15:15	9/22/20 12:59		1.015	0.00308	mg/L	0.001	0.005	J
* Barium, Total	9/21/20 15:15	9/22/20 12:59		1.015	0.0451	mg/L	0.002	0.01	
* Beryllium, Total	9/21/20 15:15	9/22/20 12:59		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	9/21/20 15:15	9/22/20 12:59		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	9/21/20 15:15	9/22/20 12:59		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	9/21/20 15:15	9/22/20 12:59		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	9/21/20 15:15	9/22/20 12:59		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	9/21/20 15:15	9/22/20 12:59		1.015	0.00598	mg/L	0.002	0.01	J
* Potassium, Total	9/21/20 15:15	9/22/20 12:59		1.015	35.4	mg/L	0.3	2.5	
* Manganese, Total	9/21/20 15:15	9/22/20 12:59		1.015	0.296	mg/L	0.001	0.005	
* Selenium, Total	9/21/20 15:15	9/22/20 12:59		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	9/21/20 15:15	9/22/20 12:59		1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Manganese, Dissolved	9/22/20 11:56	9/22/20 14:17		1.015	0.310	mg/L	0.001	0.005	
Analytical Method: EPA 245.1	***Analyst: GAS***								
* Mercury, Total by CVAA	9/22/20 09:37	9/22/20 12:54		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2320 B	***Analyst: JAG***								
Alkalinity, Total as CaCO3	9/23/20 13:10	9/23/20 13:30		1	203	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: TJW***								
* Solids, Dissolved	9/18/20 14:55	9/21/20 15:30		1	2720	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 10/16/20

Reported: 10/26/2020
Version: 3.1
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-34HO

Location Code: WMWGORAP
Collected: 9/16/20 09:56
Customer ID:
Submittal Date: 9/16/20 15:41

Laboratory ID Number: BA17432

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 4500CO2 D		***Analyst: JAG***							
Bicarbonate Alkalinity, (calc.)	9/23/20 13:10	9/23/20 13:30		1	202	mg/L			
Carbonate Alkalinity, (calc.)	9/23/20 13:10	9/23/20 13:30		1	0.56	mg/L			
Analytical Method: SM4500Cl E		***Analyst: JCC***							
* Chloride	9/25/20 12:26	9/25/20 12:26		20	210	mg/L	10.00	20	
Analytical Method: SM4500F G 2017		***Analyst: JCC***							
* Fluoride	9/28/20 11:22	9/28/20 11:22		1	0.364	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E 2011		***Analyst: JCC***							
* Sulfate	9/21/20 15:41	9/21/20 15:41		50	1390	mg/L	25.00	50	
Analytical Method: Field Measurements		***Analyst: DKG***							
Conductivity	9/16/20 09:52	9/16/20 09:52			3904.78	uS/cm			FA
pH	9/16/20 09:52	9/16/20 09:52			7.45	SU			FA
Temperature	9/16/20 09:52	9/16/20 09:52			20.08	C			FA
Turbidity	9/16/20 09:52	9/16/20 09:52			1.54	NTU			FA

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

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 10/16/20

Reported: 10/26/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORAP
Sample Date: 9/16/20 09:56
Customer ID:
Delivery Date: 9/16/20 15:41

Description: Gorgas Ash Pond - MW-34HO

Laboratory ID Number: BA17432

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA17435	Beryllium, Total	mg/L	0.0000439	0.00088	0.10	0.0993	0.103	0.107	0.085 to 0.115	99.3	70 to 130	3.66	20
BA17435	Lead, Total	mg/L	0.0000113	0.0001474	0.10	0.108	0.111	0.111	0.085 to 0.115	108	70 to 130	2.74	20
BA17434	Manganese, Dissolved	mg/L	0.0000119	0.0001474	0.10	0.120	0.117	0.108	0.085 to 0.115	110	70 to 130	2.53	20
BA17435	Boron, Total	mg/L	-0.000629	0.0650254	1.00	1.01	1.00	1.03	0.85 to 1.15	101	70 to 130	0.995	20
BA17435	Cobalt, Total	mg/L	-0.0000127	0.0001474	0.10	0.112	0.112	0.110	0.085 to 0.115	112	70 to 130	0.00	20
BA17435	Potassium, Total	mg/L	0.00287	0.3674	10.0	10.6	10.7	10.4	8.5 to 11.5	106	70 to 130	0.939	20
BA17435	Chromium, Total	mg/L	0.0000595	0.00044	0.10	0.110	0.110	0.108	0.085 to 0.115	110	70 to 130	0.00	20
BA17435	Thallium, Total	mg/L	0.0000108	0.0001474	0.10	0.112	0.115	0.112	0.085 to 0.115	112	70 to 130	2.64	20
BA17435	Magnesium, Total	mg/L	-0.00154	0.0462	5.00	5.04	5.03	5.23	4.25 to 5.75	101	70 to 130	0.199	20
BA17435	Antimony, Total	mg/L	0.000230	0.001	0.10	0.106	0.105	0.104	0.085 to 0.115	106	70 to 130	0.948	20
BA17434	Iron, Dissolved	mg/L	0.0000450	0.0176	0.2	0.224	0.225	0.209	0.17 to 0.23	112	70 to 130	0.445	20
BA17435	Barium, Total	mg/L	-0.0000064	0.0002	0.10	0.102	0.103	0.107	0.085 to 0.115	102	70 to 130	0.976	20
BA17435	Molybdenum, Total	mg/L	0.0000047	0.0001474	0.10	0.107	0.107	0.107	0.085 to 0.115	107	70 to 130	0.00	20
BA17435	Iron, Total	mg/L	0.000215	0.0176	0.2	0.203	0.201	0.209	0.17 to 0.23	102	70 to 130	0.990	20
BA17435	Lithium, Total	mg/L	-0.0000254	0.0154	0.20	0.194	0.194	0.200	0.17 to 0.23	97.0	70 to 130	0.00	20
BA17435	Manganese, Total	mg/L	0.0000064	0.0001474	0.10	0.110	0.110	0.108	0.085 to 0.115	110	70 to 130	0.00	20
BA17435	Sodium, Total	mg/L	0.00105	0.044	5.00	4.92	4.91	5.14	4.25 to 5.75	98.4	70 to 130	0.203	20
BA17435	Arsenic, Total	mg/L	0.0000235	0.0001474	0.10	0.110	0.111	0.108	0.085 to 0.115	110	70 to 130	0.905	20
BA17435	Calcium, Total	mg/L	-0.00323	0.1518	5.00	5.06	5.04	5.20	4.25 to 5.75	101	70 to 130	0.396	20
BA17435	Cadmium, Total	mg/L	0.0000000	0.0001474	0.10	0.107	0.106	0.105	0.085 to 0.115	107	70 to 130	0.939	20
BA17435	Mercury, Total by CVAA	mg/L	0.0000170	0.0005	0.004	0.00439	0.00434	0.00443	0.0034 to 0.0046	110	70 to 130	1.15	20
BA17435	Selenium, Total	mg/L	0.000110	0.001	0.10	0.108	0.108	0.105	0.085 to 0.115	108	70 to 130	0.00	20

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 10/16/20

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/16/20 09:56
Customer ID:
Delivery Date: 9/16/20 15:41

Description: Gorgas Ash Pond - MW-34HO

Laboratory ID Number: BA17432

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA17435	Chloride	mg/L	-0.0382	0.50	10.0	9.95	0.0163	10.6	9 to 11	99.5	80 to 120	0.00	20
BA17434	Alkalinity, Total as CaCO3	mg/L					231	50.7	45.0 to 55.0			0.00	10
BA17435	Fluoride	mg/L	0.0229	0.05	2.50	2.60	0.0213	2.55	2.25 to 2.75	104	80 to 120	0.00	20
BA17435	Sulfate	mg/L	-0.407	0.50	20.0	18.5	-0.472	19.5	18 to 22	92.5	80 to 120	0.00	20
BA17434	Solids, Dissolved	mg/L	0.0000	25			326	53.0	40 to 60			0.00	5

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 10/16/20

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-34HO DUP

Location Code: WMWGORAP
Collected: 9/16/20 09:56
Customer ID:
Submittal Date: 9/16/20 15:41

Laboratory ID Number: BA17433

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	9/23/20 10:35	9/24/20 10:18		1.015	0.0874	mg/L	0.03	0.1	J
* Calcium, Total	9/23/20 10:35	9/24/20 11:08		10.15	87.6	mg/L	1.015	5.075	
* Iron, Total	9/23/20 10:35	9/24/20 10:18		1.015	1.27	mg/L	0.02	0.05	
* Lithium, Total	9/23/20 10:35	9/24/20 10:18		1.015	0.179	mg/L	0.01	0.02	
* Magnesium, Total	9/23/20 10:35	9/24/20 10:18		1.015	23.0	mg/L	0.1	0.5	
* Sodium, Total	9/23/20 10:35	9/24/20 11:38		101.5	745	mg/L	10.15	50.75	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Iron, Dissolved	9/23/20 11:20	9/23/20 12:24		1.015	1.45	mg/L	0.02	0.05	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	9/21/20 15:15	9/22/20 13:02		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	9/21/20 15:15	9/22/20 13:02		1.015	0.00314	mg/L	0.001	0.005	J
* Barium, Total	9/21/20 15:15	9/22/20 13:02		1.015	0.0464	mg/L	0.002	0.01	
* Beryllium, Total	9/21/20 15:15	9/22/20 13:02		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	9/21/20 15:15	9/22/20 13:02		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	9/21/20 15:15	9/22/20 13:02		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	9/21/20 15:15	9/22/20 13:02		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	9/21/20 15:15	9/22/20 13:02		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	9/21/20 15:15	9/22/20 13:02		1.015	0.00569	mg/L	0.002	0.01	J
* Potassium, Total	9/21/20 15:15	9/22/20 13:02		1.015	36.5	mg/L	0.3	2.5	
* Manganese, Total	9/21/20 15:15	9/22/20 13:02		1.015	0.297	mg/L	0.001	0.005	
* Selenium, Total	9/21/20 15:15	9/22/20 13:02		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	9/21/20 15:15	9/22/20 13:02		1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Manganese, Dissolved	9/22/20 11:56	9/22/20 14:20		1.015	0.296	mg/L	0.001	0.005	
Analytical Method: EPA 245.1	***Analyst: GAS***								
* Mercury, Total by CVAA	9/22/20 09:37	9/22/20 12:56		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2320 B	***Analyst: JAG***								
Alkalinity, Total as CaCO3	9/23/20 13:10	9/23/20 13:30		1	201	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: TJW***								
* Solids, Dissolved	9/18/20 14:55	9/21/20 15:30		1	2710	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 10/16/20

Reported: 10/26/2020
Version: 3.1
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-34HO DUP

Location Code: WMWGORAP
Collected: 9/16/20 09:56
Customer ID:
Submittal Date: 9/16/20 15:41

Laboratory ID Number: BA17433

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 4500CO2 D		***Analyst: JAG***							
Bicarbonate Alkalinity, (calc.)	9/23/20 13:10	9/23/20 13:30		1	201	mg/L			
Carbonate Alkalinity, (calc.)	9/23/20 13:10	9/23/20 13:30		1	0.43	mg/L			
Analytical Method: SM4500Cl E		***Analyst: JCC***							
* Chloride	9/25/20 12:27	9/25/20 12:27		20	218	mg/L	10.00	20	
Analytical Method: SM4500F G 2017		***Analyst: JCC***							
* Fluoride	9/28/20 11:23	9/28/20 11:23		1	0.358	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E 2011		***Analyst: JCC***							
* Sulfate	9/21/20 15:42	9/21/20 15:42		50	1350	mg/L	25.00	50	
Analytical Method: Field Measurements		***Analyst: DKG***							
Conductivity	9/16/20 09:52	9/16/20 09:52			3904.78	uS/cm			FA
pH	9/16/20 09:52	9/16/20 09:52			7.45	SU			FA
Temperature	9/16/20 09:52	9/16/20 09:52			20.08	C			FA
Turbidity	9/16/20 09:52	9/16/20 09:52			1.54	NTU			FA

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

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 10/16/20

Reported: 10/26/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORAP
Sample Date: 9/16/20 09:56
Customer ID:
Delivery Date: 9/16/20 15:41

Description: Gorgas Ash Pond - MW-34HO DUP

Laboratory ID Number: BA17433

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA17435	Chromium, Total	mg/L	0.0000595	0.00044	0.10	0.110	0.110	0.108	0.085 to 0.115	110	70 to 130	0.00	20
BA17435	Thallium, Total	mg/L	0.0000108	0.0001474	0.10	0.112	0.115	0.112	0.085 to 0.115	112	70 to 130	2.64	20
BA17434	Manganese, Dissolved	mg/L	0.0000119	0.0001474	0.10	0.120	0.117	0.108	0.085 to 0.115	110	70 to 130	2.53	20
BA17435	Boron, Total	mg/L	-0.000629	0.0650254	1.00	1.01	1.00	1.03	0.85 to 1.15	101	70 to 130	0.995	20
BA17435	Cobalt, Total	mg/L	-0.0000127	0.0001474	0.10	0.112	0.112	0.110	0.085 to 0.115	112	70 to 130	0.00	20
BA17435	Potassium, Total	mg/L	0.00287	0.3674	10.0	10.6	10.7	10.4	8.5 to 11.5	106	70 to 130	0.939	20
BA17435	Beryllium, Total	mg/L	0.0000439	0.00088	0.10	0.0993	0.103	0.107	0.085 to 0.115	99.3	70 to 130	3.66	20
BA17435	Lead, Total	mg/L	0.0000113	0.0001474	0.10	0.108	0.111	0.111	0.085 to 0.115	108	70 to 130	2.74	20
BA17435	Iron, Total	mg/L	0.000215	0.0176	0.2	0.203	0.201	0.209	0.17 to 0.23	102	70 to 130	0.990	20
BA17435	Lithium, Total	mg/L	-0.0000254	0.0154	0.20	0.194	0.194	0.200	0.17 to 0.23	97.0	70 to 130	0.00	20
BA17435	Manganese, Total	mg/L	0.0000064	0.0001474	0.10	0.110	0.110	0.108	0.085 to 0.115	110	70 to 130	0.00	20
BA17435	Sodium, Total	mg/L	0.00105	0.044	5.00	4.92	4.91	5.14	4.25 to 5.75	98.4	70 to 130	0.203	20
BA17435	Magnesium, Total	mg/L	-0.00154	0.0462	5.00	5.04	5.03	5.23	4.25 to 5.75	101	70 to 130	0.199	20
BA17435	Antimony, Total	mg/L	0.000230	0.001	0.10	0.106	0.105	0.104	0.085 to 0.115	106	70 to 130	0.948	20
BA17435	Arsenic, Total	mg/L	0.0000235	0.0001474	0.10	0.110	0.111	0.108	0.085 to 0.115	110	70 to 130	0.905	20
BA17435	Calcium, Total	mg/L	-0.00323	0.1518	5.00	5.06	5.04	5.20	4.25 to 5.75	101	70 to 130	0.396	20
BA17434	Iron, Dissolved	mg/L	0.0000450	0.0176	0.2	0.224	0.225	0.209	0.17 to 0.23	112	70 to 130	0.445	20
BA17435	Barium, Total	mg/L	-0.0000064	0.0002	0.10	0.102	0.103	0.107	0.085 to 0.115	102	70 to 130	0.976	20
BA17435	Molybdenum, Total	mg/L	0.0000047	0.0001474	0.10	0.107	0.107	0.107	0.085 to 0.115	107	70 to 130	0.00	20
BA17435	Cadmium, Total	mg/L	0.0000000	0.0001474	0.10	0.107	0.106	0.105	0.085 to 0.115	107	70 to 130	0.939	20
BA17435	Mercury, Total by CVAA	mg/L	0.0000170	0.0005	0.004	0.00439	0.00434	0.00443	0.0034 to 0.0046	110	70 to 130	1.15	20
BA17435	Selenium, Total	mg/L	0.000110	0.001	0.10	0.108	0.108	0.105	0.085 to 0.115	108	70 to 130	0.00	20

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 10/16/20

Reported: 10/26/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/16/20 09:56
Customer ID:
Delivery Date: 9/16/20 15:41

Description: Gorgas Ash Pond - MW-34HO DUP

Laboratory ID Number: BA17433

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA17434	Alkalinity, Total as CaCO3	mg/L					231	50.7	45.0 to 55.0			0.00	10
BA17434	Solids, Dissolved	mg/L	0.0000	25			326	53.0	40 to 60			0.00	5
BA17435	Fluoride	mg/L	0.0229	0.05	2.50	2.60	0.0213	2.55	2.25 to 2.75	104	80 to 120	0.00	20
BA17435	Sulfate	mg/L	-0.407	0.50	20.0	18.5	-0.472	19.5	18 to 22	92.5	80 to 120	0.00	20
BA17435	Chloride	mg/L	-0.0382	0.50	10.0	9.95	0.0163	10.6	9 to 11	99.5	80 to 120	0.00	20

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 10/16/20

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-35HO

Location Code: WMWGORAP
Collected: 9/16/20 12:05
Customer ID:
Submittal Date: 9/16/20 15:41

Laboratory ID Number: BA17434

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	9/23/20 10:35	9/24/20 10:21		1.015	Not Detected	mg/L	0.03	0.1	U
* Calcium, Total	9/23/20 10:35	9/24/20 10:21		1.015	3.04	mg/L	0.1	0.5	
* Iron, Total	9/23/20 10:35	9/24/20 10:21		1.015	0.167	mg/L	0.02	0.05	
* Lithium, Total	9/23/20 10:35	9/24/20 10:21		1.015	0.0685	mg/L	0.01	0.02	
* Magnesium, Total	9/23/20 10:35	9/24/20 10:21		1.015	0.584	mg/L	0.1	0.5	
* Sodium, Total	9/23/20 10:35	9/24/20 11:11		10.15	124	mg/L	1.015	5.075	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Iron, Dissolved	9/23/20 11:20	9/23/20 12:27		1.015	Not Detected	mg/L	0.02	0.05	U
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	9/21/20 15:15	9/22/20 13:04		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	9/21/20 15:15	9/22/20 13:04		1.015	Not Detected	mg/L	0.001	0.005	U
* Barium, Total	9/21/20 15:15	9/22/20 13:04		1.015	0.0532	mg/L	0.002	0.01	
* Beryllium, Total	9/21/20 15:15	9/22/20 13:04		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	9/21/20 15:15	9/22/20 13:04		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	9/21/20 15:15	9/22/20 13:04		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	9/21/20 15:15	9/22/20 13:04		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	9/21/20 15:15	9/22/20 13:04		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	9/21/20 15:15	9/22/20 13:04		1.015	Not Detected	mg/L	0.002	0.01	U
* Potassium, Total	9/21/20 15:15	9/22/20 13:04		1.015	2.31	mg/L	0.3	2.5	J
* Manganese, Total	9/21/20 15:15	9/22/20 13:04		1.015	0.0132	mg/L	0.001	0.005	
* Selenium, Total	9/21/20 15:15	9/22/20 13:04		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	9/21/20 15:15	9/22/20 13:04		1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Manganese, Dissolved	9/22/20 11:56	9/22/20 14:23		1.015	0.00984	mg/L	0.001	0.005	
Analytical Method: EPA 245.1	***Analyst: GAS***								
* Mercury, Total by CVAA	9/22/20 09:37	9/22/20 12:59		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2320 B	***Analyst: JAG***								
Alkalinity, Total as CaCO3	9/23/20 13:10	9/23/20 13:30		1	231	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: TJW***								
* Solids, Dissolved	9/18/20 14:55	9/21/20 15:30		1	326	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 10/16/20

Reported: 10/26/2020
Version: 3.1
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-35HO

Location Code: WMWGORAP
Collected: 9/16/20 12:05
Customer ID:
Submittal Date: 9/16/20 15:41

Laboratory ID Number: BA17434

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 4500CO2 D		***Analyst: JAG***							
Bicarbonate Alkalinity, (calc.)	9/23/20 13:10	9/23/20 13:30		1	224	mg/L			
Carbonate Alkalinity, (calc.)	9/23/20 13:10	9/23/20 13:30		1	6.97	mg/L			
Analytical Method: SM4500Cl E		***Analyst: JCC***							
* Chloride	9/25/20 12:28	9/25/20 12:28		2	20.9	mg/L	1.00	2	
Analytical Method: SM4500F G 2017		***Analyst: JCC***							
* Fluoride	9/28/20 11:25	9/28/20 11:25		1	0.162	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E 2011		***Analyst: JCC***							
* Sulfate	9/21/20 15:43	9/21/20 15:43		1	24.6	mg/L	0.50	1	
Analytical Method: Field Measurements		***Analyst: DKG***							
Conductivity	9/16/20 12:01	9/16/20 12:01			527.09	uS/cm			FA
pH	9/16/20 12:01	9/16/20 12:01			8.48	SU			FA
Temperature	9/16/20 12:01	9/16/20 12:01			18.64	C			FA
Turbidity	9/16/20 12:01	9/16/20 12:01			6.14	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 10/16/20

Reported: 10/26/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORAP
Sample Date: 9/16/20 12:05
Customer ID:
Delivery Date: 9/16/20 15:41

Description: Gorgas Ash Pond - MW-35HO

Laboratory ID Number: BA17434

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA17435	Cadmium, Total	mg/L	0.0000000	0.0001474	0.10	0.107	0.106	0.105	0.085 to 0.115	107	70 to 130	0.939	20
BA17435	Mercury, Total by CVAA	mg/L	0.0000170	0.0005	0.004	0.00439	0.00434	0.00443	0.0034 to 0.0046	110	70 to 130	1.15	20
BA17435	Selenium, Total	mg/L	0.000110	0.001	0.10	0.108	0.108	0.105	0.085 to 0.115	108	70 to 130	0.00	20
BA17435	Magnesium, Total	mg/L	-0.00154	0.0462	5.00	5.04	5.03	5.23	4.25 to 5.75	101	70 to 130	0.199	20
BA17435	Antimony, Total	mg/L	0.000230	0.001	0.10	0.106	0.105	0.104	0.085 to 0.115	106	70 to 130	0.948	20
BA17434	Manganese, Dissolved	mg/L	0.0000119	0.0001474	0.10	0.120	0.117	0.108	0.085 to 0.115	110	70 to 130	2.53	20
BA17435	Boron, Total	mg/L	-0.000629	0.0650254	1.00	1.01	1.00	1.03	0.85 to 1.15	101	70 to 130	0.995	20
BA17435	Cobalt, Total	mg/L	-0.0000127	0.0001474	0.10	0.112	0.112	0.110	0.085 to 0.115	112	70 to 130	0.00	20
BA17435	Potassium, Total	mg/L	0.00287	0.3674	10.0	10.6	10.7	10.4	8.5 to 11.5	106	70 to 130	0.939	20
BA17435	Beryllium, Total	mg/L	0.0000439	0.00088	0.10	0.0993	0.103	0.107	0.085 to 0.115	99.3	70 to 130	3.66	20
BA17435	Lead, Total	mg/L	0.0000113	0.0001474	0.10	0.108	0.111	0.111	0.085 to 0.115	108	70 to 130	2.74	20
BA17435	Chromium, Total	mg/L	0.0000595	0.00044	0.10	0.110	0.110	0.108	0.085 to 0.115	110	70 to 130	0.00	20
BA17435	Thallium, Total	mg/L	0.0000108	0.0001474	0.10	0.112	0.115	0.112	0.085 to 0.115	112	70 to 130	2.64	20
BA17434	Iron, Dissolved	mg/L	0.0000450	0.0176	0.2	0.224	0.225	0.209	0.17 to 0.23	112	70 to 130	0.445	20
BA17435	Barium, Total	mg/L	-0.0000064	0.0002	0.10	0.102	0.103	0.107	0.085 to 0.115	102	70 to 130	0.976	20
BA17435	Molybdenum, Total	mg/L	0.0000047	0.0001474	0.10	0.107	0.107	0.107	0.085 to 0.115	107	70 to 130	0.00	20
BA17435	Arsenic, Total	mg/L	0.0000235	0.0001474	0.10	0.110	0.111	0.108	0.085 to 0.115	110	70 to 130	0.905	20
BA17435	Calcium, Total	mg/L	-0.00323	0.1518	5.00	5.06	5.04	5.20	4.25 to 5.75	101	70 to 130	0.396	20
BA17435	Iron, Total	mg/L	0.000215	0.0176	0.2	0.203	0.201	0.209	0.17 to 0.23	102	70 to 130	0.990	20
BA17435	Lithium, Total	mg/L	-0.0000254	0.0154	0.20	0.194	0.194	0.200	0.17 to 0.23	97.0	70 to 130	0.00	20
BA17435	Manganese, Total	mg/L	0.0000064	0.0001474	0.10	0.110	0.110	0.108	0.085 to 0.115	110	70 to 130	0.00	20
BA17435	Sodium, Total	mg/L	0.00105	0.044	5.00	4.92	4.91	5.14	4.25 to 5.75	98.4	70 to 130	0.203	20

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 10/16/20

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/16/20 12:05
Customer ID:
Delivery Date: 9/16/20 15:41

Description: Gorgas Ash Pond - MW-35HO

Laboratory ID Number: BA17434

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA17434	Alkalinity, Total as CaCO3	mg/L					231	50.7	45.0 to 55.0			0.00	10
BA17435	Chloride	mg/L	-0.0382	0.50	10.0	9.95	0.0163	10.6	9 to 11	99.5	80 to 120	0.00	20
BA17434	Solids, Dissolved	mg/L	0.0000	25			326	53.0	40 to 60			0.00	5
BA17435	Fluoride	mg/L	0.0229	0.05	2.50	2.60	0.0213	2.55	2.25 to 2.75	104	80 to 120	0.00	20
BA17435	Sulfate	mg/L	-0.407	0.50	20.0	18.5	-0.472	19.5	18 to 22	92.5	80 to 120	0.00	20

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 10/16/20

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond Equipment Blank-1

Location Code: WMWGORAPEB
Collected: 9/16/20 12:50
Customer ID:
Submittal Date: 9/16/20 15:41

Laboratory ID Number: BA17435

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	9/23/20 10:35	9/24/20 10:24		1.015	Not Detected	mg/L	0.03	0.1	U
* Calcium, Total	9/23/20 10:35	9/24/20 10:24		1.015	Not Detected	mg/L	0.1	0.5	U
* Iron, Total	9/23/20 10:35	9/24/20 10:24		1.015	Not Detected	mg/L	0.02	0.05	U
* Lithium, Total	9/23/20 10:35	9/24/20 10:24		1.015	Not Detected	mg/L	0.01	0.02	U
* Magnesium, Total	9/23/20 10:35	9/24/20 10:24		1.015	Not Detected	mg/L	0.1	0.5	U
* Sodium, Total	9/23/20 10:35	9/24/20 10:24		1.015	Not Detected	mg/L	0.1	0.5	U
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	9/21/20 15:15	9/22/20 13:07		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	9/21/20 15:15	9/22/20 13:07		1.015	Not Detected	mg/L	0.001	0.005	U
* Barium, Total	9/21/20 15:15	9/22/20 13:07		1.015	Not Detected	mg/L	0.002	0.01	U
* Beryllium, Total	9/21/20 15:15	9/22/20 13:07		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	9/21/20 15:15	9/22/20 13:07		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	9/21/20 15:15	9/22/20 13:07		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	9/21/20 15:15	9/22/20 13:07		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	9/21/20 15:15	9/22/20 13:07		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	9/21/20 15:15	9/22/20 13:07		1.015	Not Detected	mg/L	0.002	0.01	U
* Manganese, Total	9/21/20 15:15	9/22/20 13:07		1.015	Not Detected	mg/L	0.001	0.005	U
* Potassium, Total	9/21/20 15:15	9/22/20 13:07		1.015	Not Detected	mg/L	0.3	2.5	U
* Selenium, Total	9/21/20 15:15	9/22/20 13:07		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	9/21/20 15:15	9/22/20 13:07		1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 245.1	***Analyst: GAS***								
* Mercury, Total by CVAA	9/22/20 09:37	9/22/20 13:01		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2540C	***Analyst: TJW***								
* Solids, Dissolved	9/18/20 14:55	9/21/20 15:30		1	Not Detected	mg/L		25	U
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	9/25/20 12:30	9/25/20 12:30		1	Not Detected	mg/L	0.50	1	U
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	9/28/20 11:26	9/28/20 11:26		1	Not Detected	mg/L	0.06	0.1	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	9/21/20 15:45	9/21/20 15:45		1	Not Detected	mg/L	0.50	1	U

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

Comments:

Reported: 10/26/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORAPEB
Sample Date: 9/16/20 12:50
Customer ID:
Delivery Date: 9/16/20 15:41

Description: Gorgas Ash Pond Equipment Blank-1

Laboratory ID Number: BA17435

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA17435	Boron, Total	mg/L	-0.000629	0.0650254	1.00	1.01	1.00	1.03	0.85 to 1.15	101	70 to 130	0.995	20
BA17435	Cobalt, Total	mg/L	-0.0000127	0.0001474	0.10	0.112	0.112	0.110	0.085 to 0.115	112	70 to 130	0.00	20
BA17435	Potassium, Total	mg/L	0.00287	0.3674	10.0	10.6	10.7	10.4	8.5 to 11.5	106	70 to 130	0.939	20
BA17435	Chromium, Total	mg/L	0.0000595	0.00044	0.10	0.110	0.110	0.108	0.085 to 0.115	110	70 to 130	0.00	20
BA17435	Thallium, Total	mg/L	0.0000108	0.0001474	0.10	0.112	0.115	0.112	0.085 to 0.115	112	70 to 130	2.64	20
BA17435	Beryllium, Total	mg/L	0.0000439	0.00088	0.10	0.0993	0.103	0.107	0.085 to 0.115	99.3	70 to 130	3.66	20
BA17435	Lead, Total	mg/L	0.0000113	0.0001474	0.10	0.108	0.111	0.111	0.085 to 0.115	108	70 to 130	2.74	20
BA17435	Cadmium, Total	mg/L	0.0000000	0.0001474	0.10	0.107	0.106	0.105	0.085 to 0.115	107	70 to 130	0.939	20
BA17435	Mercury, Total by CVAA	mg/L	0.0000170	0.0005	0.004	0.00439	0.00434	0.00443	0.0034 to 0.0046	110	70 to 130	1.15	20
BA17435	Selenium, Total	mg/L	0.000110	0.001	0.10	0.108	0.108	0.105	0.085 to 0.115	108	70 to 130	0.00	20
BA17435	Arsenic, Total	mg/L	0.0000235	0.0001474	0.10	0.110	0.111	0.108	0.085 to 0.115	110	70 to 130	0.905	20
BA17435	Calcium, Total	mg/L	-0.00323	0.1518	5.00	5.06	5.04	5.20	4.25 to 5.75	101	70 to 130	0.396	20
BA17435	Iron, Total	mg/L	0.000215	0.0176	0.2	0.203	0.201	0.209	0.17 to 0.23	102	70 to 130	0.990	20
BA17435	Lithium, Total	mg/L	-0.0000254	0.0154	0.20	0.194	0.194	0.200	0.17 to 0.23	97.0	70 to 130	0.00	20
BA17435	Manganese, Total	mg/L	0.0000064	0.0001474	0.10	0.110	0.110	0.108	0.085 to 0.115	110	70 to 130	0.00	20
BA17435	Sodium, Total	mg/L	0.00105	0.044	5.00	4.92	4.91	5.14	4.25 to 5.75	98.4	70 to 130	0.203	20
BA17435	Magnesium, Total	mg/L	-0.00154	0.0462	5.00	5.04	5.03	5.23	4.25 to 5.75	101	70 to 130	0.199	20
BA17435	Antimony, Total	mg/L	0.000230	0.001	0.10	0.106	0.105	0.104	0.085 to 0.115	106	70 to 130	0.948	20
BA17435	Barium, Total	mg/L	-0.0000064	0.0002	0.10	0.102	0.103	0.107	0.085 to 0.115	102	70 to 130	0.976	20
BA17435	Molybdenum, Total	mg/L	0.0000047	0.0001474	0.10	0.107	0.107	0.107	0.085 to 0.115	107	70 to 130	0.00	20

Comments:

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

Batch QC Summary

Customer Account: WMWGORAPEB
Sample Date: 9/16/20 12:50
Customer ID:
Delivery Date: 9/16/20 15:41

Description: Gorgas Ash Pond Equipment Blank-1

Laboratory ID Number: BA17435

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA17435	Chloride	mg/L	-0.0382	0.50	10.0	9.95	0.0163	10.6	9 to 11	99.5	80 to 120	0.00	20
BA17434	Solids, Dissolved	mg/L	0.0000	25			326	53.0	40 to 60			0.00	5
BA17435	Fluoride	mg/L	0.0229	0.05	2.50	2.60	0.0213	2.55	2.25 to 2.75	104	80 to 120	0.00	20
BA17435	Sulfate	mg/L	-0.407	0.50	20.0	18.5	-0.472	19.5	18 to 22	92.5	80 to 120	0.00	20

Comments:

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

Definitions

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	Dallas Gentry	Location	Gorgas Ash Pond

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
FB-1	09/15/2020	14:00	4	Field Blank		BA17430
MW-33HO	09/15/2020	14:46	6	Groundwater		BA17431
MW-34HO	09/16/2020	09:56	6	Groundwater		BA17432
MW-34HO dup	09/16/2020	09:56	6	Sample Duplicate		BA17433
MW-35HO	09/16/2020	12:05	6	Groundwater		BA17434
EB-1	09/16/2020	12:50	4	Equipment Blank		BA17435

Relinquished By	Received By	Date/Time
		09/16/2020 14:51

SmarTroll ID	7586-41442-5-1
Turbidity ID	7081-38476-1-1
Sample Event	1302

All metals and radiological bottles have pH < 2 ✔

Cooler Temp	0.0 degrees C
Thermometer ID	5408-27568-2-2
pH Strip ID	8129-45507-2-2

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 Ash Pond

Bottles

1	Radium	1 L	3	N/A	N/A	5	N/A	N/A	7	N/A	N/A
2	N/A	N/A	4	N/A	N/A	6	N/A	N/A	8	N/A	N/A

Comments: Radium MS/MSD collected at MW-33HO

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
FB-1	09/15/2020	14:00	1	Field Blank		BA17440
MW-33HO	09/15/2020	14:46	3	Groundwater		BA17441
MW-34HO	09/16/2020	09:56	1	Groundwater		BA17442
MW-34HO dup	09/16/2020	09:56	1	Sample Duplicate		BA17443
MW-35HO	09/16/2020	12:05	1	Groundwater		BA17444
EB-1	09/16/2020	12:50	1	Equipment Blank		BA17445

Relinquished By	Received By	Date/Time
[signature]	[signature]	09/16/2020 14:50

SmarTroll ID	7586-41442-5-1
Turbidity ID	7081-38476-1-1
Sample Event	1302

All metals and radiological bottles have pH < 2 ✔

Cooler Temp	N/A
Thermometer ID	N/A
pH Strip ID	8129-45507-2-2

Bottles/Pre-Preserved Bottles are provided by the GTL

7.1

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ANALYTICAL REPORT

Eurofins TestAmerica, Pensacola
3355 McLemore Drive
Pensacola, FL 32514
Tel: (850)474-1001

Laboratory Job ID: 400-193485-1
Laboratory Sample Delivery Group: Gorgas Ash Pond 1302
Client Project/Site: CCR Plant Gorgas

For:
Alabama Power General Test Laboratory
744 County Rd 87
GSC #8
Calera, Alabama 35040

Attn: Laura Midkiff

Authorized for release by:
12/1/2020 3:09:52 PM

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Results relate only to the items tested and the sample(s) as received by the laboratory.

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Job ID: 400-193485-1

Laboratory: Eurofins TestAmerica, Pensacola

Narrative

Job Narrative
400-193485-1

RAD

Method 9315: Radium-226 prep batch 160-486958. The following samples did not meet the requested limit (RL) due to the reduced sample volume (insufficient volume due to re-analysis). The method blank (MB) and laboratory control sample (LCS) were also run at the reduced aliquot following NELAC guidance to match the nominal volume of client samples in the prep batch. The data have been reported with this narrative. (LCS 160-486958/2-A), (MB 160-486958/1-A), BA17441 MW-33HO (400-193485-2), BA17442 MW-34HO (400-193485-3), BA17443 MW-34HO DUP (400-193485-4) and BA17444 MW-35HO (400-193485-5)

Method 9315: Radium-226 prep batch 160-486958. Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. BA17440 FB-1 (400-193485-1), BA17441 MW-33HO (400-193485-2), BA17441 MW-33HO (400-193485-2[MS]), BA17441 MW-33HO (400-193485-2[MSD]), BA17442 MW-34HO (400-193485-3), BA17443 MW-34HO DUP (400-193485-4), BA17444 MW-35HO (400-193485-5), BA17445 EB-1 (400-193485-6), (LCS 160-486958/2-A) and (MB 160-486958/1-A)

Method 9320: prep batch 160-484054. Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. BA17440 FB-1 (400-193485-1), BA17441 MW-33HO (400-193485-2), BA17441 MW-33HO (400-193485-2[MS]), BA17441 MW-33HO (400-193485-2[MSD]), BA17442 MW-34HO (400-193485-3), BA17443 MW-34HO DUP (400-193485-4), BA17444 MW-35HO (400-193485-5) and BA17445 EB-1 (400-193485-6)

Method PrecSep_0: Radium 228 Prep Batch 160-484054. The following samples were prepared at a reduced aliquot to insure sufficient volume remains if needed for reanalysis: BA17440 FB-1 (400-193485-1), BA17441 MW-33HO (400-193485-2), BA17441 MW-33HO (400-193485-2[MS]), BA17441 MW-33HO (400-193485-2[MSD]), BA17442 MW-34HO (400-193485-3), BA17443 MW-34HO DUP (400-193485-4), BA17444 MW-35HO (400-193485-5) and BA17445 EB-1 (400-193485-6).

Method PrecSep-21: Radium 226 Prep Batch 160-484048. The following samples were prepared at a reduced aliquot to insure sufficient volume remains if needed for reanalysis: BA17440 FB-1 (400-193485-1), BA17441 MW-33HO (400-193485-2), BA17441 MW-33HO (400-193485-2[MS]), BA17441 MW-33HO (400-193485-2[MSD]), BA17442 MW-34HO (400-193485-3), BA17443 MW-34HO DUP (400-193485-4), BA17444 MW-35HO (400-193485-5) and BA17445 EB-1 (400-193485-6).

Method PrecSep-21: Radium 226 Prep Batch 160-486958. The following samples were prepared at a reduced aliquot to insure sufficient volume remains if needed for reanalysis: BA17440 FB-1 (400-193485-1), BA17441 MW-33HO (400-193485-2), BA17441 MW-33HO (400-193485-2[MS]), BA17441 MW-33HO (400-193485-2[MSD]), BA17442 MW-34HO (400-193485-3), BA17443 MW-34HO DUP (400-193485-4), BA17444 MW-35HO (400-193485-5) and BA17445 EB-1 (400-193485-6).

Method Summary

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-193485-1
SDG: Gorgas Ash Pond 1302

Method	Method Description	Protocol	Laboratory
9315	Radium-226 (GFPC)	SW846	TAL SL
9320	Radium-228 (GFPC)	SW846	TAL SL
Ra226_Ra228	Combined Radium-226 and Radium-228	TAL-STL	TAL SL
PrecSep_0	Preparation, Precipitate Separation	None	TAL SL
PrecSep-21	Preparation, Precipitate Separation (21-Day In-Growth)	None	TAL SL

Protocol References:

None = None

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

TAL-STL = TestAmerica Laboratories, St. Louis, Facility Standard Operating Procedure.

Laboratory References:

TAL SL = Eurofins TestAmerica, St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

Sample Summary

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-193485-1
SDG: Gorgas Ash Pond 1302

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
400-193485-1	BA17440 FB-1	Water	09/15/20 14:00	09/22/20 12:00	
400-193485-2	BA17441 MW-33HO	Water	09/15/20 14:46	09/22/20 12:00	
400-193485-3	BA17442 MW-34HO	Water	09/16/20 09:56	09/22/20 12:00	
400-193485-4	BA17443 MW-34HO DUP	Water	09/16/20 09:56	09/22/20 12:00	
400-193485-5	BA17444 MW-35HO	Water	09/16/20 12:05	09/22/20 12:00	
400-193485-6	BA17445 EB-1	Water	09/16/20 12:50	09/22/20 12:00	

Client Sample Results

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-193485-1
SDG: Gorgas Ash Pond 1302

Client Sample ID: BA17440 FB-1

Date Collected: 09/15/20 14:00
Date Received: 09/22/20 12:00

Lab Sample ID: 400-193485-1

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.208	U	0.505	0.505	1.00	0.932	pCi/L	10/27/20 11:44	11/20/20 13:16	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*66.3*		*40 - 110*	*10/27/20 11:44*	*11/20/20 13:16*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.309	U	0.403	0.404	1.00	0.671	pCi/L	09/29/20 09:17	10/22/20 12:45	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*83.7*		*40 - 110*	*09/29/20 09:17*	*10/22/20 12:45*	*1*
Y Carrier	*76.3*		*40 - 110*	*09/29/20 09:17*	*10/22/20 12:45*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.517	U	0.646	0.647	5.00	0.932	pCi/L		11/30/20 22:08	1

Client Sample Results

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-193485-1
SDG: Gorgas Ash Pond 1302

Client Sample ID: BA17441 MW-33HO

Date Collected: 09/15/20 14:46
Date Received: 09/22/20 12:00

Lab Sample ID: 400-193485-2

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.253	U G	0.801	0.802	1.00	1.64	pCi/L	10/27/20 11:44	11/20/20 13:17	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*56.3*		*40 - 110*	*10/27/20 11:44*	*11/20/20 13:17*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.147	U	0.386	0.387	1.00	0.669	pCi/L	09/29/20 09:17	10/22/20 12:53	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*82.8*		*40 - 110*	*09/29/20 09:17*	*10/22/20 12:53*	*1*
Y Carrier	*72.5*		*40 - 110*	*09/29/20 09:17*	*10/22/20 12:53*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	-0.106	U	0.889	0.890	5.00	1.64	pCi/L		11/30/20 22:08	1

Client Sample Results

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-193485-1
SDG: Gorgas Ash Pond 1302

Client Sample ID: BA17442 MW-34HO

Lab Sample ID: 400-193485-3

Date Collected: 09/16/20 09:56
Matrix: Water
Date Received: 09/22/20 12:00

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.162	U G	0.604	0.604	1.00	1.13	pCi/L	10/27/20 11:44	11/20/20 13:30	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*70.1*		*40 - 110*	*10/27/20 11:44*	*11/20/20 13:30*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.125	U	0.359	0.360	1.00	0.624	pCi/L	09/29/20 09:17	10/22/20 12:45	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*89.6*		*40 - 110*	*09/29/20 09:17*	*10/22/20 12:45*	*1*
Y Carrier	*74.4*		*40 - 110*	*09/29/20 09:17*	*10/22/20 12:45*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.286	U	0.703	0.703	5.00	1.13	pCi/L		11/30/20 22:08	1

Client Sample Results

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-193485-1
SDG: Gorgas Ash Pond 1302

Client Sample ID: BA17443 MW-34HO DUP

Lab Sample ID: 400-193485-4

Date Collected: 09/16/20 09:56
Matrix: Water
Date Received: 09/22/20 12:00

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.216	U G	0.579	0.579	1.00	1.08	pCi/L	10/27/20 11:44	11/20/20 13:30	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*58.9*		*40 - 110*	*10/27/20 11:44*	*11/20/20 13:30*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.114	U	0.467	0.467	1.00	0.811	pCi/L	09/29/20 09:17	10/22/20 12:46	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*84.6*		*40 - 110*	*09/29/20 09:17*	*10/22/20 12:46*	*1*
Y Carrier	*71.0*		*40 - 110*	*09/29/20 09:17*	*10/22/20 12:46*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.330	U	0.744	0.744	5.00	1.08	pCi/L		11/30/20 22:08	1

Client Sample Results

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-193485-1
SDG: Gorgas Ash Pond 1302

Client Sample ID: BA17444 MW-35HO

Date Collected: 09/16/20 12:05
Date Received: 09/22/20 12:00

Lab Sample ID: 400-193485-5

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.139	U G	0.569	0.569	1.00	1.20	pCi/L	10/27/20 11:44	11/20/20 13:30	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*63.0*		*40 - 110*	*10/27/20 11:44*	*11/20/20 13:30*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.574	U	0.465	0.468	1.00	0.739	pCi/L	09/29/20 09:17	10/22/20 12:46	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*79.0*		*40 - 110*	*09/29/20 09:17*	*10/22/20 12:46*	*1*
Y Carrier	*71.8*		*40 - 110*	*09/29/20 09:17*	*10/22/20 12:46*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.435	U	0.735	0.737	5.00	1.20	pCi/L		11/30/20 22:08	1

Client Sample Results

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-193485-1
SDG: Gorgas Ash Pond 1302

Client Sample ID: BA17445 EB-1

Date Collected: 09/16/20 12:50
Date Received: 09/22/20 12:00

Lab Sample ID: 400-193485-6

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.125	U	0.525	0.526	1.00	0.995	pCi/L	10/27/20 11:44	11/20/20 14:56	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*71.0*		*40 - 110*	*10/27/20 11:44*	*11/20/20 14:56*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.145	U	0.412	0.412	1.00	0.757	pCi/L	09/29/20 09:17	10/22/20 12:46	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*80.5*		*40 - 110*	*09/29/20 09:17*	*10/22/20 12:46*	*1*
Y Carrier	*76.3*		*40 - 110*	*09/29/20 09:17*	*10/22/20 12:46*	*1*

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	-0.0204	U	0.667	0.668	5.00	0.995	pCi/L		11/30/20 22:08	1

Definitions/Glossary

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-193485-1
SDG: Gorgas Ash Pond 1302

Qualifiers

Rad

Qualifier	Qualifier Description
G	The Sample MDC is greater than the requested RL.
U	Result is less than the sample detection limit.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Lab Chronicle

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-193485-1
SDG: Gorgas Ash Pond 1302

Client Sample ID: BA17440 FB-1 — Lab Sample ID: 400-193485-1

Date Collected: 09/15/20 14:00 — **Matrix: Water**
Date Received: 09/22/20 12:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			486958	10/27/20 11:44	MNH	TAL SL
Total/NA	Analysis	9315		1	489829	11/20/20 13:16	CMM	TAL SL
Total/NA	Prep	PrecSep_0			484054	09/29/20 09:17	AVB	TAL SL
Total/NA	Analysis	9320		1	486604	10/22/20 12:45	FLC	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	490591	11/30/20 22:08	SCB	TAL SL

Client Sample ID: BA17441 MW-33HO — Lab Sample ID: 400-193485-2

Date Collected: 09/15/20 14:46 — **Matrix: Water**
Date Received: 09/22/20 12:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			486958	10/27/20 11:44	MNH	TAL SL
Total/NA	Analysis	9315		1	489829	11/20/20 13:17	CMM	TAL SL
Total/NA	Prep	PrecSep_0			484054	09/29/20 09:17	AVB	TAL SL
Total/NA	Analysis	9320		1	486603	10/22/20 12:53	CMM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	490591	11/30/20 22:08	SCB	TAL SL

Client Sample ID: BA17442 MW-34HO — Lab Sample ID: 400-193485-3

Date Collected: 09/16/20 09:56 — **Matrix: Water**
Date Received: 09/22/20 12:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			486958	10/27/20 11:44	MNH	TAL SL
Total/NA	Analysis	9315		1	489826	11/20/20 13:30	CMM	TAL SL
Total/NA	Prep	PrecSep_0			484054	09/29/20 09:17	AVB	TAL SL
Total/NA	Analysis	9320		1	486604	10/22/20 12:45	FLC	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	490591	11/30/20 22:08	SCB	TAL SL

Client Sample ID: BA17443 MW-34HO DUP — Lab Sample ID: 400-193485-4

Date Collected: 09/16/20 09:56 — **Matrix: Water**
Date Received: 09/22/20 12:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			486958	10/27/20 11:44	MNH	TAL SL
Total/NA	Analysis	9315		1	489826	11/20/20 13:30	CMM	TAL SL
Total/NA	Prep	PrecSep_0			484054	09/29/20 09:17	AVB	TAL SL
Total/NA	Analysis	9320		1	486604	10/22/20 12:46	FLC	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	490591	11/30/20 22:08	SCB	TAL SL

Lab Chronicle

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-193485-1
SDG: Gorgas Ash Pond 1302

Client Sample ID: BA17444 MW-35HO

Lab Sample ID: 400-193485-5

Date Collected: 09/16/20 12:05
Matrix: Water
Date Received: 09/22/20 12:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			486958	10/27/20 11:44	MNH	TAL SL
Total/NA	Analysis	9315		1	489826	11/20/20 13:30	CMM	TAL SL
Total/NA	Prep	PrecSep_0			484054	09/29/20 09:17	AVB	TAL SL
Total/NA	Analysis	9320		1	486604	10/22/20 12:46	FLC	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	490591	11/30/20 22:08	SCB	TAL SL

Client Sample ID: BA17445 EB-1

Lab Sample ID: 400-193485-6

Date Collected: 09/16/20 12:50
Matrix: Water
Date Received: 09/22/20 12:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			486958	10/27/20 11:44	MNH	TAL SL
Total/NA	Analysis	9315		1	489829	11/20/20 14:56	CMM	TAL SL
Total/NA	Prep	PrecSep_0			484054	09/29/20 09:17	AVB	TAL SL
Total/NA	Analysis	9320		1	486604	10/22/20 12:46	FLC	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	490591	11/30/20 22:08	SCB	TAL SL

Laboratory References:

TAL SL = Eurofins TestAmerica, St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

QC Association Summary

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-193485-1
SDG: Gorgas Ash Pond 1302

Rad

Prep Batch: 484054

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-193485-1	BA17440 FB-1	Total/NA	Water	PrecSep_0	
400-193485-2	BA17441 MW-33HO	Total/NA	Water	PrecSep_0	
400-193485-3	BA17442 MW-34HO	Total/NA	Water	PrecSep_0	
400-193485-4	BA17443 MW-34HO DUP	Total/NA	Water	PrecSep_0	
400-193485-5	BA17444 MW-35HO	Total/NA	Water	PrecSep_0	
400-193485-6	BA17445 EB-1	Total/NA	Water	PrecSep_0	
MB 160-484054/24-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-484054/1-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
400-193485-2 MS	BA17441 MW-33HO	Total/NA	Water	PrecSep_0	
400-193485-2 MSD	BA17441 MW-33HO	Total/NA	Water	PrecSep_0	

Prep Batch: 486958

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-193485-1	BA17440 FB-1	Total/NA	Water	PrecSep-21	
400-193485-2	BA17441 MW-33HO	Total/NA	Water	PrecSep-21	
400-193485-3	BA17442 MW-34HO	Total/NA	Water	PrecSep-21	
400-193485-4	BA17443 MW-34HO DUP	Total/NA	Water	PrecSep-21	
400-193485-5	BA17444 MW-35HO	Total/NA	Water	PrecSep-21	
400-193485-6	BA17445 EB-1	Total/NA	Water	PrecSep-21	
MB 160-486958/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-486958/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
400-193485-2 MS	BA17441 MW-33HO	Total/NA	Water	PrecSep-21	
400-193485-2 MSD	BA17441 MW-33HO	Total/NA	Water	PrecSep-21	

QC Sample Results

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-193485-1
SDG: Gorgas Ash Pond 1302

Method: 9315 - Radium-226 (GFPC)

Lab Sample ID: MB 160-486958/1-A
Matrix: Water
Analysis Batch: 489829

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 486958

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.06992	U G	0.548	0.548	1.00	1.07	pCi/L	10/27/20 11:44	11/20/20 13:05	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*63.6*		*40 - 110*	*10/27/20 11:44*	*11/20/20 13:05*	*1*

Lab Sample ID: LCS 160-486958/2-A
Matrix: Water
Analysis Batch: 489829

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 486958

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-226			32.4	33.46		4.40	1.00	1.09	pCi/L	103	75 - 125		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*52.2*		*40 - 110*

Lab Sample ID: 400-193485-2 MS
Matrix: Water
Analysis Batch: 489829

Client Sample ID: BA17441 MW-33HO
Prep Type: Total/NA
Prep Batch: 486958

Analyte	Sample Result	Sample Qual	Spike Added	MS Result	MS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-226	-0.253	U G	34.7	33.04		4.17	1.00	0.851	pCi/L	95	75 - 138		

Carrier	*MS %Yield*	*MS Qualifier*	*Limits*
Ba Carrier	*70.7*		*40 - 110*

Lab Sample ID: 400-193485-2 MSD
Matrix: Water
Analysis Batch: 489826

Client Sample ID: BA17441 MW-33HO
Prep Type: Total/NA
Prep Batch: 486958

Analyte	Sample Result	Sample Qual	Spike Added	MSD Result	MSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits	RER	RER Limit
Radium-226	-0.253	U G	34.8	40.24		4.89	1.00	0.921	pCi/L	116	75 - 138	0.79	1

Carrier	*MSD %Yield*	*MSD Qualifier*	*Limits*
Ba Carrier	*66.0*		*40 - 110*

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-484054/24-A
Matrix: Water
Analysis Batch: 486603

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 484054

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.09363	U	0.381	0.381	1.00	0.666	pCi/L	09/29/20 09:17	10/22/20 12:55	1

Method: 9320 - Radium-228 (GFPC) (Continued)

Carrier	MB %Yield	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	82.0		40 - 110	09/29/20 09:17	10/22/20 12:55	1
Y Carrier	80.4		40 - 110	09/29/20 09:17	10/22/20 12:55	1

Lab Sample ID: LCS 160-484054/1-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 486604 — **Prep Batch: 484054**

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-228			10.3	11.08		1.35	1.00	0.516	pCi/L	108	75 - 125		

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	95.0		40 - 110
Y Carrier	78.1		40 - 110

Lab Sample ID: 400-193485-2 MS — **Client Sample ID: BA17441 MW-33HO**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 486604 — **Prep Batch: 484054**

Analyte	Sample Result	Sample Qual	Spike Added	MS Result	MS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-228	0.147	U	10.3	12.24		1.56	1.00	0.690	pCi/L	118	45 - 150		

Carrier	MS %Yield	MS Qualifier	Limits
Ba Carrier	79.6		40 - 110
Y Carrier	71.8		40 - 110

Lab Sample ID: 400-193485-2 MSD — **Client Sample ID: BA17441 MW-33HO**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 486604 — **Prep Batch: 484054**

Analyte	Sample Result	Sample Qual	Spike Added	MSD Result	MSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits	RER	RER Limit
Radium-228	0.147	U	10.3	14.87		1.88	1.00	0.877	pCi/L	143	45 - 150	0.77	1

Carrier	MSD %Yield	MSD Qualifier	Limits
Ba Carrier	80.5		40 - 110
Y Carrier	60.2		40 - 110

TestAmerica Pensacola
3355 McLemore Drive
Pensacola, FL 32514
Phone (850) 474-1001 Fax (850) 478-2671

Chain of Custody Record

TestAmerica

Client Information (Sub Contract Lab)	Sampler: Dallas Gentry	Lab PM: Whitmire, Cheyenne R	Carrier Tracking No(s):	COC No: 400-56525-24537.1
Client Contact: Laura Midkif	Phone:	E-Mail: cheyenne.whitmire@testamericainc.com	State of Origin: Alabama	Page: Page 1 of 1
Company: Alabama Power General Test Laboratory		Accreditations Required (See note):		Job #:
Address: 744 County Rd 87 GSC#8	Due Date Requested:			
City: Calera	TAT Requested (days): Routine			
State, Zip: AL, 35040				
Phone: 205-664-6197	PO #: APC67309-0001			
Email: lbmidkif@southernco.com	WO #:			
Project Name: CCR	Project #: 40007143			
Site: Gorgas Ash Pond 1302	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
Other:

400-193485 COC

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, AA=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	SM 4500 F_C	SM 4500 Cl_E	SM 4500 SO4_E	9315_Ra226, 9320_Ra228, Ra226Ra228_GFPC	Total Number of containers	Special Instructions/Note:
			Preservation Code:									
BA17440	9/15/20	14:00	G	Water						X	1	FB-1 (Field Blank)
BA17441	9/15/20	14:46	G	Water		X				X	3	MW-33HO
BA17442	9/16/20	09:56	G	Water						X	1	MW-34HO
BA17443	9/16/20	09:56	G	Water						X	1	MW-34HO DUP (Sample Duplicate)
BA17444	9/16/20	12:05	G	Water						X	1	MW-35HO
BA17445	9/16/20	12:50	G	Water						X	1	EB-1 (Equipment Blank)

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to TestAmerica Laboratories, Inc.

Possible Hazard Identification
Unconfirmed

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*

Deliverable Requested: I, II, III, IV, Other (specify) 44048 Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:		Method of Shipment:	
Relinquished by: Laura Midkiff	Date/Time: 09/17/2020 1100	Water AFC	Received by:	Date/Time: 9/22/2020 1500	Company: TAPA
Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 12:00	Company
Relinquished by:	0	Company	Received by:	Date/Time:	Company
Custody Seals Intact:			Cooler Temperature(s) °C and Other Remarks:		

Rev. 09/20/2016

21.8°C IR9

Login Sample Receipt Checklist

Client: Alabama Power General Test Laboratory

Job Number: 400-193485-1
SDG Number: Gorgas Ash Pond 1302

Login Number: 193485
List Number: 1
Creator: Gore, Beija K

List Source: Eurofins TestAmerica, Pensacola

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	21.8 °C IR 9
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Alabama Power General Test Laboratory

Job Number: 400-193485-1
SDG Number: Gorgas Ash Pond 1302

Login Number: 193485
List Number: 2
Creator: Mazariegos, Leonel A

List Source: Eurofins TestAmerica, St. Louis
List Creation: 09/25/20 08:25 AM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	N/A	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Accreditation/Certification Summary

Client: Alabama Power General Test Laboratory
Project/Site: CCR Plant Gorgas

Job ID: 400-193485-1
SDG: Gorgas Ash Pond 1302

Laboratory: Eurofins TestAmerica, St. Louis

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	20-001	05-06-22
ANAB	Dept. of Defense ELAP	L2305	04-06-22
ANAB	Dept. of Energy	L2305.01	04-06-22
ANAB	ISO/IEC 17025	L2305	04-06-22
Arizona	State	AZ0813	12-08-20
California	Los Angeles County Sanitation Districts	10259	06-30-21
California	State	2886	06-30-21
Connecticut	State	PH-0241	03-31-21
Florida	NELAP	E87689	06-30-21
HI - RadChem Recognition	State	n/a	06-30-21
Illinois	NELAP	004553	11-30-20
Iowa	State	373	11-30-20
Kentucky (DW)	State	KY90125	12-31-20
Louisiana	NELAP	04080	06-30-21
Louisiana (DW)	State	LA011	12-31-20
Maryland	State	310	09-30-21
MI - RadChem Recognition	State	9005	06-30-21
Missouri	State	780	06-30-22
Nevada	State	MO000542020-1	07-31-21
New Jersey	NELAP	MO002	06-30-21
New York	NELAP	11616	04-01-21
North Dakota	State	R-207	06-30-21
NRC	NRC	24-24817-01	12-31-22
Oklahoma	State	9997	08-31-21
Oregon	NELAP	4157	09-01-21
Pennsylvania	NELAP	68-00540	02-28-21
South Carolina	State	85002001	06-30-21
Texas	NELAP	T104704193-19-13	07-31-21
US Fish & Wildlife	US Federal Programs	058448	07-31-21
USDA	US Federal Programs	P330-17-00028	03-11-23
Utah	NELAP	MO000542019-11	07-31-21
Virginia	NELAP	10310	06-14-21
Washington	State	C592	08-30-21
West Virginia DEP	State	381	10-31-21

Alabama Power Company
Plant Gorgas Ash Pond

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-33HO	9/15/2020 13:38	Conductivity	768.45	uS/cm
GS-AP-MW-33HO	9/15/2020 13:38	DO	2.2	mg/L
GS-AP-MW-33HO	9/15/2020 13:38	Depth to Water Detail	240.43	ft
GS-AP-MW-33HO	9/15/2020 13:38	Oxidation Reduction Potention	30.53	mv
GS-AP-MW-33HO	9/15/2020 13:38	pH	7.48	pH
GS-AP-MW-33HO	9/15/2020 13:38	Temperature	22.76	C
GS-AP-MW-33HO	9/15/2020 13:38	Turbidity	4.29	NTU
GS-AP-MW-33HO	9/15/2020 13:43	Conductivity	734.61	uS/cm
GS-AP-MW-33HO	9/15/2020 13:43	DO	0.65	mg/L
GS-AP-MW-33HO	9/15/2020 13:43	Depth to Water Detail	240.86	ft
GS-AP-MW-33HO	9/15/2020 13:43	Oxidation Reduction Potention	-152.64	mv
GS-AP-MW-33HO	9/15/2020 13:43	pH	7.58	pH
GS-AP-MW-33HO	9/15/2020 13:43	Temperature	22.1	C
GS-AP-MW-33HO	9/15/2020 13:43	Turbidity	2.17	NTU
GS-AP-MW-33HO	9/15/2020 13:48	Conductivity	767.09	uS/cm
GS-AP-MW-33HO	9/15/2020 13:48	DO	0.5	mg/L
GS-AP-MW-33HO	9/15/2020 13:48	Depth to Water Detail	241.08	ft
GS-AP-MW-33HO	9/15/2020 13:48	Oxidation Reduction Potention	-191.33	mv
GS-AP-MW-33HO	9/15/2020 13:48	pH	7.63	pH
GS-AP-MW-33HO	9/15/2020 13:48	Temperature	23.59	C
GS-AP-MW-33HO	9/15/2020 13:48	Turbidity	1.45	NTU
GS-AP-MW-33HO	9/15/2020 13:53	Conductivity	827.36	uS/cm
GS-AP-MW-33HO	9/15/2020 13:53	DO	0.33	mg/L
GS-AP-MW-33HO	9/15/2020 13:53	Depth to Water Detail	241.32	ft
GS-AP-MW-33HO	9/15/2020 13:53	Oxidation Reduction Potention	-211.39	mv
GS-AP-MW-33HO	9/15/2020 13:53	pH	7.66	pH
GS-AP-MW-33HO	9/15/2020 13:53	Temperature	23.09	C
GS-AP-MW-33HO	9/15/2020 13:53	Turbidity	1.17	NTU
GS-AP-MW-33HO	9/15/2020 13:58	Conductivity	869.14	uS/cm
GS-AP-MW-33HO	9/15/2020 13:58	DO	0.25	mg/L
GS-AP-MW-33HO	9/15/2020 13:58	Depth to Water Detail	241.62	ft
GS-AP-MW-33HO	9/15/2020 13:58	Oxidation Reduction Potention	-219.73	mv
GS-AP-MW-33HO	9/15/2020 13:58	pH	7.65	pH
GS-AP-MW-33HO	9/15/2020 13:58	Temperature	23.42	C
GS-AP-MW-33HO	9/15/2020 13:58	Turbidity	1.2	NTU
GS-AP-MW-33HO	9/15/2020 14:03	Conductivity	888.39	uS/cm
GS-AP-MW-33HO	9/15/2020 14:03	DO	0.23	mg/L
GS-AP-MW-33HO	9/15/2020 14:03	Depth to Water Detail	241.82	ft
GS-AP-MW-33HO	9/15/2020 14:03	Oxidation Reduction Potention	-224.05	mv
GS-AP-MW-33HO	9/15/2020 14:03	pH	7.65	pH
GS-AP-MW-33HO	9/15/2020 14:03	Temperature	23.24	C
GS-AP-MW-33HO	9/15/2020 14:03	Turbidity	1.18	NTU
GS-AP-MW-33HO	9/15/2020 14:08	Conductivity	898.2	uS/cm
GS-AP-MW-33HO	9/15/2020 14:08	DO	0.2	mg/L
GS-AP-MW-33HO	9/15/2020 14:08	Depth to Water Detail	242.11	ft
GS-AP-MW-33HO	9/15/2020 14:08	Oxidation Reduction Potention	-227.26	mv

Alabama Power Company
Plant Gorgas Ash Pond

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-33HO	9/15/2020 14:08	pH	7.65	pH
GS-AP-MW-33HO	9/15/2020 14:08	Temperature	22.76	C
GS-AP-MW-33HO	9/15/2020 14:08	Turbidity	1.14	NTU
GS-AP-MW-33HO	9/15/2020 14:13	Conductivity	899.66	uS/cm
GS-AP-MW-33HO	9/15/2020 14:13	DO	0.18	mg/L
GS-AP-MW-33HO	9/15/2020 14:13	Depth to Water Detail	242.36	ft
GS-AP-MW-33HO	9/15/2020 14:13	Oxidation Reduction Potention	-228.96	mv
GS-AP-MW-33HO	9/15/2020 14:13	pH	7.65	pH
GS-AP-MW-33HO	9/15/2020 14:13	Temperature	22.62	C
GS-AP-MW-33HO	9/15/2020 14:13	Turbidity	1.1	NTU
GS-AP-MW-33HO	9/15/2020 14:18	Conductivity	901.09	uS/cm
GS-AP-MW-33HO	9/15/2020 14:18	DO	0.17	mg/L
GS-AP-MW-33HO	9/15/2020 14:18	Depth to Water Detail	242.53	ft
GS-AP-MW-33HO	9/15/2020 14:18	Oxidation Reduction Potention	-231.39	mv
GS-AP-MW-33HO	9/15/2020 14:18	pH	7.65	pH
GS-AP-MW-33HO	9/15/2020 14:18	Temperature	22.79	C
GS-AP-MW-33HO	9/15/2020 14:18	Turbidity	1.1	NTU
GS-AP-MW-33HO	9/15/2020 14:23	Conductivity	899.32	uS/cm
GS-AP-MW-33HO	9/15/2020 14:23	DO	0.17	mg/L
GS-AP-MW-33HO	9/15/2020 14:23	Depth to Water Detail	242.74	ft
GS-AP-MW-33HO	9/15/2020 14:23	Oxidation Reduction Potention	-232.65	mv
GS-AP-MW-33HO	9/15/2020 14:23	pH	7.66	pH
GS-AP-MW-33HO	9/15/2020 14:23	Temperature	22.41	C
GS-AP-MW-33HO	9/15/2020 14:23	Turbidity	1.05	NTU
GS-AP-MW-33HO	9/15/2020 14:28	Conductivity	903.72	uS/cm
GS-AP-MW-33HO	9/15/2020 14:28	DO	0.17	mg/L
GS-AP-MW-33HO	9/15/2020 14:28	Depth to Water Detail	242.91	ft
GS-AP-MW-33HO	9/15/2020 14:28	Oxidation Reduction Potention	-233.21	mv
GS-AP-MW-33HO	9/15/2020 14:28	pH	7.65	pH
GS-AP-MW-33HO	9/15/2020 14:28	Temperature	22.75	C
GS-AP-MW-33HO	9/15/2020 14:28	Turbidity	1.6	NTU
GS-AP-MW-33HO	9/15/2020 14:33	Conductivity	897.3	uS/cm
GS-AP-MW-33HO	9/15/2020 14:33	DO	0.16	mg/L
GS-AP-MW-33HO	9/15/2020 14:33	Depth to Water Detail	243.06	ft
GS-AP-MW-33HO	9/15/2020 14:33	Oxidation Reduction Potention	-233.37	mv
GS-AP-MW-33HO	9/15/2020 14:33	pH	7.66	pH
GS-AP-MW-33HO	9/15/2020 14:33	Temperature	22.27	C
GS-AP-MW-33HO	9/15/2020 14:33	Turbidity	0.71	NTU
GS-AP-MW-33HO	9/15/2020 14:38	Conductivity	903.81	uS/cm
GS-AP-MW-33HO	9/15/2020 14:38	DO	0.16	mg/L
GS-AP-MW-33HO	9/15/2020 14:38	Depth to Water Detail	243.22	ft
GS-AP-MW-33HO	9/15/2020 14:38	Oxidation Reduction Potention	-234.61	mv
GS-AP-MW-33HO	9/15/2020 14:38	pH	7.66	pH
GS-AP-MW-33HO	9/15/2020 14:38	Temperature	22.32	C
GS-AP-MW-33HO	9/15/2020 14:38	Turbidity	0.64	NTU
GS-AP-MW-33HO	9/15/2020 14:43	Conductivity	898.65	uS/cm

Alabama Power Company
Plant Gorgas Ash Pond

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-33HO	9/15/2020 14:43	DO	0.15	mg/L
GS-AP-MW-33HO	9/15/2020 14:43	Depth to Water Detail	243.34	ft
GS-AP-MW-33HO	9/15/2020 14:43	Oxidation Reduction Potention	-235.56	mv
GS-AP-MW-33HO	9/15/2020 14:43	pH	7.66	pH
GS-AP-MW-33HO	9/15/2020 14:43	Temperature	21.78	C
GS-AP-MW-33HO	9/15/2020 14:43	Turbidity	0.62	NTU

Alabama Power Company
Plant Gorgas Ash Pond

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-34HO	9/16/2020 8:07	Conductivity	3456.37	uS/cm
GS-AP-MW-34HO	9/16/2020 8:07	DO	3.7	mg/L
GS-AP-MW-34HO	9/16/2020 8:07	Depth to Water Detail	249.37	ft
GS-AP-MW-34HO	9/16/2020 8:07	Oxidation Reduction Potention	76.2	mv
GS-AP-MW-34HO	9/16/2020 8:07	pH	6.89	pH
GS-AP-MW-34HO	9/16/2020 8:07	Temperature	19.85	C
GS-AP-MW-34HO	9/16/2020 8:07	Turbidity	2.74	NTU
GS-AP-MW-34HO	9/16/2020 8:12	Conductivity	3446.88	uS/cm
GS-AP-MW-34HO	9/16/2020 8:12	DO	2.18	mg/L
GS-AP-MW-34HO	9/16/2020 8:12	Depth to Water Detail	250.52	ft
GS-AP-MW-34HO	9/16/2020 8:12	Oxidation Reduction Potention	-124.16	mv
GS-AP-MW-34HO	9/16/2020 8:12	pH	6.89	pH
GS-AP-MW-34HO	9/16/2020 8:12	Temperature	19.55	C
GS-AP-MW-34HO	9/16/2020 8:12	Turbidity	4.56	NTU
GS-AP-MW-34HO	9/16/2020 8:17	Conductivity	3423.85	uS/cm
GS-AP-MW-34HO	9/16/2020 8:17	DO	0.66	mg/L
GS-AP-MW-34HO	9/16/2020 8:17	Depth to Water Detail	250.86	ft
GS-AP-MW-34HO	9/16/2020 8:17	Oxidation Reduction Potention	-270.34	mv
GS-AP-MW-34HO	9/16/2020 8:17	pH	7.42	pH
GS-AP-MW-34HO	9/16/2020 8:17	Temperature	19.53	C
GS-AP-MW-34HO	9/16/2020 8:17	Turbidity	3.54	NTU
GS-AP-MW-34HO	9/16/2020 8:22	Conductivity	3894.74	uS/cm
GS-AP-MW-34HO	9/16/2020 8:22	DO	0.17	mg/L
GS-AP-MW-34HO	9/16/2020 8:22	Depth to Water Detail	251.48	ft
GS-AP-MW-34HO	9/16/2020 8:22	Oxidation Reduction Potention	-316.49	mv
GS-AP-MW-34HO	9/16/2020 8:22	pH	7.6	pH
GS-AP-MW-34HO	9/16/2020 8:22	Temperature	19.43	C
GS-AP-MW-34HO	9/16/2020 8:22	Turbidity	3.79	NTU
GS-AP-MW-34HO	9/16/2020 8:27	Conductivity	4367.6	uS/cm
GS-AP-MW-34HO	9/16/2020 8:27	DO	0.09	mg/L
GS-AP-MW-34HO	9/16/2020 8:27	Depth to Water Detail	252.02	ft
GS-AP-MW-34HO	9/16/2020 8:27	Oxidation Reduction Potention	-318.05	mv
GS-AP-MW-34HO	9/16/2020 8:27	pH	7.49	pH
GS-AP-MW-34HO	9/16/2020 8:27	Temperature	19.49	C
GS-AP-MW-34HO	9/16/2020 8:27	Turbidity	4.69	NTU
GS-AP-MW-34HO	9/16/2020 8:32	Conductivity	4454.14	uS/cm
GS-AP-MW-34HO	9/16/2020 8:32	DO	0.09	mg/L
GS-AP-MW-34HO	9/16/2020 8:32	Depth to Water Detail	252.65	ft
GS-AP-MW-34HO	9/16/2020 8:32	Oxidation Reduction Potention	-306.43	mv
GS-AP-MW-34HO	9/16/2020 8:32	pH	7.4	pH
GS-AP-MW-34HO	9/16/2020 8:32	Temperature	19.45	C
GS-AP-MW-34HO	9/16/2020 8:32	Turbidity	5.72	NTU
GS-AP-MW-34HO	9/16/2020 8:37	Conductivity	4327.41	uS/cm
GS-AP-MW-34HO	9/16/2020 8:37	DO	0.08	mg/L
GS-AP-MW-34HO	9/16/2020 8:37	Depth to Water Detail	253.06	ft
GS-AP-MW-34HO	9/16/2020 8:37	Oxidation Reduction Potention	-303.38	mv

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Plant Gorgas Ash Pond

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-34HO	9/16/2020 8:37	pH	7.4	pH
GS-AP-MW-34HO	9/16/2020 8:37	Temperature	19.4	C
GS-AP-MW-34HO	9/16/2020 8:37	Turbidity	5.9	NTU
GS-AP-MW-34HO	9/16/2020 8:42	Conductivity	4217.69	uS/cm
GS-AP-MW-34HO	9/16/2020 8:42	DO	0.07	mg/L
GS-AP-MW-34HO	9/16/2020 8:42	Depth to Water Detail	253.65	ft
GS-AP-MW-34HO	9/16/2020 8:42	Oxidation Reduction Potention	-305.43	mv
GS-AP-MW-34HO	9/16/2020 8:42	pH	7.41	pH
GS-AP-MW-34HO	9/16/2020 8:42	Temperature	19.33	C
GS-AP-MW-34HO	9/16/2020 8:42	Turbidity	5.45	NTU
GS-AP-MW-34HO	9/16/2020 8:47	Conductivity	4149.54	uS/cm
GS-AP-MW-34HO	9/16/2020 8:47	DO	0.07	mg/L
GS-AP-MW-34HO	9/16/2020 8:47	Depth to Water Detail	254	ft
GS-AP-MW-34HO	9/16/2020 8:47	Oxidation Reduction Potention	-307.86	mv
GS-AP-MW-34HO	9/16/2020 8:47	pH	7.43	pH
GS-AP-MW-34HO	9/16/2020 8:47	Temperature	19.28	C
GS-AP-MW-34HO	9/16/2020 8:47	Turbidity	4.71	NTU
GS-AP-MW-34HO	9/16/2020 8:52	Conductivity	4112.02	uS/cm
GS-AP-MW-34HO	9/16/2020 8:52	DO	0.07	mg/L
GS-AP-MW-34HO	9/16/2020 8:52	Depth to Water Detail	254.43	ft
GS-AP-MW-34HO	9/16/2020 8:52	Oxidation Reduction Potention	-307.13	mv
GS-AP-MW-34HO	9/16/2020 8:52	pH	7.43	pH
GS-AP-MW-34HO	9/16/2020 8:52	Temperature	19.31	C
GS-AP-MW-34HO	9/16/2020 8:52	Turbidity	3.95	NTU
GS-AP-MW-34HO	9/16/2020 8:57	Conductivity	4082.94	uS/cm
GS-AP-MW-34HO	9/16/2020 8:57	DO	0.06	mg/L
GS-AP-MW-34HO	9/16/2020 8:57	Depth to Water Detail	254.84	ft
GS-AP-MW-34HO	9/16/2020 8:57	Oxidation Reduction Potention	-307.09	mv
GS-AP-MW-34HO	9/16/2020 8:57	pH	7.44	pH
GS-AP-MW-34HO	9/16/2020 8:57	Temperature	19.26	C
GS-AP-MW-34HO	9/16/2020 8:57	Turbidity	3.27	NTU
GS-AP-MW-34HO	9/16/2020 9:02	Conductivity	4063.06	uS/cm
GS-AP-MW-34HO	9/16/2020 9:02	DO	0.06	mg/L
GS-AP-MW-34HO	9/16/2020 9:02	Depth to Water Detail	255.25	ft
GS-AP-MW-34HO	9/16/2020 9:02	Oxidation Reduction Potention	-304.91	mv
GS-AP-MW-34HO	9/16/2020 9:02	pH	7.44	pH
GS-AP-MW-34HO	9/16/2020 9:02	Temperature	19.24	C
GS-AP-MW-34HO	9/16/2020 9:02	Turbidity	3.03	NTU
GS-AP-MW-34HO	9/16/2020 9:07	Conductivity	4045.91	uS/cm
GS-AP-MW-34HO	9/16/2020 9:07	DO	0.05	mg/L
GS-AP-MW-34HO	9/16/2020 9:07	Depth to Water Detail	255.68	ft
GS-AP-MW-34HO	9/16/2020 9:07	Oxidation Reduction Potention	-309.91	mv
GS-AP-MW-34HO	9/16/2020 9:07	pH	7.45	pH
GS-AP-MW-34HO	9/16/2020 9:07	Temperature	19.16	C
GS-AP-MW-34HO	9/16/2020 9:07	Turbidity	2.55	NTU
GS-AP-MW-34HO	9/16/2020 9:12	Conductivity	4033.72	uS/cm

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-34HO	9/16/2020 9:12	DO	0.05	mg/L
GS-AP-MW-34HO	9/16/2020 9:12	Depth to Water Detail	255.98	ft
GS-AP-MW-34HO	9/16/2020 9:12	Oxidation Reduction Potention	-311.16	mv
GS-AP-MW-34HO	9/16/2020 9:12	pH	7.45	pH
GS-AP-MW-34HO	9/16/2020 9:12	Temperature	19.21	C
GS-AP-MW-34HO	9/16/2020 9:12	Turbidity	2.25	NTU
GS-AP-MW-34HO	9/16/2020 9:17	Conductivity	4019.92	uS/cm
GS-AP-MW-34HO	9/16/2020 9:17	DO	0.05	mg/L
GS-AP-MW-34HO	9/16/2020 9:17	Depth to Water Detail	256.33	ft
GS-AP-MW-34HO	9/16/2020 9:17	Oxidation Reduction Potention	-312.59	mv
GS-AP-MW-34HO	9/16/2020 9:17	pH	7.45	pH
GS-AP-MW-34HO	9/16/2020 9:17	Temperature	19.18	C
GS-AP-MW-34HO	9/16/2020 9:17	Turbidity	2.89	NTU
GS-AP-MW-34HO	9/16/2020 9:22	Conductivity	4008.7	uS/cm
GS-AP-MW-34HO	9/16/2020 9:22	DO	0.04	mg/L
GS-AP-MW-34HO	9/16/2020 9:22	Depth to Water Detail	256.68	ft
GS-AP-MW-34HO	9/16/2020 9:22	Oxidation Reduction Potention	-314.18	mv
GS-AP-MW-34HO	9/16/2020 9:22	pH	7.45	pH
GS-AP-MW-34HO	9/16/2020 9:22	Temperature	19.2	C
GS-AP-MW-34HO	9/16/2020 9:22	Turbidity	1.86	NTU
GS-AP-MW-34HO	9/16/2020 9:27	Conductivity	3995.26	uS/cm
GS-AP-MW-34HO	9/16/2020 9:27	DO	0.05	mg/L
GS-AP-MW-34HO	9/16/2020 9:27	Depth to Water Detail	257.02	ft
GS-AP-MW-34HO	9/16/2020 9:27	Oxidation Reduction Potention	-315.36	mv
GS-AP-MW-34HO	9/16/2020 9:27	pH	7.45	pH
GS-AP-MW-34HO	9/16/2020 9:27	Temperature	19.14	C
GS-AP-MW-34HO	9/16/2020 9:27	Turbidity	2.19	NTU
GS-AP-MW-34HO	9/16/2020 9:32	Conductivity	3974.16	uS/cm
GS-AP-MW-34HO	9/16/2020 9:32	DO	0.04	mg/L
GS-AP-MW-34HO	9/16/2020 9:32	Depth to Water Detail	257.31	ft
GS-AP-MW-34HO	9/16/2020 9:32	Oxidation Reduction Potention	-317.17	mv
GS-AP-MW-34HO	9/16/2020 9:32	pH	7.45	pH
GS-AP-MW-34HO	9/16/2020 9:32	Temperature	19.14	C
GS-AP-MW-34HO	9/16/2020 9:32	Turbidity	1.54	NTU
GS-AP-MW-34HO	9/16/2020 9:37	Conductivity	3954.01	uS/cm
GS-AP-MW-34HO	9/16/2020 9:37	DO	0.04	mg/L
GS-AP-MW-34HO	9/16/2020 9:37	Depth to Water Detail	257.61	ft
GS-AP-MW-34HO	9/16/2020 9:37	Oxidation Reduction Potention	-317.86	mv
GS-AP-MW-34HO	9/16/2020 9:37	pH	7.45	pH
GS-AP-MW-34HO	9/16/2020 9:37	Temperature	19.14	C
GS-AP-MW-34HO	9/16/2020 9:37	Turbidity	2.01	NTU
GS-AP-MW-34HO	9/16/2020 9:42	Conductivity	3934.69	uS/cm
GS-AP-MW-34HO	9/16/2020 9:42	DO	0.04	mg/L
GS-AP-MW-34HO	9/16/2020 9:42	Depth to Water Detail	257.94	ft
GS-AP-MW-34HO	9/16/2020 9:42	Oxidation Reduction Potention	-319.89	mv
GS-AP-MW-34HO	9/16/2020 9:42	pH	7.45	pH

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WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-34HO	9/16/2020 9:42	Temperature	19.13	C
GS-AP-MW-34HO	9/16/2020 9:42	Turbidity	1.43	NTU
GS-AP-MW-34HO	9/16/2020 9:47	Conductivity	3915.8	uS/cm
GS-AP-MW-34HO	9/16/2020 9:47	DO	0.05	mg/L
GS-AP-MW-34HO	9/16/2020 9:47	Depth to Water Detail	258.09	ft
GS-AP-MW-34HO	9/16/2020 9:47	Oxidation Reduction Potention	-317.23	mv
GS-AP-MW-34HO	9/16/2020 9:47	pH	7.45	pH
GS-AP-MW-34HO	9/16/2020 9:47	Temperature	19.21	C
GS-AP-MW-34HO	9/16/2020 9:47	Turbidity	1.35	NTU
GS-AP-MW-34HO	9/16/2020 9:52	Conductivity	3904.78	uS/cm
GS-AP-MW-34HO	9/16/2020 9:52	DO	0.09	mg/L
GS-AP-MW-34HO	9/16/2020 9:52	Depth to Water Detail	258.21	ft
GS-AP-MW-34HO	9/16/2020 9:52	Oxidation Reduction Potention	-309.48	mv
GS-AP-MW-34HO	9/16/2020 9:52	pH	7.45	pH
GS-AP-MW-34HO	9/16/2020 9:52	Temperature	20.08	C
GS-AP-MW-34HO	9/16/2020 9:52	Turbidity	1.54	NTU

Alabama Power Company
Plant Gorgas Ash Pond

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-35HO	9/16/2020 11:21	Conductivity	514.41	uS/cm
GS-AP-MW-35HO	9/16/2020 11:21	DO	0.54	mg/L
GS-AP-MW-35HO	9/16/2020 11:21	Depth to Water Detail	262.64	ft
GS-AP-MW-35HO	9/16/2020 11:21	Oxidation Reduction Potention	-178.95	mv
GS-AP-MW-35HO	9/16/2020 11:21	pH	8.36	pH
GS-AP-MW-35HO	9/16/2020 11:21	Temperature	18.52	C
GS-AP-MW-35HO	9/16/2020 11:21	Turbidity	21.4	NTU
GS-AP-MW-35HO	9/16/2020 11:26	Conductivity	533.3	uS/cm
GS-AP-MW-35HO	9/16/2020 11:26	DO	0.22	mg/L
GS-AP-MW-35HO	9/16/2020 11:26	Depth to Water Detail	263.14	ft
GS-AP-MW-35HO	9/16/2020 11:26	Oxidation Reduction Potention	-179.32	mv
GS-AP-MW-35HO	9/16/2020 11:26	pH	8.44	pH
GS-AP-MW-35HO	9/16/2020 11:26	Temperature	18.37	C
GS-AP-MW-35HO	9/16/2020 11:26	Turbidity	26.3	NTU
GS-AP-MW-35HO	9/16/2020 11:31	Conductivity	532.55	uS/cm
GS-AP-MW-35HO	9/16/2020 11:31	DO	0.47	mg/L
GS-AP-MW-35HO	9/16/2020 11:31	Depth to Water Detail	263.18	ft
GS-AP-MW-35HO	9/16/2020 11:31	Oxidation Reduction Potention	-163.03	mv
GS-AP-MW-35HO	9/16/2020 11:31	pH	8.46	pH
GS-AP-MW-35HO	9/16/2020 11:31	Temperature	19.02	C
GS-AP-MW-35HO	9/16/2020 11:31	Turbidity	26.6	NTU
GS-AP-MW-35HO	9/16/2020 11:36	Conductivity	516.86	uS/cm
GS-AP-MW-35HO	9/16/2020 11:36	DO	0.8	mg/L
GS-AP-MW-35HO	9/16/2020 11:36	Depth to Water Detail	263.26	ft
GS-AP-MW-35HO	9/16/2020 11:36	Oxidation Reduction Potention	-152.32	mv
GS-AP-MW-35HO	9/16/2020 11:36	pH	8.47	pH
GS-AP-MW-35HO	9/16/2020 11:36	Temperature	19.31	C
GS-AP-MW-35HO	9/16/2020 11:36	Turbidity	19.5	NTU
GS-AP-MW-35HO	9/16/2020 11:41	Conductivity	528.42	uS/cm
GS-AP-MW-35HO	9/16/2020 11:41	DO	0.88	mg/L
GS-AP-MW-35HO	9/16/2020 11:41	Depth to Water Detail	163.35	ft
GS-AP-MW-35HO	9/16/2020 11:41	Oxidation Reduction Potention	-150.27	mv
GS-AP-MW-35HO	9/16/2020 11:41	pH	8.47	pH
GS-AP-MW-35HO	9/16/2020 11:41	Temperature	19.35	C
GS-AP-MW-35HO	9/16/2020 11:41	Turbidity	17.8	NTU
GS-AP-MW-35HO	9/16/2020 11:46	Conductivity	525.85	uS/cm
GS-AP-MW-35HO	9/16/2020 11:46	DO	0.84	mg/L
GS-AP-MW-35HO	9/16/2020 11:46	Depth to Water Detail	163.4	ft
GS-AP-MW-35HO	9/16/2020 11:46	Oxidation Reduction Potention	-149.44	mv
GS-AP-MW-35HO	9/16/2020 11:46	pH	8.46	pH
GS-AP-MW-35HO	9/16/2020 11:46	Temperature	19.26	C
GS-AP-MW-35HO	9/16/2020 11:46	Turbidity	13.7	NTU
GS-AP-MW-35HO	9/16/2020 11:51	Conductivity	526.29	uS/cm
GS-AP-MW-35HO	9/16/2020 11:51	DO	0.91	mg/L
GS-AP-MW-35HO	9/16/2020 11:51	Depth to Water Detail	163.44	ft
GS-AP-MW-35HO	9/16/2020 11:51	Oxidation Reduction Potention	-151.78	mv

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Plant Gorgas Ash Pond

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-35HO	9/16/2020 11:51	pH	8.48	pH
GS-AP-MW-35HO	9/16/2020 11:51	Temperature	18.98	C
GS-AP-MW-35HO	9/16/2020 11:51	Turbidity	9.99	NTU
GS-AP-MW-35HO	9/16/2020 11:56	Conductivity	525.53	uS/cm
GS-AP-MW-35HO	9/16/2020 11:56	DO	0.35	mg/L
GS-AP-MW-35HO	9/16/2020 11:56	Depth to Water Detail	163.49	ft
GS-AP-MW-35HO	9/16/2020 11:56	Oxidation Reduction Potention	-166.27	mv
GS-AP-MW-35HO	9/16/2020 11:56	pH	8.47	pH
GS-AP-MW-35HO	9/16/2020 11:56	Temperature	18.73	C
GS-AP-MW-35HO	9/16/2020 11:56	Turbidity	7.04	NTU
GS-AP-MW-35HO	9/16/2020 12:01	Conductivity	527.09	uS/cm
GS-AP-MW-35HO	9/16/2020 12:01	DO	0.22	mg/L
GS-AP-MW-35HO	9/16/2020 12:01	Depth to Water Detail	163.51	ft
GS-AP-MW-35HO	9/16/2020 12:01	Oxidation Reduction Potention	-170.34	mv
GS-AP-MW-35HO	9/16/2020 12:01	pH	8.48	pH
GS-AP-MW-35HO	9/16/2020 12:01	Temperature	18.64	C
GS-AP-MW-35HO	9/16/2020 12:01	Turbidity	6.14	NTU

Appendix E

1st
Semi-Annual
Monitoring Event

Interwell Prediction Limits - Significant Results

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond Printed 7/27/2020, 11:33 AM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	%NDs	Transform	Alpha	Method
Boron (mg/L)	GS-AP-MW-2	0.1	n/a	5/13/2020	0.154	Yes	26	96.15	n/a	0.002407	NP Inter (NDs) 1 of 2
Boron (mg/L)	GS-AP-MW-6D	0.1	n/a	3/17/2020	1.17	Yes	26	96.15	n/a	0.002407	NP Inter (NDs) 1 of 2
Boron (mg/L)	GS-AP-MW-6S	0.1	n/a	3/17/2020	0.867	Yes	26	96.15	n/a	0.002407	NP Inter (NDs) 1 of 2
Boron (mg/L)	GS-AP-MW-7	0.1	n/a	3/17/2020	1.58	Yes	26	96.15	n/a	0.002407	NP Inter (NDs) 1 of 2
Boron (mg/L)	GS-AP-MW-18	0.1	n/a	3/18/2020	0.492	Yes	26	96.15	n/a	0.002407	NP Inter (NDs) 1 of 2
Calcium (mg/L)	GS-AP-MW-6D	48.1	n/a	3/17/2020	57.2	Yes	26	0	n/a	0.002407	NP Inter (normality) ...
Calcium (mg/L)	GS-AP-MW-6S	48.1	n/a	3/17/2020	59.3	Yes	26	0	n/a	0.002407	NP Inter (normality) ...
Calcium (mg/L)	GS-AP-MW-18	48.1	n/a	3/18/2020	90.9	Yes	26	0	n/a	0.002407	NP Inter (normality) ...
Chloride (mg/L)	GS-AP-MW-2	4.112	n/a	5/13/2020	8.25	Yes	26	0	No	0.000...	Param Inter 1 of 2
Chloride (mg/L)	GS-AP-MW-6D	4.112	n/a	3/17/2020	10.1	Yes	26	0	No	0.000...	Param Inter 1 of 2
Chloride (mg/L)	GS-AP-MW-6S	4.112	n/a	3/17/2020	17.4	Yes	26	0	No	0.000...	Param Inter 1 of 2
Chloride (mg/L)	GS-AP-MW-7	4.112	n/a	3/17/2020	6.65	Yes	26	0	No	0.000...	Param Inter 1 of 2
Chloride (mg/L)	GS-AP-MW-12	4.112	n/a	3/18/2020	4.22	Yes	26	0	No	0.000...	Param Inter 1 of 2
Chloride (mg/L)	GS-AP-MW-15	4.112	n/a	3/18/2020	8	Yes	26	0	No	0.000...	Param Inter 1 of 2
Chloride (mg/L)	GS-AP-MW-17	4.112	n/a	5/12/2020	9.16	Yes	26	0	No	0.000...	Param Inter 1 of 2
Chloride (mg/L)	GS-AP-MW-18	4.112	n/a	3/18/2020	6.68	Yes	26	0	No	0.000...	Param Inter 1 of 2
Chloride (mg/L)	GS-AP-MW-19	4.112	n/a	3/24/2020	6.29	Yes	26	0	No	0.000...	Param Inter 1 of 2
Chloride (mg/L)	GS-AP-MW-21	4.112	n/a	3/18/2020	49.5	Yes	26	0	No	0.000...	Param Inter 1 of 2
Fluoride (mg/L)	GS-AP-MW-2	0.2175	n/a	5/13/2020	0.777	Yes	28	0	No	0.000...	Param Inter 1 of 2
Fluoride (mg/L)	GS-AP-MW-6S	0.2175	n/a	3/17/2020	0.231	Yes	28	0	No	0.000...	Param Inter 1 of 2
Fluoride (mg/L)	GS-AP-MW-15	0.2175	n/a	3/18/2020	0.647	Yes	28	0	No	0.000...	Param Inter 1 of 2
Fluoride (mg/L)	GS-AP-MW-17	0.2175	n/a	5/12/2020	0.263	Yes	28	0	No	0.000...	Param Inter 1 of 2
Fluoride (mg/L)	GS-AP-MW-18	0.2175	n/a	3/18/2020	0.437	Yes	28	0	No	0.000...	Param Inter 1 of 2
Fluoride (mg/L)	GS-AP-MW-19	0.2175	n/a	3/24/2020	0.327	Yes	28	0	No	0.000...	Param Inter 1 of 2
Fluoride (mg/L)	GS-AP-MW-21	0.2175	n/a	3/18/2020	0.234	Yes	28	0	No	0.000...	Param Inter 1 of 2
pH (SU)	GS-AP-MW-2	6.85	5.27	5/13/2020	9.43	Yes	28	0	n/a	0.00426	NP Inter (normality) ...
pH (SU)	GS-AP-MW-6D	6.85	5.27	3/17/2020	7.39	Yes	28	0	n/a	0.00426	NP Inter (normality) ...
pH (SU)	GS-AP-MW-6S	6.85	5.27	3/17/2020	6.92	Yes	28	0	n/a	0.00426	NP Inter (normality) ...
pH (SU)	GS-AP-MW-7	6.85	5.27	3/17/2020	7.72	Yes	28	0	n/a	0.00426	NP Inter (normality) ...
pH (SU)	GS-AP-MW-12	6.85	5.27	3/18/2020	7.56	Yes	28	0	n/a	0.00426	NP Inter (normality) ...
pH (SU)	GS-AP-MW-15	6.85	5.27	3/18/2020	11.47	Yes	28	0	n/a	0.00426	NP Inter (normality) ...
pH (SU)	GS-AP-MW-16D	6.85	5.27	3/24/2020	7.46	Yes	28	0	n/a	0.00426	NP Inter (normality) ...
pH (SU)	GS-AP-MW-17	6.85	5.27	5/12/2020	8.42	Yes	28	0	n/a	0.00426	NP Inter (normality) ...
pH (SU)	GS-AP-MW-18	6.85	5.27	3/18/2020	6.99	Yes	28	0	n/a	0.00426	NP Inter (normality) ...
pH (SU)	GS-AP-MW-19	6.85	5.27	3/24/2020	7.93	Yes	28	0	n/a	0.00426	NP Inter (normality) ...
pH (SU)	GS-AP-MW-21	6.85	5.27	3/18/2020	11.37	Yes	28	0	n/a	0.00426	NP Inter (normality) ...
Sulfate (mg/L)	GS-AP-MW-2	12.1	n/a	5/13/2020	33.6	Yes	26	0	n/a	0.002407	NP Inter (normality) ...
Sulfate (mg/L)	GS-AP-MW-6D	12.1	n/a	3/17/2020	59.5	Yes	26	0	n/a	0.002407	NP Inter (normality) ...
Sulfate (mg/L)	GS-AP-MW-6S	12.1	n/a	3/17/2020	148	Yes	26	0	n/a	0.002407	NP Inter (normality) ...
Sulfate (mg/L)	GS-AP-MW-7	12.1	n/a	3/17/2020	149	Yes	26	0	n/a	0.002407	NP Inter (normality) ...
Sulfate (mg/L)	GS-AP-MW-12	12.1	n/a	3/18/2020	20.8	Yes	26	0	n/a	0.002407	NP Inter (normality) ...
Sulfate (mg/L)	GS-AP-MW-15	12.1	n/a	3/18/2020	15.9	Yes	26	0	n/a	0.002407	NP Inter (normality) ...
Sulfate (mg/L)	GS-AP-MW-16D	12.1	n/a	3/24/2020	14.1	Yes	26	0	n/a	0.002407	NP Inter (normality) ...
Sulfate (mg/L)	GS-AP-MW-17	12.1	n/a	5/12/2020	44.4	Yes	26	0	n/a	0.002407	NP Inter (normality) ...
Sulfate (mg/L)	GS-AP-MW-18	12.1	n/a	3/18/2020	216	Yes	26	0	n/a	0.002407	NP Inter (normality) ...
Sulfate (mg/L)	GS-AP-MW-19	12.1	n/a	3/24/2020	15.2	Yes	26	0	n/a	0.002407	NP Inter (normality) ...
Sulfate (mg/L)	GS-AP-MW-21	12.1	n/a	3/18/2020	228	Yes	26	0	n/a	0.002407	NP Inter (normality) ...
TDS (mg/L)	GS-AP-MW-2	226	n/a	5/13/2020	328	Yes	26	0	n/a	0.002407	NP Inter (normality) ...
TDS (mg/L)	GS-AP-MW-6D	226	n/a	3/17/2020	303	Yes	26	0	n/a	0.002407	NP Inter (normality) ...
TDS (mg/L)	GS-AP-MW-6S	226	n/a	3/17/2020	328	Yes	26	0	n/a	0.002407	NP Inter (normality) ...
TDS (mg/L)	GS-AP-MW-7	226	n/a	3/17/2020	334	Yes	26	0	n/a	0.002407	NP Inter (normality) ...
TDS (mg/L)	GS-AP-MW-12	226	n/a	3/18/2020	236	Yes	26	0	n/a	0.002407	NP Inter (normality) ...
TDS (mg/L)	GS-AP-MW-15	226	n/a	3/18/2020	515	Yes	26	0	n/a	0.002407	NP Inter (normality) ...
TDS (mg/L)	GS-AP-MW-17	226	n/a	5/12/2020	493	Yes	26	0	n/a	0.002407	NP Inter (normality) ...
TDS (mg/L)	GS-AP-MW-18	226	n/a	3/18/2020	618	Yes	26	0	n/a	0.002407	NP Inter (normality) ...
TDS (mg/L)	GS-AP-MW-19	226	n/a	3/24/2020	302	Yes	26	0	n/a	0.002407	NP Inter (normality) ...
TDS (mg/L)	GS-AP-MW-21	226	n/a	3/18/2020	661	Yes	26	0	n/a	0.002407	NP Inter (normality) ...

Interwell Prediction Limits - All Results

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond Printed 7/27/2020, 11:33 AM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	%NDs	Transform	Alpha	Method
Boron (mg/L)	**GS-AP-MW-2**	**0.1**	**n/a**	**5/13/2020**	**0.154**	**Yes**	**26**	**96.15**	**n/a**	**0.002407**	**NP Inter (NDs) 1 of 2**
Boron (mg/L)	**GS-AP-MW-6D**	**0.1**	**n/a**	**3/17/2020**	**1.17**	**Yes**	**26**	**96.15**	**n/a**	**0.002407**	**NP Inter (NDs) 1 of 2**
Boron (mg/L)	**GS-AP-MW-6S**	**0.1**	**n/a**	**3/17/2020**	**0.867**	**Yes**	**26**	**96.15**	**n/a**	**0.002407**	**NP Inter (NDs) 1 of 2**
Boron (mg/L)	**GS-AP-MW-7**	**0.1**	**n/a**	**3/17/2020**	**1.58**	**Yes**	**26**	**96.15**	**n/a**	**0.002407**	**NP Inter (NDs) 1 of 2**
Boron (mg/L)	GS-AP-MW-12	0.1	n/a	3/18/2020	0.0449	No	26	96.15	n/a	0.002407	NP Inter (NDs) 1 of 2
Boron (mg/L)	GS-AP-MW-15	0.1	n/a	3/18/2020	0.0596	No	26	96.15	n/a	0.002407	NP Inter (NDs) 1 of 2
Boron (mg/L)	GS-AP-MW-16D	0.1	n/a	3/24/2020	0.1ND	No	26	96.15	n/a	0.002407	NP Inter (NDs) 1 of 2
Boron (mg/L)	GS-AP-MW-17	0.1	n/a	5/12/2020	0.0862	No	26	96.15	n/a	0.002407	NP Inter (NDs) 1 of 2
Boron (mg/L)	**GS-AP-MW-18**	**0.1**	**n/a**	**3/18/2020**	**0.492**	**Yes**	**26**	**96.15**	**n/a**	**0.002407**	**NP Inter (NDs) 1 of 2**
Boron (mg/L)	GS-AP-MW-19	0.1	n/a	3/24/2020	0.0398	No	26	96.15	n/a	0.002407	NP Inter (NDs) 1 of 2
Boron (mg/L)	GS-AP-MW-21	0.1	n/a	3/18/2020	0.0824	No	26	96.15	n/a	0.002407	NP Inter (NDs) 1 of 2
Calcium (mg/L)	GS-AP-MW-2	48.1	n/a	5/13/2020	0.493	No	26	0	n/a	0.002407	NP Inter (normality) ...
Calcium (mg/L)	**GS-AP-MW-6D**	**48.1**	**n/a**	**3/17/2020**	**57.2**	**Yes**	**26**	**0**	**n/a**	**0.002407**	**NP Inter (normality) ...**
Calcium (mg/L)	**GS-AP-MW-6S**	**48.1**	**n/a**	**3/17/2020**	**59.3**	**Yes**	**26**	**0**	**n/a**	**0.002407**	**NP Inter (normality) ...**
Calcium (mg/L)	GS-AP-MW-7	48.1	n/a	3/17/2020	13.5	No	26	0	n/a	0.002407	NP Inter (normality) ...
Calcium (mg/L)	GS-AP-MW-12	48.1	n/a	3/18/2020	44	No	26	0	n/a	0.002407	NP Inter (normality) ...
Calcium (mg/L)	GS-AP-MW-15	48.1	n/a	3/18/2020	5.25	No	26	0	n/a	0.002407	NP Inter (normality) ...
Calcium (mg/L)	GS-AP-MW-16D	48.1	n/a	3/24/2020	34.1	No	26	0	n/a	0.002407	NP Inter (normality) ...
Calcium (mg/L)	GS-AP-MW-17	48.1	n/a	5/12/2020	2.95	No	26	0	n/a	0.002407	NP Inter (normality) ...
Calcium (mg/L)	**GS-AP-MW-18**	**48.1**	**n/a**	**3/18/2020**	**90.9**	**Yes**	**26**	**0**	**n/a**	**0.002407**	**NP Inter (normality) ...**
Calcium (mg/L)	GS-AP-MW-19	48.1	n/a	3/24/2020	41.7	No	26	0	n/a	0.002407	NP Inter (normality) ...
Calcium (mg/L)	GS-AP-MW-21	48.1	n/a	3/18/2020	2.35	No	26	0	n/a	0.002407	NP Inter (normality) ...
Chloride (mg/L)	**GS-AP-MW-2**	**4.112**	**n/a**	**5/13/2020**	**8.25**	**Yes**	**26**	**0**	**No**	**0.000...**	**Param Inter 1 of 2**
Chloride (mg/L)	**GS-AP-MW-6D**	**4.112**	**n/a**	**3/17/2020**	**10.1**	**Yes**	**26**	**0**	**No**	**0.000...**	**Param Inter 1 of 2**
Chloride (mg/L)	**GS-AP-MW-6S**	**4.112**	**n/a**	**3/17/2020**	**17.4**	**Yes**	**26**	**0**	**No**	**0.000...**	**Param Inter 1 of 2**
Chloride (mg/L)	**GS-AP-MW-7**	**4.112**	**n/a**	**3/17/2020**	**6.65**	**Yes**	**26**	**0**	**No**	**0.000...**	**Param Inter 1 of 2**
Chloride (mg/L)	**GS-AP-MW-12**	**4.112**	**n/a**	**3/18/2020**	**4.22**	**Yes**	**26**	**0**	**No**	**0.000...**	**Param Inter 1 of 2**
Chloride (mg/L)	**GS-AP-MW-15**	**4.112**	**n/a**	**3/18/2020**	**8**	**Yes**	**26**	**0**	**No**	**0.000...**	**Param Inter 1 of 2**
Chloride (mg/L)	GS-AP-MW-16D	4.112	n/a	3/24/2020	2.88	No	26	0	No	0.000...	Param Inter 1 of 2
Chloride (mg/L)	**GS-AP-MW-17**	**4.112**	**n/a**	**5/12/2020**	**9.16**	**Yes**	**26**	**0**	**No**	**0.000...**	**Param Inter 1 of 2**
Chloride (mg/L)	**GS-AP-MW-18**	**4.112**	**n/a**	**3/18/2020**	**6.68**	**Yes**	**26**	**0**	**No**	**0.000...**	**Param Inter 1 of 2**
Chloride (mg/L)	**GS-AP-MW-19**	**4.112**	**n/a**	**3/24/2020**	**6.29**	**Yes**	**26**	**0**	**No**	**0.000...**	**Param Inter 1 of 2**
Chloride (mg/L)	**GS-AP-MW-21**	**4.112**	**n/a**	**3/18/2020**	**49.5**	**Yes**	**26**	**0**	**No**	**0.000...**	**Param Inter 1 of 2**
Fluoride (mg/L)	**GS-AP-MW-2**	**0.2175**	**n/a**	**5/13/2020**	**0.777**	**Yes**	**28**	**0**	**No**	**0.000...**	**Param Inter 1 of 2**
Fluoride (mg/L)	GS-AP-MW-6D	0.2175	n/a	3/17/2020	0.132	No	28	0	No	0.000...	Param Inter 1 of 2
Fluoride (mg/L)	**GS-AP-MW-6S**	**0.2175**	**n/a**	**3/17/2020**	**0.231**	**Yes**	**28**	**0**	**No**	**0.000...**	**Param Inter 1 of 2**
Fluoride (mg/L)	GS-AP-MW-7	0.2175	n/a	3/17/2020	0.107	No	28	0	No	0.000...	Param Inter 1 of 2
Fluoride (mg/L)	GS-AP-MW-12	0.2175	n/a	3/18/2020	0.122	No	28	0	No	0.000...	Param Inter 1 of 2
Fluoride (mg/L)	**GS-AP-MW-15**	**0.2175**	**n/a**	**3/18/2020**	**0.647**	**Yes**	**28**	**0**	**No**	**0.000...**	**Param Inter 1 of 2**
Fluoride (mg/L)	GS-AP-MW-16D	0.2175	n/a	3/24/2020	0.109	No	28	0	No	0.000...	Param Inter 1 of 2
Fluoride (mg/L)	**GS-AP-MW-17**	**0.2175**	**n/a**	**5/12/2020**	**0.263**	**Yes**	**28**	**0**	**No**	**0.000...**	**Param Inter 1 of 2**
Fluoride (mg/L)	**GS-AP-MW-18**	**0.2175**	**n/a**	**3/18/2020**	**0.437**	**Yes**	**28**	**0**	**No**	**0.000...**	**Param Inter 1 of 2**
Fluoride (mg/L)	**GS-AP-MW-19**	**0.2175**	**n/a**	**3/24/2020**	**0.327**	**Yes**	**28**	**0**	**No**	**0.000...**	**Param Inter 1 of 2**
Fluoride (mg/L)	**GS-AP-MW-21**	**0.2175**	**n/a**	**3/18/2020**	**0.234**	**Yes**	**28**	**0**	**No**	**0.000...**	**Param Inter 1 of 2**
pH (SU)	**GS-AP-MW-2**	**6.85**	**5.27**	**5/13/2020**	**9.43**	**Yes**	**28**	**0**	**n/a**	**0.00426**	**NP Inter (normality) ...**
pH (SU)	**GS-AP-MW-6D**	**6.85**	**5.27**	**3/17/2020**	**7.39**	**Yes**	**28**	**0**	**n/a**	**0.00426**	**NP Inter (normality) ...**
pH (SU)	**GS-AP-MW-6S**	**6.85**	**5.27**	**3/17/2020**	**6.92**	**Yes**	**28**	**0**	**n/a**	**0.00426**	**NP Inter (normality) ...**
pH (SU)	**GS-AP-MW-7**	**6.85**	**5.27**	**3/17/2020**	**7.72**	**Yes**	**28**	**0**	**n/a**	**0.00426**	**NP Inter (normality) ...**
pH (SU)	**GS-AP-MW-12**	**6.85**	**5.27**	**3/18/2020**	**7.56**	**Yes**	**28**	**0**	**n/a**	**0.00426**	**NP Inter (normality) ...**
pH (SU)	**GS-AP-MW-15**	**6.85**	**5.27**	**3/18/2020**	**11.47**	**Yes**	**28**	**0**	**n/a**	**0.00426**	**NP Inter (normality) ...**
pH (SU)	**GS-AP-MW-16D**	**6.85**	**5.27**	**3/24/2020**	**7.46**	**Yes**	**28**	**0**	**n/a**	**0.00426**	**NP Inter (normality) ...**
pH (SU)	**GS-AP-MW-17**	**6.85**	**5.27**	**5/12/2020**	**8.42**	**Yes**	**28**	**0**	**n/a**	**0.00426**	**NP Inter (normality) ...**
pH (SU)	**GS-AP-MW-18**	**6.85**	**5.27**	**3/18/2020**	**6.99**	**Yes**	**28**	**0**	**n/a**	**0.00426**	**NP Inter (normality) ...**
pH (SU)	**GS-AP-MW-19**	**6.85**	**5.27**	**3/24/2020**	**7.93**	**Yes**	**28**	**0**	**n/a**	**0.00426**	**NP Inter (normality) ...**
pH (SU)	**GS-AP-MW-21**	**6.85**	**5.27**	**3/18/2020**	**11.37**	**Yes**	**28**	**0**	**n/a**	**0.00426**	**NP Inter (normality) ...**
Sulfate (mg/L)	**GS-AP-MW-2**	**12.1**	**n/a**	**5/13/2020**	**33.6**	**Yes**	**26**	**0**	**n/a**	**0.002407**	**NP Inter (normality) ...**
Sulfate (mg/L)	**GS-AP-MW-6D**	**12.1**	**n/a**	**3/17/2020**	**59.5**	**Yes**	**26**	**0**	**n/a**	**0.002407**	**NP Inter (normality) ...**
Sulfate (mg/L)	**GS-AP-MW-6S**	**12.1**	**n/a**	**3/17/2020**	**148**	**Yes**	**26**	**0**	**n/a**	**0.002407**	**NP Inter (normality) ...**
Sulfate (mg/L)	**GS-AP-MW-7**	**12.1**	**n/a**	**3/17/2020**	**149**	**Yes**	**26**	**0**	**n/a**	**0.002407**	**NP Inter (normality) ...**
Sulfate (mg/L)	**GS-AP-MW-12**	**12.1**	**n/a**	**3/18/2020**	**20.8**	**Yes**	**26**	**0**	**n/a**	**0.002407**	**NP Inter (normality) ...**
Sulfate (mg/L)	**GS-AP-MW-15**	**12.1**	**n/a**	**3/18/2020**	**15.9**	**Yes**	**26**	**0**	**n/a**	**0.002407**	**NP Inter (normality) ...**
Sulfate (mg/L)	**GS-AP-MW-16D**	**12.1**	**n/a**	**3/24/2020**	**14.1**	**Yes**	**26**	**0**	**n/a**	**0.002407**	**NP Inter (normality) ...**
Sulfate (mg/L)	**GS-AP-MW-17**	**12.1**	**n/a**	**5/12/2020**	**44.4**	**Yes**	**26**	**0**	**n/a**	**0.002407**	**NP Inter (normality) ...**
Sulfate (mg/L)	**GS-AP-MW-18**	**12.1**	**n/a**	**3/18/2020**	**216**	**Yes**	**26**	**0**	**n/a**	**0.002407**	**NP Inter (normality) ...**
Sulfate (mg/L)	**GS-AP-MW-19**	**12.1**	**n/a**	**3/24/2020**	**15.2**	**Yes**	**26**	**0**	**n/a**	**0.002407**	**NP Inter (normality) ...**
Sulfate (mg/L)	**GS-AP-MW-21**	**12.1**	**n/a**	**3/18/2020**	**228**	**Yes**	**26**	**0**	**n/a**	**0.002407**	**NP Inter (normality) ...**
TDS (mg/L)	**GS-AP-MW-2**	**226**	**n/a**	**5/13/2020**	**328**	**Yes**	**26**	**0**	**n/a**	**0.002407**	**NP Inter (normality) ...**
TDS (mg/L)	**GS-AP-MW-6D**	**226**	**n/a**	**3/17/2020**	**303**	**Yes**	**26**	**0**	**n/a**	**0.002407**	**NP Inter (normality) ...**

Interwell Prediction Limits - All Results

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond Printed 7/27/2020, 11:33 AM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	%NDs	Transform	Alpha	Method
TDS (mg/L)	**GS-AP-MW-6S**	**226**	**n/a**	**3/17/2020**	**328**	**Yes**	**26**	**0**	**n/a**	**0.002407**	**NP Inter (normality) ...**
TDS (mg/L)	**GS-AP-MW-7**	**226**	**n/a**	**3/17/2020**	**334**	**Yes**	**26**	**0**	**n/a**	**0.002407**	**NP Inter (normality) ...**
TDS (mg/L)	**GS-AP-MW-12**	**226**	**n/a**	**3/18/2020**	**236**	**Yes**	**26**	**0**	**n/a**	**0.002407**	**NP Inter (normality) ...**
TDS (mg/L)	**GS-AP-MW-15**	**226**	**n/a**	**3/18/2020**	**515**	**Yes**	**26**	**0**	**n/a**	**0.002407**	**NP Inter (normality) ...**
TDS (mg/L)	GS-AP-MW-16D	226	n/a	3/24/2020	205	No	26	0	n/a	0.002407	NP Inter (normality) ...
TDS (mg/L)	**GS-AP-MW-17**	**226**	**n/a**	**5/12/2020**	**493**	**Yes**	**26**	**0**	**n/a**	**0.002407**	**NP Inter (normality) ...**
TDS (mg/L)	**GS-AP-MW-18**	**226**	**n/a**	**3/18/2020**	**618**	**Yes**	**26**	**0**	**n/a**	**0.002407**	**NP Inter (normality) ...**
TDS (mg/L)	**GS-AP-MW-19**	**226**	**n/a**	**3/24/2020**	**302**	**Yes**	**26**	**0**	**n/a**	**0.002407**	**NP Inter (normality) ...**
TDS (mg/L)	**GS-AP-MW-21**	**226**	**n/a**	**3/18/2020**	**661**	**Yes**	**26**	**0**	**n/a**	**0.002407**	**NP Inter (normality) ...**

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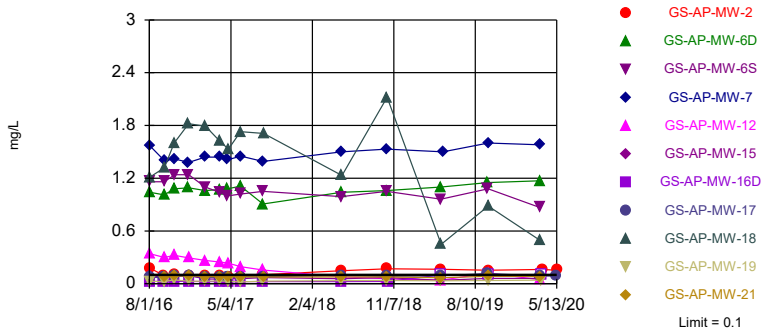
Hollow symbols indicate censored values.

Exceeds Limit: GS-AP-MW-2, GS-AP-MW-6D, GS-AP-MW-6S, GS-AP-MW-7, GS-AP-MW-18

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 26 background values. 96.15% NDs. Annual per-constituent alpha = 0.05165. Individual comparison alpha = 0.002407 (1 of 2). Comparing 11 points to limit.

Constituent: Boron Analysis Run 7/27/2020 11:29 AM View: Interwell PL

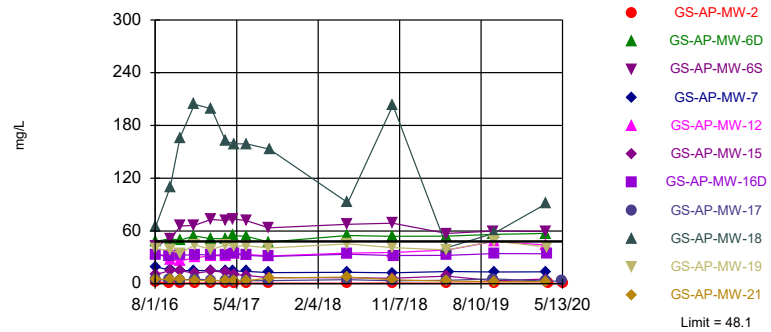
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.24 Sanitas software licensed to Southern Company. UG

Exceeds Limit: GS-AP-MW-6D, GS-AP-MW-6S, GS-AP-MW-18

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 26 background values. Annual per-constituent alpha = 0.05165. Individual comparison alpha = 0.002407 (1 of 2). Comparing 11 points to limit.

Constituent: Calcium Analysis Run 7/27/2020 11:30 AM View: Interwell PL

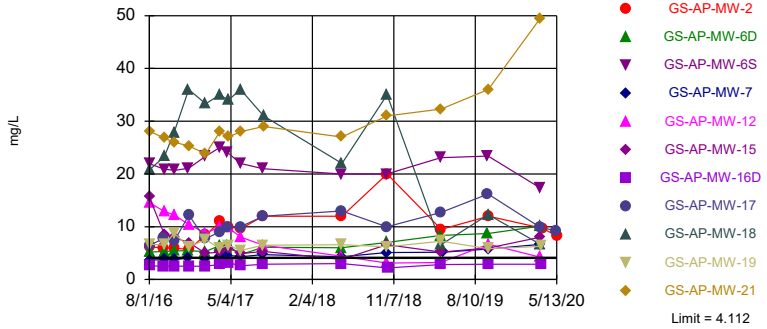
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.24 Sanitas software licensed to Southern Company. UG

Exceeds Limit: GS-AP-MW-2, GS-AP-MW-6D, GS-AP-MW-6S, GS-AP-MW-7, GS-AP-MW-12, GS-AP-MW-15, GS-AP-MW-17,..

Prediction Limit

Interwell Parametric



Background Data Summary: Mean=3.252, Std. Dev.=0.3914, n=26. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9476, critical = 0.891. Kappa = 2.197 (c=7, w=11, 1 of 2, event alpha = 0.05132). Report alpha = 0.007498. Individual comparison alpha = 0.0006839. Comparing 11 points to limit.

Constituent: Chloride Analysis Run 7/27/2020 11:30 AM View: Interwell PL

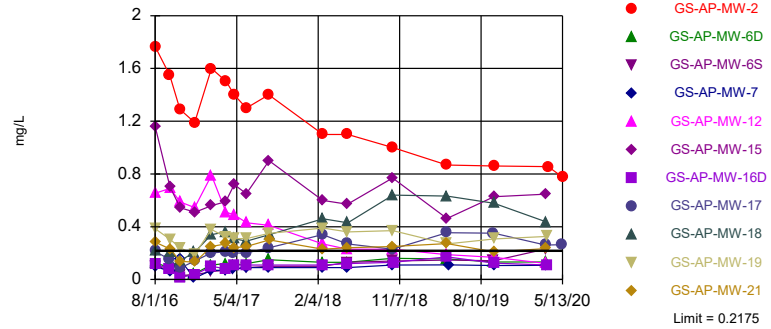
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.24 Sanitas software licensed to Southern Company. UG
Hollow symbols indicate censored values.

Exceeds Limit: GS-AP-MW-2, GS-AP-MW-6S, GS-AP-MW-15, GS-AP-MW-17, GS-AP-MW-18, GS-AP-MW-19, GS-AP-MW-21

Prediction Limit

Interwell Parametric



Background Data Summary: Mean=0.1179, Std. Dev.=0.04576, n=28. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9672, critical = 0.896. Kappa = 2.177 (c=7, w=11, 1 of 2, event alpha = 0.05132). Report alpha = 0.007498. Individual comparison alpha = 0.0006839. Comparing 11 points to limit.

Constituent: Fluoride Analysis Run 7/27/2020 11:30 AM View: Interwell PL

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 7/27/2020 11:33 AM View: Interwell PL

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-16D	GS-AP-MW-19	GS-AP-MW-17	GS-AP-MW-15	GS-AP-MW-2	GS-AP-MW-13 (bg)	GS-AP-MW-7	GS-AP-MW-18	GS-AP-MW-6D
8/1/2016	0.0266 (J)	0.0279 (J)	0.0712 (J)	0.0955 (J)					
8/2/2016					0.178	<0.1	1.57	1.21	
8/3/2016									1.04
9/19/2016	0.0262 (J)		0.0716 (J)		0.0937 (J)				
9/20/2016				0.0706 (J)		<0.1			1.01
9/21/2016		0.0235 (J)					1.4	1.32	
10/24/2016		0.0444 (J)	0.0858 (J)		0.0986 (J)		1.42	1.6	1.08
10/25/2016	0.0273 (J)			0.0849 (J)		<0.1			
10/26/2016									
12/12/2016							1.38	1.82	1.09
12/13/2016	0.0258 (J)	0.0285 (J)	0.0875 (J)		0.0965 (J)	<0.1			
12/14/2016				0.0914 (J)					
2/6/2017			0.0729 (J)				1.44		1.06
2/7/2017		0.03 (J)							
2/8/2017	0.0249 (J)			0.0524 (J)	0.0896 (J)	<0.1		1.79	
3/27/2017			0.0706 (J)						1.07
3/28/2017		0.0309 (J)		0.0532 (J)			1.44	1.62	
3/29/2017	0.0247 (J)					<0.1			
3/30/2017					0.0871 (J)				
4/24/2017			0.0737 (J)				1.41		1.08
4/26/2017	0.0264 (J)	0.0273 (J)		0.0598 (J)	0.0818 (J)	<0.1		1.53	
6/5/2017			0.0767 (J)						
6/6/2017	0.0247 (J)	0.0212 (J)		0.0576 (J)	0.0805 (J)			1.73	1.11
6/7/2017						<0.1	1.45		
8/21/2017					0.102		1.39		0.906
8/22/2017	0.0246 (J)	0.0294 (J)	0.0786 (J)	0.0702 (J)		<0.1			
8/23/2017								1.71	
5/14/2018									1.04
5/15/2018			0.0953 (J)	0.0567 (J)		<0.1	1.5		
5/16/2018	0.0247 (J)	0.0356 (J)			0.147			1.23	
10/15/2018			0.0842 (J)	0.07 (J)			1.53		1.06
10/16/2018		0.0363 (J)			0.169			2.12	
10/17/2018	0.0251 (J)					<0.1			
4/16/2019						<0.1			1.1
4/17/2019	<0.1	0.0336 (J)	0.0916 (J)	0.0388 (J)	0.165			0.449	
4/23/2019							1.5		
9/23/2019			0.116						1.15
9/24/2019	<0.1	0.0375 (J)		0.0607 (J)			1.6	0.883	
9/25/2019					0.153				
3/16/2020			0.0894 (J)						
3/17/2020							1.58		1.17
3/18/2020				0.0596 (J)				0.492	
3/24/2020	<0.1	0.0398 (J)							
3/25/2020					0.163				
5/12/2020			0.0862 (J)						
5/13/2020					0.154				

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 7/27/2020 11:33 AM View: Interwell PL

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-8 (bg)	GS-AP-MW-12	GS-AP-MW-6S	GS-AP-MW-21
8/1/2016				
8/2/2016				0.176 (o)
8/3/2016	0.0239 (J)	0.34	1.16	
9/19/2016				
9/20/2016		0.299	1.16	
9/21/2016	<0.1			0.0723 (J)
10/24/2016				
10/25/2016	<0.1	0.323		0.0867 (J)
10/26/2016			1.24	
12/12/2016			1.24	
12/13/2016	<0.1	0.294		
12/14/2016				0.092 (J)
2/6/2017	<0.1		1.1	
2/7/2017				
2/8/2017		0.264		0.0803 (J)
3/27/2017			1.04	
3/28/2017	<0.1			0.0804 (J)
3/29/2017		0.246		
3/30/2017				
4/24/2017	<0.1		1	
4/26/2017		0.234		0.0801 (J)
6/5/2017				
6/6/2017			1.02	0.0795 (J)
6/7/2017	<0.1	0.194		
8/21/2017	<0.1		1.05	
8/22/2017		0.156		
8/23/2017				0.0764 (J)
5/14/2018			0.99	
5/15/2018	<0.1	0.0781 (J)		0.0769 (J)
5/16/2018				
10/15/2018			1.05	
10/16/2018	<0.1	0.057 (J)		0.0764 (J)
10/17/2018				
4/16/2019	<0.1	0.0385 (J)	0.961	
4/17/2019				0.0675 (J)
4/23/2019				
9/23/2019			1.08	
9/24/2019	<0.1			0.0843 (J)
9/25/2019		0.122		
3/16/2020				
3/17/2020			0.867	
3/18/2020	<0.1	0.0449 (J)		0.0824 (J)
3/24/2020				
3/25/2020				
5/12/2020				
5/13/2020				

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 7/27/2020 11:33 AM View: Interwell PL

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-19	GS-AP-MW-15	GS-AP-MW-16D	GS-AP-MW-17	GS-AP-MW-2	GS-AP-MW-21	GS-AP-MW-18	GS-AP-MW-7	GS-AP-MW-13 (bg)
8/1/2016	39.6	10.5	33	4.52					
8/2/2016					2.25	5.29	64.2	19.4	47.2
8/3/2016									
9/19/2016			31.7	4.3	0.724				
9/20/2016		14.7							46.3
9/21/2016	38.1					4.51	110	15.4	
10/24/2016	34.7			4.02	0.635		166	14.8	
10/25/2016		14.7	32.2			4.92			46.6
10/26/2016									
12/12/2016							204	15	
12/13/2016	44		33.1	5.5	0.714				43.1
12/14/2016		11.9				3.5			
2/6/2017				3.79				14.9	
2/7/2017	39								
2/8/2017		14.4	32.7		0.722	3.75	199		47.5
3/27/2017				3.13					
3/28/2017	43.9	12.9				3.63	162	14.3	
3/29/2017			32.7						46.8
3/30/2017					0.686				
4/24/2017				3.41				14.5	
4/26/2017	42.8	10.4	33.8		0.646	3.3	159		48.1
6/5/2017				3.32					
6/6/2017	43.1	9.41	32.2		0.569	3.24	159		
6/7/2017								14.1	44.4
8/21/2017					0.634			12.6	
8/22/2017	40.7	6.89	30.9	3.52					42.9
8/23/2017						6.6	153		
5/14/2018									
5/15/2018		6.86		4.53		7.57		12.9	44.3
5/16/2018	45.3		33.5		0.588		92.1		
10/15/2018		6.28		3.38				12.5	
10/16/2018	40.9				0.714	4.4	203		
10/17/2018			32						41.8
4/16/2019									38.6
4/17/2019	38.4	8.53	32.3	3.86	0.511	2.88	40.9		
4/23/2019								13.8	
9/23/2019				5.43					
9/24/2019	48.4 (D)	3.26	34.3			2.47	57.4	13.4	
9/25/2019					0.581				
3/16/2020				3					
3/17/2020								13.5	
3/18/2020		5.25				2.35	90.9		
3/24/2020	41.7		34.1						
3/25/2020					0.518				
5/12/2020				2.95					
5/13/2020					0.493 (J)				

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 7/27/2020 11:33 AM View: Interwell PL

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-8 (bg)	GS-AP-MW-6D	GS-AP-MW-12	GS-AP-MW-6S
8/1/2016				
8/2/2016				
8/3/2016	6.85	48.1	36.1	42.5
9/19/2016				
9/20/2016		51.2	27	51.1
9/21/2016	11.7			
10/24/2016		49.5		
10/25/2016	10.8		26.1	
10/26/2016				65.6
12/12/2016		54.3		66.5
12/13/2016	5.86		29.4	
12/14/2016				
2/6/2017	9.76	51.2		73.1
2/7/2017				
2/8/2017			31.9	
3/27/2017		51.4		71.9
3/28/2017	5.28			
3/29/2017			31.8	
3/30/2017				
4/24/2017	6.89	54.7		73.5
4/26/2017			34.6	
6/5/2017				
6/6/2017		53.9		71.8
6/7/2017	3.58		33.4	
8/21/2017	3.38	47.3		63.5
8/22/2017			31.5	
8/23/2017				
5/14/2018		54.8		67.5
5/15/2018	4.25		34.8	
5/16/2018				
10/15/2018		53.9		68.9
10/16/2018	3.21		35.6	
10/17/2018				
4/16/2019	4.43	54	38.3	57.1
4/17/2019				
4/23/2019				
9/23/2019		56.1		60 (D)
9/24/2019	7.24			
9/25/2019			48.1	
3/16/2020				
3/17/2020		57.2		59.3
3/18/2020	4.51		44	
3/24/2020				
3/25/2020				
5/12/2020				
5/13/2020				

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 7/27/2020 11:33 AM View: Interwell PL

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-19	GS-AP-MW-15	GS-AP-MW-16D	GS-AP-MW-17	GS-AP-MW-2	GS-AP-MW-21	GS-AP-MW-18	GS-AP-MW-7	GS-AP-MW-13 (bg)
8/1/2016	6.67	15.6	2.6	6.47					
8/2/2016					6.15	28.1	20.8	3.7	2.91
8/3/2016									
9/19/2016			2.51	7.78	5.98				
9/20/2016		8.6							2.94
9/21/2016	6.54					26.8	23.3	3.74	
10/24/2016	8.77			7.29	5.93		27.9	3.75	
10/25/2016		7.96	2.53			26			2.94
10/26/2016									
12/12/2016							36	4.06	
12/13/2016	6.16		2.53	12.2	5.7				2.93
12/14/2016		6.94				25.3			
2/6/2017				7.68				3.92	
2/7/2017	7.57								
2/8/2017		4.96	2.5		8.44	23.8	33.3		2.85
3/27/2017				9 (D)					
3/28/2017	5.9 (D)	5.2 (D)				28 (D)	35 (D)	4.3 (D)	
3/29/2017			2.9 (D)						3.4 (D)
3/30/2017					11 (D)				
4/24/2017				10 (D)				4.6 (D)	
4/26/2017	6.5 (D)	6 (D)	3.2 (D)		10 (D)	27 (D)	34 (D)		3.7 (D)
6/5/2017				10					
6/6/2017	5.5	4.9	2.6		9.6	28	36		
6/7/2017								4.3	3.3
8/21/2017					12			4.7	
8/22/2017	6.5	5.3	2.9	12					3.4
8/23/2017						29	31		
5/14/2018									
5/15/2018		3.8		13		27		4.3	3.2
5/16/2018	6.6		3		12		22		
10/15/2018		6.6		10				5.1	
10/16/2018	6.2				20	31	35		
10/17/2018			2.2						2.3
4/16/2019									3.23
4/17/2019	7.27	5.2	2.82	12.7	9.5	32.3	6.61		
4/23/2019								5.16	
9/23/2019				16.2					
9/24/2019	5.83 (D)	5.96	2.9			36	12.3	5.76	
9/25/2019					12				
3/16/2020				9.95					
3/17/2020								6.65	
3/18/2020		8				49.5	6.68		
3/24/2020	6.29		2.88						
3/25/2020					9.7				
5/12/2020				9.16					
5/13/2020					8.25				

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 7/27/2020 11:33 AM View: Interwell PL

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-8 (bg)	GS-AP-MW-6D	GS-AP-MW-12	GS-AP-MW-6S
8/1/2016				
8/2/2016				
8/3/2016	3.21	5.2	14.5	21.9
9/19/2016				
9/20/2016		5.31	12.9	20.9
9/21/2016	2.95			
10/24/2016		5.4		
10/25/2016	3.03		12.2	
10/26/2016				20.7
12/12/2016		5.46		21.1
12/13/2016	3.21		10.4	
12/14/2016				
2/6/2017	3	5.28		23.3
2/7/2017				
2/8/2017			8.77	
3/27/2017		6.4 (D)		25 (D)
3/28/2017	3.3 (D)			
3/29/2017			10 (D)	
3/30/2017				
4/24/2017	3.8 (D)	6.5 (D)		24 (D)
4/26/2017			9.8 (D)	
6/5/2017				
6/6/2017		4.7		22
6/7/2017	3.5		8	
8/21/2017	3.6	6.1		21
8/22/2017			6.5	
8/23/2017				
5/14/2018		6		20
5/15/2018	3.3		4.4	
5/16/2018				
10/15/2018		7		20
10/16/2018	3.3		3.1	
10/17/2018				
4/16/2019	3.69	8.36	3.22	23.1
4/17/2019				
4/23/2019				
9/23/2019		8.72		23.4 (D)
9/24/2019	3.21			
9/25/2019			6.68	
3/16/2020				
3/17/2020		10.1		17.4
3/18/2020	4.35		4.22	
3/24/2020				
3/25/2020				
5/12/2020				
5/13/2020				

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 7/27/2020 11:33 AM View: Interwell PL

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-19	GS-AP-MW-17	GS-AP-MW-16D	GS-AP-MW-15	GS-AP-MW-21	GS-AP-MW-18	GS-AP-MW-7	GS-AP-MW-13 (bg)	GS-AP-MW-2
8/1/2016	0.385	0.214 (J)	0.117 (J)	1.16					
8/2/2016					0.282 (J)	0.219 (J)	0.098 (J)	0.161 (J)	1.76
8/3/2016									
9/19/2016		0.151 (J)	0.078 (J)						1.55
9/20/2016				0.7				0.122 (J)	
9/21/2016	0.303				0.231 (J)	0.213 (J)	0.061 (J)		
10/24/2016	0.24 (J)	0.086 (J)				0.141 (J)	<0.3		1.29
10/25/2016			0.018 (J)	0.544	0.137 (J)			0.058 (J)	
10/26/2016									
12/12/2016						0.206 (J)	0.01 (J)		
12/13/2016	0.188 (J)	0.14 (J)	0.035 (J)					0.072 (J)	1.19
12/14/2016				0.51	0.131 (J)				
2/6/2017		0.2 (D)					0.07 (JD)		
2/7/2017	0.38 (D)								
2/8/2017			0.1 (D)	0.56 (D)	0.25 (D)	0.34 (D)		0.16 (D)	1.6 (D)
3/27/2017		0.21 (D)							
3/28/2017	0.32 (D)			0.59 (D)	0.27 (D)	0.36 (D)	0.07 (JD)		
3/29/2017			0.08 (JD)					0.14 (D)	
3/30/2017									1.5 (D)
4/24/2017		0.2 (D)					0.08 (JD)		
4/26/2017	0.31 (D)		0.11 (D)	0.72 (D)	0.24 (D)	0.31 (D)		0.16 (D)	1.4 (D)
6/5/2017		0.2							
6/6/2017	0.31		0.11	0.65	0.25	0.29			1.3
6/7/2017							0.09 (J)	0.15	
8/21/2017							0.09 (J)		1.4
8/22/2017	0.35	0.24	0.11	0.9				0.18	
8/23/2017					0.3	0.34			
2/19/2018		0.34					0.09 (J)		
2/20/2018				0.6	0.23			0.17	
2/21/2018	0.39		0.11			0.46			1.1
5/14/2018									
5/15/2018		0.27		0.57	0.24		0.09 (J)	0.17	
5/16/2018	0.36		0.12			0.43			1.1
10/15/2018		0.23		0.77			0.11		
10/16/2018	0.37				0.25	0.64			1
10/17/2018			0.13					0.19	
4/16/2019								0.197	
4/17/2019	0.27	0.354	0.171	0.463	0.272	0.632			0.868
4/23/2019							0.111		
9/23/2019		0.351							
9/24/2019	0.307 (D)		0.124	0.628	0.209	0.578	0.106		
9/25/2019									0.86
3/16/2020		0.261							
3/17/2020							0.107		
3/18/2020				0.647	0.234	0.437			
3/24/2020	0.327		0.109						
3/25/2020									0.855
5/12/2020		0.263							
5/13/2020									0.777

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 7/27/2020 11:33 AM View: Interwell PL

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-12	GS-AP-MW-6S	GS-AP-MW-6D	GS-AP-MW-8 (bg)
8/1/2016				
8/2/2016				
8/3/2016	0.656	0.099 (J)	0.127 (J)	0.125 (J)
9/19/2016				
9/20/2016	0.691	0.074 (J)	0.087 (J)	
9/21/2016				0.098 (J)
10/24/2016			0.019 (J)	
10/25/2016	0.588			0.025 (J)
10/26/2016		0.032 (J)		
12/12/2016		0.034 (J)	0.043 (J)	
12/13/2016	0.545			0.045 (J)
12/14/2016				
2/6/2017		0.06 (JD)	0.11 (D)	0.1 (D)
2/7/2017				
2/8/2017	0.79 (D)			
3/27/2017		0.07 (JD)	0.12 (D)	
3/28/2017				0.08 (JD)
3/29/2017	0.51 (D)			
3/30/2017				
4/24/2017		0.08 (JD)	0.11 (D)	0.09 (JD)
4/26/2017	0.49 (D)			
6/5/2017				
6/6/2017		0.09 (J)	0.12	
6/7/2017	0.43			0.08 (J)
8/21/2017		0.1	0.15	0.08 (J)
8/22/2017	0.41			
8/23/2017				
2/19/2018		0.1	0.13	0.08 (J)
2/20/2018	0.27			
2/21/2018				
5/14/2018		0.13	0.13	
5/15/2018	0.23			0.1
5/16/2018				
10/15/2018		0.14	0.16	
10/16/2018	0.23			0.09 (J)
10/17/2018				
4/16/2019	0.188	0.147	0.156	0.143
4/17/2019				
4/23/2019				
9/23/2019		0.142 (D)	0.132	
9/24/2019				0.128
9/25/2019	0.168			
3/16/2020				
3/17/2020		0.231	0.132	
3/18/2020	0.122			0.108
3/24/2020				
3/25/2020				
5/12/2020				
5/13/2020				

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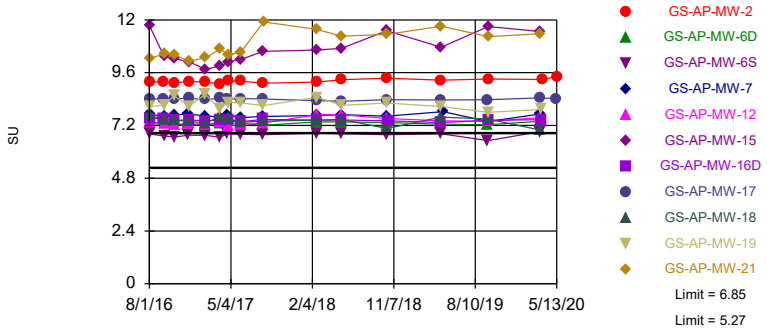
Exceeds Limits: GS-AP-MW-2, GS-AP-MW-6D, GS-AP-MW-6S, GS-AP-MW-7, GS-AP-MW-12, GS-AP-MW-15, GS-AP-MW-16D,..

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limits are highest and lowest of 28 background values. Annual per-constituent alpha = 0.09165. Individual comparison alpha = 0.00426 (1 of 2). Comparing 11 points to limit.

Constituent: pH Analysis Run 7/27/2020 11:30 AM View: Interwell PL

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

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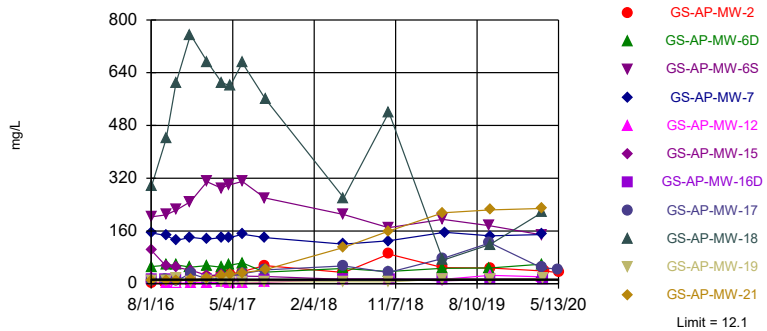
Hollow symbols indicate censored values.

Exceeds Limit: GS-AP-MW-2, GS-AP-MW-6D, GS-AP-MW-6S, GS-AP-MW-7, GS-AP-MW-12, GS-AP-MW-15, GS-AP-MW-16D,..

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 26 background values. Annual per-constituent alpha = 0.05165. Individual comparison alpha = 0.002407 (1 of 2). Comparing 11 points to limit.

Constituent: Sulfate Analysis Run 7/27/2020 11:30 AM View: Interwell PL

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

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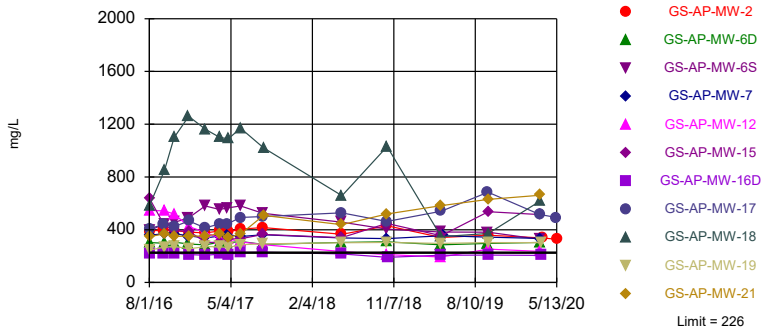
Exceeds Limit: GS-AP-MW-2, GS-AP-MW-6D, GS-AP-MW-6S, GS-AP-MW-7, GS-AP-MW-12, GS-AP-MW-15, GS-AP-MW-17,..

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 26 background values. Annual per-constituent alpha = 0.05165. Individual comparison alpha = 0.002407 (1 of 2). Comparing 11 points to limit.

Constituent: TDS Analysis Run 7/27/2020 11:30 AM View: Interwell PL

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

Prediction Limit

Constituent: pH (SU) Analysis Run 7/27/2020 11:33 AM View: Interwell PL

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-19	GS-AP-MW-17	GS-AP-MW-16D	GS-AP-MW-15	GS-AP-MW-21	GS-AP-MW-18	GS-AP-MW-7	GS-AP-MW-13 (bg)	GS-AP-MW-2
8/1/2016	8.05	8.39	7.53	11.74					
8/2/2016					10.26	7.65	7.72	6.8	9.18
8/3/2016									
9/19/2016		8.42	7.5						9.18
9/20/2016				10.33				6.8	
9/21/2016	8.14				10.45	7.47	7.6		
10/24/2016	8.55	8.42				7.44	7.68		9.14
10/25/2016			7.44	10.24	10.42			6.85	
10/26/2016									
12/12/2016						7.39	7.72		
12/13/2016	8.08	8.43	7.45					6.8	9.2
12/14/2016				10.09	10.12				
2/6/2017		8.38					7.64		
2/7/2017	8.61								
2/8/2017			7.41	9.75	10.28	7.31		6.76	9.17
3/27/2017		8.43							
3/28/2017	7.94			9.9	10.67	7.6	7.58		
3/29/2017			7.44					6.76	
3/30/2017									9.08
4/24/2017		8.39					7.68		
4/26/2017	8.26		7.47	10.08	10.42	7.5		6.71	9.22
6/5/2017		8.42							
6/6/2017	8.23		7.37	10.2	10.51	7.34			9.22
6/7/2017							7.56	6.71	
8/21/2017							7.61		9.12
8/22/2017	8.1	8.4	7.48	10.57				6.84	
8/23/2017					11.91	7.4			
2/19/2018		8.33					7.65		
2/20/2018				10.63	11.57			6.77	
2/21/2018	8.48		7.44			7.44			9.17
5/14/2018									
5/15/2018		8.3		10.71	11.26		7.69	6.8	
5/16/2018	8.12		7.45			7.47			9.28
10/15/2018		8.37		11.51			7.62		
10/16/2018	8.22				11.34	7.06			9.35
10/17/2018			7.41					6.67	
4/16/2019								6.64	
4/17/2019	8.06	8.36	7.33	10.76	11.71	7.58			9.26
4/23/2019							7.83		
9/23/2019		8.37							
9/24/2019	7.8		7.43	11.7	11.24	7.49	7.38		
9/25/2019									9.31
3/16/2020		8.45							
3/17/2020							7.72		
3/18/2020				11.47	11.37	6.99			
3/24/2020	7.93		7.46						
3/25/2020									9.29
5/12/2020		8.42							
5/13/2020									9.43

Prediction Limit

Constituent: pH (SU) Analysis Run 7/27/2020 11:33 AM View: Interwell PL

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-12	GS-AP-MW-6S	GS-AP-MW-6D	GS-AP-MW-8 (bg)
8/1/2016				
8/2/2016				
8/3/2016	7.36	6.81	7.27	5.84
9/19/2016				
9/20/2016	7.28	6.72	7.27	
9/21/2016				5.99
10/24/2016			7.25	
10/25/2016	7.23			5.94
10/26/2016		6.68		
12/12/2016		6.76	7.26	
12/13/2016	7.27			5.84
12/14/2016				
2/6/2017		6.75	7.24	5.9
2/7/2017				
2/8/2017	7.25			
3/27/2017		6.67	7.29	
3/28/2017				5.67
3/29/2017	7.34			
3/30/2017				
4/24/2017		6.81	7.46	5.79
4/26/2017	7.19			
6/5/2017				
6/6/2017		6.8	7.29	
6/7/2017	7.24			5.71
8/21/2017		6.78	7.21	5.7
8/22/2017	7.31			
8/23/2017				
2/19/2018		6.85	7.36	5.78
2/20/2018	7.69			
2/21/2018				
5/14/2018		6.82	7.36	
5/15/2018	7.69			5.84
5/16/2018				
10/15/2018		6.78	7.33	
10/16/2018	7.51			5.75
10/17/2018				
4/16/2019	7.41	6.82	7.26	5.76
4/17/2019				
4/23/2019				
9/23/2019		6.51	7.23	
9/24/2019				5.27
9/25/2019	7.38			
3/16/2020				
3/17/2020		6.92	7.39	
3/18/2020	7.56			5.81
3/24/2020				
3/25/2020				
5/12/2020				
5/13/2020				

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 7/27/2020 11:33 AM View: Interwell PL

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-19	GS-AP-MW-15	GS-AP-MW-16D	GS-AP-MW-17	GS-AP-MW-2	GS-AP-MW-21	GS-AP-MW-18	GS-AP-MW-7	GS-AP-MW-13 (bg)
8/1/2016	9.02	102	13.4	9.56					
8/2/2016					2.87	9.14	295	154	12
8/3/2016									
9/19/2016			12.9	12.7	1.22				
9/20/2016		53.3							11.2
9/21/2016	8.38					8.71	440	146	
10/24/2016	18.5			8.58	<1		608	131	
10/25/2016		49.8	11.6			8.54			10.1
10/26/2016									
12/12/2016							755	141	
12/13/2016	7.4		12.7	31	<1				11.4
12/14/2016		40.9				11.5			
2/6/2017				14.7				135	
2/7/2017	8.16								
2/8/2017		25	12.2		19.4	17	672		10.9
3/27/2017				14 (D)					
3/28/2017	6.4 (D)	27 (D)				25 (D)	610 (D)	140 (D)	
3/29/2017			12 (D)						11 (D)
3/30/2017					31 (D)				
4/24/2017				22 (D)				140 (D)	
4/26/2017	4.6 (JD)	29 (D)	13 (D)		29 (D)	28 (D)	600 (D)		11 (D)
6/5/2017				30					
6/6/2017	5.2	23	12		37	33	670		
6/7/2017								150	11
8/21/2017					55			140	
8/22/2017	5.3	22	12	42					11
8/23/2017						43	560		
5/14/2018									
5/15/2018		13		54		110		120	11
5/16/2018	6		13		34		260		
10/15/2018		14		34				130	
10/16/2018	5.6				90	160	520		
10/17/2018			13						12
4/16/2019									12.1
4/17/2019	14.3	9.02	14.1	76.6	48.6	215	71.6		
4/23/2019								156	
9/23/2019				124					
9/24/2019	13.8 (D)	12.4	14.1			224	119	145	
9/25/2019					47.7				
3/16/2020				48.6					
3/17/2020								149	
3/18/2020		15.9				228	216		
3/24/2020	15.2		14.1						
3/25/2020					38.5				
5/12/2020				44.4					
5/13/2020					33.6				

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 7/27/2020 11:33 AM View: Interwell PL

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-8 (bg)	GS-AP-MW-6D	GS-AP-MW-12	GS-AP-MW-6S
8/1/2016				
8/2/2016				
8/3/2016	4.2	52	19.2	203
9/19/2016				
9/20/2016		56	1.42	209
9/21/2016	4.27			
10/24/2016		57.5		
10/25/2016	2.78		<1	
10/26/2016				224
12/12/2016		50		249
12/13/2016	3.18		3.21	
12/14/2016				
2/6/2017	3.74	54.9		309
2/7/2017				
2/8/2017			3.3	
3/27/2017		50 (D)		290 (D)
3/28/2017	3.4 (JD)			
3/29/2017			3.8 (JD)	
3/30/2017				
4/24/2017	2.7 (JD)	56 (D)		300 (D)
4/26/2017			1.4 (JD)	
6/5/2017				
6/6/2017		63		310
6/7/2017	2.7 (J)		1.7 (J)	
8/21/2017	3.9 (J)	35		260
8/22/2017			4.2 (J)	
8/23/2017				
5/14/2018		46		210
5/15/2018	2.5 (J)		14	
5/16/2018				
10/15/2018		37		170
10/16/2018	2.4 (J)		13	
10/17/2018				
4/16/2019	4.53	46.8	13.3	195
4/17/2019				
4/23/2019				
9/23/2019		47.9		176 (D)
9/24/2019	6.61			
9/25/2019			25.5	
3/16/2020				
3/17/2020		59.5		148
3/18/2020	4.86		20.8	
3/24/2020				
3/25/2020				
5/12/2020				
5/13/2020				

Prediction Limit

Constituent: TDS (mg/L) Analysis Run 7/27/2020 11:33 AM View: Interwell PL

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-19	GS-AP-MW-15	GS-AP-MW-16D	GS-AP-MW-17	GS-AP-MW-2	GS-AP-MW-21	GS-AP-MW-18	GS-AP-MW-7	GS-AP-MW-13 (bg)
8/1/2016	245	640	222	408					
8/2/2016					390	348	586	358	221
8/3/2016									
9/19/2016			220	441	398				
9/20/2016		434							221
9/21/2016	267					368	848	370	
10/24/2016	275			424	395		1100	370	
10/25/2016		394	223			348			226
10/26/2016									
12/12/2016							1260	353	
12/13/2016	255		211	466	381				211
12/14/2016		387				352			
2/6/2017				414				338	
2/7/2017	272								
2/8/2017		303	206		376	352	1160		212
3/27/2017				444					
3/28/2017	271	305				370	1100	352	
3/29/2017			215						217
3/30/2017					391				
4/24/2017				446				362	
4/26/2017	265	329	212		384	342	1090		202
6/5/2017				493					
6/6/2017	287	331	227		404	367	1170		
6/7/2017								348	218
8/21/2017					416			362	
8/22/2017	293	364	230	500					224
8/23/2017						508	1020		
5/14/2018									
5/15/2018		340		528		438		338	209
5/16/2018	301		216		365		658		
10/15/2018		448 (D)		462 (D)				333 (D)	
10/16/2018	303 (D)				430 (D)	520 (D)	1030 (D)		
10/17/2018			191 (D)						208 (D)
4/16/2019									185
4/17/2019	296	354	207	540	341	582	347		
4/23/2019								354	
9/23/2019				684					
9/24/2019	302	536	208			630	372	344	
9/25/2019					358				
3/16/2020				516					
3/17/2020								334	
3/18/2020		515				661	618		
3/24/2020	302		205						
3/25/2020					337				
5/12/2020				493					
5/13/2020					328				

Prediction Limit

Constituent: TDS (mg/L) Analysis Run 7/27/2020 11:33 AM View: Interwell PL

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-8 (bg)	GS-AP-MW-6D	GS-AP-MW-12	GS-AP-MW-6S
8/1/2016				
8/2/2016				
8/3/2016	113	302	546	394
9/19/2016				
9/20/2016		298	542	444
9/21/2016	128			
10/24/2016		306		
10/25/2016	121		518	
10/26/2016				456
12/12/2016		291		491
12/13/2016	101		424	
12/14/2016				
2/6/2017	108	285		580
2/7/2017				
2/8/2017			379	
3/27/2017		305		554
3/28/2017	91			
3/29/2017			334	
3/30/2017				
4/24/2017	89.3	301		566
4/26/2017			332	
6/5/2017				
6/6/2017		311		580
6/7/2017	84		308	
8/21/2017	91.3	289		524
8/22/2017			286	
8/23/2017				
5/14/2018		303		458
5/15/2018	94.7		235	
5/16/2018				
10/15/2018		309 (D)		404 (D)
10/16/2018	76.7 (D)		211 (D)	
10/17/2018				
4/16/2019	92	285	193	382
4/17/2019				
4/23/2019				
9/23/2019		296		381
9/24/2019	109			
9/25/2019			253	
3/16/2020				
3/17/2020		303		328
3/18/2020	90.7		236	
3/24/2020				
3/25/2020				
5/12/2020				
5/13/2020				

Trend Test - All Results

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond Printed 7/27/2020, 11:44 AM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	GS-AP-MW-8 (bg)	0	13	48	No	14	92.86	n/a	n/a	0.01	NP
Boron (mg/L)	GS-AP-MW-13 (bg)	0	0	38	No	12	100	n/a	n/a	0.01	NP
Boron (mg/L)	GS-AP-MW-2	0.01863	23	53	No	15	0	n/a	n/a	0.01	NP
Boron (mg/L)	GS-AP-MW-6D	0.03105	36	48	No	14	0	n/a	n/a	0.01	NP
Boron (mg/L)	**GS-AP-MW-6S**	**-0.07493**	**-50**	**-48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	GS-AP-MW-7	0.04845	41	48	No	14	0	n/a	n/a	0.01	NP
Boron (mg/L)	GS-AP-MW-18	-0.1866	-17	-48	No	14	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GS-AP-MW-8 (bg)	-1.483	-37	-48	No	14	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GS-AP-MW-13 (bg)	-2.607	-32	-38	No	12	0	n/a	n/a	0.01	NP
Calcium (mg/L)	**GS-AP-MW-6D**	**1.817**	**51**	**48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	GS-AP-MW-6S	-0.5141	-1	-48	No	14	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GS-AP-MW-18	-22.09	-28	-48	No	14	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GS-AP-MW-8 (bg)	0.2052	43	48	No	14	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GS-AP-MW-13 (bg)	0.1178	10	38	No	12	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GS-AP-MW-2	1.355	38	53	No	15	0	n/a	n/a	0.01	NP
Chloride (mg/L)	**GS-AP-MW-6D**	**1.134**	**61**	**48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	GS-AP-MW-6S	-0.4351	-10	-48	No	14	0	n/a	n/a	0.01	NP
Chloride (mg/L)	**GS-AP-MW-7**	**0.6889**	**80**	**48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**GS-AP-MW-12**	**-3.767**	**-73**	**-48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	GS-AP-MW-15	-0.9184	-26	-48	No	14	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GS-AP-MW-17	1.447	46	53	No	15	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GS-AP-MW-18	-3.893	-17	-48	No	14	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GS-AP-MW-19	-0.1608	-22	-48	No	14	0	n/a	n/a	0.01	NP
Chloride (mg/L)	**GS-AP-MW-21**	**2.683**	**53**	**48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Fluoride (mg/L)	GS-AP-MW-8 (bg)	0.009411	31	53	No	15	0	n/a	n/a	0.01	NP
Fluoride (mg/L)	**GS-AP-MW-13 (bg)**	**0.02914**	**48**	**43**	**Yes**	**13**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Fluoride (mg/L)	**GS-AP-MW-2**	**-0.2301**	**-94**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Fluoride (mg/L)	**GS-AP-MW-6S**	**0.03974**	**80**	**53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Fluoride (mg/L)	GS-AP-MW-15	-0.00...	-1	-53	No	15	0	n/a	n/a	0.01	NP
Fluoride (mg/L)	**GS-AP-MW-17**	**0.0507**	**69**	**58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Fluoride (mg/L)	**GS-AP-MW-18**	**0.1324**	**66**	**53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Fluoride (mg/L)	GS-AP-MW-19	0.005837	8	53	No	15	0	n/a	n/a	0.01	NP
Fluoride (mg/L)	GS-AP-MW-21	0	1	53	No	15	0	n/a	n/a	0.01	NP
pH (SU)	GS-AP-MW-8 (bg)	-0.06395	-42	-53	No	15	0	n/a	n/a	0.01	NP
pH (SU)	GS-AP-MW-13 (bg)	-0.05825	-34	-43	No	13	0	n/a	n/a	0.01	NP
pH (SU)	**GS-AP-MW-2**	**0.05543**	**63**	**58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
pH (SU)	GS-AP-MW-6D	0.02378	15	53	No	15	0	n/a	n/a	0.01	NP
pH (SU)	GS-AP-MW-6S	0.03037	30	53	No	15	0	n/a	n/a	0.01	NP
pH (SU)	GS-AP-MW-7	0	-1	-53	No	15	0	n/a	n/a	0.01	NP
pH (SU)	GS-AP-MW-12	0.0681	38	53	No	15	0	n/a	n/a	0.01	NP
pH (SU)	GS-AP-MW-15	0.4002	43	53	No	15	0	n/a	n/a	0.01	NP
pH (SU)	GS-AP-MW-17	-0.00...	-19	-58	No	16	0	n/a	n/a	0.01	NP
pH (SU)	GS-AP-MW-18	-0.07276	-21	-53	No	15	0	n/a	n/a	0.01	NP
pH (SU)	GS-AP-MW-19	-0.06518	-27	-53	No	15	0	n/a	n/a	0.01	NP
pH (SU)	**GS-AP-MW-21**	**0.4313**	**58**	**53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	GS-AP-MW-8 (bg)	0.1222	4	48	No	14	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GS-AP-MW-13 (bg)	0.01849	11	38	No	12	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	**GS-AP-MW-2**	**13.36**	**56**	**53**	**Yes**	**15**	**13.33**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	GS-AP-MW-6D	-1.925	-15	-48	No	14	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GS-AP-MW-6S	-17.48	-23	-48	No	14	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GS-AP-MW-7	0	0	48	No	14	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GS-AP-MW-12	5.317	47	48	No	14	7.143	n/a	n/a	0.01	NP
Sulfate (mg/L)	**GS-AP-MW-15**	**-12.83**	**-73**	**-48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	GS-AP-MW-16D	0.4269	32	48	No	14	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	**GS-AP-MW-17**	**16.47**	**73**	**53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	GS-AP-MW-18	-115.3	-37	-48	No	14	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GS-AP-MW-19	-0.515	-3	-48	No	14	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	**GS-AP-MW-21**	**64.6**	**85**	**48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
TDS (mg/L)	GS-AP-MW-8 (bg)	-9.205	-37	-48	No	14	0	n/a	n/a	0.01	NP
TDS (mg/L)	GS-AP-MW-13 (bg)	-7.182	-29	-38	No	12	0	n/a	n/a	0.01	NP
TDS (mg/L)	GS-AP-MW-2	-14.72	-39	-53	No	15	0	n/a	n/a	0.01	NP
TDS (mg/L)	GS-AP-MW-6D	0	-1	-48	No	14	0	n/a	n/a	0.01	NP
TDS (mg/L)	GS-AP-MW-6S	-29.94	-24	-48	No	14	0	n/a	n/a	0.01	NP
TDS (mg/L)	GS-AP-MW-7	-8.643	-42	-48	No	14	0	n/a	n/a	0.01	NP
TDS (mg/L)	**GS-AP-MW-12**	**-105.7**	**-79**	**-48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
TDS (mg/L)	GS-AP-MW-15	12.66	9	48	No	14	0	n/a	n/a	0.01	NP
TDS (mg/L)	**GS-AP-MW-17**	**38.05**	**68**	**53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
TDS (mg/L)	GS-AP-MW-18	-141.8	-30	-48	No	14	0	n/a	n/a	0.01	NP

Trend Test - All Results

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond Printed 7/27/2020, 11:44 AM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
TDS (mg/L)	**GS-AP-MW-19**	**14.85**	**64**	**48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
TDS (mg/L)	**GS-AP-MW-21**	**87.07**	**65**	**48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**

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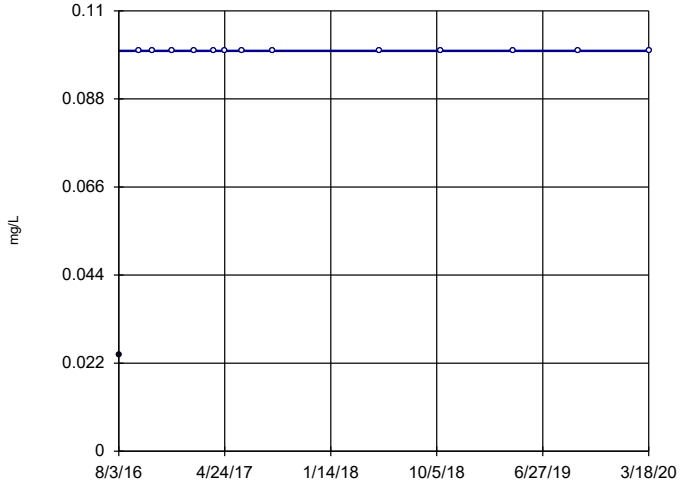
Hollow symbols indicate censored values.

Sen's Slope Estimator

GS-AP-MW-8 (bg)



n = 14

Slope = 0
units per year.

Mann-Kendall
statistic = 13
critical = 48

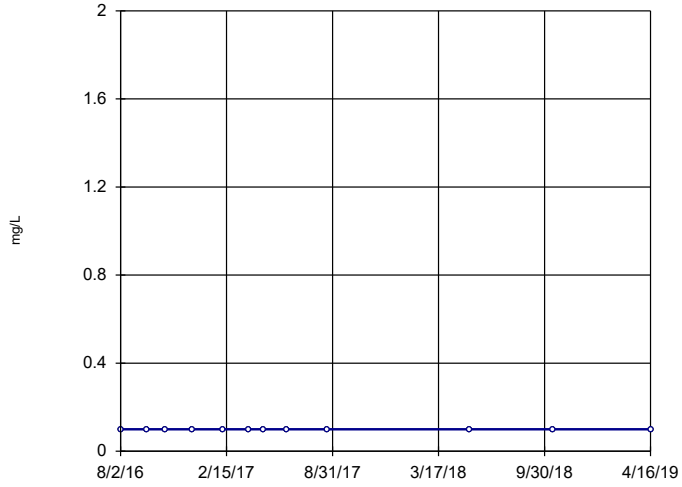
Trend not sig-
nificant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Boron Analysis Run 7/27/2020 11:41 AM View: Trend Test
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.24 Sanitas software licensed to Southern Company. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

GS-AP-MW-13 (bg)



n = 12

Slope = 0
units per year.

Mann-Kendall
statistic = 0
critical = 38

Trend not sig-
nificant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Boron Analysis Run 7/27/2020 11:41 AM View: Trend Test
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

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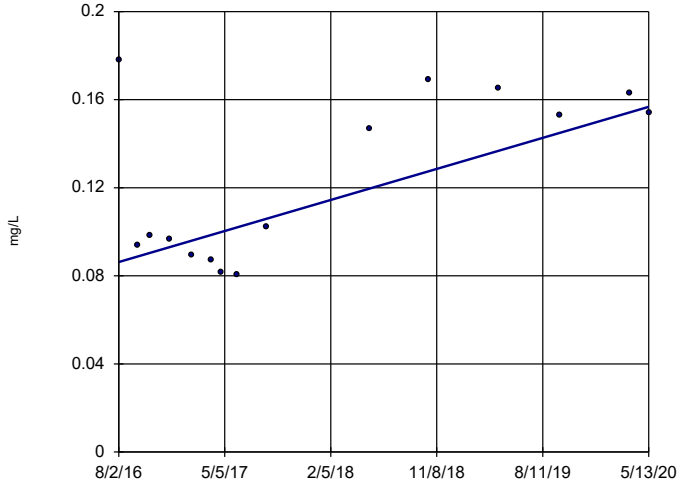
Sen's Slope Estimator

GS-AP-MW-2



n = 15

Slope = 0.01863
units per year.

Mann-Kendall
statistic = 23
critical = 53

Trend not sig-
nificant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Boron Analysis Run 7/27/2020 11:41 AM View: Trend Test
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

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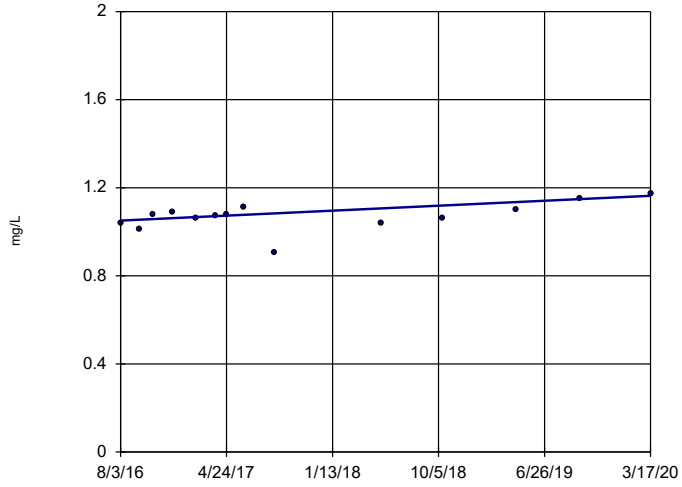
Sen's Slope Estimator

GS-AP-MW-6D



n = 14

Slope = 0.03105
units per year.

Mann-Kendall
statistic = 36
critical = 48

Trend not sig-
nificant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Boron Analysis Run 7/27/2020 11:41 AM View: Trend Test
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

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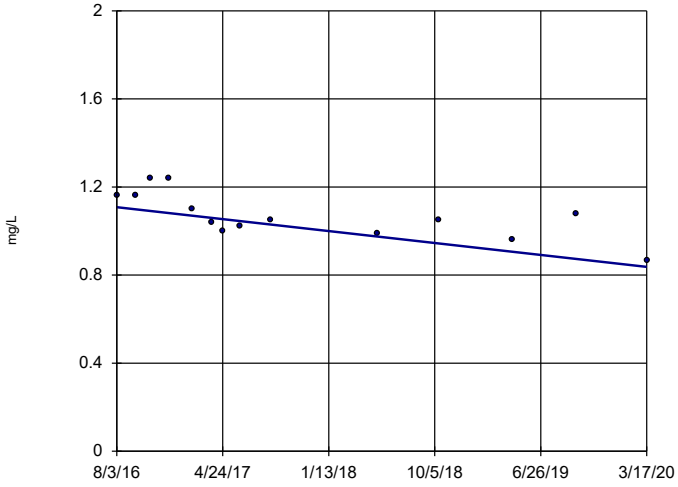
Sen's Slope Estimator

GS-AP-MW-6S



n = 14

Slope = -0.07493 units per year.

Mann-Kendall statistic = -50 critical = -48

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 7/27/2020 11:41 AM View: Trend Test

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

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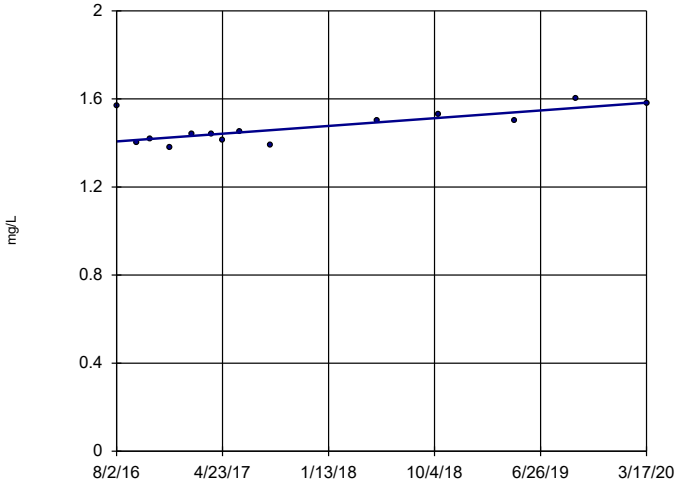
Sen's Slope Estimator

GS-AP-MW-7



n = 14

Slope = 0.04845 units per year.

Mann-Kendall statistic = 41 critical = 48

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 7/27/2020 11:41 AM View: Trend Test

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

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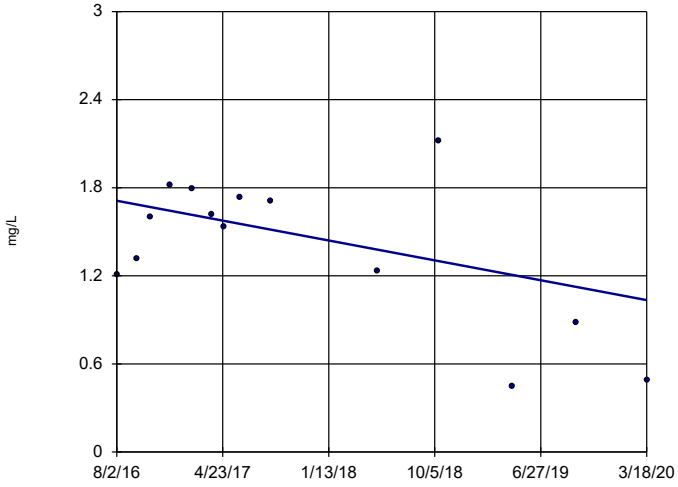
Sen's Slope Estimator

GS-AP-MW-18



n = 14

Slope = -0.1866 units per year.

Mann-Kendall statistic = -17 critical = -48

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 7/27/2020 11:41 AM View: Trend Test

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

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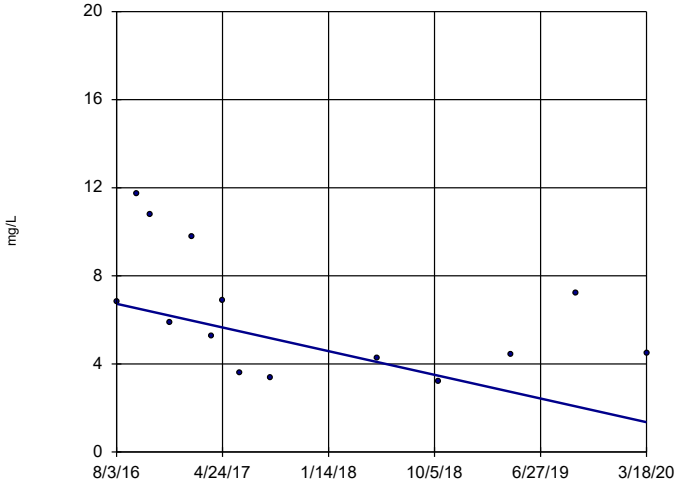
Sen's Slope Estimator

GS-AP-MW-8 (bg)



n = 14

Slope = -1.483 units per year.

Mann-Kendall statistic = -37 critical = -48

Trend not significant at 99% confidence level (α = 0.005 per tail).

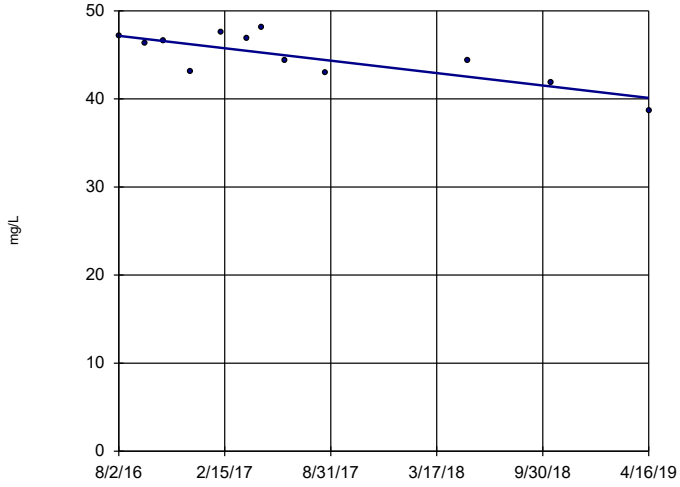
Constituent: Calcium Analysis Run 7/27/2020 11:41 AM View: Trend Test

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.24 Sanitas software licensed to Southern Company. UG

Sen's Slope Estimator

GS-AP-MW-13 (bg)



n = 12

Slope = -2.607 units per year.

Mann-Kendall statistic = -32 critical = -38

Trend not significant at 99% confidence level (α = 0.005 per tail).

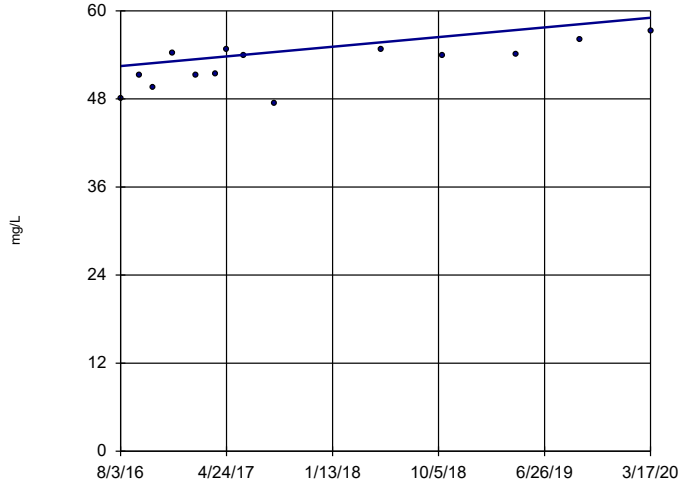
Constituent: Calcium Analysis Run 7/27/2020 11:41 AM View: Trend Test

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.24 Sanitas software licensed to Southern Company. UG

Sen's Slope Estimator

GS-AP-MW-6D



n = 14

Slope = 1.817 units per year.

Mann-Kendall statistic = 51 critical = 48

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

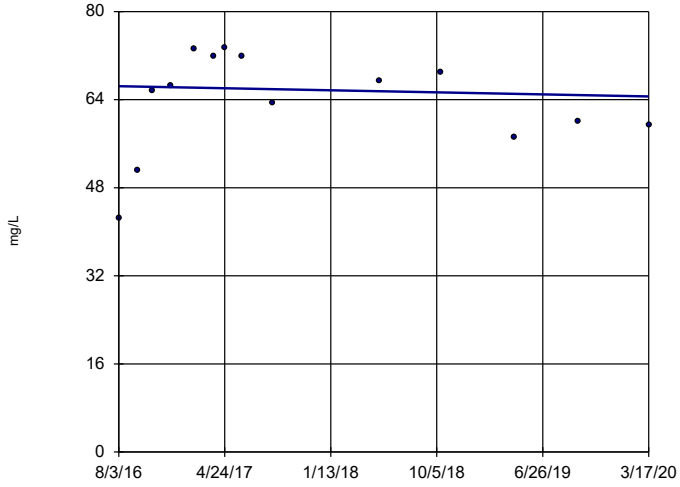
Constituent: Calcium Analysis Run 7/27/2020 11:41 AM View: Trend Test

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.24 Sanitas software licensed to Southern Company. UG

Sen's Slope Estimator

GS-AP-MW-6S



n = 14

Slope = -0.5141 units per year.

Mann-Kendall statistic = -1 critical = -48

Trend not significant at 99% confidence level (α = 0.005 per tail).

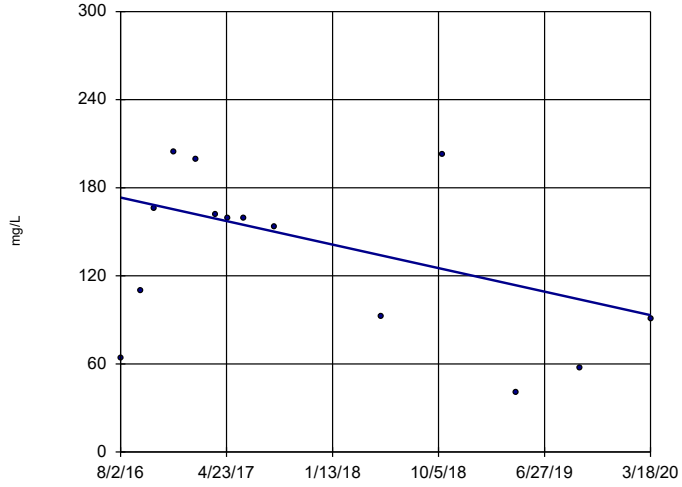
Constituent: Calcium Analysis Run 7/27/2020 11:41 AM View: Trend Test

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.24 Sanitas software licensed to Southern Company. UG

Sen's Slope Estimator

GS-AP-MW-18



n = 14

Slope = -22.09 units per year.

Mann-Kendall statistic = -28 critical = -48

Trend not significant at 99% confidence level (α = 0.005 per tail).

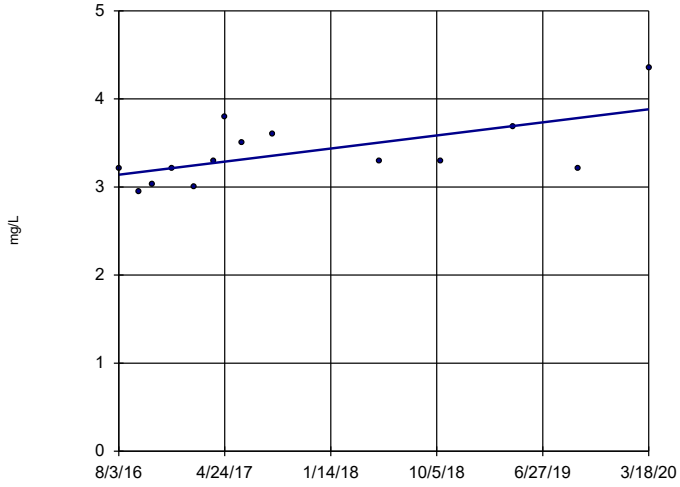
Constituent: Calcium Analysis Run 7/27/2020 11:41 AM View: Trend Test

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.24 Sanitas software licensed to Southern Company. UG

Sen's Slope Estimator

GS-AP-MW-8 (bg)



n = 14

Slope = 0.2052 units per year.

Mann-Kendall statistic = 43 critical = 48

Trend not significant at 99% confidence level (α = 0.005 per tail).

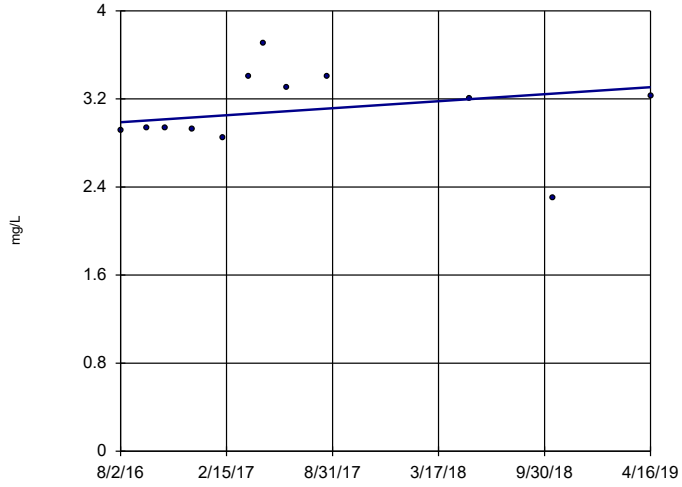
Constituent: Chloride Analysis Run 7/27/2020 11:41 AM View: Trend Test

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.24 Sanitas software licensed to Southern Company. UG

Sen's Slope Estimator

GS-AP-MW-13 (bg)



n = 12

Slope = 0.1178 units per year.

Mann-Kendall statistic = 10 critical = 38

Trend not significant at 99% confidence level (α = 0.005 per tail).

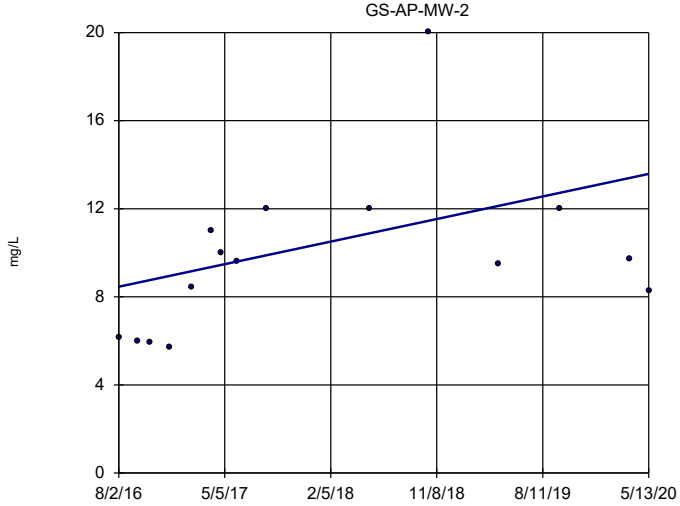
Constituent: Chloride Analysis Run 7/27/2020 11:41 AM View: Trend Test

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.24 Sanitas software licensed to Southern Company. UG

Sen's Slope Estimator

GS-AP-MW-2



n = 15

Slope = 1.355 units per year.

Mann-Kendall statistic = 38 critical = 53

Trend not significant at 99% confidence level (α = 0.005 per tail).

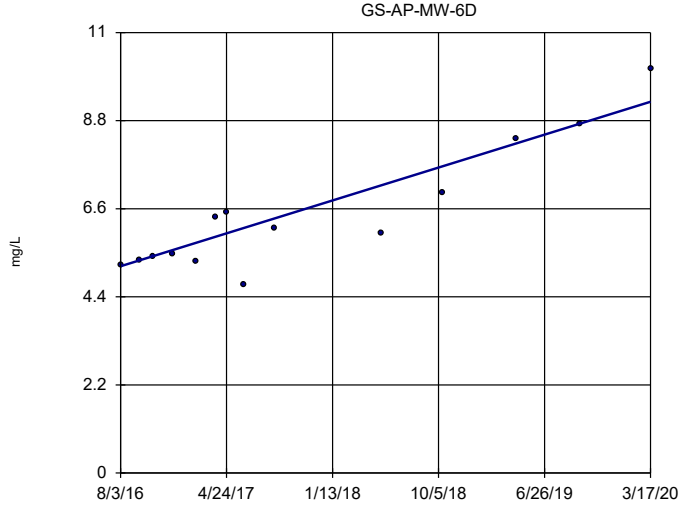
Constituent: Chloride Analysis Run 7/27/2020 11:41 AM View: Trend Test

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.24 Sanitas software licensed to Southern Company. UG

Sen's Slope Estimator

GS-AP-MW-6D



n = 14

Slope = 1.134 units per year.

Mann-Kendall statistic = 61 critical = 48

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

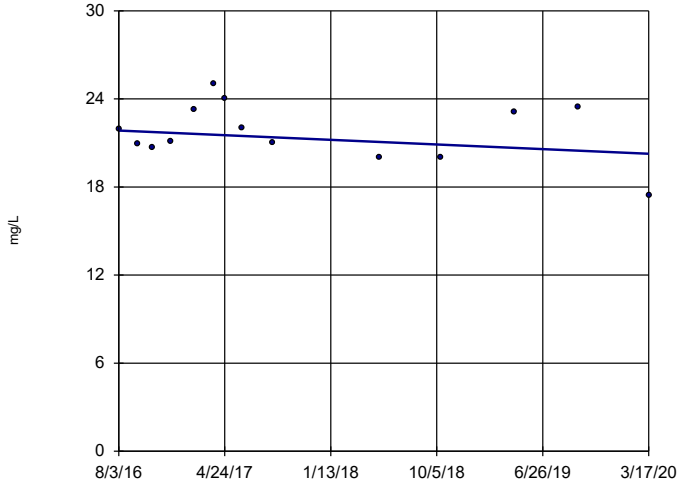
Constituent: Chloride Analysis Run 7/27/2020 11:41 AM View: Trend Test

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.24 Sanitas software licensed to Southern Company. UG

Sen's Slope Estimator

GS-AP-MW-6S



n = 14

Slope = -0.4351 units per year.

Mann-Kendall statistic = -10 critical = -48

Trend not significant at 99% confidence level (α = 0.005 per tail).

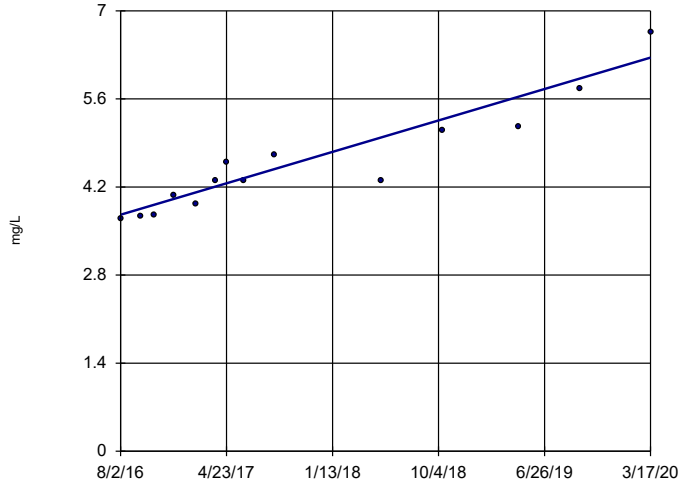
Constituent: Chloride Analysis Run 7/27/2020 11:41 AM View: Trend Test

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.24 Sanitas software licensed to Southern Company. UG

Sen's Slope Estimator

GS-AP-MW-7



n = 14

Slope = 0.6889 units per year.

Mann-Kendall statistic = 80 critical = 48

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

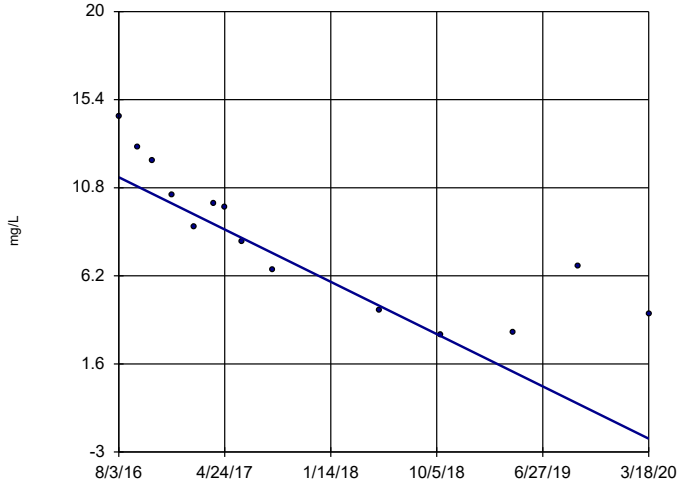
Constituent: Chloride Analysis Run 7/27/2020 11:41 AM View: Trend Test

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.24 Sanitas software licensed to Southern Company. UG

Sen's Slope Estimator

GS-AP-MW-12



n = 14

Slope = -3.767 units per year.

Mann-Kendall statistic = -73 critical = -48

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

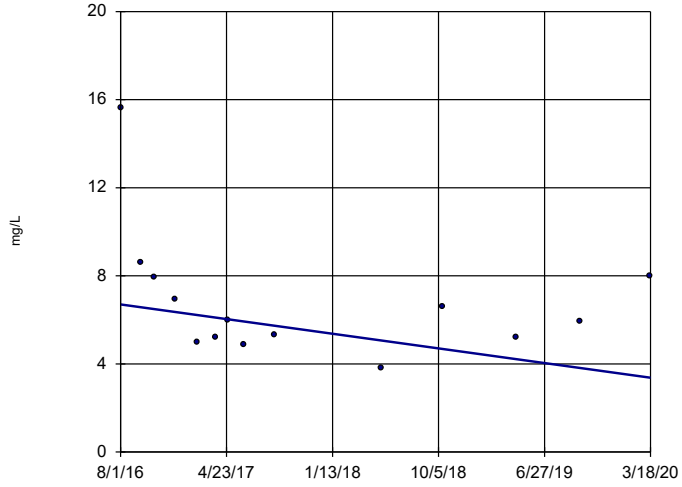
Constituent: Chloride Analysis Run 7/27/2020 11:41 AM View: Trend Test

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.24 Sanitas software licensed to Southern Company. UG

Sen's Slope Estimator

GS-AP-MW-15



n = 14

Slope = -0.9184 units per year.

Mann-Kendall statistic = -26 critical = -48

Trend not significant at 99% confidence level (α = 0.005 per tail).

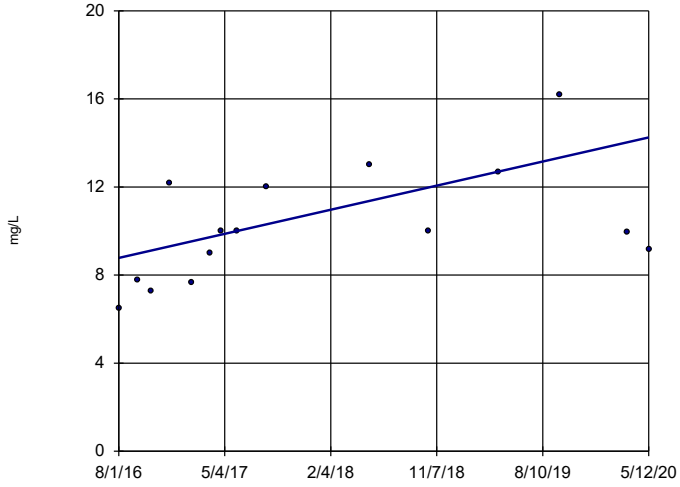
Constituent: Chloride Analysis Run 7/27/2020 11:41 AM View: Trend Test

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.24 Sanitas software licensed to Southern Company. UG

Sen's Slope Estimator

GS-AP-MW-17



n = 15

Slope = 1.447 units per year.

Mann-Kendall statistic = 46 critical = 53

Trend not significant at 99% confidence level (α = 0.005 per tail).

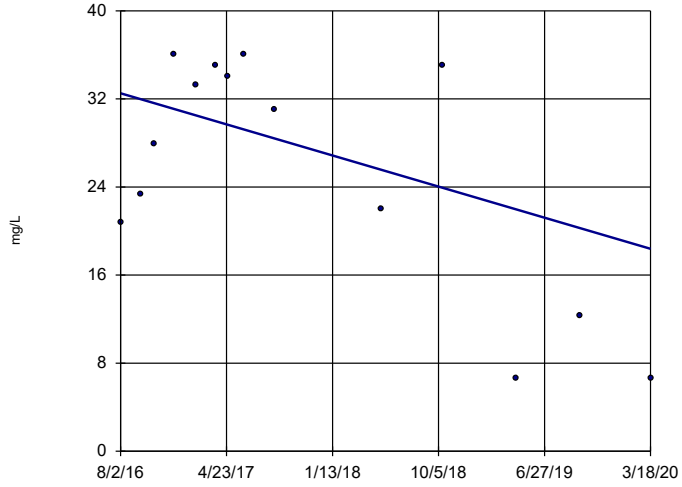
Constituent: Chloride Analysis Run 7/27/2020 11:41 AM View: Trend Test

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.24 Sanitas software licensed to Southern Company. UG

Sen's Slope Estimator

GS-AP-MW-18



n = 14

Slope = -3.893 units per year.

Mann-Kendall statistic = -17 critical = -48

Trend not significant at 99% confidence level (α = 0.005 per tail).

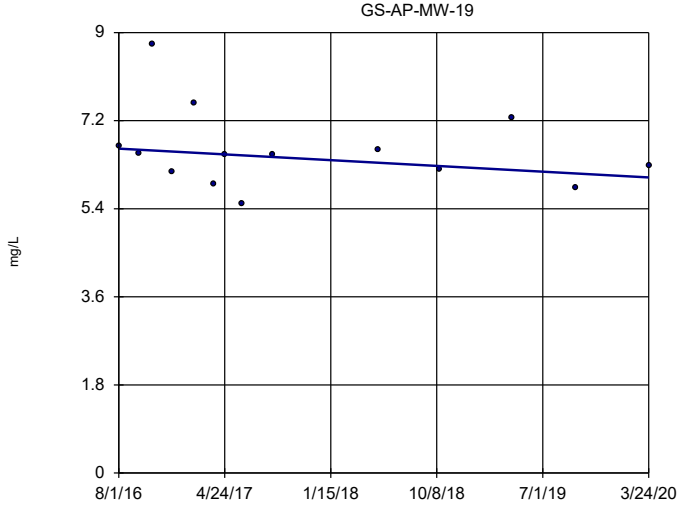
Constituent: Chloride Analysis Run 7/27/2020 11:41 AM View: Trend Test

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.24 Sanitas software licensed to Southern Company. UG

Sen's Slope Estimator

GS-AP-MW-19



n = 14

Slope = -0.1608 units per year.

Mann-Kendall statistic = -22 critical = -48

Trend not significant at 99% confidence level (α = 0.005 per tail).

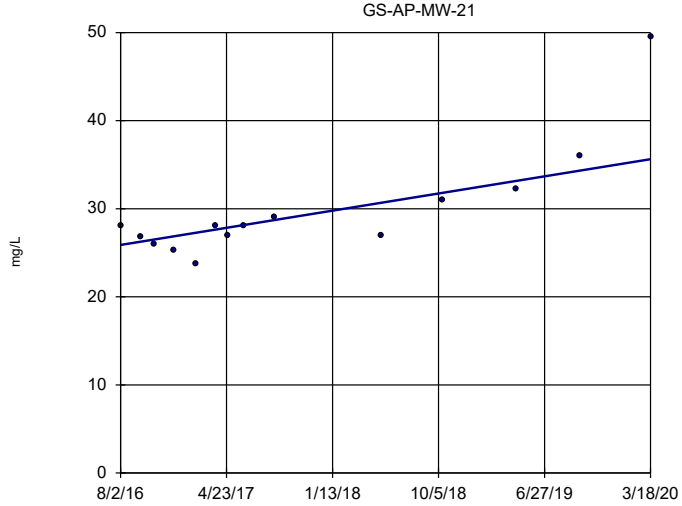
Constituent: Chloride Analysis Run 7/27/2020 11:41 AM View: Trend Test

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.24 Sanitas software licensed to Southern Company. UG

Sen's Slope Estimator

GS-AP-MW-21



n = 14

Slope = 2.683 units per year.

Mann-Kendall statistic = 53 critical = 48

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

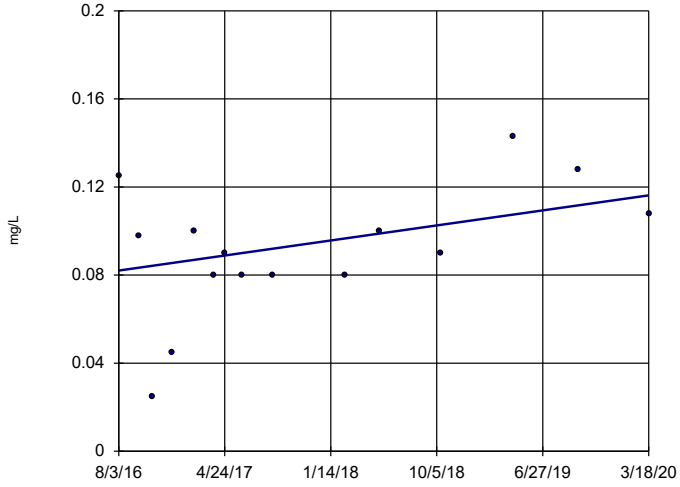
Constituent: Chloride Analysis Run 7/27/2020 11:41 AM View: Trend Test

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.24 Sanitas software licensed to Southern Company. UG

Sen's Slope Estimator

GS-AP-MW-8 (bg)



n = 15

Slope = 0.009411 units per year.

Mann-Kendall statistic = 31 critical = 53

Trend not significant at 99% confidence level (α = 0.005 per tail).

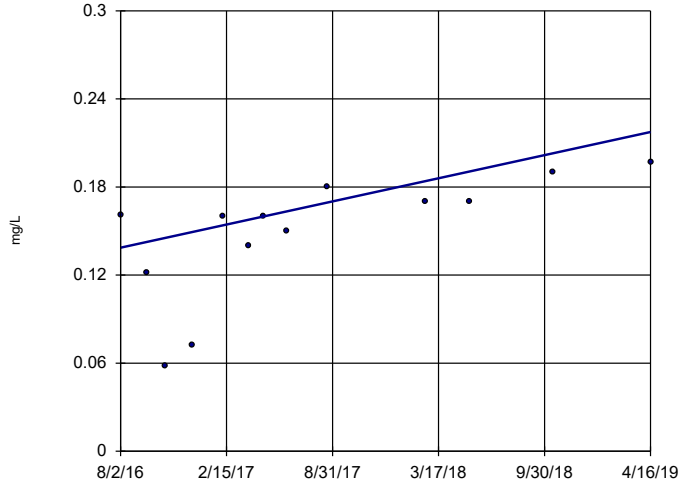
Constituent: Fluoride Analysis Run 7/27/2020 11:41 AM View: Trend Test

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.24 Sanitas software licensed to Southern Company. UG

Sen's Slope Estimator

GS-AP-MW-13 (bg)



n = 13

Slope = 0.02914 units per year.

Mann-Kendall statistic = 48 critical = 43

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

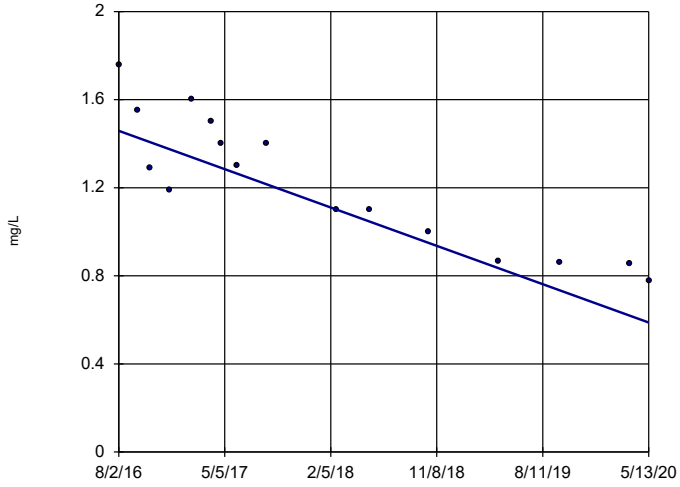
Constituent: Fluoride Analysis Run 7/27/2020 11:41 AM View: Trend Test

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.24 Sanitas software licensed to Southern Company. UG

Sen's Slope Estimator

GS-AP-MW-2



n = 16

Slope = -0.2301 units per year.

Mann-Kendall statistic = -94 critical = -58

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

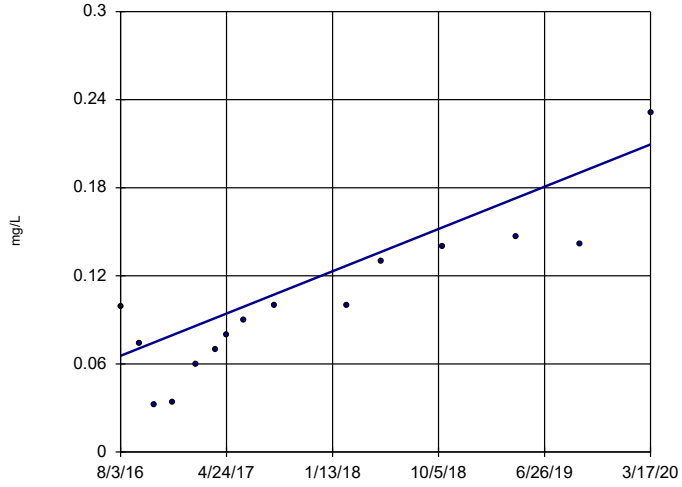
Constituent: Fluoride Analysis Run 7/27/2020 11:41 AM View: Trend Test

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.24 Sanitas software licensed to Southern Company. UG

Sen's Slope Estimator

GS-AP-MW-6S



n = 15

Slope = 0.03974 units per year.

Mann-Kendall statistic = 80 critical = 53

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

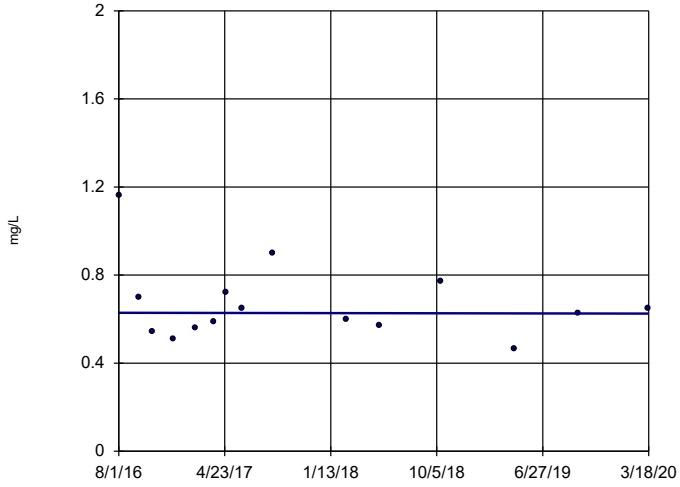
Constituent: Fluoride Analysis Run 7/27/2020 11:41 AM View: Trend Test

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.24 Sanitas software licensed to Southern Company. UG

Sen's Slope Estimator

GS-AP-MW-15



n = 15

Slope = -0.001078 units per year.

Mann-Kendall statistic = -1 critical = -53

Trend not significant at 99% confidence level (α = 0.005 per tail).

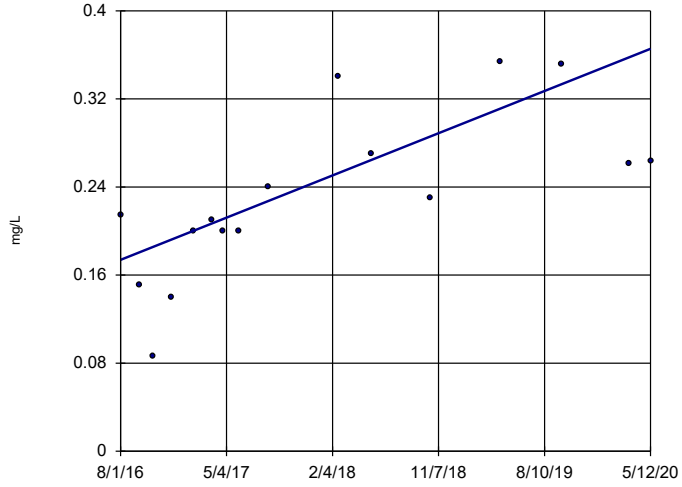
Constituent: Fluoride Analysis Run 7/27/2020 11:41 AM View: Trend Test

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.24 Sanitas software licensed to Southern Company. UG

Sen's Slope Estimator

GS-AP-MW-17



n = 16

Slope = 0.0507 units per year.

Mann-Kendall statistic = 69 critical = 58

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

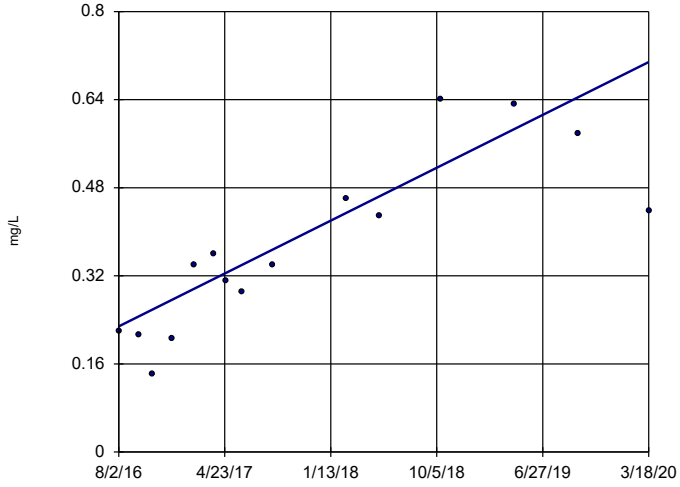
Constituent: Fluoride Analysis Run 7/27/2020 11:41 AM View: Trend Test

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.24 Sanitas software licensed to Southern Company. UG

Sen's Slope Estimator

GS-AP-MW-18



n = 15

Slope = 0.1324 units per year.

