

**2019 ANNUAL GROUNDWATER MONITORING AND  
CORRECTIVE ACTION REPORT**

**ALABAMA POWER COMPANY  
PLANT GORGAS  
ASH POND**

**January 31, 2020**

Prepared for

Alabama Power Company  
Birmingham, Alabama

By

Southern Company Services  
Earth Science and Environmental Engineering



## 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.

  
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## EXECUTIVE SUMMARY

In accordance with the United States Environmental Protection Agency (EPA) coal combustion residual (CCR) rule (40 CFR Part 257, Subpart D) and the State of Alabama's ADEM Admin. Code Ch. 335-13-15, this 2019 Annual Groundwater Monitoring and Corrective Action Report has been prepared to document 2019 semi-annual assessment groundwater monitoring activities at the Plant Gorgas 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 following summarizes results obtained from 2019 groundwater monitoring activities at the site:

- 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 (SSIs) 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 (SSLs) above groundwater protection standards (GWPS) during the 2019 semiannual monitoring events. Molybdenum was only present above GWPS during the first semiannual event. 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 the Agency and posted to the site's CCR compliance web site.
- 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 monitoring-related activities are planned for the CCR Unit:
  - Installation, sampling, and analyses of additional (Phase II) delineation wells,
  - Collect additional data to further evaluate remedies selected as feasible for the remediation of arsenic, molybdenum, and lithium as described in the ACM; and
  - Conduct the first semi-annual assessment monitoring event in the March or April of 2020 and submit a semi-annual groundwater monitoring report summarizing findings by July 31, 2020.

## TABLE OF CONTENTS

EXECUTIVE SUMMARY .....	i
1.0 Introduction .....	1
2.0 Site Location and Description .....	2
2.1 Site Geology and Hydrogeology.....	2
2.1.1 Physical Setting.....	2
2.1.2 Geology and Hydrogeology.....	2
2.1.3 Pottsville Formation – Rock Chemistry.....	3
2.1.4 Uppermost Aquifer .....	5
2.1.5 Flow Interpretation .....	5
2.2 Groundwater Monitoring System .....	6
2.2.1 Monitoring Wells.....	6
2.2.1.1 Upgradient Wells .....	7
2.2.1.2 Downgradient Wells .....	8
2.2.1.3 Piezometers.....	8
2.2.1.4 Delineation Wells .....	9
2.2.1.5 Monitoring Well Replacement and Abandonment .....	9
2.2.1.6 Monitoring Variances .....	10
2.2.2 Groundwater Monitoring History .....	10
2.2.2.1 Available Monitoring Data .....	10
2.2.2.2 Historical Groundwater Flow .....	11
2.2.3 Groundwater Sampling and Analysis .....	11
2.2.3.1 Sampling Event Summary .....	11
2.2.3.2 Groundwater Sample Collection.....	12
2.2.3.3 Sample Preservation and Handling.....	12
2.2.3.4 Chain of Custody .....	13
2.2.3.5 Laboratory Analysis.....	13

Plant Gorgas Ash Pond  
2019 Annual Groundwater Monitoring and Corrective Action Report

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3.0	Groundwater Elevations .....	14
3.1	Groundwater Elevations And Flow .....	14
3.2	Groundwater Flow Velocity Calculations .....	14
4.0	Evaluation of Groundwater Quality Data .....	16
4.1	Data Validation – Quality Assurance/Quality Control .....	16
4.2	Statistical Methodology and Tests .....	17
4.2.1	Appendix III Evaluation .....	17
4.2.2	Appendix IV Evaluation .....	18
4.3	Statistical Exceedances .....	19
4.3.1	Appendix III Constituents.....	19
4.3.2	Appendix IV Constituents .....	19
4.3.2.1	First Semi-Annual Groundwater Monitoring Event .....	19
4.3.2.2	Second Semi-Annual Groundwater Monitoring Event.....	20
5.0	Monitoring Program Status.....	22
6.0	Summary and Conclusions .....	23
7.0	References .....	24

## **FIGURES**

Figure 1	Site Location Map
Figure 2	Site Topographic Map
Figure 3	Site Geologic Map
Figure 4	Geologic Cross-Section A-A'
Figure 5	Monitoring Well Location Map
Figure 6	Potentiometric Surface Contour Map (April 15, 2019)
Figure 7A	Potentiometric Surface Contour Map (September 23, 2019) – Water Table
Figure 7B	Potentiometric Surface Contour Map (September 23, 2019) – Pratt Aquifer

## **TABLES**

Table 1	Groundwater Monitoring Well Network Details
Table 2	Monitoring Parameters and Reporting Limits
Table 3	Groundwater Elevation Summary
Table 4	Relative Percent Difference Calculations
Table 5	Summary of Background Levels and Groundwater Protection Standards
Table 6	First Semi-Annual Monitoring Event Analytical Summary
Table 7	Second Semi-Annual Monitoring Event Analytical Summary

## **APPENDICES**

Appendix A	Well Abandonment and Replacement
Appendix B	Groundwater Analytical Data
Appendix C	Laboratory and Field Records
Appendix D	Statistical Analyses

## ABBREVIATIONS

ACM	Assessment of Corrective Measures
ADEM	Alabama Department of Environmental Management
AL	Alabama
APC	Alabama Power Company
APCEL	APC Environmental Laboratory
ASD	Alternate Source Demonstration
ASTM	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



## **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's ADEM Admin. Code Ch. 335-13-15, this 2019 Annual Groundwater Monitoring and Corrective Action Report has been prepared to document 2019 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 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

APC's William Crawford Gorgas Electric Generating Plant (Plant Gorgas) is located in southeastern Walker County, Alabama, approximately fifteen 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 4<sup>th</sup> or 5<sup>th</sup> 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 in 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 3 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 ( $0.5^{\circ}$  to  $1.0^{\circ}$ ) to the south and south-southwest. **Figure 4, Geologic Cross-Section A-A'**, provides 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 comprised primarily of Pennsylvanian-aged sandstones, shales, conglomerates, and coal. Groundwater flow primarily occurs via 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 ppm) in the Pottsville coal strata is 3 times that of the average of other coal basins (Bragg et al., 1997). Of the US 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 which includes trace metal concentration data. 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) provided 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 plains. 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 absent of 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 utilized to determine groundwater yielding zones. Packer testing was utilized 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 can be grouped into two general systems: (1) water-table flow system and (2) Pratt Coal Group or deep bedrock 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 § 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. As required by § 257.90(e) and ADEM Admin Code r. 335-13-15-.06(1)(f), the following also describes monitoring related-activities performed during the preceding year.

### **2.2.1 Monitoring Wells**

Historically, the groundwater monitoring network has been comprised of 16 monitoring wells and 10 piezometers. In 2019, ash pond closure activities necessitated the abandonment of 6 monitoring wells (GS-AP-MW-5, 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. Also, in 2019, the installation of 13 additional wells was accomplished for purposes of horizontal and vertical delineation of Site groundwater impacts. Of these new delineation locations, 8 produced sufficient groundwater to be developed and sampled and will be sampled in future monitoring events as part of the routine compliance monitoring network. The remaining 5 delineation locations lacked sufficient groundwater for development and therefore, will be utilized as water-level only piezometers for future monitoring events.

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 comprised 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 utilized for statistical comparison of groundwater quality. The upper groundwater flow system corresponds to younger or recharging groundwater and flows towards the Ash Pond or other surface water bodies as represented by groundwater elevations greater than those of the Ash Pond. Spatially, these locations are located amongst 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. This data, along with groundwater elevation data, supports 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 utilized 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 that this location is upgradient of the Ash Pond with groundwater elevations roughly 35 feet higher than the Ash Pond. This location will likely be proposed to be added to the upgradient well network. A plan for additional upgradient locations was submitted to the Department in February 2019 and upgradient wells will be installed during the first half of 2020.

### **2.2.1.2 Downgradient Wells**

Historically, the groundwater monitoring network has been comprised of 14 downgradient monitoring wells installed along the boundary of the Ash Pond. Borehole geophysics, hydrophysical logging, and occasionally, packer testing were utilized 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 utilized 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 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.

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 to replace these locations will be included along with an updated groundwater monitoring plan to be submitted to the Department by April 15, 2020.

### **2.2.1.3 Piezometers**

There are currently 15 water-level only piezometers at the Site. Three 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). Seven (7) locations (GS-AP-MW-1, GS-AP-MW-3, GS-AP-MW-4, GS-AP-MW-5, GS-AP-MW-16S, GS-AP-MW-19, and GS-AP-MW-20) were originally intended to be incorporated as compliance monitoring wells with GS-AP-MW-16S potentially serving as an upgradient location. However, these locations did not yield sufficient water for well development and therefore, have been maintained as water-level only piezometers during the course of monitoring at the Site. Five water-level only piezometers (GS-AP-MW-7V, GS-AP-MW-25H, GS-AP-MW-27H, GS-AP-MW-30H, and GS-AP-MW-30HS) were recently added in the form of horizontal and vertical delineation wells that did not produce sufficient groundwater for



development or sampling. Many of these locations will be evaluated during the first half of 2020 to determine if alternative sampling methods (i.e., no purge sampling or other) can be utilized to collect representative groundwater samples.

#### **2.2.1.4 Delineation Wells**

Pursuant to § 257.95(g)(1), ADEM Admin. Code r. 335-13-15-.06(6)(g)2., and AO 18-096-GW additional monitoring wells were installed to characterize the horizontal and vertical extent of GWPS exceedances identified during assessment monitoring. Nine horizontal delineation wells were installed to assess lateral extent of GWPS exceedances in the direction(s) of groundwater flow away from the facility. Four vertical delineation wells were installed to assess the vertical extent of GWPS exceedances in uppermost aquifer at the CCR waste boundary. Of these locations, 5 horizontal delineation wells and 3 vertical wells were sampled. The remaining five delineation locations did not produce sufficient groundwater for development or sampling. In the future monitoring events, these 5 locations will be utilized as water-level only piezometers or sampled if an alternative sampling method can be used to obtain representative groundwater samples. Data and discussion of results were provided in the Plant Gorgas Ash Pond Groundwater Investigation Report submitted to ADEM in May 2019. These delineation wells were sampled again during the second semi-annual sampling event of 2019 and will be sampled as a part of the compliance network in semi-annual compliance events going forward. Delineation 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 Plant Gorgas Ash Pond.

An additional phase of delineation was initiated in the latter part of 2019. Eighteen additional delineation wells and the sampling of two piezometers were proposed in a plan submitted to the Department in August 2019. At the time of publication wells were being installed and developed. A report summarizing findings will be submitted to the Department in the first half of 2020.

#### **2.2.1.5 Monitoring Well Replacement and Abandonment**

In 2019, ash pond closure activities necessitated the abandonment of 6 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 guidelines identified in the ADEM Guidelines for Well Abandonments. The abandonment report and plan to replace these locations are included in **Appendix A, Well Abandonment Report**. Replacement monitoring wells will be installed

### **2.2.1.6 Monitoring Variances**

The groundwater monitoring program at the site is operating under a Variance granted by the Department 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; and
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 over the period of 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 with sampling events in May and October of 2018 and April and September of 2019.

Tables summarizing analytical data from all previous groundwater monitoring events are included within **Appendix B, 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 upon available monitoring data.

### **2.2.3 Groundwater Sampling and Analysis**

As required by § 257.90(e) and ADEM Admin. Code r. 335-13-15-.06(1)(f), the following describes monitoring-related activities performed during the preceding year. The Ash Pond entered an assessment monitoring program pursuant to 40 CFR § 257.95(a) and ADEM Admin. Code r. 335-13-15-.06(6)(a) in January 2018. Statistical evaluations of 2018 assessment monitoring data identified SSLs of Appendix IV constituents above the GWPS and the Site entered into Assessment of Corrective Measures. Pursuant to §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 April 2019 and September 2019. Delineation wells installed at the Site were sampled semi-annually for the first time between February and March 2019 in order expedite delineation reporting. Beginning with the second semi-annual sampling event in September 2019 delineation wells were sampled concurrently with the compliance monitoring well network. The results of this investigation were submitted to ADEM in May 2019.

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 is included as **Appendix C, 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 whereby samples are collected when field water quality parameters (pH, turbidity, conductivity, and dissolved oxygen) were measured to determine stabilization. Groundwater samples were collected when the following stabilization criteria were 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 C, Laboratory and Field Records**.