Mann-Kendall statistic = 66 critical = 53

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

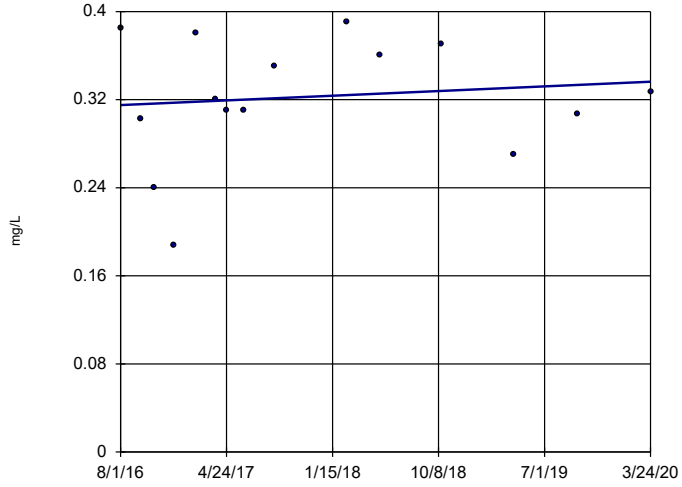
Constituent: Fluoride Analysis Run 7/27/2020 11:41 AM View: Trend Test

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.24 Sanitas software licensed to Southern Company. UG

Sen's Slope Estimator

GS-AP-MW-19



n = 15

Slope = 0.005837 units per year.

Mann-Kendall statistic = 8 critical = 53

Trend not significant at 99% confidence level (α = 0.005 per tail).

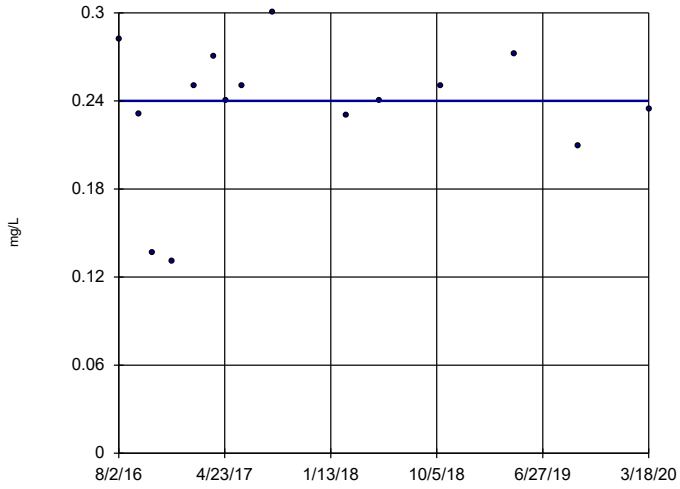
Constituent: Fluoride Analysis Run 7/27/2020 11:41 AM View: Trend Test

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.24 Sanitas software licensed to Southern Company. UG

Sen's Slope Estimator

GS-AP-MW-21



n = 15

Slope = 0 units per year.

Mann-Kendall statistic = 1 critical = 53

Trend not significant at 99% confidence level (α = 0.005 per tail).

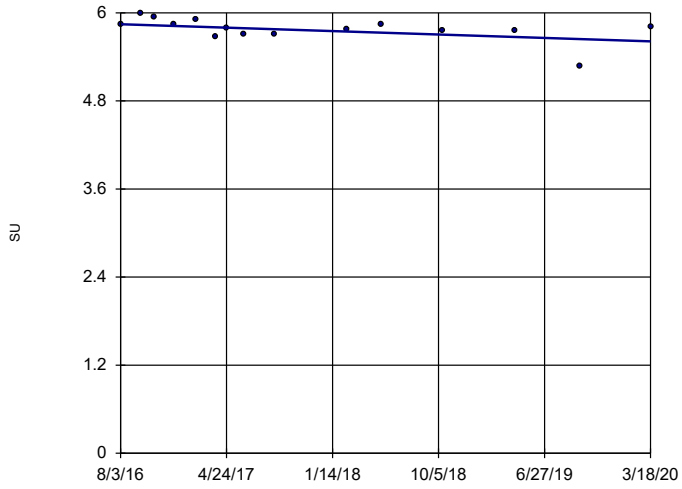
Constituent: Fluoride Analysis Run 7/27/2020 11:42 AM View: Trend Test

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.24 Sanitas software licensed to Southern Company. UG

Sen's Slope Estimator

GS-AP-MW-8 (bg)



n = 15

Slope = -0.06395 units per year.

Mann-Kendall statistic = -42 critical = -53

Trend not significant at 99% confidence level (α = 0.005 per tail).

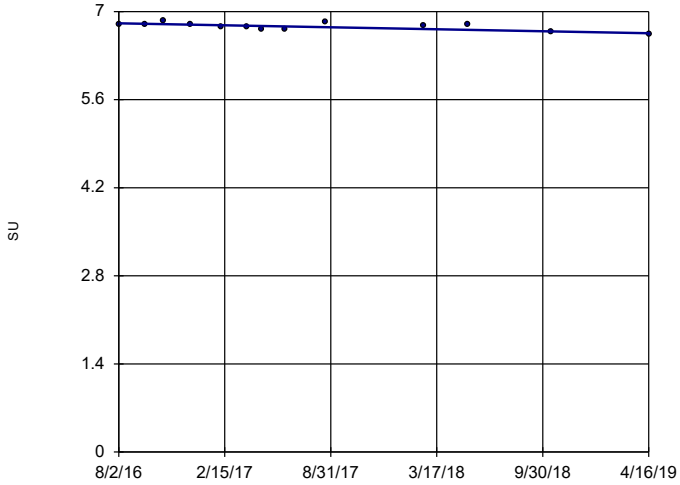
Constituent: pH Analysis Run 7/27/2020 11:42 AM View: Trend Test

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.24 Sanitas software licensed to Southern Company. UG

Sen's Slope Estimator

GS-AP-MW-13 (bg)



n = 13

Slope = -0.05825 units per year.

Mann-Kendall statistic = -34 critical = -43

Trend not significant at 99% confidence level (α = 0.005 per tail).

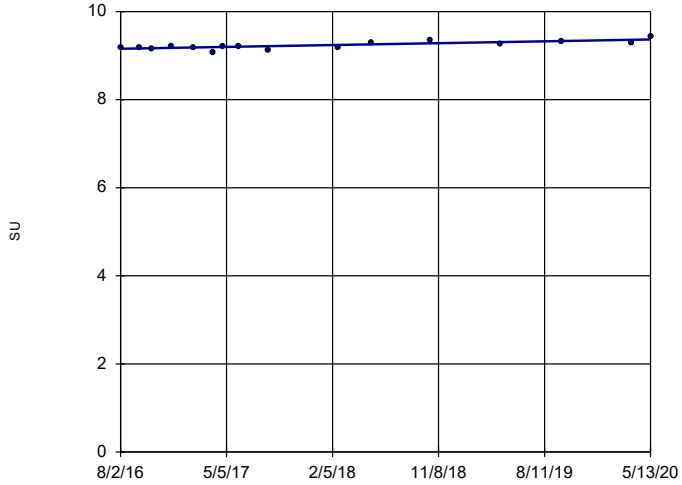
Constituent: pH Analysis Run 7/27/2020 11:42 AM View: Trend Test

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.24 Sanitas software licensed to Southern Company. UG

Sen's Slope Estimator

GS-AP-MW-2



n = 16

Slope = 0.05543 units per year.

Mann-Kendall statistic = 63 critical = 58

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

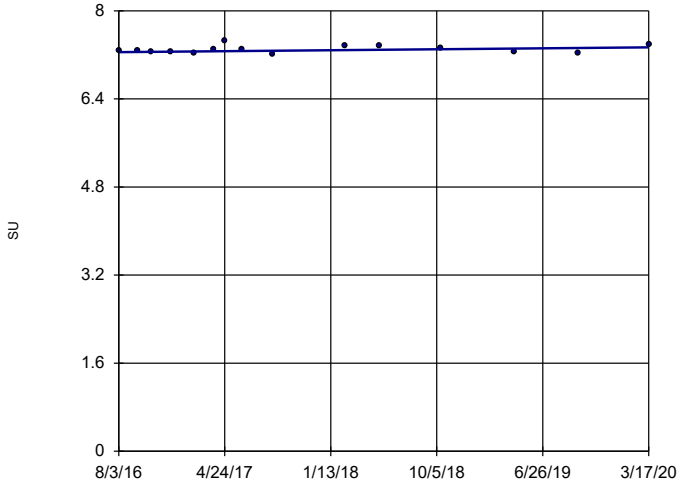
Constituent: pH Analysis Run 7/27/2020 11:42 AM View: Trend Test

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.24 Sanitas software licensed to Southern Company. UG

Sen's Slope Estimator

GS-AP-MW-6D



n = 15

Slope = 0.02378 units per year.

Mann-Kendall statistic = 15 critical = 53

Trend not significant at 99% confidence level (α = 0.005 per tail).

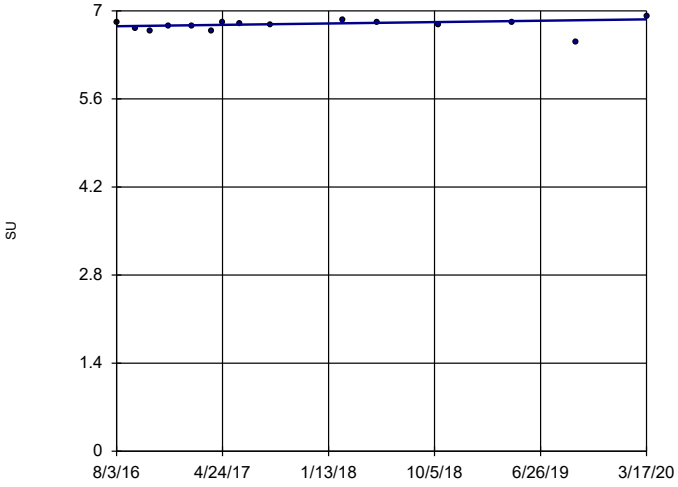
Constituent: pH Analysis Run 7/27/2020 11:42 AM View: Trend Test

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.24 Sanitas software licensed to Southern Company. UG

Sen's Slope Estimator

GS-AP-MW-6S



n = 15

Slope = 0.03037 units per year.

Mann-Kendall statistic = 30 critical = 53

Trend not significant at 99% confidence level (α = 0.005 per tail).

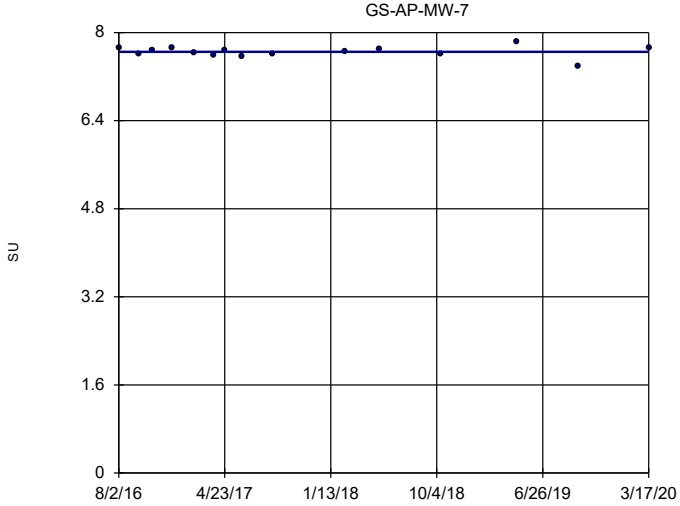
Constituent: pH Analysis Run 7/27/2020 11:42 AM View: Trend Test

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.24 Sanitas software licensed to Southern Company. UG

Sen's Slope Estimator

GS-AP-MW-7



n = 15

Slope = 0 units per year.

Mann-Kendall statistic = -1 critical = -53

Trend not significant at 99% confidence level (α = 0.005 per tail).

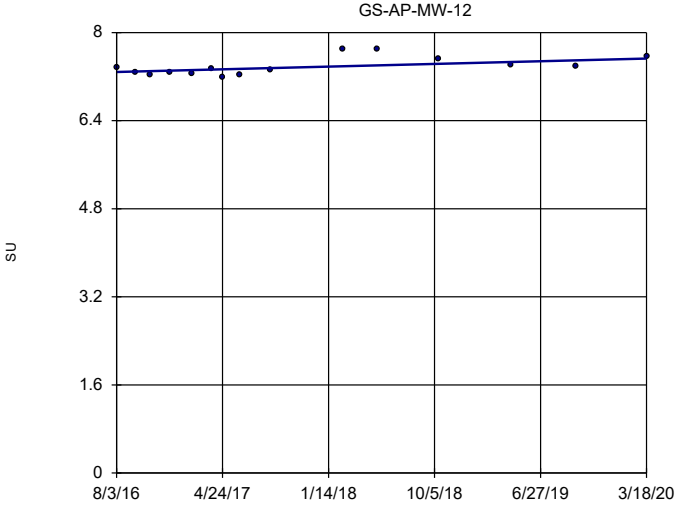
Constituent: pH Analysis Run 7/27/2020 11:42 AM View: Trend Test

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.24 Sanitas software licensed to Southern Company. UG

Sen's Slope Estimator

GS-AP-MW-12



n = 15

Slope = 0.0681 units per year.

Mann-Kendall statistic = 38 critical = 53

Trend not significant at 99% confidence level (α = 0.005 per tail).

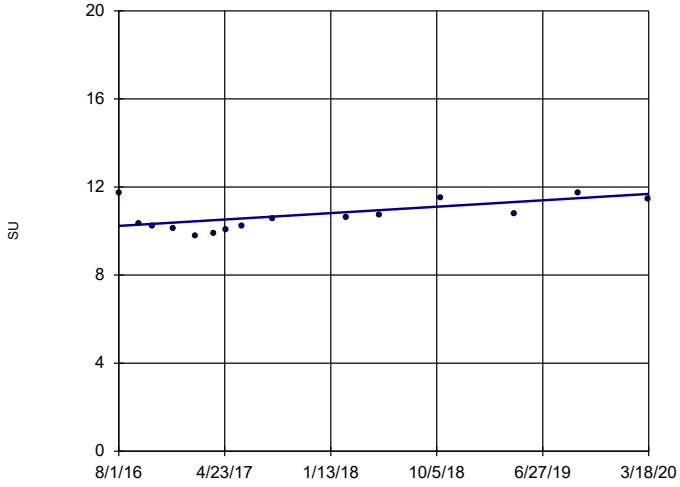
Constituent: pH Analysis Run 7/27/2020 11:42 AM View: Trend Test

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.24 Sanitas software licensed to Southern Company. UG

Sen's Slope Estimator

GS-AP-MW-15



n = 15

Slope = 0.4002 units per year.

Mann-Kendall statistic = 43 critical = 53

Trend not significant at 99% confidence level (α = 0.005 per tail).

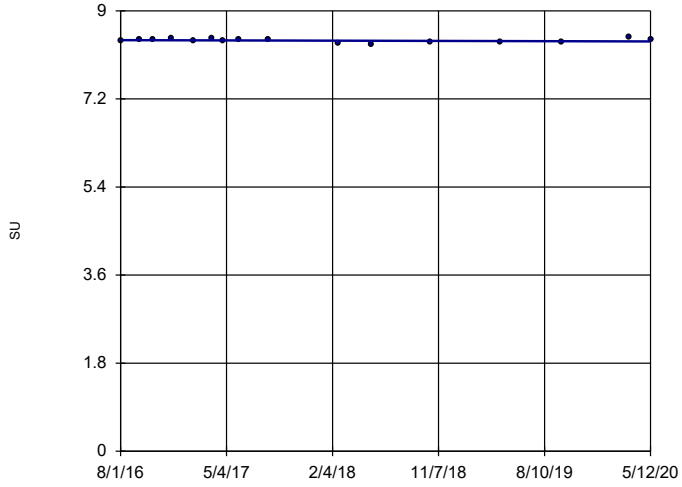
Constituent: pH Analysis Run 7/27/2020 11:42 AM View: Trend Test

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.24 Sanitas software licensed to Southern Company. UG

Sen's Slope Estimator

GS-AP-MW-17



n = 16

Slope = -0.007318 units per year.

Mann-Kendall statistic = -19 critical = -58

Trend not significant at 99% confidence level (α = 0.005 per tail).

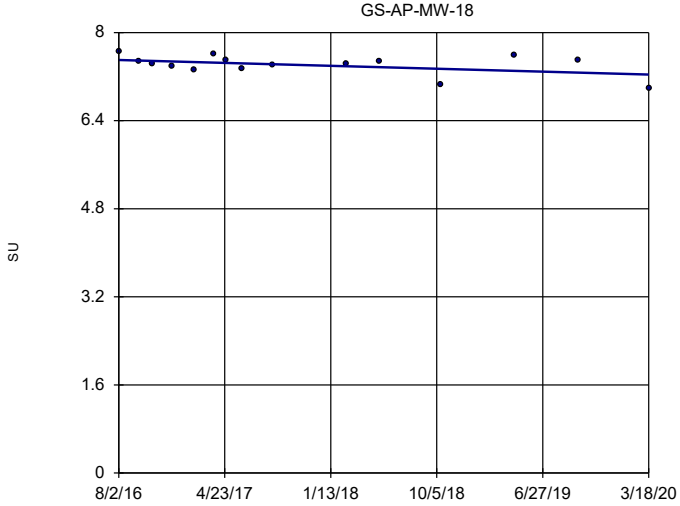
Constituent: pH Analysis Run 7/27/2020 11:42 AM View: Trend Test

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.24 Sanitas software licensed to Southern Company. UG

Sen's Slope Estimator

GS-AP-MW-18



n = 15

Slope = -0.07276 units per year.

Mann-Kendall statistic = -21 critical = -53

Trend not significant at 99% confidence level (α = 0.005 per tail).

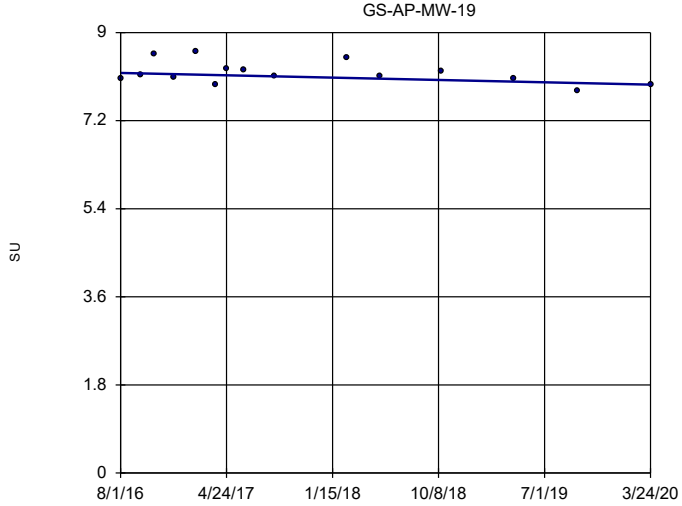
Constituent: pH Analysis Run 7/27/2020 11:42 AM View: Trend Test

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.24 Sanitas software licensed to Southern Company. UG

Sen's Slope Estimator

GS-AP-MW-19



n = 15

Slope = -0.06518 units per year.

Mann-Kendall statistic = -27 critical = -53

Trend not significant at 99% confidence level (α = 0.005 per tail).

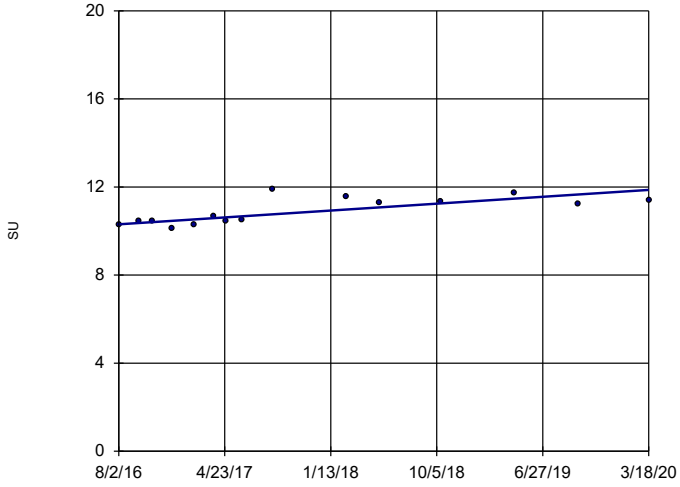
Constituent: pH Analysis Run 7/27/2020 11:42 AM View: Trend Test

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.24 Sanitas software licensed to Southern Company. UG

Sen's Slope Estimator

GS-AP-MW-21



n = 15

Slope = 0.4313 units per year.

Mann-Kendall statistic = 58 critical = 53

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

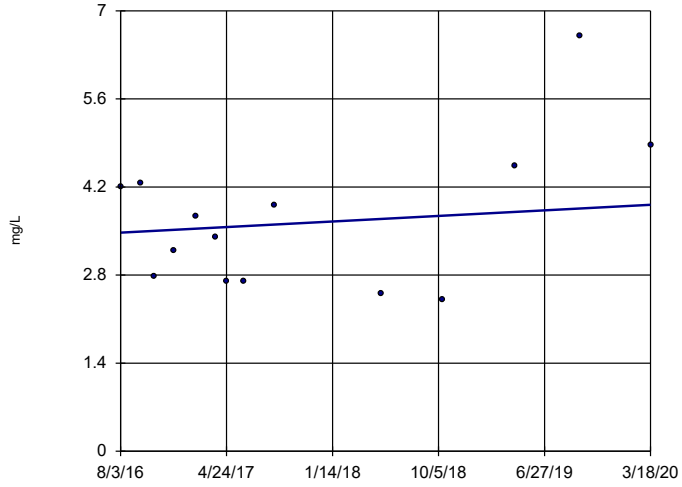
Constituent: pH Analysis Run 7/27/2020 11:42 AM View: Trend Test

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.24 Sanitas software licensed to Southern Company. UG

Sen's Slope Estimator

GS-AP-MW-8 (bg)



n = 14

Slope = 0.1222 units per year.

Mann-Kendall statistic = 4 critical = 48

Trend not significant at 99% confidence level (α = 0.005 per tail).

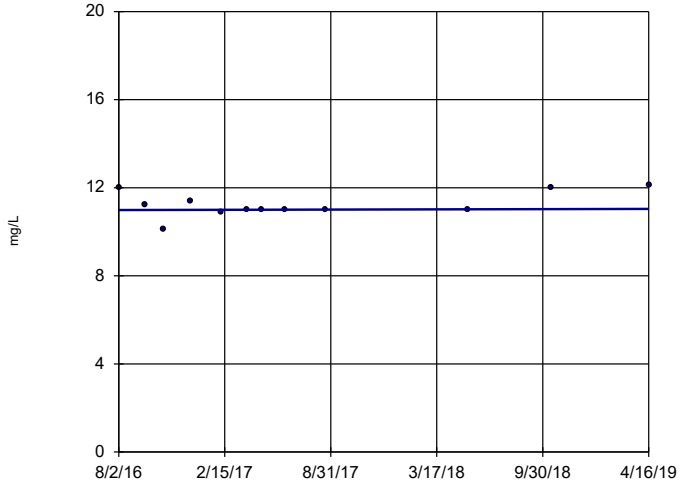
Constituent: Sulfate Analysis Run 7/27/2020 11:42 AM View: Trend Test

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.24 Sanitas software licensed to Southern Company. UG

Sen's Slope Estimator

GS-AP-MW-13 (bg)



n = 12

Slope = 0.01849 units per year.

Mann-Kendall statistic = 11 critical = 38

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 7/27/2020 11:42 AM View: Trend Test

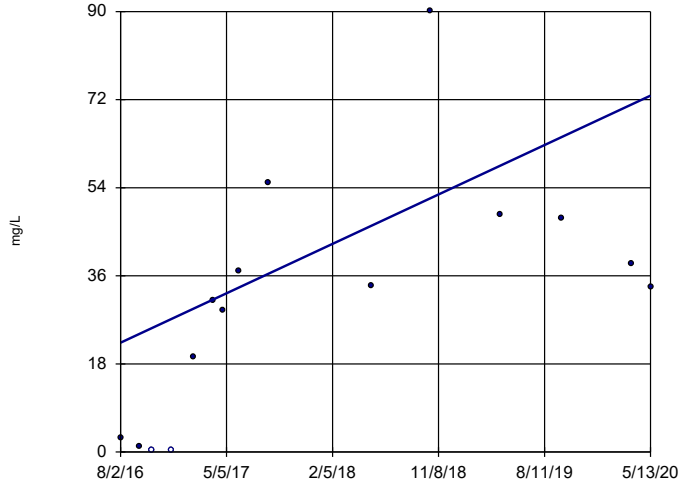
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.24 Sanitas software licensed to Southern Company. UG

Hollow symbols indicate censored values.

Sen's Slope Estimator

GS-AP-MW-2



n = 15

Slope = 13.36 units per year.

Mann-Kendall statistic = 56 critical = 53

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

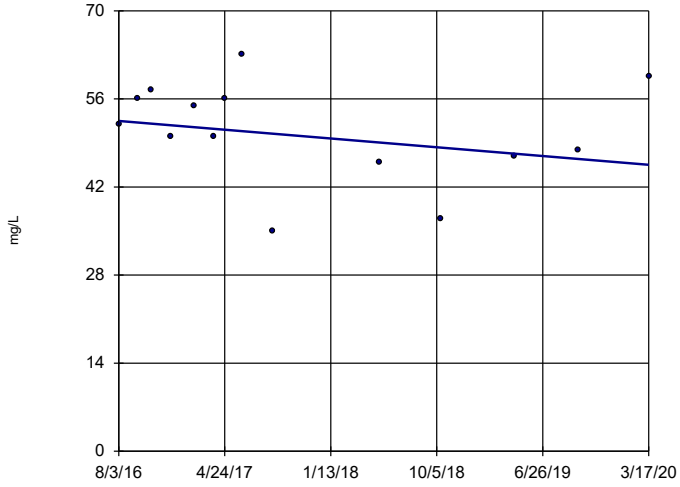
Constituent: Sulfate Analysis Run 7/27/2020 11:42 AM View: Trend Test

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.24 Sanitas software licensed to Southern Company. UG

Sen's Slope Estimator

GS-AP-MW-6D



n = 14

Slope = -1.925 units per year.

Mann-Kendall statistic = -15 critical = -48

Trend not significant at 99% confidence level (α = 0.005 per tail).

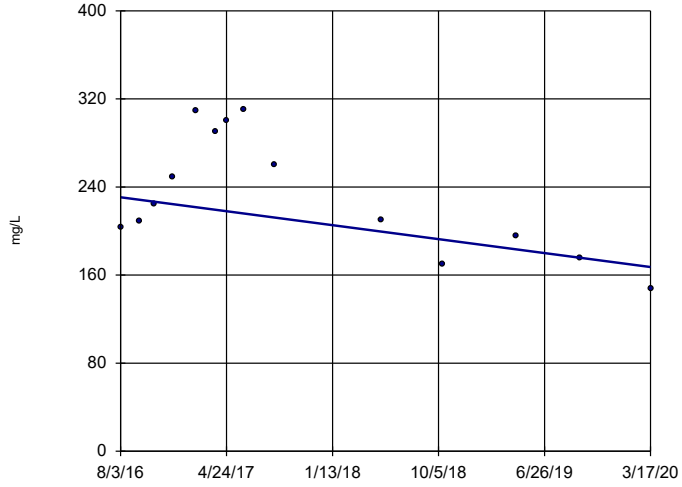
Constituent: Sulfate Analysis Run 7/27/2020 11:42 AM View: Trend Test

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.24 Sanitas software licensed to Southern Company. UG

Sen's Slope Estimator

GS-AP-MW-6S



n = 14

Slope = -17.48 units per year.

Mann-Kendall statistic = -23 critical = -48

Trend not significant at 99% confidence level (α = 0.005 per tail).

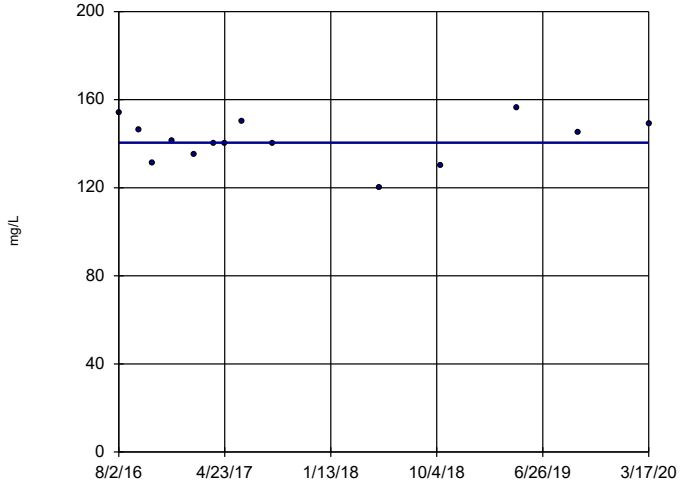
Constituent: Sulfate Analysis Run 7/27/2020 11:42 AM View: Trend Test

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.24 Sanitas software licensed to Southern Company. UG

Sen's Slope Estimator

GS-AP-MW-7



n = 14

Slope = 0 units per year.

Mann-Kendall statistic = 0 critical = 48

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 7/27/2020 11:42 AM View: Trend Test

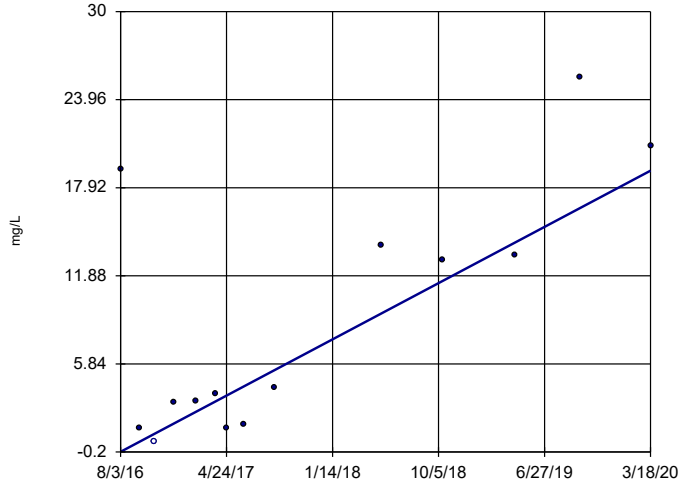
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.24 Sanitas software licensed to Southern Company. UG

Hollow symbols indicate censored values.

Sen's Slope Estimator

GS-AP-MW-12



n = 14

Slope = 5.317 units per year.

Mann-Kendall statistic = 47 critical = 48

Trend not significant at 99% confidence level (α = 0.005 per tail).

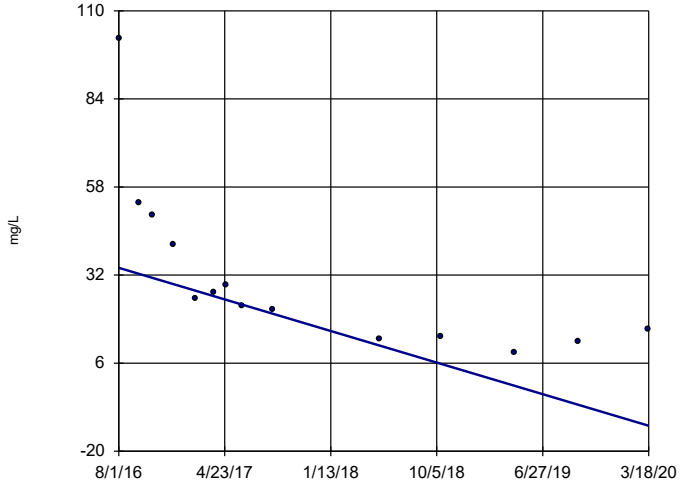
Constituent: Sulfate Analysis Run 7/27/2020 11:42 AM View: Trend Test

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.24 Sanitas software licensed to Southern Company. UG

Sen's Slope Estimator

GS-AP-MW-15



n = 14

Slope = -12.83 units per year.

Mann-Kendall statistic = -73 critical = -48

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

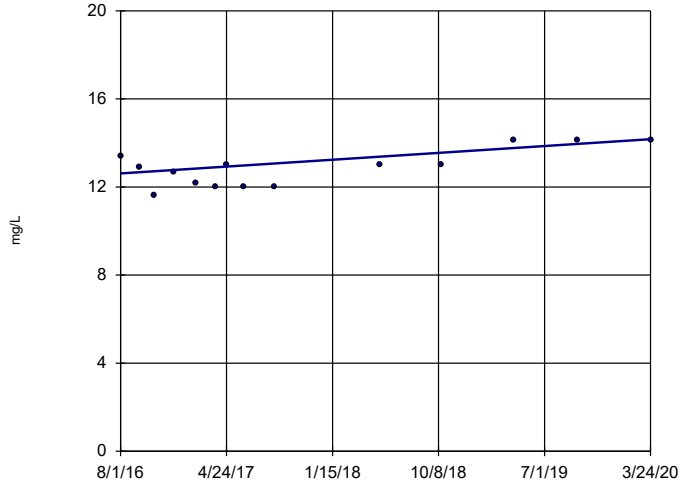
Constituent: Sulfate Analysis Run 7/27/2020 11:42 AM View: Trend Test

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.24 Sanitas software licensed to Southern Company. UG

Sen's Slope Estimator

GS-AP-MW-16D



n = 14

Slope = 0.4269 units per year.

Mann-Kendall statistic = 32 critical = 48

Trend not significant at 99% confidence level (α = 0.005 per tail).

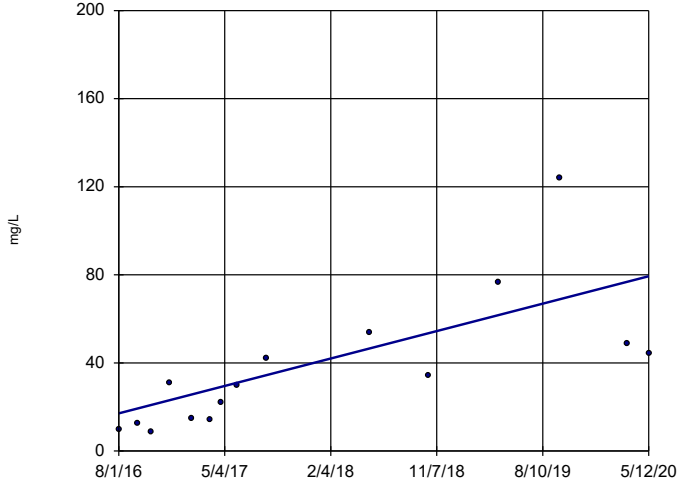
Constituent: Sulfate Analysis Run 7/27/2020 11:42 AM View: Trend Test

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.24 Sanitas software licensed to Southern Company. UG

Sen's Slope Estimator

GS-AP-MW-17



n = 15

Slope = 16.47 units per year.

Mann-Kendall statistic = 73 critical = 53

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

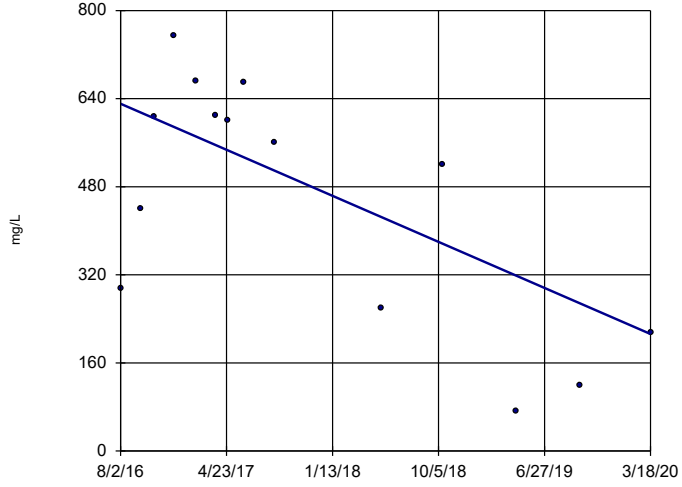
Constituent: Sulfate Analysis Run 7/27/2020 11:42 AM View: Trend Test

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.24 Sanitas software licensed to Southern Company. UG

Sen's Slope Estimator

GS-AP-MW-18



n = 14

Slope = -115.3 units per year.

Mann-Kendall statistic = -37 critical = -48

Trend not significant at 99% confidence level (α = 0.005 per tail).

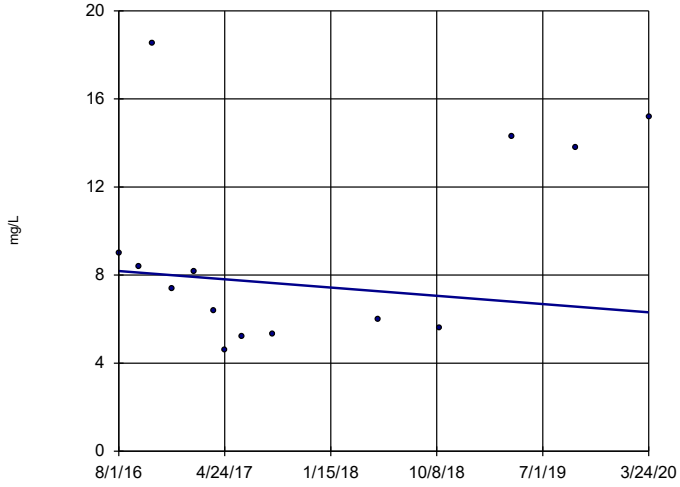
Constituent: Sulfate Analysis Run 7/27/2020 11:42 AM View: Trend Test

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.24 Sanitas software licensed to Southern Company. UG

Sen's Slope Estimator

GS-AP-MW-19



n = 14

Slope = -0.515 units per year.

Mann-Kendall statistic = -3 critical = -48

Trend not significant at 99% confidence level (α = 0.005 per tail).

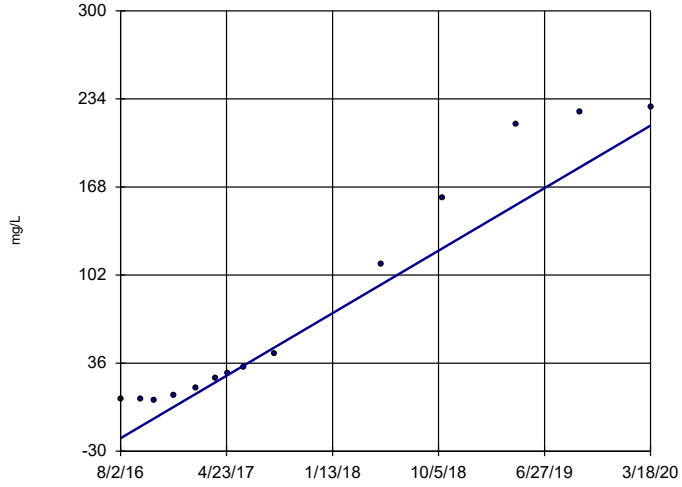
Constituent: Sulfate Analysis Run 7/27/2020 11:42 AM View: Trend Test

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.24 Sanitas software licensed to Southern Company. UG

Sen's Slope Estimator

GS-AP-MW-21



n = 14

Slope = 64.6 units per year.

Mann-Kendall statistic = 85 critical = 48

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

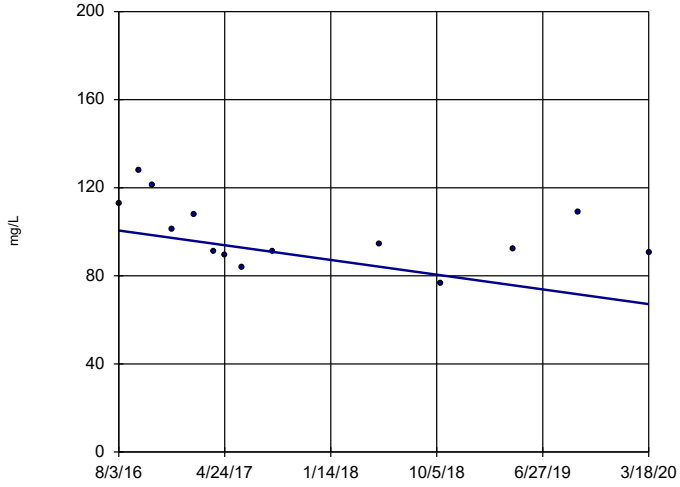
Constituent: Sulfate Analysis Run 7/27/2020 11:42 AM View: Trend Test

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.24 Sanitas software licensed to Southern Company. UG

Sen's Slope Estimator

GS-AP-MW-8 (bg)



n = 14

Slope = -9.205 units per year.

Mann-Kendall statistic = -37 critical = -48

Trend not significant at 99% confidence level (α = 0.005 per tail).

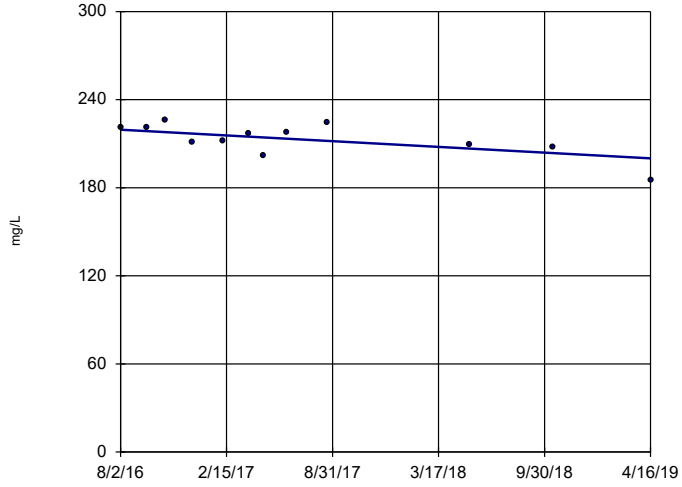
Constituent: TDS Analysis Run 7/27/2020 11:42 AM View: Trend Test

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.24 Sanitas software licensed to Southern Company. UG

Sen's Slope Estimator

GS-AP-MW-13 (bg)



n = 12

Slope = -7.182 units per year.

Mann-Kendall statistic = -29 critical = -38

Trend not significant at 99% confidence level (α = 0.005 per tail).

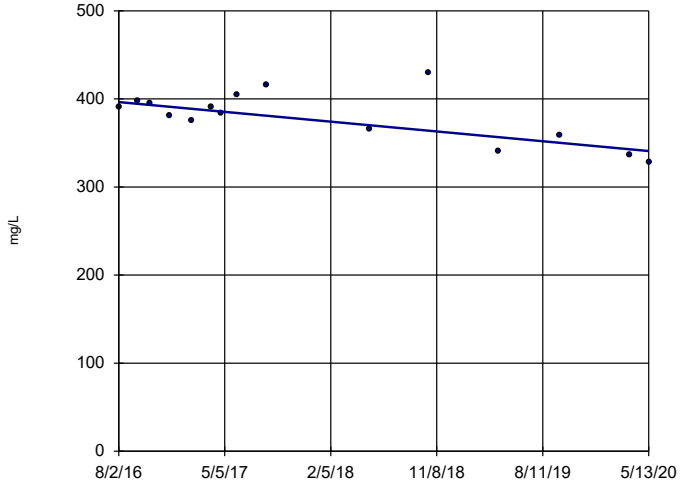
Constituent: TDS Analysis Run 7/27/2020 11:42 AM View: Trend Test

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.24 Sanitas software licensed to Southern Company. UG

Sen's Slope Estimator

GS-AP-MW-2



n = 15

Slope = -14.72 units per year.

Mann-Kendall statistic = -39 critical = -53

Trend not significant at 99% confidence level (α = 0.005 per tail).

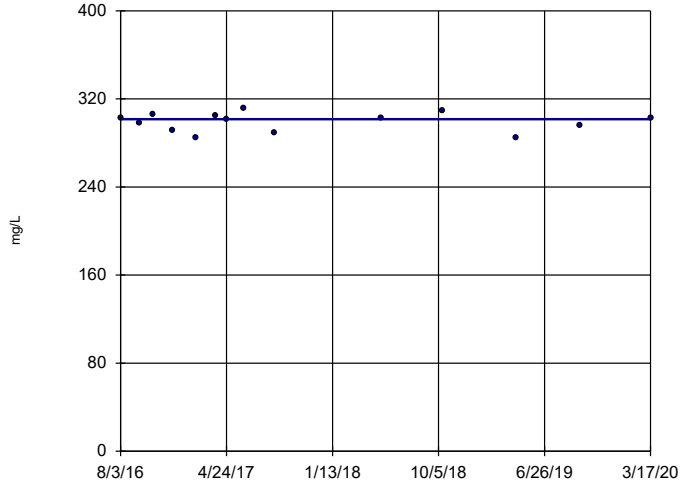
Constituent: TDS Analysis Run 7/27/2020 11:42 AM View: Trend Test

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.24 Sanitas software licensed to Southern Company. UG

Sen's Slope Estimator

GS-AP-MW-6D



n = 14

Slope = 0 units per year.

Mann-Kendall statistic = -1 critical = -48

Trend not significant at 99% confidence level (α = 0.005 per tail).

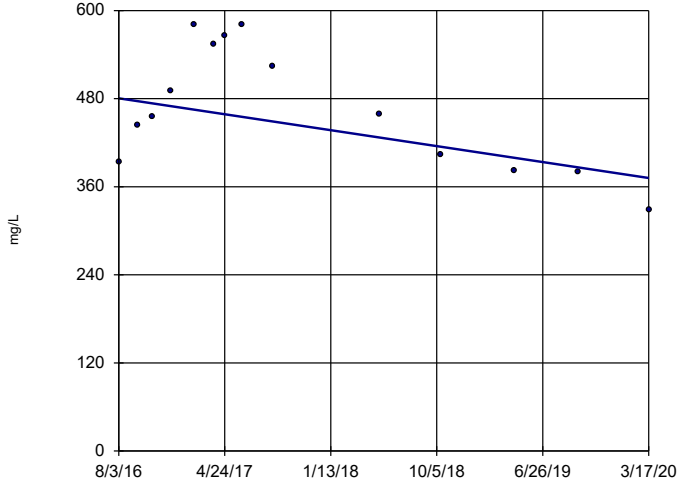
Constituent: TDS Analysis Run 7/27/2020 11:42 AM View: Trend Test

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.24 Sanitas software licensed to Southern Company. UG

Sen's Slope Estimator

GS-AP-MW-6S



n = 14

Slope = -29.94 units per year.

Mann-Kendall statistic = -24 critical = -48

Trend not significant at 99% confidence level (α = 0.005 per tail).

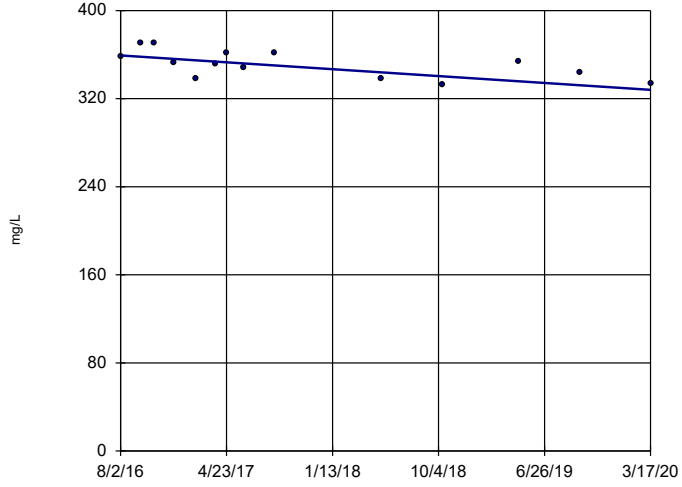
Constituent: TDS Analysis Run 7/27/2020 11:43 AM View: Trend Test

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.24 Sanitas software licensed to Southern Company. UG

Sen's Slope Estimator

GS-AP-MW-7



n = 14

Slope = -8.643 units per year.

Mann-Kendall statistic = -42 critical = -48

Trend not significant at 99% confidence level (α = 0.005 per tail).

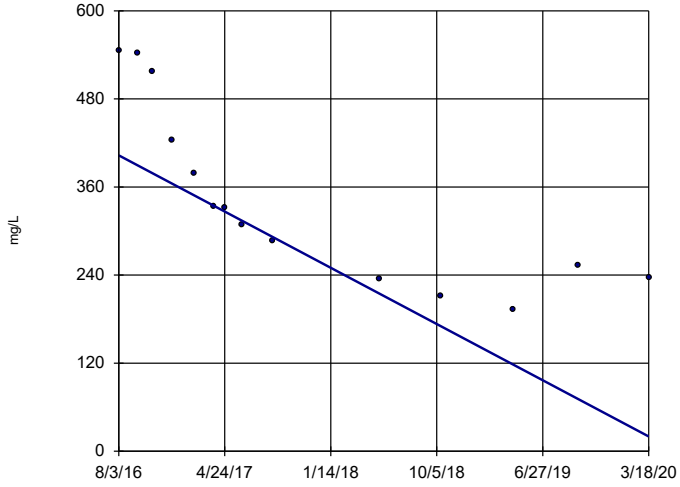
Constituent: TDS Analysis Run 7/27/2020 11:43 AM View: Trend Test

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.24 Sanitas software licensed to Southern Company. UG

Sen's Slope Estimator

GS-AP-MW-12



n = 14

Slope = -105.7 units per year.

Mann-Kendall statistic = -79 critical = -48

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

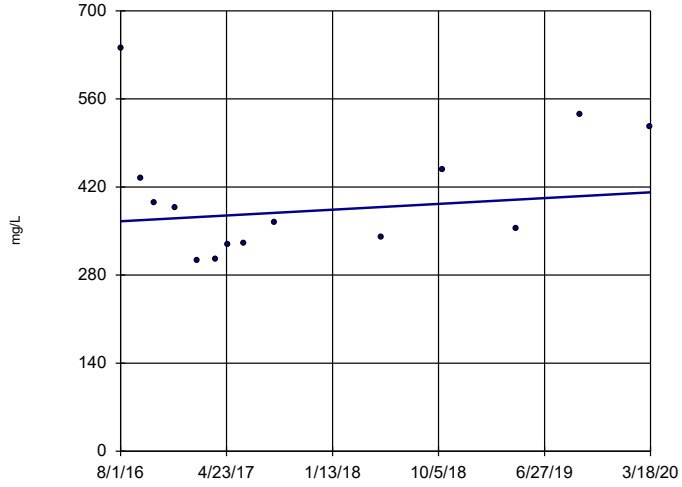
Constituent: TDS Analysis Run 7/27/2020 11:43 AM View: Trend Test

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.24 Sanitas software licensed to Southern Company. UG

Sen's Slope Estimator

GS-AP-MW-15



n = 14

Slope = 12.66 units per year.

Mann-Kendall statistic = 9 critical = 48

Trend not significant at 99% confidence level (α = 0.005 per tail).

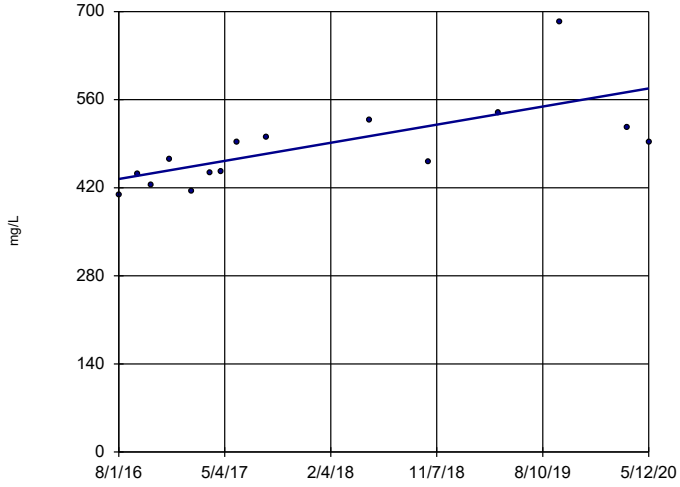
Constituent: TDS Analysis Run 7/27/2020 11:43 AM View: Trend Test

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.24 Sanitas software licensed to Southern Company. UG

Sen's Slope Estimator

GS-AP-MW-17



n = 15

Slope = 38.05 units per year.

Mann-Kendall statistic = 68 critical = 53

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

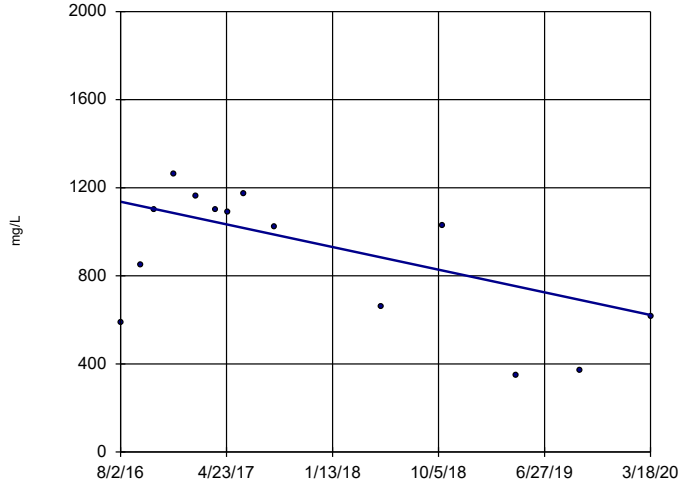
Constituent: TDS Analysis Run 7/27/2020 11:43 AM View: Trend Test

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.24 Sanitas software licensed to Southern Company. UG

Sen's Slope Estimator

GS-AP-MW-18



n = 14

Slope = -141.8 units per year.

Mann-Kendall statistic = -30 critical = -48

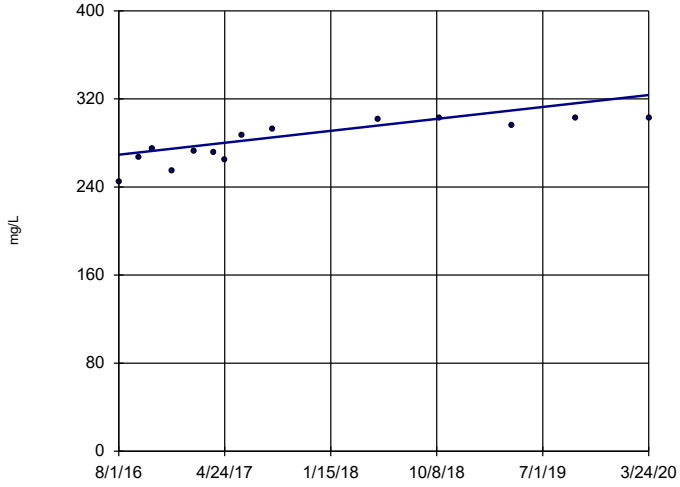
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: TDS Analysis Run 7/27/2020 11:43 AM View: Trend Test

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sen's Slope Estimator

GS-AP-MW-19



n = 14

Slope = 14.85 units per year.

Mann-Kendall statistic = 64 critical = 48

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

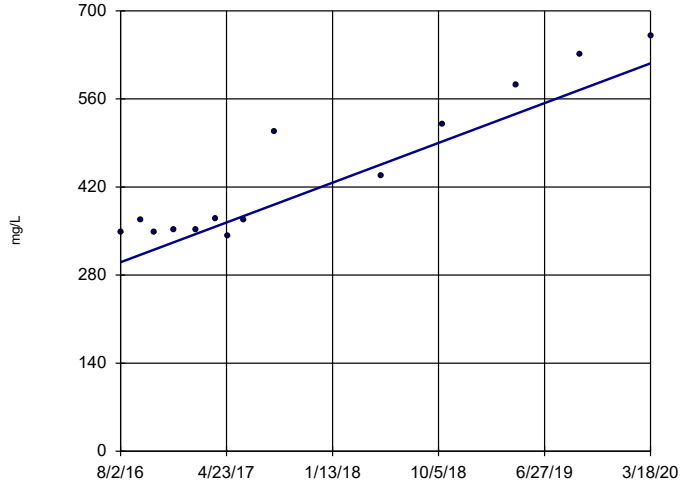
Constituent: TDS Analysis Run 7/27/2020 11:43 AM View: Trend Test

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.24 Sanitas software licensed to Southern Company. UG

Sen's Slope Estimator

GS-AP-MW-21



n = 14

Slope = 87.07 units per year.

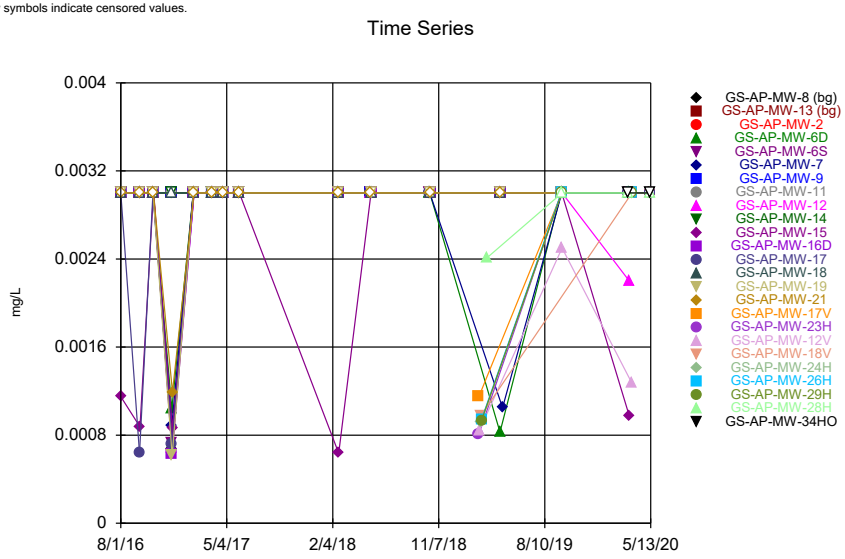
Mann-Kendall statistic = 65 critical = 48

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: TDS Analysis Run 7/27/2020 11:43 AM View: Trend Test

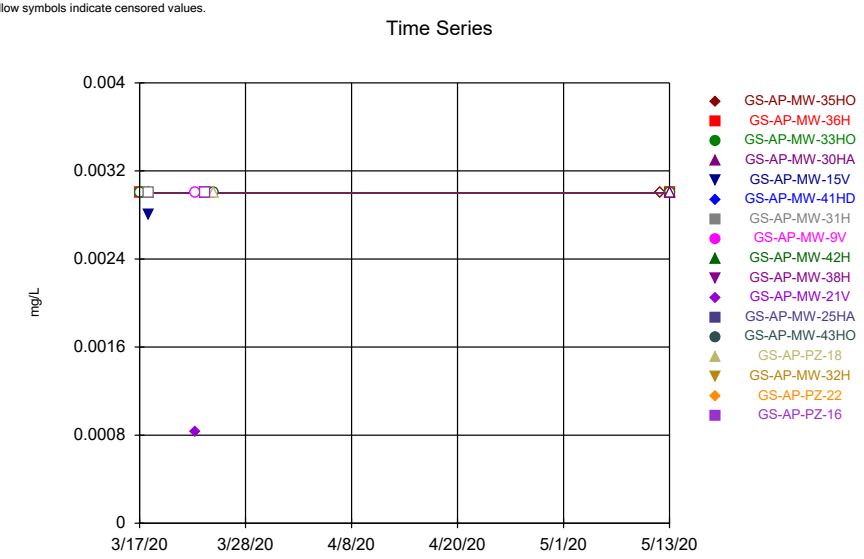
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.24 Sanitas software licensed to Southern Company. UG
Hollow symbols indicate censored values.



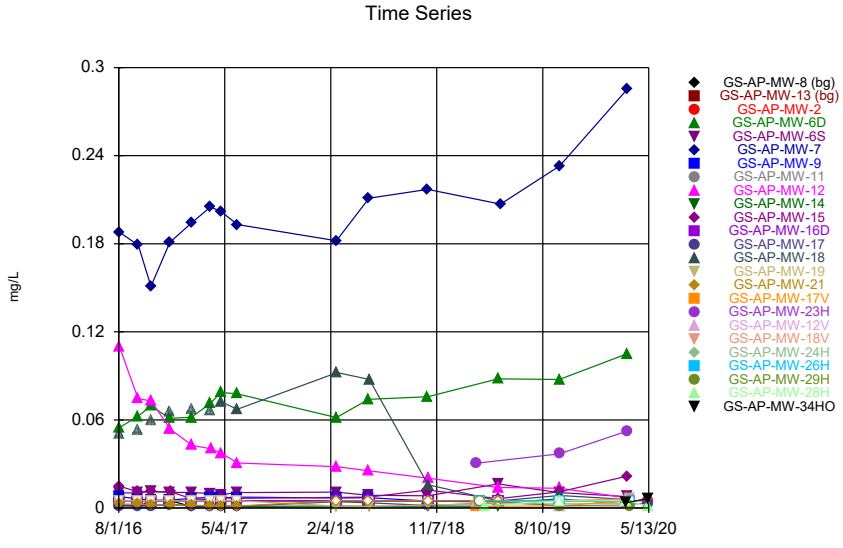
Constituent: Antimony Analysis Run 7/27/2020 11:23 AM View: Time Series
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.24 Sanitas software licensed to Southern Company. UG
Hollow symbols indicate censored values.



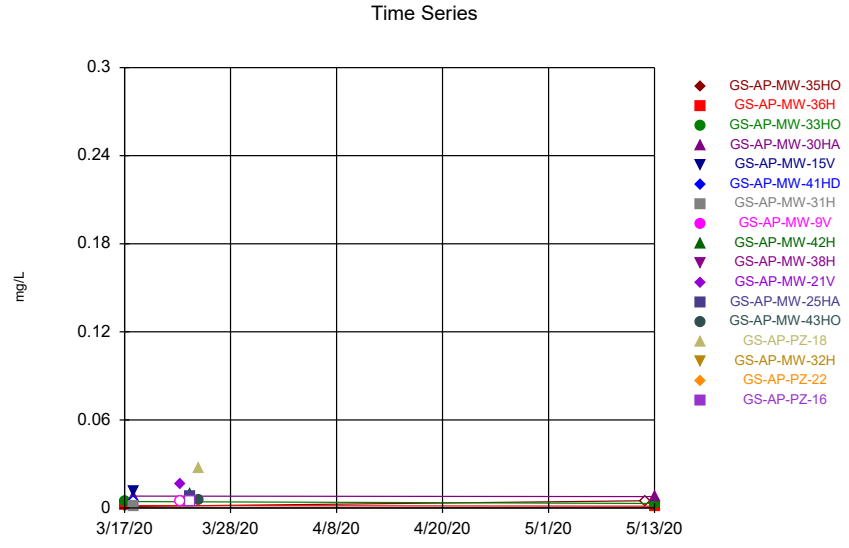
Constituent: Antimony Analysis Run 7/27/2020 11:23 AM View: Time Series
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.24 Sanitas software licensed to Southern Company. UG
Hollow symbols indicate censored values.



Constituent: Arsenic Analysis Run 7/27/2020 11:24 AM View: Time Series
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.24 Sanitas software licensed to Southern Company. UG
Hollow symbols indicate censored values.



Constituent: Arsenic Analysis Run 7/27/2020 11:24 AM View: Time Series
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

Time Series

Constituent: Antimony (mg/L) Analysis Run 7/27/2020 11:28 AM View: Time Series

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-8 (bg)	GS-AP-MW-13 (bg)	GS-AP-MW-2	GS-AP-MW-6D	GS-AP-MW-6S	GS-AP-MW-7	GS-AP-MW-9	GS-AP-MW-11	GS-AP-MW-12
8/1/2016									
8/2/2016		<0.003	<0.003			<0.003		<0.003	
8/3/2016	<0.003			<0.003	<0.003		<0.003		<0.003
9/19/2016			<0.003						
9/20/2016		<0.003		<0.003	<0.003				<0.003
9/21/2016	<0.003					<0.003	<0.003	<0.003	
10/24/2016			<0.003	<0.003		<0.003			
10/25/2016	<0.003	<0.003					<0.003	<0.003	<0.003
10/26/2016					<0.003				
12/12/2016				0.00104 (J)	0.000727 (J)	0.000891 (J)			
12/13/2016	0.00067 (J)	<0.003	<0.003				<0.003	<0.003	0.000681 (J)
12/14/2016									
2/6/2017	<0.003			<0.003	<0.003	<0.003			
2/7/2017									
2/8/2017		<0.003	<0.003				<0.003	<0.003	<0.003
3/27/2017				<0.003	<0.003				
3/28/2017	<0.003					<0.003	<0.003	<0.003	
3/29/2017		<0.003							<0.003
3/30/2017			<0.003						
4/24/2017	<0.003			<0.003	<0.003	<0.003			
4/26/2017		<0.003	<0.003				<0.003	<0.003	<0.003
6/5/2017									
6/6/2017			<0.003	<0.003	<0.003				
6/7/2017	<0.003	<0.003				<0.003	<0.003	<0.003	<0.003
2/19/2018	<0.003			<0.003	<0.003	<0.003			
2/20/2018		<0.003					<0.003	<0.003	<0.003
2/21/2018			<0.003						
5/14/2018				<0.003	<0.003				
5/15/2018	<0.003	<0.003				<0.003	<0.003	<0.003	<0.003
5/16/2018			<0.003						
10/15/2018				<0.003	<0.003	<0.003			
10/16/2018	<0.003		<0.003				<0.003	<0.003	<0.003
10/17/2018		<0.003							
2/20/2019									
2/21/2019									
2/26/2019									
2/27/2019									
3/13/2019									
4/16/2019	<0.003	<0.003		0.000828 (J)	<0.003		<0.003	<0.003	<0.003
4/17/2019			<0.003						
4/23/2019						0.00105 (J)			
9/23/2019				<0.003	<0.003				
9/24/2019	<0.003					<0.003			
9/25/2019			<0.003						<0.003
3/16/2020									
3/17/2020				<0.003	<0.003	<0.003			
3/18/2020	<0.003								0.0022 (J)
3/24/2020									
3/25/2020			<0.003						
5/12/2020									
5/13/2020			<0.003						

Time Series

Constituent: Antimony (mg/L) Analysis Run 7/27/2020 11:28 AM View: Time Series

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-14	GS-AP-MW-15	GS-AP-MW-16D	GS-AP-MW-17	GS-AP-MW-18	GS-AP-MW-19	GS-AP-MW-21	GS-AP-MW-17V	GS-AP-MW-23H
8/1/2016		0.00115 (J)	<0.003	<0.003		<0.003			
8/2/2016	<0.003				<0.003		<0.003		
8/3/2016									
9/19/2016	<0.003		<0.003	0.000636 (J)					
9/20/2016		0.000876 (J)							
9/21/2016					<0.003	<0.003	<0.003		
10/24/2016				<0.003	<0.003	<0.003			
10/25/2016	<0.003	<0.003	<0.003				<0.003		
10/26/2016									
12/12/2016					<0.003				
12/13/2016	<0.003		0.000633 (J)	0.00072 (J)		0.000613 (J)			
12/14/2016		0.000858 (J)					0.00119 (J)		
2/6/2017				<0.003					
2/7/2017						<0.003			
2/8/2017	<0.003	<0.003	<0.003		<0.003		<0.003		
3/27/2017				<0.003					
3/28/2017	<0.003	<0.003			<0.003	<0.003	<0.003		
3/29/2017			<0.003						
3/30/2017									
4/24/2017				<0.003					
4/26/2017	<0.003	<0.003	<0.003		<0.003	<0.003	<0.003		
6/5/2017				<0.003					
6/6/2017		<0.003	<0.003		<0.003	<0.003	<0.003		
6/7/2017	<0.003								
2/19/2018				<0.003					
2/20/2018	<0.003	0.000636 (J)					<0.003		
2/21/2018			<0.003		<0.003	<0.003			
5/14/2018									
5/15/2018		<0.003		<0.003			<0.003		
5/16/2018	<0.003		<0.003		<0.003	<0.003			
10/15/2018		<0.003		<0.003					
10/16/2018					<0.003	<0.003	<0.003		
10/17/2018	<0.003		<0.003						
2/20/2019								0.00115 (J)	0.000809 (J)
2/21/2019									
2/26/2019									
2/27/2019									
3/13/2019									
4/16/2019	<0.003								
4/17/2019		<0.003	<0.003	<0.003	<0.003	<0.003	<0.003		
4/23/2019									
9/23/2019				<0.003					<0.003
9/24/2019		<0.003	<0.003		<0.003	<0.003	<0.003	<0.003	
9/25/2019									
3/16/2020				<0.003					
3/17/2020									<0.003
3/18/2020		0.000976 (J)			<0.003		<0.003		
3/24/2020			<0.003			<0.003			
3/25/2020								<0.003	
5/12/2020				<0.003					
5/13/2020									

Time Series

Constituent: Antimony (mg/L) Analysis Run 7/27/2020 11:28 AM View: Time Series

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-12V	GS-AP-MW-18V	GS-AP-MW-24H	GS-AP-MW-26H	GS-AP-MW-29H	GS-AP-MW-28H	GS-AP-MW-34HO
8/1/2016							
8/2/2016							
8/3/2016							
9/19/2016							
9/20/2016							
9/21/2016							
10/24/2016							
10/25/2016							
10/26/2016							
12/12/2016							
12/13/2016							
12/14/2016							
2/6/2017							
2/7/2017							
2/8/2017							
3/27/2017							
3/28/2017							
3/29/2017							
3/30/2017							
4/24/2017							
4/26/2017							
6/5/2017							
6/6/2017							
6/7/2017							
2/19/2018							
2/20/2018							
2/21/2018							
5/14/2018							
5/15/2018							
5/16/2018							
10/15/2018							
10/16/2018							
10/17/2018							
2/20/2019							
2/21/2019	0.000841 (J)						
2/26/2019		0.00098 (J)	0.000918 (J)				
2/27/2019				0.00094 (J)	0.000932 (J)		
3/13/2019						0.00241 (J)	
4/16/2019							
4/17/2019							
4/23/2019							
9/23/2019				<0.003			
9/24/2019			<0.003		<0.003		
9/25/2019	0.0025 (J)					<0.003	
3/16/2020						<0.003	<0.003
3/17/2020							
3/18/2020			<0.003				
3/24/2020	0.00128 (J)						
3/25/2020		<0.003		<0.003	<0.003		
5/12/2020						<0.003	<0.003
5/13/2020							

Time Series

Constituent: Antimony (mg/L) Analysis Run 7/27/2020 11:28 AM View: Time Series

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-35HO	GS-AP-MW-36H	GS-AP-MW-33HO	GS-AP-MW-30HA	GS-AP-MW-15V	GS-AP-MW-41HD	GS-AP-MW-31H	GS-AP-MW-9V	GS-AP-MW-42H
3/17/2020	<0.003	<0.003	<0.003						
3/18/2020				<0.003	0.0028 (J)	<0.003	<0.003		
3/23/2020								<0.003	
3/24/2020									<0.003
3/25/2020									
5/12/2020	<0.003								
5/13/2020		<0.003	<0.003	<0.003					

Time Series

Constituent: Antimony (mg/L) Analysis Run 7/27/2020 11:28 AM View: Time Series

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-38H	GS-AP-MW-21V	GS-AP-MW-25HA	GS-AP-MW-43HO	GS-AP-PZ-18	GS-AP-MW-32H	GS-AP-PZ-22	GS-AP-PZ-16
3/17/2020								
3/18/2020								
3/23/2020		0.000831 (J)						
3/24/2020	<0.003		<0.003			<0.003	<0.003	<0.003
3/25/2020				<0.003	<0.003			
5/12/2020								
5/13/2020								

Time Series

Constituent: Arsenic (mg/L) Analysis Run 7/27/2020 11:28 AM View: Time Series

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-8 (bg)	GS-AP-MW-13 (bg)	GS-AP-MW-2	GS-AP-MW-6D	GS-AP-MW-6S	GS-AP-MW-7	GS-AP-MW-9	GS-AP-MW-11	GS-AP-MW-12
8/1/2016									
8/2/2016		<0.005	<0.005			0.188		<0.005	
8/3/2016	0.00214 (J)			0.0547	0.0103		0.00781		0.11
9/19/2016			<0.005						
9/20/2016		<0.005		0.0625	0.0103				0.0746
9/21/2016	0.00112 (J)					0.179	0.0062	<0.005	
10/24/2016			<0.005	0.0695		0.151			
10/25/2016	<0.005	<0.005					0.00525	<0.005	0.0728
10/26/2016					0.0115				
12/12/2016				0.0611	0.0106	0.181			
12/13/2016	<0.005	<0.005	<0.005				0.00535	<0.005	0.0538
12/14/2016									
2/6/2017	0.00111 (J)			0.0618	0.0106	0.194			
2/7/2017									
2/8/2017		<0.005	<0.005				0.00659	<0.005	0.0427
3/27/2017				0.0711	0.00989				
3/28/2017	0.00109 (J)					0.205	0.00735	<0.005	
3/29/2017		<0.005							0.0404
3/30/2017			<0.005						
4/24/2017	<0.005			0.0787	0.00907	0.202			
4/26/2017		<0.005	<0.005				0.00689	<0.005	0.0372
6/5/2017									
6/6/2017			<0.005	0.0778	0.0105				
6/7/2017	<0.005	<0.005				0.193	0.00743	<0.005	0.0307
2/19/2018	<0.005			0.0616	0.0108	0.182			
2/20/2018		<0.005					0.00676	<0.005	0.0282
2/21/2018			<0.005						
5/14/2018				0.074	0.00864				
5/15/2018	<0.005	<0.005				0.211	0.00698	<0.005	0.0253
5/16/2018			<0.005						
10/15/2018				0.0758	0.00832	0.217			
10/16/2018	<0.005		<0.005				0.00473 (J)	<0.005	0.0203
10/17/2018		<0.005							
2/20/2019									
2/21/2019									
2/26/2019									
2/27/2019									
3/13/2019									
4/16/2019	<0.005	<0.005		0.088	0.0164		0.00403 (J)	<0.005	0.014
4/17/2019			<0.005						
4/23/2019						0.207			
9/23/2019				0.0876	0.0105				
9/24/2019	<0.005					0.233			
9/25/2019			<0.005						0.0135
3/16/2020									
3/17/2020				0.105	0.00778	0.285			
3/18/2020	<0.005								0.00693
3/24/2020									
3/25/2020			<0.005						
5/12/2020									
5/13/2020			<0.005						

Time Series

Constituent: Arsenic (mg/L) Analysis Run 7/27/2020 11:28 AM View: Time Series

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-14	GS-AP-MW-15	GS-AP-MW-16D	GS-AP-MW-17	GS-AP-MW-18	GS-AP-MW-19	GS-AP-MW-21	GS-AP-MW-17V	GS-AP-MW-23H
8/1/2016		0.015	<0.005	0.00138 (J)		<0.005			
8/2/2016	0.00189 (J)				0.0505		0.0027 (J)		
8/3/2016									
9/19/2016	0.00173 (J)		<0.005	0.00137 (J)					
9/20/2016		0.0111							
9/21/2016					0.0527	<0.005	0.00258 (J)		
10/24/2016				0.00122 (J)	0.0597	<0.005			
10/25/2016	0.00199 (J)	0.0109	<0.005				0.00214 (J)		
10/26/2016									
12/12/2016					0.0659				
12/13/2016	0.00186 (J)		<0.005	0.00243 (J)		<0.005			
12/14/2016		0.011					0.00193 (J)		
2/6/2017				0.00158 (J)					
2/7/2017						<0.005			
2/8/2017	0.00157 (J)	0.00625	<0.005		0.0669		0.00188 (J)		
3/27/2017				0.0011 (J)					
3/28/2017	0.00125 (J)	0.00558			0.0668	<0.005	0.00153 (J)		
3/29/2017			<0.005						
3/30/2017									
4/24/2017				0.00133 (J)					
4/26/2017	0.0011 (J)	0.007	<0.005		0.0722	<0.005	0.00135 (J)		
6/5/2017				0.00115 (J)					
6/6/2017		0.00663	<0.005		0.0673	<0.005	0.00131 (J)		
6/7/2017	0.00108 (J)								
2/19/2018				0.00424 (J)					
2/20/2018	0.00139 (J)	0.00724					<0.005		
2/21/2018			<0.005		0.0922	0.00138 (J)			
5/14/2018									
5/15/2018		0.00749		0.00352 (J)			<0.005		
5/16/2018	0.00112 (J)		<0.005		0.0876	0.00114 (J)			
10/15/2018		0.0123		0.0018 (J)					
10/16/2018					0.0158	0.00216 (J)	<0.005		
10/17/2018	0.00132 (J)		<0.005						
2/20/2019								0.0011 (J)	0.0306
2/21/2019									
2/26/2019									
2/27/2019									
3/13/2019									
4/16/2019	0.0011 (J)								
4/17/2019		0.00633	<0.005	0.00343 (J)	0.00481 (J)	0.00302 (J)	<0.005		
4/23/2019									
9/23/2019				0.00631					0.0369
9/24/2019		0.011	<0.005		0.00854	0.00289 (J)	<0.005	0.00149 (J)	
9/25/2019									
3/16/2020				0.00268 (J)					
3/17/2020									0.0524
3/18/2020		0.0217			0.00583		<0.005		
3/24/2020			<0.005			0.00313 (J)			
3/25/2020								<0.005	
5/12/2020				0.00326 (J)					
5/13/2020									

Time Series

Constituent: Arsenic (mg/L) Analysis Run 7/27/2020 11:28 AM View: Time Series

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-12V	GS-AP-MW-18V	GS-AP-MW-24H	GS-AP-MW-26H	GS-AP-MW-29H	GS-AP-MW-28H	GS-AP-MW-34HO
8/1/2016							
8/2/2016							
8/3/2016							
9/19/2016							
9/20/2016							
9/21/2016							
10/24/2016							
10/25/2016							
10/26/2016							
12/12/2016							
12/13/2016							
12/14/2016							
2/6/2017							
2/7/2017							
2/8/2017							
3/27/2017							
3/28/2017							
3/29/2017							
3/30/2017							
4/24/2017							
4/26/2017							
6/5/2017							
6/6/2017							
6/7/2017							
2/19/2018							
2/20/2018							
2/21/2018							
5/14/2018							
5/15/2018							
5/16/2018							
10/15/2018							
10/16/2018							
10/17/2018							
2/20/2019							
2/21/2019	<0.005						
2/26/2019		0.00368 (J)	<0.005				
2/27/2019				<0.005	<0.005		
3/13/2019						0.00142 (J)	
4/16/2019							
4/17/2019							
4/23/2019							
9/23/2019				<0.005			
9/24/2019			<0.005		0.00155 (J)		
9/25/2019	0.00129 (J)					<0.005	
3/16/2020						<0.005	0.00351 (J)
3/17/2020							
3/18/2020			<0.005				
3/24/2020	0.00266 (J)						
3/25/2020		0.0063		<0.005	0.00141 (J)		
5/12/2020						0.00135 (J)	0.00668
5/13/2020							

Time Series

Constituent: Arsenic (mg/L) Analysis Run 7/27/2020 11:28 AM View: Time Series

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-35HO	GS-AP-MW-36H	GS-AP-MW-33HO	GS-AP-MW-30HA	GS-AP-MW-15V	GS-AP-MW-41HD	GS-AP-MW-31H	GS-AP-MW-9V	GS-AP-MW-42H
3/17/2020	0.00105 (J)	0.00171 (J)	0.0044 (J)						
3/18/2020				0.00813	0.011	<0.005	0.0012 (J)		
3/23/2020								<0.005	
3/24/2020									0.00944
3/25/2020									
5/12/2020	<0.005								
5/13/2020		0.00122 (J)	0.00308 (J)	0.00779					

Time Series

Constituent: Arsenic (mg/L) Analysis Run 7/27/2020 11:28 AM View: Time Series

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-38H	GS-AP-MW-21V	GS-AP-MW-25HA	GS-AP-MW-43HO	GS-AP-PZ-18	GS-AP-MW-32H	GS-AP-PZ-22	GS-AP-PZ-16
3/17/2020								
3/18/2020								
3/23/2020		0.0159						
3/24/2020	0.00302 (J)		0.00798			<0.005	0.00367 (J)	<0.005
3/25/2020				0.00509	0.0275			
5/12/2020								
5/13/2020								

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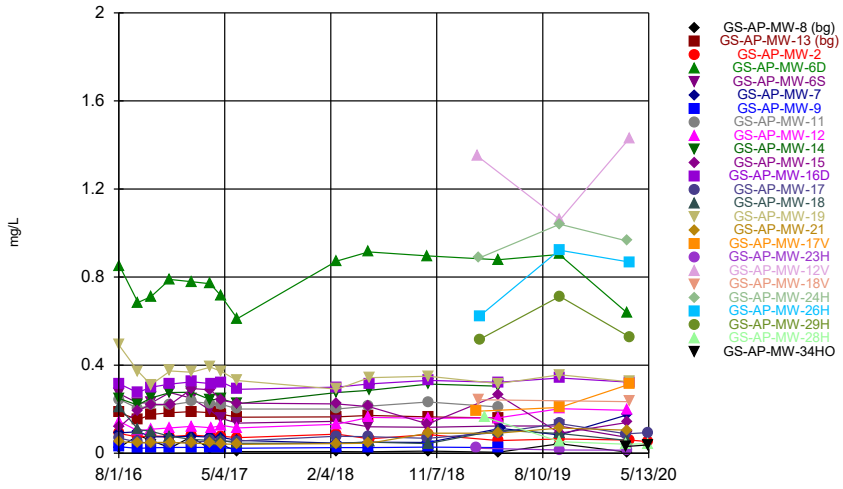
Time Series



Constituent: Barium Analysis Run 7/27/2020 11:24 AM View: Time Series

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

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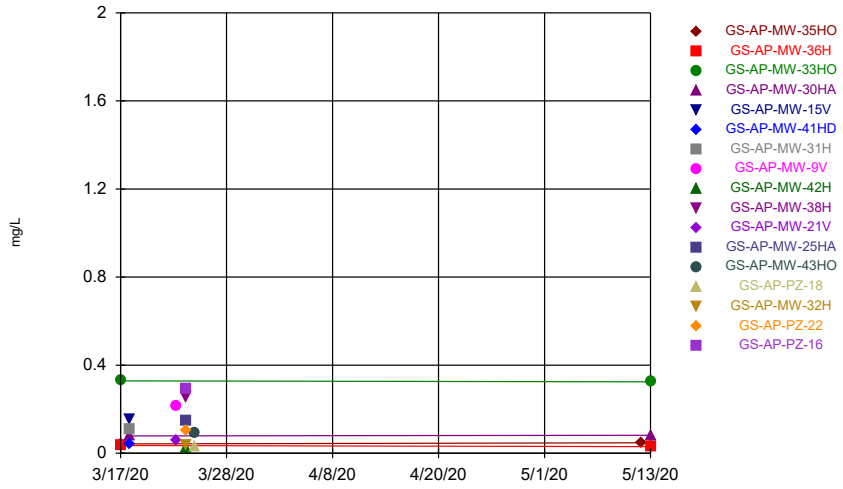
Time Series



Constituent: Barium Analysis Run 7/27/2020 11:24 AM View: Time Series

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

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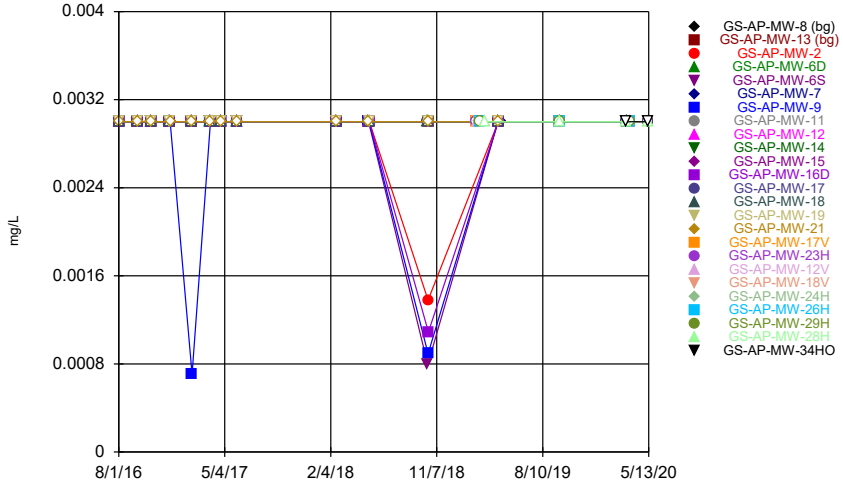
Hollow symbols indicate censored values.

Time Series



Constituent: Beryllium Analysis Run 7/27/2020 11:24 AM View: Time Series

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

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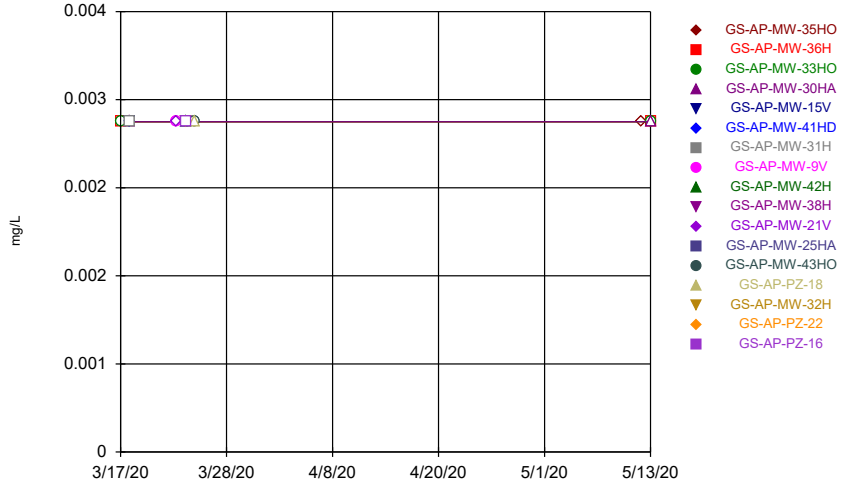
Hollow symbols indicate censored values.

Time Series



Constituent: Beryllium Analysis Run 7/27/2020 11:24 AM View: Time Series

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

Time Series

Constituent: Barium (mg/L) Analysis Run 7/27/2020 11:28 AM View: Time Series

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-8 (bg)	GS-AP-MW-13 (bg)	GS-AP-MW-2	GS-AP-MW-6D	GS-AP-MW-6S	GS-AP-MW-7	GS-AP-MW-9	GS-AP-MW-11	GS-AP-MW-12
8/1/2016									
8/2/2016		0.184	0.0895			0.0927		0.245	
8/3/2016	0.0274			0.852	0.27		0.029		0.144
9/19/2016			0.0744						
9/20/2016		0.153		0.685	0.228				0.102
9/21/2016	0.0811					0.0979	0.0218	0.203	
10/24/2016			0.0787	0.711		0.0751			
10/25/2016	0.0576	0.176					0.0253	0.218	0.109
10/26/2016					0.23				
12/12/2016				0.789	0.276	0.0737			
12/13/2016	0.0241	0.184	0.0758				0.0268	0.22	0.115
12/14/2016									
2/6/2017	0.0747			0.779	0.25	0.0773			
2/7/2017									
2/8/2017		0.189	0.0823				0.0264	0.234	0.122
3/27/2017				0.77	0.196				
3/28/2017	0.0183					0.0728	0.0264	0.226	
3/29/2017		0.184							0.116
3/30/2017			0.0768						
4/24/2017	0.04			0.716	0.159	0.0724			
4/26/2017		0.177	0.077				0.0234	0.222	0.127
6/5/2017									
6/6/2017			0.0711	0.611	0.137				
6/7/2017	0.00769 (J)	0.164				0.0581	0.0229	0.201	0.115
2/19/2018	0.00762 (J)			0.872	0.145	0.0464			
2/20/2018		0.165					0.0255	0.201	0.132
2/21/2018			0.0864						
5/14/2018				0.914	0.12				
5/15/2018	0.00701 (J)	0.172				0.0501	0.0258	0.214	0.163
5/16/2018			0.0658						
10/15/2018				0.896	0.118	0.049			
10/16/2018	0.0094 (J)		0.0846				0.0282	0.233	0.159
10/17/2018		0.165							
2/20/2019									
2/21/2019									
2/26/2019									
2/27/2019									
3/13/2019									
4/16/2019	0.00459 (J)	0.16		0.879	0.124		0.0256	0.21	0.161
4/17/2019			0.0576						
4/23/2019						0.113			
9/23/2019				0.903	0.124				
9/24/2019	0.0434					0.0834			
9/25/2019			0.065						0.202
3/16/2020									
3/17/2020				0.638	0.0725	0.174			
3/18/2020	0.00507 (J)								0.195
3/24/2020									
3/25/2020			0.0602						
5/12/2020									
5/13/2020			0.0528						

Time Series

Constituent: Barium (mg/L) Analysis Run 7/27/2020 11:28 AM View: Time Series

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-14	GS-AP-MW-15	GS-AP-MW-16D	GS-AP-MW-17	GS-AP-MW-18	GS-AP-MW-19	GS-AP-MW-21	GS-AP-MW-17V	GS-AP-MW-23H
8/1/2016		0.117	0.316	0.0696		0.492			
8/2/2016	0.249				0.21		0.0535		
8/3/2016									
9/19/2016	0.219		0.276	0.0503					
9/20/2016		0.193							
9/21/2016					0.107	0.371	0.0458		
10/24/2016				0.0468	0.0999	0.311			
10/25/2016	0.252	0.222	0.3				0.0489		
10/26/2016									
12/12/2016					0.0772				
12/13/2016	0.276		0.314	0.0472		0.374			
12/14/2016		0.222					0.0494		
2/6/2017				0.0498					
2/7/2017						0.368			
2/8/2017	0.277	0.294	0.324		0.0625		0.0449		
3/27/2017				0.0559					
3/28/2017	0.243	0.288			0.0581	0.391	0.0446		
3/29/2017			0.316						
3/30/2017									
4/24/2017				0.055					
4/26/2017	0.246	0.24	0.323		0.0587	0.371	0.0424		
6/5/2017				0.0552					
6/6/2017		0.228	0.29		0.0452	0.33	0.0402		
6/7/2017	0.225								
2/19/2018				0.077					
2/20/2018	0.276	0.224					0.0441		
2/21/2018			0.3		0.0455	0.291			
5/14/2018									
5/15/2018		0.212		0.0751			0.0456		
5/16/2018	0.286		0.315		0.0505	0.343			
10/15/2018		0.133		0.0682					
10/16/2018					0.0436	0.35	0.0909		
10/17/2018	0.314		0.331						
2/20/2019								0.191	0.0227
2/21/2019									
2/26/2019									
2/27/2019									
3/13/2019									
4/16/2019	0.305								
4/17/2019		0.264	0.322	0.0946	0.105	0.316	0.0914		
4/23/2019									
9/23/2019				0.135					0.0148
9/24/2019		0.0913	0.342		0.0896	0.356	0.114	0.208	
9/25/2019									
3/16/2020				0.0883					
3/17/2020									0.0143
3/18/2020		0.14			0.0587		0.105		
3/24/2020			0.323			0.324			
3/25/2020								0.314	
5/12/2020				0.0941					
5/13/2020									

Time Series

Constituent: Barium (mg/L) Analysis Run 7/27/2020 11:28 AM View: Time Series

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-12V	GS-AP-MW-18V	GS-AP-MW-24H	GS-AP-MW-26H	GS-AP-MW-29H	GS-AP-MW-28H	GS-AP-MW-34HO
8/1/2016							
8/2/2016							
8/3/2016							
9/19/2016							
9/20/2016							
9/21/2016							
10/24/2016							
10/25/2016							
10/26/2016							
12/12/2016							
12/13/2016							
12/14/2016							
2/6/2017							
2/7/2017							
2/8/2017							
3/27/2017							
3/28/2017							
3/29/2017							
3/30/2017							
4/24/2017							
4/26/2017							
6/5/2017							
6/6/2017							
6/7/2017							
2/19/2018							
2/20/2018							
2/21/2018							
5/14/2018							
5/15/2018							
5/16/2018							
10/15/2018							
10/16/2018							
10/17/2018							
2/20/2019							
2/21/2019	1.35						
2/26/2019		0.243	0.887				
2/27/2019				0.622	0.517		
3/13/2019						0.164	
4/16/2019							
4/17/2019							
4/23/2019							
9/23/2019				0.922			
9/24/2019			1.04		0.712		
9/25/2019	1.06					0.0528	
3/16/2020						0.0411	0.0309
3/17/2020							
3/18/2020			0.964				
3/24/2020	1.43						
3/25/2020		0.234		0.868	0.527		
5/12/2020						0.0436	0.0379
5/13/2020							

Time Series

Constituent: Barium (mg/L) Analysis Run 7/27/2020 11:28 AM View: Time Series

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-35HO	GS-AP-MW-36H	GS-AP-MW-33HO	GS-AP-MW-30HA	GS-AP-MW-15V	GS-AP-MW-41HD	GS-AP-MW-31H	GS-AP-MW-9V	GS-AP-MW-42H
3/17/2020	0.0426	0.0353	0.329						
3/18/2020				0.0791	0.155	0.0393	0.106		
3/23/2020								0.215	
3/24/2020									0.0253
3/25/2020									
5/12/2020	0.0472								
5/13/2020		0.03	0.324	0.0819					

Time Series

Constituent: Barium (mg/L) Analysis Run 7/27/2020 11:28 AM View: Time Series

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-38H	GS-AP-MW-21V	GS-AP-MW-25HA	GS-AP-MW-43HO	GS-AP-PZ-18	GS-AP-MW-32H	GS-AP-PZ-22	GS-AP-PZ-16
3/17/2020								
3/18/2020								
3/23/2020		0.0574						
3/24/2020	0.253		0.147			0.0362	0.104	0.295
3/25/2020				0.0927	0.028			
5/12/2020								
5/13/2020								

Time Series

Constituent: Beryllium (mg/L) Analysis Run 7/27/2020 11:28 AM View: Time Series

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-8 (bg)	GS-AP-MW-13 (bg)	GS-AP-MW-2	GS-AP-MW-6D	GS-AP-MW-6S	GS-AP-MW-7	GS-AP-MW-9	GS-AP-MW-11	GS-AP-MW-12
8/1/2016									
8/2/2016		<0.003	<0.003			<0.003		<0.003	
8/3/2016	<0.003			<0.003	<0.003		<0.003		<0.003
9/19/2016			<0.003						
9/20/2016		<0.003		<0.003	<0.003				<0.003
9/21/2016	<0.003					<0.003	<0.003	<0.003	
10/24/2016			<0.003	<0.003		<0.003			
10/25/2016	<0.003	<0.003					<0.003	<0.003	<0.003
10/26/2016					<0.003				
12/12/2016				<0.003	<0.003	<0.003			
12/13/2016	<0.003	<0.003	<0.003				<0.003	<0.003	<0.003
12/14/2016									
2/6/2017	<0.003			<0.003	<0.003	<0.003			
2/7/2017									
2/8/2017		<0.003	<0.003				0.000705 (J)	<0.003	<0.003
3/27/2017				<0.003	<0.003				
3/28/2017	<0.003					<0.003	<0.003	<0.003	
3/29/2017		<0.003							<0.003
3/30/2017			<0.003						
4/24/2017	<0.003			<0.003	<0.003	<0.003			
4/26/2017		<0.003	<0.003				<0.003	<0.003	<0.003
6/5/2017									
6/6/2017			<0.003	<0.003	<0.003				
6/7/2017	<0.003	<0.003				<0.003	<0.003	<0.003	<0.003
2/19/2018	<0.003			<0.003	<0.003	<0.003			
2/20/2018		<0.003					<0.003	<0.003	<0.003
2/21/2018			<0.003						
5/14/2018				<0.003	<0.003				
5/15/2018	<0.003	<0.003				<0.003	<0.003	<0.003	<0.003
5/16/2018			<0.003						
10/15/2018				<0.003	0.000794 (J)	<0.003			
10/16/2018	<0.003		0.00138 (J)				0.000893 (J)	<0.003	<0.003
10/17/2018		<0.003							
2/20/2019									
2/21/2019									
2/26/2019									
2/27/2019									
3/13/2019									
4/16/2019	<0.003	<0.003		<0.003	<0.003		<0.003	<0.003	<0.003
4/17/2019			<0.003						
4/23/2019						<0.003			
9/23/2019				<0.003	<0.003				
9/24/2019	<0.003					<0.003			
9/25/2019			<0.003						<0.003
3/16/2020									
3/17/2020				<0.003	<0.003	<0.003			
3/18/2020	<0.003								<0.003
3/24/2020									
3/25/2020			<0.003						
5/12/2020									
5/13/2020			<0.003						

Time Series

Constituent: Beryllium (mg/L) Analysis Run 7/27/2020 11:28 AM View: Time Series

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-14	GS-AP-MW-15	GS-AP-MW-16D	GS-AP-MW-17	GS-AP-MW-18	GS-AP-MW-19	GS-AP-MW-21	GS-AP-MW-17V	GS-AP-MW-23H
8/1/2016		<0.003	<0.003	<0.003		<0.003			
8/2/2016	<0.003				<0.003		<0.003		
8/3/2016									
9/19/2016	<0.003		<0.003	<0.003					
9/20/2016		<0.003							
9/21/2016					<0.003	<0.003	<0.003		
10/24/2016				<0.003	<0.003	<0.003			
10/25/2016	<0.003	<0.003	<0.003				<0.003		
10/26/2016									
12/12/2016					<0.003				
12/13/2016	<0.003		<0.003	<0.003		<0.003			
12/14/2016		<0.003					<0.003		
2/6/2017				<0.003					
2/7/2017						<0.003			
2/8/2017	<0.003	<0.003	<0.003		<0.003		<0.003		
3/27/2017				<0.003					
3/28/2017	<0.003	<0.003			<0.003	<0.003	<0.003		
3/29/2017			<0.003						
3/30/2017									
4/24/2017				<0.003					
4/26/2017	<0.003	<0.003	<0.003		<0.003	<0.003	<0.003		
6/5/2017				<0.003					
6/6/2017		<0.003	<0.003		<0.003	<0.003	<0.003		
6/7/2017	<0.003								
2/19/2018				<0.003					
2/20/2018	<0.003	<0.003					<0.003		
2/21/2018			<0.003		<0.003	<0.003			
5/14/2018									
5/15/2018		<0.003		<0.003			<0.003		
5/16/2018	<0.003		<0.003		<0.003	<0.003			
10/15/2018		<0.003		<0.003					
10/16/2018					<0.003	<0.003	<0.003		
10/17/2018	<0.003		0.00109 (J)						
2/20/2019								<0.003	<0.003
2/21/2019									
2/26/2019									
2/27/2019									
3/13/2019									
4/16/2019	<0.003								
4/17/2019		<0.003	<0.003	<0.003	<0.003	<0.003	<0.003		
4/23/2019									
9/23/2019				<0.003					<0.003
9/24/2019		<0.003	<0.003		<0.003	<0.003	<0.003	<0.003	
9/25/2019									
3/16/2020				<0.003					
3/17/2020									<0.003
3/18/2020		<0.003			<0.003		<0.003		
3/24/2020			<0.003			<0.003			
3/25/2020								<0.003	
5/12/2020				<0.003					
5/13/2020									

Time Series

Constituent: Beryllium (mg/L) Analysis Run 7/27/2020 11:28 AM View: Time Series

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-12V	GS-AP-MW-18V	GS-AP-MW-24H	GS-AP-MW-26H	GS-AP-MW-29H	GS-AP-MW-28H	GS-AP-MW-34HO
8/1/2016							
8/2/2016							
8/3/2016							
9/19/2016							
9/20/2016							
9/21/2016							
10/24/2016							
10/25/2016							
10/26/2016							
12/12/2016							
12/13/2016							
12/14/2016							
2/6/2017							
2/7/2017							
2/8/2017							
3/27/2017							
3/28/2017							
3/29/2017							
3/30/2017							
4/24/2017							
4/26/2017							
6/5/2017							
6/6/2017							
6/7/2017							
2/19/2018							
2/20/2018							
2/21/2018							
5/14/2018							
5/15/2018							
5/16/2018							
10/15/2018							
10/16/2018							
10/17/2018							
2/20/2019							
2/21/2019	<0.003						
2/26/2019		<0.003	<0.003				
2/27/2019				<0.003	<0.003		
3/13/2019						<0.003	
4/16/2019							
4/17/2019							
4/23/2019							
9/23/2019				<0.003			
9/24/2019			<0.003		<0.003		
9/25/2019	<0.003					<0.003	
3/16/2020						<0.003	<0.003
3/17/2020							
3/18/2020			<0.003				
3/24/2020	<0.003						
3/25/2020		<0.003		<0.003	<0.003		
5/12/2020						<0.003	<0.003
5/13/2020							

Time Series

Constituent: Beryllium (mg/L) Analysis Run 7/27/2020 11:28 AM View: Time Series

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-35HO	GS-AP-MW-36H	GS-AP-MW-33HO	GS-AP-MW-30HA	GS-AP-MW-15V	GS-AP-MW-41HD	GS-AP-MW-31H	GS-AP-MW-9V	GS-AP-MW-42H
3/17/2020	<0.003	<0.003	<0.003						
3/18/2020				<0.003	<0.003	<0.003	<0.003		
3/23/2020								<0.003	
3/24/2020									<0.003
3/25/2020									
5/12/2020	<0.003								
5/13/2020		<0.003	<0.003	<0.003					

Time Series

Constituent: Beryllium (mg/L) Analysis Run 7/27/2020 11:28 AM View: Time Series

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-38H	GS-AP-MW-21V	GS-AP-MW-25HA	GS-AP-MW-43HO	GS-AP-PZ-18	GS-AP-MW-32H	GS-AP-PZ-22	GS-AP-PZ-16
3/17/2020								
3/18/2020								
3/23/2020		<0.003						
3/24/2020	<0.003		<0.003			<0.003	<0.003	<0.003
3/25/2020				<0.003	<0.003			
5/12/2020								
5/13/2020								

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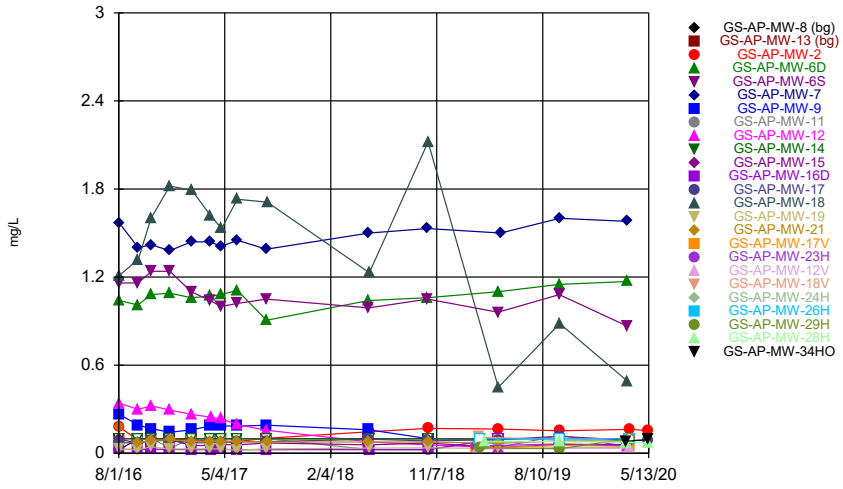
Hollow symbols indicate censored values.

Time Series



Constituent: Boron Analysis Run 7/27/2020 11:24 AM View: Time Series
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

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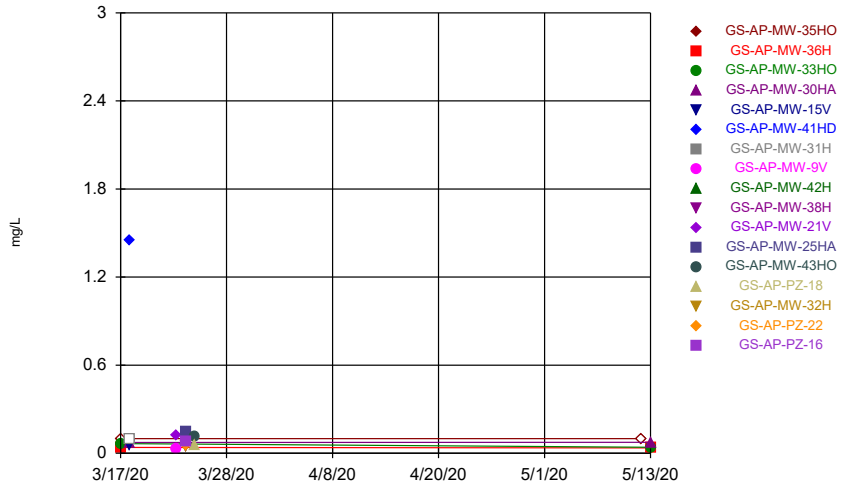
Hollow symbols indicate censored values.

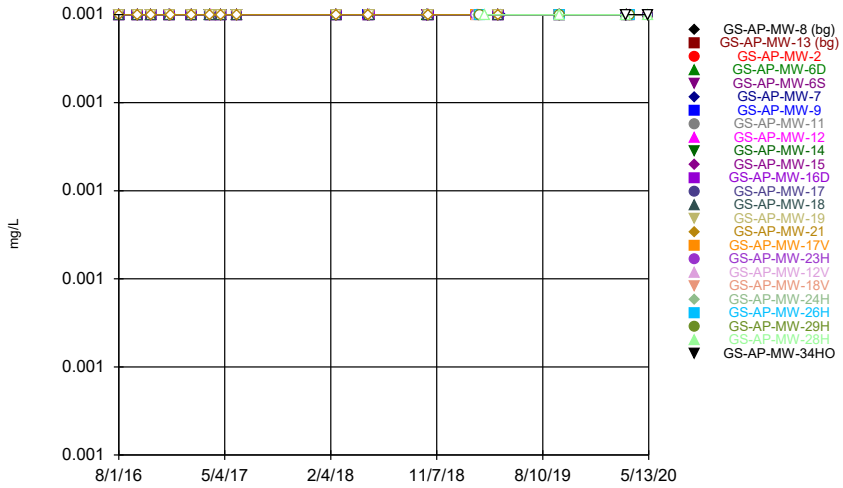
Time Series



Constituent: Boron Analysis Run 7/27/2020 11:24 AM View: Time Series
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.24 Sanitas software licensed to Southern Company. UG
Hollow symbols indicate censored values.

Time Series



Constituent: Cadmium Analysis Run 7/27/2020 11:24 AM View: Time Series
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

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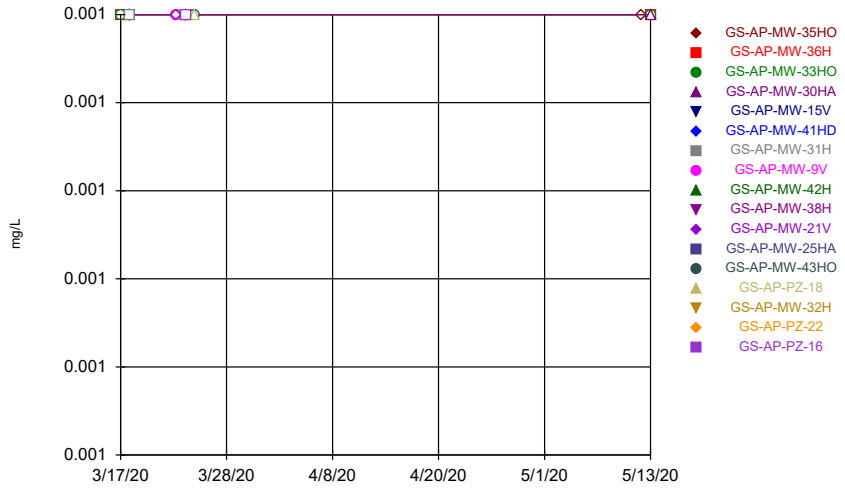
Hollow symbols indicate censored values.

Time Series



Constituent: Cadmium Analysis Run 7/27/2020 11:25 AM View: Time Series
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

Time Series

Constituent: Boron (mg/L) Analysis Run 7/27/2020 11:28 AM View: Time Series

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-8 (bg)	GS-AP-MW-13 (bg)	GS-AP-MW-2	GS-AP-MW-6D	GS-AP-MW-6S	GS-AP-MW-7	GS-AP-MW-9	GS-AP-MW-11	GS-AP-MW-12
8/1/2016									
8/2/2016		<0.1	0.178			1.57		<0.1	
8/3/2016	0.0239 (J)			1.04	1.16		0.264		0.34
9/19/2016			0.0937 (J)						
9/20/2016		<0.1		1.01	1.16				0.299
9/21/2016	<0.1					1.4	0.192	<0.1	
10/24/2016			0.0986 (J)	1.08		1.42			
10/25/2016	<0.1	<0.1					0.167	<0.1	0.323
10/26/2016					1.24				
12/12/2016				1.09	1.24	1.38			
12/13/2016	<0.1	<0.1	0.0965 (J)				0.143	0.0362 (J)	0.294
12/14/2016									
2/6/2017	<0.1			1.06	1.1	1.44			
2/7/2017									
2/8/2017		<0.1	0.0896 (J)				0.16	<0.1	0.264
3/27/2017				1.07	1.04				
3/28/2017	<0.1					1.44	0.187	<0.1	
3/29/2017		<0.1							0.246
3/30/2017			0.0871 (J)						
4/24/2017	<0.1			1.08	1	1.41			
4/26/2017		<0.1	0.0818 (J)				0.187	<0.1	0.234
6/5/2017									
6/6/2017			0.0805 (J)	1.11	1.02				
6/7/2017	<0.1	<0.1				1.45	0.185	<0.1	0.194
8/21/2017	<0.1		0.102	0.906	1.05	1.39			
8/22/2017		<0.1					0.191	<0.1	0.156
8/23/2017									
5/14/2018				1.04	0.99				
5/15/2018	<0.1	<0.1				1.5	0.16	0.0255 (J)	0.0781 (J)
5/16/2018			0.147						
10/15/2018				1.06	1.05	1.53			
10/16/2018	<0.1		0.169				0.1 (J)	0.0221 (J)	0.057 (J)
10/17/2018		<0.1							
2/20/2019									
2/21/2019									
2/26/2019									
2/27/2019									
3/13/2019									
4/16/2019	<0.1	<0.1		1.1	0.961		0.0979 (J)	<0.1	0.0385 (J)
4/17/2019			0.165						
4/23/2019						1.5			
9/23/2019				1.15	1.08				
9/24/2019	<0.1					1.6			
9/25/2019			0.153						0.122
3/16/2020									
3/17/2020				1.17	0.867	1.58			
3/18/2020	<0.1								0.0449 (J)
3/24/2020									
3/25/2020			0.163						
5/12/2020									
5/13/2020			0.154						

Time Series

Constituent: Boron (mg/L) Analysis Run 7/27/2020 11:28 AM View: Time Series

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-14	GS-AP-MW-15	GS-AP-MW-16D	GS-AP-MW-17	GS-AP-MW-18	GS-AP-MW-19	GS-AP-MW-21	GS-AP-MW-17V	GS-AP-MW-23H
8/1/2016		0.0955 (J)	0.0266 (J)	0.0712 (J)		0.0279 (J)			
8/2/2016	<0.1				1.21		0.176 (o)		
8/3/2016									
9/19/2016	<0.1		0.0262 (J)	0.0716 (J)					
9/20/2016		0.0706 (J)							
9/21/2016					1.32	0.0235 (J)	0.0723 (J)		
10/24/2016				0.0858 (J)	1.6	0.0444 (J)			
10/25/2016	<0.1	0.0849 (J)	0.0273 (J)				0.0867 (J)		
10/26/2016									
12/12/2016					1.82				
12/13/2016	<0.1		0.0258 (J)	0.0875 (J)		0.0285 (J)			
12/14/2016		0.0914 (J)					0.092 (J)		
2/6/2017				0.0729 (J)					
2/7/2017						0.03 (J)			
2/8/2017	<0.1	0.0524 (J)	0.0249 (J)		1.79		0.0803 (J)		
3/27/2017				0.0706 (J)					
3/28/2017	<0.1	0.0532 (J)			1.62	0.0309 (J)	0.0804 (J)		
3/29/2017			0.0247 (J)						
3/30/2017									
4/24/2017				0.0737 (J)					
4/26/2017	<0.1	0.0598 (J)	0.0264 (J)		1.53	0.0273 (J)	0.0801 (J)		
6/5/2017				0.0767 (J)					
6/6/2017		0.0576 (J)	0.0247 (J)		1.73	0.0212 (J)	0.0795 (J)		
6/7/2017	<0.1								
8/21/2017									
8/22/2017	<0.1	0.0702 (J)	0.0246 (J)	0.0786 (J)		0.0294 (J)			
8/23/2017					1.71		0.0764 (J)		
5/14/2018									
5/15/2018		0.0567 (J)		0.0953 (J)			0.0769 (J)		
5/16/2018	<0.1		0.0247 (J)		1.23	0.0356 (J)			
10/15/2018		0.07 (J)		0.0842 (J)					
10/16/2018					2.12	0.0363 (J)	0.0764 (J)		
10/17/2018	<0.1		0.0251 (J)						
2/20/2019								0.0337 (J)	0.0498 (J)
2/21/2019									
2/26/2019									
2/27/2019									
3/13/2019									
4/16/2019	<0.1								
4/17/2019		0.0388 (J)	<0.1	0.0916 (J)	0.449	0.0336 (J)	0.0675 (J)		
4/23/2019									
9/23/2019				0.116					0.0641 (J)
9/24/2019		0.0607 (J)	<0.1		0.883	0.0375 (J)	0.0843 (J)	0.0532 (J)	
9/25/2019									
3/16/2020				0.0894 (J)					
3/17/2020									0.0504 (J)
3/18/2020		0.0596 (J)			0.492		0.0824 (J)		
3/24/2020			<0.1			0.0398 (J)			
3/25/2020								0.0482 (J)	
5/12/2020				0.0862 (J)					
5/13/2020									

Time Series

Constituent: Boron (mg/L) Analysis Run 7/27/2020 11:28 AM View: Time Series

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-12V	GS-AP-MW-18V	GS-AP-MW-24H	GS-AP-MW-26H	GS-AP-MW-29H	GS-AP-MW-28H	GS-AP-MW-34HO
8/1/2016							
8/2/2016							
8/3/2016							
9/19/2016							
9/20/2016							
9/21/2016							
10/24/2016							
10/25/2016							
10/26/2016							
12/12/2016							
12/13/2016							
12/14/2016							
2/6/2017							
2/7/2017							
2/8/2017							
3/27/2017							
3/28/2017							
3/29/2017							
3/30/2017							
4/24/2017							
4/26/2017							
6/5/2017							
6/6/2017							
6/7/2017							
8/21/2017							
8/22/2017							
8/23/2017							
5/14/2018							
5/15/2018							
5/16/2018							
10/15/2018							
10/16/2018							
10/17/2018							
2/20/2019							
2/21/2019	0.0303 (J)						
2/26/2019		0.109	0.0719 (J)				
2/27/2019				<0.1	0.0359 (J)		
3/13/2019						0.0819 (J)	
4/16/2019							
4/17/2019							
4/23/2019							
9/23/2019				<0.1			
9/24/2019			0.0821 (J)		0.0305 (J)		
9/25/2019	0.0347 (J)					0.0784 (J)	
3/16/2020						0.0751 (J)	0.0827 (J)
3/17/2020							
3/18/2020			0.0811 (J)				
3/24/2020	0.0343 (J)						
3/25/2020		0.0834 (J)		<0.1	<0.1		
5/12/2020						0.0719 (J)	0.0929 (J)
5/13/2020							

Time Series

Constituent: Boron (mg/L) Analysis Run 7/27/2020 11:28 AM View: Time Series

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-35HO	GS-AP-MW-36H	GS-AP-MW-33HO	GS-AP-MW-30HA	GS-AP-MW-15V	GS-AP-MW-41HD	GS-AP-MW-31H	GS-AP-MW-9V	GS-AP-MW-42H
3/17/2020	<0.1	0.0394 (J)	0.066 (J)						
3/18/2020				0.0734 (J)	0.0565 (J)	1.45	<0.1		
3/23/2020								0.0316 (J)	
3/24/2020									<0.1
3/25/2020									
5/12/2020	<0.1								
5/13/2020		0.0359 (J)	0.0409 (J)	0.0747 (J)					

Time Series

Constituent: Boron (mg/L) Analysis Run 7/27/2020 11:28 AM View: Time Series

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-38H	GS-AP-MW-21V	GS-AP-MW-25HA	GS-AP-MW-43HO	GS-AP-PZ-18	GS-AP-MW-32H	GS-AP-PZ-22	GS-AP-PZ-16
3/17/2020								
3/18/2020								
3/23/2020		0.122						
3/24/2020	0.0468 (J)		0.146			0.0492 (J)	0.0521 (J)	0.0772 (J)
3/25/2020				0.112	0.0568 (J)			
5/12/2020								
5/13/2020								

Time Series

Constituent: Cadmium (mg/L) Analysis Run 7/27/2020 11:28 AM View: Time Series

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-8 (bg)	GS-AP-MW-13 (bg)	GS-AP-MW-2	GS-AP-MW-6D	GS-AP-MW-6S	GS-AP-MW-7	GS-AP-MW-9	GS-AP-MW-11	GS-AP-MW-12
8/1/2016									
8/2/2016		<0.001	<0.001			<0.001		<0.001	
8/3/2016	<0.001			<0.001	<0.001		<0.001		<0.001
9/19/2016			<0.001						
9/20/2016		<0.001		<0.001	<0.001				<0.001
9/21/2016	<0.001					<0.001	<0.001	<0.001	
10/24/2016			<0.001	<0.001		<0.001			
10/25/2016	<0.001	<0.001					<0.001	<0.001	<0.001
10/26/2016					<0.001				
12/12/2016				<0.001	<0.001	<0.001			
12/13/2016	<0.001	<0.001	<0.001				<0.001	<0.001	<0.001
12/14/2016									
2/6/2017	<0.001			<0.001	<0.001	<0.001			
2/7/2017									
2/8/2017		<0.001	<0.001				<0.001	<0.001	<0.001
3/27/2017				<0.001	<0.001				
3/28/2017	<0.001					<0.001	<0.001	<0.001	
3/29/2017		<0.001							<0.001
3/30/2017			<0.001						
4/24/2017	<0.001			<0.001	<0.001	<0.001			
4/26/2017		<0.001	<0.001				<0.001	<0.001	<0.001
6/5/2017									
6/6/2017			<0.001	<0.001	<0.001				
6/7/2017	<0.001	<0.001				<0.001	<0.001	<0.001	<0.001
2/19/2018	<0.001			<0.001	<0.001	<0.001			
2/20/2018		<0.001					<0.001	<0.001	<0.001
2/21/2018			<0.001						
5/14/2018				<0.001	<0.001				
5/15/2018	<0.001	<0.001				<0.001	<0.001	<0.001	<0.001
5/16/2018			<0.001						
10/15/2018				<0.001	<0.001	<0.001			
10/16/2018	<0.001		<0.001				<0.001	<0.001	<0.001
10/17/2018		<0.001							
2/20/2019									
2/21/2019									
2/26/2019									
2/27/2019									
3/13/2019									
4/16/2019	<0.001	<0.001		<0.001	<0.001		<0.001	<0.001	<0.001
4/17/2019			<0.001						
4/23/2019						<0.001			
9/23/2019				<0.001	<0.001				
9/24/2019	<0.001					<0.001			
9/25/2019			<0.001						<0.001
3/16/2020									
3/17/2020				<0.001	<0.001	<0.001			
3/18/2020	<0.001								<0.001
3/24/2020									
3/25/2020			<0.001						
5/12/2020									
5/13/2020			<0.001						

Time Series

Constituent: Cadmium (mg/L) Analysis Run 7/27/2020 11:28 AM View: Time Series

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-14	GS-AP-MW-15	GS-AP-MW-16D	GS-AP-MW-17	GS-AP-MW-18	GS-AP-MW-19	GS-AP-MW-21	GS-AP-MW-17V	GS-AP-MW-23H
8/1/2016		<0.001	<0.001	<0.001		<0.001			
8/2/2016	<0.001				<0.001		<0.001		
8/3/2016									
9/19/2016	<0.001		<0.001	<0.001					
9/20/2016		<0.001							
9/21/2016					<0.001	<0.001	<0.001		
10/24/2016				<0.001	<0.001	<0.001			
10/25/2016	<0.001	<0.001	<0.001				<0.001		
10/26/2016									
12/12/2016					<0.001				
12/13/2016	<0.001		<0.001	<0.001		<0.001			
12/14/2016		<0.001					<0.001		
2/6/2017				<0.001					
2/7/2017						<0.001			
2/8/2017	<0.001	<0.001	<0.001		<0.001		<0.001		
3/27/2017				<0.001					
3/28/2017	<0.001	<0.001			<0.001	<0.001	<0.001		
3/29/2017			<0.001						
3/30/2017									
4/24/2017				<0.001					
4/26/2017	<0.001	<0.001	<0.001		<0.001	<0.001	<0.001		
6/5/2017				<0.001					
6/6/2017		<0.001	<0.001		<0.001	<0.001	<0.001		
6/7/2017	<0.001								
2/19/2018				<0.001					
2/20/2018	<0.001	<0.001					<0.001		
2/21/2018			<0.001		<0.001	<0.001			
5/14/2018									
5/15/2018		<0.001		<0.001			<0.001		
5/16/2018	<0.001		<0.001		<0.001	<0.001			
10/15/2018		<0.001		<0.001					
10/16/2018					<0.001	<0.001	<0.001		
10/17/2018	<0.001		<0.001						
2/20/2019								<0.001	<0.001
2/21/2019									
2/26/2019									
2/27/2019									
3/13/2019									
4/16/2019	<0.001								
4/17/2019		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001		
4/23/2019									
9/23/2019				<0.001					<0.001
9/24/2019		<0.001	<0.001		<0.001	<0.001	<0.001	<0.001	
9/25/2019									
3/16/2020				<0.001					
3/17/2020									<0.001
3/18/2020		<0.001			<0.001		<0.001		
3/24/2020			<0.001			<0.001			
3/25/2020								<0.001	
5/12/2020				<0.001					
5/13/2020									

Time Series

Constituent: Cadmium (mg/L) Analysis Run 7/27/2020 11:28 AM View: Time Series

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-12V	GS-AP-MW-18V	GS-AP-MW-24H	GS-AP-MW-26H	GS-AP-MW-29H	GS-AP-MW-28H	GS-AP-MW-34HO
8/1/2016							
8/2/2016							
8/3/2016							
9/19/2016							
9/20/2016							
9/21/2016							
10/24/2016							
10/25/2016							
10/26/2016							
12/12/2016							
12/13/2016							
12/14/2016							
2/6/2017							
2/7/2017							
2/8/2017							
3/27/2017							
3/28/2017							
3/29/2017							
3/30/2017							
4/24/2017							
4/26/2017							
6/5/2017							
6/6/2017							
6/7/2017							
2/19/2018							
2/20/2018							
2/21/2018							
5/14/2018							
5/15/2018							
5/16/2018							
10/15/2018							
10/16/2018							
10/17/2018							
2/20/2019							
2/21/2019	<0.001						
2/26/2019		<0.001	<0.001				
2/27/2019				<0.001	<0.001		
3/13/2019						<0.001	
4/16/2019							
4/17/2019							
4/23/2019							
9/23/2019				<0.001			
9/24/2019			<0.001		<0.001		
9/25/2019	<0.001					<0.001	
3/16/2020						<0.001	<0.001
3/17/2020							
3/18/2020			<0.001				
3/24/2020	<0.001						
3/25/2020		<0.001		<0.001	<0.001		
5/12/2020						<0.001	<0.001
5/13/2020							

Time Series

Constituent: Cadmium (mg/L) Analysis Run 7/27/2020 11:28 AM View: Time Series

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-35HO	GS-AP-MW-36H	GS-AP-MW-33HO	GS-AP-MW-30HA	GS-AP-MW-15V	GS-AP-MW-41HD	GS-AP-MW-31H	GS-AP-MW-9V	GS-AP-MW-42H
3/17/2020	<0.001	<0.001	<0.001						
3/18/2020				<0.001	<0.001	<0.001	<0.001		
3/23/2020								<0.001	
3/24/2020									<0.001
3/25/2020									
5/12/2020	<0.001								
5/13/2020		<0.001	<0.001	<0.001					

Time Series

Constituent: Cadmium (mg/L) Analysis Run 7/27/2020 11:28 AM View: Time Series

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-38H	GS-AP-MW-21V	GS-AP-MW-25HA	GS-AP-MW-43HO	GS-AP-PZ-18	GS-AP-MW-32H	GS-AP-PZ-22	GS-AP-PZ-16
3/17/2020								
3/18/2020								
3/23/2020		<0.001						
3/24/2020	<0.001		<0.001			<0.001	<0.001	<0.001
3/25/2020				<0.001	<0.001			
5/12/2020								
5/13/2020								

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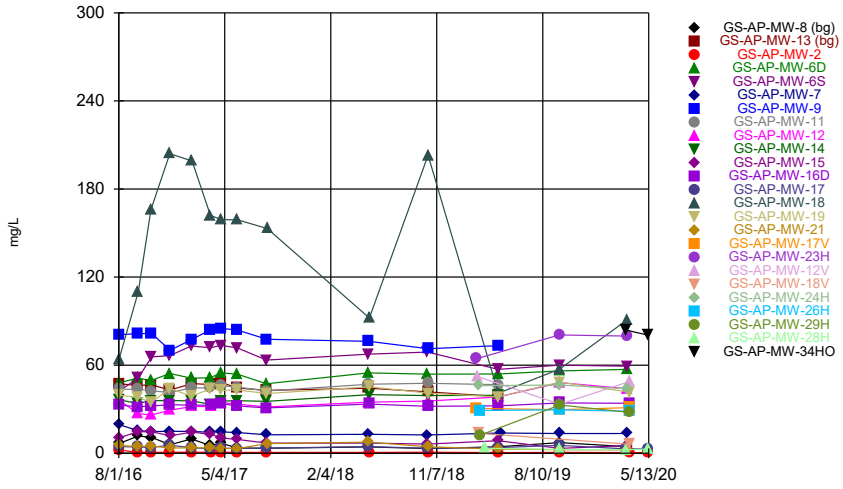
Time Series



Constituent: Calcium Analysis Run 7/27/2020 11:25 AM View: Time Series

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

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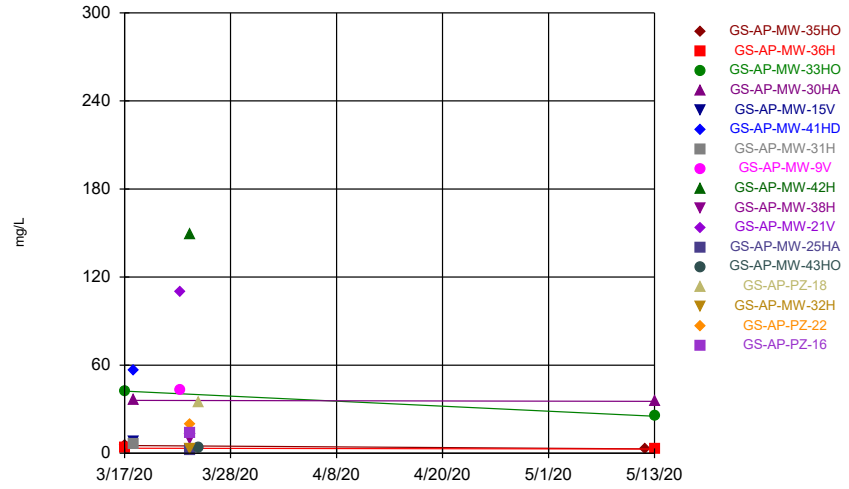
Time Series



Constituent: Calcium Analysis Run 7/27/2020 11:25 AM View: Time Series

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

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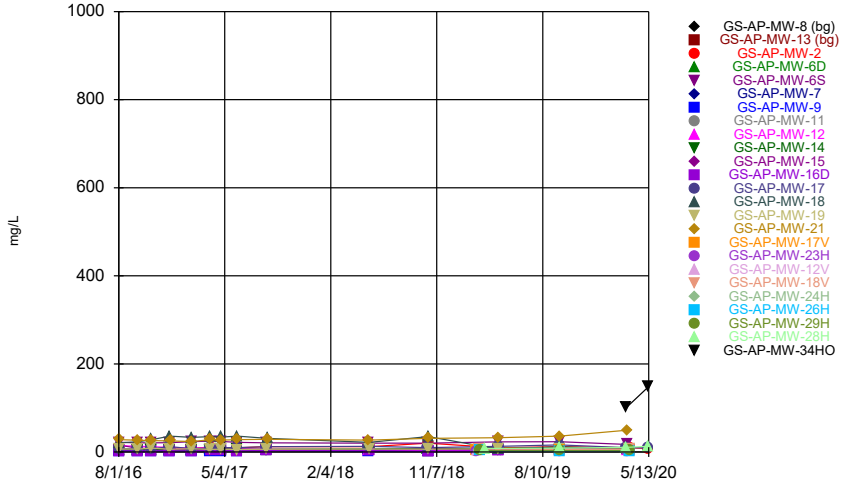
Time Series



Constituent: Chloride Analysis Run 7/27/2020 11:25 AM View: Time Series

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

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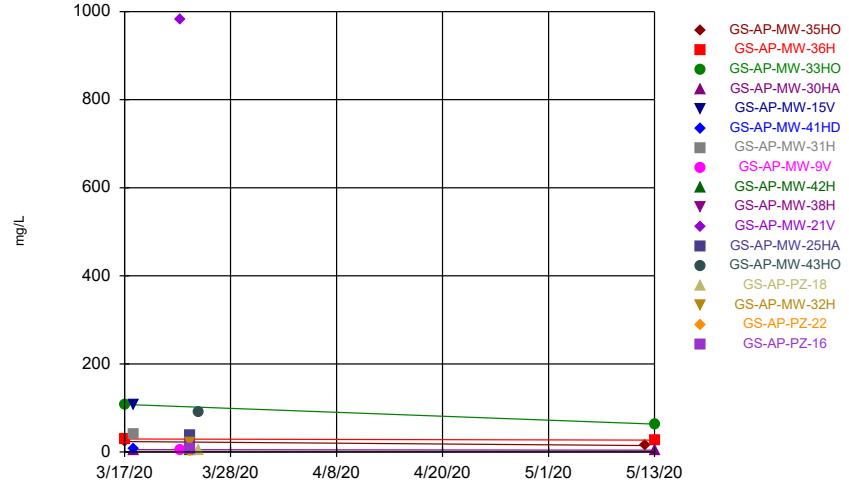
Time Series



Constituent: Chloride Analysis Run 7/27/2020 11:25 AM View: Time Series

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

Time Series

Constituent: Calcium (mg/L) Analysis Run 7/27/2020 11:28 AM View: Time Series

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-8 (bg)	GS-AP-MW-13 (bg)	GS-AP-MW-2	GS-AP-MW-6D	GS-AP-MW-6S	GS-AP-MW-7	GS-AP-MW-9	GS-AP-MW-11	GS-AP-MW-12
8/1/2016									
8/2/2016		47.2	2.25			19.4		43.5	
8/3/2016	6.85			48.1	42.5		80.8		36.1
9/19/2016			0.724						
9/20/2016		46.3		51.2	51.1				27
9/21/2016	11.7					15.4	81.5	43.6	
10/24/2016			0.635	49.5		14.8			
10/25/2016	10.8	46.6					81.7	42.6	26.1
10/26/2016					65.6				
12/12/2016				54.3	66.5	15			
12/13/2016	5.86	43.1	0.714				70.1	41.4	29.4
12/14/2016									
2/6/2017	9.76			51.2	73.1	14.9			
2/7/2017									
2/8/2017		47.5	0.722				77.6	44.6	31.9
3/27/2017				51.4	71.9				
3/28/2017	5.28					14.3	84.1	44.4	
3/29/2017		46.8							31.8
3/30/2017			0.686						
4/24/2017	6.89			54.7	73.5	14.5			
4/26/2017		48.1	0.646				85	46	34.6
6/5/2017									
6/6/2017			0.569	53.9	71.8				
6/7/2017	3.58	44.4				14.1	83.9	45.1	33.4
8/21/2017	3.38		0.634	47.3	63.5	12.6			
8/22/2017		42.9					77.6	42.4	31.5
8/23/2017									
5/14/2018				54.8	67.5				
5/15/2018	4.25	44.3				12.9	76.2	47	34.8
5/16/2018			0.588						
10/15/2018				53.9	68.9	12.5			
10/16/2018	3.21		0.714				71.2	47.7	35.6
10/17/2018		41.8							
2/20/2019									
2/21/2019									
2/26/2019									
2/27/2019									
3/13/2019									
4/16/2019	4.43	38.6		54	57.1		73.3	46.7	38.3
4/17/2019			0.511						
4/23/2019						13.8			
9/23/2019				56.1	60 (D)				
9/24/2019	7.24					13.4			
9/25/2019			0.581						48.1
3/16/2020									
3/17/2020				57.2	59.3	13.5			
3/18/2020	4.51								44
3/24/2020									
3/25/2020			0.518						
5/12/2020									
5/13/2020			0.493 (J)						

Time Series

Constituent: Calcium (mg/L) Analysis Run 7/27/2020 11:28 AM View: Time Series

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-14	GS-AP-MW-15	GS-AP-MW-16D	GS-AP-MW-17	GS-AP-MW-18	GS-AP-MW-19	GS-AP-MW-21	GS-AP-MW-17V	GS-AP-MW-23H
8/1/2016		10.5	33	4.52		39.6			
8/2/2016	36.4				64.2		5.29		
8/3/2016									
9/19/2016	33.9		31.7	4.3					
9/20/2016		14.7							
9/21/2016					110	38.1	4.51		
10/24/2016				4.02	166	34.7			
10/25/2016	35.8	14.7	32.2				4.92		
10/26/2016									
12/12/2016					204				
12/13/2016	35.9		33.1	5.5		44			
12/14/2016		11.9					3.5		
2/6/2017				3.79					
2/7/2017						39			
2/8/2017	35.7	14.4	32.7		199		3.75		
3/27/2017				3.13					
3/28/2017	33.3	12.9			162	43.9	3.63		
3/29/2017			32.7						
3/30/2017									
4/24/2017				3.41					
4/26/2017	35.6	10.4	33.8		159	42.8	3.3		
6/5/2017				3.32					
6/6/2017		9.41	32.2		159	43.1	3.24		
6/7/2017	35.8								
8/21/2017									
8/22/2017	35.3	6.89	30.9	3.52		40.7			
8/23/2017					153		6.6		
5/14/2018									
5/15/2018		6.86		4.53			7.57		
5/16/2018	39.9		33.5		92.1	45.3			
10/15/2018		6.28		3.38					
10/16/2018					203	40.9	4.4		
10/17/2018	39.3		32						
2/20/2019								30.6	64.5
2/21/2019									
2/26/2019									
2/27/2019									
3/13/2019									
4/16/2019	39.5								
4/17/2019		8.53	32.3	3.86	40.9	38.4	2.88		
4/23/2019									
9/23/2019				5.43					80.6
9/24/2019		3.26	34.3		57.4	48.4 (D)	2.47	29.7	
9/25/2019									
3/16/2020				3					
3/17/2020									79.8
3/18/2020		5.25			90.9		2.35		
3/24/2020			34.1			41.7			
3/25/2020								31.1	
5/12/2020				2.95					
5/13/2020									

Time Series

Constituent: Calcium (mg/L) Analysis Run 7/27/2020 11:28 AM View: Time Series

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-12V	GS-AP-MW-18V	GS-AP-MW-24H	GS-AP-MW-26H	GS-AP-MW-29H	GS-AP-MW-28H	GS-AP-MW-34HO
8/1/2016							
8/2/2016							
8/3/2016							
9/19/2016							
9/20/2016							
9/21/2016							
10/24/2016							
10/25/2016							
10/26/2016							
12/12/2016							
12/13/2016							
12/14/2016							
2/6/2017							
2/7/2017							
2/8/2017							
3/27/2017							
3/28/2017							
3/29/2017							
3/30/2017							
4/24/2017							
4/26/2017							
6/5/2017							
6/6/2017							
6/7/2017							
8/21/2017							
8/22/2017							
8/23/2017							
5/14/2018							
5/15/2018							
5/16/2018							
10/15/2018							
10/16/2018							
10/17/2018							
2/20/2019							
2/21/2019	52.3						
2/26/2019		13.6	46				
2/27/2019				29.1	12.1		
3/13/2019						3.42	
4/16/2019							
4/17/2019							
4/23/2019							
9/23/2019				29.6			
9/24/2019			46.5		32.8		
9/25/2019	33.4					2.52	
3/16/2020						2.4	83.8
3/17/2020							
3/18/2020			44				
3/24/2020	48.9						
3/25/2020		6.18		28.6	27.8		
5/12/2020						2.83	80.4
5/13/2020							

Time Series

Constituent: Calcium (mg/L) Analysis Run 7/27/2020 11:28 AM View: Time Series

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-35HO	GS-AP-MW-36H	GS-AP-MW-33HO	GS-AP-MW-30HA	GS-AP-MW-15V	GS-AP-MW-41HD	GS-AP-MW-31H	GS-AP-MW-9V	GS-AP-MW-42H
3/17/2020	5.27	3.45	42.3						
3/18/2020				36	8.01	56.6	6.06		
3/23/2020								42.9	
3/24/2020									149
3/25/2020									
5/12/2020	3.04								
5/13/2020		2.93	25.2	35.3					

Time Series

Constituent: Calcium (mg/L) Analysis Run 7/27/2020 11:28 AM View: Time Series

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-38H	GS-AP-MW-21V	GS-AP-MW-25HA	GS-AP-MW-43HO	GS-AP-PZ-18	GS-AP-MW-32H	GS-AP-PZ-22	GS-AP-PZ-16
3/17/2020								
3/18/2020								
3/23/2020		110						
3/24/2020	9.33		2.42			2.62	19.3	13.9
3/25/2020				4.11	34.5			
5/12/2020								
5/13/2020								

Time Series

Constituent: Chloride (mg/L) Analysis Run 7/27/2020 11:28 AM View: Time Series

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-8 (bg)	GS-AP-MW-13 (bg)	GS-AP-MW-2	GS-AP-MW-6D	GS-AP-MW-6S	GS-AP-MW-7	GS-AP-MW-9	GS-AP-MW-11	GS-AP-MW-12
8/1/2016									
8/2/2016		2.91	6.15			3.7		6.7	
8/3/2016	3.21			5.2	21.9		2.18		14.5
9/19/2016			5.98						
9/20/2016		2.94		5.31	20.9				12.9
9/21/2016	2.95					3.74	2.11	6.28	
10/24/2016			5.93	5.4		3.75			
10/25/2016	3.03	2.94					2.06	5.53	12.2
10/26/2016					20.7				
12/12/2016				5.46	21.1	4.06			
12/13/2016	3.21	2.93	5.7				2.05	4.84	10.4
12/14/2016									
2/6/2017	3			5.28	23.3	3.92			
2/7/2017									
2/8/2017		2.85	8.44				2.21	4.84	8.77
3/27/2017				6.4 (D)	25 (D)				
3/28/2017	3.3 (D)					4.3 (D)	2.3 (D)	4.4 (D)	
3/29/2017		3.4 (D)							10 (D)
3/30/2017			11 (D)						
4/24/2017	3.8 (D)			6.5 (D)	24 (D)	4.6 (D)			
4/26/2017		3.7 (D)	10 (D)				2.7 (D)	5.5 (D)	9.8 (D)
6/5/2017									
6/6/2017			9.6	4.7	22				
6/7/2017	3.5	3.3				4.3	2.6	5.1	8
8/21/2017	3.6		12	6.1	21	4.7			
8/22/2017		3.4					3.3	6	6.5
8/23/2017									
5/14/2018				6	20				
5/15/2018	3.3	3.2				4.3	2.1	6.9	4.4
5/16/2018			12						
10/15/2018				7	20	5.1			
10/16/2018	3.3		20				2.3	8.1	3.1
10/17/2018		2.3							
2/20/2019									
2/21/2019									
2/26/2019									
2/27/2019									
3/13/2019									
4/16/2019	3.69	3.23		8.36	23.1		2.81	8.06	3.22
4/17/2019			9.5						
4/23/2019						5.16			
9/23/2019				8.72	23.4 (D)				
9/24/2019	3.21					5.76			
9/25/2019			12						6.68
3/16/2020									
3/17/2020				10.1	17.4	6.65			
3/18/2020	4.35								4.22
3/24/2020									
3/25/2020			9.7						
5/12/2020									
5/13/2020			8.25						

Time Series

Constituent: Chloride (mg/L) Analysis Run 7/27/2020 11:28 AM View: Time Series

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-14	GS-AP-MW-15	GS-AP-MW-16D	GS-AP-MW-17	GS-AP-MW-18	GS-AP-MW-19	GS-AP-MW-21	GS-AP-MW-17V	GS-AP-MW-23H
8/1/2016		15.6	2.6	6.47		6.67			
8/2/2016	5.17				20.8		28.1		
8/3/2016									
9/19/2016	4.9		2.51	7.78					
9/20/2016		8.6							
9/21/2016					23.3	6.54	26.8		
10/24/2016				7.29	27.9	8.77			
10/25/2016	5.08	7.96	2.53				26		
10/26/2016									
12/12/2016					36				
12/13/2016	5.1		2.53	12.2		6.16			
12/14/2016		6.94					25.3		
2/6/2017				7.68					
2/7/2017						7.57			
2/8/2017	5	4.96	2.5		33.3		23.8		
3/27/2017				9 (D)					
3/28/2017	5.5 (D)	5.2 (D)			35 (D)	5.9 (D)	28 (D)		
3/29/2017			2.9 (D)						
3/30/2017									
4/24/2017				10 (D)					
4/26/2017	7 (D)	6 (D)	3.2 (D)		34 (D)	6.5 (D)	27 (D)		
6/5/2017				10					
6/6/2017		4.9	2.6		36	5.5	28		
6/7/2017	6.2								
8/21/2017									
8/22/2017	5.9	5.3	2.9	12		6.5			
8/23/2017					31		29		
5/14/2018									
5/15/2018		3.8		13			27		
5/16/2018	6.5		3		22	6.6			
10/15/2018		6.6		10					
10/16/2018					35	6.2	31		
10/17/2018	6.9		2.2						
2/20/2019								3.56	2.58
2/21/2019									
2/26/2019									
2/27/2019									
3/13/2019									
4/16/2019	7.7								
4/17/2019		5.2	2.82	12.7	6.61	7.27	32.3		
4/23/2019									
9/23/2019				16.2					2.26
9/24/2019		5.96	2.9		12.3	5.83 (D)	36	3.69	
9/25/2019									
3/16/2020				9.95					
3/17/2020									2.62
3/18/2020		8			6.68		49.5		
3/24/2020			2.88			6.29			
3/25/2020								3.72	
5/12/2020				9.16					
5/13/2020									

Time Series

Constituent: Chloride (mg/L) Analysis Run 7/27/2020 11:28 AM View: Time Series

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-12V	GS-AP-MW-18V	GS-AP-MW-24H	GS-AP-MW-26H	GS-AP-MW-29H	GS-AP-MW-28H	GS-AP-MW-34HO
8/1/2016							
8/2/2016							
8/3/2016							
9/19/2016							
9/20/2016							
9/21/2016							
10/24/2016							
10/25/2016							
10/26/2016							
12/12/2016							
12/13/2016							
12/14/2016							
2/6/2017							
2/7/2017							
2/8/2017							
3/27/2017							
3/28/2017							
3/29/2017							
3/30/2017							
4/24/2017							
4/26/2017							
6/5/2017							
6/6/2017							
6/7/2017							
8/21/2017							
8/22/2017							
8/23/2017							
5/14/2018							
5/15/2018							
5/16/2018							
10/15/2018							
10/16/2018							
10/17/2018							
2/20/2019							
2/21/2019	3.77						
2/26/2019		7.13	3.28				
2/27/2019				2.87	3.09		
3/13/2019						8	
4/16/2019							
4/17/2019							
4/23/2019							
9/23/2019				2.35			
9/24/2019			2.89		3.11		
9/25/2019	3.84					8.93	
3/16/2020						10.6	101
3/17/2020							
3/18/2020			3.5				
3/24/2020	4.46						
3/25/2020		6.23		2.73	3.1		
5/12/2020						12.7	148
5/13/2020							

Time Series

Constituent: Chloride (mg/L) Analysis Run 7/27/2020 11:28 AM View: Time Series

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-35HO	GS-AP-MW-36H	GS-AP-MW-33HO	GS-AP-MW-30HA	GS-AP-MW-15V	GS-AP-MW-41HD	GS-AP-MW-31H	GS-AP-MW-9V	GS-AP-MW-42H
3/17/2020	23.9	29.4	108						
3/18/2020				5.14	108	6.02	41.3		
3/23/2020								5.13	
3/24/2020									3.35
3/25/2020									
5/12/2020	14.5								
5/13/2020		27.2	63.3	4.24					

Time Series

Constituent: Chloride (mg/L) Analysis Run 7/27/2020 11:28 AM View: Time Series

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-38H	GS-AP-MW-21V	GS-AP-MW-25HA	GS-AP-MW-43HO	GS-AP-PZ-18	GS-AP-MW-32H	GS-AP-PZ-22	GS-AP-PZ-16
3/17/2020								
3/18/2020								
3/23/2020		981						
3/24/2020	12.6		38			20.5	2.53	5.72
3/25/2020				90.6	2.88			
5/12/2020								
5/13/2020								

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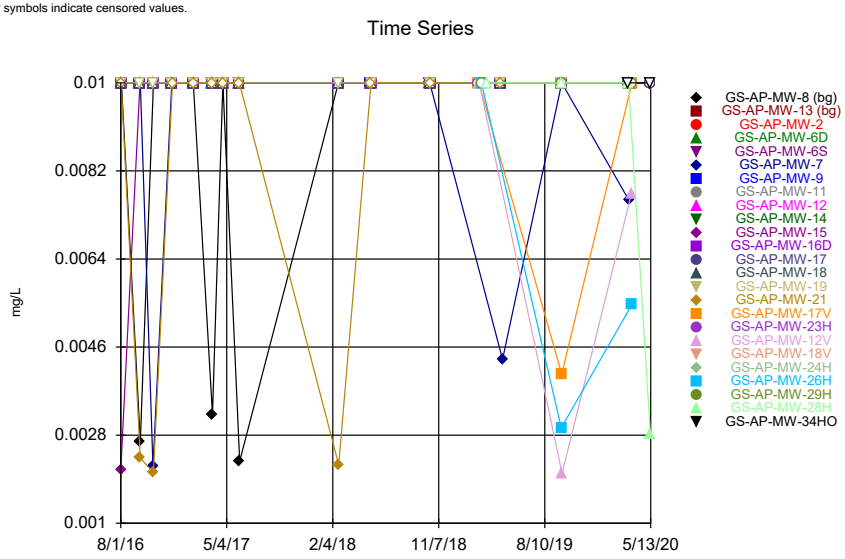
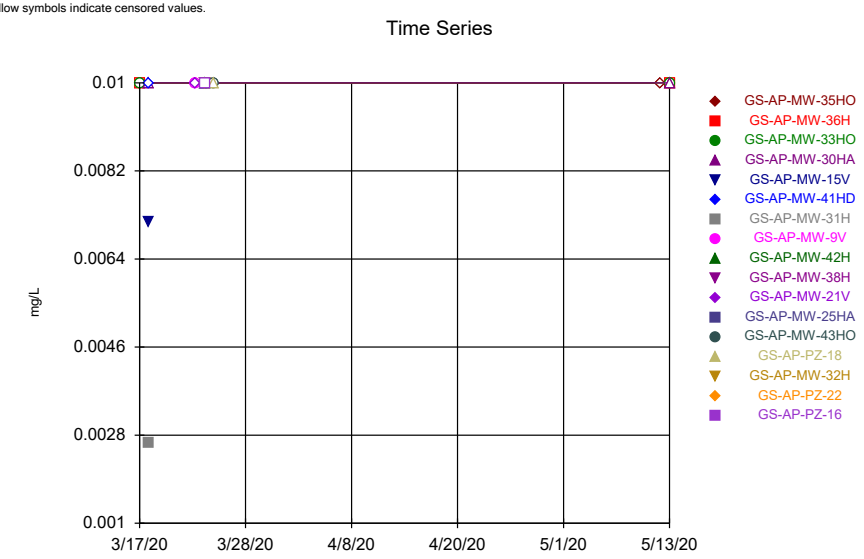
Hollow symbols indicate censored values.



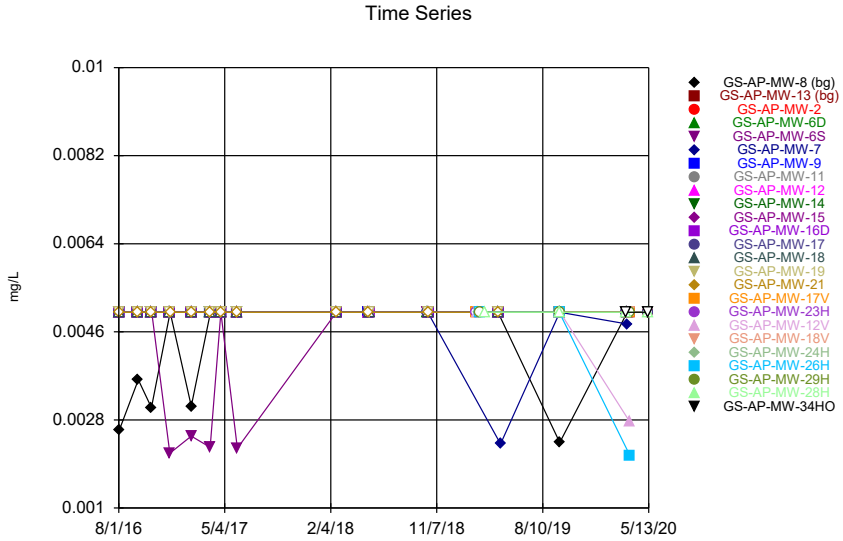
Constituent: Chromium Analysis Run 7/27/2020 11:25 AM View: Time Series
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.24 Sanitas software licensed to Southern Company. UG
Hollow symbols indicate censored values.



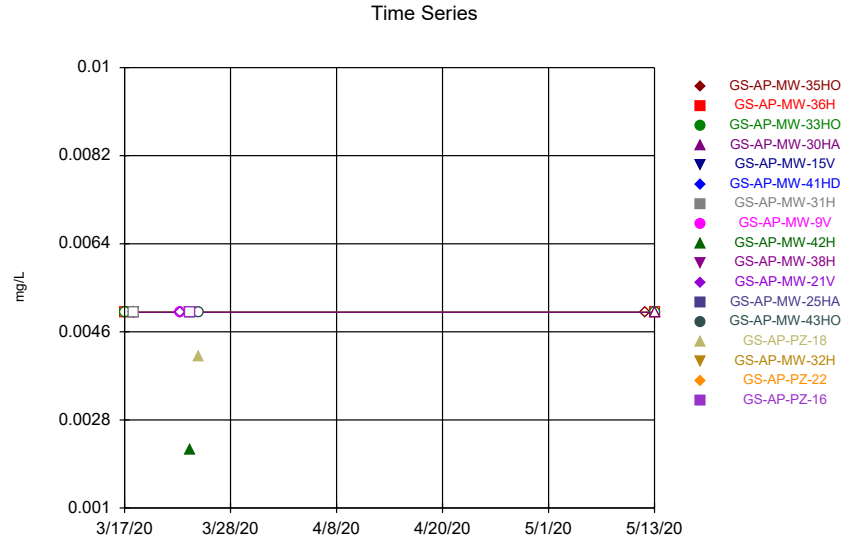
Constituent: Chromium Analysis Run 7/27/2020 11:25 AM View: Time Series
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.24 Sanitas software licensed to Southern Company. UG
Hollow symbols indicate censored values.



Constituent: Cobalt Analysis Run 7/27/2020 11:25 AM View: Time Series
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.24 Sanitas software licensed to Southern Company. UG
Hollow symbols indicate censored values.



Constituent: Cobalt Analysis Run 7/27/2020 11:25 AM View: Time Series
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

Time Series

Constituent: Chromium (mg/L) Analysis Run 7/27/2020 11:28 AM View: Time Series

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-8 (bg)	GS-AP-MW-13 (bg)	GS-AP-MW-2	GS-AP-MW-6D	GS-AP-MW-6S	GS-AP-MW-7	GS-AP-MW-9	GS-AP-MW-11	GS-AP-MW-12
8/1/2016									
8/2/2016		<0.01	<0.01			<0.01		<0.01	
8/3/2016	<0.01			<0.01	<0.01		<0.01		<0.01
9/19/2016			<0.01						
9/20/2016		<0.01		<0.01	<0.01				<0.01
9/21/2016	0.00266 (J)					<0.01	<0.01	<0.01	
10/24/2016			<0.01	<0.01		0.00216 (J)			
10/25/2016	<0.01	<0.01					<0.01	<0.01	<0.01
10/26/2016					<0.01				
12/12/2016				<0.01	<0.01	<0.01			
12/13/2016	<0.01	<0.01	<0.01				<0.01	<0.01	<0.01
12/14/2016									
2/6/2017	<0.01			<0.01	<0.01	<0.01			
2/7/2017									
2/8/2017		<0.01	<0.01				<0.01	<0.01	<0.01
3/27/2017				<0.01	<0.01				
3/28/2017	0.00322 (J)					<0.01	<0.01	<0.01	
3/29/2017		<0.01							<0.01
3/30/2017			<0.01						
4/24/2017	<0.01			<0.01	<0.01	<0.01			
4/26/2017		<0.01	<0.01				<0.01	<0.01	<0.01
6/5/2017									
6/6/2017			<0.01	<0.01	<0.01				
6/7/2017	0.00227 (J)	<0.01				<0.01	<0.01	<0.01	<0.01
2/19/2018	<0.01			<0.01	<0.01	<0.01			
2/20/2018		<0.01					<0.01	<0.01	<0.01
2/21/2018			<0.01						
5/14/2018				<0.01	<0.01				
5/15/2018	<0.01	<0.01				<0.01	<0.01	<0.01	<0.01
5/16/2018			<0.01						
10/15/2018				<0.01	<0.01	<0.01			
10/16/2018	<0.01		<0.01				<0.01	<0.01	<0.01
10/17/2018		<0.01							
2/20/2019									
2/21/2019									
2/26/2019									
2/27/2019									
3/13/2019									
4/16/2019	<0.01	<0.01		<0.01	<0.01		<0.01	<0.01	<0.01
4/17/2019			<0.01						
4/23/2019						0.00435 (J)			
9/23/2019				<0.01	<0.01				
9/24/2019	<0.01					<0.01			
9/25/2019			<0.01						<0.01
3/16/2020									
3/17/2020				<0.01	<0.01	0.0076 (J)			
3/18/2020	<0.01								<0.01
3/24/2020									
3/25/2020			<0.01						
5/12/2020									
5/13/2020			<0.01						

Time Series

Constituent: Chromium (mg/L) Analysis Run 7/27/2020 11:28 AM View: Time Series

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-14	GS-AP-MW-15	GS-AP-MW-16D	GS-AP-MW-17	GS-AP-MW-18	GS-AP-MW-19	GS-AP-MW-21	GS-AP-MW-17V	GS-AP-MW-23H
8/1/2016		0.00209 (J)	<0.01	<0.01		<0.01			
8/2/2016	<0.01				<0.01		<0.01		
8/3/2016									
9/19/2016	<0.01		<0.01	<0.01					
9/20/2016		<0.01							
9/21/2016					<0.01	<0.01	0.00233 (J)		
10/24/2016				<0.01	<0.01	<0.01			
10/25/2016	<0.01	<0.01	<0.01				0.00204 (J)		
10/26/2016									
12/12/2016					<0.01				
12/13/2016	<0.01		<0.01	<0.01		<0.01			
12/14/2016		<0.01					<0.01		
2/6/2017				<0.01					
2/7/2017						<0.01			
2/8/2017	<0.01	<0.01	<0.01		<0.01		<0.01		
3/27/2017				<0.01					
3/28/2017	<0.01	<0.01			<0.01	<0.01	<0.01		
3/29/2017			<0.01						
3/30/2017									
4/24/2017				<0.01					
4/26/2017	<0.01	<0.01	<0.01		<0.01	<0.01	<0.01		
6/5/2017				<0.01					
6/6/2017		<0.01	<0.01		<0.01	<0.01	<0.01		
6/7/2017	<0.01								
2/19/2018				<0.01					
2/20/2018	<0.01	<0.01					0.00219 (J)		
2/21/2018			<0.01		<0.01	<0.01			
5/14/2018									
5/15/2018		<0.01		<0.01			<0.01		
5/16/2018	<0.01		<0.01		<0.01	<0.01			
10/15/2018		<0.01		<0.01					
10/16/2018					<0.01	<0.01	<0.01		
10/17/2018	<0.01		<0.01						
2/20/2019								<0.01	<0.01
2/21/2019									
2/26/2019									
2/27/2019									
3/13/2019									
4/16/2019	<0.01								
4/17/2019		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		
4/23/2019									
9/23/2019				<0.01					<0.01
9/24/2019		<0.01	<0.01		<0.01	<0.01	<0.01	0.00405 (J)	
9/25/2019									
3/16/2020				<0.01					
3/17/2020									<0.01
3/18/2020		<0.01			<0.01		<0.01		
3/24/2020			<0.01			<0.01			
3/25/2020								<0.01	
5/12/2020				<0.01					
5/13/2020									

Time Series

Constituent: Chromium (mg/L) Analysis Run 7/27/2020 11:28 AM View: Time Series

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-12V	GS-AP-MW-18V	GS-AP-MW-24H	GS-AP-MW-26H	GS-AP-MW-29H	GS-AP-MW-28H	GS-AP-MW-34HO
8/1/2016							
8/2/2016							
8/3/2016							
9/19/2016							
9/20/2016							
9/21/2016							
10/24/2016							
10/25/2016							
10/26/2016							
12/12/2016							
12/13/2016							
12/14/2016							
2/6/2017							
2/7/2017							
2/8/2017							
3/27/2017							
3/28/2017							
3/29/2017							
3/30/2017							
4/24/2017							
4/26/2017							
6/5/2017							
6/6/2017							
6/7/2017							
2/19/2018							
2/20/2018							
2/21/2018							
5/14/2018							
5/15/2018							
5/16/2018							
10/15/2018							
10/16/2018							
10/17/2018							
2/20/2019							
2/21/2019	<0.01						
2/26/2019		<0.01	<0.01				
2/27/2019				<0.01	<0.01		
3/13/2019						<0.01	
4/16/2019							
4/17/2019							
4/23/2019							
9/23/2019				0.00295 (J)			
9/24/2019			<0.01		<0.01		
9/25/2019	0.00202 (J)					<0.01	
3/16/2020						<0.01	<0.01
3/17/2020							
3/18/2020			<0.01				
3/24/2020	0.00774 (J)						
3/25/2020		<0.01		0.00547 (J)	<0.01		
5/12/2020						0.00281 (J)	<0.01
5/13/2020							

Time Series

Constituent: Chromium (mg/L) Analysis Run 7/27/2020 11:28 AM View: Time Series

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-35HO	GS-AP-MW-36H	GS-AP-MW-33HO	GS-AP-MW-30HA	GS-AP-MW-15V	GS-AP-MW-41HD	GS-AP-MW-31H	GS-AP-MW-9V	GS-AP-MW-42H
3/17/2020	<0.01	<0.01	<0.01						
3/18/2020				<0.01	0.00716 (J)	<0.01	0.00264 (J)		
3/23/2020								<0.01	
3/24/2020									<0.01
3/25/2020									
5/12/2020	<0.01								
5/13/2020		<0.01	<0.01	<0.01					

Time Series

Constituent: Chromium (mg/L) Analysis Run 7/27/2020 11:28 AM View: Time Series

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-38H	GS-AP-MW-21V	GS-AP-MW-25HA	GS-AP-MW-43HO	GS-AP-PZ-18	GS-AP-MW-32H	GS-AP-PZ-22	GS-AP-PZ-16
3/17/2020								
3/18/2020								
3/23/2020		<0.01						
3/24/2020	<0.01		<0.01			<0.01	<0.01	<0.01
3/25/2020				<0.01	<0.01			
5/12/2020								
5/13/2020								

Time Series

Constituent: Cobalt (mg/L) Analysis Run 7/27/2020 11:28 AM View: Time Series

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-8 (bg)	GS-AP-MW-13 (bg)	GS-AP-MW-2	GS-AP-MW-6D	GS-AP-MW-6S	GS-AP-MW-7	GS-AP-MW-9	GS-AP-MW-11	GS-AP-MW-12
8/1/2016									
8/2/2016		<0.005	<0.005			<0.005		<0.005	
8/3/2016	0.0026 (J)			<0.005	<0.005		<0.005		<0.005
9/19/2016			<0.005						
9/20/2016		<0.005		<0.005	<0.005				<0.005
9/21/2016	0.00362 (J)					<0.005	<0.005	<0.005	
10/24/2016			<0.005	<0.005		<0.005			
10/25/2016	0.00305 (J)	<0.005					<0.005	<0.005	<0.005
10/26/2016					<0.005				
12/12/2016				<0.005	0.00212 (J)	<0.005			
12/13/2016	<0.005	<0.005	<0.005				<0.005	<0.005	<0.005
12/14/2016									
2/6/2017	0.00308 (J)			<0.005	0.00247 (J)	<0.005			
2/7/2017									
2/8/2017		<0.005	<0.005				<0.005	<0.005	<0.005
3/27/2017				<0.005	0.00224 (J)				
3/28/2017	<0.005					<0.005	<0.005	<0.005	
3/29/2017		<0.005							<0.005
3/30/2017			<0.005						
4/24/2017	<0.005			<0.005	<0.005	<0.005			
4/26/2017		<0.005	<0.005				<0.005	<0.005	<0.005
6/5/2017									
6/6/2017			<0.005	<0.005	0.00222 (J)				
6/7/2017	<0.005	<0.005				<0.005	<0.005	<0.005	<0.005
2/19/2018	<0.005			<0.005	<0.005	<0.005			
2/20/2018		<0.005					<0.005	<0.005	<0.005
2/21/2018			<0.005						
5/14/2018				<0.005	<0.005				
5/15/2018	<0.005	<0.005				<0.005	<0.005	<0.005	<0.005
5/16/2018			<0.005						
10/15/2018				<0.005	<0.005	<0.005			
10/16/2018	<0.005		<0.005				<0.005	<0.005	<0.005
10/17/2018		<0.005							
2/20/2019									
2/21/2019									
2/26/2019									
2/27/2019									
3/13/2019									
4/16/2019	<0.005	<0.005		<0.005	<0.005		<0.005	<0.005	<0.005
4/17/2019			<0.005						
4/23/2019						0.00231 (J)			
9/23/2019				<0.005	<0.005				
9/24/2019	0.00234 (J)					<0.005			
9/25/2019			<0.005						<0.005
3/16/2020									
3/17/2020				<0.005	<0.005	0.00476 (J)			
3/18/2020	<0.005								<0.005
3/24/2020									
3/25/2020			<0.005						
5/12/2020									
5/13/2020			<0.005						

Time Series

Constituent: Cobalt (mg/L) Analysis Run 7/27/2020 11:28 AM View: Time Series

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-14	GS-AP-MW-15	GS-AP-MW-16D	GS-AP-MW-17	GS-AP-MW-18	GS-AP-MW-19	GS-AP-MW-21	GS-AP-MW-17V	GS-AP-MW-23H
8/1/2016		<0.005	<0.005	<0.005		<0.005			
8/2/2016	<0.005				<0.005		<0.005		
8/3/2016									
9/19/2016	<0.005		<0.005	<0.005					
9/20/2016		<0.005							
9/21/2016					<0.005	<0.005	<0.005		
10/24/2016				<0.005	<0.005	<0.005			
10/25/2016	<0.005	<0.005	<0.005				<0.005		
10/26/2016									
12/12/2016					<0.005				
12/13/2016	<0.005		<0.005	<0.005		<0.005			
12/14/2016		<0.005					<0.005		
2/6/2017				<0.005					
2/7/2017						<0.005			
2/8/2017	<0.005	<0.005	<0.005		<0.005		<0.005		
3/27/2017				<0.005					
3/28/2017	<0.005	<0.005			<0.005	<0.005	<0.005		
3/29/2017			<0.005						
3/30/2017									
4/24/2017				<0.005					
4/26/2017	<0.005	<0.005	<0.005		<0.005	<0.005	<0.005		
6/5/2017				<0.005					
6/6/2017		<0.005	<0.005		<0.005	<0.005	<0.005		
6/7/2017	<0.005								
2/19/2018				<0.005					
2/20/2018	<0.005	<0.005					<0.005		
2/21/2018			<0.005		<0.005	<0.005			
5/14/2018									
5/15/2018		<0.005		<0.005			<0.005		
5/16/2018	<0.005		<0.005		<0.005	<0.005			
10/15/2018		<0.005		<0.005					
10/16/2018					<0.005	<0.005	<0.005		
10/17/2018	<0.005		<0.005						
2/20/2019								<0.005	<0.005
2/21/2019									
2/26/2019									
2/27/2019									
3/13/2019									
4/16/2019	<0.005								
4/17/2019		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005		
4/23/2019									
9/23/2019				<0.005					<0.005
9/24/2019		<0.005	<0.005		<0.005	<0.005	<0.005	<0.005	
9/25/2019									
3/16/2020				<0.005					
3/17/2020									<0.005
3/18/2020		<0.005			<0.005		<0.005		
3/24/2020			<0.005			<0.005			
3/25/2020								<0.005	
5/12/2020				<0.005					
5/13/2020									

Time Series

Constituent: Cobalt (mg/L) Analysis Run 7/27/2020 11:28 AM View: Time Series

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-12V	GS-AP-MW-18V	GS-AP-MW-24H	GS-AP-MW-26H	GS-AP-MW-29H	GS-AP-MW-28H	GS-AP-MW-34HO
8/1/2016							
8/2/2016							
8/3/2016							
9/19/2016							
9/20/2016							
9/21/2016							
10/24/2016							
10/25/2016							
10/26/2016							
12/12/2016							
12/13/2016							
12/14/2016							
2/6/2017							
2/7/2017							
2/8/2017							
3/27/2017							
3/28/2017							
3/29/2017							
3/30/2017							
4/24/2017							
4/26/2017							
6/5/2017							
6/6/2017							
6/7/2017							
2/19/2018							
2/20/2018							
2/21/2018							
5/14/2018							
5/15/2018							
5/16/2018							
10/15/2018							
10/16/2018							
10/17/2018							
2/20/2019							
2/21/2019	<0.005						
2/26/2019		<0.005	<0.005				
2/27/2019				<0.005	<0.005		
3/13/2019						<0.005	
4/16/2019							
4/17/2019							
4/23/2019							
9/23/2019				<0.005			
9/24/2019			<0.005		<0.005		
9/25/2019	<0.005					<0.005	
3/16/2020						<0.005	<0.005
3/17/2020							
3/18/2020			<0.005				
3/24/2020	0.00277 (J)						
3/25/2020		<0.005		0.00207 (J)	<0.005		
5/12/2020						<0.005	<0.005
5/13/2020							

Time Series

Constituent: Cobalt (mg/L) Analysis Run 7/27/2020 11:28 AM View: Time Series

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-35HO	GS-AP-MW-36H	GS-AP-MW-33HO	GS-AP-MW-30HA	GS-AP-MW-15V	GS-AP-MW-41HD	GS-AP-MW-31H	GS-AP-MW-9V	GS-AP-MW-42H
3/17/2020	<0.005	<0.005	<0.005						
3/18/2020				<0.005	<0.005	<0.005	<0.005		
3/23/2020								<0.005	
3/24/2020									0.00218 (J)
3/25/2020									
5/12/2020	<0.005								
5/13/2020		<0.005	<0.005	<0.005					

Time Series

Constituent: Cobalt (mg/L) Analysis Run 7/27/2020 11:28 AM View: Time Series

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-38H	GS-AP-MW-21V	GS-AP-MW-25HA	GS-AP-MW-43HO	GS-AP-PZ-18	GS-AP-MW-32H	GS-AP-PZ-22	GS-AP-PZ-16
3/17/2020								
3/18/2020								
3/23/2020		<0.005						
3/24/2020	<0.005		<0.005			<0.005	<0.005	<0.005
3/25/2020				<0.005	0.00409 (J)			
5/12/2020								
5/13/2020								

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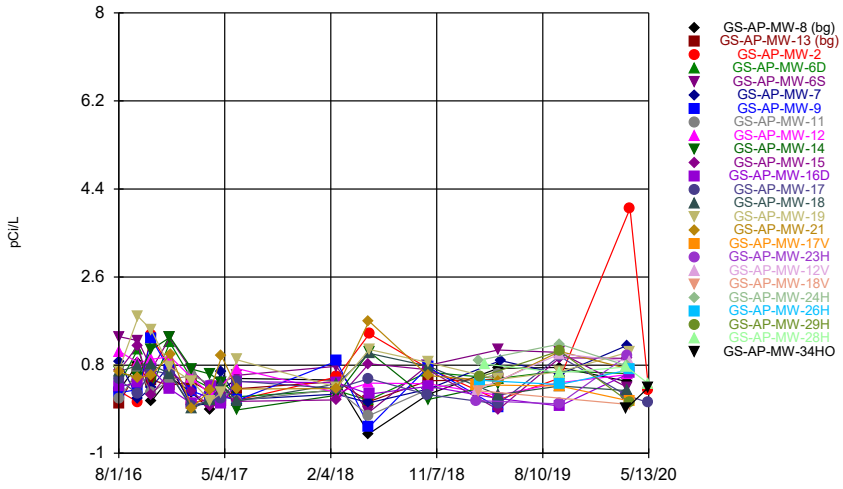
Time Series

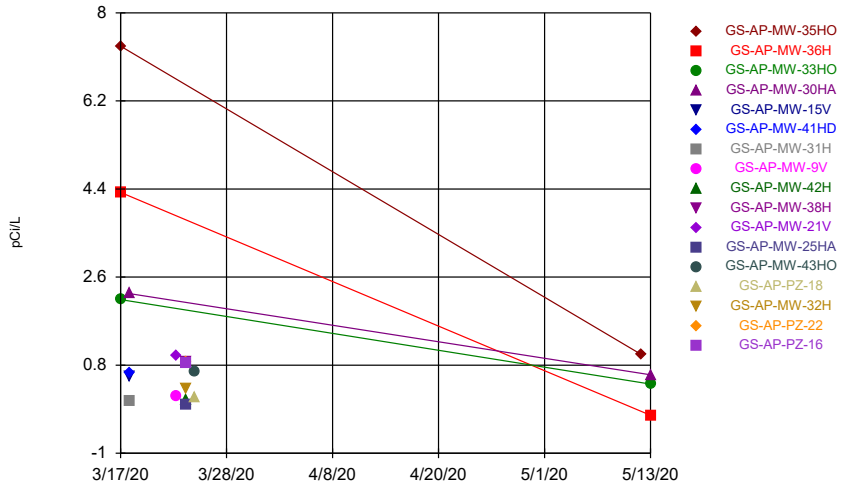


Constituent: Combined Radium 226 + 228 Analysis Run 7/27/2020 11:25 AM View: Time Series

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.24 Sanitas software licensed to Southern Company. UG

Time Series



Constituent: Combined Radium 226 + 228 Analysis Run 7/27/2020 11:25 AM View: Time Series

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

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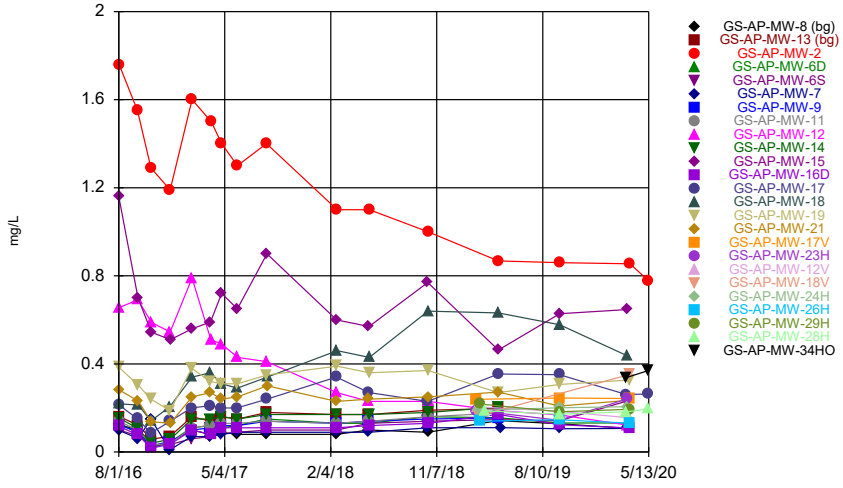
Hollow symbols indicate censored values.

Time Series

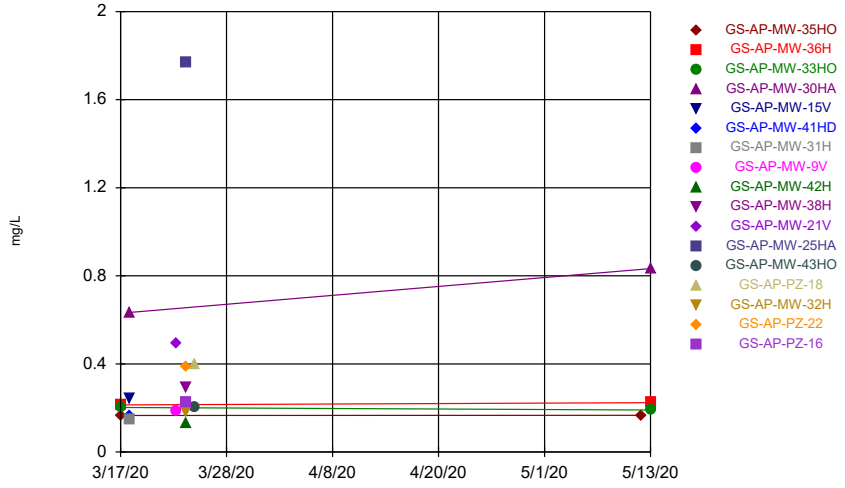


Constituent: Fluoride Analysis Run 7/27/2020 11:26 AM View: Time Series

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.24 Sanitas software licensed to Southern Company. UG

Time Series



Constituent: Fluoride Analysis Run 7/27/2020 11:26 AM View: Time Series

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 7/27/2020 11:28 AM View: Time Series

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-8 (bg)	GS-AP-MW-13 (bg)	GS-AP-MW-2	GS-AP-MW-6D	GS-AP-MW-6S	GS-AP-MW-7	GS-AP-MW-9	GS-AP-MW-11	GS-AP-MW-12
8/1/2016									
8/2/2016		0.0177 (U)	0.274 (U)			0.87		0.105 (U)	
8/3/2016	0.299 (U)			0.42 (U)	1.38		0.241 (U)		1.08
9/19/2016			0.0478 (U)						
9/20/2016		0.725		1.13	1.3				0.848
9/21/2016	0.835					0.107 (U)	0.304 (U)	0.694	
10/24/2016			1.41	0.327 (U)		0.337 (U)			
10/25/2016	0.0629 (U)	0.494 (U)					1.34	0.241 (U)	0.92
10/26/2016					0.721 (U)				
12/12/2016				1.26	1.36	0.803			
12/13/2016	0.547	0.39 (U)	0.733				0.683	0.499	0.974
12/14/2016									
2/6/2017	0.251 (U)			0.532	0.702	-0.0165 (U)			
2/7/2017									
2/8/2017		0.455 (U)	0.0206 (U)				0.27 (U)	0.596	0.535
3/27/2017				0.334 (U)	0.325 (U)				
3/28/2017	-0.109 (U)					0.00697 (U)	0.129 (U)		
3/29/2017		0.251 (U)						0.403 (U)	0.194 (U)
3/30/2017			0.122 (U)						
4/24/2017	0.293 (U)			0.492	0.436 (U)	0.672			
4/26/2017		0.0762 (U)	0.397 (U)				0.16 (U)	0.258 (U)	0.384 (U)
6/5/2017									
6/6/2017			0.0873 (U)	0.156 (U)	0.592				
6/7/2017	0.529	0.32 (U)				0.096 (U)	0.0871 (U)	0.077 (U)	0.729
2/19/2018	0.497			0.283 (U)	0.776	0.207 (U)			
2/20/2018		0.465					0.882	0.303 (U)	0.242 (U)
2/21/2018			0.562						
5/14/2018				0.083 (U)	-0.169 (U)				
5/15/2018	-0.601 (U)	0.0571 (U)				0.0311 (U)	-0.462 (U)	-0.232 (U)	0.433 (U)
5/16/2018			1.44						
10/15/2018				0.656	0.792	0.309 (U)			
10/16/2018	0.2 (U)		0.736				0.761	0.307 (U)	0.421 (U)
10/17/2018		0.482							
2/20/2019									
2/21/2019									
2/26/2019									
2/27/2019									
3/13/2019									
4/16/2019	0.733	0.506 (U)		0.528	1.11		-0.065 (U)	0.609 (U)	0.184 (U)
4/17/2019			0.0905 (U)						
4/23/2019						0.894			
9/23/2019				0.677	1.06				
9/24/2019	0.753					0.618 (U)			
9/25/2019			0.537 (U)						0.442 (U)
3/16/2020									
3/17/2020				0.629	0.351 (U)	1.2			
3/18/2020	0.465 (U)								0.605
3/24/2020									
3/25/2020			4						
5/12/2020									
5/13/2020			0.289 (U)						

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 7/27/2020 11:28 AM View: Time Series

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-14	GS-AP-MW-15	GS-AP-MW-16D	GS-AP-MW-17	GS-AP-MW-18	GS-AP-MW-19	GS-AP-MW-21	GS-AP-MW-17V	GS-AP-MW-23H
8/1/2016		0.682	0.363 (U)	0.508 (U)		0.697 (U)			
8/2/2016	0.657				0.665		0.665		
8/3/2016									
9/19/2016	0.543		0.435 (U)	0.216 (U)					
9/20/2016		1.2							
9/21/2016					0.801	1.79	0.532 (U)		
10/24/2016				0.694	0.809	1.53			
10/25/2016	1.12	0.194 (U)	0.725				0.601		
10/26/2016									
12/12/2016					0.628 (U)				
12/13/2016	1.37		0.309 (U)	0.614		0.758			
12/14/2016		0.688					1.02		
2/6/2017				-0.0283 (U)					
2/7/2017						0.473			
2/8/2017	0.717	0.254 (U)	0.00772 (U)		-0.0851 (U)		-0.074 (U)		
3/27/2017				0.0736 (U)					
3/28/2017	0.618	-0.0411 (U)			0.0973 (U)	0.0705 (U)	0.3 (U)		
3/29/2017			0.36 (U)						
3/30/2017									
4/24/2017				0.114 (U)					
4/26/2017	0.442	0.207 (U)	0.0175 (U)		0.388 (U)	0.238 (U)	0.982 (U)		
6/5/2017				0.476					
6/6/2017		0.0618 (U)	0.464		0.0674 (U)	0.909	0.312 (U)		
6/7/2017	-0.113 (U)								
2/19/2018				0.322 (U)					
2/20/2018	0.186 (U)	0.0898 (U)					0.321 (U)		
2/21/2018			0.44		0.418 (U)	0.349 (U)			
5/14/2018									
5/15/2018		0.829		0.526			1.7		
5/16/2018	1.07		0.209 (U)		1.04	1.12			
10/15/2018		0.708		0.199 (U)					
10/16/2018					0.779	0.856	0.586		
10/17/2018	0.101 (U)		0.368 (U)						
2/20/2019								0.398 (U)	0.0759 (U)
2/21/2019									
2/26/2019									
2/27/2019									
3/13/2019									
4/16/2019	0.408 (U)								
4/17/2019		-0.11 (U)	0.121 (U)	0.00935 (U)	0.196 (U)	0.507 (U)	0.47 (U)		
4/23/2019									
9/23/2019				0.983					0.00709 (U)
9/24/2019		0.951	-0.033 (U)		0.375 (U)	0.664	1.08	0.373 (U)	
9/25/2019									
3/16/2020				0.185 (U)					
3/17/2020									0.989
3/18/2020		0.939			0.281 (U)		0.732		
3/24/2020			0.636			1.07			
3/25/2020								0.0656 (U)	
5/12/2020				0.0339 (U)					
5/13/2020									

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 7/27/2020 11:28 AM View: Time Series

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-12V	GS-AP-MW-18V	GS-AP-MW-24H	GS-AP-MW-26H	GS-AP-MW-29H	GS-AP-MW-28H	GS-AP-MW-34HO
8/1/2016							
8/2/2016							
8/3/2016							
9/19/2016							
9/20/2016							
9/21/2016							
10/24/2016							
10/25/2016							
10/26/2016							
12/12/2016							
12/13/2016							
12/14/2016							
2/6/2017							
2/7/2017							
2/8/2017							
3/27/2017							
3/28/2017							
3/29/2017							
3/30/2017							
4/24/2017							
4/26/2017							
6/5/2017							
6/6/2017							
6/7/2017							
2/19/2018							
2/20/2018							
2/21/2018							
5/14/2018							
5/15/2018							
5/16/2018							
10/15/2018							
10/16/2018							
10/17/2018							
2/20/2019							
2/21/2019	0.296 (U)						
2/26/2019		0.278 (U)	0.9				
2/27/2019				0.492	0.556		
3/13/2019						0.824	
4/16/2019							
4/17/2019							
4/23/2019							
9/23/2019				0.404 (U)			
9/24/2019			1.23		1.09		
9/25/2019	1.03					0.648 (U)	
3/16/2020						0.762 (U)	-0.085 (U)
3/17/2020							
3/18/2020			0.788				
3/24/2020	0.877 (U)						
3/25/2020		-0.00344 (U)		0.707 (U)	0.036 (U)		
5/12/2020						0.425 (U)	0.345 (U)
5/13/2020							

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 7/27/2020 11:28 AM View: Time Series

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-35HO	GS-AP-MW-36H	GS-AP-MW-33HO	GS-AP-MW-30HA	GS-AP-MW-15V	GS-AP-MW-41HD	GS-AP-MW-31H	GS-AP-MW-9V	GS-AP-MW-42H
3/17/2020	7.32	4.33	2.14						
3/18/2020				2.26	0.566 (U)	0.64	0.0549 (U)		
3/23/2020								0.156 (U)	
3/24/2020									0.0821 (U)
3/25/2020									
5/12/2020	1.02								
5/13/2020		-0.225 (U)	0.415 (U)	0.604					

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 7/27/2020 11:28 AM View: Time Series

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-38H	GS-AP-MW-21V	GS-AP-MW-25HA	GS-AP-MW-43HO	GS-AP-PZ-18	GS-AP-MW-32H	GS-AP-PZ-22	GS-AP-PZ-16
3/17/2020								
3/18/2020								
3/23/2020		0.982						
3/24/2020	0.862		-0.00194 (U)			0.313 (U)	0.878	0.847
3/25/2020				0.678 (U)	0.13 (U)			
5/12/2020								
5/13/2020								

Time Series

Constituent: Fluoride (mg/L) Analysis Run 7/27/2020 11:28 AM View: Time Series

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-8 (bg)	GS-AP-MW-13 (bg)	GS-AP-MW-2	GS-AP-MW-6D	GS-AP-MW-6S	GS-AP-MW-7	GS-AP-MW-9	GS-AP-MW-11	GS-AP-MW-12
8/1/2016									
8/2/2016		0.161 (J)	1.76			0.098 (J)		0.14 (J)	
8/3/2016	0.125 (J)			0.127 (J)	0.099 (J)		0.123 (J)		0.656
9/19/2016			1.55						
9/20/2016		0.122 (J)		0.087 (J)	0.074 (J)				0.691
9/21/2016	0.098 (J)					0.061 (J)	0.09 (J)	0.098 (J)	
10/24/2016			1.29	0.019 (J)		<0.3			
10/25/2016	0.025 (J)	0.058 (J)					0.028 (J)	0.031 (J)	0.588
10/26/2016					0.032 (J)				
12/12/2016				0.043 (J)	0.034 (J)	0.01 (J)			
12/13/2016	0.045 (J)	0.072 (J)	1.19				0.049 (J)	0.04 (J)	0.545
12/14/2016									
2/6/2017	0.1 (D)			0.11 (D)	0.06 (JD)	0.07 (JD)			
2/7/2017									
2/8/2017		0.16 (D)	1.6 (D)				0.1 (D)	0.11 (D)	0.79 (D)
3/27/2017				0.12 (D)	0.07 (JD)				
3/28/2017	0.08 (JD)					0.07 (JD)	0.11 (D)	0.12 (D)	
3/29/2017		0.14 (D)							0.51 (D)
3/30/2017			1.5 (D)						
4/24/2017	0.09 (JD)			0.11 (D)	0.08 (JD)	0.08 (JD)			
4/26/2017		0.16 (D)	1.4 (D)				0.12 (D)	0.13 (D)	0.49 (D)
6/5/2017									
6/6/2017			1.3	0.12	0.09 (J)				
6/7/2017	0.08 (J)	0.15				0.09 (J)	0.12	0.13	0.43
8/21/2017	0.08 (J)		1.4	0.15	0.1	0.09 (J)			
8/22/2017		0.18					0.14	0.14	0.41
8/23/2017									
2/19/2018	0.08 (J)			0.13	0.1	0.09 (J)			
2/20/2018		0.17					0.13	0.13	0.27
2/21/2018			1.1						
5/14/2018				0.13	0.13				
5/15/2018	0.1	0.17				0.09 (J)	0.14	0.14	0.23
5/16/2018			1.1						
10/15/2018				0.16	0.14	0.11			
10/16/2018	0.09 (J)		1				0.15	0.16	0.23
10/17/2018		0.19							
2/20/2019									
2/21/2019									
2/26/2019									
2/27/2019									
3/13/2019									
4/16/2019	0.143	0.197		0.156	0.147		0.154	0.177	0.188
4/17/2019			0.868						
4/23/2019						0.111			
9/23/2019				0.132	0.142 (D)				
9/24/2019	0.128					0.106			
9/25/2019			0.86						0.168
3/16/2020									
3/17/2020				0.132	0.231	0.107			
3/18/2020	0.108								0.122
3/24/2020									
3/25/2020			0.855						

Time Series

Constituent: Fluoride (mg/L) Analysis Run 7/27/2020 11:28 AM View: Time Series

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-8 (bg)	GS-AP-MW-13 (bg)	GS-AP-MW-2	GS-AP-MW-6D	GS-AP-MW-6S	GS-AP-MW-7	GS-AP-MW-9	GS-AP-MW-11	GS-AP-MW-12
5/12/2020									
5/13/2020			0.777						

Time Series

Constituent: Fluoride (mg/L) Analysis Run 7/27/2020 11:28 AM View: Time Series

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-14	GS-AP-MW-15	GS-AP-MW-16D	GS-AP-MW-17	GS-AP-MW-18	GS-AP-MW-19	GS-AP-MW-21	GS-AP-MW-17V	GS-AP-MW-23H
8/1/2016		1.16	0.117 (J)	0.214 (J)		0.385			
8/2/2016	0.154 (J)				0.219 (J)		0.282 (J)		
8/3/2016									
9/19/2016	0.108 (J)		0.078 (J)	0.151 (J)					
9/20/2016		0.7							
9/21/2016					0.213 (J)	0.303	0.231 (J)		
10/24/2016				0.086 (J)	0.141 (J)	0.24 (J)			
10/25/2016	0.04 (J)	0.544	0.018 (J)				0.137 (J)		
10/26/2016									
12/12/2016					0.206 (J)				
12/13/2016	0.058 (J)		0.035 (J)	0.14 (J)		0.188 (J)			
12/14/2016		0.51					0.131 (J)		
2/6/2017				0.2 (D)					
2/7/2017						0.38 (D)			
2/8/2017	0.15 (D)	0.56 (D)	0.1 (D)		0.34 (D)		0.25 (D)		
3/27/2017				0.21 (D)					
3/28/2017	0.15 (D)	0.59 (D)			0.36 (D)	0.32 (D)	0.27 (D)		
3/29/2017			0.08 (JD)						
3/30/2017									
4/24/2017				0.2 (D)					
4/26/2017	0.16 (D)	0.72 (D)	0.11 (D)		0.31 (D)	0.31 (D)	0.24 (D)		
6/5/2017				0.2					
6/6/2017		0.65	0.11		0.29	0.31	0.25		
6/7/2017	0.15								
8/21/2017									
8/22/2017	0.17	0.9	0.11	0.24		0.35			
8/23/2017					0.34		0.3		
2/19/2018				0.34					
2/20/2018	0.17	0.6					0.23		
2/21/2018			0.11		0.46	0.39			
5/14/2018									
5/15/2018		0.57		0.27			0.24		
5/16/2018	0.17		0.12		0.43	0.36			
10/15/2018		0.77		0.23					
10/16/2018					0.64	0.37	0.25		
10/17/2018	0.18		0.13						
2/20/2019								0.239	0.188
2/21/2019									
2/26/2019									
2/27/2019									
3/13/2019									
4/16/2019	0.204								
4/17/2019		0.463	0.171	0.354	0.632	0.27	0.272		
4/23/2019									
9/23/2019				0.351					0.144
9/24/2019		0.628	0.124		0.578	0.307 (D)	0.209	0.245	
9/25/2019									
3/16/2020				0.261					
3/17/2020									0.241
3/18/2020		0.647			0.437		0.234		
3/24/2020			0.109			0.327			
3/25/2020								0.243	

Time Series

Constituent: Fluoride (mg/L) Analysis Run 7/27/2020 11:28 AM View: Time Series

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-14	GS-AP-MW-15	GS-AP-MW-16D	GS-AP-MW-17	GS-AP-MW-18	GS-AP-MW-19	GS-AP-MW-21	GS-AP-MW-17V	GS-AP-MW-23H
5/12/2020				0.263					
5/13/2020									

Time Series

Constituent: Fluoride (mg/L) Analysis Run 7/27/2020 11:28 AM View: Time Series

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-12V	GS-AP-MW-18V	GS-AP-MW-24H	GS-AP-MW-26H	GS-AP-MW-29H	GS-AP-MW-28H	GS-AP-MW-34HO
8/1/2016							
8/2/2016							
8/3/2016							
9/19/2016							
9/20/2016							
9/21/2016							
10/24/2016							
10/25/2016							
10/26/2016							
12/12/2016							
12/13/2016							
12/14/2016							
2/6/2017							
2/7/2017							
2/8/2017							
3/27/2017							
3/28/2017							
3/29/2017							
3/30/2017							
4/24/2017							
4/26/2017							
6/5/2017							
6/6/2017							
6/7/2017							
8/21/2017							
8/22/2017							
8/23/2017							
2/19/2018							
2/20/2018							
2/21/2018							
5/14/2018							
5/15/2018							
5/16/2018							
10/15/2018							
10/16/2018							
10/17/2018							
2/20/2019							
2/21/2019	0.205						
2/26/2019		0.165	0.19				
2/27/2019				0.14	0.218		
3/13/2019						0.187	
4/16/2019							
4/17/2019							
4/23/2019							
9/23/2019				0.146			
9/24/2019			0.201		0.183		
9/25/2019	0.185					0.172	
3/16/2020						0.183	0.338
3/17/2020							
3/18/2020			0.206				
3/24/2020	0.155						
3/25/2020		0.353		0.131	0.194		

Time Series

Constituent: Fluoride (mg/L) Analysis Run 7/27/2020 11:28 AM View: Time Series

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-12V	GS-AP-MW-18V	GS-AP-MW-24H	GS-AP-MW-26H	GS-AP-MW-29H	GS-AP-MW-28H	GS-AP-MW-34HO
5/12/2020						0.195	0.37
5/13/2020							

Time Series

Constituent: Fluoride (mg/L) Analysis Run 7/27/2020 11:28 AM View: Time Series

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-35HO	GS-AP-MW-36H	GS-AP-MW-33HO	GS-AP-MW-30HA	GS-AP-MW-15V	GS-AP-MW-41HD	GS-AP-MW-31H	GS-AP-MW-9V	GS-AP-MW-42H
3/17/2020	0.166	0.214	0.202						
3/18/2020				0.634	0.243	0.165	0.15		
3/23/2020								0.187	
3/24/2020									0.13
3/25/2020									
5/12/2020	0.167								
5/13/2020		0.224	0.191	0.833					

Time Series

Constituent: Fluoride (mg/L) Analysis Run 7/27/2020 11:28 AM View: Time Series

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-38H	GS-AP-MW-21V	GS-AP-MW-25HA	GS-AP-MW-43HO	GS-AP-PZ-18	GS-AP-MW-32H	GS-AP-PZ-22	GS-AP-PZ-16
3/17/2020								
3/18/2020								
3/23/2020		0.494						
3/24/2020	0.291		1.77			0.18	0.387	0.228
3/25/2020				0.204	0.396			
5/12/2020								
5/13/2020								

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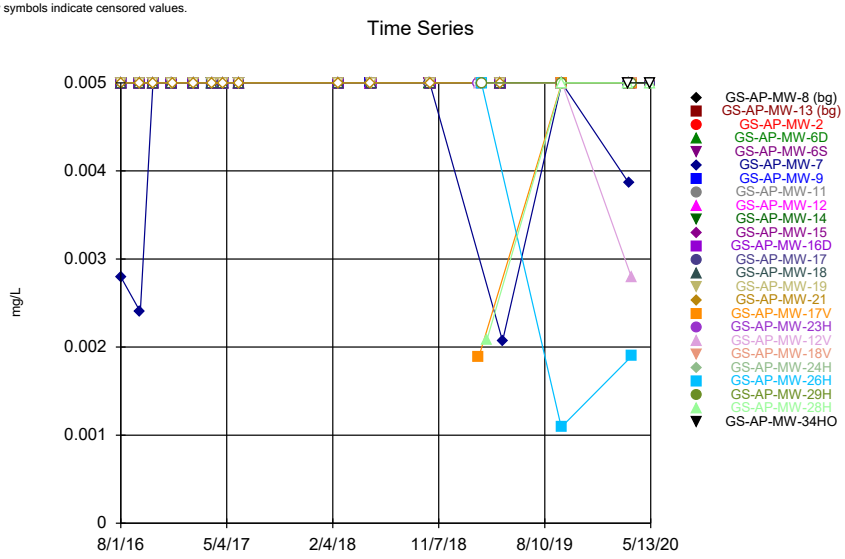
Hollow symbols indicate censored values.



Constituent: Lead Analysis Run 7/27/2020 11:26 AM View: Time Series
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

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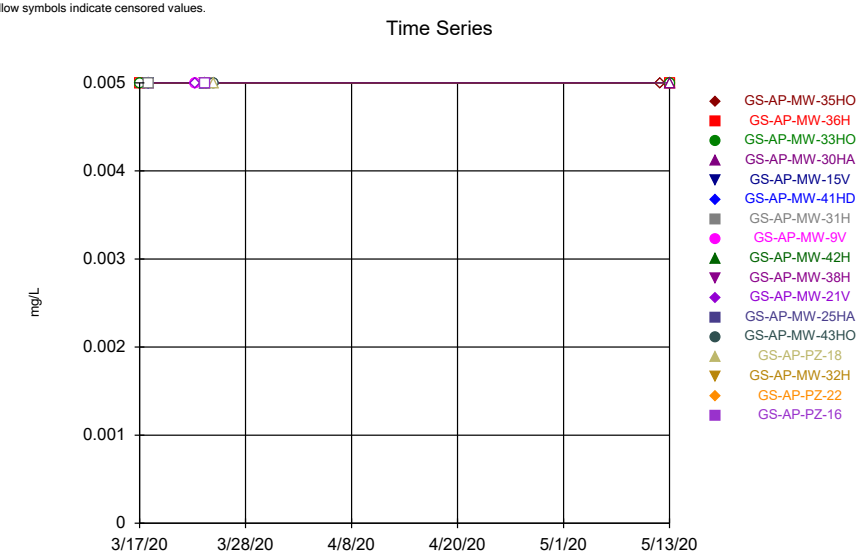
Hollow symbols indicate censored values.



Constituent: Lead Analysis Run 7/27/2020 11:26 AM View: Time Series
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

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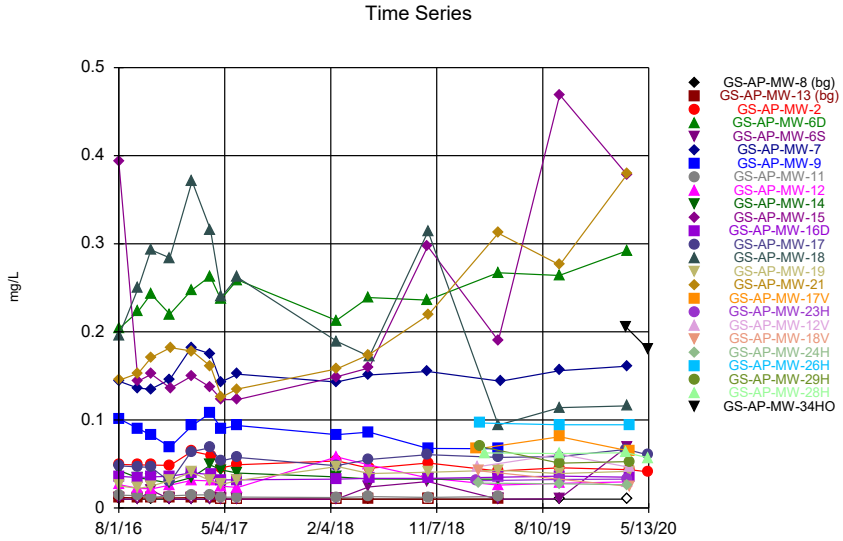
Hollow symbols indicate censored values.



Constituent: Lithium Analysis Run 7/27/2020 11:26 AM View: Time Series
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

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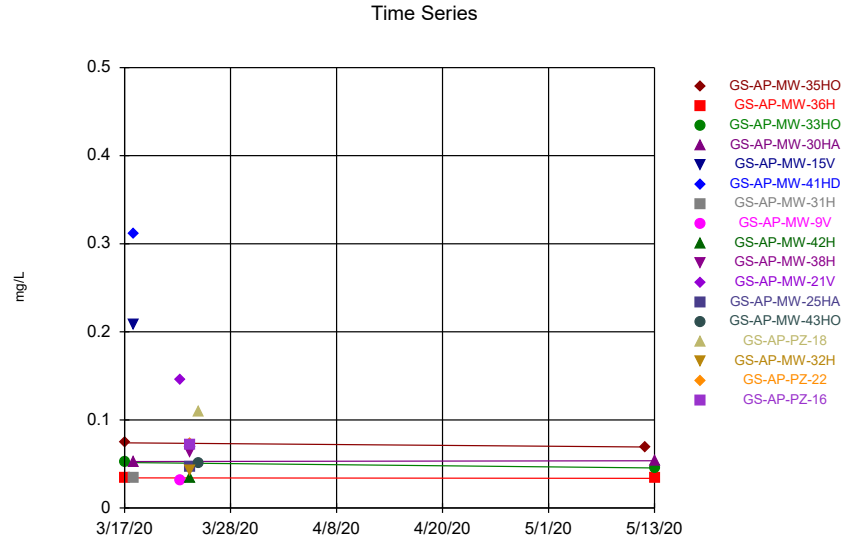

Constituent: Lithium Analysis Run 7/27/2020 11:26 AM View: Time Series
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

Time Series

Constituent: Lead (mg/L) Analysis Run 7/27/2020 11:28 AM View: Time Series

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-8 (bg)	GS-AP-MW-13 (bg)	GS-AP-MW-2	GS-AP-MW-6D	GS-AP-MW-6S	GS-AP-MW-7	GS-AP-MW-9	GS-AP-MW-11	GS-AP-MW-12
8/1/2016									
8/2/2016		<0.005	<0.005			0.00279 (J)		<0.005	
8/3/2016	<0.005			<0.005	<0.005		<0.005		<0.005
9/19/2016			<0.005						
9/20/2016		<0.005		<0.005	<0.005				<0.005
9/21/2016	<0.005					0.0024 (J)	<0.005	<0.005	
10/24/2016			<0.005	<0.005		<0.005			
10/25/2016	<0.005	<0.005					<0.005	<0.005	<0.005
10/26/2016					<0.005				
12/12/2016				<0.005	<0.005	<0.005			
12/13/2016	<0.005	<0.005	<0.005				<0.005	<0.005	<0.005
12/14/2016									
2/6/2017	<0.005			<0.005	<0.005	<0.005			
2/7/2017									
2/8/2017		<0.005	<0.005				<0.005	<0.005	<0.005
3/27/2017				<0.005	<0.005				
3/28/2017	<0.005					<0.005	<0.005	<0.005	
3/29/2017		<0.005							<0.005
3/30/2017			<0.005						
4/24/2017	<0.005			<0.005	<0.005	<0.005			
4/26/2017		<0.005	<0.005				<0.005	<0.005	<0.005
6/5/2017									
6/6/2017			<0.005	<0.005	<0.005				
6/7/2017	<0.005	<0.005				<0.005	<0.005	<0.005	<0.005
2/19/2018	<0.005			<0.005	<0.005	<0.005			
2/20/2018		<0.005					<0.005	<0.005	<0.005
2/21/2018			<0.005						
5/14/2018				<0.005	<0.005				
5/15/2018	<0.005	<0.005				<0.005	<0.005	<0.005	<0.005
5/16/2018			<0.005						
10/15/2018				<0.005	<0.005	<0.005			
10/16/2018	<0.005		<0.005				<0.005	<0.005	<0.005
10/17/2018		<0.005							
2/20/2019									
2/21/2019									
2/26/2019									
2/27/2019									
3/13/2019									
4/16/2019	<0.005	<0.005		<0.005	<0.005		<0.005	<0.005	<0.005
4/17/2019			<0.005						
4/23/2019						0.00207 (J)			
9/23/2019				<0.005	<0.005				
9/24/2019	<0.005					<0.005			
9/25/2019			<0.005						<0.005
3/16/2020									
3/17/2020				<0.005	<0.005	0.00386 (J)			
3/18/2020	<0.005								<0.005
3/24/2020									
3/25/2020			<0.005						
5/12/2020									
5/13/2020			<0.005						

Time Series

Constituent: Lead (mg/L) Analysis Run 7/27/2020 11:28 AM View: Time Series

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-14	GS-AP-MW-15	GS-AP-MW-16D	GS-AP-MW-17	GS-AP-MW-18	GS-AP-MW-19	GS-AP-MW-21	GS-AP-MW-17V	GS-AP-MW-23H
8/1/2016		<0.005	<0.005	<0.005		<0.005			
8/2/2016	<0.005				<0.005		<0.005		
8/3/2016									
9/19/2016	<0.005		<0.005	<0.005					
9/20/2016		<0.005							
9/21/2016					<0.005	<0.005	<0.005		
10/24/2016				<0.005	<0.005	<0.005			
10/25/2016	<0.005	<0.005	<0.005				<0.005		
10/26/2016									
12/12/2016					<0.005				
12/13/2016	<0.005		<0.005	<0.005		<0.005			
12/14/2016		<0.005					<0.005		
2/6/2017				<0.005					
2/7/2017						<0.005			
2/8/2017	<0.005	<0.005	<0.005		<0.005		<0.005		
3/27/2017				<0.005					
3/28/2017	<0.005	<0.005			<0.005	<0.005	<0.005		
3/29/2017			<0.005						
3/30/2017									
4/24/2017				<0.005					
4/26/2017	<0.005	<0.005	<0.005		<0.005	<0.005	<0.005		
6/5/2017				<0.005					
6/6/2017		<0.005	<0.005		<0.005	<0.005	<0.005		
6/7/2017	<0.005								
2/19/2018				<0.005					
2/20/2018	<0.005	<0.005					<0.005		
2/21/2018			<0.005		<0.005	<0.005			
5/14/2018									
5/15/2018		<0.005		<0.005			<0.005		
5/16/2018	<0.005		<0.005		<0.005	<0.005			
10/15/2018		<0.005		<0.005					
10/16/2018					<0.005	<0.005	<0.005		
10/17/2018	<0.005		<0.005						
2/20/2019								0.00189 (J)	<0.005
2/21/2019									
2/26/2019									
2/27/2019									
3/13/2019									
4/16/2019	<0.005								
4/17/2019		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005		
4/23/2019									
9/23/2019				<0.005					<0.005
9/24/2019		<0.005	<0.005		<0.005	<0.005	<0.005	<0.005	
9/25/2019									
3/16/2020				<0.005					
3/17/2020									<0.005
3/18/2020		<0.005			<0.005		<0.005		
3/24/2020			<0.005			<0.005			
3/25/2020								<0.005	
5/12/2020				<0.005					
5/13/2020									

Time Series

Constituent: Lead (mg/L) Analysis Run 7/27/2020 11:28 AM View: Time Series

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-12V	GS-AP-MW-18V	GS-AP-MW-24H	GS-AP-MW-26H	GS-AP-MW-29H	GS-AP-MW-28H	GS-AP-MW-34HO
8/1/2016							
8/2/2016							
8/3/2016							
9/19/2016							
9/20/2016							
9/21/2016							
10/24/2016							
10/25/2016							
10/26/2016							
12/12/2016							
12/13/2016							
12/14/2016							
2/6/2017							
2/7/2017							
2/8/2017							
3/27/2017							
3/28/2017							
3/29/2017							
3/30/2017							
4/24/2017							
4/26/2017							
6/5/2017							
6/6/2017							
6/7/2017							
2/19/2018							
2/20/2018							
2/21/2018							
5/14/2018							
5/15/2018							
5/16/2018							
10/15/2018							
10/16/2018							
10/17/2018							
2/20/2019							
2/21/2019	<0.005						
2/26/2019		<0.005	<0.005				
2/27/2019				<0.005	<0.005		
3/13/2019						0.00208 (J)	
4/16/2019							
4/17/2019							
4/23/2019							
9/23/2019				0.00109 (J)			
9/24/2019			<0.005		<0.005		
9/25/2019	<0.005					<0.005	
3/16/2020						<0.005	<0.005
3/17/2020							
3/18/2020			<0.005				
3/24/2020	0.00279 (J)						
3/25/2020		<0.005		0.0019 (J)	<0.005		
5/12/2020						<0.005	<0.005
5/13/2020							

Time Series

Constituent: Lead (mg/L) Analysis Run 7/27/2020 11:28 AM View: Time Series

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-35HO	GS-AP-MW-36H	GS-AP-MW-33HO	GS-AP-MW-30HA	GS-AP-MW-15V	GS-AP-MW-41HD	GS-AP-MW-31H	GS-AP-MW-9V	GS-AP-MW-42H
3/17/2020	<0.005	<0.005	<0.005						
3/18/2020				<0.005	<0.005	<0.005	<0.005		
3/23/2020								<0.005	
3/24/2020									<0.005
3/25/2020									
5/12/2020	<0.005								
5/13/2020		<0.005	<0.005	<0.005					

Time Series

Constituent: Lead (mg/L) Analysis Run 7/27/2020 11:28 AM View: Time Series

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-38H	GS-AP-MW-21V	GS-AP-MW-25HA	GS-AP-MW-43HO	GS-AP-PZ-18	GS-AP-MW-32H	GS-AP-PZ-22	GS-AP-PZ-16
3/17/2020								
3/18/2020								
3/23/2020		<0.005						
3/24/2020	<0.005		<0.005			<0.005	<0.005	<0.005
3/25/2020				<0.005	<0.005			
5/12/2020								
5/13/2020								

Time Series

Constituent: Lithium (mg/L) Analysis Run 7/27/2020 11:28 AM View: Time Series

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-8 (bg)	GS-AP-MW-13 (bg)	GS-AP-MW-2	GS-AP-MW-6D	GS-AP-MW-6S	GS-AP-MW-7	GS-AP-MW-9	GS-AP-MW-11	GS-AP-MW-12
8/1/2016									
8/2/2016		0.0121 (J)	0.0495 (J)			0.144		0.0146 (J)	
8/3/2016	<0.02			0.204	<0.02		0.101		0.0265 (J)
9/19/2016			0.049 (J)						
9/20/2016		0.0116 (J)		0.223	<0.02				0.0225 (J)
9/21/2016	<0.02					0.136	0.0902	0.0141 (J)	
10/24/2016			0.0488 (J)	0.243		0.135			
10/25/2016	<0.02	0.0114 (J)					0.0825	0.012 (J)	0.0217 (J)
10/26/2016					0.0199 (J)				
12/12/2016				0.22	<0.02	0.146			
12/13/2016	<0.02	0.0116 (J)	0.0483 (J)				0.0693	0.0138 (J)	0.026 (J)
12/14/2016									
2/6/2017	<0.02			0.247	<0.02	0.182			
2/7/2017									
2/8/2017		0.0118 (J)	0.0644				0.0935	0.0148 (J)	0.0315 (J)
3/27/2017				0.263	<0.02				
3/28/2017	<0.02					0.175	0.108	0.0149 (J)	
3/29/2017		0.0118 (J)							0.0308 (J)
3/30/2017			0.0597						
4/24/2017	<0.02			0.237	<0.02	0.143			
4/26/2017		<0.02	0.0459 (J)				0.0901	0.0123 (J)	0.0248 (J)
6/5/2017									
6/6/2017			0.0491 (J)	0.259	<0.02				
6/7/2017	<0.02	<0.02				0.152	0.0937	0.0125 (J)	0.0234 (J)
2/19/2018	<0.02			0.213	<0.02	0.143			
2/20/2018		<0.02					0.0833	0.0119 (J)	0.058
2/21/2018			0.0534						
5/14/2018				0.239	0.0238 (J)				
5/15/2018	<0.02	0.0101				0.151	0.0861	0.013 (J)	0.0489 (J)
5/16/2018			0.0451 (J)						
10/15/2018				0.236	0.03	0.155			
10/16/2018	<0.02		0.0511				0.0676	0.012 (J)	0.0341
10/17/2018		<0.02							
2/20/2019									
2/21/2019									
2/26/2019									
2/27/2019									
3/13/2019									
4/16/2019	<0.02	0.0101 (J)		0.267	<0.02		0.0673	0.0129 (J)	0.0261
4/17/2019			0.0421						
4/23/2019						0.144			
9/23/2019				0.264	0.0105 (J)				
9/24/2019	<0.02					0.156			
9/25/2019			0.0457						0.028
3/16/2020									
3/17/2020				0.292	0.0695	0.161			
3/18/2020	<0.02								0.0297
3/24/2020									
3/25/2020			0.0434						
5/12/2020									
5/13/2020			0.0409						

Time Series

Constituent: Lithium (mg/L) Analysis Run 7/27/2020 11:28 AM View: Time Series

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-14	GS-AP-MW-15	GS-AP-MW-16D	GS-AP-MW-17	GS-AP-MW-18	GS-AP-MW-19	GS-AP-MW-21	GS-AP-MW-17V	GS-AP-MW-23H
8/1/2016		0.393	0.036 (J)	0.0479 (J)		0.0252 (J)			
8/2/2016	0.0425 (J)				0.196		0.145		
8/3/2016									
9/19/2016	0.0344 (J)		0.0346 (J)	0.0467 (J)					
9/20/2016		0.144							
9/21/2016					0.25	0.0223 (J)	0.153		
10/24/2016				0.0462 (J)	0.293	0.0247 (J)			
10/25/2016	0.0321 (J)	0.152	0.0353 (J)				0.171		
10/26/2016									
12/12/2016					0.284 (J)				
12/13/2016	0.0281 (J)		0.0361 (J)	0.0296 (J)		0.0312 (J)			
12/14/2016		0.136					0.182		
2/6/2017				0.064					
2/7/2017						0.0406 (J)			
2/8/2017	0.0348 (J)	0.15	0.0401 (J)		0.371		0.178		
3/27/2017				0.0683					
3/28/2017	0.0488 (J)	0.137			0.316	0.0309 (J)	0.161		
3/29/2017			0.0379 (J)						
3/30/2017									
4/24/2017				0.0534					
4/26/2017	0.0431 (J)	0.123	0.0318 (J)		0.24	0.0267 (J)	0.126		
6/5/2017				0.0574					
6/6/2017		0.123	0.032 (J)		0.262	0.0311 (J)	0.135		
6/7/2017	0.0397 (J)								
2/19/2018				0.0481 (J)					
2/20/2018	0.0353 (J)	0.149					0.158		
2/21/2018			0.0327 (J)		0.189	0.0472 (J)			
5/14/2018									
5/15/2018		0.159		0.0551			0.174		
5/16/2018	0.033 (J)		0.0337 (J)		0.172	0.0391 (J)			
10/15/2018		0.297		0.0606					
10/16/2018					0.314	0.0406	0.219		
10/17/2018	0.0327		0.0336						
2/20/2019								0.0671	0.031
2/21/2019									
2/26/2019									
2/27/2019									
3/13/2019									
4/16/2019	0.0328								
4/17/2019		0.19	0.0349	0.0574	0.0942	0.0429	0.312		
4/23/2019									
9/23/2019				0.0583					0.0324
9/24/2019		0.469	0.0362		0.114	0.0392	0.276	0.0809	
9/25/2019									
3/16/2020				0.0665					
3/17/2020									0.0327
3/18/2020		0.378			0.116		0.379		
3/24/2020			0.035			0.0417			
3/25/2020								0.0646	
5/12/2020				0.0602					
5/13/2020									

Time Series

Constituent: Lithium (mg/L) Analysis Run 7/27/2020 11:28 AM View: Time Series

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-12V	GS-AP-MW-18V	GS-AP-MW-24H	GS-AP-MW-26H	GS-AP-MW-29H	GS-AP-MW-28H	GS-AP-MW-34HO
8/1/2016							
8/2/2016							
8/3/2016							
9/19/2016							
9/20/2016							
9/21/2016							
10/24/2016							
10/25/2016							
10/26/2016							
12/12/2016							
12/13/2016							
12/14/2016							
2/6/2017							
2/7/2017							
2/8/2017							
3/27/2017							
3/28/2017							
3/29/2017							
3/30/2017							
4/24/2017							
4/26/2017							
6/5/2017							
6/6/2017							
6/7/2017							
2/19/2018							
2/20/2018							
2/21/2018							
5/14/2018							
5/15/2018							
5/16/2018							
10/15/2018							
10/16/2018							
10/17/2018							
2/20/2019							
2/21/2019	0.0468						
2/26/2019		0.0423	0.0282				
2/27/2019				0.0966	0.07		
3/13/2019						0.0625	
4/16/2019							
4/17/2019							
4/23/2019							
9/23/2019				0.0945			
9/24/2019			0.0275		0.0509		
9/25/2019	0.0611					0.0619	
3/16/2020						0.0627	0.205
3/17/2020							
3/18/2020			0.0264				
3/24/2020	0.0462						
3/25/2020		0.0244		0.0946	0.0528		
5/12/2020						0.0569	0.18
5/13/2020							

Time Series

Constituent: Lithium (mg/L) Analysis Run 7/27/2020 11:28 AM View: Time Series

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-35HO	GS-AP-MW-36H	GS-AP-MW-33HO	GS-AP-MW-30HA	GS-AP-MW-15V	GS-AP-MW-41HD	GS-AP-MW-31H	GS-AP-MW-9V	GS-AP-MW-42H
3/17/2020	0.074	0.0342	0.0516						
3/18/2020				0.0528	0.208	0.311	0.0347		
3/23/2020								0.0309	
3/24/2020									0.0346
3/25/2020									
5/12/2020	0.0693								
5/13/2020		0.0337	0.0455	0.0536					

Time Series

Constituent: Lithium (mg/L) Analysis Run 7/27/2020 11:28 AM View: Time Series

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-38H	GS-AP-MW-21V	GS-AP-MW-25HA	GS-AP-MW-43HO	GS-AP-PZ-18	GS-AP-MW-32H	GS-AP-PZ-22	GS-AP-PZ-16
3/17/2020								
3/18/2020								
3/23/2020		0.146						
3/24/2020	0.0632		0.0461			0.0428	0.0734	0.0714
3/25/2020				0.0505	0.109			
5/12/2020								
5/13/2020								

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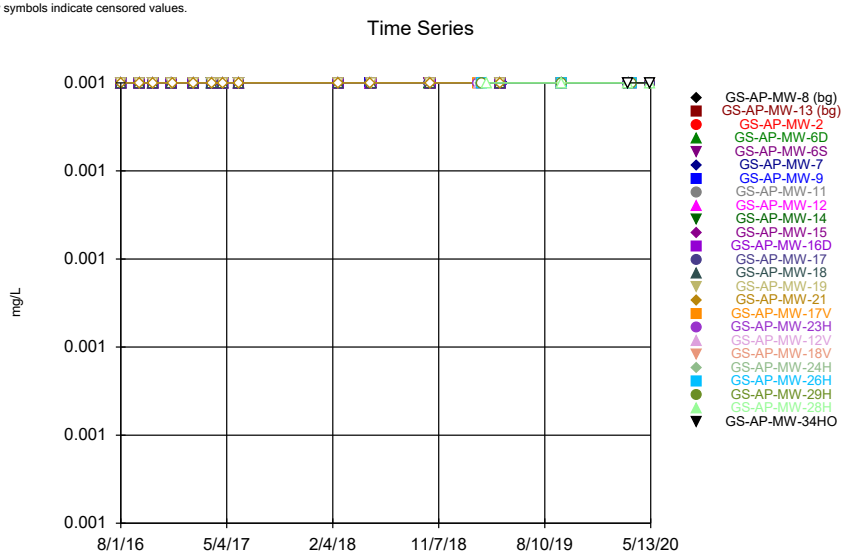
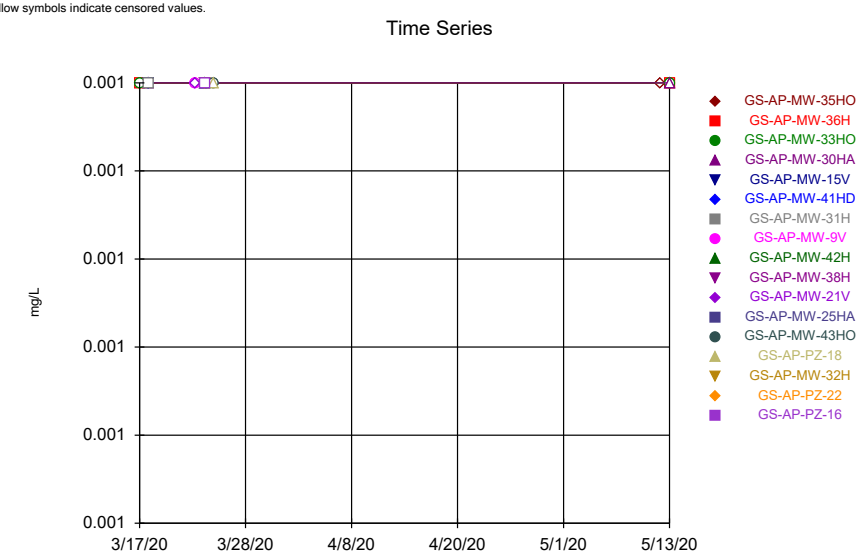
Hollow symbols indicate censored values.



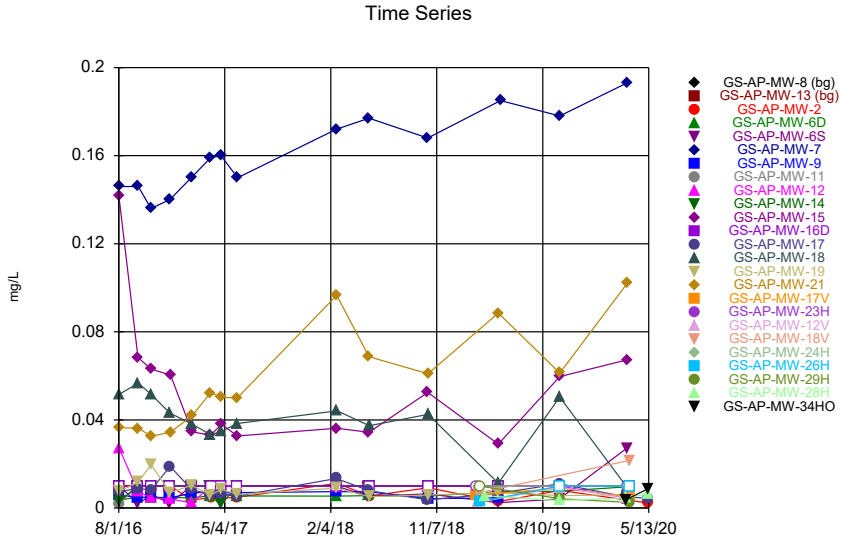
Constituent: Mercury Analysis Run 7/27/2020 11:26 AM View: Time Series
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.24 Sanitas software licensed to Southern Company. UG
Hollow symbols indicate censored values.



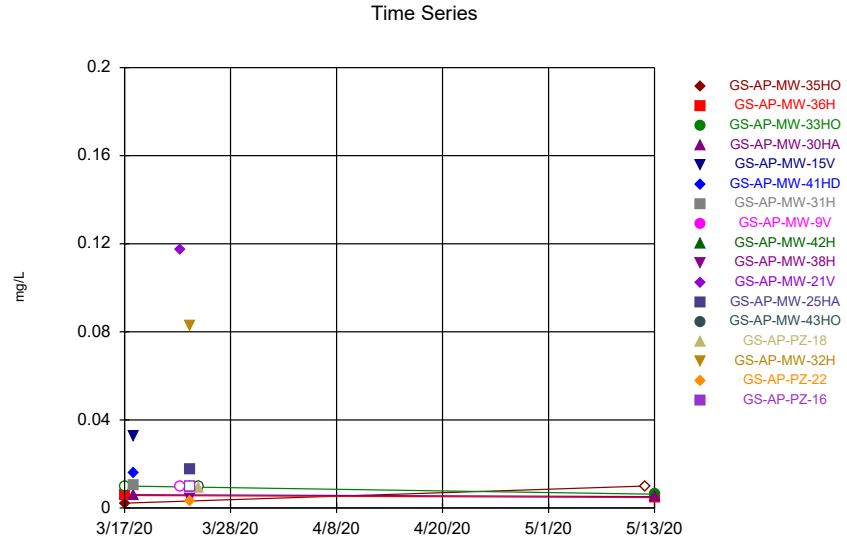
Constituent: Mercury Analysis Run 7/27/2020 11:26 AM View: Time Series
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.24 Sanitas software licensed to Southern Company. UG
Hollow symbols indicate censored values.



Constituent: Molybdenum Analysis Run 7/27/2020 11:26 AM View: Time Series
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.24 Sanitas software licensed to Southern Company. UG
Hollow symbols indicate censored values.



Constituent: Molybdenum Analysis Run 7/27/2020 11:26 AM View: Time Series
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

Time Series

Constituent: Mercury (mg/L) Analysis Run 7/27/2020 11:28 AM View: Time Series

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-8 (bg)	GS-AP-MW-13 (bg)	GS-AP-MW-2	GS-AP-MW-6D	GS-AP-MW-6S	GS-AP-MW-7	GS-AP-MW-9	GS-AP-MW-11	GS-AP-MW-12
8/1/2016									
8/2/2016		<0.0005	<0.0005			<0.0005		<0.0005	
8/3/2016	<0.0005			<0.0005	<0.0005		<0.0005		<0.0005
9/19/2016			<0.0005						
9/20/2016		<0.0005		<0.0005	<0.0005				<0.0005
9/21/2016	<0.0005					<0.0005	<0.0005	<0.0005	
10/24/2016			<0.0005	<0.0005		<0.0005			
10/25/2016	<0.0005	<0.0005					<0.0005	<0.0005	<0.0005
10/26/2016					<0.0005				
12/12/2016				<0.0005	<0.0005	<0.0005			
12/13/2016	<0.0005	<0.0005	<0.0005				<0.0005	<0.0005	<0.0005
12/14/2016									
2/6/2017	<0.0005			<0.0005	<0.0005	<0.0005			
2/7/2017									
2/8/2017		<0.0005	<0.0005				<0.0005	<0.0005	<0.0005
3/27/2017				<0.0005	<0.0005				
3/28/2017	<0.0005					<0.0005	<0.0005	<0.0005	
3/29/2017		<0.0005							<0.0005
3/30/2017			<0.0005						
4/24/2017	<0.0005			<0.0005	<0.0005	<0.0005			
4/26/2017		<0.0005	<0.0005				<0.0005	<0.0005	<0.0005
6/5/2017									
6/6/2017			<0.0005	<0.0005	<0.0005				
6/7/2017	<0.0005	<0.0005				<0.0005	<0.0005	<0.0005	<0.0005
2/19/2018	<0.0005			<0.0005	<0.0005	<0.0005			
2/20/2018		<0.0005					<0.0005	<0.0005	<0.0005
2/21/2018			<0.0005						
5/14/2018				<0.0005	<0.0005				
5/15/2018	<0.0005	<0.0005				<0.0005	<0.0005	<0.0005	<0.0005
5/16/2018			<0.0005						
10/15/2018				<0.0005	<0.0005	<0.0005			
10/16/2018	<0.0005		<0.0005				<0.0005	<0.0005	<0.0005
10/17/2018		<0.0005							
2/20/2019									
2/21/2019									
2/26/2019									
2/27/2019									
3/13/2019									
4/16/2019	<0.0005	<0.0005		<0.0005	<0.0005		<0.0005	<0.0005	<0.0005
4/17/2019			<0.0005						
4/23/2019						<0.0005			
9/23/2019				<0.0005	<0.0005				
9/24/2019	<0.0005					<0.0005			
9/25/2019			<0.0005						<0.0005
3/16/2020									
3/17/2020				<0.0005	<0.0005	<0.0005			
3/18/2020	<0.0005								<0.0005
3/24/2020									
3/25/2020			<0.0005						
5/12/2020									
5/13/2020			<0.0005						

Time Series

Constituent: Mercury (mg/L) Analysis Run 7/27/2020 11:28 AM View: Time Series

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-14	GS-AP-MW-15	GS-AP-MW-16D	GS-AP-MW-17	GS-AP-MW-18	GS-AP-MW-19	GS-AP-MW-21	GS-AP-MW-17V	GS-AP-MW-23H
8/1/2016		<0.0005	<0.0005	<0.0005		<0.0005			
8/2/2016	<0.0005				<0.0005		<0.0005		
8/3/2016									
9/19/2016	<0.0005		<0.0005	<0.0005					
9/20/2016		<0.0005							
9/21/2016					<0.0005	<0.0005	<0.0005		
10/24/2016				<0.0005	<0.0005	<0.0005			
10/25/2016	<0.0005	<0.0005	<0.0005				<0.0005		
10/26/2016									
12/12/2016					<0.0005				
12/13/2016	<0.0005		<0.0005	<0.0005		<0.0005			
12/14/2016		<0.0005					<0.0005		
2/6/2017				<0.0005					
2/7/2017						<0.0005			
2/8/2017	<0.0005	<0.0005	<0.0005		<0.0005		<0.0005		
3/27/2017				<0.0005					
3/28/2017	<0.0005	<0.0005			<0.0005	<0.0005	<0.0005		
3/29/2017			<0.0005						
3/30/2017									
4/24/2017				<0.0005					
4/26/2017	<0.0005	<0.0005	<0.0005		<0.0005	<0.0005	<0.0005		
6/5/2017				<0.0005					
6/6/2017		<0.0005	<0.0005		<0.0005	<0.0005	<0.0005		
6/7/2017	<0.0005								
2/19/2018				<0.0005					
2/20/2018	<0.0005	<0.0005					<0.0005		
2/21/2018			<0.0005		<0.0005	<0.0005			
5/14/2018									
5/15/2018		<0.0005		<0.0005			<0.0005		
5/16/2018	<0.0005		<0.0005		<0.0005	<0.0005			
10/15/2018		<0.0005		<0.0005					
10/16/2018					<0.0005	<0.0005	<0.0005		
10/17/2018	<0.0005		<0.0005						
2/20/2019								<0.0005	<0.0005
2/21/2019									
2/26/2019									
2/27/2019									
3/13/2019									
4/16/2019	<0.0005								
4/17/2019		<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005		
4/23/2019									
9/23/2019				<0.0005					<0.0005
9/24/2019		<0.0005	<0.0005		<0.0005	<0.0005	<0.0005	<0.0005	
9/25/2019									
3/16/2020				<0.0005					
3/17/2020									<0.0005
3/18/2020		<0.0005			<0.0005		<0.0005		
3/24/2020			<0.0005			<0.0005			
3/25/2020								<0.0005	
5/12/2020				<0.0005					
5/13/2020									

Time Series

Constituent: Mercury (mg/L) Analysis Run 7/27/2020 11:28 AM View: Time Series

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-12V	GS-AP-MW-18V	GS-AP-MW-24H	GS-AP-MW-26H	GS-AP-MW-29H	GS-AP-MW-28H	GS-AP-MW-34HO
8/1/2016							
8/2/2016							
8/3/2016							
9/19/2016							
9/20/2016							
9/21/2016							
10/24/2016							
10/25/2016							
10/26/2016							
12/12/2016							
12/13/2016							
12/14/2016							
2/6/2017							
2/7/2017							
2/8/2017							
3/27/2017							
3/28/2017							
3/29/2017							
3/30/2017							
4/24/2017							
4/26/2017							
6/5/2017							
6/6/2017							
6/7/2017							
2/19/2018							
2/20/2018							
2/21/2018							
5/14/2018							
5/15/2018							
5/16/2018							
10/15/2018							
10/16/2018							
10/17/2018							
2/20/2019							
2/21/2019	<0.0005						
2/26/2019		<0.0005	<0.0005				
2/27/2019				<0.0005	<0.0005		
3/13/2019						<0.0005	
4/16/2019							
4/17/2019							
4/23/2019							
9/23/2019				<0.0005			
9/24/2019			<0.0005		<0.0005		
9/25/2019	<0.0005					<0.0005	
3/16/2020						<0.0005	<0.0005
3/17/2020							
3/18/2020			<0.0005				
3/24/2020	<0.0005						
3/25/2020		<0.0005		<0.0005	<0.0005		
5/12/2020						<0.0005	<0.0005
5/13/2020							

Time Series

Constituent: Mercury (mg/L) Analysis Run 7/27/2020 11:28 AM View: Time Series

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-35HO	GS-AP-MW-36H	GS-AP-MW-33HO	GS-AP-MW-30HA	GS-AP-MW-15V	GS-AP-MW-41HD	GS-AP-MW-31H	GS-AP-MW-9V	GS-AP-MW-42H
3/17/2020	<0.0005	<0.0005	<0.0005						
3/18/2020				<0.0005	<0.0005	<0.0005	<0.0005		
3/23/2020								<0.0005	
3/24/2020									<0.0005
3/25/2020									
5/12/2020	<0.0005								
5/13/2020		<0.0005	<0.0005	<0.0005					

Time Series

Constituent: Mercury (mg/L) Analysis Run 7/27/2020 11:28 AM View: Time Series

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-38H	GS-AP-MW-21V	GS-AP-MW-25HA	GS-AP-MW-43HO	GS-AP-PZ-18	GS-AP-MW-32H	GS-AP-PZ-22	GS-AP-PZ-16
3/17/2020								
3/18/2020								
3/23/2020		<0.0005						
3/24/2020	<0.0005		<0.0005			<0.0005	<0.0005	<0.0005
3/25/2020				<0.0005	<0.0005			
5/12/2020								
5/13/2020								

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 7/27/2020 11:28 AM View: Time Series

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-8 (bg)	GS-AP-MW-13 (bg)	GS-AP-MW-2	GS-AP-MW-6D	GS-AP-MW-6S	GS-AP-MW-7	GS-AP-MW-9	GS-AP-MW-11	GS-AP-MW-12
8/1/2016									
8/2/2016		<0.01	<0.01			0.146		0.00217 (J)	
8/3/2016	<0.01			0.00372 (J)	<0.01		0.00571 (J)		0.0269
9/19/2016			<0.01						
9/20/2016		<0.01		0.00481 (J)	0.00202 (J)				0.00762 (J)
9/21/2016	<0.01					0.146	0.005 (J)	<0.01	
10/24/2016			<0.01	0.00496 (J)		0.136			
10/25/2016	<0.01	<0.01					0.00452 (J)	<0.01	0.00456 (J)
10/26/2016					0.00599 (J)				
12/12/2016				0.00467 (J)	0.00214 (J)	0.14			
12/13/2016	<0.01	<0.01	<0.01				0.00467 (J)	<0.01	0.00411 (J)
12/14/2016									
2/6/2017	<0.01			0.00468 (J)	<0.01	0.15			
2/7/2017									
2/8/2017		<0.01	0.00359 (J)				0.0067 (J)	<0.01	0.00235 (J)
3/27/2017				0.00548 (J)	<0.01				
3/28/2017	<0.01					0.159	0.00752 (J)	<0.01	
3/29/2017		<0.01							<0.01
3/30/2017			0.00485 (J)						
4/24/2017	<0.01			0.00606 (J)	<0.01	0.16			
4/26/2017		<0.01	0.00444 (J)				0.00676 (J)	<0.01	<0.01
6/5/2017									
6/6/2017			0.00489 (J)	0.00545 (J)	<0.01				
6/7/2017	<0.01	<0.01				0.15	0.00701 (J)	<0.01	<0.01
2/19/2018	<0.01			0.00537 (J)	<0.01	0.172			
2/20/2018		<0.01					0.00747 (J)	<0.01	<0.01
2/21/2018			0.0112						
5/14/2018				0.00564 (J)	0.00526 (J)				
5/15/2018	<0.01	<0.01				0.177	0.00736 (J)	<0.01	<0.01
5/16/2018			0.00547 (J)						
10/15/2018				0.00538 (J)	0.00644 (J)	0.168			
10/16/2018	<0.01		0.00919 (J)				0.00425 (J)	<0.01	<0.01
10/17/2018		<0.01							
2/20/2019									
2/21/2019									
2/26/2019									
2/27/2019									
3/13/2019									
4/16/2019	<0.01	<0.01		0.00747 (J)	0.00246 (J)		0.00462 (J)	<0.01	<0.01
4/17/2019			0.00293 (J)						
4/23/2019						0.185			
9/23/2019				0.00758 (J)	0.00412 (J)				
9/24/2019	<0.01					0.178			
9/25/2019			0.00803 (J)						<0.01
3/16/2020									
3/17/2020				0.00959 (J)	0.0272	0.193			
3/18/2020	<0.01								0.00444 (J)
3/24/2020									
3/25/2020			0.00343 (J)						
5/12/2020									
5/13/2020			0.00224 (J)						

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 7/27/2020 11:28 AM View: Time Series

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-14	GS-AP-MW-15	GS-AP-MW-16D	GS-AP-MW-17	GS-AP-MW-18	GS-AP-MW-19	GS-AP-MW-21	GS-AP-MW-17V	GS-AP-MW-23H
8/1/2016		0.142	<0.01	0.00738 (J)		0.00752 (J)			
8/2/2016	0.00283 (J)				0.0516		0.0365		
8/3/2016									
9/19/2016	<0.01		<0.01	0.00889 (J)					
9/20/2016		0.0683							
9/21/2016					0.0567	0.0117	0.0362		
10/24/2016				0.00819 (J)	0.0517	0.0198			
10/25/2016	<0.01	0.063	<0.01				0.0326		
10/26/2016									
12/12/2016					0.0431				
12/13/2016	<0.01		<0.01	0.0189		0.00703 (J)			
12/14/2016		0.0604					0.0345		
2/6/2017				0.00852 (J)					
2/7/2017						0.0103			
2/8/2017	<0.01	0.0346	<0.01		0.0381		0.0419		
3/27/2017				0.00592 (J)					
3/28/2017	<0.01	0.0331			0.0333	0.00599 (J)	0.0523		
3/29/2017			<0.01						
3/30/2017									
4/24/2017				0.00644 (J)					
4/26/2017	0.00212 (J)	0.038	<0.01		0.0348	0.00845 (J)	0.0502		
6/5/2017				0.00537 (J)					
6/6/2017		0.0327	<0.01		0.0384	0.00624 (J)	0.05		
6/7/2017	<0.01								
2/19/2018				0.0134					
2/20/2018	<0.01	0.0362					0.0966		
2/21/2018			<0.01		0.0441	0.00903 (J)			
5/14/2018									
5/15/2018		0.0344		0.00789 (J)			0.0687		
5/16/2018	<0.01		<0.01		0.0374	0.00515 (J)			
10/15/2018		0.0525		0.00376 (J)					
10/16/2018					0.0425	0.00593 (J)	0.061		
10/17/2018	<0.01		<0.01						
2/20/2019								0.00577 (J)	<0.01
2/21/2019									
2/26/2019									
2/27/2019									
3/13/2019									
4/16/2019	<0.01								
4/17/2019		0.029	<0.01	0.00661 (J)	0.0113	0.00703 (J)	0.0885		
4/23/2019									
9/23/2019				0.011					<0.01
9/24/2019		0.0597	<0.01		0.0504	0.00562 (J)	0.0613	0.00906 (J)	
9/25/2019									
3/16/2020				0.00504 (J)					
3/17/2020									<0.01
3/18/2020		0.0673			0.00927 (J)		0.102		
3/24/2020			<0.01			0.00605 (J)			
3/25/2020								0.00508 (J)	
5/12/2020				0.00436 (J)					
5/13/2020									

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 7/27/2020 11:28 AM View: Time Series

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-12V	GS-AP-MW-18V	GS-AP-MW-24H	GS-AP-MW-26H	GS-AP-MW-29H	GS-AP-MW-28H	GS-AP-MW-34HO
8/1/2016							
8/2/2016							
8/3/2016							
9/19/2016							
9/20/2016							
9/21/2016							
10/24/2016							
10/25/2016							
10/26/2016							
12/12/2016							
12/13/2016							
12/14/2016							
2/6/2017							
2/7/2017							
2/8/2017							
3/27/2017							
3/28/2017							
3/29/2017							
3/30/2017							
4/24/2017							
4/26/2017							
6/5/2017							
6/6/2017							
6/7/2017							
2/19/2018							
2/20/2018							
2/21/2018							
5/14/2018							
5/15/2018							
5/16/2018							
10/15/2018							
10/16/2018							
10/17/2018							
2/20/2019							
2/21/2019	0.00253 (J)						
2/26/2019		0.00696 (J)	<0.01				
2/27/2019				0.00286 (J)	<0.01		
3/13/2019						0.00555 (J)	
4/16/2019							
4/17/2019							
4/23/2019							
9/23/2019				<0.01			
9/24/2019			<0.01		0.00424 (J)		
9/25/2019	0.00942 (J)					0.00338 (J)	
3/16/2020						0.00463 (J)	0.00386 (J)
3/17/2020							
3/18/2020			<0.01				
3/24/2020	0.00454 (J)						
3/25/2020		0.0217		<0.01	0.0025 (J)		
5/12/2020						0.00644 (J)	0.0088 (J)
5/13/2020							

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 7/27/2020 11:28 AM View: Time Series

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-35HO	GS-AP-MW-36H	GS-AP-MW-33HO	GS-AP-MW-30HA	GS-AP-MW-15V	GS-AP-MW-41HD	GS-AP-MW-31H	GS-AP-MW-9V	GS-AP-MW-42H
3/17/2020	0.00222 (J)	0.00571 (J)	<0.01						
3/18/2020				0.00603 (J)	0.0327	0.0158	0.0102		
3/23/2020								<0.01	
3/24/2020									<0.01
3/25/2020									
5/12/2020	<0.01								
5/13/2020		0.00475 (J)	0.00626 (J)	0.00519 (J)					

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 7/27/2020 11:28 AM View: Time Series

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-38H	GS-AP-MW-21V	GS-AP-MW-25HA	GS-AP-MW-43HO	GS-AP-PZ-18	GS-AP-MW-32H	GS-AP-PZ-22	GS-AP-PZ-16
3/17/2020								
3/18/2020								
3/23/2020		0.117						
3/24/2020	0.00445 (J)		0.0176			0.0826	0.00333 (J)	<0.01
3/25/2020				<0.01	0.00919 (J)			
5/12/2020								
5/13/2020								

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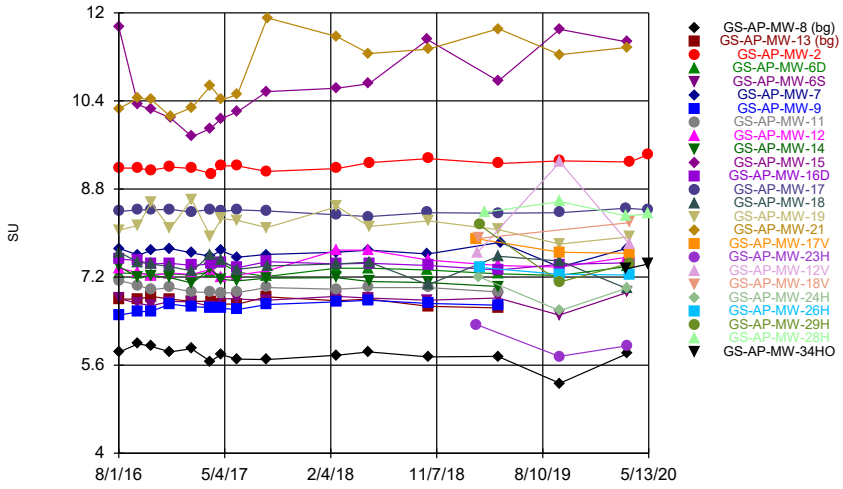
Time Series



Constituent: pH Analysis Run 7/27/2020 11:26 AM View: Time Series

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

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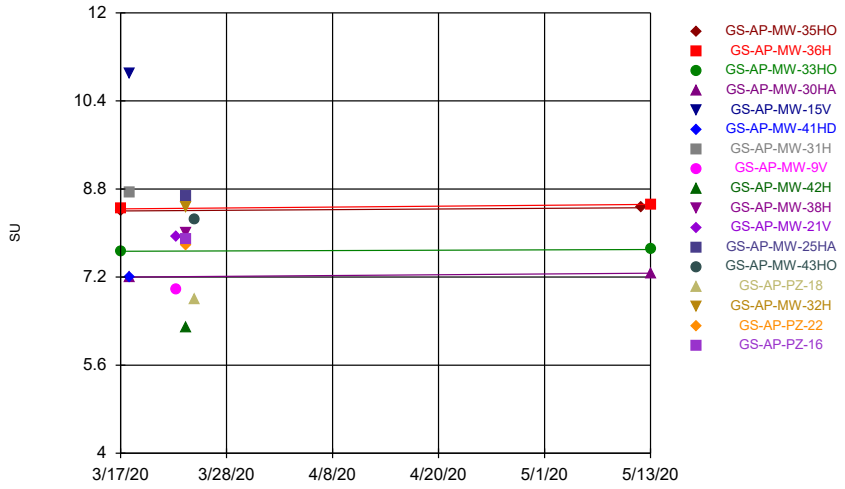
Time Series



Constituent: pH Analysis Run 7/27/2020 11:27 AM View: Time Series

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

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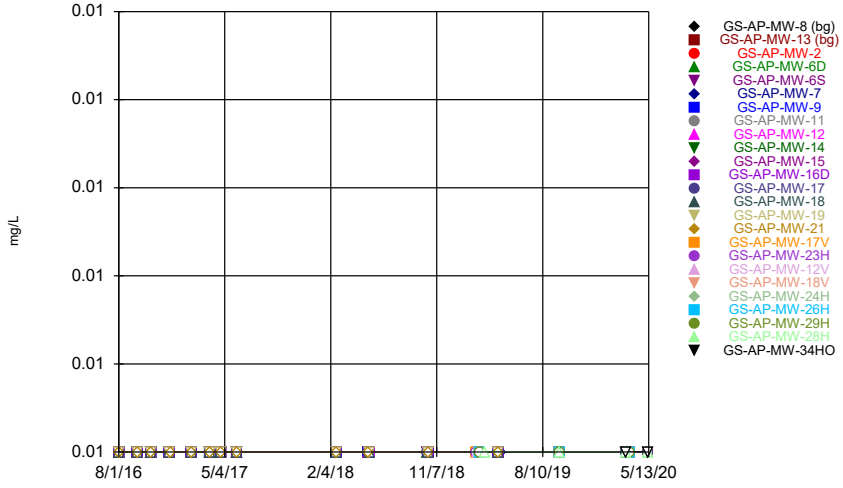
Hollow symbols indicate censored values.

Time Series

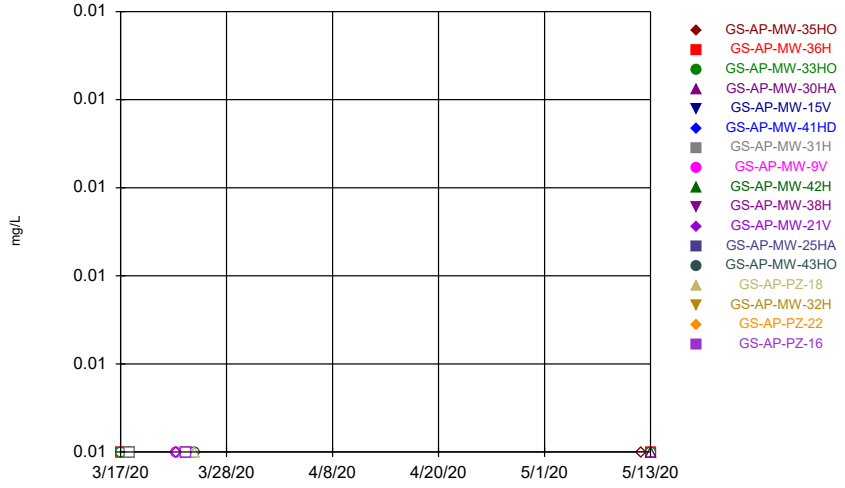


Constituent: Selenium Analysis Run 7/27/2020 11:27 AM View: Time Series

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.24 Sanitas software licensed to Southern Company. UG
Hollow symbols indicate censored values.

Time Series



Constituent: Selenium Analysis Run 7/27/2020 11:27 AM View: Time Series

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

Time Series

Constituent: pH (SU) Analysis Run 7/27/2020 11:28 AM View: Time Series

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-8 (bg)	GS-AP-MW-13 (bg)	GS-AP-MW-2	GS-AP-MW-6D	GS-AP-MW-6S	GS-AP-MW-7	GS-AP-MW-9	GS-AP-MW-11	GS-AP-MW-12
8/1/2016									
8/2/2016		6.8	9.18			7.72		7.14	
8/3/2016	5.84			7.27	6.81		6.51		7.36
9/19/2016			9.18						
9/20/2016		6.8		7.27	6.72				7.28
9/21/2016	5.99					7.6	6.57	7.05	
10/24/2016			9.14	7.25		7.68			
10/25/2016	5.94	6.85					6.58	6.97	7.23
10/26/2016					6.68				
12/12/2016				7.26	6.76	7.72			
12/13/2016	5.84	6.8	9.2				6.71	7.01	7.27
12/14/2016									
2/6/2017	5.9			7.24	6.75	7.64			
2/7/2017									
2/8/2017		6.76	9.17				6.66	6.93	7.25
3/27/2017				7.29	6.67				
3/28/2017	5.67					7.58	6.65	6.92	
3/29/2017		6.76							7.34
3/30/2017			9.08						
4/24/2017	5.79			7.46	6.81	7.68			
4/26/2017		6.71	9.22				6.63	6.91	7.19
6/5/2017									
6/6/2017			9.22	7.29	6.8				
6/7/2017	5.71	6.71				7.56	6.61	6.92	7.24
8/21/2017	5.7		9.12	7.21	6.78	7.61			
8/22/2017		6.84					6.7	7.01	7.31
8/23/2017									
2/19/2018	5.78			7.36	6.85	7.65			
2/20/2018		6.77					6.75	6.98	7.69
2/21/2018			9.17						
5/14/2018				7.36	6.82				
5/15/2018	5.84	6.8				7.69	6.78	7.01	7.69
5/16/2018			9.28						
10/15/2018				7.33	6.78	7.62			
10/16/2018	5.75		9.35				6.72	7.01	7.51
10/17/2018		6.67							
2/20/2019									
2/21/2019									
2/26/2019									
2/27/2019									
3/13/2019									
4/16/2019	5.76	6.64		7.26	6.82		6.69	6.93	7.41
4/17/2019			9.26						
4/23/2019						7.83			
9/23/2019				7.23	6.51				
9/24/2019	5.27					7.38			
9/25/2019			9.31						7.38
3/16/2020									
3/17/2020				7.39	6.92	7.72			
3/18/2020	5.81								7.56
3/24/2020									
3/25/2020			9.29						

Time Series

Constituent: pH (SU) Analysis Run 7/27/2020 11:28 AM View: Time Series

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-8 (bg)	GS-AP-MW-13 (bg)	GS-AP-MW-2	GS-AP-MW-6D	GS-AP-MW-6S	GS-AP-MW-7	GS-AP-MW-9	GS-AP-MW-11	GS-AP-MW-12
5/12/2020									
5/13/2020			9.43						

Time Series

Constituent: pH (SU) Analysis Run 7/27/2020 11:28 AM View: Time Series

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-14	GS-AP-MW-15	GS-AP-MW-16D	GS-AP-MW-17	GS-AP-MW-18	GS-AP-MW-19	GS-AP-MW-21	GS-AP-MW-17V	GS-AP-MW-23H
8/1/2016		11.74	7.53	8.39		8.05			
8/2/2016	7.39				7.65		10.26		
8/3/2016									
9/19/2016	7.2		7.5	8.42					
9/20/2016		10.33							
9/21/2016					7.47	8.14	10.45		
10/24/2016				8.42	7.44	8.55			
10/25/2016	7.23	10.24	7.44				10.42		
10/26/2016									
12/12/2016					7.39				
12/13/2016	7.19		7.45	8.43		8.08			
12/14/2016		10.09					10.12		
2/6/2017				8.38					
2/7/2017						8.61			
2/8/2017	7.09	9.75	7.41		7.31		10.28		
3/27/2017				8.43					
3/28/2017	7.35	9.9			7.6	7.94	10.67		
3/29/2017			7.44						
3/30/2017									
4/24/2017				8.39					
4/26/2017	7.16	10.08	7.47		7.5	8.26	10.42		
6/5/2017				8.42					
6/6/2017		10.2	7.37		7.34	8.23	10.51		
6/7/2017	7.13								
8/21/2017									
8/22/2017	7.18	10.57	7.48	8.4		8.1			
8/23/2017					7.4		11.91		
2/19/2018				8.33					
2/20/2018	7.19	10.63					11.57		
2/21/2018			7.44		7.44	8.48			
5/14/2018									
5/15/2018		10.71		8.3			11.26		
5/16/2018	7.12		7.45		7.47	8.12			
10/15/2018		11.51		8.37					
10/16/2018					7.06	8.22	11.34		
10/17/2018	7.1		7.41						
2/20/2019								7.895 (D)	6.335 (D)
2/21/2019									
2/26/2019									
2/27/2019									
3/13/2019									
4/16/2019	7.03								
4/17/2019		10.76	7.33	8.36	7.58	8.06	11.71		
4/23/2019									
9/23/2019				8.37					5.76
9/24/2019		11.7	7.43		7.49	7.8	11.24	7.65	
9/25/2019									
3/16/2020				8.45					
3/17/2020									5.95
3/18/2020		11.47			6.99		11.37		
3/24/2020			7.46			7.93			
3/25/2020								7.63	

Time Series

Constituent: pH (SU) Analysis Run 7/27/2020 11:28 AM View: Time Series

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-14	GS-AP-MW-15	GS-AP-MW-16D	GS-AP-MW-17	GS-AP-MW-18	GS-AP-MW-19	GS-AP-MW-21	GS-AP-MW-17V	GS-AP-MW-23H
5/12/2020				8.42					
5/13/2020									

Time Series

Constituent: pH (SU) Analysis Run 7/27/2020 11:28 AM View: Time Series

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-12V	GS-AP-MW-18V	GS-AP-MW-24H	GS-AP-MW-26H	GS-AP-MW-29H	GS-AP-MW-28H	GS-AP-MW-34HO
8/1/2016							
8/2/2016							
8/3/2016							
9/19/2016							
9/20/2016							
9/21/2016							
10/24/2016							
10/25/2016							
10/26/2016							
12/12/2016							
12/13/2016							
12/14/2016							
2/6/2017							
2/7/2017							
2/8/2017							
3/27/2017							
3/28/2017							
3/29/2017							
3/30/2017							
4/24/2017							
4/26/2017							
6/5/2017							
6/6/2017							
6/7/2017							
8/21/2017							
8/22/2017							
8/23/2017							
2/19/2018							
2/20/2018							
2/21/2018							
5/14/2018							
5/15/2018							
5/16/2018							
10/15/2018							
10/16/2018							
10/17/2018							
2/20/2019							
2/21/2019	7.64 (D)						
2/26/2019		7.905 (D)	7.205 (D)				
2/27/2019				7.375 (D)	8.145 (D)		
3/13/2019						8.38 (D)	
4/16/2019							
4/17/2019							
4/23/2019							
9/23/2019				7.25			
9/24/2019			6.59		7.11		
9/25/2019	9.29					8.57	
3/16/2020						8.31	7.35
3/17/2020							
3/18/2020			7				
3/24/2020	7.8						
3/25/2020		8.19		7.24	7.45		

Time Series

Constituent: pH (SU) Analysis Run 7/27/2020 11:28 AM View: Time Series

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-12V	GS-AP-MW-18V	GS-AP-MW-24H	GS-AP-MW-26H	GS-AP-MW-29H	GS-AP-MW-28H	GS-AP-MW-34HO
5/12/2020						8.35	7.44
5/13/2020							

Time Series

Constituent: pH (SU) Analysis Run 7/27/2020 11:28 AM View: Time Series

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-35HO	GS-AP-MW-36H	GS-AP-MW-33HO	GS-AP-MW-30HA	GS-AP-MW-15V	GS-AP-MW-41HD	GS-AP-MW-31H	GS-AP-MW-9V	GS-AP-MW-42H
3/17/2020	8.4	8.44	7.67						
3/18/2020				7.2	10.89	7.2	8.73		
3/23/2020								6.97	
3/24/2020									6.28
3/25/2020									
5/12/2020	8.46								
5/13/2020		8.52	7.7	7.27					

Time Series

Constituent: pH (SU) Analysis Run 7/27/2020 11:28 AM View: Time Series

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-38H	GS-AP-MW-21V	GS-AP-MW-25HA	GS-AP-MW-43HO	GS-AP-PZ-18	GS-AP-MW-32H	GS-AP-PZ-22	GS-AP-PZ-16
3/17/2020								
3/18/2020								
3/23/2020		7.93						
3/24/2020	7.99		8.67			8.47	7.77	7.89
3/25/2020				8.24	6.8			
5/12/2020								
5/13/2020								

Time Series

Constituent: Selenium (mg/L) Analysis Run 7/27/2020 11:28 AM View: Time Series

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-8 (bg)	GS-AP-MW-13 (bg)	GS-AP-MW-2	GS-AP-MW-6D	GS-AP-MW-6S	GS-AP-MW-7	GS-AP-MW-9	GS-AP-MW-11	GS-AP-MW-12
8/1/2016									
8/2/2016		<0.01	<0.01			<0.01		<0.01	
8/3/2016	<0.01			<0.01	<0.01		<0.01		<0.01
9/19/2016			<0.01						
9/20/2016		<0.01		<0.01	<0.01				<0.01
9/21/2016	<0.01					<0.01	<0.01	<0.01	
10/24/2016			<0.01	<0.01		<0.01			
10/25/2016	<0.01	<0.01					<0.01	<0.01	<0.01
10/26/2016					<0.01				
12/12/2016				<0.01	<0.01	<0.01			
12/13/2016	<0.01	<0.01	<0.01				<0.01	<0.01	<0.01
12/14/2016									
2/6/2017	<0.01			<0.01	<0.01	<0.01			
2/7/2017									
2/8/2017		<0.01	<0.01				<0.01	<0.01	<0.01
3/27/2017				<0.01	<0.01				
3/28/2017	<0.01					<0.01	<0.01	<0.01	
3/29/2017		<0.01							<0.01
3/30/2017			<0.01						
4/24/2017	<0.01			<0.01	<0.01	<0.01			
4/26/2017		<0.01	<0.01				<0.01	<0.01	<0.01
6/5/2017									
6/6/2017			<0.01	<0.01	<0.01				
6/7/2017	<0.01	<0.01				<0.01	<0.01	<0.01	<0.01
2/19/2018	<0.01			<0.01	<0.01	<0.01			
2/20/2018		<0.01					<0.01	<0.01	<0.01
2/21/2018			<0.01						
5/14/2018				<0.01	<0.01				
5/15/2018	<0.01	<0.01				<0.01	<0.01	<0.01	<0.01
5/16/2018			<0.01						
10/15/2018				<0.01	<0.01	<0.01			
10/16/2018	<0.01		<0.01				<0.01	<0.01	<0.01
10/17/2018		<0.01							
2/20/2019									
2/21/2019									
2/26/2019									
2/27/2019									
3/13/2019									
4/16/2019	<0.01	<0.01		<0.01	<0.01		<0.01	<0.01	<0.01
4/17/2019			<0.01						
4/23/2019						<0.01			
9/23/2019				<0.01	<0.01				
9/24/2019	<0.01					<0.01			
9/25/2019			<0.01						<0.01
3/16/2020									
3/17/2020				<0.01	<0.01	<0.01			
3/18/2020	<0.01								<0.01
3/24/2020									
3/25/2020			<0.01						
5/12/2020									
5/13/2020			<0.01						

Time Series

Constituent: Selenium (mg/L) Analysis Run 7/27/2020 11:28 AM View: Time Series

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-14	GS-AP-MW-15	GS-AP-MW-16D	GS-AP-MW-17	GS-AP-MW-18	GS-AP-MW-19	GS-AP-MW-21	GS-AP-MW-17V	GS-AP-MW-23H
8/1/2016		<0.01	<0.01	<0.01		<0.01			
8/2/2016	<0.01				<0.01		<0.01		
8/3/2016									
9/19/2016	<0.01		<0.01	<0.01					
9/20/2016		<0.01							
9/21/2016					<0.01	<0.01	<0.01		
10/24/2016				<0.01	<0.01	<0.01			
10/25/2016	<0.01	<0.01	<0.01				<0.01		
10/26/2016									
12/12/2016					<0.01				
12/13/2016	<0.01		<0.01	<0.01		<0.01			
12/14/2016		<0.01					<0.01		
2/6/2017				<0.01					
2/7/2017						<0.01			
2/8/2017	<0.01	<0.01	<0.01		<0.01		<0.01		
3/27/2017				<0.01					
3/28/2017	<0.01	<0.01			<0.01	<0.01	<0.01		
3/29/2017			<0.01						
3/30/2017									
4/24/2017				<0.01					
4/26/2017	<0.01	<0.01	<0.01		<0.01	<0.01	<0.01		
6/5/2017				<0.01					
6/6/2017		<0.01	<0.01		<0.01	<0.01	<0.01		
6/7/2017	<0.01								
2/19/2018				<0.01					
2/20/2018	<0.01	<0.01					<0.01		
2/21/2018			<0.01		<0.01	<0.01			
5/14/2018									
5/15/2018		<0.01		<0.01			<0.01		
5/16/2018	<0.01		<0.01		<0.01	<0.01			
10/15/2018		<0.01		<0.01					
10/16/2018					<0.01	<0.01	<0.01		
10/17/2018	<0.01		<0.01						
2/20/2019								<0.01	<0.01
2/21/2019									
2/26/2019									
2/27/2019									
3/13/2019									
4/16/2019	<0.01								
4/17/2019		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		
4/23/2019									
9/23/2019				<0.01					<0.01
9/24/2019		<0.01	<0.01		<0.01	<0.01	<0.01	<0.01	
9/25/2019									
3/16/2020				<0.01					
3/17/2020									<0.01
3/18/2020		<0.01			<0.01		<0.01		
3/24/2020			<0.01			<0.01			
3/25/2020								<0.01	
5/12/2020				<0.01					
5/13/2020									

Time Series

Constituent: Selenium (mg/L) Analysis Run 7/27/2020 11:28 AM View: Time Series

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-12V	GS-AP-MW-18V	GS-AP-MW-24H	GS-AP-MW-26H	GS-AP-MW-29H	GS-AP-MW-28H	GS-AP-MW-34HO
8/1/2016							
8/2/2016							
8/3/2016							
9/19/2016							
9/20/2016							
9/21/2016							
10/24/2016							
10/25/2016							
10/26/2016							
12/12/2016							
12/13/2016							
12/14/2016							
2/6/2017							
2/7/2017							
2/8/2017							
3/27/2017							
3/28/2017							
3/29/2017							
3/30/2017							
4/24/2017							
4/26/2017							
6/5/2017							
6/6/2017							
6/7/2017							
2/19/2018							
2/20/2018							
2/21/2018							
5/14/2018							
5/15/2018							
5/16/2018							
10/15/2018							
10/16/2018							
10/17/2018							
2/20/2019							
2/21/2019	<0.01						
2/26/2019		<0.01	<0.01				
2/27/2019				<0.01	<0.01		
3/13/2019						<0.01	
4/16/2019							
4/17/2019							
4/23/2019							
9/23/2019				<0.01			
9/24/2019			<0.01		<0.01		
9/25/2019	<0.01					<0.01	
3/16/2020						<0.01	<0.01
3/17/2020							
3/18/2020			<0.01				
3/24/2020	<0.01						
3/25/2020		<0.01		<0.01	<0.01		
5/12/2020						<0.01	<0.01
5/13/2020							

Time Series

Constituent: Selenium (mg/L) Analysis Run 7/27/2020 11:28 AM View: Time Series

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-35HO	GS-AP-MW-36H	GS-AP-MW-33HO	GS-AP-MW-30HA	GS-AP-MW-15V	GS-AP-MW-41HD	GS-AP-MW-31H	GS-AP-MW-9V	GS-AP-MW-42H
3/17/2020	<0.01	<0.01	<0.01						
3/18/2020				<0.01	<0.01	<0.01	<0.01		
3/23/2020								<0.01	
3/24/2020									<0.01
3/25/2020									
5/12/2020	<0.01								
5/13/2020		<0.01	<0.01	<0.01					

Time Series

Constituent: Selenium (mg/L) Analysis Run 7/27/2020 11:28 AM View: Time Series

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-38H	GS-AP-MW-21V	GS-AP-MW-25HA	GS-AP-MW-43HO	GS-AP-PZ-18	GS-AP-MW-32H	GS-AP-PZ-22	GS-AP-PZ-16
3/17/2020								
3/18/2020								
3/23/2020		<0.01						
3/24/2020	<0.01		<0.01			<0.01	<0.01	<0.01
3/25/2020				<0.01	<0.01			
5/12/2020								
5/13/2020								

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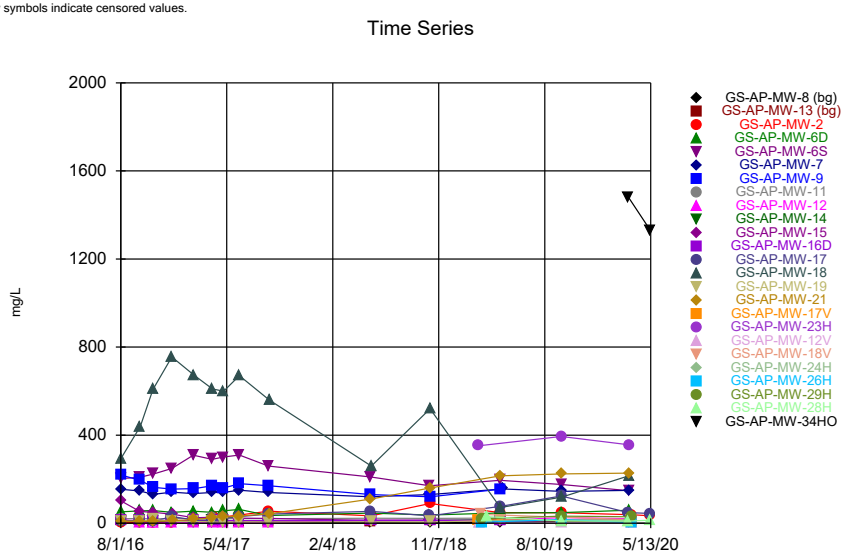
Hollow symbols indicate censored values.



Constituent: Sulfate Analysis Run 7/27/2020 11:27 AM View: Time Series
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

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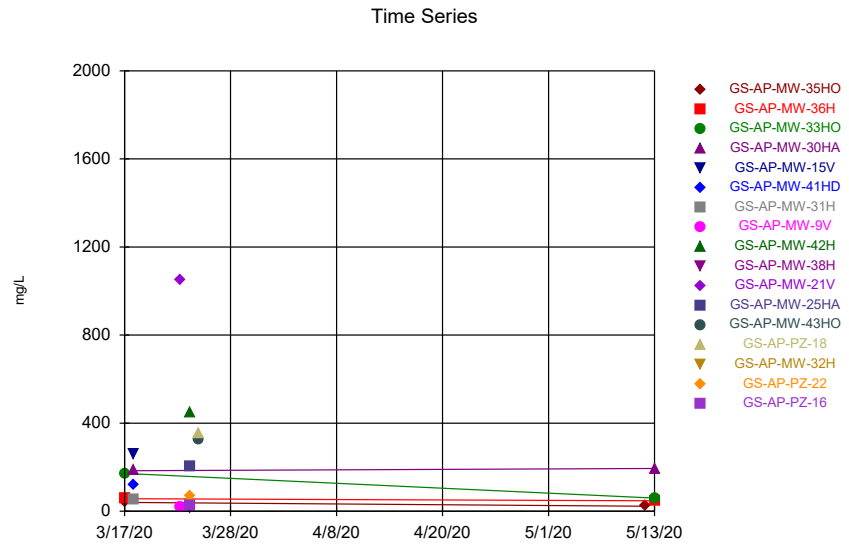

Constituent: Sulfate Analysis Run 7/27/2020 11:27 AM View: Time Series
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

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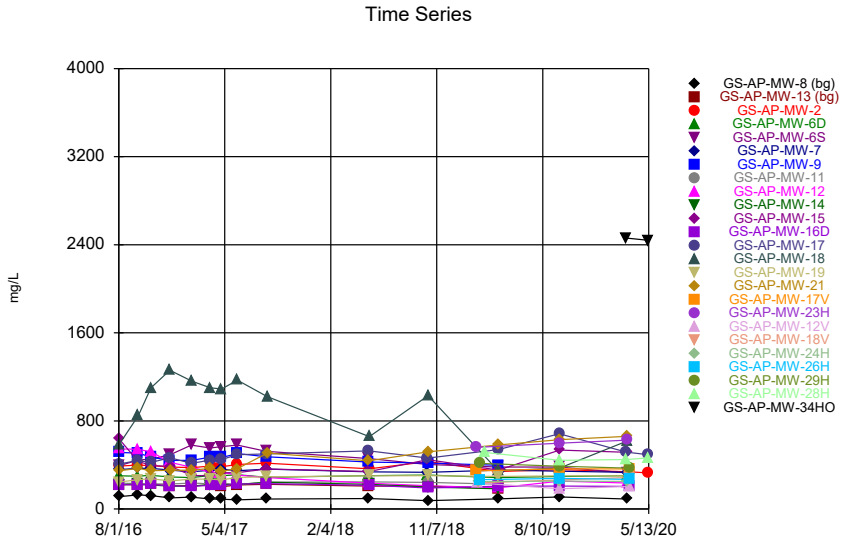

Constituent: TDS Analysis Run 7/27/2020 11:27 AM View: Time Series
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

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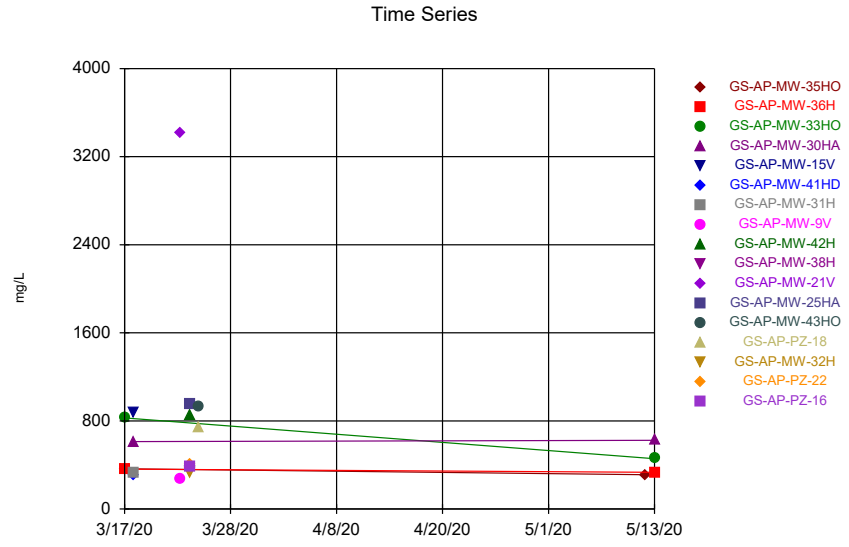

Constituent: TDS Analysis Run 7/27/2020 11:27 AM View: Time Series
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

Time Series

Constituent: Sulfate (mg/L) Analysis Run 7/27/2020 11:29 AM View: Time Series

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-8 (bg)	GS-AP-MW-13 (bg)	GS-AP-MW-2	GS-AP-MW-6D	GS-AP-MW-6S	GS-AP-MW-7	GS-AP-MW-9	GS-AP-MW-11	GS-AP-MW-12
8/1/2016									
8/2/2016		12	2.87			154		20.5	
8/3/2016	4.2			52	203		218		19.2
9/19/2016			1.22						
9/20/2016		11.2		56	209				1.42
9/21/2016	4.27					146	195	21.3	
10/24/2016			<1	57.5		131			
10/25/2016	2.78	10.1					163	20.1	<1
10/26/2016					224				
12/12/2016				50	249	141			
12/13/2016	3.18	11.4	<1				155	21.7	3.21
12/14/2016									
2/6/2017	3.74			54.9	309	135			
2/7/2017									
2/8/2017		10.9	19.4				157	21.1	3.3
3/27/2017				50 (D)	290 (D)				
3/28/2017	3.4 (JD)					140 (D)	170 (D)	23 (D)	
3/29/2017		11 (D)							3.8 (JD)
3/30/2017			31 (D)						
4/24/2017	2.7 (JD)			56 (D)	300 (D)	140 (D)			
4/26/2017		11 (D)	29 (D)				160 (D)	23 (D)	1.4 (JD)
6/5/2017									
6/6/2017			37	63	310				
6/7/2017	2.7 (J)	11				150	180	22	1.7 (J)
8/21/2017	3.9 (J)		55	35	260	140			
8/22/2017		11					170	21	4.2 (J)
8/23/2017									
5/14/2018				46	210				
5/15/2018	2.5 (J)	11				120	130	23	14
5/16/2018			34						
10/15/2018				37	170	130			
10/16/2018	2.4 (J)		90				120	22	13
10/17/2018		12							
2/20/2019									
2/21/2019									
2/26/2019									
2/27/2019									
3/13/2019									
4/16/2019	4.53	12.1		46.8	195		154	23.2	13.3
4/17/2019			48.6						
4/23/2019						156			
9/23/2019				47.9	176 (D)				
9/24/2019	6.61					145			
9/25/2019			47.7						25.5
3/16/2020									
3/17/2020				59.5	148	149			
3/18/2020	4.86								20.8
3/24/2020									
3/25/2020			38.5						
5/12/2020									
5/13/2020			33.6						

Time Series

Constituent: Sulfate (mg/L) Analysis Run 7/27/2020 11:29 AM View: Time Series

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-14	GS-AP-MW-15	GS-AP-MW-16D	GS-AP-MW-17	GS-AP-MW-18	GS-AP-MW-19	GS-AP-MW-21	GS-AP-MW-17V	GS-AP-MW-23H
8/1/2016		102	13.4	9.56		9.02			
8/2/2016	10.6				295		9.14		
8/3/2016									
9/19/2016	9.9		12.9	12.7					
9/20/2016		53.3							
9/21/2016					440	8.38	8.71		
10/24/2016				8.58	608	18.5			
10/25/2016	8.12	49.8	11.6				8.54		
10/26/2016									
12/12/2016					755				
12/13/2016	10.5		12.7	31		7.4			
12/14/2016		40.9					11.5		
2/6/2017				14.7					
2/7/2017						8.16			
2/8/2017	11.1	25	12.2		672		17		
3/27/2017				14 (D)					
3/28/2017	14 (D)	27 (D)			610 (D)	6.4 (D)	25 (D)		
3/29/2017			12 (D)						
3/30/2017									
4/24/2017				22 (D)					
4/26/2017	13 (D)	29 (D)	13 (D)		600 (D)	4.6 (JD)	28 (D)		
6/5/2017				30					
6/6/2017		23	12		670	5.2	33		
6/7/2017	13								
8/21/2017									
8/22/2017	12	22	12	42		5.3			
8/23/2017					560		43		
5/14/2018									
5/15/2018		13		54			110		
5/16/2018	13		13		260	6			
10/15/2018		14		34					
10/16/2018					520	5.6	160		
10/17/2018	13		13						
2/20/2019								15.2	352
2/21/2019									
2/26/2019									
2/27/2019									
3/13/2019									
4/16/2019	16.9								
4/17/2019		9.02	14.1	76.6	71.6	14.3	215		
4/23/2019									
9/23/2019				124					394
9/24/2019		12.4	14.1		119	13.8 (D)	224	11.8	
9/25/2019									
3/16/2020				48.6					
3/17/2020									356
3/18/2020		15.9			216		228		
3/24/2020			14.1			15.2			
3/25/2020								9.69	
5/12/2020				44.4					
5/13/2020									

Time Series

Constituent: Sulfate (mg/L) Analysis Run 7/27/2020 11:29 AM View: Time Series

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-12V	GS-AP-MW-18V	GS-AP-MW-24H	GS-AP-MW-26H	GS-AP-MW-29H	GS-AP-MW-28H	GS-AP-MW-34HO
8/1/2016							
8/2/2016							
8/3/2016							
9/19/2016							
9/20/2016							
9/21/2016							
10/24/2016							
10/25/2016							
10/26/2016							
12/12/2016							
12/13/2016							
12/14/2016							
2/6/2017							
2/7/2017							
2/8/2017							
3/27/2017							
3/28/2017							
3/29/2017							
3/30/2017							
4/24/2017							
4/26/2017							
6/5/2017							
6/6/2017							
6/7/2017							
8/21/2017							
8/22/2017							
8/23/2017							
5/14/2018							
5/15/2018							
5/16/2018							
10/15/2018							
10/16/2018							
10/17/2018							
2/20/2019							
2/21/2019	<1						
2/26/2019		39.9	10.9				
2/27/2019				4.89	20.7		
3/13/2019						30	
4/16/2019							
4/17/2019							
4/23/2019							
9/23/2019				16.9			
9/24/2019			15.3		32.6		
9/25/2019	1.61					10.2	
3/16/2020						9.91	1480
3/17/2020							
3/18/2020			12.2				
3/24/2020	<1						
3/25/2020		16.5		3.25	29.4		
5/12/2020						14.3	1330
5/13/2020							

Time Series

Constituent: Sulfate (mg/L) Analysis Run 7/27/2020 11:29 AM View: Time Series

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-35HO	GS-AP-MW-36H	GS-AP-MW-33HO	GS-AP-MW-30HA	GS-AP-MW-15V	GS-AP-MW-41HD	GS-AP-MW-31H	GS-AP-MW-9V	GS-AP-MW-42H
3/17/2020	40.1	57.1	172						
3/18/2020				184	261	122	50.4		
3/23/2020								18.7	
3/24/2020									449
3/25/2020									
5/12/2020	22.6								
5/13/2020		47.8	60	194					

Time Series

Constituent: Sulfate (mg/L) Analysis Run 7/27/2020 11:29 AM View: Time Series

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-38H	GS-AP-MW-21V	GS-AP-MW-25HA	GS-AP-MW-43HO	GS-AP-PZ-18	GS-AP-MW-32H	GS-AP-PZ-22	GS-AP-PZ-16
3/17/2020								
3/18/2020								
3/23/2020		1050						
3/24/2020	16.7		201			33.2	70.1	27.7
3/25/2020				327	355			
5/12/2020								
5/13/2020								

Time Series

Constituent: TDS (mg/L) Analysis Run 7/27/2020 11:29 AM View: Time Series

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-8 (bg)	GS-AP-MW-13 (bg)	GS-AP-MW-2	GS-AP-MW-6D	GS-AP-MW-6S	GS-AP-MW-7	GS-AP-MW-9	GS-AP-MW-11	GS-AP-MW-12
8/1/2016									
8/2/2016		221	390			358		235	
8/3/2016	113			302	394		514		546
9/19/2016			398						
9/20/2016		221		298	444				542
9/21/2016	128					370	508	232	
10/24/2016			395	306		370			
10/25/2016	121	226					470	229	518
10/26/2016					456				
12/12/2016				291	491	353			
12/13/2016	101	211	381				441	227	424
12/14/2016									
2/6/2017	108			285	580	338			
2/7/2017									
2/8/2017		212	376				442	236	379
3/27/2017				305	554				
3/28/2017	91					352	472	228	
3/29/2017		217							334
3/30/2017			391						
4/24/2017	89.3			301	566	362			
4/26/2017		202	384				469	234	332
6/5/2017									
6/6/2017			404	311	580				
6/7/2017	84	218				348	503	223	308
8/21/2017	91.3		416	289	524	362			
8/22/2017		224					474	244	286
8/23/2017									
5/14/2018				303	458				
5/15/2018	94.7	209				338	426	246	235
5/16/2018			365						
10/15/2018				309 (D)	404 (D)	333 (D)			
10/16/2018	76.7 (D)		430 (D)				417 (D)	242 (D)	211 (D)
10/17/2018		208 (D)							
2/20/2019									
2/21/2019									
2/26/2019									
2/27/2019									
3/13/2019									
4/16/2019	92	185		285	382		397	226	193
4/17/2019			341						
4/23/2019						354			
9/23/2019				296	381				
9/24/2019	109					344			
9/25/2019			358						253
3/16/2020									
3/17/2020				303	328	334			
3/18/2020	90.7								236
3/24/2020									
3/25/2020			337						
5/12/2020									
5/13/2020			328						

Time Series

Constituent: TDS (mg/L) Analysis Run 7/27/2020 11:29 AM View: Time Series

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-14	GS-AP-MW-15	GS-AP-MW-16D	GS-AP-MW-17	GS-AP-MW-18	GS-AP-MW-19	GS-AP-MW-21	GS-AP-MW-17V	GS-AP-MW-23H
8/1/2016		640	222	408		245			
8/2/2016	222				586		348		
8/3/2016									
9/19/2016	225		220	441					
9/20/2016		434							
9/21/2016					848	267	368		
10/24/2016				424	1100	275			
10/25/2016	219	394	223				348		
10/26/2016									
12/12/2016					1260				
12/13/2016	207		211	466		255			
12/14/2016		387					352		
2/6/2017				414					
2/7/2017						272			
2/8/2017	208	303	206		1160		352		
3/27/2017				444					
3/28/2017	222	305			1100	271	370		
3/29/2017			215						
3/30/2017									
4/24/2017				446					
4/26/2017	222	329	212		1090	265	342		
6/5/2017				493					
6/6/2017		331	227		1170	287	367		
6/7/2017	223								
8/21/2017									
8/22/2017	243	364	230	500		293			
8/23/2017					1020		508		
5/14/2018									
5/15/2018		340		528			438		
5/16/2018	225		216		658	301			
10/15/2018		448 (D)		462 (D)					
10/16/2018					1030 (D)	303 (D)	520 (D)		
10/17/2018	199 (D)		191 (D)						
2/20/2019								346	560
2/21/2019									
2/26/2019									
2/27/2019									
3/13/2019									
4/16/2019	184 (P)								
4/17/2019		354	207	540	347	296	582		
4/23/2019									
9/23/2019				684					598
9/24/2019		536	208		372	302	630	365	
9/25/2019									
3/16/2020				516					
3/17/2020									626
3/18/2020		515			618		661		
3/24/2020			205			302			
3/25/2020								364	
5/12/2020				493					
5/13/2020									

Time Series

Constituent: TDS (mg/L) Analysis Run 7/27/2020 11:29 AM View: Time Series

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-12V	GS-AP-MW-18V	GS-AP-MW-24H	GS-AP-MW-26H	GS-AP-MW-29H	GS-AP-MW-28H	GS-AP-MW-34HO
8/1/2016							
8/2/2016							
8/3/2016							
9/19/2016							
9/20/2016							
9/21/2016							
10/24/2016							
10/25/2016							
10/26/2016							
12/12/2016							
12/13/2016							
12/14/2016							
2/6/2017							
2/7/2017							
2/8/2017							
3/27/2017							
3/28/2017							
3/29/2017							
3/30/2017							
4/24/2017							
4/26/2017							
6/5/2017							
6/6/2017							
6/7/2017							
8/21/2017							
8/22/2017							
8/23/2017							
5/14/2018							
5/15/2018							
5/16/2018							
10/15/2018							
10/16/2018							
10/17/2018							
2/20/2019							
2/21/2019	237						
2/26/2019		238	249				
2/27/2019				266	414		
3/13/2019						514	
4/16/2019							
4/17/2019							
4/23/2019							
9/23/2019				278			
9/24/2019			253		389		
9/25/2019	183					443	
3/16/2020						449	2460
3/17/2020							
3/18/2020			250				
3/24/2020	206						
3/25/2020		287		269	371		
5/12/2020						464	2440
5/13/2020							

Time Series

Constituent: TDS (mg/L) Analysis Run 7/27/2020 11:29 AM View: Time Series

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-35HO	GS-AP-MW-36H	GS-AP-MW-33HO	GS-AP-MW-30HA	GS-AP-MW-15V	GS-AP-MW-41HD	GS-AP-MW-31H	GS-AP-MW-9V	GS-AP-MW-42H
3/17/2020	365	362	827						
3/18/2020				612	873	309	326		
3/23/2020								268	
3/24/2020									850
3/25/2020									
5/12/2020	311								
5/13/2020		333	457	624					

Time Series

Constituent: TDS (mg/L) Analysis Run 7/27/2020 11:29 AM View: Time Series

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-38H	GS-AP-MW-21V	GS-AP-MW-25HA	GS-AP-MW-43HO	GS-AP-PZ-18	GS-AP-MW-32H	GS-AP-PZ-22	GS-AP-PZ-16
3/17/2020								
3/18/2020								
3/23/2020		3410						
3/24/2020	335		948			331	412	381
3/25/2020				930	738			
5/12/2020								
5/13/2020								

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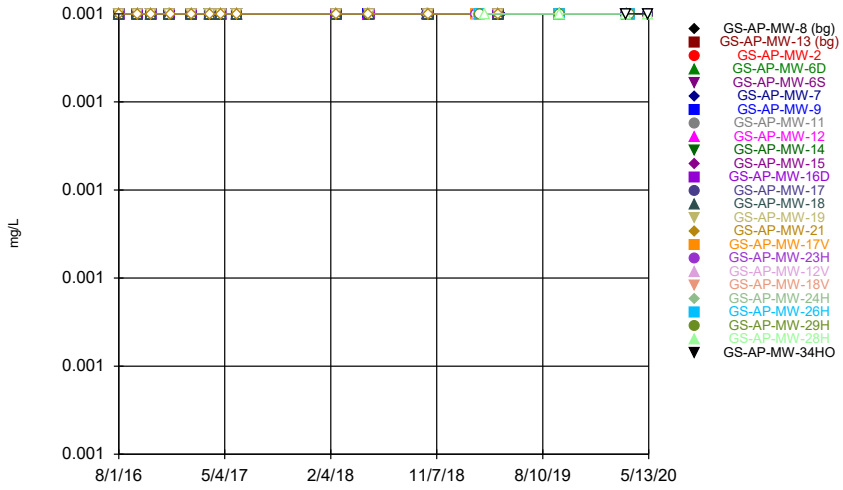
Hollow symbols indicate censored values.

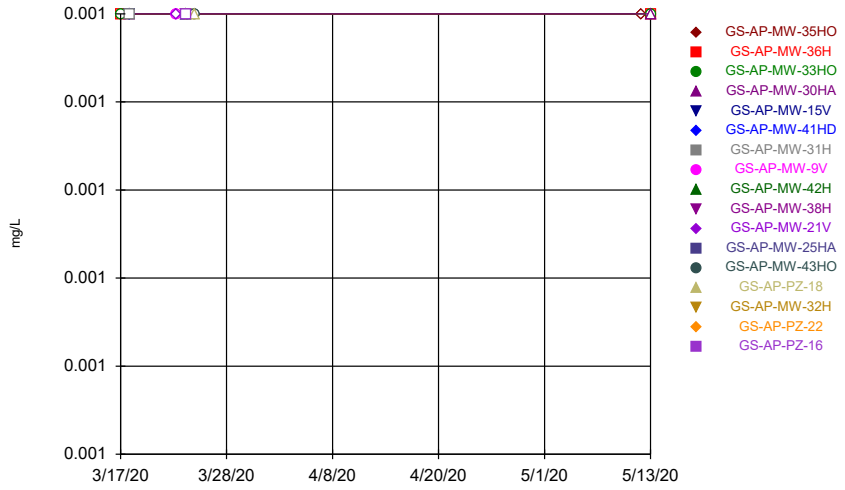
Time Series



Constituent: Thallium Analysis Run 7/27/2020 11:27 AM View: Time Series
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.24 Sanitas software licensed to Southern Company. UG
Hollow symbols indicate censored values.

Time Series



Constituent: Thallium Analysis Run 7/27/2020 11:27 AM View: Time Series
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

Time Series

Constituent: Thallium (mg/L) Analysis Run 7/27/2020 11:29 AM View: Time Series

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-8 (bg)	GS-AP-MW-13 (bg)	GS-AP-MW-2	GS-AP-MW-6D	GS-AP-MW-6S	GS-AP-MW-7	GS-AP-MW-9	GS-AP-MW-11	GS-AP-MW-12
8/1/2016									
8/2/2016		<0.001	<0.001			<0.001		<0.001	
8/3/2016	<0.001			<0.001	<0.001		<0.001		<0.001
9/19/2016			<0.001						
9/20/2016		<0.001		<0.001	<0.001				<0.001
9/21/2016	<0.001					<0.001	<0.001	<0.001	
10/24/2016			<0.001	<0.001		<0.001			
10/25/2016	<0.001	<0.001					<0.001	<0.001	<0.001
10/26/2016					<0.001				
12/12/2016				<0.001	<0.001	<0.001			
12/13/2016	<0.001	<0.001	<0.001				<0.001	<0.001	<0.001
12/14/2016									
2/6/2017	<0.001			<0.001	<0.001	<0.001			
2/7/2017									
2/8/2017		<0.001	<0.001				<0.001	<0.001	<0.001
3/27/2017				<0.001	<0.001				
3/28/2017	<0.001					<0.001	<0.001	<0.001	
3/29/2017		<0.001							<0.001
3/30/2017			<0.001						
4/24/2017	<0.001			<0.001	<0.001	<0.001			
4/26/2017		<0.001	<0.001				<0.001	<0.001	<0.001
6/5/2017									
6/6/2017			<0.001	<0.001	<0.001				
6/7/2017	<0.001	<0.001				<0.001	<0.001	<0.001	<0.001
2/19/2018	<0.001			<0.001	<0.001	<0.001			
2/20/2018		<0.001					<0.001	<0.001	<0.001
2/21/2018			<0.001						
5/14/2018				<0.001	<0.001				
5/15/2018	<0.001	<0.001				<0.001	<0.001	<0.001	<0.001
5/16/2018			<0.001						
10/15/2018				<0.001	<0.001	<0.001			
10/16/2018	<0.001		<0.001				<0.001	<0.001	<0.001
10/17/2018		<0.001							
2/20/2019									
2/21/2019									
2/26/2019									
2/27/2019									
3/13/2019									
4/16/2019	<0.001	<0.001		<0.001	<0.001		<0.001	<0.001	<0.001
4/17/2019			<0.001						
4/23/2019						<0.001			
9/23/2019				<0.001	<0.001				
9/24/2019	<0.001					<0.001			
9/25/2019			<0.001						<0.001
3/16/2020									
3/17/2020				<0.001	<0.001	<0.001			
3/18/2020	<0.001								<0.001
3/24/2020									
3/25/2020			<0.001						
5/12/2020									
5/13/2020			<0.001						

Time Series

Constituent: Thallium (mg/L) Analysis Run 7/27/2020 11:29 AM View: Time Series

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-14	GS-AP-MW-15	GS-AP-MW-16D	GS-AP-MW-17	GS-AP-MW-18	GS-AP-MW-19	GS-AP-MW-21	GS-AP-MW-17V	GS-AP-MW-23H
8/1/2016		<0.001	<0.001	<0.001		<0.001			
8/2/2016	<0.001				<0.001		<0.001		
8/3/2016									
9/19/2016	<0.001		<0.001	<0.001					
9/20/2016		<0.001							
9/21/2016					<0.001	<0.001	<0.001		
10/24/2016				<0.001	<0.001	<0.001			
10/25/2016	<0.001	<0.001	<0.001				<0.001		
10/26/2016									
12/12/2016					<0.001				
12/13/2016	<0.001		<0.001	<0.001		<0.001			
12/14/2016		<0.001					<0.001		
2/6/2017				<0.001					
2/7/2017						<0.001			
2/8/2017	<0.001	<0.001	<0.001		<0.001		<0.001		
3/27/2017				<0.001					
3/28/2017	<0.001	<0.001			<0.001	<0.001	<0.001		
3/29/2017			<0.001						
3/30/2017									
4/24/2017				<0.001					
4/26/2017	<0.001	<0.001	<0.001		<0.001	<0.001	<0.001		
6/5/2017				<0.001					
6/6/2017		<0.001	<0.001		<0.001	<0.001	<0.001		
6/7/2017	<0.001								
2/19/2018				<0.001					
2/20/2018	<0.001	<0.001					<0.001		
2/21/2018			<0.001		<0.001	<0.001			
5/14/2018									
5/15/2018		<0.001		<0.001			<0.001		
5/16/2018	<0.001		<0.001		<0.001	<0.001			
10/15/2018		<0.001		<0.001					
10/16/2018					<0.001	<0.001	<0.001		
10/17/2018	<0.001		<0.001						
2/20/2019								<0.001	<0.001
2/21/2019									
2/26/2019									
2/27/2019									
3/13/2019									
4/16/2019	<0.001								
4/17/2019		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001		
4/23/2019									
9/23/2019				<0.001					<0.001
9/24/2019		<0.001	<0.001		<0.001	<0.001	<0.001	<0.001	
9/25/2019									
3/16/2020				<0.001					
3/17/2020									<0.001
3/18/2020		<0.001			<0.001		<0.001		
3/24/2020			<0.001			<0.001			
3/25/2020								<0.001	
5/12/2020				<0.001					
5/13/2020									

Time Series

Constituent: Thallium (mg/L) Analysis Run 7/27/2020 11:29 AM View: Time Series

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-12V	GS-AP-MW-18V	GS-AP-MW-24H	GS-AP-MW-26H	GS-AP-MW-29H	GS-AP-MW-28H	GS-AP-MW-34HO
8/1/2016							
8/2/2016							
8/3/2016							
9/19/2016							
9/20/2016							
9/21/2016							
10/24/2016							
10/25/2016							
10/26/2016							
12/12/2016							
12/13/2016							
12/14/2016							
2/6/2017							
2/7/2017							
2/8/2017							
3/27/2017							
3/28/2017							
3/29/2017							
3/30/2017							
4/24/2017							
4/26/2017							
6/5/2017							
6/6/2017							
6/7/2017							
2/19/2018							
2/20/2018							
2/21/2018							
5/14/2018							
5/15/2018							
5/16/2018							
10/15/2018							
10/16/2018							
10/17/2018							
2/20/2019							
2/21/2019	<0.001						
2/26/2019		<0.001	<0.001				
2/27/2019				<0.001	<0.001		
3/13/2019						<0.001	
4/16/2019							
4/17/2019							
4/23/2019							
9/23/2019				<0.001			
9/24/2019			<0.001		<0.001		
9/25/2019	<0.001					<0.001	
3/16/2020						<0.001	<0.001
3/17/2020							
3/18/2020			<0.001				
3/24/2020	<0.001						
3/25/2020		<0.001		<0.001	<0.001		
5/12/2020						<0.001	<0.001
5/13/2020							

Time Series

Constituent: Thallium (mg/L) Analysis Run 7/27/2020 11:29 AM View: Time Series

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-35HO	GS-AP-MW-36H	GS-AP-MW-33HO	GS-AP-MW-30HA	GS-AP-MW-15V	GS-AP-MW-41HD	GS-AP-MW-31H	GS-AP-MW-9V	GS-AP-MW-42H
3/17/2020	<0.001	<0.001	<0.001						
3/18/2020				<0.001	<0.001	<0.001	<0.001		
3/23/2020								<0.001	
3/24/2020									<0.001
3/25/2020									
5/12/2020	<0.001								
5/13/2020		<0.001	<0.001	<0.001					

Time Series

Constituent: Thallium (mg/L) Analysis Run 7/27/2020 11:29 AM View: Time Series

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-38H	GS-AP-MW-21V	GS-AP-MW-25HA	GS-AP-MW-43HO	GS-AP-PZ-18	GS-AP-MW-32H	GS-AP-PZ-22	GS-AP-PZ-16
3/17/2020								
3/18/2020								
3/23/2020		<0.001						
3/24/2020	<0.001		<0.001			<0.001	<0.001	<0.001
3/25/2020				<0.001	<0.001			
5/12/2020								
5/13/2020								

Upper Tolerance Limits - Appendix IV

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond Printed 7/22/2020, 3:32 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	27	n/a	n/a	92.59	n/a	n/a	0.2503	NP Inter(NDs)
Arsenic (mg/L)	0.005	n/a	27	n/a	n/a	77.78	n/a	n/a	0.2503	NP Inter(NDs)
Barium (mg/L)	0.208	n/a	27	n/a	n/a	0	n/a	n/a	0.2503	NP Inter(normal...
Beryllium (mg/L)	0.003	n/a	27	n/a	n/a	100	n/a	n/a	0.2503	NP Inter(NDs)
Cadmium (mg/L)	0.001	n/a	27	n/a	n/a	100	n/a	n/a	0.2503	NP Inter(NDs)
Chromium (mg/L)	0.01	n/a	27	n/a	n/a	85.19	n/a	n/a	0.2503	NP Inter(NDs)
Cobalt (mg/L)	0.005	n/a	27	n/a	n/a	81.48	n/a	n/a	0.2503	NP Inter(NDs)
Combined Radium 226 + 228 (pCi/L)	1.03	n/a	27	0.3444	0.3029	0	None	No	0.05	Inter
Fluoride (mg/L)	0.2499	n/a	29	0.1268	0.05508	0	None	No	0.05	Inter
Lead (mg/L)	0.005	n/a	27	n/a	n/a	96.3	n/a	n/a	0.2503	NP Inter(NDs)
Lithium (mg/L)	0.0809	n/a	27	n/a	n/a	62.96	n/a	n/a	0.2503	NP Inter(NDs)
Mercury (mg/L)	0.0005	n/a	27	n/a	n/a	100	n/a	n/a	0.2503	NP Inter(NDs)
Molybdenum (mg/L)	0.01	n/a	27	n/a	n/a	92.59	n/a	n/a	0.2503	NP Inter(NDs)
Selenium (mg/L)	0.01	n/a	27	n/a	n/a	100	n/a	n/a	0.2503	NP Inter(NDs)
Thallium (mg/L)	0.001	n/a	27	n/a	n/a	100	n/a	n/a	0.2503	NP Inter(NDs)

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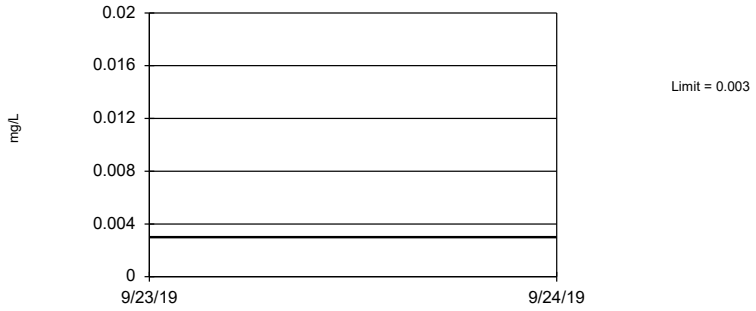
Tolerance Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. Limit is highest of 27 background values. 92.59% NDs. 84.18% coverage at alpha=0.01; 89.65% coverage at alpha=0.05; 97.46% coverage at alpha=0.5. Report alpha = 0.2503.

Constituent: Antimony Analysis Run 7/22/2020 3:30 PM View: UTL's - Appendix IV

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

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Tolerance Limit

Interwell Non-parametric

Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. Limit is highest of 27 background values. 77.78% NDs. 84.18% coverage at alpha=0.01; 89.65% coverage at alpha=0.05; 97.46% coverage at alpha=0.5. Report alpha = 0.2503.

Constituent: Arsenic Analysis Run 7/22/2020 3:30 PM View: UTL's - Appendix IV

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

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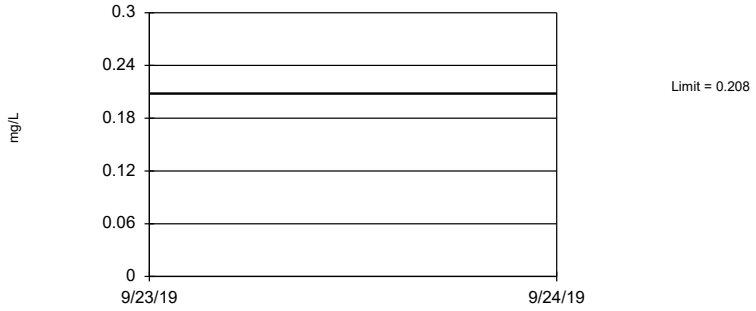
Tolerance Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 27 background values. 84.18% coverage at alpha=0.01; 89.65% coverage at alpha=0.05; 97.46% coverage at alpha=0.5. Report alpha = 0.2503.

Constituent: Barium Analysis Run 7/22/2020 3:30 PM View: UTL's - Appendix IV

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

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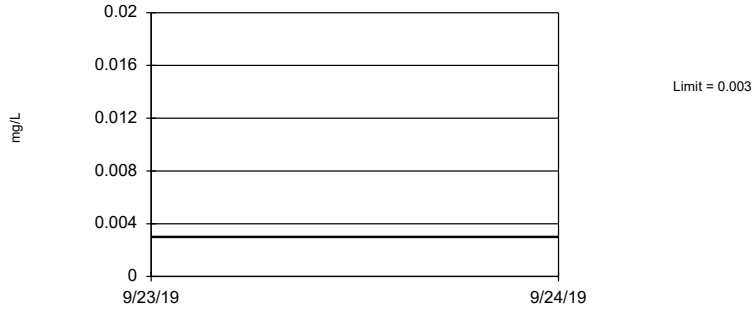
Tolerance Limit

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. 84.18% coverage at alpha=0.01; 89.65% coverage at alpha=0.05; 97.46% coverage at alpha=0.5. Report alpha = 0.2503.

Constituent: Beryllium Analysis Run 7/22/2020 3:30 PM View: UTL's - Appendix IV

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

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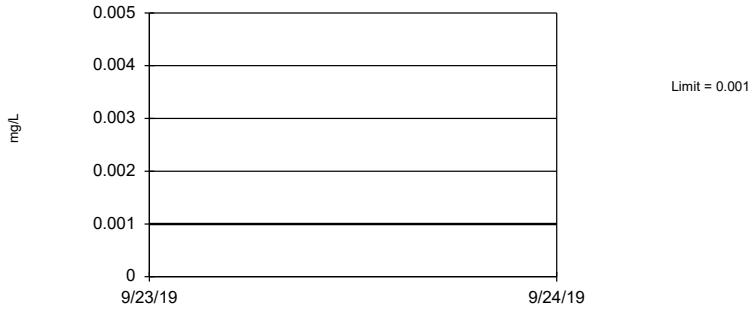
Tolerance Limit

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. 84.18% coverage at alpha=0.01; 89.65% coverage at alpha=0.05; 97.46% coverage at alpha=0.5. Report alpha = 0.2503.

Constituent: Cadmium Analysis Run 7/22/2020 3:30 PM View: UTL's - Appendix IV

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

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Tolerance Limit

Interwell Non-parametric

Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. Limit is highest of 27 background values. 85.19% NDs. 84.18% coverage at alpha=0.01; 89.65% coverage at alpha=0.05; 97.46% coverage at alpha=0.5. Report alpha = 0.2503.

Constituent: Chromium Analysis Run 7/22/2020 3:30 PM View: UTL's - Appendix IV

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

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Tolerance Limit

Interwell Non-parametric

Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. Limit is highest of 27 background values. 81.48% NDs. 84.18% coverage at alpha=0.01; 89.65% coverage at alpha=0.05; 97.46% coverage at alpha=0.5. Report alpha = 0.2503.

Constituent: Cobalt Analysis Run 7/22/2020 3:30 PM View: UTL's - Appendix IV

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

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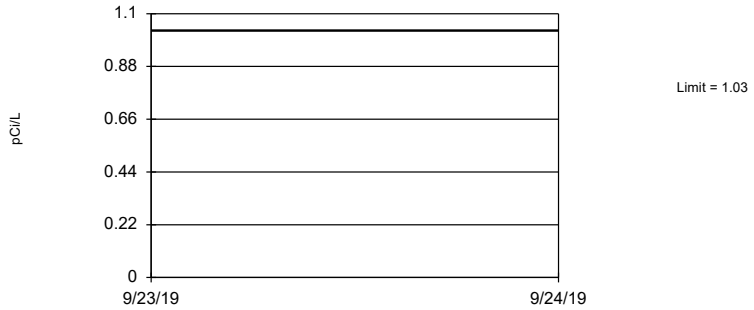
Tolerance Limit

Interwell Parametric



95% coverage. Background Data Summary: Mean=0.3444, Std. Dev.=0.3029, n=27. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.933, critical = 0.894. Report alpha = 0.05.

Constituent: Combined Radium 226 + 228 Analysis Run 7/22/2020 3:30 PM View: UTL's - Appendix IV

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

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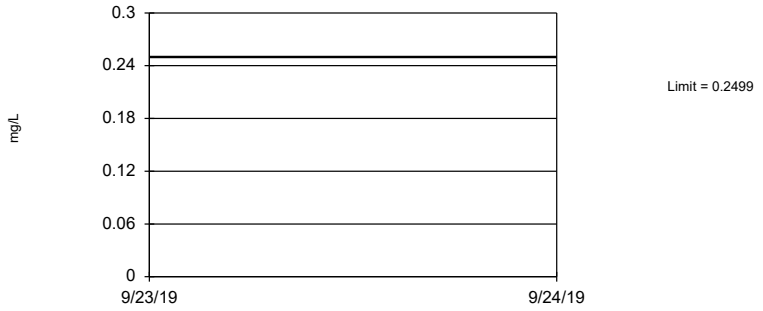
Tolerance Limit

Interwell Parametric



95% coverage. Background Data Summary: Mean=0.1268, Std. Dev.=0.05508, n=29. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9702, critical = 0.898. Report alpha = 0.05.

Constituent: Fluoride Analysis Run 7/22/2020 3:30 PM View: UTL's - Appendix IV

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

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Tolerance Limit

Interwell Non-parametric

Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. Limit is highest of 27 background values. 96.3% NDs. 84.18% coverage at alpha=0.01; 89.65% coverage at alpha=0.05; 97.46% coverage at alpha=0.5. Report alpha = 0.2503.

Constituent: Lead Analysis Run 7/22/2020 3:30 PM View: UTL's - Appendix IV

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

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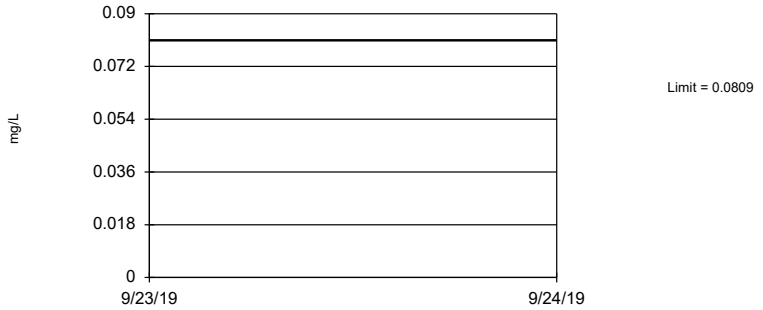
Tolerance Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. Limit is highest of 27 background values. 62.96% NDs. 84.18% coverage at alpha=0.01; 89.65% coverage at alpha=0.05; 97.46% coverage at alpha=0.5. Report alpha = 0.2503.

Constituent: Lithium Analysis Run 7/22/2020 3:30 PM View: UTL's - Appendix IV

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

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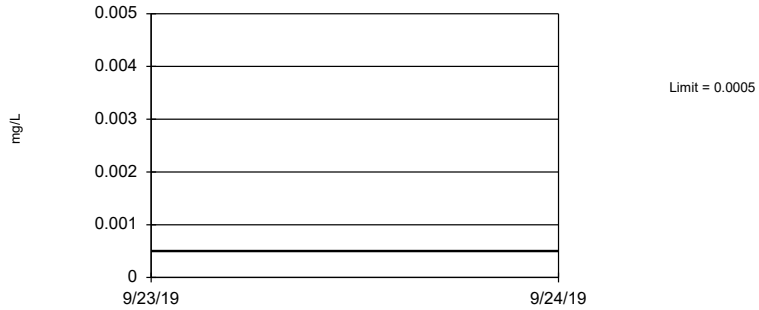
Tolerance Limit

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. 84.18% coverage at alpha=0.01; 89.65% coverage at alpha=0.05; 97.46% coverage at alpha=0.5. Report alpha = 0.2503.

Constituent: Mercury Analysis Run 7/22/2020 3:30 PM View: UTL's - Appendix IV

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

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Tolerance Limit

Interwell Non-parametric

Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. Limit is highest of 27 background values. 92.59% NDs. 84.18% coverage at alpha=0.01; 89.65% coverage at alpha=0.05; 97.46% coverage at alpha=0.5. Report alpha = 0.2503.

Constituent: Molybdenum Analysis Run 7/22/2020 3:30 PM View: UTL's - Appendix IV

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

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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. 84.18% coverage at alpha=0.01; 89.65% coverage at alpha=0.05; 97.46% coverage at alpha=0.5. Report alpha = 0.2503.

Constituent: Selenium Analysis Run 7/22/2020 3:30 PM View: UTL's - Appendix IV

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

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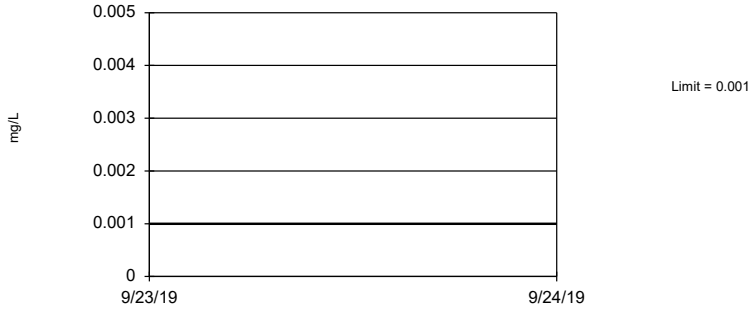
Tolerance Limit

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. 84.18% coverage at alpha=0.01; 89.65% coverage at alpha=0.05; 97.46% coverage at alpha=0.5. Report alpha = 0.2503.

Constituent: Thallium Analysis Run 7/22/2020 3:30 PM View: UTL's - Appendix IV

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

Confidence Intervals - Significant Results

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond Printed 7/27/2020, 11:50 AM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	%NDs	Transform	Alpha	Method
Arsenic (mg/L)	**GS-AP-MW-6D**	**0.0831**	**0.06393**	**0.01**	**Yes**	**14**	**0**	**No**	**0.01**	**Param.**
Arsenic (mg/L)	**GS-AP-MW-7**	**0.224**	**0.18**	**0.01**	**Yes**	**14**	**0**	**No**	**0.01**	**Param.**
Arsenic (mg/L)	**GS-AP-MW-12**	**0.06104**	**0.02045**	**0.01**	**Yes**	**14**	**0**	**No**	**0.01**	**Param.**
Lithium (mg/L)	**GS-AP-MW-6D**	**0.2604**	**0.2263**	**0.0809**	**Yes**	**14**	**0**	**No**	**0.01**	**Param.**
Lithium (mg/L)	**GS-AP-MW-7**	**0.1613**	**0.142**	**0.0809**	**Yes**	**14**	**0**	**No**	**0.01**	**Param.**
Lithium (mg/L)	**GS-AP-MW-15**	**0.378**	**0.136**	**0.0809**	**Yes**	**14**	**0**	**No**	**0.01**	**NP (normality)**
Lithium (mg/L)	**GS-AP-MW-18**	**0.2895**	**0.1692**	**0.0809**	**Yes**	**14**	**0**	**No**	**0.01**	**Param.**
Lithium (mg/L)	**GS-AP-MW-21**	**0.2359**	**0.1489**	**0.0809**	**Yes**	**14**	**0**	**ln(x)**	**0.01**	**Param.**
Molybdenum (mg/L)	**GS-AP-MW-7**	**0.174**	**0.1489**	**0.1**	**Yes**	**14**	**0**	**No**	**0.01**	**Param.**

Confidence Intervals - All Results

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond Printed 7/27/2020, 11:50 AM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	%NDs	Transform	Alpha	Method
Antimony (mg/L)	GS-AP-MW-2	0.003	0.003	0.006	No	15	100	No	0.01	NP (NDs)
Antimony (mg/L)	GS-AP-MW-6D	0.003	0.00104	0.006	No	14	85.71	No	0.01	NP (NDs)
Antimony (mg/L)	GS-AP-MW-6S	0.003	0.000727	0.006	No	14	92.86	No	0.01	NP (NDs)
Antimony (mg/L)	GS-AP-MW-7	0.003	0.00105	0.006	No	14	85.71	No	0.01	NP (NDs)
Antimony (mg/L)	GS-AP-MW-12	0.003	0.0022	0.006	No	14	85.71	No	0.01	NP (NDs)
Antimony (mg/L)	GS-AP-MW-15	0.003	0.000876	0.006	No	14	64.29	No	0.01	NP (NDs)
Antimony (mg/L)	GS-AP-MW-16D	0.003	0.000633	0.006	No	14	92.86	No	0.01	NP (NDs)
Antimony (mg/L)	GS-AP-MW-17	0.003	0.00072	0.006	No	15	86.67	No	0.01	NP (NDs)
Antimony (mg/L)	GS-AP-MW-18	0.003	0.003	0.006	No	14	100	No	0.01	NP (NDs)
Antimony (mg/L)	GS-AP-MW-19	0.003	0.000613	0.006	No	14	92.86	No	0.01	NP (NDs)
Antimony (mg/L)	GS-AP-MW-21	0.003	0.00119	0.006	No	14	92.86	No	0.01	NP (NDs)
Arsenic (mg/L)	GS-AP-MW-2	0.005	0.005	0.01	No	15	100	No	0.01	NP (NDs)
Arsenic (mg/L)	**GS-AP-MW-6D**	**0.0831**	**0.06393**	**0.01**	**Yes**	**14**	**0**	**No**	**0.01**	**Param.**
Arsenic (mg/L)	GS-AP-MW-6S	0.0108	0.00864	0.01	No	14	0	No	0.01	NP (normality)
Arsenic (mg/L)	**GS-AP-MW-7**	**0.224**	**0.18**	**0.01**	**Yes**	**14**	**0**	**No**	**0.01**	**Param.**
Arsenic (mg/L)	**GS-AP-MW-12**	**0.06104**	**0.02045**	**0.01**	**Yes**	**14**	**0**	**No**	**0.01**	**Param.**
Arsenic (mg/L)	GS-AP-MW-15	0.01262	0.006961	0.01	No	14	0	sqrt(x)	0.01	Param.
Arsenic (mg/L)	GS-AP-MW-16D	0.005	0.005	0.01	No	14	100	No	0.01	NP (NDs)
Arsenic (mg/L)	GS-AP-MW-17	0.003257	0.001469	0.01	No	15	0	sqrt(x)	0.01	Param.
Arsenic (mg/L)	GS-AP-MW-18	0.0922	0.00481	0.01	No	8	0	No	0.004	NP (normality)
Arsenic (mg/L)	GS-AP-MW-19	0.005	0.00216	0.01	No	14	57.14	No	0.01	NP (NDs)
Arsenic (mg/L)	GS-AP-MW-21	0.005	0.00153	0.01	No	14	42.86	No	0.01	NP (normality)
Barium (mg/L)	GS-AP-MW-2	0.08061	0.06579	2	No	15	0	No	0.01	Param.
Barium (mg/L)	GS-AP-MW-6D	0.8593	0.7143	2	No	14	0	No	0.01	Param.
Barium (mg/L)	GS-AP-MW-6S	0.2213	0.1286	2	No	14	0	No	0.01	Param.
Barium (mg/L)	GS-AP-MW-7	0.1009	0.05895	2	No	14	0	sqrt(x)	0.01	Param.
Barium (mg/L)	GS-AP-MW-12	0.1625	0.1177	2	No	14	0	No	0.01	Param.
Barium (mg/L)	GS-AP-MW-15	0.2494	0.1604	2	No	14	0	No	0.01	Param.
Barium (mg/L)	GS-AP-MW-16D	0.3259	0.3016	2	No	14	0	No	0.01	Param.
Barium (mg/L)	GS-AP-MW-17	0.08527	0.05459	2	No	15	0	sqrt(x)	0.01	Param.
Barium (mg/L)	GS-AP-MW-18	0.09799	0.05226	2	No	14	0	ln(x)	0.01	Param.
Barium (mg/L)	GS-AP-MW-19	0.3886	0.3227	2	No	14	0	sqrt(x)	0.01	Param.
Barium (mg/L)	GS-AP-MW-21	0.0914	0.0441	2	No	14	0	No	0.01	NP (normality)
Beryllium (mg/L)	GS-AP-MW-2	0.003	0.00138	0.004	No	15	93.33	No	0.01	NP (NDs)
Beryllium (mg/L)	GS-AP-MW-6D	0.003	0.003	0.004	No	14	100	No	0.01	NP (NDs)
Beryllium (mg/L)	GS-AP-MW-6S	0.003	0.000794	0.004	No	14	92.86	No	0.01	NP (NDs)
Beryllium (mg/L)	GS-AP-MW-7	0.003	0.003	0.004	No	14	100	No	0.01	NP (NDs)
Beryllium (mg/L)	GS-AP-MW-12	0.003	0.003	0.004	No	14	100	No	0.01	NP (NDs)
Beryllium (mg/L)	GS-AP-MW-15	0.003	0.003	0.004	No	14	100	No	0.01	NP (NDs)
Beryllium (mg/L)	GS-AP-MW-16D	0.003	0.00109	0.004	No	14	92.86	No	0.01	NP (NDs)
Beryllium (mg/L)	GS-AP-MW-17	0.003	0.003	0.004	No	15	100	No	0.01	NP (NDs)
Beryllium (mg/L)	GS-AP-MW-18	0.003	0.003	0.004	No	14	100	No	0.01	NP (NDs)
Beryllium (mg/L)	GS-AP-MW-19	0.003	0.003	0.004	No	14	100	No	0.01	NP (NDs)
Beryllium (mg/L)	GS-AP-MW-21	0.003	0.003	0.004	No	14	100	No	0.01	NP (NDs)
Cadmium (mg/L)	GS-AP-MW-2	0.001	0.001	0.005	No	15	100	No	0.01	NP (NDs)
Cadmium (mg/L)	GS-AP-MW-6D	0.001	0.001	0.005	No	14	100	No	0.01	NP (NDs)
Cadmium (mg/L)	GS-AP-MW-6S	0.001	0.001	0.005	No	14	100	No	0.01	NP (NDs)
Cadmium (mg/L)	GS-AP-MW-7	0.001	0.001	0.005	No	14	100	No	0.01	NP (NDs)
Cadmium (mg/L)	GS-AP-MW-12	0.001	0.001	0.005	No	14	100	No	0.01	NP (NDs)
Cadmium (mg/L)	GS-AP-MW-15	0.001	0.001	0.005	No	14	100	No	0.01	NP (NDs)
Cadmium (mg/L)	GS-AP-MW-16D	0.001	0.001	0.005	No	14	100	No	0.01	NP (NDs)
Cadmium (mg/L)	GS-AP-MW-17	0.001	0.001	0.005	No	15	100	No	0.01	NP (NDs)
Cadmium (mg/L)	GS-AP-MW-18	0.001	0.001	0.005	No	14	100	No	0.01	NP (NDs)
Cadmium (mg/L)	GS-AP-MW-19	0.001	0.001	0.005	No	14	100	No	0.01	NP (NDs)
Cadmium (mg/L)	GS-AP-MW-21	0.001	0.001	0.005	No	14	100	No	0.01	NP (NDs)
Chromium (mg/L)	GS-AP-MW-2	0.01	0.01	0.1	No	15	100	No	0.01	NP (NDs)
Chromium (mg/L)	GS-AP-MW-6D	0.01	0.01	0.1	No	14	100	No	0.01	NP (NDs)
Chromium (mg/L)	GS-AP-MW-6S	0.01	0.01	0.1	No	14	100	No	0.01	NP (NDs)
Chromium (mg/L)	GS-AP-MW-7	0.01	0.0076	0.1	No	14	78.57	No	0.01	NP (NDs)
Chromium (mg/L)	GS-AP-MW-12	0.01	0.01	0.1	No	14	100	No	0.01	NP (NDs)
Chromium (mg/L)	GS-AP-MW-15	0.01	0.00209	0.1	No	14	92.86	No	0.01	NP (NDs)
Chromium (mg/L)	GS-AP-MW-16D	0.01	0.01	0.1	No	14	100	No	0.01	NP (NDs)
Chromium (mg/L)	GS-AP-MW-17	0.01	0.01	0.1	No	15	100	No	0.01	NP (NDs)
Chromium (mg/L)	GS-AP-MW-18	0.01	0.01	0.1	No	14	100	No	0.01	NP (NDs)
Chromium (mg/L)	GS-AP-MW-19	0.01	0.01	0.1	No	14	100	No	0.01	NP (NDs)
Chromium (mg/L)	GS-AP-MW-21	0.01	0.00233	0.1	No	14	78.57	No	0.01	NP (NDs)
Cobalt (mg/L)	GS-AP-MW-2	0.005	0.005	0.006	No	15	100	No	0.01	NP (NDs)
Cobalt (mg/L)	GS-AP-MW-6D	0.005	0.005	0.006	No	14	100	No	0.01	NP (NDs)

Confidence Intervals - All Results

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond Printed 7/27/2020, 11:50 AM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	%NDs	Transform	Alpha	Method
Cobalt (mg/L)	GS-AP-MW-6S	0.005	0.00224	0.006	No	14	71.43	No	0.01	NP (NDs)
Cobalt (mg/L)	GS-AP-MW-7	0.005	0.00476	0.006	No	14	85.71	No	0.01	NP (NDs)
Cobalt (mg/L)	GS-AP-MW-12	0.005	0.005	0.006	No	14	100	No	0.01	NP (NDs)
Cobalt (mg/L)	GS-AP-MW-15	0.005	0.005	0.006	No	14	100	No	0.01	NP (NDs)
Cobalt (mg/L)	GS-AP-MW-16D	0.005	0.005	0.006	No	14	100	No	0.01	NP (NDs)
Cobalt (mg/L)	GS-AP-MW-17	0.005	0.005	0.006	No	15	100	No	0.01	NP (NDs)
Cobalt (mg/L)	GS-AP-MW-18	0.005	0.005	0.006	No	14	100	No	0.01	NP (NDs)
Cobalt (mg/L)	GS-AP-MW-19	0.005	0.005	0.006	No	14	100	No	0.01	NP (NDs)
Cobalt (mg/L)	GS-AP-MW-21	0.005	0.005	0.006	No	14	100	No	0.01	NP (NDs)
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-2	1.068	0.1425	5	No	15	0	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-6D	0.7714	0.301	5	No	14	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-6S	1.084	0.4497	5	No	14	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-7	0.7202	0.1562	5	No	14	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-12	0.7806	0.361	5	No	14	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-15	0.7771	0.1732	5	No	14	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-16D	0.4783	0.1535	5	No	14	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-17	0.5279	0.1289	5	No	15	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-18	0.6976	0.2252	5	No	14	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-19	1.127	0.449	5	No	14	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-21	0.9673	0.3508	5	No	14	0	No	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-2	1.418	1.026	4	No	16	0	No	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-6D	0.1399	0.09878	4	No	15	0	x^2	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-6S	0.1364	0.06746	4	No	15	0	No	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-7	0.1097	0.06808	4	No	15	6.667	No	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-12	0.5643	0.2781	4	No	15	0	No	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-15	0.7722	0.5533	4	No	15	0	sqrt(x)	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-16D	0.1267	0.07618	4	No	15	0	No	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-17	0.2806	0.1831	4	No	16	0	No	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-18	0.4786	0.2675	4	No	15	0	No	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-19	0.359	0.2824	4	No	15	0	No	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-21	0.266	0.2095	4	No	15	0	x^2	0.01	Param.
Lead (mg/L)	GS-AP-MW-2	0.005	0.005	0.015	No	15	100	No	0.01	NP (NDs)
Lead (mg/L)	GS-AP-MW-6D	0.005	0.005	0.015	No	14	100	No	0.01	NP (NDs)
Lead (mg/L)	GS-AP-MW-6S	0.005	0.005	0.015	No	14	100	No	0.01	NP (NDs)
Lead (mg/L)	GS-AP-MW-7	0.005	0.00279	0.015	No	14	71.43	No	0.01	NP (NDs)
Lead (mg/L)	GS-AP-MW-12	0.005	0.005	0.015	No	14	100	No	0.01	NP (NDs)
Lead (mg/L)	GS-AP-MW-15	0.005	0.005	0.015	No	14	100	No	0.01	NP (NDs)
Lead (mg/L)	GS-AP-MW-16D	0.005	0.005	0.015	No	14	100	No	0.01	NP (NDs)
Lead (mg/L)	GS-AP-MW-17	0.005	0.005	0.015	No	15	100	No	0.01	NP (NDs)
Lead (mg/L)	GS-AP-MW-18	0.005	0.005	0.015	No	14	100	No	0.01	NP (NDs)
Lead (mg/L)	GS-AP-MW-19	0.005	0.005	0.015	No	14	100	No	0.01	NP (NDs)
Lead (mg/L)	GS-AP-MW-21	0.005	0.005	0.015	No	14	100	No	0.01	NP (NDs)
Lithium (mg/L)	GS-AP-MW-2	0.05337	0.04482	0.0809	No	15	0	No	0.01	Param.
Lithium (mg/L)	**GS-AP-MW-6D**	**0.2604**	**0.2263**	**0.0809**	**Yes**	**14**	**0**	**No**	**0.01**	**Param.**
Lithium (mg/L)	GS-AP-MW-6S	0.0238	0.01	0.0809	No	14	64.29	No	0.01	NP (NDs)
Lithium (mg/L)	**GS-AP-MW-7**	**0.1613**	**0.142**	**0.0809**	**Yes**	**14**	**0**	**No**	**0.01**	**Param.**
Lithium (mg/L)	GS-AP-MW-12	0.0341	0.0234	0.0809	No	14	0	No	0.01	NP (normality)
Lithium (mg/L)	**GS-AP-MW-15**	**0.378**	**0.136**	**0.0809**	**Yes**	**14**	**0**	**No**	**0.01**	**NP (normality)**
Lithium (mg/L)	GS-AP-MW-16D	0.0366	0.03339	0.0809	No	14	0	No	0.01	Param.
Lithium (mg/L)	GS-AP-MW-17	0.06133	0.04796	0.0809	No	15	0	No	0.01	Param.
Lithium (mg/L)	**GS-AP-MW-18**	**0.2895**	**0.1692**	**0.0809**	**Yes**	**14**	**0**	**No**	**0.01**	**Param.**
Lithium (mg/L)	GS-AP-MW-19	0.04018	0.02887	0.0809	No	14	0	No	0.01	Param.
Lithium (mg/L)	**GS-AP-MW-21**	**0.2359**	**0.1489**	**0.0809**	**Yes**	**14**	**0**	**ln(x)**	**0.01**	**Param.**
Mercury (mg/L)	GS-AP-MW-2	0.0005	0.0005	0.002	No	15	100	No	0.01	NP (NDs)
Mercury (mg/L)	GS-AP-MW-6D	0.0005	0.0005	0.002	No	14	100	No	0.01	NP (NDs)
Mercury (mg/L)	GS-AP-MW-6S	0.0005	0.0005	0.002	No	14	100	No	0.01	NP (NDs)
Mercury (mg/L)	GS-AP-MW-7	0.0005	0.0005	0.002	No	14	100	No	0.01	NP (NDs)
Mercury (mg/L)	GS-AP-MW-12	0.0005	0.0005	0.002	No	14	100	No	0.01	NP (NDs)
Mercury (mg/L)	GS-AP-MW-15	0.0005	0.0005	0.002	No	14	100	No	0.01	NP (NDs)
Mercury (mg/L)	GS-AP-MW-16D	0.0005	0.0005	0.002	No	14	100	No	0.01	NP (NDs)
Mercury (mg/L)	GS-AP-MW-17	0.0005	0.0005	0.002	No	15	100	No	0.01	NP (NDs)
Mercury (mg/L)	GS-AP-MW-18	0.0005	0.0005	0.002	No	14	100	No	0.01	NP (NDs)
Mercury (mg/L)	GS-AP-MW-19	0.0005	0.0005	0.002	No	14	100	No	0.01	NP (NDs)
Mercury (mg/L)	GS-AP-MW-21	0.0005	0.0005	0.002	No	14	100	No	0.01	NP (NDs)
Molybdenum (mg/L)	GS-AP-MW-2	0.006782	0.003568	0.1	No	15	26.67	sqrt(x)	0.01	Param.
Molybdenum (mg/L)	GS-AP-MW-6D	0.006744	0.004732	0.1	No	14	0	sqrt(x)	0.01	Param.
Molybdenum (mg/L)	GS-AP-MW-6S	0.007685	0.002481	0.1	No	14	42.86	x^(1/3)	0.01	Param.
Molybdenum (mg/L)	**GS-AP-MW-7**	**0.174**	**0.1489**	**0.1**	**Yes**	**14**	**0**	**No**	**0.01**	**Param.**

Confidence Intervals - All Results

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond Printed 7/27/2020, 11:50 AM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	%NDs	Transform	Alpha	Method
Molybdenum (mg/L)	GS-AP-MW-12	0.0269	0.00444	0.1	No	14	57.14	No	0.01	NP (NDs)
Molybdenum (mg/L)	GS-AP-MW-15	0.06613	0.03559	0.1	No	14	0	ln(x)	0.01	Param.
Molybdenum (mg/L)	GS-AP-MW-16D	0.01	0.01	0.1	No	14	100	No	0.01	NP (NDs)
Molybdenum (mg/L)	GS-AP-MW-17	0.01029	0.005561	0.1	No	15	0	sqrt(x)	0.01	Param.
Molybdenum (mg/L)	GS-AP-MW-18	0.04826	0.03219	0.1	No	14	0	x^2	0.01	Param.
Molybdenum (mg/L)	GS-AP-MW-19	0.0103	0.00593	0.1	No	14	0	No	0.01	NP (normality)
Molybdenum (mg/L)	GS-AP-MW-21	0.07451	0.04154	0.1	No	14	0	No	0.01	Param.
Selenium (mg/L)	GS-AP-MW-2	0.01	0.01	0.05	No	15	100	No	0.01	NP (NDs)
Selenium (mg/L)	GS-AP-MW-6D	0.01	0.01	0.05	No	14	100	No	0.01	NP (NDs)
Selenium (mg/L)	GS-AP-MW-6S	0.01	0.01	0.05	No	14	100	No	0.01	NP (NDs)
Selenium (mg/L)	GS-AP-MW-7	0.01	0.01	0.05	No	14	100	No	0.01	NP (NDs)
Selenium (mg/L)	GS-AP-MW-12	0.01	0.01	0.05	No	14	100	No	0.01	NP (NDs)
Selenium (mg/L)	GS-AP-MW-15	0.01	0.01	0.05	No	14	100	No	0.01	NP (NDs)
Selenium (mg/L)	GS-AP-MW-16D	0.01	0.01	0.05	No	14	100	No	0.01	NP (NDs)
Selenium (mg/L)	GS-AP-MW-17	0.01	0.01	0.05	No	15	100	No	0.01	NP (NDs)
Selenium (mg/L)	GS-AP-MW-18	0.01	0.01	0.05	No	14	100	No	0.01	NP (NDs)
Selenium (mg/L)	GS-AP-MW-19	0.01	0.01	0.05	No	14	100	No	0.01	NP (NDs)
Selenium (mg/L)	GS-AP-MW-21	0.01	0.01	0.05	No	14	100	No	0.01	NP (NDs)
Thallium (mg/L)	GS-AP-MW-2	0.001	0.001	0.002	No	15	100	No	0.01	NP (NDs)
Thallium (mg/L)	GS-AP-MW-6D	0.001	0.001	0.002	No	14	100	No	0.01	NP (NDs)
Thallium (mg/L)	GS-AP-MW-6S	0.001	0.001	0.002	No	14	100	No	0.01	NP (NDs)
Thallium (mg/L)	GS-AP-MW-7	0.001	0.001	0.002	No	14	100	No	0.01	NP (NDs)
Thallium (mg/L)	GS-AP-MW-12	0.001	0.001	0.002	No	14	100	No	0.01	NP (NDs)
Thallium (mg/L)	GS-AP-MW-15	0.001	0.001	0.002	No	14	100	No	0.01	NP (NDs)
Thallium (mg/L)	GS-AP-MW-16D	0.001	0.001	0.002	No	14	100	No	0.01	NP (NDs)
Thallium (mg/L)	GS-AP-MW-17	0.001	0.001	0.002	No	15	100	No	0.01	NP (NDs)
Thallium (mg/L)	GS-AP-MW-18	0.001	0.001	0.002	No	14	100	No	0.01	NP (NDs)
Thallium (mg/L)	GS-AP-MW-19	0.001	0.001	0.002	No	14	100	No	0.01	NP (NDs)
Thallium (mg/L)	GS-AP-MW-21	0.001	0.001	0.002	No	14	100	No	0.01	NP (NDs)

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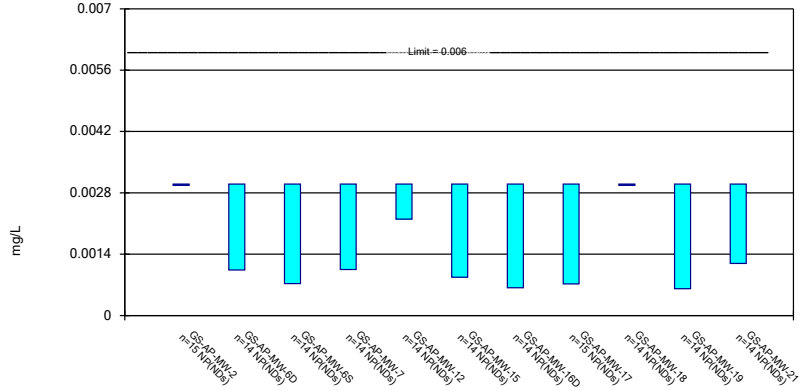
Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Antimony Analysis Run 7/27/2020 11:46 AM View: Confidence Intervals - Appendix IV

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

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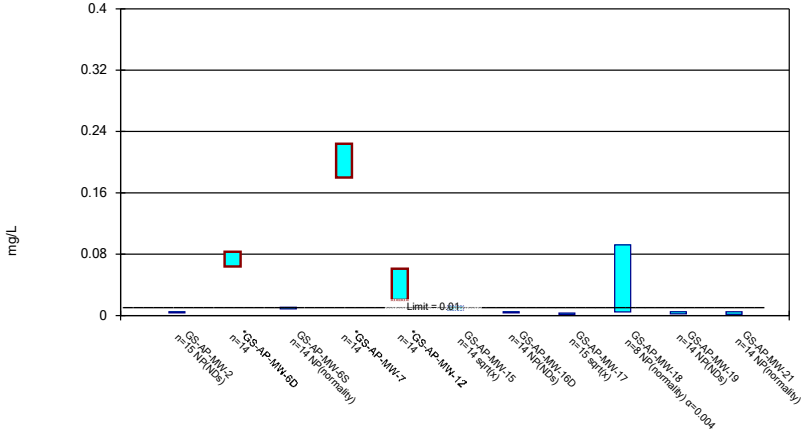
Parametric and Non-Parametric (NP) Confidence Interval

Compliance limit is exceeded.* Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Arsenic Analysis Run 7/27/2020 11:47 AM View: Confidence Intervals - Appendix IV

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

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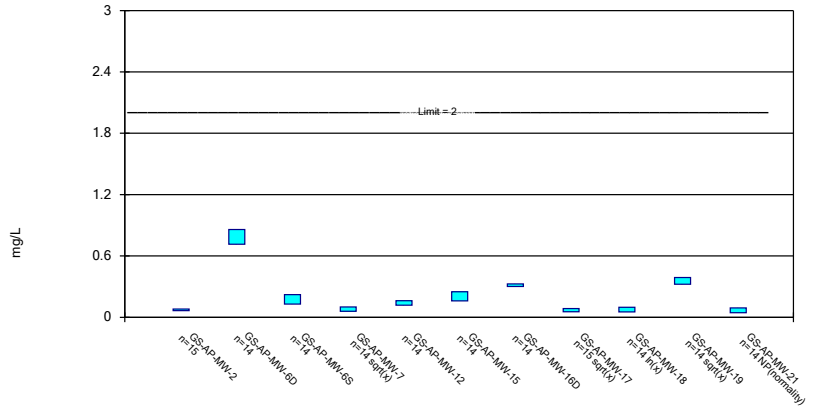
Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Barium Analysis Run 7/27/2020 11:47 AM View: Confidence Intervals - Appendix IV

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

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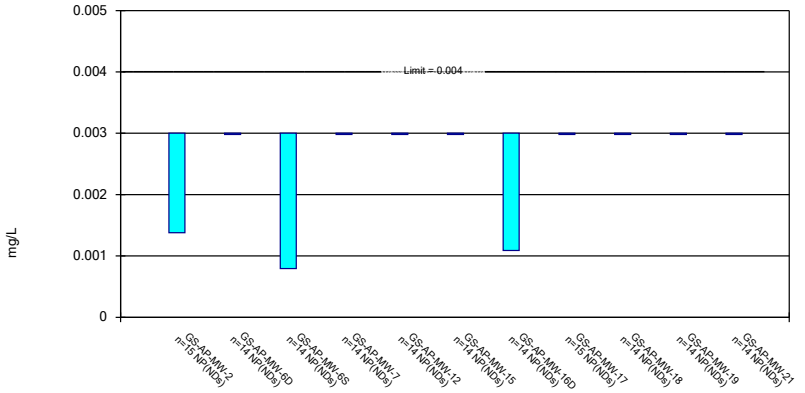
Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Beryllium Analysis Run 7/27/2020 11:47 AM View: Confidence Intervals - Appendix IV

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

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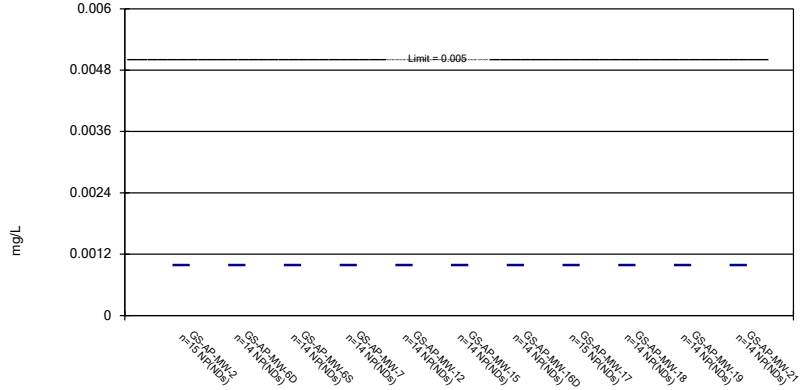
Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Cadmium Analysis Run 7/27/2020 11:47 AM View: Confidence Intervals - Appendix IV

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

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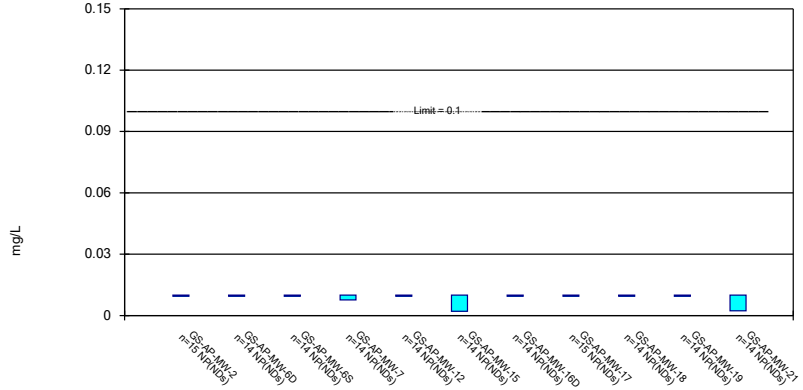
Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Chromium Analysis Run 7/27/2020 11:47 AM View: Confidence Intervals - Appendix IV

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

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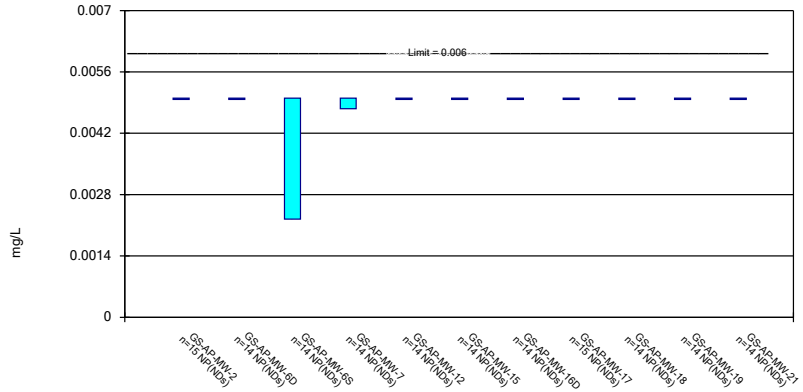
Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Cobalt Analysis Run 7/27/2020 11:47 AM View: Confidence Intervals - Appendix IV

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

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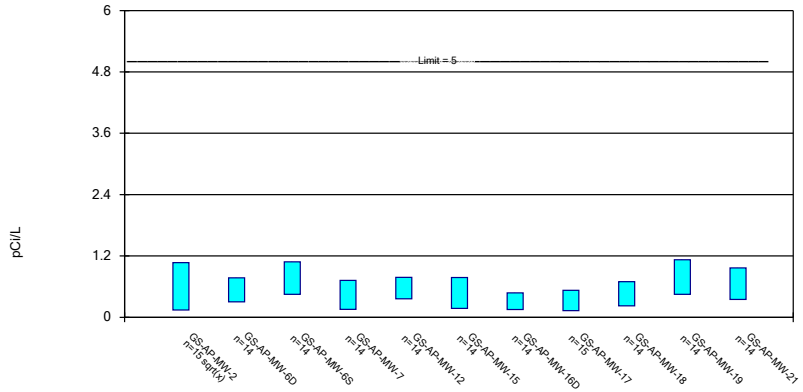
Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Combined Radium 226 + 228 Analysis Run 7/27/2020 11:47 AM View: Confidence Intervals -

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

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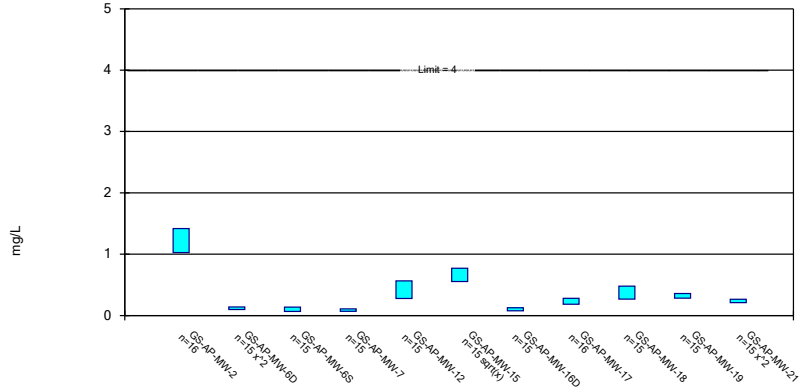
Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Fluoride Analysis Run 7/27/2020 11:47 AM View: Confidence Intervals - Appendix IV

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

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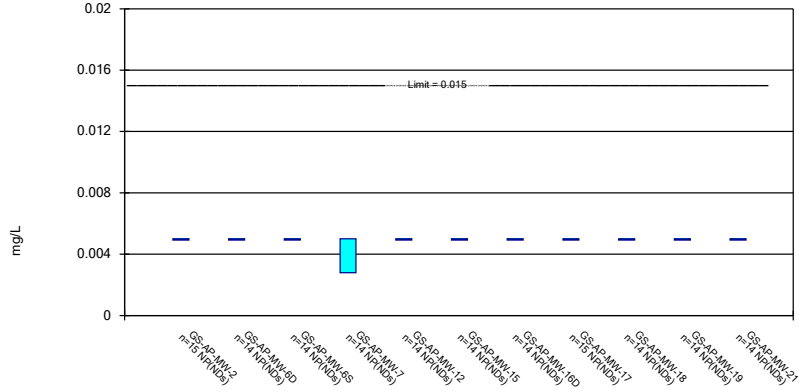
Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.



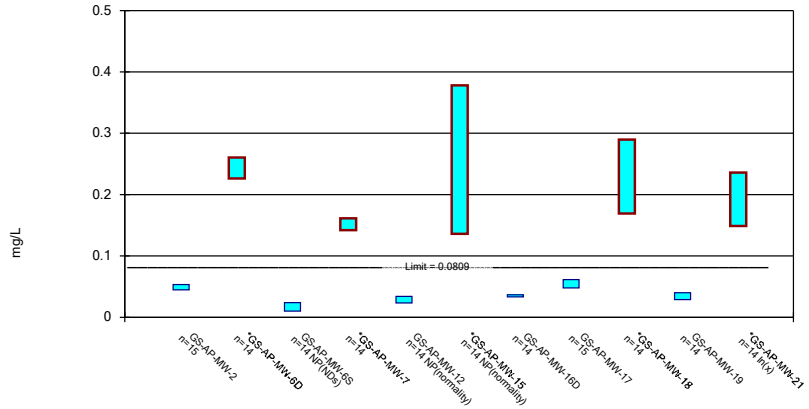
Constituent: Lead Analysis Run 7/27/2020 11:47 AM View: Confidence Intervals - Appendix IV

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.24 Sanitas software licensed to Southern Company. UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance limit is exceeded.* Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



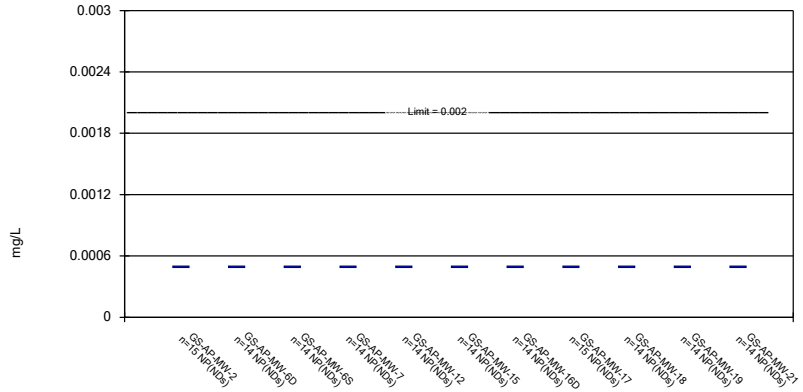
Constituent: Lithium Analysis Run 7/27/2020 11:47 AM View: Confidence Intervals - Appendix IV

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.24 Sanitas software licensed to Southern Company. UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.



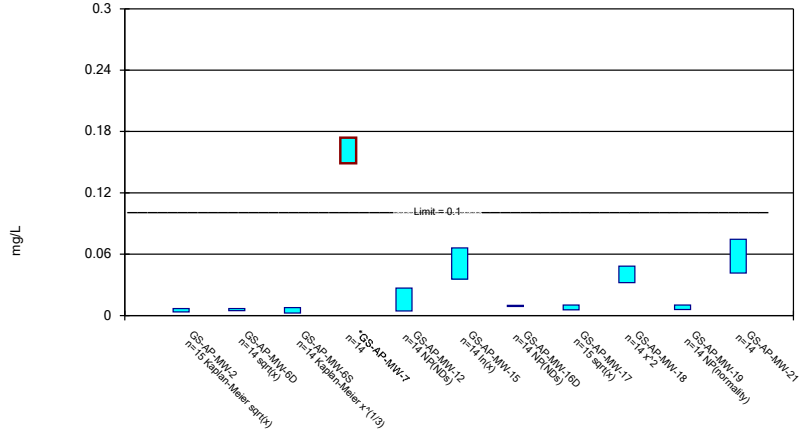
Constituent: Mercury Analysis Run 7/27/2020 11:47 AM View: Confidence Intervals - Appendix IV

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.24 Sanitas software licensed to Southern Company. UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance limit is exceeded.* Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



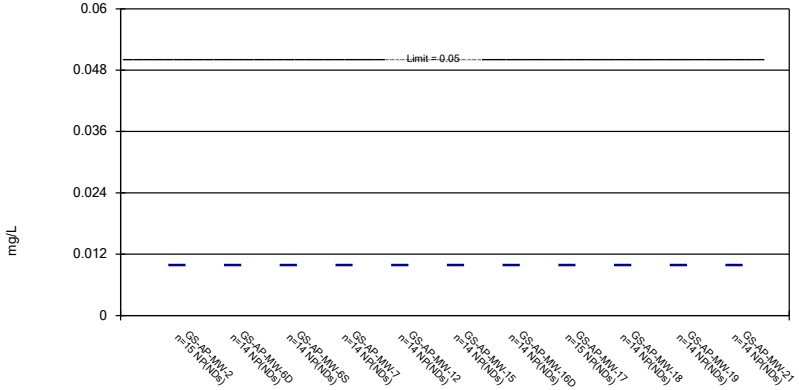
Constituent: Molybdenum Analysis Run 7/27/2020 11:47 AM View: Confidence Intervals - Appendix IV

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.24 Sanitas software licensed to Southern Company. UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Selenium Analysis Run 7/27/2020 11:48 AM View: Confidence Intervals - Appendix IV

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

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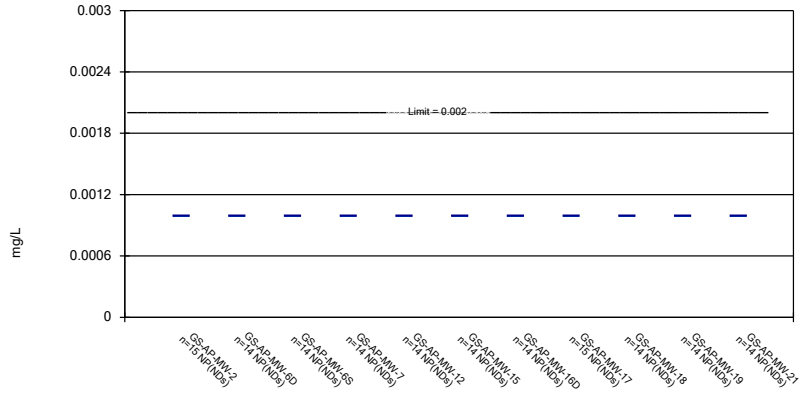
Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Thallium Analysis Run 7/27/2020 11:48 AM View: Confidence Intervals - Appendix IV

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

Confidence Intervals - Significant Results

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond Printed 7/27/2020, 11:53 AM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	%NDs	Transform	Alpha	Method
Arsenic (mg/L)	**GS-AP-MW-6D**	**0.0831**	**0.06393**	**0.01**	**Yes**	**14**	**0**	**No**	**0.01**	**Param.**
Arsenic (mg/L)	**GS-AP-MW-7**	**0.224**	**0.18**	**0.01**	**Yes**	**14**	**0**	**No**	**0.01**	**Param.**
Arsenic (mg/L)	**GS-AP-MW-12**	**0.06104**	**0.02045**	**0.01**	**Yes**	**14**	**0**	**No**	**0.01**	**Param.**
Lithium (mg/L)	**GS-AP-MW-2**	**0.05337**	**0.04482**	**0.04**	**Yes**	**15**	**0**	**No**	**0.01**	**Param.**
Lithium (mg/L)	**GS-AP-MW-6D**	**0.2604**	**0.2263**	**0.04**	**Yes**	**14**	**0**	**No**	**0.01**	**Param.**
Lithium (mg/L)	**GS-AP-MW-7**	**0.1613**	**0.142**	**0.04**	**Yes**	**14**	**0**	**No**	**0.01**	**Param.**
Lithium (mg/L)	**GS-AP-MW-15**	**0.378**	**0.136**	**0.04**	**Yes**	**14**	**0**	**No**	**0.01**	**NP (normality)**
Lithium (mg/L)	**GS-AP-MW-17**	**0.06133**	**0.04796**	**0.04**	**Yes**	**15**	**0**	**No**	**0.01**	**Param.**
Lithium (mg/L)	**GS-AP-MW-18**	**0.2895**	**0.1692**	**0.04**	**Yes**	**14**	**0**	**No**	**0.01**	**Param.**
Lithium (mg/L)	**GS-AP-MW-21**	**0.2359**	**0.1489**	**0.04**	**Yes**	**14**	**0**	**ln(x)**	**0.01**	**Param.**
Molybdenum (mg/L)	**GS-AP-MW-7**	**0.174**	**0.1489**	**0.1**	**Yes**	**14**	**0**	**No**	**0.01**	**Param.**

Confidence Intervals - All Results

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond Printed 7/27/2020, 11:53 AM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	%NDs	Transform	Alpha	Method
Antimony (mg/L)	GS-AP-MW-2	0.003	0.003	0.006	No	15	100	No	0.01	NP (NDs)
Antimony (mg/L)	GS-AP-MW-6D	0.003	0.00104	0.006	No	14	85.71	No	0.01	NP (NDs)
Antimony (mg/L)	GS-AP-MW-6S	0.003	0.000727	0.006	No	14	92.86	No	0.01	NP (NDs)
Antimony (mg/L)	GS-AP-MW-7	0.003	0.00105	0.006	No	14	85.71	No	0.01	NP (NDs)
Antimony (mg/L)	GS-AP-MW-12	0.003	0.0022	0.006	No	14	85.71	No	0.01	NP (NDs)
Antimony (mg/L)	GS-AP-MW-15	0.003	0.000876	0.006	No	14	64.29	No	0.01	NP (NDs)
Antimony (mg/L)	GS-AP-MW-16D	0.003	0.000633	0.006	No	14	92.86	No	0.01	NP (NDs)
Antimony (mg/L)	GS-AP-MW-17	0.003	0.00072	0.006	No	15	86.67	No	0.01	NP (NDs)
Antimony (mg/L)	GS-AP-MW-18	0.003	0.003	0.006	No	14	100	No	0.01	NP (NDs)
Antimony (mg/L)	GS-AP-MW-19	0.003	0.000613	0.006	No	14	92.86	No	0.01	NP (NDs)
Antimony (mg/L)	GS-AP-MW-21	0.003	0.00119	0.006	No	14	92.86	No	0.01	NP (NDs)
Arsenic (mg/L)	GS-AP-MW-2	0.005	0.005	0.01	No	15	100	No	0.01	NP (NDs)
Arsenic (mg/L)	**GS-AP-MW-6D**	**0.0831**	**0.06393**	**0.01**	**Yes**	**14**	**0**	**No**	**0.01**	**Param.**
Arsenic (mg/L)	GS-AP-MW-6S	0.0108	0.00864	0.01	No	14	0	No	0.01	NP (normality)
Arsenic (mg/L)	**GS-AP-MW-7**	**0.224**	**0.18**	**0.01**	**Yes**	**14**	**0**	**No**	**0.01**	**Param.**
Arsenic (mg/L)	**GS-AP-MW-12**	**0.06104**	**0.02045**	**0.01**	**Yes**	**14**	**0**	**No**	**0.01**	**Param.**
Arsenic (mg/L)	GS-AP-MW-15	0.01262	0.006961	0.01	No	14	0	sqrt(x)	0.01	Param.
Arsenic (mg/L)	GS-AP-MW-16D	0.005	0.005	0.01	No	14	100	No	0.01	NP (NDs)
Arsenic (mg/L)	GS-AP-MW-17	0.003257	0.001469	0.01	No	15	0	sqrt(x)	0.01	Param.
Arsenic (mg/L)	GS-AP-MW-18	0.0922	0.00481	0.01	No	8	0	No	0.004	NP (normality)
Arsenic (mg/L)	GS-AP-MW-19	0.005	0.00216	0.01	No	14	57.14	No	0.01	NP (NDs)
Arsenic (mg/L)	GS-AP-MW-21	0.005	0.00153	0.01	No	14	42.86	No	0.01	NP (normality)
Barium (mg/L)	GS-AP-MW-2	0.08061	0.06579	2	No	15	0	No	0.01	Param.
Barium (mg/L)	GS-AP-MW-6D	0.8593	0.7143	2	No	14	0	No	0.01	Param.
Barium (mg/L)	GS-AP-MW-6S	0.2213	0.1286	2	No	14	0	No	0.01	Param.
Barium (mg/L)	GS-AP-MW-7	0.1009	0.05895	2	No	14	0	sqrt(x)	0.01	Param.
Barium (mg/L)	GS-AP-MW-12	0.1625	0.1177	2	No	14	0	No	0.01	Param.
Barium (mg/L)	GS-AP-MW-15	0.2494	0.1604	2	No	14	0	No	0.01	Param.
Barium (mg/L)	GS-AP-MW-16D	0.3259	0.3016	2	No	14	0	No	0.01	Param.
Barium (mg/L)	GS-AP-MW-17	0.08527	0.05459	2	No	15	0	sqrt(x)	0.01	Param.
Barium (mg/L)	GS-AP-MW-18	0.09799	0.05226	2	No	14	0	ln(x)	0.01	Param.
Barium (mg/L)	GS-AP-MW-19	0.3886	0.3227	2	No	14	0	sqrt(x)	0.01	Param.
Barium (mg/L)	GS-AP-MW-21	0.0914	0.0441	2	No	14	0	No	0.01	NP (normality)
Beryllium (mg/L)	GS-AP-MW-2	0.003	0.00138	0.004	No	15	93.33	No	0.01	NP (NDs)
Beryllium (mg/L)	GS-AP-MW-6D	0.003	0.003	0.004	No	14	100	No	0.01	NP (NDs)
Beryllium (mg/L)	GS-AP-MW-6S	0.003	0.000794	0.004	No	14	92.86	No	0.01	NP (NDs)
Beryllium (mg/L)	GS-AP-MW-7	0.003	0.003	0.004	No	14	100	No	0.01	NP (NDs)
Beryllium (mg/L)	GS-AP-MW-12	0.003	0.003	0.004	No	14	100	No	0.01	NP (NDs)
Beryllium (mg/L)	GS-AP-MW-15	0.003	0.003	0.004	No	14	100	No	0.01	NP (NDs)
Beryllium (mg/L)	GS-AP-MW-16D	0.003	0.00109	0.004	No	14	92.86	No	0.01	NP (NDs)
Beryllium (mg/L)	GS-AP-MW-17	0.003	0.003	0.004	No	15	100	No	0.01	NP (NDs)
Beryllium (mg/L)	GS-AP-MW-18	0.003	0.003	0.004	No	14	100	No	0.01	NP (NDs)
Beryllium (mg/L)	GS-AP-MW-19	0.003	0.003	0.004	No	14	100	No	0.01	NP (NDs)
Beryllium (mg/L)	GS-AP-MW-21	0.003	0.003	0.004	No	14	100	No	0.01	NP (NDs)
Cadmium (mg/L)	GS-AP-MW-2	0.001	0.001	0.005	No	15	100	No	0.01	NP (NDs)
Cadmium (mg/L)	GS-AP-MW-6D	0.001	0.001	0.005	No	14	100	No	0.01	NP (NDs)
Cadmium (mg/L)	GS-AP-MW-6S	0.001	0.001	0.005	No	14	100	No	0.01	NP (NDs)
Cadmium (mg/L)	GS-AP-MW-7	0.001	0.001	0.005	No	14	100	No	0.01	NP (NDs)
Cadmium (mg/L)	GS-AP-MW-12	0.001	0.001	0.005	No	14	100	No	0.01	NP (NDs)
Cadmium (mg/L)	GS-AP-MW-15	0.001	0.001	0.005	No	14	100	No	0.01	NP (NDs)
Cadmium (mg/L)	GS-AP-MW-16D	0.001	0.001	0.005	No	14	100	No	0.01	NP (NDs)
Cadmium (mg/L)	GS-AP-MW-17	0.001	0.001	0.005	No	15	100	No	0.01	NP (NDs)
Cadmium (mg/L)	GS-AP-MW-18	0.001	0.001	0.005	No	14	100	No	0.01	NP (NDs)
Cadmium (mg/L)	GS-AP-MW-19	0.001	0.001	0.005	No	14	100	No	0.01	NP (NDs)
Cadmium (mg/L)	GS-AP-MW-21	0.001	0.001	0.005	No	14	100	No	0.01	NP (NDs)
Chromium (mg/L)	GS-AP-MW-2	0.01	0.01	0.1	No	15	100	No	0.01	NP (NDs)
Chromium (mg/L)	GS-AP-MW-6D	0.01	0.01	0.1	No	14	100	No	0.01	NP (NDs)
Chromium (mg/L)	GS-AP-MW-6S	0.01	0.01	0.1	No	14	100	No	0.01	NP (NDs)
Chromium (mg/L)	GS-AP-MW-7	0.01	0.0076	0.1	No	14	78.57	No	0.01	NP (NDs)
Chromium (mg/L)	GS-AP-MW-12	0.01	0.01	0.1	No	14	100	No	0.01	NP (NDs)
Chromium (mg/L)	GS-AP-MW-15	0.01	0.00209	0.1	No	14	92.86	No	0.01	NP (NDs)
Chromium (mg/L)	GS-AP-MW-16D	0.01	0.01	0.1	No	14	100	No	0.01	NP (NDs)
Chromium (mg/L)	GS-AP-MW-17	0.01	0.01	0.1	No	15	100	No	0.01	NP (NDs)
Chromium (mg/L)	GS-AP-MW-18	0.01	0.01	0.1	No	14	100	No	0.01	NP (NDs)
Chromium (mg/L)	GS-AP-MW-19	0.01	0.01	0.1	No	14	100	No	0.01	NP (NDs)
Chromium (mg/L)	GS-AP-MW-21	0.01	0.00233	0.1	No	14	78.57	No	0.01	NP (NDs)
Cobalt (mg/L)	GS-AP-MW-2	0.005	0.005	0.006	No	15	100	No	0.01	NP (NDs)
Cobalt (mg/L)	GS-AP-MW-6D	0.005	0.005	0.006	No	14	100	No	0.01	NP (NDs)

Confidence Intervals - All Results

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond Printed 7/27/2020, 11:53 AM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	%NDs	Transform	Alpha	Method
Cobalt (mg/L)	GS-AP-MW-6S	0.005	0.00224	0.006	No	14	71.43	No	0.01	NP (NDs)
Cobalt (mg/L)	GS-AP-MW-7	0.005	0.00476	0.006	No	14	85.71	No	0.01	NP (NDs)
Cobalt (mg/L)	GS-AP-MW-12	0.005	0.005	0.006	No	14	100	No	0.01	NP (NDs)
Cobalt (mg/L)	GS-AP-MW-15	0.005	0.005	0.006	No	14	100	No	0.01	NP (NDs)
Cobalt (mg/L)	GS-AP-MW-16D	0.005	0.005	0.006	No	14	100	No	0.01	NP (NDs)
Cobalt (mg/L)	GS-AP-MW-17	0.005	0.005	0.006	No	15	100	No	0.01	NP (NDs)
Cobalt (mg/L)	GS-AP-MW-18	0.005	0.005	0.006	No	14	100	No	0.01	NP (NDs)
Cobalt (mg/L)	GS-AP-MW-19	0.005	0.005	0.006	No	14	100	No	0.01	NP (NDs)
Cobalt (mg/L)	GS-AP-MW-21	0.005	0.005	0.006	No	14	100	No	0.01	NP (NDs)
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-2	1.068	0.1425	5	No	15	0	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-6D	0.7714	0.301	5	No	14	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-6S	1.084	0.4497	5	No	14	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-7	0.7202	0.1562	5	No	14	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-12	0.7806	0.361	5	No	14	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-15	0.7771	0.1732	5	No	14	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-16D	0.4783	0.1535	5	No	14	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-17	0.5279	0.1289	5	No	15	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-18	0.6976	0.2252	5	No	14	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-19	1.127	0.449	5	No	14	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-21	0.9673	0.3508	5	No	14	0	No	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-2	1.418	1.026	4	No	16	0	No	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-6D	0.1399	0.09878	4	No	15	0	x^2	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-6S	0.1364	0.06746	4	No	15	0	No	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-7	0.1097	0.06808	4	No	15	6.667	No	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-12	0.5643	0.2781	4	No	15	0	No	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-15	0.7722	0.5533	4	No	15	0	sqrt(x)	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-16D	0.1267	0.07618	4	No	15	0	No	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-17	0.2806	0.1831	4	No	16	0	No	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-18	0.4786	0.2675	4	No	15	0	No	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-19	0.359	0.2824	4	No	15	0	No	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-21	0.266	0.2095	4	No	15	0	x^2	0.01	Param.
Lead (mg/L)	GS-AP-MW-2	0.005	0.005	0.015	No	15	100	No	0.01	NP (NDs)
Lead (mg/L)	GS-AP-MW-6D	0.005	0.005	0.015	No	14	100	No	0.01	NP (NDs)
Lead (mg/L)	GS-AP-MW-6S	0.005	0.005	0.015	No	14	100	No	0.01	NP (NDs)
Lead (mg/L)	GS-AP-MW-7	0.005	0.00279	0.015	No	14	71.43	No	0.01	NP (NDs)
Lead (mg/L)	GS-AP-MW-12	0.005	0.005	0.015	No	14	100	No	0.01	NP (NDs)
Lead (mg/L)	GS-AP-MW-15	0.005	0.005	0.015	No	14	100	No	0.01	NP (NDs)
Lead (mg/L)	GS-AP-MW-16D	0.005	0.005	0.015	No	14	100	No	0.01	NP (NDs)
Lead (mg/L)	GS-AP-MW-17	0.005	0.005	0.015	No	15	100	No	0.01	NP (NDs)
Lead (mg/L)	GS-AP-MW-18	0.005	0.005	0.015	No	14	100	No	0.01	NP (NDs)
Lead (mg/L)	GS-AP-MW-19	0.005	0.005	0.015	No	14	100	No	0.01	NP (NDs)
Lead (mg/L)	GS-AP-MW-21	0.005	0.005	0.015	No	14	100	No	0.01	NP (NDs)
Lithium (mg/L)	**GS-AP-MW-2**	**0.05337**	**0.04482**	**0.04**	**Yes**	**15**	**0**	**No**	**0.01**	**Param.**
Lithium (mg/L)	**GS-AP-MW-6D**	**0.2604**	**0.2263**	**0.04**	**Yes**	**14**	**0**	**No**	**0.01**	**Param.**
Lithium (mg/L)	GS-AP-MW-6S	0.0238	0.01	0.04	No	14	64.29	No	0.01	NP (NDs)
Lithium (mg/L)	**GS-AP-MW-7**	**0.1613**	**0.142**	**0.04**	**Yes**	**14**	**0**	**No**	**0.01**	**Param.**
Lithium (mg/L)	GS-AP-MW-12	0.0341	0.0234	0.04	No	14	0	No	0.01	NP (normality)
Lithium (mg/L)	**GS-AP-MW-15**	**0.378**	**0.136**	**0.04**	**Yes**	**14**	**0**	**No**	**0.01**	**NP (normality)**
Lithium (mg/L)	GS-AP-MW-16D	0.0366	0.03339	0.04	No	14	0	No	0.01	Param.
Lithium (mg/L)	**GS-AP-MW-17**	**0.06133**	**0.04796**	**0.04**	**Yes**	**15**	**0**	**No**	**0.01**	**Param.**
Lithium (mg/L)	**GS-AP-MW-18**	**0.2895**	**0.1692**	**0.04**	**Yes**	**14**	**0**	**No**	**0.01**	**Param.**
Lithium (mg/L)	GS-AP-MW-19	0.04018	0.02887	0.04	No	14	0	No	0.01	Param.
Lithium (mg/L)	**GS-AP-MW-21**	**0.2359**	**0.1489**	**0.04**	**Yes**	**14**	**0**	**ln(x)**	**0.01**	**Param.**
Mercury (mg/L)	GS-AP-MW-2	0.0005	0.0005	0.002	No	15	100	No	0.01	NP (NDs)
Mercury (mg/L)	GS-AP-MW-6D	0.0005	0.0005	0.002	No	14	100	No	0.01	NP (NDs)
Mercury (mg/L)	GS-AP-MW-6S	0.0005	0.0005	0.002	No	14	100	No	0.01	NP (NDs)
Mercury (mg/L)	GS-AP-MW-7	0.0005	0.0005	0.002	No	14	100	No	0.01	NP (NDs)
Mercury (mg/L)	GS-AP-MW-12	0.0005	0.0005	0.002	No	14	100	No	0.01	NP (NDs)
Mercury (mg/L)	GS-AP-MW-15	0.0005	0.0005	0.002	No	14	100	No	0.01	NP (NDs)
Mercury (mg/L)	GS-AP-MW-16D	0.0005	0.0005	0.002	No	14	100	No	0.01	NP (NDs)
Mercury (mg/L)	GS-AP-MW-17	0.0005	0.0005	0.002	No	15	100	No	0.01	NP (NDs)
Mercury (mg/L)	GS-AP-MW-18	0.0005	0.0005	0.002	No	14	100	No	0.01	NP (NDs)
Mercury (mg/L)	GS-AP-MW-19	0.0005	0.0005	0.002	No	14	100	No	0.01	NP (NDs)
Mercury (mg/L)	GS-AP-MW-21	0.0005	0.0005	0.002	No	14	100	No	0.01	NP (NDs)
Molybdenum (mg/L)	GS-AP-MW-2	0.006782	0.003568	0.1	No	15	26.67	sqrt(x)	0.01	Param.
Molybdenum (mg/L)	GS-AP-MW-6D	0.006744	0.004732	0.1	No	14	0	sqrt(x)	0.01	Param.
Molybdenum (mg/L)	GS-AP-MW-6S	0.007685	0.002481	0.1	No	14	42.86	x^(1/3)	0.01	Param.
Molybdenum (mg/L)	**GS-AP-MW-7**	**0.174**	**0.1489**	**0.1**	**Yes**	**14**	**0**	**No**	**0.01**	**Param.**

Confidence Intervals - All Results

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond Printed 7/27/2020, 11:53 AM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	%NDs	Transform	Alpha	Method
Molybdenum (mg/L)	GS-AP-MW-12	0.0269	0.00444	0.1	No	14	57.14	No	0.01	NP (NDs)
Molybdenum (mg/L)	GS-AP-MW-15	0.06613	0.03559	0.1	No	14	0	ln(x)	0.01	Param.
Molybdenum (mg/L)	GS-AP-MW-16D	0.01	0.01	0.1	No	14	100	No	0.01	NP (NDs)
Molybdenum (mg/L)	GS-AP-MW-17	0.01029	0.005561	0.1	No	15	0	sqrt(x)	0.01	Param.
Molybdenum (mg/L)	GS-AP-MW-18	0.04826	0.03219	0.1	No	14	0	x^2	0.01	Param.
Molybdenum (mg/L)	GS-AP-MW-19	0.0103	0.00593	0.1	No	14	0	No	0.01	NP (normality)
Molybdenum (mg/L)	GS-AP-MW-21	0.07451	0.04154	0.1	No	14	0	No	0.01	Param.
Selenium (mg/L)	GS-AP-MW-2	0.01	0.01	0.05	No	15	100	No	0.01	NP (NDs)
Selenium (mg/L)	GS-AP-MW-6D	0.01	0.01	0.05	No	14	100	No	0.01	NP (NDs)
Selenium (mg/L)	GS-AP-MW-6S	0.01	0.01	0.05	No	14	100	No	0.01	NP (NDs)
Selenium (mg/L)	GS-AP-MW-7	0.01	0.01	0.05	No	14	100	No	0.01	NP (NDs)
Selenium (mg/L)	GS-AP-MW-12	0.01	0.01	0.05	No	14	100	No	0.01	NP (NDs)
Selenium (mg/L)	GS-AP-MW-15	0.01	0.01	0.05	No	14	100	No	0.01	NP (NDs)
Selenium (mg/L)	GS-AP-MW-16D	0.01	0.01	0.05	No	14	100	No	0.01	NP (NDs)
Selenium (mg/L)	GS-AP-MW-17	0.01	0.01	0.05	No	15	100	No	0.01	NP (NDs)
Selenium (mg/L)	GS-AP-MW-18	0.01	0.01	0.05	No	14	100	No	0.01	NP (NDs)
Selenium (mg/L)	GS-AP-MW-19	0.01	0.01	0.05	No	14	100	No	0.01	NP (NDs)
Selenium (mg/L)	GS-AP-MW-21	0.01	0.01	0.05	No	14	100	No	0.01	NP (NDs)
Thallium (mg/L)	GS-AP-MW-2	0.001	0.001	0.002	No	15	100	No	0.01	NP (NDs)
Thallium (mg/L)	GS-AP-MW-6D	0.001	0.001	0.002	No	14	100	No	0.01	NP (NDs)
Thallium (mg/L)	GS-AP-MW-6S	0.001	0.001	0.002	No	14	100	No	0.01	NP (NDs)
Thallium (mg/L)	GS-AP-MW-7	0.001	0.001	0.002	No	14	100	No	0.01	NP (NDs)
Thallium (mg/L)	GS-AP-MW-12	0.001	0.001	0.002	No	14	100	No	0.01	NP (NDs)
Thallium (mg/L)	GS-AP-MW-15	0.001	0.001	0.002	No	14	100	No	0.01	NP (NDs)
Thallium (mg/L)	GS-AP-MW-16D	0.001	0.001	0.002	No	14	100	No	0.01	NP (NDs)
Thallium (mg/L)	GS-AP-MW-17	0.001	0.001	0.002	No	15	100	No	0.01	NP (NDs)
Thallium (mg/L)	GS-AP-MW-18	0.001	0.001	0.002	No	14	100	No	0.01	NP (NDs)
Thallium (mg/L)	GS-AP-MW-19	0.001	0.001	0.002	No	14	100	No	0.01	NP (NDs)
Thallium (mg/L)	GS-AP-MW-21	0.001	0.001	0.002	No	14	100	No	0.01	NP (NDs)

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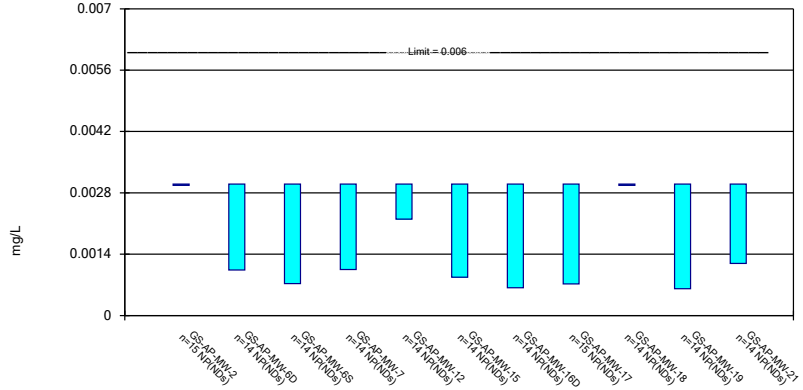
Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Antimony Analysis Run 7/27/2020 11:51 AM View: Confidence Intervals - Appendix IV

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

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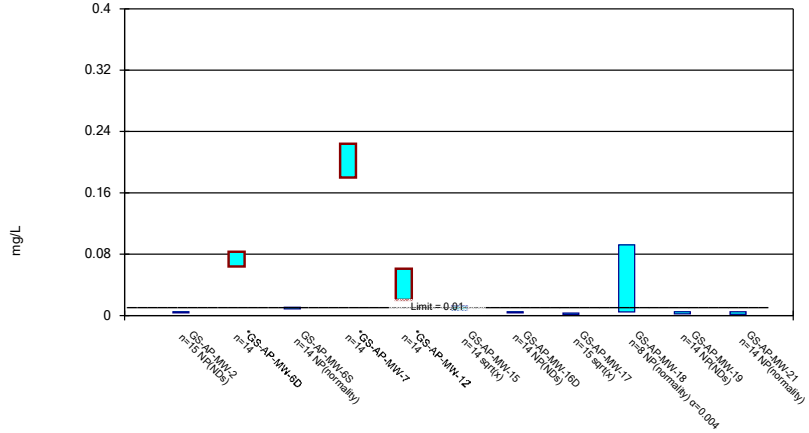
Parametric and Non-Parametric (NP) Confidence Interval

Compliance limit is exceeded.* Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Arsenic Analysis Run 7/27/2020 11:51 AM View: Confidence Intervals - Appendix IV

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

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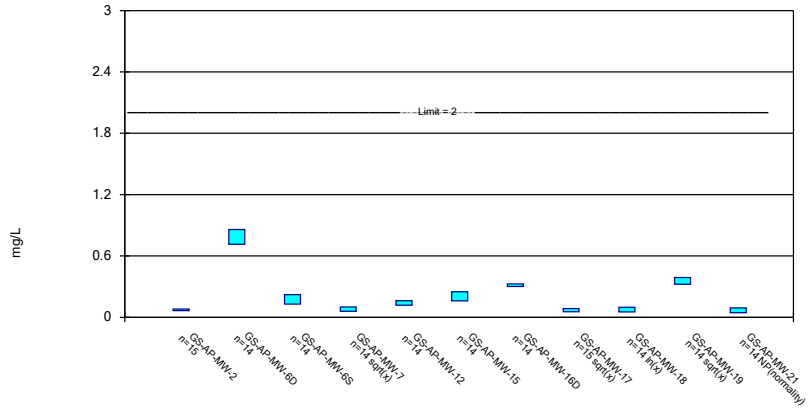
Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Barium Analysis Run 7/27/2020 11:51 AM View: Confidence Intervals - Appendix IV

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

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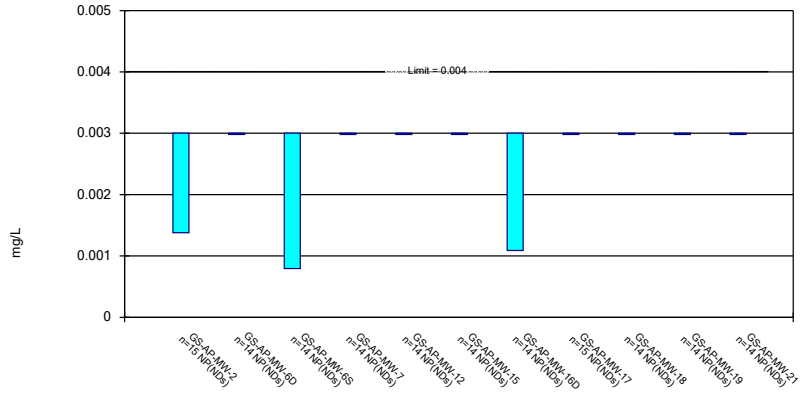
Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Beryllium Analysis Run 7/27/2020 11:51 AM View: Confidence Intervals - Appendix IV

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

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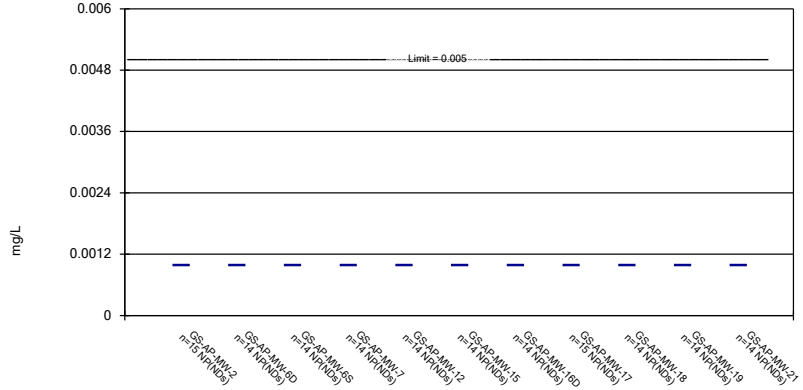
Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Cadmium Analysis Run 7/27/2020 11:51 AM View: Confidence Intervals - Appendix IV

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

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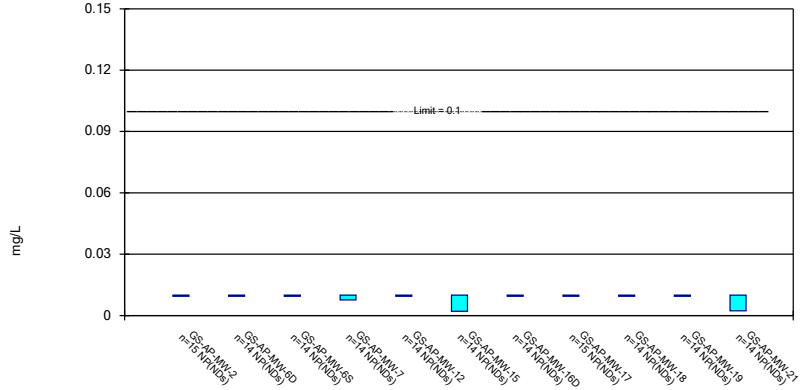
Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Chromium Analysis Run 7/27/2020 11:51 AM View: Confidence Intervals - Appendix IV

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

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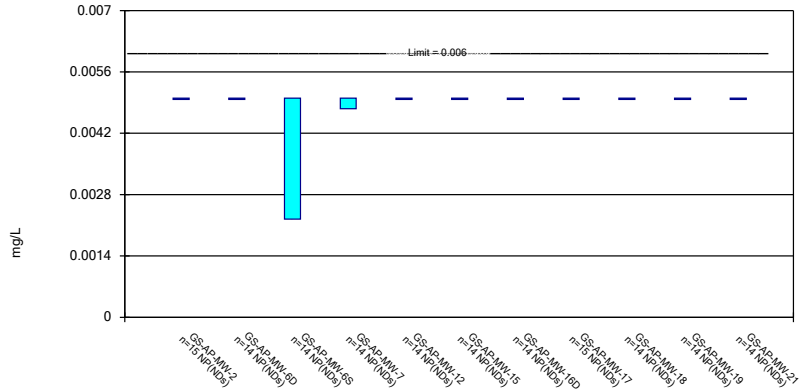
Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Cobalt Analysis Run 7/27/2020 11:51 AM View: Confidence Intervals - Appendix IV

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

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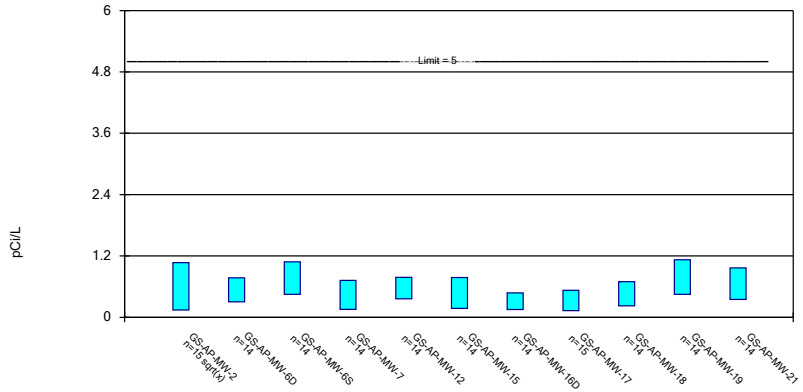
Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Combined Radium 226 + 228 Analysis Run 7/27/2020 11:51 AM View: Confidence Intervals -

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

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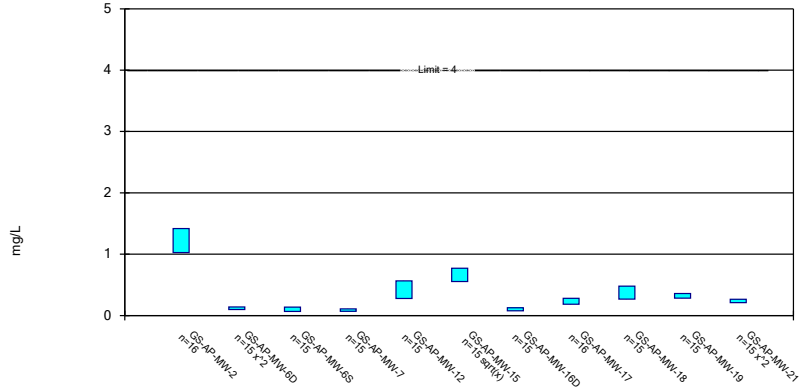
Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Fluoride Analysis Run 7/27/2020 11:51 AM View: Confidence Intervals - Appendix IV

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

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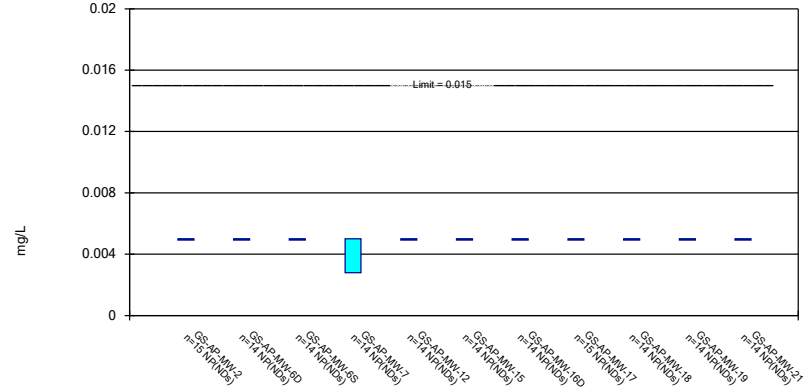
Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Lead Analysis Run 7/27/2020 11:52 AM View: Confidence Intervals - Appendix IV

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

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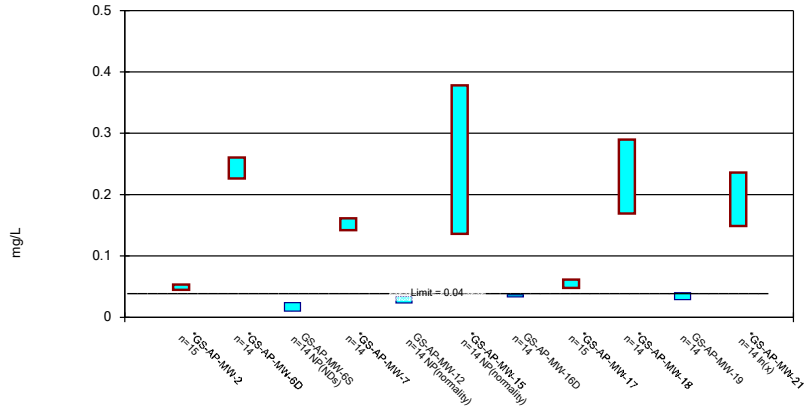
Parametric and Non-Parametric (NP) Confidence Interval

Compliance limit is exceeded.* Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Lithium Analysis Run 7/27/2020 11:52 AM View: Confidence Intervals - Appendix IV

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

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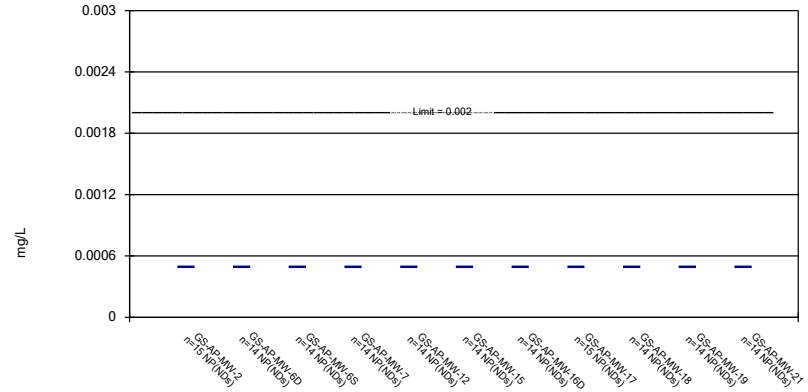
Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Mercury Analysis Run 7/27/2020 11:52 AM View: Confidence Intervals - Appendix IV

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

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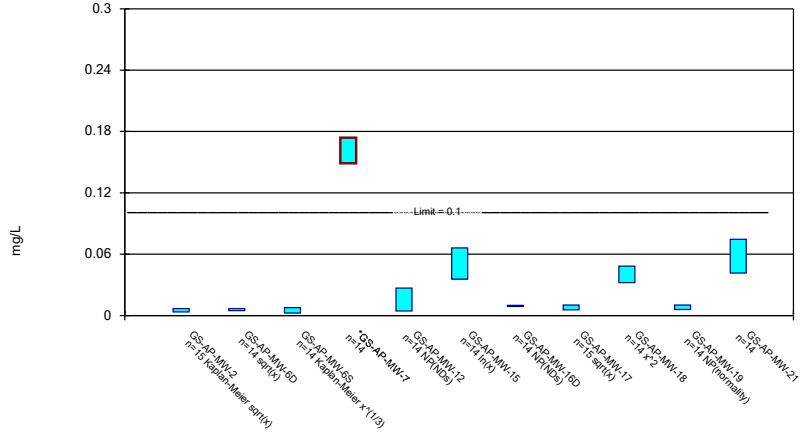
Parametric and Non-Parametric (NP) Confidence Interval

Compliance limit is exceeded.* Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Molybdenum Analysis Run 7/27/2020 11:52 AM View: Confidence Intervals - Appendix IV

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

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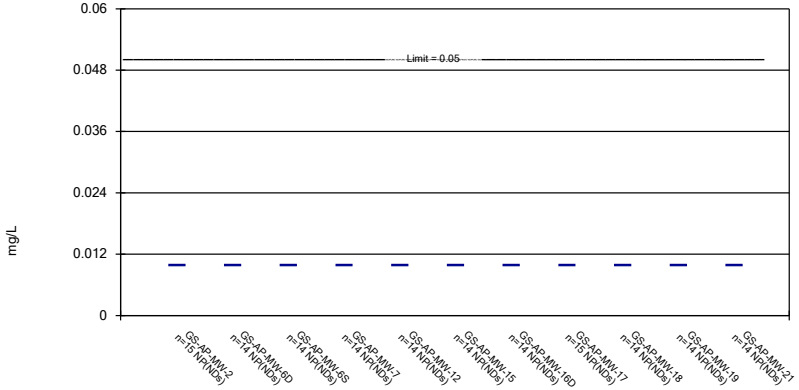
Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.



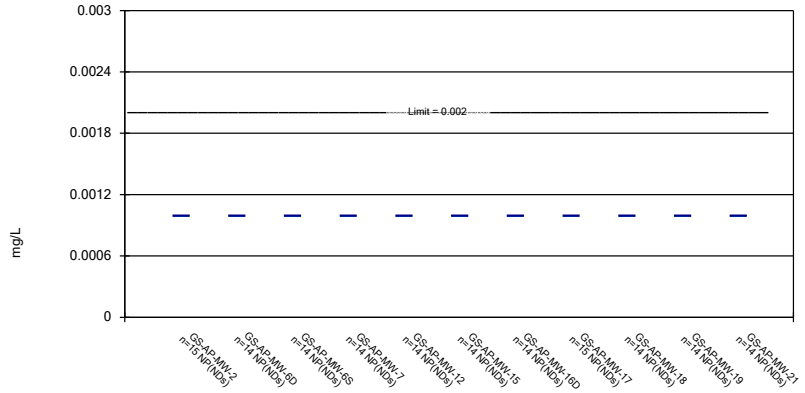
Constituent: Selenium Analysis Run 7/27/2020 11:52 AM View: Confidence Intervals - Appendix IV

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.24 Sanitas software licensed to Southern Company. UG

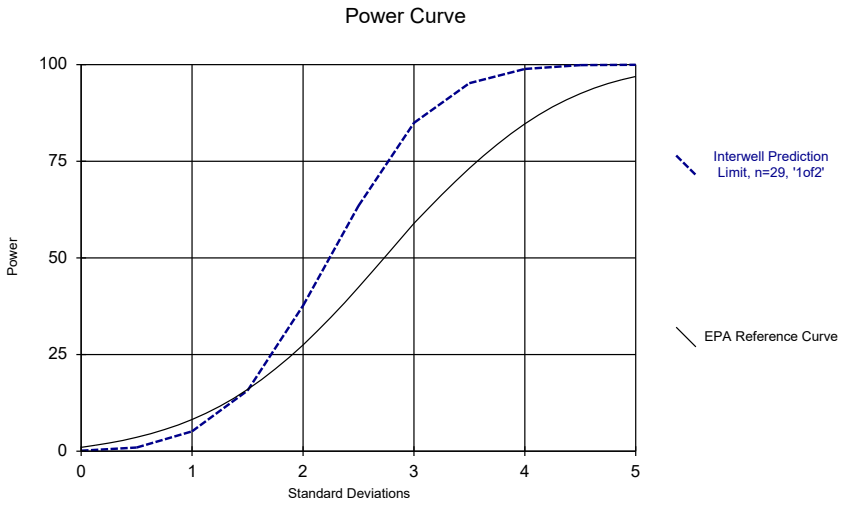
Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Thallium Analysis Run 7/27/2020 11:52 AM View: Confidence Intervals - Appendix IV

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond



Kappa = 2.167, based on 11 compliance wells and 7 constituents, evaluated semi-annually (this report reflects annual total).

Analysis Run 6/15/2020 10:35 AM View: Power Curves

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

2nd
Semi-Annual
Monitoring Event

GROUNDWATER STATS CONSULTING

December 10, 2020

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

Re: Plant Gorgas Ash Pond
2nd Semi-Annual Statistical Analysis – September 2020 Sampling Event

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 2nd Semi-Annual September 2020 sample event for Alabama Power Company's Plant Gorgas Ash 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 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:** GS-AP-MW-8, GS-AP-MW-13, and GS-AP-MW-17V
- **Downgradient wells:** GS-AP-MW-2, GS-AP-MW-6S, GS-AP-MW-6D, GS-AP-MW-7, GS-AP-MW-12, GS-AP-MW-15, GS-AP-MW-16D, GS-AP-MW-17, GS-AP-MW-18, GS-AP-MW-19, and GS-AP-MW-21
- **Delineation wells:** GS-AP-PZ-16, GS-AP-PZ-18, GS-AP-MW-12V, GS-AP-MW-18V, GS-AP-PZ-22, GS-AP-MW-23H, GS-AP-MW-24H, GS-AP-MW-26H, GS-AP-MW-28H, GS-AP-MW-29H, GS-AP-MW-9V, GS-AP-MW-15V, GS-AP-MW-21V, GS-AP-MW-25HA, GS-AP-MW-30HA, GS-AP-MW-31H, GS-AP-MW-32H, GS-AP-MW-33HO, GS-AP-MW-34HO, GS-AP-MW-35HO, GS-AP-MW-36H, GS-AP-MW-37H, GS-AP-MW-38H, GS-AP-MW-39H, GS-AP-MW-40HO GS-AP-MW-41HS, GS-AP-MW-41HD, GS-AP-MW-42H, GS-AP-MW-43H, GS-AP-MW-44HO, and GS-AP-MW-6V

- **Piezometers:** GS-AP-MW-1, GS-AP-MW-3 GS-AP-MW-4, GSAP-MW-16S, GS-AP-MW-7V, GS-AP-MW-20, GS-AP-MW-25H, GS-AP-MW-27H, GS-AP-MW-30H, GS-AP-MW-30HS, and GS-AP-MW-7VR

Data from delineation wells were included on time series and box plots but did not require formal statistics.

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 of Groundwater Stats Consulting.

The CCR program consists of the following constituents:

Appendix III (Detection Monitoring) - boron, calcium, chloride, fluoride, pH, sulfate, and TDS
Appendix IV (Assessment Monitoring) - antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, combined radium 226 + 228, fluoride, lead, lithium, mercury, molybdenum, selenium, and thallium

Note that when there are no detections present in downgradient wells for a given constituent, statistical analyses are not required. A summary of well/constituent pairs with 100% nondetects follows this letter. A substitution of the most recent reporting limit is used for nondetect data.

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 nondetect 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
- Interwell Prediction Limits with 1-of-2 resample plan
- # Background Samples: 31
- # Constituents: 7
- # Downgradient wells: 11

Summary of Statistical Methods – Appendix III Parameters

Based on the earlier evaluation described above, the following statistical methods were selected:

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

Parametric prediction limits are utilized when the screened historical data follow a normal or transformed-normal distribution. When data cannot be normalized or the majority of data are nondetects, 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% nondetects (USEPA Unified Guidance, 2009, Chapter 6).
- When data contain <15% nondetects in background, simple substitution of one-half the reporting limit is utilized in the statistical analysis. The reporting limit utilized for nondetects is the practical quantification limit (PQL) as reported by the laboratory.
- When data contain between 15-50% nondetects, the Kaplan-Meier nondetect 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% nondetects.

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 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

Interwell prediction limits, which compare the most recent sample from each downgradient well to statistical limits constructed from pooled upgradient well data, are updated during each sample event. Data from upgradient wells are periodically re-screened for newly developing trends, which may require adjustment of the background period to eliminate the trend, as well as for outliers over the entire record. As discussed in the Statistical Analysis Plan (August 2020), interwell prediction limits are used to evaluate boron, calcium, chloride, fluoride, sulfate, pH, and TDS.

Prior to performing prediction limits, proposed background data through April 2019 were reviewed to identify any newly suspected outliers at upgradient wells for boron, calcium, chloride, fluoride, pH, sulfate, and TDS. Both Tukey's Test and visual screening are used to identify potential outliers. When identified, 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 were identified by Tukey's test but are not greatly different from the rest of the data were not flagged. Also, outliers that are not identified as important 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 was included with the September 2019 screening.

The Sen's Slope/Mann Kendall trend test was used to evaluate the entire record of data from upgradient wells for all parameters which utilize 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 may be seen on the Trend Test Summary Table. These trends required no adjustments at this 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. A summary of the results was included with the September 2019 screening.

Evaluation of Appendix III Parameters – September 2020

Background (upgradient) well data were re-assessed for potential outliers during this analysis and no new values were flagged. 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 previously flagged outliers follows this report (Figure C).

Interwell prediction limits combined with a 1-of-2 verification strategy were constructed for boron, calcium, chloride, fluoride, sulfate, pH, and TDS (Figure D). 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).

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. Exceedances for interwell prediction limits were identified for several well/constituent pairs and a summary of the prediction limit results may be found in the Prediction Limit Summary tables following this letter.

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 E). 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-AP-MW-17
- Calcium: GS-AP-MW-6D
- Chloride: GS-AP-MW-17, GS-AP-MW-21, GS-AP-MW-6D, and GS-AP-MW-7
- Fluoride: GS-AP-MW-13 (upgradient), GS-AP-MW-6S, GS-AP-MW-17, and GS-AP-MW-18
- pH: GS-AP-MW-2 and GS-AP-MW-21
- Sulfate: GS-AP-MW-12, GS-AP-MW-17, and GS-AP-MW-21
- TDS: GS-AP-MW-17 and GS-AP-MW-21

Decreasing:

- Boron: GS-AP-MW-6S
- Fluoride: GS-AP-MW-2

Evaluation of Appendix IV Parameters – September 2020

Data from all wells for Appendix IV parameters are reassessed for outliers during each analysis and no new outliers were flagged. A summary of previously 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 2020 2nd 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 F).

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% nondetects. 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 G) in the confidence interval comparisons described below. An exception is noted in Figure G for lithium, which uses two separate GWPS constructed with and without the inclusion of upgradient well GS-AP-MW-17V, since the background limit is higher when upgradient well GS-AP-MW-17V is used in the tolerance limit calculation. The resulting GWPSs are 0.0809 mg/L and 0.04 mg/L, respectively. 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 September 2020 for each of the Appendix IV parameters (Figure H and I). These intervals were constructed as either parametric or nonparametric confidence intervals depending on the data distribution and percentage of nondetects. Date ranges were set for well/constituent pairs that had more than 8 samples between the dates of 6/6/2017 and 9/23/2020 and a list of those well/constituent pairs follows this report. As mentioned above, well/constituent pairs with 100% nondetects did not require statistics and were, therefore, deselected prior to construction 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 intervals, 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 is above the GWPS is the well/constituent pair considered to exceed its respective standard. As mentioned above, lithium is evaluated using two separate GWPS based on including and excluding upgradient well GS-AP-MW-17V in the confidence interval interval comparisons (Figures H and I, respectively). Both a tabular summary and graphical presentation of the confidence interval results including a list of statistical exceedances follow this letter.

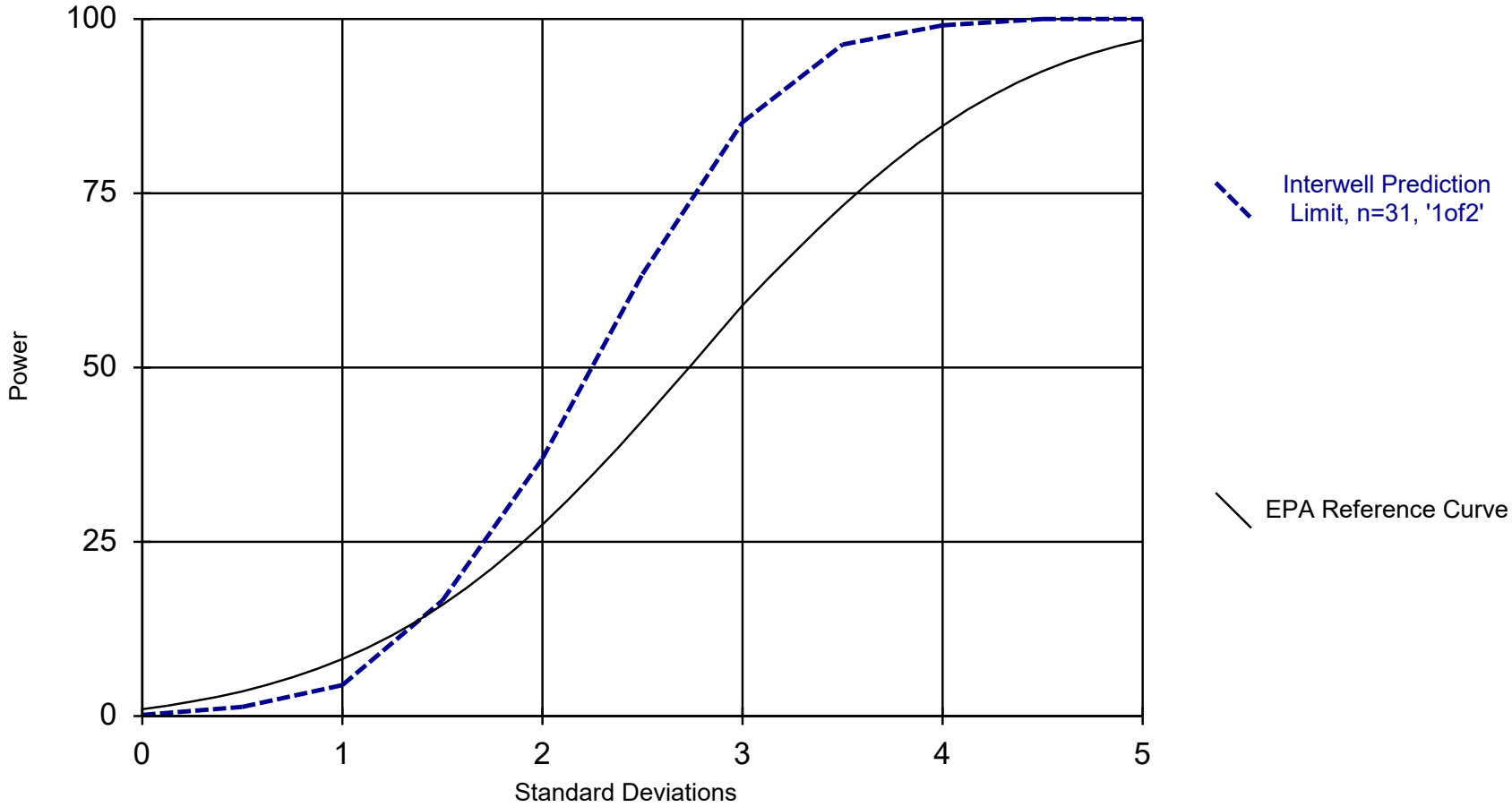
Thank you for the opportunity to assist you in the statistical analysis of groundwater quality for Gorgas Ash Pond. If you have any questions or comments, please feel free to contact us.

For Groundwater Stats Consulting,

Andrew Collins
Project Manager

Kristina Rayner
Groundwater Statistician

Interwell Power Curve



Kappa = 2.149, based on 11 compliance wells and 7 constituents, evaluated semi-annually (this report reflects annual total).