### 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 4°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 C**.

#### **2.2.3.5 Laboratory Analysis**

Laboratory analyses was 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 C**.

### 3.0 GROUNDWATER ELEVATIONS

#### 3.1 GROUNDWATER ELEVATIONS AND FLOW

During the April 2019 sampling event, depths to water ranged from 10.02 to 241.90 ft BTOC and groundwater elevations ranged from 404.12 to 256.77 ft MSL. During the September 2019 sampling event, depths to water ranged from 6.36 to 271.47 ft BTOC and groundwater elevations ranged from 419.40 to 138.68 ft MSL. It should be noted that the April 2019 groundwater elevation data set does not include delineation well groundwater elevations. A complete first set of groundwater elevations was obtained in March 2019 and included in the Groundwater Delineation report submitted to the Department in May 2019.

**Figure 6, Potentiometric Surface Contour Map (April 15, 2019) and Figure 7A and Figure 7B, Potentiometric Surface Contour Map (September 23, 2019)** depict groundwater elevations and inferred groundwater flow direction. Beginning with the second semi-annual sampling event, potentiometric surface maps are split into two potentiometric surface maps representing the two groundwater flow regimes observed at the site. **Figures 7A** shows groundwater flow towards the Ash Pond in wells screen in the upper flow system. **Figures 7B** shows radial groundwater flow away from the Ash Pond in the deeper Pratt Coal Group 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/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  $1.19 \times 10^{-3}$  cm/sec and  $1.22 \times 10^{-5}$  cm/sec with an average of  $4.52 \times 10^{-4}$  cm/sec. Forty three packer tests were conducted resulting in a range of hydraulic conductivity (k) values from an estimated low of  $7 \times 10^{-7}$  cm/sec to a high of  $4 \times 10^{-3}$  cm/sec, with most tests (31) in the moderate range ( $10^{-5}$  cm/sec to  $10^{-4}$  cm/sec), two test results

in the more permeable range ( $10^{-3}$  to  $10^{-2}$  cm/sec), and ten 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 one sample per every group of 10 well samples. Equipment blanks and duplicate 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 differences 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 2019 sampling events. All RPD's were below 20% for the most recent sampling event except for fluoride in a parent-duplicate pair (GS-AP-MW-6/GS-AP-MW-6 DUP) collected during the first semi-annual sampling



event. However, a qualifier was not needed since both results were less than 5 times the RL and the difference between the parent and duplicate result was less than the RL value.

## **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 September 2019 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% nondetects 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, 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 upon 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 **2.2.1.4**), 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; and
  - (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 two 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 in between updates may still be used to support ASDs if merited.

### 4.3 STATISTICAL EXCEEDANCES

Analytical data from the 2019 semi-annual monitoring events in April and September were statistically analyzed in accordance with the PE-certified Statistical Analysis Plan (October 2017). 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 D, 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 D**.

The following subsections describe statistical exceedances during 2019 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-6D: Arsenic, Lithium
- GS-AP-MW-7: Arsenic, Lithium, Molybdenum
- GS-AP-MW-9: Lithium
- GS-AP-MW-12: Arsenic
- GS-AP-MW-15: Lithium
- GS-AP-MW-18: Arsenic, 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 D**.

#### 4.3.2.2 Second Semi-Annual Groundwater 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-9: Lithium
- GS-AP-MW-12: Arsenic
- GS-AP-MW-15: Lithium
- GS-AP-MW-17: Lithium
- GS-AP-MW-18: Arsenic, 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 D**.

Limited groundwater analytical data is available for delineation wells installed at the site in 2019; 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-12V: Lithium
- GS-AP-MW-17V: Lithium
- GS-AP-MW-23H: Arsenic
- GS-AP-MW-26H: Lithium
- GS-AP-MW-28H: Lithium
- GS-AP-MW-29H: Lithium

Details regarding the installation and sampling of these wells, and future proposed actions as a result of these exceedances, were submitted to the Department in a delineation report on May 13, 2019. **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.

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 the Department and placed in the operating record on June 12, 2019.

## **5.0 MONITORING PROGRAM STATUS**

The site is currently in assessment monitoring and 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 2019. In accordance with § 257.95(g)(3)(i) and ADEM Admin. Code r. 335-13-15-.06(6)(g)4.(i), APC completed an ACM as required by § 257.96, ADEM Admin. Code r. 335-13-15-.06(7), and ADEM Administrative Order AO 18-096-GW.

## 6.0 SUMMARY AND CONCLUSIONS

Semi-annual assessment monitoring events took place in April and September 2019. Statistical evaluations of the 2019 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 May 2019. 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.

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

- Installation, sampling, and analyses of additional (Phase II) delineation wells,
- Collect additional data to further evaluate remedies selected as feasible for the remediation of arsenic, molybdenum, and lithium as described in the ACM; and
- Conduct the first semi-annual assessment monitoring event in the March or April of 2020 and submit a semi-annual groundwater monitoring report summarizing findings by July 31, 2020.

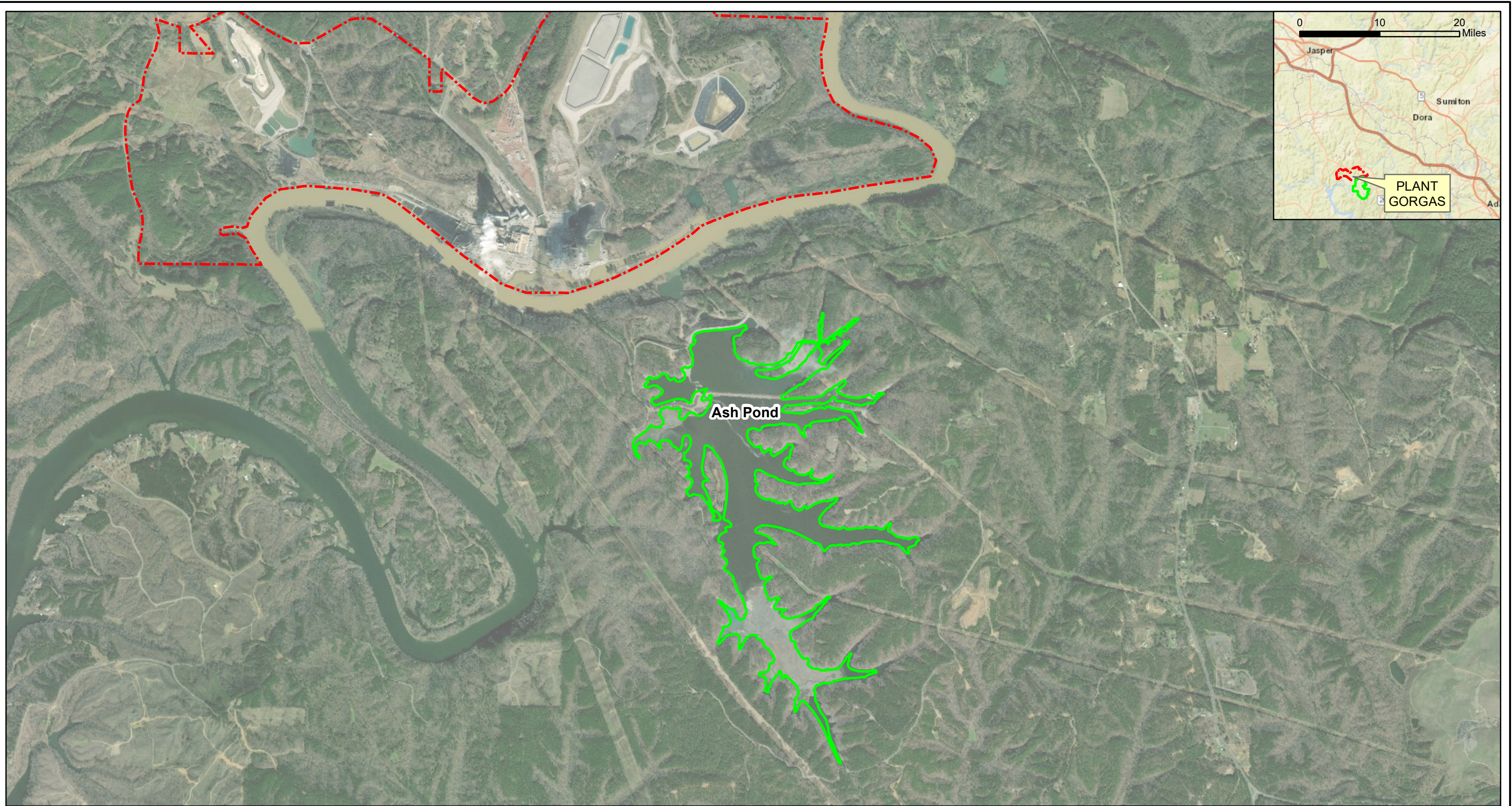
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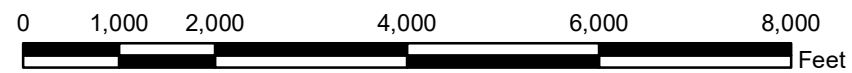


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# Figures



- Legend**
- Ash Pond Boundary
  - Property Boundary (Approximate)

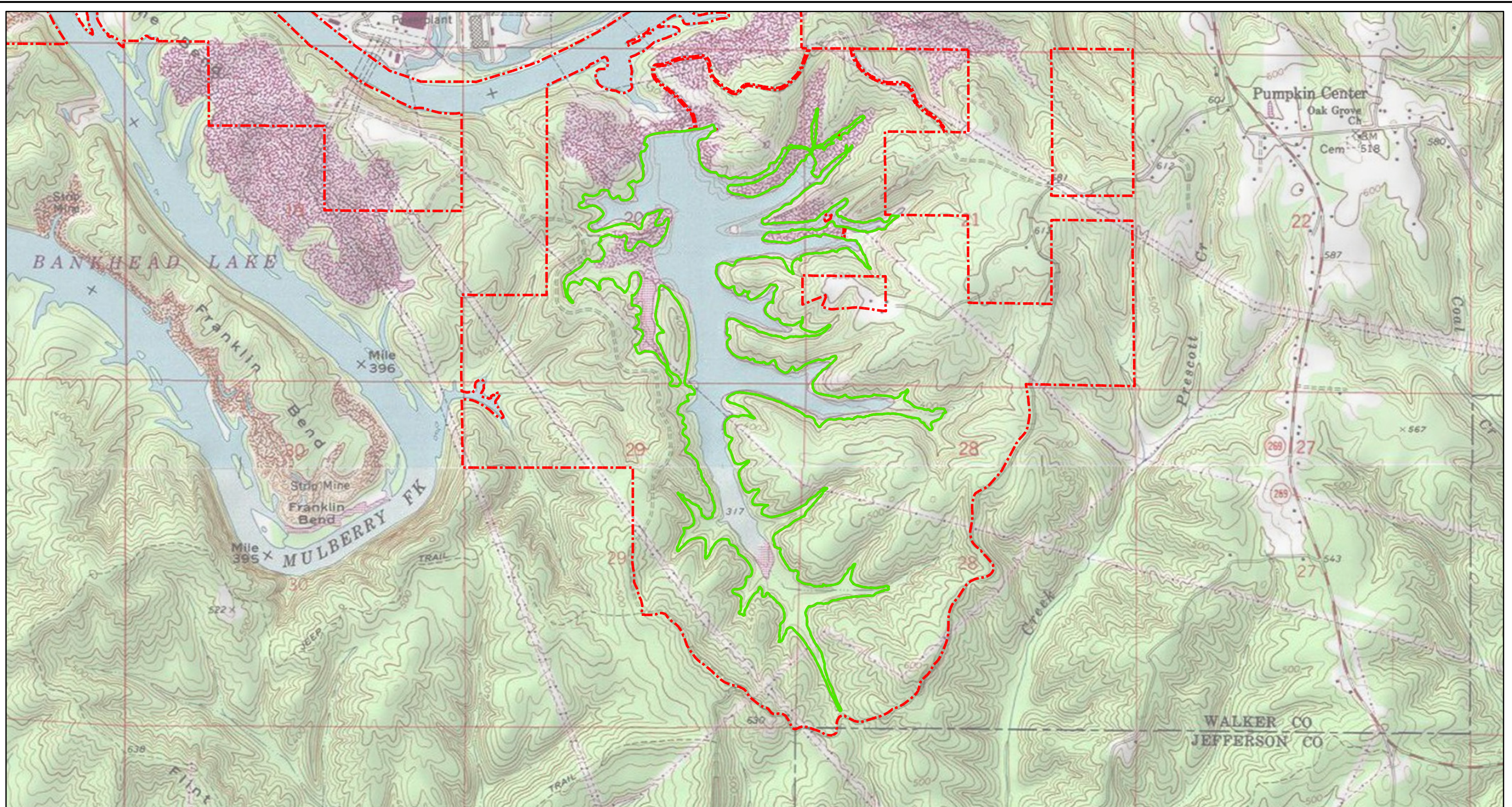


SCALE	1:24,000
DATE	6/26/2019
DRAWN BY	KAR
CHECKED BY	GBD

DRAWING TITLE  
**SITE LOCATION MAP  
 PLANT GORGAS ASH POND**

FIGURE NO  
**FIGURE 1**





- Legend**
- Ash Pond Boundary
  - Property Boundary (Approximate)