Analysis Run 12/9/2020 2:46 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

100% Non-Detects

Analysis Run 11/12/2020 11:05 AM View: Appendix IV Confidence Intervals
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Antimony (mg/L)
GS-AP-MW-16D, GS-AP-MW-17, GS-AP-MW-18, GS-AP-MW-19, GS-AP-MW-2, GS-AP-MW-21

Arsenic (mg/L)
GS-AP-MW-16D, GS-AP-MW-2

Beryllium (mg/L)
GS-AP-MW-12, GS-AP-MW-15, GS-AP-MW-17, GS-AP-MW-18, GS-AP-MW-19, GS-AP-MW-21, GS-AP-MW-6D, GS-AP-MW-7

Cadmium (mg/L)
GS-AP-MW-12, GS-AP-MW-15, GS-AP-MW-16D, GS-AP-MW-17, GS-AP-MW-18, GS-AP-MW-19, GS-AP-MW-2, GS-AP-MW-21, GS-AP-MW-6D, GS-AP-MW-6S, GS-AP-MW-7

Chromium (mg/L)
GS-AP-MW-12, GS-AP-MW-15, GS-AP-MW-16D, GS-AP-MW-17, GS-AP-MW-18, GS-AP-MW-19, GS-AP-MW-2, GS-AP-MW-6D, GS-AP-MW-6S

Cobalt (mg/L)
GS-AP-MW-12, GS-AP-MW-15, GS-AP-MW-16D, GS-AP-MW-17, GS-AP-MW-18, GS-AP-MW-19, GS-AP-MW-2, GS-AP-MW-21, GS-AP-MW-6D

Lead (mg/L)
GS-AP-MW-12, GS-AP-MW-15, GS-AP-MW-16D, GS-AP-MW-17, GS-AP-MW-18, GS-AP-MW-19, GS-AP-MW-2, GS-AP-MW-21, GS-AP-MW-6D, GS-AP-MW-6S

Mercury (mg/L)
GS-AP-MW-12, GS-AP-MW-15, GS-AP-MW-16D, GS-AP-MW-17, GS-AP-MW-18, GS-AP-MW-19, GS-AP-MW-2, GS-AP-MW-21, GS-AP-MW-6D, GS-AP-MW-6S, GS-AP-MW-7

Molybdenum (mg/L)
GS-AP-MW-16D

Selenium (mg/L)
GS-AP-MW-12, GS-AP-MW-15, GS-AP-MW-16D, GS-AP-MW-17, GS-AP-MW-18, GS-AP-MW-19, GS-AP-MW-2, GS-AP-MW-21, GS-AP-MW-6D, GS-AP-MW-6S, GS-AP-MW-7

Thallium (mg/L)
GS-AP-MW-12, GS-AP-MW-15, GS-AP-MW-16D, GS-AP-MW-17, GS-AP-MW-18, GS-AP-MW-19, GS-AP-MW-2, GS-AP-MW-21, GS-AP-MW-6D, GS-AP-MW-6S, GS-AP-MW-7

Date Ranges

Date: 12/9/2020 1:59 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Barium (mg/L)
- GS-AP-MW-2 overall:2/21/2018-9/22/2020

Beryllium (mg/L)
- GS-AP-MW-2 overall:2/21/2018-9/22/2020

Combined Radium 226 + 228 (pCi/L)
- GS-AP-MW-2 overall:2/21/2018-9/22/2020

Fluoride (mg/L)
- GS-AP-MW-11 overall:8/21/2017-9/23/2020
- GS-AP-MW-12 overall:8/21/2017-9/23/2020
- GS-AP-MW-12V overall:8/21/2017-9/23/2020
- GS-AP-MW-13 overall:8/21/2017-9/23/2020
- GS-AP-MW-14 overall:8/21/2017-9/23/2020
- GS-AP-MW-15 overall:8/21/2017-9/23/2020
- GS-AP-MW-15V overall:8/21/2017-9/23/2020
- GS-AP-MW-16D overall:8/21/2017-9/23/2020
- GS-AP-MW-17 overall:2/19/2018-9/23/2020
- GS-AP-MW-17V overall:8/21/2017-9/23/2020
- GS-AP-MW-18 overall:8/21/2017-9/23/2020
- GS-AP-MW-18V overall:8/21/2017-9/23/2020
- GS-AP-MW-19 overall:8/21/2017-9/23/2020
- GS-AP-MW-2 overall:2/19/2018-9/23/2020
- GS-AP-MW-21 overall:8/21/2017-9/23/2020
- GS-AP-MW-21V overall:8/21/2017-9/23/2020
- GS-AP-MW-23H overall:8/21/2017-9/23/2020
- GS-AP-MW-24H overall:8/21/2017-9/23/2020
- GS-AP-MW-25HA overall:8/21/2017-9/23/2020
- GS-AP-MW-26H overall:8/21/2017-9/23/2020
- GS-AP-MW-28H overall:8/21/2017-9/23/2020
- GS-AP-MW-29H overall:8/21/2017-9/23/2020
- GS-AP-MW-30HA overall:8/21/2017-9/23/2020
- GS-AP-MW-31H overall:8/21/2017-9/23/2020
- GS-AP-MW-32H overall:8/21/2017-9/23/2020
- GS-AP-MW-33HO overall:8/21/2017-9/23/2020
- GS-AP-MW-34HO overall:8/21/2017-9/23/2020
- GS-AP-MW-35HO overall:8/21/2017-9/23/2020
- GS-AP-MW-36H overall:8/21/2017-9/23/2020
- GS-AP-MW-38H overall:8/21/2017-9/23/2020
- GS-AP-MW-41HD overall:8/21/2017-9/23/2020
- GS-AP-MW-42H overall:8/21/2017-9/23/2020
- GS-AP-MW-43HO overall:8/21/2017-9/23/2020
- GS-AP-MW-6D overall:8/21/2017-9/23/2020
- GS-AP-MW-6S overall:8/21/2017-9/23/2020
- GS-AP-MW-7 overall:8/21/2017-9/23/2020
- GS-AP-MW-8 overall:8/21/2017-9/23/2020
- GS-AP-MW-9 overall:8/21/2017-9/23/2020
- GS-AP-MW-9V overall:8/21/2017-9/23/2020
- GS-AP-PZ-16 overall:8/21/2017-9/23/2020
- GS-AP-PZ-18 overall:8/21/2017-9/23/2020
- GS-AP-PZ-22 overall:8/21/2017-9/23/2020
- GS-AP-MW-6V overall:8/21/2017-9/23/2020
- GS-AP-MW-43H overall:8/21/2017-9/23/2020
- GS-AP-MW-16S overall:8/21/2017-9/23/2020
- GS-AP-MW-40H overall:8/21/2017-9/23/2020
- GS-AP-MW-44HO overall:8/21/2017-9/23/2020

Lithium (mg/L)
- GS-AP-MW-2 overall:2/21/2018-9/22/2020

Molybdenum (mg/L)
- GS-AP-MW-2 overall:2/21/2018-9/22/2020

Appendix III - Interwell Prediction Limits - Significant Results

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond Printed 12/9/2020, 1:32 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-AP-MW-17	0.1	n/a	9/21/2020	0.102	Yes	31	n/a	n/a	83.87	n/a	n/a	0.001764	NP Inter (NDs) 1 of 2
Boron (mg/L)	GS-AP-MW-18	0.1	n/a	9/23/2020	0.491	Yes	31	n/a	n/a	83.87	n/a	n/a	0.001764	NP Inter (NDs) 1 of 2
Boron (mg/L)	GS-AP-MW-2	0.1	n/a	9/22/2020	0.133	Yes	31	n/a	n/a	83.87	n/a	n/a	0.001764	NP Inter (NDs) 1 of 2
Boron (mg/L)	GS-AP-MW-6D	0.1	n/a	9/17/2020	1.22	Yes	31	n/a	n/a	83.87	n/a	n/a	0.001764	NP Inter (NDs) 1 of 2
Boron (mg/L)	GS-AP-MW-6S	0.1	n/a	9/16/2020	0.8	Yes	31	n/a	n/a	83.87	n/a	n/a	0.001764	NP Inter (NDs) 1 of 2
Boron (mg/L)	GS-AP-MW-7	0.1	n/a	9/16/2020	1.54	Yes	31	n/a	n/a	83.87	n/a	n/a	0.001764	NP Inter (NDs) 1 of 2
Calcium (mg/L)	GS-AP-MW-6D	48.1	n/a	9/17/2020	61.5	Yes	31	n/a	n/a	0	n/a	n/a	0.001764	NP Inter (normality) 1 of 2
Calcium (mg/L)	GS-AP-MW-6S	48.1	n/a	9/16/2020	55.9	Yes	31	n/a	n/a	0	n/a	n/a	0.001764	NP Inter (normality) 1 of 2
Chloride (mg/L)	GS-AP-MW-15	4.137	n/a	9/23/2020	6	Yes	31	3.306	0.3867	0	None	No	0.0006839	Param Inter 1 of 2
Chloride (mg/L)	GS-AP-MW-17	4.137	n/a	9/21/2020	13.8	Yes	31	3.306	0.3867	0	None	No	0.0006839	Param Inter 1 of 2
Chloride (mg/L)	GS-AP-MW-18	4.137	n/a	9/23/2020	5.29	Yes	31	3.306	0.3867	0	None	No	0.0006839	Param Inter 1 of 2
Chloride (mg/L)	GS-AP-MW-19	4.137	n/a	9/22/2020	6.6	Yes	31	3.306	0.3867	0	None	No	0.0006839	Param Inter 1 of 2
Chloride (mg/L)	GS-AP-MW-2	4.137	n/a	9/22/2020	6.33	Yes	31	3.306	0.3867	0	None	No	0.0006839	Param Inter 1 of 2
Chloride (mg/L)	GS-AP-MW-21	4.137	n/a	9/23/2020	56.9	Yes	31	3.306	0.3867	0	None	No	0.0006839	Param Inter 1 of 2
Chloride (mg/L)	GS-AP-MW-6D	4.137	n/a	9/17/2020	10.5	Yes	31	3.306	0.3867	0	None	No	0.0006839	Param Inter 1 of 2
Chloride (mg/L)	GS-AP-MW-6S	4.137	n/a	9/16/2020	14.6	Yes	31	3.306	0.3867	0	None	No	0.0006839	Param Inter 1 of 2
Chloride (mg/L)	GS-AP-MW-7	4.137	n/a	9/16/2020	6.17	Yes	31	3.306	0.3867	0	None	No	0.0006839	Param Inter 1 of 2
Fluoride (mg/L)	GS-AP-MW-15	0.2649	n/a	9/23/2020	0.452	Yes	33	0.1343	0.06119	0	None	No	0.0006839	Param Inter 1 of 2
Fluoride (mg/L)	GS-AP-MW-17	0.2649	n/a	9/21/2020	0.371	Yes	33	0.1343	0.06119	0	None	No	0.0006839	Param Inter 1 of 2
Fluoride (mg/L)	GS-AP-MW-18	0.2649	n/a	9/23/2020	0.575	Yes	33	0.1343	0.06119	0	None	No	0.0006839	Param Inter 1 of 2
Fluoride (mg/L)	GS-AP-MW-19	0.2649	n/a	9/22/2020	0.339	Yes	33	0.1343	0.06119	0	None	No	0.0006839	Param Inter 1 of 2
Fluoride (mg/L)	GS-AP-MW-2	0.2649	n/a	9/22/2020	0.921	Yes	33	0.1343	0.06119	0	None	No	0.0006839	Param Inter 1 of 2
Fluoride (mg/L)	GS-AP-MW-6S	0.2649	n/a	9/16/2020	0.308	Yes	33	0.1343	0.06119	0	None	No	0.0006839	Param Inter 1 of 2
pH (SU)	GS-AP-MW-12	7.76	5.27	9/23/2020	8.3	Yes	33	n/a	n/a	0	n/a	n/a	0.00317	NP Inter (normality) 1 of 2
pH (SU)	GS-AP-MW-15	7.76	5.27	9/23/2020	11.89	Yes	33	n/a	n/a	0	n/a	n/a	0.00317	NP Inter (normality) 1 of 2
pH (SU)	GS-AP-MW-17	7.76	5.27	9/21/2020	8.22	Yes	33	n/a	n/a	0	n/a	n/a	0.00317	NP Inter (normality) 1 of 2
pH (SU)	GS-AP-MW-19	7.76	5.27	9/22/2020	8.17	Yes	33	n/a	n/a	0	n/a	n/a	0.00317	NP Inter (normality) 1 of 2
pH (SU)	GS-AP-MW-2	7.76	5.27	9/22/2020	9.41	Yes	33	n/a	n/a	0	n/a	n/a	0.00317	NP Inter (normality) 1 of 2
pH (SU)	GS-AP-MW-21	7.76	5.27	9/23/2020	10.71	Yes	33	n/a	n/a	0	n/a	n/a	0.00317	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GS-AP-MW-12	15.2	n/a	9/23/2020	19.1	Yes	31	n/a	n/a	0	n/a	n/a	0.001764	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GS-AP-MW-17	15.2	n/a	9/21/2020	104	Yes	31	n/a	n/a	0	n/a	n/a	0.001764	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GS-AP-MW-18	15.2	n/a	9/23/2020	88.9	Yes	31	n/a	n/a	0	n/a	n/a	0.001764	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GS-AP-MW-19	15.2	n/a	9/22/2020	16.9	Yes	31	n/a	n/a	0	n/a	n/a	0.001764	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GS-AP-MW-2	15.2	n/a	9/22/2020	21.5	Yes	31	n/a	n/a	0	n/a	n/a	0.001764	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GS-AP-MW-21	15.2	n/a	9/23/2020	248	Yes	31	n/a	n/a	0	n/a	n/a	0.001764	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GS-AP-MW-6D	15.2	n/a	9/17/2020	65.1	Yes	31	n/a	n/a	0	n/a	n/a	0.001764	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GS-AP-MW-6S	15.2	n/a	9/16/2020	115	Yes	31	n/a	n/a	0	n/a	n/a	0.001764	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GS-AP-MW-7	15.2	n/a	9/16/2020	131	Yes	31	n/a	n/a	0	n/a	n/a	0.001764	NP Inter (normality) 1 of 2
TDS (mg/L)	GS-AP-MW-15	368	n/a	9/23/2020	600	Yes	31	n/a	n/a	0	n/a	n/a	0.001764	NP Inter (normality) 1 of 2
TDS (mg/L)	GS-AP-MW-17	368	n/a	9/21/2020	658	Yes	31	n/a	n/a	0	n/a	n/a	0.001764	NP Inter (normality) 1 of 2
TDS (mg/L)	GS-AP-MW-18	368	n/a	9/23/2020	380	Yes	31	n/a	n/a	0	n/a	n/a	0.001764	NP Inter (normality) 1 of 2
TDS (mg/L)	GS-AP-MW-21	368	n/a	9/23/2020	642	Yes	31	n/a	n/a	0	n/a	n/a	0.001764	NP Inter (normality) 1 of 2

Appendix III - Interwell Prediction Limits - All Results

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond Printed 12/9/2020, 1:32 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-AP-MW-12	0.1	n/a	9/23/2020	0.0446J	No	31	n/a	n/a	83.87	n/a	n/a	0.001764	NP Inter (NDs) 1 of 2
Boron (mg/L)	GS-AP-MW-15	0.1	n/a	9/23/2020	0.0537J	No	31	n/a	n/a	83.87	n/a	n/a	0.001764	NP Inter (NDs) 1 of 2
Boron (mg/L)	GS-AP-MW-16D	0.1	n/a	9/22/2020	0.1ND	No	31	n/a	n/a	83.87	n/a	n/a	0.001764	NP Inter (NDs) 1 of 2
Boron (mg/L)	**GS-AP-MW-17**	**0.1**	**n/a**	**9/21/2020**	**0.102**	**Yes**	**31**	**n/a**	**n/a**	**83.87**	**n/a**	**n/a**	**0.001764**	**NP Inter (NDs) 1 of 2**
Boron (mg/L)	**GS-AP-MW-18**	**0.1**	**n/a**	**9/23/2020**	**0.491**	**Yes**	**31**	**n/a**	**n/a**	**83.87**	**n/a**	**n/a**	**0.001764**	**NP Inter (NDs) 1 of 2**
Boron (mg/L)	GS-AP-MW-19	0.1	n/a	9/22/2020	0.037J	No	31	n/a	n/a	83.87	n/a	n/a	0.001764	NP Inter (NDs) 1 of 2
Boron (mg/L)	**GS-AP-MW-2**	**0.1**	**n/a**	**9/22/2020**	**0.133**	**Yes**	**31**	**n/a**	**n/a**	**83.87**	**n/a**	**n/a**	**0.001764**	**NP Inter (NDs) 1 of 2**
Boron (mg/L)	GS-AP-MW-21	0.1	n/a	9/23/2020	0.0871J	No	31	n/a	n/a	83.87	n/a	n/a	0.001764	NP Inter (NDs) 1 of 2
Boron (mg/L)	**GS-AP-MW-6D**	**0.1**	**n/a**	**9/17/2020**	**1.22**	**Yes**	**31**	**n/a**	**n/a**	**83.87**	**n/a**	**n/a**	**0.001764**	**NP Inter (NDs) 1 of 2**
Boron (mg/L)	**GS-AP-MW-6S**	**0.1**	**n/a**	**9/16/2020**	**0.8**	**Yes**	**31**	**n/a**	**n/a**	**83.87**	**n/a**	**n/a**	**0.001764**	**NP Inter (NDs) 1 of 2**
Boron (mg/L)	**GS-AP-MW-7**	**0.1**	**n/a**	**9/16/2020**	**1.54**	**Yes**	**31**	**n/a**	**n/a**	**83.87**	**n/a**	**n/a**	**0.001764**	**NP Inter (NDs) 1 of 2**
Calcium (mg/L)	GS-AP-MW-12	48.1	n/a	9/23/2020	45.9	No	31	n/a	n/a	0	n/a	n/a	0.001764	NP Inter (normality) 1 of 2
Calcium (mg/L)	GS-AP-MW-15	48.1	n/a	9/23/2020	3.83	No	31	n/a	n/a	0	n/a	n/a	0.001764	NP Inter (normality) 1 of 2
Calcium (mg/L)	GS-AP-MW-16D	48.1	n/a	9/22/2020	32	No	31	n/a	n/a	0	n/a	n/a	0.001764	NP Inter (normality) 1 of 2
Calcium (mg/L)	GS-AP-MW-17	48.1	n/a	9/21/2020	3.73	No	31	n/a	n/a	0	n/a	n/a	0.001764	NP Inter (normality) 1 of 2
Calcium (mg/L)	GS-AP-MW-18	48.1	n/a	9/23/2020	38.8	No	31	n/a	n/a	0	n/a	n/a	0.001764	NP Inter (normality) 1 of 2
Calcium (mg/L)	GS-AP-MW-19	48.1	n/a	9/22/2020	46.9	No	31	n/a	n/a	0	n/a	n/a	0.001764	NP Inter (normality) 1 of 2
Calcium (mg/L)	GS-AP-MW-2	48.1	n/a	9/22/2020	0.503	No	31	n/a	n/a	0	n/a	n/a	0.001764	NP Inter (normality) 1 of 2
Calcium (mg/L)	GS-AP-MW-21	48.1	n/a	9/23/2020	1.96	No	31	n/a	n/a	0	n/a	n/a	0.001764	NP Inter (normality) 1 of 2
Calcium (mg/L)	**GS-AP-MW-6D**	**48.1**	**n/a**	**9/17/2020**	**61.5**	**Yes**	**31**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.001764**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**GS-AP-MW-6S**	**48.1**	**n/a**	**9/16/2020**	**55.9**	**Yes**	**31**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.001764**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	GS-AP-MW-7	48.1	n/a	9/16/2020	12.2	No	31	n/a	n/a	0	n/a	n/a	0.001764	NP Inter (normality) 1 of 2
Chloride (mg/L)	GS-AP-MW-12	4.137	n/a	9/23/2020	3.15	No	31	3.306	0.3867	0	None	No	0.0006839	Param Inter 1 of 2
Chloride (mg/L)	**GS-AP-MW-15**	**4.137**	**n/a**	**9/23/2020**	**6**	**Yes**	**31**	**3.306**	**0.3867**	**0**	**None**	**No**	**0.0006839**	**Param Inter 1 of 2**
Chloride (mg/L)	GS-AP-MW-16D	4.137	n/a	9/22/2020	2.94	No	31	3.306	0.3867	0	None	No	0.0006839	Param Inter 1 of 2
Chloride (mg/L)	**GS-AP-MW-17**	**4.137**	**n/a**	**9/21/2020**	**13.8**	**Yes**	**31**	**3.306**	**0.3867**	**0**	**None**	**No**	**0.0006839**	**Param Inter 1 of 2**
Chloride (mg/L)	**GS-AP-MW-18**	**4.137**	**n/a**	**9/23/2020**	**5.29**	**Yes**	**31**	**3.306**	**0.3867**	**0**	**None**	**No**	**0.0006839**	**Param Inter 1 of 2**
Chloride (mg/L)	**GS-AP-MW-19**	**4.137**	**n/a**	**9/22/2020**	**6.6**	**Yes**	**31**	**3.306**	**0.3867**	**0**	**None**	**No**	**0.0006839**	**Param Inter 1 of 2**
Chloride (mg/L)	**GS-AP-MW-2**	**4.137**	**n/a**	**9/22/2020**	**6.33**	**Yes**	**31**	**3.306**	**0.3867**	**0**	**None**	**No**	**0.0006839**	**Param Inter 1 of 2**
Chloride (mg/L)	**GS-AP-MW-21**	**4.137**	**n/a**	**9/23/2020**	**56.9**	**Yes**	**31**	**3.306**	**0.3867**	**0**	**None**	**No**	**0.0006839**	**Param Inter 1 of 2**
Chloride (mg/L)	**GS-AP-MW-6D**	**4.137**	**n/a**	**9/17/2020**	**10.5**	**Yes**	**31**	**3.306**	**0.3867**	**0**	**None**	**No**	**0.0006839**	**Param Inter 1 of 2**
Chloride (mg/L)	**GS-AP-MW-6S**	**4.137**	**n/a**	**9/16/2020**	**14.6**	**Yes**	**31**	**3.306**	**0.3867**	**0**	**None**	**No**	**0.0006839**	**Param Inter 1 of 2**
Chloride (mg/L)	**GS-AP-MW-7**	**4.137**	**n/a**	**9/16/2020**	**6.17**	**Yes**	**31**	**3.306**	**0.3867**	**0**	**None**	**No**	**0.0006839**	**Param Inter 1 of 2**
Fluoride (mg/L)	GS-AP-MW-12	0.2649	n/a	9/23/2020	0.12	No	33	0.1343	0.06119	0	None	No	0.0006839	Param Inter 1 of 2
Fluoride (mg/L)	**GS-AP-MW-15**	**0.2649**	**n/a**	**9/23/2020**	**0.452**	**Yes**	**33**	**0.1343**	**0.06119**	**0**	**None**	**No**	**0.0006839**	**Param Inter 1 of 2**
Fluoride (mg/L)	GS-AP-MW-16D	0.2649	n/a	9/22/2020	0.123	No	33	0.1343	0.06119	0	None	No	0.0006839	Param Inter 1 of 2
Fluoride (mg/L)	**GS-AP-MW-17**	**0.2649**	**n/a**	**9/21/2020**	**0.371**	**Yes**	**33**	**0.1343**	**0.06119**	**0**	**None**	**No**	**0.0006839**	**Param Inter 1 of 2**
Fluoride (mg/L)	**GS-AP-MW-18**	**0.2649**	**n/a**	**9/23/2020**	**0.575**	**Yes**	**33**	**0.1343**	**0.06119**	**0**	**None**	**No**	**0.0006839**	**Param Inter 1 of 2**
Fluoride (mg/L)	**GS-AP-MW-19**	**0.2649**	**n/a**	**9/22/2020**	**0.339**	**Yes**	**33**	**0.1343**	**0.06119**	**0**	**None**	**No**	**0.0006839**	**Param Inter 1 of 2**
Fluoride (mg/L)	**GS-AP-MW-2**	**0.2649**	**n/a**	**9/22/2020**	**0.921**	**Yes**	**33**	**0.1343**	**0.06119**	**0**	**None**	**No**	**0.0006839**	**Param Inter 1 of 2**
Fluoride (mg/L)	GS-AP-MW-21	0.2649	n/a	9/23/2020	0.208	No	33	0.1343	0.06119	0	None	No	0.0006839	Param Inter 1 of 2
Fluoride (mg/L)	GS-AP-MW-6D	0.2649	n/a	9/17/2020	0.133	No	33	0.1343	0.06119	0	None	No	0.0006839	Param Inter 1 of 2
Fluoride (mg/L)	**GS-AP-MW-6S**	**0.2649**	**n/a**	**9/16/2020**	**0.308**	**Yes**	**33**	**0.1343**	**0.06119**	**0**	**None**	**No**	**0.0006839**	**Param Inter 1 of 2**
Fluoride (mg/L)	GS-AP-MW-7	0.2649	n/a	9/16/2020	0.126	No	33	0.1343	0.06119	0	None	No	0.0006839	Param Inter 1 of 2
pH (SU)	**GS-AP-MW-12**	**7.76**	**5.27**	**9/23/2020**	**8.3**	**Yes**	**33**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.00317**	**NP Inter (normality) 1 of 2**
pH (SU)	**GS-AP-MW-15**	**7.76**	**5.27**	**9/23/2020**	**11.89**	**Yes**	**33**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.00317**	**NP Inter (normality) 1 of 2**
pH (SU)	GS-AP-MW-16D	7.76	5.27	9/22/2020	7.52	No	33	n/a	n/a	0	n/a	n/a	0.00317	NP Inter (normality) 1 of 2
pH (SU)	**GS-AP-MW-17**	**7.76**	**5.27**	**9/21/2020**	**8.22**	**Yes**	**33**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.00317**	**NP Inter (normality) 1 of 2**
pH (SU)	GS-AP-MW-18	7.76	5.27	9/23/2020	7.54	No	33	n/a	n/a	0	n/a	n/a	0.00317	NP Inter (normality) 1 of 2
pH (SU)	**GS-AP-MW-19**	**7.76**	**5.27**	**9/22/2020**	**8.17**	**Yes**	**33**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.00317**	**NP Inter (normality) 1 of 2**
pH (SU)	**GS-AP-MW-2**	**7.76**	**5.27**	**9/22/2020**	**9.41**	**Yes**	**33**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.00317**	**NP Inter (normality) 1 of 2**
pH (SU)	**GS-AP-MW-21**	**7.76**	**5.27**	**9/23/2020**	**10.71**	**Yes**	**33**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.00317**	**NP Inter (normality) 1 of 2**
pH (SU)	GS-AP-MW-6D	7.76	5.27	9/17/2020	7.41	No	33	n/a	n/a	0	n/a	n/a	0.00317	NP Inter (normality) 1 of 2
pH (SU)	GS-AP-MW-6S	7.76	5.27	9/16/2020	6.93	No	33	n/a	n/a	0	n/a	n/a	0.00317	NP Inter (normality) 1 of 2
pH (SU)	GS-AP-MW-7	7.76	5.27	9/16/2020	7.74	No	33	n/a	n/a	0	n/a	n/a	0.00317	NP Inter (normality) 1 of 2

Appendix III - Interwell Prediction Limits - All Results

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond Printed 12/9/2020, 1:32 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Sulfate (mg/L)	**GS-AP-MW-12**	**15.2**	**n/a**	**9/23/2020**	**19.1**	**Yes**	**31**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.001764**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	GS-AP-MW-15	15.2	n/a	9/23/2020	13.2	No	31	n/a	n/a	0	n/a	n/a	0.001764	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GS-AP-MW-16D	15.2	n/a	9/22/2020	13.6	No	31	n/a	n/a	0	n/a	n/a	0.001764	NP Inter (normality) 1 of 2
Sulfate (mg/L)	**GS-AP-MW-17**	**15.2**	**n/a**	**9/21/2020**	**104**	**Yes**	**31**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.001764**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**GS-AP-MW-18**	**15.2**	**n/a**	**9/23/2020**	**88.9**	**Yes**	**31**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.001764**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**GS-AP-MW-19**	**15.2**	**n/a**	**9/22/2020**	**16.9**	**Yes**	**31**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.001764**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**GS-AP-MW-2**	**15.2**	**n/a**	**9/22/2020**	**21.5**	**Yes**	**31**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.001764**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**GS-AP-MW-21**	**15.2**	**n/a**	**9/23/2020**	**248**	**Yes**	**31**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.001764**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**GS-AP-MW-6D**	**15.2**	**n/a**	**9/17/2020**	**65.1**	**Yes**	**31**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.001764**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**GS-AP-MW-6S**	**15.2**	**n/a**	**9/16/2020**	**115**	**Yes**	**31**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.001764**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**GS-AP-MW-7**	**15.2**	**n/a**	**9/16/2020**	**131**	**Yes**	**31**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.001764**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	GS-AP-MW-12	368	n/a	9/23/2020	216	No	31	n/a	n/a	0	n/a	n/a	0.001764	NP Inter (normality) 1 of 2
TDS (mg/L)	**GS-AP-MW-15**	**368**	**n/a**	**9/23/2020**	**600**	**Yes**	**31**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.001764**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	GS-AP-MW-16D	368	n/a	9/22/2020	218	No	31	n/a	n/a	0	n/a	n/a	0.001764	NP Inter (normality) 1 of 2
TDS (mg/L)	**GS-AP-MW-17**	**368**	**n/a**	**9/21/2020**	**658**	**Yes**	**31**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.001764**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	**GS-AP-MW-18**	**368**	**n/a**	**9/23/2020**	**380**	**Yes**	**31**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.001764**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	GS-AP-MW-19	368	n/a	9/22/2020	300	No	31	n/a	n/a	0	n/a	n/a	0.001764	NP Inter (normality) 1 of 2
TDS (mg/L)	GS-AP-MW-2	368	n/a	9/22/2020	318	No	31	n/a	n/a	0	n/a	n/a	0.001764	NP Inter (normality) 1 of 2
TDS (mg/L)	**GS-AP-MW-21**	**368**	**n/a**	**9/23/2020**	**642**	**Yes**	**31**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.001764**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	GS-AP-MW-6D	368	n/a	9/17/2020	314	No	31	n/a	n/a	0	n/a	n/a	0.001764	NP Inter (normality) 1 of 2
TDS (mg/L)	GS-AP-MW-6S	368	n/a	9/16/2020	269	No	31	n/a	n/a	0	n/a	n/a	0.001764	NP Inter (normality) 1 of 2
TDS (mg/L)	GS-AP-MW-7	368	n/a	9/16/2020	351	No	31	n/a	n/a	0	n/a	n/a	0.001764	NP Inter (normality) 1 of 2

Trend Tests - Prediction Limit Exceedances - Significant Results

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond Printed 12/9/2020, 1:37 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	**GS-AP-MW-17**	**0.006094**	**68**	**58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**GS-AP-MW-6S**	**-0.08133**	**-64**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**GS-AP-MW-6D**	**2.184**	**65**	**53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**GS-AP-MW-17**	**1.443**	**59**	**58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**GS-AP-MW-21**	**3.353**	**67**	**53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**GS-AP-MW-6D**	**1.187**	**75**	**53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**GS-AP-MW-7**	**0.6356**	**92**	**53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Fluoride (mg/L)	**GS-AP-MW-13 (bg)**	**0.02914**	**48**	**43**	**Yes**	**13**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Fluoride (mg/L)	**GS-AP-MW-17**	**0.04997**	**85**	**63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Fluoride (mg/L)	**GS-AP-MW-18**	**0.117**	**75**	**58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Fluoride (mg/L)	**GS-AP-MW-2**	**-0.2072**	**-102**	**-63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Fluoride (mg/L)	**GS-AP-MW-6S**	**0.04697**	**95**	**58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
pH (SU)	**GS-AP-MW-2**	**0.05621**	**77**	**63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
pH (SU)	**GS-AP-MW-21**	**0.3339**	**59**	**58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**GS-AP-MW-12**	**4.636**	**55**	**53**	**Yes**	**15**	**6.667**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**GS-AP-MW-17**	**21.08**	**86**	**58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**GS-AP-MW-21**	**62.83**	**99**	**53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
TDS (mg/L)	**GS-AP-MW-17**	**47.09**	**81**	**58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
TDS (mg/L)	**GS-AP-MW-21**	**83.3**	**77**	**53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**

Trend Tests - Prediction Limit Exceedances - All Results

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond Printed 12/9/2020, 1:37 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	GS-AP-MW-13 (bg)	0	0	38	No	12	100	n/a	n/a	0.01	NP
Boron (mg/L)	**GS-AP-MW-17**	**0.006094**	**68**	**58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	GS-AP-MW-17V (bg)	0.004028	0	8	No	4	0	n/a	n/a	0.01	NP
Boron (mg/L)	GS-AP-MW-18	-0.2372	-29	-53	No	15	0	n/a	n/a	0.01	NP
Boron (mg/L)	GS-AP-MW-2	0.012	24	58	No	16	0	n/a	n/a	0.01	NP
Boron (mg/L)	GS-AP-MW-6D	0.03503	50	53	No	15	0	n/a	n/a	0.01	NP
Boron (mg/L)	**GS-AP-MW-6S**	**-0.08133**	**-64**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	GS-AP-MW-7	0.04506	49	53	No	15	0	n/a	n/a	0.01	NP
Boron (mg/L)	GS-AP-MW-8 (bg)	0	14	53	No	15	93.33	n/a	n/a	0.01	NP
Calcium (mg/L)	GS-AP-MW-13 (bg)	-2.607	-32	-38	No	12	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GS-AP-MW-17V (bg)	-0.6083	-2	-8	No	4	0	n/a	n/a	0.01	NP
Calcium (mg/L)	**GS-AP-MW-6D**	**2.184**	**65**	**53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	GS-AP-MW-6S	-1.857	-11	-53	No	15	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GS-AP-MW-8 (bg)	-1.261	-39	-53	No	15	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GS-AP-MW-13 (bg)	0.1178	10	38	No	12	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GS-AP-MW-15	-0.6791	-25	-53	No	15	0	n/a	n/a	0.01	NP
Chloride (mg/L)	**GS-AP-MW-17**	**1.443**	**59**	**58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	GS-AP-MW-17V (bg)	0.08646	6	8	No	4	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GS-AP-MW-18	-5.242	-31	-53	No	15	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GS-AP-MW-19	-0.08111	-17	-53	No	15	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GS-AP-MW-2	0.8568	31	58	No	16	0	n/a	n/a	0.01	NP
Chloride (mg/L)	**GS-AP-MW-21**	**3.353**	**67**	**53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**GS-AP-MW-6D**	**1.187**	**75**	**53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	GS-AP-MW-6S	-0.8577	-24	-53	No	15	0	n/a	n/a	0.01	NP
Chloride (mg/L)	**GS-AP-MW-7**	**0.6356**	**92**	**53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	GS-AP-MW-8 (bg)	0.1386	41	53	No	15	0	n/a	n/a	0.01	NP
Fluoride (mg/L)	**GS-AP-MW-13 (bg)**	**0.02914**	**48**	**43**	**Yes**	**13**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Fluoride (mg/L)	GS-AP-MW-15	-0.02371	-16	-58	No	16	0	n/a	n/a	0.01	NP
Fluoride (mg/L)	**GS-AP-MW-17**	**0.04997**	**85**	**63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Fluoride (mg/L)	GS-AP-MW-17V (bg)	0.01732	4	8	No	4	0	n/a	n/a	0.01	NP
Fluoride (mg/L)	**GS-AP-MW-18**	**0.117**	**75**	**58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Fluoride (mg/L)	GS-AP-MW-19	0.005954	11	58	No	16	0	n/a	n/a	0.01	NP
Fluoride (mg/L)	**GS-AP-MW-2**	**-0.2072**	**-102**	**-63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Fluoride (mg/L)	**GS-AP-MW-6S**	**0.04697**	**95**	**58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Fluoride (mg/L)	GS-AP-MW-8 (bg)	0.01002	41	58	No	16	0	n/a	n/a	0.01	NP
pH (SU)	GS-AP-MW-12	0.0902	53	58	No	16	0	n/a	n/a	0.01	NP
pH (SU)	GS-AP-MW-13 (bg)	-0.05825	-34	-43	No	13	0	n/a	n/a	0.01	NP
pH (SU)	GS-AP-MW-15	0.42	58	58	No	16	0	n/a	n/a	0.01	NP
pH (SU)	GS-AP-MW-17	-0.01688	-35	-63	No	17	0	n/a	n/a	0.01	NP
pH (SU)	GS-AP-MW-17V (bg)	-0.1322	-6	-8	No	4	0	n/a	n/a	0.01	NP
pH (SU)	GS-AP-MW-19	-0.04466	-24	-58	No	16	0	n/a	n/a	0.01	NP
pH (SU)	**GS-AP-MW-2**	**0.05621**	**77**	**63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
pH (SU)	**GS-AP-MW-21**	**0.3339**	**59**	**58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
pH (SU)	GS-AP-MW-8 (bg)	-0.04795	-48	-58	No	16	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	**GS-AP-MW-12**	**4.636**	**55**	**53**	**Yes**	**15**	**6.667**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	GS-AP-MW-13 (bg)	0.01849	11	38	No	12	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	**GS-AP-MW-17**	**21.08**	**86**	**58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	GS-AP-MW-17V (bg)	-3.392	-4	-8	No	4	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GS-AP-MW-18	-123.3	-49	-53	No	15	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GS-AP-MW-19	0.8488	9	53	No	15	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GS-AP-MW-2	9.847	51	58	No	16	12.5	n/a	n/a	0.01	NP
Sulfate (mg/L)	**GS-AP-MW-21**	**62.83**	**99**	**53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	GS-AP-MW-6D	0	-1	-53	No	15	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GS-AP-MW-6S	-26.25	-37	-53	No	15	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GS-AP-MW-7	-0.5062	-9	-53	No	15	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GS-AP-MW-8 (bg)	0.1821	14	53	No	15	0	n/a	n/a	0.01	NP

Trend Tests - Prediction Limit Exceedances - All Results

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond Printed 12/9/2020, 1:37 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
TDS (mg/L)	GS-AP-MW-13 (bg)	-7.182	-29	-38	No	12	0	n/a	n/a	0.01	NP
TDS (mg/L)	GS-AP-MW-15	23.85	21	53	No	15	0	n/a	n/a	0.01	NP
TDS (mg/L)	**GS-AP-MW-17**	**47.09**	**81**	**58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
TDS (mg/L)	GS-AP-MW-17V (bg)	10.92	4	8	No	4	0	n/a	n/a	0.01	NP
TDS (mg/L)	GS-AP-MW-18	-158.2	-40	-53	No	15	0	n/a	n/a	0.01	NP
TDS (mg/L)	**GS-AP-MW-21**	**83.3**	**77**	**53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
TDS (mg/L)	GS-AP-MW-8 (bg)	-6.906	-37	-53	No	15	0	n/a	n/a	0.01	NP

Upper Tolerance Limits - Appendix IV

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond Printed 7/22/2020, 3:32 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	27	n/a	n/a	92.59	n/a	n/a	0.2503	NP Inter(NDs)
Arsenic (mg/L)	0.005	n/a	27	n/a	n/a	77.78	n/a	n/a	0.2503	NP Inter(NDs)
Barium (mg/L)	0.208	n/a	27	n/a	n/a	0	n/a	n/a	0.2503	NP Inter(normal...
Beryllium (mg/L)	0.003	n/a	27	n/a	n/a	100	n/a	n/a	0.2503	NP Inter(NDs)
Cadmium (mg/L)	0.001	n/a	27	n/a	n/a	100	n/a	n/a	0.2503	NP Inter(NDs)
Chromium (mg/L)	0.01	n/a	27	n/a	n/a	85.19	n/a	n/a	0.2503	NP Inter(NDs)
Cobalt (mg/L)	0.005	n/a	27	n/a	n/a	81.48	n/a	n/a	0.2503	NP Inter(NDs)
Combined Radium 226 + 228 (pCi/L)	1.03	n/a	27	0.3444	0.3029	0	None	No	0.05	Inter
Fluoride (mg/L)	0.2499	n/a	29	0.1268	0.05508	0	None	No	0.05	Inter
Lead (mg/L)	0.005	n/a	27	n/a	n/a	96.3	n/a	n/a	0.2503	NP Inter(NDs)
Lithium (mg/L)	0.0809	n/a	27	n/a	n/a	62.96	n/a	n/a	0.2503	NP Inter(NDs)
Mercury (mg/L)	0.0005	n/a	27	n/a	n/a	100	n/a	n/a	0.2503	NP Inter(NDs)
Molybdenum (mg/L)	0.01	n/a	27	n/a	n/a	92.59	n/a	n/a	0.2503	NP Inter(NDs)
Selenium (mg/L)	0.01	n/a	27	n/a	n/a	100	n/a	n/a	0.2503	NP Inter(NDs)
Thallium (mg/L)	0.001	n/a	27	n/a	n/a	100	n/a	n/a	0.2503	NP Inter(NDs)

GORGAS ASH POND GWPS			
Analyte	**Units**	**Background**	**GWPS**
Antimony	mg/L	0.003	0.006
Arsenic	mg/L	0.005	0.01
Barium	mg/L	0.208	2
Beryllium	mg/L	0.003	0.004
Cadmium	mg/L	0.001	0.005
Chromium	mg/L	0.01	0.1
Cobalt	mg/L	0.005	0.006
Combined Radium-226/228	pCi/L	1.03	5
Fluoride	mg/L	0.2499	4
Lead	mg/L	0.005	0.015
Lithium	mg/L	**0.0809**	**0.0809 / 0.04**
Mercury	mg/L	0.0005	0.002
Molybdenum	mg/L	0.01	0.1
Selenium	mg/L	0.01	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.

5. Lithium background constructed by including newly installed upgradient well GS-AP-MW-17V. Lithium GWPS limits constructed with and without GS-AP-MW-17V, respectively.

Confidence Intervals Set 1 of 2 - Significant Results

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond Printed 12/9/2020, 2:00 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Arsenic (mg/L)	**GS-AP-MW-6D**	**0.09703**	**0.0687**	**0.01**	**Yes**	**8**	**0.08286**	**0.01336**	**0**	**None**	**No**	**0.01**	**Param.**
Arsenic (mg/L)	**GS-AP-MW-7**	**0.267**	**0.1855**	**0.01**	**Yes**	**8**	**0.2263**	**0.03847**	**0**	**None**	**No**	**0.01**	**Param.**
Lithium (mg/L)	**GS-AP-MW-15**	**0.4155**	**0.1292**	**0.0809**	**Yes**	**8**	**0.2724**	**0.135**	**0**	**None**	**No**	**0.01**	**Param.**
Lithium (mg/L)	**GS-AP-MW-18**	**0.2565**	**0.08122**	**0.0809**	**Yes**	**8**	**0.1688**	**0.08266**	**0**	**None**	**No**	**0.01**	**Param.**
Lithium (mg/L)	**GS-AP-MW-21**	**0.3196**	**0.1384**	**0.0809**	**Yes**	**8**	**0.229**	**0.08544**	**0**	**None**	**No**	**0.01**	**Param.**
Lithium (mg/L)	**GS-AP-MW-6D**	**0.2892**	**0.2281**	**0.0809**	**Yes**	**8**	**0.2586**	**0.02884**	**0**	**None**	**No**	**0.01**	**Param.**
Lithium (mg/L)	**GS-AP-MW-7**	**0.1598**	**0.1457**	**0.0809**	**Yes**	**8**	**0.1528**	**0.006671**	**0**	**None**	**No**	**0.01**	**Param.**
Molybdenum (mg/L)	**GS-AP-MW-7**	**0.1999**	**0.1596**	**0.1**	**Yes**	**8**	**0.1798**	**0.01905**	**0**	**None**	**No**	**0.01**	**Param.**

Confidence Intervals Set 1 of 2 - All Results

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond Printed 12/9/2020, 2:00 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	GS-AP-MW-12	0.003	0.00202	0.006	No	8	0.002778	0.0004148	75	None	No	0.004	NP (NDs)
Antimony (mg/L)	GS-AP-MW-15	0.003	0.000636	0.006	No	8	0.002182	0.001133	62.5	None	No	0.004	NP (NDs)
Antimony (mg/L)	GS-AP-MW-6D	0.003	0.000828	0.006	No	8	0.002729	0.0007679	87.5	None	No	0.004	NP (NDs)
Antimony (mg/L)	GS-AP-MW-6S	0.003	0.000948	0.006	No	8	0.002744	0.0007255	87.5	None	No	0.004	NP (NDs)
Antimony (mg/L)	GS-AP-MW-7	0.003	0.00105	0.006	No	8	0.002756	0.0006894	87.5	None	No	0.004	NP (NDs)
Arsenic (mg/L)	GS-AP-MW-12	0.02813	0.008139	0.01	No	8	0.01814	0.009432	0	None	No	0.01	Param.
Arsenic (mg/L)	GS-AP-MW-15	0.017	0.005293	0.01	No	8	0.01115	0.005524	0	None	No	0.01	Param.
Arsenic (mg/L)	GS-AP-MW-17	0.005401	0.002284	0.01	No	8	0.003843	0.00147	0	None	No	0.01	Param.
Arsenic (mg/L)	GS-AP-MW-18	0.0922	0.00481	0.01	No	8	0.03635	0.03889	0	None	No	0.004	NP (normality)
Arsenic (mg/L)	GS-AP-MW-19	0.003172	0.001654	0.01	No	8	0.002419	0.0007913	12.5	None	x^2	0.01	Param.
Arsenic (mg/L)	GS-AP-MW-21	0.0025	0.00131	0.01	No	8	0.002351	0.0004207	87.5	None	No	0.004	NP (NDs)
Arsenic (mg/L)	**GS-AP-MW-6D**	**0.09703**	**0.0687**	**0.01**	**Yes**	**8**	**0.08286**	**0.01336**	**0**	**None**	**No**	**0.01**	**Param.**
Arsenic (mg/L)	GS-AP-MW-6S	0.01315	0.006609	0.01	No	8	0.009881	0.003087	0	None	No	0.01	Param.
Arsenic (mg/L)	**GS-AP-MW-7**	**0.267**	**0.1855**	**0.01**	**Yes**	**8**	**0.2263**	**0.03847**	**0**	**None**	**No**	**0.01**	**Param.**
Barium (mg/L)	GS-AP-MW-12	0.1978	0.1322	2	No	8	0.165	0.03093	0	None	No	0.01	Param.
Barium (mg/L)	GS-AP-MW-15	0.243	0.1098	2	No	8	0.1764	0.06281	0	None	No	0.01	Param.
Barium (mg/L)	GS-AP-MW-16D	0.3403	0.3009	2	No	8	0.3206	0.01861	0	None	No	0.01	Param.
Barium (mg/L)	GS-AP-MW-17	0.1209	0.06916	2	No	8	0.09504	0.02442	0	None	No	0.01	Param.
Barium (mg/L)	GS-AP-MW-18	0.105	0.0436	2	No	8	0.06615	0.02495	0	None	No	0.004	NP (normality)
Barium (mg/L)	GS-AP-MW-19	0.353	0.3088	2	No	8	0.3309	0.02084	0	None	No	0.01	Param.
Barium (mg/L)	GS-AP-MW-2	0.07931	0.05315	2	No	8	0.06609	0.01274	0	None	sqrt(x)	0.01	Param.
Barium (mg/L)	GS-AP-MW-21	0.1294	0.04265	2	No	8	0.08603	0.04093	0	None	No	0.01	Param.
Barium (mg/L)	GS-AP-MW-6D	0.914	0.378	2	No	8	0.7614	0.1973	0	None	No	0.004	NP (normality)
Barium (mg/L)	GS-AP-MW-6S	0.1407	0.08608	2	No	8	0.1136	0.02818	0	None	x^2	0.01	Param.
Barium (mg/L)	GS-AP-MW-7	0.1362	0.03832	2	No	8	0.08725	0.04616	0	None	No	0.01	Param.
Beryllium (mg/L)	GS-AP-MW-16D	0.003	0.00109	0.004	No	8	0.002761	0.0006753	87.5	None	No	0.004	NP (NDs)
Beryllium (mg/L)	GS-AP-MW-2	0.003	0.00138	0.004	No	8	0.002798	0.0005728	87.5	None	No	0.004	NP (NDs)
Beryllium (mg/L)	GS-AP-MW-6S	0.003	0.000794	0.004	No	8	0.002724	0.0007799	87.5	None	No	0.004	NP (NDs)
Chromium (mg/L)	GS-AP-MW-21	0.01	0.00219	0.1	No	8	0.009024	0.002761	87.5	None	No	0.004	NP (NDs)
Chromium (mg/L)	GS-AP-MW-7	0.01	0.00435	0.1	No	8	0.008346	0.002468	62.5	None	No	0.004	NP (NDs)
Cobalt (mg/L)	GS-AP-MW-6S	0.005	0.00222	0.006	No	8	0.004652	0.0009829	87.5	None	No	0.004	NP (NDs)
Cobalt (mg/L)	GS-AP-MW-7	0.005	0.00231	0.006	No	8	0.004385	0.001084	62.5	None	No	0.004	NP (NDs)
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-12	0.7165	0.2503	5	No	8	0.4834	0.2199	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-15	0.9556	0.04831	5	No	8	0.502	0.428	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-16D	0.5963	0.1025	5	No	8	0.3494	0.2329	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-17	0.7192	0.008131	5	No	8	0.3637	0.3354	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-18	0.8791	0.132	5	No	8	0.5056	0.3525	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-19	1.511	0.3801	5	No	8	0.9456	0.5335	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-2	2.094	0.1286	5	No	8	1.046	1.257	0	None	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-21	1.161	0.2888	5	No	8	0.7086	0.4719	0	None	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-6D	0.6664	0.1666	5	No	8	0.4165	0.2357	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-6S	1.156	0.2345	5	No	8	0.6953	0.4347	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-7	1.277	-0.003135	5	No	8	0.6369	0.6038	0	None	No	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-12	0.3171	0.1174	4	No	8	0.2173	0.09417	0	None	No	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-15	0.7874	0.4701	4	No	8	0.6288	0.1497	0	None	No	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-16D	0.171	0.109	4	No	8	0.1246	0.02027	0	None	No	0.004	NP (normality)
Fluoride (mg/L)	GS-AP-MW-17	0.3626	0.2474	4	No	8	0.305	0.05431	0	None	No	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-18	0.6274	0.3956	4	No	8	0.5115	0.1094	0	None	No	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-19	0.3793	0.299	4	No	8	0.3391	0.0379	0	None	No	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-2	1.062	0.8082	4	No	8	0.9351	0.1197	0	None	No	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-21	0.2759	0.2099	4	No	8	0.2429	0.03112	0	None	No	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-6D	0.16	0.13	4	No	8	0.1404	0.01272	0	None	No	0.004	NP (normality)
Fluoride (mg/L)	GS-AP-MW-6S	0.2313	0.09691	4	No	8	0.1623	0.07161	0	None	x^(1/3)	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-7	0.1175	0.09005	4	No	8	0.1038	0.01293	0	None	No	0.01	Param.
Lead (mg/L)	GS-AP-MW-7	0.005	0.00207	0.015	No	8	0.004235	0.001159	62.5	None	No	0.004	NP (NDs)

Confidence Intervals Set 1 of 2 - All Results

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond Printed 12/9/2020, 2:00 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Lithium (mg/L)	GS-AP-MW-12	0.04614	0.02345	0.0809	No	8	0.03451	0.01232	0	None	ln(x)	0.01	Param.
Lithium (mg/L)	**GS-AP-MW-15**	**0.4155**	**0.1292**	**0.0809**	**Yes**	**8**	**0.2724**	**0.135**	**0**	**None**	**No**	**0.01**	**Param.**
Lithium (mg/L)	GS-AP-MW-16D	0.03548	0.03262	0.0809	No	8	0.03405	0.001345	0	None	No	0.01	Param.
Lithium (mg/L)	GS-AP-MW-17	0.06355	0.05248	0.0809	No	8	0.05801	0.00522	0	None	No	0.01	Param.
Lithium (mg/L)	**GS-AP-MW-18**	**0.2565**	**0.08122**	**0.0809**	**Yes**	**8**	**0.1688**	**0.08266**	**0**	**None**	**No**	**0.01**	**Param.**
Lithium (mg/L)	GS-AP-MW-19	0.04562	0.03571	0.0809	No	8	0.04066	0.004674	0	None	No	0.01	Param.
Lithium (mg/L)	GS-AP-MW-2	0.05031	0.03999	0.0809	No	8	0.04515	0.004871	0	None	No	0.01	Param.
Lithium (mg/L)	**GS-AP-MW-21**	**0.3196**	**0.1384**	**0.0809**	**Yes**	**8**	**0.229**	**0.08544**	**0**	**None**	**No**	**0.01**	**Param.**
Lithium (mg/L)	**GS-AP-MW-6D**	**0.2892**	**0.2281**	**0.0809**	**Yes**	**8**	**0.2586**	**0.02884**	**0**	**None**	**No**	**0.01**	**Param.**
Lithium (mg/L)	GS-AP-MW-6S	0.0695	0.01	0.0809	No	8	0.02872	0.02525	37.5	None	No	0.004	NP (normality)
Lithium (mg/L)	**GS-AP-MW-7**	**0.1598**	**0.1457**	**0.0809**	**Yes**	**8**	**0.1528**	**0.006671**	**0**	**None**	**No**	**0.01**	**Param.**
Molybdenum (mg/L)	GS-AP-MW-12	0.00577	0.00444	0.1	No	8	0.005026	0.0003588	75	None	No	0.004	NP (NDs)
Molybdenum (mg/L)	GS-AP-MW-15	0.06683	0.02972	0.1	No	8	0.04828	0.01751	0	None	No	0.01	Param.
Molybdenum (mg/L)	GS-AP-MW-17	0.01101	0.00394	0.1	No	8	0.007478	0.003337	0	None	No	0.01	Param.
Molybdenum (mg/L)	GS-AP-MW-18	0.04843	0.02199	0.1	No	8	0.03467	0.01557	0	None	x^2	0.01	Param.
Molybdenum (mg/L)	GS-AP-MW-19	0.007626	0.005236	0.1	No	8	0.006419	0.001187	0	None	sqrt(x)	0.01	Param.
Molybdenum (mg/L)	GS-AP-MW-2	0.00927	0.002123	0.1	No	8	0.005696	0.003372	0	None	No	0.01	Param.
Molybdenum (mg/L)	GS-AP-MW-21	0.09476	0.04736	0.1	No	8	0.07106	0.02236	0	None	No	0.01	Param.
Molybdenum (mg/L)	GS-AP-MW-6D	0.00959	0.00537	0.1	No	8	0.006965	0.001765	0	None	No	0.004	NP (normality)
Molybdenum (mg/L)	GS-AP-MW-6S	0.0427	0.00246	0.1	No	8	0.01227	0.01464	25	None	No	0.004	NP (normality)
Molybdenum (mg/L)	**GS-AP-MW-7**	**0.1999**	**0.1596**	**0.1**	**Yes**	**8**	**0.1798**	**0.01905**	**0**	**None**	**No**	**0.01**	**Param.**

Confidence Intervals Set 2 of 2 - Significant Results

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond Printed 12/9/2020, 2:04 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Arsenic (mg/L)	**GS-AP-MW-6D**	**0.09703**	**0.0687**	**0.01**	**Yes**	**8**	**0.08286**	**0.01336**	**0**	**None**	**No**	**0.01**	**Param.**
Arsenic (mg/L)	**GS-AP-MW-7**	**0.267**	**0.1855**	**0.01**	**Yes**	**8**	**0.2263**	**0.03847**	**0**	**None**	**No**	**0.01**	**Param.**
Lithium (mg/L)	**GS-AP-MW-15**	**0.4155**	**0.1292**	**0.04**	**Yes**	**8**	**0.2724**	**0.135**	**0**	**None**	**No**	**0.01**	**Param.**
Lithium (mg/L)	**GS-AP-MW-17**	**0.06355**	**0.05248**	**0.04**	**Yes**	**8**	**0.05801**	**0.00522**	**0**	**None**	**No**	**0.01**	**Param.**
Lithium (mg/L)	**GS-AP-MW-18**	**0.2565**	**0.08122**	**0.04**	**Yes**	**8**	**0.1688**	**0.08266**	**0**	**None**	**No**	**0.01**	**Param.**
Lithium (mg/L)	**GS-AP-MW-21**	**0.3196**	**0.1384**	**0.04**	**Yes**	**8**	**0.229**	**0.08544**	**0**	**None**	**No**	**0.01**	**Param.**
Lithium (mg/L)	**GS-AP-MW-6D**	**0.2892**	**0.2281**	**0.04**	**Yes**	**8**	**0.2586**	**0.02884**	**0**	**None**	**No**	**0.01**	**Param.**
Lithium (mg/L)	**GS-AP-MW-7**	**0.1598**	**0.1457**	**0.04**	**Yes**	**8**	**0.1528**	**0.006671**	**0**	**None**	**No**	**0.01**	**Param.**
Molybdenum (mg/L)	**GS-AP-MW-7**	**0.1999**	**0.1596**	**0.1**	**Yes**	**8**	**0.1798**	**0.01905**	**0**	**None**	**No**	**0.01**	**Param.**

Confidence Intervals Set 2 of 2 - All Results

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond Printed 12/9/2020, 2:04 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	GS-AP-MW-12	0.003	0.00202	0.006	No	8	0.002778	0.0004148	75	None	No	0.004	NP (NDs)
Antimony (mg/L)	GS-AP-MW-15	0.003	0.000636	0.006	No	8	0.002182	0.001133	62.5	None	No	0.004	NP (NDs)
Antimony (mg/L)	GS-AP-MW-6D	0.003	0.000828	0.006	No	8	0.002729	0.0007679	87.5	None	No	0.004	NP (NDs)
Antimony (mg/L)	GS-AP-MW-6S	0.003	0.000948	0.006	No	8	0.002744	0.0007255	87.5	None	No	0.004	NP (NDs)
Antimony (mg/L)	GS-AP-MW-7	0.003	0.00105	0.006	No	8	0.002756	0.0006894	87.5	None	No	0.004	NP (NDs)
Arsenic (mg/L)	GS-AP-MW-12	0.02813	0.008139	0.01	No	8	0.01814	0.009432	0	None	No	0.01	Param.
Arsenic (mg/L)	GS-AP-MW-15	0.017	0.005293	0.01	No	8	0.01115	0.005524	0	None	No	0.01	Param.
Arsenic (mg/L)	GS-AP-MW-17	0.005401	0.002284	0.01	No	8	0.003843	0.00147	0	None	No	0.01	Param.
Arsenic (mg/L)	GS-AP-MW-18	0.0922	0.00481	0.01	No	8	0.03635	0.03889	0	None	No	0.004	NP (normality)
Arsenic (mg/L)	GS-AP-MW-19	0.003172	0.001654	0.01	No	8	0.002419	0.0007913	12.5	None	x^2	0.01	Param.
Arsenic (mg/L)	GS-AP-MW-21	0.0025	0.00131	0.01	No	8	0.002351	0.0004207	87.5	None	No	0.004	NP (NDs)
Arsenic (mg/L)	**GS-AP-MW-6D**	**0.09703**	**0.0687**	**0.01**	**Yes**	**8**	**0.08286**	**0.01336**	**0**	**None**	**No**	**0.01**	**Param.**
Arsenic (mg/L)	GS-AP-MW-6S	0.01315	0.006609	0.01	No	8	0.009881	0.003087	0	None	No	0.01	Param.
Arsenic (mg/L)	**GS-AP-MW-7**	**0.267**	**0.1855**	**0.01**	**Yes**	**8**	**0.2263**	**0.03847**	**0**	**None**	**No**	**0.01**	**Param.**
Barium (mg/L)	GS-AP-MW-12	0.1978	0.1322	2	No	8	0.165	0.03093	0	None	No	0.01	Param.
Barium (mg/L)	GS-AP-MW-15	0.243	0.1098	2	No	8	0.1764	0.06281	0	None	No	0.01	Param.
Barium (mg/L)	GS-AP-MW-16D	0.3403	0.3009	2	No	8	0.3206	0.01861	0	None	No	0.01	Param.
Barium (mg/L)	GS-AP-MW-17	0.1209	0.06916	2	No	8	0.09504	0.02442	0	None	No	0.01	Param.
Barium (mg/L)	GS-AP-MW-18	0.105	0.0436	2	No	8	0.06615	0.02495	0	None	No	0.004	NP (normality)
Barium (mg/L)	GS-AP-MW-19	0.353	0.3088	2	No	8	0.3309	0.02084	0	None	No	0.01	Param.
Barium (mg/L)	GS-AP-MW-2	0.07931	0.05315	2	No	8	0.06609	0.01274	0	None	sqrt(x)	0.01	Param.
Barium (mg/L)	GS-AP-MW-21	0.1294	0.04265	2	No	8	0.08603	0.04093	0	None	No	0.01	Param.
Barium (mg/L)	GS-AP-MW-6D	0.914	0.378	2	No	8	0.7614	0.1973	0	None	No	0.004	NP (normality)
Barium (mg/L)	GS-AP-MW-6S	0.1407	0.08608	2	No	8	0.1136	0.02818	0	None	x^2	0.01	Param.
Barium (mg/L)	GS-AP-MW-7	0.1362	0.03832	2	No	8	0.08725	0.04616	0	None	No	0.01	Param.
Beryllium (mg/L)	GS-AP-MW-16D	0.003	0.00109	0.004	No	8	0.002761	0.0006753	87.5	None	No	0.004	NP (NDs)
Beryllium (mg/L)	GS-AP-MW-2	0.003	0.00138	0.004	No	8	0.002798	0.0005728	87.5	None	No	0.004	NP (NDs)
Beryllium (mg/L)	GS-AP-MW-6S	0.003	0.000794	0.004	No	8	0.002724	0.0007799	87.5	None	No	0.004	NP (NDs)
Chromium (mg/L)	GS-AP-MW-21	0.01	0.00219	0.1	No	8	0.009024	0.002761	87.5	None	No	0.004	NP (NDs)
Chromium (mg/L)	GS-AP-MW-7	0.01	0.00435	0.1	No	8	0.008346	0.002468	62.5	None	No	0.004	NP (NDs)
Cobalt (mg/L)	GS-AP-MW-6S	0.005	0.00222	0.006	No	8	0.004652	0.0009829	87.5	None	No	0.004	NP (NDs)
Cobalt (mg/L)	GS-AP-MW-7	0.005	0.00231	0.006	No	8	0.004385	0.001084	62.5	None	No	0.004	NP (NDs)
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-12	0.7165	0.2503	5	No	8	0.4834	0.2199	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-15	0.9556	0.04831	5	No	8	0.502	0.428	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-16D	0.5963	0.1025	5	No	8	0.3494	0.2329	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-17	0.7192	0.008131	5	No	8	0.3637	0.3354	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-18	0.8791	0.132	5	No	8	0.5056	0.3525	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-19	1.511	0.3801	5	No	8	0.9456	0.5335	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-2	2.094	0.1286	5	No	8	1.046	1.257	0	None	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-21	1.161	0.2888	5	No	8	0.7086	0.4719	0	None	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-6D	0.6664	0.1666	5	No	8	0.4165	0.2357	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-6S	1.156	0.2345	5	No	8	0.6953	0.4347	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-7	1.277	-0.003135	5	No	8	0.6369	0.6038	0	None	No	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-12	0.3171	0.1174	4	No	8	0.2173	0.09417	0	None	No	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-15	0.7874	0.4701	4	No	8	0.6288	0.1497	0	None	No	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-16D	0.171	0.109	4	No	8	0.1246	0.02027	0	None	No	0.004	NP (normality)
Fluoride (mg/L)	GS-AP-MW-17	0.3626	0.2474	4	No	8	0.305	0.05431	0	None	No	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-18	0.6274	0.3956	4	No	8	0.5115	0.1094	0	None	No	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-19	0.3793	0.299	4	No	8	0.3391	0.0379	0	None	No	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-2	1.062	0.8082	4	No	8	0.9351	0.1197	0	None	No	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-21	0.2759	0.2099	4	No	8	0.2429	0.03112	0	None	No	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-6D	0.16	0.13	4	No	8	0.1404	0.01272	0	None	No	0.004	NP (normality)
Fluoride (mg/L)	GS-AP-MW-6S	0.2313	0.09691	4	No	8	0.1623	0.07161	0	None	x^(1/3)	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-7	0.1175	0.09005	4	No	8	0.1038	0.01293	0	None	No	0.01	Param.
Lead (mg/L)	GS-AP-MW-7	0.005	0.00207	0.015	No	8	0.004235	0.001159	62.5	None	No	0.004	NP (NDs)

Confidence Intervals Set 2 of 2 - All Results

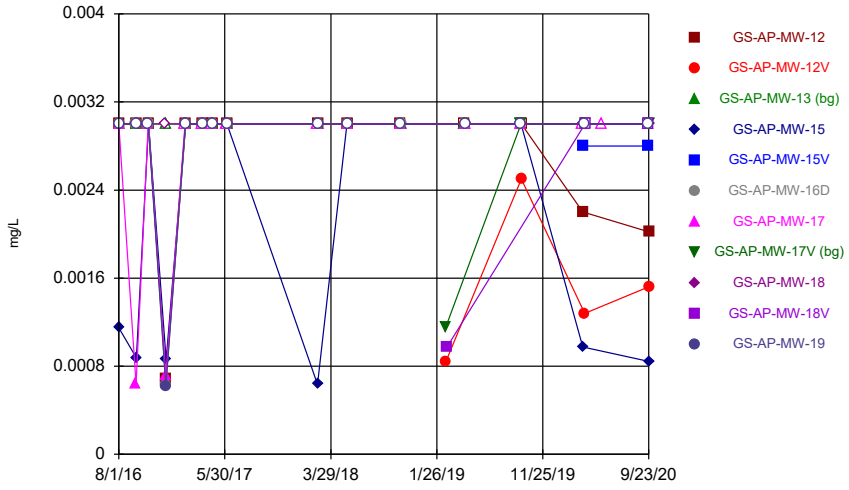
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond Printed 12/9/2020, 2:04 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Lithium (mg/L)	GS-AP-MW-12	0.04614	0.02345	0.04	No	8	0.03451	0.01232	0	None	ln(x)	0.01	Param.
Lithium (mg/L)	**GS-AP-MW-15**	**0.4155**	**0.1292**	**0.04**	**Yes**	**8**	**0.2724**	**0.135**	**0**	**None**	**No**	**0.01**	**Param.**
Lithium (mg/L)	GS-AP-MW-16D	0.03548	0.03262	0.04	No	8	0.03405	0.001345	0	None	No	0.01	Param.
Lithium (mg/L)	**GS-AP-MW-17**	**0.06355**	**0.05248**	**0.04**	**Yes**	**8**	**0.05801**	**0.00522**	**0**	**None**	**No**	**0.01**	**Param.**
Lithium (mg/L)	**GS-AP-MW-18**	**0.2565**	**0.08122**	**0.04**	**Yes**	**8**	**0.1688**	**0.08266**	**0**	**None**	**No**	**0.01**	**Param.**
Lithium (mg/L)	GS-AP-MW-19	0.04562	0.03571	0.04	No	8	0.04066	0.004674	0	None	No	0.01	Param.
Lithium (mg/L)	GS-AP-MW-2	0.05031	0.03999	0.04	No	8	0.04515	0.004871	0	None	No	0.01	Param.
Lithium (mg/L)	**GS-AP-MW-21**	**0.3196**	**0.1384**	**0.04**	**Yes**	**8**	**0.229**	**0.08544**	**0**	**None**	**No**	**0.01**	**Param.**
Lithium (mg/L)	**GS-AP-MW-6D**	**0.2892**	**0.2281**	**0.04**	**Yes**	**8**	**0.2586**	**0.02884**	**0**	**None**	**No**	**0.01**	**Param.**
Lithium (mg/L)	GS-AP-MW-6S	0.0695	0.01	0.04	No	8	0.02872	0.02525	37.5	None	No	0.004	NP (normality)
Lithium (mg/L)	**GS-AP-MW-7**	**0.1598**	**0.1457**	**0.04**	**Yes**	**8**	**0.1528**	**0.006671**	**0**	**None**	**No**	**0.01**	**Param.**
Molybdenum (mg/L)	GS-AP-MW-12	0.00577	0.00444	0.1	No	8	0.005026	0.0003588	75	None	No	0.004	NP (NDs)
Molybdenum (mg/L)	GS-AP-MW-15	0.06683	0.02972	0.1	No	8	0.04828	0.01751	0	None	No	0.01	Param.
Molybdenum (mg/L)	GS-AP-MW-17	0.01101	0.00394	0.1	No	8	0.007478	0.003337	0	None	No	0.01	Param.
Molybdenum (mg/L)	GS-AP-MW-18	0.04843	0.02199	0.1	No	8	0.03467	0.01557	0	None	x^2	0.01	Param.
Molybdenum (mg/L)	GS-AP-MW-19	0.007626	0.005236	0.1	No	8	0.006419	0.001187	0	None	sqrt(x)	0.01	Param.
Molybdenum (mg/L)	GS-AP-MW-2	0.00927	0.002123	0.1	No	8	0.005696	0.003372	0	None	No	0.01	Param.
Molybdenum (mg/L)	GS-AP-MW-21	0.09476	0.04736	0.1	No	8	0.07106	0.02236	0	None	No	0.01	Param.
Molybdenum (mg/L)	GS-AP-MW-6D	0.00959	0.00537	0.1	No	8	0.006965	0.001765	0	None	No	0.004	NP (normality)
Molybdenum (mg/L)	GS-AP-MW-6S	0.0427	0.00246	0.1	No	8	0.01227	0.01464	25	None	No	0.004	NP (normality)
Molybdenum (mg/L)	**GS-AP-MW-7**	**0.1999**	**0.1596**	**0.1**	**Yes**	**8**	**0.1798**	**0.01905**	**0**	**None**	**No**	**0.01**	**Param.**

FIGURE A.

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

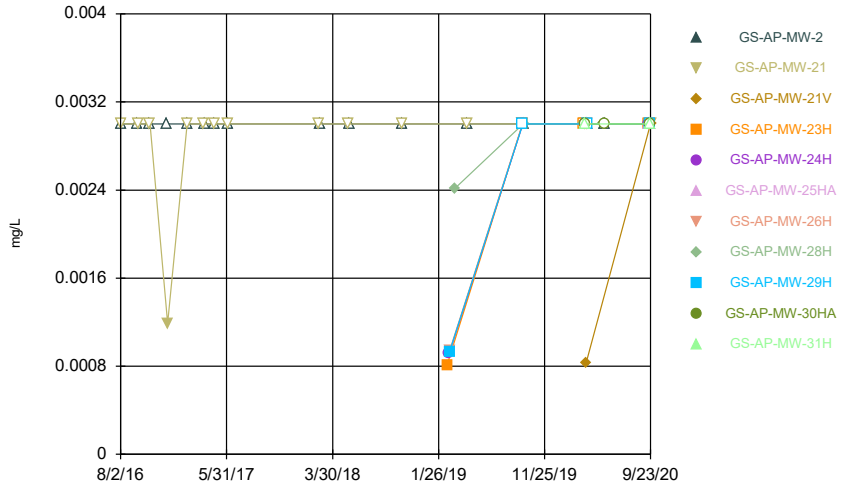
Time Series



Constituent: Antimony Analysis Run 12/9/2020 2:19 PM
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

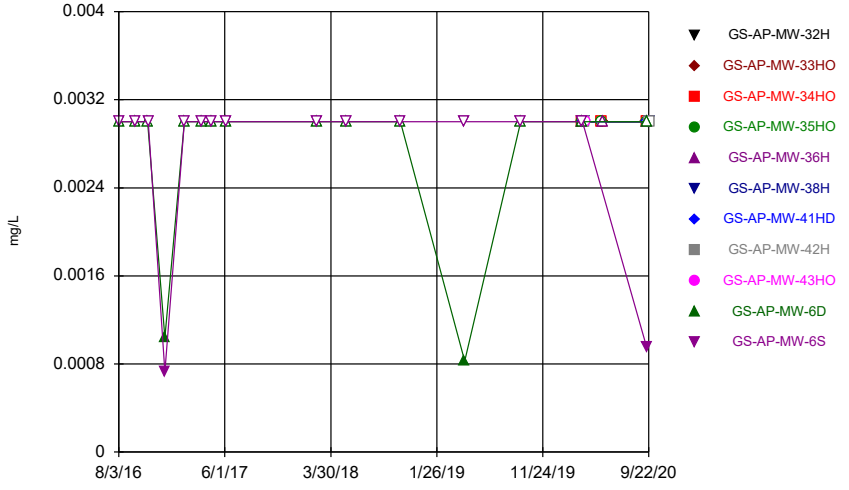
Time Series



Constituent: Antimony Analysis Run 12/9/2020 2:19 PM
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

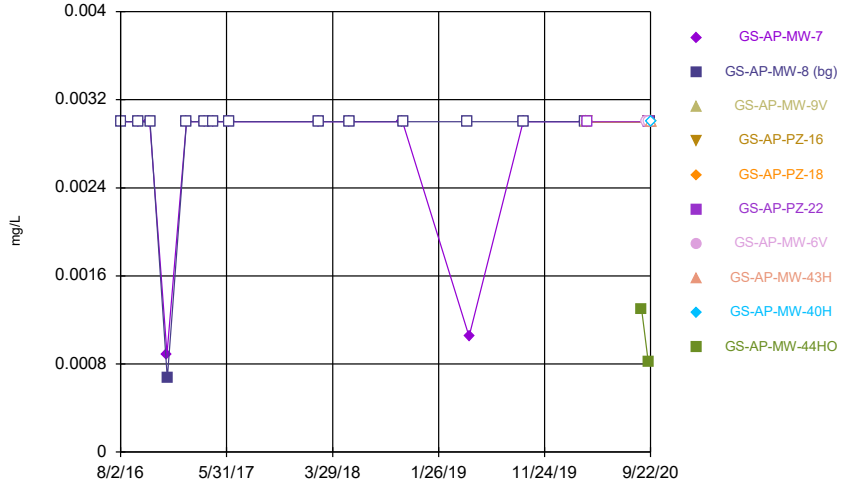
Time Series



Constituent: Antimony Analysis Run 12/9/2020 2:19 PM
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series



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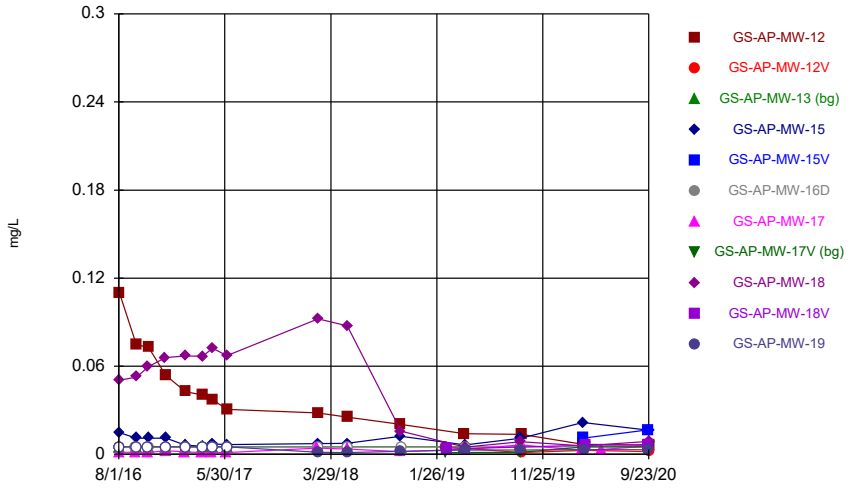
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series



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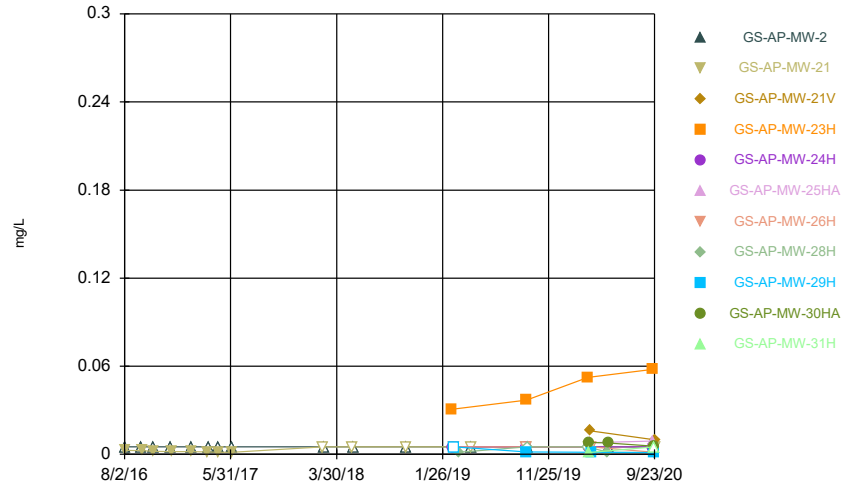
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series



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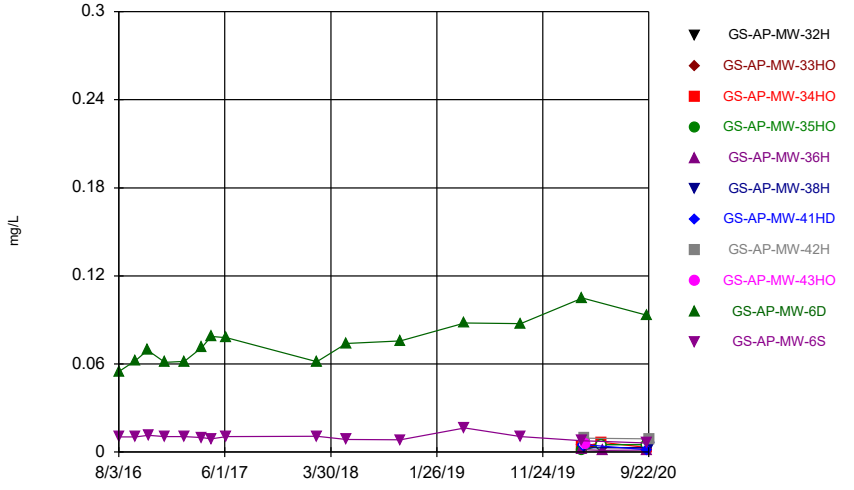
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series



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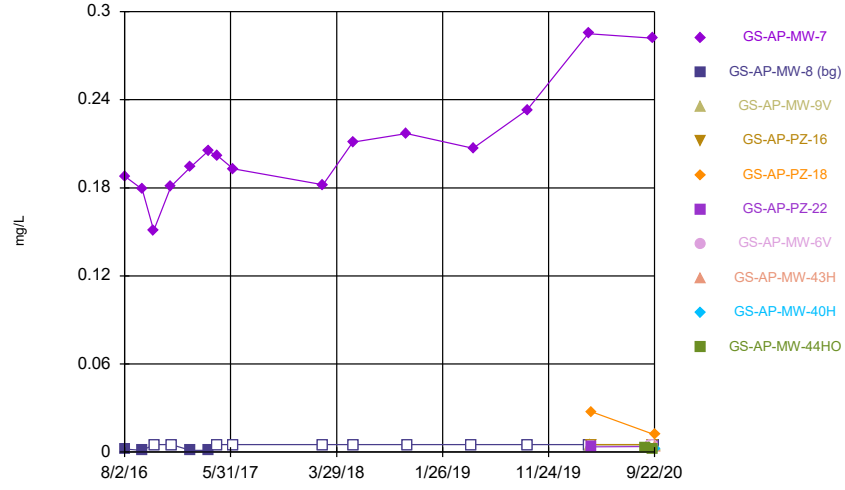
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series



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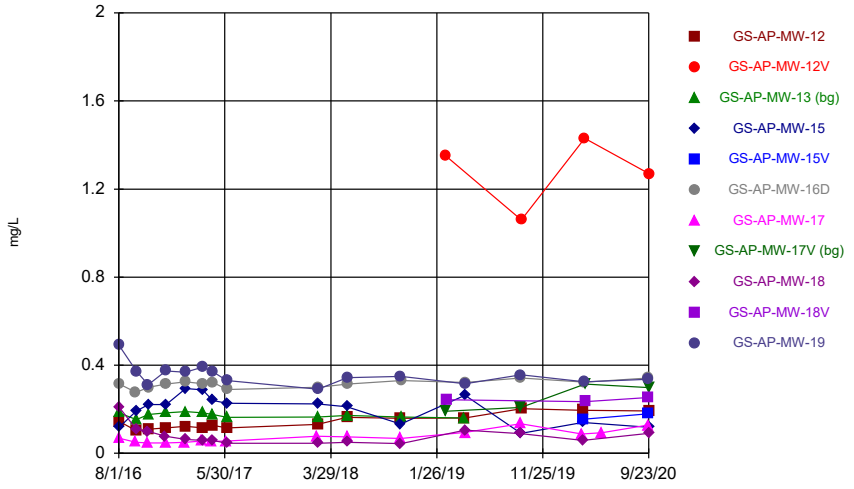
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Time Series



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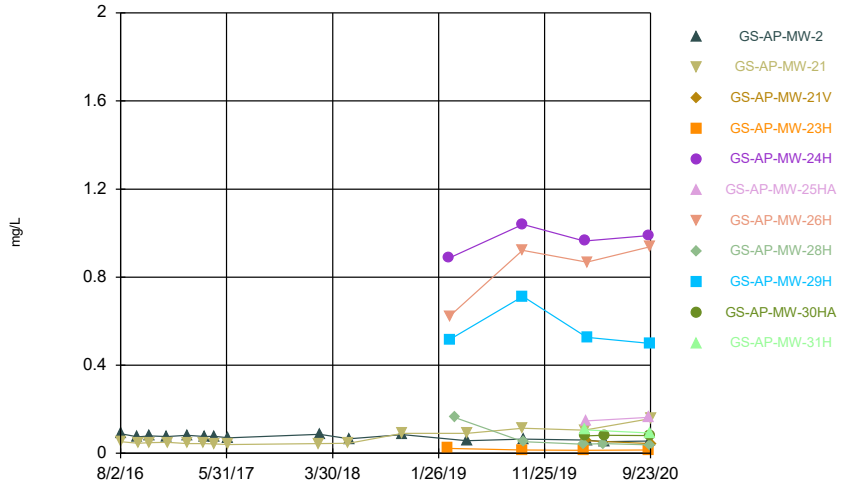
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Time Series



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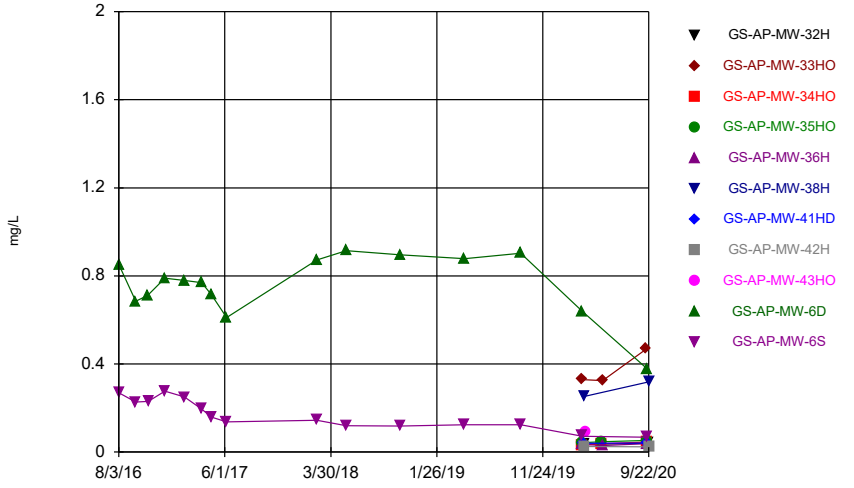
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Time Series



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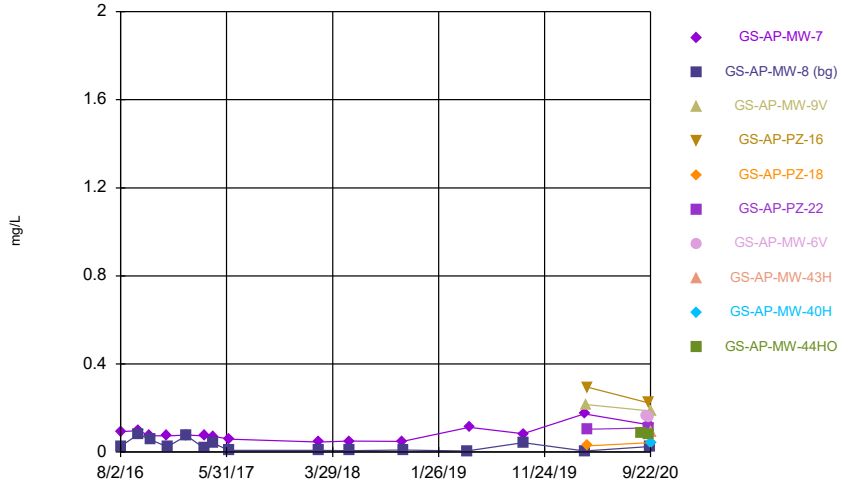
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Time Series



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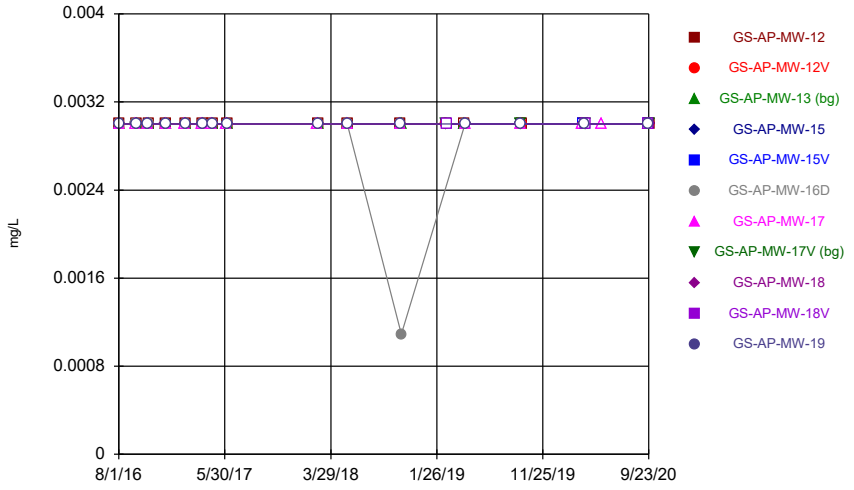
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series



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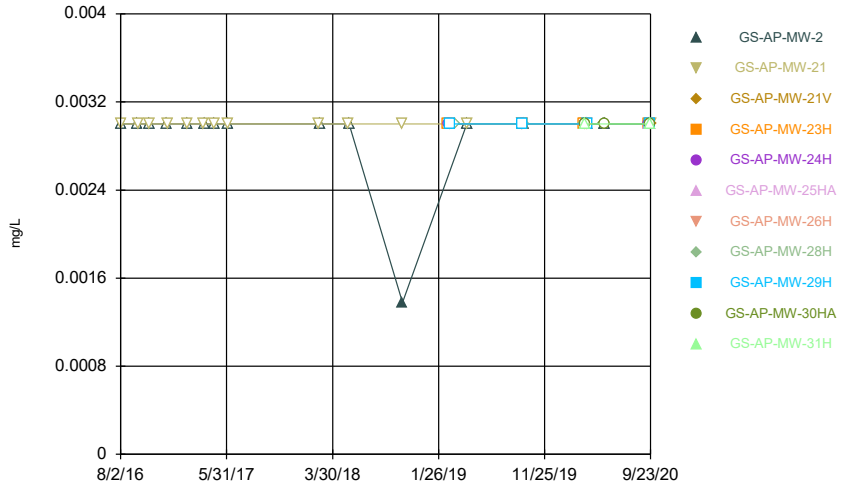
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series



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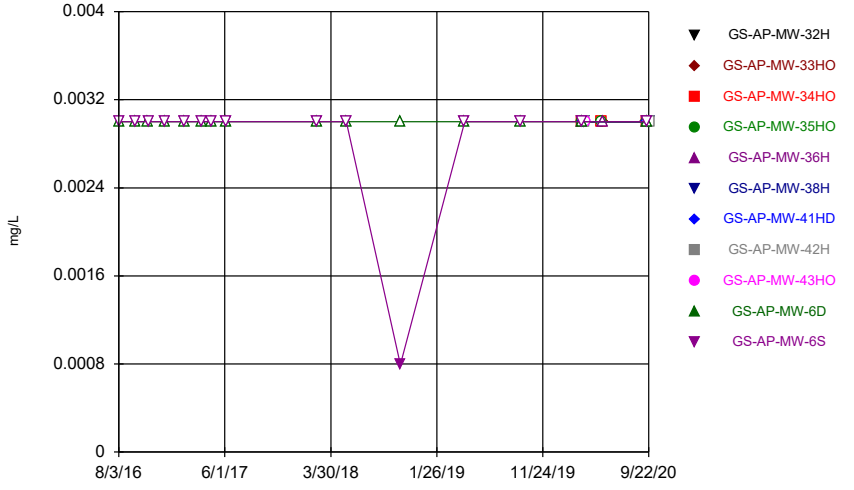
Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series



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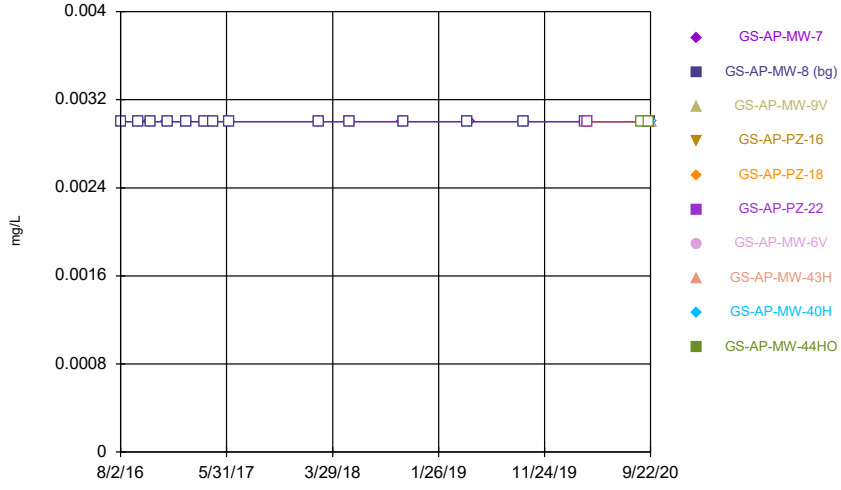
Time Series



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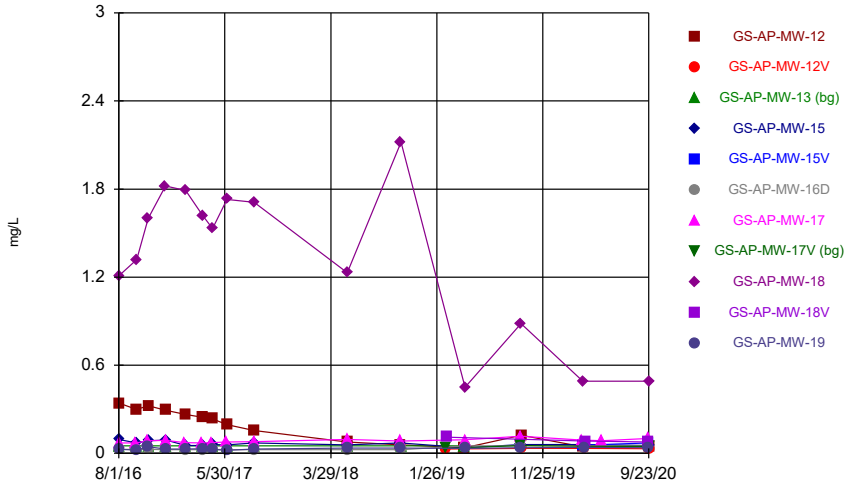
Hollow symbols indicate censored values.

Time Series



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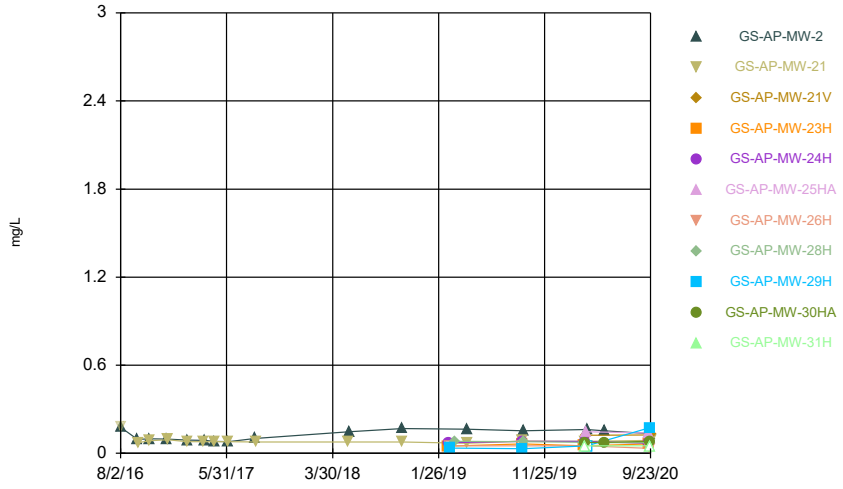
Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series



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Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

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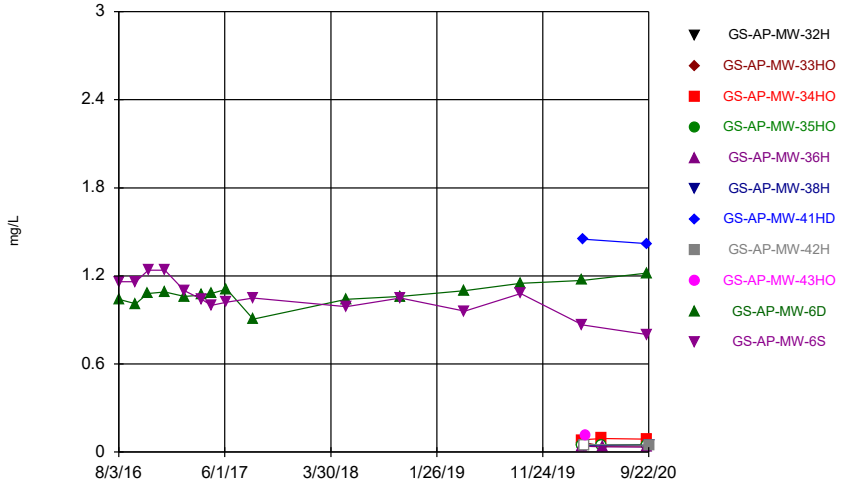
Time Series



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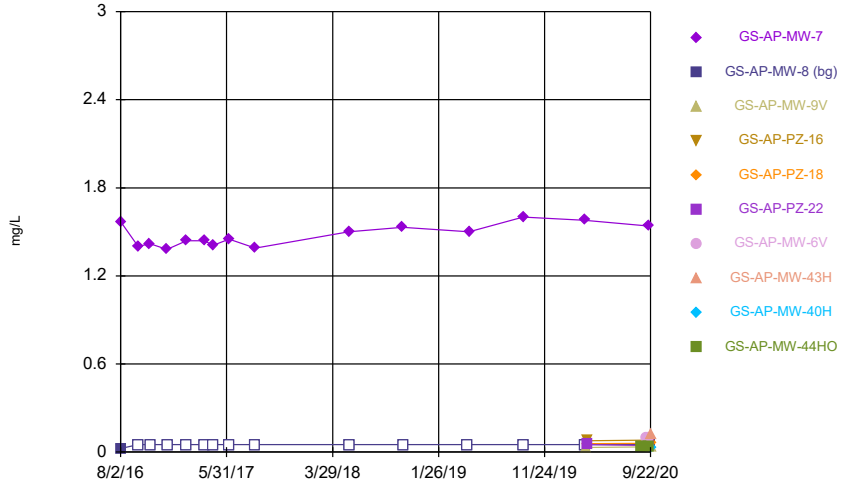
Hollow symbols indicate censored values.

Time Series



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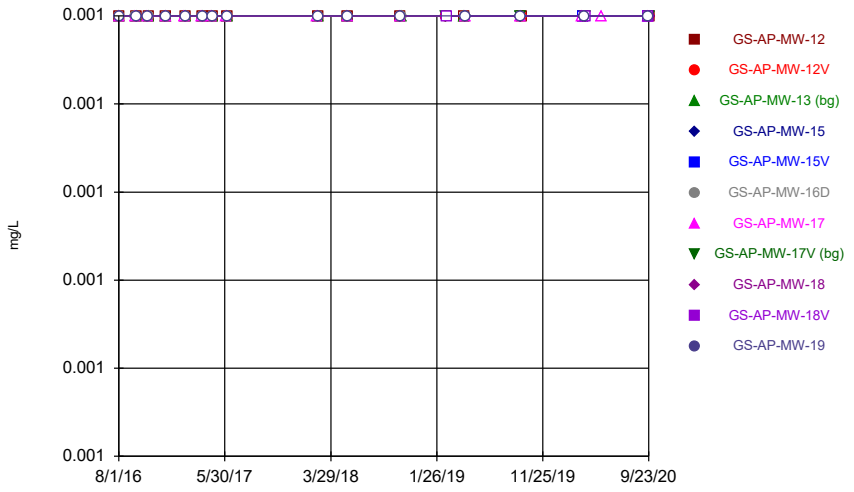
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

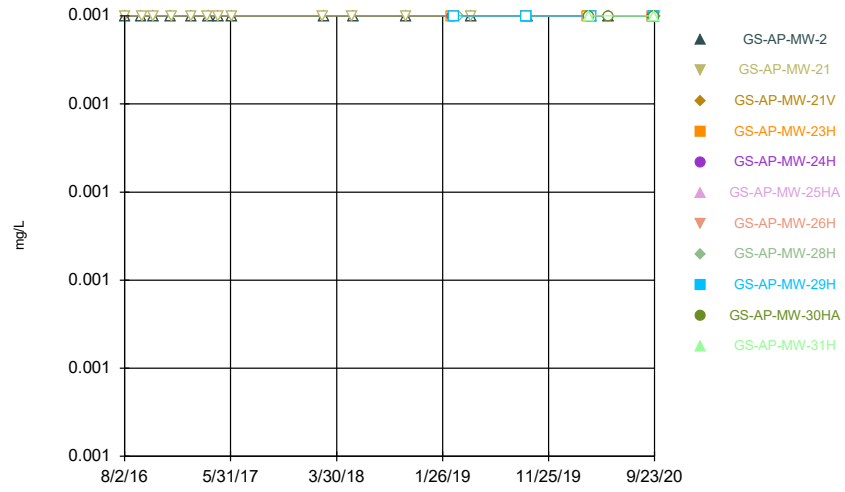
Time Series



Constituent: Cadmium Analysis Run 12/9/2020 2:19 PM
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series



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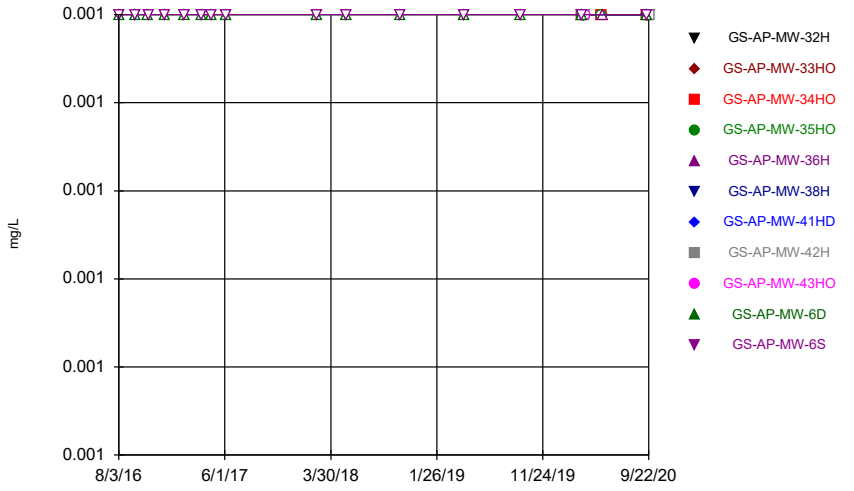
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series



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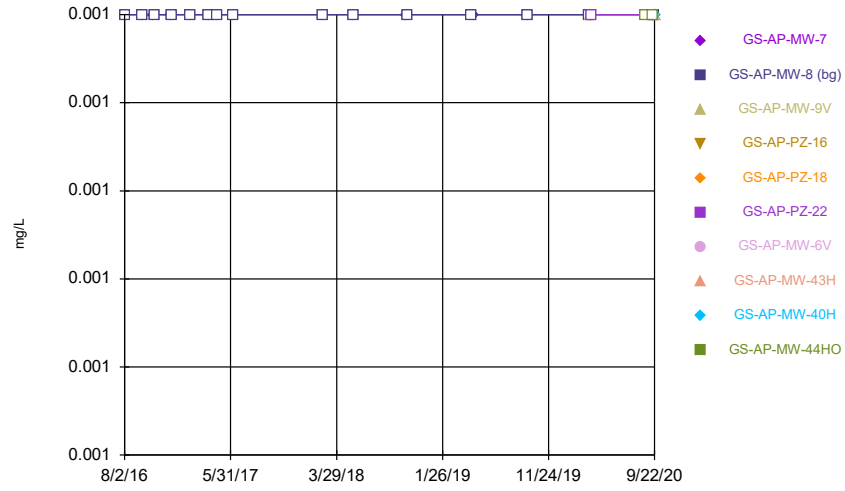
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series



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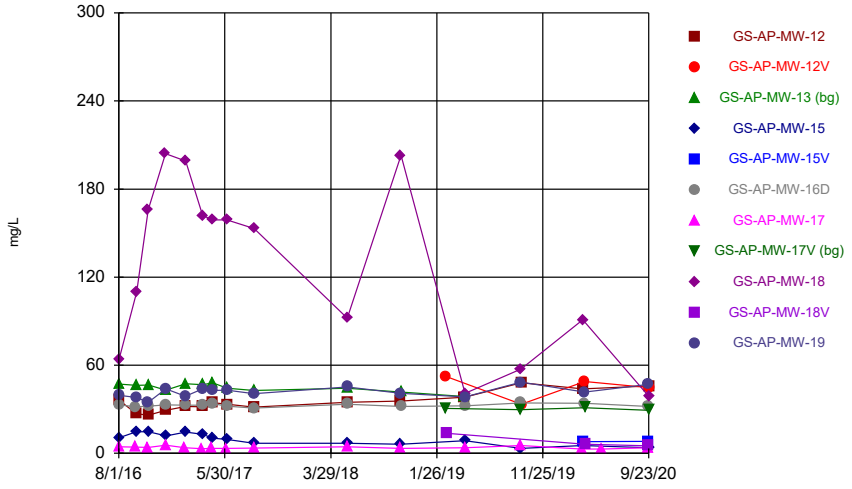
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Time Series

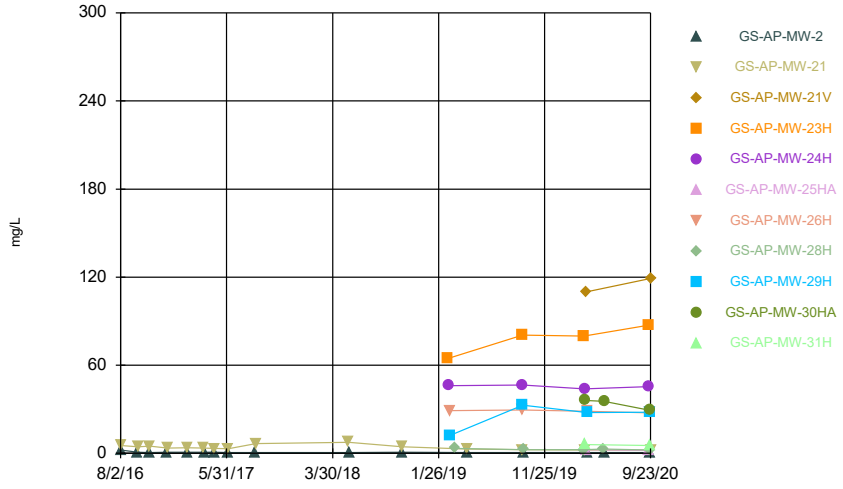


Constituent: Calcium Analysis Run 12/9/2020 2:19 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Time Series



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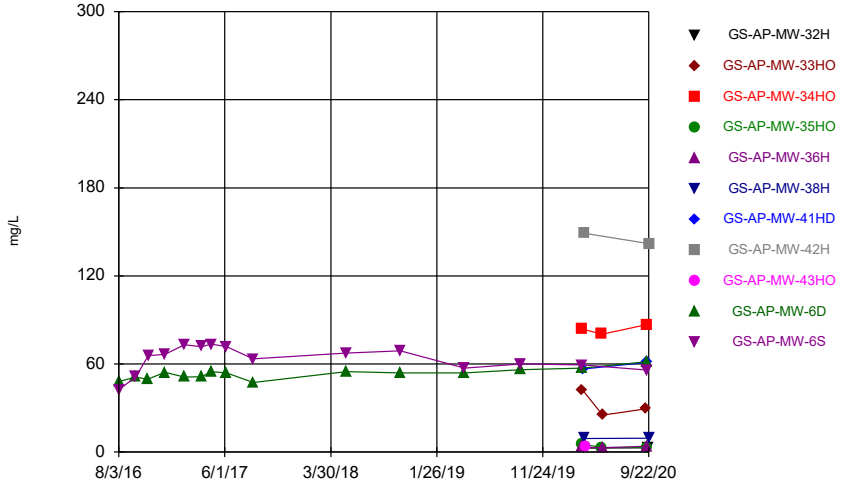
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Time Series



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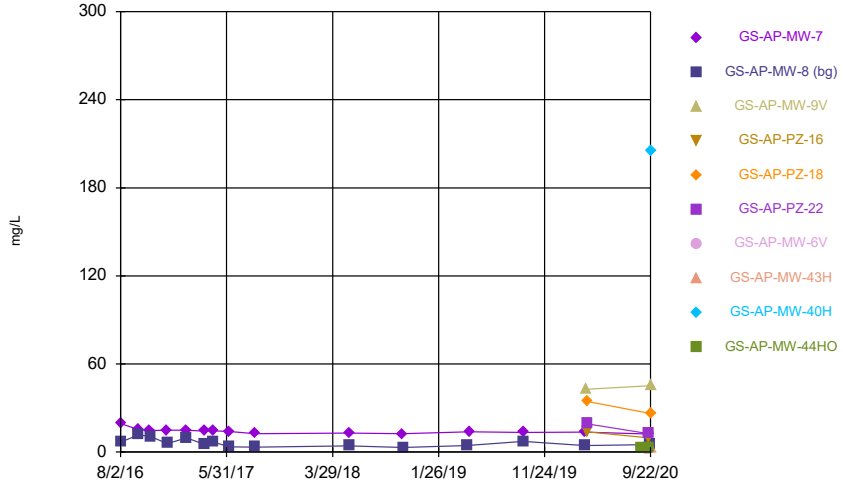
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Time Series



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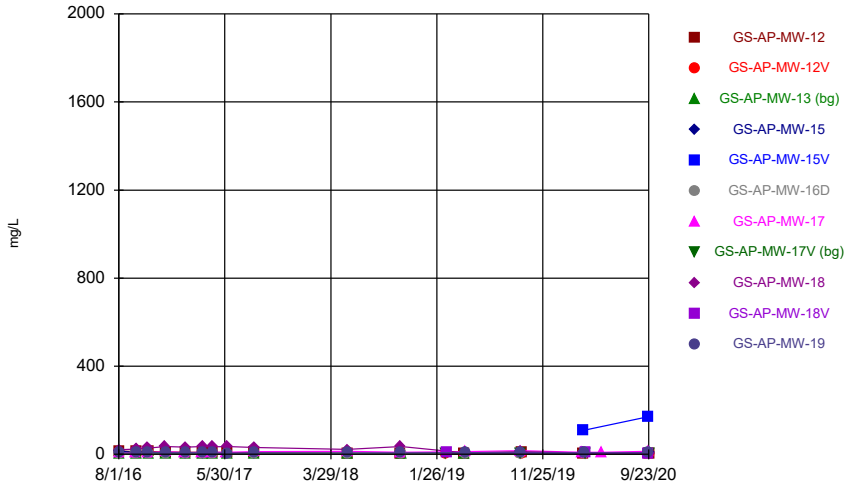
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Time Series

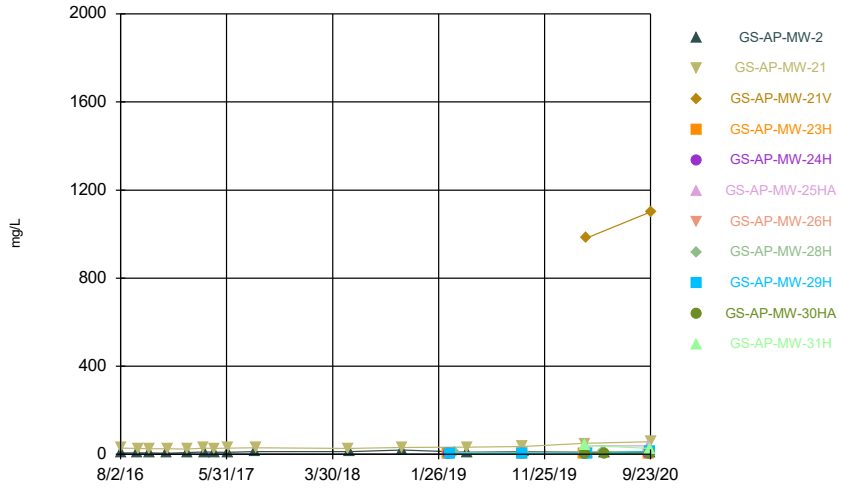


Constituent: Chloride Analysis Run 12/9/2020 2:19 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Time Series

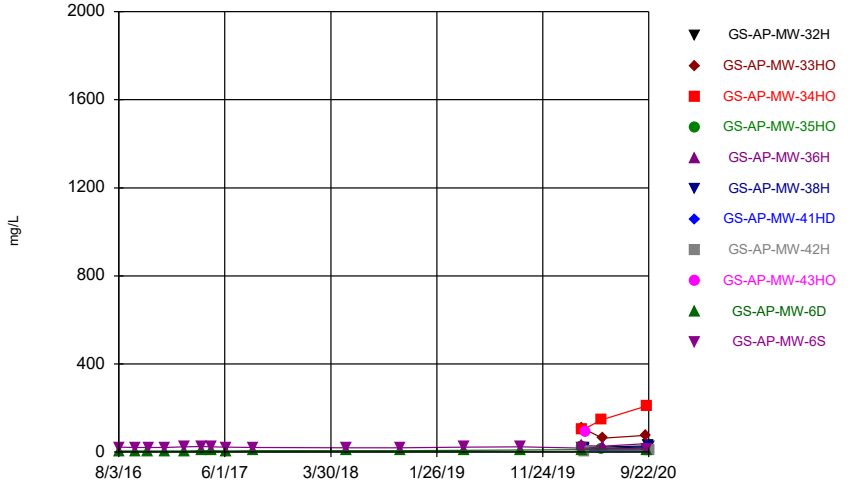


Constituent: Chloride Analysis Run 12/9/2020 2:19 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Time Series



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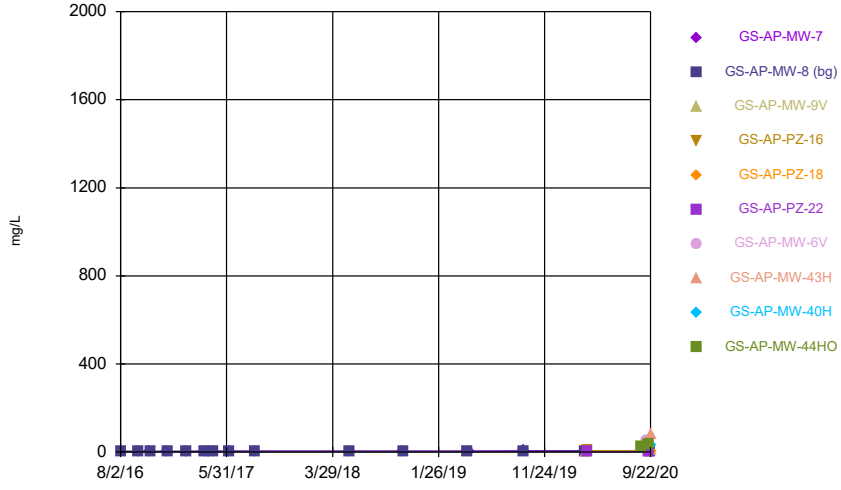
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Time Series



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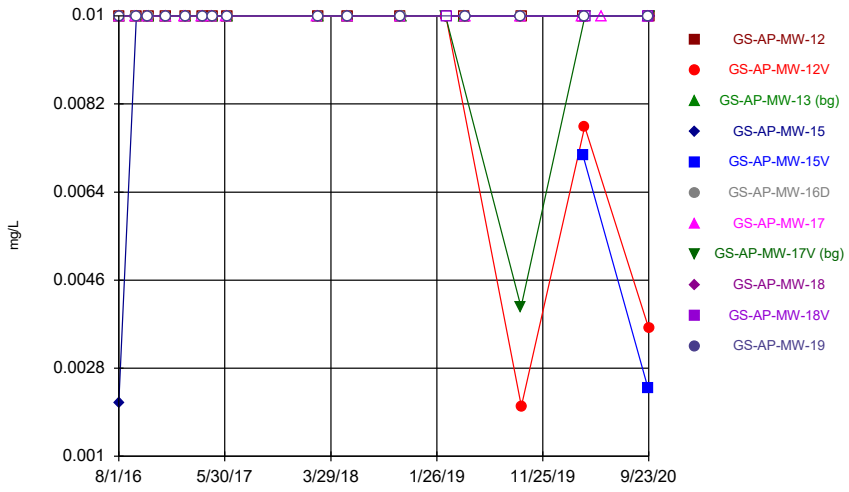
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

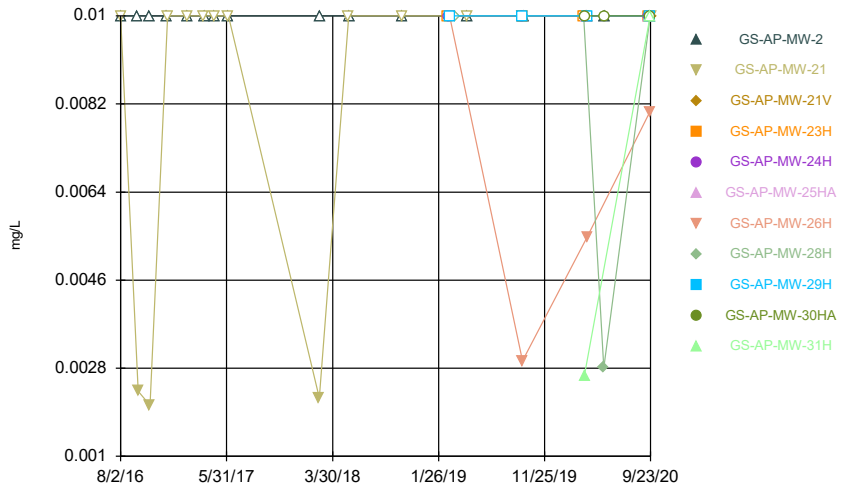
Time Series



Constituent: Chromium Analysis Run 12/9/2020 2:20 PM
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series



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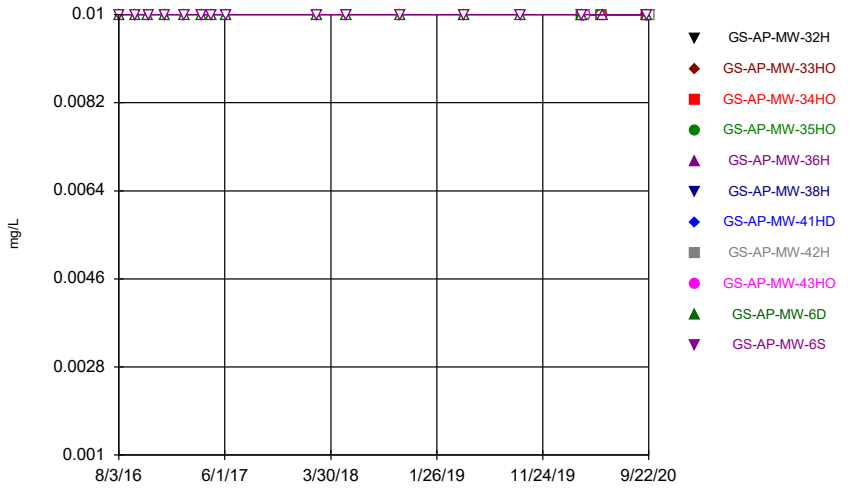
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series



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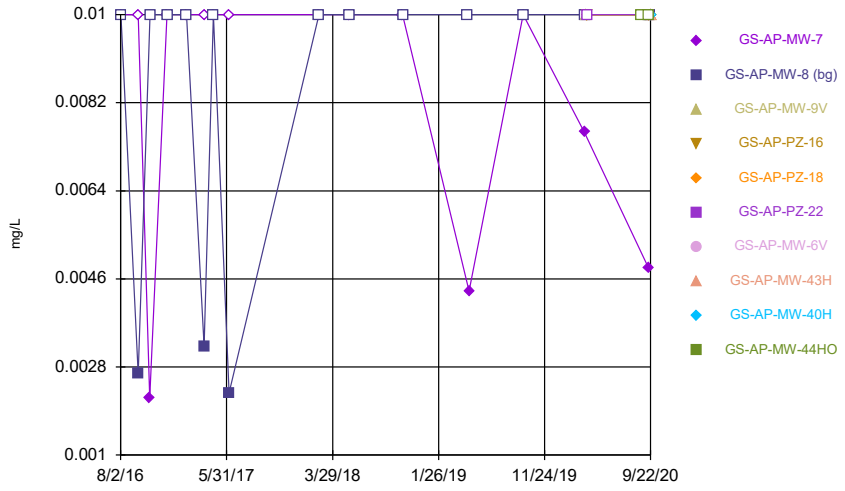
Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

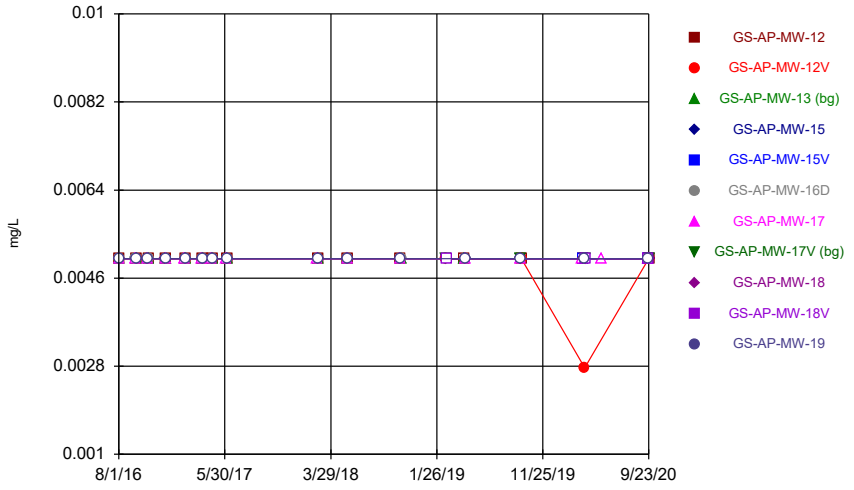
Time Series



Constituent: Chromium Analysis Run 12/9/2020 2:20 PM
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

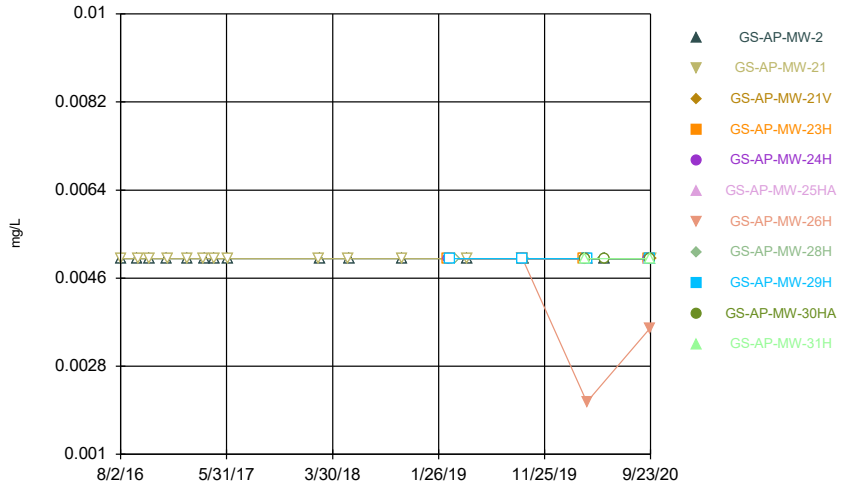
Time Series



Constituent: Cobalt Analysis Run 12/9/2020 2:20 PM
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

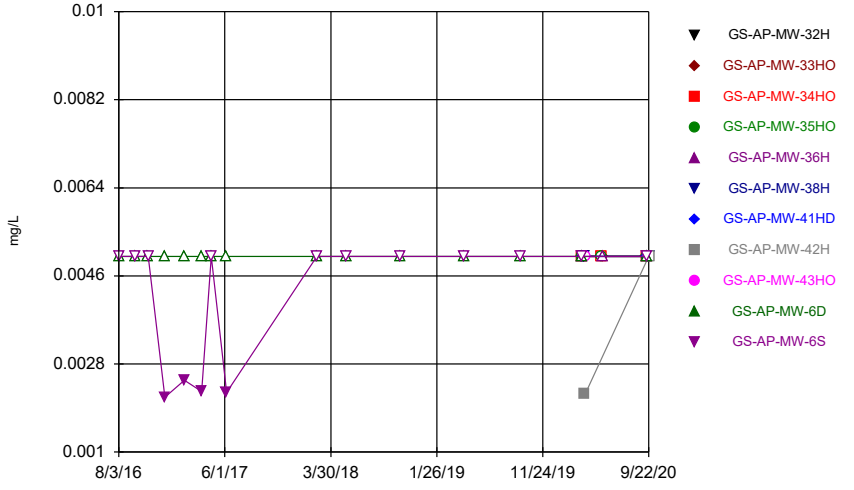
Time Series



Constituent: Cobalt Analysis Run 12/9/2020 2:20 PM
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

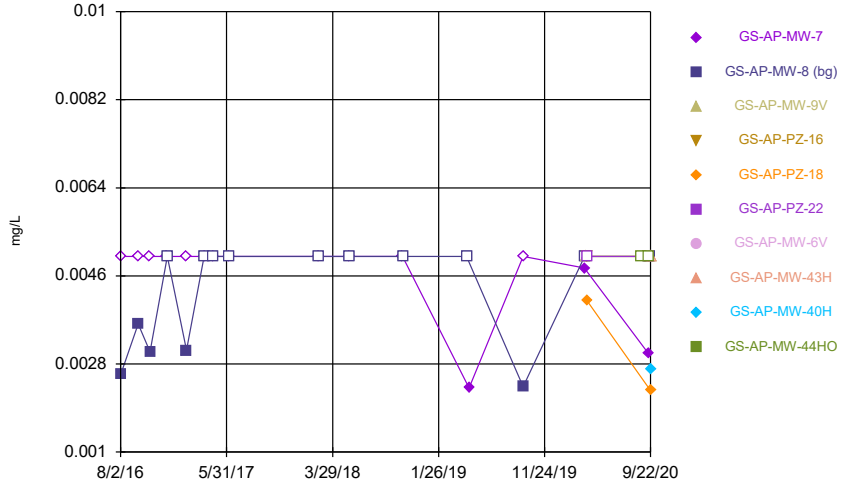
Time Series



Constituent: Cobalt Analysis Run 12/9/2020 2:20 PM
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

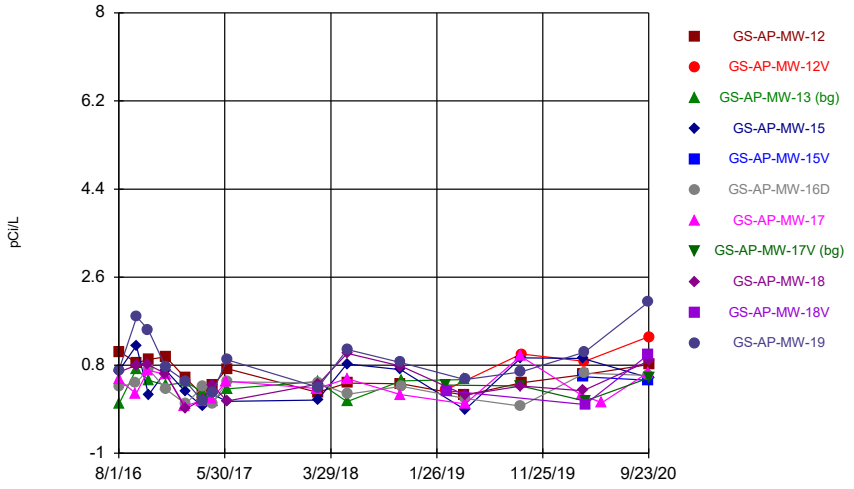
Time Series



Constituent: Cobalt Analysis Run 12/9/2020 2:20 PM
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Time Series

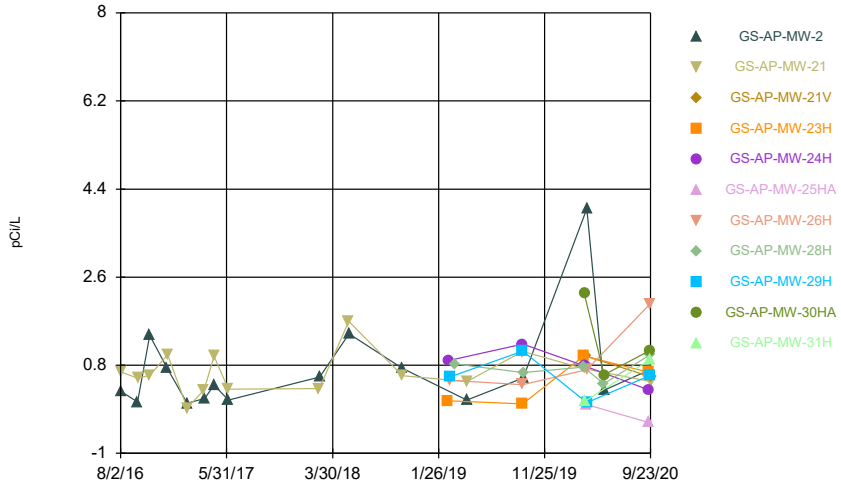


Constituent: Combined Radium 226 + 228 Analysis Run 12/9/2020 2:20 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Time Series

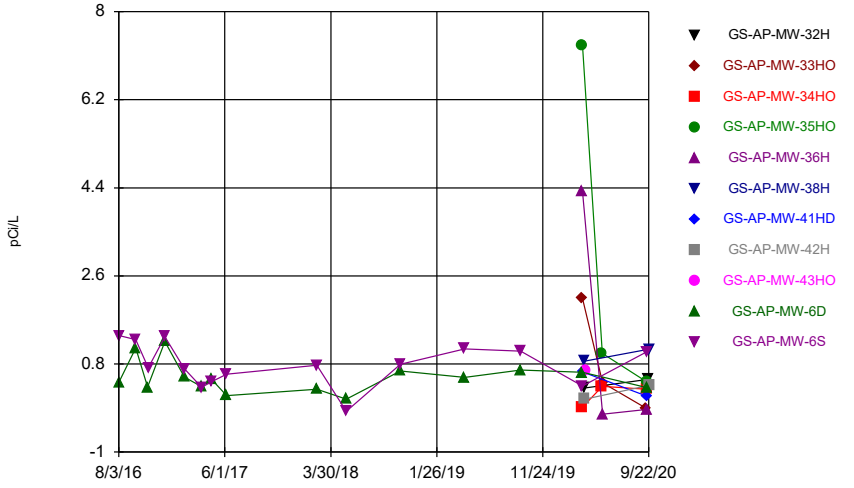


Constituent: Combined Radium 226 + 228 Analysis Run 12/9/2020 2:20 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Time Series

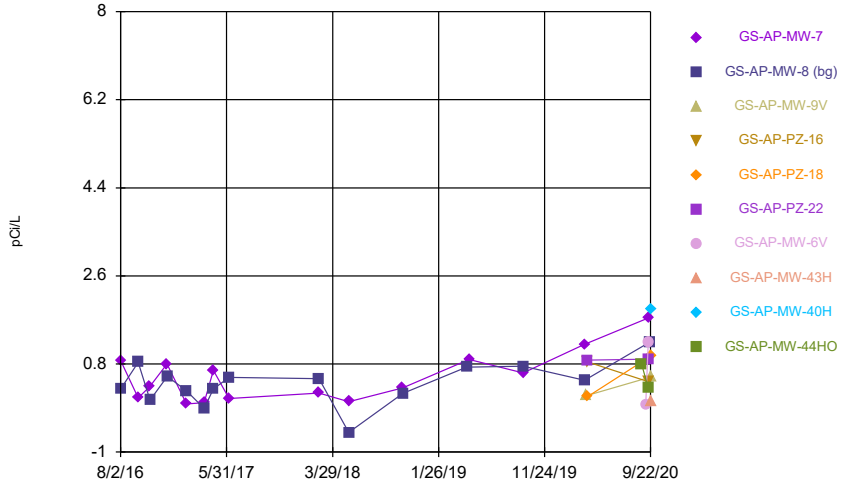


Constituent: Combined Radium 226 + 228 Analysis Run 12/9/2020 2:20 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Time Series

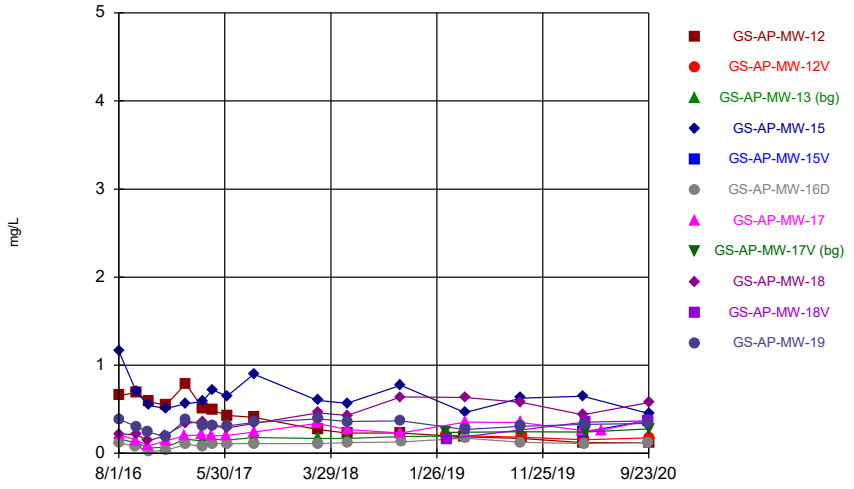


Constituent: Combined Radium 226 + 228 Analysis Run 12/9/2020 2:20 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Time Series

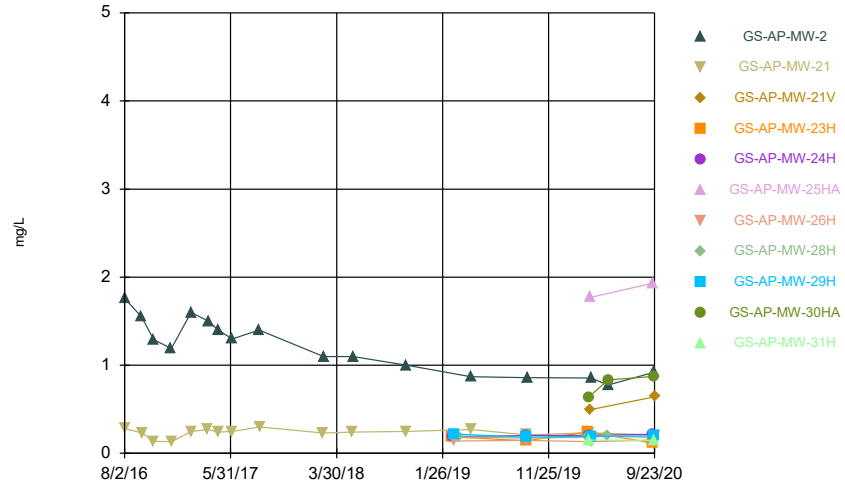


Constituent: Fluoride Analysis Run 12/9/2020 2:20 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Time Series



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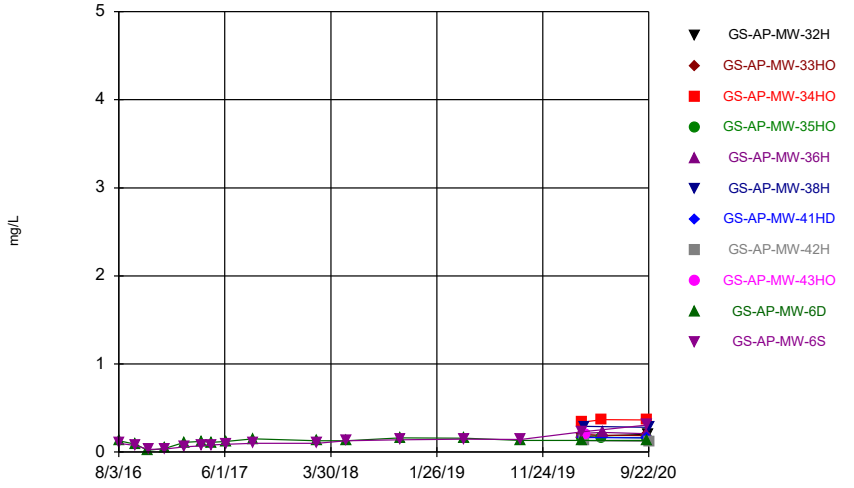
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Time Series



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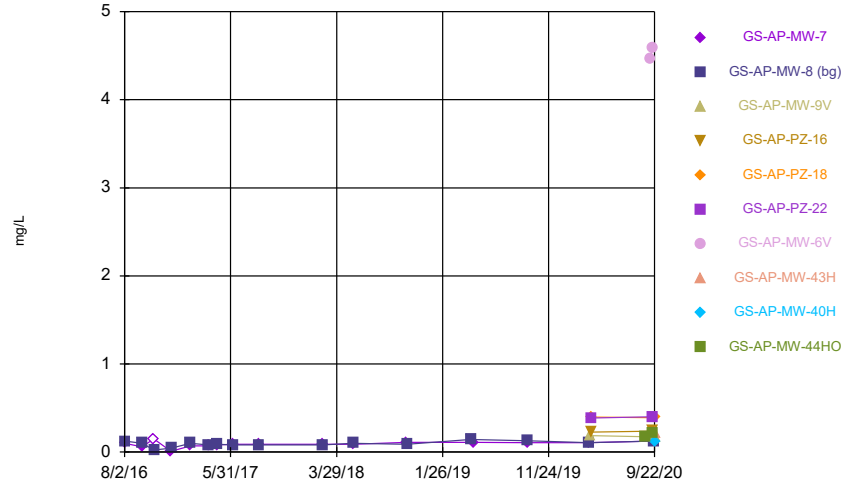
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Time Series



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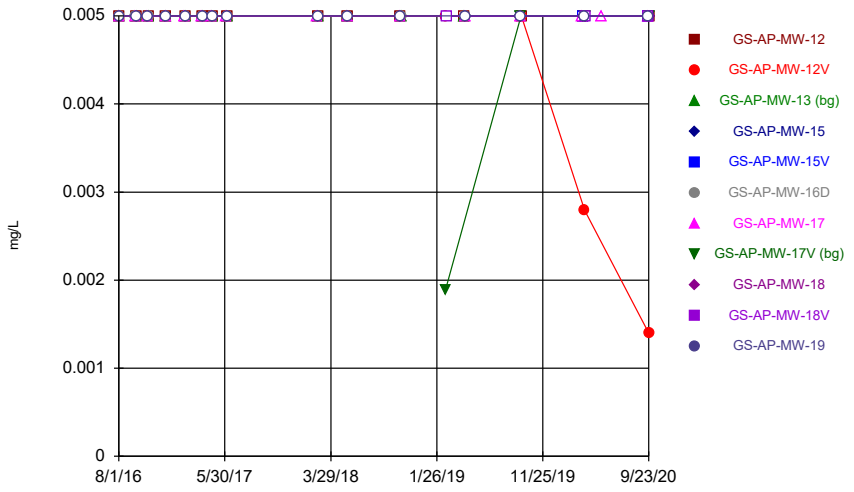
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

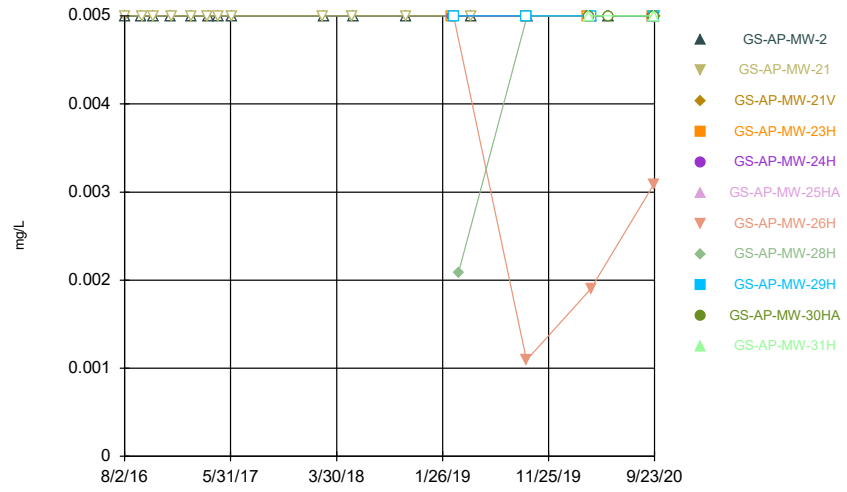
Time Series



Constituent: Lead Analysis Run 12/9/2020 2:20 PM
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series



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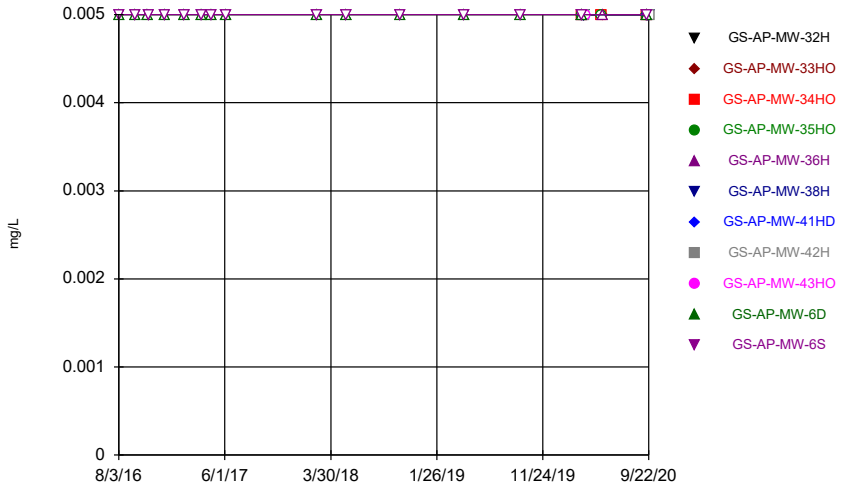
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series



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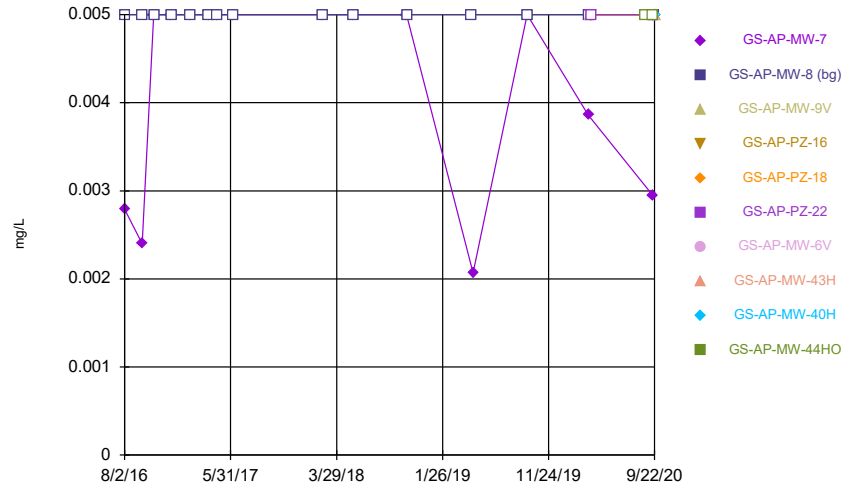
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series



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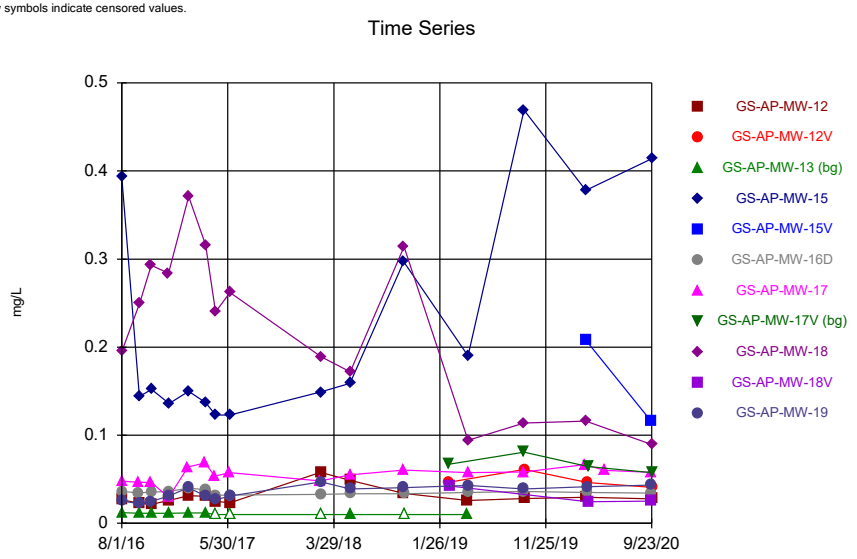
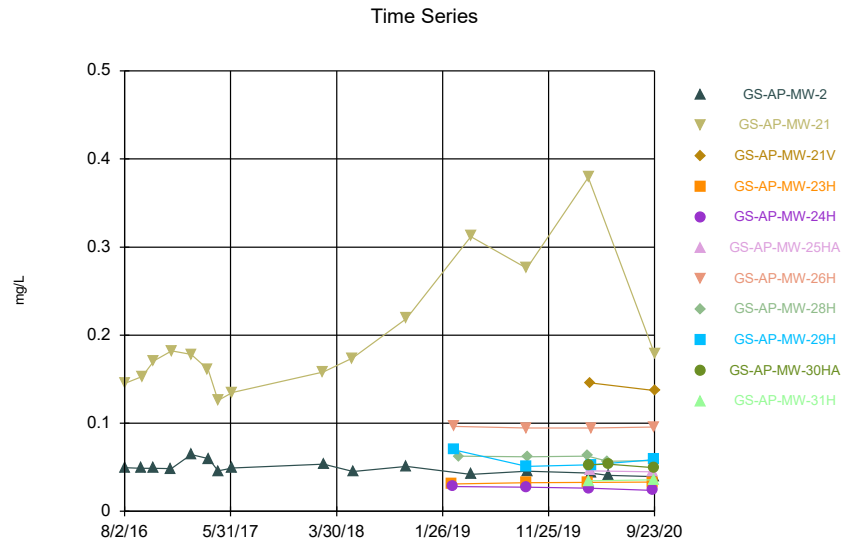
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.



Constituent: Lithium Analysis Run 12/9/2020 2:20 PM
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG



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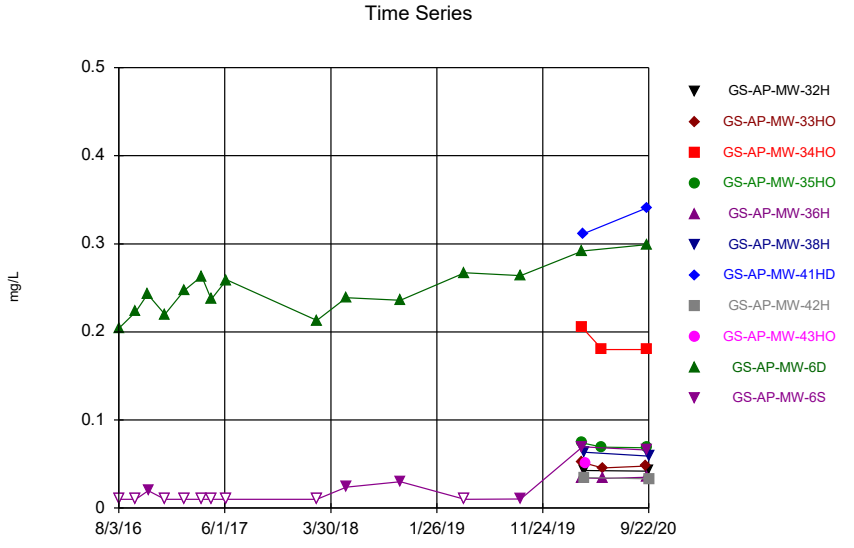
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.



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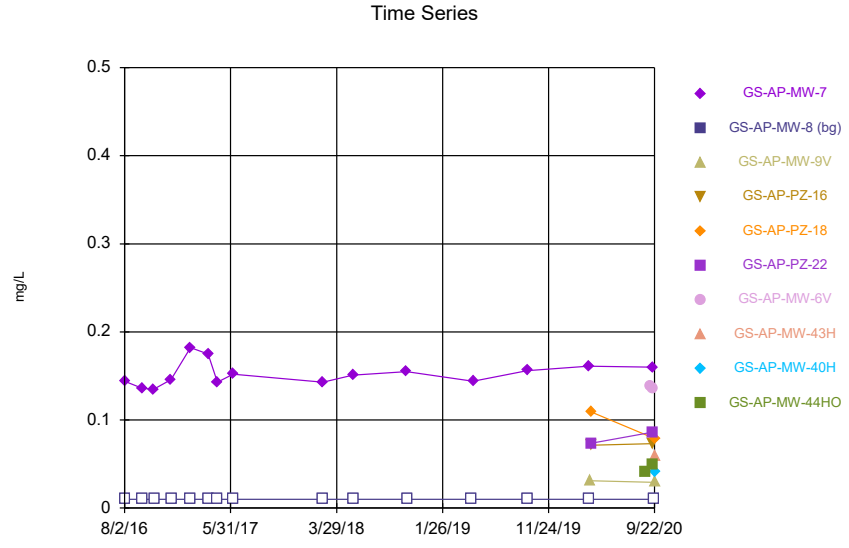
Hollow symbols indicate censored values.



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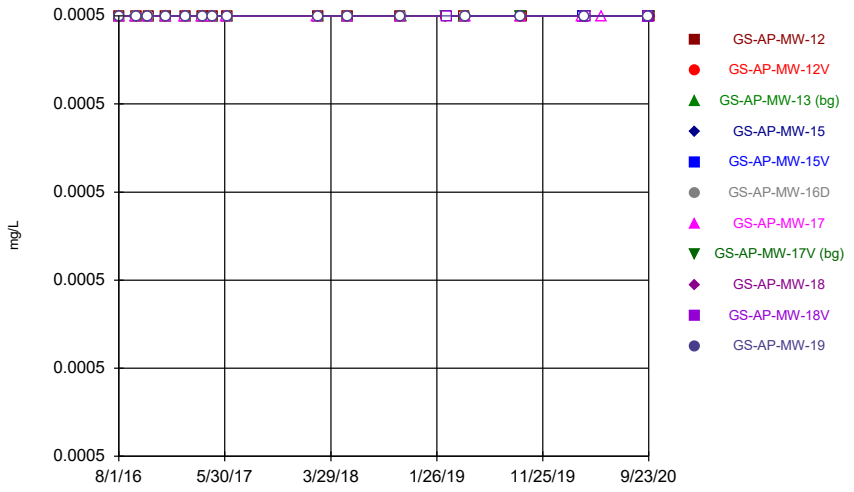
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

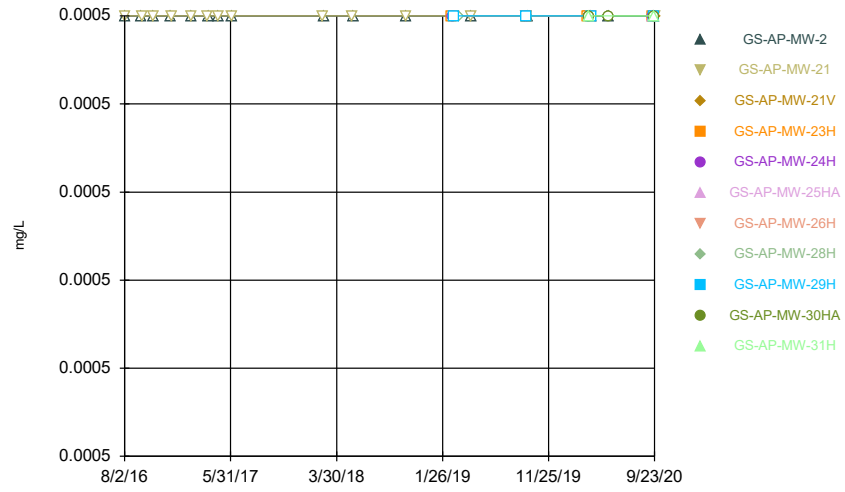
Time Series



Constituent: Mercury Analysis Run 12/9/2020 2:20 PM
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series



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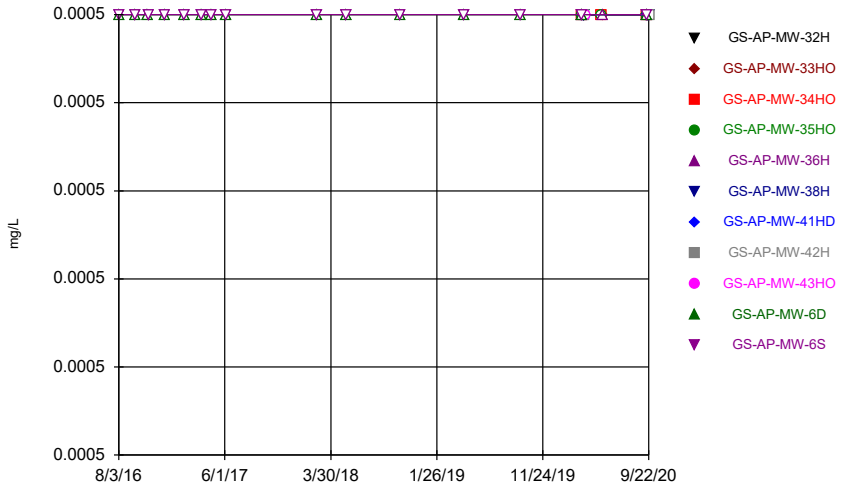
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series



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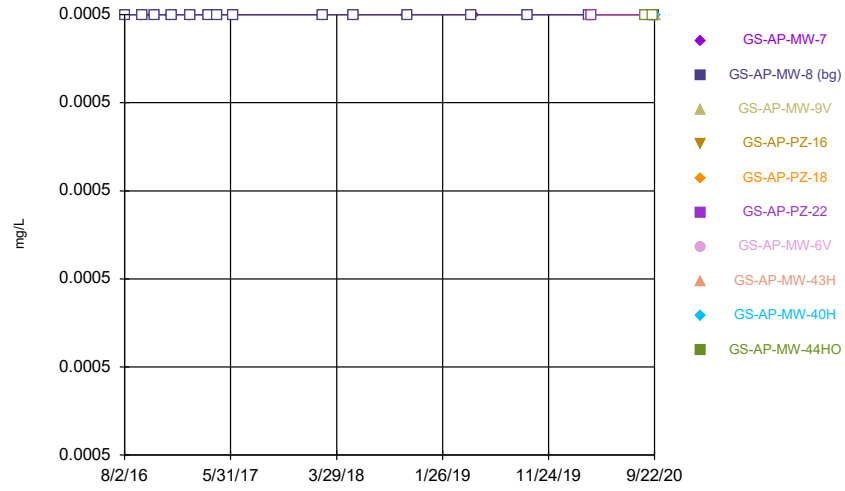
Time Series



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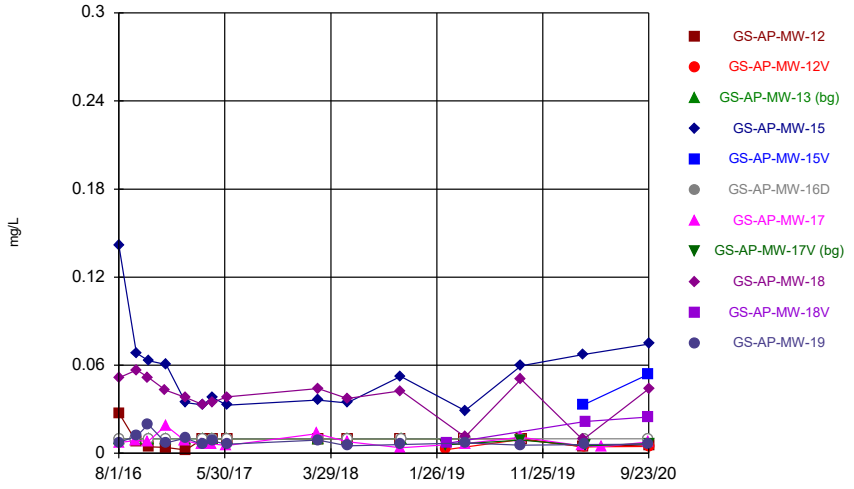
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series



Constituent: Molybdenum Analysis Run 12/9/2020 2:20 PM
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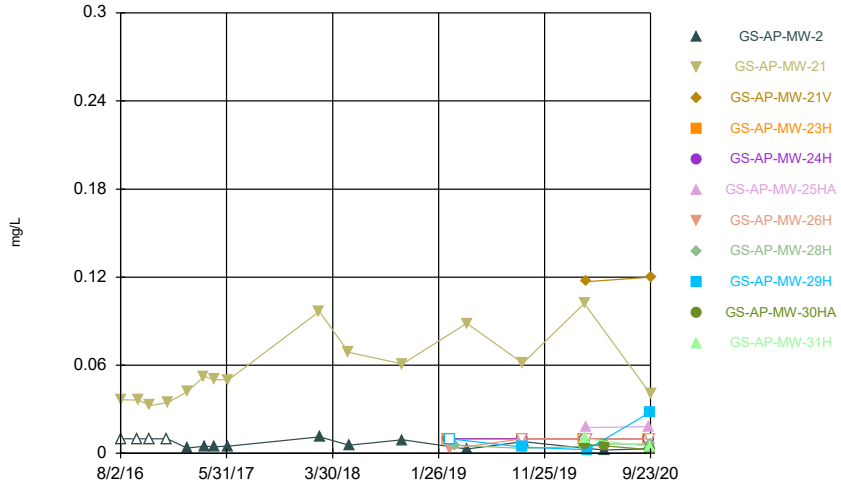
Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series



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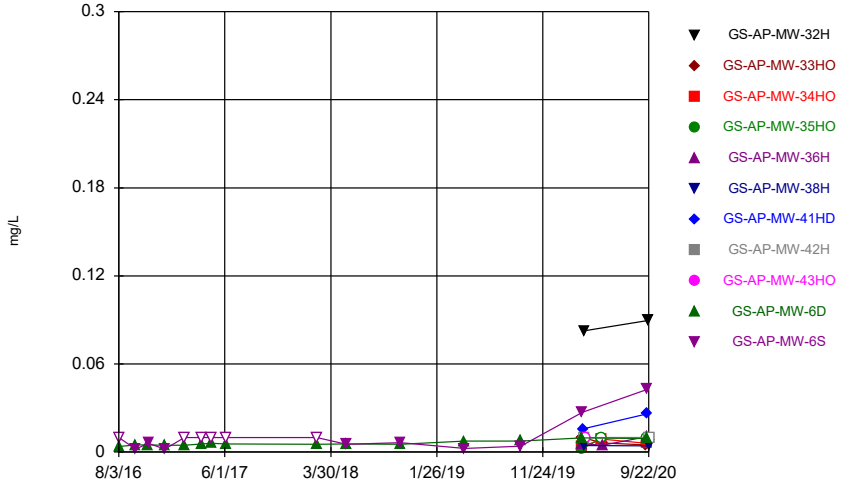
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series



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Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG
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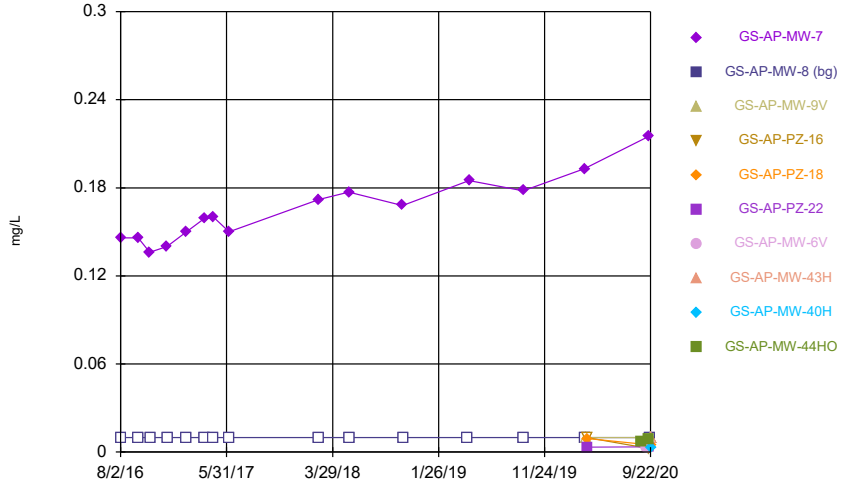
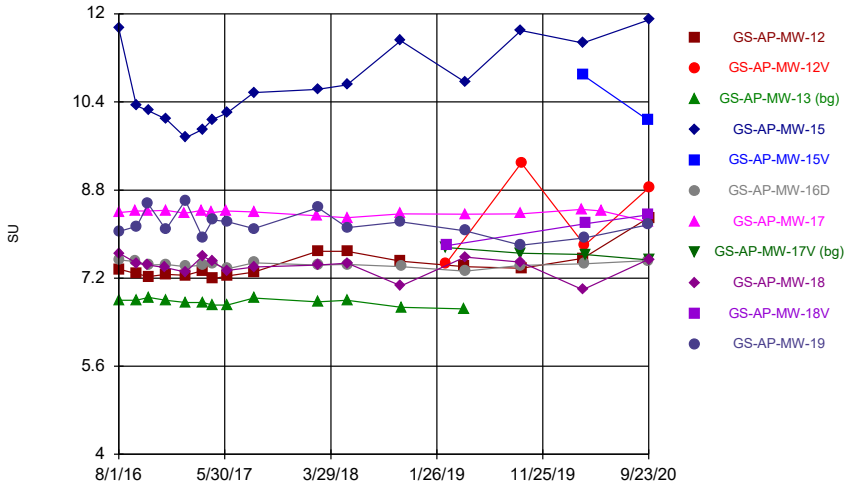
Time Series



Constituent: Molybdenum Analysis Run 12/9/2020 2:20 PM
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Time Series

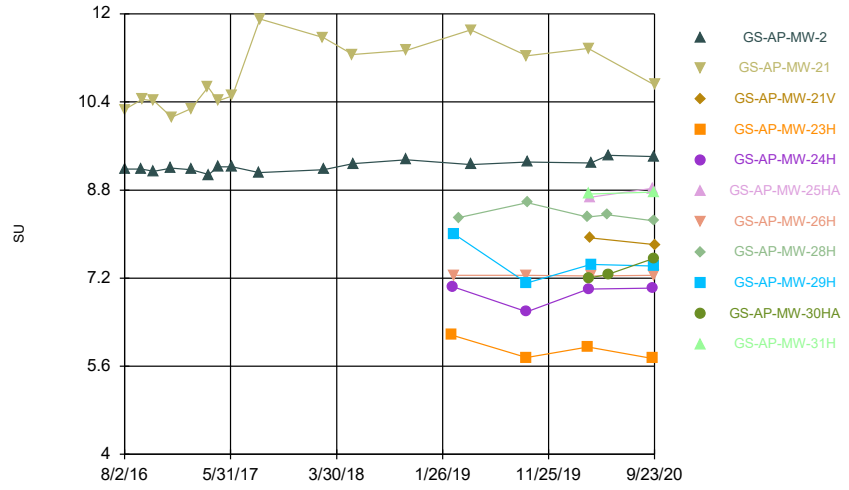


Constituent: pH Analysis Run 12/9/2020 2:20 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Time Series

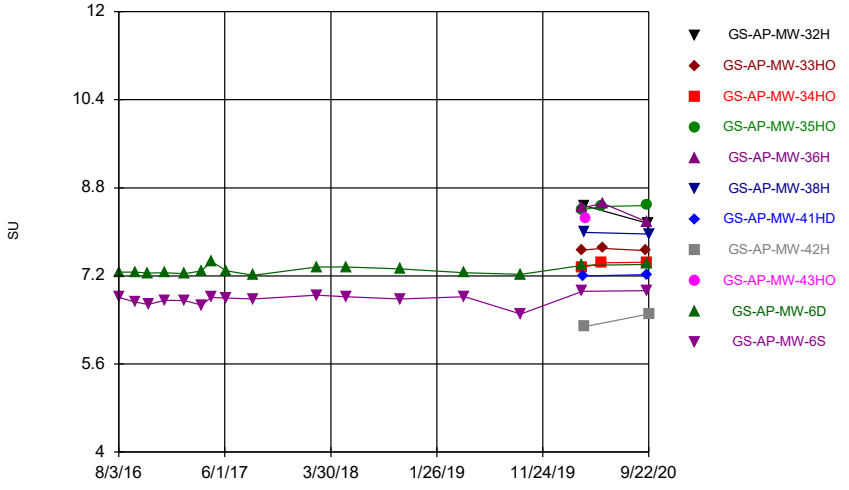


Constituent: pH Analysis Run 12/9/2020 2:20 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Time Series



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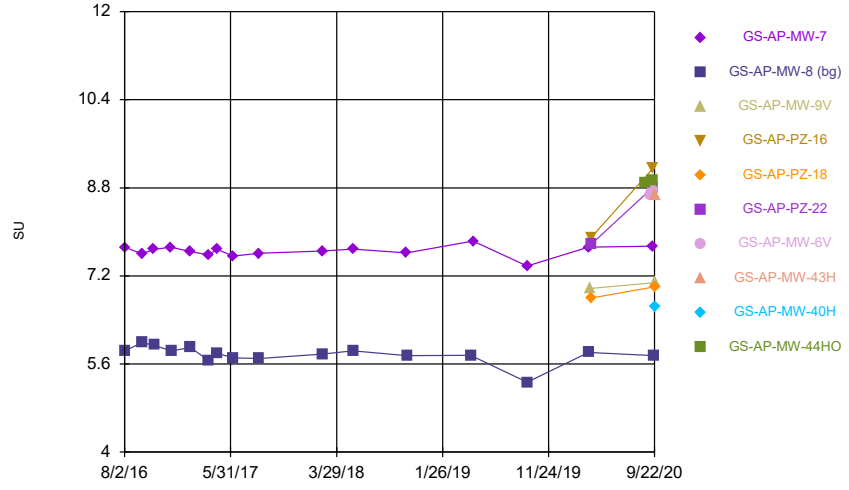
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Time Series



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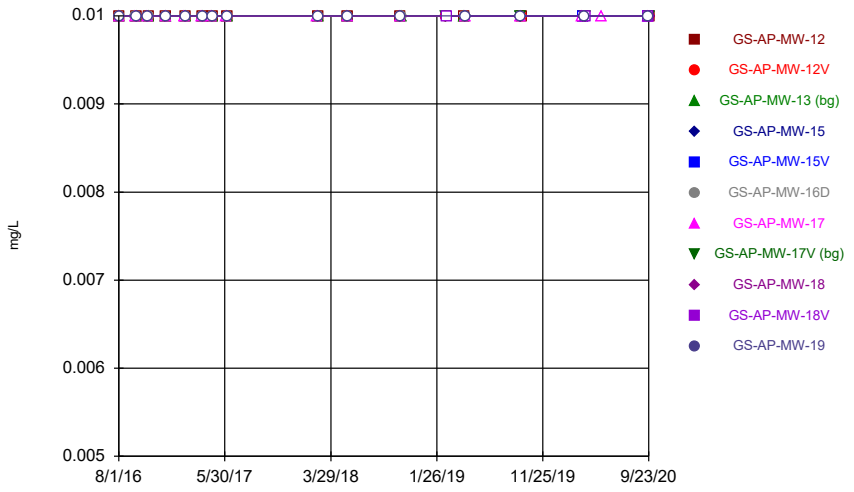
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

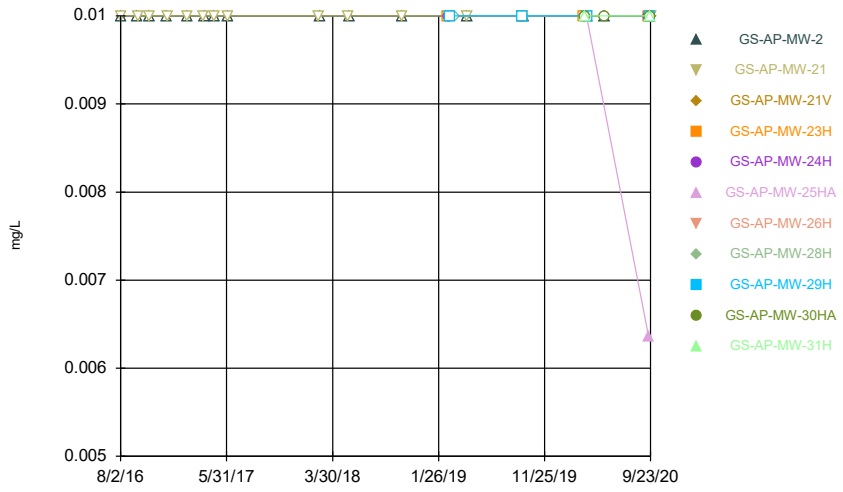
Time Series



Constituent: Selenium Analysis Run 12/9/2020 2:20 PM
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series



Constituent: Selenium Analysis Run 12/9/2020 2:20 PM
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG
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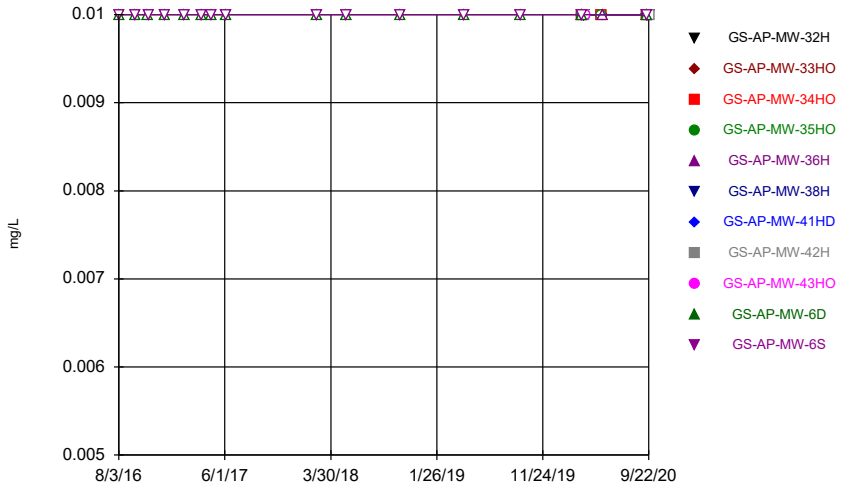
Time Series



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Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG
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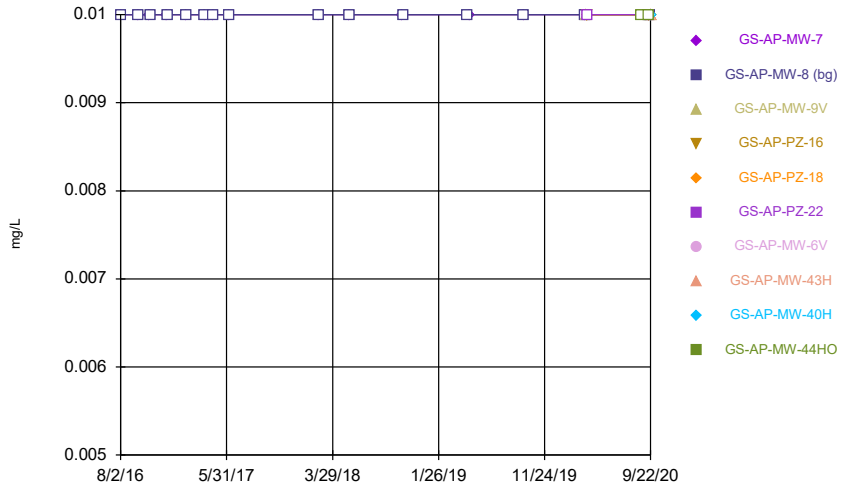
Time Series



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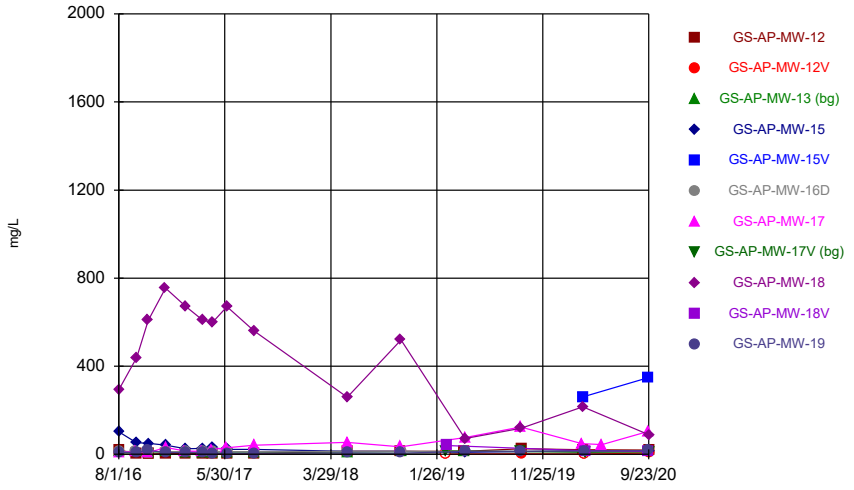
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

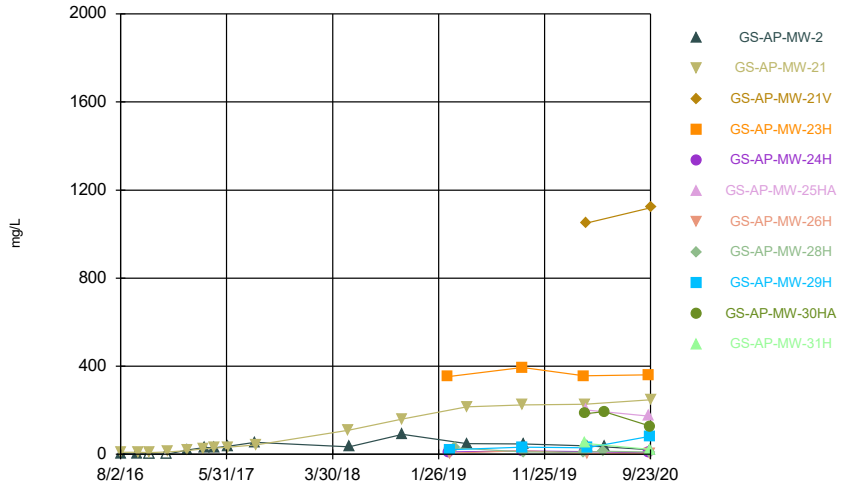
Time Series



Constituent: Sulfate Analysis Run 12/9/2020 2:20 PM
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

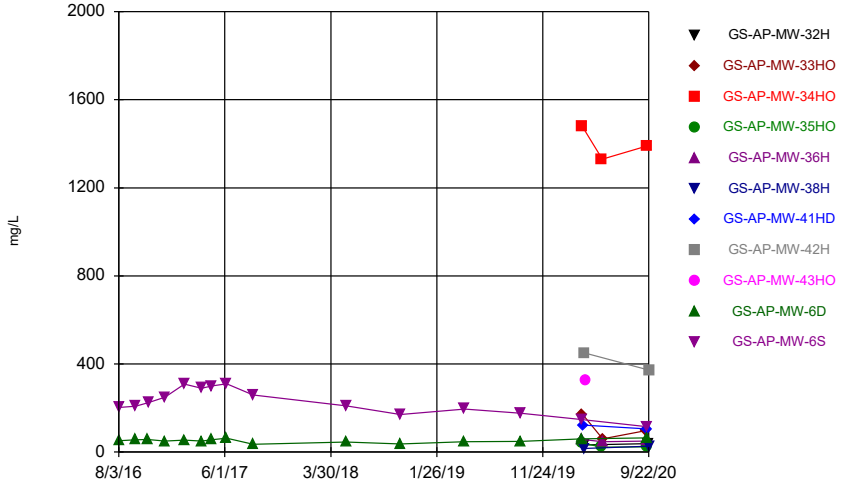
Time Series



Constituent: Sulfate Analysis Run 12/9/2020 2:20 PM
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

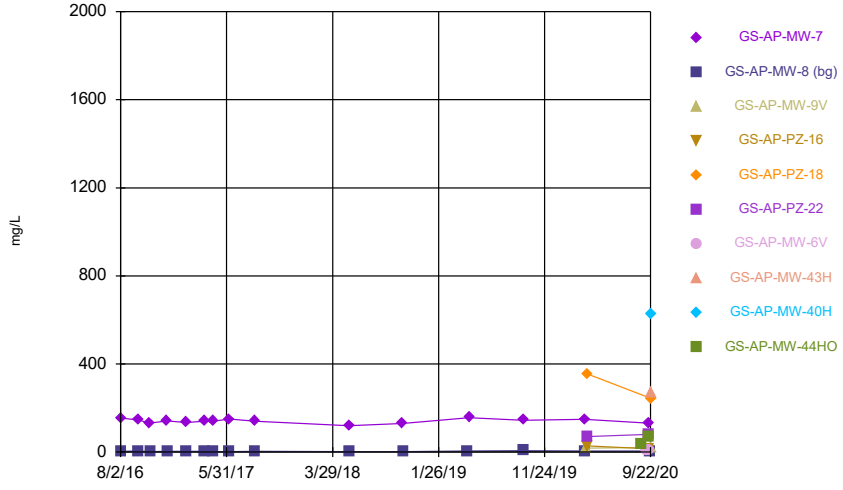
Time Series



Constituent: Sulfate Analysis Run 12/9/2020 2:20 PM
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

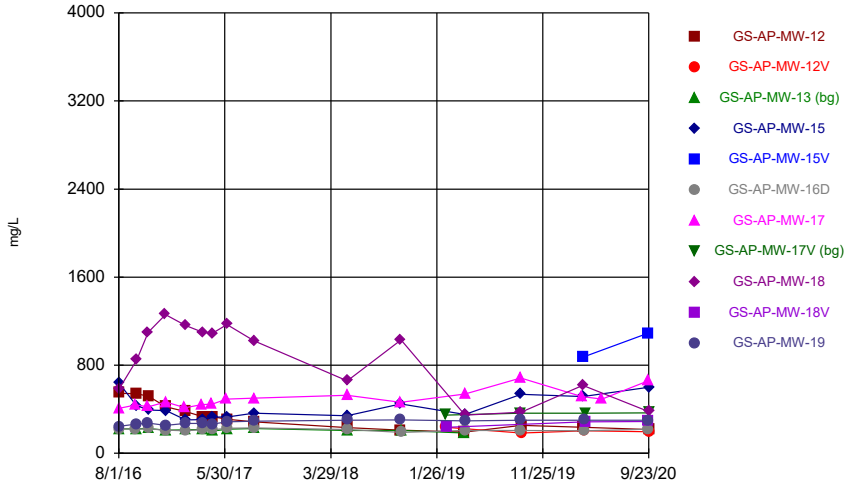
Time Series



Constituent: Sulfate Analysis Run 12/9/2020 2:20 PM
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Time Series

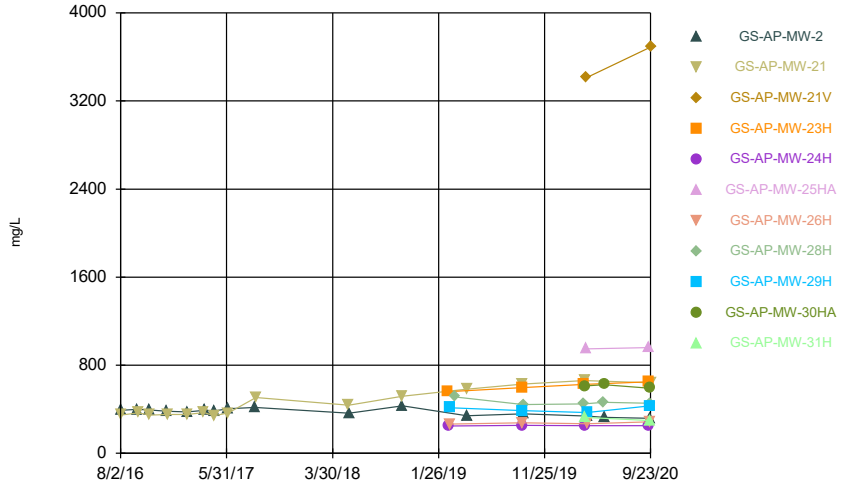


Constituent: TDS Analysis Run 12/9/2020 2:20 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Time Series



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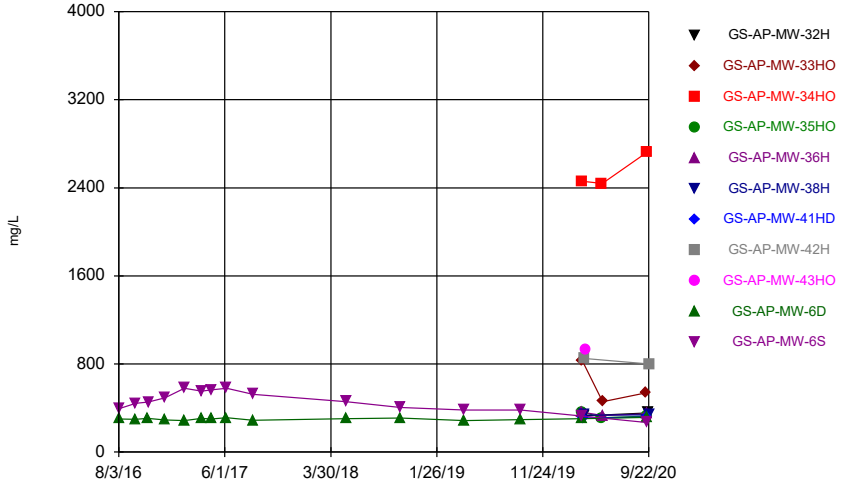
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Time Series



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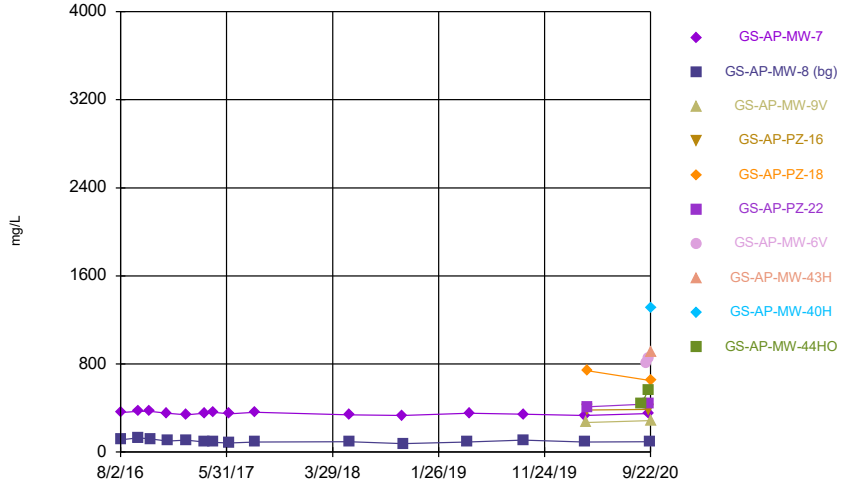
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Time Series

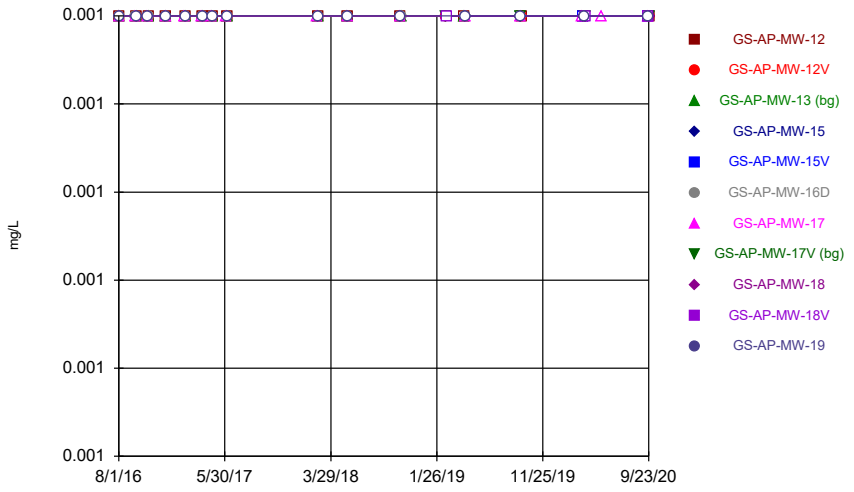


Constituent: TDS Analysis Run 12/9/2020 2:20 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

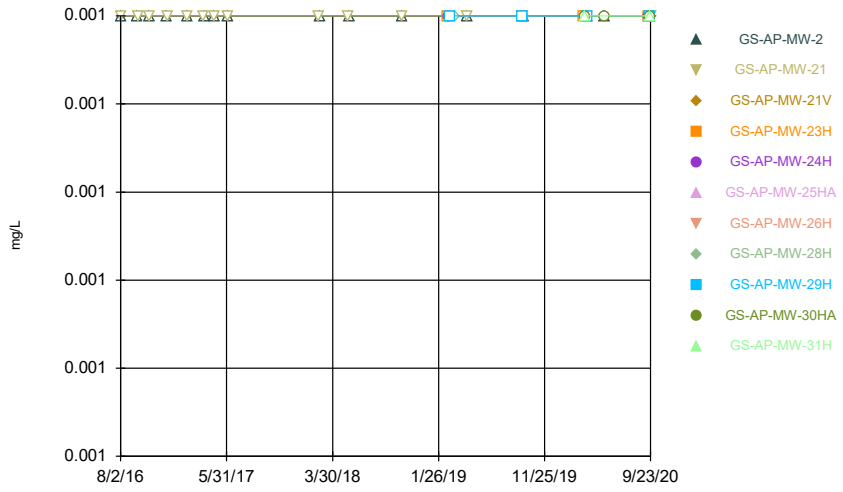
Time Series



Constituent: Thallium Analysis Run 12/9/2020 2:20 PM
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

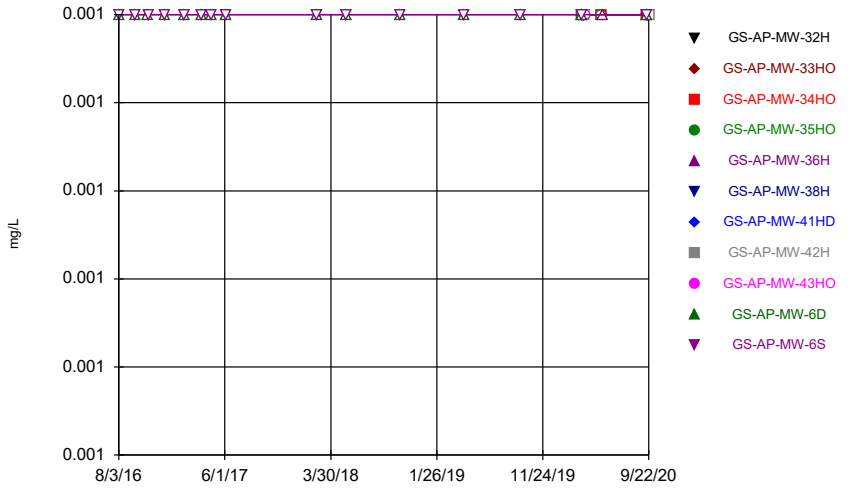
Time Series



Constituent: Thallium Analysis Run 12/9/2020 2:20 PM
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

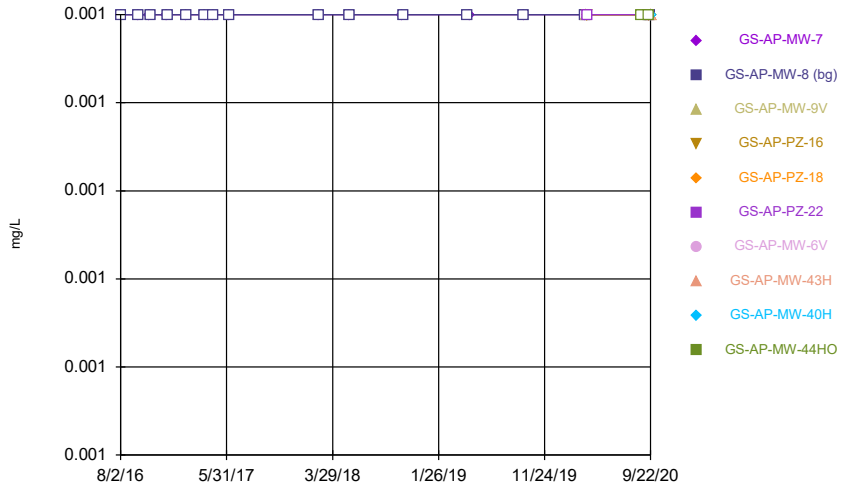
Time Series



Constituent: Thallium Analysis Run 12/9/2020 2:20 PM
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series



Constituent: Thallium Analysis Run 12/9/2020 2:20 PM
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Time Series

Constituent: Antimony (mg/L) Analysis Run 12/9/2020 2:20 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-12	GS-AP-MW-12V	GS-AP-MW-13 (bg)	GS-AP-MW-15	GS-AP-MW-15V	GS-AP-MW-16D	GS-AP-MW-17	GS-AP-MW-17V ...	GS-AP-MW-18
8/1/2016				0.00115 (J)		<0.003	<0.003		
8/2/2016			<0.003						<0.003
8/3/2016	<0.003								
9/19/2016						<0.003	0.000636 (J)		
9/20/2016	<0.003		<0.003	0.000876 (J)					
9/21/2016									<0.003
10/24/2016							<0.003		<0.003
10/25/2016	<0.003		<0.003	<0.003		<0.003			
12/12/2016									<0.003
12/13/2016	0.000681 (J)		<0.003			0.000633 (J)	0.00072 (J)		
12/14/2016				0.000858 (J)					
2/6/2017							<0.003		
2/7/2017									
2/8/2017	<0.003		<0.003	<0.003		<0.003			<0.003
3/27/2017							<0.003		
3/28/2017				<0.003					<0.003
3/29/2017	<0.003		<0.003			<0.003			
4/24/2017							<0.003		
4/26/2017	<0.003		<0.003	<0.003		<0.003			<0.003
6/5/2017							<0.003		
6/6/2017				<0.003		<0.003			<0.003
6/7/2017	<0.003		<0.003						
2/19/2018							<0.003		
2/20/2018	<0.003		<0.003	0.000636 (J)					
2/21/2018						<0.003			<0.003
5/15/2018	<0.003		<0.003	<0.003			<0.003		
5/16/2018						<0.003			<0.003
10/15/2018				<0.003			<0.003		
10/16/2018	<0.003								<0.003
10/17/2018			<0.003			<0.003			
2/20/2019								0.00115 (J)	
2/21/2019		0.000841 (J)							
2/26/2019									
4/16/2019	<0.003		<0.003						
4/17/2019				<0.003		<0.003	<0.003		<0.003
9/23/2019							<0.003		
9/24/2019				<0.003		<0.003		<0.003	<0.003
9/25/2019	<0.003	0.0025 (J)							
3/16/2020							<0.003		
3/18/2020	0.0022 (J)			0.000976 (J)	0.0028 (J)				<0.003
3/24/2020		0.00128 (J)				<0.003			
3/25/2020								<0.003	
5/12/2020							<0.003		
9/21/2020					0.0028 (J)		<0.003		
9/22/2020						<0.003			
9/23/2020	0.00202 (J)	0.00152 (J)		0.000844 (J)				<0.003	<0.003

Time Series

Constituent: Antimony (mg/L) Analysis Run 12/9/2020 2:20 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-18V	GS-AP-MW-19
8/1/2016		<0.003
8/2/2016		
8/3/2016		
9/19/2016		
9/20/2016		
9/21/2016		<0.003
10/24/2016		<0.003
10/25/2016		
12/12/2016		
12/13/2016		0.000613 (J)
12/14/2016		
2/6/2017		
2/7/2017		<0.003
2/8/2017		
3/27/2017		
3/28/2017		<0.003
3/29/2017		
4/24/2017		
4/26/2017		<0.003
6/5/2017		
6/6/2017		<0.003
6/7/2017		
2/19/2018		
2/20/2018		
2/21/2018		<0.003
5/15/2018		
5/16/2018		<0.003
10/15/2018		
10/16/2018		<0.003
10/17/2018		
2/20/2019		
2/21/2019		
2/26/2019	0.00098 (J)	
4/16/2019		
4/17/2019		<0.003
9/23/2019		
9/24/2019		<0.003
9/25/2019		
3/16/2020		
3/18/2020		
3/24/2020		<0.003
3/25/2020	<0.003	
5/12/2020		
9/21/2020		
9/22/2020	<0.003	<0.003
9/23/2020		

Time Series

Constituent: Antimony (mg/L) Analysis Run 12/9/2020 2:20 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-2	GS-AP-MW-21	GS-AP-MW-21V	GS-AP-MW-23H	GS-AP-MW-24H	GS-AP-MW-25HA	GS-AP-MW-26H	GS-AP-MW-28H	GS-AP-MW-29H
8/2/2016	<0.003	<0.003							
9/19/2016	<0.003								
9/21/2016		<0.003							
10/24/2016	<0.003								
10/25/2016		<0.003							
12/13/2016	<0.003								
12/14/2016		0.00119 (J)							
2/8/2017	<0.003	<0.003							
3/28/2017		<0.003							
3/30/2017	<0.003								
4/26/2017	<0.003	<0.003							
6/6/2017	<0.003	<0.003							
2/20/2018		<0.003							
2/21/2018	<0.003								
5/15/2018		<0.003							
5/16/2018	<0.003								
10/16/2018	<0.003	<0.003							
2/20/2019				0.000809 (J)					
2/26/2019					0.000918 (J)				
2/27/2019							0.00094 (J)		0.000932 (J)
3/13/2019								0.00241 (J)	
4/17/2019	<0.003	<0.003							
9/23/2019				<0.003			<0.003		
9/24/2019		<0.003			<0.003				<0.003
9/25/2019	<0.003							<0.003	
3/16/2020								<0.003	
3/17/2020				<0.003					
3/18/2020		<0.003			<0.003				
3/23/2020			0.000831 (J)						
3/24/2020						<0.003			
3/25/2020	<0.003						<0.003		<0.003
5/12/2020								<0.003	
5/13/2020	<0.003								
9/17/2020				<0.003	<0.003	<0.003			
9/21/2020							<0.003		
9/22/2020	<0.003							<0.003	<0.003
9/23/2020		<0.003	<0.003						

Time Series

Constituent: Antimony (mg/L) Analysis Run 12/9/2020 2:20 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-30HA	GS-AP-MW-31H
8/2/2016		
9/19/2016		
9/21/2016		
10/24/2016		
10/25/2016		
12/13/2016		
12/14/2016		
2/8/2017		
3/28/2017		
3/30/2017		
4/26/2017		
6/6/2017		
2/20/2018		
2/21/2018		
5/15/2018		
5/16/2018		
10/16/2018		
2/20/2019		
2/26/2019		
2/27/2019		
3/13/2019		
4/17/2019		
9/23/2019		
9/24/2019		
9/25/2019		
3/16/2020		
3/17/2020		
3/18/2020	<0.003	<0.003
3/23/2020		
3/24/2020		
3/25/2020		
5/12/2020		
5/13/2020	<0.003	
9/17/2020		
9/21/2020	<0.003	
9/22/2020		<0.003
9/23/2020		

Time Series

Constituent: Antimony (mg/L) Analysis Run 12/9/2020 2:20 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-32H	GS-AP-MW-33HO	GS-AP-MW-34HO	GS-AP-MW-35HO	GS-AP-MW-36H	GS-AP-MW-38H	GS-AP-MW-41HD	GS-AP-MW-42H	GS-AP-MW-43HO
8/3/2016									
9/20/2016									
10/24/2016									
10/26/2016									
12/12/2016									
2/6/2017									
3/27/2017									
4/24/2017									
6/6/2017									
2/19/2018									
5/14/2018									
10/15/2018									
4/16/2019									
9/23/2019									
3/16/2020			<0.003						
3/17/2020		<0.003		<0.003	<0.003				
3/18/2020							<0.003		
3/24/2020	<0.003					<0.003		<0.003	
3/25/2020									<0.003
5/12/2020			<0.003	<0.003					
5/13/2020		<0.003			<0.003				
9/15/2020		<0.003							
9/16/2020			<0.003	<0.003					
9/17/2020					<0.003		<0.003		
9/21/2020	<0.003								
9/22/2020						<0.003		<0.003	

Time Series

Constituent: Antimony (mg/L) Analysis Run 12/9/2020 2:20 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-6D	GS-AP-MW-6S
8/3/2016	<0.003	<0.003
9/20/2016	<0.003	<0.003
10/24/2016	<0.003	
10/26/2016		<0.003
12/12/2016	0.00104 (J)	0.000727 (J)
2/6/2017	<0.003	<0.003
3/27/2017	<0.003	<0.003
4/24/2017	<0.003	<0.003
6/6/2017	<0.003	<0.003
2/19/2018	<0.003	<0.003
5/14/2018	<0.003	<0.003
10/15/2018	<0.003	<0.003
4/16/2019	0.000828 (J)	<0.003
9/23/2019	<0.003	<0.003
3/16/2020		
3/17/2020	<0.003	<0.003
3/18/2020		
3/24/2020		
3/25/2020		
5/12/2020		
5/13/2020		
9/15/2020		
9/16/2020		0.000948 (J)
9/17/2020	<0.003	
9/21/2020		
9/22/2020		

Time Series

Constituent: Antimony (mg/L) Analysis Run 12/9/2020 2:20 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-7	GS-AP-MW-8 (bg)	GS-AP-MW-9V	GS-AP-PZ-16	GS-AP-PZ-18	GS-AP-PZ-22	GS-AP-MW-6V	GS-AP-MW-43H	GS-AP-MW-40H
8/2/2016	<0.003								
8/3/2016		<0.003							
9/21/2016	<0.003	<0.003							
10/24/2016	<0.003								
10/25/2016		<0.003							
12/12/2016	0.000891 (J)								
12/13/2016		0.00067 (J)							
2/6/2017	<0.003	<0.003							
3/28/2017	<0.003	<0.003							
4/24/2017	<0.003	<0.003							
6/7/2017	<0.003	<0.003							
2/19/2018	<0.003	<0.003							
5/15/2018	<0.003	<0.003							
10/15/2018	<0.003								
10/16/2018		<0.003							
4/16/2019		<0.003							
4/23/2019	0.00105 (J)								
9/24/2019	<0.003	<0.003							
3/17/2020	<0.003								
3/18/2020		<0.003							
3/23/2020			<0.003						
3/24/2020				<0.003		<0.003			
3/25/2020					<0.003				
8/27/2020									
9/8/2020							<0.003		
9/15/2020							<0.003		
9/16/2020	<0.003								
9/17/2020				<0.003		<0.003			
9/21/2020		<0.003							
9/22/2020			<0.003		<0.003			<0.003	<0.003

Time Series

Constituent: Antimony (mg/L) Analysis Run 12/9/2020 2:20 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-44HO
8/2/2016	
8/3/2016	
9/21/2016	
10/24/2016	
10/25/2016	
12/12/2016	
12/13/2016	
2/6/2017	
3/28/2017	
4/24/2017	
6/7/2017	
2/19/2018	
5/15/2018	
10/15/2018	
10/16/2018	
4/16/2019	
4/23/2019	
9/24/2019	
3/17/2020	
3/18/2020	
3/23/2020	
3/24/2020	
3/25/2020	
8/27/2020	0.0013 (J)
9/8/2020	
9/15/2020	0.000819 (J)
9/16/2020	
9/17/2020	
9/21/2020	
9/22/2020	

Time Series

Constituent: Arsenic (mg/L) Analysis Run 12/9/2020 2:20 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-12	GS-AP-MW-12V	GS-AP-MW-13 (bg)	GS-AP-MW-15	GS-AP-MW-15V	GS-AP-MW-16D	GS-AP-MW-17	GS-AP-MW-17V ...	GS-AP-MW-18
8/1/2016				0.015		<0.005	0.00138 (J)		
8/2/2016			<0.005						0.0505
8/3/2016	0.11								
9/19/2016						<0.005	0.00137 (J)		
9/20/2016	0.0746		<0.005	0.0111					
9/21/2016									0.0527
10/24/2016							0.00122 (J)		0.0597
10/25/2016	0.0728		<0.005	0.0109		<0.005			
12/12/2016									0.0659
12/13/2016	0.0538		<0.005			<0.005	0.00243 (J)		
12/14/2016				0.011					
2/6/2017							0.00158 (J)		
2/7/2017									
2/8/2017	0.0427		<0.005	0.00625		<0.005			0.0669
3/27/2017							0.0011 (J)		
3/28/2017				0.00558					0.0668
3/29/2017	0.0404		<0.005			<0.005			
4/24/2017							0.00133 (J)		
4/26/2017	0.0372		<0.005	0.007		<0.005			0.0722
6/5/2017							0.00115 (J)		
6/6/2017				0.00663		<0.005			0.0673
6/7/2017	0.0307		<0.005						
2/19/2018							0.00424 (J)		
2/20/2018	0.0282		<0.005	0.00724					
2/21/2018						<0.005			0.0922
5/15/2018	0.0253		<0.005	0.00749			0.00352 (J)		
5/16/2018						<0.005			0.0876
10/15/2018				0.0123			0.0018 (J)		
10/16/2018	0.0203								0.0158
10/17/2018			<0.005			<0.005			
2/20/2019								0.0011 (J)	
2/21/2019		<0.005							
2/26/2019									
4/16/2019	0.014		<0.005						
4/17/2019				0.00633		<0.005	0.00343 (J)		0.00481 (J)
9/23/2019							0.00631		
9/24/2019				0.011		<0.005		0.00149 (J)	0.00854
9/25/2019	0.0135	0.00129 (J)							
3/16/2020							0.00268 (J)		
3/18/2020	0.00693			0.0217	0.011				0.00583
3/24/2020		0.00266 (J)				<0.005			
3/25/2020								<0.005	
5/12/2020							0.00326 (J)		
9/21/2020					0.0167		0.0055		
9/22/2020						<0.005			
9/23/2020	0.00616	0.00176 (J)		0.0165				<0.005	0.00873

Time Series

Constituent: Arsenic (mg/L) Analysis Run 12/9/2020 2:20 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-18V	GS-AP-MW-19
8/1/2016		<0.005
8/2/2016		
8/3/2016		
9/19/2016		
9/20/2016		
9/21/2016		<0.005
10/24/2016		<0.005
10/25/2016		
12/12/2016		
12/13/2016		<0.005
12/14/2016		
2/6/2017		
2/7/2017		<0.005
2/8/2017		
3/27/2017		
3/28/2017		<0.005
3/29/2017		
4/24/2017		
4/26/2017		<0.005
6/5/2017		
6/6/2017		<0.005
6/7/2017		
2/19/2018		
2/20/2018		
2/21/2018		0.00138 (J)
5/15/2018		
5/16/2018		0.00114 (J)
10/15/2018		
10/16/2018		0.00216 (J)
10/17/2018		
2/20/2019		
2/21/2019		
2/26/2019	0.00368 (J)	
4/16/2019		
4/17/2019		0.00302 (J)
9/23/2019		
9/24/2019		0.00289 (J)
9/25/2019		
3/16/2020		
3/18/2020		
3/24/2020		0.00313 (J)
3/25/2020	0.0063	
5/12/2020		
9/21/2020		
9/22/2020	0.00654	0.00313 (J)
9/23/2020		

Time Series

Constituent: Arsenic (mg/L) Analysis Run 12/9/2020 2:20 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-2	GS-AP-MW-21	GS-AP-MW-21V	GS-AP-MW-23H	GS-AP-MW-24H	GS-AP-MW-25HA	GS-AP-MW-26H	GS-AP-MW-28H	GS-AP-MW-29H
8/2/2016	<0.005	0.0027 (J)							
9/19/2016	<0.005								
9/21/2016		0.00258 (J)							
10/24/2016	<0.005								
10/25/2016		0.00214 (J)							
12/13/2016	<0.005								
12/14/2016		0.00193 (J)							
2/8/2017	<0.005	0.00188 (J)							
3/28/2017		0.00153 (J)							
3/30/2017	<0.005								
4/26/2017	<0.005	0.00135 (J)							
6/6/2017	<0.005	0.00131 (J)							
2/20/2018		<0.005							
2/21/2018	<0.005								
5/15/2018		<0.005							
5/16/2018	<0.005								
10/16/2018	<0.005	<0.005							
2/20/2019				0.0306					
2/26/2019					<0.005				
2/27/2019							<0.005		<0.005
3/13/2019								0.00142 (J)	
4/17/2019	<0.005	<0.005							
9/23/2019				0.0369			<0.005		
9/24/2019		<0.005			<0.005				0.00155 (J)
9/25/2019	<0.005							<0.005	
3/16/2020								<0.005	
3/17/2020				0.0524					
3/18/2020		<0.005			<0.005				
3/23/2020			0.0159						
3/24/2020						0.00798			
3/25/2020	<0.005						<0.005		0.00141 (J)
5/12/2020								0.00135 (J)	
5/13/2020	<0.005								
9/17/2020				0.0579	<0.005	0.00904			
9/21/2020							0.00143 (J)		
9/22/2020	<0.005							0.00112 (J)	0.00109 (J)
9/23/2020		<0.005	0.01						

Time Series

Constituent: Arsenic (mg/L) Analysis Run 12/9/2020 2:20 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-30HA	GS-AP-MW-31H
8/2/2016		
9/19/2016		
9/21/2016		
10/24/2016		
10/25/2016		
12/13/2016		
12/14/2016		
2/8/2017		
3/28/2017		
3/30/2017		
4/26/2017		
6/6/2017		
2/20/2018		
2/21/2018		
5/15/2018		
5/16/2018		
10/16/2018		
2/20/2019		
2/26/2019		
2/27/2019		
3/13/2019		
4/17/2019		
9/23/2019		
9/24/2019		
9/25/2019		
3/16/2020		
3/17/2020		
3/18/2020	0.00813	0.0012 (J)
3/23/2020		
3/24/2020		
3/25/2020		
5/12/2020		
5/13/2020	0.00779	
9/17/2020		
9/21/2020	0.00551	
9/22/2020		<0.005
9/23/2020		

Time Series

Constituent: Arsenic (mg/L) Analysis Run 12/9/2020 2:20 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-32H	GS-AP-MW-33HO	GS-AP-MW-34HO	GS-AP-MW-35HO	GS-AP-MW-36H	GS-AP-MW-38H	GS-AP-MW-41HD	GS-AP-MW-42H	GS-AP-MW-43HO
8/3/2016									
9/20/2016									
10/24/2016									
10/26/2016									
12/12/2016									
2/6/2017									
3/27/2017									
4/24/2017									
6/6/2017									
2/19/2018									
5/14/2018									
10/15/2018									
4/16/2019									
9/23/2019									
3/16/2020			0.00351 (J)						
3/17/2020		0.0044 (J)		0.00105 (J)	0.00171 (J)				
3/18/2020							<0.005		
3/24/2020	<0.005					0.00302 (J)		0.00944	
3/25/2020									0.00509
5/12/2020			0.00668	<0.005					
5/13/2020		0.00308 (J)			0.00122 (J)				
9/15/2020		0.00275 (J)							
9/16/2020			0.00308 (J)	<0.005					
9/17/2020					0.0013 (J)		0.0016 (J)		
9/21/2020	<0.005								
9/22/2020						0.00304 (J)		0.00912	

Time Series

Constituent: Arsenic (mg/L) Analysis Run 12/9/2020 2:20 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-6D	GS-AP-MW-6S
8/3/2016	0.0547	0.0103
9/20/2016	0.0625	0.0103
10/24/2016	0.0695	
10/26/2016		0.0115
12/12/2016	0.0611	0.0106
2/6/2017	0.0618	0.0106
3/27/2017	0.0711	0.00989
4/24/2017	0.0787	0.00907
6/6/2017	0.0778	0.0105
2/19/2018	0.0616	0.0108
5/14/2018	0.074	0.00864
10/15/2018	0.0758	0.00832
4/16/2019	0.088	0.0164
9/23/2019	0.0876	0.0105
3/16/2020		
3/17/2020	0.105	0.00778
3/18/2020		
3/24/2020		
3/25/2020		
5/12/2020		
5/13/2020		
9/15/2020		
9/16/2020		0.00611
9/17/2020	0.0931	
9/21/2020		
9/22/2020		

Time Series

Constituent: Arsenic (mg/L) Analysis Run 12/9/2020 2:20 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-7	GS-AP-MW-8 (bg)	GS-AP-MW-9V	GS-AP-PZ-16	GS-AP-PZ-18	GS-AP-PZ-22	GS-AP-MW-6V	GS-AP-MW-43H	GS-AP-MW-40H
8/2/2016	0.188								
8/3/2016		0.00214 (J)							
9/21/2016	0.179	0.00112 (J)							
10/24/2016	0.151								
10/25/2016		<0.005							
12/12/2016	0.181								
12/13/2016		<0.005							
2/6/2017	0.194	0.00111 (J)							
3/28/2017	0.205	0.00109 (J)							
4/24/2017	0.202	<0.005							
6/7/2017	0.193	<0.005							
2/19/2018	0.182	<0.005							
5/15/2018	0.211	<0.005							
10/15/2018	0.217								
10/16/2018		<0.005							
4/16/2019		<0.005							
4/23/2019	0.207								
9/24/2019	0.233	<0.005							
3/17/2020	0.285								
3/18/2020		<0.005							
3/23/2020			<0.005						
3/24/2020				<0.005		0.00367 (J)			
3/25/2020					0.0275				
8/27/2020									
9/8/2020							<0.005		
9/15/2020							<0.005		
9/16/2020	0.282								
9/17/2020				<0.005		0.00387 (J)			
9/21/2020		<0.005							
9/22/2020			<0.005		0.0119			0.0039 (J)	0.00193 (J)

Time Series

Constituent: Arsenic (mg/L) Analysis Run 12/9/2020 2:20 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-44HO
8/2/2016	
8/3/2016	
9/21/2016	
10/24/2016	
10/25/2016	
12/12/2016	
12/13/2016	
2/6/2017	
3/28/2017	
4/24/2017	
6/7/2017	
2/19/2018	
5/15/2018	
10/15/2018	
10/16/2018	
4/16/2019	
4/23/2019	
9/24/2019	
3/17/2020	
3/18/2020	
3/23/2020	
3/24/2020	
3/25/2020	
8/27/2020	0.00321 (J)
9/8/2020	
9/15/2020	0.00184 (J)
9/16/2020	
9/17/2020	
9/21/2020	
9/22/2020	

Time Series

Constituent: Barium (mg/L) Analysis Run 12/9/2020 2:20 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-12	GS-AP-MW-12V	GS-AP-MW-13 (bg)	GS-AP-MW-15	GS-AP-MW-15V	GS-AP-MW-16D	GS-AP-MW-17	GS-AP-MW-17V ...	GS-AP-MW-18
8/1/2016				0.117		0.316	0.0696		
8/2/2016			0.184						0.21
8/3/2016	0.144								
9/19/2016						0.276	0.0503		
9/20/2016	0.102		0.153	0.193					
9/21/2016									0.107
10/24/2016							0.0468		0.0999
10/25/2016	0.109		0.176	0.222		0.3			
12/12/2016									0.0772
12/13/2016	0.115		0.184			0.314	0.0472		
12/14/2016				0.222					
2/6/2017							0.0498		
2/7/2017									
2/8/2017	0.122		0.189	0.294		0.324			0.0625
3/27/2017							0.0559		
3/28/2017				0.288					0.0581
3/29/2017	0.116		0.184			0.316			
4/24/2017							0.055		
4/26/2017	0.127		0.177	0.24		0.323			0.0587
6/5/2017							0.0552		
6/6/2017				0.228		0.29			0.0452
6/7/2017	0.115		0.164						
2/19/2018							0.077		
2/20/2018	0.132		0.165	0.224					
2/21/2018						0.3			0.0455
5/15/2018	0.163		0.172	0.212			0.0751		
5/16/2018						0.315			0.0505
10/15/2018				0.133			0.0682		
10/16/2018	0.159								0.0436
10/17/2018			0.165			0.331			
2/20/2019								0.191	
2/21/2019		1.35							
2/26/2019									
4/16/2019	0.161		0.16						
4/17/2019				0.264		0.322	0.0946		0.105
9/23/2019							0.135		
9/24/2019				0.0913		0.342		0.208	0.0896
9/25/2019	0.202	1.06							
3/16/2020							0.0883		
3/18/2020	0.195			0.14	0.155				0.0587
3/24/2020		1.43				0.323			
3/25/2020								0.314	
5/12/2020							0.0941		
9/21/2020					0.18		0.128		
9/22/2020						0.342			
9/23/2020	0.193	1.27		0.119				0.299	0.0911

Time Series

Constituent: Barium (mg/L) Analysis Run 12/9/2020 2:20 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-18V	GS-AP-MW-19
8/1/2016		0.492
8/2/2016		
8/3/2016		
9/19/2016		
9/20/2016		
9/21/2016		0.371
10/24/2016		0.311
10/25/2016		
12/12/2016		
12/13/2016		0.374
12/14/2016		
2/6/2017		
2/7/2017		0.368
2/8/2017		
3/27/2017		
3/28/2017		0.391
3/29/2017		
4/24/2017		
4/26/2017		0.371
6/5/2017		
6/6/2017		0.33
6/7/2017		
2/19/2018		
2/20/2018		
2/21/2018		0.291
5/15/2018		
5/16/2018		0.343
10/15/2018		
10/16/2018		0.35
10/17/2018		
2/20/2019		
2/21/2019		
2/26/2019	0.243	
4/16/2019		
4/17/2019		0.316
9/23/2019		
9/24/2019		0.356
9/25/2019		
3/16/2020		
3/18/2020		
3/24/2020		0.324
3/25/2020	0.234	
5/12/2020		
9/21/2020		
9/22/2020	0.253	0.337
9/23/2020		