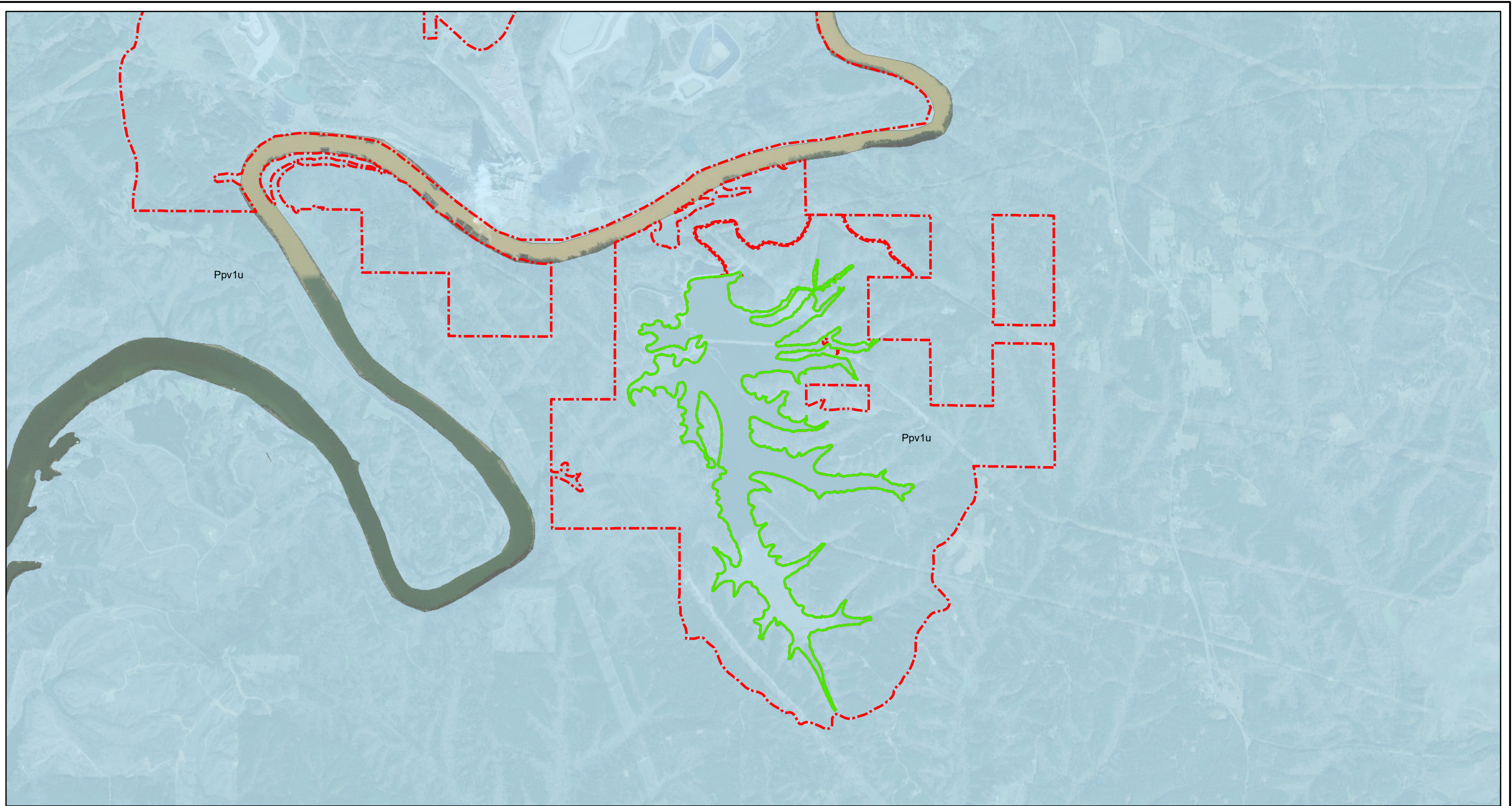


SCALE	1:18,000
DATE	12/18/2019
DRAWN BY	KAR
CHECKED BY	GBD

DRAWING TITLE  
**SITE TOPOGRAPHIC MAP  
 PLANT GORGAS ASH POND**

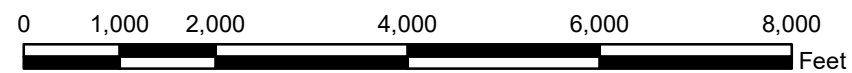
FIGURE NO  
**FIGURE 2**





**Legend**

- Ash Pond Boundary
- Property Boundary (Approximate)
- Geologic Units
- Pottsville Formation (upper part), Appalachian Plateaus (Ppv1u)

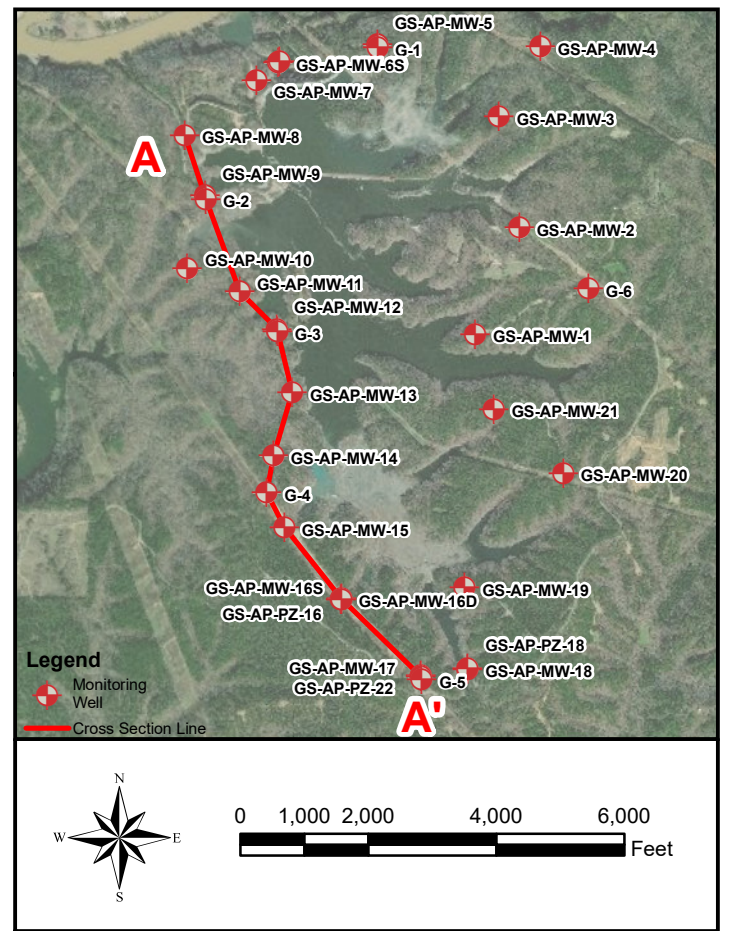
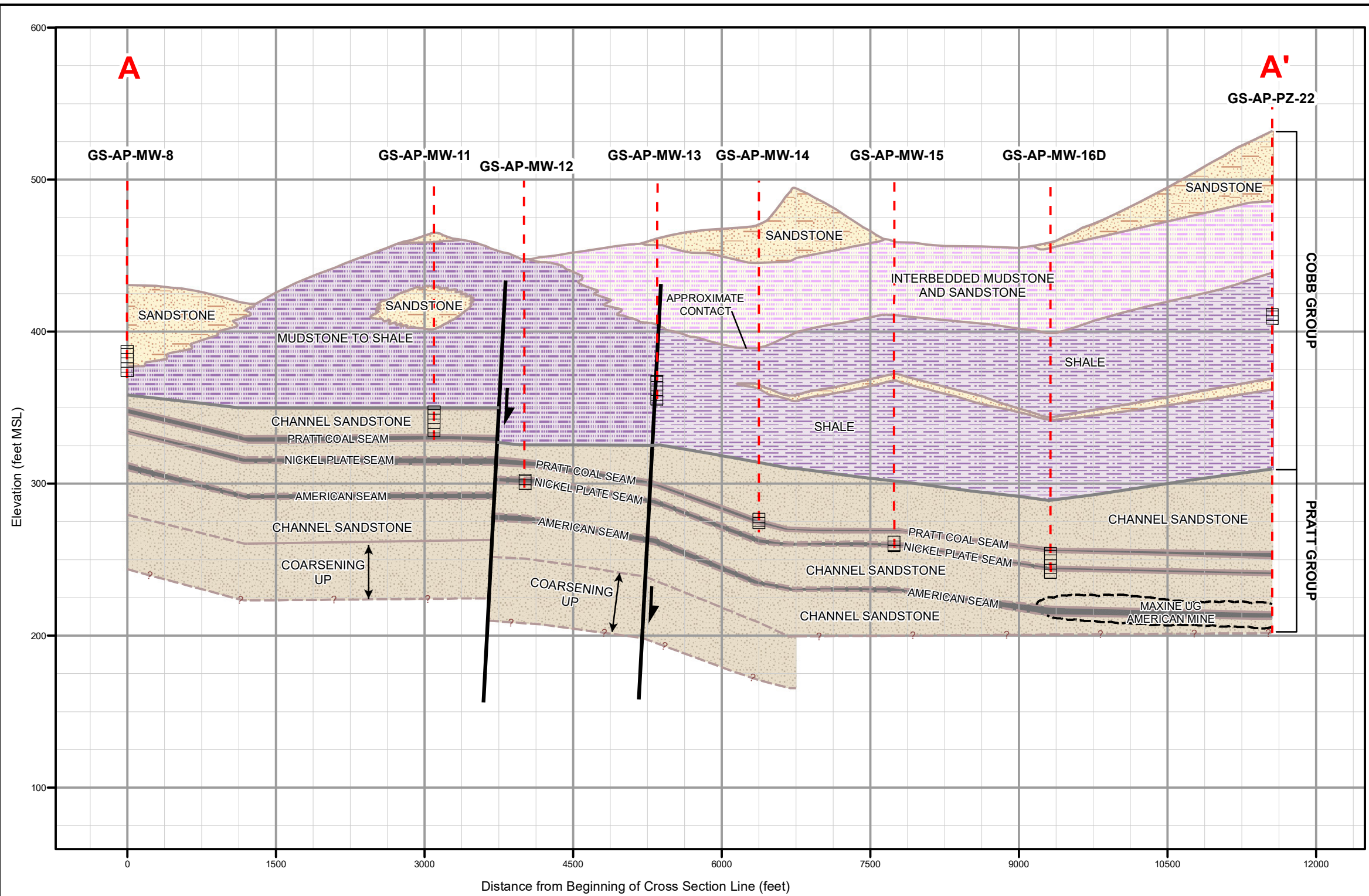


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DATE	12/18/2019
DRAWN BY	KAR
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DRAWING TITLE  
**SITE GEOLOGIC MAP  
 PLANT GORGAS ASH POND**