Time Series

Constituent: Barium (mg/L) Analysis Run 12/9/2020 2:20 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-2	GS-AP-MW-21	GS-AP-MW-21V	GS-AP-MW-23H	GS-AP-MW-24H	GS-AP-MW-25HA	GS-AP-MW-26H	GS-AP-MW-28H	GS-AP-MW-29H
8/2/2016	0.0895	0.0535							
9/19/2016	0.0744								
9/21/2016		0.0458							
10/24/2016	0.0787								
10/25/2016		0.0489							
12/13/2016	0.0758								
12/14/2016		0.0494							
2/8/2017	0.0823	0.0449							
3/28/2017		0.0446							
3/30/2017	0.0768								
4/26/2017	0.077	0.0424							
6/6/2017	0.0711	0.0402							
2/20/2018		0.0441							
2/21/2018	0.0864								
5/15/2018		0.0456							
5/16/2018	0.0658								
10/16/2018	0.0846	0.0909							
2/20/2019				0.0227					
2/26/2019					0.887				
2/27/2019							0.622		0.517
3/13/2019								0.164	
4/17/2019	0.0576	0.0914							
9/23/2019				0.0148			0.922		
9/24/2019		0.114			1.04				0.712
9/25/2019	0.065							0.0528	
3/16/2020								0.0411	
3/17/2020				0.0143					
3/18/2020		0.105			0.964				
3/23/2020			0.0574						
3/24/2020						0.147			
3/25/2020	0.0602						0.868		0.527
5/12/2020								0.0436	
5/13/2020	0.0528								
9/17/2020				0.0146	0.988	0.164			
9/21/2020							0.938		
9/22/2020	0.0563							0.0385	0.499
9/23/2020		0.157	0.0438						

Time Series

Constituent: Barium (mg/L) Analysis Run 12/9/2020 2:20 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-30HA	GS-AP-MW-31H
8/2/2016		
9/19/2016		
9/21/2016		
10/24/2016		
10/25/2016		
12/13/2016		
12/14/2016		
2/8/2017		
3/28/2017		
3/30/2017		
4/26/2017		
6/6/2017		
2/20/2018		
2/21/2018		
5/15/2018		
5/16/2018		
10/16/2018		
2/20/2019		
2/26/2019		
2/27/2019		
3/13/2019		
4/17/2019		
9/23/2019		
9/24/2019		
9/25/2019		
3/16/2020		
3/17/2020		
3/18/2020	0.0791	0.106
3/23/2020		
3/24/2020		
3/25/2020		
5/12/2020		
5/13/2020	0.0819	
9/17/2020		
9/21/2020	0.0811	
9/22/2020		0.0916
9/23/2020		

Time Series

Constituent: Barium (mg/L) Analysis Run 12/9/2020 2:20 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-32H	GS-AP-MW-33HO	GS-AP-MW-34HO	GS-AP-MW-35HO	GS-AP-MW-36H	GS-AP-MW-38H	GS-AP-MW-41HD	GS-AP-MW-42H	GS-AP-MW-43HO
8/3/2016									
9/20/2016									
10/24/2016									
10/26/2016									
12/12/2016									
2/6/2017									
3/27/2017									
4/24/2017									
6/6/2017									
2/19/2018									
5/14/2018									
10/15/2018									
4/16/2019									
9/23/2019									
3/16/2020			0.0309						
3/17/2020		0.329		0.0426	0.0353				
3/18/2020							0.0393		
3/24/2020	0.0362					0.253		0.0253	
3/25/2020									0.0927
5/12/2020			0.0379	0.0472					
5/13/2020		0.324			0.03				
9/15/2020		0.469							
9/16/2020			0.0451	0.0532					
9/17/2020					0.0378		0.0414		
9/21/2020	0.0396								
9/22/2020						0.319		0.0237	

Time Series

Constituent: Barium (mg/L) Analysis Run 12/9/2020 2:20 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-6D	GS-AP-MW-6S
8/3/2016	0.852	0.27
9/20/2016	0.685	0.228
10/24/2016	0.711	
10/26/2016		0.23
12/12/2016	0.789	0.276
2/6/2017	0.779	0.25
3/27/2017	0.77	0.196
4/24/2017	0.716	0.159
6/6/2017	0.611	0.137
2/19/2018	0.872	0.145
5/14/2018	0.914	0.12
10/15/2018	0.896	0.118
4/16/2019	0.879	0.124
9/23/2019	0.903	0.124
3/16/2020		
3/17/2020	0.638	0.0725
3/18/2020		
3/24/2020		
3/25/2020		
5/12/2020		
5/13/2020		
9/15/2020		
9/16/2020		0.0682
9/17/2020	0.378	
9/21/2020		
9/22/2020		

Time Series

Constituent: Barium (mg/L) Analysis Run 12/9/2020 2:20 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-7	GS-AP-MW-8 (bg)	GS-AP-MW-9V	GS-AP-PZ-16	GS-AP-PZ-18	GS-AP-PZ-22	GS-AP-MW-6V	GS-AP-MW-43H	GS-AP-MW-40H
8/2/2016	0.0927								
8/3/2016		0.0274							
9/21/2016	0.0979	0.0811							
10/24/2016	0.0751								
10/25/2016		0.0576							
12/12/2016	0.0737								
12/13/2016		0.0241							
2/6/2017	0.0773	0.0747							
3/28/2017	0.0728	0.0183							
4/24/2017	0.0724	0.04							
6/7/2017	0.0581	0.00769 (J)							
2/19/2018	0.0464	0.00762 (J)							
5/15/2018	0.0501	0.00701 (J)							
10/15/2018	0.049								
10/16/2018		0.0094 (J)							
4/16/2019		0.00459 (J)							
4/23/2019	0.113								
9/24/2019	0.0834	0.0434							
3/17/2020	0.174								
3/18/2020		0.00507 (J)							
3/23/2020			0.215						
3/24/2020				0.295		0.104			
3/25/2020					0.028				
8/27/2020									
9/8/2020							0.164		
9/15/2020							0.16		
9/16/2020	0.124								
9/17/2020				0.223		0.109			
9/21/2020		0.026							
9/22/2020			0.187		0.0432			0.0921	0.0417

Time Series

Constituent: Barium (mg/L) Analysis Run 12/9/2020 2:20 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-44HO
8/2/2016	
8/3/2016	
9/21/2016	
10/24/2016	
10/25/2016	
12/12/2016	
12/13/2016	
2/6/2017	
3/28/2017	
4/24/2017	
6/7/2017	
2/19/2018	
5/15/2018	
10/15/2018	
10/16/2018	
4/16/2019	
4/23/2019	
9/24/2019	
3/17/2020	
3/18/2020	
3/23/2020	
3/24/2020	
3/25/2020	
8/27/2020	0.0867
9/8/2020	
9/15/2020	0.0783
9/16/2020	
9/17/2020	
9/21/2020	
9/22/2020	

Time Series

Constituent: Beryllium (mg/L) Analysis Run 12/9/2020 2:20 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-12	GS-AP-MW-12V	GS-AP-MW-13 (bg)	GS-AP-MW-15	GS-AP-MW-15V	GS-AP-MW-16D	GS-AP-MW-17	GS-AP-MW-17V ...	GS-AP-MW-18
8/1/2016				<0.003		<0.003	<0.003		
8/2/2016			<0.003						<0.003
8/3/2016	<0.003								
9/19/2016						<0.003	<0.003		
9/20/2016	<0.003		<0.003	<0.003					
9/21/2016									<0.003
10/24/2016							<0.003		<0.003
10/25/2016	<0.003		<0.003	<0.003		<0.003			
12/12/2016									<0.003
12/13/2016	<0.003		<0.003			<0.003	<0.003		
12/14/2016				<0.003					
2/6/2017							<0.003		
2/7/2017									
2/8/2017	<0.003		<0.003	<0.003		<0.003			<0.003
3/27/2017							<0.003		
3/28/2017				<0.003					<0.003
3/29/2017	<0.003		<0.003			<0.003			
4/24/2017							<0.003		
4/26/2017	<0.003		<0.003	<0.003		<0.003			<0.003
6/5/2017							<0.003		
6/6/2017				<0.003		<0.003			<0.003
6/7/2017	<0.003		<0.003						
2/19/2018							<0.003		
2/20/2018	<0.003		<0.003	<0.003					
2/21/2018						<0.003			<0.003
5/15/2018	<0.003		<0.003	<0.003			<0.003		
5/16/2018						<0.003			<0.003
10/15/2018				<0.003			<0.003		
10/16/2018	<0.003								<0.003
10/17/2018			<0.003			0.00109 (J)			
2/20/2019								<0.003	
2/21/2019		<0.003							
2/26/2019									
4/16/2019	<0.003		<0.003						
4/17/2019				<0.003		<0.003	<0.003		<0.003
9/23/2019							<0.003		
9/24/2019				<0.003		<0.003		<0.003	<0.003
9/25/2019	<0.003	<0.003							
3/16/2020							<0.003		
3/18/2020	<0.003			<0.003	<0.003				<0.003
3/24/2020		<0.003				<0.003			
3/25/2020								<0.003	
5/12/2020							<0.003		
9/21/2020					<0.003		<0.003		
9/22/2020						<0.003			
9/23/2020	<0.003	<0.003		<0.003				<0.003	<0.003

Time Series

Constituent: Beryllium (mg/L) Analysis Run 12/9/2020 2:20 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-18V	GS-AP-MW-19
8/1/2016		<0.003
8/2/2016		
8/3/2016		
9/19/2016		
9/20/2016		
9/21/2016		<0.003
10/24/2016		<0.003
10/25/2016		
12/12/2016		
12/13/2016		<0.003
12/14/2016		
2/6/2017		
2/7/2017		<0.003
2/8/2017		
3/27/2017		
3/28/2017		<0.003
3/29/2017		
4/24/2017		
4/26/2017		<0.003
6/5/2017		
6/6/2017		<0.003
6/7/2017		
2/19/2018		
2/20/2018		
2/21/2018		<0.003
5/15/2018		
5/16/2018		<0.003
10/15/2018		
10/16/2018		<0.003
10/17/2018		
2/20/2019		
2/21/2019		
2/26/2019	<0.003	
4/16/2019		
4/17/2019		<0.003
9/23/2019		
9/24/2019		<0.003
9/25/2019		
3/16/2020		
3/18/2020		
3/24/2020		<0.003
3/25/2020	<0.003	
5/12/2020		
9/21/2020		
9/22/2020	<0.003	<0.003
9/23/2020		

Time Series

Constituent: Beryllium (mg/L) Analysis Run 12/9/2020 2:20 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-2	GS-AP-MW-21	GS-AP-MW-21V	GS-AP-MW-23H	GS-AP-MW-24H	GS-AP-MW-25HA	GS-AP-MW-26H	GS-AP-MW-28H	GS-AP-MW-29H
8/2/2016	<0.003	<0.003							
9/19/2016	<0.003								
9/21/2016		<0.003							
10/24/2016	<0.003								
10/25/2016		<0.003							
12/13/2016	<0.003								
12/14/2016		<0.003							
2/8/2017	<0.003	<0.003							
3/28/2017		<0.003							
3/30/2017	<0.003								
4/26/2017	<0.003	<0.003							
6/6/2017	<0.003	<0.003							
2/20/2018		<0.003							
2/21/2018	<0.003								
5/15/2018		<0.003							
5/16/2018	<0.003								
10/16/2018	0.00138 (J)	<0.003							
2/20/2019				<0.003					
2/26/2019					<0.003				
2/27/2019							<0.003		<0.003
3/13/2019								<0.003	
4/17/2019	<0.003	<0.003							
9/23/2019				<0.003			<0.003		
9/24/2019		<0.003			<0.003				<0.003
9/25/2019	<0.003							<0.003	
3/16/2020								<0.003	
3/17/2020				<0.003					
3/18/2020		<0.003			<0.003				
3/23/2020			<0.003						
3/24/2020						<0.003			
3/25/2020	<0.003						<0.003		<0.003
5/12/2020								<0.003	
5/13/2020	<0.003								
9/17/2020				<0.003	<0.003	<0.003			
9/21/2020							<0.003		
9/22/2020	<0.003							<0.003	<0.003
9/23/2020		<0.003	<0.003						

Time Series

Constituent: Beryllium (mg/L) Analysis Run 12/9/2020 2:20 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-30HA	GS-AP-MW-31H
8/2/2016		
9/19/2016		
9/21/2016		
10/24/2016		
10/25/2016		
12/13/2016		
12/14/2016		
2/8/2017		
3/28/2017		
3/30/2017		
4/26/2017		
6/6/2017		
2/20/2018		
2/21/2018		
5/15/2018		
5/16/2018		
10/16/2018		
2/20/2019		
2/26/2019		
2/27/2019		
3/13/2019		
4/17/2019		
9/23/2019		
9/24/2019		
9/25/2019		
3/16/2020		
3/17/2020		
3/18/2020	<0.003	<0.003
3/23/2020		
3/24/2020		
3/25/2020		
5/12/2020		
5/13/2020	<0.003	
9/17/2020		
9/21/2020	<0.003	
9/22/2020		<0.003
9/23/2020		

Time Series

Constituent: Beryllium (mg/L) Analysis Run 12/9/2020 2:20 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-32H	GS-AP-MW-33HO	GS-AP-MW-34HO	GS-AP-MW-35HO	GS-AP-MW-36H	GS-AP-MW-38H	GS-AP-MW-41HD	GS-AP-MW-42H	GS-AP-MW-43HO
8/3/2016									
9/20/2016									
10/24/2016									
10/26/2016									
12/12/2016									
2/6/2017									
3/27/2017									
4/24/2017									
6/6/2017									
2/19/2018									
5/14/2018									
10/15/2018									
4/16/2019									
9/23/2019									
3/16/2020			<0.003						
3/17/2020		<0.003		<0.003	<0.003				
3/18/2020							<0.003		
3/24/2020	<0.003					<0.003		<0.003	
3/25/2020									<0.003
5/12/2020			<0.003	<0.003					
5/13/2020		<0.003			<0.003				
9/15/2020		<0.003							
9/16/2020			<0.003	<0.003					
9/17/2020					<0.003		<0.003		
9/21/2020	<0.003								
9/22/2020						<0.003		<0.003	

Time Series

Constituent: Beryllium (mg/L) Analysis Run 12/9/2020 2:20 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-6D	GS-AP-MW-6S
8/3/2016	<0.003	<0.003
9/20/2016	<0.003	<0.003
10/24/2016	<0.003	
10/26/2016		<0.003
12/12/2016	<0.003	<0.003
2/6/2017	<0.003	<0.003
3/27/2017	<0.003	<0.003
4/24/2017	<0.003	<0.003
6/6/2017	<0.003	<0.003
2/19/2018	<0.003	<0.003
5/14/2018	<0.003	<0.003
10/15/2018	<0.003	0.000794 (J)
4/16/2019	<0.003	<0.003
9/23/2019	<0.003	<0.003
3/16/2020		
3/17/2020	<0.003	<0.003
3/18/2020		
3/24/2020		
3/25/2020		
5/12/2020		
5/13/2020		
9/15/2020		
9/16/2020		<0.003
9/17/2020	<0.003	
9/21/2020		
9/22/2020		

Time Series

Constituent: Beryllium (mg/L) Analysis Run 12/9/2020 2:20 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-7	GS-AP-MW-8 (bg)	GS-AP-MW-9V	GS-AP-PZ-16	GS-AP-PZ-18	GS-AP-PZ-22	GS-AP-MW-6V	GS-AP-MW-43H	GS-AP-MW-40H
8/2/2016	<0.003								
8/3/2016		<0.003							
9/21/2016	<0.003	<0.003							
10/24/2016	<0.003								
10/25/2016		<0.003							
12/12/2016	<0.003								
12/13/2016		<0.003							
2/6/2017	<0.003	<0.003							
3/28/2017	<0.003	<0.003							
4/24/2017	<0.003	<0.003							
6/7/2017	<0.003	<0.003							
2/19/2018	<0.003	<0.003							
5/15/2018	<0.003	<0.003							
10/15/2018	<0.003								
10/16/2018		<0.003							
4/16/2019		<0.003							
4/23/2019	<0.003								
9/24/2019	<0.003	<0.003							
3/17/2020	<0.003								
3/18/2020		<0.003							
3/23/2020			<0.003						
3/24/2020				<0.003		<0.003			
3/25/2020					<0.003				
8/27/2020									
9/8/2020							<0.003		
9/15/2020							<0.003		
9/16/2020	<0.003								
9/17/2020				<0.003		<0.003			
9/21/2020		<0.003							
9/22/2020			<0.003		<0.003			<0.003	<0.003

Time Series

Constituent: Beryllium (mg/L) Analysis Run 12/9/2020 2:20 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-44HO
8/2/2016	
8/3/2016	
9/21/2016	
10/24/2016	
10/25/2016	
12/12/2016	
12/13/2016	
2/6/2017	
3/28/2017	
4/24/2017	
6/7/2017	
2/19/2018	
5/15/2018	
10/15/2018	
10/16/2018	
4/16/2019	
4/23/2019	
9/24/2019	
3/17/2020	
3/18/2020	
3/23/2020	
3/24/2020	
3/25/2020	
8/27/2020	<0.003
9/8/2020	
9/15/2020	<0.003
9/16/2020	
9/17/2020	
9/21/2020	
9/22/2020	

Time Series

Constituent: Boron (mg/L) Analysis Run 12/9/2020 2:20 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-12	GS-AP-MW-12V	GS-AP-MW-13 (bg)	GS-AP-MW-15	GS-AP-MW-15V	GS-AP-MW-16D	GS-AP-MW-17	GS-AP-MW-17V ...	GS-AP-MW-18
8/1/2016				0.0955 (J)		0.0266 (J)	0.0712 (J)		
8/2/2016			<0.1						1.21
8/3/2016	0.34								
9/19/2016						0.0262 (J)	0.0716 (J)		
9/20/2016	0.299		<0.1	0.0706 (J)					
9/21/2016									1.32
10/24/2016							0.0858 (J)		1.6
10/25/2016	0.323		<0.1	0.0849 (J)		0.0273 (J)			
12/12/2016									1.82
12/13/2016	0.294		<0.1			0.0258 (J)	0.0875 (J)		
12/14/2016				0.0914 (J)					
2/6/2017							0.0729 (J)		
2/7/2017									
2/8/2017	0.264		<0.1	0.0524 (J)		0.0249 (J)			1.79
3/27/2017							0.0706 (J)		
3/28/2017				0.0532 (J)					1.62
3/29/2017	0.246		<0.1			0.0247 (J)			
4/24/2017							0.0737 (J)		
4/26/2017	0.234		<0.1	0.0598 (J)		0.0264 (J)			1.53
6/5/2017							0.0767 (J)		
6/6/2017				0.0576 (J)		0.0247 (J)			1.73
6/7/2017	0.194		<0.1						
8/22/2017	0.156		<0.1	0.0702 (J)		0.0246 (J)	0.0786 (J)		
8/23/2017									1.71
5/15/2018	0.0781 (J)		<0.1	0.0567 (J)			0.0953 (J)		
5/16/2018						0.0247 (J)			1.23
10/15/2018				0.07 (J)			0.0842 (J)		
10/16/2018	0.057 (J)								2.12
10/17/2018			<0.1			0.0251 (J)			
2/20/2019								0.0337 (J)	
2/21/2019		0.0303 (J)							
2/26/2019									
4/16/2019	0.0385 (J)		<0.1						
4/17/2019				0.0388 (J)		<0.1	0.0916 (J)		0.449
9/23/2019							0.116		
9/24/2019				0.0607 (J)		<0.1		0.0532 (J)	0.883
9/25/2019	0.122	0.0347 (J)							
3/16/2020							0.0894 (J)		
3/18/2020	0.0449 (J)			0.0596 (J)	0.0565 (J)				0.492
3/24/2020		0.0343 (J)				<0.1			
3/25/2020								0.0482 (J)	
5/12/2020							0.0862 (J)		
9/21/2020					0.0712 (J)		0.102		
9/22/2020						<0.1			
9/23/2020	0.0446 (J)	0.0322 (J)		0.0537 (J)				0.0478 (J)	0.491

Time Series

Constituent: Boron (mg/L) Analysis Run 12/9/2020 2:20 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-18V	GS-AP-MW-19
8/1/2016		0.0279 (J)
8/2/2016		
8/3/2016		
9/19/2016		
9/20/2016		
9/21/2016		0.0235 (J)
10/24/2016		0.0444 (J)
10/25/2016		
12/12/2016		
12/13/2016		0.0285 (J)
12/14/2016		
2/6/2017		
2/7/2017		0.03 (J)
2/8/2017		
3/27/2017		
3/28/2017		0.0309 (J)
3/29/2017		
4/24/2017		
4/26/2017		0.0273 (J)
6/5/2017		
6/6/2017		0.0212 (J)
6/7/2017		
8/22/2017		0.0294 (J)
8/23/2017		
5/15/2018		
5/16/2018		0.0356 (J)
10/15/2018		
10/16/2018		0.0363 (J)
10/17/2018		
2/20/2019		
2/21/2019		
2/26/2019	0.109	
4/16/2019		
4/17/2019		0.0336 (J)
9/23/2019		
9/24/2019		0.0375 (J)
9/25/2019		
3/16/2020		
3/18/2020		
3/24/2020		0.0398 (J)
3/25/2020	0.0834 (J)	
5/12/2020		
9/21/2020		
9/22/2020	0.0769 (J)	0.037 (J)
9/23/2020		

Time Series

Constituent: Boron (mg/L) Analysis Run 12/9/2020 2:20 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-2	GS-AP-MW-21	GS-AP-MW-21V	GS-AP-MW-23H	GS-AP-MW-24H	GS-AP-MW-25HA	GS-AP-MW-26H	GS-AP-MW-28H	GS-AP-MW-29H
8/2/2016	0.178	0.176 (o)							
9/19/2016	0.0937 (J)								
9/21/2016		0.0723 (J)							
10/24/2016	0.0986 (J)								
10/25/2016		0.0867 (J)							
12/13/2016	0.0965 (J)								
12/14/2016		0.092 (J)							
2/8/2017	0.0896 (J)	0.0803 (J)							
3/28/2017		0.0804 (J)							
3/30/2017	0.0871 (J)								
4/26/2017	0.0818 (J)	0.0801 (J)							
6/6/2017	0.0805 (J)	0.0795 (J)							
8/21/2017	0.102								
8/23/2017		0.0764 (J)							
5/15/2018		0.0769 (J)							
5/16/2018	0.147								
10/16/2018	0.169	0.0764 (J)							
2/20/2019				0.0498 (J)					
2/26/2019					0.0719 (J)				
2/27/2019							<0.1		0.0359 (J)
3/13/2019								0.0819 (J)	
4/17/2019	0.165	0.0675 (J)							
9/23/2019				0.0641 (J)			<0.1		
9/24/2019		0.0843 (J)			0.0821 (J)				0.0305 (J)
9/25/2019	0.153							0.0784 (J)	
3/16/2020								0.0751 (J)	
3/17/2020				0.0504 (J)					
3/18/2020		0.0824 (J)			0.0811 (J)				
3/23/2020			0.122						
3/24/2020						0.146			
3/25/2020	0.163						<0.1		<0.1
5/12/2020								0.0719 (J)	
5/13/2020	0.154								
9/17/2020				0.0637 (J)	0.069 (J)	0.138			
9/21/2020							0.0334 (J)		
9/22/2020	0.133							0.0728 (J)	0.175
9/23/2020		0.0871 (J)	0.126						

Time Series

Constituent: Boron (mg/L) Analysis Run 12/9/2020 2:21 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-30HA	GS-AP-MW-31H
8/2/2016		
9/19/2016		
9/21/2016		
10/24/2016		
10/25/2016		
12/13/2016		
12/14/2016		
2/8/2017		
3/28/2017		
3/30/2017		
4/26/2017		
6/6/2017		
8/21/2017		
8/23/2017		
5/15/2018		
5/16/2018		
10/16/2018		
2/20/2019		
2/26/2019		
2/27/2019		
3/13/2019		
4/17/2019		
9/23/2019		
9/24/2019		
9/25/2019		
3/16/2020		
3/17/2020		
3/18/2020	0.0734 (J)	<0.1
3/23/2020		
3/24/2020		
3/25/2020		
5/12/2020		
5/13/2020	0.0747 (J)	
9/17/2020		
9/21/2020	0.0814 (J)	
9/22/2020		<0.1
9/23/2020		

Time Series

Constituent: Boron (mg/L) Analysis Run 12/9/2020 2:21 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-32H	GS-AP-MW-33HO	GS-AP-MW-34HO	GS-AP-MW-35HO	GS-AP-MW-36H	GS-AP-MW-38H	GS-AP-MW-41HD	GS-AP-MW-42H	GS-AP-MW-43HO
8/3/2016									
9/20/2016									
10/24/2016									
10/26/2016									
12/12/2016									
2/6/2017									
3/27/2017									
4/24/2017									
6/6/2017									
8/21/2017									
5/14/2018									
10/15/2018									
4/16/2019									
9/23/2019									
3/16/2020			0.0827 (J)						
3/17/2020		0.066 (J)		<0.1	0.0394 (J)				
3/18/2020							1.45		
3/24/2020	0.0492 (J)					0.0468 (J)		<0.1	
3/25/2020									0.112
5/12/2020			0.0929 (J)	<0.1					
5/13/2020		0.0409 (J)			0.0359 (J)				
9/15/2020		0.0425 (J)							
9/16/2020			0.0874 (J)	<0.1					
9/17/2020					0.0345 (J)		1.42		
9/21/2020	0.0455 (J)								
9/22/2020						0.0461 (J)		0.0469 (J)	

Time Series

Constituent: Boron (mg/L) Analysis Run 12/9/2020 2:21 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-6D	GS-AP-MW-6S
8/3/2016	1.04	1.16
9/20/2016	1.01	1.16
10/24/2016	1.08	
10/26/2016		1.24
12/12/2016	1.09	1.24
2/6/2017	1.06	1.1
3/27/2017	1.07	1.04
4/24/2017	1.08	1
6/6/2017	1.11	1.02
8/21/2017	0.906	1.05
5/14/2018	1.04	0.99
10/15/2018	1.06	1.05
4/16/2019	1.1	0.961
9/23/2019	1.15	1.08
3/16/2020		
3/17/2020	1.17	0.867
3/18/2020		
3/24/2020		
3/25/2020		
5/12/2020		
5/13/2020		
9/15/2020		
9/16/2020		0.8
9/17/2020	1.22	
9/21/2020		
9/22/2020		

Time Series

Constituent: Boron (mg/L) Analysis Run 12/9/2020 2:21 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-7	GS-AP-MW-8 (bg)	GS-AP-MW-9V	GS-AP-PZ-16	GS-AP-PZ-18	GS-AP-PZ-22	GS-AP-MW-6V	GS-AP-MW-43H	GS-AP-MW-40H
8/2/2016	1.57								
8/3/2016		0.0239 (J)							
9/21/2016	1.4	<0.1							
10/24/2016	1.42								
10/25/2016		<0.1							
12/12/2016	1.38								
12/13/2016		<0.1							
2/6/2017	1.44	<0.1							
3/28/2017	1.44	<0.1							
4/24/2017	1.41	<0.1							
6/7/2017	1.45	<0.1							
8/21/2017	1.39	<0.1							
5/15/2018	1.5	<0.1							
10/15/2018	1.53								
10/16/2018		<0.1							
4/16/2019		<0.1							
4/23/2019	1.5								
9/24/2019	1.6	<0.1							
3/17/2020	1.58								
3/18/2020		<0.1							
3/23/2020			0.0316 (J)						
3/24/2020				0.0772 (J)		0.0521 (J)			
3/25/2020					0.0568 (J)				
8/27/2020									
9/8/2020							0.0974 (J)		
9/15/2020							0.0974 (J)		
9/16/2020	1.54								
9/17/2020				0.0824 (J)		0.0454 (J)			
9/21/2020		<0.1							
9/22/2020			0.0348 (J)		0.0603 (J)			0.12	0.0326 (J)

Time Series

Constituent: Boron (mg/L) Analysis Run 12/9/2020 2:21 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-44HO
8/2/2016	
8/3/2016	
9/21/2016	
10/24/2016	
10/25/2016	
12/12/2016	
12/13/2016	
2/6/2017	
3/28/2017	
4/24/2017	
6/7/2017	
8/21/2017	
5/15/2018	
10/15/2018	
10/16/2018	
4/16/2019	
4/23/2019	
9/24/2019	
3/17/2020	
3/18/2020	
3/23/2020	
3/24/2020	
3/25/2020	
8/27/2020	0.0366 (J)
9/8/2020	
9/15/2020	0.0404 (J)
9/16/2020	
9/17/2020	
9/21/2020	
9/22/2020	

Time Series

Constituent: Cadmium (mg/L) Analysis Run 12/9/2020 2:21 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-12	GS-AP-MW-12V	GS-AP-MW-13 (bg)	GS-AP-MW-15	GS-AP-MW-15V	GS-AP-MW-16D	GS-AP-MW-17	GS-AP-MW-17V ...	GS-AP-MW-18
8/1/2016				<0.001		<0.001	<0.001		
8/2/2016			<0.001						<0.001
8/3/2016	<0.001								
9/19/2016						<0.001	<0.001		
9/20/2016	<0.001		<0.001	<0.001					
9/21/2016									<0.001
10/24/2016							<0.001		<0.001
10/25/2016	<0.001		<0.001	<0.001		<0.001			
12/12/2016									<0.001
12/13/2016	<0.001		<0.001			<0.001	<0.001		
12/14/2016				<0.001					
2/6/2017							<0.001		
2/7/2017									
2/8/2017	<0.001		<0.001	<0.001		<0.001			<0.001
3/27/2017							<0.001		
3/28/2017				<0.001					<0.001
3/29/2017	<0.001		<0.001			<0.001			
4/24/2017							<0.001		
4/26/2017	<0.001		<0.001	<0.001		<0.001			<0.001
6/5/2017							<0.001		
6/6/2017				<0.001		<0.001			<0.001
6/7/2017	<0.001		<0.001						
2/19/2018							<0.001		
2/20/2018	<0.001		<0.001	<0.001					
2/21/2018						<0.001			<0.001
5/15/2018	<0.001		<0.001	<0.001			<0.001		
5/16/2018						<0.001			<0.001
10/15/2018				<0.001			<0.001		
10/16/2018	<0.001								<0.001
10/17/2018			<0.001			<0.001			
2/20/2019								<0.001	
2/21/2019		<0.001							
2/26/2019									
4/16/2019	<0.001		<0.001						
4/17/2019				<0.001		<0.001	<0.001		<0.001
9/23/2019							<0.001		
9/24/2019				<0.001		<0.001		<0.001	<0.001
9/25/2019	<0.001	<0.001							
3/16/2020							<0.001		
3/18/2020	<0.001			<0.001	<0.001				<0.001
3/24/2020		<0.001				<0.001			
3/25/2020								<0.001	
5/12/2020							<0.001		
9/21/2020					<0.001		<0.001		
9/22/2020						<0.001			
9/23/2020	<0.001	<0.001		<0.001				<0.001	<0.001

Time Series

Constituent: Cadmium (mg/L) Analysis Run 12/9/2020 2:21 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-18V	GS-AP-MW-19
8/1/2016		<0.001
8/2/2016		
8/3/2016		
9/19/2016		
9/20/2016		
9/21/2016		<0.001
10/24/2016		<0.001
10/25/2016		
12/12/2016		
12/13/2016		<0.001
12/14/2016		
2/6/2017		
2/7/2017		<0.001
2/8/2017		
3/27/2017		
3/28/2017		<0.001
3/29/2017		
4/24/2017		
4/26/2017		<0.001
6/5/2017		
6/6/2017		<0.001
6/7/2017		
2/19/2018		
2/20/2018		
2/21/2018		<0.001
5/15/2018		
5/16/2018		<0.001
10/15/2018		
10/16/2018		<0.001
10/17/2018		
2/20/2019		
2/21/2019		
2/26/2019	<0.001	
4/16/2019		
4/17/2019		<0.001
9/23/2019		
9/24/2019		<0.001
9/25/2019		
3/16/2020		
3/18/2020		
3/24/2020		<0.001
3/25/2020	<0.001	
5/12/2020		
9/21/2020		
9/22/2020	<0.001	<0.001
9/23/2020		

Time Series

Constituent: Cadmium (mg/L) Analysis Run 12/9/2020 2:21 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-2	GS-AP-MW-21	GS-AP-MW-21V	GS-AP-MW-23H	GS-AP-MW-24H	GS-AP-MW-25HA	GS-AP-MW-26H	GS-AP-MW-28H	GS-AP-MW-29H
8/2/2016	<0.001	<0.001							
9/19/2016	<0.001								
9/21/2016		<0.001							
10/24/2016	<0.001								
10/25/2016		<0.001							
12/13/2016	<0.001								
12/14/2016		<0.001							
2/8/2017	<0.001	<0.001							
3/28/2017		<0.001							
3/30/2017	<0.001								
4/26/2017	<0.001	<0.001							
6/6/2017	<0.001	<0.001							
2/20/2018		<0.001							
2/21/2018	<0.001								
5/15/2018		<0.001							
5/16/2018	<0.001								
10/16/2018	<0.001	<0.001							
2/20/2019				<0.001					
2/26/2019					<0.001				
2/27/2019							<0.001		<0.001
3/13/2019								<0.001	
4/17/2019	<0.001	<0.001							
9/23/2019				<0.001			<0.001		
9/24/2019		<0.001			<0.001				<0.001
9/25/2019	<0.001							<0.001	
3/16/2020								<0.001	
3/17/2020				<0.001					
3/18/2020		<0.001			<0.001				
3/23/2020			<0.001						
3/24/2020						<0.001			
3/25/2020	<0.001						<0.001		<0.001
5/12/2020								<0.001	
5/13/2020	<0.001								
9/17/2020				<0.001	<0.001	<0.001			
9/21/2020							<0.001		
9/22/2020	<0.001							<0.001	<0.001
9/23/2020		<0.001	<0.001						

Time Series

Constituent: Cadmium (mg/L) Analysis Run 12/9/2020 2:21 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-30HA	GS-AP-MW-31H
8/2/2016		
9/19/2016		
9/21/2016		
10/24/2016		
10/25/2016		
12/13/2016		
12/14/2016		
2/8/2017		
3/28/2017		
3/30/2017		
4/26/2017		
6/6/2017		
2/20/2018		
2/21/2018		
5/15/2018		
5/16/2018		
10/16/2018		
2/20/2019		
2/26/2019		
2/27/2019		
3/13/2019		
4/17/2019		
9/23/2019		
9/24/2019		
9/25/2019		
3/16/2020		
3/17/2020		
3/18/2020	<0.001	<0.001
3/23/2020		
3/24/2020		
3/25/2020		
5/12/2020		
5/13/2020	<0.001	
9/17/2020		
9/21/2020	<0.001	
9/22/2020		<0.001
9/23/2020		

Time Series

Constituent: Cadmium (mg/L) Analysis Run 12/9/2020 2:21 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-32H	GS-AP-MW-33HO	GS-AP-MW-34HO	GS-AP-MW-35HO	GS-AP-MW-36H	GS-AP-MW-38H	GS-AP-MW-41HD	GS-AP-MW-42H	GS-AP-MW-43HO
8/3/2016									
9/20/2016									
10/24/2016									
10/26/2016									
12/12/2016									
2/6/2017									
3/27/2017									
4/24/2017									
6/6/2017									
2/19/2018									
5/14/2018									
10/15/2018									
4/16/2019									
9/23/2019									
3/16/2020			<0.001						
3/17/2020		<0.001		<0.001	<0.001				
3/18/2020							<0.001		
3/24/2020	<0.001					<0.001		<0.001	
3/25/2020									<0.001
5/12/2020			<0.001	<0.001					
5/13/2020		<0.001			<0.001				
9/15/2020		<0.001							
9/16/2020			<0.001	<0.001					
9/17/2020					<0.001		<0.001		
9/21/2020	<0.001								
9/22/2020						<0.001		<0.001	

Time Series

Constituent: Cadmium (mg/L) Analysis Run 12/9/2020 2:21 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-6D	GS-AP-MW-6S
8/3/2016	<0.001	<0.001
9/20/2016	<0.001	<0.001
10/24/2016	<0.001	
10/26/2016		<0.001
12/12/2016	<0.001	<0.001
2/6/2017	<0.001	<0.001
3/27/2017	<0.001	<0.001
4/24/2017	<0.001	<0.001
6/6/2017	<0.001	<0.001
2/19/2018	<0.001	<0.001
5/14/2018	<0.001	<0.001
10/15/2018	<0.001	<0.001
4/16/2019	<0.001	<0.001
9/23/2019	<0.001	<0.001
3/16/2020		
3/17/2020	<0.001	<0.001
3/18/2020		
3/24/2020		
3/25/2020		
5/12/2020		
5/13/2020		
9/15/2020		
9/16/2020		<0.001
9/17/2020	<0.001	
9/21/2020		
9/22/2020		

Time Series

Constituent: Cadmium (mg/L) Analysis Run 12/9/2020 2:21 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-7	GS-AP-MW-8 (bg)	GS-AP-MW-9V	GS-AP-PZ-16	GS-AP-PZ-18	GS-AP-PZ-22	GS-AP-MW-6V	GS-AP-MW-43H	GS-AP-MW-40H
8/2/2016	<0.001								
8/3/2016		<0.001							
9/21/2016	<0.001	<0.001							
10/24/2016	<0.001								
10/25/2016		<0.001							
12/12/2016	<0.001								
12/13/2016		<0.001							
2/6/2017	<0.001	<0.001							
3/28/2017	<0.001	<0.001							
4/24/2017	<0.001	<0.001							
6/7/2017	<0.001	<0.001							
2/19/2018	<0.001	<0.001							
5/15/2018	<0.001	<0.001							
10/15/2018	<0.001								
10/16/2018		<0.001							
4/16/2019		<0.001							
4/23/2019	<0.001								
9/24/2019	<0.001	<0.001							
3/17/2020	<0.001								
3/18/2020		<0.001							
3/23/2020			<0.001						
3/24/2020				<0.001		<0.001			
3/25/2020					<0.001				
8/27/2020									
9/8/2020							<0.001		
9/15/2020							<0.001		
9/16/2020	<0.001								
9/17/2020				<0.001		<0.001			
9/21/2020		<0.001							
9/22/2020			<0.001		<0.001			<0.001	<0.001

Time Series

Constituent: Cadmium (mg/L) Analysis Run 12/9/2020 2:21 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-44HO
8/2/2016	
8/3/2016	
9/21/2016	
10/24/2016	
10/25/2016	
12/12/2016	
12/13/2016	
2/6/2017	
3/28/2017	
4/24/2017	
6/7/2017	
2/19/2018	
5/15/2018	
10/15/2018	
10/16/2018	
4/16/2019	
4/23/2019	
9/24/2019	
3/17/2020	
3/18/2020	
3/23/2020	
3/24/2020	
3/25/2020	
8/27/2020	<0.001
9/8/2020	
9/15/2020	<0.001
9/16/2020	
9/17/2020	
9/21/2020	
9/22/2020	

Time Series

Constituent: Calcium (mg/L) Analysis Run 12/9/2020 2:21 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-12	GS-AP-MW-12V	GS-AP-MW-13 (bg)	GS-AP-MW-15	GS-AP-MW-15V	GS-AP-MW-16D	GS-AP-MW-17	GS-AP-MW-17V ...	GS-AP-MW-18
8/1/2016				10.5		33	4.52		
8/2/2016			47.2						64.2
8/3/2016	36.1								
9/19/2016						31.7	4.3		
9/20/2016	27		46.3	14.7					
9/21/2016									110
10/24/2016							4.02		166
10/25/2016	26.1		46.6	14.7		32.2			
12/12/2016									204
12/13/2016	29.4		43.1			33.1	5.5		
12/14/2016				11.9					
2/6/2017							3.79		
2/7/2017									
2/8/2017	31.9		47.5	14.4		32.7			199
3/27/2017							3.13		
3/28/2017				12.9					162
3/29/2017	31.8		46.8			32.7			
4/24/2017							3.41		
4/26/2017	34.6		48.1	10.4		33.8			159
6/5/2017							3.32		
6/6/2017				9.41		32.2			159
6/7/2017	33.4		44.4						
8/22/2017	31.5		42.9	6.89		30.9	3.52		
8/23/2017									153
5/15/2018	34.8		44.3	6.86			4.53		
5/16/2018						33.5			92.1
10/15/2018				6.28			3.38		
10/16/2018	35.6								203
10/17/2018			41.8			32			
2/20/2019								30.6	
2/21/2019		52.3							
2/26/2019									
4/16/2019	38.3		38.6						
4/17/2019				8.53		32.3	3.86		40.9
9/23/2019							5.43		
9/24/2019				3.26		34.3		29.7	57.4
9/25/2019	48.1	33.4							
3/16/2020							3		
3/18/2020	44			5.25	8.01				90.9
3/24/2020		48.9				34.1			
3/25/2020								31.1	
5/12/2020							2.95		
9/21/2020					8.2		3.73		
9/22/2020						32			
9/23/2020	45.9	44.8		3.83				29.3	38.8

Time Series

Constituent: Calcium (mg/L) Analysis Run 12/9/2020 2:21 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-18V	GS-AP-MW-19
8/1/2016		39.6
8/2/2016		
8/3/2016		
9/19/2016		
9/20/2016		
9/21/2016		38.1
10/24/2016		34.7
10/25/2016		
12/12/2016		
12/13/2016		44
12/14/2016		
2/6/2017		
2/7/2017		39
2/8/2017		
3/27/2017		
3/28/2017		43.9
3/29/2017		
4/24/2017		
4/26/2017		42.8
6/5/2017		
6/6/2017		43.1
6/7/2017		
8/22/2017		40.7
8/23/2017		
5/15/2018		
5/16/2018		45.3
10/15/2018		
10/16/2018		40.9
10/17/2018		
2/20/2019		
2/21/2019		
2/26/2019	13.6	
4/16/2019		
4/17/2019		38.4
9/23/2019		
9/24/2019		48.4
9/25/2019		
3/16/2020		
3/18/2020		
3/24/2020		41.7
3/25/2020	6.18	
5/12/2020		
9/21/2020		
9/22/2020	5.12	46.9
9/23/2020		

Time Series

Constituent: Calcium (mg/L) Analysis Run 12/9/2020 2:21 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-2	GS-AP-MW-21	GS-AP-MW-21V	GS-AP-MW-23H	GS-AP-MW-24H	GS-AP-MW-25HA	GS-AP-MW-26H	GS-AP-MW-28H	GS-AP-MW-29H
8/2/2016	2.25	5.29							
9/19/2016	0.724								
9/21/2016		4.51							
10/24/2016	0.635								
10/25/2016		4.92							
12/13/2016	0.714								
12/14/2016		3.5							
2/8/2017	0.722	3.75							
3/28/2017		3.63							
3/30/2017	0.686								
4/26/2017	0.646	3.3							
6/6/2017	0.569	3.24							
8/21/2017	0.634								
8/23/2017		6.6							
5/15/2018		7.57							
5/16/2018	0.588								
10/16/2018	0.714	4.4							
2/20/2019				64.5					
2/26/2019					46				
2/27/2019							29.1		12.1
3/13/2019								3.42	
4/17/2019	0.511	2.88							
9/23/2019				80.6			29.6		
9/24/2019		2.47			46.5				32.8
9/25/2019	0.581							2.52	
3/16/2020								2.4	
3/17/2020				79.8					
3/18/2020		2.35			44				
3/23/2020			110						
3/24/2020						2.42			
3/25/2020	0.518						28.6		27.8
5/12/2020								2.83	
5/13/2020	0.493 (J)								
9/17/2020				87.2	45.5	1.99			
9/21/2020							27.6		
9/22/2020	0.503							2.37	28.1
9/23/2020		1.96	119						

Time Series

Constituent: Calcium (mg/L) Analysis Run 12/9/2020 2:21 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-30HA	GS-AP-MW-31H
8/2/2016		
9/19/2016		
9/21/2016		
10/24/2016		
10/25/2016		
12/13/2016		
12/14/2016		
2/8/2017		
3/28/2017		
3/30/2017		
4/26/2017		
6/6/2017		
8/21/2017		
8/23/2017		
5/15/2018		
5/16/2018		
10/16/2018		
2/20/2019		
2/26/2019		
2/27/2019		
3/13/2019		
4/17/2019		
9/23/2019		
9/24/2019		
9/25/2019		
3/16/2020		
3/17/2020		
3/18/2020	36	6.06
3/23/2020		
3/24/2020		
3/25/2020		
5/12/2020		
5/13/2020	35.3	
9/17/2020		
9/21/2020	29.4	
9/22/2020		5.31
9/23/2020		

Time Series

Constituent: Calcium (mg/L) Analysis Run 12/9/2020 2:21 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-32H	GS-AP-MW-33HO	GS-AP-MW-34HO	GS-AP-MW-35HO	GS-AP-MW-36H	GS-AP-MW-38H	GS-AP-MW-41HD	GS-AP-MW-42H	GS-AP-MW-43HO
8/3/2016									
9/20/2016									
10/24/2016									
10/26/2016									
12/12/2016									
2/6/2017									
3/27/2017									
4/24/2017									
6/6/2017									
8/21/2017									
5/14/2018									
10/15/2018									
4/16/2019									
9/23/2019									
3/16/2020			83.8						
3/17/2020		42.3		5.27	3.45				
3/18/2020							56.6		
3/24/2020	2.62					9.33		149	
3/25/2020									4.11
5/12/2020			80.4	3.04					
5/13/2020		25.2			2.93				
9/15/2020		29.5							
9/16/2020			86.9	3.04					
9/17/2020					4.12		61.1		
9/21/2020	3								
9/22/2020						9.56		142	

Time Series

Constituent: Calcium (mg/L) Analysis Run 12/9/2020 2:21 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-6D	GS-AP-MW-6S
8/3/2016	48.1	42.5
9/20/2016	51.2	51.1
10/24/2016	49.5	
10/26/2016		65.6
12/12/2016	54.3	66.5
2/6/2017	51.2	73.1
3/27/2017	51.4	71.9
4/24/2017	54.7	73.5
6/6/2017	53.9	71.8
8/21/2017	47.3	63.5
5/14/2018	54.8	67.5
10/15/2018	53.9	68.9
4/16/2019	54	57.1
9/23/2019	56.1	60
3/16/2020		
3/17/2020	57.2	59.3
3/18/2020		
3/24/2020		
3/25/2020		
5/12/2020		
5/13/2020		
9/15/2020		
9/16/2020		55.9
9/17/2020	61.5	
9/21/2020		
9/22/2020		

Time Series

Constituent: Calcium (mg/L) Analysis Run 12/9/2020 2:21 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-7	GS-AP-MW-8 (bg)	GS-AP-MW-9V	GS-AP-PZ-16	GS-AP-PZ-18	GS-AP-PZ-22	GS-AP-MW-6V	GS-AP-MW-43H	GS-AP-MW-40H
8/2/2016	19.4								
8/3/2016		6.85							
9/21/2016	15.4	11.7							
10/24/2016	14.8								
10/25/2016		10.8							
12/12/2016	15								
12/13/2016		5.86							
2/6/2017	14.9	9.76							
3/28/2017	14.3	5.28							
4/24/2017	14.5	6.89							
6/7/2017	14.1	3.58							
8/21/2017	12.6	3.38							
5/15/2018	12.9	4.25							
10/15/2018	12.5								
10/16/2018		3.21							
4/16/2019		4.43							
4/23/2019	13.8								
9/24/2019	13.4	7.24							
3/17/2020	13.5								
3/18/2020		4.51							
3/23/2020			42.9						
3/24/2020				13.9		19.3			
3/25/2020					34.5				
8/27/2020									
9/8/2020							1.8		
9/15/2020							1.74		
9/16/2020	12.2								
9/17/2020				9.69		12.6			
9/21/2020		5.19							
9/22/2020			45.3		26.2			2.82	205

Time Series

Constituent: Calcium (mg/L) Analysis Run 12/9/2020 2:21 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-44HO
8/2/2016	
8/3/2016	
9/21/2016	
10/24/2016	
10/25/2016	
12/12/2016	
12/13/2016	
2/6/2017	
3/28/2017	
4/24/2017	
6/7/2017	
8/21/2017	
5/15/2018	
10/15/2018	
10/16/2018	
4/16/2019	
4/23/2019	
9/24/2019	
3/17/2020	
3/18/2020	
3/23/2020	
3/24/2020	
3/25/2020	
8/27/2020	2.89
9/8/2020	
9/15/2020	2.94
9/16/2020	
9/17/2020	
9/21/2020	
9/22/2020	

Time Series

Constituent: Chloride (mg/L) Analysis Run 12/9/2020 2:21 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-12	GS-AP-MW-12V	GS-AP-MW-13 (bg)	GS-AP-MW-15	GS-AP-MW-15V	GS-AP-MW-16D	GS-AP-MW-17	GS-AP-MW-17V ...	GS-AP-MW-18
8/1/2016				15.6		2.6	6.47		
8/2/2016			2.91						20.8
8/3/2016	14.5								
9/19/2016						2.51	7.78		
9/20/2016	12.9		2.94	8.6					
9/21/2016									23.3
10/24/2016							7.29		27.9
10/25/2016	12.2		2.94	7.96		2.53			
12/12/2016									36
12/13/2016	10.4		2.93			2.53	12.2		
12/14/2016				6.94					
2/6/2017							7.68		
2/7/2017									
2/8/2017	8.77		2.85	4.96		2.5			33.3
3/27/2017							9		
3/28/2017				5.2					35
3/29/2017	10		3.4			2.9			
4/24/2017							10		
4/26/2017	9.8		3.7	6		3.2			34
6/5/2017							10		
6/6/2017				4.9		2.6			36
6/7/2017	8		3.3						
8/22/2017	6.5		3.4	5.3		2.9	12		
8/23/2017									31
5/15/2018	4.4		3.2	3.8			13		
5/16/2018						3			22
10/15/2018				6.6			10		
10/16/2018	3.1								35
10/17/2018			2.3			2.2			
2/20/2019								3.56	
2/21/2019		3.77							
2/26/2019									
4/16/2019	3.22		3.23						
4/17/2019				5.2		2.82	12.7		6.61
9/23/2019							16.2		
9/24/2019				5.96		2.9		3.69	12.3
9/25/2019	6.68	3.84							
3/16/2020							9.95		
3/18/2020	4.22			8	108				6.68
3/24/2020		4.46				2.88			
3/25/2020								3.72	
5/12/2020							9.16		
9/21/2020					171		13.8		
9/22/2020						2.94			
9/23/2020	3.15	4.63		6				3.74	5.29

Time Series

Constituent: Chloride (mg/L) Analysis Run 12/9/2020 2:21 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-18V	GS-AP-MW-19
8/1/2016		6.67
8/2/2016		
8/3/2016		
9/19/2016		
9/20/2016		
9/21/2016		6.54
10/24/2016		8.77
10/25/2016		
12/12/2016		
12/13/2016		6.16
12/14/2016		
2/6/2017		
2/7/2017		7.57
2/8/2017		
3/27/2017		
3/28/2017		5.9
3/29/2017		
4/24/2017		
4/26/2017		6.5
6/5/2017		
6/6/2017		5.5
6/7/2017		
8/22/2017		6.5
8/23/2017		
5/15/2018		
5/16/2018		6.6
10/15/2018		
10/16/2018		6.2
10/17/2018		
2/20/2019		
2/21/2019		
2/26/2019	7.13	
4/16/2019		
4/17/2019		7.27
9/23/2019		
9/24/2019		5.83
9/25/2019		
3/16/2020		
3/18/2020		
3/24/2020		6.29
3/25/2020	6.23	
5/12/2020		
9/21/2020		
9/22/2020	5.57	6.6
9/23/2020		

Time Series

Constituent: Chloride (mg/L) Analysis Run 12/9/2020 2:21 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-2	GS-AP-MW-21	GS-AP-MW-21V	GS-AP-MW-23H	GS-AP-MW-24H	GS-AP-MW-25HA	GS-AP-MW-26H	GS-AP-MW-28H	GS-AP-MW-29H
8/2/2016	6.15	28.1							
9/19/2016	5.98								
9/21/2016		26.8							
10/24/2016	5.93								
10/25/2016		26							
12/13/2016	5.7								
12/14/2016		25.3							
2/8/2017	8.44	23.8							
3/28/2017		28							
3/30/2017	11								
4/26/2017	10	27							
6/6/2017	9.6	28							
8/21/2017	12								
8/23/2017		29							
5/15/2018		27							
5/16/2018	12								
10/16/2018	20	31							
2/20/2019				2.58					
2/26/2019					3.28				
2/27/2019							2.87		3.09
3/13/2019								8	
4/17/2019	9.5	32.3							
9/23/2019				2.26			2.35		
9/24/2019		36			2.89				3.11
9/25/2019	12							8.93	
3/16/2020								10.6	
3/17/2020				2.62					
3/18/2020		49.5			3.5				
3/23/2020			981						
3/24/2020						38			
3/25/2020	9.7						2.73		3.1
5/12/2020								12.7	
5/13/2020	8.25								
9/17/2020				1.92	3.19	38.3			
9/21/2020							3.25		
9/22/2020	6.33							12.2	13.2
9/23/2020		56.9	1100						

Time Series

Constituent: Chloride (mg/L) Analysis Run 12/9/2020 2:21 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-30HA	GS-AP-MW-31H
8/2/2016		
9/19/2016		
9/21/2016		
10/24/2016		
10/25/2016		
12/13/2016		
12/14/2016		
2/8/2017		
3/28/2017		
3/30/2017		
4/26/2017		
6/6/2017		
8/21/2017		
8/23/2017		
5/15/2018		
5/16/2018		
10/16/2018		
2/20/2019		
2/26/2019		
2/27/2019		
3/13/2019		
4/17/2019		
9/23/2019		
9/24/2019		
9/25/2019		
3/16/2020		
3/17/2020		
3/18/2020	5.14	41.3
3/23/2020		
3/24/2020		
3/25/2020		
5/12/2020		
5/13/2020	4.24	
9/17/2020		
9/21/2020	3.45	
9/22/2020		27.3
9/23/2020		

Time Series

Constituent: Chloride (mg/L) Analysis Run 12/9/2020 2:21 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-32H	GS-AP-MW-33HO	GS-AP-MW-34HO	GS-AP-MW-35HO	GS-AP-MW-36H	GS-AP-MW-38H	GS-AP-MW-41HD	GS-AP-MW-42H	GS-AP-MW-43HO
8/3/2016									
9/20/2016									
10/24/2016									
10/26/2016									
12/12/2016									
2/6/2017									
3/27/2017									
4/24/2017									
6/6/2017									
8/21/2017									
5/14/2018									
10/15/2018									
4/16/2019									
9/23/2019									
3/16/2020			101						
3/17/2020		108		23.9	29.4				
3/18/2020							6.02		
3/24/2020	20.5					12.6		3.35	
3/25/2020									90.6
5/12/2020			148	14.5					
5/13/2020		63.3			27.2				
9/15/2020		75.6							
9/16/2020			210	20.9					
9/17/2020					38.5		6.63		
9/21/2020	28.2								
9/22/2020						24.8		7.07	

Time Series

Constituent: Chloride (mg/L) Analysis Run 12/9/2020 2:21 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-6D	GS-AP-MW-6S
8/3/2016	5.2	21.9
9/20/2016	5.31	20.9
10/24/2016	5.4	
10/26/2016		20.7
12/12/2016	5.46	21.1
2/6/2017	5.28	23.3
3/27/2017	6.4	25
4/24/2017	6.5	24
6/6/2017	4.7	22
8/21/2017	6.1	21
5/14/2018	6	20
10/15/2018	7	20
4/16/2019	8.36	23.1
9/23/2019	8.72	23.4
3/16/2020		
3/17/2020	10.1	17.4
3/18/2020		
3/24/2020		
3/25/2020		
5/12/2020		
5/13/2020		
9/15/2020		
9/16/2020		14.6
9/17/2020	10.5	
9/21/2020		
9/22/2020		

Time Series

Constituent: Chloride (mg/L) Analysis Run 12/9/2020 2:21 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-7	GS-AP-MW-8 (bg)	GS-AP-MW-9V	GS-AP-PZ-16	GS-AP-PZ-18	GS-AP-PZ-22	GS-AP-MW-6V	GS-AP-MW-43H	GS-AP-MW-40H
8/2/2016	3.7								
8/3/2016		3.21							
9/21/2016	3.74	2.95							
10/24/2016	3.75								
10/25/2016		3.03							
12/12/2016	4.06								
12/13/2016		3.21							
2/6/2017	3.92	3							
3/28/2017	4.3	3.3							
4/24/2017	4.6	3.8							
6/7/2017	4.3	3.5							
8/21/2017	4.7	3.6							
5/15/2018	4.3	3.3							
10/15/2018	5.1								
10/16/2018		3.3							
4/16/2019		3.69							
4/23/2019	5.16								
9/24/2019	5.76	3.21							
3/17/2020	6.65								
3/18/2020		4.35							
3/23/2020			5.13						
3/24/2020				5.72		2.53			
3/25/2020					2.88				
8/27/2020									
9/8/2020							50.4		
9/15/2020							49.8		
9/16/2020	6.17								
9/17/2020				6.57		2.46			
9/21/2020		3.22							
9/22/2020			7.57		2.73			78	30.4

Time Series

Constituent: Chloride (mg/L) Analysis Run 12/9/2020 2:21 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-44HO
8/2/2016	
8/3/2016	
9/21/2016	
10/24/2016	
10/25/2016	
12/12/2016	
12/13/2016	
2/6/2017	
3/28/2017	
4/24/2017	
6/7/2017	
8/21/2017	
5/15/2018	
10/15/2018	
10/16/2018	
4/16/2019	
4/23/2019	
9/24/2019	
3/17/2020	
3/18/2020	
3/23/2020	
3/24/2020	
3/25/2020	
8/27/2020	27.1
9/8/2020	
9/15/2020	36.2
9/16/2020	
9/17/2020	
9/21/2020	
9/22/2020	

Time Series

Constituent: Chromium (mg/L) Analysis Run 12/9/2020 2:21 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-12	GS-AP-MW-12V	GS-AP-MW-13 (bg)	GS-AP-MW-15	GS-AP-MW-15V	GS-AP-MW-16D	GS-AP-MW-17	GS-AP-MW-17V ...	GS-AP-MW-18
8/1/2016				0.00209 (J)		<0.01	<0.01		
8/2/2016			<0.01						<0.01
8/3/2016	<0.01								
9/19/2016						<0.01	<0.01		
9/20/2016	<0.01		<0.01	<0.01					
9/21/2016									<0.01
10/24/2016							<0.01		<0.01
10/25/2016	<0.01		<0.01	<0.01		<0.01			
12/12/2016									<0.01
12/13/2016	<0.01		<0.01			<0.01	<0.01		
12/14/2016				<0.01					
2/6/2017							<0.01		
2/7/2017									
2/8/2017	<0.01		<0.01	<0.01		<0.01			<0.01
3/27/2017							<0.01		
3/28/2017				<0.01					<0.01
3/29/2017	<0.01		<0.01			<0.01			
4/24/2017							<0.01		
4/26/2017	<0.01		<0.01	<0.01		<0.01			<0.01
6/5/2017							<0.01		
6/6/2017				<0.01		<0.01			<0.01
6/7/2017	<0.01		<0.01						
2/19/2018							<0.01		
2/20/2018	<0.01		<0.01	<0.01					
2/21/2018						<0.01			<0.01
5/15/2018	<0.01		<0.01	<0.01			<0.01		
5/16/2018						<0.01			<0.01
10/15/2018				<0.01			<0.01		
10/16/2018	<0.01								<0.01
10/17/2018			<0.01			<0.01			
2/20/2019								<0.01	
2/21/2019		<0.01							
2/26/2019									
4/16/2019	<0.01		<0.01						
4/17/2019				<0.01		<0.01	<0.01		<0.01
9/23/2019							<0.01		
9/24/2019				<0.01		<0.01		0.00405 (J)	<0.01
9/25/2019	<0.01	0.00202 (J)							
3/16/2020							<0.01		
3/18/2020	<0.01			<0.01	0.00716 (J)				<0.01
3/24/2020		0.00774 (J)				<0.01			
3/25/2020								<0.01	
5/12/2020							<0.01		
9/21/2020					0.00239 (J)		<0.01		
9/22/2020						<0.01			
9/23/2020	<0.01	0.00362 (J)		<0.01				<0.01	<0.01

Time Series

Constituent: Chromium (mg/L) Analysis Run 12/9/2020 2:21 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-18V	GS-AP-MW-19
8/1/2016		<0.01
8/2/2016		
8/3/2016		
9/19/2016		
9/20/2016		
9/21/2016		<0.01
10/24/2016		<0.01
10/25/2016		
12/12/2016		
12/13/2016		<0.01
12/14/2016		
2/6/2017		
2/7/2017		<0.01
2/8/2017		
3/27/2017		
3/28/2017		<0.01
3/29/2017		
4/24/2017		
4/26/2017		<0.01
6/5/2017		
6/6/2017		<0.01
6/7/2017		
2/19/2018		
2/20/2018		
2/21/2018		<0.01
5/15/2018		
5/16/2018		<0.01
10/15/2018		
10/16/2018		<0.01
10/17/2018		
2/20/2019		
2/21/2019		
2/26/2019	<0.01	
4/16/2019		
4/17/2019		<0.01
9/23/2019		
9/24/2019		<0.01
9/25/2019		
3/16/2020		
3/18/2020		
3/24/2020		<0.01
3/25/2020	<0.01	
5/12/2020		
9/21/2020		
9/22/2020	<0.01	<0.01
9/23/2020		

Time Series

Constituent: Chromium (mg/L) Analysis Run 12/9/2020 2:21 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-2	GS-AP-MW-21	GS-AP-MW-21V	GS-AP-MW-23H	GS-AP-MW-24H	GS-AP-MW-25HA	GS-AP-MW-26H	GS-AP-MW-28H	GS-AP-MW-29H
8/2/2016	<0.01	<0.01							
9/19/2016	<0.01								
9/21/2016		0.00233 (J)							
10/24/2016	<0.01								
10/25/2016		0.00204 (J)							
12/13/2016	<0.01								
12/14/2016		<0.01							
2/8/2017	<0.01	<0.01							
3/28/2017		<0.01							
3/30/2017	<0.01								
4/26/2017	<0.01	<0.01							
6/6/2017	<0.01	<0.01							
2/20/2018		0.00219 (J)							
2/21/2018	<0.01								
5/15/2018		<0.01							
5/16/2018	<0.01								
10/16/2018	<0.01	<0.01							
2/20/2019				<0.01					
2/26/2019					<0.01				
2/27/2019							<0.01		<0.01
3/13/2019								<0.01	
4/17/2019	<0.01	<0.01							
9/23/2019				<0.01			0.00295 (J)		
9/24/2019		<0.01			<0.01				<0.01
9/25/2019	<0.01							<0.01	
3/16/2020								<0.01	
3/17/2020				<0.01					
3/18/2020		<0.01			<0.01				
3/23/2020			<0.01						
3/24/2020						<0.01			
3/25/2020	<0.01						0.00547 (J)		<0.01
5/12/2020								0.00281 (J)	
5/13/2020	<0.01								
9/17/2020				<0.01	<0.01	<0.01			
9/21/2020							0.00804 (J)		
9/22/2020	<0.01							<0.01	<0.01
9/23/2020		<0.01	<0.01						

Time Series

Constituent: Chromium (mg/L) Analysis Run 12/9/2020 2:21 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-30HA	GS-AP-MW-31H
8/2/2016		
9/19/2016		
9/21/2016		
10/24/2016		
10/25/2016		
12/13/2016		
12/14/2016		
2/8/2017		
3/28/2017		
3/30/2017		
4/26/2017		
6/6/2017		
2/20/2018		
2/21/2018		
5/15/2018		
5/16/2018		
10/16/2018		
2/20/2019		
2/26/2019		
2/27/2019		
3/13/2019		
4/17/2019		
9/23/2019		
9/24/2019		
9/25/2019		
3/16/2020		
3/17/2020		
3/18/2020	<0.01	0.00264 (J)
3/23/2020		
3/24/2020		
3/25/2020		
5/12/2020		
5/13/2020	<0.01	
9/17/2020		
9/21/2020	<0.01	
9/22/2020		<0.01
9/23/2020		

Time Series

Constituent: Chromium (mg/L) Analysis Run 12/9/2020 2:21 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-32H	GS-AP-MW-33HO	GS-AP-MW-34HO	GS-AP-MW-35HO	GS-AP-MW-36H	GS-AP-MW-38H	GS-AP-MW-41HD	GS-AP-MW-42H	GS-AP-MW-43HO
8/3/2016									
9/20/2016									
10/24/2016									
10/26/2016									
12/12/2016									
2/6/2017									
3/27/2017									
4/24/2017									
6/6/2017									
2/19/2018									
5/14/2018									
10/15/2018									
4/16/2019									
9/23/2019									
3/16/2020			<0.01						
3/17/2020		<0.01		<0.01	<0.01				
3/18/2020							<0.01		
3/24/2020	<0.01					<0.01		<0.01	
3/25/2020									<0.01
5/12/2020			<0.01	<0.01					
5/13/2020		<0.01			<0.01				
9/15/2020		<0.01							
9/16/2020			<0.01	<0.01					
9/17/2020					<0.01		<0.01		
9/21/2020	<0.01								
9/22/2020						<0.01		<0.01	

Time Series

Constituent: Chromium (mg/L) Analysis Run 12/9/2020 2:21 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-6D	GS-AP-MW-6S
8/3/2016	<0.01	<0.01
9/20/2016	<0.01	<0.01
10/24/2016	<0.01	
10/26/2016		<0.01
12/12/2016	<0.01	<0.01
2/6/2017	<0.01	<0.01
3/27/2017	<0.01	<0.01
4/24/2017	<0.01	<0.01
6/6/2017	<0.01	<0.01
2/19/2018	<0.01	<0.01
5/14/2018	<0.01	<0.01
10/15/2018	<0.01	<0.01
4/16/2019	<0.01	<0.01
9/23/2019	<0.01	<0.01
3/16/2020		
3/17/2020	<0.01	<0.01
3/18/2020		
3/24/2020		
3/25/2020		
5/12/2020		
5/13/2020		
9/15/2020		
9/16/2020		<0.01
9/17/2020	<0.01	
9/21/2020		
9/22/2020		

Time Series

Constituent: Chromium (mg/L) Analysis Run 12/9/2020 2:21 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-7	GS-AP-MW-8 (bg)	GS-AP-MW-9V	GS-AP-PZ-16	GS-AP-PZ-18	GS-AP-PZ-22	GS-AP-MW-6V	GS-AP-MW-43H	GS-AP-MW-40H
8/2/2016	<0.01								
8/3/2016		<0.01							
9/21/2016	<0.01	0.00266 (J)							
10/24/2016	0.00216 (J)								
10/25/2016		<0.01							
12/12/2016	<0.01								
12/13/2016		<0.01							
2/6/2017	<0.01	<0.01							
3/28/2017	<0.01	0.00322 (J)							
4/24/2017	<0.01	<0.01							
6/7/2017	<0.01	0.00227 (J)							
2/19/2018	<0.01	<0.01							
5/15/2018	<0.01	<0.01							
10/15/2018	<0.01								
10/16/2018		<0.01							
4/16/2019		<0.01							
4/23/2019	0.00435 (J)								
9/24/2019	<0.01	<0.01							
3/17/2020	0.0076 (J)								
3/18/2020		<0.01							
3/23/2020			<0.01						
3/24/2020				<0.01		<0.01			
3/25/2020					<0.01				
8/27/2020									
9/8/2020							<0.01		
9/15/2020							<0.01		
9/16/2020	0.00482 (J)								
9/17/2020				<0.01		<0.01			
9/21/2020		<0.01							
9/22/2020			<0.01		<0.01			<0.01	<0.01

Time Series

Constituent: Chromium (mg/L) Analysis Run 12/9/2020 2:21 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-44HO
8/2/2016	
8/3/2016	
9/21/2016	
10/24/2016	
10/25/2016	
12/12/2016	
12/13/2016	
2/6/2017	
3/28/2017	
4/24/2017	
6/7/2017	
2/19/2018	
5/15/2018	
10/15/2018	
10/16/2018	
4/16/2019	
4/23/2019	
9/24/2019	
3/17/2020	
3/18/2020	
3/23/2020	
3/24/2020	
3/25/2020	
8/27/2020	<0.01
9/8/2020	
9/15/2020	<0.01
9/16/2020	
9/17/2020	
9/21/2020	
9/22/2020	

Time Series

Constituent: Cobalt (mg/L) Analysis Run 12/9/2020 2:21 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-12	GS-AP-MW-12V	GS-AP-MW-13 (bg)	GS-AP-MW-15	GS-AP-MW-15V	GS-AP-MW-16D	GS-AP-MW-17	GS-AP-MW-17V ...	GS-AP-MW-18
8/1/2016				<0.005		<0.005	<0.005		
8/2/2016			<0.005						<0.005
8/3/2016	<0.005								
9/19/2016						<0.005	<0.005		
9/20/2016	<0.005		<0.005	<0.005					
9/21/2016									<0.005
10/24/2016							<0.005		<0.005
10/25/2016	<0.005		<0.005	<0.005		<0.005			
12/12/2016									<0.005
12/13/2016	<0.005		<0.005			<0.005	<0.005		
12/14/2016				<0.005					
2/6/2017							<0.005		
2/7/2017									
2/8/2017	<0.005		<0.005	<0.005		<0.005			<0.005
3/27/2017							<0.005		
3/28/2017				<0.005					<0.005
3/29/2017	<0.005		<0.005			<0.005			
4/24/2017							<0.005		
4/26/2017	<0.005		<0.005	<0.005		<0.005			<0.005
6/5/2017							<0.005		
6/6/2017				<0.005		<0.005			<0.005
6/7/2017	<0.005		<0.005						
2/19/2018							<0.005		
2/20/2018	<0.005		<0.005	<0.005					
2/21/2018						<0.005			<0.005
5/15/2018	<0.005		<0.005	<0.005			<0.005		
5/16/2018						<0.005			<0.005
10/15/2018				<0.005			<0.005		
10/16/2018	<0.005								<0.005
10/17/2018			<0.005			<0.005			
2/20/2019								<0.005	
2/21/2019		<0.005							
2/26/2019									
4/16/2019	<0.005		<0.005						
4/17/2019				<0.005		<0.005	<0.005		<0.005
9/23/2019							<0.005		
9/24/2019				<0.005		<0.005		<0.005	<0.005
9/25/2019	<0.005	<0.005							
3/16/2020							<0.005		
3/18/2020	<0.005			<0.005	<0.005				<0.005
3/24/2020		0.00277 (J)				<0.005			
3/25/2020								<0.005	
5/12/2020							<0.005		
9/21/2020					<0.005		<0.005		
9/22/2020						<0.005			
9/23/2020	<0.005	<0.005		<0.005				<0.005	<0.005

Time Series

Constituent: Cobalt (mg/L) Analysis Run 12/9/2020 2:21 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-18V	GS-AP-MW-19
8/1/2016		<0.005
8/2/2016		
8/3/2016		
9/19/2016		
9/20/2016		
9/21/2016		<0.005
10/24/2016		<0.005
10/25/2016		
12/12/2016		
12/13/2016		<0.005
12/14/2016		
2/6/2017		
2/7/2017		<0.005
2/8/2017		
3/27/2017		
3/28/2017		<0.005
3/29/2017		
4/24/2017		
4/26/2017		<0.005
6/5/2017		
6/6/2017		<0.005
6/7/2017		
2/19/2018		
2/20/2018		
2/21/2018		<0.005
5/15/2018		
5/16/2018		<0.005
10/15/2018		
10/16/2018		<0.005
10/17/2018		
2/20/2019		
2/21/2019		
2/26/2019	<0.005	
4/16/2019		
4/17/2019		<0.005
9/23/2019		
9/24/2019		<0.005
9/25/2019		
3/16/2020		
3/18/2020		
3/24/2020		<0.005
3/25/2020	<0.005	
5/12/2020		
9/21/2020		
9/22/2020	<0.005	<0.005
9/23/2020		

Time Series

Constituent: Cobalt (mg/L) Analysis Run 12/9/2020 2:21 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-2	GS-AP-MW-21	GS-AP-MW-21V	GS-AP-MW-23H	GS-AP-MW-24H	GS-AP-MW-25HA	GS-AP-MW-26H	GS-AP-MW-28H	GS-AP-MW-29H
8/2/2016	<0.005	<0.005							
9/19/2016	<0.005								
9/21/2016		<0.005							
10/24/2016	<0.005								
10/25/2016		<0.005							
12/13/2016	<0.005								
12/14/2016		<0.005							
2/8/2017	<0.005	<0.005							
3/28/2017		<0.005							
3/30/2017	<0.005								
4/26/2017	<0.005	<0.005							
6/6/2017	<0.005	<0.005							
2/20/2018		<0.005							
2/21/2018	<0.005								
5/15/2018		<0.005							
5/16/2018	<0.005								
10/16/2018	<0.005	<0.005							
2/20/2019				<0.005					
2/26/2019					<0.005				
2/27/2019							<0.005		<0.005
3/13/2019								<0.005	
4/17/2019	<0.005	<0.005							
9/23/2019				<0.005			<0.005		
9/24/2019		<0.005			<0.005				<0.005
9/25/2019	<0.005							<0.005	
3/16/2020								<0.005	
3/17/2020				<0.005					
3/18/2020		<0.005			<0.005				
3/23/2020			<0.005						
3/24/2020						<0.005			
3/25/2020	<0.005						0.00207 (J)		<0.005
5/12/2020								<0.005	
5/13/2020	<0.005								
9/17/2020				<0.005	<0.005	<0.005			
9/21/2020							0.00357 (J)		
9/22/2020	<0.005							<0.005	<0.005
9/23/2020		<0.005	<0.005						

Time Series

Constituent: Cobalt (mg/L) Analysis Run 12/9/2020 2:21 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-30HA	GS-AP-MW-31H
8/2/2016		
9/19/2016		
9/21/2016		
10/24/2016		
10/25/2016		
12/13/2016		
12/14/2016		
2/8/2017		
3/28/2017		
3/30/2017		
4/26/2017		
6/6/2017		
2/20/2018		
2/21/2018		
5/15/2018		
5/16/2018		
10/16/2018		
2/20/2019		
2/26/2019		
2/27/2019		
3/13/2019		
4/17/2019		
9/23/2019		
9/24/2019		
9/25/2019		
3/16/2020		
3/17/2020		
3/18/2020	<0.005	<0.005
3/23/2020		
3/24/2020		
3/25/2020		
5/12/2020		
5/13/2020	<0.005	
9/17/2020		
9/21/2020	<0.005	
9/22/2020		<0.005
9/23/2020		

Time Series

Constituent: Cobalt (mg/L) Analysis Run 12/9/2020 2:21 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-32H	GS-AP-MW-33HO	GS-AP-MW-34HO	GS-AP-MW-35HO	GS-AP-MW-36H	GS-AP-MW-38H	GS-AP-MW-41HD	GS-AP-MW-42H	GS-AP-MW-43HO
8/3/2016									
9/20/2016									
10/24/2016									
10/26/2016									
12/12/2016									
2/6/2017									
3/27/2017									
4/24/2017									
6/6/2017									
2/19/2018									
5/14/2018									
10/15/2018									
4/16/2019									
9/23/2019									
3/16/2020			<0.005						
3/17/2020		<0.005		<0.005	<0.005				
3/18/2020							<0.005		
3/24/2020	<0.005					<0.005		0.00218 (J)	
3/25/2020									<0.005
5/12/2020			<0.005	<0.005					
5/13/2020		<0.005			<0.005				
9/15/2020		<0.005							
9/16/2020			<0.005	<0.005					
9/17/2020					<0.005		<0.005		
9/21/2020	<0.005								
9/22/2020						<0.005		<0.005	

Time Series

Constituent: Cobalt (mg/L) Analysis Run 12/9/2020 2:21 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-6D	GS-AP-MW-6S
8/3/2016	<0.005	<0.005
9/20/2016	<0.005	<0.005
10/24/2016	<0.005	
10/26/2016		<0.005
12/12/2016	<0.005	0.00212 (J)
2/6/2017	<0.005	0.00247 (J)
3/27/2017	<0.005	0.00224 (J)
4/24/2017	<0.005	<0.005
6/6/2017	<0.005	0.00222 (J)
2/19/2018	<0.005	<0.005
5/14/2018	<0.005	<0.005
10/15/2018	<0.005	<0.005
4/16/2019	<0.005	<0.005
9/23/2019	<0.005	<0.005
3/16/2020		
3/17/2020	<0.005	<0.005
3/18/2020		
3/24/2020		
3/25/2020		
5/12/2020		
5/13/2020		
9/15/2020		
9/16/2020		<0.005
9/17/2020	<0.005	
9/21/2020		
9/22/2020		

Time Series

Constituent: Cobalt (mg/L) Analysis Run 12/9/2020 2:21 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-7	GS-AP-MW-8 (bg)	GS-AP-MW-9V	GS-AP-PZ-16	GS-AP-PZ-18	GS-AP-PZ-22	GS-AP-MW-6V	GS-AP-MW-43H	GS-AP-MW-40H
8/2/2016	<0.005								
8/3/2016		0.0026 (J)							
9/21/2016	<0.005	0.00362 (J)							
10/24/2016	<0.005								
10/25/2016		0.00305 (J)							
12/12/2016	<0.005								
12/13/2016		<0.005							
2/6/2017	<0.005	0.00308 (J)							
3/28/2017	<0.005	<0.005							
4/24/2017	<0.005	<0.005							
6/7/2017	<0.005	<0.005							
2/19/2018	<0.005	<0.005							
5/15/2018	<0.005	<0.005							
10/15/2018	<0.005								
10/16/2018		<0.005							
4/16/2019		<0.005							
4/23/2019	0.00231 (J)								
9/24/2019	<0.005	0.00234 (J)							
3/17/2020	0.00476 (J)								
3/18/2020		<0.005							
3/23/2020			<0.005						
3/24/2020				<0.005		<0.005			
3/25/2020					0.00409 (J)				
8/27/2020									
9/8/2020							<0.005		
9/15/2020							<0.005		
9/16/2020	0.00301 (J)								
9/17/2020				<0.005		<0.005			
9/21/2020		<0.005							
9/22/2020			<0.005		0.00226 (J)			<0.005	0.0027 (J)

Time Series

Constituent: Cobalt (mg/L) Analysis Run 12/9/2020 2:21 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-44HO
8/2/2016	
8/3/2016	
9/21/2016	
10/24/2016	
10/25/2016	
12/12/2016	
12/13/2016	
2/6/2017	
3/28/2017	
4/24/2017	
6/7/2017	
2/19/2018	
5/15/2018	
10/15/2018	
10/16/2018	
4/16/2019	
4/23/2019	
9/24/2019	
3/17/2020	
3/18/2020	
3/23/2020	
3/24/2020	
3/25/2020	
8/27/2020	<0.005
9/8/2020	
9/15/2020	<0.005
9/16/2020	
9/17/2020	
9/21/2020	
9/22/2020	

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 12/9/2020 2:21 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-12	GS-AP-MW-12V	GS-AP-MW-13 (bg)	GS-AP-MW-15	GS-AP-MW-15V	GS-AP-MW-16D	GS-AP-MW-17	GS-AP-MW-17V ...	GS-AP-MW-18
8/1/2016				0.682		0.363 (U)	0.508 (U)		
8/2/2016			0.0177 (U)						0.665
8/3/2016	1.08								
9/19/2016						0.435 (U)	0.216 (U)		
9/20/2016	0.848		0.725	1.2					
9/21/2016									0.801
10/24/2016							0.694		0.809
10/25/2016	0.92		0.494 (U)	0.194 (U)		0.725			
12/12/2016									0.628 (U)
12/13/2016	0.974		0.39 (U)			0.309 (U)	0.614		
12/14/2016				0.688					
2/6/2017							-0.0283 (U)		
2/7/2017									
2/8/2017	0.535		0.455 (U)	0.254 (U)		0.00772 (U)			-0.0851 (U)
3/27/2017							0.0736 (U)		
3/28/2017				-0.0411 (U)					0.0973 (U)
3/29/2017	0.194 (U)		0.251 (U)			0.36 (U)			
4/24/2017							0.114 (U)		
4/26/2017	0.384 (U)		0.0762 (U)	0.207 (U)		0.0175 (U)			0.388 (U)
6/5/2017							0.476		
6/6/2017				0.0618 (U)		0.464			0.0674 (U)
6/7/2017	0.729		0.32 (U)						
2/19/2018							0.322 (U)		
2/20/2018	0.242 (U)		0.465	0.0898 (U)					
2/21/2018						0.44			0.418 (U)
5/15/2018	0.433 (U)		0.0571 (U)	0.829			0.526		
5/16/2018						0.209 (U)			1.04
10/15/2018				0.708			0.199 (U)		
10/16/2018	0.421 (U)								0.779
10/17/2018			0.482			0.368 (U)			
2/20/2019								0.398 (U)	
2/21/2019		0.296 (U)							
2/26/2019									
4/16/2019	0.184 (U)		0.506 (U)						
4/17/2019				-0.11 (U)		0.121 (U)	0.00935 (U)		0.196 (U)
9/23/2019							0.983		
9/24/2019				0.951		-0.033 (U)		0.373 (U)	0.375 (U)
9/25/2019	0.442 (U)	1.03							
3/16/2020							0.185 (U)		
3/18/2020	0.605			0.939	0.566 (U)				0.281 (U)
3/24/2020		0.877 (U)				0.636			
3/25/2020								0.0656 (U)	
5/12/2020							0.0339 (U)		
9/21/2020					0.494 (U)		0.651 (U)		
9/22/2020						0.59 (U)			
9/23/2020	0.811 (U)	1.38		0.547 (U)				0.542 (U)	0.888

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 12/9/2020 2:21 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-18V	GS-AP-MW-19
8/1/2016		0.697 (U)
8/2/2016		
8/3/2016		
9/19/2016		
9/20/2016		
9/21/2016		1.79
10/24/2016		1.53
10/25/2016		
12/12/2016		
12/13/2016		0.758
12/14/2016		
2/6/2017		
2/7/2017		0.473
2/8/2017		
3/27/2017		
3/28/2017		0.0705 (U)
3/29/2017		
4/24/2017		
4/26/2017		0.238 (U)
6/5/2017		
6/6/2017		0.909
6/7/2017		
2/19/2018		
2/20/2018		
2/21/2018		0.349 (U)
5/15/2018		
5/16/2018		1.12
10/15/2018		
10/16/2018		0.856
10/17/2018		
2/20/2019		
2/21/2019		
2/26/2019	0.278 (U)	
4/16/2019		
4/17/2019		0.507 (U)
9/23/2019		
9/24/2019		0.664
9/25/2019		
3/16/2020		
3/18/2020		
3/24/2020		1.07
3/25/2020	-0.00344 (U)	
5/12/2020		
9/21/2020		
9/22/2020	1.02	2.09
9/23/2020		

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 12/9/2020 2:21 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-2	GS-AP-MW-21	GS-AP-MW-21V	GS-AP-MW-23H	GS-AP-MW-24H	GS-AP-MW-25HA	GS-AP-MW-26H	GS-AP-MW-28H	GS-AP-MW-29H
8/2/2016	0.274 (U)	0.665							
9/19/2016	0.0478 (U)								
9/21/2016		0.532 (U)							
10/24/2016	1.41								
10/25/2016		0.601							
12/13/2016	0.733								
12/14/2016		1.02							
2/8/2017	0.0206 (U)	-0.074 (U)							
3/28/2017		0.3 (U)							
3/30/2017	0.122 (U)								
4/26/2017	0.397 (U)	0.982 (U)							
6/6/2017	0.0873 (U)	0.312 (U)							
2/20/2018		0.321 (U)							
2/21/2018	0.562								
5/15/2018		1.7							
5/16/2018	1.44								
10/16/2018	0.736	0.586							
2/20/2019				0.0759 (U)					
2/26/2019					0.9				
2/27/2019							0.492		0.556
3/13/2019								0.824	
4/17/2019	0.0905 (U)	0.47 (U)							
9/23/2019				0.00709 (U)			0.404 (U)		
9/24/2019		1.08			1.23				1.09
9/25/2019	0.537 (U)							0.648 (U)	
3/16/2020								0.762 (U)	
3/17/2020				0.989					
3/18/2020		0.732			0.788				
3/23/2020			0.982						
3/24/2020						-0.00194 (U)			
3/25/2020	4						0.707 (U)		0.036 (U)
5/12/2020								0.425 (U)	
5/13/2020	0.289 (U)								
9/17/2020				0.66 (U)	0.298 (U)	-0.369 (U)			
9/21/2020							2.05		
9/22/2020	0.712							1.02	0.591 (U)
9/23/2020		0.468 (U)	0.563 (U)						

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 12/9/2020 2:21 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-30HA	GS-AP-MW-31H
8/2/2016		
9/19/2016		
9/21/2016		
10/24/2016		
10/25/2016		
12/13/2016		
12/14/2016		
2/8/2017		
3/28/2017		
3/30/2017		
4/26/2017		
6/6/2017		
2/20/2018		
2/21/2018		
5/15/2018		
5/16/2018		
10/16/2018		
2/20/2019		
2/26/2019		
2/27/2019		
3/13/2019		
4/17/2019		
9/23/2019		
9/24/2019		
9/25/2019		
3/16/2020		
3/17/2020		
3/18/2020	2.26	0.0549 (U)
3/23/2020		
3/24/2020		
3/25/2020		
5/12/2020		
5/13/2020	0.604	
9/17/2020		
9/21/2020	1.1	
9/22/2020		0.912
9/23/2020		

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 12/9/2020 2:21 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-32H	GS-AP-MW-33HO	GS-AP-MW-34HO	GS-AP-MW-35HO	GS-AP-MW-36H	GS-AP-MW-38H	GS-AP-MW-41HD	GS-AP-MW-42H	GS-AP-MW-43HO
8/3/2016									
9/20/2016									
10/24/2016									
10/26/2016									
12/12/2016									
2/6/2017									
3/27/2017									
4/24/2017									
6/6/2017									
2/19/2018									
5/14/2018									
10/15/2018									
4/16/2019									
9/23/2019									
3/16/2020			-0.085 (U)						
3/17/2020		2.14		7.32	4.33				
3/18/2020							0.64		
3/24/2020	0.313 (U)					0.862		0.0821 (U)	
3/25/2020									0.678 (U)
5/12/2020			0.345 (U)	1.02					
5/13/2020		0.415 (U)			-0.225 (U)				
9/15/2020		-0.106 (U)							
9/16/2020			0.286 (U)	0.435 (U)					
9/17/2020					-0.125 (U)		0.14 (U)		
9/21/2020	0.484 (U)								
9/22/2020						1.1		0.36 (U)	

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 12/9/2020 2:21 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-6D	GS-AP-MW-6S
8/3/2016	0.42 (U)	1.38
9/20/2016	1.13	1.3
10/24/2016	0.327 (U)	
10/26/2016		0.721 (U)
12/12/2016	1.26	1.36
2/6/2017	0.532	0.702
3/27/2017	0.334 (U)	0.325 (U)
4/24/2017	0.492	0.436 (U)
6/6/2017	0.156 (U)	0.592
2/19/2018	0.283 (U)	0.776
5/14/2018	0.083 (U)	-0.169 (U)
10/15/2018	0.656	0.792
4/16/2019	0.528	1.11
9/23/2019	0.677	1.06
3/16/2020		
3/17/2020	0.629	0.351 (U)
3/18/2020		
3/24/2020		
3/25/2020		
5/12/2020		
5/13/2020		
9/15/2020		
9/16/2020		1.05
9/17/2020	0.32 (U)	
9/21/2020		
9/22/2020		

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 12/9/2020 2:21 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-7	GS-AP-MW-8 (bg)	GS-AP-MW-9V	GS-AP-PZ-16	GS-AP-PZ-18	GS-AP-PZ-22	GS-AP-MW-6V	GS-AP-MW-43H	GS-AP-MW-40H
8/2/2016	0.87								
8/3/2016		0.299 (U)							
9/21/2016	0.107 (U)	0.835							
10/24/2016	0.337 (U)								
10/25/2016		0.0629 (U)							
12/12/2016	0.803								
12/13/2016		0.547							
2/6/2017	-0.0165 (U)	0.251 (U)							
3/28/2017	0.00697 (U)	-0.109 (U)							
4/24/2017	0.672	0.293 (U)							
6/7/2017	0.096 (U)	0.529							
2/19/2018	0.207 (U)	0.497							
5/15/2018	0.0311 (U)	-0.601 (U)							
10/15/2018	0.309 (U)								
10/16/2018		0.2 (U)							
4/16/2019		0.733							
4/23/2019	0.894								
9/24/2019	0.618 (U)	0.753							
3/17/2020	1.2								
3/18/2020		0.465 (U)							
3/23/2020			0.156 (U)						
3/24/2020				0.847		0.878			
3/25/2020					0.13 (U)				
8/27/2020									
9/8/2020							-0.0377 (U)		
9/15/2020							1.25		
9/16/2020	1.74								
9/17/2020				0.438 (U)		0.896			
9/21/2020		1.25							
9/22/2020			0.536 (U)		0.96			0.0466 (U)	1.91

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 12/9/2020 2:21 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-44HO
8/2/2016	
8/3/2016	
9/21/2016	
10/24/2016	
10/25/2016	
12/12/2016	
12/13/2016	
2/6/2017	
3/28/2017	
4/24/2017	
6/7/2017	
2/19/2018	
5/15/2018	
10/15/2018	
10/16/2018	
4/16/2019	
4/23/2019	
9/24/2019	
3/17/2020	
3/18/2020	
3/23/2020	
3/24/2020	
3/25/2020	
8/27/2020	0.798
9/8/2020	
9/15/2020	0.311 (U)
9/16/2020	
9/17/2020	
9/21/2020	
9/22/2020	

Time Series

Constituent: Fluoride (mg/L) Analysis Run 12/9/2020 2:21 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-12	GS-AP-MW-12V	GS-AP-MW-13 (bg)	GS-AP-MW-15	GS-AP-MW-15V	GS-AP-MW-16D	GS-AP-MW-17	GS-AP-MW-17V ...	GS-AP-MW-18
8/1/2016				1.16		0.117 (J)	0.214 (J)		
8/2/2016			0.161 (J)						0.219 (J)
8/3/2016	0.656								
9/19/2016						0.078 (J)	0.151 (J)		
9/20/2016	0.691		0.122 (J)	0.7					
9/21/2016									0.213 (J)
10/24/2016							0.086 (J)		0.141 (J)
10/25/2016	0.588		0.058 (J)	0.544		0.018 (J)			
12/12/2016									0.206 (J)
12/13/2016	0.545		0.072 (J)			0.035 (J)	0.14 (J)		
12/14/2016				0.51					
2/6/2017							0.2		
2/7/2017									
2/8/2017	0.79		0.16	0.56		0.1			0.34
3/27/2017							0.21		
3/28/2017				0.59					0.36
3/29/2017	0.51		0.14			0.08 (J)			
4/24/2017							0.2		
4/26/2017	0.49		0.16	0.72		0.11			0.31
6/5/2017							0.2		
6/6/2017				0.65		0.11			0.29
6/7/2017	0.43		0.15						
8/22/2017	0.41		0.18	0.9		0.11	0.24		
8/23/2017									0.34
2/19/2018							0.34		
2/20/2018	0.27		0.17	0.6					
2/21/2018						0.11			0.46
5/15/2018	0.23		0.17	0.57			0.27		
5/16/2018						0.12			0.43
10/15/2018				0.77			0.23		
10/16/2018	0.23								0.64
10/17/2018			0.19			0.13			
2/20/2019								0.239	
2/21/2019		0.205							
2/26/2019									
4/16/2019	0.188		0.197						
4/17/2019				0.463		0.171	0.354		0.632
9/23/2019							0.351		
9/24/2019				0.628		0.124		0.245	0.578
9/25/2019	0.168	0.185							
3/16/2020							0.261		
3/18/2020	0.122			0.647	0.243				0.437
3/24/2020		0.155				0.109			
3/25/2020								0.243	
5/12/2020							0.263		
9/21/2020					0.372		0.371		
9/22/2020						0.123			
9/23/2020	0.12	0.176		0.452				0.278	0.575

Time Series

Constituent: Fluoride (mg/L) Analysis Run 12/9/2020 2:21 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-18V	GS-AP-MW-19
8/1/2016		0.385
8/2/2016		
8/3/2016		
9/19/2016		
9/20/2016		
9/21/2016		0.303
10/24/2016		0.24 (J)
10/25/2016		
12/12/2016		
12/13/2016		0.188 (J)
12/14/2016		
2/6/2017		
2/7/2017		0.38
2/8/2017		
3/27/2017		
3/28/2017		0.32
3/29/2017		
4/24/2017		
4/26/2017		0.31
6/5/2017		
6/6/2017		0.31
6/7/2017		
8/22/2017		0.35
8/23/2017		
2/19/2018		
2/20/2018		
2/21/2018		0.39
5/15/2018		
5/16/2018		0.36
10/15/2018		
10/16/2018		0.37
10/17/2018		
2/20/2019		
2/21/2019		
2/26/2019	0.165	
4/16/2019		
4/17/2019		0.27
9/23/2019		
9/24/2019		0.307
9/25/2019		
3/16/2020		
3/18/2020		
3/24/2020		0.327
3/25/2020	0.353	
5/12/2020		
9/21/2020		
9/22/2020	0.368	0.339
9/23/2020		

Time Series

Constituent: Fluoride (mg/L) Analysis Run 12/9/2020 2:21 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-2	GS-AP-MW-21	GS-AP-MW-21V	GS-AP-MW-23H	GS-AP-MW-24H	GS-AP-MW-25HA	GS-AP-MW-26H	GS-AP-MW-28H	GS-AP-MW-29H
8/2/2016	1.76	0.282 (J)							
9/19/2016	1.55								
9/21/2016		0.231 (J)							
10/24/2016	1.29								
10/25/2016		0.137 (J)							
12/13/2016	1.19								
12/14/2016		0.131 (J)							
2/8/2017	1.6	0.25							
3/28/2017		0.27							
3/30/2017	1.5								
4/26/2017	1.4	0.24							
6/6/2017	1.3	0.25							
8/21/2017	1.4								
8/23/2017		0.3							
2/20/2018		0.23							
2/21/2018	1.1								
5/15/2018		0.24							
5/16/2018	1.1								
10/16/2018	1	0.25							
2/20/2019				0.188					
2/26/2019					0.19				
2/27/2019							0.14		0.218
3/13/2019								0.187	
4/17/2019	0.868	0.272							
9/23/2019				0.144			0.146		
9/24/2019		0.209			0.201				0.183
9/25/2019	0.86							0.172	
3/16/2020								0.183	
3/17/2020				0.241					
3/18/2020		0.234			0.206				
3/23/2020			0.494						
3/24/2020						1.77			
3/25/2020	0.855						0.131		0.194
5/12/2020								0.195	
5/13/2020	0.777								
9/17/2020				0.117	0.217	1.93			
9/21/2020							0.151		
9/22/2020	0.921							0.181	0.198
9/23/2020		0.208	0.641						

Time Series

Constituent: Fluoride (mg/L) Analysis Run 12/9/2020 2:21 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-30HA	GS-AP-MW-31H
8/2/2016		
9/19/2016		
9/21/2016		
10/24/2016		
10/25/2016		
12/13/2016		
12/14/2016		
2/8/2017		
3/28/2017		
3/30/2017		
4/26/2017		
6/6/2017		
8/21/2017		
8/23/2017		
2/20/2018		
2/21/2018		
5/15/2018		
5/16/2018		
10/16/2018		
2/20/2019		
2/26/2019		
2/27/2019		
3/13/2019		
4/17/2019		
9/23/2019		
9/24/2019		
9/25/2019		
3/16/2020		
3/17/2020		
3/18/2020	0.634	0.15
3/23/2020		
3/24/2020		
3/25/2020		
5/12/2020		
5/13/2020	0.833	
9/17/2020		
9/21/2020	0.872	
9/22/2020		0.148
9/23/2020		

Time Series

Constituent: Fluoride (mg/L) Analysis Run 12/9/2020 2:21 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-32H	GS-AP-MW-33HO	GS-AP-MW-34HO	GS-AP-MW-35HO	GS-AP-MW-36H	GS-AP-MW-38H	GS-AP-MW-41HD	GS-AP-MW-42H	GS-AP-MW-43HO
8/3/2016									
9/20/2016									
10/24/2016									
10/26/2016									
12/12/2016									
2/6/2017									
3/27/2017									
4/24/2017									
6/6/2017									
8/21/2017									
2/19/2018									
5/14/2018									
10/15/2018									
4/16/2019									
9/23/2019									
3/16/2020			0.338						
3/17/2020		0.202		0.166	0.214				
3/18/2020							0.165		
3/24/2020	0.18					0.291		0.13	
3/25/2020									0.204
5/12/2020			0.37	0.167					
5/13/2020		0.191			0.224				
9/15/2020		0.188							
9/16/2020			0.364	0.162					
9/17/2020					0.209		0.16		
9/21/2020	0.202								
9/22/2020						0.28		0.121	

Time Series

Constituent: Fluoride (mg/L) Analysis Run 12/9/2020 2:21 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-6D	GS-AP-MW-6S
8/3/2016	0.127 (J)	0.099 (J)
9/20/2016	0.087 (J)	0.074 (J)
10/24/2016	0.019 (J)	
10/26/2016		0.032 (J)
12/12/2016	0.043 (J)	0.034 (J)
2/6/2017	0.11	0.06 (J)
3/27/2017	0.12	0.07 (J)
4/24/2017	0.11	0.08 (J)
6/6/2017	0.12	0.09 (J)
8/21/2017	0.15	0.1
2/19/2018	0.13	0.1
5/14/2018	0.13	0.13
10/15/2018	0.16	0.14
4/16/2019	0.156	0.147
9/23/2019	0.132	0.142
3/16/2020		
3/17/2020	0.132	0.231
3/18/2020		
3/24/2020		
3/25/2020		
5/12/2020		
5/13/2020		
9/15/2020		
9/16/2020		0.308
9/17/2020	0.133	
9/21/2020		
9/22/2020		

Time Series

Constituent: Fluoride (mg/L) Analysis Run 12/9/2020 2:21 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-7	GS-AP-MW-8 (bg)	GS-AP-MW-9V	GS-AP-PZ-16	GS-AP-PZ-18	GS-AP-PZ-22	GS-AP-MW-6V	GS-AP-MW-43H	GS-AP-MW-40H
8/2/2016	0.098 (J)								
8/3/2016		0.125 (J)							
9/21/2016	0.061 (J)	0.098 (J)							
10/24/2016	<0.3								
10/25/2016		0.025 (J)							
12/12/2016	0.01 (J)								
12/13/2016		0.045 (J)							
2/6/2017	0.07 (J)	0.1							
3/28/2017	0.07 (J)	0.08 (J)							
4/24/2017	0.08 (J)	0.09 (J)							
6/7/2017	0.09 (J)	0.08 (J)							
8/21/2017	0.09 (J)	0.08 (J)							
2/19/2018	0.09 (J)	0.08 (J)							
5/15/2018	0.09 (J)	0.1							
10/15/2018	0.11								
10/16/2018		0.09 (J)							
4/16/2019		0.143							
4/23/2019	0.111								
9/24/2019	0.106	0.128							
3/17/2020	0.107								
3/18/2020		0.108							
3/23/2020			0.187						
3/24/2020				0.228		0.387			
3/25/2020					0.396				
8/27/2020									
9/8/2020							4.46		
9/15/2020							4.59		
9/16/2020	0.126								
9/17/2020				0.237		0.402			
9/21/2020		0.125							
9/22/2020			0.174		0.392			0.216	0.114

Time Series

Constituent: Fluoride (mg/L) Analysis Run 12/9/2020 2:21 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-44HO
8/2/2016	
8/3/2016	
9/21/2016	
10/24/2016	
10/25/2016	
12/12/2016	
12/13/2016	
2/6/2017	
3/28/2017	
4/24/2017	
6/7/2017	
8/21/2017	
2/19/2018	
5/15/2018	
10/15/2018	
10/16/2018	
4/16/2019	
4/23/2019	
9/24/2019	
3/17/2020	
3/18/2020	
3/23/2020	
3/24/2020	
3/25/2020	
8/27/2020	0.174
9/8/2020	
9/15/2020	0.221
9/16/2020	
9/17/2020	
9/21/2020	
9/22/2020	

Time Series

Constituent: Lead (mg/L) Analysis Run 12/9/2020 2:21 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-12	GS-AP-MW-12V	GS-AP-MW-13 (bg)	GS-AP-MW-15	GS-AP-MW-15V	GS-AP-MW-16D	GS-AP-MW-17	GS-AP-MW-17V ...	GS-AP-MW-18
8/1/2016				<0.005		<0.005	<0.005		
8/2/2016			<0.005						<0.005
8/3/2016	<0.005								
9/19/2016						<0.005	<0.005		
9/20/2016	<0.005		<0.005	<0.005					
9/21/2016									<0.005
10/24/2016							<0.005		<0.005
10/25/2016	<0.005		<0.005	<0.005		<0.005			
12/12/2016									<0.005
12/13/2016	<0.005		<0.005			<0.005	<0.005		
12/14/2016				<0.005					
2/6/2017							<0.005		
2/7/2017									
2/8/2017	<0.005		<0.005	<0.005		<0.005			<0.005
3/27/2017							<0.005		
3/28/2017				<0.005					<0.005
3/29/2017	<0.005		<0.005			<0.005			
4/24/2017							<0.005		
4/26/2017	<0.005		<0.005	<0.005		<0.005			<0.005
6/5/2017							<0.005		
6/6/2017				<0.005		<0.005			<0.005
6/7/2017	<0.005		<0.005						
2/19/2018							<0.005		
2/20/2018	<0.005		<0.005	<0.005					
2/21/2018						<0.005			<0.005
5/15/2018	<0.005		<0.005	<0.005			<0.005		
5/16/2018						<0.005			<0.005
10/15/2018				<0.005			<0.005		
10/16/2018	<0.005								<0.005
10/17/2018			<0.005			<0.005			
2/20/2019								0.00189 (J)	
2/21/2019		<0.005							
2/26/2019									
4/16/2019	<0.005		<0.005						
4/17/2019				<0.005		<0.005	<0.005		<0.005
9/23/2019							<0.005		
9/24/2019				<0.005		<0.005		<0.005	<0.005
9/25/2019	<0.005	<0.005							
3/16/2020							<0.005		
3/18/2020	<0.005			<0.005	<0.005				<0.005
3/24/2020		0.00279 (J)				<0.005			
3/25/2020								<0.005	
5/12/2020							<0.005		
9/21/2020					<0.005		<0.005		
9/22/2020						<0.005			
9/23/2020	<0.005	0.0014 (J)		<0.005				<0.005	<0.005

Time Series

Constituent: Lead (mg/L) Analysis Run 12/9/2020 2:21 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-18V	GS-AP-MW-19
8/1/2016		<0.005
8/2/2016		
8/3/2016		
9/19/2016		
9/20/2016		
9/21/2016		<0.005
10/24/2016		<0.005
10/25/2016		
12/12/2016		
12/13/2016		<0.005
12/14/2016		
2/6/2017		
2/7/2017		<0.005
2/8/2017		
3/27/2017		
3/28/2017		<0.005
3/29/2017		
4/24/2017		
4/26/2017		<0.005
6/5/2017		
6/6/2017		<0.005
6/7/2017		
2/19/2018		
2/20/2018		
2/21/2018		<0.005
5/15/2018		
5/16/2018		<0.005
10/15/2018		
10/16/2018		<0.005
10/17/2018		
2/20/2019		
2/21/2019		
2/26/2019	<0.005	
4/16/2019		
4/17/2019		<0.005
9/23/2019		
9/24/2019		<0.005
9/25/2019		
3/16/2020		
3/18/2020		
3/24/2020		<0.005
3/25/2020	<0.005	
5/12/2020		
9/21/2020		
9/22/2020	<0.005	<0.005
9/23/2020		

Time Series

Constituent: Lead (mg/L) Analysis Run 12/9/2020 2:21 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-2	GS-AP-MW-21	GS-AP-MW-21V	GS-AP-MW-23H	GS-AP-MW-24H	GS-AP-MW-25HA	GS-AP-MW-26H	GS-AP-MW-28H	GS-AP-MW-29H
8/2/2016	<0.005	<0.005							
9/19/2016	<0.005								
9/21/2016		<0.005							
10/24/2016	<0.005								
10/25/2016		<0.005							
12/13/2016	<0.005								
12/14/2016		<0.005							
2/8/2017	<0.005	<0.005							
3/28/2017		<0.005							
3/30/2017	<0.005								
4/26/2017	<0.005	<0.005							
6/6/2017	<0.005	<0.005							
2/20/2018		<0.005							
2/21/2018	<0.005								
5/15/2018		<0.005							
5/16/2018	<0.005								
10/16/2018	<0.005	<0.005							
2/20/2019				<0.005					
2/26/2019					<0.005				
2/27/2019							<0.005		<0.005
3/13/2019								0.00208 (J)	
4/17/2019	<0.005	<0.005							
9/23/2019				<0.005			0.00109 (J)		
9/24/2019		<0.005			<0.005				<0.005
9/25/2019	<0.005							<0.005	
3/16/2020								<0.005	
3/17/2020				<0.005					
3/18/2020		<0.005			<0.005				
3/23/2020			<0.005						
3/24/2020						<0.005			
3/25/2020	<0.005						0.0019 (J)		<0.005
5/12/2020								<0.005	
5/13/2020	<0.005								
9/17/2020				<0.005	<0.005	<0.005			
9/21/2020							0.00309 (J)		
9/22/2020	<0.005							<0.005	<0.005
9/23/2020		<0.005	<0.005						

Time Series

Constituent: Lead (mg/L) Analysis Run 12/9/2020 2:21 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-30HA	GS-AP-MW-31H
8/2/2016		
9/19/2016		
9/21/2016		
10/24/2016		
10/25/2016		
12/13/2016		
12/14/2016		
2/8/2017		
3/28/2017		
3/30/2017		
4/26/2017		
6/6/2017		
2/20/2018		
2/21/2018		
5/15/2018		
5/16/2018		
10/16/2018		
2/20/2019		
2/26/2019		
2/27/2019		
3/13/2019		
4/17/2019		
9/23/2019		
9/24/2019		
9/25/2019		
3/16/2020		
3/17/2020		
3/18/2020	<0.005	<0.005
3/23/2020		
3/24/2020		
3/25/2020		
5/12/2020		
5/13/2020	<0.005	
9/17/2020		
9/21/2020	<0.005	
9/22/2020		<0.005
9/23/2020		

Time Series

Constituent: Lead (mg/L) Analysis Run 12/9/2020 2:21 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-32H	GS-AP-MW-33HO	GS-AP-MW-34HO	GS-AP-MW-35HO	GS-AP-MW-36H	GS-AP-MW-38H	GS-AP-MW-41HD	GS-AP-MW-42H	GS-AP-MW-43HO
8/3/2016									
9/20/2016									
10/24/2016									
10/26/2016									
12/12/2016									
2/6/2017									
3/27/2017									
4/24/2017									
6/6/2017									
2/19/2018									
5/14/2018									
10/15/2018									
4/16/2019									
9/23/2019									
3/16/2020			<0.005						
3/17/2020		<0.005		<0.005	<0.005				
3/18/2020							<0.005		
3/24/2020	<0.005					<0.005		<0.005	
3/25/2020									<0.005
5/12/2020			<0.005	<0.005					
5/13/2020		<0.005			<0.005				
9/15/2020		<0.005							
9/16/2020			<0.005	<0.005					
9/17/2020					<0.005		<0.005		
9/21/2020	<0.005								
9/22/2020						<0.005		<0.005	

Time Series

Constituent: Lead (mg/L) Analysis Run 12/9/2020 2:21 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-6D	GS-AP-MW-6S
8/3/2016	<0.005	<0.005
9/20/2016	<0.005	<0.005
10/24/2016	<0.005	
10/26/2016		<0.005
12/12/2016	<0.005	<0.005
2/6/2017	<0.005	<0.005
3/27/2017	<0.005	<0.005
4/24/2017	<0.005	<0.005
6/6/2017	<0.005	<0.005
2/19/2018	<0.005	<0.005
5/14/2018	<0.005	<0.005
10/15/2018	<0.005	<0.005
4/16/2019	<0.005	<0.005
9/23/2019	<0.005	<0.005
3/16/2020		
3/17/2020	<0.005	<0.005
3/18/2020		
3/24/2020		
3/25/2020		
5/12/2020		
5/13/2020		
9/15/2020		
9/16/2020		<0.005
9/17/2020	<0.005	
9/21/2020		
9/22/2020		

Time Series

Constituent: Lead (mg/L) Analysis Run 12/9/2020 2:21 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-7	GS-AP-MW-8 (bg)	GS-AP-MW-9V	GS-AP-PZ-16	GS-AP-PZ-18	GS-AP-PZ-22	GS-AP-MW-6V	GS-AP-MW-43H	GS-AP-MW-40H
8/2/2016	0.00279 (J)								
8/3/2016		<0.005							
9/21/2016	0.0024 (J)	<0.005							
10/24/2016	<0.005								
10/25/2016		<0.005							
12/12/2016	<0.005								
12/13/2016		<0.005							
2/6/2017	<0.005	<0.005							
3/28/2017	<0.005	<0.005							
4/24/2017	<0.005	<0.005							
6/7/2017	<0.005	<0.005							
2/19/2018	<0.005	<0.005							
5/15/2018	<0.005	<0.005							
10/15/2018	<0.005								
10/16/2018		<0.005							
4/16/2019		<0.005							
4/23/2019	0.00207 (J)								
9/24/2019	<0.005	<0.005							
3/17/2020	0.00386 (J)								
3/18/2020		<0.005							
3/23/2020			<0.005						
3/24/2020				<0.005		<0.005			
3/25/2020					<0.005				
8/27/2020									
9/8/2020							<0.005		
9/15/2020							<0.005		
9/16/2020	0.00295 (J)								
9/17/2020				<0.005		<0.005			
9/21/2020		<0.005							
9/22/2020			<0.005		<0.005			<0.005	<0.005

Time Series

Constituent: Lead (mg/L) Analysis Run 12/9/2020 2:21 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-44HO
8/2/2016	
8/3/2016	
9/21/2016	
10/24/2016	
10/25/2016	
12/12/2016	
12/13/2016	
2/6/2017	
3/28/2017	
4/24/2017	
6/7/2017	
2/19/2018	
5/15/2018	
10/15/2018	
10/16/2018	
4/16/2019	
4/23/2019	
9/24/2019	
3/17/2020	
3/18/2020	
3/23/2020	
3/24/2020	
3/25/2020	
8/27/2020	<0.005
9/8/2020	
9/15/2020	<0.005
9/16/2020	
9/17/2020	
9/21/2020	
9/22/2020	

Time Series

Constituent: Lithium (mg/L) Analysis Run 12/9/2020 2:21 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-12	GS-AP-MW-12V	GS-AP-MW-13 (bg)	GS-AP-MW-15	GS-AP-MW-15V	GS-AP-MW-16D	GS-AP-MW-17	GS-AP-MW-17V ...	GS-AP-MW-18
8/1/2016				0.393		0.036 (J)	0.0479 (J)		
8/2/2016			0.0121 (J)						0.196
8/3/2016	0.0265 (J)								
9/19/2016						0.0346 (J)	0.0467 (J)		
9/20/2016	0.0225 (J)		0.0116 (J)	0.144					
9/21/2016									0.25
10/24/2016							0.0462 (J)		0.293
10/25/2016	0.0217 (J)		0.0114 (J)	0.152		0.0353 (J)			
12/12/2016									0.284 (J)
12/13/2016	0.026 (J)		0.0116 (J)			0.0361 (J)	0.0296 (J)		
12/14/2016				0.136					
2/6/2017							0.064		
2/7/2017									
2/8/2017	0.0315 (J)		0.0118 (J)	0.15		0.0401 (J)			0.371
3/27/2017							0.0683		
3/28/2017				0.137					0.316
3/29/2017	0.0308 (J)		0.0118 (J)			0.0379 (J)			
4/24/2017							0.0534		
4/26/2017	0.0248 (J)		<0.02	0.123		0.0318 (J)			0.24
6/5/2017							0.0574		
6/6/2017				0.123		0.032 (J)			0.262
6/7/2017	0.0234 (J)		<0.02						
2/19/2018							0.0481 (J)		
2/20/2018	0.058		<0.02	0.149					
2/21/2018						0.0327 (J)			0.189
5/15/2018	0.0489 (J)		0.0101	0.159			0.0551		
5/16/2018						0.0337 (J)			0.172
10/15/2018				0.297			0.0606		
10/16/2018	0.0341								0.314
10/17/2018			<0.02			0.0336			
2/20/2019								0.0671	
2/21/2019		0.0468							
2/26/2019									
4/16/2019	0.0261		0.0101 (J)						
4/17/2019				0.19		0.0349	0.0574		0.0942
9/23/2019							0.0583		
9/24/2019				0.469		0.0362		0.0809	0.114
9/25/2019	0.028	0.0611							
3/16/2020							0.0665		
3/18/2020	0.0297			0.378	0.208				0.116
3/24/2020		0.0462				0.035			
3/25/2020								0.0646	
5/12/2020							0.0602		
9/21/2020					0.116		0.0579		
9/22/2020						0.0343			
9/23/2020	0.0279	0.0409		0.414				0.0574	0.0895

Time Series

Constituent: Lithium (mg/L) Analysis Run 12/9/2020 2:21 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-18V	GS-AP-MW-19
8/1/2016		0.0252 (J)
8/2/2016		
8/3/2016		
9/19/2016		
9/20/2016		
9/21/2016		0.0223 (J)
10/24/2016		0.0247 (J)
10/25/2016		
12/12/2016		
12/13/2016		0.0312 (J)
12/14/2016		
2/6/2017		
2/7/2017		0.0406 (J)
2/8/2017		
3/27/2017		
3/28/2017		0.0309 (J)
3/29/2017		
4/24/2017		
4/26/2017		0.0267 (J)
6/5/2017		
6/6/2017		0.0311 (J)
6/7/2017		
2/19/2018		
2/20/2018		
2/21/2018		0.0472 (J)
5/15/2018		
5/16/2018		0.0391 (J)
10/15/2018		
10/16/2018		0.0406
10/17/2018		
2/20/2019		
2/21/2019		
2/26/2019	0.0423	
4/16/2019		
4/17/2019		0.0429
9/23/2019		
9/24/2019		0.0392
9/25/2019		
3/16/2020		
3/18/2020		
3/24/2020		0.0417
3/25/2020	0.0244	
5/12/2020		
9/21/2020		
9/22/2020	0.0254	0.0435
9/23/2020		

Time Series

Constituent: Lithium (mg/L) Analysis Run 12/9/2020 2:21 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-2	GS-AP-MW-21	GS-AP-MW-21V	GS-AP-MW-23H	GS-AP-MW-24H	GS-AP-MW-25HA	GS-AP-MW-26H	GS-AP-MW-28H	GS-AP-MW-29H
8/2/2016	0.0495 (J)	0.145							
9/19/2016	0.049 (J)								
9/21/2016		0.153							
10/24/2016	0.0488 (J)								
10/25/2016		0.171							
12/13/2016	0.0483 (J)								
12/14/2016		0.182							
2/8/2017	0.0644	0.178							
3/28/2017		0.161							
3/30/2017	0.0597								
4/26/2017	0.0459 (J)	0.126							
6/6/2017	0.0491 (J)	0.135							
2/20/2018		0.158							
2/21/2018	0.0534								
5/15/2018		0.174							
5/16/2018	0.0451 (J)								
10/16/2018	0.0511	0.219							
2/20/2019				0.031					
2/26/2019					0.0282				
2/27/2019							0.0966		0.07
3/13/2019								0.0625	
4/17/2019	0.0421	0.312							
9/23/2019				0.0324			0.0945		
9/24/2019		0.276			0.0275				0.0509
9/25/2019	0.0457							0.0619	
3/16/2020								0.0627	
3/17/2020				0.0327					
3/18/2020		0.379			0.0264				
3/23/2020			0.146						
3/24/2020						0.0461			
3/25/2020	0.0434						0.0946		0.0528
5/12/2020								0.0569	
5/13/2020	0.0409								
9/17/2020				0.0333	0.0237	0.0449			
9/21/2020							0.0958		
9/22/2020	0.0395							0.0574	0.0586
9/23/2020		0.179	0.137						

Time Series

Constituent: Lithium (mg/L) Analysis Run 12/9/2020 2:21 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-30HA	GS-AP-MW-31H
8/2/2016		
9/19/2016		
9/21/2016		
10/24/2016		
10/25/2016		
12/13/2016		
12/14/2016		
2/8/2017		
3/28/2017		
3/30/2017		
4/26/2017		
6/6/2017		
2/20/2018		
2/21/2018		
5/15/2018		
5/16/2018		
10/16/2018		
2/20/2019		
2/26/2019		
2/27/2019		
3/13/2019		
4/17/2019		
9/23/2019		
9/24/2019		
9/25/2019		
3/16/2020		
3/17/2020		
3/18/2020	0.0528	0.0347
3/23/2020		
3/24/2020		
3/25/2020		
5/12/2020		
5/13/2020	0.0536	
9/17/2020		
9/21/2020	0.0494	
9/22/2020		0.0357
9/23/2020		

Time Series

Constituent: Lithium (mg/L) Analysis Run 12/9/2020 2:21 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-32H	GS-AP-MW-33HO	GS-AP-MW-34HO	GS-AP-MW-35HO	GS-AP-MW-36H	GS-AP-MW-38H	GS-AP-MW-41HD	GS-AP-MW-42H	GS-AP-MW-43HO
8/3/2016									
9/20/2016									
10/24/2016									
10/26/2016									
12/12/2016									
2/6/2017									
3/27/2017									
4/24/2017									
6/6/2017									
2/19/2018									
5/14/2018									
10/15/2018									
4/16/2019									
9/23/2019									
3/16/2020			0.205						
3/17/2020		0.0516		0.074	0.0342				
3/18/2020							0.311		
3/24/2020	0.0428					0.0632		0.0346	
3/25/2020									0.0505
5/12/2020			0.18	0.0693					
5/13/2020		0.0455			0.0337				
9/15/2020		0.0479							
9/16/2020			0.18	0.0685					
9/17/2020					0.035		0.341		
9/21/2020	0.0421								
9/22/2020						0.0591		0.0333	

Time Series

Constituent: Lithium (mg/L) Analysis Run 12/9/2020 2:21 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-6D	GS-AP-MW-6S
8/3/2016	0.204	<0.02
9/20/2016	0.223	<0.02
10/24/2016	0.243	
10/26/2016		0.0199 (J)
12/12/2016	0.22	<0.02
2/6/2017	0.247	<0.02
3/27/2017	0.263	<0.02
4/24/2017	0.237	<0.02
6/6/2017	0.259	<0.02
2/19/2018	0.213	<0.02
5/14/2018	0.239	0.0238 (J)
10/15/2018	0.236	0.03
4/16/2019	0.267	<0.02
9/23/2019	0.264	0.0105 (J)
3/16/2020		
3/17/2020	0.292	0.0695
3/18/2020		
3/24/2020		
3/25/2020		
5/12/2020		
5/13/2020		
9/15/2020		
9/16/2020		0.066
9/17/2020	0.299	
9/21/2020		
9/22/2020		

Time Series

Constituent: Lithium (mg/L) Analysis Run 12/9/2020 2:21 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-7	GS-AP-MW-8 (bg)	GS-AP-MW-9V	GS-AP-PZ-16	GS-AP-PZ-18	GS-AP-PZ-22	GS-AP-MW-6V	GS-AP-MW-43H	GS-AP-MW-40H
8/2/2016	0.144								
8/3/2016		<0.02							
9/21/2016	0.136	<0.02							
10/24/2016	0.135								
10/25/2016		<0.02							
12/12/2016	0.146								
12/13/2016		<0.02							
2/6/2017	0.182	<0.02							
3/28/2017	0.175	<0.02							
4/24/2017	0.143	<0.02							
6/7/2017	0.152	<0.02							
2/19/2018	0.143	<0.02							
5/15/2018	0.151	<0.02							
10/15/2018	0.155								
10/16/2018		<0.02							
4/16/2019		<0.02							
4/23/2019	0.144								
9/24/2019	0.156	<0.02							
3/17/2020	0.161								
3/18/2020		<0.02							
3/23/2020			0.0309						
3/24/2020				0.0714		0.0734			
3/25/2020					0.109				
8/27/2020									
9/8/2020							0.138		
9/15/2020							0.136		
9/16/2020	0.16								
9/17/2020				0.073		0.0862			
9/21/2020		<0.02							
9/22/2020			0.0293		0.0789			0.0587	0.0405

Time Series

Constituent: Lithium (mg/L) Analysis Run 12/9/2020 2:21 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-44HO
8/2/2016	
8/3/2016	
9/21/2016	
10/24/2016	
10/25/2016	
12/12/2016	
12/13/2016	
2/6/2017	
3/28/2017	
4/24/2017	
6/7/2017	
2/19/2018	
5/15/2018	
10/15/2018	
10/16/2018	
4/16/2019	
4/23/2019	
9/24/2019	
3/17/2020	
3/18/2020	
3/23/2020	
3/24/2020	
3/25/2020	
8/27/2020	0.0411
9/8/2020	
9/15/2020	0.0494
9/16/2020	
9/17/2020	
9/21/2020	
9/22/2020	

Time Series

Constituent: Mercury (mg/L) Analysis Run 12/9/2020 2:21 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-12	GS-AP-MW-12V	GS-AP-MW-13 (bg)	GS-AP-MW-15	GS-AP-MW-15V	GS-AP-MW-16D	GS-AP-MW-17	GS-AP-MW-17V ...	GS-AP-MW-18
8/1/2016				<0.0005		<0.0005	<0.0005		
8/2/2016			<0.0005						<0.0005
8/3/2016	<0.0005								
9/19/2016						<0.0005	<0.0005		
9/20/2016	<0.0005		<0.0005	<0.0005					
9/21/2016									<0.0005
10/24/2016							<0.0005		<0.0005
10/25/2016	<0.0005		<0.0005	<0.0005		<0.0005			
12/12/2016									<0.0005
12/13/2016	<0.0005		<0.0005			<0.0005	<0.0005		
12/14/2016				<0.0005					
2/6/2017							<0.0005		
2/7/2017									
2/8/2017	<0.0005		<0.0005	<0.0005		<0.0005			<0.0005
3/27/2017							<0.0005		
3/28/2017				<0.0005					<0.0005
3/29/2017	<0.0005		<0.0005			<0.0005			
4/24/2017							<0.0005		
4/26/2017	<0.0005		<0.0005	<0.0005		<0.0005			<0.0005
6/5/2017							<0.0005		
6/6/2017				<0.0005		<0.0005			<0.0005
6/7/2017	<0.0005		<0.0005						
2/19/2018							<0.0005		
2/20/2018	<0.0005		<0.0005	<0.0005					
2/21/2018						<0.0005			<0.0005
5/15/2018	<0.0005		<0.0005	<0.0005			<0.0005		
5/16/2018						<0.0005			<0.0005
10/15/2018				<0.0005			<0.0005		
10/16/2018	<0.0005								<0.0005
10/17/2018			<0.0005			<0.0005			
2/20/2019								<0.0005	
2/21/2019		<0.0005							
2/26/2019									
4/16/2019	<0.0005		<0.0005						
4/17/2019				<0.0005		<0.0005	<0.0005		<0.0005
9/23/2019							<0.0005		
9/24/2019				<0.0005		<0.0005		<0.0005	<0.0005
9/25/2019	<0.0005	<0.0005							
3/16/2020							<0.0005		
3/18/2020	<0.0005			<0.0005	<0.0005				<0.0005
3/24/2020		<0.0005				<0.0005			
3/25/2020								<0.0005	
5/12/2020							<0.0005		
9/21/2020					<0.0005		<0.0005		
9/22/2020						<0.0005			
9/23/2020	<0.0005	<0.0005		<0.0005				<0.0005	<0.0005

Time Series

Constituent: Mercury (mg/L) Analysis Run 12/9/2020 2:21 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-18V	GS-AP-MW-19
8/1/2016		<0.0005
8/2/2016		
8/3/2016		
9/19/2016		
9/20/2016		
9/21/2016		<0.0005
10/24/2016		<0.0005
10/25/2016		
12/12/2016		
12/13/2016		<0.0005
12/14/2016		
2/6/2017		
2/7/2017		<0.0005
2/8/2017		
3/27/2017		
3/28/2017		<0.0005
3/29/2017		
4/24/2017		
4/26/2017		<0.0005
6/5/2017		
6/6/2017		<0.0005
6/7/2017		
2/19/2018		
2/20/2018		
2/21/2018		<0.0005
5/15/2018		
5/16/2018		<0.0005
10/15/2018		
10/16/2018		<0.0005
10/17/2018		
2/20/2019		
2/21/2019		
2/26/2019	<0.0005	
4/16/2019		
4/17/2019		<0.0005
9/23/2019		
9/24/2019		<0.0005
9/25/2019		
3/16/2020		
3/18/2020		
3/24/2020		<0.0005
3/25/2020	<0.0005	
5/12/2020		
9/21/2020		
9/22/2020	<0.0005	<0.0005
9/23/2020		

Time Series

Constituent: Mercury (mg/L) Analysis Run 12/9/2020 2:21 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-2	GS-AP-MW-21	GS-AP-MW-21V	GS-AP-MW-23H	GS-AP-MW-24H	GS-AP-MW-25HA	GS-AP-MW-26H	GS-AP-MW-28H	GS-AP-MW-29H
8/2/2016	<0.0005	<0.0005							
9/19/2016	<0.0005								
9/21/2016		<0.0005							
10/24/2016	<0.0005								
10/25/2016		<0.0005							
12/13/2016	<0.0005								
12/14/2016		<0.0005							
2/8/2017	<0.0005	<0.0005							
3/28/2017		<0.0005							
3/30/2017	<0.0005								
4/26/2017	<0.0005	<0.0005							
6/6/2017	<0.0005	<0.0005							
2/20/2018		<0.0005							
2/21/2018	<0.0005								
5/15/2018		<0.0005							
5/16/2018	<0.0005								
10/16/2018	<0.0005	<0.0005							
2/20/2019				<0.0005					
2/26/2019					<0.0005				
2/27/2019							<0.0005		<0.0005
3/13/2019								<0.0005	
4/17/2019	<0.0005	<0.0005							
9/23/2019				<0.0005			<0.0005		
9/24/2019		<0.0005			<0.0005				<0.0005
9/25/2019	<0.0005							<0.0005	
3/16/2020								<0.0005	
3/17/2020				<0.0005					
3/18/2020		<0.0005			<0.0005				
3/23/2020			<0.0005						
3/24/2020						<0.0005			
3/25/2020	<0.0005						<0.0005		<0.0005
5/12/2020								<0.0005	
5/13/2020	<0.0005								
9/17/2020				<0.0005	<0.0005	<0.0005			
9/21/2020							<0.0005		
9/22/2020	<0.0005							<0.0005	<0.0005
9/23/2020		<0.0005	<0.0005						

Time Series

Constituent: Mercury (mg/L) Analysis Run 12/9/2020 2:21 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-30HA	GS-AP-MW-31H
8/2/2016		
9/19/2016		
9/21/2016		
10/24/2016		
10/25/2016		
12/13/2016		
12/14/2016		
2/8/2017		
3/28/2017		
3/30/2017		
4/26/2017		
6/6/2017		
2/20/2018		
2/21/2018		
5/15/2018		
5/16/2018		
10/16/2018		
2/20/2019		
2/26/2019		
2/27/2019		
3/13/2019		
4/17/2019		
9/23/2019		
9/24/2019		
9/25/2019		
3/16/2020		
3/17/2020		
3/18/2020	<0.0005	<0.0005
3/23/2020		
3/24/2020		
3/25/2020		
5/12/2020		
5/13/2020	<0.0005	
9/17/2020		
9/21/2020	<0.0005	
9/22/2020		<0.0005
9/23/2020		

Time Series

Constituent: Mercury (mg/L) Analysis Run 12/9/2020 2:21 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-32H	GS-AP-MW-33HO	GS-AP-MW-34HO	GS-AP-MW-35HO	GS-AP-MW-36H	GS-AP-MW-38H	GS-AP-MW-41HD	GS-AP-MW-42H	GS-AP-MW-43HO
8/3/2016									
9/20/2016									
10/24/2016									
10/26/2016									
12/12/2016									
2/6/2017									
3/27/2017									
4/24/2017									
6/6/2017									
2/19/2018									
5/14/2018									
10/15/2018									
4/16/2019									
9/23/2019									
3/16/2020			<0.0005						
3/17/2020		<0.0005		<0.0005	<0.0005				
3/18/2020							<0.0005		
3/24/2020	<0.0005					<0.0005		<0.0005	
3/25/2020									<0.0005
5/12/2020			<0.0005	<0.0005					
5/13/2020		<0.0005			<0.0005				
9/15/2020		<0.0005							
9/16/2020			<0.0005	<0.0005					
9/17/2020					<0.0005		<0.0005		
9/21/2020	<0.0005								
9/22/2020						<0.0005		<0.0005	

Time Series

Constituent: Mercury (mg/L) Analysis Run 12/9/2020 2:21 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-6D	GS-AP-MW-6S
8/3/2016	<0.0005	<0.0005
9/20/2016	<0.0005	<0.0005
10/24/2016	<0.0005	
10/26/2016		<0.0005
12/12/2016	<0.0005	<0.0005
2/6/2017	<0.0005	<0.0005
3/27/2017	<0.0005	<0.0005
4/24/2017	<0.0005	<0.0005
6/6/2017	<0.0005	<0.0005
2/19/2018	<0.0005	<0.0005
5/14/2018	<0.0005	<0.0005
10/15/2018	<0.0005	<0.0005
4/16/2019	<0.0005	<0.0005
9/23/2019	<0.0005	<0.0005
3/16/2020		
3/17/2020	<0.0005	<0.0005
3/18/2020		
3/24/2020		
3/25/2020		
5/12/2020		
5/13/2020		
9/15/2020		
9/16/2020		<0.0005
9/17/2020	<0.0005	
9/21/2020		
9/22/2020		

Time Series

Constituent: Mercury (mg/L) Analysis Run 12/9/2020 2:21 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-7	GS-AP-MW-8 (bg)	GS-AP-MW-9V	GS-AP-PZ-16	GS-AP-PZ-18	GS-AP-PZ-22	GS-AP-MW-6V	GS-AP-MW-43H	GS-AP-MW-40H
8/2/2016	<0.0005								
8/3/2016		<0.0005							
9/21/2016	<0.0005	<0.0005							
10/24/2016	<0.0005								
10/25/2016		<0.0005							
12/12/2016	<0.0005								
12/13/2016		<0.0005							
2/6/2017	<0.0005	<0.0005							
3/28/2017	<0.0005	<0.0005							
4/24/2017	<0.0005	<0.0005							
6/7/2017	<0.0005	<0.0005							
2/19/2018	<0.0005	<0.0005							
5/15/2018	<0.0005	<0.0005							
10/15/2018	<0.0005								
10/16/2018		<0.0005							
4/16/2019		<0.0005							
4/23/2019	<0.0005								
9/24/2019	<0.0005	<0.0005							
3/17/2020	<0.0005								
3/18/2020		<0.0005							
3/23/2020			<0.0005						
3/24/2020				<0.0005		<0.0005			
3/25/2020					<0.0005				
8/27/2020									
9/8/2020							<0.0005		
9/15/2020							<0.0005		
9/16/2020	<0.0005								
9/17/2020				<0.0005		<0.0005			
9/21/2020		<0.0005							
9/22/2020			<0.0005		<0.0005			<0.0005	<0.0005

Time Series

Constituent: Mercury (mg/L) Analysis Run 12/9/2020 2:21 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-44HO
8/2/2016	
8/3/2016	
9/21/2016	
10/24/2016	
10/25/2016	
12/12/2016	
12/13/2016	
2/6/2017	
3/28/2017	
4/24/2017	
6/7/2017	
2/19/2018	
5/15/2018	
10/15/2018	
10/16/2018	
4/16/2019	
4/23/2019	
9/24/2019	
3/17/2020	
3/18/2020	
3/23/2020	
3/24/2020	
3/25/2020	
8/27/2020	<0.0005
9/8/2020	
9/15/2020	<0.0005
9/16/2020	
9/17/2020	
9/21/2020	
9/22/2020	

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 12/9/2020 2:21 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-12	GS-AP-MW-12V	GS-AP-MW-13 (bg)	GS-AP-MW-15	GS-AP-MW-15V	GS-AP-MW-16D	GS-AP-MW-17	GS-AP-MW-17V ...	GS-AP-MW-18
8/1/2016				0.142		<0.01	0.00738 (J)		
8/2/2016			<0.01						0.0516
8/3/2016	0.0269								
9/19/2016						<0.01	0.00889 (J)		
9/20/2016	0.00762 (J)		<0.01	0.0683					
9/21/2016									0.0567
10/24/2016							0.00819 (J)		0.0517
10/25/2016	0.00456 (J)		<0.01	0.063		<0.01			
12/12/2016									0.0431
12/13/2016	0.00411 (J)		<0.01			<0.01	0.0189		
12/14/2016				0.0604					
2/6/2017							0.00852 (J)		
2/7/2017									
2/8/2017	0.00235 (J)		<0.01	0.0346		<0.01			0.0381
3/27/2017							0.00592 (J)		
3/28/2017				0.0331					0.0333
3/29/2017	<0.01		<0.01			<0.01			
4/24/2017							0.00644 (J)		
4/26/2017	<0.01		<0.01	0.038		<0.01			0.0348
6/5/2017							0.00537 (J)		
6/6/2017				0.0327		<0.01			0.0384
6/7/2017	<0.01		<0.01						
2/19/2018							0.0134		
2/20/2018	<0.01		<0.01	0.0362					
2/21/2018						<0.01			0.0441
5/15/2018	<0.01		<0.01	0.0344			0.00789 (J)		
5/16/2018						<0.01			0.0374
10/15/2018				0.0525			0.00376 (J)		
10/16/2018	<0.01								0.0425
10/17/2018			<0.01			<0.01			
2/20/2019								0.00577 (J)	
2/21/2019		0.00253 (J)							
2/26/2019									
4/16/2019	<0.01		<0.01						
4/17/2019				0.029		<0.01	0.00661 (J)		0.0113
9/23/2019							0.011		
9/24/2019				0.0597		<0.01		0.00906 (J)	0.0504
9/25/2019	<0.01	0.00942 (J)							
3/16/2020							0.00504 (J)		
3/18/2020	0.00444 (J)			0.0673	0.0327				0.00927 (J)
3/24/2020		0.00454 (J)				<0.01			
3/25/2020								0.00508 (J)	
5/12/2020							0.00436 (J)		
9/21/2020					0.0538		0.00776 (J)		
9/22/2020						<0.01			
9/23/2020	0.00577 (J)	0.00463 (J)		0.0744				0.00664 (J)	0.044

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 12/9/2020 2:21 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-18V	GS-AP-MW-19
8/1/2016		0.00752 (J)
8/2/2016		
8/3/2016		
9/19/2016		
9/20/2016		
9/21/2016		0.0117
10/24/2016		0.0198
10/25/2016		
12/12/2016		
12/13/2016		0.00703 (J)
12/14/2016		
2/6/2017		
2/7/2017		0.0103
2/8/2017		
3/27/2017		
3/28/2017		0.00599 (J)
3/29/2017		
4/24/2017		
4/26/2017		0.00845 (J)
6/5/2017		
6/6/2017		0.00624 (J)
6/7/2017		
2/19/2018		
2/20/2018		
2/21/2018		0.00903 (J)
5/15/2018		
5/16/2018		0.00515 (J)
10/15/2018		
10/16/2018		0.00593 (J)
10/17/2018		
2/20/2019		
2/21/2019		
2/26/2019	0.00696 (J)	
4/16/2019		
4/17/2019		0.00703 (J)
9/23/2019		
9/24/2019		0.00562 (J)
9/25/2019		
3/16/2020		
3/18/2020		
3/24/2020		0.00605 (J)
3/25/2020	0.0217	
5/12/2020		
9/21/2020		
9/22/2020	0.0248	0.0063 (J)
9/23/2020		

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 12/9/2020 2:21 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-2	GS-AP-MW-21	GS-AP-MW-21V	GS-AP-MW-23H	GS-AP-MW-24H	GS-AP-MW-25HA	GS-AP-MW-26H	GS-AP-MW-28H	GS-AP-MW-29H
8/2/2016	<0.01	0.0365							
9/19/2016	<0.01								
9/21/2016		0.0362							
10/24/2016	<0.01								
10/25/2016		0.0326							
12/13/2016	<0.01								
12/14/2016		0.0345							
2/8/2017	0.00359 (J)	0.0419							
3/28/2017		0.0523							
3/30/2017	0.00485 (J)								
4/26/2017	0.00444 (J)	0.0502							
6/6/2017	0.00489 (J)	0.05							
2/20/2018		0.0966							
2/21/2018	0.0112								
5/15/2018		0.0687							
5/16/2018	0.00547 (J)								
10/16/2018	0.00919 (J)	0.061							
2/20/2019				<0.01					
2/26/2019					<0.01				
2/27/2019							0.00286 (J)		<0.01
3/13/2019								0.00555 (J)	
4/17/2019	0.00293 (J)	0.0885							
9/23/2019				<0.01			<0.01		
9/24/2019		0.0613			<0.01				0.00424 (J)
9/25/2019	0.00803 (J)							0.00338 (J)	
3/16/2020								0.00463 (J)	
3/17/2020				<0.01					
3/18/2020		0.102			<0.01				
3/23/2020			0.117						
3/24/2020						0.0176			
3/25/2020	0.00343 (J)						<0.01		0.0025 (J)
5/12/2020								0.00644 (J)	
5/13/2020	0.00224 (J)								
9/17/2020				<0.01	<0.01	0.0182			
9/21/2020							<0.01		
9/22/2020	0.00308 (J)							0.00616 (J)	0.0281
9/23/2020		0.0404	0.12						

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 12/9/2020 2:21 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-30HA	GS-AP-MW-31H
8/2/2016		
9/19/2016		
9/21/2016		
10/24/2016		
10/25/2016		
12/13/2016		
12/14/2016		
2/8/2017		
3/28/2017		
3/30/2017		
4/26/2017		
6/6/2017		
2/20/2018		
2/21/2018		
5/15/2018		
5/16/2018		
10/16/2018		
2/20/2019		
2/26/2019		
2/27/2019		
3/13/2019		
4/17/2019		
9/23/2019		
9/24/2019		
9/25/2019		
3/16/2020		
3/17/2020		
3/18/2020	0.00603 (J)	0.0102
3/23/2020		
3/24/2020		
3/25/2020		
5/12/2020		
5/13/2020	0.00519 (J)	
9/17/2020		
9/21/2020	0.00254 (J)	
9/22/2020		0.00438 (J)
9/23/2020		

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 12/9/2020 2:21 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-32H	GS-AP-MW-33HO	GS-AP-MW-34HO	GS-AP-MW-35HO	GS-AP-MW-36H	GS-AP-MW-38H	GS-AP-MW-41HD	GS-AP-MW-42H	GS-AP-MW-43HO
8/3/2016									
9/20/2016									
10/24/2016									
10/26/2016									
12/12/2016									
2/6/2017									
3/27/2017									
4/24/2017									
6/6/2017									
2/19/2018									
5/14/2018									
10/15/2018									
4/16/2019									
9/23/2019									
3/16/2020			0.00386 (J)						
3/17/2020		<0.01		0.00222 (J)	0.00571 (J)				
3/18/2020							0.0158		
3/24/2020	0.0826					0.00445 (J)		<0.01	
3/25/2020									<0.01
5/12/2020			0.0088 (J)	<0.01					
5/13/2020		0.00626 (J)			0.00475 (J)				
9/15/2020		0.00496 (J)							
9/16/2020			0.00598 (J)	<0.01					
9/17/2020					0.0105		0.026		
9/21/2020	0.0896								
9/22/2020						0.00423 (J)		<0.01	

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 12/9/2020 2:21 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-6D	GS-AP-MW-6S
8/3/2016	0.00372 (J)	<0.01
9/20/2016	0.00481 (J)	0.00202 (J)
10/24/2016	0.00496 (J)	
10/26/2016		0.00599 (J)
12/12/2016	0.00467 (J)	0.00214 (J)
2/6/2017	0.00468 (J)	<0.01
3/27/2017	0.00548 (J)	<0.01
4/24/2017	0.00606 (J)	<0.01
6/6/2017	0.00545 (J)	<0.01
2/19/2018	0.00537 (J)	<0.01
5/14/2018	0.00564 (J)	0.00526 (J)
10/15/2018	0.00538 (J)	0.00644 (J)
4/16/2019	0.00747 (J)	0.00246 (J)
9/23/2019	0.00758 (J)	0.00412 (J)
3/16/2020		
3/17/2020	0.00959 (J)	0.0272
3/18/2020		
3/24/2020		
3/25/2020		
5/12/2020		
5/13/2020		
9/15/2020		
9/16/2020		0.0427
9/17/2020	0.00924 (J)	
9/21/2020		
9/22/2020		

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 12/9/2020 2:21 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-7	GS-AP-MW-8 (bg)	GS-AP-MW-9V	GS-AP-PZ-16	GS-AP-PZ-18	GS-AP-PZ-22	GS-AP-MW-6V	GS-AP-MW-43H	GS-AP-MW-40H
8/2/2016	0.146								
8/3/2016		<0.01							
9/21/2016	0.146	<0.01							
10/24/2016	0.136								
10/25/2016		<0.01							
12/12/2016	0.14								
12/13/2016		<0.01							
2/6/2017	0.15	<0.01							
3/28/2017	0.159	<0.01							
4/24/2017	0.16	<0.01							
6/7/2017	0.15	<0.01							
2/19/2018	0.172	<0.01							
5/15/2018	0.177	<0.01							
10/15/2018	0.168								
10/16/2018		<0.01							
4/16/2019		<0.01							
4/23/2019	0.185								
9/24/2019	0.178	<0.01							
3/17/2020	0.193								
3/18/2020		<0.01							
3/23/2020			<0.01						
3/24/2020				<0.01		0.00333 (J)			
3/25/2020					0.00919 (J)				
8/27/2020									
9/8/2020							0.00317 (J)		
9/15/2020							0.00256 (J)		
9/16/2020	0.215								
9/17/2020				0.00241 (J)		0.00357 (J)			
9/21/2020		<0.01							
9/22/2020			<0.01		0.00496 (J)			<0.01	0.00293 (J)

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 12/9/2020 2:21 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-44HO
8/2/2016	
8/3/2016	
9/21/2016	
10/24/2016	
10/25/2016	
12/12/2016	
12/13/2016	
2/6/2017	
3/28/2017	
4/24/2017	
6/7/2017	
2/19/2018	
5/15/2018	
10/15/2018	
10/16/2018	
4/16/2019	
4/23/2019	
9/24/2019	
3/17/2020	
3/18/2020	
3/23/2020	
3/24/2020	
3/25/2020	
8/27/2020	0.0071 (J)
9/8/2020	
9/15/2020	0.00858 (J)
9/16/2020	
9/17/2020	
9/21/2020	
9/22/2020	

Time Series

Constituent: pH (SU) Analysis Run 12/9/2020 2:21 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-12	GS-AP-MW-12V	GS-AP-MW-13 (bg)	GS-AP-MW-15	GS-AP-MW-15V	GS-AP-MW-16D	GS-AP-MW-17	GS-AP-MW-17V ...	GS-AP-MW-18
8/1/2016				11.74		7.53	8.39		
8/2/2016			6.8						7.65
8/3/2016	7.36								
9/19/2016						7.5	8.42		
9/20/2016	7.28		6.8	10.33					
9/21/2016									7.47
10/24/2016							8.42		7.44
10/25/2016	7.23		6.85	10.24		7.44			
12/12/2016									7.39
12/13/2016	7.27		6.8			7.45	8.43		
12/14/2016				10.09					
2/6/2017							8.38		
2/7/2017									
2/8/2017	7.25		6.76	9.75		7.41			7.31
3/27/2017							8.43		
3/28/2017				9.9					7.6
3/29/2017	7.34		6.76			7.44			
4/24/2017							8.39		
4/26/2017	7.19		6.71	10.08		7.47			7.5
6/5/2017							8.42		
6/6/2017				10.2		7.37			7.34
6/7/2017	7.24		6.71						
8/22/2017	7.31		6.84	10.57		7.48	8.4		
8/23/2017									7.4
2/19/2018							8.33		
2/20/2018	7.69		6.77	10.63					
2/21/2018						7.44			7.44
5/15/2018	7.69		6.8	10.71			8.3		
5/16/2018						7.45			7.47
10/15/2018				11.51			8.37		
10/16/2018	7.51								7.06
10/17/2018			6.67			7.41			
2/20/2019								7.76	
2/21/2019		7.46							
2/26/2019									
4/16/2019	7.41		6.64						
4/17/2019				10.76		7.33	8.36		7.58
9/23/2019							8.37		
9/24/2019				11.7		7.43		7.65	7.49
9/25/2019	7.38	9.29							
3/16/2020							8.45		
3/18/2020	7.56			11.47	10.89				6.99
3/24/2020		7.8				7.46			
3/25/2020								7.63	
5/12/2020							8.42		
9/21/2020					10.07		8.22		
9/22/2020						7.52			
9/23/2020	8.3	8.84		11.89				7.53	7.54

Time Series

Constituent: pH (SU) Analysis Run 12/9/2020 2:21 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-18V	GS-AP-MW-19
8/1/2016		8.05
8/2/2016		
8/3/2016		
9/19/2016		
9/20/2016		
9/21/2016		8.14
10/24/2016		8.55
10/25/2016		
12/12/2016		
12/13/2016		8.08
12/14/2016		
2/6/2017		
2/7/2017		8.61
2/8/2017		
3/27/2017		
3/28/2017		7.94
3/29/2017		
4/24/2017		
4/26/2017		8.26
6/5/2017		
6/6/2017		8.23
6/7/2017		
8/22/2017		8.1
8/23/2017		
2/19/2018		
2/20/2018		
2/21/2018		8.48
5/15/2018		
5/16/2018		8.12
10/15/2018		
10/16/2018		8.22
10/17/2018		
2/20/2019		
2/21/2019		
2/26/2019	7.79	
4/16/2019		
4/17/2019		8.06
9/23/2019		
9/24/2019		7.8
9/25/2019		
3/16/2020		
3/18/2020		
3/24/2020		7.93
3/25/2020	8.19	
5/12/2020		
9/21/2020		
9/22/2020	8.35	8.17
9/23/2020		

Time Series

Constituent: pH (SU) Analysis Run 12/9/2020 2:21 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-2	GS-AP-MW-21	GS-AP-MW-21V	GS-AP-MW-23H	GS-AP-MW-24H	GS-AP-MW-25HA	GS-AP-MW-26H	GS-AP-MW-28H	GS-AP-MW-29H
8/2/2016	9.18	10.26							
9/19/2016	9.18								
9/21/2016		10.45							
10/24/2016	9.14								
10/25/2016		10.42							
12/13/2016	9.2								
12/14/2016		10.12							
2/8/2017	9.17	10.28							
3/28/2017		10.67							
3/30/2017	9.08								
4/26/2017	9.22	10.42							
6/6/2017	9.22	10.51							
8/21/2017	9.12								
8/23/2017		11.91							
2/20/2018		11.57							
2/21/2018	9.17								
5/15/2018		11.26							
5/16/2018	9.28								
10/16/2018	9.35	11.34							
2/20/2019				6.17					
2/26/2019					7.04				
2/27/2019							7.25		8.01
3/13/2019								8.3	
4/17/2019	9.26	11.71							
9/23/2019				5.76			7.25		
9/24/2019		11.24			6.59				7.11
9/25/2019	9.31							8.57	
3/16/2020								8.31	
3/17/2020				5.95					
3/18/2020		11.37			7				
3/23/2020			7.93						
3/24/2020						8.67			
3/25/2020	9.29						7.24		7.45
5/12/2020								8.35	
5/13/2020	9.43								
9/17/2020				5.74	7.02	8.83			
9/21/2020							7.25		
9/22/2020	9.41							8.24	7.42
9/23/2020		10.71	7.81						

Time Series

Constituent: pH (SU) Analysis Run 12/9/2020 2:21 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-30HA	GS-AP-MW-31H
8/2/2016		
9/19/2016		
9/21/2016		
10/24/2016		
10/25/2016		
12/13/2016		
12/14/2016		
2/8/2017		
3/28/2017		
3/30/2017		
4/26/2017		
6/6/2017		
8/21/2017		
8/23/2017		
2/20/2018		
2/21/2018		
5/15/2018		
5/16/2018		
10/16/2018		
2/20/2019		
2/26/2019		
2/27/2019		
3/13/2019		
4/17/2019		
9/23/2019		
9/24/2019		
9/25/2019		
3/16/2020		
3/17/2020		
3/18/2020	7.2	8.73
3/23/2020		
3/24/2020		
3/25/2020		
5/12/2020		
5/13/2020	7.27	
9/17/2020		
9/21/2020	7.56	
9/22/2020		8.76
9/23/2020		

Time Series

Constituent: pH (SU) Analysis Run 12/9/2020 2:21 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-32H	GS-AP-MW-33HO	GS-AP-MW-34HO	GS-AP-MW-35HO	GS-AP-MW-36H	GS-AP-MW-38H	GS-AP-MW-41HD	GS-AP-MW-42H	GS-AP-MW-43HO
8/3/2016									
9/20/2016									
10/24/2016									
10/26/2016									
12/12/2016									
2/6/2017									
3/27/2017									
4/24/2017									
6/6/2017									
8/21/2017									
2/19/2018									
5/14/2018									
10/15/2018									
4/16/2019									
9/23/2019									
3/16/2020			7.35						
3/17/2020		7.67		8.4	8.44				
3/18/2020							7.2		
3/24/2020	8.47					7.99		6.28	
3/25/2020									8.24
5/12/2020			7.44	8.46					
5/13/2020		7.7			8.52				
9/15/2020		7.66							
9/16/2020			7.45	8.48					
9/17/2020					8.18		7.22		
9/21/2020	8.15								
9/22/2020						7.96		6.51	

Time Series

Constituent: pH (SU) Analysis Run 12/9/2020 2:21 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-6D	GS-AP-MW-6S
8/3/2016	7.27	6.81
9/20/2016	7.27	6.72
10/24/2016	7.25	
10/26/2016		6.68
12/12/2016	7.26	6.76
2/6/2017	7.24	6.75
3/27/2017	7.29	6.67
4/24/2017	7.46	6.81
6/6/2017	7.29	6.8
8/21/2017	7.21	6.78
2/19/2018	7.36	6.85
5/14/2018	7.36	6.82
10/15/2018	7.33	6.78
4/16/2019	7.26	6.82
9/23/2019	7.23	6.51
3/16/2020		
3/17/2020	7.39	6.92
3/18/2020		
3/24/2020		
3/25/2020		
5/12/2020		
5/13/2020		
9/15/2020		
9/16/2020		6.93
9/17/2020	7.41	
9/21/2020		
9/22/2020		

Time Series

Constituent: pH (SU) Analysis Run 12/9/2020 2:21 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-7	GS-AP-MW-8 (bg)	GS-AP-MW-9V	GS-AP-PZ-16	GS-AP-PZ-18	GS-AP-PZ-22	GS-AP-MW-6V	GS-AP-MW-43H	GS-AP-MW-40H
8/2/2016	7.72								
8/3/2016		5.84							
9/21/2016	7.6	5.99							
10/24/2016	7.68								
10/25/2016		5.94							
12/12/2016	7.72								
12/13/2016		5.84							
2/6/2017	7.64	5.9							
3/28/2017	7.58	5.67							
4/24/2017	7.68	5.79							
6/7/2017	7.56	5.71							
8/21/2017	7.61	5.7							
2/19/2018	7.65	5.78							
5/15/2018	7.69	5.84							
10/15/2018	7.62								
10/16/2018		5.75							
4/16/2019		5.76							
4/23/2019	7.83								
9/24/2019	7.38	5.27							
3/17/2020	7.72								
3/18/2020		5.81							
3/23/2020			6.97						
3/24/2020				7.89		7.77			
3/25/2020					6.8				
8/27/2020									
9/8/2020							8.67		
9/15/2020							8.76		
9/16/2020	7.74								
9/17/2020				9.15		8.81			
9/21/2020		5.75							
9/22/2020			7.08		7			8.66	6.64

Time Series

Constituent: pH (SU) Analysis Run 12/9/2020 2:21 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-44HO
8/2/2016	
8/3/2016	
9/21/2016	
10/24/2016	
10/25/2016	
12/12/2016	
12/13/2016	
2/6/2017	
3/28/2017	
4/24/2017	
6/7/2017	
8/21/2017	
2/19/2018	
5/15/2018	
10/15/2018	
10/16/2018	
4/16/2019	
4/23/2019	
9/24/2019	
3/17/2020	
3/18/2020	
3/23/2020	
3/24/2020	
3/25/2020	
8/27/2020	8.9
9/8/2020	
9/15/2020	8.94
9/16/2020	
9/17/2020	
9/21/2020	
9/22/2020	

Time Series

Constituent: Selenium (mg/L) Analysis Run 12/9/2020 2:21 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-12	GS-AP-MW-12V	GS-AP-MW-13 (bg)	GS-AP-MW-15	GS-AP-MW-15V	GS-AP-MW-16D	GS-AP-MW-17	GS-AP-MW-17V ...	GS-AP-MW-18
8/1/2016				<0.01		<0.01	<0.01		
8/2/2016			<0.01						<0.01
8/3/2016	<0.01								
9/19/2016						<0.01	<0.01		
9/20/2016	<0.01		<0.01	<0.01					
9/21/2016									<0.01
10/24/2016							<0.01		<0.01
10/25/2016	<0.01		<0.01	<0.01		<0.01			
12/12/2016									<0.01
12/13/2016	<0.01		<0.01			<0.01	<0.01		
12/14/2016				<0.01					
2/6/2017							<0.01		
2/7/2017									
2/8/2017	<0.01		<0.01	<0.01		<0.01			<0.01
3/27/2017							<0.01		
3/28/2017				<0.01					<0.01
3/29/2017	<0.01		<0.01			<0.01			
4/24/2017							<0.01		
4/26/2017	<0.01		<0.01	<0.01		<0.01			<0.01
6/5/2017							<0.01		
6/6/2017				<0.01		<0.01			<0.01
6/7/2017	<0.01		<0.01						
2/19/2018							<0.01		
2/20/2018	<0.01		<0.01	<0.01					
2/21/2018						<0.01			<0.01
5/15/2018	<0.01		<0.01	<0.01			<0.01		
5/16/2018						<0.01			<0.01
10/15/2018				<0.01			<0.01		
10/16/2018	<0.01								<0.01
10/17/2018			<0.01			<0.01			
2/20/2019								<0.01	
2/21/2019		<0.01							
2/26/2019									
4/16/2019	<0.01		<0.01						
4/17/2019				<0.01		<0.01	<0.01		<0.01
9/23/2019							<0.01		
9/24/2019				<0.01		<0.01		<0.01	<0.01
9/25/2019	<0.01	<0.01							
3/16/2020							<0.01		
3/18/2020	<0.01			<0.01	<0.01				<0.01
3/24/2020		<0.01				<0.01			
3/25/2020								<0.01	
5/12/2020							<0.01		
9/21/2020					<0.01		<0.01		
9/22/2020						<0.01			
9/23/2020	<0.01	<0.01		<0.01				<0.01	<0.01

Time Series

Constituent: Selenium (mg/L) Analysis Run 12/9/2020 2:21 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-18V	GS-AP-MW-19
8/1/2016		<0.01
8/2/2016		
8/3/2016		
9/19/2016		
9/20/2016		
9/21/2016		<0.01
10/24/2016		<0.01
10/25/2016		
12/12/2016		
12/13/2016		<0.01
12/14/2016		
2/6/2017		
2/7/2017		<0.01
2/8/2017		
3/27/2017		
3/28/2017		<0.01
3/29/2017		
4/24/2017		
4/26/2017		<0.01
6/5/2017		
6/6/2017		<0.01
6/7/2017		
2/19/2018		
2/20/2018		
2/21/2018		<0.01
5/15/2018		
5/16/2018		<0.01
10/15/2018		
10/16/2018		<0.01
10/17/2018		
2/20/2019		
2/21/2019		
2/26/2019	<0.01	
4/16/2019		
4/17/2019		<0.01
9/23/2019		
9/24/2019		<0.01
9/25/2019		
3/16/2020		
3/18/2020		
3/24/2020		<0.01
3/25/2020	<0.01	
5/12/2020		
9/21/2020		
9/22/2020	<0.01	<0.01
9/23/2020		

Time Series

Constituent: Selenium (mg/L) Analysis Run 12/9/2020 2:21 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-2	GS-AP-MW-21	GS-AP-MW-21V	GS-AP-MW-23H	GS-AP-MW-24H	GS-AP-MW-25HA	GS-AP-MW-26H	GS-AP-MW-28H	GS-AP-MW-29H
8/2/2016	<0.01	<0.01							
9/19/2016	<0.01								
9/21/2016		<0.01							
10/24/2016	<0.01								
10/25/2016		<0.01							
12/13/2016	<0.01								
12/14/2016		<0.01							
2/8/2017	<0.01	<0.01							
3/28/2017		<0.01							
3/30/2017	<0.01								
4/26/2017	<0.01	<0.01							
6/6/2017	<0.01	<0.01							
2/20/2018		<0.01							
2/21/2018	<0.01								
5/15/2018		<0.01							
5/16/2018	<0.01								
10/16/2018	<0.01	<0.01							
2/20/2019				<0.01					
2/26/2019					<0.01				
2/27/2019							<0.01		<0.01
3/13/2019								<0.01	
4/17/2019	<0.01	<0.01							
9/23/2019				<0.01			<0.01		
9/24/2019		<0.01			<0.01				<0.01
9/25/2019	<0.01							<0.01	
3/16/2020								<0.01	
3/17/2020				<0.01					
3/18/2020		<0.01			<0.01				
3/23/2020			<0.01						
3/24/2020						<0.01			
3/25/2020	<0.01						<0.01		<0.01
5/12/2020								<0.01	
5/13/2020	<0.01								
9/17/2020				<0.01	<0.01	0.00636 (J)			
9/21/2020							<0.01		
9/22/2020	<0.01							<0.01	<0.01
9/23/2020		<0.01	<0.01						

Time Series

Constituent: Selenium (mg/L) Analysis Run 12/9/2020 2:21 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-30HA	GS-AP-MW-31H
8/2/2016		
9/19/2016		
9/21/2016		
10/24/2016		
10/25/2016		
12/13/2016		
12/14/2016		
2/8/2017		
3/28/2017		
3/30/2017		
4/26/2017		
6/6/2017		
2/20/2018		
2/21/2018		
5/15/2018		
5/16/2018		
10/16/2018		
2/20/2019		
2/26/2019		
2/27/2019		
3/13/2019		
4/17/2019		
9/23/2019		
9/24/2019		
9/25/2019		
3/16/2020		
3/17/2020		
3/18/2020	<0.01	<0.01
3/23/2020		
3/24/2020		
3/25/2020		
5/12/2020		
5/13/2020	<0.01	
9/17/2020		
9/21/2020	<0.01	
9/22/2020		<0.01
9/23/2020		

Time Series

Constituent: Selenium (mg/L) Analysis Run 12/9/2020 2:21 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-32H	GS-AP-MW-33HO	GS-AP-MW-34HO	GS-AP-MW-35HO	GS-AP-MW-36H	GS-AP-MW-38H	GS-AP-MW-41HD	GS-AP-MW-42H	GS-AP-MW-43HO
8/3/2016									
9/20/2016									
10/24/2016									
10/26/2016									
12/12/2016									
2/6/2017									
3/27/2017									
4/24/2017									
6/6/2017									
2/19/2018									
5/14/2018									
10/15/2018									
4/16/2019									
9/23/2019									
3/16/2020			<0.01						
3/17/2020		<0.01		<0.01	<0.01				
3/18/2020							<0.01		
3/24/2020	<0.01					<0.01		<0.01	
3/25/2020									<0.01
5/12/2020			<0.01	<0.01					
5/13/2020		<0.01			<0.01				
9/15/2020		<0.01							
9/16/2020			<0.01	<0.01					
9/17/2020					<0.01		<0.01		
9/21/2020	<0.01								
9/22/2020						<0.01		<0.01	

Time Series

Constituent: Selenium (mg/L) Analysis Run 12/9/2020 2:21 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-6D	GS-AP-MW-6S
8/3/2016	<0.01	<0.01
9/20/2016	<0.01	<0.01
10/24/2016	<0.01	
10/26/2016		<0.01
12/12/2016	<0.01	<0.01
2/6/2017	<0.01	<0.01
3/27/2017	<0.01	<0.01
4/24/2017	<0.01	<0.01
6/6/2017	<0.01	<0.01
2/19/2018	<0.01	<0.01
5/14/2018	<0.01	<0.01
10/15/2018	<0.01	<0.01
4/16/2019	<0.01	<0.01
9/23/2019	<0.01	<0.01
3/16/2020		
3/17/2020	<0.01	<0.01
3/18/2020		
3/24/2020		
3/25/2020		
5/12/2020		
5/13/2020		
9/15/2020		
9/16/2020		<0.01
9/17/2020	<0.01	
9/21/2020		
9/22/2020		

Time Series

Constituent: Selenium (mg/L) Analysis Run 12/9/2020 2:21 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-7	GS-AP-MW-8 (bg)	GS-AP-MW-9V	GS-AP-PZ-16	GS-AP-PZ-18	GS-AP-PZ-22	GS-AP-MW-6V	GS-AP-MW-43H	GS-AP-MW-40H
8/2/2016	<0.01								
8/3/2016		<0.01							
9/21/2016	<0.01	<0.01							
10/24/2016	<0.01								
10/25/2016		<0.01							
12/12/2016	<0.01								
12/13/2016		<0.01							
2/6/2017	<0.01	<0.01							
3/28/2017	<0.01	<0.01							
4/24/2017	<0.01	<0.01							
6/7/2017	<0.01	<0.01							
2/19/2018	<0.01	<0.01							
5/15/2018	<0.01	<0.01							
10/15/2018	<0.01								
10/16/2018		<0.01							
4/16/2019		<0.01							
4/23/2019	<0.01								
9/24/2019	<0.01	<0.01							
3/17/2020	<0.01								
3/18/2020		<0.01							
3/23/2020			<0.01						
3/24/2020				<0.01		<0.01			
3/25/2020					<0.01				
8/27/2020									
9/8/2020							<0.01		
9/15/2020							<0.01		
9/16/2020	<0.01								
9/17/2020				<0.01		<0.01			
9/21/2020		<0.01							
9/22/2020			<0.01		<0.01			<0.01	<0.01

Time Series

Constituent: Selenium (mg/L) Analysis Run 12/9/2020 2:21 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-44HO
8/2/2016	
8/3/2016	
9/21/2016	
10/24/2016	
10/25/2016	
12/12/2016	
12/13/2016	
2/6/2017	
3/28/2017	
4/24/2017	
6/7/2017	
2/19/2018	
5/15/2018	
10/15/2018	
10/16/2018	
4/16/2019	
4/23/2019	
9/24/2019	
3/17/2020	
3/18/2020	
3/23/2020	
3/24/2020	
3/25/2020	
8/27/2020	<0.01
9/8/2020	
9/15/2020	<0.01
9/16/2020	
9/17/2020	
9/21/2020	
9/22/2020	

Time Series

Constituent: Sulfate (mg/L) Analysis Run 12/9/2020 2:21 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-12	GS-AP-MW-12V	GS-AP-MW-13 (bg)	GS-AP-MW-15	GS-AP-MW-15V	GS-AP-MW-16D	GS-AP-MW-17	GS-AP-MW-17V ...	GS-AP-MW-18
8/1/2016				102		13.4	9.56		
8/2/2016			12						295
8/3/2016	19.2								
9/19/2016						12.9	12.7		
9/20/2016	1.42		11.2	53.3					
9/21/2016									440
10/24/2016							8.58		608
10/25/2016	<1		10.1	49.8		11.6			
12/12/2016									755
12/13/2016	3.21		11.4			12.7	31		
12/14/2016				40.9					
2/6/2017							14.7		
2/7/2017									
2/8/2017	3.3		10.9	25		12.2			672
3/27/2017							14		
3/28/2017				27					610
3/29/2017	3.8 (J)		11			12			
4/24/2017							22		
4/26/2017	1.4 (J)		11	29		13			600
6/5/2017							30		
6/6/2017				23		12			670
6/7/2017	1.7 (J)		11						
8/22/2017	4.2 (J)		11	22		12	42		
8/23/2017									560
5/15/2018	14		11	13			54		
5/16/2018						13			260
10/15/2018				14			34		
10/16/2018	13								520
10/17/2018			12			13			
2/20/2019								15.2	
2/21/2019		<1							
2/26/2019									
4/16/2019	13.3		12.1						
4/17/2019				9.02		14.1	76.6		71.6
9/23/2019							124		
9/24/2019				12.4		14.1		11.8	119
9/25/2019	25.5	1.61							
3/16/2020							48.6		
3/18/2020	20.8			15.9	261				216
3/24/2020		<1				14.1			
3/25/2020								9.69	
5/12/2020							44.4		
9/21/2020					348		104		
9/22/2020						13.6			
9/23/2020	19.1	6.56		13.2				11.1	88.9

Time Series

Constituent: Sulfate (mg/L) Analysis Run 12/9/2020 2:21 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-18V	GS-AP-MW-19
8/1/2016		9.02
8/2/2016		
8/3/2016		
9/19/2016		
9/20/2016		
9/21/2016		8.38
10/24/2016		18.5
10/25/2016		
12/12/2016		
12/13/2016		7.4
12/14/2016		
2/6/2017		
2/7/2017		8.16
2/8/2017		
3/27/2017		
3/28/2017		6.4
3/29/2017		
4/24/2017		
4/26/2017		4.6 (J)
6/5/2017		
6/6/2017		5.2
6/7/2017		
8/22/2017		5.3
8/23/2017		
5/15/2018		
5/16/2018		6
10/15/2018		
10/16/2018		5.6
10/17/2018		
2/20/2019		
2/21/2019		
2/26/2019	39.9	
4/16/2019		
4/17/2019		14.3
9/23/2019		
9/24/2019		13.8
9/25/2019		
3/16/2020		
3/18/2020		
3/24/2020		15.2
3/25/2020	16.5	
5/12/2020		
9/21/2020		
9/22/2020	14.4	16.9
9/23/2020		

Time Series

Constituent: Sulfate (mg/L) Analysis Run 12/9/2020 2:21 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-2	GS-AP-MW-21	GS-AP-MW-21V	GS-AP-MW-23H	GS-AP-MW-24H	GS-AP-MW-25HA	GS-AP-MW-26H	GS-AP-MW-28H	GS-AP-MW-29H
8/2/2016	2.87	9.14							
9/19/2016	1.22								
9/21/2016		8.71							
10/24/2016	<1								
10/25/2016		8.54							
12/13/2016	<1								
12/14/2016		11.5							
2/8/2017	19.4	17							
3/28/2017		25							
3/30/2017	31								
4/26/2017	29	28							
6/6/2017	37	33							
8/21/2017	55								
8/23/2017		43							
5/15/2018		110							
5/16/2018	34								
10/16/2018	90	160							
2/20/2019				352					
2/26/2019					10.9				
2/27/2019							4.89		20.7
3/13/2019								30	
4/17/2019	48.6	215							
9/23/2019				394			16.9		
9/24/2019		224			15.3				32.6
9/25/2019	47.7							10.2	
3/16/2020								9.91	
3/17/2020				356					
3/18/2020		228			12.2				
3/23/2020			1050						
3/24/2020						201			
3/25/2020	38.5						3.25		29.4
5/12/2020								14.3	
5/13/2020	33.6								
9/17/2020				361	6.7	173			
9/21/2020							4.54		
9/22/2020	21.5							10.5	81.6
9/23/2020		248	1120						

Time Series

Constituent: Sulfate (mg/L) Analysis Run 12/9/2020 2:21 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-30HA	GS-AP-MW-31H
8/2/2016		
9/19/2016		
9/21/2016		
10/24/2016		
10/25/2016		
12/13/2016		
12/14/2016		
2/8/2017		
3/28/2017		
3/30/2017		
4/26/2017		
6/6/2017		
8/21/2017		
8/23/2017		
5/15/2018		
5/16/2018		
10/16/2018		
2/20/2019		
2/26/2019		
2/27/2019		
3/13/2019		
4/17/2019		
9/23/2019		
9/24/2019		
9/25/2019		
3/16/2020		
3/17/2020		
3/18/2020	184	50.4
3/23/2020		
3/24/2020		
3/25/2020		
5/12/2020		
5/13/2020	194	
9/17/2020		
9/21/2020	128	
9/22/2020		22.1
9/23/2020		

Time Series

Constituent: Sulfate (mg/L) Analysis Run 12/9/2020 2:21 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-32H	GS-AP-MW-33HO	GS-AP-MW-34HO	GS-AP-MW-35HO	GS-AP-MW-36H	GS-AP-MW-38H	GS-AP-MW-41HD	GS-AP-MW-42H	GS-AP-MW-43HO
8/3/2016									
9/20/2016									
10/24/2016									
10/26/2016									
12/12/2016									
2/6/2017									
3/27/2017									
4/24/2017									
6/6/2017									
8/21/2017									
5/14/2018									
10/15/2018									
4/16/2019									
9/23/2019									
3/16/2020			1480						
3/17/2020		172		40.1	57.1				
3/18/2020							122		
3/24/2020	33.2					16.7		449	
3/25/2020									327
5/12/2020			1330	22.6					
5/13/2020		60			47.8				
9/15/2020		98.6							
9/16/2020			1390	24.6					
9/17/2020					50.2		105		
9/21/2020	38.7								
9/22/2020						27		372	

Time Series

Constituent: Sulfate (mg/L) Analysis Run 12/9/2020 2:21 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-6D	GS-AP-MW-6S
8/3/2016	52	203
9/20/2016	56	209
10/24/2016	57.5	
10/26/2016		224
12/12/2016	50	249
2/6/2017	54.9	309
3/27/2017	50	290
4/24/2017	56	300
6/6/2017	63	310
8/21/2017	35	260
5/14/2018	46	210
10/15/2018	37	170
4/16/2019	46.8	195
9/23/2019	47.9	176
3/16/2020		
3/17/2020	59.5	148
3/18/2020		
3/24/2020		
3/25/2020		
5/12/2020		
5/13/2020		
9/15/2020		
9/16/2020		115
9/17/2020	65.1	
9/21/2020		
9/22/2020		

Time Series

Constituent: Sulfate (mg/L) Analysis Run 12/9/2020 2:21 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-7	GS-AP-MW-8 (bg)	GS-AP-MW-9V	GS-AP-PZ-16	GS-AP-PZ-18	GS-AP-PZ-22	GS-AP-MW-6V	GS-AP-MW-43H	GS-AP-MW-40H
8/2/2016	154								
8/3/2016		4.2							
9/21/2016	146	4.27							
10/24/2016	131								
10/25/2016		2.78							
12/12/2016	141								
12/13/2016		3.18							
2/6/2017	135	3.74							
3/28/2017	140	3.4 (J)							
4/24/2017	140	2.7 (J)							
6/7/2017	150	2.7 (J)							
8/21/2017	140	3.9 (J)							
5/15/2018	120	2.5 (J)							
10/15/2018	130								
10/16/2018		2.4 (J)							
4/16/2019		4.53							
4/23/2019	156								
9/24/2019	145	6.61							
3/17/2020	149								
3/18/2020		4.86							
3/23/2020			18.7						
3/24/2020				27.7		70.1			
3/25/2020					355				
8/27/2020									
9/8/2020							9.06		
9/15/2020							7.02		
9/16/2020	131								
9/17/2020				15.2		79.9			
9/21/2020		4.69							
9/22/2020			21.2		245			269	626

Time Series

Constituent: Sulfate (mg/L) Analysis Run 12/9/2020 2:21 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-44HO
8/2/2016	
8/3/2016	
9/21/2016	
10/24/2016	
10/25/2016	
12/12/2016	
12/13/2016	
2/6/2017	
3/28/2017	
4/24/2017	
6/7/2017	
8/21/2017	
5/15/2018	
10/15/2018	
10/16/2018	
4/16/2019	
4/23/2019	
9/24/2019	
3/17/2020	
3/18/2020	
3/23/2020	
3/24/2020	
3/25/2020	
8/27/2020	33.5
9/8/2020	
9/15/2020	71.6
9/16/2020	
9/17/2020	
9/21/2020	
9/22/2020	

Time Series

Constituent: TDS (mg/L) Analysis Run 12/9/2020 2:21 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-12	GS-AP-MW-12V	GS-AP-MW-13 (bg)	GS-AP-MW-15	GS-AP-MW-15V	GS-AP-MW-16D	GS-AP-MW-17	GS-AP-MW-17V ...	GS-AP-MW-18
8/1/2016				640		222	408		
8/2/2016			221						586
8/3/2016	546								
9/19/2016						220	441		
9/20/2016	542		221	434					
9/21/2016									848
10/24/2016							424		1100
10/25/2016	518		226	394		223			
12/12/2016									1260
12/13/2016	424		211			211	466		
12/14/2016				387					
2/6/2017							414		
2/7/2017									
2/8/2017	379		212	303		206			1160
3/27/2017							444		
3/28/2017				305					1100
3/29/2017	334		217			215			
4/24/2017							446		
4/26/2017	332		202	329		212			1090
6/5/2017							493		
6/6/2017				331		227			1170
6/7/2017	308		218						
8/22/2017	286		224	364		230	500		
8/23/2017									1020
5/15/2018	235		209	340			528		
5/16/2018						216			658
10/15/2018				448			462		
10/16/2018	211								1030
10/17/2018			208			191			
2/20/2019								346	
2/21/2019		237							
2/26/2019									
4/16/2019	193		185						
4/17/2019				354		207	540		347
9/23/2019							684		
9/24/2019				536		208		365	372
9/25/2019	253	183							
3/16/2020							516		
3/18/2020	236			515	873				618
3/24/2020		206				205			
3/25/2020								364	
5/12/2020							493		
9/21/2020					1090		658		
9/22/2020						218			
9/23/2020	216	195		600				368	380

Time Series

Constituent: TDS (mg/L) Analysis Run 12/9/2020 2:21 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-18V	GS-AP-MW-19
8/1/2016		245
8/2/2016		
8/3/2016		
9/19/2016		
9/20/2016		
9/21/2016		267
10/24/2016		275
10/25/2016		
12/12/2016		
12/13/2016		255
12/14/2016		
2/6/2017		
2/7/2017		272
2/8/2017		
3/27/2017		
3/28/2017		271
3/29/2017		
4/24/2017		
4/26/2017		265
6/5/2017		
6/6/2017		287
6/7/2017		
8/22/2017		293
8/23/2017		
5/15/2018		
5/16/2018		301
10/15/2018		
10/16/2018		303
10/17/2018		
2/20/2019		
2/21/2019		
2/26/2019	238	
4/16/2019		
4/17/2019		296
9/23/2019		
9/24/2019		302
9/25/2019		
3/16/2020		
3/18/2020		
3/24/2020		302
3/25/2020	287	
5/12/2020		
9/21/2020		
9/22/2020	290	300
9/23/2020		

Time Series

Constituent: TDS (mg/L) Analysis Run 12/9/2020 2:21 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-2	GS-AP-MW-21	GS-AP-MW-21V	GS-AP-MW-23H	GS-AP-MW-24H	GS-AP-MW-25HA	GS-AP-MW-26H	GS-AP-MW-28H	GS-AP-MW-29H
8/2/2016	390	348							
9/19/2016	398								
9/21/2016		368							
10/24/2016	395								
10/25/2016		348							
12/13/2016	381								
12/14/2016		352							
2/8/2017	376	352							
3/28/2017		370							
3/30/2017	391								
4/26/2017	384	342							
6/6/2017	404	367							
8/21/2017	416								
8/23/2017		508							
5/15/2018		438							
5/16/2018	365								
10/16/2018	430	520							
2/20/2019				560					
2/26/2019					249				
2/27/2019							266		414
3/13/2019								514	
4/17/2019	341	582							
9/23/2019				598			278		
9/24/2019		630			253				389
9/25/2019	358							443	
3/16/2020								449	
3/17/2020				626					
3/18/2020		661			250				
3/23/2020			3410						
3/24/2020						948			
3/25/2020	337						269		371
5/12/2020								464	
5/13/2020	328								
9/17/2020				648	250	960			
9/21/2020							287		
9/22/2020	318							456	430
9/23/2020		642	3690						

Time Series

Constituent: TDS (mg/L) Analysis Run 12/9/2020 2:21 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-30HA	GS-AP-MW-31H
8/2/2016		
9/19/2016		
9/21/2016		
10/24/2016		
10/25/2016		
12/13/2016		
12/14/2016		
2/8/2017		
3/28/2017		
3/30/2017		
4/26/2017		
6/6/2017		
8/21/2017		
8/23/2017		
5/15/2018		
5/16/2018		
10/16/2018		
2/20/2019		
2/26/2019		
2/27/2019		
3/13/2019		
4/17/2019		
9/23/2019		
9/24/2019		
9/25/2019		
3/16/2020		
3/17/2020		
3/18/2020	612	326
3/23/2020		
3/24/2020		
3/25/2020		
5/12/2020		
5/13/2020	624	
9/17/2020		
9/21/2020	592	
9/22/2020		298
9/23/2020		

Time Series

Constituent: TDS (mg/L) Analysis Run 12/9/2020 2:21 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-32H	GS-AP-MW-33HO	GS-AP-MW-34HO	GS-AP-MW-35HO	GS-AP-MW-36H	GS-AP-MW-38H	GS-AP-MW-41HD	GS-AP-MW-42H	GS-AP-MW-43HO
8/3/2016									
9/20/2016									
10/24/2016									
10/26/2016									
12/12/2016									
2/6/2017									
3/27/2017									
4/24/2017									
6/6/2017									
8/21/2017									
5/14/2018									
10/15/2018									
4/16/2019									
9/23/2019									
3/16/2020			2460						
3/17/2020		827		365	362				
3/18/2020							309		
3/24/2020	331					335		850	
3/25/2020									930
5/12/2020			2440	311					
5/13/2020		457			333				
9/15/2020		538							
9/16/2020			2720	326					
9/17/2020					348		318		
9/21/2020	357								
9/22/2020						339		800	

Time Series

Constituent: TDS (mg/L) Analysis Run 12/9/2020 2:21 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-6D	GS-AP-MW-6S
8/3/2016	302	394
9/20/2016	298	444
10/24/2016	306	
10/26/2016		456
12/12/2016	291	491
2/6/2017	285	580
3/27/2017	305	554
4/24/2017	301	566
6/6/2017	311	580
8/21/2017	289	524
5/14/2018	303	458
10/15/2018	309	404
4/16/2019	285	382
9/23/2019	296	381
3/16/2020		
3/17/2020	303	328
3/18/2020		
3/24/2020		
3/25/2020		
5/12/2020		
5/13/2020		
9/15/2020		
9/16/2020		269
9/17/2020	314	
9/21/2020		
9/22/2020		

Time Series

Constituent: TDS (mg/L) Analysis Run 12/9/2020 2:21 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-7	GS-AP-MW-8 (bg)	GS-AP-MW-9V	GS-AP-PZ-16	GS-AP-PZ-18	GS-AP-PZ-22	GS-AP-MW-6V	GS-AP-MW-43H	GS-AP-MW-40H
8/2/2016	358								
8/3/2016		113							
9/21/2016	370	128							
10/24/2016	370								
10/25/2016		121							
12/12/2016	353								
12/13/2016		101							
2/6/2017	338	108							
3/28/2017	352	91							
4/24/2017	362	89.3							
6/7/2017	348	84							
8/21/2017	362	91.3							
5/15/2018	338	94.7							
10/15/2018	333								
10/16/2018		76.7							
4/16/2019		92							
4/23/2019	354								
9/24/2019	344	109							
3/17/2020	334								
3/18/2020		90.7							
3/23/2020			268						
3/24/2020				381		412			
3/25/2020					738				
8/27/2020									
9/8/2020							810		
9/15/2020							857		
9/16/2020	351								
9/17/2020				387		438			
9/21/2020		94							
9/22/2020			285		648			910	1310

Time Series

Constituent: TDS (mg/L) Analysis Run 12/9/2020 2:21 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-44HO
8/2/2016	
8/3/2016	
9/21/2016	
10/24/2016	
10/25/2016	
12/12/2016	
12/13/2016	
2/6/2017	
3/28/2017	
4/24/2017	
6/7/2017	
8/21/2017	
5/15/2018	
10/15/2018	
10/16/2018	
4/16/2019	
4/23/2019	
9/24/2019	
3/17/2020	
3/18/2020	
3/23/2020	
3/24/2020	
3/25/2020	
8/27/2020	435
9/8/2020	
9/15/2020	564
9/16/2020	
9/17/2020	
9/21/2020	
9/22/2020	

Time Series

Constituent: Thallium (mg/L) Analysis Run 12/9/2020 2:21 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-12	GS-AP-MW-12V	GS-AP-MW-13 (bg)	GS-AP-MW-15	GS-AP-MW-15V	GS-AP-MW-16D	GS-AP-MW-17	GS-AP-MW-17V ...	GS-AP-MW-18
8/1/2016				<0.001		<0.001	<0.001		
8/2/2016			<0.001						<0.001
8/3/2016	<0.001								
9/19/2016						<0.001	<0.001		
9/20/2016	<0.001		<0.001	<0.001					
9/21/2016									<0.001
10/24/2016							<0.001		<0.001
10/25/2016	<0.001		<0.001	<0.001		<0.001			
12/12/2016									<0.001
12/13/2016	<0.001		<0.001			<0.001	<0.001		
12/14/2016				<0.001					
2/6/2017							<0.001		
2/7/2017									
2/8/2017	<0.001		<0.001	<0.001		<0.001			<0.001
3/27/2017							<0.001		
3/28/2017				<0.001					<0.001
3/29/2017	<0.001		<0.001			<0.001			
4/24/2017							<0.001		
4/26/2017	<0.001		<0.001	<0.001		<0.001			<0.001
6/5/2017							<0.001		
6/6/2017				<0.001		<0.001			<0.001
6/7/2017	<0.001		<0.001						
2/19/2018							<0.001		
2/20/2018	<0.001		<0.001	<0.001					
2/21/2018						<0.001			<0.001
5/15/2018	<0.001		<0.001	<0.001			<0.001		
5/16/2018						<0.001			<0.001
10/15/2018				<0.001			<0.001		
10/16/2018	<0.001								<0.001
10/17/2018			<0.001			<0.001			
2/20/2019								<0.001	
2/21/2019		<0.001							
2/26/2019									
4/16/2019	<0.001		<0.001						
4/17/2019				<0.001		<0.001	<0.001		<0.001
9/23/2019							<0.001		
9/24/2019				<0.001		<0.001		<0.001	<0.001
9/25/2019	<0.001	<0.001							
3/16/2020							<0.001		
3/18/2020	<0.001			<0.001	<0.001				<0.001
3/24/2020		<0.001				<0.001			
3/25/2020								<0.001	
5/12/2020							<0.001		
9/21/2020					<0.001		<0.001		
9/22/2020						<0.001			
9/23/2020	<0.001	<0.001		<0.001				<0.001	<0.001

Time Series

Constituent: Thallium (mg/L) Analysis Run 12/9/2020 2:21 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-18V	GS-AP-MW-19
8/1/2016		<0.001
8/2/2016		
8/3/2016		
9/19/2016		
9/20/2016		
9/21/2016		<0.001
10/24/2016		<0.001
10/25/2016		
12/12/2016		
12/13/2016		<0.001
12/14/2016		
2/6/2017		
2/7/2017		<0.001
2/8/2017		
3/27/2017		
3/28/2017		<0.001
3/29/2017		
4/24/2017		
4/26/2017		<0.001
6/5/2017		
6/6/2017		<0.001
6/7/2017		
2/19/2018		
2/20/2018		
2/21/2018		<0.001
5/15/2018		
5/16/2018		<0.001
10/15/2018		
10/16/2018		<0.001
10/17/2018		
2/20/2019		
2/21/2019		
2/26/2019	<0.001	
4/16/2019		
4/17/2019		<0.001
9/23/2019		
9/24/2019		<0.001
9/25/2019		
3/16/2020		
3/18/2020		
3/24/2020		<0.001
3/25/2020	<0.001	
5/12/2020		
9/21/2020		
9/22/2020	<0.001	<0.001
9/23/2020		

Time Series

Constituent: Thallium (mg/L) Analysis Run 12/9/2020 2:21 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-2	GS-AP-MW-21	GS-AP-MW-21V	GS-AP-MW-23H	GS-AP-MW-24H	GS-AP-MW-25HA	GS-AP-MW-26H	GS-AP-MW-28H	GS-AP-MW-29H
8/2/2016	<0.001	<0.001							
9/19/2016	<0.001								
9/21/2016		<0.001							
10/24/2016	<0.001								
10/25/2016		<0.001							
12/13/2016	<0.001								
12/14/2016		<0.001							
2/8/2017	<0.001	<0.001							
3/28/2017		<0.001							
3/30/2017	<0.001								
4/26/2017	<0.001	<0.001							
6/6/2017	<0.001	<0.001							
2/20/2018		<0.001							
2/21/2018	<0.001								
5/15/2018		<0.001							
5/16/2018	<0.001								
10/16/2018	<0.001	<0.001							
2/20/2019				<0.001					
2/26/2019					<0.001				
2/27/2019							<0.001		<0.001
3/13/2019								<0.001	
4/17/2019	<0.001	<0.001							
9/23/2019				<0.001			<0.001		
9/24/2019		<0.001			<0.001				<0.001
9/25/2019	<0.001							<0.001	
3/16/2020								<0.001	
3/17/2020				<0.001					
3/18/2020		<0.001			<0.001				
3/23/2020			<0.001						
3/24/2020						<0.001			
3/25/2020	<0.001						<0.001		<0.001
5/12/2020								<0.001	
5/13/2020	<0.001								
9/17/2020				<0.001	<0.001	<0.001			
9/21/2020							<0.001		
9/22/2020	<0.001							<0.001	<0.001
9/23/2020		<0.001	<0.001						

Time Series

Constituent: Thallium (mg/L) Analysis Run 12/9/2020 2:21 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-30HA	GS-AP-MW-31H
8/2/2016		
9/19/2016		
9/21/2016		
10/24/2016		
10/25/2016		
12/13/2016		
12/14/2016		
2/8/2017		
3/28/2017		
3/30/2017		
4/26/2017		
6/6/2017		
2/20/2018		
2/21/2018		
5/15/2018		
5/16/2018		
10/16/2018		
2/20/2019		
2/26/2019		
2/27/2019		
3/13/2019		
4/17/2019		
9/23/2019		
9/24/2019		
9/25/2019		
3/16/2020		
3/17/2020		
3/18/2020	<0.001	<0.001
3/23/2020		
3/24/2020		
3/25/2020		
5/12/2020		
5/13/2020	<0.001	
9/17/2020		
9/21/2020	<0.001	
9/22/2020		<0.001
9/23/2020		

Time Series

Constituent: Thallium (mg/L) Analysis Run 12/9/2020 2:21 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-32H	GS-AP-MW-33HO	GS-AP-MW-34HO	GS-AP-MW-35HO	GS-AP-MW-36H	GS-AP-MW-38H	GS-AP-MW-41HD	GS-AP-MW-42H	GS-AP-MW-43HO
8/3/2016									
9/20/2016									
10/24/2016									
10/26/2016									
12/12/2016									
2/6/2017									
3/27/2017									
4/24/2017									
6/6/2017									
2/19/2018									
5/14/2018									
10/15/2018									
4/16/2019									
9/23/2019									
3/16/2020			<0.001						
3/17/2020		<0.001		<0.001	<0.001				
3/18/2020							<0.001		
3/24/2020	<0.001					<0.001		<0.001	
3/25/2020									<0.001
5/12/2020			<0.001	<0.001					
5/13/2020		<0.001			<0.001				
9/15/2020		<0.001							
9/16/2020			<0.001	<0.001					
9/17/2020					<0.001		<0.001		
9/21/2020	<0.001								
9/22/2020						<0.001		<0.001	

Time Series

Constituent: Thallium (mg/L) Analysis Run 12/9/2020 2:21 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-6D	GS-AP-MW-6S
8/3/2016	<0.001	<0.001
9/20/2016	<0.001	<0.001
10/24/2016	<0.001	
10/26/2016		<0.001
12/12/2016	<0.001	<0.001
2/6/2017	<0.001	<0.001
3/27/2017	<0.001	<0.001
4/24/2017	<0.001	<0.001
6/6/2017	<0.001	<0.001
2/19/2018	<0.001	<0.001
5/14/2018	<0.001	<0.001
10/15/2018	<0.001	<0.001
4/16/2019	<0.001	<0.001
9/23/2019	<0.001	<0.001
3/16/2020		
3/17/2020	<0.001	<0.001
3/18/2020		
3/24/2020		
3/25/2020		
5/12/2020		
5/13/2020		
9/15/2020		
9/16/2020		<0.001
9/17/2020	<0.001	
9/21/2020		
9/22/2020		

Time Series

Constituent: Thallium (mg/L) Analysis Run 12/9/2020 2:21 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-7	GS-AP-MW-8 (bg)	GS-AP-MW-9V	GS-AP-PZ-16	GS-AP-PZ-18	GS-AP-PZ-22	GS-AP-MW-6V	GS-AP-MW-43H	GS-AP-MW-40H
8/2/2016	<0.001								
8/3/2016		<0.001							
9/21/2016	<0.001	<0.001							
10/24/2016	<0.001								
10/25/2016		<0.001							
12/12/2016	<0.001								
12/13/2016		<0.001							
2/6/2017	<0.001	<0.001							
3/28/2017	<0.001	<0.001							
4/24/2017	<0.001	<0.001							
6/7/2017	<0.001	<0.001							
2/19/2018	<0.001	<0.001							
5/15/2018	<0.001	<0.001							
10/15/2018	<0.001								
10/16/2018		<0.001							
4/16/2019		<0.001							
4/23/2019	<0.001								
9/24/2019	<0.001	<0.001							
3/17/2020	<0.001								
3/18/2020		<0.001							
3/23/2020			<0.001						
3/24/2020				<0.001		<0.001			
3/25/2020					<0.001				
8/27/2020									
9/8/2020							<0.001		
9/15/2020							<0.001		
9/16/2020	<0.001								
9/17/2020				<0.001		<0.001			
9/21/2020		<0.001							
9/22/2020			<0.001		<0.001			<0.001	<0.001

Time Series

Constituent: Thallium (mg/L) Analysis Run 12/9/2020 2:21 PM

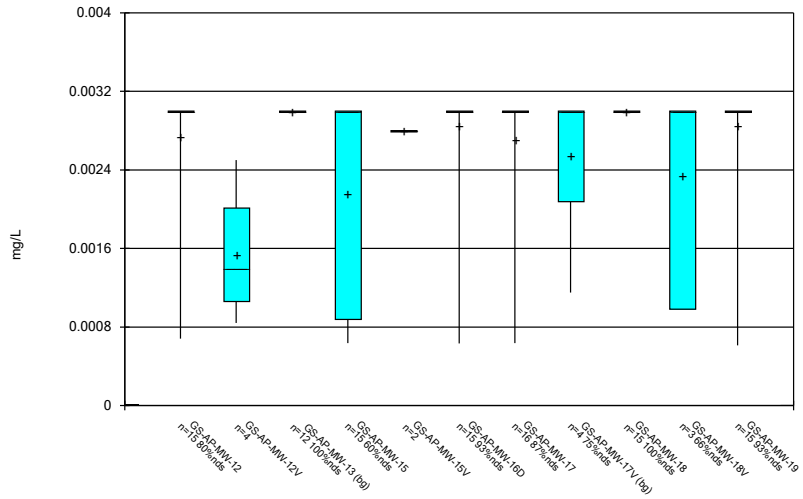
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-44HO
8/2/2016	
8/3/2016	
9/21/2016	
10/24/2016	
10/25/2016	
12/12/2016	
12/13/2016	
2/6/2017	
3/28/2017	
4/24/2017	
6/7/2017	
2/19/2018	
5/15/2018	
10/15/2018	
10/16/2018	
4/16/2019	
4/23/2019	
9/24/2019	
3/17/2020	
3/18/2020	
3/23/2020	
3/24/2020	
3/25/2020	
8/27/2020	<0.001
9/8/2020	
9/15/2020	<0.001
9/16/2020	
9/17/2020	
9/21/2020	
9/22/2020	

FIGURE B.