FIGURE NO  
**FIGURE 3**





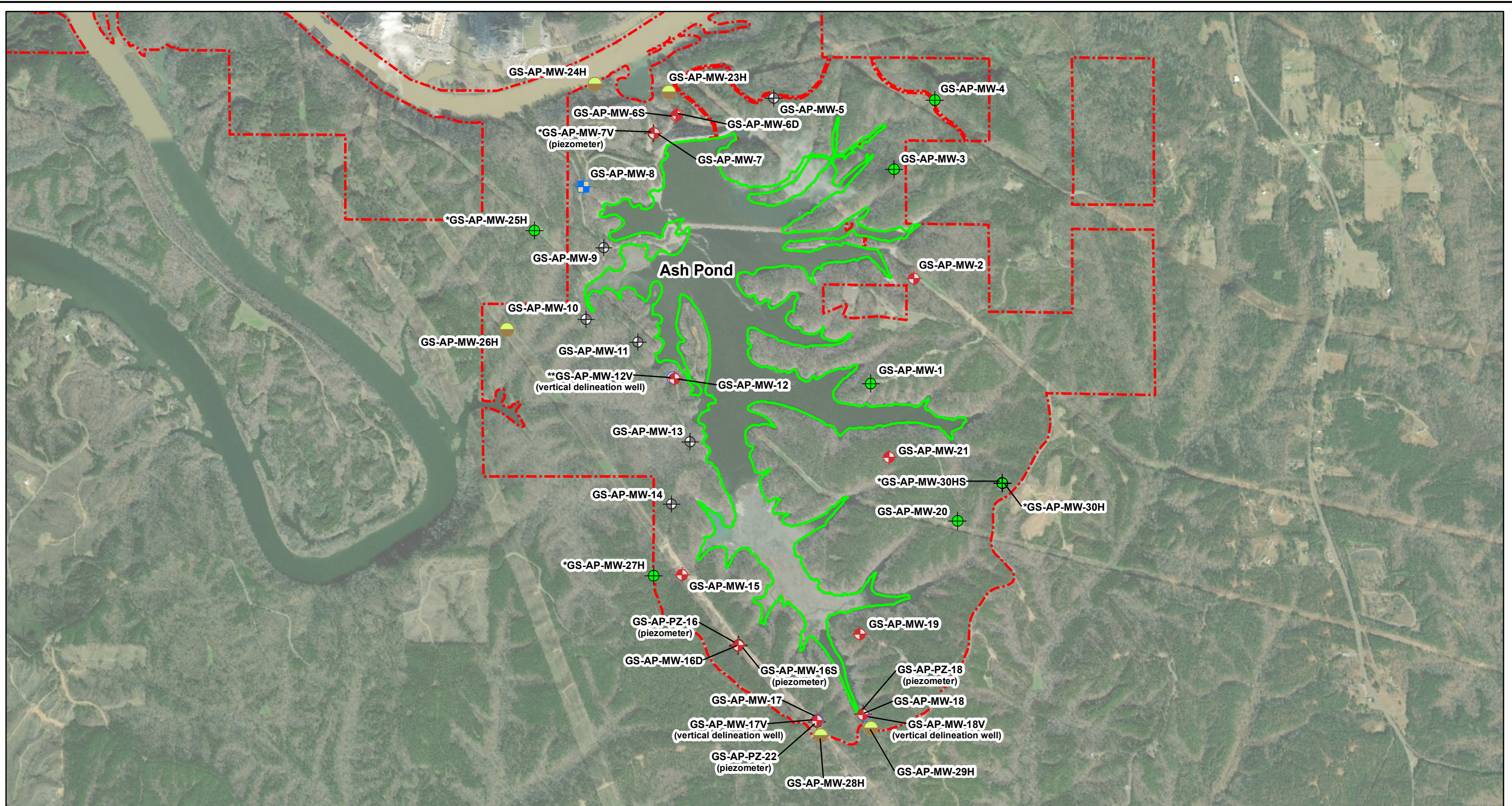
- Legend**
- Screen Interval
  - Monitoring Well Location
  - Group Boundary
  - Strata Boundary
  - Inferred Strata Boundary
  - Fault
  - Mine

- 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.

SCALE	As Shown
DATE	1/17/2020
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CHECKED BY	GBD

DRAWING TITLE	
GEOLOGIC CROSS SECTION A - A' PLANT GORGAS ASH POND	
FIGURE NO	<b>FIGURE 4</b>
Southern Company	



**Legend**

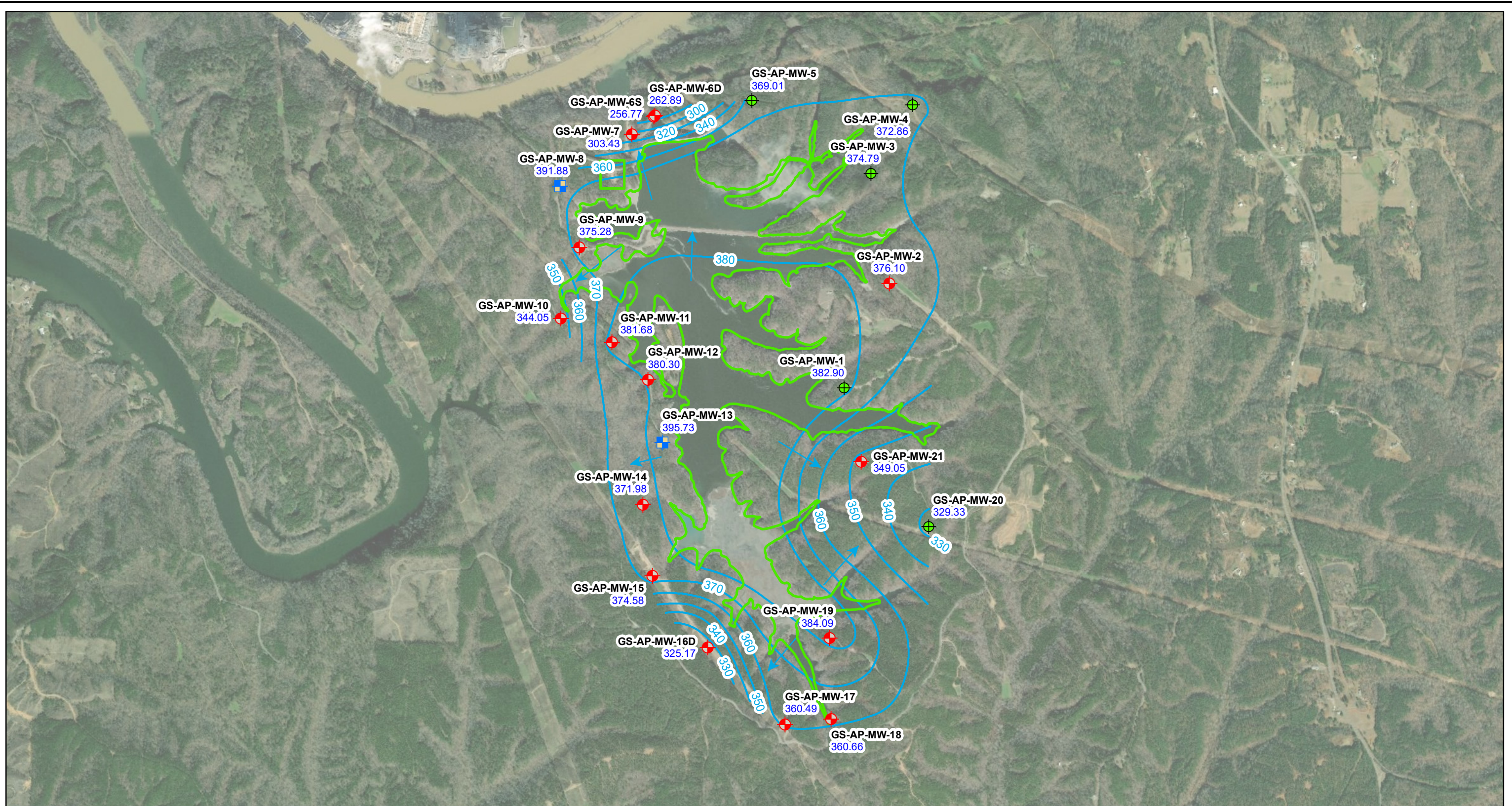
	Upgradient Monitoring Well		Vertical Delineation Well
	Downgradient Monitoring Well		Piezometer
	Horizontal Delineation Well		Abandoned Well
			Ash Pond Boundary
			Property Boundary (Approximate)