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Box & Whiskers Plot

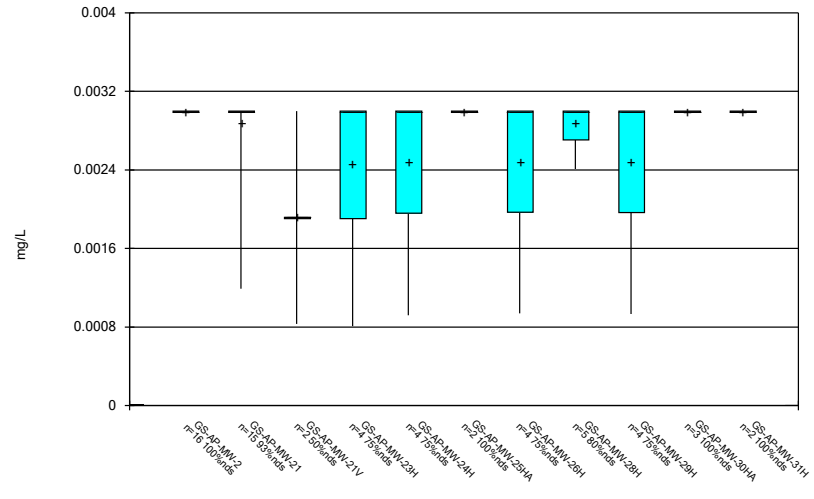


Constituent: Antimony Analysis Run 12/9/2020 2:25 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Box & Whiskers Plot

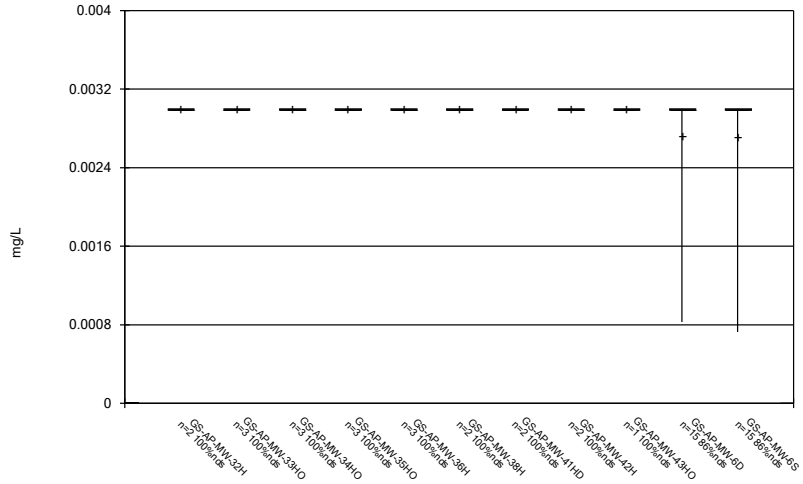


Constituent: Antimony Analysis Run 12/9/2020 2:25 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Box & Whiskers Plot

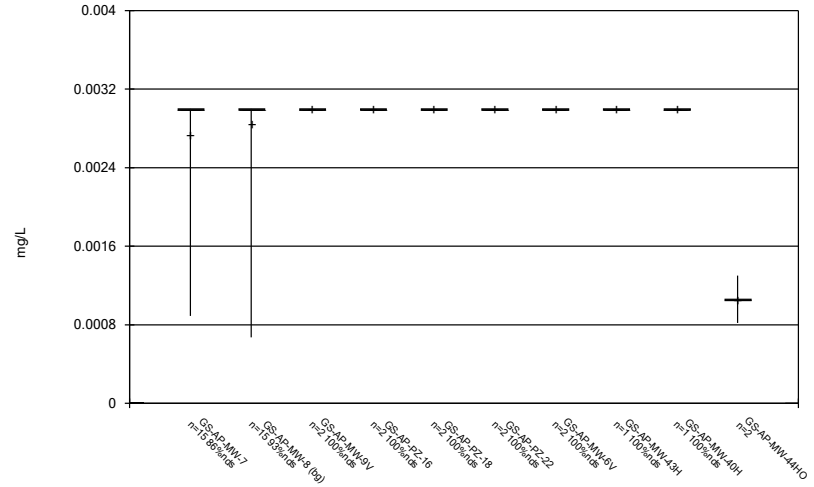


Constituent: Antimony Analysis Run 12/9/2020 2:25 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Box & Whiskers Plot

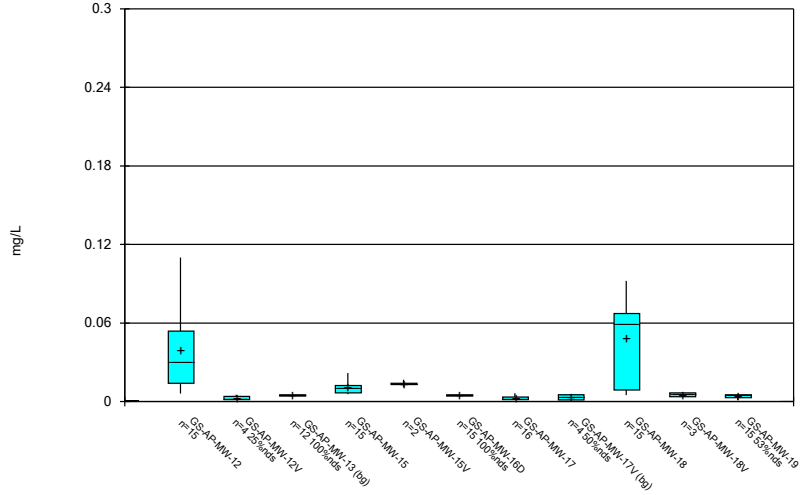


Constituent: Antimony Analysis Run 12/9/2020 2:25 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Box & Whiskers Plot

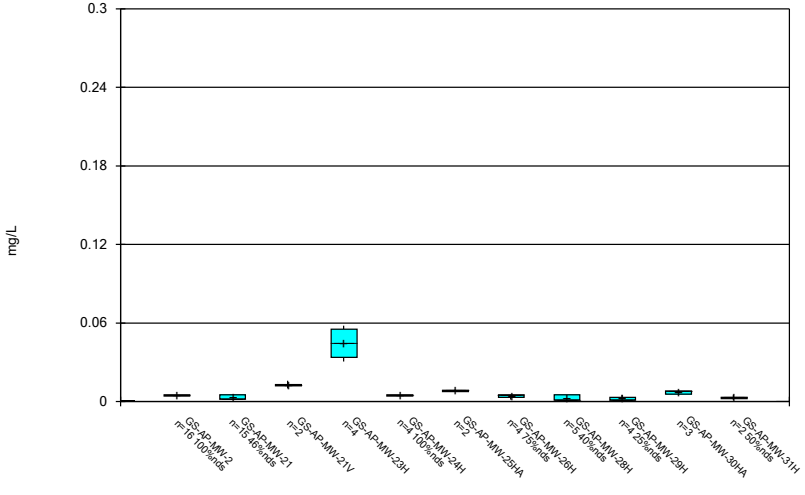


Constituent: Arsenic Analysis Run 12/9/2020 2:25 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Box & Whiskers Plot

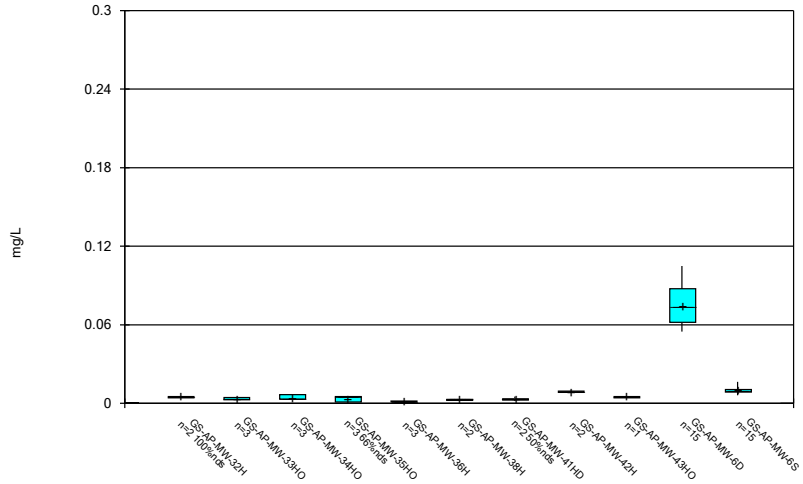


Constituent: Arsenic Analysis Run 12/9/2020 2:25 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Box & Whiskers Plot

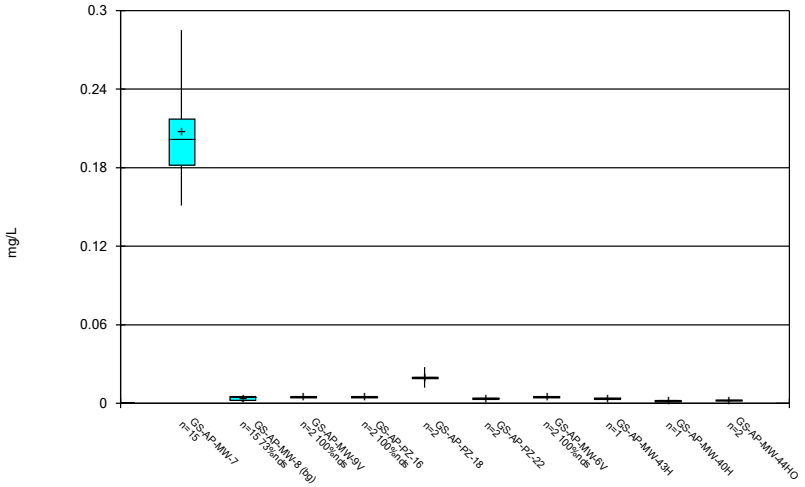


Constituent: Arsenic Analysis Run 12/9/2020 2:25 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Box & Whiskers Plot

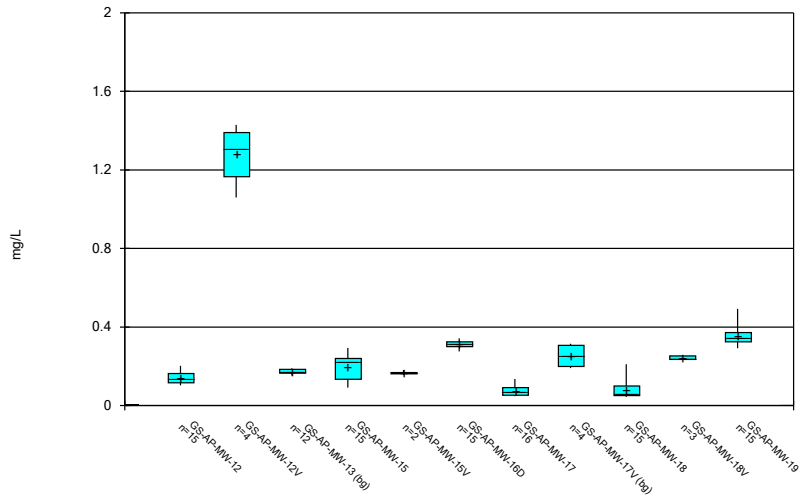


Constituent: Arsenic Analysis Run 12/9/2020 2:25 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Box & Whiskers Plot

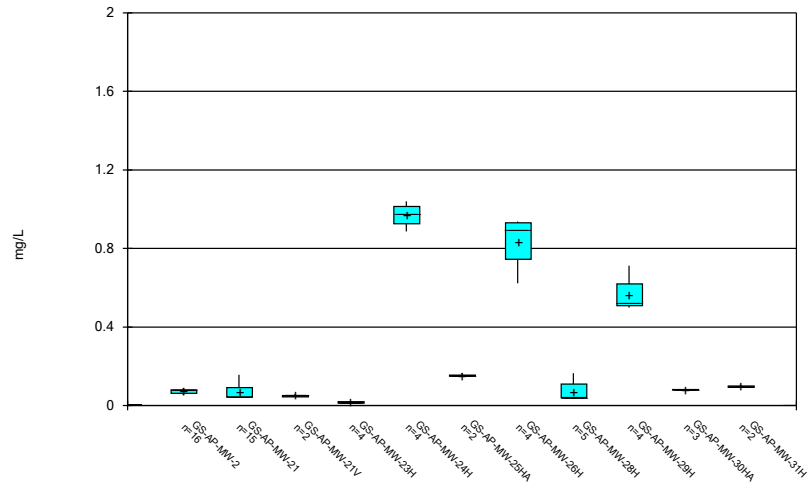


Constituent: Barium Analysis Run 12/9/2020 2:25 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Box & Whiskers Plot

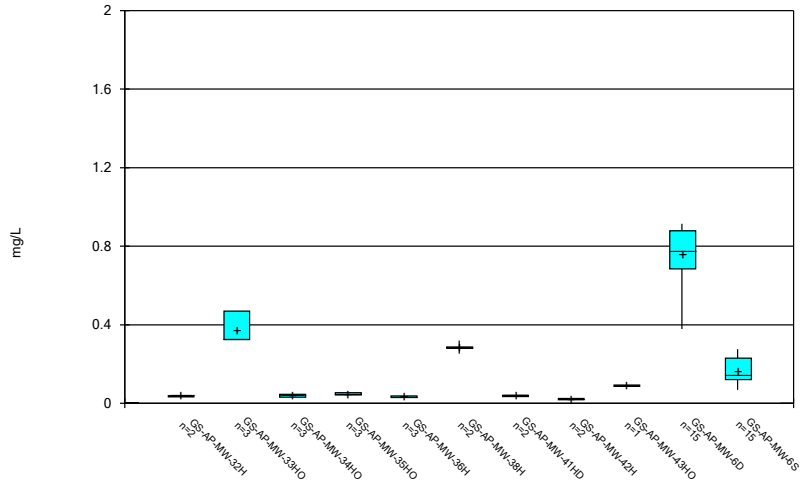


Constituent: Barium Analysis Run 12/9/2020 2:25 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Box & Whiskers Plot

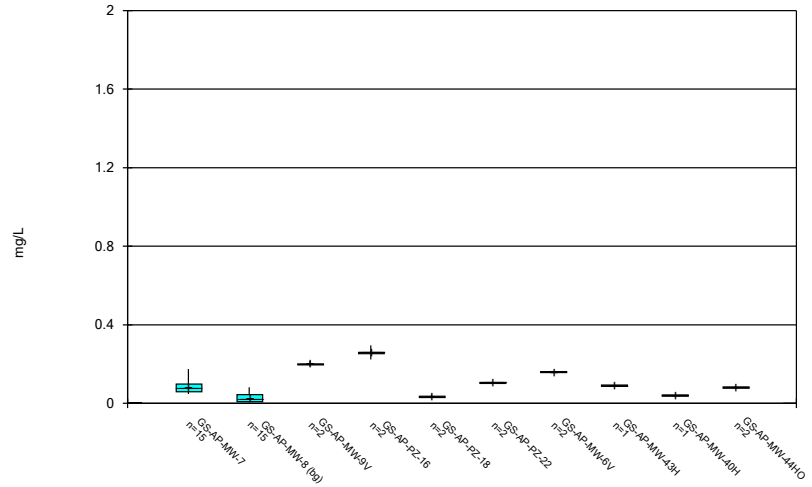


Constituent: Barium Analysis Run 12/9/2020 2:25 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Box & Whiskers Plot

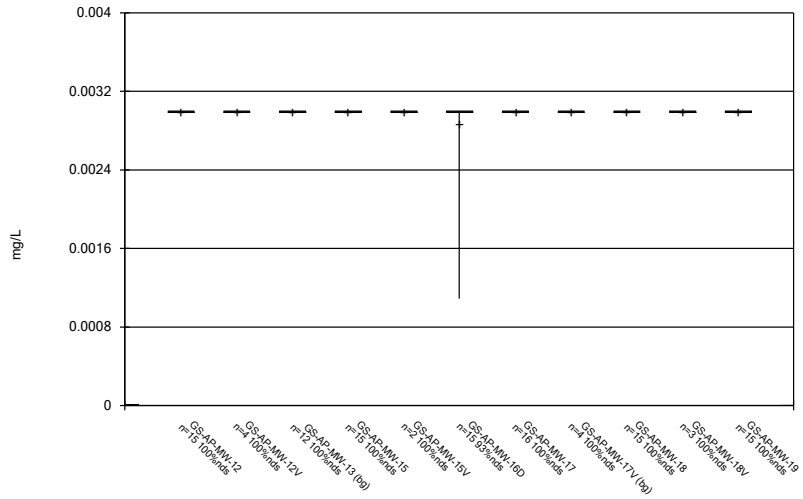


Constituent: Barium Analysis Run 12/9/2020 2:25 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Box & Whiskers Plot

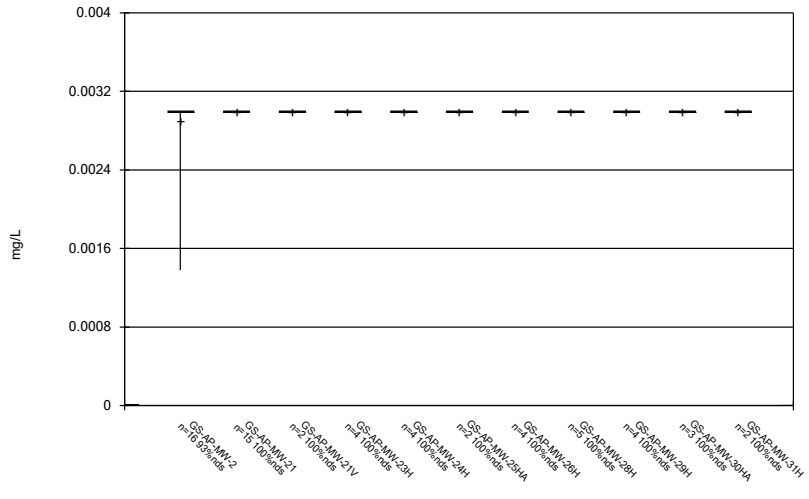


Constituent: Beryllium Analysis Run 12/9/2020 2:25 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Box & Whiskers Plot

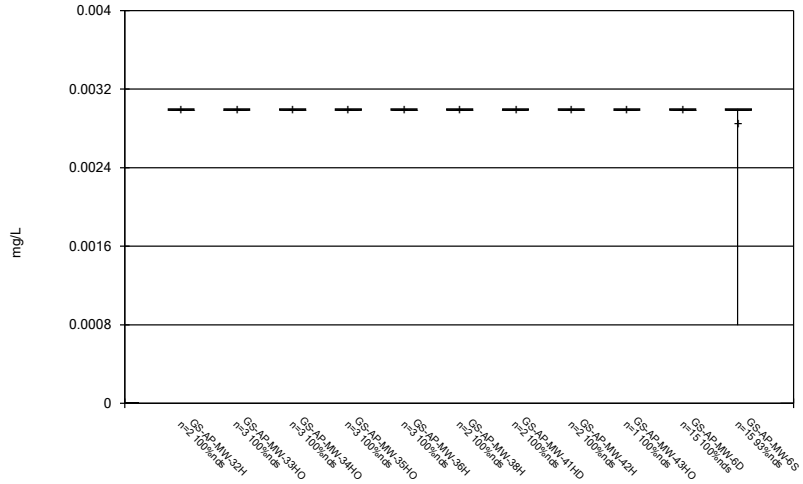


Constituent: Beryllium Analysis Run 12/9/2020 2:25 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Box & Whiskers Plot

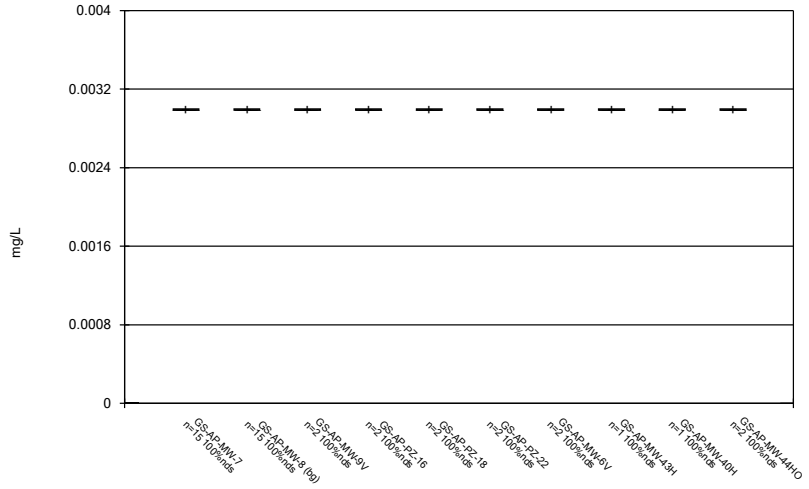


Constituent: Beryllium Analysis Run 12/9/2020 2:25 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Box & Whiskers Plot

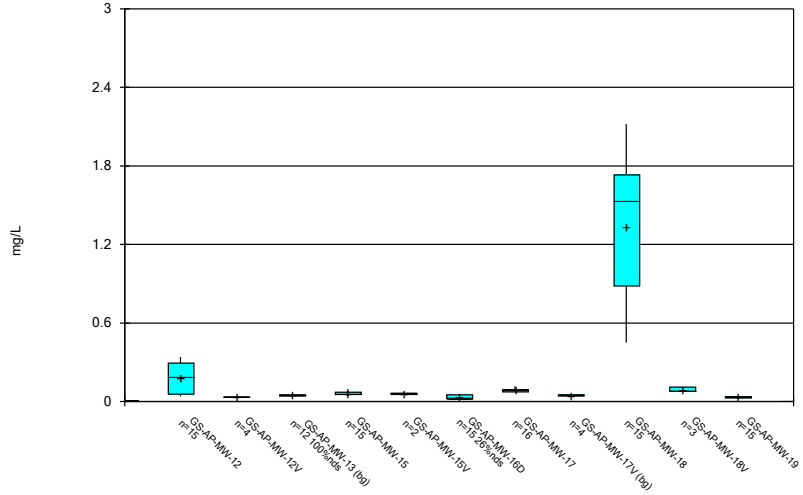


Constituent: Beryllium Analysis Run 12/9/2020 2:25 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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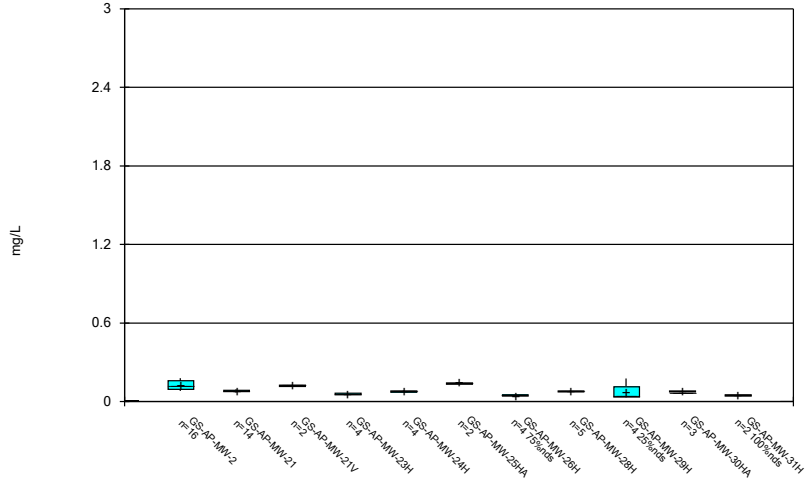
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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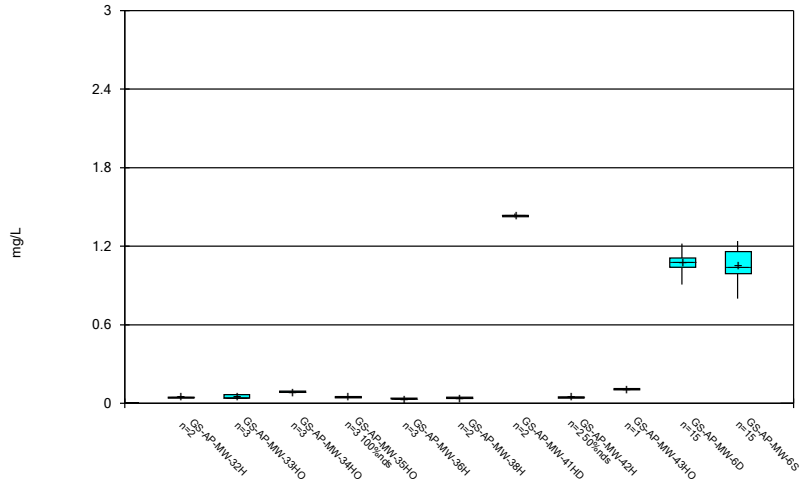
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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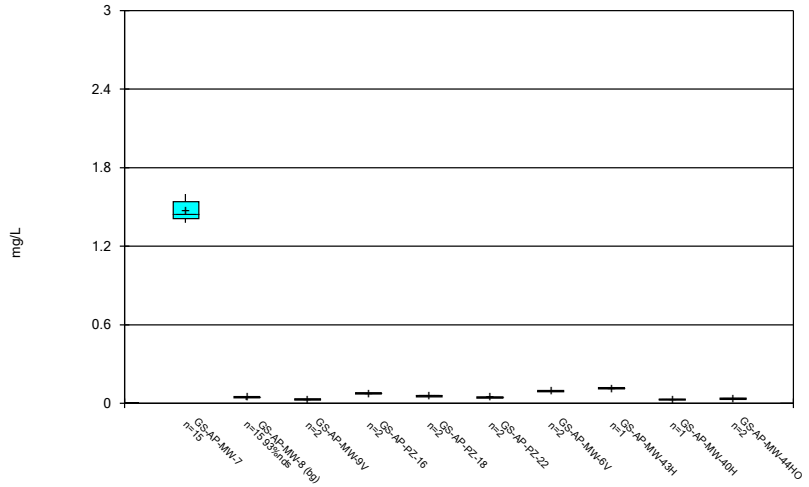
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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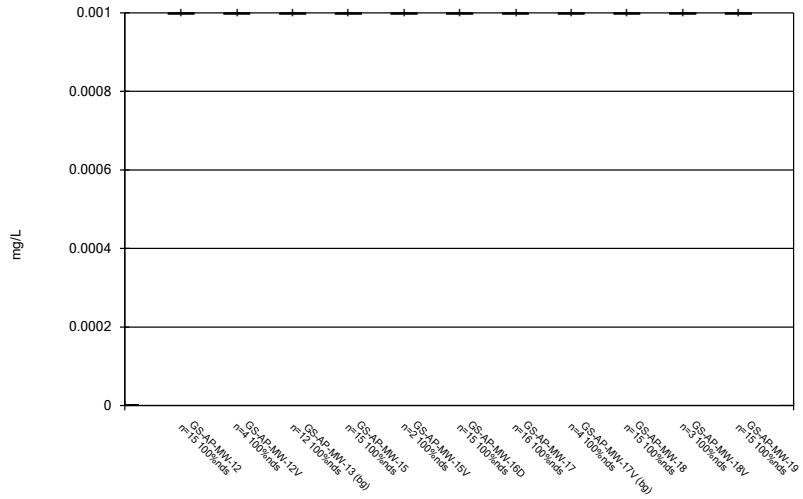
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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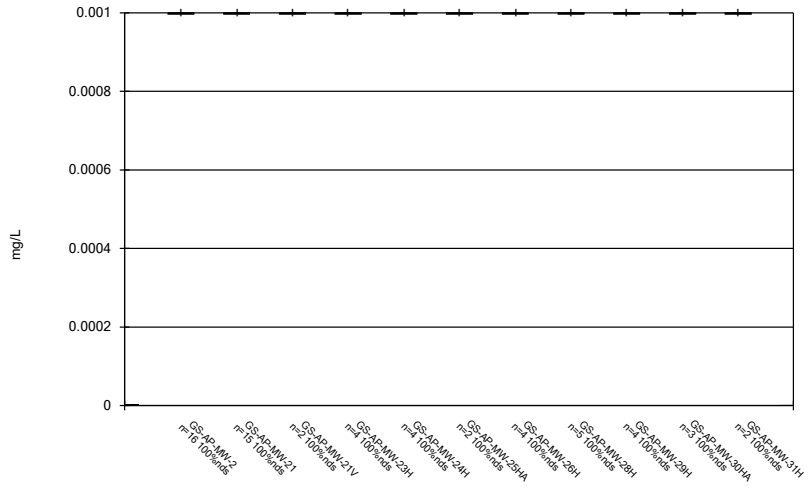
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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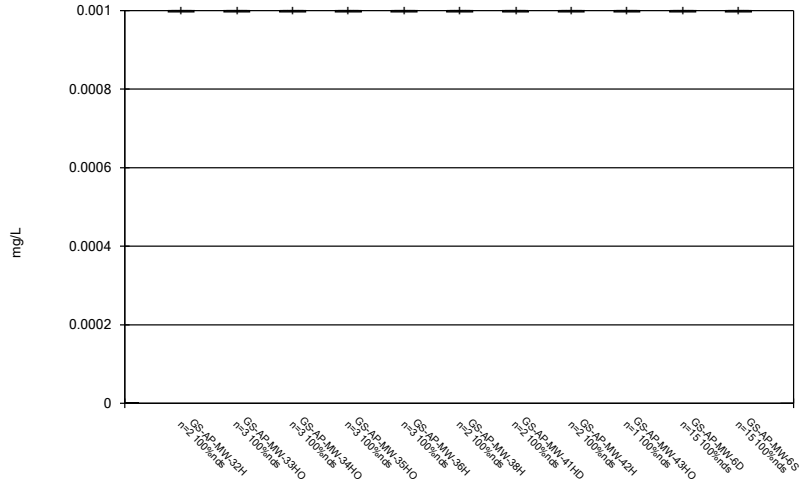
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

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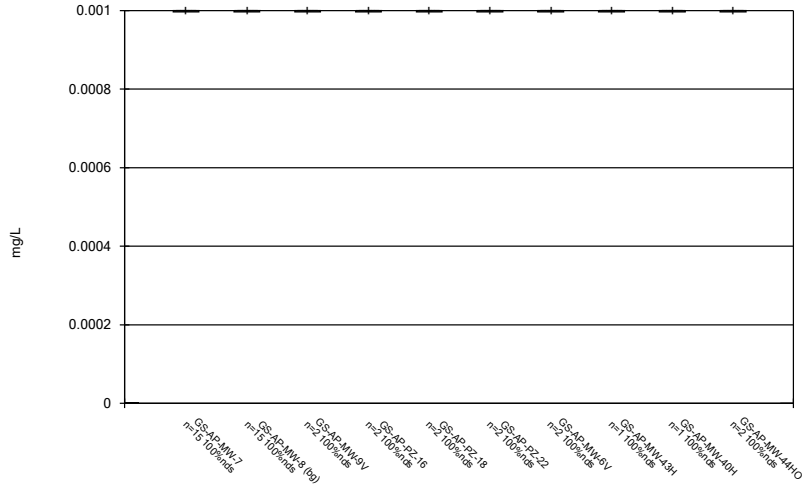

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Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

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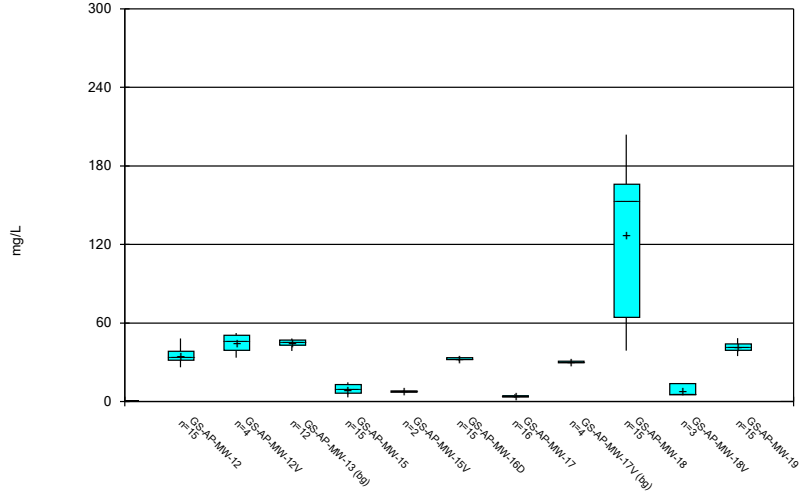

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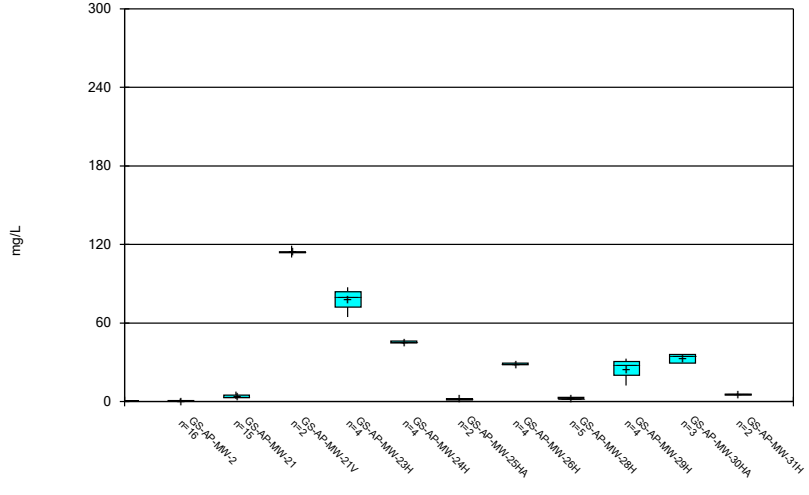
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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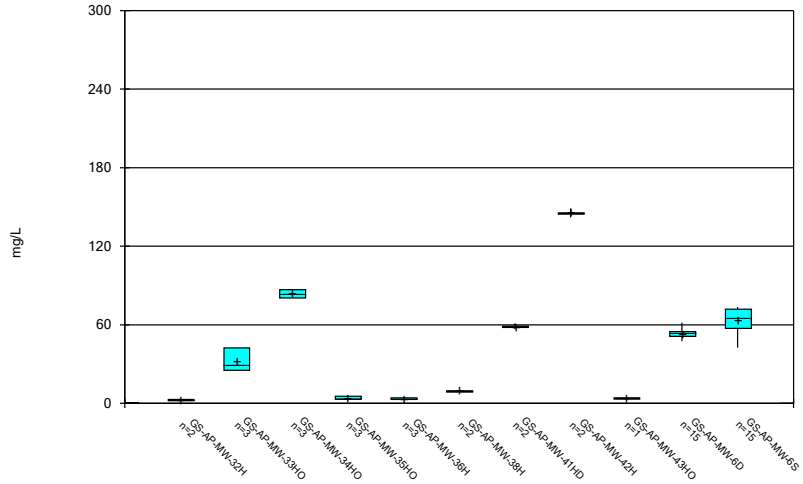
Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

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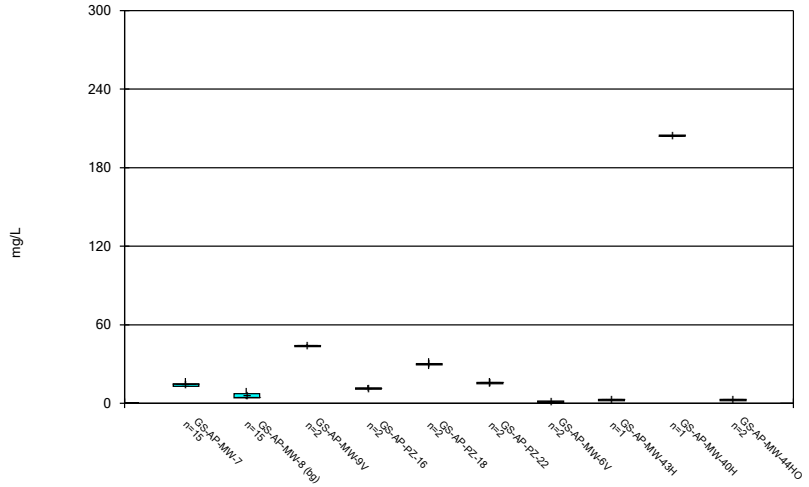
Box & Whiskers Plot



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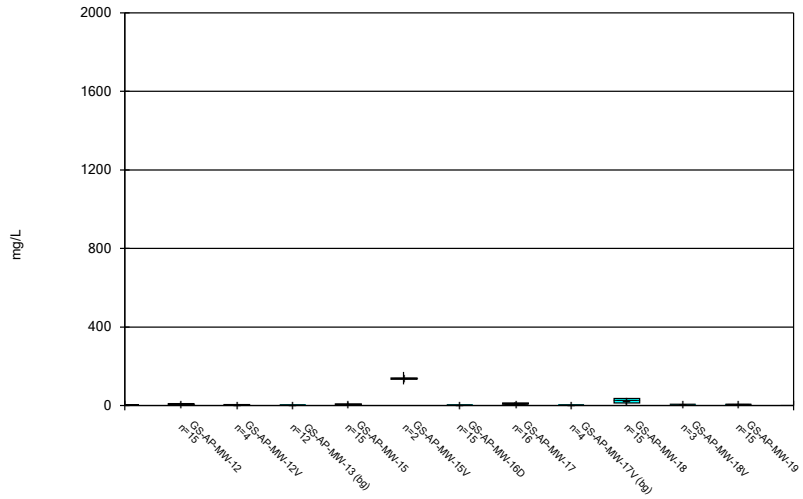
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Box & Whiskers Plot

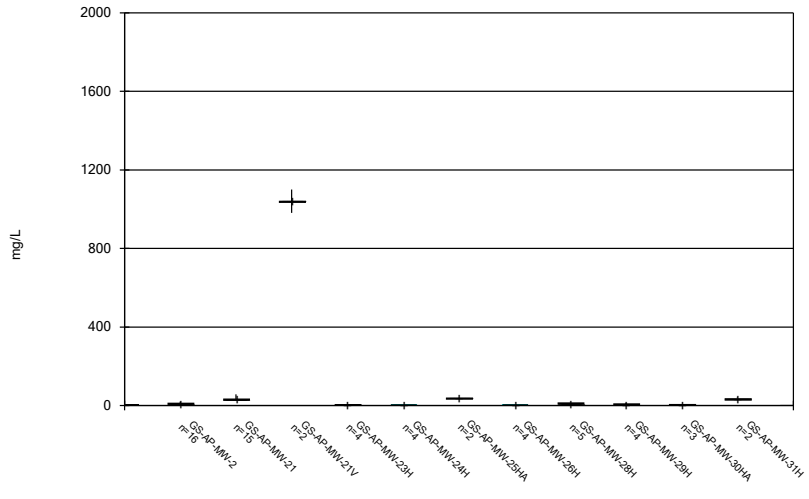


Constituent: Chloride Analysis Run 12/9/2020 2:25 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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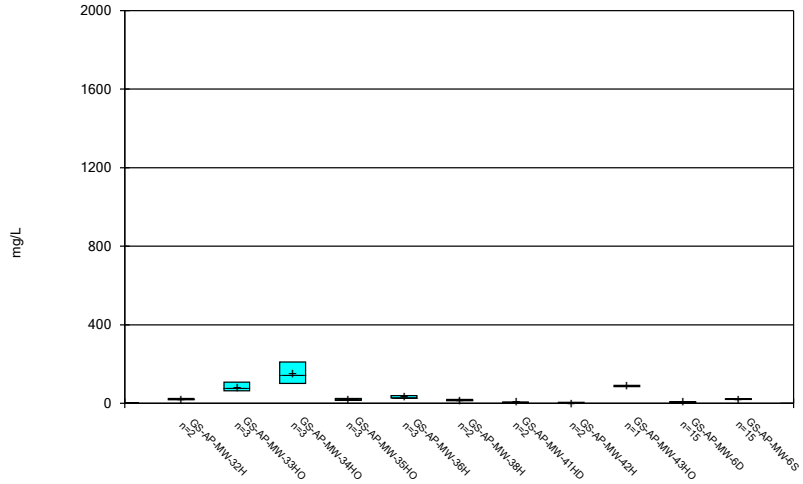
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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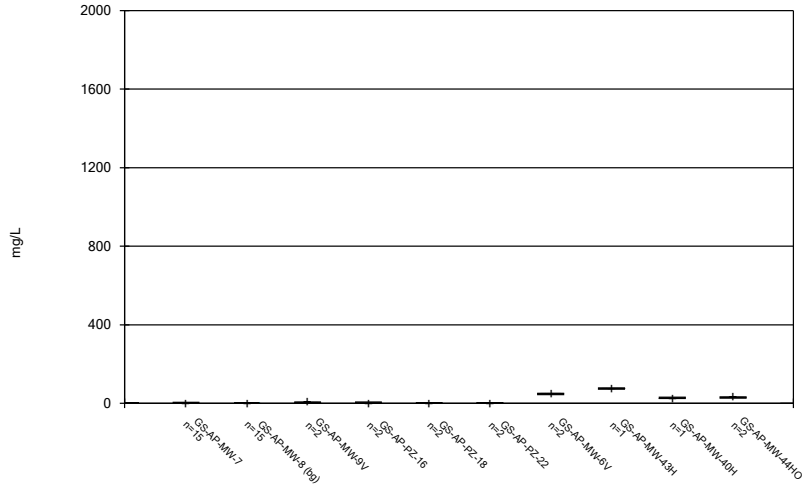
Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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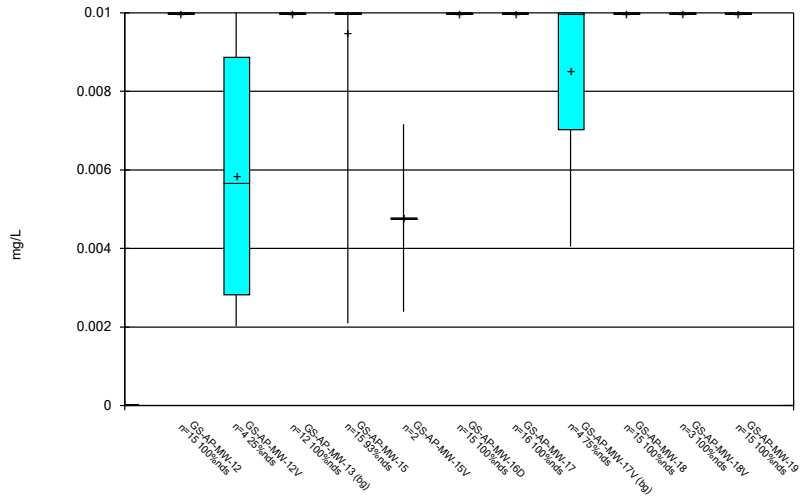
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Box & Whiskers Plot

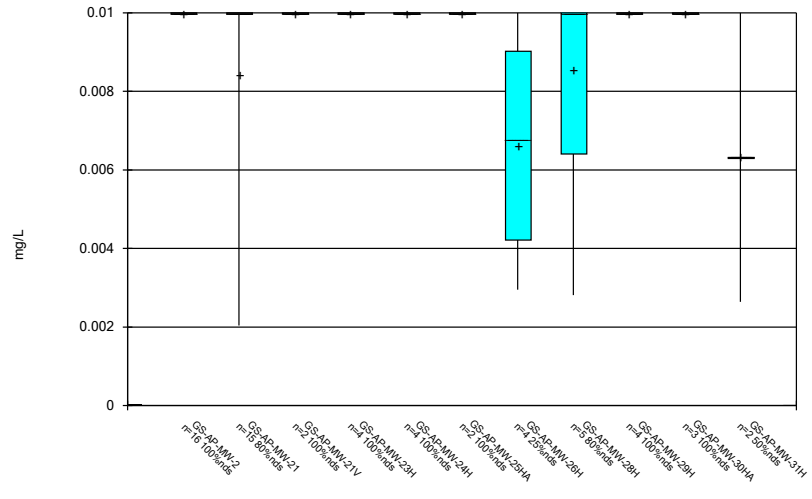


Constituent: Chromium Analysis Run 12/9/2020 2:25 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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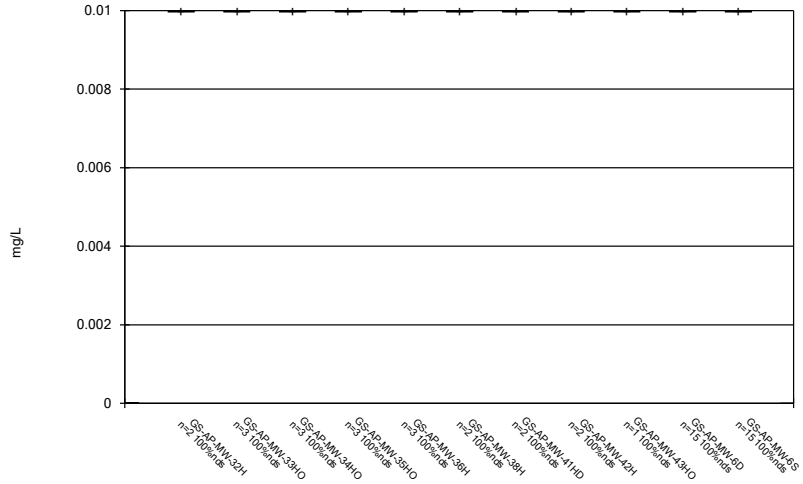
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

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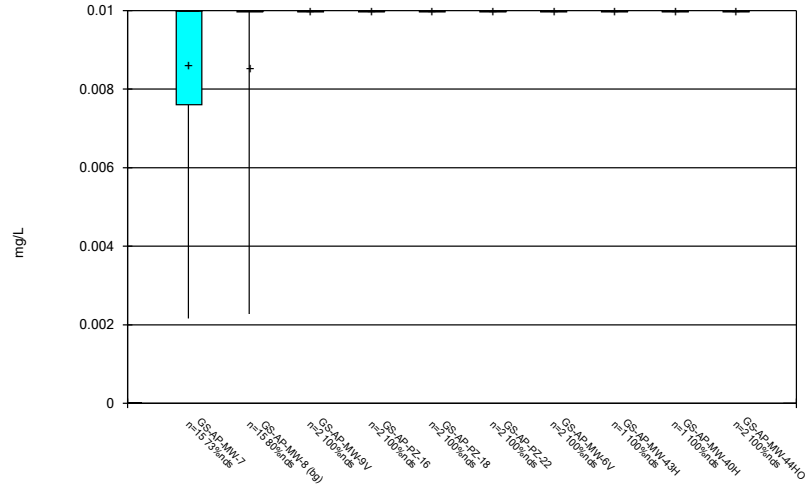
Box & Whiskers Plot



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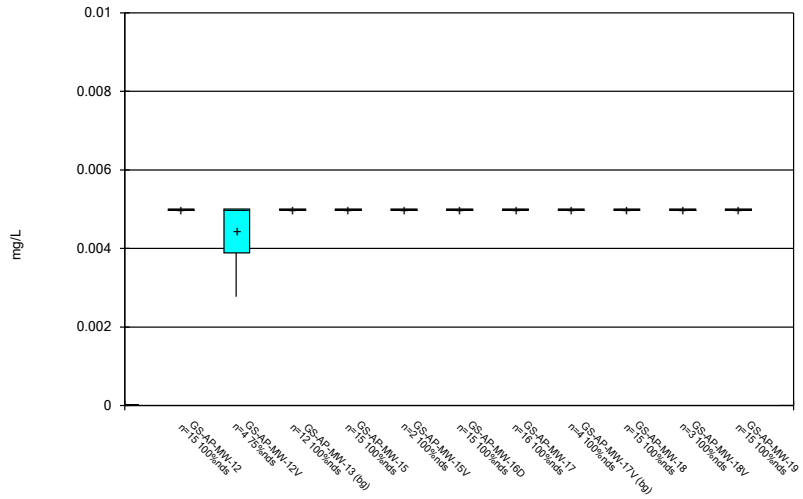
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Box & Whiskers Plot

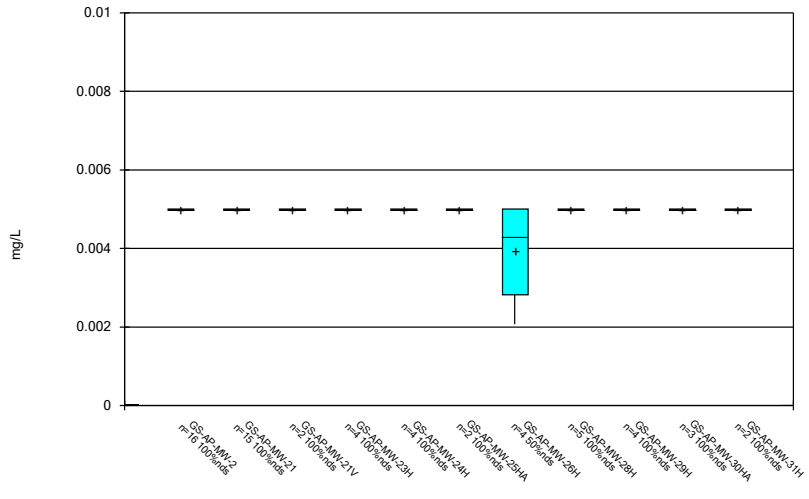


Constituent: Cobalt Analysis Run 12/9/2020 2:25 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Box & Whiskers Plot

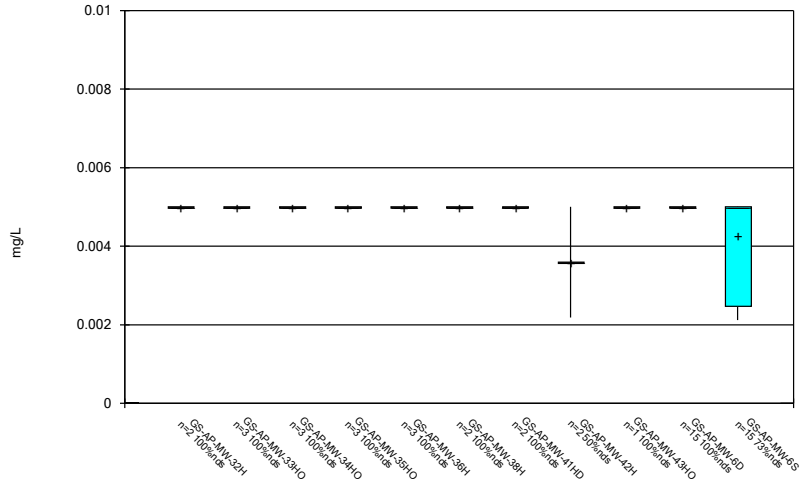


Constituent: Cobalt Analysis Run 12/9/2020 2:25 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Box & Whiskers Plot

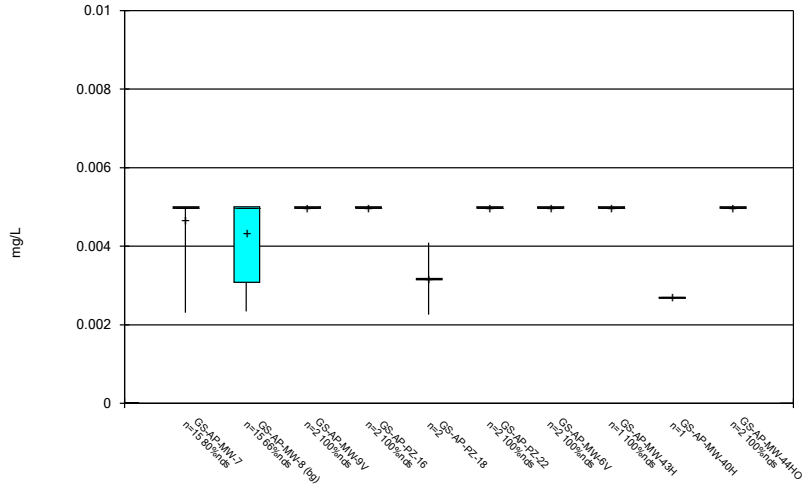


Constituent: Cobalt Analysis Run 12/9/2020 2:25 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Box & Whiskers Plot

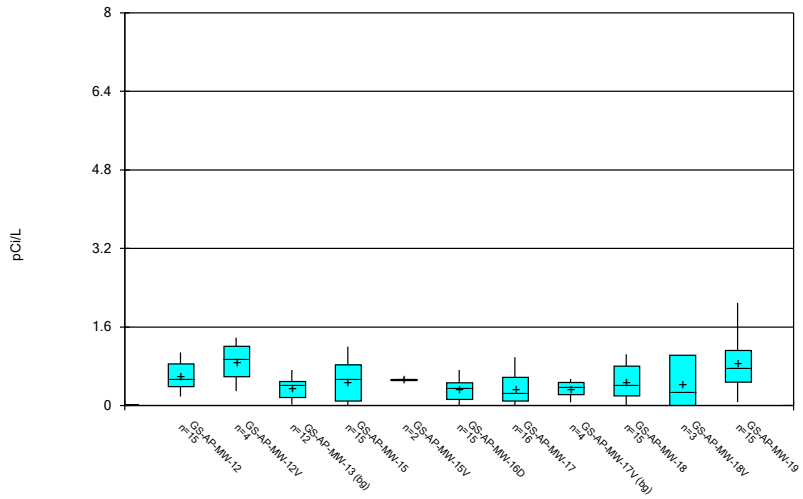


Constituent: Cobalt Analysis Run 12/9/2020 2:26 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Box & Whiskers Plot

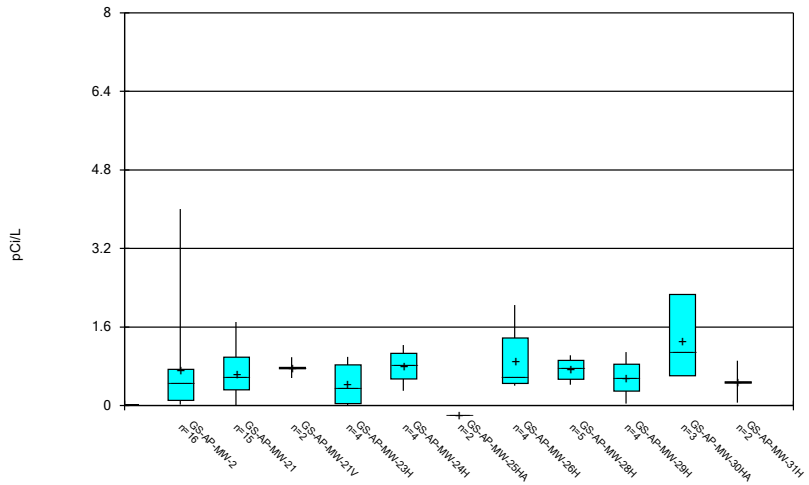


Constituent: Combined Radium 226 + 228 Analysis Run 12/9/2020 2:26 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Box & Whiskers Plot

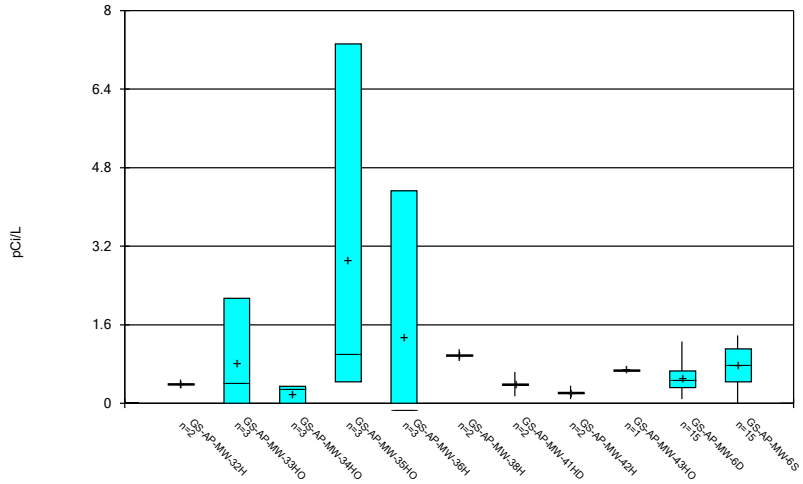


Constituent: Combined Radium 226 + 228 Analysis Run 12/9/2020 2:26 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Box & Whiskers Plot

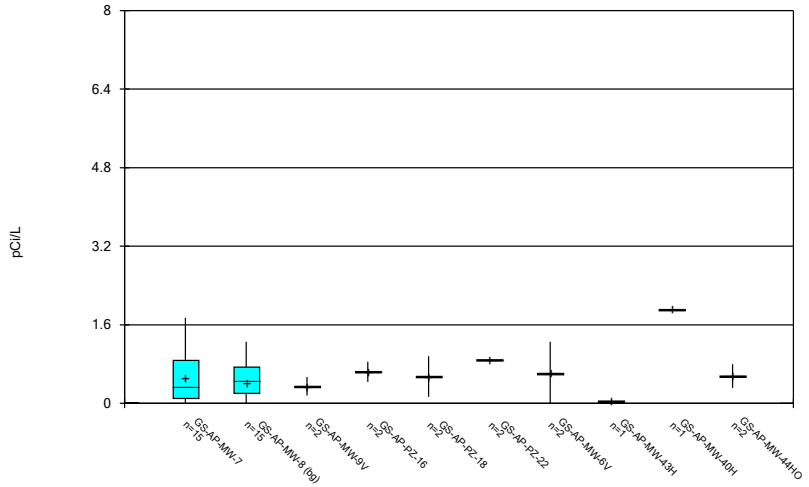


Constituent: Combined Radium 226 + 228 Analysis Run 12/9/2020 2:26 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Box & Whiskers Plot

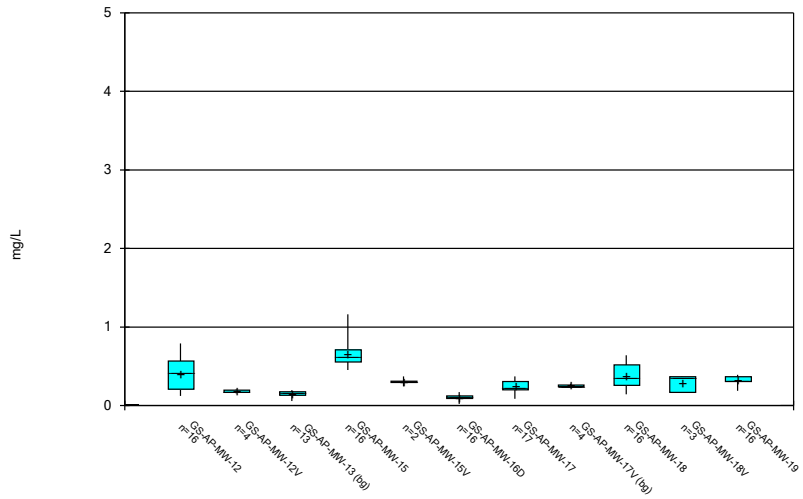


Constituent: Combined Radium 226 + 228 Analysis Run 12/9/2020 2:26 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Box & Whiskers Plot

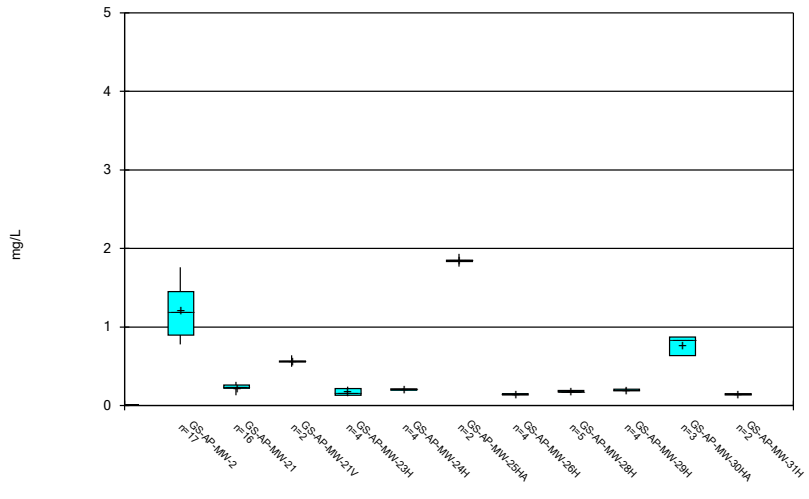


Constituent: Fluoride Analysis Run 12/9/2020 2:26 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Box & Whiskers Plot

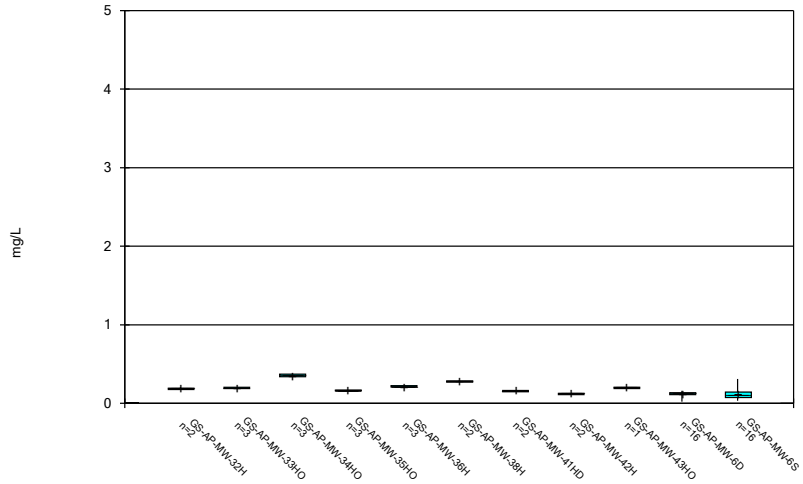


Constituent: Fluoride Analysis Run 12/9/2020 2:26 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Box & Whiskers Plot

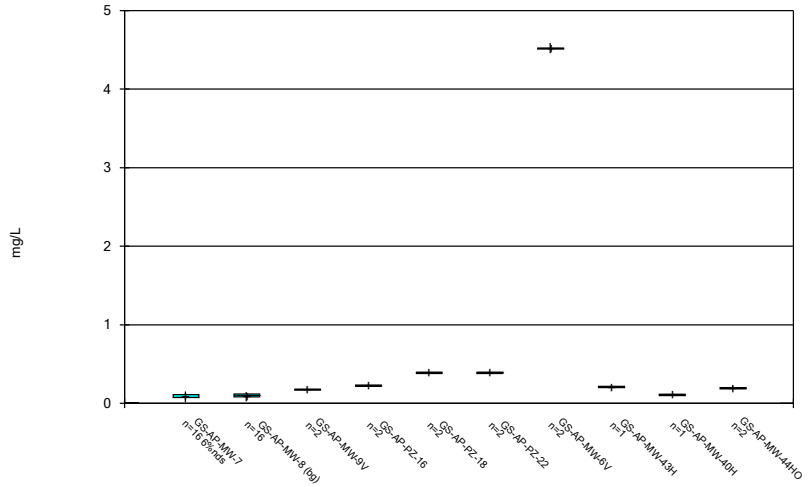


Constituent: Fluoride Analysis Run 12/9/2020 2:26 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Box & Whiskers Plot

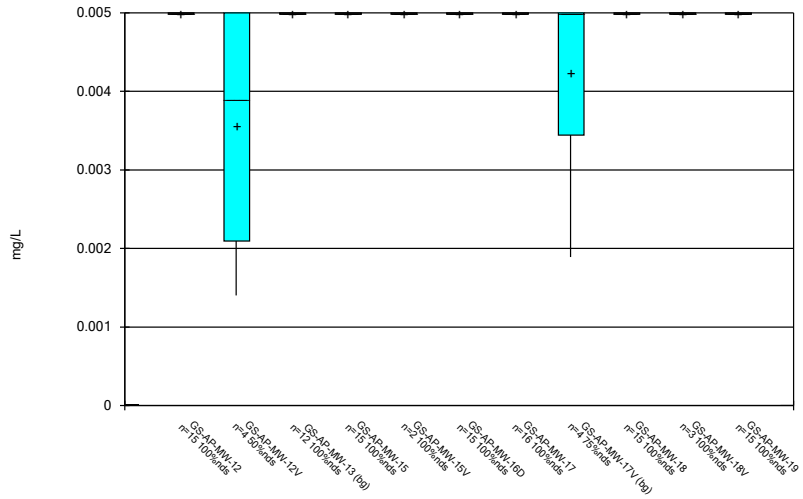


Constituent: Fluoride Analysis Run 12/9/2020 2:26 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Box & Whiskers Plot

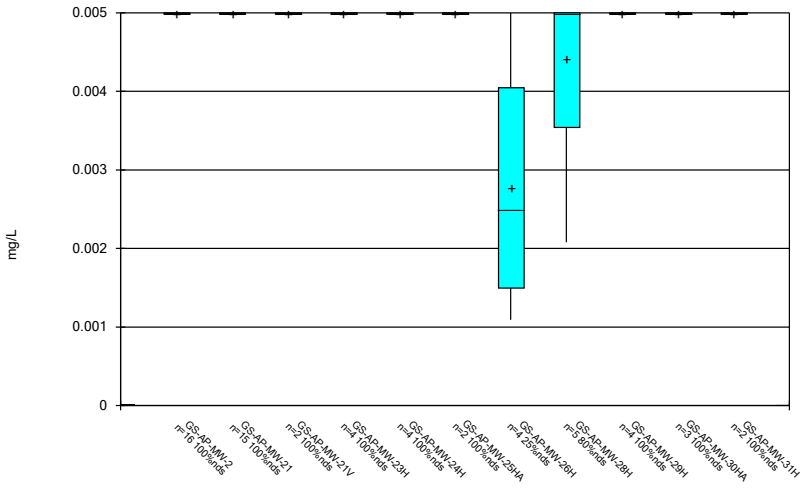


Constituent: Lead Analysis Run 12/9/2020 2:26 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Box & Whiskers Plot

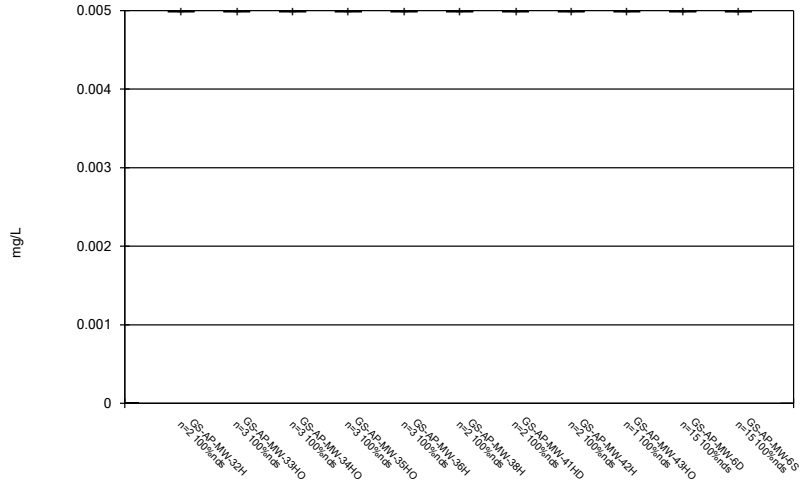


Constituent: Lead Analysis Run 12/9/2020 2:26 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Box & Whiskers Plot

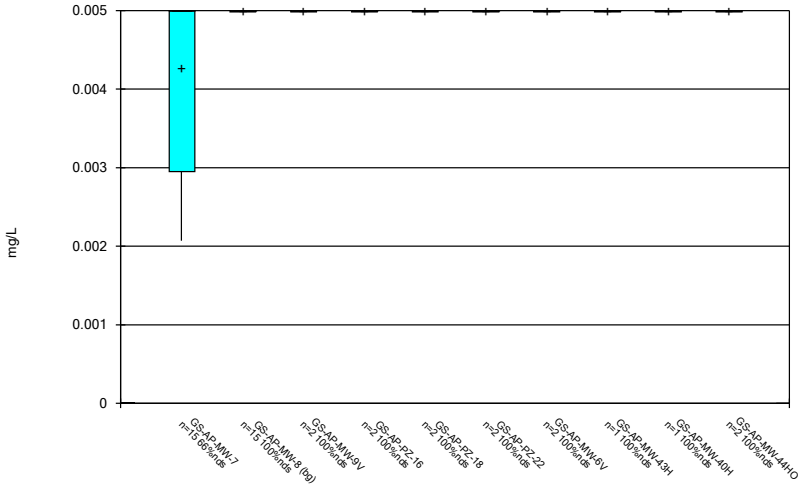


Constituent: Lead Analysis Run 12/9/2020 2:26 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Box & Whiskers Plot

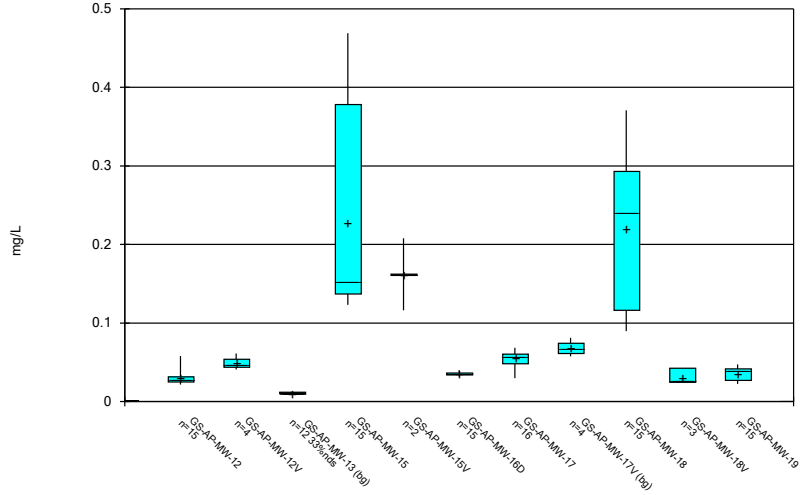


Constituent: Lead Analysis Run 12/9/2020 2:26 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Box & Whiskers Plot

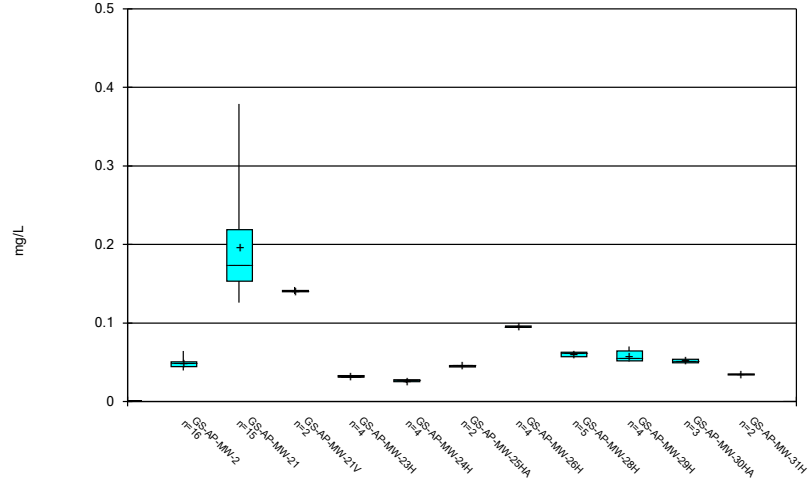


Constituent: Lithium Analysis Run 12/9/2020 2:26 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Box & Whiskers Plot

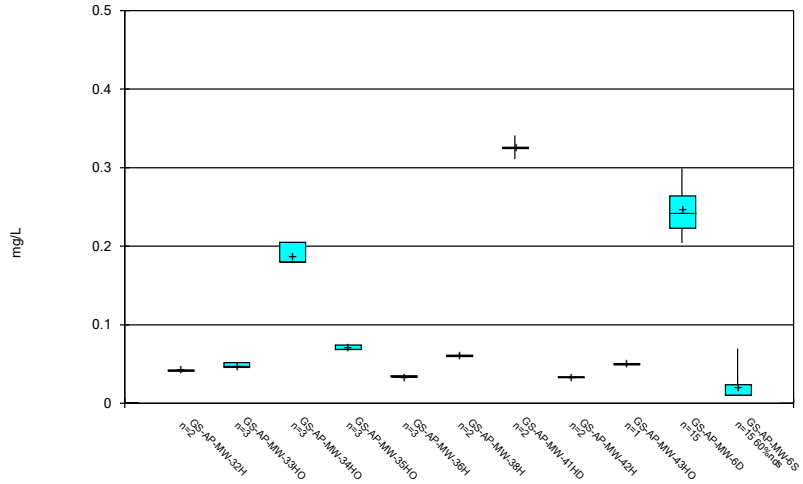


Constituent: Lithium Analysis Run 12/9/2020 2:26 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Box & Whiskers Plot

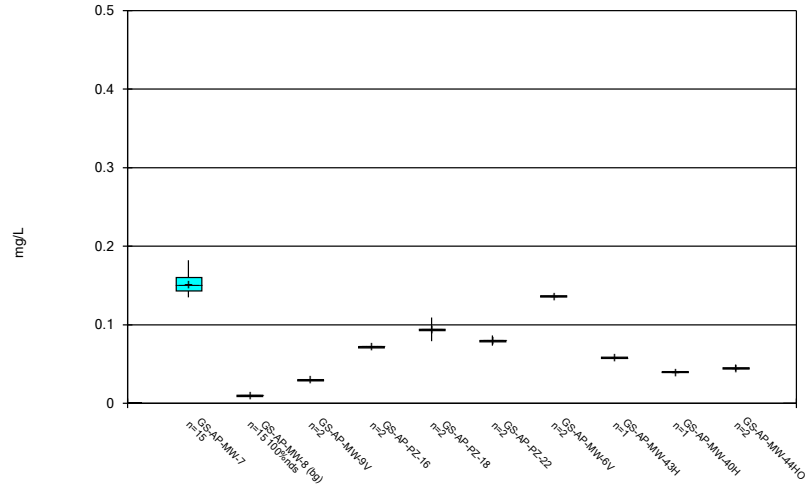


Constituent: Lithium Analysis Run 12/9/2020 2:26 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Box & Whiskers Plot

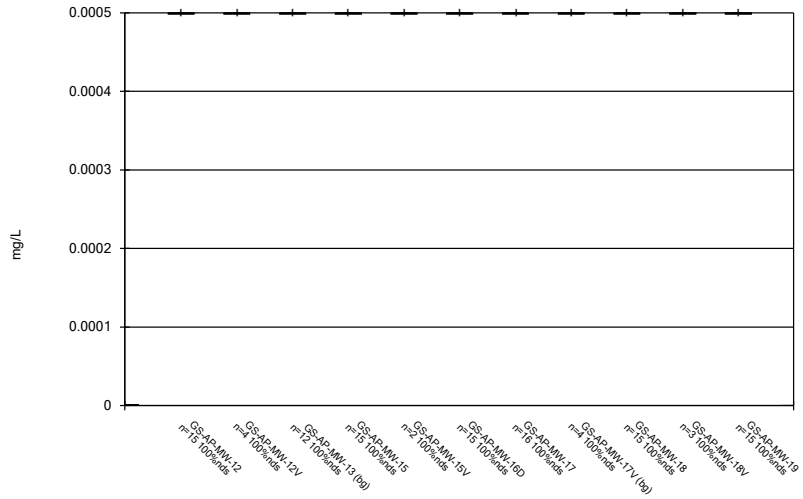


Constituent: Lithium Analysis Run 12/9/2020 2:26 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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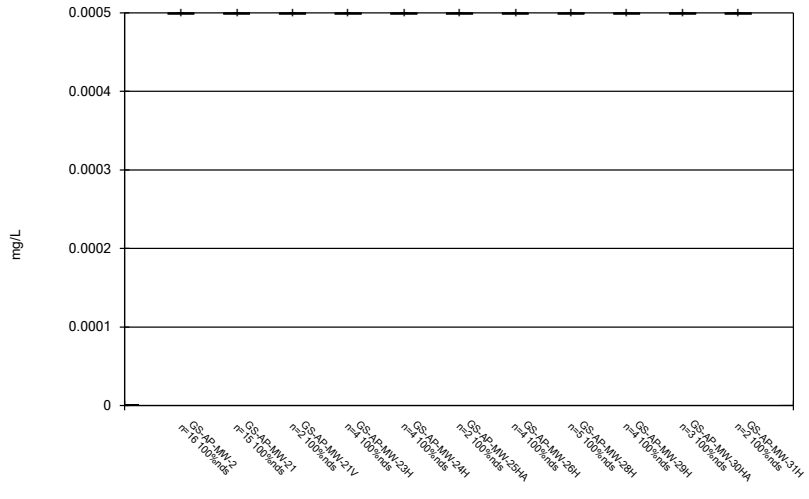
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Box & Whiskers Plot

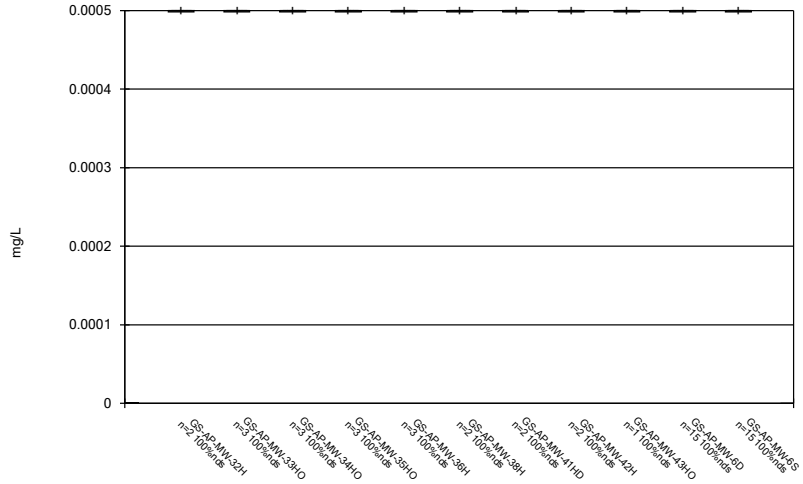


Constituent: Mercury Analysis Run 12/9/2020 2:26 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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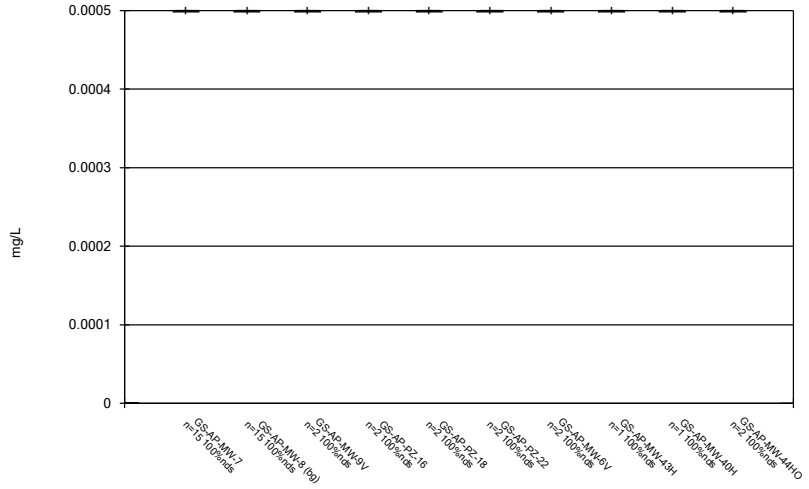
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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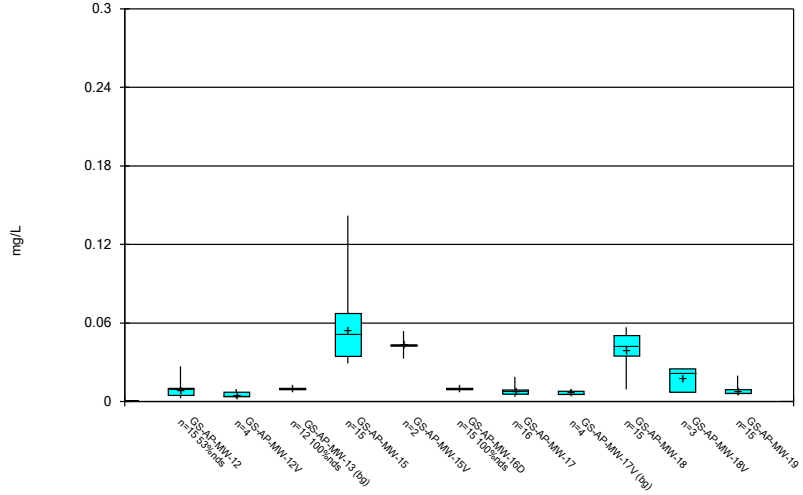
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Box & Whiskers Plot

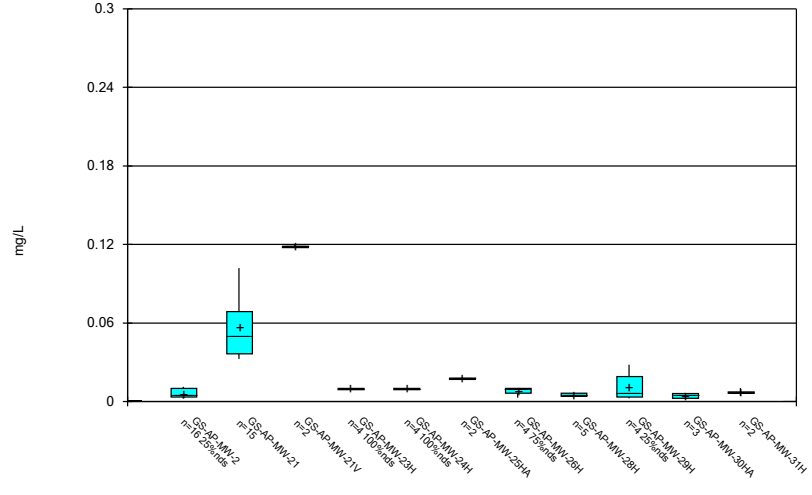


Constituent: Molybdenum Analysis Run 12/9/2020 2:26 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Box & Whiskers Plot

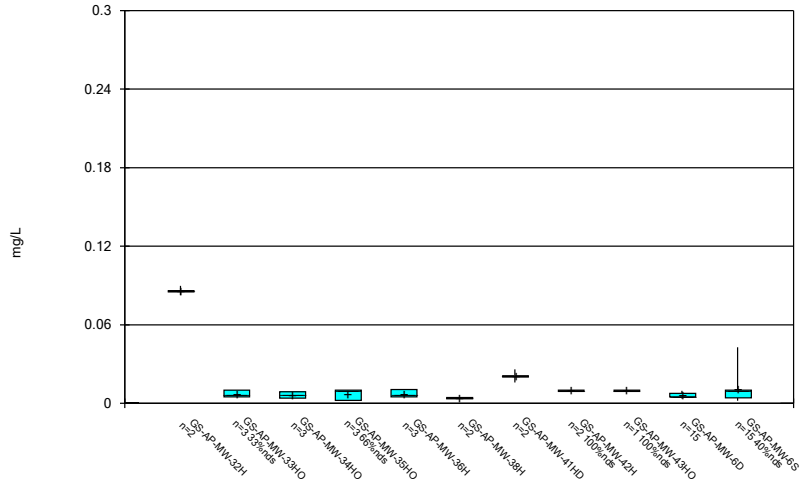


Constituent: Molybdenum Analysis Run 12/9/2020 2:26 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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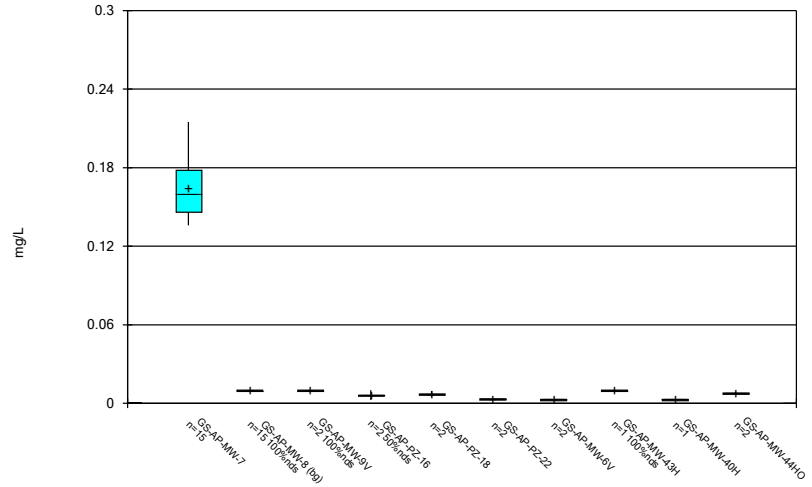
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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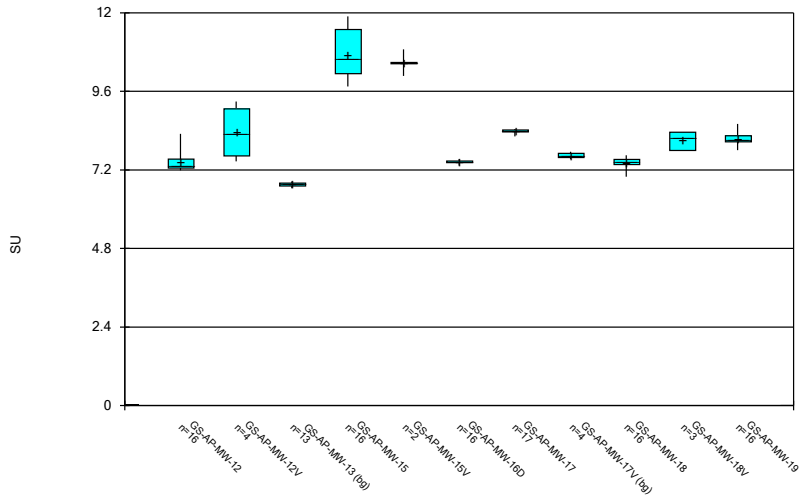
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Box & Whiskers Plot

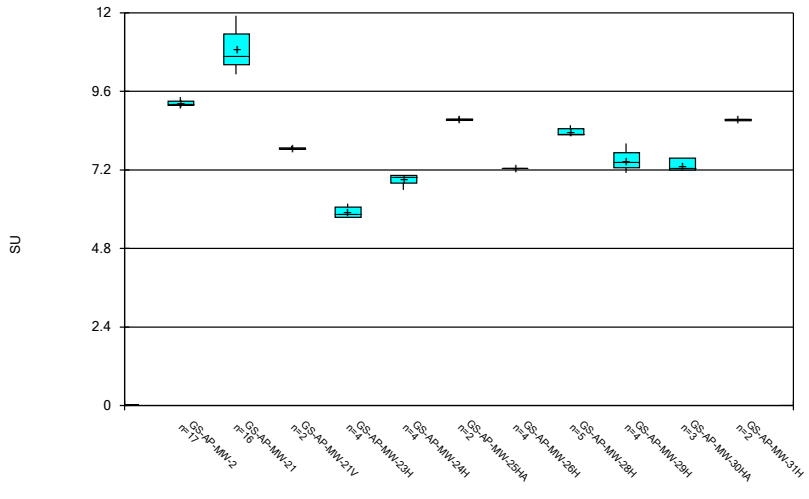


Constituent: pH Analysis Run 12/9/2020 2:26 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Box & Whiskers Plot

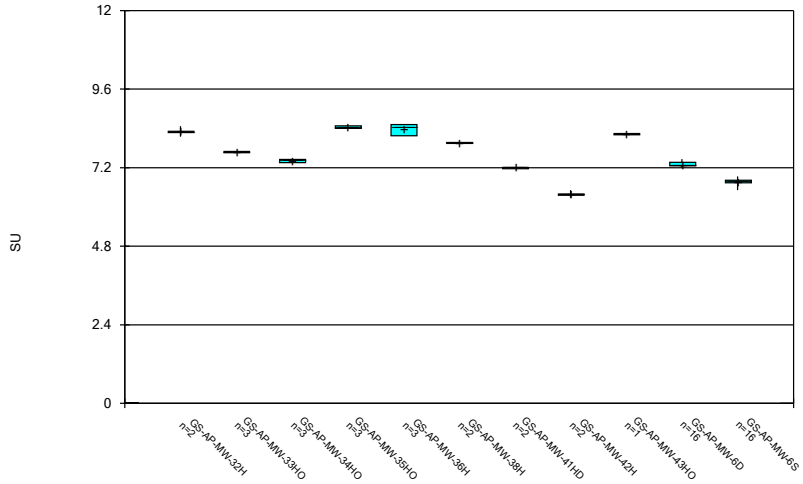


Constituent: pH Analysis Run 12/9/2020 2:26 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Box & Whiskers Plot

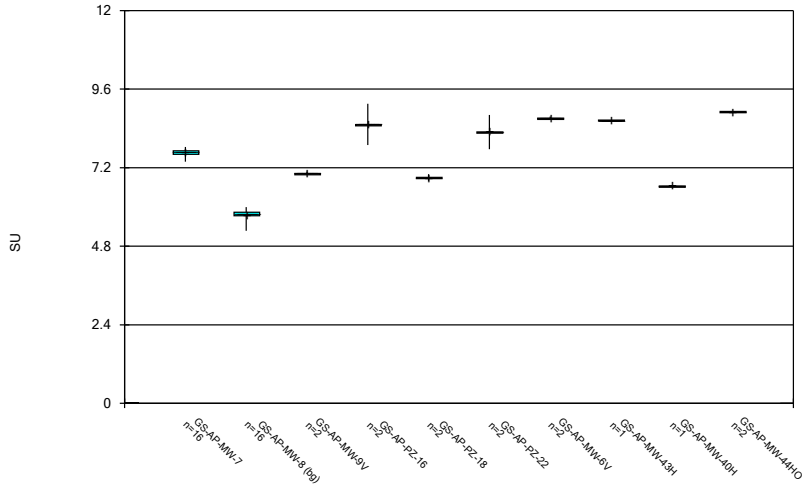


Constituent: pH Analysis Run 12/9/2020 2:26 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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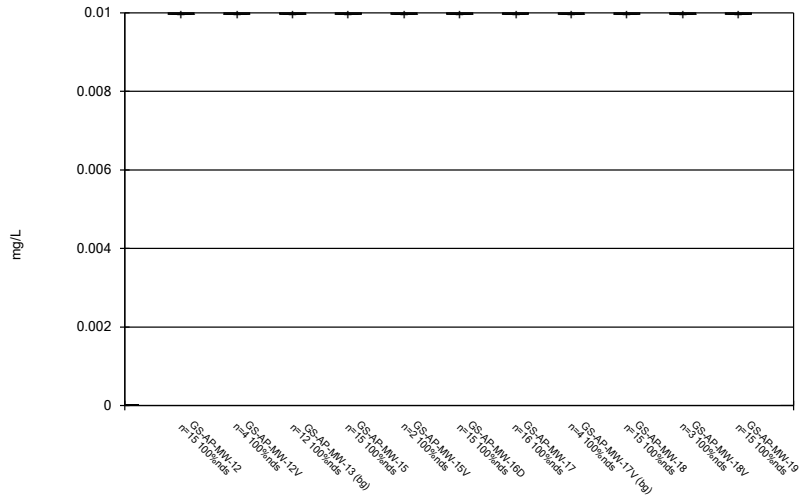
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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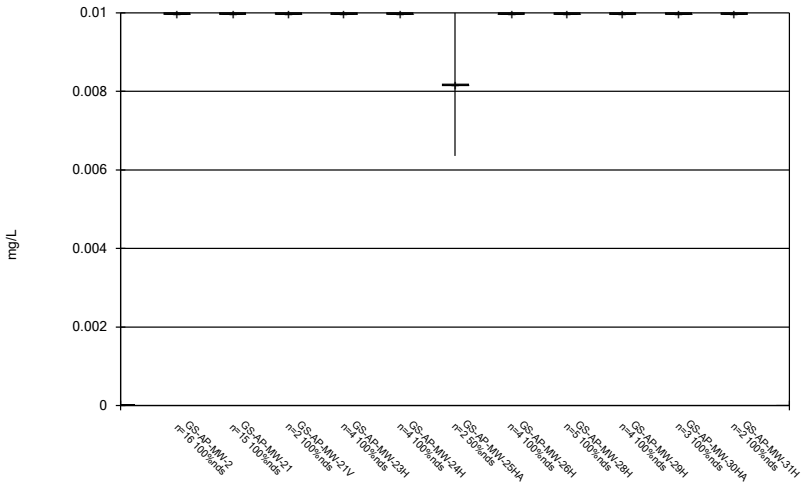
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Box & Whiskers Plot

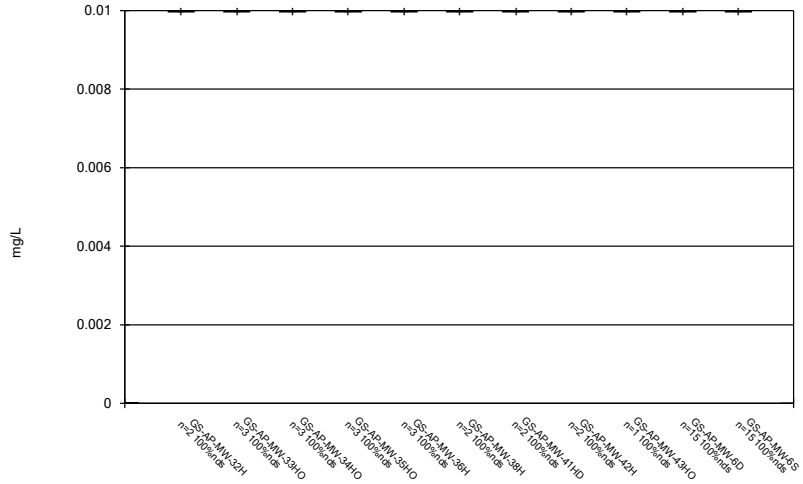


Constituent: Selenium Analysis Run 12/9/2020 2:26 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Box & Whiskers Plot

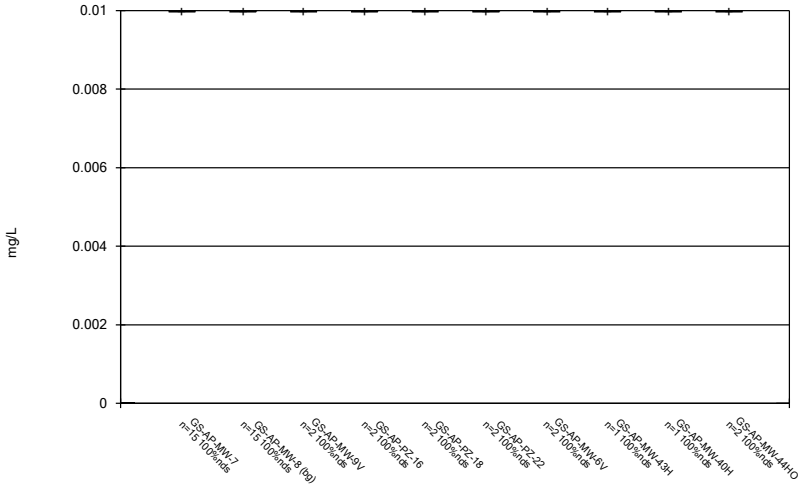


Constituent: Selenium Analysis Run 12/9/2020 2:26 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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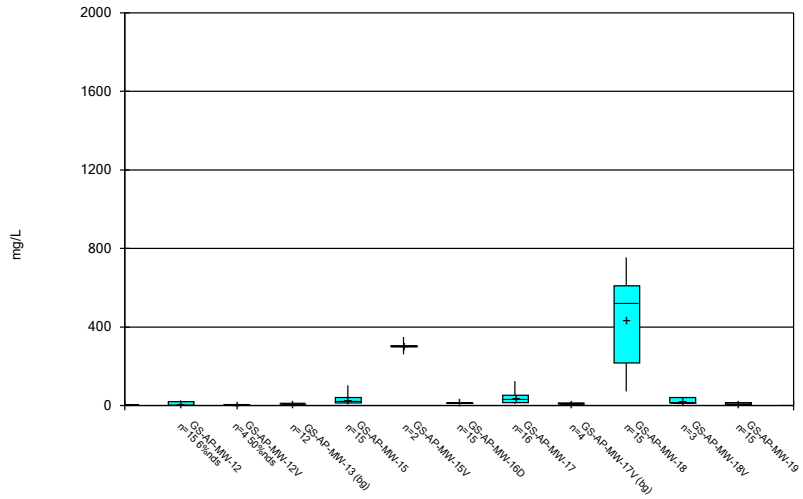
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Sulfate Analysis Run 12/9/2020 2:26 PM

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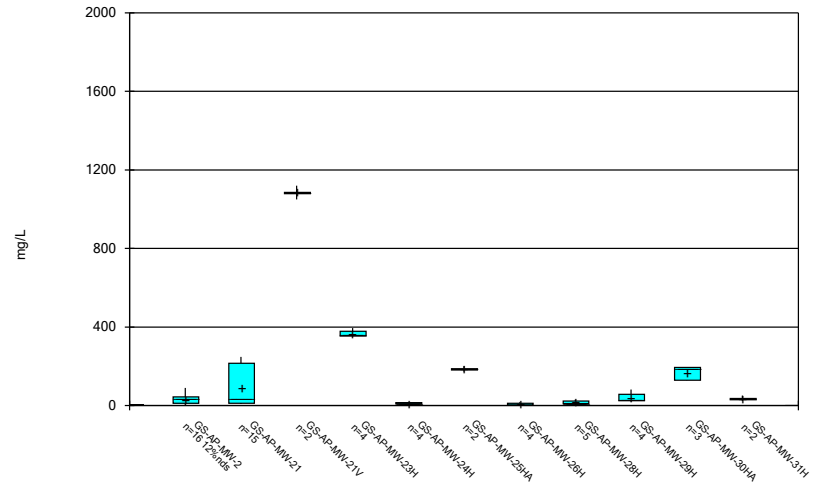
Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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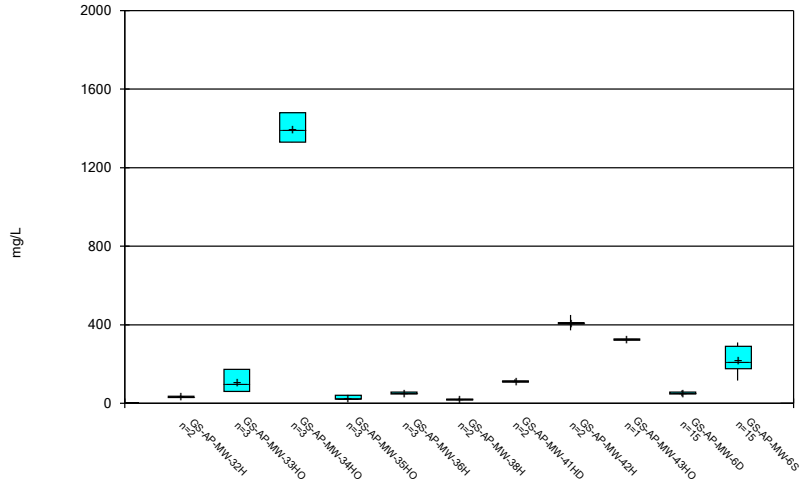
Box & Whiskers Plot



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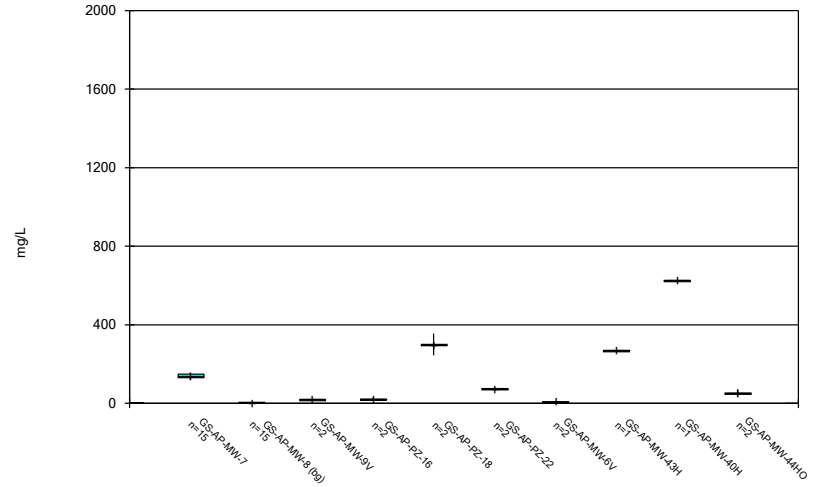
Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

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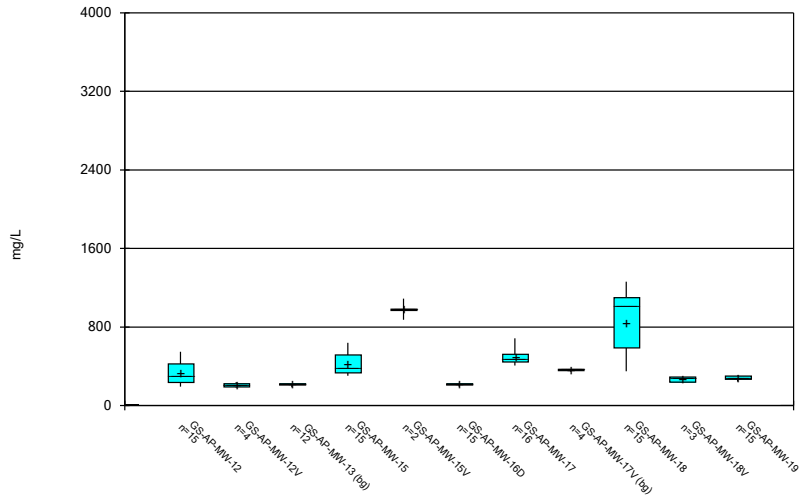
Box & Whiskers Plot

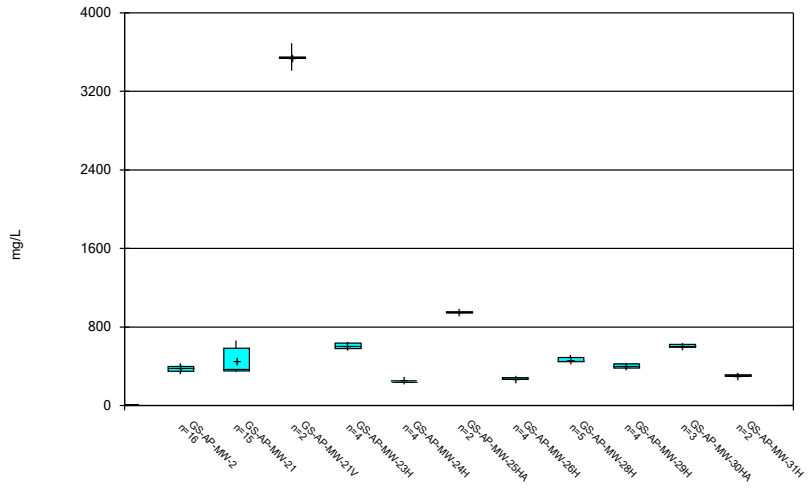


Constituent: TDS Analysis Run 12/9/2020 2:26 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Box & Whiskers Plot

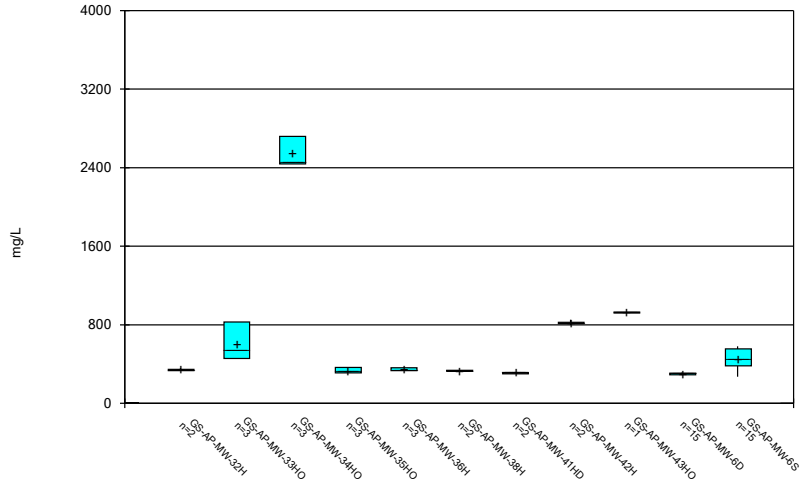


Constituent: TDS Analysis Run 12/9/2020 2:26 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Box & Whiskers Plot

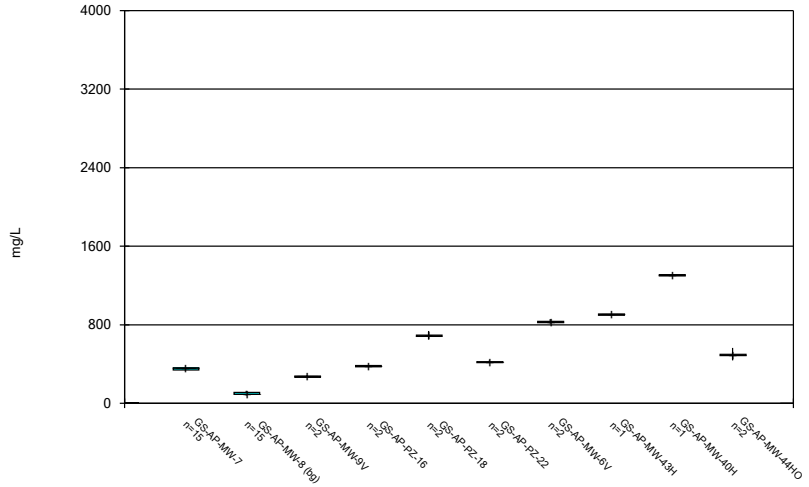


Constituent: TDS Analysis Run 12/9/2020 2:26 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Box & Whiskers Plot

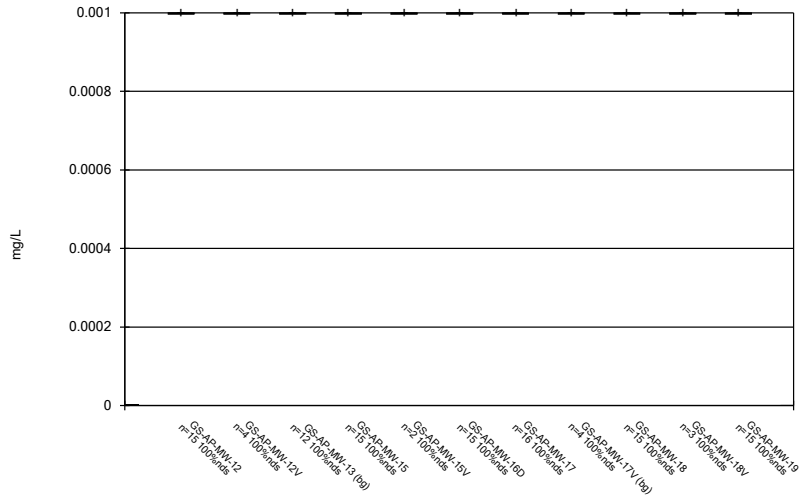


Constituent: TDS Analysis Run 12/9/2020 2:26 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Box & Whiskers Plot

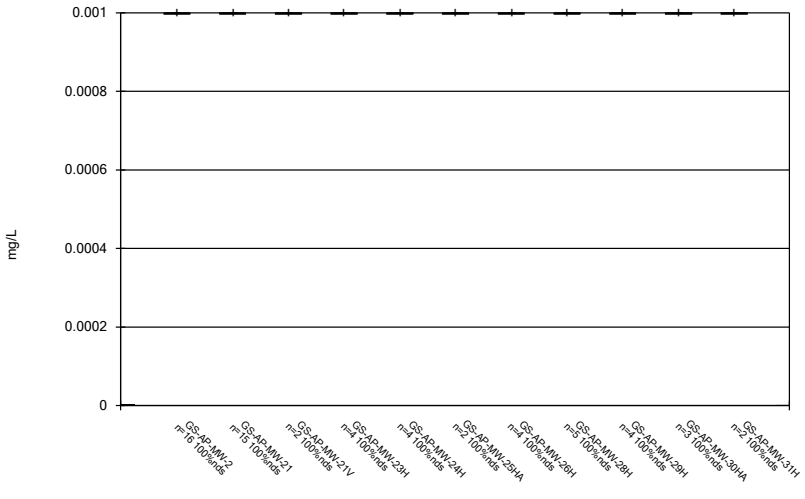


Constituent: Thallium Analysis Run 12/9/2020 2:26 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Box & Whiskers Plot

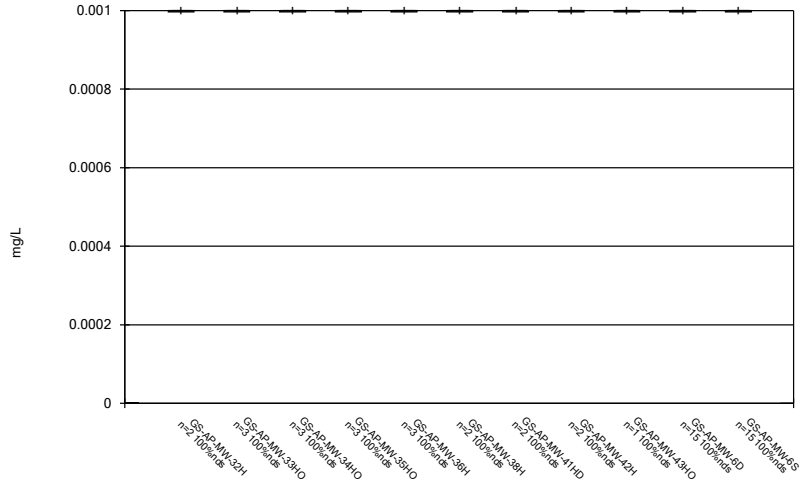


Constituent: Thallium Analysis Run 12/9/2020 2:26 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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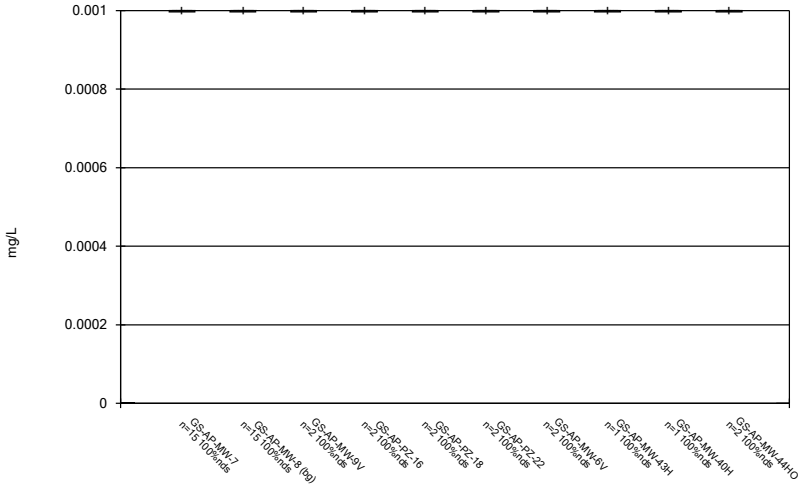
Box & Whiskers Plot



Constituent: Thallium Analysis Run 12/9/2020 2:26 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

FIGURE C.

Outlier Summary

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond Printed 11/12/2020, 11:34 AM

	GS-AP-MW-21 Boron (mg/L)
8/2/2016	0.176 (o)

FIGURE D.

Appendix III - Interwell Prediction Limits - Significant Results

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond Printed 12/9/2020, 1:32 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-AP-MW-17	0.1	n/a	9/21/2020	0.102	Yes	31	n/a	n/a	83.87	n/a	n/a	0.001764	NP Inter (NDs) 1 of 2
Boron (mg/L)	GS-AP-MW-18	0.1	n/a	9/23/2020	0.491	Yes	31	n/a	n/a	83.87	n/a	n/a	0.001764	NP Inter (NDs) 1 of 2
Boron (mg/L)	GS-AP-MW-2	0.1	n/a	9/22/2020	0.133	Yes	31	n/a	n/a	83.87	n/a	n/a	0.001764	NP Inter (NDs) 1 of 2
Boron (mg/L)	GS-AP-MW-6D	0.1	n/a	9/17/2020	1.22	Yes	31	n/a	n/a	83.87	n/a	n/a	0.001764	NP Inter (NDs) 1 of 2
Boron (mg/L)	GS-AP-MW-6S	0.1	n/a	9/16/2020	0.8	Yes	31	n/a	n/a	83.87	n/a	n/a	0.001764	NP Inter (NDs) 1 of 2
Boron (mg/L)	GS-AP-MW-7	0.1	n/a	9/16/2020	1.54	Yes	31	n/a	n/a	83.87	n/a	n/a	0.001764	NP Inter (NDs) 1 of 2
Calcium (mg/L)	GS-AP-MW-6D	48.1	n/a	9/17/2020	61.5	Yes	31	n/a	n/a	0	n/a	n/a	0.001764	NP Inter (normality) 1 of 2
Calcium (mg/L)	GS-AP-MW-6S	48.1	n/a	9/16/2020	55.9	Yes	31	n/a	n/a	0	n/a	n/a	0.001764	NP Inter (normality) 1 of 2
Chloride (mg/L)	GS-AP-MW-15	4.137	n/a	9/23/2020	6	Yes	31	3.306	0.3867	0	None	No	0.0006839	Param Inter 1 of 2
Chloride (mg/L)	GS-AP-MW-17	4.137	n/a	9/21/2020	13.8	Yes	31	3.306	0.3867	0	None	No	0.0006839	Param Inter 1 of 2
Chloride (mg/L)	GS-AP-MW-18	4.137	n/a	9/23/2020	5.29	Yes	31	3.306	0.3867	0	None	No	0.0006839	Param Inter 1 of 2
Chloride (mg/L)	GS-AP-MW-19	4.137	n/a	9/22/2020	6.6	Yes	31	3.306	0.3867	0	None	No	0.0006839	Param Inter 1 of 2
Chloride (mg/L)	GS-AP-MW-2	4.137	n/a	9/22/2020	6.33	Yes	31	3.306	0.3867	0	None	No	0.0006839	Param Inter 1 of 2
Chloride (mg/L)	GS-AP-MW-21	4.137	n/a	9/23/2020	56.9	Yes	31	3.306	0.3867	0	None	No	0.0006839	Param Inter 1 of 2
Chloride (mg/L)	GS-AP-MW-6D	4.137	n/a	9/17/2020	10.5	Yes	31	3.306	0.3867	0	None	No	0.0006839	Param Inter 1 of 2
Chloride (mg/L)	GS-AP-MW-6S	4.137	n/a	9/16/2020	14.6	Yes	31	3.306	0.3867	0	None	No	0.0006839	Param Inter 1 of 2
Chloride (mg/L)	GS-AP-MW-7	4.137	n/a	9/16/2020	6.17	Yes	31	3.306	0.3867	0	None	No	0.0006839	Param Inter 1 of 2
Fluoride (mg/L)	GS-AP-MW-15	0.2649	n/a	9/23/2020	0.452	Yes	33	0.1343	0.06119	0	None	No	0.0006839	Param Inter 1 of 2
Fluoride (mg/L)	GS-AP-MW-17	0.2649	n/a	9/21/2020	0.371	Yes	33	0.1343	0.06119	0	None	No	0.0006839	Param Inter 1 of 2
Fluoride (mg/L)	GS-AP-MW-18	0.2649	n/a	9/23/2020	0.575	Yes	33	0.1343	0.06119	0	None	No	0.0006839	Param Inter 1 of 2
Fluoride (mg/L)	GS-AP-MW-19	0.2649	n/a	9/22/2020	0.339	Yes	33	0.1343	0.06119	0	None	No	0.0006839	Param Inter 1 of 2
Fluoride (mg/L)	GS-AP-MW-2	0.2649	n/a	9/22/2020	0.921	Yes	33	0.1343	0.06119	0	None	No	0.0006839	Param Inter 1 of 2
Fluoride (mg/L)	GS-AP-MW-6S	0.2649	n/a	9/16/2020	0.308	Yes	33	0.1343	0.06119	0	None	No	0.0006839	Param Inter 1 of 2
pH (SU)	GS-AP-MW-12	7.76	5.27	9/23/2020	8.3	Yes	33	n/a	n/a	0	n/a	n/a	0.00317	NP Inter (normality) 1 of 2
pH (SU)	GS-AP-MW-15	7.76	5.27	9/23/2020	11.89	Yes	33	n/a	n/a	0	n/a	n/a	0.00317	NP Inter (normality) 1 of 2
pH (SU)	GS-AP-MW-17	7.76	5.27	9/21/2020	8.22	Yes	33	n/a	n/a	0	n/a	n/a	0.00317	NP Inter (normality) 1 of 2
pH (SU)	GS-AP-MW-19	7.76	5.27	9/22/2020	8.17	Yes	33	n/a	n/a	0	n/a	n/a	0.00317	NP Inter (normality) 1 of 2
pH (SU)	GS-AP-MW-2	7.76	5.27	9/22/2020	9.41	Yes	33	n/a	n/a	0	n/a	n/a	0.00317	NP Inter (normality) 1 of 2
pH (SU)	GS-AP-MW-21	7.76	5.27	9/23/2020	10.71	Yes	33	n/a	n/a	0	n/a	n/a	0.00317	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GS-AP-MW-12	15.2	n/a	9/23/2020	19.1	Yes	31	n/a	n/a	0	n/a	n/a	0.001764	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GS-AP-MW-17	15.2	n/a	9/21/2020	104	Yes	31	n/a	n/a	0	n/a	n/a	0.001764	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GS-AP-MW-18	15.2	n/a	9/23/2020	88.9	Yes	31	n/a	n/a	0	n/a	n/a	0.001764	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GS-AP-MW-19	15.2	n/a	9/22/2020	16.9	Yes	31	n/a	n/a	0	n/a	n/a	0.001764	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GS-AP-MW-2	15.2	n/a	9/22/2020	21.5	Yes	31	n/a	n/a	0	n/a	n/a	0.001764	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GS-AP-MW-21	15.2	n/a	9/23/2020	248	Yes	31	n/a	n/a	0	n/a	n/a	0.001764	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GS-AP-MW-6D	15.2	n/a	9/17/2020	65.1	Yes	31	n/a	n/a	0	n/a	n/a	0.001764	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GS-AP-MW-6S	15.2	n/a	9/16/2020	115	Yes	31	n/a	n/a	0	n/a	n/a	0.001764	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GS-AP-MW-7	15.2	n/a	9/16/2020	131	Yes	31	n/a	n/a	0	n/a	n/a	0.001764	NP Inter (normality) 1 of 2
TDS (mg/L)	GS-AP-MW-15	368	n/a	9/23/2020	600	Yes	31	n/a	n/a	0	n/a	n/a	0.001764	NP Inter (normality) 1 of 2
TDS (mg/L)	GS-AP-MW-17	368	n/a	9/21/2020	658	Yes	31	n/a	n/a	0	n/a	n/a	0.001764	NP Inter (normality) 1 of 2
TDS (mg/L)	GS-AP-MW-18	368	n/a	9/23/2020	380	Yes	31	n/a	n/a	0	n/a	n/a	0.001764	NP Inter (normality) 1 of 2
TDS (mg/L)	GS-AP-MW-21	368	n/a	9/23/2020	642	Yes	31	n/a	n/a	0	n/a	n/a	0.001764	NP Inter (normality) 1 of 2

Appendix III - Interwell Prediction Limits - All Results

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond Printed 12/9/2020, 1:32 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-AP-MW-12	0.1	n/a	9/23/2020	0.0446J	No	31	n/a	n/a	83.87	n/a	n/a	0.001764	NP Inter (NDs) 1 of 2
Boron (mg/L)	GS-AP-MW-15	0.1	n/a	9/23/2020	0.0537J	No	31	n/a	n/a	83.87	n/a	n/a	0.001764	NP Inter (NDs) 1 of 2
Boron (mg/L)	GS-AP-MW-16D	0.1	n/a	9/22/2020	0.1ND	No	31	n/a	n/a	83.87	n/a	n/a	0.001764	NP Inter (NDs) 1 of 2
Boron (mg/L)	**GS-AP-MW-17**	**0.1**	**n/a**	**9/21/2020**	**0.102**	**Yes**	**31**	**n/a**	**n/a**	**83.87**	**n/a**	**n/a**	**0.001764**	**NP Inter (NDs) 1 of 2**
Boron (mg/L)	**GS-AP-MW-18**	**0.1**	**n/a**	**9/23/2020**	**0.491**	**Yes**	**31**	**n/a**	**n/a**	**83.87**	**n/a**	**n/a**	**0.001764**	**NP Inter (NDs) 1 of 2**
Boron (mg/L)	GS-AP-MW-19	0.1	n/a	9/22/2020	0.037J	No	31	n/a	n/a	83.87	n/a	n/a	0.001764	NP Inter (NDs) 1 of 2
Boron (mg/L)	**GS-AP-MW-2**	**0.1**	**n/a**	**9/22/2020**	**0.133**	**Yes**	**31**	**n/a**	**n/a**	**83.87**	**n/a**	**n/a**	**0.001764**	**NP Inter (NDs) 1 of 2**
Boron (mg/L)	GS-AP-MW-21	0.1	n/a	9/23/2020	0.0871J	No	31	n/a	n/a	83.87	n/a	n/a	0.001764	NP Inter (NDs) 1 of 2
Boron (mg/L)	**GS-AP-MW-6D**	**0.1**	**n/a**	**9/17/2020**	**1.22**	**Yes**	**31**	**n/a**	**n/a**	**83.87**	**n/a**	**n/a**	**0.001764**	**NP Inter (NDs) 1 of 2**
Boron (mg/L)	**GS-AP-MW-6S**	**0.1**	**n/a**	**9/16/2020**	**0.8**	**Yes**	**31**	**n/a**	**n/a**	**83.87**	**n/a**	**n/a**	**0.001764**	**NP Inter (NDs) 1 of 2**
Boron (mg/L)	**GS-AP-MW-7**	**0.1**	**n/a**	**9/16/2020**	**1.54**	**Yes**	**31**	**n/a**	**n/a**	**83.87**	**n/a**	**n/a**	**0.001764**	**NP Inter (NDs) 1 of 2**
Calcium (mg/L)	GS-AP-MW-12	48.1	n/a	9/23/2020	45.9	No	31	n/a	n/a	0	n/a	n/a	0.001764	NP Inter (normality) 1 of 2
Calcium (mg/L)	GS-AP-MW-15	48.1	n/a	9/23/2020	3.83	No	31	n/a	n/a	0	n/a	n/a	0.001764	NP Inter (normality) 1 of 2
Calcium (mg/L)	GS-AP-MW-16D	48.1	n/a	9/22/2020	32	No	31	n/a	n/a	0	n/a	n/a	0.001764	NP Inter (normality) 1 of 2
Calcium (mg/L)	GS-AP-MW-17	48.1	n/a	9/21/2020	3.73	No	31	n/a	n/a	0	n/a	n/a	0.001764	NP Inter (normality) 1 of 2
Calcium (mg/L)	GS-AP-MW-18	48.1	n/a	9/23/2020	38.8	No	31	n/a	n/a	0	n/a	n/a	0.001764	NP Inter (normality) 1 of 2
Calcium (mg/L)	GS-AP-MW-19	48.1	n/a	9/22/2020	46.9	No	31	n/a	n/a	0	n/a	n/a	0.001764	NP Inter (normality) 1 of 2
Calcium (mg/L)	GS-AP-MW-2	48.1	n/a	9/22/2020	0.503	No	31	n/a	n/a	0	n/a	n/a	0.001764	NP Inter (normality) 1 of 2
Calcium (mg/L)	GS-AP-MW-21	48.1	n/a	9/23/2020	1.96	No	31	n/a	n/a	0	n/a	n/a	0.001764	NP Inter (normality) 1 of 2
Calcium (mg/L)	**GS-AP-MW-6D**	**48.1**	**n/a**	**9/17/2020**	**61.5**	**Yes**	**31**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.001764**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**GS-AP-MW-6S**	**48.1**	**n/a**	**9/16/2020**	**55.9**	**Yes**	**31**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.001764**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	GS-AP-MW-7	48.1	n/a	9/16/2020	12.2	No	31	n/a	n/a	0	n/a	n/a	0.001764	NP Inter (normality) 1 of 2
Chloride (mg/L)	GS-AP-MW-12	4.137	n/a	9/23/2020	3.15	No	31	3.306	0.3867	0	None	No	0.0006839	Param Inter 1 of 2
Chloride (mg/L)	**GS-AP-MW-15**	**4.137**	**n/a**	**9/23/2020**	**6**	**Yes**	**31**	**3.306**	**0.3867**	**0**	**None**	**No**	**0.0006839**	**Param Inter 1 of 2**
Chloride (mg/L)	GS-AP-MW-16D	4.137	n/a	9/22/2020	2.94	No	31	3.306	0.3867	0	None	No	0.0006839	Param Inter 1 of 2
Chloride (mg/L)	**GS-AP-MW-17**	**4.137**	**n/a**	**9/21/2020**	**13.8**	**Yes**	**31**	**3.306**	**0.3867**	**0**	**None**	**No**	**0.0006839**	**Param Inter 1 of 2**
Chloride (mg/L)	**GS-AP-MW-18**	**4.137**	**n/a**	**9/23/2020**	**5.29**	**Yes**	**31**	**3.306**	**0.3867**	**0**	**None**	**No**	**0.0006839**	**Param Inter 1 of 2**
Chloride (mg/L)	**GS-AP-MW-19**	**4.137**	**n/a**	**9/22/2020**	**6.6**	**Yes**	**31**	**3.306**	**0.3867**	**0**	**None**	**No**	**0.0006839**	**Param Inter 1 of 2**
Chloride (mg/L)	**GS-AP-MW-2**	**4.137**	**n/a**	**9/22/2020**	**6.33**	**Yes**	**31**	**3.306**	**0.3867**	**0**	**None**	**No**	**0.0006839**	**Param Inter 1 of 2**
Chloride (mg/L)	**GS-AP-MW-21**	**4.137**	**n/a**	**9/23/2020**	**56.9**	**Yes**	**31**	**3.306**	**0.3867**	**0**	**None**	**No**	**0.0006839**	**Param Inter 1 of 2**
Chloride (mg/L)	**GS-AP-MW-6D**	**4.137**	**n/a**	**9/17/2020**	**10.5**	**Yes**	**31**	**3.306**	**0.3867**	**0**	**None**	**No**	**0.0006839**	**Param Inter 1 of 2**
Chloride (mg/L)	**GS-AP-MW-6S**	**4.137**	**n/a**	**9/16/2020**	**14.6**	**Yes**	**31**	**3.306**	**0.3867**	**0**	**None**	**No**	**0.0006839**	**Param Inter 1 of 2**
Chloride (mg/L)	**GS-AP-MW-7**	**4.137**	**n/a**	**9/16/2020**	**6.17**	**Yes**	**31**	**3.306**	**0.3867**	**0**	**None**	**No**	**0.0006839**	**Param Inter 1 of 2**
Fluoride (mg/L)	GS-AP-MW-12	0.2649	n/a	9/23/2020	0.12	No	33	0.1343	0.06119	0	None	No	0.0006839	Param Inter 1 of 2
Fluoride (mg/L)	**GS-AP-MW-15**	**0.2649**	**n/a**	**9/23/2020**	**0.452**	**Yes**	**33**	**0.1343**	**0.06119**	**0**	**None**	**No**	**0.0006839**	**Param Inter 1 of 2**
Fluoride (mg/L)	GS-AP-MW-16D	0.2649	n/a	9/22/2020	0.123	No	33	0.1343	0.06119	0	None	No	0.0006839	Param Inter 1 of 2
Fluoride (mg/L)	**GS-AP-MW-17**	**0.2649**	**n/a**	**9/21/2020**	**0.371**	**Yes**	**33**	**0.1343**	**0.06119**	**0**	**None**	**No**	**0.0006839**	**Param Inter 1 of 2**
Fluoride (mg/L)	**GS-AP-MW-18**	**0.2649**	**n/a**	**9/23/2020**	**0.575**	**Yes**	**33**	**0.1343**	**0.06119**	**0**	**None**	**No**	**0.0006839**	**Param Inter 1 of 2**
Fluoride (mg/L)	**GS-AP-MW-19**	**0.2649**	**n/a**	**9/22/2020**	**0.339**	**Yes**	**33**	**0.1343**	**0.06119**	**0**	**None**	**No**	**0.0006839**	**Param Inter 1 of 2**
Fluoride (mg/L)	**GS-AP-MW-2**	**0.2649**	**n/a**	**9/22/2020**	**0.921**	**Yes**	**33**	**0.1343**	**0.06119**	**0**	**None**	**No**	**0.0006839**	**Param Inter 1 of 2**
Fluoride (mg/L)	GS-AP-MW-21	0.2649	n/a	9/23/2020	0.208	No	33	0.1343	0.06119	0	None	No	0.0006839	Param Inter 1 of 2
Fluoride (mg/L)	GS-AP-MW-6D	0.2649	n/a	9/17/2020	0.133	No	33	0.1343	0.06119	0	None	No	0.0006839	Param Inter 1 of 2
Fluoride (mg/L)	**GS-AP-MW-6S**	**0.2649**	**n/a**	**9/16/2020**	**0.308**	**Yes**	**33**	**0.1343**	**0.06119**	**0**	**None**	**No**	**0.0006839**	**Param Inter 1 of 2**
Fluoride (mg/L)	GS-AP-MW-7	0.2649	n/a	9/16/2020	0.126	No	33	0.1343	0.06119	0	None	No	0.0006839	Param Inter 1 of 2
pH (SU)	**GS-AP-MW-12**	**7.76**	**5.27**	**9/23/2020**	**8.3**	**Yes**	**33**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.00317**	**NP Inter (normality) 1 of 2**
pH (SU)	**GS-AP-MW-15**	**7.76**	**5.27**	**9/23/2020**	**11.89**	**Yes**	**33**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.00317**	**NP Inter (normality) 1 of 2**
pH (SU)	GS-AP-MW-16D	7.76	5.27	9/22/2020	7.52	No	33	n/a	n/a	0	n/a	n/a	0.00317	NP Inter (normality) 1 of 2
pH (SU)	**GS-AP-MW-17**	**7.76**	**5.27**	**9/21/2020**	**8.22**	**Yes**	**33**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.00317**	**NP Inter (normality) 1 of 2**
pH (SU)	GS-AP-MW-18	7.76	5.27	9/23/2020	7.54	No	33	n/a	n/a	0	n/a	n/a	0.00317	NP Inter (normality) 1 of 2
pH (SU)	**GS-AP-MW-19**	**7.76**	**5.27**	**9/22/2020**	**8.17**	**Yes**	**33**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.00317**	**NP Inter (normality) 1 of 2**
pH (SU)	**GS-AP-MW-2**	**7.76**	**5.27**	**9/22/2020**	**9.41**	**Yes**	**33**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.00317**	**NP Inter (normality) 1 of 2**
pH (SU)	**GS-AP-MW-21**	**7.76**	**5.27**	**9/23/2020**	**10.71**	**Yes**	**33**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.00317**	**NP Inter (normality) 1 of 2**
pH (SU)	GS-AP-MW-6D	7.76	5.27	9/17/2020	7.41	No	33	n/a	n/a	0	n/a	n/a	0.00317	NP Inter (normality) 1 of 2
pH (SU)	GS-AP-MW-6S	7.76	5.27	9/16/2020	6.93	No	33	n/a	n/a	0	n/a	n/a	0.00317	NP Inter (normality) 1 of 2
pH (SU)	GS-AP-MW-7	7.76	5.27	9/16/2020	7.74	No	33	n/a	n/a	0	n/a	n/a	0.00317	NP Inter (normality) 1 of 2

Appendix III - Interwell Prediction Limits - All Results

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond Printed 12/9/2020, 1:32 PM

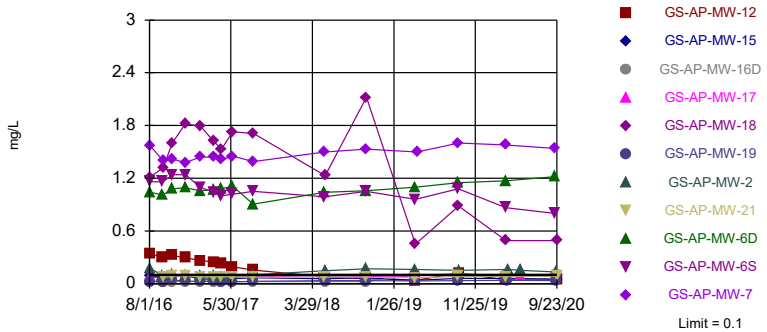
Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Sulfate (mg/L)	**GS-AP-MW-12**	**15.2**	**n/a**	**9/23/2020**	**19.1**	**Yes**	**31**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.001764**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	GS-AP-MW-15	15.2	n/a	9/23/2020	13.2	No	31	n/a	n/a	0	n/a	n/a	0.001764	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GS-AP-MW-16D	15.2	n/a	9/22/2020	13.6	No	31	n/a	n/a	0	n/a	n/a	0.001764	NP Inter (normality) 1 of 2
Sulfate (mg/L)	**GS-AP-MW-17**	**15.2**	**n/a**	**9/21/2020**	**104**	**Yes**	**31**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.001764**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**GS-AP-MW-18**	**15.2**	**n/a**	**9/23/2020**	**88.9**	**Yes**	**31**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.001764**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**GS-AP-MW-19**	**15.2**	**n/a**	**9/22/2020**	**16.9**	**Yes**	**31**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.001764**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**GS-AP-MW-2**	**15.2**	**n/a**	**9/22/2020**	**21.5**	**Yes**	**31**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.001764**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**GS-AP-MW-21**	**15.2**	**n/a**	**9/23/2020**	**248**	**Yes**	**31**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.001764**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**GS-AP-MW-6D**	**15.2**	**n/a**	**9/17/2020**	**65.1**	**Yes**	**31**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.001764**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**GS-AP-MW-6S**	**15.2**	**n/a**	**9/16/2020**	**115**	**Yes**	**31**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.001764**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**GS-AP-MW-7**	**15.2**	**n/a**	**9/16/2020**	**131**	**Yes**	**31**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.001764**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	GS-AP-MW-12	368	n/a	9/23/2020	216	No	31	n/a	n/a	0	n/a	n/a	0.001764	NP Inter (normality) 1 of 2
TDS (mg/L)	**GS-AP-MW-15**	**368**	**n/a**	**9/23/2020**	**600**	**Yes**	**31**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.001764**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	GS-AP-MW-16D	368	n/a	9/22/2020	218	No	31	n/a	n/a	0	n/a	n/a	0.001764	NP Inter (normality) 1 of 2
TDS (mg/L)	**GS-AP-MW-17**	**368**	**n/a**	**9/21/2020**	**658**	**Yes**	**31**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.001764**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	**GS-AP-MW-18**	**368**	**n/a**	**9/23/2020**	**380**	**Yes**	**31**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.001764**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	GS-AP-MW-19	368	n/a	9/22/2020	300	No	31	n/a	n/a	0	n/a	n/a	0.001764	NP Inter (normality) 1 of 2
TDS (mg/L)	GS-AP-MW-2	368	n/a	9/22/2020	318	No	31	n/a	n/a	0	n/a	n/a	0.001764	NP Inter (normality) 1 of 2
TDS (mg/L)	**GS-AP-MW-21**	**368**	**n/a**	**9/23/2020**	**642**	**Yes**	**31**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.001764**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	GS-AP-MW-6D	368	n/a	9/17/2020	314	No	31	n/a	n/a	0	n/a	n/a	0.001764	NP Inter (normality) 1 of 2
TDS (mg/L)	GS-AP-MW-6S	368	n/a	9/16/2020	269	No	31	n/a	n/a	0	n/a	n/a	0.001764	NP Inter (normality) 1 of 2
TDS (mg/L)	GS-AP-MW-7	368	n/a	9/16/2020	351	No	31	n/a	n/a	0	n/a	n/a	0.001764	NP Inter (normality) 1 of 2

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Exceeds Limit: GS-AP-MW-17, GS-AP-MW-18, GS-AP-MW-2, GS-AP-MW-6D, GS-AP-MW-6S, GS-AP-MW-7

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 31 background values. 83.87% NDs. Annual per-constituent alpha = 0.0381. Individual comparison alpha = 0.001764 (1 of 2). Comparing 11 points to limit.

Constituent: Boron Analysis Run 12/9/2020 1:30 PM View: Appendix III

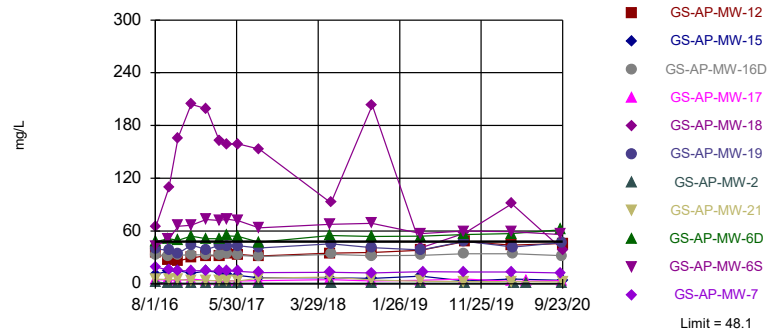
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Exceeds Limit: GS-AP-MW-6D, GS-AP-MW-6S

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 31 background values. Annual per-constituent alpha = 0.0381. Individual comparison alpha = 0.001764 (1 of 2). Comparing 11 points to limit.

Constituent: Calcium Analysis Run 12/9/2020 1:30 PM View: Appendix III

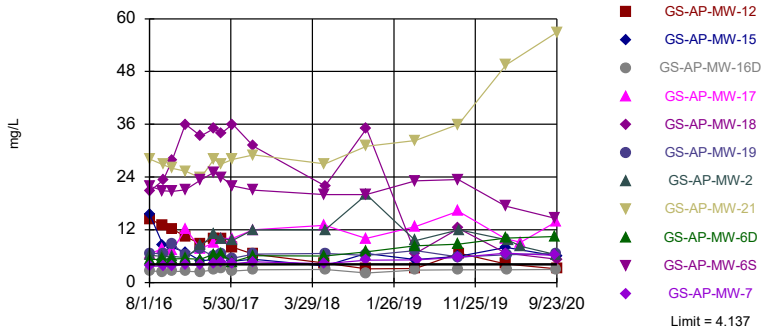
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Exceeds Limit: GS-AP-MW-15, GS-AP-MW-17, GS-AP-MW-18, GS-AP-MW-19, GS-AP-MW-2, GS-AP-MW-21, GS-AP-MW-6D,..

Prediction Limit

Interwell Parametric



Background Data Summary: Mean=3.306, Std. Dev.=0.3867, n=31. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9641, critical = 0.902. Kappa = 2.149 (c=7, w=11, 1 of 2, event alpha = 0.05132). Report alpha = 0.007498. Individual comparison alpha = 0.0006839. Comparing 11 points to limit.

Constituent: Chloride Analysis Run 12/9/2020 1:30 PM View: Appendix III

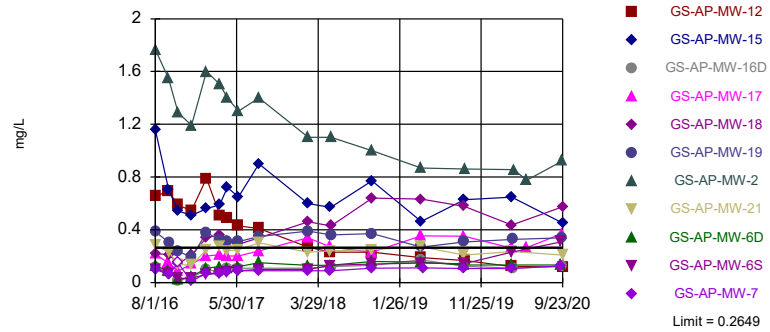
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Exceeds Limit: GS-AP-MW-15, GS-AP-MW-17, GS-AP-MW-18, GS-AP-MW-19, GS-AP-MW-2, GS-AP-MW-6S

Prediction Limit

Interwell Parametric



Background Data Summary: Mean=0.1343, Std. Dev.=0.06119, n=33. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9619, critical = 0.906. Kappa = 2.134 (c=7, w=11, 1 of 2, event alpha = 0.05132). Report alpha = 0.007498. Individual comparison alpha = 0.0006839. Comparing 11 points to limit.

Constituent: Fluoride Analysis Run 12/9/2020 1:30 PM View: Appendix III

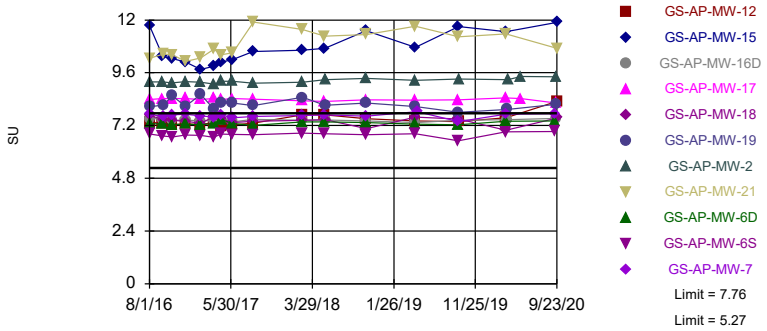
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Exceeds Limits: GS-AP-MW-12, GS-AP-MW-15, GS-AP-MW-17, GS-AP-MW-19, GS-AP-MW-2, GS-AP-MW-21

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limits are highest and lowest of 33 background values. Annual per-constituent alpha = 0.0686. Individual comparison alpha = 0.00317 (1 of 2). Comparing 11 points to limit.

Constituent: pH Analysis Run 12/9/2020 1:30 PM View: Appendix III

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

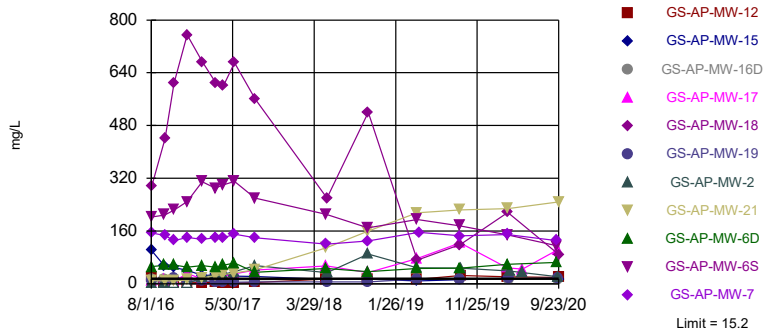
Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Exceeds Limit: GS-AP-MW-12, GS-AP-MW-17, GS-AP-MW-18, GS-AP-MW-19, GS-AP-MW-2, GS-AP-MW-21, GS-AP-MW-6D,..

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 31 background values. Annual per-constituent alpha = 0.0381. Individual comparison alpha = 0.001764 (1 of 2). Comparing 11 points to limit.

Constituent: Sulfate Analysis Run 12/9/2020 1:30 PM View: Appendix III

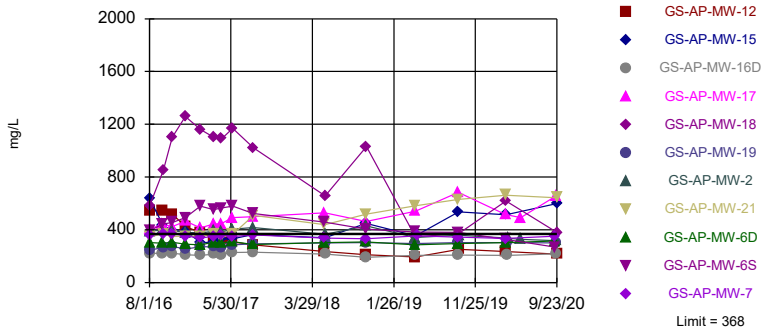
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Exceeds Limit: GS-AP-MW-15, GS-AP-MW-17, GS-AP-MW-18, GS-AP-MW-21

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 31 background values. Annual per-constituent alpha = 0.0381. Individual comparison alpha = 0.001764 (1 of 2). Comparing 11 points to limit.

Constituent: TDS Analysis Run 12/9/2020 1:30 PM View: Appendix III

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 12/9/2020 1:32 PM View: Appendix III

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-19	GS-AP-MW-17	GS-AP-MW-16D	GS-AP-MW-15	GS-AP-MW-18	GS-AP-MW-2	GS-AP-MW-7	GS-AP-MW-13 (bg)	GS-AP-MW-6D
8/1/2016	0.0279 (J)	0.0712 (J)	0.0266 (J)	0.0955 (J)					
8/2/2016					1.21	0.178	1.57	<0.1	
8/3/2016									1.04
9/19/2016		0.0716 (J)	0.0262 (J)			0.0937 (J)			
9/20/2016				0.0706 (J)				<0.1	1.01
9/21/2016	0.0235 (J)				1.32		1.4		
10/24/2016	0.0444 (J)	0.0858 (J)			1.6	0.0986 (J)	1.42		1.08
10/25/2016			0.0273 (J)	0.0849 (J)				<0.1	
10/26/2016									
12/12/2016					1.82		1.38		1.09
12/13/2016	0.0285 (J)	0.0875 (J)	0.0258 (J)			0.0965 (J)		<0.1	
12/14/2016				0.0914 (J)					
2/6/2017		0.0729 (J)					1.44		1.06
2/7/2017	0.03 (J)								
2/8/2017			0.0249 (J)	0.0524 (J)	1.79	0.0896 (J)		<0.1	
3/27/2017		0.0706 (J)							1.07
3/28/2017	0.0309 (J)			0.0532 (J)	1.62		1.44		
3/29/2017			0.0247 (J)					<0.1	
3/30/2017						0.0871 (J)			
4/24/2017		0.0737 (J)					1.41		1.08
4/26/2017	0.0273 (J)		0.0264 (J)	0.0598 (J)	1.53	0.0818 (J)		<0.1	
6/5/2017		0.0767 (J)							
6/6/2017	0.0212 (J)		0.0247 (J)	0.0576 (J)	1.73	0.0805 (J)			1.11
6/7/2017							1.45	<0.1	
8/21/2017						0.102	1.39		0.906
8/22/2017	0.0294 (J)	0.0786 (J)	0.0246 (J)	0.0702 (J)				<0.1	
8/23/2017					1.71				
5/14/2018									1.04
5/15/2018		0.0953 (J)		0.0567 (J)			1.5	<0.1	
5/16/2018	0.0356 (J)		0.0247 (J)		1.23	0.147			
10/15/2018		0.0842 (J)		0.07 (J)			1.53		1.06
10/16/2018	0.0363 (J)				2.12	0.169			
10/17/2018			0.0251 (J)					<0.1	
2/20/2019									
4/16/2019								<0.1	1.1
4/17/2019	0.0336 (J)	0.0916 (J)	<0.1	0.0388 (J)	0.449	0.165			
4/23/2019							1.5		
9/23/2019		0.116							1.15
9/24/2019	0.0375 (J)		<0.1	0.0607 (J)	0.883		1.6		
9/25/2019						0.153			
3/16/2020		0.0894 (J)							
3/17/2020							1.58		1.17
3/18/2020				0.0596 (J)	0.492				
3/24/2020	0.0398 (J)		<0.1						
3/25/2020						0.163			
5/12/2020		0.0862 (J)							
5/13/2020						0.154			
9/16/2020							1.54		
9/17/2020									1.22
9/21/2020		0.102							
9/22/2020	0.037 (J)		<0.1			0.133			
9/23/2020				0.0537 (J)	0.491				

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 12/9/2020 1:32 PM View: Appendix III

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-6S	GS-AP-MW-8 (bg)	GS-AP-MW-12	GS-AP-MW-21	GS-AP-MW-17V ...
8/1/2016					
8/2/2016				0.176 (o)	
8/3/2016	1.16	0.0239 (J)	0.34		
9/19/2016					
9/20/2016	1.16		0.299		
9/21/2016		<0.1		0.0723 (J)	
10/24/2016					
10/25/2016		<0.1	0.323	0.0867 (J)	
10/26/2016	1.24				
12/12/2016	1.24				
12/13/2016		<0.1	0.294		
12/14/2016				0.092 (J)	
2/6/2017	1.1	<0.1			
2/7/2017					
2/8/2017			0.264	0.0803 (J)	
3/27/2017	1.04				
3/28/2017		<0.1		0.0804 (J)	
3/29/2017			0.246		
3/30/2017					
4/24/2017	1	<0.1			
4/26/2017			0.234	0.0801 (J)	
6/5/2017					
6/6/2017	1.02			0.0795 (J)	
6/7/2017		<0.1	0.194		
8/21/2017	1.05	<0.1			
8/22/2017			0.156		
8/23/2017				0.0764 (J)	
5/14/2018	0.99				
5/15/2018		<0.1	0.0781 (J)	0.0769 (J)	
5/16/2018					
10/15/2018	1.05				
10/16/2018		<0.1	0.057 (J)	0.0764 (J)	
10/17/2018					
2/20/2019					0.0337 (J)
4/16/2019	0.961	<0.1	0.0385 (J)		
4/17/2019				0.0675 (J)	
4/23/2019					
9/23/2019	1.08				
9/24/2019		<0.1		0.0843 (J)	0.0532 (J)
9/25/2019			0.122		
3/16/2020					
3/17/2020	0.867				
3/18/2020		<0.1	0.0449 (J)	0.0824 (J)	
3/24/2020					
3/25/2020					0.0482 (J)
5/12/2020					
5/13/2020					
9/16/2020	0.8				
9/17/2020					
9/21/2020		<0.1			
9/22/2020					
9/23/2020			0.0446 (J)	0.0871 (J)	0.0478 (J)

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 12/9/2020 1:32 PM View: Appendix III

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-16D	GS-AP-MW-17	GS-AP-MW-15	GS-AP-MW-19	GS-AP-MW-18	GS-AP-MW-2	GS-AP-MW-7	GS-AP-MW-21	GS-AP-MW-13 (bg)
8/1/2016	33	4.52	10.5	39.6					
8/2/2016					64.2	2.25	19.4	5.29	47.2
8/3/2016									
9/19/2016	31.7	4.3				0.724			
9/20/2016			14.7						46.3
9/21/2016				38.1	110		15.4	4.51	
10/24/2016		4.02		34.7	166	0.635	14.8		
10/25/2016	32.2		14.7					4.92	46.6
10/26/2016									
12/12/2016					204		15		
12/13/2016	33.1	5.5		44		0.714			43.1
12/14/2016			11.9					3.5	
2/6/2017		3.79					14.9		
2/7/2017				39					
2/8/2017	32.7		14.4		199	0.722		3.75	47.5
3/27/2017		3.13							
3/28/2017			12.9	43.9	162		14.3	3.63	
3/29/2017	32.7								46.8
3/30/2017						0.686			
4/24/2017		3.41					14.5		
4/26/2017	33.8		10.4	42.8	159	0.646		3.3	48.1
6/5/2017		3.32							
6/6/2017	32.2		9.41	43.1	159	0.569		3.24	
6/7/2017							14.1		44.4
8/21/2017						0.634	12.6		
8/22/2017	30.9	3.52	6.89	40.7					42.9
8/23/2017					153			6.6	
5/14/2018									
5/15/2018		4.53	6.86				12.9	7.57	44.3
5/16/2018	33.5			45.3	92.1	0.588			
10/15/2018		3.38	6.28				12.5		
10/16/2018				40.9	203	0.714		4.4	
10/17/2018	32								41.8
2/20/2019									
4/16/2019									38.6
4/17/2019	32.3	3.86	8.53	38.4	40.9	0.511		2.88	
4/23/2019							13.8		
9/23/2019		5.43							
9/24/2019	34.3		3.26	48.4	57.4		13.4	2.47	
9/25/2019						0.581			
3/16/2020		3							
3/17/2020							13.5		
3/18/2020			5.25		90.9			2.35	
3/24/2020	34.1			41.7					
3/25/2020						0.518			
5/12/2020		2.95							
5/13/2020						0.493 (J)			
9/16/2020							12.2		
9/17/2020									
9/21/2020		3.73							
9/22/2020	32			46.9		0.503			
9/23/2020			3.83		38.8			1.96	

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 12/9/2020 1:32 PM View: Appendix III

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-12	GS-AP-MW-8 (bg)	GS-AP-MW-6D	GS-AP-MW-6S	GS-AP-MW-17V ...
8/1/2016					
8/2/2016					
8/3/2016	36.1	6.85	48.1	42.5	
9/19/2016					
9/20/2016	27		51.2	51.1	
9/21/2016		11.7			
10/24/2016			49.5		
10/25/2016	26.1	10.8			
10/26/2016				65.6	
12/12/2016			54.3	66.5	
12/13/2016	29.4	5.86			
12/14/2016					
2/6/2017		9.76	51.2	73.1	
2/7/2017					
2/8/2017	31.9				
3/27/2017			51.4	71.9	
3/28/2017		5.28			
3/29/2017	31.8				
3/30/2017					
4/24/2017		6.89	54.7	73.5	
4/26/2017	34.6				
6/5/2017					
6/6/2017			53.9	71.8	
6/7/2017	33.4	3.58			
8/21/2017		3.38	47.3	63.5	
8/22/2017	31.5				
8/23/2017					
5/14/2018			54.8	67.5	
5/15/2018	34.8	4.25			
5/16/2018					
10/15/2018			53.9	68.9	
10/16/2018	35.6	3.21			
10/17/2018					
2/20/2019					30.6
4/16/2019	38.3	4.43	54	57.1	
4/17/2019					
4/23/2019					
9/23/2019			56.1	60	
9/24/2019		7.24			29.7
9/25/2019	48.1				
3/16/2020					
3/17/2020			57.2	59.3	
3/18/2020	44	4.51			
3/24/2020					
3/25/2020					31.1
5/12/2020					
5/13/2020					
9/16/2020				55.9	
9/17/2020			61.5		
9/21/2020		5.19			
9/22/2020					
9/23/2020	45.9				29.3

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 12/9/2020 1:32 PM View: Appendix III

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-16D	GS-AP-MW-17	GS-AP-MW-15	GS-AP-MW-19	GS-AP-MW-18	GS-AP-MW-2	GS-AP-MW-7	GS-AP-MW-21	GS-AP-MW-13 (bg)
8/1/2016	2.6	6.47	15.6	6.67					
8/2/2016					20.8	6.15	3.7	28.1	2.91
8/3/2016									
9/19/2016	2.51	7.78				5.98			
9/20/2016			8.6						2.94
9/21/2016				6.54	23.3		3.74	26.8	
10/24/2016		7.29		8.77	27.9	5.93	3.75		
10/25/2016	2.53		7.96					26	2.94
10/26/2016									
12/12/2016					36		4.06		
12/13/2016	2.53	12.2		6.16		5.7			2.93
12/14/2016			6.94					25.3	
2/6/2017		7.68					3.92		
2/7/2017				7.57					
2/8/2017	2.5		4.96		33.3	8.44		23.8	2.85
3/27/2017		9							
3/28/2017			5.2	5.9	35		4.3	28	
3/29/2017	2.9								3.4
3/30/2017						11			
4/24/2017		10					4.6		
4/26/2017	3.2		6	6.5	34	10		27	3.7
6/5/2017		10							
6/6/2017	2.6		4.9	5.5	36	9.6		28	
6/7/2017							4.3		3.3
8/21/2017						12	4.7		
8/22/2017	2.9	12	5.3	6.5					3.4
8/23/2017					31			29	
5/14/2018									
5/15/2018		13	3.8				4.3	27	3.2
5/16/2018	3			6.6	22	12			
10/15/2018		10	6.6				5.1		
10/16/2018				6.2	35	20		31	
10/17/2018	2.2								2.3
2/20/2019									
4/16/2019									3.23
4/17/2019	2.82	12.7	5.2	7.27	6.61	9.5		32.3	
4/23/2019							5.16		
9/23/2019		16.2							
9/24/2019	2.9		5.96	5.83	12.3		5.76	36	
9/25/2019						12			
3/16/2020		9.95							
3/17/2020							6.65		
3/18/2020			8		6.68			49.5	
3/24/2020	2.88			6.29					
3/25/2020						9.7			
5/12/2020		9.16							
5/13/2020						8.25			
9/16/2020							6.17		
9/17/2020									
9/21/2020		13.8							
9/22/2020	2.94			6.6		6.33			
9/23/2020			6		5.29			56.9	

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 12/9/2020 1:32 PM View: Appendix III

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-12	GS-AP-MW-8 (bg)	GS-AP-MW-6D	GS-AP-MW-6S	GS-AP-MW-17V ...
8/1/2016					
8/2/2016					
8/3/2016	14.5	3.21	5.2	21.9	
9/19/2016					
9/20/2016	12.9		5.31	20.9	
9/21/2016		2.95			
10/24/2016			5.4		
10/25/2016	12.2	3.03			
10/26/2016				20.7	
12/12/2016			5.46	21.1	
12/13/2016	10.4	3.21			
12/14/2016					
2/6/2017		3	5.28	23.3	
2/7/2017					
2/8/2017	8.77				
3/27/2017			6.4	25	
3/28/2017		3.3			
3/29/2017	10				
3/30/2017					
4/24/2017		3.8	6.5	24	
4/26/2017	9.8				
6/5/2017					
6/6/2017			4.7	22	
6/7/2017	8	3.5			
8/21/2017		3.6	6.1	21	
8/22/2017	6.5				
8/23/2017					
5/14/2018			6	20	
5/15/2018	4.4	3.3			
5/16/2018					
10/15/2018			7	20	
10/16/2018	3.1	3.3			
10/17/2018					
2/20/2019					3.56
4/16/2019	3.22	3.69	8.36	23.1	
4/17/2019					
4/23/2019					
9/23/2019			8.72	23.4	
9/24/2019		3.21			3.69
9/25/2019	6.68				
3/16/2020					
3/17/2020			10.1	17.4	
3/18/2020	4.22	4.35			
3/24/2020					
3/25/2020					3.72
5/12/2020					
5/13/2020					
9/16/2020				14.6	
9/17/2020			10.5		
9/21/2020		3.22			
9/22/2020					
9/23/2020	3.15				3.74

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 12/9/2020 1:32 PM View: Appendix III

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-19	GS-AP-MW-17	GS-AP-MW-16D	GS-AP-MW-15	GS-AP-MW-18	GS-AP-MW-2	GS-AP-MW-21	GS-AP-MW-7	GS-AP-MW-13 (bg)
8/1/2016	0.385	0.214 (J)	0.117 (J)	1.16					
8/2/2016					0.219 (J)	1.76	0.282 (J)	0.098 (J)	0.161 (J)
8/3/2016									
9/19/2016		0.151 (J)	0.078 (J)			1.55			
9/20/2016				0.7					0.122 (J)
9/21/2016	0.303				0.213 (J)		0.231 (J)	0.061 (J)	
10/24/2016	0.24 (J)	0.086 (J)			0.141 (J)	1.29		<0.3	
10/25/2016			0.018 (J)	0.544			0.137 (J)		0.058 (J)
10/26/2016									
12/12/2016					0.206 (J)			0.01 (J)	
12/13/2016	0.188 (J)	0.14 (J)	0.035 (J)			1.19			0.072 (J)
12/14/2016				0.51			0.131 (J)		
2/6/2017		0.2						0.07 (J)	
2/7/2017	0.38								
2/8/2017			0.1	0.56	0.34	1.6	0.25		0.16
3/27/2017		0.21							
3/28/2017	0.32			0.59	0.36		0.27	0.07 (J)	
3/29/2017			0.08 (J)						0.14
3/30/2017						1.5			
4/24/2017		0.2						0.08 (J)	
4/26/2017	0.31		0.11	0.72	0.31	1.4	0.24		0.16
6/5/2017		0.2							
6/6/2017	0.31		0.11	0.65	0.29	1.3	0.25		
6/7/2017								0.09 (J)	0.15
8/21/2017						1.4		0.09 (J)	
8/22/2017	0.35	0.24	0.11	0.9					0.18
8/23/2017					0.34		0.3		
2/19/2018		0.34						0.09 (J)	
2/20/2018				0.6			0.23		0.17
2/21/2018	0.39		0.11		0.46	1.1			
5/14/2018									
5/15/2018		0.27		0.57			0.24	0.09 (J)	0.17
5/16/2018	0.36		0.12		0.43	1.1			
10/15/2018		0.23		0.77				0.11	
10/16/2018	0.37				0.64	1	0.25		
10/17/2018			0.13						0.19
2/20/2019									
4/16/2019									0.197
4/17/2019	0.27	0.354	0.171	0.463	0.632	0.868	0.272		
4/23/2019								0.111	
9/23/2019		0.351							
9/24/2019	0.307		0.124	0.628	0.578		0.209	0.106	
9/25/2019						0.86			
3/16/2020		0.261							
3/17/2020								0.107	
3/18/2020				0.647	0.437		0.234		
3/24/2020	0.327		0.109						
3/25/2020						0.855			
5/12/2020		0.263							
5/13/2020						0.777			
9/16/2020								0.126	
9/17/2020									

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 12/9/2020 1:32 PM View: Appendix III

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-19	GS-AP-MW-17	GS-AP-MW-16D	GS-AP-MW-15	GS-AP-MW-18	GS-AP-MW-2	GS-AP-MW-21	GS-AP-MW-7	GS-AP-MW-13 (bg)
9/21/2020		0.371							
9/22/2020	0.339		0.123			0.921			
9/23/2020				0.452	0.575		0.208		

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 12/9/2020 1:32 PM View: Appendix III

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-6D	GS-AP-MW-6S	GS-AP-MW-8 (bg)	GS-AP-MW-12	GS-AP-MW-17V ...
8/1/2016					
8/2/2016					
8/3/2016	0.127 (J)	0.099 (J)	0.125 (J)	0.656	
9/19/2016					
9/20/2016	0.087 (J)	0.074 (J)		0.691	
9/21/2016			0.098 (J)		
10/24/2016	0.019 (J)				
10/25/2016			0.025 (J)	0.588	
10/26/2016		0.032 (J)			
12/12/2016	0.043 (J)	0.034 (J)			
12/13/2016			0.045 (J)	0.545	
12/14/2016					
2/6/2017	0.11	0.06 (J)	0.1		
2/7/2017					
2/8/2017				0.79	
3/27/2017	0.12	0.07 (J)			
3/28/2017			0.08 (J)		
3/29/2017				0.51	
3/30/2017					
4/24/2017	0.11	0.08 (J)	0.09 (J)		
4/26/2017				0.49	
6/5/2017					
6/6/2017	0.12	0.09 (J)			
6/7/2017			0.08 (J)	0.43	
8/21/2017	0.15	0.1	0.08 (J)		
8/22/2017				0.41	
8/23/2017					
2/19/2018	0.13	0.1	0.08 (J)		
2/20/2018				0.27	
2/21/2018					
5/14/2018	0.13	0.13			
5/15/2018			0.1	0.23	
5/16/2018					
10/15/2018	0.16	0.14			
10/16/2018			0.09 (J)	0.23	
10/17/2018					
2/20/2019					0.239
4/16/2019	0.156	0.147	0.143	0.188	
4/17/2019					
4/23/2019					
9/23/2019	0.132	0.142			
9/24/2019			0.128		0.245
9/25/2019				0.168	
3/16/2020					
3/17/2020	0.132	0.231			
3/18/2020			0.108	0.122	
3/24/2020					
3/25/2020					0.243
5/12/2020					
5/13/2020					
9/16/2020		0.308			
9/17/2020	0.133				

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 12/9/2020 1:32 PM View: Appendix III

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-6D	GS-AP-MW-6S	GS-AP-MW-8 (bg)	GS-AP-MW-12	GS-AP-MW-17V ...
9/21/2020			0.125		
9/22/2020					
9/23/2020				0.12	0.278

Prediction Limit

Constituent: pH (SU) Analysis Run 12/9/2020 1:32 PM View: Appendix III

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-19	GS-AP-MW-17	GS-AP-MW-16D	GS-AP-MW-15	GS-AP-MW-18	GS-AP-MW-2	GS-AP-MW-21	GS-AP-MW-7	GS-AP-MW-13 (bg)
8/1/2016	8.05	8.39	7.53	11.74					
8/2/2016					7.65	9.18	10.26	7.72	6.8
8/3/2016									
9/19/2016		8.42	7.5			9.18			
9/20/2016				10.33					6.8
9/21/2016	8.14				7.47		10.45	7.6	
10/24/2016	8.55	8.42			7.44	9.14		7.68	
10/25/2016			7.44	10.24			10.42		6.85
10/26/2016									
12/12/2016					7.39			7.72	
12/13/2016	8.08	8.43	7.45			9.2			6.8
12/14/2016				10.09			10.12		
2/6/2017		8.38						7.64	
2/7/2017	8.61								
2/8/2017			7.41	9.75	7.31	9.17	10.28		6.76
3/27/2017		8.43							
3/28/2017	7.94			9.9	7.6		10.67	7.58	
3/29/2017			7.44						6.76
3/30/2017						9.08			
4/24/2017		8.39						7.68	
4/26/2017	8.26		7.47	10.08	7.5	9.22	10.42		6.71
6/5/2017		8.42							
6/6/2017	8.23		7.37	10.2	7.34	9.22	10.51		
6/7/2017								7.56	6.71
8/21/2017						9.12		7.61	
8/22/2017	8.1	8.4	7.48	10.57					6.84
8/23/2017					7.4		11.91		
2/19/2018		8.33						7.65	
2/20/2018				10.63			11.57		6.77
2/21/2018	8.48		7.44		7.44	9.17			
5/14/2018									
5/15/2018		8.3		10.71			11.26	7.69	6.8
5/16/2018	8.12		7.45		7.47	9.28			
10/15/2018		8.37		11.51				7.62	
10/16/2018	8.22				7.06	9.35	11.34		
10/17/2018			7.41						6.67
2/20/2019									
4/16/2019									6.64
4/17/2019	8.06	8.36	7.33	10.76	7.58	9.26	11.71		
4/23/2019								7.83	
9/23/2019		8.37							
9/24/2019	7.8		7.43	11.7	7.49		11.24	7.38	
9/25/2019						9.31			
3/16/2020		8.45							
3/17/2020								7.72	
3/18/2020				11.47	6.99		11.37		
3/24/2020	7.93		7.46						
3/25/2020						9.29			
5/12/2020		8.42							
5/13/2020						9.43			
9/16/2020								7.74	
9/17/2020									

Prediction Limit

Constituent: pH (SU) Analysis Run 12/9/2020 1:32 PM View: Appendix III

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-19	GS-AP-MW-17	GS-AP-MW-16D	GS-AP-MW-15	GS-AP-MW-18	GS-AP-MW-2	GS-AP-MW-21	GS-AP-MW-7	GS-AP-MW-13 (bg)
9/21/2020		8.22							
9/22/2020	8.17		7.52			9.41			
9/23/2020				11.89	7.54		10.71		

Prediction Limit

Constituent: pH (SU) Analysis Run 12/9/2020 1:32 PM View: Appendix III

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-6D	GS-AP-MW-6S	GS-AP-MW-8 (bg)	GS-AP-MW-12	GS-AP-MW-17V ...
8/1/2016					
8/2/2016					
8/3/2016	7.27	6.81	5.84	7.36	
9/19/2016					
9/20/2016	7.27	6.72		7.28	
9/21/2016			5.99		
10/24/2016	7.25				
10/25/2016			5.94	7.23	
10/26/2016		6.68			
12/12/2016	7.26	6.76			
12/13/2016			5.84	7.27	
12/14/2016					
2/6/2017	7.24	6.75	5.9		
2/7/2017					
2/8/2017				7.25	
3/27/2017	7.29	6.67			
3/28/2017			5.67		
3/29/2017				7.34	
3/30/2017					
4/24/2017	7.46	6.81	5.79		
4/26/2017				7.19	
6/5/2017					
6/6/2017	7.29	6.8			
6/7/2017			5.71	7.24	
8/21/2017	7.21	6.78	5.7		
8/22/2017				7.31	
8/23/2017					
2/19/2018	7.36	6.85	5.78		
2/20/2018				7.69	
2/21/2018					
5/14/2018	7.36	6.82			
5/15/2018			5.84	7.69	
5/16/2018					
10/15/2018	7.33	6.78			
10/16/2018			5.75	7.51	
10/17/2018					
2/20/2019					7.76
4/16/2019	7.26	6.82	5.76	7.41	
4/17/2019					
4/23/2019					
9/23/2019	7.23	6.51			
9/24/2019			5.27		7.65
9/25/2019				7.38	
3/16/2020					
3/17/2020	7.39	6.92			
3/18/2020			5.81	7.56	
3/24/2020					
3/25/2020					7.63
5/12/2020					
5/13/2020					
9/16/2020		6.93			
9/17/2020	7.41				

Prediction Limit

Constituent: pH (SU) Analysis Run 12/9/2020 1:32 PM View: Appendix III

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-6D	GS-AP-MW-6S	GS-AP-MW-8 (bg)	GS-AP-MW-12	GS-AP-MW-17V ...
9/21/2020			5.75		
9/22/2020					
9/23/2020				8.3	7.53

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 12/9/2020 1:32 PM View: Appendix III

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-16D	GS-AP-MW-17	GS-AP-MW-15	GS-AP-MW-19	GS-AP-MW-18	GS-AP-MW-2	GS-AP-MW-7	GS-AP-MW-21	GS-AP-MW-13 (bg)
8/1/2016	13.4	9.56	102	9.02					
8/2/2016					295	2.87	154	9.14	12
8/3/2016									
9/19/2016	12.9	12.7				1.22			
9/20/2016			53.3						11.2
9/21/2016				8.38	440		146	8.71	
10/24/2016		8.58		18.5	608	<1	131		
10/25/2016	11.6		49.8					8.54	10.1
10/26/2016									
12/12/2016					755		141		
12/13/2016	12.7	31		7.4		<1			11.4
12/14/2016			40.9					11.5	
2/6/2017		14.7					135		
2/7/2017				8.16					
2/8/2017	12.2		25		672	19.4		17	10.9
3/27/2017		14							
3/28/2017			27	6.4	610		140	25	
3/29/2017	12								11
3/30/2017						31			
4/24/2017		22					140		
4/26/2017	13		29	4.6 (J)	600	29		28	11
6/5/2017		30							
6/6/2017	12		23	5.2	670	37		33	
6/7/2017							150		11
8/21/2017						55	140		
8/22/2017	12	42	22	5.3					11
8/23/2017					560			43	
5/14/2018									
5/15/2018		54	13				120	110	11
5/16/2018	13			6	260	34			
10/15/2018		34	14				130		
10/16/2018				5.6	520	90		160	
10/17/2018	13								12
2/20/2019									
4/16/2019									12.1
4/17/2019	14.1	76.6	9.02	14.3	71.6	48.6		215	
4/23/2019							156		
9/23/2019		124							
9/24/2019	14.1		12.4	13.8	119		145	224	
9/25/2019						47.7			
3/16/2020		48.6							
3/17/2020							149		
3/18/2020			15.9		216			228	
3/24/2020	14.1			15.2					
3/25/2020						38.5			
5/12/2020		44.4							
5/13/2020						33.6			
9/16/2020							131		
9/17/2020									
9/21/2020		104							
9/22/2020	13.6			16.9		21.5			
9/23/2020			13.2		88.9			248	

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 12/9/2020 1:32 PM View: Appendix III

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-12	GS-AP-MW-8 (bg)	GS-AP-MW-6D	GS-AP-MW-6S	GS-AP-MW-17V ...
8/1/2016					
8/2/2016					
8/3/2016	19.2	4.2	52	203	
9/19/2016					
9/20/2016	1.42		56	209	
9/21/2016		4.27			
10/24/2016			57.5		
10/25/2016	<1	2.78			
10/26/2016				224	
12/12/2016			50	249	
12/13/2016	3.21	3.18			
12/14/2016					
2/6/2017		3.74	54.9	309	
2/7/2017					
2/8/2017	3.3				
3/27/2017			50	290	
3/28/2017		3.4 (J)			
3/29/2017	3.8 (J)				
3/30/2017					
4/24/2017		2.7 (J)	56	300	
4/26/2017	1.4 (J)				
6/5/2017					
6/6/2017			63	310	
6/7/2017	1.7 (J)	2.7 (J)			
8/21/2017		3.9 (J)	35	260	
8/22/2017	4.2 (J)				
8/23/2017					
5/14/2018			46	210	
5/15/2018	14	2.5 (J)			
5/16/2018					
10/15/2018			37	170	
10/16/2018	13	2.4 (J)			
10/17/2018					
2/20/2019					15.2
4/16/2019	13.3	4.53	46.8	195	
4/17/2019					
4/23/2019					
9/23/2019			47.9	176	
9/24/2019		6.61			11.8
9/25/2019	25.5				
3/16/2020					
3/17/2020			59.5	148	
3/18/2020	20.8	4.86			
3/24/2020					
3/25/2020					9.69
5/12/2020					
5/13/2020					
9/16/2020				115	
9/17/2020			65.1		
9/21/2020		4.69			
9/22/2020					
9/23/2020	19.1				11.1

Prediction Limit

Constituent: TDS (mg/L) Analysis Run 12/9/2020 1:32 PM View: Appendix III

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-16D	GS-AP-MW-17	GS-AP-MW-15	GS-AP-MW-19	GS-AP-MW-18	GS-AP-MW-2	GS-AP-MW-7	GS-AP-MW-21	GS-AP-MW-13 (bg)
8/1/2016	222	408	640	245					
8/2/2016					586	390	358	348	221
8/3/2016									
9/19/2016	220	441				398			
9/20/2016			434						221
9/21/2016				267	848		370	368	
10/24/2016		424		275	1100	395	370		
10/25/2016	223		394					348	226
10/26/2016									
12/12/2016					1260		353		
12/13/2016	211	466		255		381			211
12/14/2016			387					352	
2/6/2017		414					338		
2/7/2017				272					
2/8/2017	206		303		1160	376		352	212
3/27/2017		444							
3/28/2017			305	271	1100		352	370	
3/29/2017	215								217
3/30/2017						391			
4/24/2017		446					362		
4/26/2017	212		329	265	1090	384		342	202
6/5/2017		493							
6/6/2017	227		331	287	1170	404		367	
6/7/2017							348		218
8/21/2017						416	362		
8/22/2017	230	500	364	293					224
8/23/2017					1020			508	
5/14/2018									
5/15/2018		528	340				338	438	209
5/16/2018	216			301	658	365			
10/15/2018		462	448				333		
10/16/2018				303	1030	430		520	
10/17/2018	191								208
2/20/2019									
4/16/2019									185
4/17/2019	207	540	354	296	347	341		582	
4/23/2019							354		
9/23/2019		684							
9/24/2019	208		536	302	372		344	630	
9/25/2019						358			
3/16/2020		516							
3/17/2020							334		
3/18/2020			515		618			661	
3/24/2020	205			302					
3/25/2020						337			
5/12/2020		493							
5/13/2020						328			
9/16/2020							351		
9/17/2020									
9/21/2020		658							
9/22/2020	218			300		318			
9/23/2020			600		380			642	

Prediction Limit

Constituent: TDS (mg/L) Analysis Run 12/9/2020 1:32 PM View: Appendix III

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-12	GS-AP-MW-8 (bg)	GS-AP-MW-6D	GS-AP-MW-6S	GS-AP-MW-17V ...
8/1/2016					
8/2/2016					
8/3/2016	546	113	302	394	
9/19/2016					
9/20/2016	542		298	444	
9/21/2016		128			
10/24/2016			306		
10/25/2016	518	121			
10/26/2016				456	
12/12/2016			291	491	
12/13/2016	424	101			
12/14/2016					
2/6/2017		108	285	580	
2/7/2017					
2/8/2017	379				
3/27/2017			305	554	
3/28/2017		91			
3/29/2017	334				
3/30/2017					
4/24/2017		89.3	301	566	
4/26/2017	332				
6/5/2017					
6/6/2017			311	580	
6/7/2017	308	84			
8/21/2017		91.3	289	524	
8/22/2017	286				
8/23/2017					
5/14/2018			303	458	
5/15/2018	235	94.7			
5/16/2018					
10/15/2018			309	404	
10/16/2018	211	76.7			
10/17/2018					
2/20/2019					346
4/16/2019	193	92	285	382	
4/17/2019					
4/23/2019					
9/23/2019			296	381	
9/24/2019		109			365
9/25/2019	253				
3/16/2020					
3/17/2020			303	328	
3/18/2020	236	90.7			
3/24/2020					
3/25/2020					364
5/12/2020					
5/13/2020					
9/16/2020				269	
9/17/2020			314		
9/21/2020		94			
9/22/2020					
9/23/2020	216				368

FIGURE E.

Trend Tests - Prediction Limit Exceedances - Significant Results

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond Printed 12/9/2020, 1:37 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	**GS-AP-MW-17**	**0.006094**	**68**	**58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**GS-AP-MW-6S**	**-0.08133**	**-64**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**GS-AP-MW-6D**	**2.184**	**65**	**53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**GS-AP-MW-17**	**1.443**	**59**	**58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**GS-AP-MW-21**	**3.353**	**67**	**53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**GS-AP-MW-6D**	**1.187**	**75**	**53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**GS-AP-MW-7**	**0.6356**	**92**	**53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Fluoride (mg/L)	**GS-AP-MW-13 (bg)**	**0.02914**	**48**	**43**	**Yes**	**13**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Fluoride (mg/L)	**GS-AP-MW-17**	**0.04997**	**85**	**63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Fluoride (mg/L)	**GS-AP-MW-18**	**0.117**	**75**	**58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Fluoride (mg/L)	**GS-AP-MW-2**	**-0.2072**	**-102**	**-63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Fluoride (mg/L)	**GS-AP-MW-6S**	**0.04697**	**95**	**58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
pH (SU)	**GS-AP-MW-2**	**0.05621**	**77**	**63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
pH (SU)	**GS-AP-MW-21**	**0.3339**	**59**	**58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**GS-AP-MW-12**	**4.636**	**55**	**53**	**Yes**	**15**	**6.667**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**GS-AP-MW-17**	**21.08**	**86**	**58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**GS-AP-MW-21**	**62.83**	**99**	**53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
TDS (mg/L)	**GS-AP-MW-17**	**47.09**	**81**	**58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
TDS (mg/L)	**GS-AP-MW-21**	**83.3**	**77**	**53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**

Trend Tests - Prediction Limit Exceedances - All Results

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond Printed 12/9/2020, 1:37 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	GS-AP-MW-13 (bg)	0	0	38	No	12	100	n/a	n/a	0.01	NP
Boron (mg/L)	**GS-AP-MW-17**	**0.006094**	**68**	**58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	GS-AP-MW-17V (bg)	0.004028	0	8	No	4	0	n/a	n/a	0.01	NP
Boron (mg/L)	GS-AP-MW-18	-0.2372	-29	-53	No	15	0	n/a	n/a	0.01	NP
Boron (mg/L)	GS-AP-MW-2	0.012	24	58	No	16	0	n/a	n/a	0.01	NP
Boron (mg/L)	GS-AP-MW-6D	0.03503	50	53	No	15	0	n/a	n/a	0.01	NP
Boron (mg/L)	**GS-AP-MW-6S**	**-0.08133**	**-64**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	GS-AP-MW-7	0.04506	49	53	No	15	0	n/a	n/a	0.01	NP
Boron (mg/L)	GS-AP-MW-8 (bg)	0	14	53	No	15	93.33	n/a	n/a	0.01	NP
Calcium (mg/L)	GS-AP-MW-13 (bg)	-2.607	-32	-38	No	12	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GS-AP-MW-17V (bg)	-0.6083	-2	-8	No	4	0	n/a	n/a	0.01	NP
Calcium (mg/L)	**GS-AP-MW-6D**	**2.184**	**65**	**53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	GS-AP-MW-6S	-1.857	-11	-53	No	15	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GS-AP-MW-8 (bg)	-1.261	-39	-53	No	15	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GS-AP-MW-13 (bg)	0.1178	10	38	No	12	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GS-AP-MW-15	-0.6791	-25	-53	No	15	0	n/a	n/a	0.01	NP
Chloride (mg/L)	**GS-AP-MW-17**	**1.443**	**59**	**58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	GS-AP-MW-17V (bg)	0.08646	6	8	No	4	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GS-AP-MW-18	-5.242	-31	-53	No	15	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GS-AP-MW-19	-0.08111	-17	-53	No	15	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GS-AP-MW-2	0.8568	31	58	No	16	0	n/a	n/a	0.01	NP
Chloride (mg/L)	**GS-AP-MW-21**	**3.353**	**67**	**53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**GS-AP-MW-6D**	**1.187**	**75**	**53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	GS-AP-MW-6S	-0.8577	-24	-53	No	15	0	n/a	n/a	0.01	NP
Chloride (mg/L)	**GS-AP-MW-7**	**0.6356**	**92**	**53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	GS-AP-MW-8 (bg)	0.1386	41	53	No	15	0	n/a	n/a	0.01	NP
Fluoride (mg/L)	**GS-AP-MW-13 (bg)**	**0.02914**	**48**	**43**	**Yes**	**13**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Fluoride (mg/L)	GS-AP-MW-15	-0.02371	-16	-58	No	16	0	n/a	n/a	0.01	NP
Fluoride (mg/L)	**GS-AP-MW-17**	**0.04997**	**85**	**63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Fluoride (mg/L)	GS-AP-MW-17V (bg)	0.01732	4	8	No	4	0	n/a	n/a	0.01	NP
Fluoride (mg/L)	**GS-AP-MW-18**	**0.117**	**75**	**58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Fluoride (mg/L)	GS-AP-MW-19	0.005954	11	58	No	16	0	n/a	n/a	0.01	NP
Fluoride (mg/L)	**GS-AP-MW-2**	**-0.2072**	**-102**	**-63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Fluoride (mg/L)	**GS-AP-MW-6S**	**0.04697**	**95**	**58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Fluoride (mg/L)	GS-AP-MW-8 (bg)	0.01002	41	58	No	16	0	n/a	n/a	0.01	NP
pH (SU)	GS-AP-MW-12	0.0902	53	58	No	16	0	n/a	n/a	0.01	NP
pH (SU)	GS-AP-MW-13 (bg)	-0.05825	-34	-43	No	13	0	n/a	n/a	0.01	NP
pH (SU)	GS-AP-MW-15	0.42	58	58	No	16	0	n/a	n/a	0.01	NP
pH (SU)	GS-AP-MW-17	-0.01688	-35	-63	No	17	0	n/a	n/a	0.01	NP
pH (SU)	GS-AP-MW-17V (bg)	-0.1322	-6	-8	No	4	0	n/a	n/a	0.01	NP
pH (SU)	GS-AP-MW-19	-0.04466	-24	-58	No	16	0	n/a	n/a	0.01	NP
pH (SU)	**GS-AP-MW-2**	**0.05621**	**77**	**63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
pH (SU)	**GS-AP-MW-21**	**0.3339**	**59**	**58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
pH (SU)	GS-AP-MW-8 (bg)	-0.04795	-48	-58	No	16	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	**GS-AP-MW-12**	**4.636**	**55**	**53**	**Yes**	**15**	**6.667**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	GS-AP-MW-13 (bg)	0.01849	11	38	No	12	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	**GS-AP-MW-17**	**21.08**	**86**	**58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	GS-AP-MW-17V (bg)	-3.392	-4	-8	No	4	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GS-AP-MW-18	-123.3	-49	-53	No	15	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GS-AP-MW-19	0.8488	9	53	No	15	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GS-AP-MW-2	9.847	51	58	No	16	12.5	n/a	n/a	0.01	NP
Sulfate (mg/L)	**GS-AP-MW-21**	**62.83**	**99**	**53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	GS-AP-MW-6D	0	-1	-53	No	15	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GS-AP-MW-6S	-26.25	-37	-53	No	15	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GS-AP-MW-7	-0.5062	-9	-53	No	15	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GS-AP-MW-8 (bg)	0.1821	14	53	No	15	0	n/a	n/a	0.01	NP

Trend Tests - Prediction Limit Exceedances - All Results

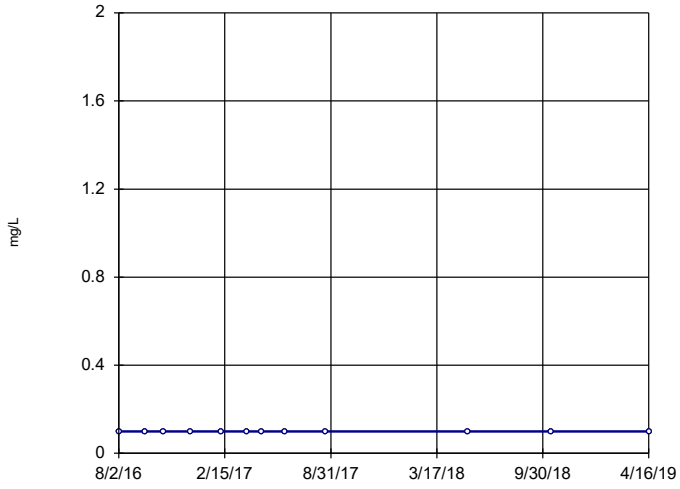
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond Printed 12/9/2020, 1:37 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
TDS (mg/L)	GS-AP-MW-13 (bg)	-7.182	-29	-38	No	12	0	n/a	n/a	0.01	NP
TDS (mg/L)	GS-AP-MW-15	23.85	21	53	No	15	0	n/a	n/a	0.01	NP
TDS (mg/L)	**GS-AP-MW-17**	**47.09**	**81**	**58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
TDS (mg/L)	GS-AP-MW-17V (bg)	10.92	4	8	No	4	0	n/a	n/a	0.01	NP
TDS (mg/L)	GS-AP-MW-18	-158.2	-40	-53	No	15	0	n/a	n/a	0.01	NP
TDS (mg/L)	**GS-AP-MW-21**	**83.3**	**77**	**53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
TDS (mg/L)	GS-AP-MW-8 (bg)	-6.906	-37	-53	No	15	0	n/a	n/a	0.01	NP

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

GS-AP-MW-13 (bg)



n = 12

Slope = 0
units per year.

Mann-Kendall
statistic = 0
critical = 38

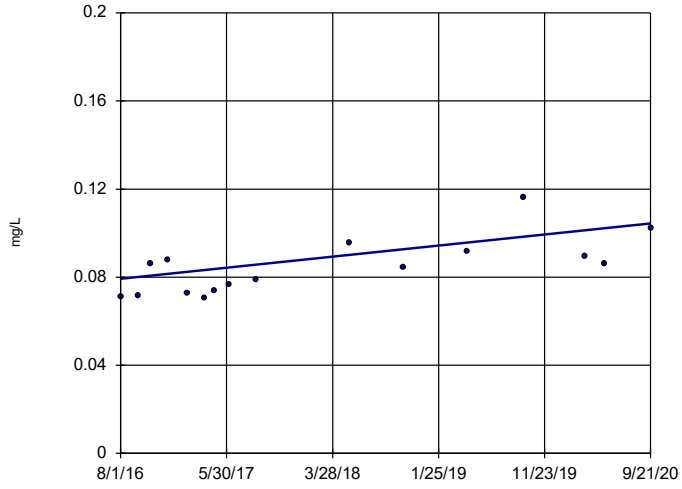
Trend not sig-
nificant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Boron Analysis Run 12/9/2020 1:35 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Sen's Slope Estimator

GS-AP-MW-17



n = 16

Slope = 0.006094
units per year.

Mann-Kendall
statistic = 68
critical = 58

Increasing trend
significant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Boron Analysis Run 12/9/2020 1:35 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

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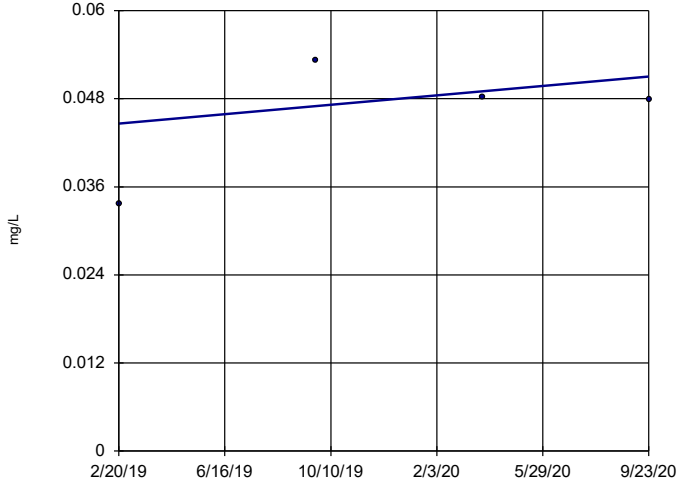
Sen's Slope Estimator

GS-AP-MW-17V (bg)



n = 4

Slope = 0.004028
units per year.

Mann-Kendall
statistic = 0
critical = 8

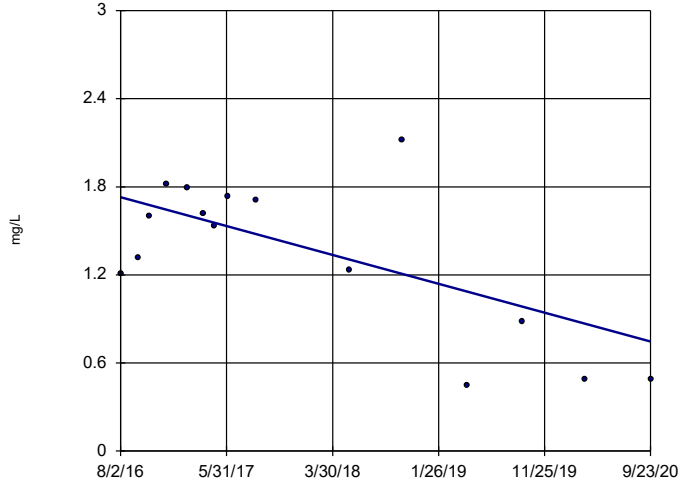
Trend not sig-
nificant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Boron Analysis Run 12/9/2020 1:35 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Sen's Slope Estimator

GS-AP-MW-18



n = 15

Slope = -0.2372
units per year.

Mann-Kendall
statistic = -29
critical = -53

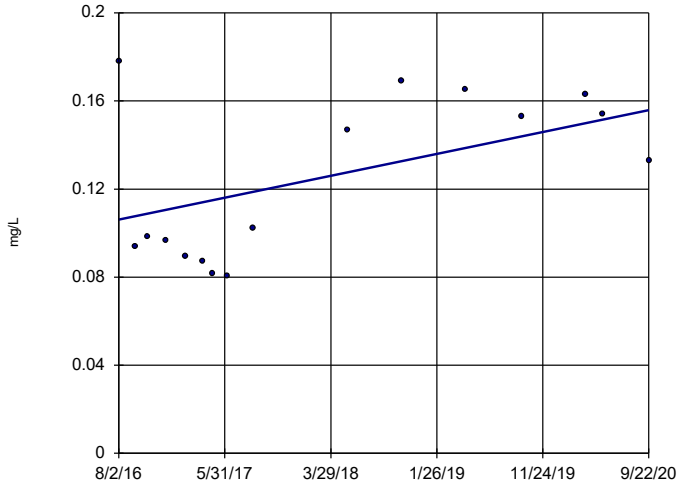
Trend not sig-
nificant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Boron Analysis Run 12/9/2020 1:35 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Sen's Slope Estimator

GS-AP-MW-2



n = 16

Slope = 0.012 units per year.

Mann-Kendall statistic = 24 critical = 58

Trend not significant at 99% confidence level (α = 0.005 per tail).

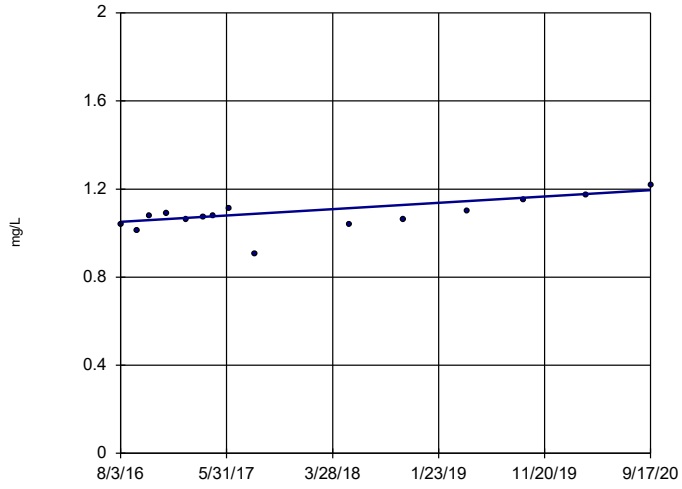
Constituent: Boron Analysis Run 12/9/2020 1:35 PM View: Appendix III - Trend Tests

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Sen's Slope Estimator

GS-AP-MW-6D



n = 15

Slope = 0.03503 units per year.

Mann-Kendall statistic = 50 critical = 53

Trend not significant at 99% confidence level (α = 0.005 per tail).

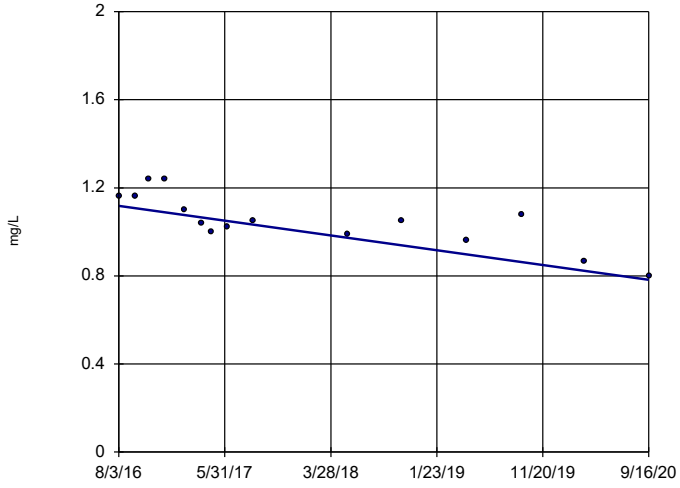
Constituent: Boron Analysis Run 12/9/2020 1:35 PM View: Appendix III - Trend Tests

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Sen's Slope Estimator

GS-AP-MW-6S



n = 15

Slope = -0.08133 units per year.

Mann-Kendall statistic = -64 critical = -53

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

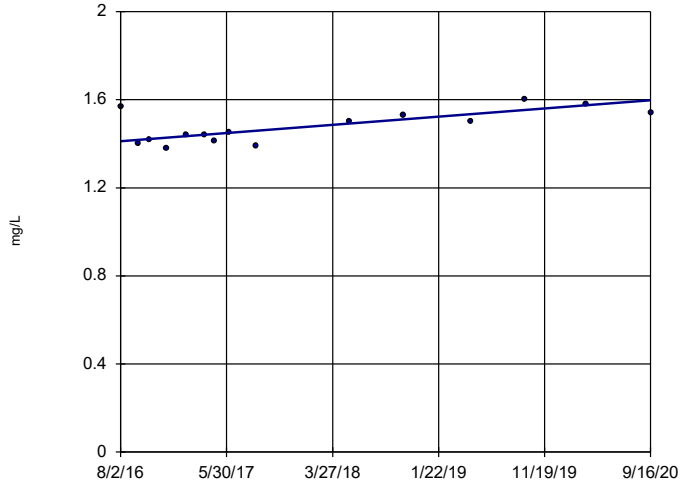
Constituent: Boron Analysis Run 12/9/2020 1:35 PM View: Appendix III - Trend Tests

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Sen's Slope Estimator

GS-AP-MW-7



n = 15

Slope = 0.04506 units per year.

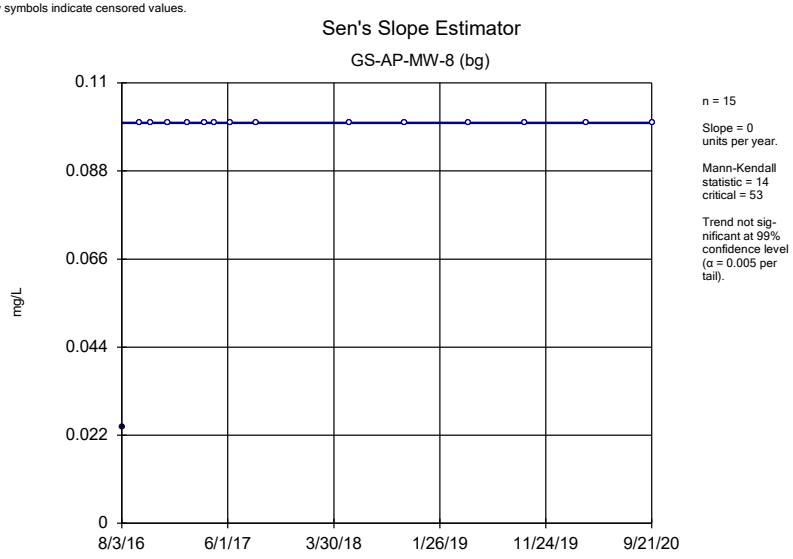
Mann-Kendall statistic = 49 critical = 53

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 12/9/2020 1:35 PM View: Appendix III - Trend Tests

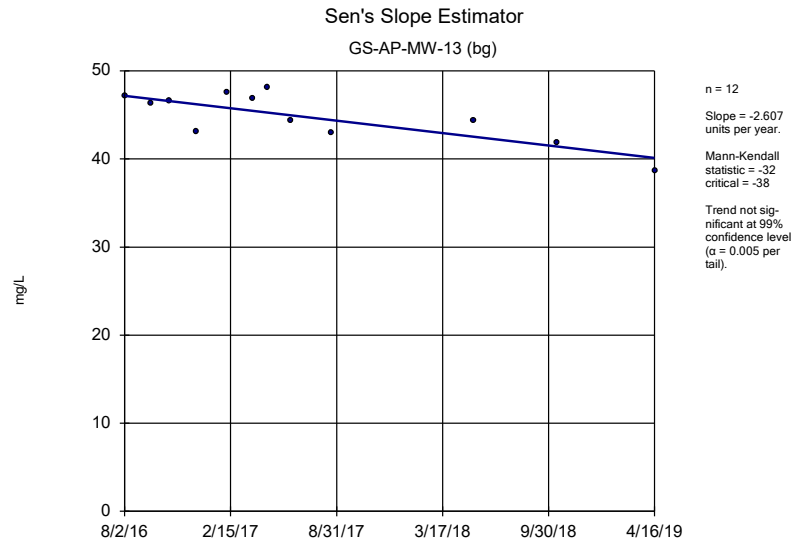
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.



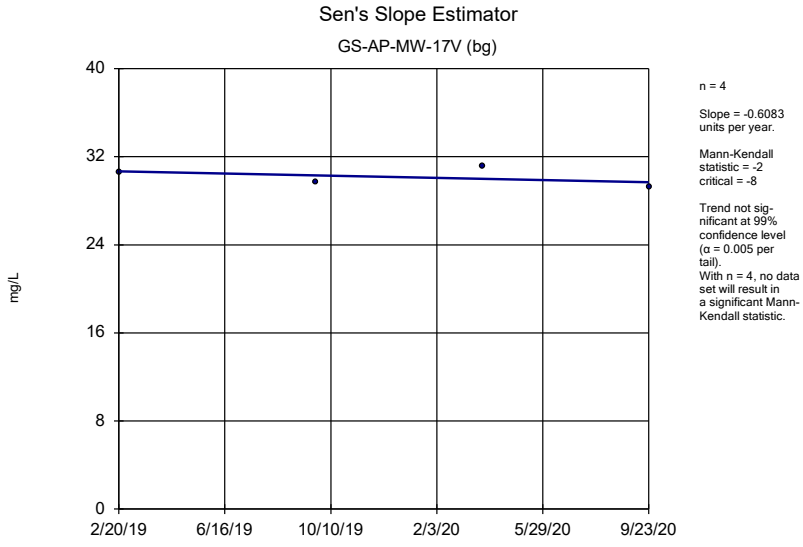
Constituent: Boron Analysis Run 12/9/2020 1:35 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG



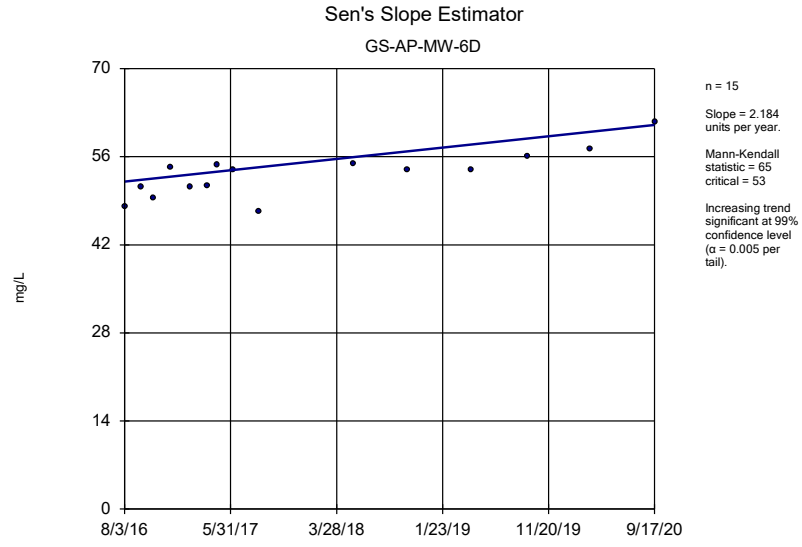
Constituent: Calcium Analysis Run 12/9/2020 1:35 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG



Constituent: Calcium Analysis Run 12/9/2020 1:35 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

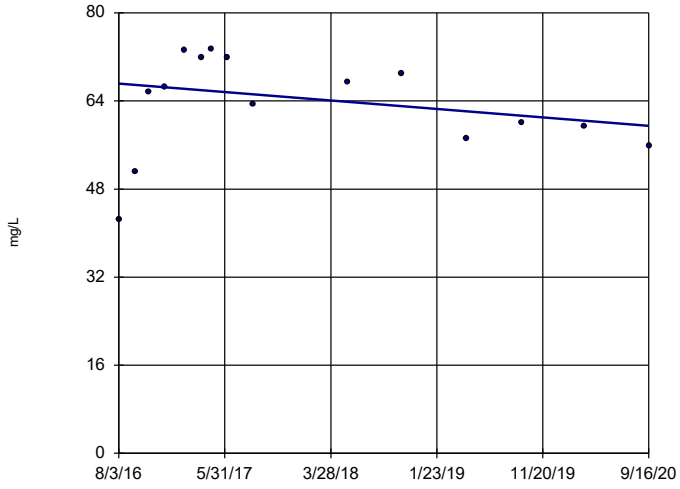


Constituent: Calcium Analysis Run 12/9/2020 1:35 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Sen's Slope Estimator

GS-AP-MW-6S



n = 15

Slope = -1.857 units per year.

Mann-Kendall statistic = -11 critical = -53

Trend not significant at 99% confidence level (α = 0.005 per tail).

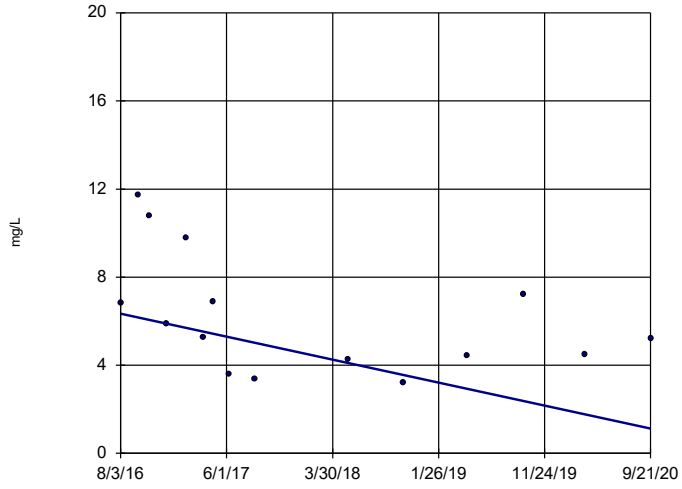
Constituent: Calcium Analysis Run 12/9/2020 1:35 PM View: Appendix III - Trend Tests

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Sen's Slope Estimator

GS-AP-MW-8 (bg)



n = 15

Slope = -1.261 units per year.

Mann-Kendall statistic = -39 critical = -53

Trend not significant at 99% confidence level (α = 0.005 per tail).

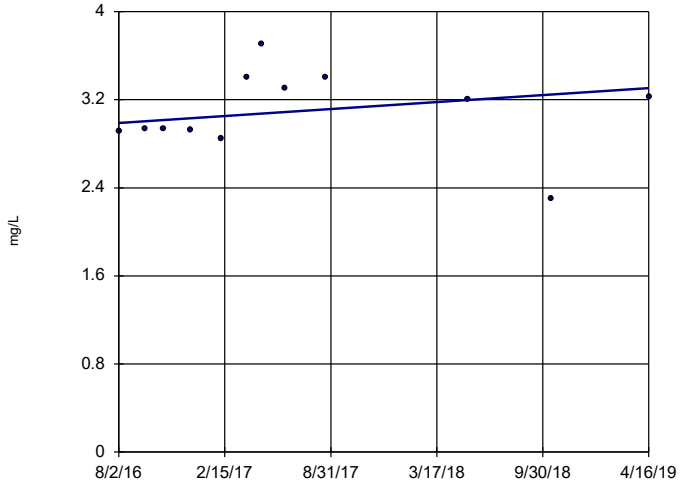
Constituent: Calcium Analysis Run 12/9/2020 1:35 PM View: Appendix III - Trend Tests

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Sen's Slope Estimator

GS-AP-MW-13 (bg)



n = 12

Slope = 0.1178 units per year.

Mann-Kendall statistic = 10 critical = 38

Trend not significant at 99% confidence level (α = 0.005 per tail).

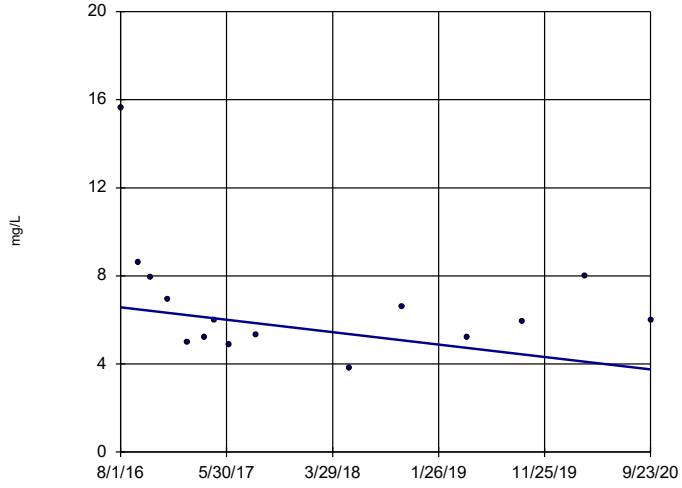
Constituent: Chloride Analysis Run 12/9/2020 1:35 PM View: Appendix III - Trend Tests

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Sen's Slope Estimator

GS-AP-MW-15



n = 15

Slope = -0.6791 units per year.

Mann-Kendall statistic = -25 critical = -53

Trend not significant at 99% confidence level (α = 0.005 per tail).

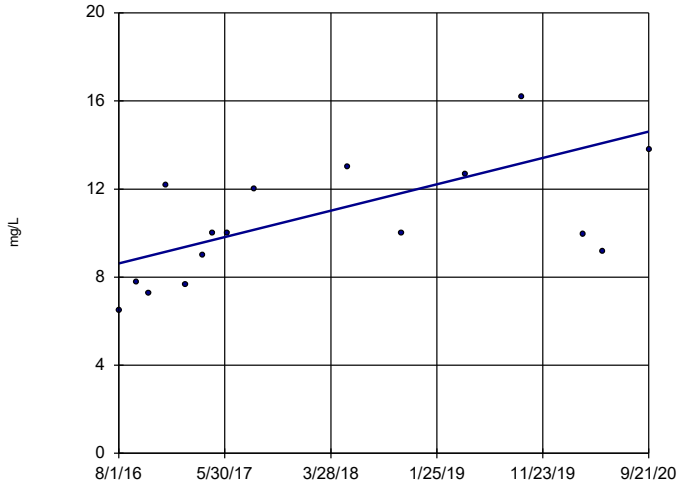
Constituent: Chloride Analysis Run 12/9/2020 1:35 PM View: Appendix III - Trend Tests

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Sen's Slope Estimator

GS-AP-MW-17



n = 16

Slope = 1.443 units per year.

Mann-Kendall statistic = 59 critical = 58

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

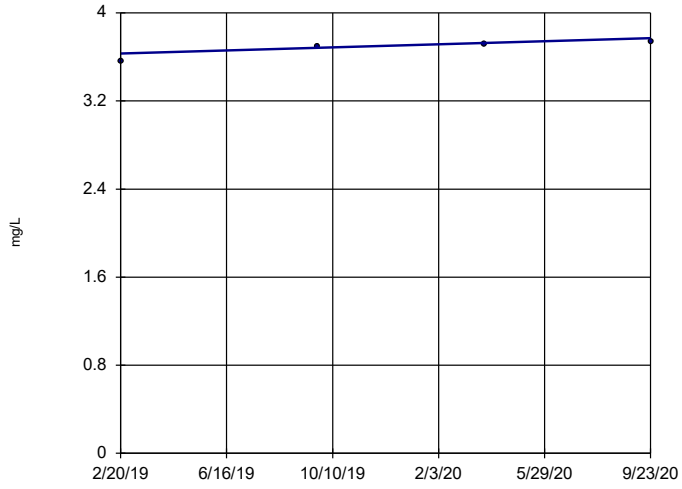
Constituent: Chloride Analysis Run 12/9/2020 1:35 PM View: Appendix III - Trend Tests

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Sen's Slope Estimator

GS-AP-MW-17V (bg)



n = 4

Slope = 0.08646 units per year.

Mann-Kendall statistic = 6 critical = 8

Trend not significant at 99% confidence level (α = 0.005 per tail).
With n = 4, no data set will result in a significant Mann-Kendall statistic.

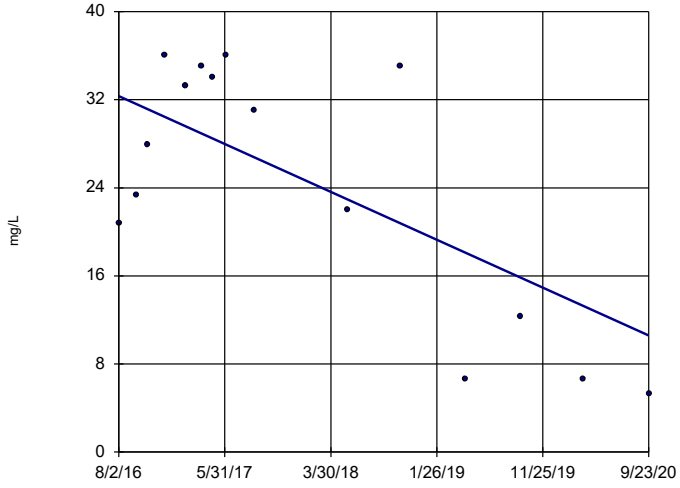
Constituent: Chloride Analysis Run 12/9/2020 1:35 PM View: Appendix III - Trend Tests

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Sen's Slope Estimator

GS-AP-MW-18



n = 15

Slope = -5.242 units per year.

Mann-Kendall statistic = -31 critical = -53

Trend not significant at 99% confidence level (α = 0.005 per tail).

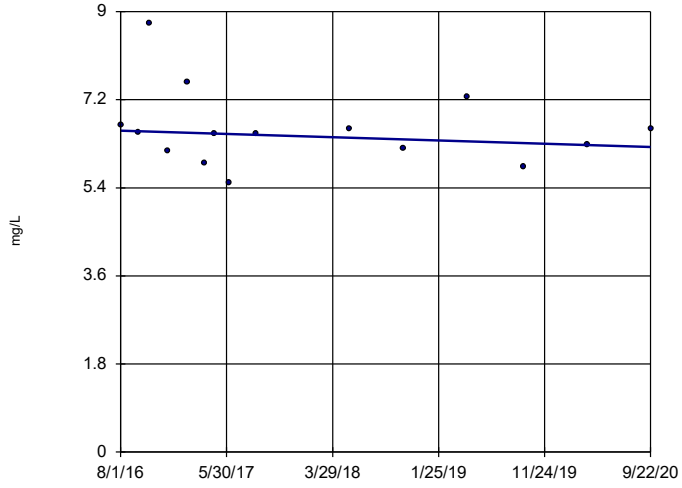
Constituent: Chloride Analysis Run 12/9/2020 1:35 PM View: Appendix III - Trend Tests

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Sen's Slope Estimator

GS-AP-MW-19



n = 15

Slope = -0.08111 units per year.

Mann-Kendall statistic = -17 critical = -53

Trend not significant at 99% confidence level (α = 0.005 per tail).

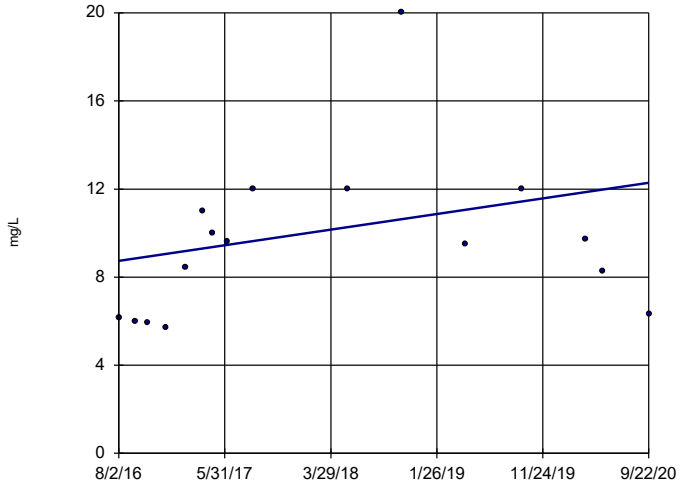
Constituent: Chloride Analysis Run 12/9/2020 1:35 PM View: Appendix III - Trend Tests

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Sen's Slope Estimator

GS-AP-MW-2



n = 16

Slope = 0.8568 units per year.

Mann-Kendall statistic = 31 critical = 58

Trend not significant at 99% confidence level (α = 0.005 per tail).

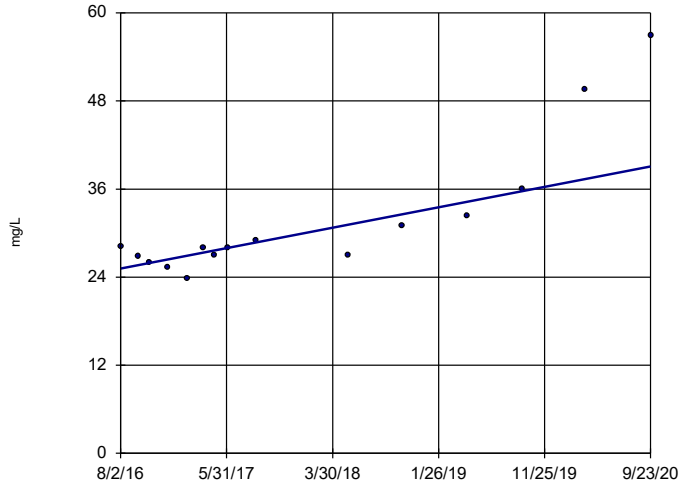
Constituent: Chloride Analysis Run 12/9/2020 1:35 PM View: Appendix III - Trend Tests

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Sen's Slope Estimator

GS-AP-MW-21



n = 15

Slope = 3.353 units per year.

Mann-Kendall statistic = 67 critical = 53

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

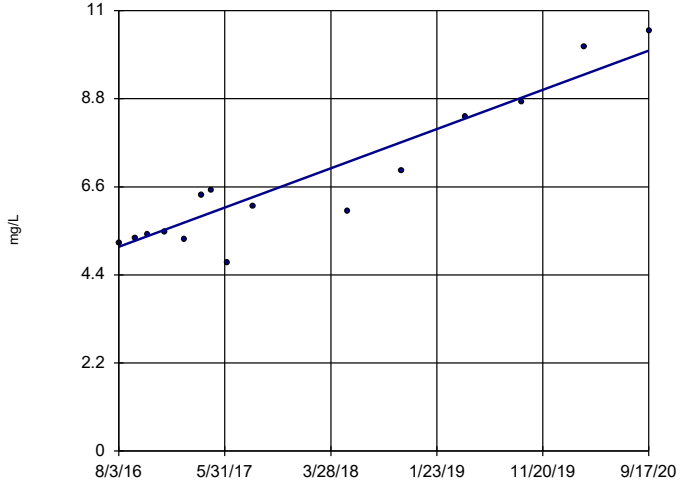
Constituent: Chloride Analysis Run 12/9/2020 1:35 PM View: Appendix III - Trend Tests

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Sen's Slope Estimator

GS-AP-MW-6D



n = 15

Slope = 1.187 units per year.

Mann-Kendall statistic = 75 critical = 53

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

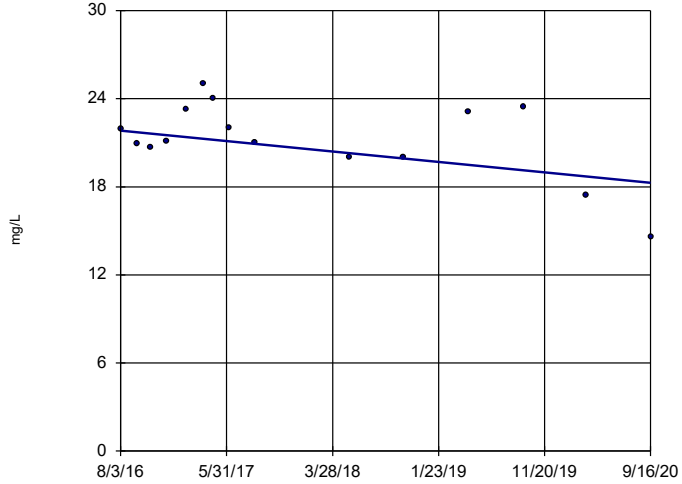
Constituent: Chloride Analysis Run 12/9/2020 1:35 PM View: Appendix III - Trend Tests

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Sen's Slope Estimator

GS-AP-MW-6S



n = 15

Slope = -0.8577 units per year.

Mann-Kendall statistic = -24 critical = -53

Trend not significant at 99% confidence level (α = 0.005 per tail).

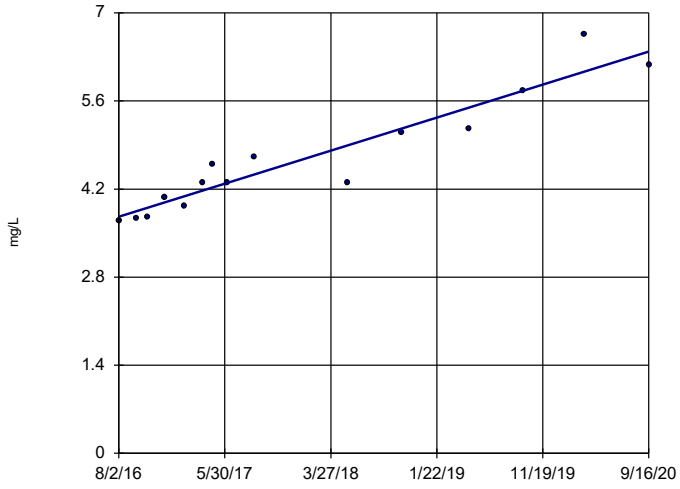
Constituent: Chloride Analysis Run 12/9/2020 1:35 PM View: Appendix III - Trend Tests

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Sen's Slope Estimator

GS-AP-MW-7



n = 15

Slope = 0.6356 units per year.

Mann-Kendall statistic = 92 critical = 53

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

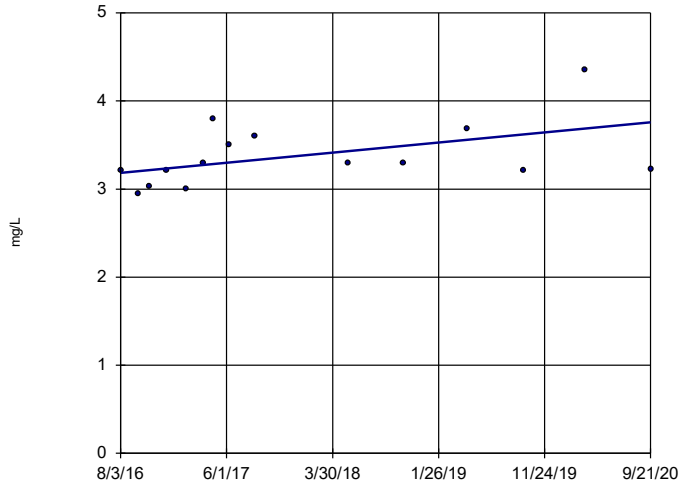
Constituent: Chloride Analysis Run 12/9/2020 1:35 PM View: Appendix III - Trend Tests

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Sen's Slope Estimator

GS-AP-MW-8 (bg)



n = 15

Slope = 0.1386 units per year.

Mann-Kendall statistic = 41 critical = 53

Trend not significant at 99% confidence level (α = 0.005 per tail).

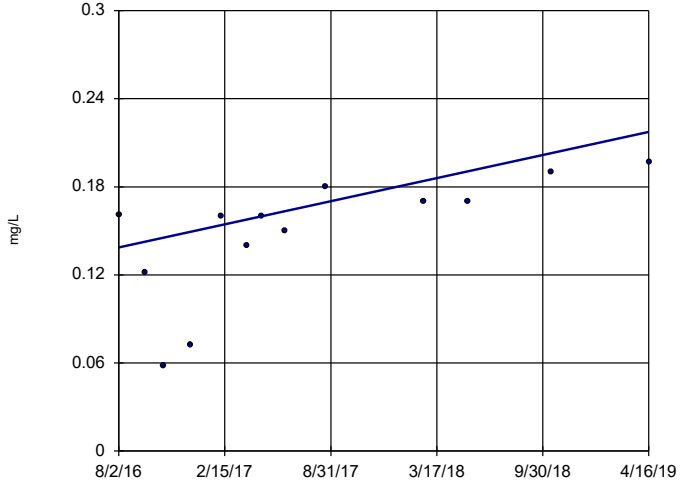
Constituent: Chloride Analysis Run 12/9/2020 1:36 PM View: Appendix III - Trend Tests

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Sen's Slope Estimator

GS-AP-MW-13 (bg)



n = 13

Slope = 0.02914 units per year.

Mann-Kendall statistic = 48 critical = 43

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

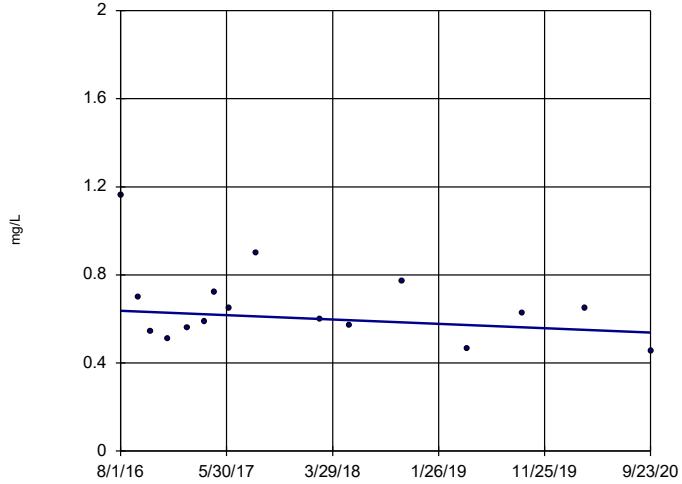
Constituent: Fluoride Analysis Run 12/9/2020 1:36 PM View: Appendix III - Trend Tests

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Sen's Slope Estimator

GS-AP-MW-15



n = 16

Slope = -0.02371 units per year.

Mann-Kendall statistic = -16 critical = -58

Trend not significant at 99% confidence level (α = 0.005 per tail).

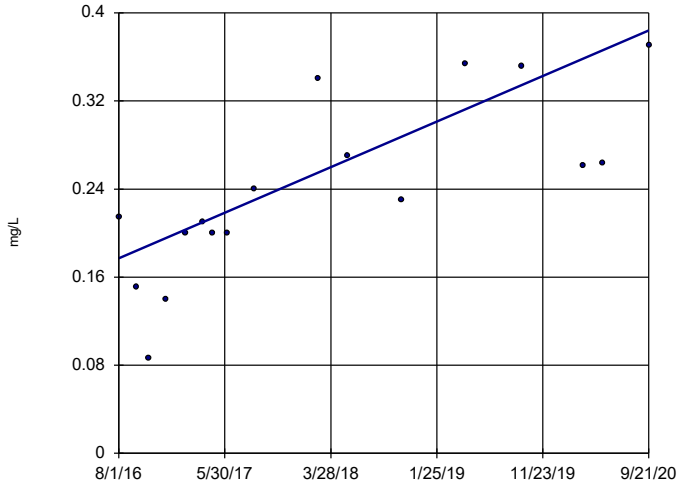
Constituent: Fluoride Analysis Run 12/9/2020 1:36 PM View: Appendix III - Trend Tests

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Sen's Slope Estimator

GS-AP-MW-17



n = 17

Slope = 0.04997 units per year.

Mann-Kendall statistic = 85 critical = 63

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

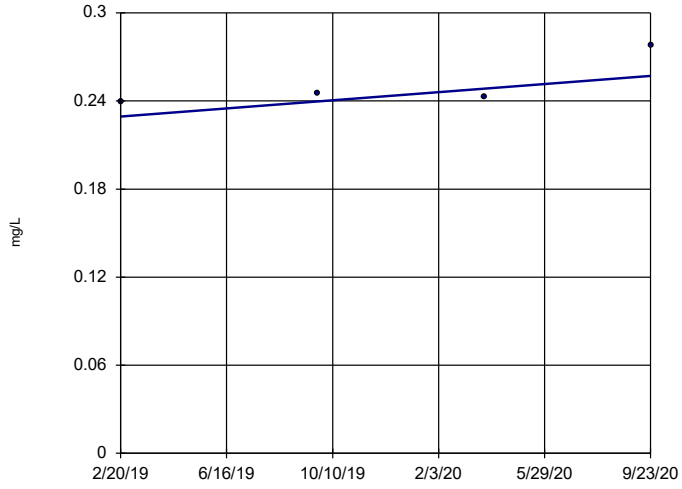
Constituent: Fluoride Analysis Run 12/9/2020 1:36 PM View: Appendix III - Trend Tests

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Sen's Slope Estimator

GS-AP-MW-17V (bg)



n = 4

Slope = 0.01732 units per year.

Mann-Kendall statistic = 4 critical = 8

Trend not significant at 99% confidence level (α = 0.005 per tail).
With n = 4, no data set will result in a significant Mann-Kendall statistic.

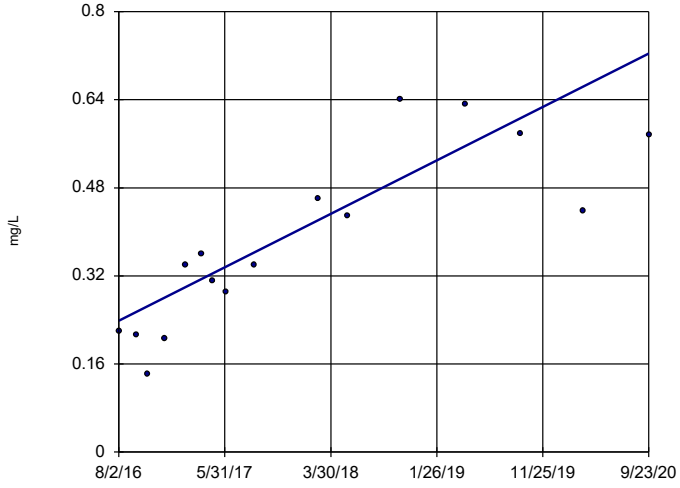
Constituent: Fluoride Analysis Run 12/9/2020 1:36 PM View: Appendix III - Trend Tests

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Sen's Slope Estimator

GS-AP-MW-18



n = 16

Slope = 0.117 units per year.

Mann-Kendall statistic = 75 critical = 58

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

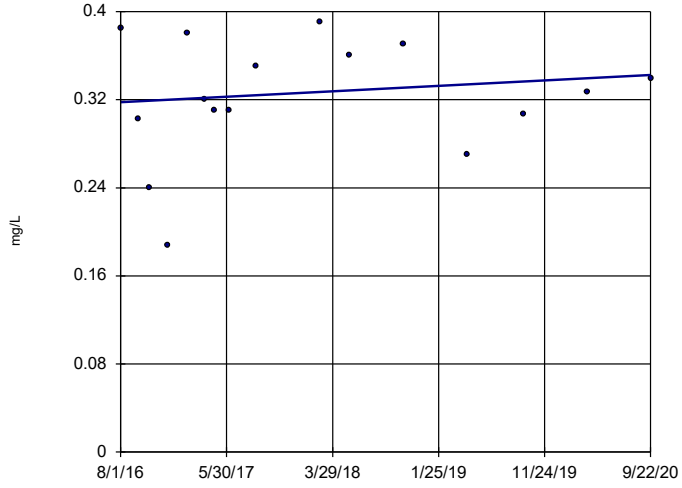
Constituent: Fluoride Analysis Run 12/9/2020 1:36 PM View: Appendix III - Trend Tests

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Sen's Slope Estimator

GS-AP-MW-19



n = 16

Slope = 0.005954 units per year.

Mann-Kendall statistic = 11 critical = 58

Trend not significant at 99% confidence level (α = 0.005 per tail).

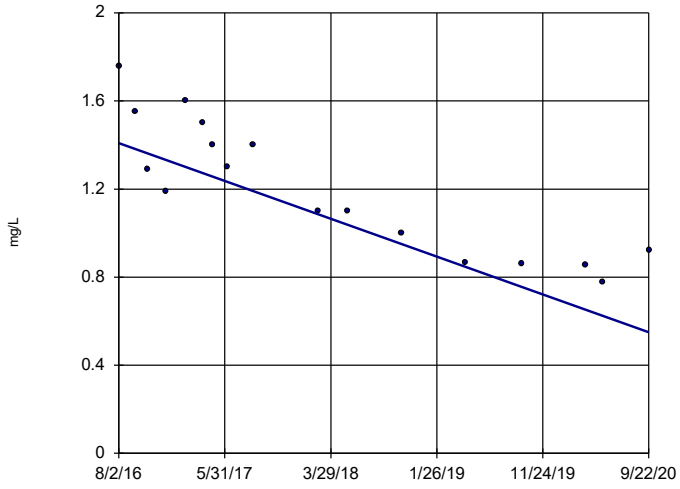
Constituent: Fluoride Analysis Run 12/9/2020 1:36 PM View: Appendix III - Trend Tests

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Sen's Slope Estimator

GS-AP-MW-2



n = 17

Slope = -0.2072 units per year.

Mann-Kendall statistic = -102 critical = -63

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

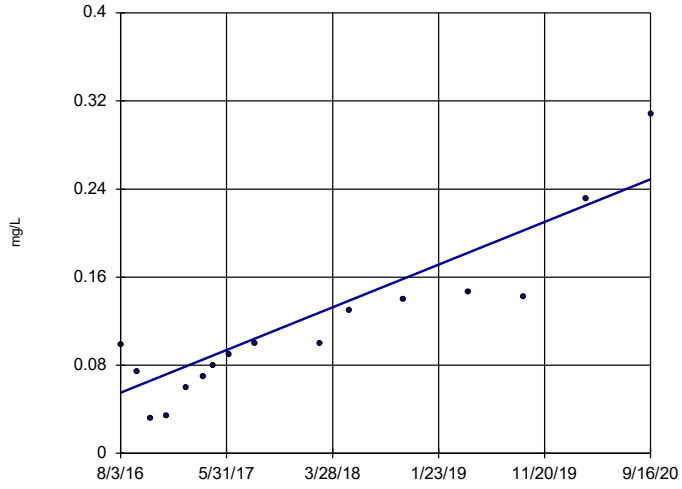
Constituent: Fluoride Analysis Run 12/9/2020 1:36 PM View: Appendix III - Trend Tests

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Sen's Slope Estimator

GS-AP-MW-6S



n = 16

Slope = 0.04697 units per year.

Mann-Kendall statistic = 95 critical = 58

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

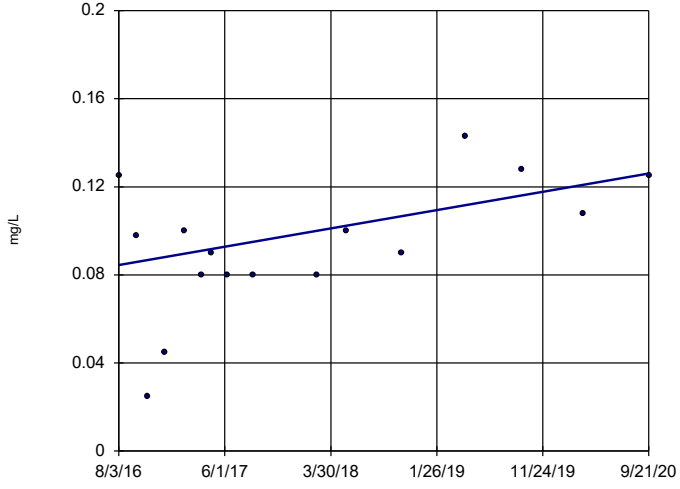
Constituent: Fluoride Analysis Run 12/9/2020 1:36 PM View: Appendix III - Trend Tests

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Sen's Slope Estimator

GS-AP-MW-8 (bg)



n = 16

Slope = 0.01002 units per year.

Mann-Kendall statistic = 41 critical = 58

Trend not significant at 99% confidence level (α = 0.005 per tail).

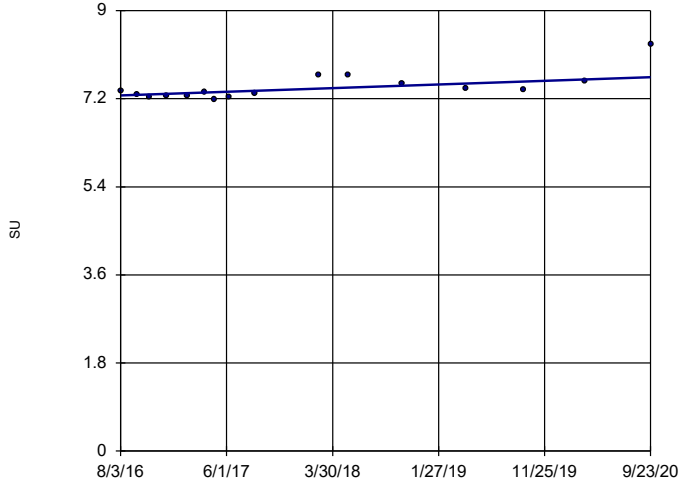
Constituent: Fluoride Analysis Run 12/9/2020 1:36 PM View: Appendix III - Trend Tests

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Sen's Slope Estimator

GS-AP-MW-12



n = 16

Slope = 0.0902 units per year.

Mann-Kendall statistic = 53 critical = 58

Trend not significant at 99% confidence level (α = 0.005 per tail).

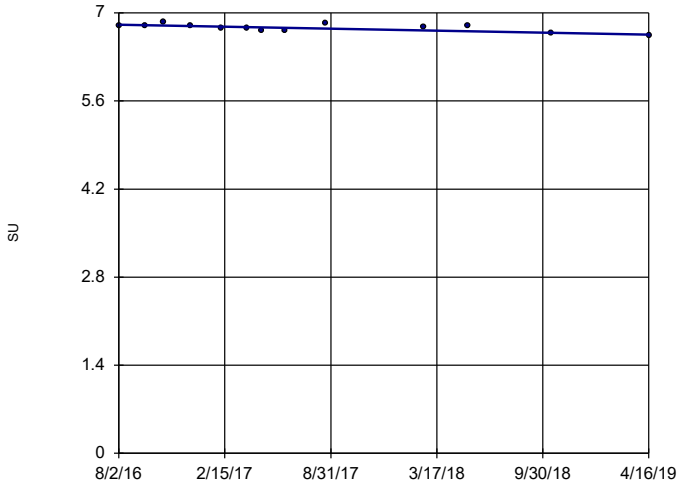
Constituent: pH Analysis Run 12/9/2020 1:36 PM View: Appendix III - Trend Tests

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Sen's Slope Estimator

GS-AP-MW-13 (bg)



n = 13

Slope = -0.05825 units per year.

Mann-Kendall statistic = -34 critical = -43

Trend not significant at 99% confidence level (α = 0.005 per tail).

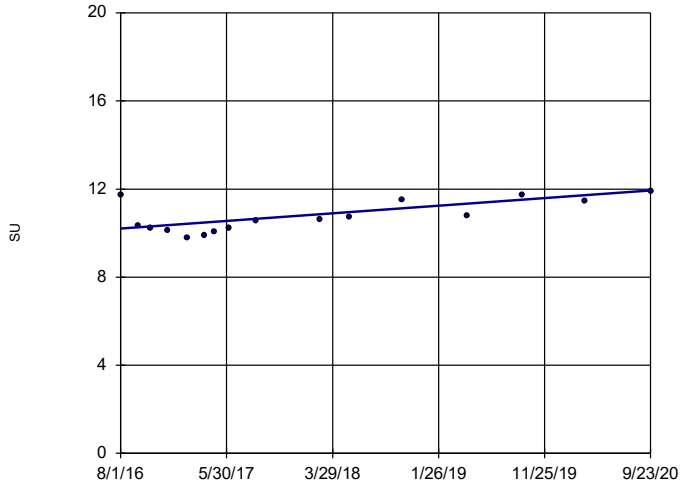
Constituent: pH Analysis Run 12/9/2020 1:36 PM View: Appendix III - Trend Tests

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Sen's Slope Estimator

GS-AP-MW-15



n = 16

Slope = 0.42 units per year.

Mann-Kendall statistic = 58 critical = 58

Trend not significant at 99% confidence level (α = 0.005 per tail).

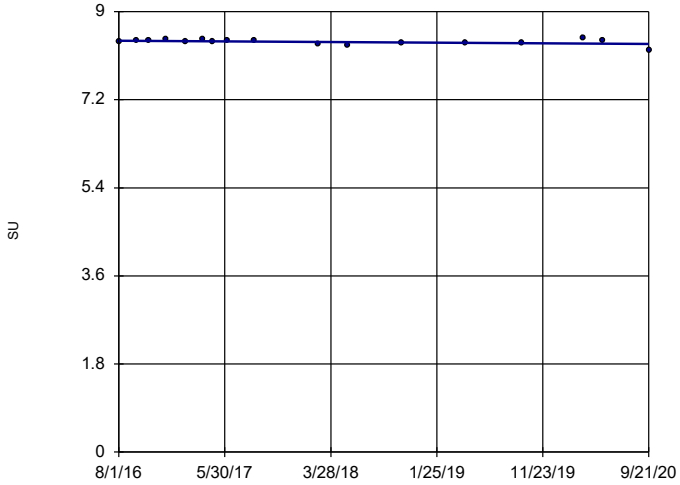
Constituent: pH Analysis Run 12/9/2020 1:36 PM View: Appendix III - Trend Tests

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Sen's Slope Estimator

GS-AP-MW-17



n = 17

Slope = -0.01688 units per year.

Mann-Kendall statistic = -35 critical = -63

Trend not significant at 99% confidence level (α = 0.005 per tail).

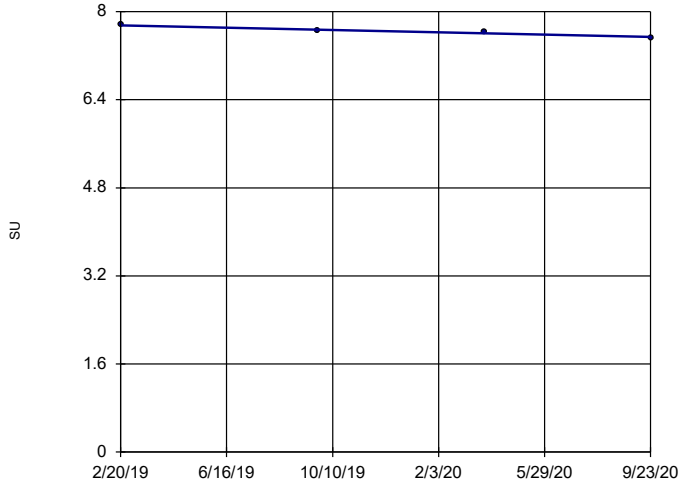
Constituent: pH Analysis Run 12/9/2020 1:36 PM View: Appendix III - Trend Tests

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Sen's Slope Estimator

GS-AP-MW-17V (bg)



n = 4

Slope = -0.1322 units per year.

Mann-Kendall statistic = -6 critical = -8

Trend not significant at 99% confidence level (α = 0.005 per tail).
With n = 4, no data set will result in a significant Mann-Kendall statistic.

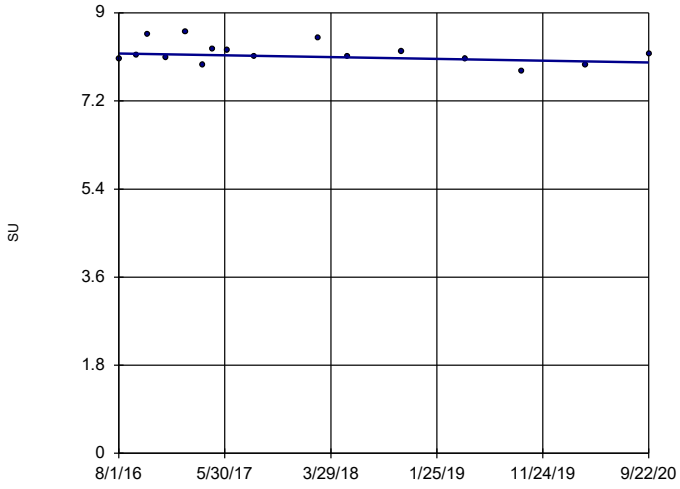
Constituent: pH Analysis Run 12/9/2020 1:36 PM View: Appendix III - Trend Tests

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Sen's Slope Estimator

GS-AP-MW-19



n = 16

Slope = -0.04466 units per year.

Mann-Kendall statistic = -24 critical = -58

Trend not significant at 99% confidence level (α = 0.005 per tail).

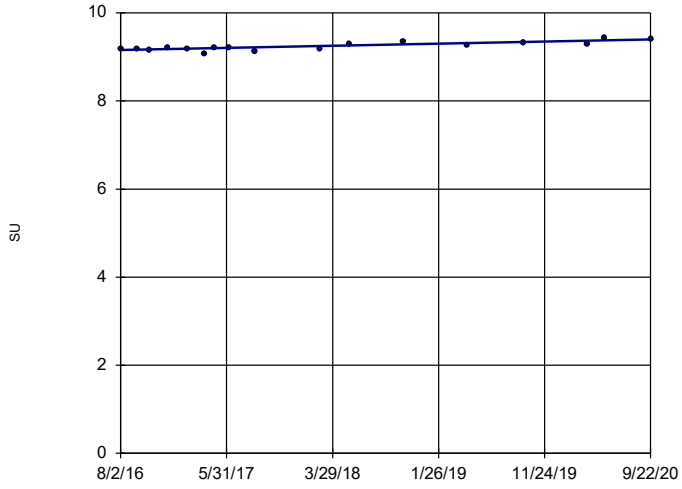
Constituent: pH Analysis Run 12/9/2020 1:36 PM View: Appendix III - Trend Tests

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Sen's Slope Estimator

GS-AP-MW-2



n = 17

Slope = 0.05621 units per year.

Mann-Kendall statistic = 77 critical = 63

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

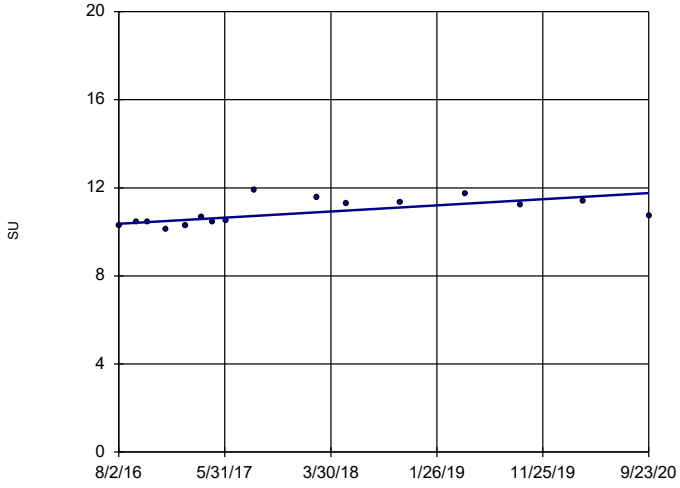
Constituent: pH Analysis Run 12/9/2020 1:36 PM View: Appendix III - Trend Tests

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Sen's Slope Estimator

GS-AP-MW-21



n = 16

Slope = 0.3339 units per year.

Mann-Kendall statistic = 59 critical = 58

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

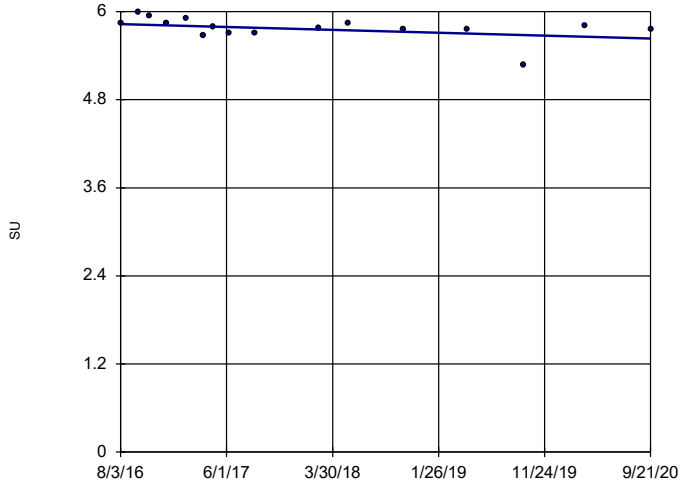
Constituent: pH Analysis Run 12/9/2020 1:36 PM View: Appendix III - Trend Tests

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Sen's Slope Estimator

GS-AP-MW-8 (bg)



n = 16

Slope = -0.04795 units per year.

Mann-Kendall statistic = -48 critical = -58

Trend not significant at 99% confidence level (α = 0.005 per tail).

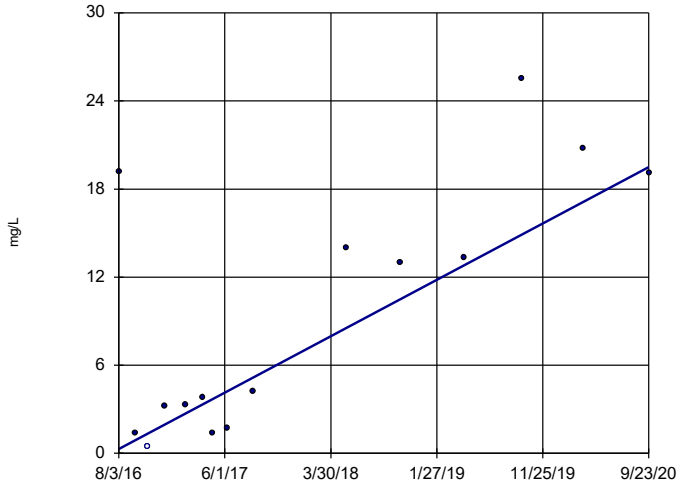
Constituent: pH Analysis Run 12/9/2020 1:36 PM View: Appendix III - Trend Tests

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

GS-AP-MW-12



n = 15

Slope = 4.636 units per year.

Mann-Kendall statistic = 55 critical = 53

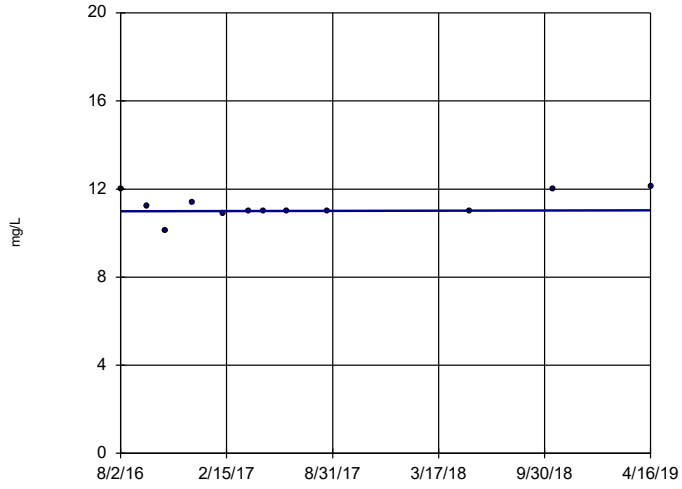
Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 12/9/2020 1:36 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Sen's Slope Estimator

GS-AP-MW-13 (bg)



n = 12

Slope = 0.01849 units per year.

Mann-Kendall statistic = 11 critical = 38

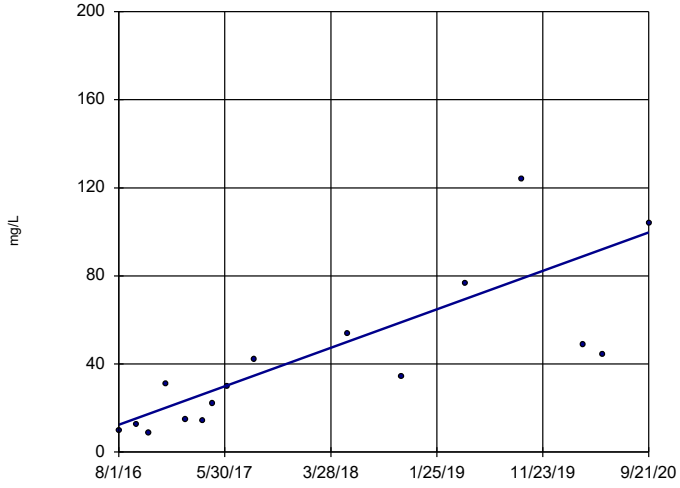
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 12/9/2020 1:36 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Sen's Slope Estimator

GS-AP-MW-17



n = 16

Slope = 21.08 units per year.

Mann-Kendall statistic = 86 critical = 58

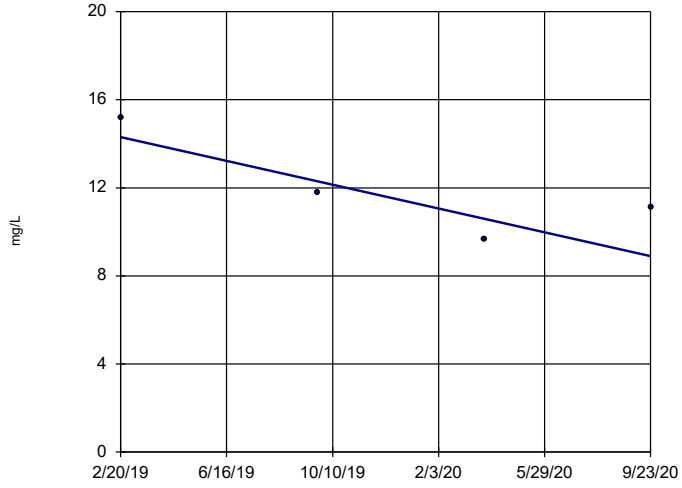
Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 12/9/2020 1:36 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Sen's Slope Estimator

GS-AP-MW-17V (bg)



n = 4

Slope = -3.392 units per year.

Mann-Kendall statistic = -4 critical = -8

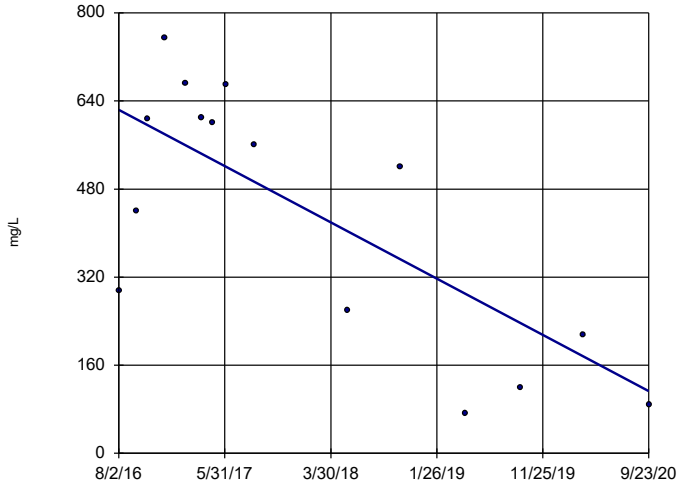
Trend not significant at 99% confidence level (α = 0.005 per tail).
With n = 4, no data set will result in a significant Mann-Kendall statistic.

Constituent: Sulfate Analysis Run 12/9/2020 1:36 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Sen's Slope Estimator

GS-AP-MW-18



n = 15

Slope = -123.3 units per year.

Mann-Kendall statistic = -49 critical = -53

Trend not significant at 99% confidence level (α = 0.005 per tail).

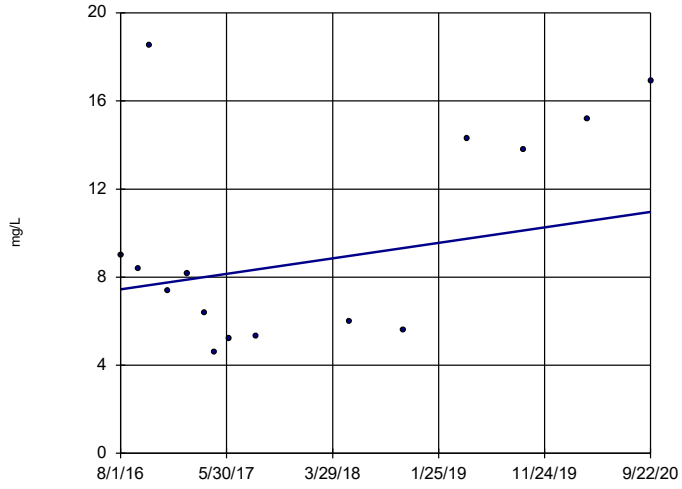
Constituent: Sulfate Analysis Run 12/9/2020 1:36 PM View: Appendix III - Trend Tests

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Sen's Slope Estimator

GS-AP-MW-19



n = 15

Slope = 0.8488 units per year.

Mann-Kendall statistic = 9 critical = 53

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 12/9/2020 1:36 PM View: Appendix III - Trend Tests

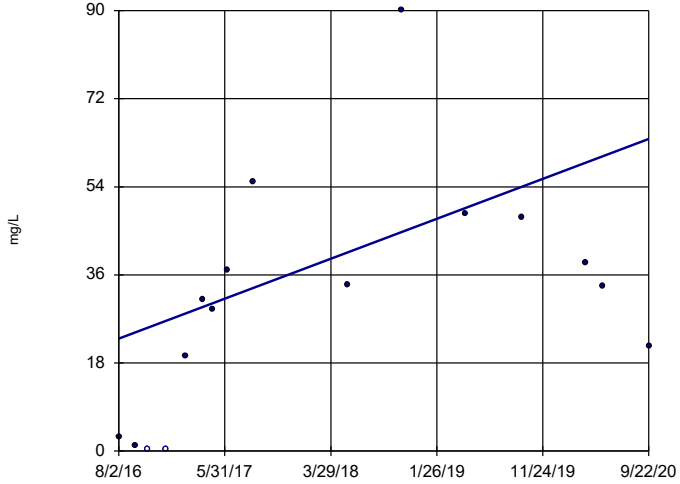
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Sen's Slope Estimator

GS-AP-MW-2



n = 16

Slope = 9.847 units per year.

Mann-Kendall statistic = 51 critical = 58

Trend not significant at 99% confidence level (α = 0.005 per tail).

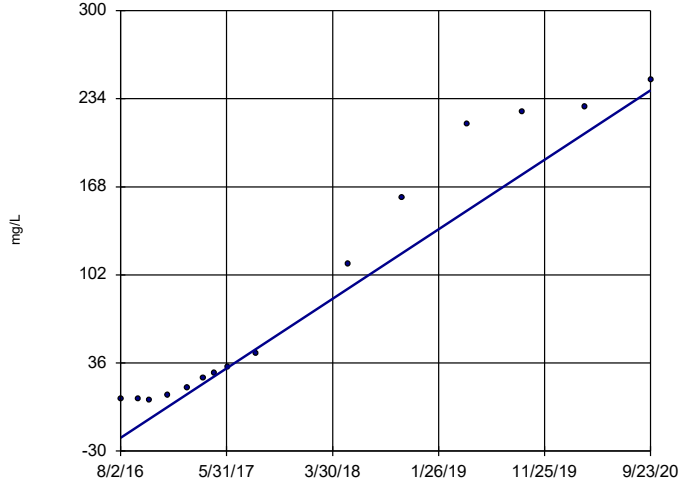
Constituent: Sulfate Analysis Run 12/9/2020 1:36 PM View: Appendix III - Trend Tests

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Sen's Slope Estimator

GS-AP-MW-21



n = 15

Slope = 62.83 units per year.

Mann-Kendall statistic = 99 critical = 53

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

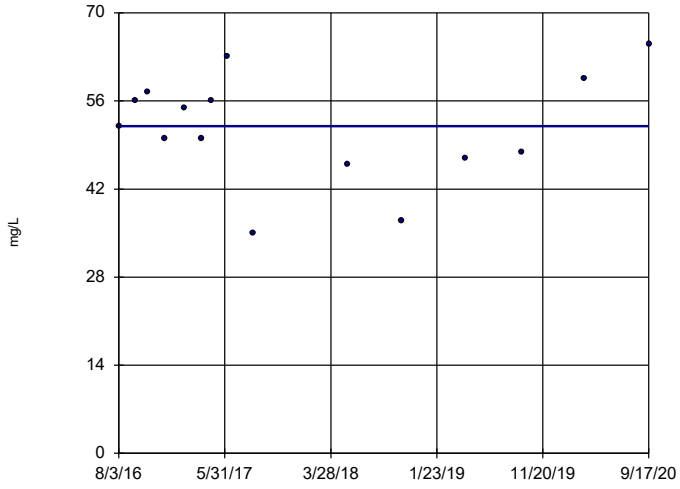
Constituent: Sulfate Analysis Run 12/9/2020 1:36 PM View: Appendix III - Trend Tests

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Sen's Slope Estimator

GS-AP-MW-6D



n = 15

Slope = 0 units per year.

Mann-Kendall statistic = -1 critical = -53

Trend not significant at 99% confidence level (α = 0.005 per tail).

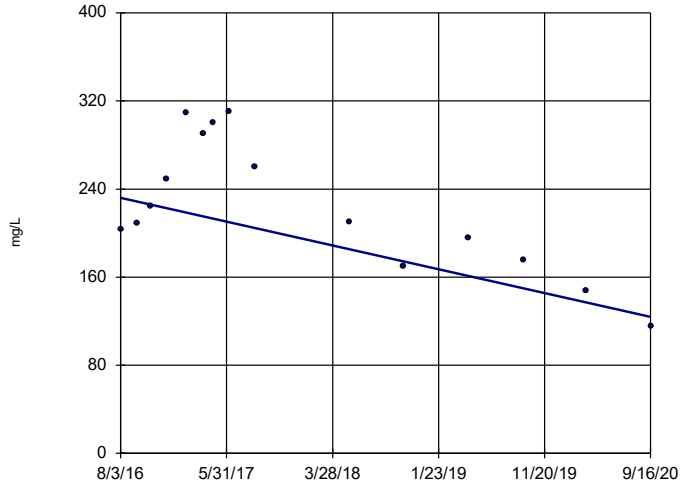
Constituent: Sulfate Analysis Run 12/9/2020 1:36 PM View: Appendix III - Trend Tests

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Sen's Slope Estimator

GS-AP-MW-6S



n = 15

Slope = -26.25 units per year.

Mann-Kendall statistic = -37 critical = -53

Trend not significant at 99% confidence level (α = 0.005 per tail).

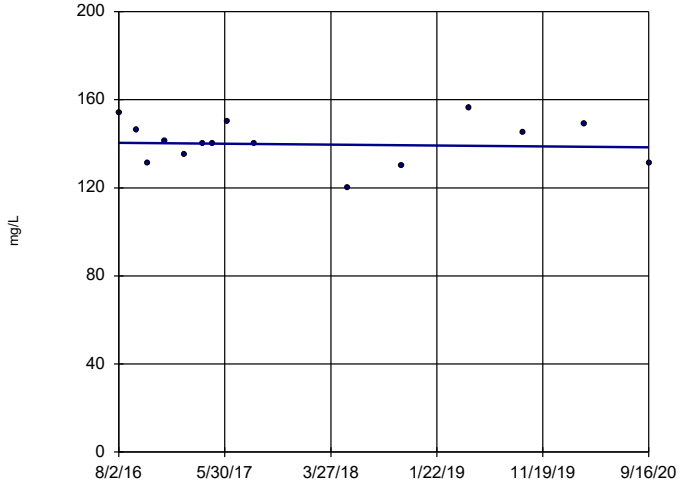
Constituent: Sulfate Analysis Run 12/9/2020 1:36 PM View: Appendix III - Trend Tests

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Sen's Slope Estimator

GS-AP-MW-7



n = 15

Slope = -0.5062 units per year.

Mann-Kendall statistic = -9 critical = -53

Trend not significant at 99% confidence level (α = 0.005 per tail).

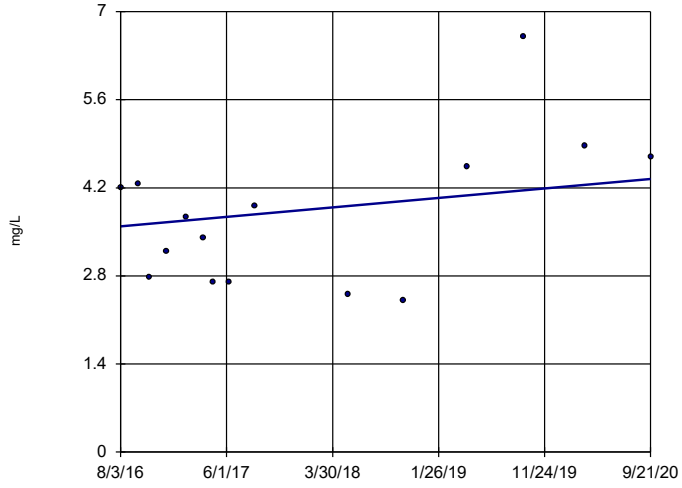
Constituent: Sulfate Analysis Run 12/9/2020 1:36 PM View: Appendix III - Trend Tests

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Sen's Slope Estimator

GS-AP-MW-8 (bg)



n = 15

Slope = 0.1821 units per year.

Mann-Kendall statistic = 14 critical = 53

Trend not significant at 99% confidence level (α = 0.005 per tail).

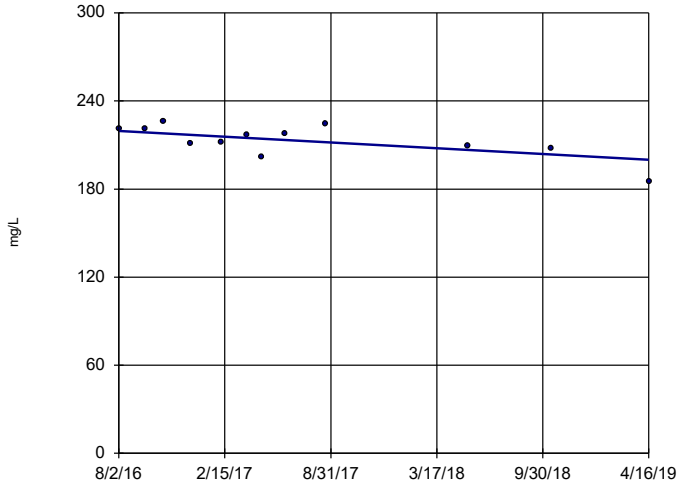
Constituent: Sulfate Analysis Run 12/9/2020 1:36 PM View: Appendix III - Trend Tests

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Sen's Slope Estimator

GS-AP-MW-13 (bg)



n = 12

Slope = -7.182 units per year.

Mann-Kendall statistic = -29 critical = -38

Trend not significant at 99% confidence level (α = 0.005 per tail).

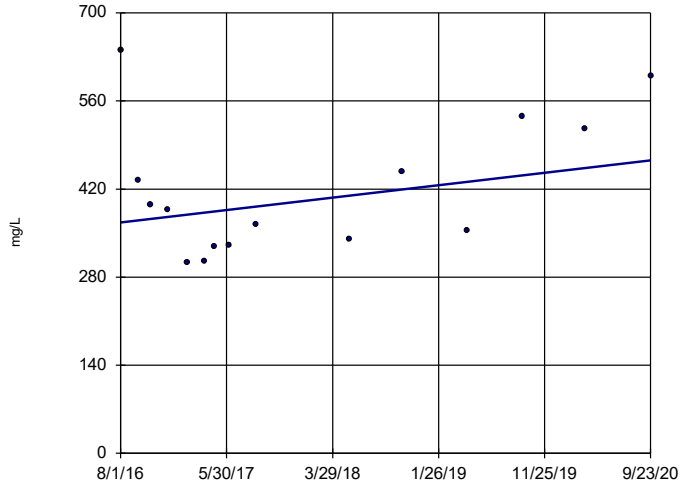
Constituent: TDS Analysis Run 12/9/2020 1:36 PM View: Appendix III - Trend Tests

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Sen's Slope Estimator

GS-AP-MW-15



n = 15

Slope = 23.85 units per year.

Mann-Kendall statistic = 21 critical = 53

Trend not significant at 99% confidence level (α = 0.005 per tail).

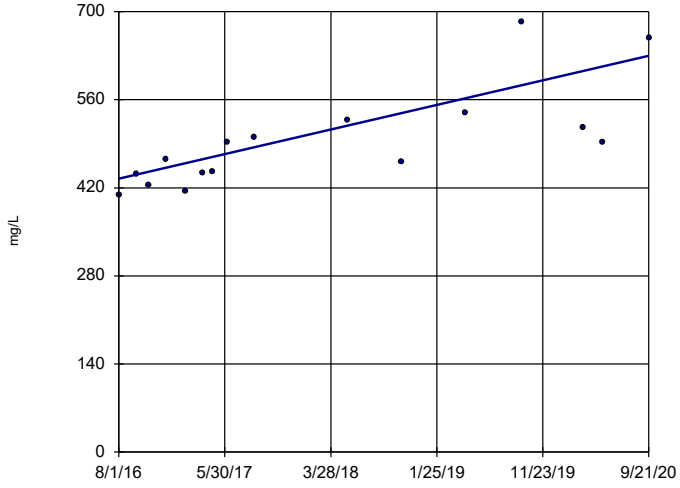
Constituent: TDS Analysis Run 12/9/2020 1:36 PM View: Appendix III - Trend Tests

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Sen's Slope Estimator

GS-AP-MW-17



n = 16

Slope = 47.09 units per year.

Mann-Kendall statistic = 81 critical = 58

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

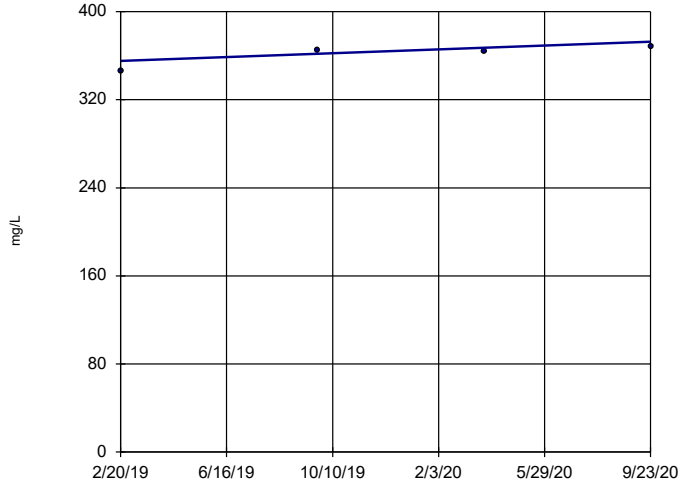
Constituent: TDS Analysis Run 12/9/2020 1:36 PM View: Appendix III - Trend Tests

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Sen's Slope Estimator

GS-AP-MW-17V (bg)



n = 4

Slope = 10.92 units per year.

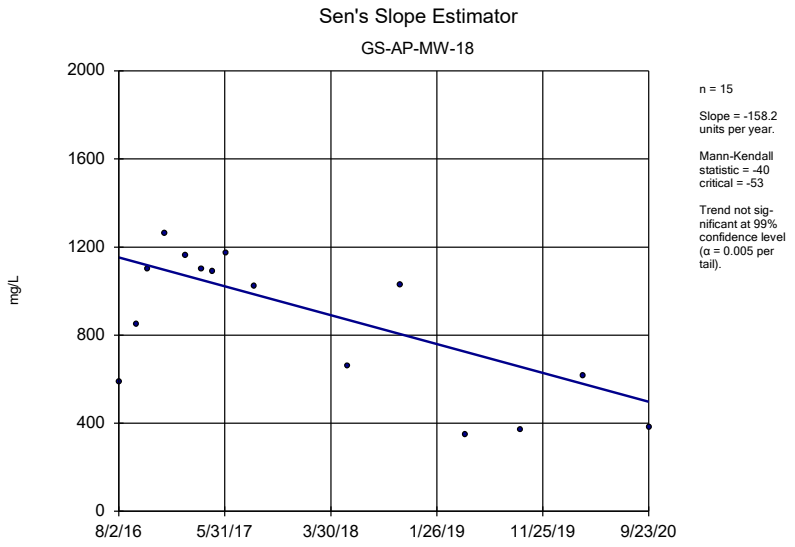
Mann-Kendall statistic = 4 critical = 8

Trend not significant at 99% confidence level (α = 0.005 per tail).
With n = 4, no data set will result in a significant Mann-Kendall statistic.

Constituent: TDS Analysis Run 12/9/2020 1:36 PM View: Appendix III - Trend Tests

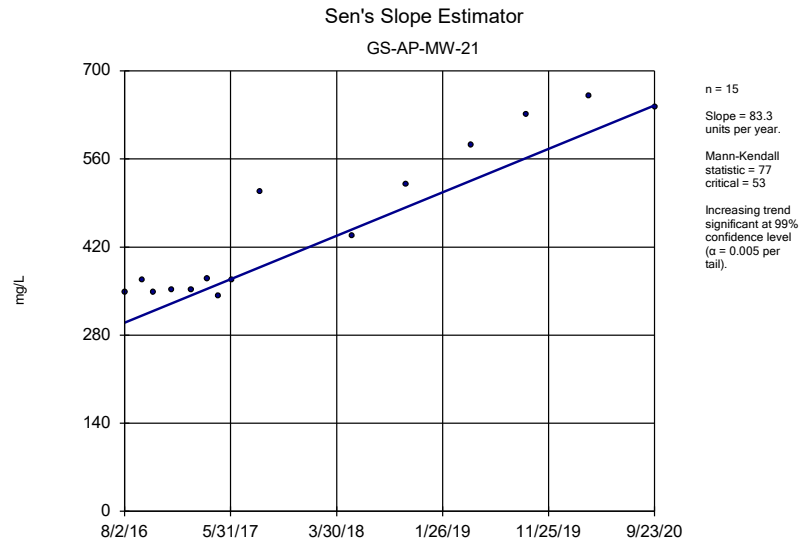
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG



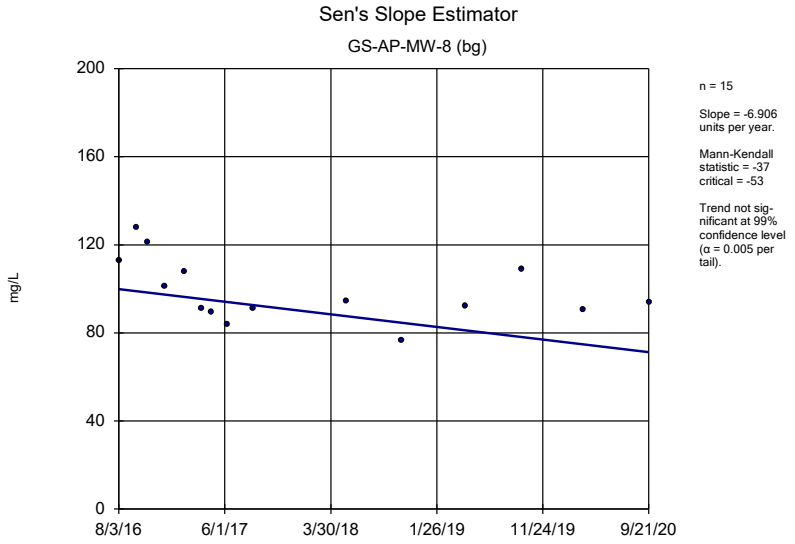
Constituent: TDS Analysis Run 12/9/2020 1:36 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG



Constituent: TDS Analysis Run 12/9/2020 1:36 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG



Constituent: TDS Analysis Run 12/9/2020 1:36 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

FIGURE F.

Upper Tolerance Limits - Appendix IV

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond Printed 7/22/2020, 3:32 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	27	n/a	n/a	92.59	n/a	n/a	0.2503	NP Inter(NDs)
Arsenic (mg/L)	0.005	n/a	27	n/a	n/a	77.78	n/a	n/a	0.2503	NP Inter(NDs)
Barium (mg/L)	0.208	n/a	27	n/a	n/a	0	n/a	n/a	0.2503	NP Inter(normal...
Beryllium (mg/L)	0.003	n/a	27	n/a	n/a	100	n/a	n/a	0.2503	NP Inter(NDs)
Cadmium (mg/L)	0.001	n/a	27	n/a	n/a	100	n/a	n/a	0.2503	NP Inter(NDs)
Chromium (mg/L)	0.01	n/a	27	n/a	n/a	85.19	n/a	n/a	0.2503	NP Inter(NDs)
Cobalt (mg/L)	0.005	n/a	27	n/a	n/a	81.48	n/a	n/a	0.2503	NP Inter(NDs)
Combined Radium 226 + 228 (pCi/L)	1.03	n/a	27	0.3444	0.3029	0	None	No	0.05	Inter
Fluoride (mg/L)	0.2499	n/a	29	0.1268	0.05508	0	None	No	0.05	Inter
Lead (mg/L)	0.005	n/a	27	n/a	n/a	96.3	n/a	n/a	0.2503	NP Inter(NDs)
Lithium (mg/L)	0.0809	n/a	27	n/a	n/a	62.96	n/a	n/a	0.2503	NP Inter(NDs)
Mercury (mg/L)	0.0005	n/a	27	n/a	n/a	100	n/a	n/a	0.2503	NP Inter(NDs)
Molybdenum (mg/L)	0.01	n/a	27	n/a	n/a	92.59	n/a	n/a	0.2503	NP Inter(NDs)
Selenium (mg/L)	0.01	n/a	27	n/a	n/a	100	n/a	n/a	0.2503	NP Inter(NDs)
Thallium (mg/L)	0.001	n/a	27	n/a	n/a	100	n/a	n/a	0.2503	NP Inter(NDs)

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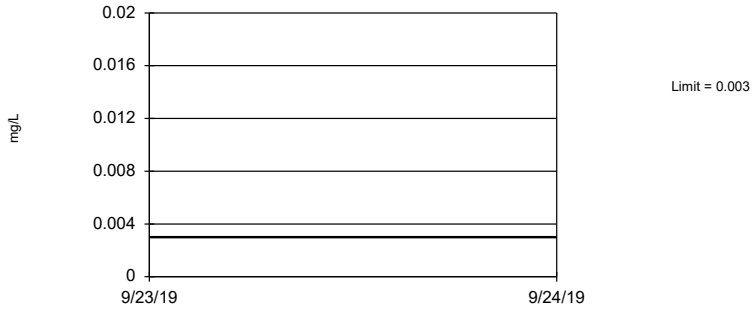
Tolerance Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. Limit is highest of 27 background values. 92.59% NDs. 84.18% coverage at alpha=0.01; 89.65% coverage at alpha=0.05; 97.46% coverage at alpha=0.5. Report alpha = 0.2503.

Constituent: Antimony Analysis Run 7/22/2020 3:30 PM View: UTL's - Appendix IV

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.24 Sanitas software licensed to Southern Company. UG

Tolerance Limit

Interwell Non-parametric

Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. Limit is highest of 27 background values. 77.78% NDs. 84.18% coverage at alpha=0.01; 89.65% coverage at alpha=0.05; 97.46% coverage at alpha=0.5. Report alpha = 0.2503.

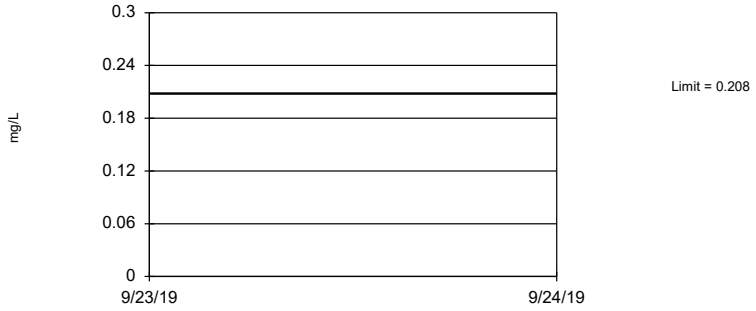
Constituent: Arsenic Analysis Run 7/22/2020 3:30 PM View: UTL's - Appendix IV

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.24 Sanitas software licensed to Southern Company. UG

Tolerance Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 27 background values. 84.18% coverage at alpha=0.01; 89.65% coverage at alpha=0.05; 97.46% coverage at alpha=0.5. Report alpha = 0.2503.

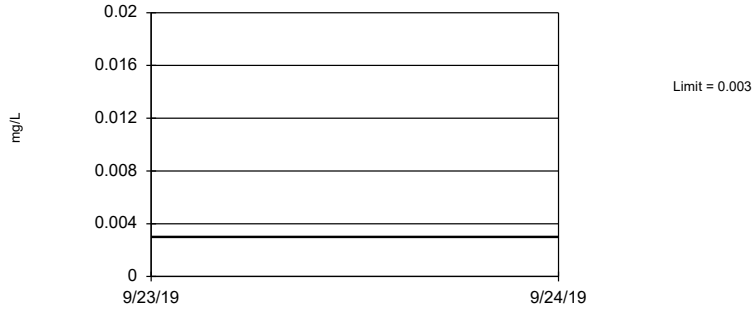
Constituent: Barium Analysis Run 7/22/2020 3:30 PM View: UTL's - Appendix IV

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.24 Sanitas software licensed to Southern Company. UG

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. 84.18% coverage at alpha=0.01; 89.65% coverage at alpha=0.05; 97.46% coverage at alpha=0.5. Report alpha = 0.2503.

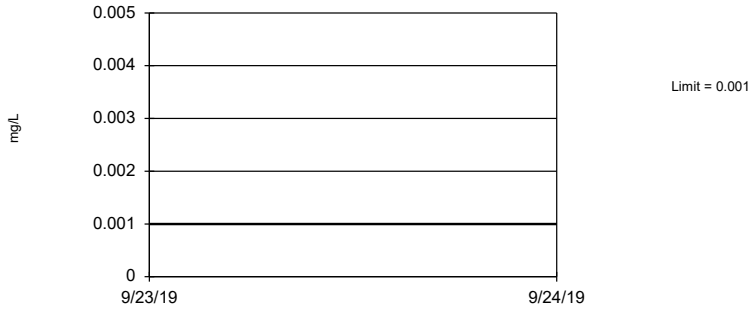
Constituent: Beryllium Analysis Run 7/22/2020 3:30 PM View: UTL's - Appendix IV

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.24 Sanitas software licensed to Southern Company. UG

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. 84.18% coverage at alpha=0.01; 89.65% coverage at alpha=0.05; 97.46% coverage at alpha=0.5. Report alpha = 0.2503.

Constituent: Cadmium Analysis Run 7/22/2020 3:30 PM View: UTL's - Appendix IV

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

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Tolerance Limit

Interwell Non-parametric

Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. Limit is highest of 27 background values. 85.19% NDs. 84.18% coverage at alpha=0.01; 89.65% coverage at alpha=0.05; 97.46% coverage at alpha=0.5. Report alpha = 0.2503.

Constituent: Chromium Analysis Run 7/22/2020 3:30 PM View: UTL's - Appendix IV

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

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Tolerance Limit

Interwell Non-parametric

Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. Limit is highest of 27 background values. 81.48% NDs. 84.18% coverage at alpha=0.01; 89.65% coverage at alpha=0.05; 97.46% coverage at alpha=0.5. Report alpha = 0.2503.

Constituent: Cobalt Analysis Run 7/22/2020 3:30 PM View: UTL's - Appendix IV

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

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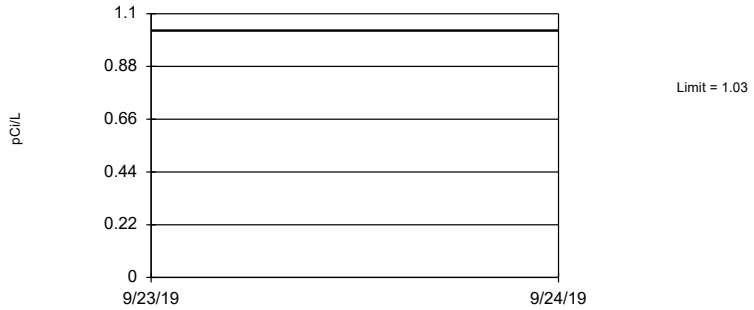
Tolerance Limit

Interwell Parametric



95% coverage. Background Data Summary: Mean=0.3444, Std. Dev.=0.3029, n=27. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.933, critical = 0.894. Report alpha = 0.05.

Constituent: Combined Radium 226 + 228 Analysis Run 7/22/2020 3:30 PM View: UTL's - Appendix IV

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

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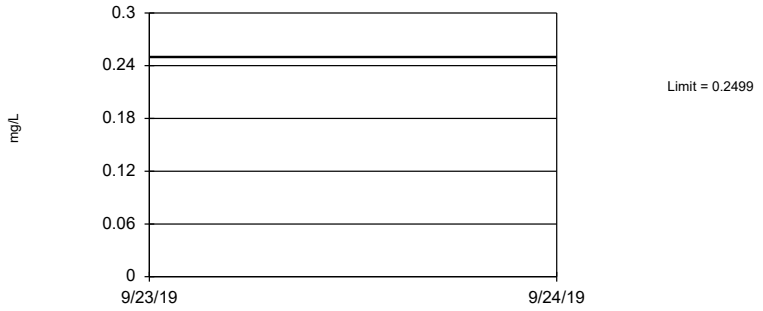
Tolerance Limit

Interwell Parametric



95% coverage. Background Data Summary: Mean=0.1268, Std. Dev.=0.05508, n=29. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9702, critical = 0.898. Report alpha = 0.05.

Constituent: Fluoride Analysis Run 7/22/2020 3:30 PM View: UTL's - Appendix IV

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

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Tolerance Limit

Interwell Non-parametric

Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. Limit is highest of 27 background values. 96.3% NDs. 84.18% coverage at alpha=0.01; 89.65% coverage at alpha=0.05; 97.46% coverage at alpha=0.5. Report alpha = 0.2503.

Constituent: Lead Analysis Run 7/22/2020 3:30 PM View: UTL's - Appendix IV

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

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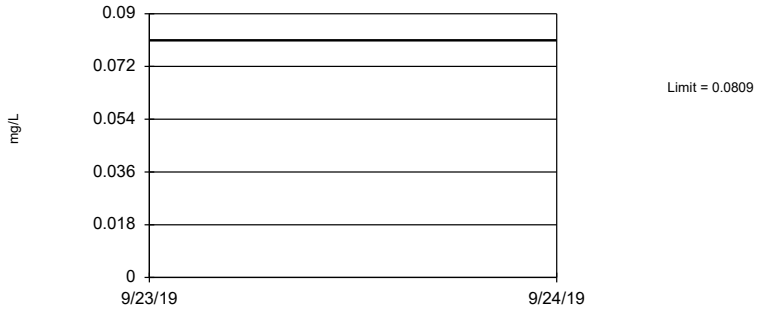
Tolerance Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. Limit is highest of 27 background values. 62.96% NDs. 84.18% coverage at alpha=0.01; 89.65% coverage at alpha=0.05; 97.46% coverage at alpha=0.5. Report alpha = 0.2503.

Constituent: Lithium Analysis Run 7/22/2020 3:30 PM View: UTL's - Appendix IV

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

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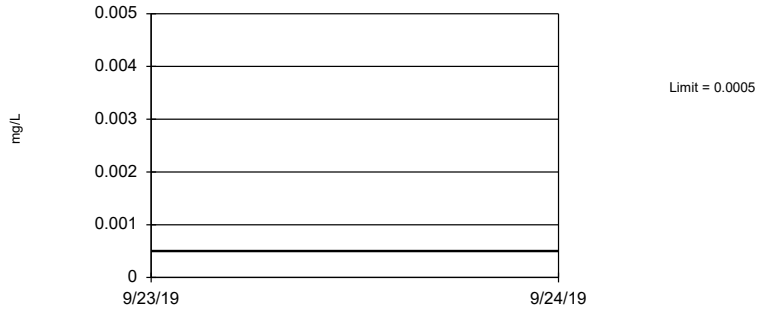
Tolerance Limit

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. 84.18% coverage at alpha=0.01; 89.65% coverage at alpha=0.05; 97.46% coverage at alpha=0.5. Report alpha = 0.2503.

Constituent: Mercury Analysis Run 7/22/2020 3:30 PM View: UTL's - Appendix IV

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

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Tolerance Limit

Interwell Non-parametric

Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. Limit is highest of 27 background values. 92.59% NDs. 84.18% coverage at alpha=0.01; 89.65% coverage at alpha=0.05; 97.46% coverage at alpha=0.5. Report alpha = 0.2503.

Constituent: Molybdenum Analysis Run 7/22/2020 3:30 PM View: UTL's - Appendix IV

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

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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. 84.18% coverage at alpha=0.01; 89.65% coverage at alpha=0.05; 97.46% coverage at alpha=0.5. Report alpha = 0.2503.

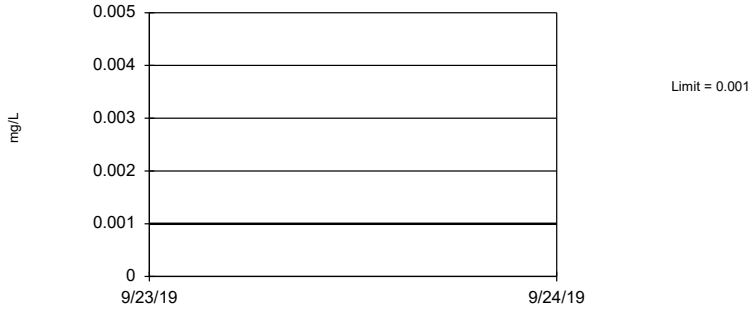
Constituent: Selenium Analysis Run 7/22/2020 3:30 PM View: UTL's - Appendix IV

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.24 Sanitas software licensed to Southern Company. UG

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. 84.18% coverage at alpha=0.01; 89.65% coverage at alpha=0.05; 97.46% coverage at alpha=0.5. Report alpha = 0.2503.

Constituent: Thallium Analysis Run 7/22/2020 3:30 PM View: UTL's - Appendix IV

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

FIGURE G.

GORGAS ASH POND GWPS			
Analyte	**Units**	**Background**	**GWPS**
Antimony	mg/L	0.003	0.006
Arsenic	mg/L	0.005	0.01
Barium	mg/L	0.208	2
Beryllium	mg/L	0.003	0.004
Cadmium	mg/L	0.001	0.005
Chromium	mg/L	0.01	0.1
Cobalt	mg/L	0.005	0.006
Combined Radium-226/228	pCi/L	1.03	5
Fluoride	mg/L	0.2499	4
Lead	mg/L	0.005	0.015
Lithium	mg/L	**0.0809**	**0.0809 / 0.04**
Mercury	mg/L	0.0005	0.002
Molybdenum	mg/L	0.01	0.1
Selenium	mg/L	0.01	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.

5. Lithium background constructed by including newly installed upgradient well GS-AP-MW-17V. Lithium GWPS limits constructed with and without GS-AP-MW-17V, respectively.

FIGURE H.

Confidence Intervals Set 1 of 2 - Significant Results

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond Printed 12/9/2020, 2:00 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Arsenic (mg/L)	**GS-AP-MW-6D**	**0.09703**	**0.0687**	**0.01**	**Yes**	**8**	**0.08286**	**0.01336**	**0**	**None**	**No**	**0.01**	**Param.**
Arsenic (mg/L)	**GS-AP-MW-7**	**0.267**	**0.1855**	**0.01**	**Yes**	**8**	**0.2263**	**0.03847**	**0**	**None**	**No**	**0.01**	**Param.**
Lithium (mg/L)	**GS-AP-MW-15**	**0.4155**	**0.1292**	**0.0809**	**Yes**	**8**	**0.2724**	**0.135**	**0**	**None**	**No**	**0.01**	**Param.**
Lithium (mg/L)	**GS-AP-MW-18**	**0.2565**	**0.08122**	**0.0809**	**Yes**	**8**	**0.1688**	**0.08266**	**0**	**None**	**No**	**0.01**	**Param.**
Lithium (mg/L)	**GS-AP-MW-21**	**0.3196**	**0.1384**	**0.0809**	**Yes**	**8**	**0.229**	**0.08544**	**0**	**None**	**No**	**0.01**	**Param.**
Lithium (mg/L)	**GS-AP-MW-6D**	**0.2892**	**0.2281**	**0.0809**	**Yes**	**8**	**0.2586**	**0.02884**	**0**	**None**	**No**	**0.01**	**Param.**
Lithium (mg/L)	**GS-AP-MW-7**	**0.1598**	**0.1457**	**0.0809**	**Yes**	**8**	**0.1528**	**0.006671**	**0**	**None**	**No**	**0.01**	**Param.**
Molybdenum (mg/L)	**GS-AP-MW-7**	**0.1999**	**0.1596**	**0.1**	**Yes**	**8**	**0.1798**	**0.01905**	**0**	**None**	**No**	**0.01**	**Param.**

Confidence Intervals Set 1 of 2 - All Results

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond Printed 12/9/2020, 2:00 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	GS-AP-MW-12	0.003	0.00202	0.006	No	8	0.002778	0.0004148	75	None	No	0.004	NP (NDs)
Antimony (mg/L)	GS-AP-MW-15	0.003	0.000636	0.006	No	8	0.002182	0.001133	62.5	None	No	0.004	NP (NDs)
Antimony (mg/L)	GS-AP-MW-6D	0.003	0.000828	0.006	No	8	0.002729	0.0007679	87.5	None	No	0.004	NP (NDs)
Antimony (mg/L)	GS-AP-MW-6S	0.003	0.000948	0.006	No	8	0.002744	0.0007255	87.5	None	No	0.004	NP (NDs)
Antimony (mg/L)	GS-AP-MW-7	0.003	0.00105	0.006	No	8	0.002756	0.0006894	87.5	None	No	0.004	NP (NDs)
Arsenic (mg/L)	GS-AP-MW-12	0.02813	0.008139	0.01	No	8	0.01814	0.009432	0	None	No	0.01	Param.
Arsenic (mg/L)	GS-AP-MW-15	0.017	0.005293	0.01	No	8	0.01115	0.005524	0	None	No	0.01	Param.
Arsenic (mg/L)	GS-AP-MW-17	0.005401	0.002284	0.01	No	8	0.003843	0.00147	0	None	No	0.01	Param.
Arsenic (mg/L)	GS-AP-MW-18	0.0922	0.00481	0.01	No	8	0.03635	0.03889	0	None	No	0.004	NP (normality)
Arsenic (mg/L)	GS-AP-MW-19	0.003172	0.001654	0.01	No	8	0.002419	0.0007913	12.5	None	x^2	0.01	Param.
Arsenic (mg/L)	GS-AP-MW-21	0.0025	0.00131	0.01	No	8	0.002351	0.0004207	87.5	None	No	0.004	NP (NDs)
Arsenic (mg/L)	**GS-AP-MW-6D**	**0.09703**	**0.0687**	**0.01**	**Yes**	**8**	**0.08286**	**0.01336**	**0**	**None**	**No**	**0.01**	**Param.**
Arsenic (mg/L)	GS-AP-MW-6S	0.01315	0.006609	0.01	No	8	0.009881	0.003087	0	None	No	0.01	Param.
Arsenic (mg/L)	**GS-AP-MW-7**	**0.267**	**0.1855**	**0.01**	**Yes**	**8**	**0.2263**	**0.03847**	**0**	**None**	**No**	**0.01**	**Param.**
Barium (mg/L)	GS-AP-MW-12	0.1978	0.1322	2	No	8	0.165	0.03093	0	None	No	0.01	Param.
Barium (mg/L)	GS-AP-MW-15	0.243	0.1098	2	No	8	0.1764	0.06281	0	None	No	0.01	Param.
Barium (mg/L)	GS-AP-MW-16D	0.3403	0.3009	2	No	8	0.3206	0.01861	0	None	No	0.01	Param.
Barium (mg/L)	GS-AP-MW-17	0.1209	0.06916	2	No	8	0.09504	0.02442	0	None	No	0.01	Param.
Barium (mg/L)	GS-AP-MW-18	0.105	0.0436	2	No	8	0.06615	0.02495	0	None	No	0.004	NP (normality)
Barium (mg/L)	GS-AP-MW-19	0.353	0.3088	2	No	8	0.3309	0.02084	0	None	No	0.01	Param.
Barium (mg/L)	GS-AP-MW-2	0.07931	0.05315	2	No	8	0.06609	0.01274	0	None	sqrt(x)	0.01	Param.
Barium (mg/L)	GS-AP-MW-21	0.1294	0.04265	2	No	8	0.08603	0.04093	0	None	No	0.01	Param.
Barium (mg/L)	GS-AP-MW-6D	0.914	0.378	2	No	8	0.7614	0.1973	0	None	No	0.004	NP (normality)
Barium (mg/L)	GS-AP-MW-6S	0.1407	0.08608	2	No	8	0.1136	0.02818	0	None	x^2	0.01	Param.
Barium (mg/L)	GS-AP-MW-7	0.1362	0.03832	2	No	8	0.08725	0.04616	0	None	No	0.01	Param.
Beryllium (mg/L)	GS-AP-MW-16D	0.003	0.00109	0.004	No	8	0.002761	0.0006753	87.5	None	No	0.004	NP (NDs)
Beryllium (mg/L)	GS-AP-MW-2	0.003	0.00138	0.004	No	8	0.002798	0.0005728	87.5	None	No	0.004	NP (NDs)
Beryllium (mg/L)	GS-AP-MW-6S	0.003	0.000794	0.004	No	8	0.002724	0.0007799	87.5	None	No	0.004	NP (NDs)
Chromium (mg/L)	GS-AP-MW-21	0.01	0.00219	0.1	No	8	0.009024	0.002761	87.5	None	No	0.004	NP (NDs)
Chromium (mg/L)	GS-AP-MW-7	0.01	0.00435	0.1	No	8	0.008346	0.002468	62.5	None	No	0.004	NP (NDs)
Cobalt (mg/L)	GS-AP-MW-6S	0.005	0.00222	0.006	No	8	0.004652	0.0009829	87.5	None	No	0.004	NP (NDs)
Cobalt (mg/L)	GS-AP-MW-7	0.005	0.00231	0.006	No	8	0.004385	0.001084	62.5	None	No	0.004	NP (NDs)
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-12	0.7165	0.2503	5	No	8	0.4834	0.2199	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-15	0.9556	0.04831	5	No	8	0.502	0.428	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-16D	0.5963	0.1025	5	No	8	0.3494	0.2329	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-17	0.7192	0.008131	5	No	8	0.3637	0.3354	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-18	0.8791	0.132	5	No	8	0.5056	0.3525	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-19	1.511	0.3801	5	No	8	0.9456	0.5335	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-2	2.094	0.1286	5	No	8	1.046	1.257	0	None	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-21	1.161	0.2888	5	No	8	0.7086	0.4719	0	None	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-6D	0.6664	0.1666	5	No	8	0.4165	0.2357	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-6S	1.156	0.2345	5	No	8	0.6953	0.4347	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-7	1.277	-0.003135	5	No	8	0.6369	0.6038	0	None	No	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-12	0.3171	0.1174	4	No	8	0.2173	0.09417	0	None	No	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-15	0.7874	0.4701	4	No	8	0.6288	0.1497	0	None	No	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-16D	0.171	0.109	4	No	8	0.1246	0.02027	0	None	No	0.004	NP (normality)
Fluoride (mg/L)	GS-AP-MW-17	0.3626	0.2474	4	No	8	0.305	0.05431	0	None	No	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-18	0.6274	0.3956	4	No	8	0.5115	0.1094	0	None	No	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-19	0.3793	0.299	4	No	8	0.3391	0.0379	0	None	No	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-2	1.062	0.8082	4	No	8	0.9351	0.1197	0	None	No	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-21	0.2759	0.2099	4	No	8	0.2429	0.03112	0	None	No	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-6D	0.16	0.13	4	No	8	0.1404	0.01272	0	None	No	0.004	NP (normality)
Fluoride (mg/L)	GS-AP-MW-6S	0.2313	0.09691	4	No	8	0.1623	0.07161	0	None	x^(1/3)	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-7	0.1175	0.09005	4	No	8	0.1038	0.01293	0	None	No	0.01	Param.
Lead (mg/L)	GS-AP-MW-7	0.005	0.00207	0.015	No	8	0.004235	0.001159	62.5	None	No	0.004	NP (NDs)

Confidence Intervals Set 1 of 2 - All Results

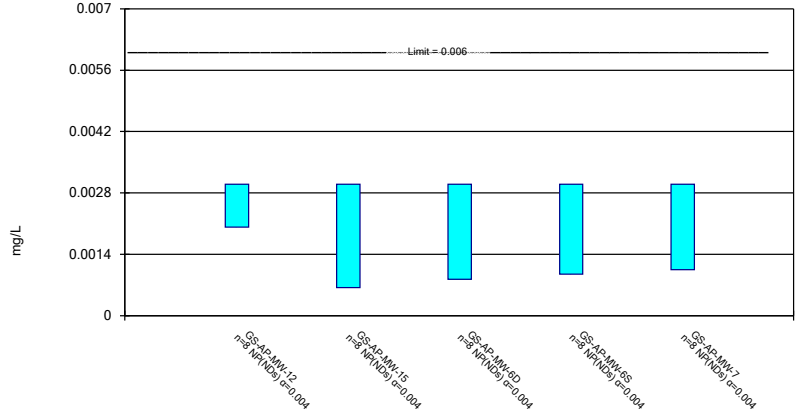
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond Printed 12/9/2020, 2:00 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Lithium (mg/L)	GS-AP-MW-12	0.04614	0.02345	0.0809	No	8	0.03451	0.01232	0	None	ln(x)	0.01	Param.
Lithium (mg/L)	**GS-AP-MW-15**	**0.4155**	**0.1292**	**0.0809**	**Yes**	**8**	**0.2724**	**0.135**	**0**	**None**	**No**	**0.01**	**Param.**
Lithium (mg/L)	GS-AP-MW-16D	0.03548	0.03262	0.0809	No	8	0.03405	0.001345	0	None	No	0.01	Param.
Lithium (mg/L)	GS-AP-MW-17	0.06355	0.05248	0.0809	No	8	0.05801	0.00522	0	None	No	0.01	Param.
Lithium (mg/L)	**GS-AP-MW-18**	**0.2565**	**0.08122**	**0.0809**	**Yes**	**8**	**0.1688**	**0.08266**	**0**	**None**	**No**	**0.01**	**Param.**
Lithium (mg/L)	GS-AP-MW-19	0.04562	0.03571	0.0809	No	8	0.04066	0.004674	0	None	No	0.01	Param.
Lithium (mg/L)	GS-AP-MW-2	0.05031	0.03999	0.0809	No	8	0.04515	0.004871	0	None	No	0.01	Param.
Lithium (mg/L)	**GS-AP-MW-21**	**0.3196**	**0.1384**	**0.0809**	**Yes**	**8**	**0.229**	**0.08544**	**0**	**None**	**No**	**0.01**	**Param.**
Lithium (mg/L)	**GS-AP-MW-6D**	**0.2892**	**0.2281**	**0.0809**	**Yes**	**8**	**0.2586**	**0.02884**	**0**	**None**	**No**	**0.01**	**Param.**
Lithium (mg/L)	GS-AP-MW-6S	0.0695	0.01	0.0809	No	8	0.02872	0.02525	37.5	None	No	0.004	NP (normality)
Lithium (mg/L)	**GS-AP-MW-7**	**0.1598**	**0.1457**	**0.0809**	**Yes**	**8**	**0.1528**	**0.006671**	**0**	**None**	**No**	**0.01**	**Param.**
Molybdenum (mg/L)	GS-AP-MW-12	0.00577	0.00444	0.1	No	8	0.005026	0.0003588	75	None	No	0.004	NP (NDs)
Molybdenum (mg/L)	GS-AP-MW-15	0.06683	0.02972	0.1	No	8	0.04828	0.01751	0	None	No	0.01	Param.
Molybdenum (mg/L)	GS-AP-MW-17	0.01101	0.00394	0.1	No	8	0.007478	0.003337	0	None	No	0.01	Param.
Molybdenum (mg/L)	GS-AP-MW-18	0.04843	0.02199	0.1	No	8	0.03467	0.01557	0	None	x^2	0.01	Param.
Molybdenum (mg/L)	GS-AP-MW-19	0.007626	0.005236	0.1	No	8	0.006419	0.001187	0	None	sqrt(x)	0.01	Param.
Molybdenum (mg/L)	GS-AP-MW-2	0.00927	0.002123	0.1	No	8	0.005696	0.003372	0	None	No	0.01	Param.
Molybdenum (mg/L)	GS-AP-MW-21	0.09476	0.04736	0.1	No	8	0.07106	0.02236	0	None	No	0.01	Param.
Molybdenum (mg/L)	GS-AP-MW-6D	0.00959	0.00537	0.1	No	8	0.006965	0.001765	0	None	No	0.004	NP (normality)
Molybdenum (mg/L)	GS-AP-MW-6S	0.0427	0.00246	0.1	No	8	0.01227	0.01464	25	None	No	0.004	NP (normality)
Molybdenum (mg/L)	**GS-AP-MW-7**	**0.1999**	**0.1596**	**0.1**	**Yes**	**8**	**0.1798**	**0.01905**	**0**	**None**	**No**	**0.01**	**Param.**

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded.



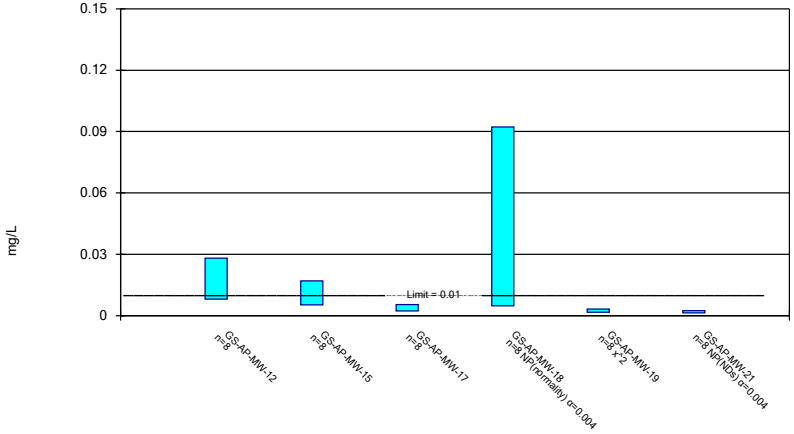
Constituent: Antimony Analysis Run 12/9/2020 1:59 PM View: Appendix IV Confidence Intervals

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



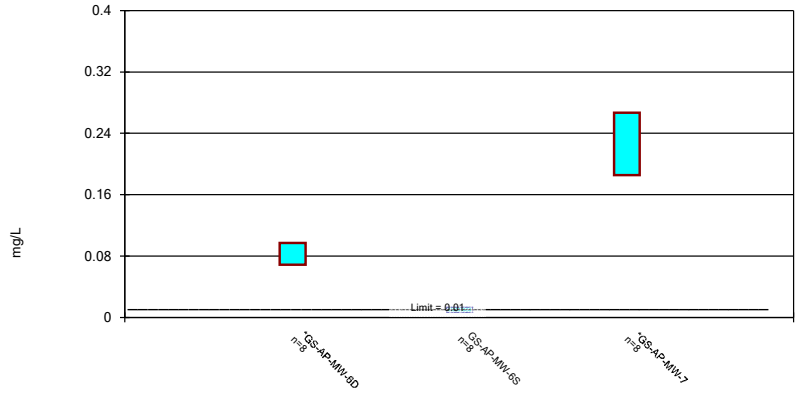
Constituent: Arsenic Analysis Run 12/9/2020 1:59 PM View: Appendix IV Confidence Intervals

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Parametric Confidence Interval

Compliance limit is exceeded.* Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



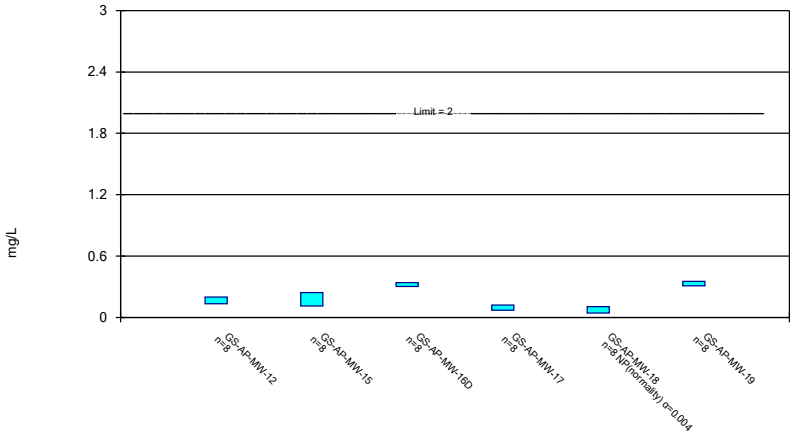
Constituent: Arsenic Analysis Run 12/9/2020 1:59 PM View: Appendix IV Confidence Intervals

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



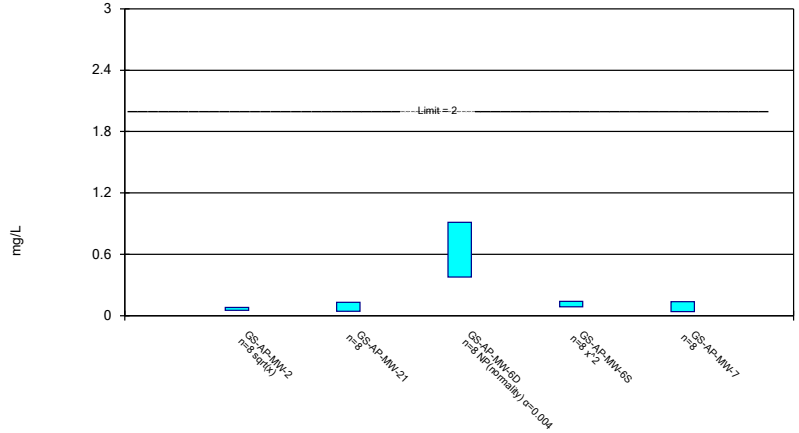
Constituent: Barium Analysis Run 12/9/2020 1:59 PM View: Appendix IV Confidence Intervals

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



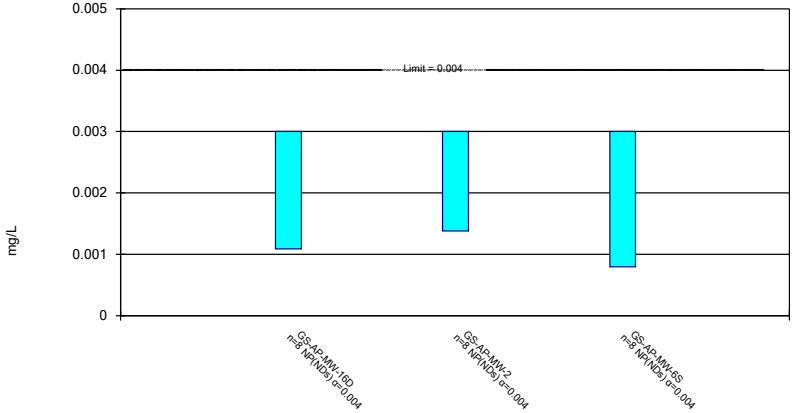
Constituent: Barium Analysis Run 12/9/2020 1:59 PM View: Appendix IV Confidence Intervals

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded.



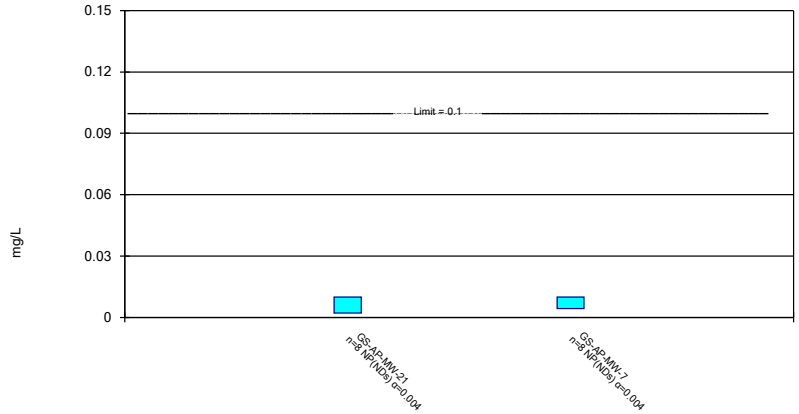
Constituent: Beryllium Analysis Run 12/9/2020 1:59 PM View: Appendix IV Confidence Intervals

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded.



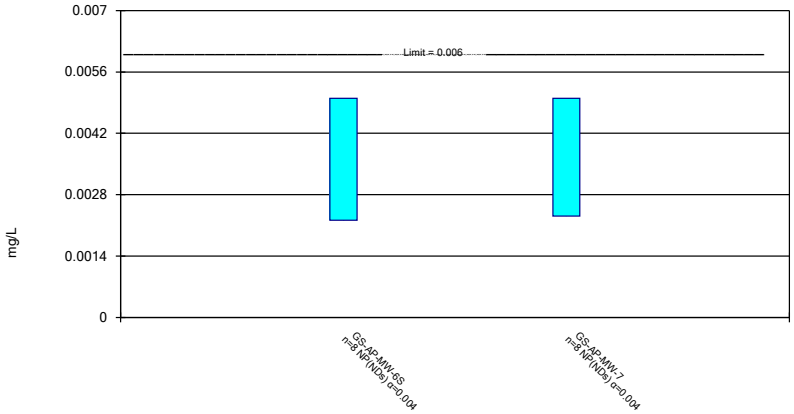
Constituent: Chromium Analysis Run 12/9/2020 1:59 PM View: Appendix IV Confidence Intervals

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded.



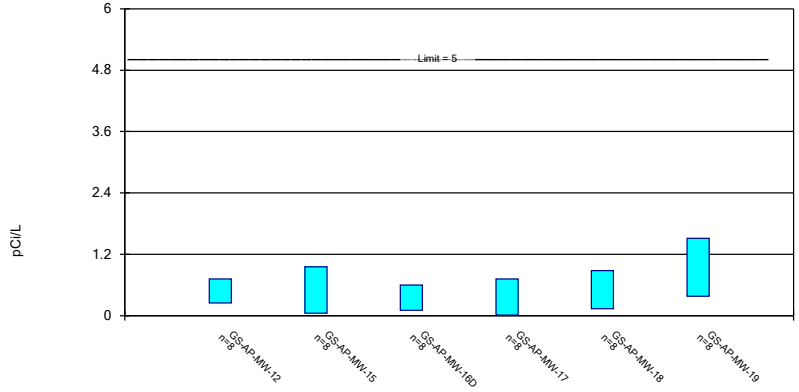
Constituent: Cobalt Analysis Run 12/9/2020 1:59 PM View: Appendix IV Confidence Intervals

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



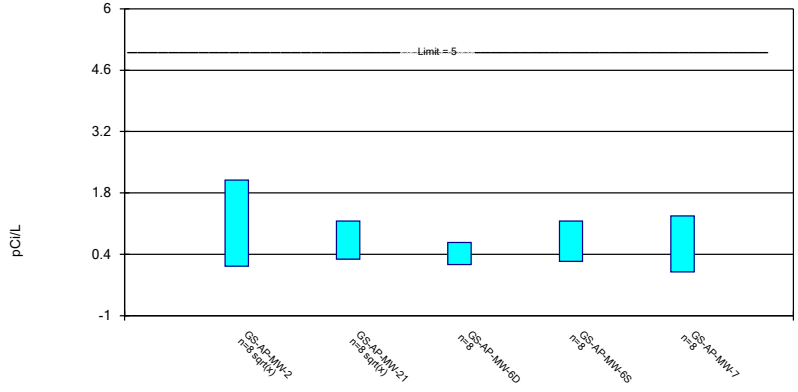
Constituent: Combined Radium 226 + 228 Analysis Run 12/9/2020 1:59 PM View: Appendix IV Confidenc

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



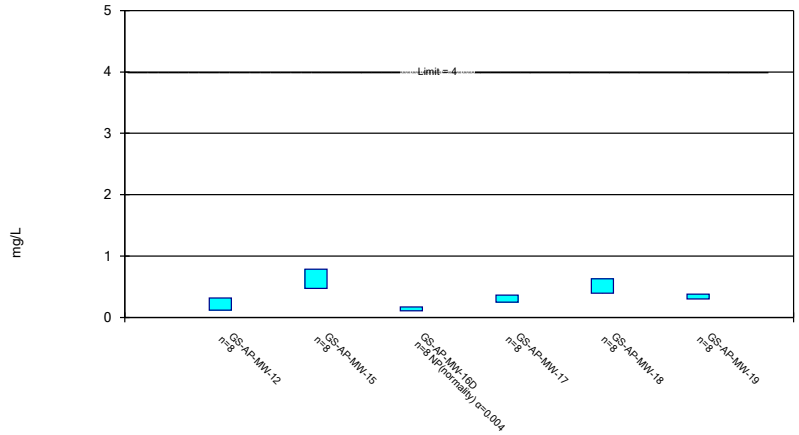
Constituent: Combined Radium 226 + 228 Analysis Run 12/9/2020 1:59 PM View: Appendix IV Confidenc

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



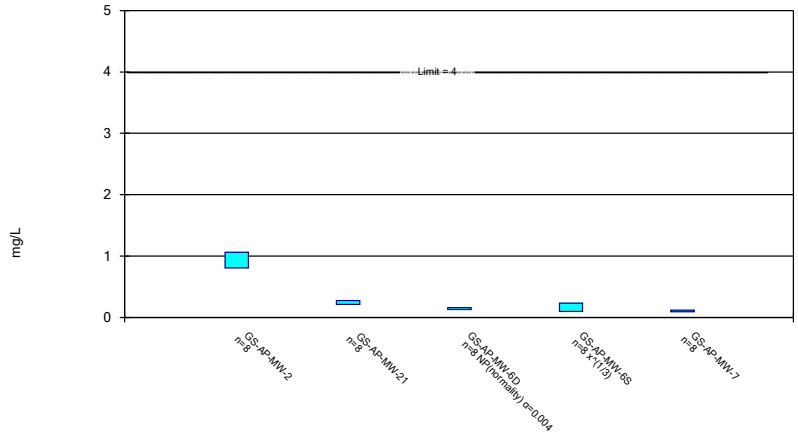
Constituent: Fluoride Analysis Run 12/9/2020 1:59 PM View: Appendix IV Confidence Intervals

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



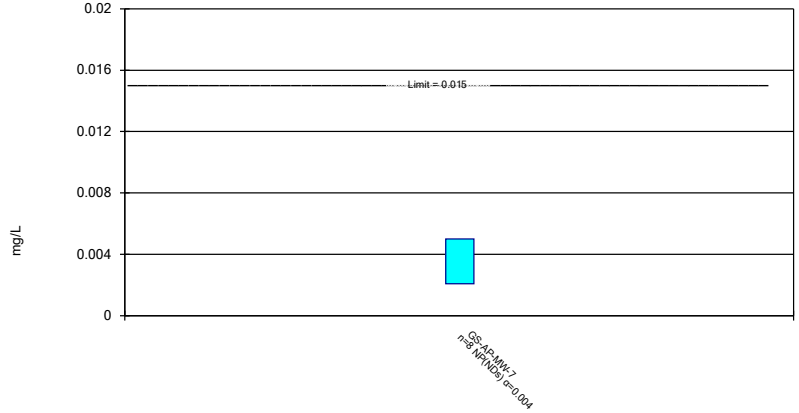
Constituent: Fluoride Analysis Run 12/9/2020 1:59 PM View: Appendix IV Confidence Intervals

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded.



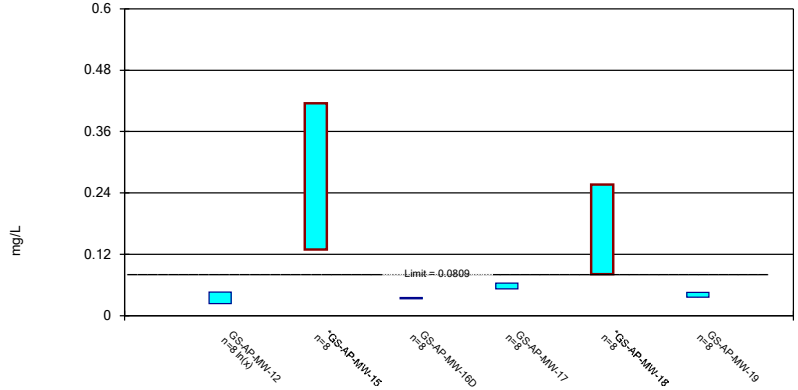
Constituent: Lead Analysis Run 12/9/2020 1:59 PM View: Appendix IV Confidence Intervals

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Parametric Confidence Interval

Compliance limit is exceeded.* Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



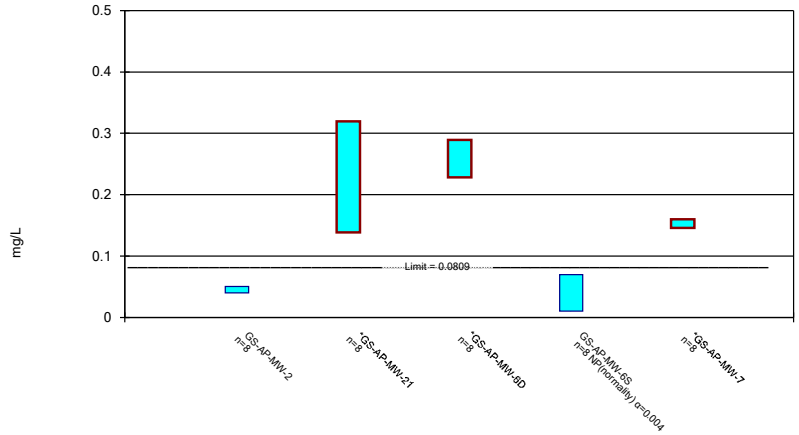
Constituent: Lithium Analysis Run 12/9/2020 1:59 PM View: Appendix IV Confidence Intervals

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance limit is exceeded.* Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



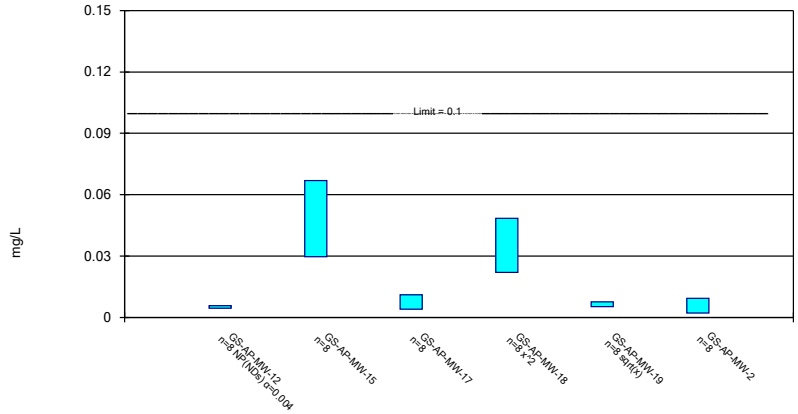
Constituent: Lithium Analysis Run 12/9/2020 1:59 PM View: Appendix IV Confidence Intervals

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.

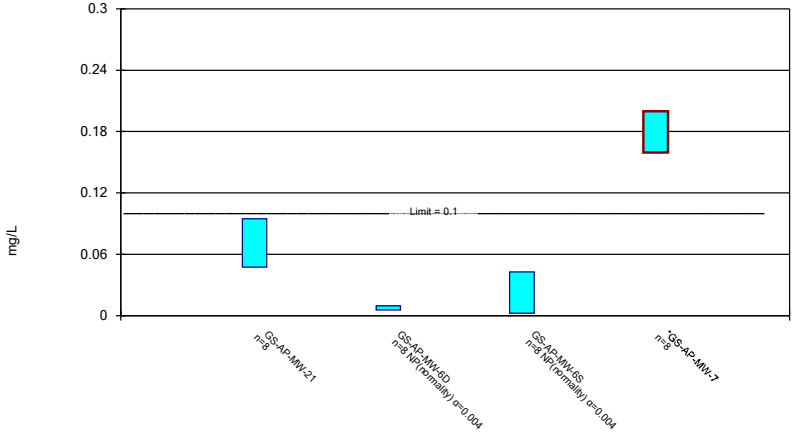


Constituent: Molybdenum Analysis Run 12/9/2020 1:59 PM View: Appendix IV Confidence Intervals

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Parametric and Non-Parametric (NP) Confidence Interval

Compliance limit is exceeded.* Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Molybdenum Analysis Run 12/9/2020 1:59 PM View: Appendix IV Confidence Intervals

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

FIGURE I.

Confidence Intervals Set 2 of 2 - Significant Results

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond Printed 12/9/2020, 2:04 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Arsenic (mg/L)	**GS-AP-MW-6D**	**0.09703**	**0.0687**	**0.01**	**Yes**	**8**	**0.08286**	**0.01336**	**0**	**None**	**No**	**0.01**	**Param.**
Arsenic (mg/L)	**GS-AP-MW-7**	**0.267**	**0.1855**	**0.01**	**Yes**	**8**	**0.2263**	**0.03847**	**0**	**None**	**No**	**0.01**	**Param.**
Lithium (mg/L)	**GS-AP-MW-15**	**0.4155**	**0.1292**	**0.04**	**Yes**	**8**	**0.2724**	**0.135**	**0**	**None**	**No**	**0.01**	**Param.**
Lithium (mg/L)	**GS-AP-MW-17**	**0.06355**	**0.05248**	**0.04**	**Yes**	**8**	**0.05801**	**0.00522**	**0**	**None**	**No**	**0.01**	**Param.**
Lithium (mg/L)	**GS-AP-MW-18**	**0.2565**	**0.08122**	**0.04**	**Yes**	**8**	**0.1688**	**0.08266**	**0**	**None**	**No**	**0.01**	**Param.**
Lithium (mg/L)	**GS-AP-MW-21**	**0.3196**	**0.1384**	**0.04**	**Yes**	**8**	**0.229**	**0.08544**	**0**	**None**	**No**	**0.01**	**Param.**
Lithium (mg/L)	**GS-AP-MW-6D**	**0.2892**	**0.2281**	**0.04**	**Yes**	**8**	**0.2586**	**0.02884**	**0**	**None**	**No**	**0.01**	**Param.**
Lithium (mg/L)	**GS-AP-MW-7**	**0.1598**	**0.1457**	**0.04**	**Yes**	**8**	**0.1528**	**0.006671**	**0**	**None**	**No**	**0.01**	**Param.**
Molybdenum (mg/L)	**GS-AP-MW-7**	**0.1999**	**0.1596**	**0.1**	**Yes**	**8**	**0.1798**	**0.01905**	**0**	**None**	**No**	**0.01**	**Param.**

Confidence Intervals Set 2 of 2 - All Results

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond Printed 12/9/2020, 2:04 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	GS-AP-MW-12	0.003	0.00202	0.006	No	8	0.002778	0.0004148	75	None	No	0.004	NP (NDs)
Antimony (mg/L)	GS-AP-MW-15	0.003	0.000636	0.006	No	8	0.002182	0.001133	62.5	None	No	0.004	NP (NDs)
Antimony (mg/L)	GS-AP-MW-6D	0.003	0.000828	0.006	No	8	0.002729	0.0007679	87.5	None	No	0.004	NP (NDs)
Antimony (mg/L)	GS-AP-MW-6S	0.003	0.000948	0.006	No	8	0.002744	0.0007255	87.5	None	No	0.004	NP (NDs)
Antimony (mg/L)	GS-AP-MW-7	0.003	0.00105	0.006	No	8	0.002756	0.0006894	87.5	None	No	0.004	NP (NDs)
Arsenic (mg/L)	GS-AP-MW-12	0.02813	0.008139	0.01	No	8	0.01814	0.009432	0	None	No	0.01	Param.
Arsenic (mg/L)	GS-AP-MW-15	0.017	0.005293	0.01	No	8	0.01115	0.005524	0	None	No	0.01	Param.
Arsenic (mg/L)	GS-AP-MW-17	0.005401	0.002284	0.01	No	8	0.003843	0.00147	0	None	No	0.01	Param.
Arsenic (mg/L)	GS-AP-MW-18	0.0922	0.00481	0.01	No	8	0.03635	0.03889	0	None	No	0.004	NP (normality)
Arsenic (mg/L)	GS-AP-MW-19	0.003172	0.001654	0.01	No	8	0.002419	0.0007913	12.5	None	x^2	0.01	Param.
Arsenic (mg/L)	GS-AP-MW-21	0.0025	0.00131	0.01	No	8	0.002351	0.0004207	87.5	None	No	0.004	NP (NDs)
Arsenic (mg/L)	**GS-AP-MW-6D**	**0.09703**	**0.0687**	**0.01**	**Yes**	**8**	**0.08286**	**0.01336**	**0**	**None**	**No**	**0.01**	**Param.**
Arsenic (mg/L)	GS-AP-MW-6S	0.01315	0.006609	0.01	No	8	0.009881	0.003087	0	None	No	0.01	Param.
Arsenic (mg/L)	**GS-AP-MW-7**	**0.267**	**0.1855**	**0.01**	**Yes**	**8**	**0.2263**	**0.03847**	**0**	**None**	**No**	**0.01**	**Param.**
Barium (mg/L)	GS-AP-MW-12	0.1978	0.1322	2	No	8	0.165	0.03093	0	None	No	0.01	Param.
Barium (mg/L)	GS-AP-MW-15	0.243	0.1098	2	No	8	0.1764	0.06281	0	None	No	0.01	Param.
Barium (mg/L)	GS-AP-MW-16D	0.3403	0.3009	2	No	8	0.3206	0.01861	0	None	No	0.01	Param.
Barium (mg/L)	GS-AP-MW-17	0.1209	0.06916	2	No	8	0.09504	0.02442	0	None	No	0.01	Param.
Barium (mg/L)	GS-AP-MW-18	0.105	0.0436	2	No	8	0.06615	0.02495	0	None	No	0.004	NP (normality)
Barium (mg/L)	GS-AP-MW-19	0.353	0.3088	2	No	8	0.3309	0.02084	0	None	No	0.01	Param.
Barium (mg/L)	GS-AP-MW-2	0.07931	0.05315	2	No	8	0.06609	0.01274	0	None	sqrt(x)	0.01	Param.
Barium (mg/L)	GS-AP-MW-21	0.1294	0.04265	2	No	8	0.08603	0.04093	0	None	No	0.01	Param.
Barium (mg/L)	GS-AP-MW-6D	0.914	0.378	2	No	8	0.7614	0.1973	0	None	No	0.004	NP (normality)
Barium (mg/L)	GS-AP-MW-6S	0.1407	0.08608	2	No	8	0.1136	0.02818	0	None	x^2	0.01	Param.
Barium (mg/L)	GS-AP-MW-7	0.1362	0.03832	2	No	8	0.08725	0.04616	0	None	No	0.01	Param.
Beryllium (mg/L)	GS-AP-MW-16D	0.003	0.00109	0.004	No	8	0.002761	0.0006753	87.5	None	No	0.004	NP (NDs)
Beryllium (mg/L)	GS-AP-MW-2	0.003	0.00138	0.004	No	8	0.002798	0.0005728	87.5	None	No	0.004	NP (NDs)
Beryllium (mg/L)	GS-AP-MW-6S	0.003	0.000794	0.004	No	8	0.002724	0.0007799	87.5	None	No	0.004	NP (NDs)
Chromium (mg/L)	GS-AP-MW-21	0.01	0.00219	0.1	No	8	0.009024	0.002761	87.5	None	No	0.004	NP (NDs)
Chromium (mg/L)	GS-AP-MW-7	0.01	0.00435	0.1	No	8	0.008346	0.002468	62.5	None	No	0.004	NP (NDs)
Cobalt (mg/L)	GS-AP-MW-6S	0.005	0.00222	0.006	No	8	0.004652	0.0009829	87.5	None	No	0.004	NP (NDs)
Cobalt (mg/L)	GS-AP-MW-7	0.005	0.00231	0.006	No	8	0.004385	0.001084	62.5	None	No	0.004	NP (NDs)
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-12	0.7165	0.2503	5	No	8	0.4834	0.2199	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-15	0.9556	0.04831	5	No	8	0.502	0.428	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-16D	0.5963	0.1025	5	No	8	0.3494	0.2329	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-17	0.7192	0.008131	5	No	8	0.3637	0.3354	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-18	0.8791	0.132	5	No	8	0.5056	0.3525	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-19	1.511	0.3801	5	No	8	0.9456	0.5335	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-2	2.094	0.1286	5	No	8	1.046	1.257	0	None	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-21	1.161	0.2888	5	No	8	0.7086	0.4719	0	None	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-6D	0.6664	0.1666	5	No	8	0.4165	0.2357	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-6S	1.156	0.2345	5	No	8	0.6953	0.4347	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-7	1.277	-0.003135	5	No	8	0.6369	0.6038	0	None	No	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-12	0.3171	0.1174	4	No	8	0.2173	0.09417	0	None	No	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-15	0.7874	0.4701	4	No	8	0.6288	0.1497	0	None	No	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-16D	0.171	0.109	4	No	8	0.1246	0.02027	0	None	No	0.004	NP (normality)
Fluoride (mg/L)	GS-AP-MW-17	0.3626	0.2474	4	No	8	0.305	0.05431	0	None	No	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-18	0.6274	0.3956	4	No	8	0.5115	0.1094	0	None	No	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-19	0.3793	0.299	4	No	8	0.3391	0.0379	0	None	No	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-2	1.062	0.8082	4	No	8	0.9351	0.1197	0	None	No	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-21	0.2759	0.2099	4	No	8	0.2429	0.03112	0	None	No	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-6D	0.16	0.13	4	No	8	0.1404	0.01272	0	None	No	0.004	NP (normality)
Fluoride (mg/L)	GS-AP-MW-6S	0.2313	0.09691	4	No	8	0.1623	0.07161	0	None	x^(1/3)	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-7	0.1175	0.09005	4	No	8	0.1038	0.01293	0	None	No	0.01	Param.
Lead (mg/L)	GS-AP-MW-7	0.005	0.00207	0.015	No	8	0.004235	0.001159	62.5	None	No	0.004	NP (NDs)

Confidence Intervals Set 2 of 2 - All Results

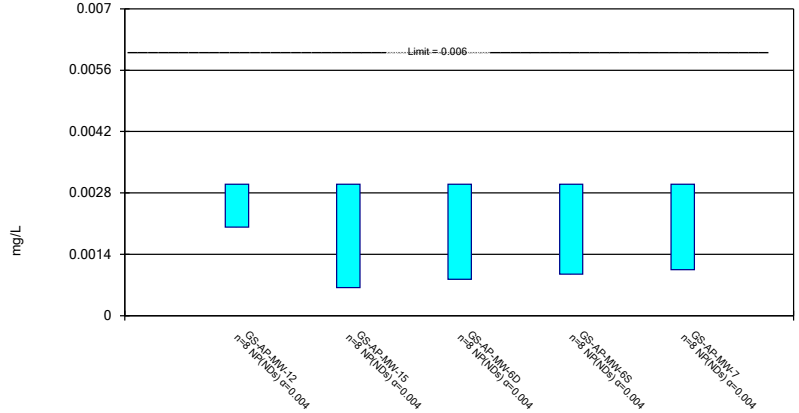
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond Printed 12/9/2020, 2:04 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Lithium (mg/L)	GS-AP-MW-12	0.04614	0.02345	0.04	No	8	0.03451	0.01232	0	None	ln(x)	0.01	Param.
Lithium (mg/L)	**GS-AP-MW-15**	**0.4155**	**0.1292**	**0.04**	**Yes**	**8**	**0.2724**	**0.135**	**0**	**None**	**No**	**0.01**	**Param.**
Lithium (mg/L)	GS-AP-MW-16D	0.03548	0.03262	0.04	No	8	0.03405	0.001345	0	None	No	0.01	Param.
Lithium (mg/L)	**GS-AP-MW-17**	**0.06355**	**0.05248**	**0.04**	**Yes**	**8**	**0.05801**	**0.00522**	**0**	**None**	**No**	**0.01**	**Param.**
Lithium (mg/L)	**GS-AP-MW-18**	**0.2565**	**0.08122**	**0.04**	**Yes**	**8**	**0.1688**	**0.08266**	**0**	**None**	**No**	**0.01**	**Param.**
Lithium (mg/L)	GS-AP-MW-19	0.04562	0.03571	0.04	No	8	0.04066	0.004674	0	None	No	0.01	Param.
Lithium (mg/L)	GS-AP-MW-2	0.05031	0.03999	0.04	No	8	0.04515	0.004871	0	None	No	0.01	Param.
Lithium (mg/L)	**GS-AP-MW-21**	**0.3196**	**0.1384**	**0.04**	**Yes**	**8**	**0.229**	**0.08544**	**0**	**None**	**No**	**0.01**	**Param.**
Lithium (mg/L)	**GS-AP-MW-6D**	**0.2892**	**0.2281**	**0.04**	**Yes**	**8**	**0.2586**	**0.02884**	**0**	**None**	**No**	**0.01**	**Param.**
Lithium (mg/L)	GS-AP-MW-6S	0.0695	0.01	0.04	No	8	0.02872	0.02525	37.5	None	No	0.004	NP (normality)
Lithium (mg/L)	**GS-AP-MW-7**	**0.1598**	**0.1457**	**0.04**	**Yes**	**8**	**0.1528**	**0.006671**	**0**	**None**	**No**	**0.01**	**Param.**
Molybdenum (mg/L)	GS-AP-MW-12	0.00577	0.00444	0.1	No	8	0.005026	0.0003588	75	None	No	0.004	NP (NDs)
Molybdenum (mg/L)	GS-AP-MW-15	0.06683	0.02972	0.1	No	8	0.04828	0.01751	0	None	No	0.01	Param.
Molybdenum (mg/L)	GS-AP-MW-17	0.01101	0.00394	0.1	No	8	0.007478	0.003337	0	None	No	0.01	Param.
Molybdenum (mg/L)	GS-AP-MW-18	0.04843	0.02199	0.1	No	8	0.03467	0.01557	0	None	x^2	0.01	Param.
Molybdenum (mg/L)	GS-AP-MW-19	0.007626	0.005236	0.1	No	8	0.006419	0.001187	0	None	sqrt(x)	0.01	Param.
Molybdenum (mg/L)	GS-AP-MW-2	0.00927	0.002123	0.1	No	8	0.005696	0.003372	0	None	No	0.01	Param.
Molybdenum (mg/L)	GS-AP-MW-21	0.09476	0.04736	0.1	No	8	0.07106	0.02236	0	None	No	0.01	Param.
Molybdenum (mg/L)	GS-AP-MW-6D	0.00959	0.00537	0.1	No	8	0.006965	0.001765	0	None	No	0.004	NP (normality)
Molybdenum (mg/L)	GS-AP-MW-6S	0.0427	0.00246	0.1	No	8	0.01227	0.01464	25	None	No	0.004	NP (normality)
Molybdenum (mg/L)	**GS-AP-MW-7**	**0.1999**	**0.1596**	**0.1**	**Yes**	**8**	**0.1798**	**0.01905**	**0**	**None**	**No**	**0.01**	**Param.**

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded.



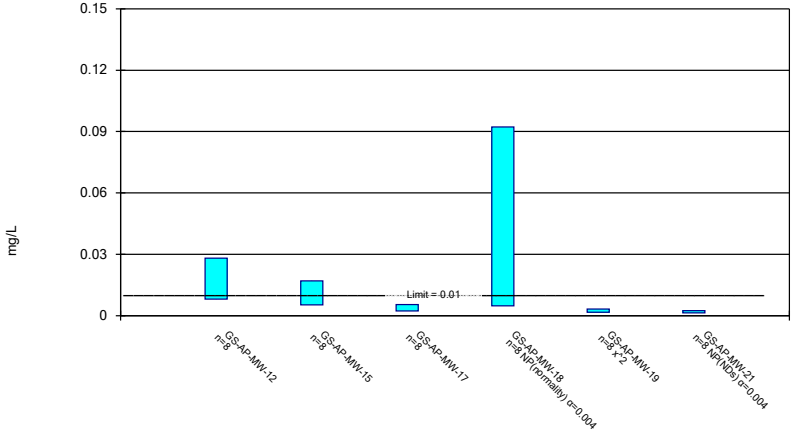
Constituent: Antimony Analysis Run 12/9/2020 2:01 PM View: Appendix IV Confidence Intervals

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



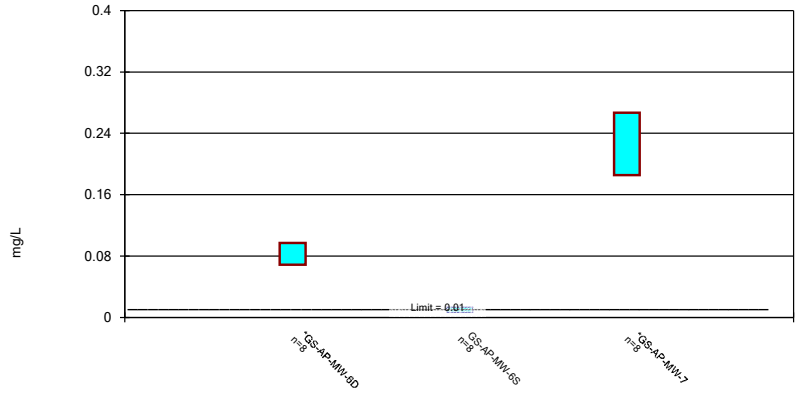
Constituent: Arsenic Analysis Run 12/9/2020 2:01 PM View: Appendix IV Confidence Intervals

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Parametric Confidence Interval

Compliance limit is exceeded.* Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



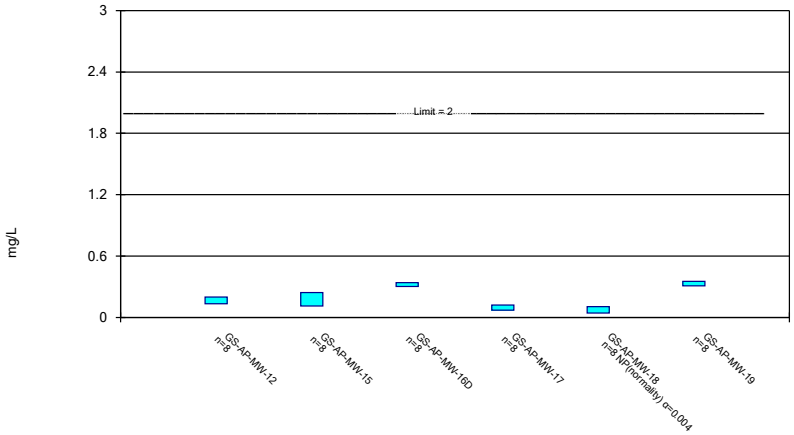
Constituent: Arsenic Analysis Run 12/9/2020 2:01 PM View: Appendix IV Confidence Intervals

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



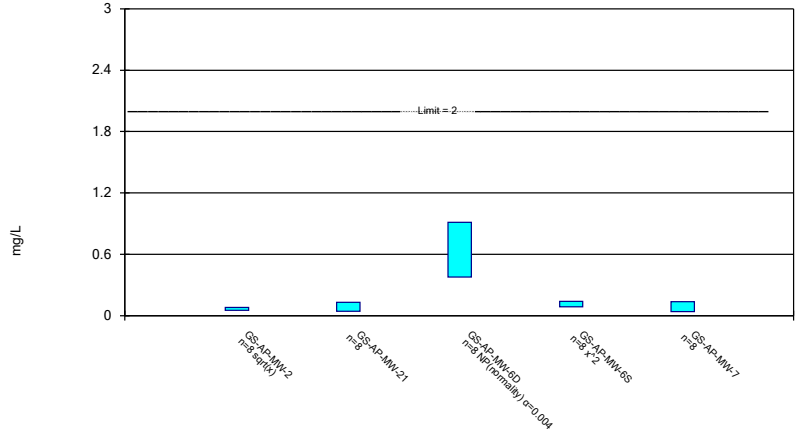
Constituent: Barium Analysis Run 12/9/2020 2:01 PM View: Appendix IV Confidence Intervals

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



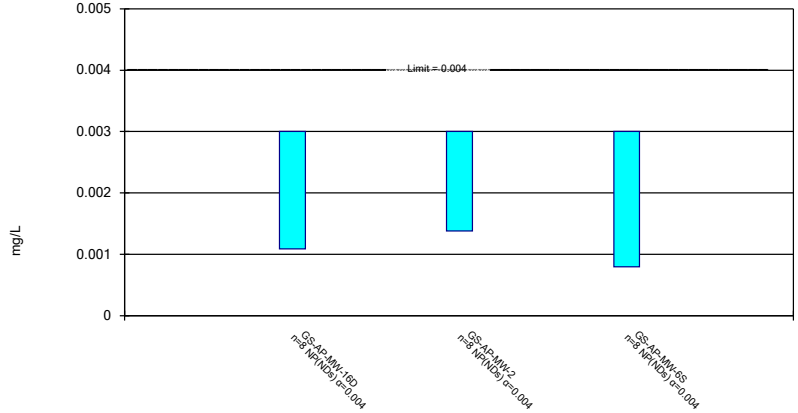
Constituent: Barium Analysis Run 12/9/2020 2:01 PM View: Appendix IV Confidence Intervals

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded.



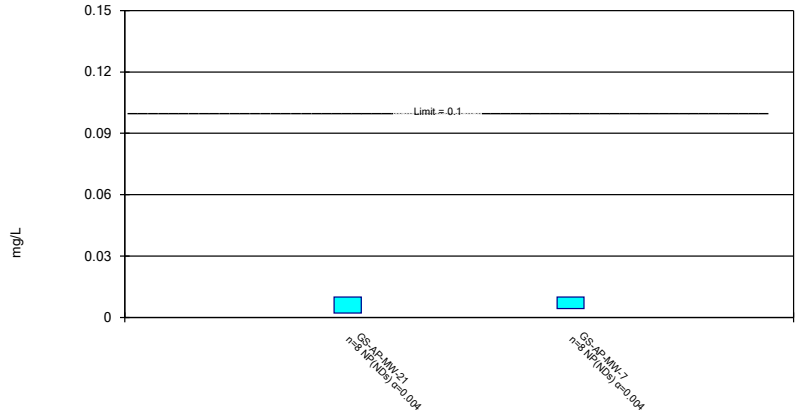
Constituent: Beryllium Analysis Run 12/9/2020 2:01 PM View: Appendix IV Confidence Intervals

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded.



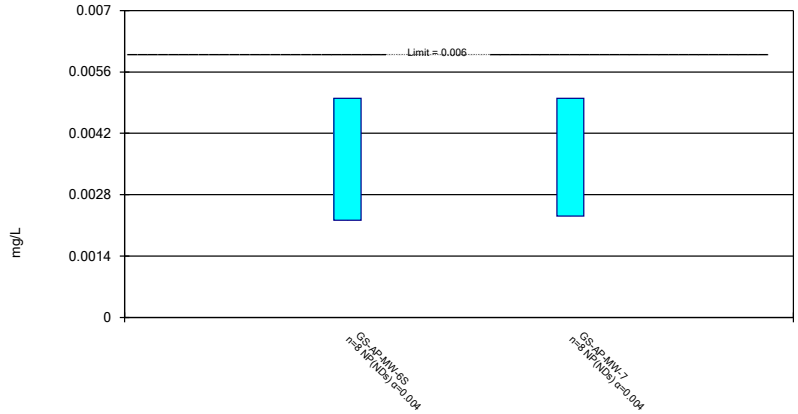
Constituent: Chromium Analysis Run 12/9/2020 2:01 PM View: Appendix IV Confidence Intervals

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded.



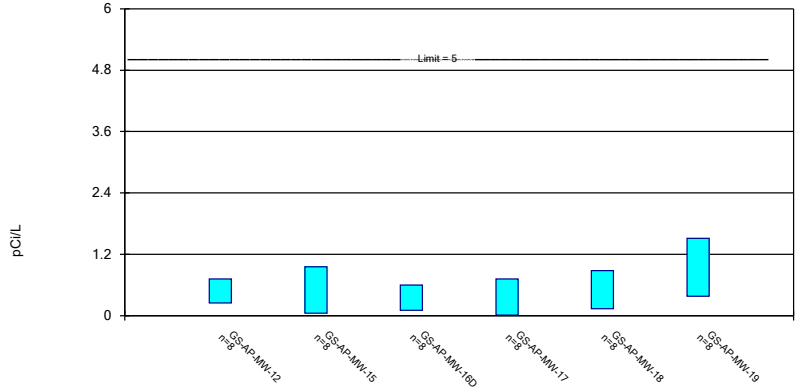
Constituent: Cobalt Analysis Run 12/9/2020 2:01 PM View: Appendix IV Confidence Intervals

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



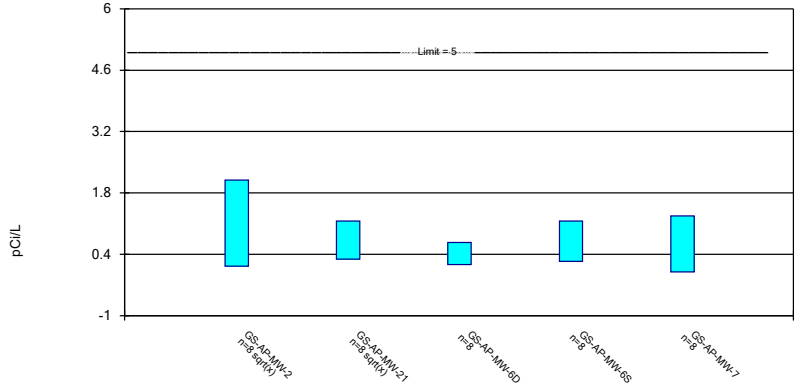
Constituent: Combined Radium 226 + 228 Analysis Run 12/9/2020 2:01 PM View: Appendix IV Confidenc

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



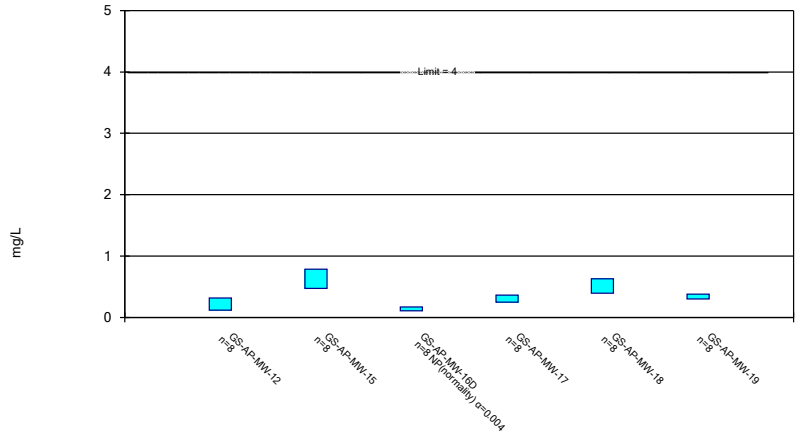
Constituent: Combined Radium 226 + 228 Analysis Run 12/9/2020 2:01 PM View: Appendix IV Confidenc

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



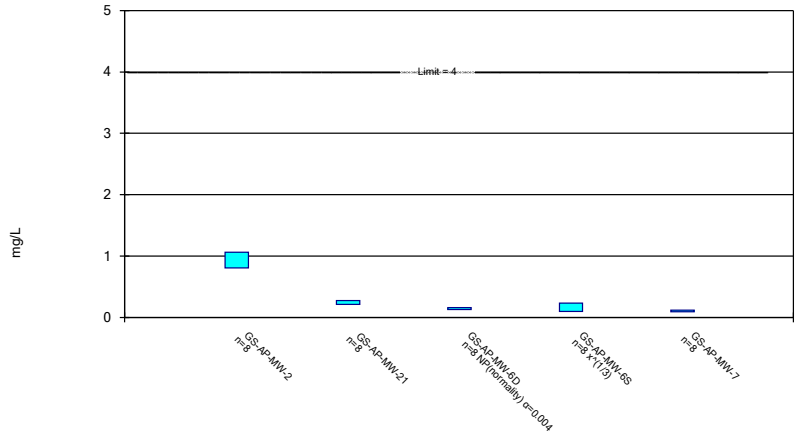
Constituent: Fluoride Analysis Run 12/9/2020 2:01 PM View: Appendix IV Confidence Intervals

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



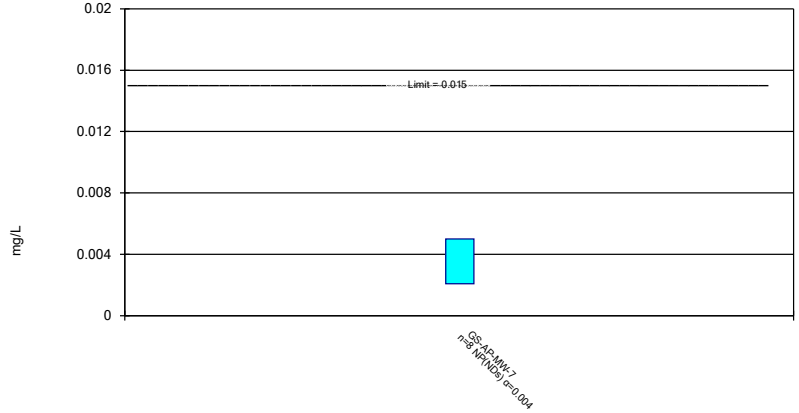
Constituent: Fluoride Analysis Run 12/9/2020 2:01 PM View: Appendix IV Confidence Intervals

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded.



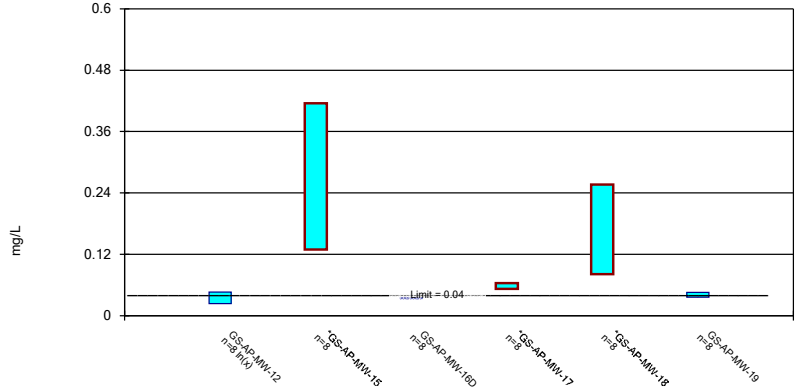
Constituent: Lead Analysis Run 12/9/2020 2:01 PM View: Appendix IV Confidence Intervals

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Parametric Confidence Interval

Compliance limit is exceeded.* Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



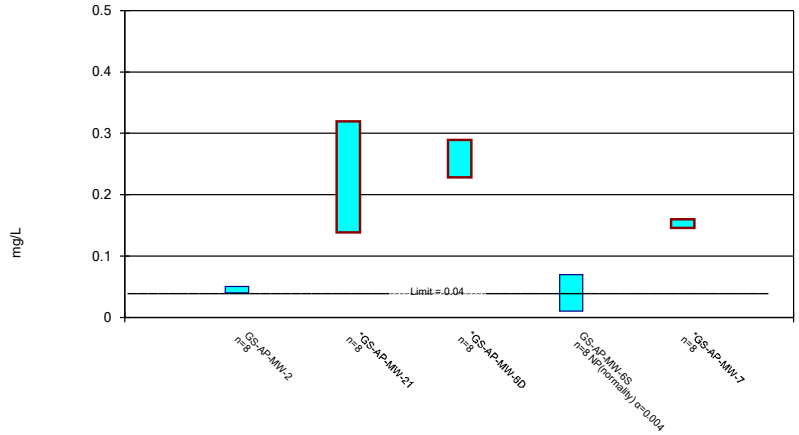
Constituent: Lithium Analysis Run 12/9/2020 2:01 PM View: Appendix IV Confidence Intervals

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance limit is exceeded.* Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



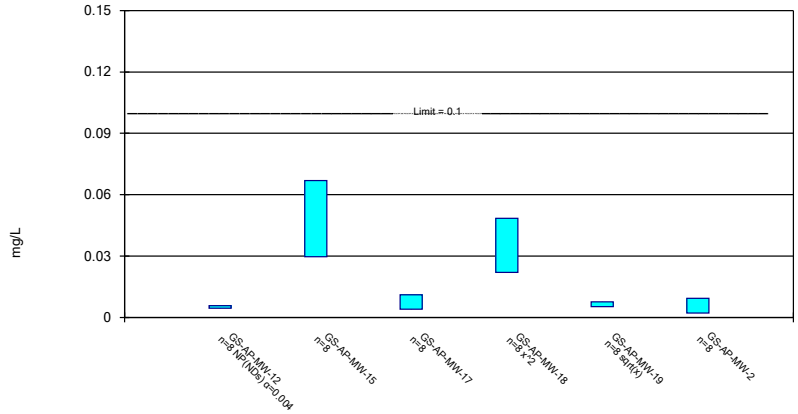
Constituent: Lithium Analysis Run 12/9/2020 2:01 PM View: Appendix IV Confidence Intervals

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.

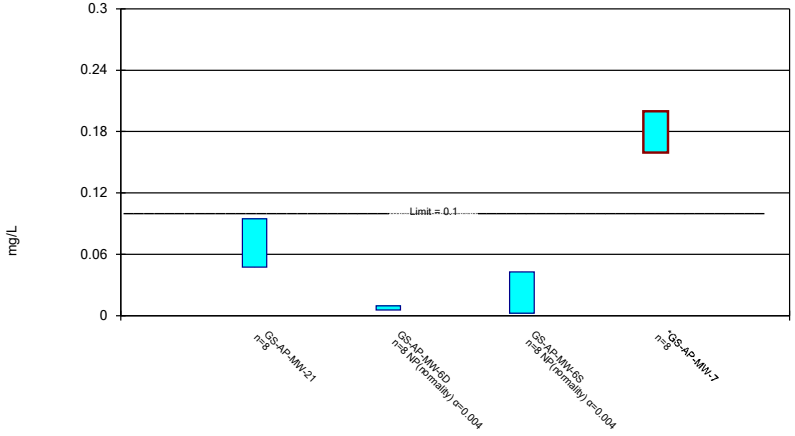


Constituent: Molybdenum Analysis Run 12/9/2020 2:01 PM View: Appendix IV Confidence Intervals

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Parametric and Non-Parametric (NP) Confidence Interval

Compliance limit is exceeded.* Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Molybdenum Analysis Run 12/9/2020 2:01 PM View: Appendix IV Confidence Intervals

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Appendix F

MNA Sampling Field Data

Well ID	pH	ORP (mV)	Conductivity (µS/cm)	DO (mg/L)	Temperature (°C)	Turbidity (NTU)	Depth to Water (feet)
GS-AP-MW-6D	7.05	46.3	516.4	0.13	16.24	1.32	11.28
GS-AP-MW-7	7.85	-120.9	491.8	0.41	16.58	121	10.2
GS-AP-MW-8	5.9	16.7	129.2	0.68	16.69	4.49	45.78
GS-AP-MW-12	7.56	-107.7	384.2	0.46	18.25	0.98	72.92
GS-AP-MW-18	7.06	-6.5	922.2	0.11	16.35	35.4	43.47

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

Analytical Report

Alabama Power

Sample Group : WMWGORAP_1264

Project/Site : Gorgas Ash Pond
Parrish, AL 35580

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

Attention : Brooks, Dyer, Redwine, Mitchell, & Vlassopoulos

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

March 20, 2020

Dear Dustin Brooks,

Enclosed are the analytical results for sample(s) received by the laboratory on February 19, 2020.
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, 2020

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: 2020.03.23 09:02:44 -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: 2020.03.23 10:28:05 -05'00'

NELAP ACCREDITED TNI LABORATORY

REPORT OF LABORATORY ANALYSIS

This Certificate states the physical and/or chemical characteristics of the sample as submitted. This document shall not be reproduced, except in full, without written consent from Alabama Power's General Test Laboratory.

Alabama Power 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 Ash Pond

WMWGORAP_1264

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 are NIST/ISO/IEC/Guide 34 traceable and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BA03511	667343	WMWGORAP_1264
BA03512	667343	WMWGORAP_1264
BA03513	667343	WMWGORAP_1264
BA03514	667343	WMWGORAP_1264
BA03515	667343	WMWGORAP_1264
BA03516	667343	WMWGORAP_1264
BA03517	667343	WMWGORAP_1264
BA03518	667343	WMWGORAP_1264

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.
- The spectral interference check associated with EPA 200.7 was analyzed and all acceptance criteria were met.
- All sample internal standard criteria were met.
- The high standard readbacks associated with EPA 200.7 were within acceptance criteria.

- 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
BA03511	Calcium	10.15
BA03512	Sodium	10.15
BA03514	Calcium	10.15
BA03515	Calcium, Sodium	10.15
BA03516	Calcium	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 Ash Pond

WMWGORAP_1264

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 are NIST/ISO/IEC/Guide 34 traceable and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BA03511	667333	WMWGORAP_1264
BA03512	667333	WMWGORAP_1264
BA03513	667333	WMWGORAP_1264
BA03514	667333	WMWGORAP_1264
BA03515	667333	WMWGORAP_1264
BA03516	667333	WMWGORAP_1264

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.
- The spectral interference check associated with EPA 200.7 was analyzed and all acceptance criteria were met.
- All sample internal standard criteria were met.
- The high standard readbacks associated with EPA 200.7 were within acceptance criteria.

- 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.

Case Narrative

Total Metals ICPMS

Gorgas Ash Pond

WMWGORAP_1264

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 are NIST/ISO/IEC/Guide 34 traceable and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BA03511	667103	WMWGORAP_1264
BA03512	667103	WMWGORAP_1264
BA03513	667103	WMWGORAP_1264
BA03514	667103	WMWGORAP_1264
BA03515	667103	WMWGORAP_1264
BA03516	667103	WMWGORAP_1264
BA03517	667103	WMWGORAP_1264
BA03518	667103	WMWGORAP_1264

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. 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 Ash Pond

WMWGORAP_1264

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 are NIST/ISO/IEC/Guide 34 traceable and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BA03511	667106	WMWGORAP_1264
BA03512	667106	WMWGORAP_1264
BA03513	667106	WMWGORAP_1264
BA03514	667106	WMWGORAP_1264
BA03515	667106	WMWGORAP_1264
BA03516	667106	WMWGORAP_1264

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. All samples were analyzed without a dilution factor.

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

Case Narrative

Anions

Gorgas Ash Pond

WMWGORAP_1264

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 are NIST/ISO/IEC/Guide 34 traceable and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BA03511	667087, 667089, & 666959	WMWGORAP_1264
BA03512	667087, 667089, & 666959	WMWGORAP_1264
BA03513	667087, 667089, & 666959	WMWGORAP_1264
BA03514	667087, 667089, & 666959	WMWGORAP_1264
BA03515	667087, 667089, & 666959	WMWGORAP_1264
BA03516	667087, 667089, & 666959	WMWGORAP_1264
BA03517	667087, 667089, & 666959	WMWGORAP_1264
BA03518	667087, 667089, & 666959	WMWGORAP_1264

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 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.
- 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 high standard of the calibration curve:

Sample ID	Analyte	Dilution Factor
BA03511	Sulfate	3
BA03512	Sulfate	10
BA03515	Sulfate	20

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

Alkalinity

Gorgas Ash Pond

WMWGORAP_1264

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 are NIST/ISO/IEC/Guide 34 traceable and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BA03511	667545 & 667546	WMWGORAP_1264
BA03512	667545 & 667546	WMWGORAP_1264
BA03513	667545 & 667546	WMWGORAP_1264
BA03514	667545 & 667546	WMWGORAP_1264
BA03515	667545 & 667546	WMWGORAP_1264
BA03516	667545 & 667546	WMWGORAP_1264

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

Case Narrative

Alabama Power

Total Organic Carbon by High Temperature Combustion

Gorgas Ash Pond

WMWGORAP_1264

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 are NIST/ISO/IEC/Guide 34 traceable and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BA03511	667375	WMWGORAP_1264
BA03512	667375	WMWGORAP_1264
BA03513	667375	WMWGORAP_1264
BA03514	667375	WMWGORAP_1264
BA03515	667375	WMWGORAP_1264
BA03516	667375	WMWGORAP_1264
BA03517	667375	WMWGORAP_1264
BA03518	667375	WMWGORAP_1264

4. All of the above samples were analyzed by Standard Method 5310B.
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:

- All calibration criteria was met.
- Prior to sample analysis, an initial calibration verification (ICV) was analyzed and met all criteria.
- Prior to sample analysis, an initial calibration blank (ICB) was analyzed and were <1/2RL.
- All continued calibration verification (CCV) were within the acceptance range.
- All continued calibration blanks (CCB) were <1/2RL.
- Matrix Specific QC:
    - A sample duplicate was run and criteria for precision was met.
    - A matrix spike was run and criteria for accuracy was met.

7. All samples were analyzed without a dilution factor.

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

Case Narrative

Alabama Power

Nitrate/Nitrite, Nitrite, and ortho-Phosphate

Gorgas Ash Pond

WMWGORAP_1264

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 are NIST/ISO/IEC/Guide 34 traceable and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BA03511	666940, 666939, & 666941	WMWGORAP_1264
BA03512	666940, 666939, & 666941	WMWGORAP_1264
BA03513	666940, 666939, & 666941	WMWGORAP_1264
BA03514	666940, 666939, & 666941	WMWGORAP_1264
BA03515	666940, 666939, & 666941	WMWGORAP_1264
BA03516	666940, 666939, & 666941	WMWGORAP_1264
BA03517	666940, 666939, & 666941	WMWGORAP_1264
BA03518	666940, 666939, & 666941	WMWGORAP_1264

4. All of the above samples were analyzed by NO_x and NO_2 by EPA 353.2 and PO_4 by SM 4500P-F.
5. All samples were prepared and analyzed within the established hold times, except for the following:
   a. BA03511 for NO_x, NO_2, and PO_4,
   b. BA03512 for PO_4,
   c. BA03513 for PO_4.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

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

EPA 353.2 Specific QC:

- For NO_x: Prior to sample analysis, Cadmium coil reduction efficiency check met criteria.
- Prior to sample analysis, an initial calibration blank (ICB) was analyzed and were below limit of detection.
- All continued calibration blanks (CCB) were below the limit of detection.
- Matrix Specific QC:
  - A sample duplicate was run and criteria for precision was met.
  - A matrix spike was run and criteria for accuracy was met.

SM 4500P-F Specific QC:

- Prior to sample analysis, an initial calibration blank (ICB) was analyzed and were below half the limit of quantitation.
- All continued calibration blanks (CCB) were below half the limit of quantitation.
- Matrix Specific QC:
    - A matrix spike was run and criteria for accuracy was met.
    - A matrix spike duplicate was run and criteria for precision was met.

7. All samples were analyzed without 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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - GS-AP-MW-6D

Location Code: WMWGORAP
Collected: 2/18/20 08:44
Customer ID:
Submittal Date: 2/19/20 08:50

Laboratory ID Number: BA03511

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	2/25/20 13:45	2/26/20 13:08		1.015	1.10	mg/L	0.03	0.1	
* Calcium, Total	2/25/20 13:45	2/26/20 13:50		10.15	58.3	mg/L	1.015	5.075	
Silicon, Total	2/25/20 13:45	2/26/20 13:08		1.015	7.90	mg/L	0.03	0.3	
* Iron, Total	2/25/20 13:45	2/26/20 13:08		1.015	0.0350	mg/L	0.02	0.05	J
* Lithium, Total	2/25/20 13:45	2/26/20 13:08		1.015	0.262	mg/L	0.01	0.02	
* Magnesium, Total	2/25/20 13:45	2/26/20 13:08		1.015	15.5	mg/L	0.1	0.5	
Silica, Total (calc.)	2/25/20 13:45	2/26/20 13:08		1	16.9	mg/L			
* Sodium, Total	2/25/20 13:45	2/26/20 13:08		1.015	31.6	mg/L	0.1	0.5	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Iron, Dissolved	2/25/20 13:20	2/26/20 12:31		1.015	0.0242	mg/L	0.02	0.05	J
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	2/19/20 10:30	2/20/20 11:40		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	2/19/20 10:30	2/20/20 11:40		1.015	0.0924	mg/L	0.001	0.005	
* Aluminum, Total	2/19/20 10:35	2/20/20 11:40		1.015	Not Detected	mg/L	0.02	0.06	U
* Barium, Total	2/19/20 10:30	2/20/20 11:40		1.015	0.849	mg/L	0.002	0.01	
* Beryllium, Total	2/19/20 10:30	2/20/20 11:40		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	2/19/20 10:30	2/20/20 11:40		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	2/19/20 10:30	2/20/20 11:40		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	2/19/20 10:30	2/20/20 11:40		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	2/19/20 10:30	2/20/20 11:40		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	2/19/20 10:30	2/20/20 11:40		1.015	0.00880	mg/L	0.002	0.01	J
* Manganese, Total	2/19/20 10:30	2/20/20 11:40		1.015	0.155	mg/L	0.001	0.005	
* Potassium, Total	2/19/20 10:30	2/20/20 11:40		1.015	2.17	mg/L	0.3	2.5	J
* Selenium, Total	2/19/20 10:30	2/20/20 11:40		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	2/19/20 10:30	2/20/20 11:40		1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	2/19/20 11:15	2/20/20 11:06		1.015	Not Detected	mg/L	0.0008	0.003	U
* Aluminum, Dissolved	2/19/20 11:15	2/20/20 11:06		1.015	Not Detected	mg/L	0.02	0.06	U
* Arsenic, Dissolved	2/19/20 11:15	2/20/20 11:06		1.015	0.0699	mg/L	0.001	0.005	
* Beryllium, Dissolved	2/19/20 11:15	2/20/20 11:06		1.015	Not Detected	mg/L	0.0006	0.003	U

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. Nitrate/Nitrite, Nitrite, Nitrate (calc.), and Ortho-Phosphate were performed outside of the analytical holding time of 48 hours. LBM 3/19/2020

Reported: 3/20/2020
Version: 3.1
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - GS-AP-MW-6D

Location Code: WMWGORAP
Collected: 2/18/20 08:44
Customer ID:
Submittal Date: 2/19/20 08:50

Laboratory ID Number: BA03511

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Cadmium, Dissolved	2/19/20 11:15	2/20/20 11:06		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Dissolved	2/19/20 11:15	2/20/20 11:06		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Dissolved	2/19/20 11:15	2/20/20 11:06		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Dissolved	2/19/20 11:15	2/20/20 11:06		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Dissolved	2/19/20 11:15	2/20/20 11:06		1.015	0.00398	mg/L	0.002	0.01	J
* Manganese, Dissolved	2/19/20 11:15	2/20/20 11:06		1.015	0.155	mg/L	0.001	0.005	
* Selenium, Dissolved	2/19/20 11:15	2/20/20 11:06		1.015	0.0383	mg/L	0.002	0.01	
* Thallium, Dissolved	2/19/20 11:15	2/20/20 11:06		1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 353.2		***Analyst: CES***							
* Nitrogen, Nitrate/Nitrite	2/20/20 10:14	2/20/20 10:14		1	Not Detected	mg/L as N	0.20	0.3	U
Nitrogen, Nitrate (calc.)	2/20/20 10:14	2/20/20 10:14		1	Not Detected	mg/L as N			U
Nitrogen, Nitrite	2/20/20 09:29	2/20/20 09:29		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B		***Analyst: JAG***							
Alkalinity, Total as CaCO3	2/27/20 13:15	2/27/20 14:00		1	194	mg/L		0.1	
Analytical Method: SM 4500CO2 D		***Analyst: JAG***							
Bicarbonate Alkalinity, (calc.)	2/27/20 13:15	2/27/20 14:00		1	193	mg/L			
Carbonate Alkalinity, (calc.)	2/27/20 13:15	2/27/20 14:00		1	0.69	mg/L			
Analytical Method: SM 4500PF-OP		***Analyst: CES***							
Ortho Phosphate	2/20/20 10:54	2/20/20 10:54		1	0.157	mg/L as P	0.010	0.03	HT
Analytical Method: SM 5310 B		***Analyst: HRG***							
* Total Organic Carbon	2/25/20 12:07	2/25/20 12:07		1	1.26	mg/L	1.00	2	J
Analytical Method: SM4500Cl E		***Analyst: JCC***							
* Chloride	2/21/20 10:37	2/21/20 10:37		1	9.27	mg/L	0.50	1	
Analytical Method: SM4500F G 2017		***Analyst: JCC***							
* Fluoride	2/21/20 13:52	2/21/20 13:52		1	0.146	mg/L	0.05	0.1	
Analytical Method: SM4500SO4 E		***Analyst: JCC***							
* Sulfate	2/20/20 10:54	2/20/20 10:54		3	52.0	mg/L	1.50	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. Nitrate/Nitrite, Nitrite, Nitrate (calc.), and Ortho-Phosphate were performed outside of the analytical holding time of 48 hours. LBM 3/19/2020

Reported: 3/20/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORAP
Sample Date: 2/18/20 08:44
Customer ID:
Delivery Date: 2/19/20 08:50

Description: Gorgas Ash Pond - GS-AP-MW-6D

Laboratory ID Number: BA03511

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA03516	Iron, Dissolved	mg/L	0.000158	0.0176	0.2	0.702	0.699	0.200	0.17 to 0.23	102	70 to 130	0.428	20
BA03516	Manganese, Dissolved	mg/L	0.0000555	0.0001474	0.10	0.162	0.165	0.0980	0.085 to 0.115	94.8	70 to 130	1.83	20
BA03518	Arsenic, Total	mg/L	0.0000502	0.0001474	0.10	0.102	0.0988	0.101	0.085 to 0.115	102	70 to 130	3.19	20
BA03516	Selenium, Dissolved	mg/L	0.0000876	0.00066	0.10	0.0825	0.0841	0.0982	0.085 to 0.115	77.2	70 to 130	1.92	20
BA03518	Cadmium, Total	mg/L	0.00000366	0.0001474	0.10	0.0942	0.0950	0.0952	0.085 to 0.115	94.2	70 to 130	0.846	20
BA03518	Total Organic Carbon	mg/L	0.530	1.00	10.0	9.00	9.01	9.48	9 to 11	90.0	80 to 120	0.111	20
BA03516	Chromium, Dissolved	mg/L	-0.0000338	0.00044	0.10	0.0958	0.0972	0.0975	0.085 to 0.115	95.8	70 to 130	1.45	20
BA03516	Antimony, Dissolved	mg/L	0.000237	0.00066	0.10	0.0940	0.0943	0.0883	0.085 to 0.115	94.0	70 to 130	0.319	20
BA03518	Aluminum, Total	mg/L	0.00186	0.0088	0.10	0.0948	0.0922	0.0944	0.085 to 0.115	94.8	70 to 130	2.78	20
BA03518	Calcium, Total	mg/L	-0.0111	0.1518	5.00	5.07	5.06	5.05	4.25 to 5.75	101	70 to 130	0.197	20
BA03516	Arsenic, Dissolved	mg/L	0.0000222	0.0001474	0.10	0.112	0.110	0.102	0.085 to 0.115	104	70 to 130	1.80	20
BA03518	Beryllium, Total	mg/L	0.0000240	0.00088	0.10	0.0917	0.0942	0.0956	0.085 to 0.115	91.7	70 to 130	2.69	20
BA03518	Chromium, Total	mg/L	0.0000410	0.00044	0.10	0.0985	0.0966	0.0966	0.085 to 0.115	98.5	70 to 130	1.95	20
BA03518	Sodium, Total	mg/L	-0.000121	0.044	5.00	5.04	5.04	5.05	4.25 to 5.75	101	70 to 130	0.00	20
BA03518	Thallium, Total	mg/L	0.00000234	0.0001474	0.10	0.0956	0.0959	0.0993	0.085 to 0.115	95.6	70 to 130	0.313	20
BA03516	Molybdenum, Dissolved	mg/L	0.00000407	0.0001474	0.10	0.0992	0.0995	0.0971	0.085 to 0.115	99.2	70 to 130	0.302	20
BA03518	Magnesium, Total	mg/L	-0.000166	0.0462	5.00	5.06	5.06	5.04	4.25 to 5.75	101	70 to 130	0.00	20
BA03518	Lead, Total	mg/L	0.00000412	0.0001474	0.10	0.0939	0.0929	0.0952	0.085 to 0.115	93.9	70 to 130	1.07	20
BA03518	Antimony, Total	mg/L	0.000232	0.00066	0.10	0.0885	0.0908	0.0906	0.085 to 0.115	88.5	70 to 130	2.57	20
BA03516	Cobalt, Dissolved	mg/L	-0.00000442	0.0001474	0.10	0.0963	0.0968	0.0991	0.085 to 0.115	96.3	70 to 130	0.518	20
BA03516	Lead, Dissolved	mg/L	0.00000378	0.0001474	0.10	0.0972	0.0952	0.0945	0.085 to 0.115	97.2	70 to 130	2.08	20
BA03518	Boron, Total	mg/L	-0.000796	0.0650254	1.00	1.01	1.00	1.00	0.85 to 1.15	101	70 to 130	0.995	20
BA03518	Iron, Total	mg/L	0.00130	0.0176	0.2	0.205	0.200	0.199	0.17 to 0.23	102	70 to 130	2.47	20
BA03518	Lithium, Total	mg/L	-0.0000198	0.0154	0.20	0.198	0.194	0.194	0.17 to 0.23	99.0	70 to 130	2.04	20

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified. Nitrate/Nitrite, Nitrite, Nitrate (calc.), and Ortho-Phosphate were performed outside of the analytical holding time of 48 hours. LBM 3/19/2020

Reported: 3/20/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORAP
Sample Date: 2/18/20 08:44
Customer ID:
Delivery Date: 2/19/20 08:50

Description: Gorgas Ash Pond - GS-AP-MW-6D

Laboratory ID Number: BA03511

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA03516	Cadmium, Dissolved	mg/L	-0.00000045	0.0001474	0.10	0.0937	0.0945	0.0967	0.085 to 0.115	93.7	70 to 130	0.850	20
BA03516	Thallium, Dissolved	mg/L	0.00000202	0.0001474	0.10	0.101	0.102	0.0969	0.085 to 0.115	101	70 to 130	0.985	20
BA03518	Molybdenum, Total	mg/L	0.0000148	0.0001474	0.10	0.0968	0.0947	0.0967	0.085 to 0.115	96.8	70 to 130	2.19	20
BA03518	Selenium, Total	mg/L	0.000656	0.00066	0.10	0.102	0.0977	0.101	0.085 to 0.115	102	70 to 130	4.31	20
BA03511	Ortho Phosphate	mg/L as P	0.002	0.015	0.250	0.399	0.403	0.234	0.225 to 0.275	96.8	80 to 120	0.998	10
BA03516	Aluminum, Dissolved	mg/L	0.000594	0.0088	0.10	0.0943	0.0959	0.0941	0.085 to 0.115	94.3	70 to 130	1.68	20
BA03516	Beryllium, Dissolved	mg/L	0.0000631	0.00088	0.10	0.0861	0.0823	0.0870	0.085 to 0.115	86.1	70 to 130	4.51	20
BA03518	Barium, Total	mg/L	-0.00000117	0.0002	0.10	0.0932	0.0923	0.0947	0.085 to 0.115	93.2	70 to 130	0.970	20
BA03518	Cobalt, Total	mg/L	-0.00000218	0.0001474	0.10	0.0994	0.0965	0.0978	0.085 to 0.115	99.4	70 to 130	2.96	20
BA03518	Potassium, Total	mg/L	-0.000899	0.3674	10.0	9.68	9.54	9.63	8.5 to 11.5	96.8	70 to 130	1.46	20
BA03518	Manganese, Total	mg/L	0.00000757	0.0001474	0.10	0.0987	0.0969	0.0965	0.085 to 0.115	98.7	70 to 130	1.84	20
BA03518	Silicon, Total	mg/L	-0.00196	0.044	1.00	1.03	1.03	0.998	0.850 to 1.15	103	70 to 130	0.00	20

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified. Nitrate/Nitrite, Nitrite, Nitrate (calc.), and Ortho-Phosphate were performed outside of the analytical holding time of 48 hours. LBM 3/19/2020

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 2/18/20 08:44
Customer ID:
Delivery Date: 2/19/20 08:50

Description: Gorgas Ash Pond - GS-AP-MW-6D

Laboratory ID Number: BA03511

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA03518	Fluoride	mg/L	0.0141	0.05	2.50	2.56	0.0135	2.55	2.25 to 2.75	102	80 to 120	0.00	20
BA03518	Sulfate	mg/L	-0.675	0.50	20.0	18.6	-0.575	19.5	18 to 22	93.0	80 to 120	0.00	20
BA03511	Nitrogen, Nitrate/Nitrite	mg/L as N	0.04	0.20	2.00	2.06	0.048	1.88	1.8 to 2.2	103	90 to 110	0.00	15
BA03518	Chloride	mg/L	-0.0221	0.50	10.0	10.2	0.0921	10.1	9 to 11	102	80 to 120	0.00	20
BA03511	Nitrogen, Nitrite	mg/L as N	0.001	0.20	0.50	0.520	-0.001	0.772	0.675 to 0.825	104	90 to 110	0.00	15
BA03516	Alkalinity, Total as CaCO3	mg/L					184	51.7	45.0 to 55.0			1.64	10

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified. Nitrate/Nitrite, Nitrite, Nitrate (calc.), and Ortho-Phosphate were performed outside of the analytical holding time of 48 hours. LBM 3/19/2020

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - GS-AP-MW-7

Location Code: WMWGORAP
Collected: 2/18/20 10:20
Customer ID:
Submittal Date: 2/19/20 08:50

Laboratory ID Number: BA03512

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	2/25/20 13:45	2/26/20 13:11		1.015	1.58	mg/L	0.03	0.1	
* Calcium, Total	2/25/20 13:45	2/26/20 13:11		1.015	12.9	mg/L	0.1	0.5	
Silicon, Total	2/25/20 13:45	2/26/20 13:11		1.015	6.46	mg/L	0.03	0.3	
* Iron, Total	2/25/20 13:45	2/26/20 13:11		1.015	2.94	mg/L	0.02	0.05	
* Lithium, Total	2/25/20 13:45	2/26/20 13:11		1.015	0.154	mg/L	0.01	0.02	
* Magnesium, Total	2/25/20 13:45	2/26/20 13:11		1.015	4.73	mg/L	0.1	0.5	
Silica, Total (calc.)	2/25/20 13:45	2/26/20 13:11		1	13.8	mg/L			
* Sodium, Total	2/25/20 13:45	2/26/20 13:53		10.15	108	mg/L	1.015	5.075	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Iron, Dissolved	2/25/20 13:20	2/26/20 12:34		1.015	0.761	mg/L	0.02	0.05	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	2/19/20 10:30	2/20/20 11:43		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	2/19/20 10:30	2/20/20 11:43		1.015	0.237	mg/L	0.001	0.005	
* Aluminum, Total	2/19/20 10:35	2/20/20 11:43		1.015	1.19	mg/L	0.02	0.06	
* Barium, Total	2/19/20 10:30	2/20/20 11:43		1.015	0.0918	mg/L	0.002	0.01	
* Beryllium, Total	2/19/20 10:30	2/20/20 11:43		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	2/19/20 10:30	2/20/20 11:43		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	2/19/20 10:30	2/20/20 11:43		1.015	0.00301	mg/L	0.002	0.01	J
* Cobalt, Total	2/19/20 10:30	2/20/20 11:43		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	2/19/20 10:30	2/20/20 11:43		1.015	0.00140	mg/L	0.001	0.005	J
* Molybdenum, Total	2/19/20 10:30	2/20/20 11:43		1.015	0.185	mg/L	0.002	0.01	
* Manganese, Total	2/19/20 10:30	2/20/20 11:43		1.015	0.0830	mg/L	0.001	0.005	
* Potassium, Total	2/19/20 10:30	2/20/20 11:43		1.015	1.52	mg/L	0.3	2.5	J
* Selenium, Total	2/19/20 10:30	2/20/20 11:43		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	2/19/20 10:30	2/20/20 11:43		1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	2/19/20 11:15	2/20/20 11:08		1.015	Not Detected	mg/L	0.0008	0.003	U
* Aluminum, Dissolved	2/19/20 11:15	2/20/20 11:08		1.015	0.197	mg/L	0.02	0.06	
* Arsenic, Dissolved	2/19/20 11:15	2/20/20 11:08		1.015	0.187	mg/L	0.001	0.005	
* Beryllium, Dissolved	2/19/20 11:15	2/20/20 11:08		1.015	Not Detected	mg/L	0.0006	0.003	U

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. Ortho-Phosphate was performed outside of the analytical holding time of 48 hours. LBM 3/19/2020

Reported: 3/20/2020
Version: 3.1
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - GS-AP-MW-7

Location Code: WMWGORAP
Collected: 2/18/20 10:20
Customer ID:
Submittal Date: 2/19/20 08:50

Laboratory ID Number: BA03512

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Cadmium, Dissolved	2/19/20 11:15	2/20/20 11:08		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Dissolved	2/19/20 11:15	2/20/20 11:08		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Dissolved	2/19/20 11:15	2/20/20 11:08		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Dissolved	2/19/20 11:15	2/20/20 11:08		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Dissolved	2/19/20 11:15	2/20/20 11:08		1.015	0.177	mg/L	0.002	0.01	
* Manganese, Dissolved	2/19/20 11:15	2/20/20 11:08		1.015	0.0445	mg/L	0.001	0.005	
* Selenium, Dissolved	2/19/20 11:15	2/20/20 11:08		1.015	0.0123	mg/L	0.002	0.01	
* Thallium, Dissolved	2/19/20 11:15	2/20/20 11:08		1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 353.2		***Analyst: CES***							
* Nitrogen, Nitrate/Nitrite	2/20/20 10:20	2/20/20 10:20		1	Not Detected	mg/L as N	0.20	0.3	U
Nitrogen, Nitrate (calc.)	2/20/20 10:20	2/20/20 10:20		1	Not Detected	mg/L as N			U
Nitrogen, Nitrite	2/20/20 09:32	2/20/20 09:32		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B		***Analyst: JAG***							
Alkalinity, Total as CaCO3	2/27/20 13:15	2/27/20 14:00		1	99.9	mg/L		0.1	
Analytical Method: SM 4500CO2 D		***Analyst: JAG***							
Bicarbonate Alkalinity, (calc.)	2/27/20 13:15	2/27/20 14:00		1	99.1	mg/L			
Carbonate Alkalinity, (calc.)	2/27/20 13:15	2/27/20 14:00		1	0.74	mg/L			
Analytical Method: SM 4500PF-OP		***Analyst: CES***							
Ortho Phosphate	2/20/20 10:56	2/20/20 10:56		1	0.139	mg/L as P	0.010	0.03	HT
Analytical Method: SM 5310 B		***Analyst: HRG***							
* Total Organic Carbon	2/25/20 12:19	2/25/20 12:19		1	1.08	mg/L	1.00	2	J
Analytical Method: SM4500Cl E		***Analyst: JCC***							
* Chloride	2/21/20 10:38	2/21/20 10:38		1	5.91	mg/L	0.50	1	
Analytical Method: SM4500F G 2017		***Analyst: JCC***							
* Fluoride	2/21/20 13:54	2/21/20 13:54		1	0.113	mg/L	0.05	0.1	
Analytical Method: SM4500SO4 E		***Analyst: JCC***							
* Sulfate	2/20/20 10:56	2/20/20 10:56		10	163	mg/L	5.00	10	

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. Ortho-Phosphate was performed outside of the analytical holding time of 48 hours. LBM 3/19/2020

Reported: 3/20/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORAP
Sample Date: 2/18/20 10:20
Customer ID:
Delivery Date: 2/19/20 08:50

Description: Gorgas Ash Pond - GS-AP-MW-7

Laboratory ID Number: BA03512

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA03516	Cobalt, Dissolved	mg/L	-0.00000442	0.0001474	0.10	0.0963	0.0968	0.0991	0.085 to 0.115	96.3	70 to 130	0.518	20
BA03516	Lead, Dissolved	mg/L	0.00000378	0.0001474	0.10	0.0972	0.0952	0.0945	0.085 to 0.115	97.2	70 to 130	2.08	20
BA03518	Boron, Total	mg/L	-0.000796	0.0650254	1.00	1.01	1.00	1.00	0.85 to 1.15	101	70 to 130	0.995	20
BA03518	Iron, Total	mg/L	0.00130	0.0176	0.2	0.205	0.200	0.199	0.17 to 0.23	102	70 to 130	2.47	20
BA03518	Lithium, Total	mg/L	-0.0000198	0.0154	0.20	0.198	0.194	0.194	0.17 to 0.23	99.0	70 to 130	2.04	20
BA03516	Iron, Dissolved	mg/L	0.000158	0.0176	0.2	0.702	0.699	0.200	0.17 to 0.23	102	70 to 130	0.428	20
BA03516	Manganese, Dissolved	mg/L	0.0000555	0.0001474	0.10	0.162	0.165	0.0980	0.085 to 0.115	94.8	70 to 130	1.83	20
BA03518	Arsenic, Total	mg/L	0.0000502	0.0001474	0.10	0.102	0.0988	0.101	0.085 to 0.115	102	70 to 130	3.19	20
BA03516	Cadmium, Dissolved	mg/L	-0.00000045	0.0001474	0.10	0.0937	0.0945	0.0967	0.085 to 0.115	93.7	70 to 130	0.850	20
BA03516	Thallium, Dissolved	mg/L	0.00000202	0.0001474	0.10	0.101	0.102	0.0969	0.085 to 0.115	101	70 to 130	0.985	20
BA03518	Molybdenum, Total	mg/L	0.0000148	0.0001474	0.10	0.0968	0.0947	0.0967	0.085 to 0.115	96.8	70 to 130	2.19	20
BA03518	Selenium, Total	mg/L	0.000656	0.00066	0.10	0.102	0.0977	0.101	0.085 to 0.115	102	70 to 130	4.31	20
BA03516	Selenium, Dissolved	mg/L	0.0000876	0.00066	0.10	0.0825	0.0841	0.0982	0.085 to 0.115	77.2	70 to 130	1.92	20
BA03518	Cadmium, Total	mg/L	0.00000366	0.0001474	0.10	0.0942	0.0950	0.0952	0.085 to 0.115	94.2	70 to 130	0.846	20
BA03518	Total Organic Carbon	mg/L	0.530	1.00	10.0	9.00	9.01	9.48	9 to 11	90.0	80 to 120	0.111	20
BA03516	Arsenic, Dissolved	mg/L	0.0000222	0.0001474	0.10	0.112	0.110	0.102	0.085 to 0.115	104	70 to 130	1.80	20
BA03518	Beryllium, Total	mg/L	0.0000240	0.00088	0.10	0.0917	0.0942	0.0956	0.085 to 0.115	91.7	70 to 130	2.69	20
BA03518	Chromium, Total	mg/L	0.0000410	0.00044	0.10	0.0985	0.0966	0.0966	0.085 to 0.115	98.5	70 to 130	1.95	20
BA03518	Sodium, Total	mg/L	-0.000121	0.044	5.00	5.04	5.04	5.05	4.25 to 5.75	101	70 to 130	0.00	20
BA03518	Thallium, Total	mg/L	0.00000234	0.0001474	0.10	0.0956	0.0959	0.0993	0.085 to 0.115	95.6	70 to 130	0.313	20
BA03516	Chromium, Dissolved	mg/L	-0.0000338	0.00044	0.10	0.0958	0.0972	0.0975	0.085 to 0.115	95.8	70 to 130	1.45	20
BA03516	Antimony, Dissolved	mg/L	0.000237	0.00066	0.10	0.0940	0.0943	0.0883	0.085 to 0.115	94.0	70 to 130	0.319	20
BA03518	Aluminum, Total	mg/L	0.00186	0.0088	0.10	0.0948	0.0922	0.0944	0.085 to 0.115	94.8	70 to 130	2.78	20
BA03518	Calcium, Total	mg/L	-0.0111	0.1518	5.00	5.07	5.06	5.05	4.25 to 5.75	101	70 to 130	0.197	20

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified. Ortho-Phosphate was performed outside of the analytical holding time of 48 hours. LBM 3/19/2020

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORAP
Sample Date: 2/18/20 10:20
Customer ID:
Delivery Date: 2/19/20 08:50

Description: Gorgas Ash Pond - GS-AP-MW-7

Laboratory ID Number: BA03512

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA03516	Molybdenum, Dissolved	mg/L	0.00000407	0.0001474	0.10	0.0992	0.0995	0.0971	0.085 to 0.115	99.2	70 to 130	0.302	20
BA03518	Magnesium, Total	mg/L	-0.000166	0.0462	5.00	5.06	5.06	5.04	4.25 to 5.75	101	70 to 130	0.00	20
BA03518	Lead, Total	mg/L	0.00000412	0.0001474	0.10	0.0939	0.0929	0.0952	0.085 to 0.115	93.9	70 to 130	1.07	20
BA03518	Antimony, Total	mg/L	0.000232	0.00066	0.10	0.0885	0.0908	0.0906	0.085 to 0.115	88.5	70 to 130	2.57	20
BA03511	Ortho Phosphate	mg/L as P	0.002	0.015	0.250	0.399	0.403	0.234	0.225 to 0.275	96.8	80 to 120	0.998	10
BA03516	Aluminum, Dissolved	mg/L	0.000594	0.0088	0.10	0.0943	0.0959	0.0941	0.085 to 0.115	94.3	70 to 130	1.68	20
BA03516	Beryllium, Dissolved	mg/L	0.0000631	0.00088	0.10	0.0861	0.0823	0.0870	0.085 to 0.115	86.1	70 to 130	4.51	20
BA03518	Barium, Total	mg/L	-0.00000117	0.0002	0.10	0.0932	0.0923	0.0947	0.085 to 0.115	93.2	70 to 130	0.970	20
BA03518	Cobalt, Total	mg/L	-0.00000218	0.0001474	0.10	0.0994	0.0965	0.0978	0.085 to 0.115	99.4	70 to 130	2.96	20
BA03518	Potassium, Total	mg/L	-0.000899	0.3674	10.0	9.68	9.54	9.63	8.5 to 11.5	96.8	70 to 130	1.46	20
BA03518	Manganese, Total	mg/L	0.00000757	0.0001474	0.10	0.0987	0.0969	0.0965	0.085 to 0.115	98.7	70 to 130	1.84	20
BA03518	Silicon, Total	mg/L	-0.00196	0.044	1.00	1.03	1.03	0.998	0.850 to 1.15	103	70 to 130	0.00	20

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified. Ortho-Phosphate was performed outside of the analytical holding time of 48 hours. LBM 3/19/2020

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 2/18/20 10:20
Customer ID:
Delivery Date: 2/19/20 08:50

Description: Gorgas Ash Pond - GS-AP-MW-7

Laboratory ID Number: BA03512

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA03518	Sulfate	mg/L	-0.675	0.50	20.0	18.6	-0.575	19.5	18 to 22	93.0	80 to 120	0.00	20
BA03518	Chloride	mg/L	-0.0221	0.50	10.0	10.2	0.0921	10.1	9 to 11	102	80 to 120	0.00	20
BA03511	Nitrogen, Nitrate/Nitrite	mg/L as N	0.04	0.20	2.00	2.06	0.048	1.88	1.8 to 2.2	103	90 to 110	0.00	15
BA03511	Nitrogen, Nitrite	mg/L as N	0.001	0.20	0.50	0.520	-0.001	0.772	0.675 to 0.825	104	90 to 110	0.00	15
BA03518	Fluoride	mg/L	0.0141	0.05	2.50	2.56	0.0135	2.55	2.25 to 2.75	102	80 to 120	0.00	20
BA03516	Alkalinity, Total as CaCO3	mg/L					184	51.7	45.0 to 55.0			1.64	10

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified. Ortho-Phosphate was performed outside of the analytical holding time of 48 hours. LBM 3/19/2020

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - GS-AP-MW-8

Location Code: WMWGORAP
Collected: 2/18/20 10:55
Customer ID:
Submittal Date: 2/19/20 08:50

Laboratory ID Number: BA03513

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	2/25/20 13:45	2/26/20 13:13		1.015	Not Detected	mg/L	0.03	0.1	U
* Calcium, Total	2/25/20 13:45	2/26/20 13:13		1.015	4.40	mg/L	0.1	0.5	
Silicon, Total	2/25/20 13:45	2/26/20 13:13		1.015	17.3	mg/L	0.03	0.3	
* Iron, Total	2/25/20 13:45	2/26/20 13:13		1.015	0.229	mg/L	0.02	0.05	
* Lithium, Total	2/25/20 13:45	2/26/20 13:13		1.015	Not Detected	mg/L	0.01	0.02	U
* Magnesium, Total	2/25/20 13:45	2/26/20 13:13		1.015	7.18	mg/L	0.1	0.5	
Silica, Total (calc.)	2/25/20 13:45	2/26/20 13:13		1	37.0	mg/L			
* Sodium, Total	2/25/20 13:45	2/26/20 13:13		1.015	11.0	mg/L	0.1	0.5	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Iron, Dissolved	2/25/20 13:20	2/26/20 12:37		1.015	Not Detected	mg/L	0.02	0.05	U
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	2/19/20 10:30	2/20/20 11:45		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	2/19/20 10:30	2/20/20 11:45		1.015	Not Detected	mg/L	0.001	0.005	U
* Aluminum, Total	2/19/20 10:35	2/20/20 11:45		1.015	0.139	mg/L	0.02	0.06	
* Barium, Total	2/19/20 10:30	2/20/20 11:45		1.015	0.00886	mg/L	0.002	0.01	J
* Beryllium, Total	2/19/20 10:30	2/20/20 11:45		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	2/19/20 10:30	2/20/20 11:45		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	2/19/20 10:30	2/20/20 11:45		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	2/19/20 10:30	2/20/20 11:45		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	2/19/20 10:30	2/20/20 11:45		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	2/19/20 10:30	2/20/20 11:45		1.015	Not Detected	mg/L	0.002	0.01	U
* Manganese, Total	2/19/20 10:30	2/20/20 11:45		1.015	0.0979	mg/L	0.001	0.005	
* Potassium, Total	2/19/20 10:30	2/20/20 11:45		1.015	0.795	mg/L	0.3	2.5	J
* Selenium, Total	2/19/20 10:30	2/20/20 11:45		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	2/19/20 10:30	2/20/20 11:45		1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	2/19/20 11:15	2/20/20 11:11		1.015	Not Detected	mg/L	0.0008	0.003	U
* Aluminum, Dissolved	2/19/20 11:15	2/20/20 11:11		1.015	Not Detected	mg/L	0.02	0.06	U
* Arsenic, Dissolved	2/19/20 11:15	2/20/20 11:11		1.015	Not Detected	mg/L	0.001	0.005	U
* Beryllium, Dissolved	2/19/20 11:15	2/20/20 11:11		1.015	Not Detected	mg/L	0.0006	0.003	U

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. Ortho-Phosphate was performed outside of the analytical holding time of 48 hours. LBM 3/19/2020

Reported: 3/20/2020
Version: 3.1
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - GS-AP-MW-8

Location Code: WMWGORAP
Collected: 2/18/20 10:55
Customer ID:
Submittal Date: 2/19/20 08:50

Laboratory ID Number: BA03513

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Cadmium, Dissolved	2/19/20 11:15	2/20/20 11:11		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Dissolved	2/19/20 11:15	2/20/20 11:11		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Dissolved	2/19/20 11:15	2/20/20 11:11		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Dissolved	2/19/20 11:15	2/20/20 11:11		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Dissolved	2/19/20 11:15	2/20/20 11:11		1.015	Not Detected	mg/L	0.002	0.01	U
* Manganese, Dissolved	2/19/20 11:15	2/20/20 11:11		1.015	0.0943	mg/L	0.001	0.005	
* Selenium, Dissolved	2/19/20 11:15	2/20/20 11:11		1.015	0.00317	mg/L	0.002	0.01	J
* Thallium, Dissolved	2/19/20 11:15	2/20/20 11:11		1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 353.2		***Analyst: CES***							
* Nitrogen, Nitrate/Nitrite	2/20/20 10:21	2/20/20 10:21		1	Not Detected	mg/L as N	0.20	0.3	U
Nitrogen, Nitrate (calc.)	2/20/20 10:21	2/20/20 10:21		1	Not Detected	mg/L as N			U
Nitrogen, Nitrite	2/20/20 09:33	2/20/20 09:33		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B		***Analyst: JAG***							
Alkalinity, Total as CaCO3	2/27/20 13:15	2/27/20 14:00		1	50.5	mg/L		0.1	
Analytical Method: SM 4500CO2 D		***Analyst: JAG***							
Bicarbonate Alkalinity, (calc.)	2/27/20 13:15	2/27/20 14:00		1	50.5	mg/L			
Carbonate Alkalinity, (calc.)	2/27/20 13:15	2/27/20 14:00		1	0.01	mg/L			
Analytical Method: SM 4500PF-OP		***Analyst: CES***							
Ortho Phosphate	2/20/20 10:57	2/20/20 10:57		1	Not Detected	mg/L as P	0.010	0.03	U
Analytical Method: SM 5310 B		***Analyst: HRG***							
* Total Organic Carbon	2/25/20 12:30	2/25/20 12:30		1	Not Detected	mg/L	1.00	2	U
Analytical Method: SM4500Cl E		***Analyst: JCC***							
* Chloride	2/21/20 10:39	2/21/20 10:39		1	3.93	mg/L	0.50	1	
Analytical Method: SM4500F G 2017		***Analyst: JCC***							
* Fluoride	2/21/20 13:55	2/21/20 13:55		1	0.0944	mg/L	0.05	0.1	J
Analytical Method: SM4500SO4 E		***Analyst: JCC***							
* Sulfate	2/20/20 10:45	2/20/20 10:45		1	5.37	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. Ortho-Phosphate was performed outside of the analytical holding time of 48 hours. LBM 3/19/2020

Reported: 3/20/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORAP
Sample Date: 2/18/20 10:55
Customer ID:
Delivery Date: 2/19/20 08:50

Description: Gorgas Ash Pond - GS-AP-MW-8

Laboratory ID Number: BA03513

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA03516	Selenium, Dissolved	mg/L	0.0000876	0.00066	0.10	0.0825	0.0841	0.0982	0.085 to 0.115	77.2	70 to 130	1.92	20
BA03518	Cadmium, Total	mg/L	0.00000366	0.0001474	0.10	0.0942	0.0950	0.0952	0.085 to 0.115	94.2	70 to 130	0.846	20
BA03518	Total Organic Carbon	mg/L	0.530	1.00	10.0	9.00	9.01	9.48	9 to 11	90.0	80 to 120	0.111	20
BA03516	Cobalt, Dissolved	mg/L	-0.00000442	0.0001474	0.10	0.0963	0.0968	0.0991	0.085 to 0.115	96.3	70 to 130	0.518	20
BA03516	Lead, Dissolved	mg/L	0.00000378	0.0001474	0.10	0.0972	0.0952	0.0945	0.085 to 0.115	97.2	70 to 130	2.08	20
BA03518	Boron, Total	mg/L	-0.000796	0.0650254	1.00	1.01	1.00	1.00	0.85 to 1.15	101	70 to 130	0.995	20
BA03518	Iron, Total	mg/L	0.00130	0.0176	0.2	0.205	0.200	0.199	0.17 to 0.23	102	70 to 130	2.47	20
BA03518	Lithium, Total	mg/L	-0.0000198	0.0154	0.20	0.198	0.194	0.194	0.17 to 0.23	99.0	70 to 130	2.04	20
BA03516	Molybdenum, Dissolved	mg/L	0.00000407	0.0001474	0.10	0.0992	0.0995	0.0971	0.085 to 0.115	99.2	70 to 130	0.302	20
BA03518	Magnesium, Total	mg/L	-0.000166	0.0462	5.00	5.06	5.06	5.04	4.25 to 5.75	101	70 to 130	0.00	20
BA03518	Lead, Total	mg/L	0.00000412	0.0001474	0.10	0.0939	0.0929	0.0952	0.085 to 0.115	93.9	70 to 130	1.07	20
BA03518	Antimony, Total	mg/L	0.000232	0.00066	0.10	0.0885	0.0908	0.0906	0.085 to 0.115	88.5	70 to 130	2.57	20
BA03516	Iron, Dissolved	mg/L	0.000158	0.0176	0.2	0.702	0.699	0.200	0.17 to 0.23	102	70 to 130	0.428	20
BA03516	Manganese, Dissolved	mg/L	0.0000555	0.0001474	0.10	0.162	0.165	0.0980	0.085 to 0.115	94.8	70 to 130	1.83	20
BA03518	Arsenic, Total	mg/L	0.0000502	0.0001474	0.10	0.102	0.0988	0.101	0.085 to 0.115	102	70 to 130	3.19	20
BA03516	Arsenic, Dissolved	mg/L	0.0000222	0.0001474	0.10	0.112	0.110	0.102	0.085 to 0.115	104	70 to 130	1.80	20
BA03518	Beryllium, Total	mg/L	0.0000240	0.00088	0.10	0.0917	0.0942	0.0956	0.085 to 0.115	91.7	70 to 130	2.69	20
BA03518	Chromium, Total	mg/L	0.0000410	0.00044	0.10	0.0985	0.0966	0.0966	0.085 to 0.115	98.5	70 to 130	1.95	20
BA03518	Sodium, Total	mg/L	-0.000121	0.044	5.00	5.04	5.04	5.05	4.25 to 5.75	101	70 to 130	0.00	20
BA03518	Thallium, Total	mg/L	0.00000234	0.0001474	0.10	0.0956	0.0959	0.0993	0.085 to 0.115	95.6	70 to 130	0.313	20
BA03516	Cadmium, Dissolved	mg/L	-0.00000045	0.0001474	0.10	0.0937	0.0945	0.0967	0.085 to 0.115	93.7	70 to 130	0.850	20
BA03516	Thallium, Dissolved	mg/L	0.00000202	0.0001474	0.10	0.101	0.102	0.0969	0.085 to 0.115	101	70 to 130	0.985	20
BA03518	Molybdenum, Total	mg/L	0.0000148	0.0001474	0.10	0.0968	0.0947	0.0967	0.085 to 0.115	96.8	70 to 130	2.19	20
BA03518	Selenium, Total	mg/L	0.000656	0.00066	0.10	0.102	0.0977	0.101	0.085 to 0.115	102	70 to 130	4.31	20

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified. Ortho-Phosphate was performed outside of the analytical holding time of 48 hours. LBM 3/19/2020

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORAP
Sample Date: 2/18/20 10:55
Customer ID:
Delivery Date: 2/19/20 08:50

Description: Gorgas Ash Pond - GS-AP-MW-8

Laboratory ID Number: BA03513

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA03516	Chromium, Dissolved	mg/L	-0.0000338	0.00044	0.10	0.0958	0.0972	0.0975	0.085 to 0.115	95.8	70 to 130	1.45	20
BA03516	Antimony, Dissolved	mg/L	0.000237	0.00066	0.10	0.0940	0.0943	0.0883	0.085 to 0.115	94.0	70 to 130	0.319	20
BA03518	Aluminum, Total	mg/L	0.00186	0.0088	0.10	0.0948	0.0922	0.0944	0.085 to 0.115	94.8	70 to 130	2.78	20
BA03518	Calcium, Total	mg/L	-0.0111	0.1518	5.00	5.07	5.06	5.05	4.25 to 5.75	101	70 to 130	0.197	20
BA03511	Ortho Phosphate	mg/L as P	0.002	0.015	0.250	0.399	0.403	0.234	0.225 to 0.275	96.8	80 to 120	0.998	10
BA03516	Aluminum, Dissolved	mg/L	0.000594	0.0088	0.10	0.0943	0.0959	0.0941	0.085 to 0.115	94.3	70 to 130	1.68	20
BA03516	Beryllium, Dissolved	mg/L	0.0000631	0.00088	0.10	0.0861	0.0823	0.0870	0.085 to 0.115	86.1	70 to 130	4.51	20
BA03518	Barium, Total	mg/L	-0.00000117	0.0002	0.10	0.0932	0.0923	0.0947	0.085 to 0.115	93.2	70 to 130	0.970	20
BA03518	Cobalt, Total	mg/L	-0.00000218	0.0001474	0.10	0.0994	0.0965	0.0978	0.085 to 0.115	99.4	70 to 130	2.96	20
BA03518	Potassium, Total	mg/L	-0.000899	0.3674	10.0	9.68	9.54	9.63	8.5 to 11.5	96.8	70 to 130	1.46	20
BA03518	Manganese, Total	mg/L	0.00000757	0.0001474	0.10	0.0987	0.0969	0.0965	0.085 to 0.115	98.7	70 to 130	1.84	20
BA03518	Silicon, Total	mg/L	-0.00196	0.044	1.00	1.03	1.03	0.998	0.850 to 1.15	103	70 to 130	0.00	20

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified. Ortho-Phosphate was performed outside of the analytical holding time of 48 hours. LBM 3/19/2020

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 2/18/20 10:55
Customer ID:
Delivery Date: 2/19/20 08:50

Description: Gorgas Ash Pond - GS-AP-MW-8

Laboratory ID Number: BA03513

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA03518	Fluoride	mg/L	0.0141	0.05	2.50	2.56	0.0135	2.55	2.25 to 2.75	102	80 to 120	0.00	20
BA03518	Chloride	mg/L	-0.0221	0.50	10.0	10.2	0.0921	10.1	9 to 11	102	80 to 120	0.00	20
BA03511	Nitrogen, Nitrate/Nitrite	mg/L as N	0.04	0.20	2.00	2.06	0.048	1.88	1.8 to 2.2	103	90 to 110	0.00	15
BA03511	Nitrogen, Nitrite	mg/L as N	0.001	0.20	0.50	0.520	-0.001	0.772	0.675 to 0.825	104	90 to 110	0.00	15
BA03518	Sulfate	mg/L	-0.675	0.50	20.0	18.6	-0.575	19.5	18 to 22	93.0	80 to 120	0.00	20
BA03516	Alkalinity, Total as CaCO3	mg/L					184	51.7	45.0 to 55.0			1.64	10

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified. Ortho-Phosphate was performed outside of the analytical holding time of 48 hours. LBM 3/19/2020

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - GS-AP-MW-12

Location Code: WMWGORAP
Collected: 2/18/20 12:35
Customer ID:
Submittal Date: 2/19/20 08:50

Laboratory ID Number: BA03514

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	2/25/20 13:45	2/26/20 13:16		1.015	0.105	mg/L	0.03	0.1	
* Calcium, Total	2/25/20 13:45	2/26/20 13:56		10.15	51.1	mg/L	1.015	5.075	
Silicon, Total	2/25/20 13:45	2/26/20 13:16		1.015	9.91	mg/L	0.03	0.3	
* Iron, Total	2/25/20 13:45	2/26/20 13:16		1.015	0.514	mg/L	0.02	0.05	
* Lithium, Total	2/25/20 13:45	2/26/20 13:16		1.015	0.0237	mg/L	0.01	0.02	
* Magnesium, Total	2/25/20 13:45	2/26/20 13:16		1.015	13.5	mg/L	0.1	0.5	
Silica, Total (calc.)	2/25/20 13:45	2/26/20 13:16		1	21.2	mg/L			
* Sodium, Total	2/25/20 13:45	2/26/20 13:16		1.015	23.7	mg/L	0.1	0.5	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Iron, Dissolved	2/25/20 13:20	2/26/20 12:41		1.015	0.492	mg/L	0.02	0.05	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	2/19/20 10:30	2/20/20 11:48		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	2/19/20 10:30	2/20/20 11:48		1.015	0.00978	mg/L	0.001	0.005	
* Aluminum, Total	2/19/20 10:35	2/20/20 11:48		1.015	0.0262	mg/L	0.02	0.06	J
* Barium, Total	2/19/20 10:30	2/20/20 11:48		1.015	0.191	mg/L	0.002	0.01	
* Beryllium, Total	2/19/20 10:30	2/20/20 11:48		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	2/19/20 10:30	2/20/20 11:48		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	2/19/20 10:30	2/20/20 11:48		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	2/19/20 10:30	2/20/20 11:48		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	2/19/20 10:30	2/20/20 11:48		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	2/19/20 10:30	2/20/20 11:48		1.015	Not Detected	mg/L	0.002	0.01	U
* Manganese, Total	2/19/20 10:30	2/20/20 11:48		1.015	0.0743	mg/L	0.001	0.005	
* Potassium, Total	2/19/20 10:30	2/20/20 11:48		1.015	1.20	mg/L	0.3	2.5	J
* Selenium, Total	2/19/20 10:30	2/20/20 11:48		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	2/19/20 10:30	2/20/20 11:48		1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	2/19/20 11:15	2/20/20 11:13		1.015	Not Detected	mg/L	0.0008	0.003	U
* Aluminum, Dissolved	2/19/20 11:15	2/20/20 11:13		1.015	Not Detected	mg/L	0.02	0.06	U
* Arsenic, Dissolved	2/19/20 11:15	2/20/20 11:13		1.015	0.00768	mg/L	0.001	0.005	
* Beryllium, Dissolved	2/19/20 11:15	2/20/20 11:13		1.015	Not Detected	mg/L	0.0006	0.003	U

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 3/19/20

Reported: 3/20/2020
Version: 3.1
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - GS-AP-MW-12

Location Code: WMWGORAP
Collected: 2/18/20 12:35
Customer ID:
Submittal Date: 2/19/20 08:50

Laboratory ID Number: BA03514

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Cadmium, Dissolved	2/19/20 11:15	2/20/20 11:13		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Dissolved	2/19/20 11:15	2/20/20 11:13		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Dissolved	2/19/20 11:15	2/20/20 11:13		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Dissolved	2/19/20 11:15	2/20/20 11:13		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Dissolved	2/19/20 11:15	2/20/20 11:13		1.015	Not Detected	mg/L	0.002	0.01	U
* Manganese, Dissolved	2/19/20 11:15	2/20/20 11:13		1.015	0.0691	mg/L	0.001	0.005	
* Selenium, Dissolved	2/19/20 11:15	2/20/20 11:13		1.015	0.00726	mg/L	0.002	0.01	J
* Thallium, Dissolved	2/19/20 11:15	2/20/20 11:13		1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 353.2		***Analyst: CES***							
* Nitrogen, Nitrate/Nitrite	2/20/20 10:22	2/20/20 10:22		1	Not Detected	mg/L as N	0.20	0.3	U
Nitrogen, Nitrate (calc.)	2/20/20 10:22	2/20/20 10:22		1	Not Detected	mg/L as N			U
Nitrogen, Nitrite	2/20/20 09:34	2/20/20 09:34		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B		***Analyst: JAG***							
Alkalinity, Total as CaCO3	2/27/20 13:15	2/27/20 14:00		1	195	mg/L		0.1	
Analytical Method: SM 4500CO2 D		***Analyst: JAG***							
Bicarbonate Alkalinity, (calc.)	2/27/20 13:15	2/27/20 14:00		1	194	mg/L			
Carbonate Alkalinity, (calc.)	2/27/20 13:15	2/27/20 14:00		1	0.83	mg/L			
Analytical Method: SM 4500PF-OP		***Analyst: CES***							
Ortho Phosphate	2/20/20 10:58	2/20/20 10:58		1	0.057	mg/L as P	0.010	0.03	
Analytical Method: SM 5310 B		***Analyst: HRG***							
* Total Organic Carbon	2/25/20 12:42	2/25/20 12:42		1	2.86	mg/L	1.00	2	
Analytical Method: SM4500Cl E		***Analyst: JCC***							
* Chloride	2/21/20 10:40	2/21/20 10:40		1	5.54	mg/L	0.50	1	
Analytical Method: SM4500F G 2017		***Analyst: JCC***							
* Fluoride	2/21/20 13:56	2/21/20 13:56		1	0.155	mg/L	0.05	0.1	
Analytical Method: SM4500SO4 E		***Analyst: JCC***							
* Sulfate	2/20/20 10:46	2/20/20 10:46		1	23.3	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.
LBM 3/19/20

Reported: 3/20/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORAP
Sample Date: 2/18/20 12:35
Customer ID:
Delivery Date: 2/19/20 08:50

Description: Gorgas Ash Pond - GS-AP-MW-12

Laboratory ID Number: BA03514

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA03516	Selenium, Dissolved	mg/L	0.0000876	0.00066	0.10	0.0825	0.0841	0.0982	0.085 to 0.115	77.2	70 to 130	1.92	20
BA03518	Cadmium, Total	mg/L	0.00000366	0.0001474	0.10	0.0942	0.0950	0.0952	0.085 to 0.115	94.2	70 to 130	0.846	20
BA03518	Total Organic Carbon	mg/L	0.530	1.00	10.0	9.00	9.01	9.48	9 to 11	90.0	80 to 120	0.111	20
BA03516	Iron, Dissolved	mg/L	0.000158	0.0176	0.2	0.702	0.699	0.200	0.17 to 0.23	102	70 to 130	0.428	20
BA03516	Manganese, Dissolved	mg/L	0.0000555	0.0001474	0.10	0.162	0.165	0.0980	0.085 to 0.115	94.8	70 to 130	1.83	20
BA03518	Arsenic, Total	mg/L	0.0000502	0.0001474	0.10	0.102	0.0988	0.101	0.085 to 0.115	102	70 to 130	3.19	20
BA03516	Chromium, Dissolved	mg/L	-0.0000338	0.00044	0.10	0.0958	0.0972	0.0975	0.085 to 0.115	95.8	70 to 130	1.45	20
BA03516	Antimony, Dissolved	mg/L	0.000237	0.00066	0.10	0.0940	0.0943	0.0883	0.085 to 0.115	94.0	70 to 130	0.319	20
BA03518	Aluminum, Total	mg/L	0.00186	0.0088	0.10	0.0948	0.0922	0.0944	0.085 to 0.115	94.8	70 to 130	2.78	20
BA03518	Calcium, Total	mg/L	-0.0111	0.1518	5.00	5.07	5.06	5.05	4.25 to 5.75	101	70 to 130	0.197	20
BA03516	Arsenic, Dissolved	mg/L	0.0000222	0.0001474	0.10	0.112	0.110	0.102	0.085 to 0.115	104	70 to 130	1.80	20
BA03518	Beryllium, Total	mg/L	0.0000240	0.00088	0.10	0.0917	0.0942	0.0956	0.085 to 0.115	91.7	70 to 130	2.69	20
BA03518	Chromium, Total	mg/L	0.0000410	0.00044	0.10	0.0985	0.0966	0.0966	0.085 to 0.115	98.5	70 to 130	1.95	20
BA03518	Sodium, Total	mg/L	-0.000121	0.044	5.00	5.04	5.04	5.05	4.25 to 5.75	101	70 to 130	0.00	20
BA03518	Thallium, Total	mg/L	0.00000234	0.0001474	0.10	0.0956	0.0959	0.0993	0.085 to 0.115	95.6	70 to 130	0.313	20
BA03516	Cobalt, Dissolved	mg/L	-0.00000442	0.0001474	0.10	0.0963	0.0968	0.0991	0.085 to 0.115	96.3	70 to 130	0.518	20
BA03516	Lead, Dissolved	mg/L	0.00000378	0.0001474	0.10	0.0972	0.0952	0.0945	0.085 to 0.115	97.2	70 to 130	2.08	20
BA03518	Boron, Total	mg/L	-0.000796	0.0650254	1.00	1.01	1.00	1.00	0.85 to 1.15	101	70 to 130	0.995	20
BA03518	Iron, Total	mg/L	0.00130	0.0176	0.2	0.205	0.200	0.199	0.17 to 0.23	102	70 to 130	2.47	20
BA03518	Lithium, Total	mg/L	-0.0000198	0.0154	0.20	0.198	0.194	0.194	0.17 to 0.23	99.0	70 to 130	2.04	20
BA03516	Cadmium, Dissolved	mg/L	-0.00000045	0.0001474	0.10	0.0937	0.0945	0.0967	0.085 to 0.115	93.7	70 to 130	0.850	20
BA03516	Thallium, Dissolved	mg/L	0.00000202	0.0001474	0.10	0.101	0.102	0.0969	0.085 to 0.115	101	70 to 130	0.985	20
BA03518	Molybdenum, Total	mg/L	0.0000148	0.0001474	0.10	0.0968	0.0947	0.0967	0.085 to 0.115	96.8	70 to 130	2.19	20
BA03518	Selenium, Total	mg/L	0.000656	0.00066	0.10	0.102	0.0977	0.101	0.085 to 0.115	102	70 to 130	4.31	20

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 3/19/20

Reported: 3/20/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORAP
Sample Date: 2/18/20 12:35
Customer ID:
Delivery Date: 2/19/20 08:50

Description: Gorgas Ash Pond - GS-AP-MW-12

Laboratory ID Number: BA03514

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA03516	Molybdenum, Dissolved	mg/L	0.00000407	0.0001474	0.10	0.0992	0.0995	0.0971	0.085 to 0.115	99.2	70 to 130	0.302	20
BA03518	Magnesium, Total	mg/L	-0.000166	0.0462	5.00	5.06	5.06	5.04	4.25 to 5.75	101	70 to 130	0.00	20
BA03518	Lead, Total	mg/L	0.00000412	0.0001474	0.10	0.0939	0.0929	0.0952	0.085 to 0.115	93.9	70 to 130	1.07	20
BA03518	Antimony, Total	mg/L	0.000232	0.00066	0.10	0.0885	0.0908	0.0906	0.085 to 0.115	88.5	70 to 130	2.57	20
BA03511	Ortho Phosphate	mg/L as P	0.002	0.015	0.250	0.399	0.403	0.234	0.225 to 0.275	96.8	80 to 120	0.998	10
BA03516	Aluminum, Dissolved	mg/L	0.000594	0.0088	0.10	0.0943	0.0959	0.0941	0.085 to 0.115	94.3	70 to 130	1.68	20
BA03516	Beryllium, Dissolved	mg/L	0.0000631	0.00088	0.10	0.0861	0.0823	0.0870	0.085 to 0.115	86.1	70 to 130	4.51	20
BA03518	Barium, Total	mg/L	-0.00000117	0.0002	0.10	0.0932	0.0923	0.0947	0.085 to 0.115	93.2	70 to 130	0.970	20
BA03518	Cobalt, Total	mg/L	-0.00000218	0.0001474	0.10	0.0994	0.0965	0.0978	0.085 to 0.115	99.4	70 to 130	2.96	20
BA03518	Potassium, Total	mg/L	-0.000899	0.3674	10.0	9.68	9.54	9.63	8.5 to 11.5	96.8	70 to 130	1.46	20
BA03518	Manganese, Total	mg/L	0.00000757	0.0001474	0.10	0.0987	0.0969	0.0965	0.085 to 0.115	98.7	70 to 130	1.84	20
BA03518	Silicon, Total	mg/L	-0.00196	0.044	1.00	1.03	1.03	0.998	0.850 to 1.15	103	70 to 130	0.00	20

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 3/19/20

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 2/18/20 12:35
Customer ID:
Delivery Date: 2/19/20 08:50

Description: Gorgas Ash Pond - GS-AP-MW-12

Laboratory ID Number: BA03514

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA03518	Fluoride	mg/L	0.0141	0.05	2.50	2.56	0.0135	2.55	2.25 to 2.75	102	80 to 120	0.00	20
BA03511	Nitrogen, Nitrite	mg/L as N	0.001	0.20	0.50	0.520	-0.001	0.772	0.675 to 0.825	104	90 to 110	0.00	15
BA03518	Chloride	mg/L	-0.0221	0.50	10.0	10.2	0.0921	10.1	9 to 11	102	80 to 120	0.00	20
BA03511	Nitrogen, Nitrate/Nitrite	mg/L as N	0.04	0.20	2.00	2.06	0.048	1.88	1.8 to 2.2	103	90 to 110	0.00	15
BA03518	Sulfate	mg/L	-0.675	0.50	20.0	18.6	-0.575	19.5	18 to 22	93.0	80 to 120	0.00	20
BA03516	Alkalinity, Total as CaCO3	mg/L					184	51.7	45.0 to 55.0			1.64	10

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 3/19/20

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - GS-AP-MW-18

Location Code: WMWGORAP
Collected: 2/18/20 15:23
Customer ID:
Submittal Date: 2/19/20 08:50

Laboratory ID Number: BA03515

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	2/25/20 13:45	2/26/20 13:19		1.015	0.399	mg/L	0.03	0.1	
* Calcium, Total	2/25/20 13:45	2/26/20 13:59		10.15	97.7	mg/L	1.015	5.075	
Silicon, Total	2/25/20 13:45	2/26/20 13:19		1.015	7.49	mg/L	0.03	0.3	
* Iron, Total	2/25/20 13:45	2/26/20 13:19		1.015	2.21	mg/L	0.02	0.05	
* Lithium, Total	2/25/20 13:45	2/26/20 13:19		1.015	0.105	mg/L	0.01	0.02	
* Magnesium, Total	2/25/20 13:45	2/26/20 13:19		1.015	21.1	mg/L	0.1	0.5	
Silica, Total (calc.)	2/25/20 13:45	2/26/20 13:19		1	16.0	mg/L			
* Sodium, Total	2/25/20 13:45	2/26/20 13:59		10.15	111	mg/L	1.015	5.075	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Iron, Dissolved	2/25/20 13:20	2/26/20 12:44		1.015	1.13	mg/L	0.02	0.05	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	2/19/20 10:30	2/20/20 11:50		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	2/19/20 10:30	2/20/20 11:50		1.015	0.00634	mg/L	0.001	0.005	
* Aluminum, Total	2/19/20 10:35	2/20/20 11:50		1.015	0.453	mg/L	0.02	0.06	
* Barium, Total	2/19/20 10:30	2/20/20 11:50		1.015	0.0614	mg/L	0.002	0.01	
* Beryllium, Total	2/19/20 10:30	2/20/20 11:50		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	2/19/20 10:30	2/20/20 11:50		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	2/19/20 10:30	2/20/20 11:50		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	2/19/20 10:30	2/20/20 11:50		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	2/19/20 10:30	2/20/20 11:50		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	2/19/20 10:30	2/20/20 11:50		1.015	0.00736	mg/L	0.002	0.01	J
* Manganese, Total	2/19/20 10:30	2/20/20 11:50		1.015	0.402	mg/L	0.001	0.005	
* Potassium, Total	2/19/20 10:30	2/20/20 11:50		1.015	2.38	mg/L	0.3	2.5	J
* Selenium, Total	2/19/20 10:30	2/20/20 11:50		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	2/19/20 10:30	2/20/20 11:50		1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	2/19/20 11:15	2/20/20 11:16		1.015	Not Detected	mg/L	0.0008	0.003	U
* Aluminum, Dissolved	2/19/20 11:15	2/20/20 11:16		1.015	Not Detected	mg/L	0.02	0.06	U
* Arsenic, Dissolved	2/19/20 11:15	2/20/20 11:16		1.015	0.00518	mg/L	0.001	0.005	
* Beryllium, Dissolved	2/19/20 11:15	2/20/20 11:16		1.015	Not Detected	mg/L	0.0006	0.003	U

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 3/19/20

Reported: 3/20/2020
Version: 3.1
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - GS-AP-MW-18

Location Code: WMWGORAP
Collected: 2/18/20 15:23
Customer ID:
Submittal Date: 2/19/20 08:50

Laboratory ID Number: BA03515

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Cadmium, Dissolved	2/19/20 11:15	2/20/20 11:16		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Dissolved	2/19/20 11:15	2/20/20 11:16		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Dissolved	2/19/20 11:15	2/20/20 11:16		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Dissolved	2/19/20 11:15	2/20/20 11:16		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Dissolved	2/19/20 11:15	2/20/20 11:16		1.015	0.00681	mg/L	0.002	0.01	J
* Manganese, Dissolved	2/19/20 11:15	2/20/20 11:16		1.015	0.381	mg/L	0.001	0.005	
* Selenium, Dissolved	2/19/20 11:15	2/20/20 11:16		1.015	0.00751	mg/L	0.002	0.01	J
* Thallium, Dissolved	2/19/20 11:15	2/20/20 11:16		1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 353.2		***Analyst: CES***							
* Nitrogen, Nitrate/Nitrite	2/20/20 10:22	2/20/20 10:22		1	Not Detected	mg/L as N	0.20	0.3	U
Nitrogen, Nitrate (calc.)	2/20/20 10:22	2/20/20 10:22		1	Not Detected	mg/L as N			U
Nitrogen, Nitrite	2/20/20 09:35	2/20/20 09:35		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B		***Analyst: JAG***							
Alkalinity, Total as CaCO3	2/27/20 13:15	2/27/20 14:00		1	292	mg/L		0.1	
Analytical Method: SM 4500CO2 D		***Analyst: JAG***							
Bicarbonate Alkalinity, (calc.)	2/27/20 13:15	2/27/20 14:00		1	291	mg/L			
Carbonate Alkalinity, (calc.)	2/27/20 13:15	2/27/20 14:00		1	1.04	mg/L			
Analytical Method: SM 4500PF-OP		***Analyst: CES***							
Ortho Phosphate	2/20/20 10:59	2/20/20 10:59		1	0.011	mg/L as P	0.010	0.03	J
Analytical Method: SM 5310 B		***Analyst: HRG***							
* Total Organic Carbon	2/25/20 12:54	2/25/20 12:54		1	1.22	mg/L	1.00	2	J
Analytical Method: SM4500Cl E		***Analyst: JCC***							
* Chloride	2/21/20 10:41	2/21/20 10:41		1	4.48	mg/L	0.50	1	
Analytical Method: SM4500F G 2017		***Analyst: JCC***							
* Fluoride	2/21/20 13:57	2/21/20 13:57		1	0.462	mg/L	0.05	0.1	
Analytical Method: SM4500SO4 E		***Analyst: JCC***							
* Sulfate	2/20/20 10:57	2/20/20 10:57		20	205	mg/L	10.00	20	

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 3/19/20

Reported: 3/20/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORAP
Sample Date: 2/18/20 15:23
Customer ID:
Delivery Date: 2/19/20 08:50

Description: Gorgas Ash Pond - GS-AP-MW-18

Laboratory ID Number: BA03515

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA03516	Selenium, Dissolved	mg/L	0.0000876	0.00066	0.10	0.0825	0.0841	0.0982	0.085 to 0.115	77.2	70 to 130	1.92	20
BA03518	Cadmium, Total	mg/L	0.00000366	0.0001474	0.10	0.0942	0.0950	0.0952	0.085 to 0.115	94.2	70 to 130	0.846	20
BA03518	Total Organic Carbon	mg/L	0.530	1.00	10.0	9.00	9.01	9.48	9 to 11	90.0	80 to 120	0.111	20
BA03516	Iron, Dissolved	mg/L	0.000158	0.0176	0.2	0.702	0.699	0.200	0.17 to 0.23	102	70 to 130	0.428	20
BA03516	Manganese, Dissolved	mg/L	0.0000555	0.0001474	0.10	0.162	0.165	0.0980	0.085 to 0.115	94.8	70 to 130	1.83	20
BA03518	Arsenic, Total	mg/L	0.0000502	0.0001474	0.10	0.102	0.0988	0.101	0.085 to 0.115	102	70 to 130	3.19	20
BA03516	Chromium, Dissolved	mg/L	-0.0000338	0.00044	0.10	0.0958	0.0972	0.0975	0.085 to 0.115	95.8	70 to 130	1.45	20
BA03516	Antimony, Dissolved	mg/L	0.000237	0.00066	0.10	0.0940	0.0943	0.0883	0.085 to 0.115	94.0	70 to 130	0.319	20
BA03518	Aluminum, Total	mg/L	0.00186	0.0088	0.10	0.0948	0.0922	0.0944	0.085 to 0.115	94.8	70 to 130	2.78	20
BA03518	Calcium, Total	mg/L	-0.0111	0.1518	5.00	5.07	5.06	5.05	4.25 to 5.75	101	70 to 130	0.197	20
BA03516	Cadmium, Dissolved	mg/L	-0.00000045	0.0001474	0.10	0.0937	0.0945	0.0967	0.085 to 0.115	93.7	70 to 130	0.850	20
BA03516	Thallium, Dissolved	mg/L	0.00000202	0.0001474	0.10	0.101	0.102	0.0969	0.085 to 0.115	101	70 to 130	0.985	20
BA03518	Molybdenum, Total	mg/L	0.0000148	0.0001474	0.10	0.0968	0.0947	0.0967	0.085 to 0.115	96.8	70 to 130	2.19	20
BA03518	Selenium, Total	mg/L	0.000656	0.00066	0.10	0.102	0.0977	0.101	0.085 to 0.115	102	70 to 130	4.31	20
BA03516	Cobalt, Dissolved	mg/L	-0.00000442	0.0001474	0.10	0.0963	0.0968	0.0991	0.085 to 0.115	96.3	70 to 130	0.518	20
BA03516	Lead, Dissolved	mg/L	0.00000378	0.0001474	0.10	0.0972	0.0952	0.0945	0.085 to 0.115	97.2	70 to 130	2.08	20
BA03518	Boron, Total	mg/L	-0.000796	0.0650254	1.00	1.01	1.00	1.00	0.85 to 1.15	101	70 to 130	0.995	20
BA03518	Iron, Total	mg/L	0.00130	0.0176	0.2	0.205	0.200	0.199	0.17 to 0.23	102	70 to 130	2.47	20
BA03518	Lithium, Total	mg/L	-0.0000198	0.0154	0.20	0.198	0.194	0.194	0.17 to 0.23	99.0	70 to 130	2.04	20
BA03516	Molybdenum, Dissolved	mg/L	0.00000407	0.0001474	0.10	0.0992	0.0995	0.0971	0.085 to 0.115	99.2	70 to 130	0.302	20
BA03518	Magnesium, Total	mg/L	-0.000166	0.0462	5.00	5.06	5.06	5.04	4.25 to 5.75	101	70 to 130	0.00	20
BA03518	Lead, Total	mg/L	0.00000412	0.0001474	0.10	0.0939	0.0929	0.0952	0.085 to 0.115	93.9	70 to 130	1.07	20
BA03518	Antimony, Total	mg/L	0.000232	0.00066	0.10	0.0885	0.0908	0.0906	0.085 to 0.115	88.5	70 to 130	2.57	20
BA03516	Arsenic, Dissolved	mg/L	0.0000222	0.0001474	0.10	0.112	0.110	0.102	0.085 to 0.115	104	70 to 130	1.80	20

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 3/19/20

Reported: 3/20/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORAP
Sample Date: 2/18/20 15:23
Customer ID:
Delivery Date: 2/19/20 08:50

Description: Gorgas Ash Pond - GS-AP-MW-18

Laboratory ID Number: BA03515

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA03518	Beryllium, Total	mg/L	0.0000240	0.00088	0.10	0.0917	0.0942	0.0956	0.085 to 0.115	91.7	70 to 130	2.69	20
BA03518	Chromium, Total	mg/L	0.0000410	0.00044	0.10	0.0985	0.0966	0.0966	0.085 to 0.115	98.5	70 to 130	1.95	20
BA03518	Sodium, Total	mg/L	-0.000121	0.044	5.00	5.04	5.04	5.05	4.25 to 5.75	101	70 to 130	0.00	20
BA03518	Thallium, Total	mg/L	0.00000234	0.0001474	0.10	0.0956	0.0959	0.0993	0.085 to 0.115	95.6	70 to 130	0.313	20
BA03511	Ortho Phosphate	mg/L as P	0.002	0.015	0.250	0.399	0.403	0.234	0.225 to 0.275	96.8	80 to 120	0.998	10
BA03516	Aluminum, Dissolved	mg/L	0.000594	0.0088	0.10	0.0943	0.0959	0.0941	0.085 to 0.115	94.3	70 to 130	1.68	20
BA03516	Beryllium, Dissolved	mg/L	0.0000631	0.00088	0.10	0.0861	0.0823	0.0870	0.085 to 0.115	86.1	70 to 130	4.51	20
BA03518	Barium, Total	mg/L	-0.00000117	0.0002	0.10	0.0932	0.0923	0.0947	0.085 to 0.115	93.2	70 to 130	0.970	20
BA03518	Cobalt, Total	mg/L	-0.00000218	0.0001474	0.10	0.0994	0.0965	0.0978	0.085 to 0.115	99.4	70 to 130	2.96	20
BA03518	Potassium, Total	mg/L	-0.000899	0.3674	10.0	9.68	9.54	9.63	8.5 to 11.5	96.8	70 to 130	1.46	20
BA03518	Manganese, Total	mg/L	0.00000757	0.0001474	0.10	0.0987	0.0969	0.0965	0.085 to 0.115	98.7	70 to 130	1.84	20
BA03518	Silicon, Total	mg/L	-0.00196	0.044	1.00	1.03	1.03	0.998	0.850 to 1.15	103	70 to 130	0.00	20

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 3/19/20

Reported: 3/20/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 2/18/20 15:23
Customer ID:
Delivery Date: 2/19/20 08:50

Description: Gorgas Ash Pond - GS-AP-MW-18

Laboratory ID Number: BA03515

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA03518	Fluoride	mg/L	0.0141	0.05	2.50	2.56	0.0135	2.55	2.25 to 2.75	102	80 to 120	0.00	20
BA03518	Sulfate	mg/L	-0.675	0.50	20.0	18.6	-0.575	19.5	18 to 22	93.0	80 to 120	0.00	20
BA03518	Chloride	mg/L	-0.0221	0.50	10.0	10.2	0.0921	10.1	9 to 11	102	80 to 120	0.00	20
BA03511	Nitrogen, Nitrate/Nitrite	mg/L as N	0.04	0.20	2.00	2.06	0.048	1.88	1.8 to 2.2	103	90 to 110	0.00	15
BA03511	Nitrogen, Nitrite	mg/L as N	0.001	0.20	0.50	0.520	-0.001	0.772	0.675 to 0.825	104	90 to 110	0.00	15
BA03516	Alkalinity, Total as CaCO3	mg/L					184	51.7	45.0 to 55.0			1.64	10

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 3/19/20

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - GS-AP-MW-12 DUP

Location Code: WMWGORAP
Collected: 2/18/20 12:35
Customer ID:
Submittal Date: 2/19/20 08:50

Laboratory ID Number: BA03516

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	2/25/20 13:45	2/26/20 13:22		1.015	0.106	mg/L	0.03	0.1	
* Calcium, Total	2/25/20 13:45	2/26/20 14:02		10.15	56.6	mg/L	1.015	5.075	
Silicon, Total	2/25/20 13:45	2/26/20 13:22		1.015	10.1	mg/L	0.03	0.3	
* Iron, Total	2/25/20 13:45	2/26/20 13:22		1.015	0.527	mg/L	0.02	0.05	
* Lithium, Total	2/25/20 13:45	2/26/20 13:22		1.015	0.0239	mg/L	0.01	0.02	
* Magnesium, Total	2/25/20 13:45	2/26/20 13:22		1.015	13.6	mg/L	0.1	0.5	
Silica, Total (calc.)	2/25/20 13:45	2/26/20 13:22		1	21.6	mg/L			
* Sodium, Total	2/25/20 13:45	2/26/20 13:22		1.015	23.9	mg/L	0.1	0.5	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Iron, Dissolved	2/25/20 13:20	2/26/20 12:47		1.015	0.499	mg/L	0.02	0.05	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	2/19/20 10:30	2/20/20 11:53		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	2/19/20 10:30	2/20/20 11:53		1.015	0.0101	mg/L	0.001	0.005	
* Aluminum, Total	2/19/20 10:35	2/20/20 11:53		1.015	Not Detected	mg/L	0.02	0.06	U
* Barium, Total	2/19/20 10:30	2/20/20 11:53		1.015	0.190	mg/L	0.002	0.01	
* Beryllium, Total	2/19/20 10:30	2/20/20 11:53		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	2/19/20 10:30	2/20/20 11:53		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	2/19/20 10:30	2/20/20 11:53		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	2/19/20 10:30	2/20/20 11:53		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	2/19/20 10:30	2/20/20 11:53		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	2/19/20 10:30	2/20/20 11:53		1.015	Not Detected	mg/L	0.002	0.01	U
* Manganese, Total	2/19/20 10:30	2/20/20 11:53		1.015	0.0754	mg/L	0.001	0.005	
* Potassium, Total	2/19/20 10:30	2/20/20 11:53		1.015	1.19	mg/L	0.3	2.5	J
* Selenium, Total	2/19/20 10:30	2/20/20 11:53		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	2/19/20 10:30	2/20/20 11:53		1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	2/19/20 11:15	2/20/20 11:19		1.015	Not Detected	mg/L	0.0008	0.003	U
* Aluminum, Dissolved	2/19/20 11:15	2/20/20 11:19		1.015	Not Detected	mg/L	0.02	0.06	U
* Arsenic, Dissolved	2/19/20 11:15	2/20/20 11:19		1.015	0.00760	mg/L	0.001	0.005	
* Beryllium, Dissolved	2/19/20 11:15	2/20/20 11:19		1.015	Not Detected	mg/L	0.0006	0.003	U

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 3/19/20

Reported: 3/20/2020
Version: 3.1
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - GS-AP-MW-12 DUP

Location Code: WMWGORAP
Collected: 2/18/20 12:35
Customer ID:
Submittal Date: 2/19/20 08:50

Laboratory ID Number: BA03516

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Cadmium, Dissolved	2/19/20 11:15	2/20/20 11:19		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Dissolved	2/19/20 11:15	2/20/20 11:19		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Dissolved	2/19/20 11:15	2/20/20 11:19		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Dissolved	2/19/20 11:15	2/20/20 11:19		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Dissolved	2/19/20 11:15	2/20/20 11:19		1.015	Not Detected	mg/L	0.002	0.01	U
* Manganese, Dissolved	2/19/20 11:15	2/20/20 11:19		1.015	0.0672	mg/L	0.001	0.005	
* Selenium, Dissolved	2/19/20 11:15	2/20/20 11:19		1.015	0.00532	mg/L	0.002	0.01	J
* Thallium, Dissolved	2/19/20 11:15	2/20/20 11:19		1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 353.2		***Analyst: CES***							
* Nitrogen, Nitrate/Nitrite	2/20/20 10:23	2/20/20 10:23		1	Not Detected	mg/L as N	0.20	0.3	U
Nitrogen, Nitrate (calc.)	2/20/20 10:23	2/20/20 10:23		1	Not Detected	mg/L as N			U
Nitrogen, Nitrite	2/20/20 09:37	2/20/20 09:37		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B		***Analyst: JAG***							
Alkalinity, Total as CaCO3	2/27/20 13:15	2/27/20 14:00		1	181	mg/L		0.1	
Analytical Method: SM 4500CO2 D		***Analyst: JAG***							
Bicarbonate Alkalinity, (calc.)	2/27/20 13:15	2/27/20 14:00		1	180	mg/L			
Carbonate Alkalinity, (calc.)	2/27/20 13:15	2/27/20 14:00		1	0.64	mg/L			
Analytical Method: SM 4500PF-OP		***Analyst: CES***							
Ortho Phosphate	2/20/20 11:00	2/20/20 11:00		1	0.057	mg/L as P	0.010	0.03	
Analytical Method: SM 5310 B		***Analyst: HRG***							
* Total Organic Carbon	2/25/20 13:06	2/25/20 13:06		1	3.05	mg/L	1.00	2	
Analytical Method: SM4500Cl E		***Analyst: JCC***							
* Chloride	2/21/20 10:43	2/21/20 10:43		1	5.64	mg/L	0.50	1	
Analytical Method: SM4500F G 2017		***Analyst: JCC***							
* Fluoride	2/21/20 13:58	2/21/20 13:58		1	0.159	mg/L	0.05	0.1	
Analytical Method: SM4500SO4 E		***Analyst: JCC***							
* Sulfate	2/20/20 10:48	2/20/20 10:48		1	23.8	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.
LBM 3/19/20

Reported: 3/20/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORAP
Sample Date: 2/18/20 12:35
Customer ID:
Delivery Date: 2/19/20 08:50

Description: Gorgas Ash Pond - GS-AP-MW-12 DUP

Laboratory ID Number: BA03516

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA03516	Selenium, Dissolved	mg/L	0.0000876	0.00066	0.10	0.0825	0.0841	0.0982	0.085 to 0.115	77.2	70 to 130	1.92	20
BA03518	Cadmium, Total	mg/L	0.00000366	0.0001474	0.10	0.0942	0.0950	0.0952	0.085 to 0.115	94.2	70 to 130	0.846	20
BA03518	Total Organic Carbon	mg/L	0.530	1.00	10.0	9.00	9.01	9.48	9 to 11	90.0	80 to 120	0.111	20
BA03516	Iron, Dissolved	mg/L	0.000158	0.0176	0.2	0.702	0.699	0.200	0.17 to 0.23	102	70 to 130	0.428	20
BA03516	Manganese, Dissolved	mg/L	0.0000555	0.0001474	0.10	0.162	0.165	0.0980	0.085 to 0.115	94.8	70 to 130	1.83	20
BA03518	Arsenic, Total	mg/L	0.0000502	0.0001474	0.10	0.102	0.0988	0.101	0.085 to 0.115	102	70 to 130	3.19	20
BA03516	Cobalt, Dissolved	mg/L	-0.00000442	0.0001474	0.10	0.0963	0.0968	0.0991	0.085 to 0.115	96.3	70 to 130	0.518	20
BA03516	Lead, Dissolved	mg/L	0.00000378	0.0001474	0.10	0.0972	0.0952	0.0945	0.085 to 0.115	97.2	70 to 130	2.08	20
BA03518	Boron, Total	mg/L	-0.000796	0.0650254	1.00	1.01	1.00	1.00	0.85 to 1.15	101	70 to 130	0.995	20
BA03518	Iron, Total	mg/L	0.00130	0.0176	0.2	0.205	0.200	0.199	0.17 to 0.23	102	70 to 130	2.47	20
BA03518	Lithium, Total	mg/L	-0.0000198	0.0154	0.20	0.198	0.194	0.194	0.17 to 0.23	99.0	70 to 130	2.04	20
BA03516	Molybdenum, Dissolved	mg/L	0.00000407	0.0001474	0.10	0.0992	0.0995	0.0971	0.085 to 0.115	99.2	70 to 130	0.302	20
BA03518	Magnesium, Total	mg/L	-0.000166	0.0462	5.00	5.06	5.06	5.04	4.25 to 5.75	101	70 to 130	0.00	20
BA03518	Lead, Total	mg/L	0.00000412	0.0001474	0.10	0.0939	0.0929	0.0952	0.085 to 0.115	93.9	70 to 130	1.07	20
BA03518	Antimony, Total	mg/L	0.000232	0.00066	0.10	0.0885	0.0908	0.0906	0.085 to 0.115	88.5	70 to 130	2.57	20
BA03516	Cadmium, Dissolved	mg/L	-0.00000045	0.0001474	0.10	0.0937	0.0945	0.0967	0.085 to 0.115	93.7	70 to 130	0.850	20
BA03516	Thallium, Dissolved	mg/L	0.00000202	0.0001474	0.10	0.101	0.102	0.0969	0.085 to 0.115	101	70 to 130	0.985	20
BA03518	Molybdenum, Total	mg/L	0.0000148	0.0001474	0.10	0.0968	0.0947	0.0967	0.085 to 0.115	96.8	70 to 130	2.19	20
BA03518	Selenium, Total	mg/L	0.000656	0.00066	0.10	0.102	0.0977	0.101	0.085 to 0.115	102	70 to 130	4.31	20
BA03516	Arsenic, Dissolved	mg/L	0.0000222	0.0001474	0.10	0.112	0.110	0.102	0.085 to 0.115	104	70 to 130	1.80	20
BA03518	Beryllium, Total	mg/L	0.0000240	0.00088	0.10	0.0917	0.0942	0.0956	0.085 to 0.115	91.7	70 to 130	2.69	20
BA03518	Chromium, Total	mg/L	0.0000410	0.00044	0.10	0.0985	0.0966	0.0966	0.085 to 0.115	98.5	70 to 130	1.95	20
BA03518	Sodium, Total	mg/L	-0.000121	0.044	5.00	5.04	5.04	5.05	4.25 to 5.75	101	70 to 130	0.00	20
BA03518	Thallium, Total	mg/L	0.00000234	0.0001474	0.10	0.0956	0.0959	0.0993	0.085 to 0.115	95.6	70 to 130	0.313	20

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 3/19/20

Reported: 3/20/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORAP
Sample Date: 2/18/20 12:35
Customer ID:
Delivery Date: 2/19/20 08:50

Description: Gorgas Ash Pond - GS-AP-MW-12 DUP

Laboratory ID Number: BA03516

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA03516	Chromium, Dissolved	mg/L	-0.0000338	0.00044	0.10	0.0958	0.0972	0.0975	0.085 to 0.115	95.8	70 to 130	1.45	20
BA03516	Antimony, Dissolved	mg/L	0.000237	0.00066	0.10	0.0940	0.0943	0.0883	0.085 to 0.115	94.0	70 to 130	0.319	20
BA03518	Aluminum, Total	mg/L	0.00186	0.0088	0.10	0.0948	0.0922	0.0944	0.085 to 0.115	94.8	70 to 130	2.78	20
BA03518	Calcium, Total	mg/L	-0.0111	0.1518	5.00	5.07	5.06	5.05	4.25 to 5.75	101	70 to 130	0.197	20
BA03511	Ortho Phosphate	mg/L as P	0.002	0.015	0.250	0.399	0.403	0.234	0.225 to 0.275	96.8	80 to 120	0.998	10
BA03516	Aluminum, Dissolved	mg/L	0.000594	0.0088	0.10	0.0943	0.0959	0.0941	0.085 to 0.115	94.3	70 to 130	1.68	20
BA03516	Beryllium, Dissolved	mg/L	0.0000631	0.00088	0.10	0.0861	0.0823	0.0870	0.085 to 0.115	86.1	70 to 130	4.51	20
BA03518	Barium, Total	mg/L	-0.00000117	0.0002	0.10	0.0932	0.0923	0.0947	0.085 to 0.115	93.2	70 to 130	0.970	20
BA03518	Cobalt, Total	mg/L	-0.00000218	0.0001474	0.10	0.0994	0.0965	0.0978	0.085 to 0.115	99.4	70 to 130	2.96	20
BA03518	Potassium, Total	mg/L	-0.000899	0.3674	10.0	9.68	9.54	9.63	8.5 to 11.5	96.8	70 to 130	1.46	20
BA03518	Manganese, Total	mg/L	0.00000757	0.0001474	0.10	0.0987	0.0969	0.0965	0.085 to 0.115	98.7	70 to 130	1.84	20
BA03518	Silicon, Total	mg/L	-0.00196	0.044	1.00	1.03	1.03	0.998	0.850 to 1.15	103	70 to 130	0.00	20

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 3/19/20

Reported: 3/20/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 2/18/20 12:35
Customer ID:
Delivery Date: 2/19/20 08:50

Description: Gorgas Ash Pond - GS-AP-MW-12 DUP

Laboratory ID Number: BA03516

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA03518	Fluoride	mg/L	0.0141	0.05	2.50	2.56	0.0135	2.55	2.25 to 2.75	102	80 to 120	0.00	20
BA03518	Sulfate	mg/L	-0.675	0.50	20.0	18.6	-0.575	19.5	18 to 22	93.0	80 to 120	0.00	20
BA03511	Nitrogen, Nitrate/Nitrite	mg/L as N	0.04	0.20	2.00	2.06	0.048	1.88	1.8 to 2.2	103	90 to 110	0.00	15
BA03518	Chloride	mg/L	-0.0221	0.50	10.0	10.2	0.0921	10.1	9 to 11	102	80 to 120	0.00	20
BA03511	Nitrogen, Nitrite	mg/L as N	0.001	0.20	0.50	0.520	-0.001	0.772	0.675 to 0.825	104	90 to 110	0.00	15
BA03516	Alkalinity, Total as CaCO3	mg/L					184	51.7	45.0 to 55.0			1.64	10

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.
LBM 3/19/20

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond Field Blank

Location Code: WMWGORAPFB
Collected: 2/18/20 11:44
Customer ID:
Submittal Date: 2/19/20 08:50

Laboratory ID Number: BA03517

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	2/25/20 13:45	2/26/20 13:25		1.015	Not Detected	mg/L	0.03	0.1	U
* Calcium, Total	2/25/20 13:45	2/26/20 13:25		1.015	Not Detected	mg/L	0.1	0.5	U
Silicon, Total	2/25/20 13:45	2/26/20 13:25		1.015	Not Detected	mg/L	0.03	0.3	U
* Iron, Total	2/25/20 13:45	2/26/20 13:25		1.015	Not Detected	mg/L	0.02	0.05	U
* Lithium, Total	2/25/20 13:45	2/26/20 13:25		1.015	Not Detected	mg/L	0.01	0.02	U
* Magnesium, Total	2/25/20 13:45	2/26/20 13:25		1.015	Not Detected	mg/L	0.1	0.5	U
Silica, Total (calc.)	2/25/20 13:45	2/26/20 13:25		1	Not Detected	mg/L			U
* Sodium, Total	2/25/20 13:45	2/26/20 13:25		1.015	Not Detected	mg/L	0.1	0.5	U
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	2/19/20 10:30	2/20/20 11:56		1.015	Not Detected	mg/L	0.0008	0.003	U
* Aluminum, Total	2/19/20 10:35	2/20/20 11:56		1.015	Not Detected	mg/L	0.02	0.06	U
* Arsenic, Total	2/19/20 10:30	2/20/20 11:56		1.015	Not Detected	mg/L	0.001	0.005	U
* Barium, Total	2/19/20 10:30	2/20/20 11:56		1.015	Not Detected	mg/L	0.002	0.01	U
* Beryllium, Total	2/19/20 10:30	2/20/20 11:56		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	2/19/20 10:30	2/20/20 11:56		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	2/19/20 10:30	2/20/20 11:56		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	2/19/20 10:30	2/20/20 11:56		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	2/19/20 10:30	2/20/20 11:56		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	2/19/20 10:30	2/20/20 11:56		1.015	Not Detected	mg/L	0.002	0.01	U
* Manganese, Total	2/19/20 10:30	2/20/20 11:56		1.015	Not Detected	mg/L	0.001	0.005	U
* Potassium, Total	2/19/20 10:30	2/20/20 11:56		1.015	Not Detected	mg/L	0.3	2.5	U
* Selenium, Total	2/19/20 10:30	2/20/20 11:56		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	2/19/20 10:30	2/20/20 11:56		1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 353.2	***Analyst: CES***								
* Nitrogen, Nitrate/Nitrite	2/20/20 10:24	2/20/20 10:24		1	Not Detected	mg/L as N	0.20	0.3	U
Nitrogen, Nitrate (calc.)	2/20/20 10:24	2/20/20 10:24		1	Not Detected	mg/L as N			U
Nitrogen, Nitrite	2/20/20 09:39	2/20/20 09:39		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 4500PF-OP	***Analyst: CES***								
Ortho Phosphate	2/20/20 11:01	2/20/20 11:01		1	Not Detected	mg/L as P	0.010	0.03	U

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

Comments:

Reported: 3/20/2020
Version: 3.1
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond Field Blank

Location Code: WMWGORAPFB
Collected: 2/18/20 11:44
Customer ID:
Submittal Date: 2/19/20 08:50

Laboratory ID Number: BA03517

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 5310 B		***Analyst: HRG***							
* Total Organic Carbon	2/25/20 13:17	2/25/20 13:17		1	Not Detected	mg/L	1.00	2	U
Analytical Method: SM4500Cl E		***Analyst: JCC***							
* Chloride	2/21/20 10:44	2/21/20 10:44		1	Not Detected	mg/L	0.50	1	U
Analytical Method: SM4500F G 2017		***Analyst: JCC***							
* Fluoride	2/21/20 14:00	2/21/20 14:00		1	Not Detected	mg/L	0.05	0.1	U
Analytical Method: SM4500SO4 E		***Analyst: JCC***							
* Sulfate	2/20/20 10:50	2/20/20 10:50		1	Not Detected	mg/L	0.50	1	U

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

Comments:

Reported: 3/20/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORAPFB
Sample Date: 2/18/20 11:44
Customer ID:
Delivery Date: 2/19/20 08:50

Description: Gorgas Ash Pond Field Blank

Laboratory ID Number: BA03517

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA03518	Arsenic, Total	mg/L	0.0000502	0.0001474	0.10	0.102	0.0988	0.101	0.085 to 0.115	102	70 to 130	3.19	20
BA03518	Molybdenum, Total	mg/L	0.0000148	0.0001474	0.10	0.0968	0.0947	0.0967	0.085 to 0.115	96.8	70 to 130	2.19	20
BA03518	Selenium, Total	mg/L	0.000656	0.00066	0.10	0.102	0.0977	0.101	0.085 to 0.115	102	70 to 130	4.31	20
BA03518	Cadmium, Total	mg/L	0.00000366	0.0001474	0.10	0.0942	0.0950	0.0952	0.085 to 0.115	94.2	70 to 130	0.846	20
BA03518	Total Organic Carbon	mg/L	0.530	1.00	10.0	9.00	9.01	9.48	9 to 11	90.0	80 to 120	0.111	20
BA03518	Magnesium, Total	mg/L	-0.000166	0.0462	5.00	5.06	5.06	5.04	4.25 to 5.75	101	70 to 130	0.00	20
BA03518	Lead, Total	mg/L	0.00000412	0.0001474	0.10	0.0939	0.0929	0.0952	0.085 to 0.115	93.9	70 to 130	1.07	20
BA03518	Antimony, Total	mg/L	0.000232	0.00066	0.10	0.0885	0.0908	0.0906	0.085 to 0.115	88.5	70 to 130	2.57	20
BA03518	Boron, Total	mg/L	-0.000796	0.0650254	1.00	1.01	1.00	1.00	0.85 to 1.15	101	70 to 130	0.995	20
BA03518	Iron, Total	mg/L	0.00130	0.0176	0.2	0.205	0.200	0.199	0.17 to 0.23	102	70 to 130	2.47	20
BA03518	Lithium, Total	mg/L	-0.0000198	0.0154	0.20	0.198	0.194	0.194	0.17 to 0.23	99.0	70 to 130	2.04	20
BA03518	Beryllium, Total	mg/L	0.0000240	0.00088	0.10	0.0917	0.0942	0.0956	0.085 to 0.115	91.7	70 to 130	2.69	20
BA03518	Chromium, Total	mg/L	0.0000410	0.00044	0.10	0.0985	0.0966	0.0966	0.085 to 0.115	98.5	70 to 130	1.95	20
BA03518	Sodium, Total	mg/L	-0.000121	0.044	5.00	5.04	5.04	5.05	4.25 to 5.75	101	70 to 130	0.00	20
BA03518	Thallium, Total	mg/L	0.00000234	0.0001474	0.10	0.0956	0.0959	0.0993	0.085 to 0.115	95.6	70 to 130	0.313	20
BA03518	Aluminum, Total	mg/L	0.00186	0.0088	0.10	0.0948	0.0922	0.0944	0.085 to 0.115	94.8	70 to 130	2.78	20
BA03518	Calcium, Total	mg/L	-0.0111	0.1518	5.00	5.07	5.06	5.05	4.25 to 5.75	101	70 to 130	0.197	20
BA03511	Ortho Phosphate	mg/L as P	0.002	0.015	0.250	0.399	0.403	0.234	0.225 to 0.275	96.8	80 to 120	0.998	10
BA03518	Barium, Total	mg/L	-0.00000117	0.0002	0.10	0.0932	0.0923	0.0947	0.085 to 0.115	93.2	70 to 130	0.970	20
BA03518	Cobalt, Total	mg/L	-0.00000218	0.0001474	0.10	0.0994	0.0965	0.0978	0.085 to 0.115	99.4	70 to 130	2.96	20
BA03518	Potassium, Total	mg/L	-0.000899	0.3674	10.0	9.68	9.54	9.63	8.5 to 11.5	96.8	70 to 130	1.46	20
BA03518	Manganese, Total	mg/L	0.00000757	0.0001474	0.10	0.0987	0.0969	0.0965	0.085 to 0.115	98.7	70 to 130	1.84	20
BA03518	Silicon, Total	mg/L	-0.00196	0.044	1.00	1.03	1.03	0.998	0.850 to 1.15	103	70 to 130	0.00	20

Comments:

Reported: 3/20/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Customer Account: WMWGORAPFB
Sample Date: 2/18/20 11:44
Customer ID:
Delivery Date: 2/19/20 08:50

Description: Gorgas Ash Pond Field Blank

Laboratory ID Number: BA03517

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA03518	Fluoride	mg/L	0.0141	0.05	2.50	2.56	0.0135	2.55	2.25 to 2.75	102	80 to 120	0.00	20
BA03518	Chloride	mg/L	-0.0221	0.50	10.0	10.2	0.0921	10.1	9 to 11	102	80 to 120	0.00	20
BA03511	Nitrogen, Nitrite	mg/L as N	0.001	0.20	0.50	0.520	-0.001	0.772	0.675 to 0.825	104	90 to 110	0.00	15
BA03511	Nitrogen, Nitrate/Nitrite	mg/L as N	0.04	0.20	2.00	2.06	0.048	1.88	1.8 to 2.2	103	90 to 110	0.00	15
BA03518	Sulfate	mg/L	-0.675	0.50	20.0	18.6	-0.575	19.5	18 to 22	93.0	80 to 120	0.00	20

Comments:

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond Equipment Blank

Location Code: WMWGORAPEB
Collected: 2/18/20 11:36
Customer ID:
Submittal Date: 2/19/20 08:50

Laboratory ID Number: BA03518

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	2/25/20 13:45	2/26/20 13:28		1.015	Not Detected	mg/L	0.03	0.1	U
* Calcium, Total	2/25/20 13:45	2/26/20 13:28		1.015	Not Detected	mg/L	0.1	0.5	U
Silicon, Total	2/25/20 13:45	2/26/20 13:28		1.015	Not Detected	mg/L	0.03	0.3	U
* Iron, Total	2/25/20 13:45	2/26/20 13:28		1.015	Not Detected	mg/L	0.02	0.05	U
* Lithium, Total	2/25/20 13:45	2/26/20 13:28		1.015	Not Detected	mg/L	0.01	0.02	U
* Magnesium, Total	2/25/20 13:45	2/26/20 13:28		1.015	Not Detected	mg/L	0.1	0.5	U
Silica, Total (calc.)	2/25/20 13:45	2/26/20 13:28		1	Not Detected	mg/L			U
* Sodium, Total	2/25/20 13:45	2/26/20 13:28		1.015	Not Detected	mg/L	0.1	0.5	U
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	2/19/20 10:30	2/20/20 11:59		1.015	Not Detected	mg/L	0.0008	0.003	U
* Aluminum, Total	2/19/20 10:35	2/20/20 11:59		1.015	Not Detected	mg/L	0.02	0.06	U
* Arsenic, Total	2/19/20 10:30	2/20/20 11:59		1.015	Not Detected	mg/L	0.001	0.005	U
* Barium, Total	2/19/20 10:30	2/20/20 11:59		1.015	Not Detected	mg/L	0.002	0.01	U
* Beryllium, Total	2/19/20 10:30	2/20/20 11:59		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	2/19/20 10:30	2/20/20 11:59		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	2/19/20 10:30	2/20/20 11:59		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	2/19/20 10:30	2/20/20 11:59		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	2/19/20 10:30	2/20/20 11:59		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	2/19/20 10:30	2/20/20 11:59		1.015	Not Detected	mg/L	0.002	0.01	U
* Manganese, Total	2/19/20 10:30	2/20/20 11:59		1.015	Not Detected	mg/L	0.001	0.005	U
* Potassium, Total	2/19/20 10:30	2/20/20 11:59		1.015	Not Detected	mg/L	0.3	2.5	U
* Selenium, Total	2/19/20 10:30	2/20/20 11:59		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	2/19/20 10:30	2/20/20 11:59		1.015	Not Detected	mg/L	0.0002	0.001	U
Analytical Method: EPA 353.2	***Analyst: CES***								
* Nitrogen, Nitrate/Nitrite	2/20/20 10:25	2/20/20 10:25		1	Not Detected	mg/L as N	0.20	0.3	U
Nitrogen, Nitrate (calc.)	2/20/20 10:25	2/20/20 10:25		1	Not Detected	mg/L as N			U
Nitrogen, Nitrite	2/20/20 09:41	2/20/20 09:41		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 4500PF-OP	***Analyst: CES***								
Ortho Phosphate	2/20/20 11:02	2/20/20 11:02		1	Not Detected	mg/L as P	0.010	0.03	U

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

Comments:

Reported: 3/20/2020
Version: 3.1
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond Equipment Blank

Location Code: WMWGORAPEB
Collected: 2/18/20 11:36
Customer ID:
Submittal Date: 2/19/20 08:50

Laboratory ID Number: BA03518

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 5310 B		***Analyst: HRG***							
* Total Organic Carbon	2/25/20 13:29	2/25/20 13:29		1	Not Detected	mg/L	1.00	2	U
Analytical Method: SM4500Cl E		***Analyst: JCC***							
* Chloride	2/21/20 10:45	2/21/20 10:45		1	Not Detected	mg/L	0.50	1	U
Analytical Method: SM4500F G 2017		***Analyst: JCC***							
* Fluoride	2/21/20 14:01	2/21/20 14:01		1	Not Detected	mg/L	0.05	0.1	U
Analytical Method: SM4500SO4 E		***Analyst: JCC***							
* Sulfate	2/20/20 10:51	2/20/20 10:51		1	Not Detected	mg/L	0.50	1	U

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

Comments:

Reported: 3/20/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORAPEB
Sample Date: 2/18/20 11:36
Customer ID:
Delivery Date: 2/19/20 08:50

Description: Gorgas Ash Pond Equipment Blank

Laboratory ID Number: BA03518

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA03518	Arsenic, Total	mg/L	0.0000502	0.0001474	0.10	0.102	0.0988	0.101	0.085 to 0.115	102	70 to 130	3.19	20
BA03518	Cadmium, Total	mg/L	0.00000366	0.0001474	0.10	0.0942	0.0950	0.0952	0.085 to 0.115	94.2	70 to 130	0.846	20
BA03518	Total Organic Carbon	mg/L	0.530	1.00	10.0	9.00	9.01	9.48	9 to 11	90.0	80 to 120	0.111	20
BA03518	Boron, Total	mg/L	-0.000796	0.0650254	1.00	1.01	1.00	1.00	0.85 to 1.15	101	70 to 130	0.995	20
BA03518	Iron, Total	mg/L	0.00130	0.0176	0.2	0.205	0.200	0.199	0.17 to 0.23	102	70 to 130	2.47	20
BA03518	Lithium, Total	mg/L	-0.0000198	0.0154	0.20	0.198	0.194	0.194	0.17 to 0.23	99.0	70 to 130	2.04	20
BA03518	Aluminum, Total	mg/L	0.00186	0.0088	0.10	0.0948	0.0922	0.0944	0.085 to 0.115	94.8	70 to 130	2.78	20
BA03518	Calcium, Total	mg/L	-0.0111	0.1518	5.00	5.07	5.06	5.05	4.25 to 5.75	101	70 to 130	0.197	20
BA03518	Magnesium, Total	mg/L	-0.000166	0.0462	5.00	5.06	5.06	5.04	4.25 to 5.75	101	70 to 130	0.00	20
BA03518	Lead, Total	mg/L	0.00000412	0.0001474	0.10	0.0939	0.0929	0.0952	0.085 to 0.115	93.9	70 to 130	1.07	20
BA03518	Antimony, Total	mg/L	0.000232	0.00066	0.10	0.0885	0.0908	0.0906	0.085 to 0.115	88.5	70 to 130	2.57	20
BA03518	Beryllium, Total	mg/L	0.0000240	0.00088	0.10	0.0917	0.0942	0.0956	0.085 to 0.115	91.7	70 to 130	2.69	20
BA03518	Chromium, Total	mg/L	0.0000410	0.00044	0.10	0.0985	0.0966	0.0966	0.085 to 0.115	98.5	70 to 130	1.95	20
BA03518	Sodium, Total	mg/L	-0.000121	0.044	5.00	5.04	5.04	5.05	4.25 to 5.75	101	70 to 130	0.00	20
BA03518	Thallium, Total	mg/L	0.00000234	0.0001474	0.10	0.0956	0.0959	0.0993	0.085 to 0.115	95.6	70 to 130	0.313	20
BA03518	Molybdenum, Total	mg/L	0.0000148	0.0001474	0.10	0.0968	0.0947	0.0967	0.085 to 0.115	96.8	70 to 130	2.19	20
BA03518	Selenium, Total	mg/L	0.000656	0.00066	0.10	0.102	0.0977	0.101	0.085 to 0.115	102	70 to 130	4.31	20
BA03511	Ortho Phosphate	mg/L as P	0.002	0.015	0.250	0.399	0.403	0.234	0.225 to 0.275	96.8	80 to 120	0.998	10
BA03518	Barium, Total	mg/L	-0.00000117	0.0002	0.10	0.0932	0.0923	0.0947	0.085 to 0.115	93.2	70 to 130	0.970	20
BA03518	Cobalt, Total	mg/L	-0.00000218	0.0001474	0.10	0.0994	0.0965	0.0978	0.085 to 0.115	99.4	70 to 130	2.96	20
BA03518	Potassium, Total	mg/L	-0.000899	0.3674	10.0	9.68	9.54	9.63	8.5 to 11.5	96.8	70 to 130	1.46	20
BA03518	Manganese, Total	mg/L	0.00000757	0.0001474	0.10	0.0987	0.0969	0.0965	0.085 to 0.115	98.7	70 to 130	1.84	20
BA03518	Silicon, Total	mg/L	-0.00196	0.044	1.00	1.03	1.03	0.998	0.850 to 1.15	103	70 to 130	0.00	20

Comments:

Reported: 3/20/2020
Version: 3.1
COA_CCR

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

Batch QC Summary

Customer Account: WMWGORAPEB
Sample Date: 2/18/20 11:36
Customer ID:
Delivery Date: 2/19/20 08:50

Description: Gorgas Ash Pond Equipment Blank

Laboratory ID Number: BA03518

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BA03518	Fluoride	mg/L	0.0141	0.05	2.50	2.56	0.0135	2.55	2.25 to 2.75	102	80 to 120	0.00	20
BA03518	Chloride	mg/L	-0.0221	0.50	10.0	10.2	0.0921	10.1	9 to 11	102	80 to 120	0.00	20
BA03511	Nitrogen, Nitrite	mg/L as N	0.001	0.20	0.50	0.520	-0.001	0.772	0.675 to 0.825	104	90 to 110	0.00	15
BA03511	Nitrogen, Nitrate/Nitrite	mg/L as N	0.04	0.20	2.00	2.06	0.048	1.88	1.8 to 2.2	103	90 to 110	0.00	15
BA03518	Sulfate	mg/L	-0.675	0.50	20.0	18.6	-0.575	19.5	18 to 22	93.0	80 to 120	0.00	20

Comments:

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

Definitions

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
HT	Analysis was performed outside of the analytical holding time.
J	Reported value is an estimate because concentration is less than reporting limit.
U	Compound was analyzed, but not detected.

WMWGOKAP_1264

Chain of Custody Groundwater

APC General Testing Laboratory

☐ Field Complete ☐ Lab Complete ☐ Outside Lab

Lab ETA

Requested Complete Date	Routine	Results To	Brooks,Redwine,Vlassopoulos,Mitchell
Site Representative	Rick Hagendorfer	Requested By	Greg Dyer
Collector	Rick Hagendorfer / Colton Evans	Location	Gorgas ash Pond

Bottles

1	Metals	500 mL	3	Anions/Alk.	250 mL	5	TOC	250 mL	7	N/A	N/A
2	Diss. Metals	500 mL	4	NO3/Ortho-P	250 mL	6	N/A	N/A	8	N/A	N/A

Comments: SEND copy of Report to Jim Redwine, Kristi Mitchell, Dimitri Vlassopoulos (All with Anchor)

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
GS-AP-MW-6D	2-18-20	0844	5	Groundwater		BA03511
GS-AP-MW-7		1020	5			12
GS-AP-MW-8		1055	5			13
GS-AP-MW-12		1235	5			14
GS-AP-MW-18		1523	5			15
GS-AP-MW-12 Dup.		1235	5	↓ ROH		16
Field Blank		1144	4	DI water		17
Equipment Blank	↓ ROH	1136	4	↓		18

Relinquished By	Received By	Date/Time
[signature]	[signature]	2-18-20 / 1556
[signature]	[signature]	2-19-20 0815

SmarTroll ID

Turbidity ID

Sample Event 1264

TOC, All metals and radiological bottles have pH < 2 ☑

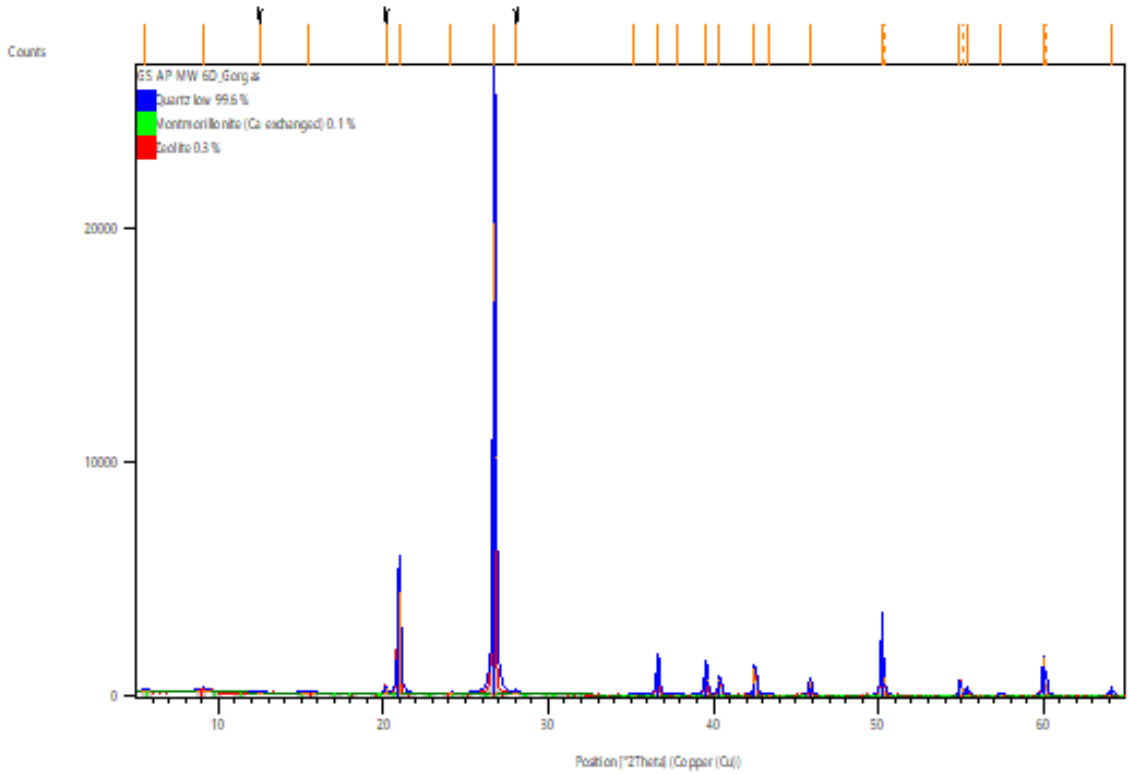
Cooler Temp 0.6°C

Thermometer ID 5408-27568-2-2

pH Strip ID 7901-43572-2-1

7.1

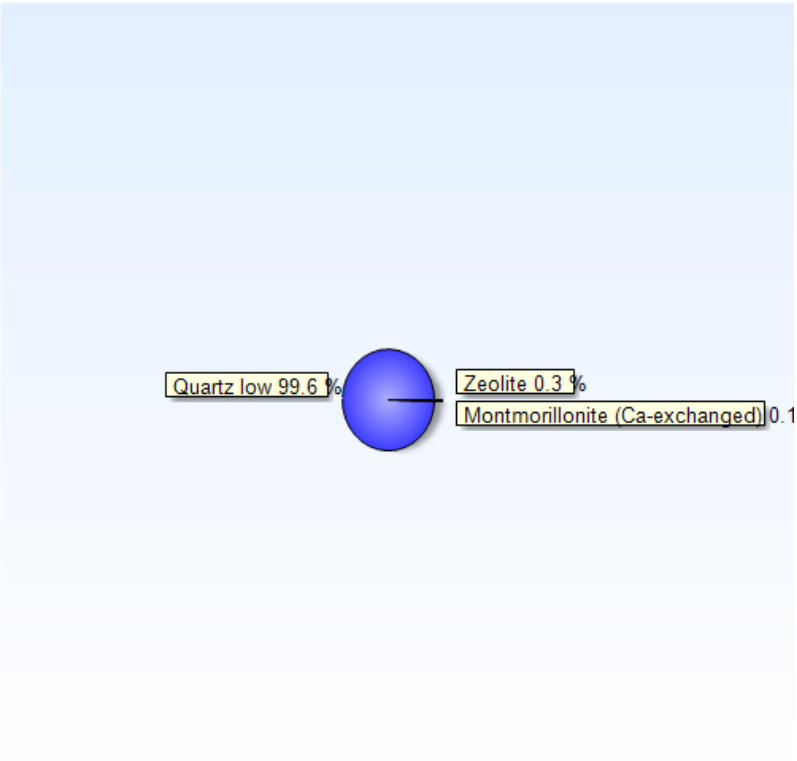
Graphics



Peak List

Pos.[°2Th.]	d-spacing [Å]	Rel. Int. [%]	Matched by
5.5912	15.80668	0.43	98-005-1636
9.0848	9.73445	0.64	98-017-0521
12.4928	7.08556	0.05	
15.4366	5.74028	0.14	98-017-0521
20.1545	4.40597	1.15	
20.9571	4.23900	21.23	98-002-7826
24.0874	3.69474	0.26	98-005-1636;98..
26.7195	3.33646	100.00	98-002-7826;98..
28.0740	3.17849	0.45	
35.2171	2.54845	0.11	98-005-1636
36.6216	2.45387	6.93	98-002-7826;98..
37.8165	2.37904	0.06	98-005-1636
39.5251	2.28005	5.66	98-002-7826;98..
40.3632	2.23462	3.26	98-002-7826;98..
42.5132	2.12646	5.60	98-002-7826
43.4195	2.08415	0.17	98-005-1636
45.8471	1.97929	3.06	98-002-7826
50.1854	1.81638	11.21	98-002-7826;98..
54.9255	1.67031	2.92	98-002-7826;98..
55.3757	1.65779	1.58	98-002-7826;98..
57.3747	1.60469	0.14	98-002-7826;98..
60.0088	1.54039	8.07	98-002-7826;98..
64.0902	1.45179	1.18	98-002-7826;98..

Quantitative Results



Phase Quartz low:	Weight fraction/ %:	100
Phase Montmorillonite :	Weight fraction/ %:	0.11
Phase Zeolite:	Weight fraction/ %:	0.32

Pattern List

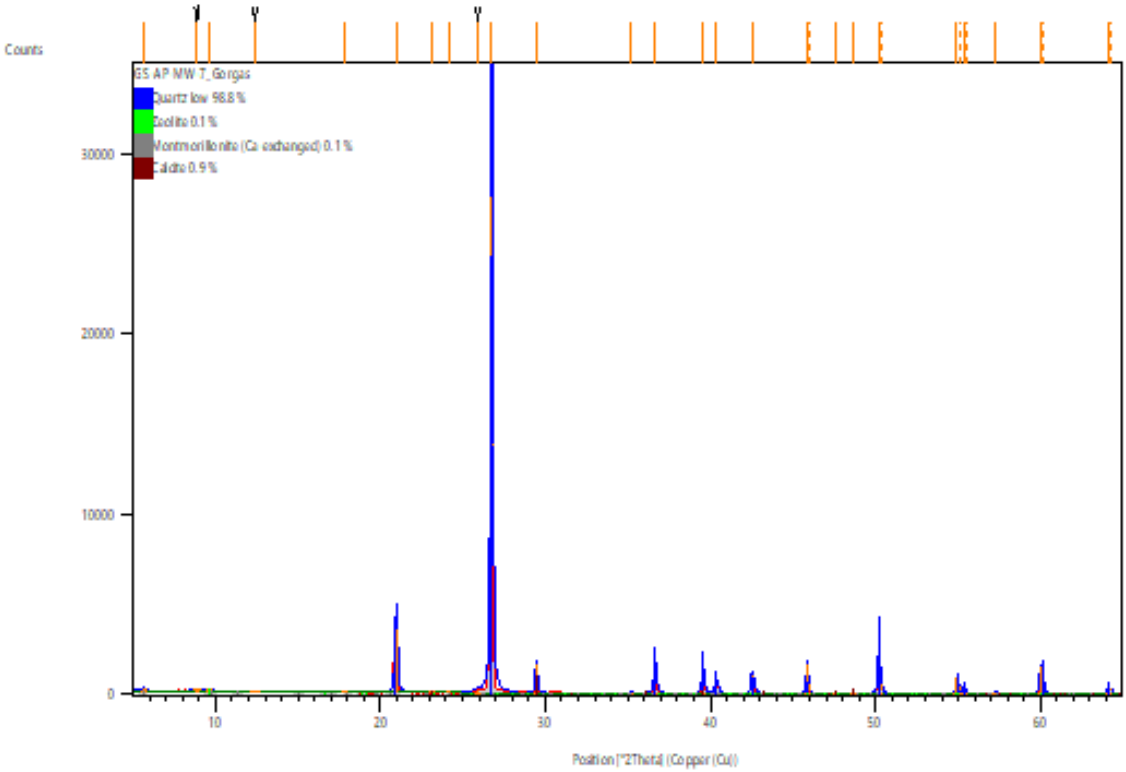
Ref.Code	Score	Compound Name	Chem. Formula
98-002-7826	74	Quartz low	O2 Si1
98-005-1636	25	Montmorillonite	H8.2 Al4 Ca1.2 O27..
98-017-0521	20	Zeolite	O2 Si1

Anchor Scan Parameters

Dataset Name:	GS-AP-MW-6D_Gorgas
File name:	C:\Users\Rick\Documents\RCIA_Win10\AnchorQEA\2020_March\GS-AP-MW-6D_Gorgas.rd
Sample Identification:	GS-AP-MW-6D Gorgas
Comment:	Exported by X'Pert SW Generated by hugo in project AnchorQEA_2
Measurement Date / Time:	3/20/2020 11:37:00 AM
Raw Data Origin:	PHILIPS-binary (scan) (.RD)
Scan Axis:	Gonio
Start Position [°2Th.]:	5.0150
End Position [°2Th.]:	64.9850
Step Size [°2Th.]:	0.0300
Scan Step Time [s]:	2.5000

Scan Type:	Continuous
Offset [°2Th.]:	0.0000
Divergence Slit Type:	Fixed
Divergence Slit Size [°]:	0.5000
Specimen Length [mm]:	10.00
Receiving Slit Size [mm]:	0.1000
Measurement Temperature [°C]:	0.00
Anode Material:	Cu
K-Alpha1 [Å]:	1.54060
K-Alpha2 [Å]:	1.54443
K-Beta [Å]:	1.39225
K-A2 / K-A1 Ratio:	0.50000
Generator Settings:	30 mA, 40 kV
Diffractometer Type:	XPert MPD
Diffractometer Number:	1
Goniometer Radius [mm]:	200.00
Dist. Focus-Diverg. Slit [mm]:	91.00
Incident Beam Monochromator:	No
Spinning:	No

Graphics

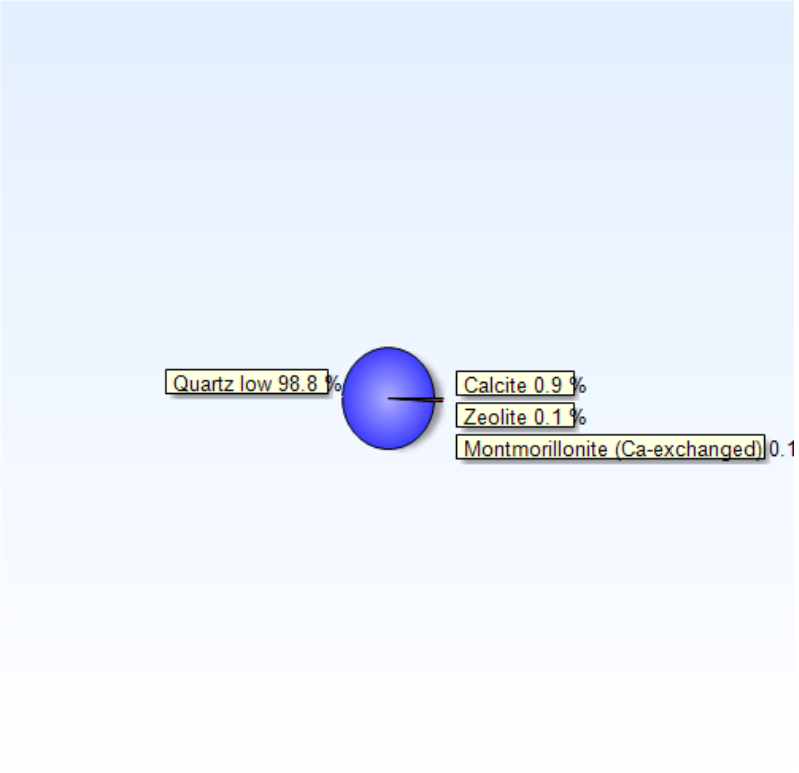


Peak List

Pos.[°2Th.]	d-spacing [Å]	Rel. Int. [%]	Matched by
5.6451	15.65591	0.39	98-005-1636
8.8847	9.95322	0.36	
9.5961	9.21684	0.37	98-017-0492
12.3891	7.14462	0.02	
17.8398	4.97206	0.10	98-005-1636
20.9629	4.23784	12.84	98-009-3974
23.1611	3.84037	0.05	98-017-0492;98..
24.1278	3.68865	0.14	98-005-1636
25.9100	3.43883	0.42	
26.7335	3.33474	100.00	98-009-3974;98..
29.4463	3.03341	5.68	98-002-8827
35.1829	2.55085	0.09	98-017-0492;98..
36.6354	2.45298	5.20	98-009-3974;98..
39.5348	2.27952	4.58	98-009-3974;98..
40.3483	2.23541	2.43	98-009-3974;98..
42.5356	2.12539	3.53	98-009-3974;98..
45.8492	1.97756	6.18	98-009-3974;98..
47.6196	1.90809	0.07	98-017-0492;98..
48.6130	1.87139	0.09	98-005-1636;98..
50.1926	1.81614	7.40	98-009-3974;98..
54.9242	1.67034	3.25	98-009-3974;98..

55.3423	1.65871	1.54	98-009-3974;98..
57.2835	1.60703	0.18	98-009-3974;98..
60.0086	1.54040	5.54	98-009-3974;98..
64.1055	1.45148	1.92	98-009-3974;98..

Quantitative Results



Phase Quartz low:	Weight fraction/ %:	99
Phase Zeolite:	Weight fraction/ %:	0.14
Phase Montmorillonite :	Weight fraction/ %:	0.11
Phase Calcite:	Weight fraction/ %:	0.9

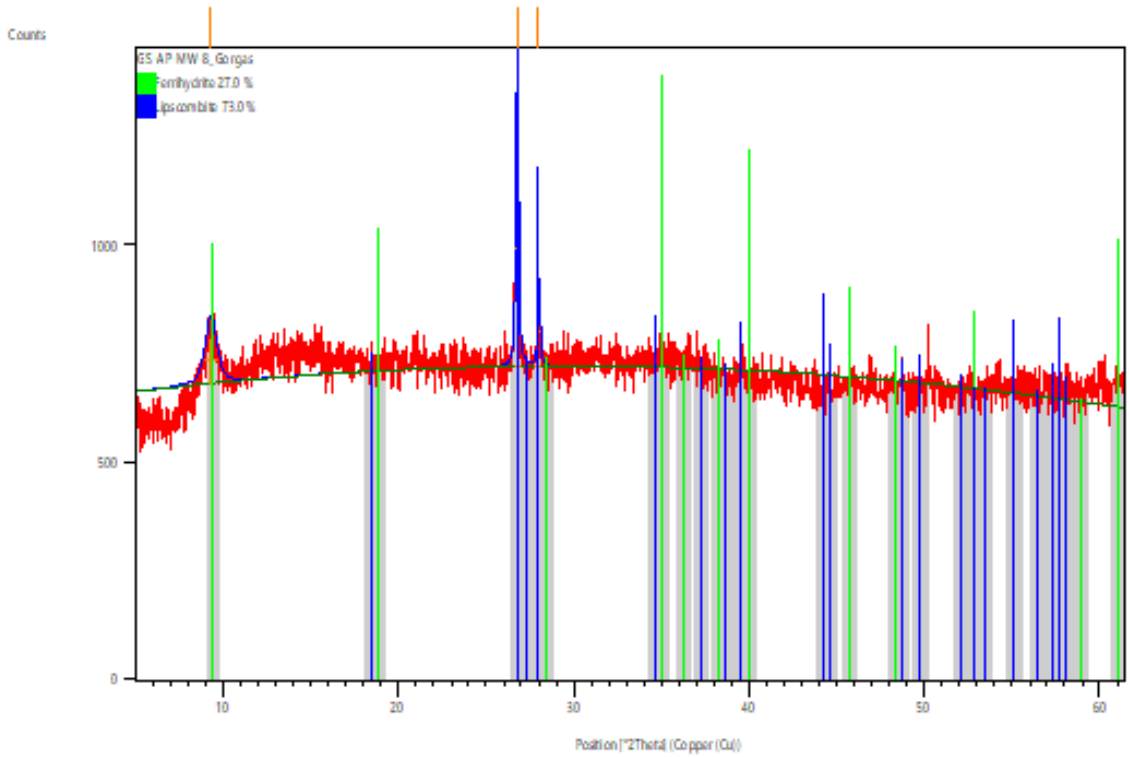
Pattern List

Ref.Code	Score	Compound Name	Chem. Formula
98-009-3974	74	Quartz low	O2 Si1
98-017-0492	23	Zeolite	O2 Si1
98-005-1636	26	Montmorillonite	H8.2 Al4 Ca1.2 O27..
98-002-8827	19	Calcite	C1 Ca1 O3

Anchor Scan Parameters

Dataset Name:	GS-AP-MW-7_Gorgas
File name:	C:\Users\Rick\Documents\RCIA_Win10\AnchorQEA\2020_March\GS-AP-MW-7_Gorgas.rd
Sample Identification:	GS-AP-MW-7 Gorgas
Comment:	Exported by X'Pert SW Generated by hugo in project AnchorQEA_2
Measurement Date / Time:	3/20/2020 2:27:00 PM
Raw Data Origin:	PHILIPS-binary (scan) (.RD)
Scan Axis:	Gonio
Start Position [°2Th.]:	5.0150
End Position [°2Th.]:	64.9850
Step Size [°2Th.]:	0.0300
Scan Step Time [s]:	2.5000
Scan Type:	Continuous
Offset [°2Th.]:	0.0000
Divergence Slit Type:	Fixed
Divergence Slit Size [°]:	0.5000
Specimen Length [mm]:	10.00
Receiving Slit Size [mm]:	0.1000
Measurement Temperature [°C]:	0.00
Anode Material:	Cu
K-Alpha1 [Å]:	1.54060
K-Alpha2 [Å]:	1.54443
K-Beta [Å]:	1.39225
K-A2 / K-A1 Ratio:	0.50000
Generator Settings:	30 mA, 40 kV
Diffractometer Type:	XPert MPD
Diffractometer Number:	1
Goniometer Radius [mm]:	200.00
Dist. Focus-Diverg. Slit [mm]:	91.00
Incident Beam Monochromator:	No
Spinning:	No

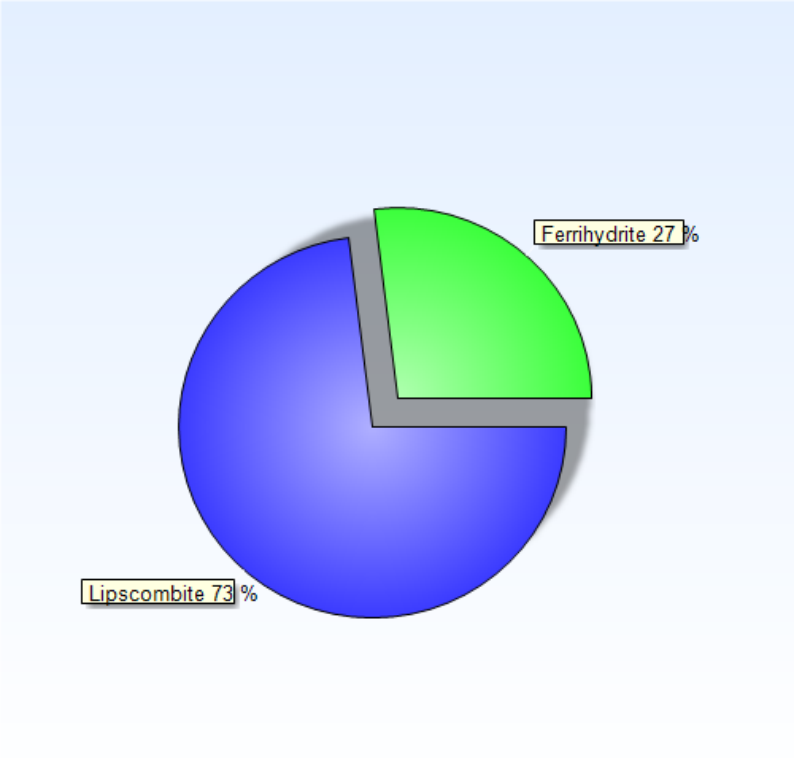
Graphics



Peak List

Pos.[°2Th.]	d-spacing [Å]	Rel. Int. [%]	Matched by
9.2973	9.51244	19.03	98-005-6287
26.7500	3.33272	100.00	98-017-0853
27.9852	3.18837	28.56	98-017-0853

Quantitative Results



Phase Ferrihydrite:	Weight fraction/ %:	27(10)
Phase Lipscombite:	Weight fraction/ %:	73(4)

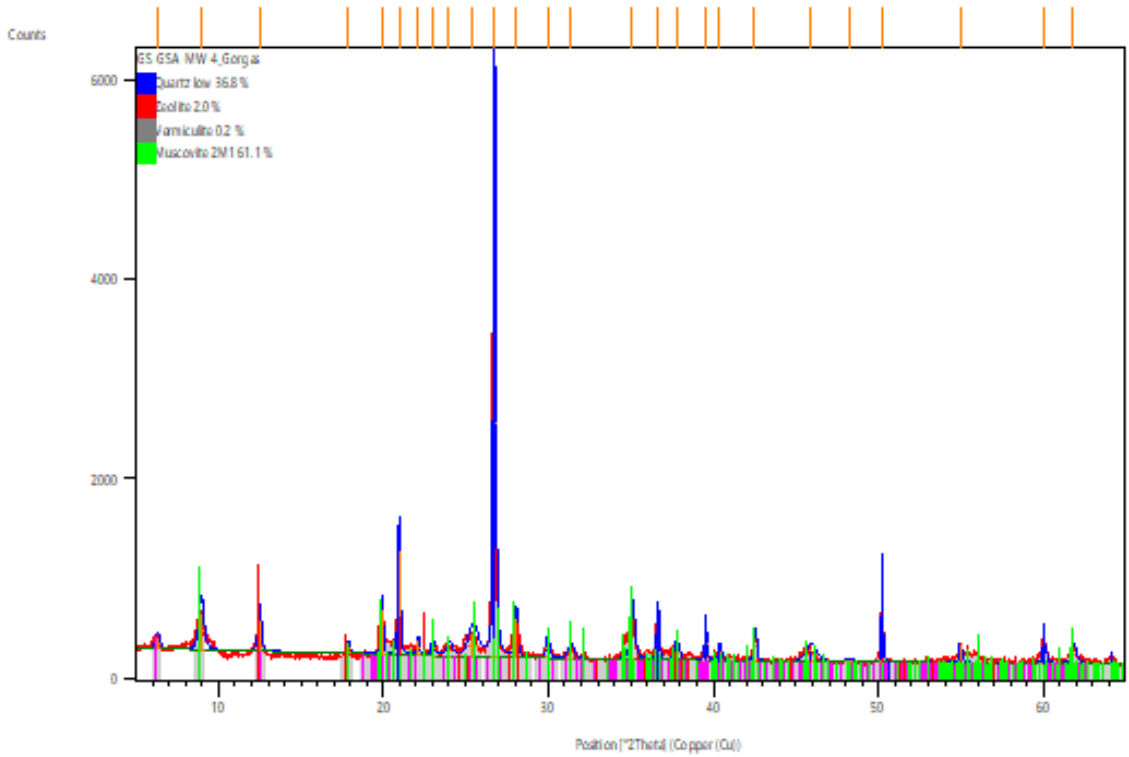
Pattern List

Ref.Code	Score	Compound Name	Chem. Formula
98-005-6287	2	Ferrihydrite	H3.68 Fe1.44 O4
98-017-0853	20	Lipscombite	H1.43 Fe1.176 O5 P1

Anchor Scan Parameters

Dataset Name:	GS-AP-MW-8_Gorgas
File name:	C:\Users\Rick\Documents\RCIA_Win10\AnchorQEA\2020_March\GS-AP-MW-8_Gorgas.rd
Sample Identification:	GS-GSA-MW-8 Gorgas
Comment:	Exported by X'Pert SW Generated by hugo in project AnchorQEA_2
Measurement Date / Time:	3/16/2020 12:01:00 PM
Raw Data Origin:	PHILIPS-binary (scan) (.RD)
Scan Axis:	Gonio
Start Position [°2Th.]:	5.0125
End Position [°2Th.]:	61.4875
Step Size [°2Th.]:	0.0250
Scan Step Time [s]:	2.5000
Scan Type:	Continuous
Offset [°2Th.]:	0.0000
Divergence Slit Type:	Fixed
Divergence Slit Size [°]:	0.5000
Specimen Length [mm]:	10.00
Receiving Slit Size [mm]:	0.1000
Measurement Temperature [°C]:	0.00
Anode Material:	Cu
K-Alpha1 [Å]:	1.54060
K-Alpha2 [Å]:	1.54443
K-Beta [Å]:	1.39225
K-A2 / K-A1 Ratio:	0.50000
Generator Settings:	30 mA, 40 kV
Diffractometer Type:	XPert MPD
Diffractometer Number:	1
Goniometer Radius [mm]:	200.00
Dist. Focus-Diverg. Slit [mm]:	91.00
Incident Beam Monochromator:	No
Spinning:	No

Graphics

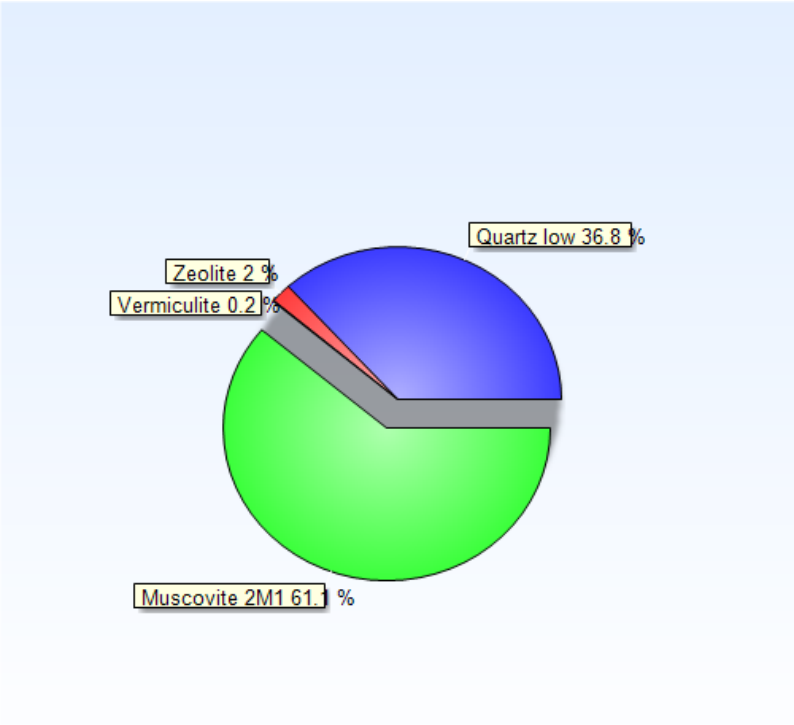


Peak List

Pos.[°2Th.]	d-spacing [Å]	Rel. Int. [%]	Matched by
6.3296	13.96420	2.35	96-900-0010
8.9867	9.84045	7.75	98-009-0144;98..
12.5041	7.07917	6.74	98-017-0517;96..
17.8767	4.96189	1.94	98-017-0517;98..
19.9220	4.45686	9.72	98-009-0144;96..
20.9421	4.24202	21.96	98-002-7826;98..
22.1157	4.01949	3.06	98-009-0144;96..
22.9982	3.86720	2.86	98-009-0144;96..
23.9919	3.70923	1.93	98-009-0144;98..
25.4355	3.50190	4.66	98-009-0144;96..
26.7267	3.33558	100.00	98-002-7826;98..
28.0339	3.18294	8.19	98-017-0517;96..
29.9545	2.98309	3.77	98-009-0144;98..
31.3473	2.85366	2.13	98-009-0144;96..
35.0751	2.55844	9.25	98-009-0144;96..
36.6315	2.45323	10.97	98-002-7826;98..
37.7670	2.38205	3.13	98-017-0517;98..
39.5283	2.27987	7.08	98-002-7826;98..
40.3670	2.23442	3.38	98-002-7826;98..
42.5165	2.12630	6.23	98-002-7826;98..
45.8888	1.97759	2.80	98-002-7826;98..

48.2217	1.88723	0.46	98-009-0144;96..
50.1985	1.81744	11.34	98-002-7826;98..
54.9487	1.67104	3.94	98-002-7826;98..
60.0158	1.54151	6.83	98-002-7826;98..
61.7991	1.50124	3.36	98-009-0144;96..

Quantitative Results



Phase Quartz low:	Weight fraction/ %:	36.8
Phase Zeolite:	Weight fraction/ %:	2.0
Phase Vermiculite:	Weight fraction/ %:	0.17
Phase Muscovite 2M1:	Weight fraction/ %:	61

Pattern List

Ref.Code	Score	Compound Name	Chem. Formula
98-002-7826	72	Quartz low	O2 Si1
98-017-0517	27	Zeolite	O2 Si1
96-900-0010	28	Vermiculite	Mg12.00 Si16.00 O4..
98-018-0082	43	Muscovite/Illite	H1.834 Al2.724 F0...

Anchor Scan Parameters

Dataset Name:	GS-GSA-MW-4_Gorgas
File name:	C:\Users\Rick\Documents\RCIA_Win10\AnchorQEA\2020_March\GS-GSA-MW-4_Gorgas.rd
Sample Identification:	GS-GSA-MW-4 Gorgas
Comment:	Exported by X'Pert SW Generated by hugo in project AnchorQEA_2
Measurement Date / Time:	3/19/2020 9:33:00 AM
Raw Data Origin:	PHILIPS-binary (scan) (.RD)
Scan Axis:	Gonio
Start Position [°2Th.]:	5.0125
End Position [°2Th.]:	64.9875
Step Size [°2Th.]:	0.0250
Scan Step Time [s]:	2.5000
Scan Type:	Continuous
Offset [°2Th.]:	0.0000
Divergence Slit Type:	Fixed
Divergence Slit Size [°]:	0.5000
Specimen Length [mm]:	10.00
Receiving Slit Size [mm]:	0.1000
Measurement Temperature [°C]:	0.00
Anode Material:	Cu
K-Alpha1 [Å]:	1.54060
K-Alpha2 [Å]:	1.54443
K-Beta [Å]:	1.39225
K-A2 / K-A1 Ratio:	0.50000
Generator Settings:	30 mA, 40 kV
Diffractometer Type:	XPert MPD
Diffractometer Number:	1
Goniometer Radius [mm]:	200.00
Dist. Focus-Diverg. Slit [mm]:	91.00
Incident Beam Monochromator:	No
Spinning:	No

Site ID	SAMPLE ID	Units	Al	Al Error	As	As Error	Bal	Bal Error	Ca	Ca Error	Ce	Ce Error	Cl	Cl Error	Co	Co Error	Fe	Fe Error	K	K Error	La	La Error	Mg	Mg Error	Mn
Gorgas	GS-AP-MW-12	ppm	5223	1537	10	4	658379	1443	214200	1300	< LOD	34	313	125	< LOD	61	3887	219	1992	128	< LOD	35	12895	7124	< LOD
Gorgas	GS-AP-MW-18	ppm	26116	1729	27	5	667313	1550	65201	759	67	30	361	103	< LOD	135	41967	438	19366	326	< LOD	44	10101	5099	< LOD
Gorgas	GS-AP-MW-6D	ppm	5959	709	4	3	751161	1003	1942	75	43	21	2414	98	< LOD	62	5582	232	3863	102	< LOD	32	< LOD	3237	< LOD
Gorgas	GS-AP-MW-6D DUP	ppm	22028	1326	23	4	686439	1307	1748	136	< LOD	33	< LOD	130	< LOD	116	37766	351	17226	291	< LOD	33	< LOD	6009	< LOD
Gorgas	GS-AP-MW-7	ppm	4571	615	11	3	745782	1004	8632	145	< LOD	30	< LOD	99	< LOD	54	2645	212	2381	79	< LOD	45	< LOD	3180	< LOD
Gorgas	GS-AP-MW-8	ppm	3032	1261	133	14	478263	3742	1187	165	< LOD	107	507	78	< LOD	421	480856	3690	< LOD	393	< LOD	94	< LOD	12481	< LOD
Gorgas	GS-GSA-MW-3	ppm	34409	1577	30	5	734608	1196	3943	202	< LOD	36	< LOD	134	< LOD	130	47819	417	25023	388	< LOD	36	< LOD	4931	< LOD
Gorgas	GS-GSA-MW-4	ppm	28215	1363	31	5	745155	1104	1808	152	< LOD	35	< LOD	121	< LOD	118	40853	362	23068	347	< LOD	35	< LOD	5397	< LOD
Gorgas	MW-1	ppm	12520	868	15	3	747370	1031	954	92	45	24	222	68	< LOD	100	26024	298	9787	194	< LOD	35	< LOD	3433	3643
Gorgas	MW-12	ppm	17301	1079	69	5	719563	1143	1461	115	< LOD	37	429	78	< LOD	113	38254	347	11331	231	< LOD	35	< LOD	7068	< LOD
Gorgas	MW-13	ppm	20751	1146	19	4	737746	1080	1152	110	62	25	< LOD	148	< LOD	104	30554	317	15234	249	56	24	< LOD	7040	< LOD
Gorgas	MW-14	ppm	20633	1084	19	4	755561	1011	1261	108	< LOD	31	214	73	< LOD	97	27298	292	13929	240	< LOD	31	< LOD	5145	< LOD
Gorgas	MW-2	ppm	12807	880	7	3	737770	1115	1341	80	78	23	324	74	< LOD	76	9873	263	8720	161	48	22	< LOD	3772	< LOD
Gorgas	MW-3	ppm	19643	1015	15	4	761934	988	1067	90	< LOD	32	< LOD	98	< LOD	80	16104	255	13226	208	< LOD	30	< LOD	5280	< LOD
Gorgas	MW-3 DUP	ppm	19841	1007	9	4	757881	1002	997	91	< LOD	31	< LOD	98	< LOD	81	16150	255	13365	210	< LOD	31	< LOD	3559	< LOD
Gorgas	MW-4	ppm	27215	1364	16	4	723095	1218	1418	150	82	28	< LOD	114	< LOD	132	50502	425	22569	354	92	28	5435	3482	< LOD
Gorgas	MW-6	ppm	22071	1308	27	4	686916	1323	1692	137	< LOD	33	< LOD	192	< LOD	118	38009	353	17233	297	< LOD	33	< LOD	4928	< LOD

Site ID	SAMPLE ID	Units	Mn Error	Mo	Mo Error	Nb	Nb Error	Nd	Nd Error	P	P Error	Pr	Pr Error	S	S Error	Se	Se Error	Si	Si Error	Ti	Ti Error	Zn	Zn Error	Zr	Zr Error
Gorgas	GS-AP-MW-12	ppm	921	10	2	3	2	< LOD	59	1862	429	< LOD	44	584	167	< LOD	3	95472	1835	< LOD	1407	< LOD	11	< LOD	7
Gorgas	GS-AP-MW-18	ppm	1615	25	3	9	2	< LOD	93	3434	403	< LOD	62	4005	200	< LOD	3	150128	1964	5121	1649	94	11	104	7
Gorgas	GS-AP-MW-6D	ppm	1000	< LOD	2	3	1	< LOD	52	3452	342	< LOD	55	1609	117	< LOD	2	221937	1915	1795	529	< LOD	8	102	2
Gorgas	GS-AP-MW-6D DUP	ppm	966	15	2	16	2	< LOD	55	4457	407	< LOD	42	2575	158	< LOD	2	221008	2118	5794	1310	137	11	277	4
Gorgas	GS-AP-MW-7	ppm	935	2	1	< LOD	2	< LOD	50	3080	312	< LOD	38	996	95	< LOD	2	230804	1810	898	420	< LOD	7	65	2
Gorgas	GS-AP-MW-8	ppm	1321	< LOD	5	< LOD	4	< LOD	183	8420	335	< LOD	132	295	99	< LOD	7	26696	829	< LOD	2804	< LOD	27	6	3
Gorgas	GS-GSA-MW-3	ppm	1445	6	2	16	2	< LOD	61	3621	350	< LOD	46	3752	175	< LOD	2	139238	1810	6057	1623	275	15	153	3
Gorgas	GS-GSA-MW-4	ppm	1005	12	2	16	2	< LOD	58	3271	328	< LOD	44	2205	140	< LOD	3	148230	1759	5841	1462	126	11	186	4
Gorgas	MW-1	ppm	654	25	2	6	1	< LOD	59	3124	310	< LOD	45	611	95	< LOD	2	191704	1768	3135	913	85	9	138	3
Gorgas	MW-12	ppm	1148	60	2	11	2	< LOD	59	3277	337	< LOD	45	2035	128	< LOD	2	201106	1899	3629	1094	126	10	208	4
Gorgas	MW-13	ppm	1012	13	2	11	1	< LOD	60	3137	326	< LOD	58	5616	177	< LOD	2	180414	1796	4212	1103	107	10	166	3
Gorgas	MW-14	ppm	937	17	2	11	1	< LOD	52	2991	310	< LOD	39	7554	195	< LOD	2	165795	1704	3755	1105	131	10	136	3
Gorgas	MW-2	ppm	1079	10	2	21	2	< LOD	72	6786	3506	< LOD	45	880	248	< LOD	2	216116	2100	3800	761	16	7	1063	9
Gorgas	MW-3	ppm	946	11	2	8	1	< LOD	50	3360	307	< LOD	38	4168	150	< LOD	2	176073	1711	3683	913	51	8	144	3
Gorgas	MW-3 DUP	ppm	942	11	2	8	1	< LOD	51	3184	308	< LOD	39	4321	152	< LOD	2	179816	1729	3759	918	45	8	145	3
Gorgas	MW-4	ppm	1378	11	2	15	2	144	47	3228	330	106	35	445	107	< LOD	2	158726	1831	5738	1480	136	11	208	4
Gorgas	MW-6	ppm	952	17	2	15	2	< LOD	56	3960	399	< LOD	42	2426	155	< LOD	2	221116	2126	5532	1343	137	12	275	4

July 20, 2020 Service Request No:K2004421

Anthony Dalton-Atha
Anchor QEA, LLC
6720 SW Macadam Avenue
Suite 125
Portland, OR 97219

Laboratory Results for: APC SSE

Dear Anthony,

Enclosed are the results of the sample(s) submitted to our laboratory May 29, 2020
For your reference, these analyses have been assigned our service request number **K2004421.**

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. All results are intended to be considered in their entirety, and ALS Group USA Corp. dba ALS Environmental (ALS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please contact me if you have any questions. My extension is 3376. You may also contact me via email at Mark.Harris@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Mark Harris
Project Manager

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PHONE +1 360 577 7222 | FAX +1 360 636 1068
ALS Group USA, Corp.
dba ALS Environmental

Narrative Documents

ALS Environmental—Kelso Laboratory
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Client: Anchor QEA, LLC
Project: APC SSE
Sample Matrix: Water

Service Request: K2004421
Date Received: 05/29/2020

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples for the Tier II level requested by the client.

Sample Receipt:

One water sample was received for analysis at ALS Environmental on 05/29/2020. Any discrepancies upon initial sample inspection are annotated on the sample receipt and preservation form included within this report. The sample was stored at minimum in accordance with the analytical method requirements.

Metals:

Method 6010C, 06/19/2020: Samples in this delivery group required dilution to non-target matrix components. Attempts to analyze the undiluted samples resulted in failed instrument QC check samples. The detection limits were elevated accordingly. No further corrective action was appropriate.

Approved by _____ Date 06/22/2020

Sample Receipt Information

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1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

PC MH

Cooler Receipt and Preservation Form

Client ANCHOR QEA Service Request K20 044221

Received: 5/29/2020 Opened: 5/29/2020 By: CG Unloaded: 5/29/2020 By: CG

1. Samples were received via? *USPS* *Fed Ex* *UPS* *DHL* *PDX* *Courier* *Hand Delivered*
2. Samples were received in: (circle) *Cooler* *Box* *Envelope* *Other* _____ *NA*
3. Were custody seals on coolers? NA Y N If yes, how many and where? 1 Front

   If present, were custody seals intact? Y N If present, were they signed and dated? Y N

Temp Blank	Sample 1	Sample 2	Sample 3	Sample 4	IR GUN	Cooler / COC ID NA	Tracking Number NA	Filed
—	10.7	12.0	10.6	9.6	IR02			

4. Packing material: *Inserts* *Baggies* *Bubble Wrap* *Gel Packs* *Wet Ice* *Dry Ice* *Sleeves* _____
5. Were custody papers properly filled out (ink, signed, etc.)? NA Y N
6. Were samples received in good condition (temperature, unbroken)? *Indicate in the table below.* NA Y N

   If applicable, tissue samples were received: *Frozen* *Partially Thawed* *Thawed*
7. Were all sample labels complete (i.e analysis, preservation, etc.)? NA Y N
8. Did all sample labels and tags agree with custody papers? *Indicate major discrepancies in the table on page 2.* NA Y N
9. Were appropriate bottles/containers and volumes received for the tests indicated? NA Y N
10. Were the pH-preserved bottles (*see SMO GEN SOP*) received at the appropriate pH? *Indicate in the table below* NA Y N
11. Were VOA vials received without headspace? *Indicate in the table below.* NA Y N
12. Was C12/Res negative? NA Y N

Sample ID on Bottle	Sample ID on COC	Identified by:

Sample ID	Bottle Count Bottle Type	Out of Temp	Head-space	Broke	pH	Reagent	Volume added	Reagent Lot Number	Initials	Time
All "F2" samples	1-125mL, each				X	HNO_3	0.5mL	RE1-54-C	CG	1100 6/1/20

Notes, Discrepancies, & Resolutions: Temp okay - metals analyses

Chain of Custody Record & Laboratory Analysis Request

Date:	5/29/2020
Project Name:	APC SSE
Project Manager:	Anthony Dalton-Atha
email:	adalton-atha@anchorqea.com
Phone Number:	541-760-0851
Shipment Method:	Courier

ANCHOR QEA

Jessica Goin
6720 SW Macadam Ave
Suite 125
Portland OR 97219

Line	Field Sample ID	Collection Date	Collection Time	Matrix	No. of Containers	Arsenic	Lithium	Cobalt	Molybdenum	Iron											Comments/Preservation
16	GS-AP-MW-8_F4_016			Water	1	x	x		x	x											nitric acid
17	MR-AP-MW-3D_F4_017			Water	1	x	x	x		x											nitric acid
18	MR-AP-MW-4_F4_018			Water	1	x	x	x		x											nitric acid
19	MR-AP-MW-5_F4_019			Water	1	x	x	x		x											nitric acid
20	MW-1_F4_020			Water	1	x	x		x	x											nitric acid
21	MW-12_F4_021			Water	1	x	x		x	x											nitric acid
22	Blank_F4_022			Water	1	x	x	x	x	x											nitric acid
23	OLD-MW-2D-F4_012_DUP			Water	1	x	x		x	x											nitric acid

Notes: **CAUTION! F4 samples are concentrated (16N) nitric acid.**

Relinquished by:	Company:
Anthony Dalton-Atha	Anchor QEA
Signature/Print Name:	Date/Time:
	5/29/2020 10:00

Received by:	Company:
SWOLF	ACS
Signature/Print Name:	Date/Time:
	5/29/20 1145

Relinquished by:	Company:
Signature/Print Name:	Date/Time:

Received by:	Company:
Signature/Print Name:	Date/Time:

Distribution: A copy will be made for the laboratory and client. The Project file will retain the original.

Miscellaneous Forms

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Inorganic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated value.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.
H	The holding time for this test is immediately following sample collection. The samples were analyzed as soon as possible after receipt by the laboratory.

Metals Data Qualifiers

#	The control limit criteria is not applicable. See case narrative.
J	The result is an estimated value.
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
M	The duplicate injection precision was not met.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
S	The reported value was determined by the Method of Standard Additions (MSA).
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
+	The correlation coefficient for the MSA is less than 0.995.
Q	See case narrative. One or more quality control criteria was outside the limits.

Organic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
A	A tentatively identified compound, a suspected aldol-condensation product.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
C	The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
D	The reported result is from a dilution.
E	The result is an estimated value.
J	The result is an estimated value.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
P	The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a chromatographic interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.

Additional Petroleum Hydrocarbon Specific Qualifiers

F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
Y	The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
Z	The chromatographic fingerprint does not resemble a petroleum product.

ALS Group USA Corp. dba ALS Environmental (ALS) - Kelso
State Certifications, Accreditations, and Licenses

Agency	Web Site	Number
Alaska DEH	http://dec.alaska.gov/eh/lab/cs/csapproval.htm	UST-040
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0339
Arkansas - DEQ	http://www.adeq.state.ar.us/techsvs/labcert.htm	88-0637
California DHS (ELAP)	http://www.cdph.ca.gov/certlic/labs/Pages/ELAP.aspx	2795
DOD ELAP	http://www.denix.osd.mil/edqw/Accreditation/AccreditedLabs.cfm	L16-58-R4
Florida DOH	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E87412
Hawaii DOH	http://health.hawaii.gov/	-
ISO 17025	http://www.pjlabs.com/	L16-57
Louisiana DEQ	http://www.deq.louisiana.gov/page/la-lab-accreditation	03016
Maine DHS	http://www.maine.gov/dhhs/	WA01276
Minnesota DOH	http://www.health.state.mn.us/accreditation	053-999-457
Nevada DEP	http://ndep.nv.gov/bsdw/labservice.htm	WA01276
New Jersey DEP	http://www.nj.gov/dep/enforcement/oqa.html	WA005
New York - DOH	https://www.wadsworth.org/regulatory/elap	12060
North Carolina DEQ	https://deq.nc.gov/about/divisions/water-resources/water-resources-data/water-sciences-home-page/laboratory-certification-branch/non-field-lab-certification	605
Oklahoma DEQ	http://www.deq.state.ok.us/CSDnew/labcert.htm	9801
Oregon – DEQ (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	WA100010
South Carolina DHEC	http://www.scdhec.gov/environment/EnvironmentalLabCertification/	61002
Texas CEQ	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704427
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C544
Wyoming (EPA Region 8)	https://www.epa.gov/region8-waterops/epa-region-8-certified-drinking-water-	-
Kelso Laboratory Website	www.alsglobal.com	NA

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. A complete listing of specific NELAP-certified analytes, can be found in the certification section at www.ALSGlobal.com or at the accreditation bodies web site.
Please refer to the certification and/or accreditation body's web site if samples are submitted for compliance purposes. The states highlighted above, require the analysis be listed on the state certification if used for compliance purposes and if the method/anlayte is offered by that state.

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LOD	Limit of Detection
LOQ	Limit of Quantitation
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Sample Results

ALS Environmental—Kelso Laboratory
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Metals

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ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2004421
Project:	APC SSE	**Date Collected:**	05/28/20 10:45
Sample Matrix:	Water	**Date Received:**	05/29/20 11:45
Sample Name:	Blank_F4_022	**Basis:**	NA
Lab Code:	K2004421-011		

Total Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	6010C	ND	U	ug/L	21	5	1	06/19/20 17:56	06/09/20	
Cobalt	6010C	ND	U	ug/L	2.1	0.7	1	06/19/20 17:56	06/09/20	
Iron	6010C	**21**	**J**	ug/L	42	8	1	06/19/20 17:56	06/09/20	
Lithium	6010C	ND	U	ug/L	21	6	1	06/19/20 17:56	06/09/20	
Molybdenum	6010C	ND	U	ug/L	8.4	2.1	1	06/19/20 17:56	06/09/20	

QC Summary Forms

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Metals

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ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2004421
Project:	APC SSE	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	KQ2007746-02		

Total Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	6010C	ND	U	ug/L	21	5	1	06/19/20 16:24	06/09/20	
Cobalt	6010C	ND	U	ug/L	2.1	0.7	1	06/19/20 16:24	06/09/20	
Iron	6010C	ND	U	ug/L	42	8	1	06/19/20 16:24	06/09/20	
Lithium	6010C	ND	U	ug/L	21	6	1	06/19/20 16:24	06/09/20	
Molybdenum	6010C	ND	U	ug/L	8.4	2.1	1	06/19/20 16:24	06/09/20	

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client:	Anchor QEA, LLC	**Service Request:**	K2004421
Project:	APC SSE	**Date Collected:**	05/28/20
Sample Matrix:	Water	**Date Received:**	05/29/20
		Date Analyzed:	06/19/20
		Date Extracted:	06/9/20

Matrix Spike Summary
Total Metals

Sample Name:	OLD-MW-2D_F4_012	**Units:**	ug/L
Lab Code:	K2004421-001	**Basis:**	NA
Analysis Method:	6010C		
Prep Method:	EPA CLP ILM04.0		

Matrix Spike
KQ2007746-04

Analyte Name	Sample Result	Result	Spike Amount	% Rec	% Rec Limits
Arsenic	ND U	960	1000	96	75-125
Cobalt	74	513	500	88	75-125
Iron	1050000	1020000	1000	-2168 #	75-125
Lithium	ND U	9900	10000	99	75-125
Molybdenum	ND U	952	1000	95	75-125

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Matrix Spike and Matrix Spike Duplicate Data is presented for information purposes only. The matrix may or may not be relevant to samples reported in this report. The laboratory evaluates system performance based on the LCS and LCSD control limits.

ALS Group USA, Corp.

dba ALS Environmental

QA/QC Report

Client:	Anchor QEA, LLC	**Service Request:**	K2004421
Project	APC SSE	**Date Collected:**	05/28/20
Sample Matrix:	Water	**Date Received:**	05/29/20
		Date Analyzed:	06/19/20

Replicate Sample Summary
Total Metals

Sample Name:	OLD-MW-2D_F4_012	**Units:**	ug/L
Lab Code:	K2004421-001	**Basis:**	NA

Analyte Name	Analysis Method	MRL	MDL	Sample Result	Duplicate Sample KQ2007746-03 Result	Average	RPD	RPD Limit
Arsenic	6010C	210	50	ND U	ND U	ND	-	20
Cobalt	6010C	11	4	74	76	75	3	20
Iron	6010C	110	40	1050000	1050000	1050000	<1	20
Lithium	6010C	110	30	ND U	ND U	ND	-	20
Molybdenum	6010C	84	21	ND U	ND U	ND	-	20

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Anchor QEA, LLC
Project: APC SSE
Sample Matrix: Water

Service Request: K2004421
Date Analyzed: 06/19/20

Lab Control Sample Summary
Total Metals

Units:ug/L
Basis:NA

Lab Control Sample
KQ2007746-01

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Arsenic	6010C	2540	2500	102	80-120
Cobalt	6010C	1190	1250	95	80-120
Iron	6010C	2340	2500	93	80-120
Lithium	6010C	9940	10000	99	80-120
Molybdenum	6010C	1010	1000	101	80-120

July 20, 2020 Service Request No:K2004415

Anthony Dalton-Atha
Anchor QEA, LLC
6720 SW Macadam Avenue
Suite 125
Portland, OR 97219

Laboratory Results for: APC SSE

Dear Anthony,

Enclosed are the results of the sample(s) submitted to our laboratory May 29, 2020
For your reference, these analyses have been assigned our service request number **K2004415.**

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. All results are intended to be considered in their entirety, and ALS Group USA Corp. dba ALS Environmental (ALS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please contact me if you have any questions. My extension is 3376. You may also contact me via email at Mark.Harris@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Mark Harris
Project Manager

ADDRESS 1317 S. 13th Avenue, Kelso, WA 98626
PHONE +1 360 577 7222 | FAX +1 360 636 1068
ALS Group USA, Corp.
dba ALS Environmental

Narrative Documents

ALS Environmental—Kelso Laboratory
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Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

1317 South 13th Ave, Kelso, WA 98626 | 1-360-577-7222 | www.alsglobal.com

Client: Anchor QEA, LLC
Project: APC SSE
Sample Matrix: Water

Service Request: K2004415
Date Received: 05/29/2020

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples for the Tier II level requested by the client.

Sample Receipt:

Three water samples were received for analysis at ALS Environmental on 05/29/2020. Any discrepancies upon initial sample inspection are annotated on the sample receipt and preservation form included within this report. The samples were stored at minimum in accordance with the analytical method requirements.

Metals:

No significant anomalies were noted with this analysis.

Approved by _____ Date 06/15/2020

Sample Receipt Information

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Chain of Custody Record & Laboratory Analysis Request

Date:	5/29/2020
Project Name:	APC SSE
Project Manager:	Anthony Dalton-Atha
email:	adalton-atha@anchorqea.com
Phone Number:	541-760-0851
Shipment Method:	Courier

ANCHOR QEA

Jessica Goin
6720 SW Macadam Ave
Suite 125
Portland OR 97219

Line	Field Sample ID	Collection Date	Collection Time	Matrix	No. of Containers	Arsenic	Lithium	Cobalt		Molybdenum												Comments/Preservation
1	BY-AP-MW-11_F1_001	5/26/2020	9:00	Water	1	x		x														nitric acid
2	BY-AP-MW-12_F1_002	5/26/2020	9:05	Water	1	x		x														nitric acid
3	BY-AP-MW-13_F1_003	5/26/2020	9:10	Water	1	x		x														nitric acid
4	BY-AP-MW-2_F1_004	5/26/2020	9:15	Water	1	x		x														nitric acid
5	BY-AP-MW-7_F1_005	5/26/2020	9:20	Water	1	x		x														nitric acid
6	BY-AP-MW-9_F1_006	5/26/2020	9:25	Water	1	x		x														nitric acid
7	GC-AP-MW-1_F1_007	5/26/2020	9:30	Water	1	x	x	x														nitric acid
8	GC-AP-MW-11_F1_008	5/26/2020	9:35	Water	1	x	x	x														nitric acid
9	GC-AP-MW-16_F1_009	5/26/2020	9:40	Water	1	x	x	x														nitric acid
10	OLD-MW-11S_F1_010	5/26/2020	9:45	Water	1	x	x			x												nitric acid
11	OLD-MW-11_F1_011	5/26/2020	9:50	Water	1	x	x			x												nitric acid
12	OLD-MW-2D_F1_012	5/26/2020	9:55	Water	1	x	x			x												nitric acid
13	GC-AP-MW-17_F1_013	5/26/2020	10:00	Water	1	x	x	x														nitric acid
14	GN-AP-MW-5_F1_014	5/26/2020	10:05	Water	1	x	x			x												nitric acid
15	GS-AP-MW-6D_F1_015	5/26/2020	10:10	Water	1	x	x			x												nitric acid

Notes:

Relinquished by:	Company:
Anthony Dalton-Atha	Anchor QEA
Signature/Print Name:	Date/Time:
	5/29/2020 10:00

Received by:	Company:
[signature]	ARS
Signature/Print Name:	Date/Time:
	5/29/20 1145

Relinquished by:	Company:
Signature/Print Name:	Date/Time:

Received by:	Company:
Signature/Print Name:	Date/Time:

Distribution: A copy will be made for the laboratory and client. The Project file will retain the original.

Chain of Custody Record & Laboratory Analysis Request

Date:	5/29/2020
Project Name:	APC SSE
Project Manager:	Anthony Dalton-Atha
email:	adalton-atha@anchorqea.com
Phone Number:	541-760-0851
Shipment Method:	Courier

ANCHOR QEA

Jessica Goin
6720 SW Macadam Ave
Suite 125
Portland OR 97219

Line	Field Sample ID	Collection Date	Collection Time	Matrix	No. of Containers	Arsenic	Lithium	Cobalt	Molybdenum												Comments/Preservation
16	GS-AP-MW-8_F1_016	5/26/2020	10:15	Water	1	x	x		x												nitric acid
17	MR-AP-MW-3D_F1_017	5/26/2020	10:20	Water	1	x	x	x													nitric acid
18	MR-AP-MW-4_F1_018	5/26/2020	10:25	Water	1	x	x	x													nitric acid
19	MR-AP-MW-5_F1_019	5/26/2020	10:30	Water	1	x	x	x													nitric acid
20	MW-1_F1_020	5/26/2020	10:35	Water	1	x	x		x												nitric acid
21	MW-12_F1_021	5/26/2020	10:40	Water	1	x	x		x												nitric acid
22	Blank_F1_022	5/26/2020	10:45	Water	1	x	x	x	x												nitric acid
23	OLD-MW-2D-F1_012_DUP	5/26/2020	10:50	Water	1	x	x		x												nitric acid

Notes:

Relinquished by:	Company:
Anthony Dalton-Atha	Anchor QEA
Signature/Print Name:	Date/Time:
	5/29/2020 10:00

Received by:	Company:
[signature] SWCF	ARS
Signature/Print Name:	Date/Time:
	5/29/20 1145

Relinquished by:	Company:
Signature/Print Name:	Date/Time:

Received by:	Company:
Signature/Print Name:	Date/Time:

Distribution: A copy will be made for the laboratory and client. The Project file will retain the original.

PC MH

Cooler Receipt and Preservation Form

Client ANCHOR QEA Service Request K20 04415

Received: 5/29/2020 Opened: 5/29/2020 By: CG Unloaded: 5/29/2020 By: CG

1. Samples were received via? *USPS* *Fed Ex* *UPS* *DHL* *PDX* *Courier* *Hand Delivered*
2. Samples were received in: (circle) *Cooler* *Box* *Envelope* *Other* _____ *NA*
3. Were custody seals on coolers? NA Y N If yes, how many and where? 1 Front

   If present, were custody seals intact? Y N If present, were they signed and dated? Y N

Temp Blank	Sample 1	Sample 2	Sample 3	Sample 4	IR GUN	Cooler / COC ID NA	Tracking Number NA	Filed
—	10.7	12.0	10.6	9.6	IR02			

4. Packing material: *Inserts* *Baggies* *Bubble Wrap* *Gel Packs* *Wet Ice* *Dry Ice* *Sleeves* _____
5. Were custody papers properly filled out (ink, signed, etc.)? NA Y N
6. Were samples received in good condition (temperature, unbroken)? *Indicate in the table below.* NA Y N

   If applicable, tissue samples were received: *Frozen* *Partially Thawed* *Thawed*
7. Were all sample labels complete (i.e analysis, preservation, etc.)? NA Y N
8. Did all sample labels and tags agree with custody papers? *Indicate major discrepancies in the table on page 2.* NA Y N
9. Were appropriate bottles/containers and volumes received for the tests indicated? NA Y N
10. Were the pH-preserved bottles (*see SMO GEN SOP*) received at the appropriate pH? *Indicate in the table below* NA Y N
11. Were VOA vials received without headspace? *Indicate in the table below.* NA Y N
12. Was C12/Res negative? NA Y N

Sample ID on Bottle	Sample ID on COC	Identified by:

Sample ID	Bottle Count Bottle Type	Out of Temp	Head-space	Broke	pH	Reagent	Volume added	Reagent Lot Number	Initials	Time
All "F2" samples	1-125mL, each				X	HNO_3	0.5mL	RE1-54-C	CG	1100 6/1/20

Notes, Discrepancies, & Resolutions: Temp okay - metals analyses

Miscellaneous Forms

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Inorganic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated value.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.
H	The holding time for this test is immediately following sample collection. The samples were analyzed as soon as possible after receipt by the laboratory.

Metals Data Qualifiers

#	The control limit criteria is not applicable. See case narrative.
J	The result is an estimated value.
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
M	The duplicate injection precision was not met.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
S	The reported value was determined by the Method of Standard Additions (MSA).
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
+	The correlation coefficient for the MSA is less than 0.995.
Q	See case narrative. One or more quality control criteria was outside the limits.

Organic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
A	A tentatively identified compound, a suspected aldol-condensation product.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
C	The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
D	The reported result is from a dilution.
E	The result is an estimated value.
J	The result is an estimated value.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
P	The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a chromatographic interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.

Additional Petroleum Hydrocarbon Specific Qualifiers

F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
Y	The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
Z	The chromatographic fingerprint does not resemble a petroleum product.

ALS Group USA Corp. dba ALS Environmental (ALS) - Kelso
State Certifications, Accreditations, and Licenses

Agency	Web Site	Number
Alaska DEH	http://dec.alaska.gov/eh/lab/cs/csapproval.htm	UST-040
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0339
Arkansas - DEQ	http://www.adeq.state.ar.us/techsvs/labcert.htm	88-0637
California DHS (ELAP)	http://www.cdph.ca.gov/certlic/labs/Pages/ELAP.aspx	2795
DOD ELAP	http://www.denix.osd.mil/edqw/Accreditation/AccreditedLabs.cfm	L16-58-R4
Florida DOH	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E87412
Hawaii DOH	http://health.hawaii.gov/	-
ISO 17025	http://www.pjlabs.com/	L16-57
Louisiana DEQ	http://www.deq.louisiana.gov/page/la-lab-accreditation	03016
Maine DHS	http://www.maine.gov/dhhs/	WA01276
Minnesota DOH	http://www.health.state.mn.us/accreditation	053-999-457
Nevada DEP	http://ndep.nv.gov/bsdw/labservice.htm	WA01276
New Jersey DEP	http://www.nj.gov/dep/enforcement/oqa.html	WA005
New York - DOH	https://www.wadsworth.org/regulatory/elap	12060
North Carolina DEQ	https://deq.nc.gov/about/divisions/water-resources/water-resources-data/water-sciences-home-page/laboratory-certification-branch/non-field-lab-certification	605
Oklahoma DEQ	http://www.deq.state.ok.us/CSDnew/labcert.htm	9801
Oregon – DEQ (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	WA100010
South Carolina DHEC	http://www.scdhec.gov/environment/EnvironmentalLabCertification/	61002
Texas CEQ	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704427
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C544
Wyoming (EPA Region 8)	https://www.epa.gov/region8-waterops/epa-region-8-certified-drinking-water-	-
Kelso Laboratory Website	www.alsglobal.com	NA

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. A complete listing of specific NELAP-certified analytes, can be found in the certification section at www.ALSGlobal.com or at the accreditation bodies web site.
Please refer to the certification and/or accreditation body's web site if samples are submitted for compliance purposes. The states highlighted above, require the analysis be listed on the state certification if used for compliance purposes and if the method/anlayte is offered by that state.

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LOD	Limit of Detection
LOQ	Limit of Quantitation
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Sample Results

ALS Environmental—Kelso Laboratory
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Metals

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ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2004415
Project:	APC SSE	**Date Collected:**	05/26/20 10:10
Sample Matrix:	Water	**Date Received:**	05/29/20 11:45
Sample Name:	GS-AP-MW-6D_F1_015	**Basis:**	NA
Lab Code:	K2004415-015		

Total Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	6010C	ND	U	ug/L	21	5	1	06/11/20 15:21	06/09/20	
Lithium	6010C	ND	U	ug/L	21	6	1	06/11/20 15:21	06/09/20	
Molybdenum	6010C	ND	U	ug/L	8.4	2.1	1	06/11/20 15:21	06/09/20	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2004415
Project:	APC SSE	**Date Collected:**	05/26/20 10:15
Sample Matrix:	Water	**Date Received:**	05/29/20 11:45
Sample Name:	GS-AP-MW-8_F1_016	**Basis:**	NA
Lab Code:	K2004415-016		

Total Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	6010C	ND	U	ug/L	21	5	1	06/11/20 15:36	06/09/20	
Lithium	6010C	ND	U	ug/L	21	6	1	06/11/20 15:36	06/09/20	
Molybdenum	6010C	ND	U	ug/L	8.4	2.1	1	06/11/20 15:36	06/09/20	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2004415
Project:	APC SSE	**Date Collected:**	05/26/20 10:35
Sample Matrix:	Water	**Date Received:**	05/29/20 11:45
Sample Name:	MW-1_F1_020	**Basis:**	NA
Lab Code:	K2004415-020		

Total Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	6010C	ND	U	ug/L	21	5	1	06/11/20 15:46	06/09/20	
Lithium	6010C	ND	U	ug/L	21	6	1	06/11/20 15:46	06/09/20	
Molybdenum	6010C	ND	U	ug/L	8.4	2.1	1	06/11/20 15:46	06/09/20	

QC Summary Forms

ALS Environmental—Kelso Laboratory
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www.alsglobal.com

Metals

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Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2004415
Project:	APC SSE	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	KQ2007740-02		

Total Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	6010C	ND	U	ug/L	21	5	1	06/11/20 14:18	06/09/20	
Cobalt	6010C	ND	U	ug/L	2.1	0.7	1	06/11/20 14:18	06/09/20	
Lithium	6010C	ND	U	ug/L	21	6	1	06/11/20 14:18	06/09/20	
Molybdenum	6010C	ND	U	ug/L	8.4	2.1	1	06/11/20 14:18	06/09/20	

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client:	Anchor QEA, LLC	**Service Request:**	K2004415
Project:	APC SSE	**Date Collected:**	05/26/20
Sample Matrix:	Water	**Date Received:**	05/29/20
		Date Analyzed:	06/11/20
		Date Extracted:	06/9/20

Matrix Spike Summary
Total Metals

Sample Name:	BY-AP-MW-11_F1_001	**Units:**	ug/L
Lab Code:	K2004415-001	**Basis:**	NA
Analysis Method:	6010C		
Prep Method:	EPA CLP ILM04.0		

Matrix Spike
KQ2007740-04

Analyte Name	Sample Result	Result	Spike Amount	% Rec	% Rec Limits
Arsenic	13 J	861	1000	85	75-125
Cobalt	0.9 J	440	500	88	75-125
Lithium	ND U	9360	10000	94	75-125
Molybdenum	10.8	1010	1000	100	75-125

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Matrix Spike and Matrix Spike Duplicate Data is presented for information purposes only. The matrix may or may not be relevant to samples reported in this report. The laboratory evaluates system performance based on the LCS and LCSD control limits.

ALS Group USA, Corp.

dba ALS Environmental

QA/QC Report

Client:	Anchor QEA, LLC	**Service Request:**	K2004415
Project	APC SSE	**Date Collected:**	05/26/20
Sample Matrix:	Water	**Date Received:**	05/29/20
		Date Analyzed:	06/11/20

Replicate Sample Summary
Total Metals

Sample Name:	BY-AP-MW-11_F1_001	**Units:**	ug/L
Lab Code:	K2004415-001	**Basis:**	NA

Analyte Name	Analysis Method	MRL	MDL	Sample Result	Duplicate Sample KQ2007740-03 Result	Average	RPD	RPD Limit
Arsenic	6010C	21	5	13 J	ND U	NC	NC	20
Cobalt	6010C	2.1	0.7	0.9 J	1.1 J	1.0	20	20
Lithium	6010C	21	6	ND U	ND U	ND	-	20
Molybdenum	6010C	8.4	2.1	10.8	ND U	NC	NC	20

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Anchor QEA, LLC
Project: APC SSE
Sample Matrix: Water

Service Request: K2004415
Date Analyzed: 06/11/20

Lab Control Sample Summary
Total Metals

Units:ug/L
Basis:NA

Lab Control Sample
KQ2007740-01

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Arsenic	6010C	2440	2500	98	80-120
Cobalt	6010C	1200	1250	96	80-120
Lithium	6010C	9280	10000	93	80-120
Molybdenum	6010C	1010	1000	101	80-120

July 20, 2020 Service Request No:K2004416

Anthony Dalton-Atha
Anchor QEA, LLC
6720 SW Macadam Avenue
Suite 125
Portland, OR 97219

Laboratory Results for: APC SSE

Dear Anthony,

Enclosed are the results of the sample(s) submitted to our laboratory May 29, 2020
For your reference, these analyses have been assigned our service request number **K2004416.**

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. All results are intended to be considered in their entirety, and ALS Group USA Corp. dba ALS Environmental (ALS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please contact me if you have any questions. My extension is 3376. You may also contact me via email at Mark.Harris@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Mark Harris
Project Manager

ADDRESS 1317 S. 13th Avenue, Kelso, WA 98626
PHONE +1 360 577 7222 | FAX +1 360 636 1068
ALS Group USA, Corp.
dba ALS Environmental

Narrative Documents

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

1317 South 13th Ave, Kelso, WA 98626 | 1-360-577-7222 | www.alsglobal.com

Client: Anchor QEA, LLC
Project: APC SSE
Sample Matrix: Water

Service Request: K2004416
Date Received: 05/29/2020

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples for the Tier II level requested by the client.

Sample Receipt:

Three water samples were received for analysis at ALS Environmental on 05/29/2020. Any discrepancies upon initial sample inspection are annotated on the sample receipt and preservation form included within this report. The samples were stored at minimum in accordance with the analytical method requirements.

Metals:

No significant anomalies were noted with this analysis.

Approved by _____ Date 06/17/2020

Sample Receipt Information

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Chain of Custody Record & Laboratory Analysis Request

Date:	5/29/2020
Project Name:	APC SSE
Project Manager:	Anthony Dalton-Atha
email:	adalton-atha@anchorqea.com
Phone Number:	541-760-0851
Shipment Method:	Courier

ANCHOR QEA

Jessica Goin
6720 SW Macadam Ave
Suite 125
Portland OR 97219

Line	Field Sample ID	Collection Date	Collection Time	Matrix	No. of Containers	Arsenic	Lithium	Cobalt	Molybdenum													Comments/Preservation
16	GS-AP-MW-8_F1_016	5/26/2020	10:15	Water	1	x	x		x													nitric acid
17	MR-AP-MW-3D_F1_017	5/26/2020	10:20	Water	1	x	x	x														nitric acid
18	MR-AP-MW-4_F1_018	5/26/2020	10:25	Water	1	x	x	x														nitric acid
19	MR-AP-MW-5_F1_019	5/26/2020	10:30	Water	1	x	x	x														nitric acid
20	MW-1_F1_020	5/26/2020	10:35	Water	1	x	x		x													nitric acid
21	MW-12_F1_021	5/26/2020	10:40	Water	1	x	x		x													nitric acid
22	Blank_F1_022	5/26/2020	10:45	Water	1	x	x	x	x													nitric acid
23	OLD-MW-2D-F1_012_DUP	5/26/2020	10:50	Water	1	x	x		x													nitric acid

Notes:

Relinquished by:	Company:
Anthony Dalton-Atha	Anchor QEA
Signature/Print Name:	Date/Time:
	5/29/2020 10:00

Received by:	Company:
[signature] SUZE	ARS
Signature/Print Name:	Date/Time:
	5/29/20 1145

Relinquished by:	Company:
Signature/Print Name:	Date/Time:

Received by:	Company:
Signature/Print Name:	Date/Time:

Distribution: A copy will be made for the laboratory and client. The Project file will retain the original.

Chain of Custody Record & Laboratory Analysis Request

Date:	5/29/2020
Project Name:	APC SSE
Project Manager:	Anthony Dalton-Atha
email:	adalton-atha@anchorqea.com
Phone Number:	541-760-0851
Shipment Method:	Courier

ANCHOR QEA

Jessica Goin
6720 SW Macadam Ave
Suite 125
Portland OR 97219

Line	Field Sample ID	Collection Date	Collection Time	Matrix	No. of Containers	Arsenic	Lithium	Cobalt	Molybdenum	Iron	Manganese	Calcium										Comments/Preservation
1	BY-AP-MW-11_F2_001	5/27/2020	9:00	Water	1	x		x		x	x	x										nitric acid
2	BY-AP-MW-12_F2_002	5/27/2020	9:05	Water	1	x		x		x	x	x										nitric acid
3	BY-AP-MW-13_F2_003	5/27/2020	9:10	Water	1	x		x		x	x	x										nitric acid
4	BY-AP-MW-2_F2_004	5/27/2020	9:15	Water	1	x		x		x	x	x										nitric acid
5	BY-AP-MW-7_F2_005	5/27/2020	9:20	Water	1	x		x		x	x	x										nitric acid
6	BY-AP-MW-9_F2_006	5/27/2020	9:25	Water	1	x		x		x	x	x										nitric acid
7	GC-AP-MW-1_F2_007	5/27/2020	9:30	Water	1	x	x	x		x	x	x										nitric acid
8	GC-AP-MW-11_F2_008	5/27/2020	9:35	Water	1	x	x	x		x	x	x										nitric acid
9	GC-AP-MW-16_F2_009	5/27/2020	9:40	Water	1	x	x	x		x	x	x										nitric acid
10	OLD-MW-11S_F2_010	5/27/2020	9:45	Water	1	x	x		x	x	x	x										nitric acid
11	OLD-MW-11_F2_011	5/27/2020	9:50	Water	1	x	x		x	x	x	x										nitric acid
12	OLD-MW-2D_F2_012	5/27/2020	9:55	Water	1	x	x		x	x	x	x										nitric acid
13	GC-AP-MW-17_F2_013	5/27/2020	10:00	Water	1	x	x	x		x	x	x										nitric acid
14	GN-AP-MW-5_F2_014	5/27/2020	10:05	Water	1	x	x		x	x	x	x										nitric acid
15	GS-AP-MW-6D_F2_015	5/27/2020	10:10	Water	1	x	x		x	x	x	x										nitric acid

Notes:

Relinquished by:	Company:
Anthony Dalton-Atha	Anchor QEA
Signature/Print Name:	Date/Time:
	5/29/2020 10:00

Received by:	Company:
Swolf	ALS
Signature/Print Name:	Date/Time:
A	5/29/20 1145

Relinquished by:	Company:
Signature/Print Name:	Date/Time:

Received by:	Company:
Signature/Print Name:	Date/Time:

Distribution: A copy will be made for the laboratory and client. The Project file will retain the original.

Chain of Custody Record & Laboratory Analysis Request

Date:	5/29/2020
Project Name:	APC SSE
Project Manager:	Anthony Dalton-Atha
email:	adalton-atha@anchorqea.com
Phone Number:	541-760-0851
Shipment Method:	Courier

ANCHOR QEA

Jessica Goin
6720 SW Macadam Ave
Suite 125
Portland OR 97219

Line	Field Sample ID	Collection Date	Collection Time	Matrix	No. of Containers	Arsenic	Lithium	Cobalt	Molybdenum	Iron	Manganese	Calcium										Comments/Preservation
16	GS-AP-MW-8_F2_016	5/27/2020	10:15	Water	1	x	x		x	x	x	x										nitric acid
17	MR-AP-MW-3D_F2_017	5/27/2020	10:20	Water	1	x	x	x		x	x	x										nitric acid
18	MR-AP-MW-4_F2_018	5/27/2020	10:25	Water	1	x	x	x		x	x	x										nitric acid
19	MR-AP-MW-5_F2_019	5/27/2020	10:30	Water	1	x	x	x		x	x	x										nitric acid
20	MW-1_F2_020	5/27/2020	10:35	Water	1	x	x		x	x	x	x										nitric acid
21	MW-12_F2_021	5/27/2020	10:40	Water	1	x	x		x	x	x	x										nitric acid
22	Blank_F2_022	5/27/2020	10:45	Water	1	x	x	x	x	x	x	x										nitric acid
23	OLD-MW-2D-F2_012_DUP	5/27/2020	10:50	Water	1	x	x		x	x	x	x										nitric acid

Notes:

Relinquished by:	Company:
Anthony Dalton-Atha	Anchor QEA
Signature/Print Name:	Date/Time:
	5/29/2020 10:00

Received by:	Company:
Swift	ARS
Signature/Print Name:	Date/Time:
	5/29/20 1145

Relinquished by:	Company:
Signature/Print Name:	Date/Time:

Received by:	Company:
Signature/Print Name:	Date/Time:

Distribution: A copy will be made for the laboratory and client. The Project file will retain the original.

PC MH

Cooler Receipt and Preservation Form

Client ANCHOR QEA Service Request K2004416

Received: 5/29/2020 Opened: 5/29/2020 By: CG Unloaded: 5/29/2020 By: CG

1. Samples were received via? *USPS* *Fed Ex* *UPS* *DHL* *PDX* *Courier* *Hand Delivered*
2. Samples were received in: (circle) *Cooler* *Box* *Envelope* *Other* _____ *NA*
3. Were custody seals on coolers? NA Y N If yes, how many and where? 1 Front

   If present, were custody seals intact? Y N If present, were they signed and dated? Y N

Temp Blank	Sample 1	Sample 2	Sample 3	Sample 4	IR GUN	Cooler / COC ID NA	Tracking Number NA	Filed
—	10.7	12.0	10.6	9.6	IR02			

4. Packing material: *Inserts* *Baggies* *Bubble Wrap* *Gel Packs* *Wet Ice* *Dry Ice* *Sleeves* _____
5. Were custody papers properly filled out (ink, signed, etc.)? NA Y N
6. Were samples received in good condition (temperature, unbroken)? *Indicate in the table below.* NA Y N

   If applicable, tissue samples were received: *Frozen* *Partially Thawed* *Thawed*
7. Were all sample labels complete (i.e analysis, preservation, etc.)? NA Y N
8. Did all sample labels and tags agree with custody papers? *Indicate major discrepancies in the table on page 2.* NA Y N
9. Were appropriate bottles/containers and volumes received for the tests indicated? NA Y N
10. Were the pH-preserved bottles (*see SMO GEN SOP*) received at the appropriate pH? *Indicate in the table below* NA Y N
11. Were VOA vials received without headspace? *Indicate in the table below.* NA Y N
12. Was C12/Res negative? NA Y N

Sample ID on Bottle	Sample ID on COC	Identified by:

Sample ID	Bottle Count Bottle Type	Out of Temp	Head-space	Broke	pH	Reagent	Volume added	Reagent Lot Number	Initials	Time
All "F2" samples	1-125mL, each				X	HNO_3	0.5mL	RE1-54-C	CG	1100 6/1/20

Notes, Discrepancies, & Resolutions: Temp okay - metals analyses

Miscellaneous Forms

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Inorganic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated value.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.
H	The holding time for this test is immediately following sample collection. The samples were analyzed as soon as possible after receipt by the laboratory.

Metals Data Qualifiers

#	The control limit criteria is not applicable. See case narrative.
J	The result is an estimated value.
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
M	The duplicate injection precision was not met.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
S	The reported value was determined by the Method of Standard Additions (MSA).
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
+	The correlation coefficient for the MSA is less than 0.995.
Q	See case narrative. One or more quality control criteria was outside the limits.

Organic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
A	A tentatively identified compound, a suspected aldol-condensation product.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
C	The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
D	The reported result is from a dilution.
E	The result is an estimated value.
J	The result is an estimated value.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
P	The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a chromatographic interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.

Additional Petroleum Hydrocarbon Specific Qualifiers

F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
Y	The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
Z	The chromatographic fingerprint does not resemble a petroleum product.

ALS Group USA Corp. dba ALS Environmental (ALS) - Kelso
State Certifications, Accreditations, and Licenses

Agency	Web Site	Number
Alaska DEH	http://dec.alaska.gov/eh/lab/cs/csapproval.htm	UST-040
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0339
Arkansas - DEQ	http://www.adeq.state.ar.us/techsvs/labcert.htm	88-0637
California DHS (ELAP)	http://www.cdph.ca.gov/certlic/labs/Pages/ELAP.aspx	2795
DOD ELAP	http://www.denix.osd.mil/edqw/Accreditation/AccreditedLabs.cfm	L16-58-R4
Florida DOH	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E87412
Hawaii DOH	http://health.hawaii.gov/	-
ISO 17025	http://www.pjlabs.com/	L16-57
Louisiana DEQ	http://www.deq.louisiana.gov/page/la-lab-accreditation	03016
Maine DHS	http://www.maine.gov/dhhs/	WA01276
Minnesota DOH	http://www.health.state.mn.us/accreditation	053-999-457
Nevada DEP	http://ndep.nv.gov/bsdw/labservice.htm	WA01276
New Jersey DEP	http://www.nj.gov/dep/enforcement/oqa.html	WA005
New York - DOH	https://www.wadsworth.org/regulatory/elap	12060
North Carolina DEQ	https://deq.nc.gov/about/divisions/water-resources/water-resources-data/water-sciences-home-page/laboratory-certification-branch/non-field-lab-certification	605
Oklahoma DEQ	http://www.deq.state.ok.us/CSDnew/labcert.htm	9801
Oregon – DEQ (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	WA100010
South Carolina DHEC	http://www.scdhec.gov/environment/EnvironmentalLabCertification/	61002
Texas CEQ	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704427
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C544
Wyoming (EPA Region 8)	https://www.epa.gov/region8-waterops/epa-region-8-certified-drinking-water-	-
Kelso Laboratory Website	www.alsglobal.com	NA

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. A complete listing of specific NELAP-certified analytes, can be found in the certification section at www.ALSGlobal.com or at the accreditation bodies web site.
Please refer to the certification and/or accreditation body's web site if samples are submitted for compliance purposes. The states highlighted above, require the analysis be listed on the state certification if used for compliance purposes and if the method/anlayte is offered by that state.

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LOD	Limit of Detection
LOQ	Limit of Quantitation
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Sample Results

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
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Metals

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ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2004416
Project:	APC SSE	**Date Collected:**	05/26/20 10:40
Sample Matrix:	Water	**Date Received:**	05/29/20 11:45
Sample Name:	MW-12_F1_021	**Basis:**	NA
Lab Code:	K2004416-001		

Total Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	6010C	ND	U	ug/L	21	5	1	06/11/20 15:09	06/09/20	
Lithium	6010C	ND	U	ug/L	21	6	1	06/11/20 15:09	06/09/20	
Molybdenum	6010C	**52.0**		ug/L	8.4	2.1	1	06/11/20 15:09	06/09/20	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2004416
Project:	APC SSE	**Date Collected:**	05/27/20 10:10
Sample Matrix:	Water	**Date Received:**	05/29/20 11:45
Sample Name:	GS-AP-MW-6D_F2_015	**Basis:**	NA
Lab Code:	K2004416-018		

Total Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	6010C	**9**	**J**	ug/L	21	5	1	06/15/20 12:33	06/09/20	
Calcium	6010C	**1140**		ug/L	21	3	1	06/15/20 12:33	06/09/20	
Iron	6010C	**430**		ug/L	42	8	1	06/15/20 12:33	06/09/20	
Lithium	6010C	ND	U	ug/L	21	6	1	06/15/20 12:33	06/09/20	
Manganese	6010C	**31.8**		ug/L	1.1	0.2	1	06/15/20 12:33	06/09/20	
Molybdenum	6010C	**13.1**		ug/L	8.4	2.1	1	06/15/20 12:33	06/09/20	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2004416
Project:	APC SSE	**Date Collected:**	05/27/20 10:15
Sample Matrix:	Water	**Date Received:**	05/29/20 11:45
Sample Name:	GS-AP-MW-8_F2_016	**Basis:**	NA
Lab Code:	K2004416-019		

Total Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	6010C	**86**		ug/L	21	5	1	06/15/20 12:36	06/09/20	
Calcium	6010C	**265**		ug/L	21	3	1	06/15/20 12:36	06/09/20	
Iron	6010C	**1160**		ug/L	42	8	1	06/15/20 12:36	06/09/20	
Lithium	6010C	ND	U	ug/L	21	6	1	06/15/20 12:36	06/09/20	
Manganese	6010C	**41.4**		ug/L	1.1	0.2	1	06/15/20 12:36	06/09/20	
Molybdenum	6010C	**7.2**	**J**	ug/L	8.4	2.1	1	06/15/20 12:36	06/09/20	

QC Summary Forms

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Metals

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ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2004416
Project:	APC SSE	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	KQ2007741-02		

Total Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	6010C	ND	U	ug/L	21	5	1	06/11/20 15:02	06/09/20	
Calcium	6010C	**3**	**J**	ug/L	21	3	1	06/11/20 15:02	06/09/20	
Cobalt	6010C	ND	U	ug/L	2.1	0.7	1	06/11/20 15:02	06/09/20	
Iron	6010C	ND	U	ug/L	21	8	1	06/11/20 15:02	06/09/20	
Lithium	6010C	ND	U	ug/L	21	6	1	06/11/20 15:02	06/09/20	
Manganese	6010C	**0.4**	**J**	ug/L	1.1	0.2	1	06/11/20 15:02	06/09/20	
Molybdenum	6010C	ND	U	ug/L	8.4	2.1	1	06/11/20 15:02	06/09/20	

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client:	Anchor QEA, LLC	**Service Request:**	K2004416
Project:	APC SSE	**Date Collected:**	05/26/20
Sample Matrix:	Water	**Date Received:**	05/29/20
		Date Analyzed:	06/11/20
		Date Extracted:	06/9/20

Matrix Spike Summary
Total Metals

Sample Name:	MW-12_F1_021	**Units:**	ug/L
Lab Code:	K2004416-001	**Basis:**	NA
Analysis Method:	6010C		
Prep Method:	EPA CLP ILM04.0		

Matrix Spike
KQ2007741-04

Analyte Name	Sample Result	Result	Spike Amount	% Rec	% Rec Limits
Arsenic	ND U	916	1000	92	75-125
Calcium	4060	13300	10000	93	75-125
Cobalt	16.9	427	500	82	75-125
Iron	62	975	1000	91	75-125
Lithium	ND U	10000	10000	100	75-125
Manganese	287	774	500	97	75-125
Molybdenum	52.0	999	1000	95	75-125

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Matrix Spike and Matrix Spike Duplicate Data is presented for information purposes only. The matrix may or may not be relevant to samples reported in this report. The laboratory evaluates system performance based on the LCS and LCSD control limits.

ALS Group USA, Corp.

dba ALS Environmental

QA/QC Report

Client:	Anchor QEA, LLC	**Service Request:**	K2004416
Project	APC SSE	**Date Collected:**	05/26/20
Sample Matrix:	Water	**Date Received:**	05/29/20
		Date Analyzed:	06/11/20

Replicate Sample Summary
Total Metals

Sample Name:	MW-12_F1_021	**Units:**	ug/L
Lab Code:	K2004416-001	**Basis:**	NA

Analyte Name	Analysis Method	MRL	MDL	Sample Result	Duplicate Sample KQ2007741-03 Result	Average	RPD	RPD Limit
Arsenic	6010C	21	5	ND U	ND U	ND	-	20
Calcium	6010C	21	3	4060	4050	4060	<1	20
Cobalt	6010C	2.1	0.7	16.9	17.9	17.4	6	20
Iron	6010C	21	8	62	62	62	<1	20
Lithium	6010C	21	6	ND U	ND U	ND	-	20
Manganese	6010C	1.1	0.2	287	290	289	1	20
Molybdenum	6010C	8.4	2.1	52.0	52.3	52.2	<1	20

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Anchor QEA, LLC
Project: APC SSE
Sample Matrix: Water

Service Request: K2004416
Date Analyzed: 06/11/20

Lab Control Sample Summary
Total Metals

Units:ug/L
Basis:NA

Lab Control Sample
KQ2007741-01

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Arsenic	6010C	2790	2500	111	80-120
Calcium	6010C	12600	12500	101	80-120
Cobalt	6010C	1230	1250	98	80-120
Iron	6010C	2490	2500	99	80-120
Lithium	6010C	9750	10000	98	80-120
Manganese	6010C	1250	1250	100	80-120
Molybdenum	6010C	1040	1000	104	80-120

July 20, 2020 Service Request No:K2004418

Anthony Dalton-Atha
Anchor QEA, LLC
6720 SW Macadam Avenue
Suite 125
Portland, OR 97219

Laboratory Results for: APC SSE

Dear Anthony,

Enclosed are the results of the sample(s) submitted to our laboratory May 29, 2020
For your reference, these analyses have been assigned our service request number **K2004418.**

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. All results are intended to be considered in their entirety, and ALS Group USA Corp. dba ALS Environmental (ALS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please contact me if you have any questions. My extension is 3376. You may also contact me via email at Mark.Harris@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Mark Harris
Project Manager

ADDRESS 1317 S. 13th Avenue, Kelso, WA 98626
PHONE +1 360 577 7222 | FAX +1 360 636 1068
ALS Group USA, Corp.
dba ALS Environmental

Narrative Documents

ALS Environmental—Kelso Laboratory
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Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

1317 South 13th Ave, Kelso, WA 98626 | 1-360-577-7222 | www.alsglobal.com

Client: Anchor QEA, LLC
Project: APC SSE
Sample Matrix: Water

Service Request: K2004418
Date Received: 05/29/2020

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples for the Tier II level requested by the client.

Sample Receipt:

Five water samples were received for analysis at ALS Environmental on 05/29/2020. Any discrepancies upon initial sample inspection are annotated on the sample receipt and preservation form included within this report. The samples were stored at minimum in accordance with the analytical method requirements.

Metals:

Method 6010C, 06/19/2020: Samples in this delivery group required dilution to non-target matrix components. Attempts to analyze the undiluted samples resulted in failed instrument QC check samples. The detection limits were elevated accordingly. No further corrective action was appropriate.

Approved by _____ Date 06/22/2020

Sample Receipt Information

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Chain of Custody Record & Laboratory Analysis Request

Date:	5/29/2020
Project Name:	APC SSE
Project Manager:	Anthony Dalton-Atha
email:	adalton-atha@anchorqea.com
Phone Number:	541-760-0851
Shipment Method:	Courier

ANCHOR QEA

Jessica Goin
6720 SW Macadam Ave
Suite 125
Portland OR 97219

Line	Field Sample ID	Collection Date	Collection Time	Matrix	No. of Containers	Arsenic	Lithium	Cobalt	Molybdenum	Iron	Manganese	Calcium										Comments/Preservation
16	GS-AP-MW-8_F2_016	5/27/2020	10:15	Water	1	x	x		x	x	x	x										nitric acid
17	MR-AP-MW-3D_F2_017	5/27/2020	10:20	Water	1	x	x	x		x	x	x										nitric acid
18	MR-AP-MW-4_F2_018	5/27/2020	10:25	Water	1	x	x	x		x	x	x										nitric acid
19	MR-AP-MW-5_F2_019	5/27/2020	10:30	Water	1	x	x	x		x	x	x										nitric acid
20	MW-1_F2_020	5/27/2020	10:35	Water	1	x	x		x	x	x	x										nitric acid
21	MW-12_F2_021	5/27/2020	10:40	Water	1	x	x		x	x	x	x										nitric acid
22	Blank_F2_022	5/27/2020	10:45	Water	1	x	x	x	x	x	x	x										nitric acid
23	OLD-MW-2D-F2_012_DUP	5/27/2020	10:50	Water	1	x	x		x	x	x	x										nitric acid

Notes:

Relinquished by:	Company:
Anthony Dalton-Atha	Anchor QEA
Signature/Print Name:	Date/Time:
	5/29/2020 10:00

Received by:	Company:
Swoff	ALS
Signature/Print Name:	Date/Time:
	5/29/20 1145

Relinquished by:	Company:
Signature/Print Name:	Date/Time:

Received by:	Company:
Signature/Print Name:	Date/Time:

Distribution: A copy will be made for the laboratory and client. The Project file will retain the original.

Chain of Custody Record & Laboratory Analysis Request

Date:	5/29/2020
Project Name:	APC SSE
Project Manager:	Anthony Dalton-Atha
email:	adalton-atha@anchorqea.com
Phone Number:	541-760-0851
Shipment Method:	Courier

ANCHOR QEA

Jessica Goin
6720 SW Macadam Ave
Suite 125
Portland OR 97219

Line	Field Sample ID	Collection Date	Collection Time	Matrix	No. of Containers	Arsenic	Lithium	Cobalt	Molybdenum	Iron	Manganese	Aluminum										Comments/Preservation
1	BY-AP-MW-11_F3_001			Water	1	x		x		x	x	x										nitric acid
2	BY-AP-MW-12_F3_002			Water	1	x		x		x	x	x										nitric acid
3	BY-AP-MW-13_F3_003			Water	1	x		x		x	x	x										nitric acid
4	BY-AP-MW-2_F3_004			Water	1	x		x		x	x	x										nitric acid
5	BY-AP-MW-7_F3_005			Water	1	x		x		x	x	x										nitric acid
6	BY-AP-MW-9_F3_006			Water	1	x		x		x	x	x										nitric acid
7	GC-AP-MW-1_F3_007			Water	1	x	x	x		x	x	x										nitric acid
8	GC-AP-MW-11_F3_008			Water	1	x	x	x		x	x	x										nitric acid
9	GC-AP-MW-16_F3_009			Water	1	x	x	x		x	x	x										nitric acid
10	OLD-MW-11S_F3_010			Water	1	x	x		x	x	x	x										nitric acid
11	OLD-MW-11_F3_011			Water	1	x	x		x	x	x	x										nitric acid
12	OLD-MW-2D_F3_012			Water	1	x	x		x	x	x	x										nitric acid
13	GC-AP-MW-17_F3_013			Water	1	x	x	x		x	x	x										nitric acid
14	GN-AP-MW-5_F3_014			Water	1	x	x		x	x	x	x										nitric acid
15	GS-AP-MW-6D_F3_015			Water	1	x	x		x	x	x	x										nitric acid

Notes:

Relinquished by:	Company:
Anthony Dalton-Atha	Anchor QEA
Signature/Print Name:	Date/Time:
	5/29/2020 10:00

Received by:	Company:
[signature]	ALS
Signature/Print Name:	Date/Time:
	5/29/20 1145

Relinquished by:	Company:
Signature/Print Name:	Date/Time:

Received by:	Company:
Signature/Print Name:	Date/Time:

Distribution: A copy will be made for the laboratory and client. The Project file will retain the original.

PC MH

Cooler Receipt and Preservation Form

Client ANCHOR QEA Service Request K20 04418

Received: 5/29/2020 Opened: 5/29/2020 By: CG Unloaded: 5/29/2020 By: CG

1. Samples were received via? *USPS* *Fed Ex* *UPS* *DHL* *PDX* *Courier* *Hand Delivered*
2. Samples were received in: (circle) *Cooler* *Box* *Envelope* *Other* _____ *NA*
3. Were custody seals on coolers? NA Y N If yes, how many and where? 1 Front

   If present, were custody seals intact? Y N If present, were they signed and dated? Y N

Temp Blank	Sample 1	Sample 2	Sample 3	Sample 4	IR GUN	Cooler / COC ID NA	Tracking Number NA	Filed
—	10.7	12.0	10.6	9.6	IR02			

4. Packing material: *Inserts* *Baggies* *Bubble Wrap* *Gel Packs* *Wet Ice* *Dry Ice* *Sleeves* _____
5. Were custody papers properly filled out (ink, signed, etc.)? NA Y N
6. Were samples received in good condition (temperature, unbroken)? *Indicate in the table below.* NA Y N

   If applicable, tissue samples were received: *Frozen* *Partially Thawed* *Thawed*
7. Were all sample labels complete (i.e analysis, preservation, etc.)? NA Y N
8. Did all sample labels and tags agree with custody papers? *Indicate major discrepancies in the table on page 2.* NA Y N
9. Were appropriate bottles/containers and volumes received for the tests indicated? NA Y N
10. Were the pH-preserved bottles (*see SMO GEN SOP*) received at the appropriate pH? *Indicate in the table below* NA Y N
11. Were VOA vials received without headspace? *Indicate in the table below.* NA Y N
12. Was C12/Res negative? NA Y N

Sample ID on Bottle	Sample ID on COC	Identified by:

Sample ID	Bottle Count Bottle Type	Out of Temp	Head-space	Broke	pH	Reagent	Volume added	Reagent Lot Number	Initials	Time
All "F2" samples	1-125mL, each				X	HNO_3	0.5mL	RE1-54-C	CG	1100 6/4/20

Notes, Discrepancies, & Resolutions: Temp okay - metals analyses

Miscellaneous Forms

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Inorganic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated value.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.
H	The holding time for this test is immediately following sample collection. The samples were analyzed as soon as possible after receipt by the laboratory.

Metals Data Qualifiers

#	The control limit criteria is not applicable. See case narrative.
J	The result is an estimated value.
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
M	The duplicate injection precision was not met.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
S	The reported value was determined by the Method of Standard Additions (MSA).
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
+	The correlation coefficient for the MSA is less than 0.995.
Q	See case narrative. One or more quality control criteria was outside the limits.

Organic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
A	A tentatively identified compound, a suspected aldol-condensation product.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
C	The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
D	The reported result is from a dilution.
E	The result is an estimated value.
J	The result is an estimated value.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
P	The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a chromatographic interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.

Additional Petroleum Hydrocarbon Specific Qualifiers

F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
Y	The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
Z	The chromatographic fingerprint does not resemble a petroleum product.

ALS Group USA Corp. dba ALS Environmental (ALS) - Kelso
State Certifications, Accreditations, and Licenses

Agency	Web Site	Number
Alaska DEH	http://dec.alaska.gov/eh/lab/cs/csapproval.htm	UST-040
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0339
Arkansas - DEQ	http://www.adeq.state.ar.us/techsvs/labcert.htm	88-0637
California DHS (ELAP)	http://www.cdph.ca.gov/certlic/labs/Pages/ELAP.aspx	2795
DOD ELAP	http://www.denix.osd.mil/edqw/Accreditation/AccreditedLabs.cfm	L16-58-R4
Florida DOH	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E87412
Hawaii DOH	http://health.hawaii.gov/	-
ISO 17025	http://www.pjlabs.com/	L16-57
Louisiana DEQ	http://www.deq.louisiana.gov/page/la-lab-accreditation	03016
Maine DHS	http://www.maine.gov/dhhs/	WA01276
Minnesota DOH	http://www.health.state.mn.us/accreditation	053-999-457
Nevada DEP	http://ndep.nv.gov/bsdw/labservice.htm	WA01276
New Jersey DEP	http://www.nj.gov/dep/enforcement/oqa.html	WA005
New York - DOH	https://www.wadsworth.org/regulatory/elap	12060
North Carolina DEQ	https://deq.nc.gov/about/divisions/water-resources/water-resources-data/water-sciences-home-page/laboratory-certification-branch/non-field-lab-certification	605
Oklahoma DEQ	http://www.deq.state.ok.us/CSDnew/labcert.htm	9801
Oregon – DEQ (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	WA100010
South Carolina DHEC	http://www.scdhec.gov/environment/EnvironmentalLabCertification/	61002
Texas CEQ	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704427
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C544
Wyoming (EPA Region 8)	https://www.epa.gov/region8-waterops/epa-region-8-certified-drinking-water-	-
Kelso Laboratory Website	www.alsglobal.com	NA

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. A complete listing of specific NELAP-certified analytes, can be found in the certification section at www.ALSGlobal.com or at the accreditation bodies web site.
Please refer to the certification and/or accreditation body's web site if samples are submitted for compliance purposes. The states highlighted above, require the analysis be listed on the state certification if used for compliance purposes and if the method/anlayte is offered by that state.

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LOD	Limit of Detection
LOQ	Limit of Quantitation
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Sample Results

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
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www.alsglobal.com

Metals

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2004418
Project:	APC SSE	**Date Collected:**	05/27/20 10:50
Sample Matrix:	Water	**Date Received:**	05/29/20 11:45
Sample Name:	OLD-MW-2D-F2_012_DUP	**Basis:**	NA
Lab Code:	K2004418-006		

Total Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	6010C	**30 J**	ug/L	110	30	5	06/19/20 12:17	06/09/20	
Calcium	6010C	**25600**	ug/L	110	20	5	06/19/20 12:17	06/09/20	
Iron	6010C	**440**	ug/L	210	40	5	06/19/20 12:17	06/09/20	
Lithium	6010C	ND U	ug/L	110	30	5	06/19/20 12:17	06/09/20	
Manganese	6010C	**667**	ug/L	5.3	1.1	5	06/19/20 12:17	06/09/20	
Molybdenum	6010C	ND U	ug/L	42	11	5	06/19/20 12:17	06/09/20	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2004418
Project:	APC SSE	**Date Collected:**	05/28/20 09:45
Sample Matrix:	Water	**Date Received:**	05/29/20 11:45
Sample Name:	OLD-MW-11S_F3_010	**Basis:**	NA
Lab Code:	K2004418-016		

Total Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	6010C	**600**	ug/L	110	30	5	06/19/20 12:50	06/09/20	
Arsenic	6010C	ND U	ug/L	110	30	5	06/19/20 12:50	06/09/20	
Iron	6010C	**3720**	ug/L	210	40	5	06/19/20 12:50	06/09/20	
Lithium	6010C	ND U	ug/L	110	30	5	06/19/20 12:50	06/09/20	
Manganese	6010C	**607**	ug/L	5.3	1.1	5	06/19/20 12:50	06/09/20	
Molybdenum	6010C	ND U	ug/L	42	11	5	06/19/20 12:50	06/09/20	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2004418
Project:	APC SSE	**Date Collected:**	05/28/20 09:50
Sample Matrix:	Water	**Date Received:**	05/29/20 11:45
Sample Name:	OLD-MW-11_F3_011	**Basis:**	NA
Lab Code:	K2004418-017		

Total Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	6010C	**770**	ug/L	110	30	5	06/19/20 12:53	06/09/20	
Arsenic	6010C	ND U	ug/L	110	30	5	06/19/20 12:53	06/09/20	
Iron	6010C	**2280**	ug/L	210	40	5	06/19/20 12:53	06/09/20	
Lithium	6010C	ND U	ug/L	110	30	5	06/19/20 12:53	06/09/20	
Manganese	6010C	**961**	ug/L	5.3	1.1	5	06/19/20 12:53	06/09/20	
Molybdenum	6010C	ND U	ug/L	42	11	5	06/19/20 12:53	06/09/20	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2004418
Project:	APC SSE	**Date Collected:**	05/28/20 09:55
Sample Matrix:	Water	**Date Received:**	05/29/20 11:45
Sample Name:	OLD-MW-2D_F3_012	**Basis:**	NA
Lab Code:	K2004418-018		

Total Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	6010C	**50**	**J**	ug/L	110	30	5	06/19/20 12:55	06/09/20	
Arsenic	6010C	ND	U	ug/L	110	30	5	06/19/20 12:55	06/09/20	
Iron	6010C	**2370**		ug/L	210	40	5	06/19/20 12:55	06/09/20	
Lithium	6010C	ND	U	ug/L	110	30	5	06/19/20 12:55	06/09/20	
Manganese	6010C	**410**		ug/L	5.3	1.1	5	06/19/20 12:55	06/09/20	
Molybdenum	6010C	ND	U	ug/L	42	11	5	06/19/20 12:55	06/09/20	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2004418
Project:	APC SSE	**Date Collected:**	05/28/20 10:05
Sample Matrix:	Water	**Date Received:**	05/29/20 11:45
Sample Name:	GN-AP-MW-5_F3_014	**Basis:**	NA
Lab Code:	K2004418-020		

Total Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	6010C	**180**	ug/L	110	30	5	06/19/20 13:00	06/09/20	
Arsenic	6010C	ND U	ug/L	110	30	5	06/19/20 13:00	06/09/20	
Iron	6010C	**1040**	ug/L	210	40	5	06/19/20 13:00	06/09/20	
Lithium	6010C	ND U	ug/L	110	30	5	06/19/20 13:00	06/09/20	
Manganese	6010C	**102**	ug/L	5.3	1.1	5	06/19/20 13:00	06/09/20	
Molybdenum	6010C	ND U	ug/L	42	11	5	06/19/20 13:00	06/09/20	

QC Summary Forms

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Metals

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ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2004418
Project:	APC SSE	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	KQ2007742-02		

Total Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	6010C	ND	U	ug/L	21	5	1	06/19/20 11:09	06/09/20	
Arsenic	6010C	ND	U	ug/L	21	5	1	06/19/20 11:09	06/09/20	
Calcium	6010C	**8**	**J**	ug/L	21	3	1	06/19/20 11:09	06/09/20	
Cobalt	6010C	ND	U	ug/L	2.1	0.7	1	06/19/20 11:09	06/09/20	
Iron	6010C	ND	U	ug/L	21	8	1	06/19/20 11:09	06/09/20	
Lithium	6010C	ND	U	ug/L	21	6	1	06/19/20 11:09	06/09/20	
Manganese	6010C	ND	U	ug/L	1.1	0.2	1	06/19/20 11:09	06/09/20	
Molybdenum	6010C	ND	U	ug/L	8.4	2.1	1	06/19/20 11:09	06/09/20	

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client:	Anchor QEA, LLC	**Service Request:**	K2004418
Project:	APC SSE	**Date Collected:**	05/27/20
Sample Matrix:	Water	**Date Received:**	05/29/20
		Date Analyzed:	06/19/20
		Date Extracted:	06/9/20

Matrix Spike Summary
Total Metals

Sample Name:	MR-AP-MW-4_F2_018	**Units:**	ug/L
Lab Code:	K2004418-001	**Basis:**	NA
Analysis Method:	6010C		
Prep Method:	EPA CLP ILM04.0		

Matrix Spike
KQ2007742-04

Analyte Name	Sample Result	Result	Spike Amount	% Rec	% Rec Limits
Aluminum	790	2470	2000	84	75-125
Arsenic	ND U	980	1000	98	75-125
Calcium	9980	19600	10000	97	75-125
Cobalt	14	481	500	93	75-125
Iron	300	1270	1000	97	75-125
Lithium	ND U	10300	10000	103	75-125
Manganese	1960	2350	500	78	75-125
Molybdenum	24 J	1050	1000	102	75-125

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Matrix Spike and Matrix Spike Duplicate Data is presented for information purposes only. The matrix may or may not be relevant to samples reported in this report. The laboratory evaluates system performance based on the LCS and LCSD control limits.

ALS Group USA, Corp.

dba ALS Environmental

QA/QC Report

Client:	Anchor QEA, LLC	**Service Request:**	K2004418
Project	APC SSE	**Date Collected:**	05/27/20
Sample Matrix:	Water	**Date Received:**	05/29/20
		Date Analyzed:	06/19/20

Replicate Sample Summary
Total Metals

Sample Name:	MR-AP-MW-4_F2_018	**Units:**	ug/L
Lab Code:	K2004418-001	**Basis:**	NA

Analyte Name	Analysis Method	MRL	MDL	Sample Result	Duplicate Sample KQ2007742-03 Result	Average	RPD	RPD Limit
Aluminum	6010C	110	30	790	760	780	4	20
Arsenic	6010C	110	30	ND U	ND U	ND	-	20
Calcium	6010C	110	20	9980	9390	9690	6	20
Cobalt	6010C	11	4	14	11	13	24 #	20
Iron	6010C	110	40	300	310	310	3	20
Lithium	6010C	110	30	ND U	ND U	ND	-	20
Manganese	6010C	5.3	1.1	1960	1850	1910	6	20
Molybdenum	6010C	42	11	24 J	18 J	21	29 #	20

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp.
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QA/QC Report

Client: Anchor QEA, LLC
Project: APC SSE
Sample Matrix: Water

Service Request: K2004418
Date Analyzed: 06/19/20

Lab Control Sample Summary
Total Metals

Units:ug/L
Basis:NA

Lab Control Sample
KQ2007742-01

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Aluminum	6010C	5240	5000	105	80-120
Arsenic	6010C	2610	2500	105	80-120
Calcium	6010C	12800	12500	102	80-120
Cobalt	6010C	1210	1250	97	80-120
Iron	6010C	2580	2500	103	80-120
Lithium	6010C	10600	10000	106	80-120
Manganese	6010C	1220	1250	97	80-120
Molybdenum	6010C	1030	1000	103	80-120

July 20, 2020 Service Request No:K2004418

Anthony Dalton-Atha
Anchor QEA, LLC
6720 SW Macadam Avenue
Suite 125
Portland, OR 97219

Laboratory Results for: APC SSE

Dear Anthony,

Enclosed are the results of the sample(s) submitted to our laboratory May 29, 2020
For your reference, these analyses have been assigned our service request number **K2004418.**

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. All results are intended to be considered in their entirety, and ALS Group USA Corp. dba ALS Environmental (ALS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please contact me if you have any questions. My extension is 3376. You may also contact me via email at Mark.Harris@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Mark Harris
Project Manager

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ALS Group USA, Corp.
dba ALS Environmental

Narrative Documents

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Client: Anchor QEA, LLC
Project: APC SSE
Sample Matrix: Water

Service Request: K2004418
Date Received: 05/29/2020

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples for the Tier II level requested by the client.

Sample Receipt:

Two water samples were received for analysis at ALS Environmental on 05/29/2020. Any discrepancies upon initial sample inspection are annotated on the sample receipt and preservation form included within this report. The samples were stored at minimum in accordance with the analytical method requirements.

Metals:

Method 6010C, 06/19/2020: Samples in this delivery group required dilution to non-target matrix components. Attempts to analyze the undiluted samples resulted in failed instrument QC check samples. The detection limits were elevated accordingly. No further corrective action was appropriate.

Approved by _____ Date 06/22/2020

Sample Receipt Information

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Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Chain of Custody Record & Laboratory Analysis Request

Date:	5/29/2020
Project Name:	APC SSE
Project Manager:	Anthony Dalton-Atha
email:	adalton-atha@anchorqea.com
Phone Number:	541-760-0851
Shipment Method:	Courier

ANCHOR QEA

Jessica Goin
6720 SW Macadam Ave
Suite 125
Portland OR 97219

Line	Field Sample ID	Collection Date	Collection Time	Matrix	No. of Containers	Arsenic	Lithium	Cobalt	Molybdenum	Iron	Manganese	Calcium										Comments/Preservation
16	GS-AP-MW-8_F2_016	5/27/2020	10:15	Water	1	x	x		x	x	x	x										nitric acid
17	MR-AP-MW-3D_F2_017	5/27/2020	10:20	Water	1	x	x	x		x	x	x										nitric acid
18	MR-AP-MW-4_F2_018	5/27/2020	10:25	Water	1	x	x	x		x	x	x										nitric acid
19	MR-AP-MW-5_F2_019	5/27/2020	10:30	Water	1	x	x	x		x	x	x										nitric acid
20	MW-1_F2_020	5/27/2020	10:35	Water	1	x	x		x	x	x	x										nitric acid
21	MW-12_F2_021	5/27/2020	10:40	Water	1	x	x		x	x	x	x										nitric acid
22	Blank_F2_022	5/27/2020	10:45	Water	1	x	x	x	x	x	x	x										nitric acid
23	OLD-MW-2D-F2_012_DUP	5/27/2020	10:50	Water	1	x	x		x	x	x	x										nitric acid

Notes:

Relinquished by:	Company:
Anthony Dalton-Atha	Anchor QEA
Signature/Print Name:	Date/Time:
	5/29/2020 10:00

Received by:	Company:
Swoff	ALS
Signature/Print Name:	Date/Time:
	5/29/20 1145

Relinquished by:	Company:
Signature/Print Name:	Date/Time:

Received by:	Company:
Signature/Print Name:	Date/Time:

Distribution: A copy will be made for the laboratory and client. The Project file will retain the original.

PC MH

Cooler Receipt and Preservation Form

Client ANCHOR QEA Service Request K20 04418

Received: 5/29/2020 Opened: 5/29/2020 By: CG Unloaded: 5/29/2020 By: CG

1. Samples were received via? *USPS* *Fed Ex* *UPS* *DHL* *PDX* *Courier* *Hand Delivered*
2. Samples were received in: (circle) *Cooler* *Box* *Envelope* *Other* _____ *NA*
3. Were custody seals on coolers? NA Y N If yes, how many and where? 1 Front

   If present, were custody seals intact? Y N If present, were they signed and dated? Y N

Temp Blank	Sample 1	Sample 2	Sample 3	Sample 4	IR GUN	Cooler / COC ID NA	Tracking Number NA	Filed
—	10.7	12.0	10.6	9.6	IR02			

4. Packing material: *Inserts* *Baggies* *Bubble Wrap* *Gel Packs* *Wet Ice* *Dry Ice* *Sleeves* _____
5. Were custody papers properly filled out (ink, signed, etc.)? NA Y N
6. Were samples received in good condition (temperature, unbroken)? *Indicate in the table below.* NA Y N

   If applicable, tissue samples were received: *Frozen* *Partially Thawed* *Thawed*
7. Were all sample labels complete (i.e analysis, preservation, etc.)? NA Y N
8. Did all sample labels and tags agree with custody papers? *Indicate major discrepancies in the table on page 2.* NA Y N
9. Were appropriate bottles/containers and volumes received for the tests indicated? NA Y N
10. Were the pH-preserved bottles (*see SMO GEN SOP*) received at the appropriate pH? *Indicate in the table below* NA Y N
11. Were VOA vials received without headspace? *Indicate in the table below.* NA Y N
12. Was C12/Res negative? NA Y N

Sample ID on Bottle	Sample ID on COC	Identified by:

Sample ID	Bottle Count Bottle Type	Out of Temp	Head-space	Broke	pH	Reagent	Volume added	Reagent Lot Number	Initials	Time
All "F2" samples	1-125mL, each				X	HNO_3	0.5mL	RE1-54-C	CG	1100 6/4/20

Notes, Discrepancies, & Resolutions: Temp okay - metals analyses

Miscellaneous Forms

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Inorganic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated value.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.
H	The holding time for this test is immediately following sample collection. The samples were analyzed as soon as possible after receipt by the laboratory.

Metals Data Qualifiers

#	The control limit criteria is not applicable. See case narrative.
J	The result is an estimated value.
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
M	The duplicate injection precision was not met.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
S	The reported value was determined by the Method of Standard Additions (MSA).
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
+	The correlation coefficient for the MSA is less than 0.995.
Q	See case narrative. One or more quality control criteria was outside the limits.

Organic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
A	A tentatively identified compound, a suspected aldol-condensation product.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
C	The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
D	The reported result is from a dilution.
E	The result is an estimated value.
J	The result is an estimated value.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
P	The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a chromatographic interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.

Additional Petroleum Hydrocarbon Specific Qualifiers

F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
Y	The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
Z	The chromatographic fingerprint does not resemble a petroleum product.

ALS Group USA Corp. dba ALS Environmental (ALS) - Kelso
State Certifications, Accreditations, and Licenses

Agency	Web Site	Number
Alaska DEH	http://dec.alaska.gov/eh/lab/cs/csapproval.htm	UST-040
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0339
Arkansas - DEQ	http://www.adeq.state.ar.us/techsvs/labcert.htm	88-0637
California DHS (ELAP)	http://www.cdph.ca.gov/certlic/labs/Pages/ELAP.aspx	2795
DOD ELAP	http://www.denix.osd.mil/edqw/Accreditation/AccreditedLabs.cfm	L16-58-R4
Florida DOH	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E87412
Hawaii DOH	http://health.hawaii.gov/	-
ISO 17025	http://www.pjlabs.com/	L16-57
Louisiana DEQ	http://www.deq.louisiana.gov/page/la-lab-accreditation	03016
Maine DHS	http://www.maine.gov/dhhs/	WA01276
Minnesota DOH	http://www.health.state.mn.us/accreditation	053-999-457
Nevada DEP	http://ndep.nv.gov/bsdw/labservice.htm	WA01276
New Jersey DEP	http://www.nj.gov/dep/enforcement/oqa.html	WA005
New York - DOH	https://www.wadsworth.org/regulatory/elap	12060
North Carolina DEQ	https://deq.nc.gov/about/divisions/water-resources/water-resources-data/water-sciences-home-page/laboratory-certification-branch/non-field-lab-certification	605
Oklahoma DEQ	http://www.deq.state.ok.us/CSDnew/labcert.htm	9801
Oregon – DEQ (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	WA100010
South Carolina DHEC	http://www.scdhec.gov/environment/EnvironmentalLabCertification/	61002
Texas CEQ	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704427
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C544
Wyoming (EPA Region 8)	https://www.epa.gov/region8-waterops/epa-region-8-certified-drinking-water-	-
Kelso Laboratory Website	www.alsglobal.com	NA

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. A complete listing of specific NELAP-certified analytes, can be found in the certification section at www.ALSGlobal.com or at the accreditation bodies web site.
Please refer to the certification and/or accreditation body's web site if samples are submitted for compliance purposes. The states highlighted above, require the analysis be listed on the state certification if used for compliance purposes and if the method/anlayte is offered by that state.

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LOD	Limit of Detection
LOQ	Limit of Quantitation
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Sample Results

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Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2004418
Project:	APC SSE	**Date Collected:**	05/27/20 10:35
Sample Matrix:	Water	**Date Received:**	05/29/20 11:45
Sample Name:	MW-1_F2_020	**Basis:**	NA
Lab Code:	K2004418-003		

Total Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	6010C	ND U	ug/L	110	30	5	06/19/20 12:10	06/09/20	
Calcium	6010C	**590**	ug/L	110	20	5	06/19/20 12:10	06/09/20	
Iron	6010C	**940**	ug/L	210	40	5	06/19/20 12:10	06/09/20	
Lithium	6010C	ND U	ug/L	110	30	5	06/19/20 12:10	06/09/20	
Manganese	6010C	**663**	ug/L	5.3	1.1	5	06/19/20 12:10	06/09/20	
Molybdenum	6010C	**18 J**	ug/L	42	11	5	06/19/20 12:10	06/09/20	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2004418
Project:	APC SSE	**Date Collected:**	05/27/20 10:40
Sample Matrix:	Water	**Date Received:**	05/29/20 11:45
Sample Name:	MW-12_F2_021	**Basis:**	NA
Lab Code:	K2004418-004		

Total Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	6010C	**70**	**J**	ug/L	110	30	5	06/19/20 12:12	06/09/20	
Calcium	6010C	**500**		ug/L	110	20	5	06/19/20 12:12	06/09/20	
Iron	6010C	**1850**		ug/L	210	40	5	06/19/20 12:12	06/09/20	
Lithium	6010C	ND	U	ug/L	110	30	5	06/19/20 12:12	06/09/20	
Manganese	6010C	**174**		ug/L	5.3	1.1	5	06/19/20 12:12	06/09/20	
Molybdenum	6010C	**70**		ug/L	42	11	5	06/19/20 12:12	06/09/20	

QC Summary Forms

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ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2004418
Project:	APC SSE	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	KQ2007742-02		

Total Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	6010C	ND	U	ug/L	21	5	1	06/19/20 11:09	06/09/20	
Arsenic	6010C	ND	U	ug/L	21	5	1	06/19/20 11:09	06/09/20	
Calcium	6010C	**8**	**J**	ug/L	21	3	1	06/19/20 11:09	06/09/20	
Cobalt	6010C	ND	U	ug/L	2.1	0.7	1	06/19/20 11:09	06/09/20	
Iron	6010C	ND	U	ug/L	21	8	1	06/19/20 11:09	06/09/20	
Lithium	6010C	ND	U	ug/L	21	6	1	06/19/20 11:09	06/09/20	
Manganese	6010C	ND	U	ug/L	1.1	0.2	1	06/19/20 11:09	06/09/20	
Molybdenum	6010C	ND	U	ug/L	8.4	2.1	1	06/19/20 11:09	06/09/20	

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client:	Anchor QEA, LLC	**Service Request:**	K2004418
Project:	APC SSE	**Date Collected:**	05/27/20
Sample Matrix:	Water	**Date Received:**	05/29/20
		Date Analyzed:	06/19/20
		Date Extracted:	06/9/20

Matrix Spike Summary
Total Metals

Sample Name:	MR-AP-MW-4_F2_018	**Units:**	ug/L
Lab Code:	K2004418-001	**Basis:**	NA
Analysis Method:	6010C		
Prep Method:	EPA CLP ILM04.0		

Matrix Spike
KQ2007742-04

Analyte Name	Sample Result	Result	Spike Amount	% Rec	% Rec Limits
Aluminum	790	2470	2000	84	75-125
Arsenic	ND U	980	1000	98	75-125
Calcium	9980	19600	10000	97	75-125
Cobalt	14	481	500	93	75-125
Iron	300	1270	1000	97	75-125
Lithium	ND U	10300	10000	103	75-125
Manganese	1960	2350	500	78	75-125
Molybdenum	24 J	1050	1000	102	75-125

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Matrix Spike and Matrix Spike Duplicate Data is presented for information purposes only. The matrix may or may not be relevant to samples reported in this report. The laboratory evaluates system performance based on the LCS and LCSD control limits.

ALS Group USA, Corp.

dba ALS Environmental

QA/QC Report

Client:	Anchor QEA, LLC	**Service Request:**	K2004418
Project	APC SSE	**Date Collected:**	05/27/20
Sample Matrix:	Water	**Date Received:**	05/29/20
		Date Analyzed:	06/19/20

Replicate Sample Summary
Total Metals

Sample Name:	MR-AP-MW-4_F2_018	**Units:**	ug/L
Lab Code:	K2004418-001	**Basis:**	NA

Analyte Name	Analysis Method	MRL	MDL	Sample Result	Duplicate Sample KQ2007742-03 Result	Average	RPD	RPD Limit
Aluminum	6010C	110	30	790	760	780	4	20
Arsenic	6010C	110	30	ND U	ND U	ND	-	20
Calcium	6010C	110	20	9980	9390	9690	6	20
Cobalt	6010C	11	4	14	11	13	24 #	20
Iron	6010C	110	40	300	310	310	3	20
Lithium	6010C	110	30	ND U	ND U	ND	-	20
Manganese	6010C	5.3	1.1	1960	1850	1910	6	20
Molybdenum	6010C	42	11	24 J	18 J	21	29 #	20

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Anchor QEA, LLC
Project: APC SSE
Sample Matrix: Water

Service Request: K2004418
Date Analyzed: 06/19/20

Lab Control Sample Summary
Total Metals

Units:ug/L
Basis:NA

Lab Control Sample
KQ2007742-01

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Aluminum	6010C	5240	5000	105	80-120
Arsenic	6010C	2610	2500	105	80-120
Calcium	6010C	12800	12500	102	80-120
Cobalt	6010C	1210	1250	97	80-120
Iron	6010C	2580	2500	103	80-120
Lithium	6010C	10600	10000	106	80-120
Manganese	6010C	1220	1250	97	80-120
Molybdenum	6010C	1030	1000	103	80-120

July 20, 2020 Service Request No:K2004421

Anthony Dalton-Atha
Anchor QEA, LLC
6720 SW Macadam Avenue
Suite 125
Portland, OR 97219

Laboratory Results for: APC SSE

Dear Anthony,

Enclosed are the results of the sample(s) submitted to our laboratory May 29, 2020
For your reference, these analyses have been assigned our service request number **K2004421.**

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. All results are intended to be considered in their entirety, and ALS Group USA Corp. dba ALS Environmental (ALS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please contact me if you have any questions. My extension is 3376. You may also contact me via email at Mark.Harris@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Mark Harris
Project Manager

ADDRESS 1317 S. 13th Avenue, Kelso, WA 98626
PHONE +1 360 577 7222 | FAX +1 360 636 1068
ALS Group USA, Corp.
dba ALS Environmental

Narrative Documents

ALS Environmental—Kelso Laboratory
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www.alsglobal.com

1317 South 13th Ave, Kelso, WA 98626 | 1-360-577-7222 | www.alsglobal.com

Client: Anchor QEA, LLC
Project: APC SSE
Sample Matrix: Water

Service Request: K2004421
Date Received: 05/29/2020

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples for the Tier II level requested by the client.

Sample Receipt:

Four water samples were received for analysis at ALS Environmental on 05/29/2020. Any discrepancies upon initial sample inspection are annotated on the sample receipt and preservation form included within this report. The samples were stored at minimum in accordance with the analytical method requirements.

Metals:

Method 6010C, 06/19/2020: Samples in this delivery group required dilution to non-target matrix components. Attempts to analyze the undiluted samples resulted in failed instrument QC check samples. The detection limits were elevated accordingly. No further corrective action was appropriate.

Approved by _____ Date 06/22/2020

Sample Receipt Information

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Chain of Custody Record & Laboratory Analysis Request

Date:	5/29/2020
Project Name:	APC SSE
Project Manager:	Anthony Dalton-Atha
email:	adalton-atha@anchorqea.com
Phone Number:	541-760-0851
Shipment Method:	Courier

ANCHOR QEA

Jessica Goin
6720 SW Macadam Ave
Suite 125
Portland OR 97219

Line	Field Sample ID	Collection Date	Collection Time	Matrix	No. of Containers	Arsenic	Lithium	Cobalt	Molybdenum	Iron												Comments/Preservation
1	BY-AP-MW-11_F4_001			Water	1	x		x		x												nitric acid
2	BY-AP-MW-12_F4_002			Water	1	x		x		x												nitric acid
3	BY-AP-MW-13_F4_003			Water	1	x		x		x												nitric acid
4	BY-AP-MW-2_F4_004			Water	1	x		x		x												nitric acid
5	BY-AP-MW-7_F4_005			Water	1	x		x		x												nitric acid
6	BY-AP-MW-9_F4_006			Water	1	x		x		x												nitric acid
7	GC-AP-MW-1_F4_007			Water	1	x	x	x		x												nitric acid
8	GC-AP-MW-11_F4_008			Water	1	x	x	x		x												nitric acid
9	GC-AP-MW-16_F4_009			Water	1	x	x	x		x												nitric acid
10	OLD-MW-11S_F4_010			Water	1	x	x		x	x												nitric acid
11	OLD-MW-11_F4_011			Water	1	x	x		x	x												nitric acid
12	OLD-MW-2D_F4_012			Water	1	x	x		x	x												nitric acid
13	GC-AP-MW-17_F4_013			Water	1	x	x	x		x												nitric acid
14	GN-AP-MW-5_F4_014			Water	1	x	x		x	x												nitric acid
15	GS-AP-MW-6D_F4_015			Water	1	x	x		x	x												nitric acid

Notes: **CAUTION! F4 samples are concentrated (16N) nitric acid.**

Relinquished by:	Company:
Anthony Dalton-Atha	Anchor QEA
Signature/Print Name:	Date/Time:
	5/29/2020 10:00

Received by:	Company:
[illegible]	ALS
Signature/Print Name:	Date/Time:
	5/29/20 1145

Relinquished by:	Company:
Signature/Print Name:	Date/Time:

Received by:	Company:
Signature/Print Name:	Date/Time:

Distribution: A copy will be made for the laboratory and client. The Project file will retain the original.

Chain of Custody Record & Laboratory Analysis Request

Date:	5/29/2020
Project Name:	APC SSE
Project Manager:	Anthony Dalton-Atha
email:	adalton-atha@anchorqea.com
Phone Number:	541-760-0851
Shipment Method:	Courier

ANCHOR QEA

Jessica Goin
6720 SW Macadam Ave
Suite 125
Portland OR 97219

Line	Field Sample ID	Collection Date	Collection Time	Matrix	No. of Containers	Arsenic	Lithium	Cobalt	Molybdenum	Iron											Comments/Preservation
16	GS-AP-MW-8_F4_016			Water	1	x	x		x	x											nitric acid
17	MR-AP-MW-3D_F4_017			Water	1	x	x	x		x											nitric acid
18	MR-AP-MW-4_F4_018			Water	1	x	x	x		x											nitric acid
19	MR-AP-MW-5_F4_019			Water	1	x	x	x		x											nitric acid
20	MW-1_F4_020			Water	1	x	x		x	x											nitric acid
21	MW-12_F4_021			Water	1	x	x		x	x											nitric acid
22	Blank_F4_022			Water	1	x	x	x	x	x											nitric acid
23	OLD-MW-2D-F4_012_DUP			Water	1	x	x		x	x											nitric acid

Notes: **CAUTION! F4 samples are concentrated (16N) nitric acid.**

Relinquished by:	Company:
Anthony Dalton-Atha	Anchor QEA
Signature/Print Name:	Date/Time:
	5/29/2020 10:00

Received by:	Company:
SWOLF	ACS
Signature/Print Name:	Date/Time:
	5/29/20 1145

Relinquished by:	Company:
Signature/Print Name:	Date/Time:

Received by:	Company:
Signature/Print Name:	Date/Time:

Distribution: A copy will be made for the laboratory and client. The Project file will retain the original.

PC MH

Cooler Receipt and Preservation Form

Client ANCHOR QEA Service Request K20 044221

Received: 5/29/2020 Opened: 5/29/2020 By: CG Unloaded: 5/29/2020 By: CG

1. Samples were received via? *USPS* *Fed Ex* *UPS* *DHL* *PDX* *Courier* *Hand Delivered*
2. Samples were received in: (circle) *Cooler* *Box* *Envelope* *Other* _____ *NA*
3. Were custody seals on coolers? NA Y N If yes, how many and where? 1 Front

   If present, were custody seals intact? Y N If present, were they signed and dated? Y N

Temp Blank	Sample 1	Sample 2	Sample 3	Sample 4	IR GUN	Cooler / COC ID NA	Tracking Number NA	Filed
—	10.7	12.0	10.6	9.6	IR02			

4. Packing material: *Inserts* *Baggies* *Bubble Wrap* *Gel Packs* *Wet Ice* *Dry Ice* *Sleeves* _____
5. Were custody papers properly filled out (ink, signed, etc.)? NA Y N
6. Were samples received in good condition (temperature, unbroken)? *Indicate in the table below.* NA Y N

   If applicable, tissue samples were received: *Frozen* *Partially Thawed* *Thawed*
7. Were all sample labels complete (i.e analysis, preservation, etc.)? NA Y N
8. Did all sample labels and tags agree with custody papers? *Indicate major discrepancies in the table on page 2.* NA Y N
9. Were appropriate bottles/containers and volumes received for the tests indicated? NA Y N
10. Were the pH-preserved bottles (*see SMO GEN SOP*) received at the appropriate pH? *Indicate in the table below* NA Y N
11. Were VOA vials received without headspace? *Indicate in the table below.* NA Y N
12. Was C12/Res negative? NA Y N

Sample ID on Bottle	Sample ID on COC	Identified by:

Sample ID	Bottle Count Bottle Type	Out of Temp	Head-space	Broke	pH	Reagent	Volume added	Reagent Lot Number	Initials	Time
All "F2" samples	1-125mL, each				X	HNO_3	0.5mL	RE1-54-C	CG	1100 6/1/20

Notes, Discrepancies, & Resolutions: Temp okay - metals analyses

Miscellaneous Forms

ALS Environmental—Kelso Laboratory
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Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Inorganic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated value.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.
H	The holding time for this test is immediately following sample collection. The samples were analyzed as soon as possible after receipt by the laboratory.

Metals Data Qualifiers

#	The control limit criteria is not applicable. See case narrative.
J	The result is an estimated value.
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
M	The duplicate injection precision was not met.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
S	The reported value was determined by the Method of Standard Additions (MSA).
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
+	The correlation coefficient for the MSA is less than 0.995.
Q	See case narrative. One or more quality control criteria was outside the limits.

Organic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
A	A tentatively identified compound, a suspected aldol-condensation product.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
C	The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
D	The reported result is from a dilution.
E	The result is an estimated value.
J	The result is an estimated value.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
P	The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a chromatographic interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.

Additional Petroleum Hydrocarbon Specific Qualifiers

F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
Y	The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
Z	The chromatographic fingerprint does not resemble a petroleum product.

ALS Group USA Corp. dba ALS Environmental (ALS) - Kelso
State Certifications, Accreditations, and Licenses

Agency	Web Site	Number
Alaska DEH	http://dec.alaska.gov/eh/lab/cs/csapproval.htm	UST-040
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0339
Arkansas - DEQ	http://www.adeq.state.ar.us/techsvs/labcert.htm	88-0637
California DHS (ELAP)	http://www.cdph.ca.gov/certlic/labs/Pages/ELAP.aspx	2795
DOD ELAP	http://www.denix.osd.mil/edqw/Accreditation/AccreditedLabs.cfm	L16-58-R4
Florida DOH	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E87412
Hawaii DOH	http://health.hawaii.gov/	-
ISO 17025	http://www.pjlabs.com/	L16-57
Louisiana DEQ	http://www.deq.louisiana.gov/page/la-lab-accreditation	03016
Maine DHS	http://www.maine.gov/dhhs/	WA01276
Minnesota DOH	http://www.health.state.mn.us/accreditation	053-999-457
Nevada DEP	http://ndep.nv.gov/bsdw/labservice.htm	WA01276
New Jersey DEP	http://www.nj.gov/dep/enforcement/oqa.html	WA005
New York - DOH	https://www.wadsworth.org/regulatory/elap	12060
North Carolina DEQ	https://deq.nc.gov/about/divisions/water-resources/water-resources-data/water-sciences-home-page/laboratory-certification-branch/non-field-lab-certification	605
Oklahoma DEQ	http://www.deq.state.ok.us/CSDnew/labcert.htm	9801
Oregon – DEQ (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	WA100010
South Carolina DHEC	http://www.scdhec.gov/environment/EnvironmentalLabCertification/	61002
Texas CEQ	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704427
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C544
Wyoming (EPA Region 8)	https://www.epa.gov/region8-waterops/epa-region-8-certified-drinking-water-	-
Kelso Laboratory Website	www.alsglobal.com	NA

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. A complete listing of specific NELAP-certified analytes, can be found in the certification section at www.ALSGlobal.com or at the accreditation bodies web site.
Please refer to the certification and/or accreditation body's web site if samples are submitted for compliance purposes. The states highlighted above, require the analysis be listed on the state certification if used for compliance purposes and if the method/anlayte is offered by that state.

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LOD	Limit of Detection
LOQ	Limit of Quantitation
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Sample Results

ALS Environmental—Kelso Laboratory
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Metals

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ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2004421
Project:	APC SSE	**Date Collected:**	05/28/20 10:10
Sample Matrix:	Water	**Date Received:**	05/29/20 11:45
Sample Name:	GS-AP-MW-6D_F4_015	**Basis:**	NA
Lab Code:	K2004421-004		

Total Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	6010C	ND U	ug/L	110	30	5	06/19/20 16:58	06/09/20	
Iron	6010C	**3530**	ug/L	110	40	5	06/19/20 11:37	06/09/20	
Lithium	6010C	ND U	ug/L	110	30	5	06/19/20 11:37	06/09/20	
Molybdenum	6010C	ND U	ug/L	42	11	5	06/19/20 16:58	06/09/20	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2004421
Project:	APC SSE	**Date Collected:**	05/28/20 10:15
Sample Matrix:	Water	**Date Received:**	05/29/20 11:45
Sample Name:	GS-AP-MW-8_F4_016	**Basis:**	NA
Lab Code:	K2004421-005		

Total Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	6010C	**380**	ug/L	210	50	10	06/19/20 17:12	06/09/20	
Iron	6010C	**2180000**	ug/L	420	80	10	06/19/20 17:12	06/09/20	
Lithium	6010C	ND U	ug/L	110	30	5	06/19/20 11:41	06/09/20	
Molybdenum	6010C	ND U	ug/L	84	21	10	06/19/20 17:12	06/09/20	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2004421
Project:	APC SSE	**Date Collected:**	05/28/20 10:35
Sample Matrix:	Water	**Date Received:**	05/29/20 11:45
Sample Name:	MW-1_F4_020	**Basis:**	NA
Lab Code:	K2004421-009		

Total Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	6010C	ND U	ug/L	110	30	5	06/19/20 17:26	06/09/20	
Iron	6010C	**37100**	ug/L	110	40	5	06/19/20 12:38	06/09/20	
Lithium	6010C	ND U	ug/L	110	30	5	06/19/20 12:38	06/09/20	
Molybdenum	6010C	**55**	ug/L	42	11	5	06/19/20 17:26	06/09/20	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2004421
Project:	APC SSE	**Date Collected:**	05/28/20 10:40
Sample Matrix:	Water	**Date Received:**	05/29/20 11:45
Sample Name:	MW-12_F4_021	**Basis:**	NA
Lab Code:	K2004421-010		

Total Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	6010C	**300**	ug/L	110	30	5	06/19/20 17:30	06/09/20	
Iron	6010C	**135000**	ug/L	110	40	5	06/19/20 12:41	06/09/20	
Lithium	6010C	ND U	ug/L	110	30	5	06/19/20 12:41	06/09/20	
Molybdenum	6010C	**144**	ug/L	42	11	5	06/19/20 17:30	06/09/20	

QC Summary Forms

ALS Environmental—Kelso Laboratory
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Metals

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ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2004421
Project:	APC SSE	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	KQ2007746-02		

Total Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	6010C	ND	U	ug/L	21	5	1	06/19/20 16:24	06/09/20	
Cobalt	6010C	ND	U	ug/L	2.1	0.7	1	06/19/20 16:24	06/09/20	
Iron	6010C	ND	U	ug/L	42	8	1	06/19/20 16:24	06/09/20	
Lithium	6010C	ND	U	ug/L	21	6	1	06/19/20 16:24	06/09/20	
Molybdenum	6010C	ND	U	ug/L	8.4	2.1	1	06/19/20 16:24	06/09/20	

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client:	Anchor QEA, LLC	**Service Request:**	K2004421
Project:	APC SSE	**Date Collected:**	05/28/20
Sample Matrix:	Water	**Date Received:**	05/29/20
		Date Analyzed:	06/19/20
		Date Extracted:	06/9/20

Matrix Spike Summary
Total Metals

Sample Name:	OLD-MW-2D_F4_012	**Units:**	ug/L
Lab Code:	K2004421-001	**Basis:**	NA
Analysis Method:	6010C		
Prep Method:	EPA CLP ILM04.0		

Matrix Spike
KQ2007746-04

Analyte Name	Sample Result	Result	Spike Amount	% Rec	% Rec Limits
Arsenic	ND U	960	1000	96	75-125
Cobalt	74	513	500	88	75-125
Iron	1050000	1020000	1000	-2168 #	75-125
Lithium	ND U	9900	10000	99	75-125
Molybdenum	ND U	952	1000	95	75-125

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Matrix Spike and Matrix Spike Duplicate Data is presented for information purposes only. The matrix may or may not be relevant to samples reported in this report. The laboratory evaluates system performance based on the LCS and LCSD control limits.

ALS Group USA, Corp.

dba ALS Environmental

QA/QC Report

Client:	Anchor QEA, LLC	**Service Request:**	K2004421
Project	APC SSE	**Date Collected:**	05/28/20
Sample Matrix:	Water	**Date Received:**	05/29/20
		Date Analyzed:	06/19/20

Replicate Sample Summary
Total Metals

Sample Name:	OLD-MW-2D_F4_012	**Units:**	ug/L
Lab Code:	K2004421-001	**Basis:**	NA

Analyte Name	Analysis Method	MRL	MDL	Sample Result	Duplicate Sample KQ2007746-03 Result	Average	RPD	RPD Limit
Arsenic	6010C	210	50	ND U	ND U	ND	-	20
Cobalt	6010C	11	4	74	76	75	3	20
Iron	6010C	110	40	1050000	1050000	1050000	<1	20
Lithium	6010C	110	30	ND U	ND U	ND	-	20
Molybdenum	6010C	84	21	ND U	ND U	ND	-	20

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Anchor QEA, LLC
Project: APC SSE
Sample Matrix: Water

Service Request: K2004421
Date Analyzed: 06/19/20

Lab Control Sample Summary
Total Metals

Units:ug/L
Basis:NA

Lab Control Sample
KQ2007746-01

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Arsenic	6010C	2540	2500	102	80-120
Cobalt	6010C	1190	1250	95	80-120
Iron	6010C	2340	2500	93	80-120
Lithium	6010C	9940	10000	99	80-120
Molybdenum	6010C	1010	1000	101	80-120

July 21, 2020 Service Request No:K2004639

Anthony Dalton-Atha
Anchor QEA, LLC
6720 SW Macadam Avenue
Suite 125
Portland, OR 97219

Laboratory Results for: APC SSE

Dear Anthony,

Enclosed are the results of the sample(s) submitted to our laboratory June 04, 2020
For your reference, these analyses have been assigned our service request number **K2004639.**

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. All results are intended to be considered in their entirety, and ALS Group USA Corp. dba ALS Environmental (ALS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please contact me if you have any questions. My extension is 3376. You may also contact me via email at Mark.Harris@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Mark Harris
Project Manager

ADDRESS 1317 S. 13th Avenue, Kelso, WA 98626
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ALS Group USA, Corp.
dba ALS Environmental

Narrative Documents

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Client: Anchor QEA, LLC
Project: APC SSE
Sample Matrix: Soil

Service Request: K2004639
Date Received: 06/04/2020

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples for the Tier II level requested by the client.

Sample Receipt:

Twenty three soil samples were received for analysis at ALS Environmental on 06/04/2020. Any discrepancies upon initial sample inspection are annotated on the sample receipt and preservation form included within this report. The samples were stored at minimum in accordance with the analytical method requirements.

Metals:

No significant anomalies were noted with this analysis.

Approved by _____ Date 07/21/2020

Sample Receipt Information

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Chain of Custody Record & Laboratory Analysis Request

Date:	5/29/2020
Project Name:	APC SSE
Project Manager:	Anthony Dalton-Atha
email:	adalton-atha@anchorqea.com
Phone Number:	541-760-0851
Shipment Method:	Courier

ANCHOR QEA

Jessica Goin
6720 SW Macadam Ave
Suite 125
Portland OR 97219

Line	Field Sample ID	Collection Date	Collection Time	Matrix	No. of Containers	Arsenic	Lithium	Cobalt	Molybdenum	Comments/Preservation
1	BY-AP-MW-11_F5_001			SED	1					
2	BY-AP-MW-12_F5_002			SED	1					
3	BY-AP-MW-13_F5_003			SED	1					
4	BY-AP-MW-2_F5_004			SED	1					
5	BY-AP-MW-7_F5_005			SED	1					
6	BY-AP-MW-9_F5_006			SED	1					
7	GC-AP-MW-1_F5_007			SED	1					
8	GC-AP-MW-11_F5_008			SED	1					
9	GC-AP-MW-16_F5_009			SED	1					
10	OLD-MW-11S_F5_010			SED	1					
11	OLD-MW-11_F5_011			SED	1					
12	OLD-MW-2D_F5_012			SED	1					
13	GC-AP-MW-17_F5_013			SED	1					
14	GN-AP-MW-5_F5_014			SED	1					
15	GS-AP-MW-6D_F5_015			SED	1					nitric acid

Notes:

Relinquished by:	Company:	Received by:	Company:
Anthony Dalton-Atha	Anchor QEA		ALS 6/4/20 1420
Signature/Print Name:	Date/Time: ~~5/29/2020 10:00~~ 6/4/2020 PAN	Signature/Print Name:	Date/Time:
Relinquished by:	Company:	Received by:	Company:
Signature/Print Name:	Date/Time:	Signature/Print Name:	Date/Time:

Distribution: A copy will be made for the laboratory and client. The Project file will retain the original.

Page_____of_____

K2004639

Chain of Custody Record & Laboratory Analysis Request

Date:	5/29/2020
Project Name:	APC SSE
Project Manager:	Anthony Dalton-Atha
email:	adalton-atha@anchorqea.com
Phone Number:	541-760-0851
Shipment Method:	Courier

ANCHOR QEA

Jessica Goin
6720 SW Macadam Ave
Suite 125
Portland OR 97219

Line	Field Sample ID	Collection Date	Collection Time	Matrix	No. of Containers	Arsenic	Lithium	Cobalt	Molybdenum	Comments/Preservation
16	GS-AP-MW-8_F5_016			SED	1					
17	MR-AP-MW-3D_F5_017			SED	1					
18	MR-AP-MW-4_F5_018			SED	1					
19	MR-AP-MW-5_F5_019			SED	1					
20	MW-1_F5_020			SED	1					
21	MW-12_F5_021			SED	1					
22	Blank_F5_022			SED	1					
23	OLD-MW-2D-F5_012_DUP			SED	1					

Notes:

Relinquished by:	Company:	Received by:	Company:
Anthony Dalton-Atha	Anchor QEA	[signature]	ACS 6/4/20 1420
Signature/Print Name:	Date/Time: 6/4/2020 ~~5/29/2020~~ 10:00	Signature/Print Name:	Date/Time:
Relinquished by:	Company:	Received by:	Company:
Signature/Print Name:	Date/Time:	Signature/Print Name:	Date/Time:

Distribution: A copy will be made for the laboratory and client. The Project file will retain the original.

Page_____of_____

PC MH

Cooler Receipt and Preservation Form

Client Anchor QEA Service Request *K20* 04639

Received: 6/4/20 Opened: 6/4/20 By: KN Unloaded: 6/4/20 By: KN

1. Samples were received via? *USPS* *Fed Ex* *UPS* *DHL* *PDX* *Courier* *Hand Delivered*
2. Samples were received in: (circle) *Cooler* *Box* *Envelope* *Other* _____ *NA*
3. Were custody seals on coolers? NA Y N If yes, how many and where? 1 Front

   If present, were custody seals intact? Y N If present, were they signed and dated? Y N

Temp Blank	Sample 1	Sample 2	Sample 3	Sample 4	IR GUN	Cooler / COC ID NA	Tracking Number NA	Filed
N/A	15.5	17.9	13.2	17.0	TR02			

4. Packing material: *Inserts* *Baggies* *Bubble Wrap* *Gel Packs* *Wet Ice* *Dry Ice* *Sleeves* Blue ice
5. Were custody papers properly filled out (ink, signed, etc.)? NA Y N
6. Were samples received in good condition (temperature, unbroken)? *Indicate in the table below.* NA Y N

   If applicable, tissue samples were received: *Frozen* *Partially Thawed* *Thawed*
7. Were all sample labels complete (i.e analysis, preservation, etc.)? NA Y N
8. Did all sample labels and tags agree with custody papers? *Indicate major discrepancies in the table on page 2.* NA Y N
9. Were appropriate bottles/containers and volumes received for the tests indicated? NA Y N
10. Were the pH-preserved bottles (*see SMO GEN SOP*) received at the appropriate pH? *Indicate in the table below* NA Y N
11. Were VOA vials received without headspace? *Indicate in the table below.* NA Y N
12. Was C12/Res negative? NA Y N

Sample ID on Bottle	Sample ID on COC	Identified by:

Sample ID	Bottle Count Bottle Type	Out of Temp	Head-space	Broke	pH	Reagent	Volume added	Reagent Lot Number	Initials	Time

Notes, Discrepancies, & Resolutions:

Miscellaneous Forms

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Inorganic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated value.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.
H	The holding time for this test is immediately following sample collection. The samples were analyzed as soon as possible after receipt by the laboratory.

Metals Data Qualifiers

#	The control limit criteria is not applicable. See case narrative.
J	The result is an estimated value.
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
M	The duplicate injection precision was not met.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
S	The reported value was determined by the Method of Standard Additions (MSA).
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
+	The correlation coefficient for the MSA is less than 0.995.
Q	See case narrative. One or more quality control criteria was outside the limits.

Organic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
A	A tentatively identified compound, a suspected aldol-condensation product.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
C	The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
D	The reported result is from a dilution.
E	The result is an estimated value.
J	The result is an estimated value.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
P	The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a chromatographic interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.

Additional Petroleum Hydrocarbon Specific Qualifiers

F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
Y	The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
Z	The chromatographic fingerprint does not resemble a petroleum product.

ALS Group USA Corp. dba ALS Environmental (ALS) - Kelso
State Certifications, Accreditations, and Licenses

Agency	Web Site	Number
Alaska DEH	http://dec.alaska.gov/eh/lab/cs/csapproval.htm	UST-040
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0339
Arkansas - DEQ	http://www.adeq.state.ar.us/techsvs/labcert.htm	88-0637
California DHS (ELAP)	http://www.cdph.ca.gov/certlic/labs/Pages/ELAP.aspx	2795
DOD ELAP	http://www.denix.osd.mil/edqw/Accreditation/AccreditedLabs.cfm	L16-58-R4
Florida DOH	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E87412
Hawaii DOH	http://health.hawaii.gov/	-
ISO 17025	http://www.pjlabs.com/	L16-57
Louisiana DEQ	http://www.deq.louisiana.gov/page/la-lab-accreditation	03016
Maine DHS	http://www.maine.gov/dhhs/	WA01276
Minnesota DOH	http://www.health.state.mn.us/accreditation	053-999-457
Nevada DEP	http://ndep.nv.gov/bsdw/labservice.htm	WA01276
New Jersey DEP	http://www.nj.gov/dep/enforcement/oqa.html	WA005
New York - DOH	https://www.wadsworth.org/regulatory/elap	12060
North Carolina DEQ	https://deq.nc.gov/about/divisions/water-resources/water-resources-data/water-sciences-home-page/laboratory-certification-branch/non-field-lab-certification	605
Oklahoma DEQ	http://www.deq.state.ok.us/CSDnew/labcert.htm	9801
Oregon – DEQ (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	WA100010
South Carolina DHEC	http://www.scdhec.gov/environment/EnvironmentalLabCertification/	61002
Texas CEQ	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704427
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C544
Wyoming (EPA Region 8)	https://www.epa.gov/region8-waterops/epa-region-8-certified-drinking-water-	-
Kelso Laboratory Website	www.alsglobal.com	NA

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. A complete listing of specific NELAP-certified analytes, can be found in the certification section at www.ALSGlobal.com or at the accreditation bodies web site.
Please refer to the certification and/or accreditation body's web site if samples are submitted for compliance purposes. The states highlighted above, require the analysis be listed on the state certification if used for compliance purposes and if the method/anlayte is offered by that state.

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LOD	Limit of Detection
LOQ	Limit of Quantitation
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Sample Results

ALS Environmental—Kelso Laboratory
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Metals

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ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2004639
Project:	APC SSE	**Date Collected:**	NA
Sample Matrix:	Soil	**Date Received:**	06/04/20 14:20
Sample Name:	GS-AP-MW-6D_F5_015	**Basis:**	As Received
Lab Code:	K2004639-015		

Total Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	6010C	ND	U	mg/Kg	8.3	2.1	2	06/18/20 16:45	06/15/20	
Cobalt	6010C	**0.23**	**J**	mg/Kg	0.83	0.10	2	06/18/20 16:45	06/15/20	
Lithium	6010C	ND	U	mg/Kg	4.1	0.6	2	06/18/20 16:45	06/15/20	
Molybdenum	6010C	ND	U	mg/Kg	0.83	0.21	2	06/18/20 16:45	06/15/20	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2004639
Project:	APC SSE	**Date Collected:**	NA
Sample Matrix:	Soil	**Date Received:**	06/04/20 14:20
Sample Name:	GS-AP-MW-8_F5_016	**Basis:**	As Received
Lab Code:	K2004639-016		

Total Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	6010C	ND	U	mg/Kg	16	4	2	06/18/20 16:55	06/15/20	
Cobalt	6010C	**0.9**	**J**	mg/Kg	1.6	0.2	2	06/18/20 16:55	06/15/20	
Lithium	6010C	ND	U	mg/Kg	8.0	1.2	2	06/18/20 16:55	06/15/20	
Molybdenum	6010C	**8.1**		mg/Kg	1.6	0.4	2	06/18/20 16:55	06/15/20	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2004639
Project:	APC SSE	**Date Collected:**	NA
Sample Matrix:	Soil	**Date Received:**	06/04/20 14:20
Sample Name:	MW-1_F5_020	**Basis:**	As Received
Lab Code:	K2004639-020		

Total Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	6010C	**2.9**	**J**	mg/Kg	8.8	2.2	2	06/18/20 17:05	06/15/20	
Cobalt	6010C	**1.63**		mg/Kg	0.88	0.11	2	06/18/20 17:05	06/15/20	
Lithium	6010C	**3.7**	**J**	mg/Kg	4.4	0.7	2	06/18/20 17:05	06/15/20	
Molybdenum	6010C	**6.51**		mg/Kg	0.88	0.22	2	06/18/20 17:05	06/15/20	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2004639
Project:	APC SSE	**Date Collected:**	NA
Sample Matrix:	Soil	**Date Received:**	06/04/20 14:20
Sample Name:	MW-12_F5_021	**Basis:**	As Received
Lab Code:	K2004639-021		

Total Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	6010C	**14.5**	mg/Kg	8.2	2.0	2	06/18/20 17:15	06/15/20	
Cobalt	6010C	**9.24**	mg/Kg	0.82	0.10	2	06/18/20 17:15	06/15/20	
Lithium	6010C	**7.1**	mg/Kg	4.1	0.6	2	06/18/20 17:15	06/15/20	
Molybdenum	6010C	**50.8**	mg/Kg	0.82	0.20	2	06/18/20 17:15	06/15/20	

QC Summary Forms

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Metals

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ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2004639
Project:	APC SSE	**Date Collected:**	NA
Sample Matrix:	Soil	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	As Received
Lab Code:	KQ2007817-01		

Total Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	6010C	ND	U	mg/Kg	8.0	2.0	2	06/18/20 15:50	06/15/20	
Cobalt	6010C	ND	U	mg/Kg	0.80	0.10	2	06/18/20 15:50	06/15/20	
Lithium	6010C	ND	U	mg/Kg	4.0	0.6	2	06/18/20 15:50	06/15/20	
Molybdenum	6010C	ND	U	mg/Kg	0.80	0.20	2	06/18/20 15:50	06/15/20	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2004639
Project:	APC SSE	**Date Collected:**	NA
Sample Matrix:	Soil	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	As Received
Lab Code:	KQ2007818-01		

Total Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	6010C	ND	U	mg/Kg	8.0	2.0	2	06/18/20 17:08	06/15/20	
Cobalt	6010C	ND	U	mg/Kg	0.80	0.10	2	06/18/20 17:08	06/15/20	
Lithium	6010C	ND	U	mg/Kg	4.0	0.6	2	06/18/20 17:08	06/15/20	
Molybdenum	6010C	ND	U	mg/Kg	0.80	0.20	2	06/18/20 17:08	06/15/20	

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client:	Anchor QEA, LLC	**Service Request:**	K2004639
Project:	APC SSE	**Date Analyzed:**	06/18/20
Sample Matrix:	Soil		

Lab Control Sample Summary
Total Metals

Units:mg/Kg
Basis: As Received

Lab Control Sample
KQ2007817-02

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Arsenic	6010C	97.3	100	97	80-120
Cobalt	6010C	96.0	100	96	80-120
Lithium	6010C	490	500	98	80-120
Molybdenum	6010C	101	100	101	80-120

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client:	Anchor QEA, LLC	**Service Request:**	K2004639
Project:	APC SSE	**Date Analyzed:**	06/18/20
Sample Matrix:	Soil		

Lab Control Sample Summary
Total Metals

Units:mg/Kg
Basis: As Received

Lab Control Sample
KQ2007818-02

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Arsenic	6010C	94.5	100	95	80-120
Cobalt	6010C	93.6	100	94	80-120
Lithium	6010C	477	500	95	80-120
Molybdenum	6010C	98.1	100	98	80-120