NOTES:  
 1. Piezometers \*GS-AP-MW-7V, \*GS-AP-MW-25H, \*GS-AP-MW-27H, \*GS-AP-MW-30H, and \*GS-AP-MW-30HS were intended to be delineation wells, but did not produce sufficient groundwater for low-flow sampling methods.  
 2. \*\*GS-AP-MW-12V survey data is incorrect and will be updated upon re-survey.

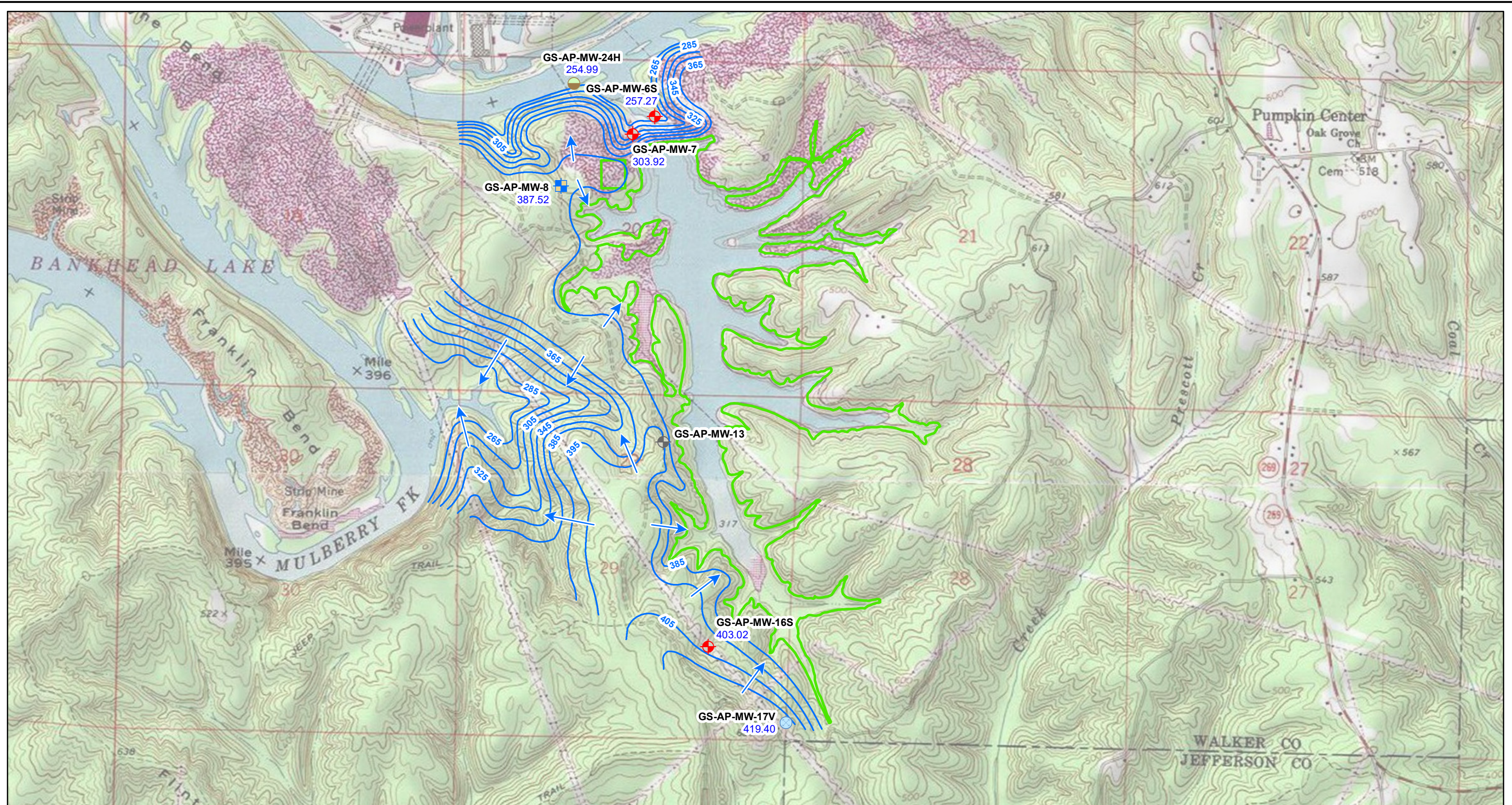
SCALE	1:18000
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MONITORING WELL LOCATION MAP PLANT GORGAS ASH POND	
FIGURE NO	<b>FIGURE 5</b>
Southern Company	



<b>Legend</b> Downgradient Monitoring Well Upgradient Monitoring Well Piezometer Ash Pond Boundary Approximate Groundwater Flow Direction Potentiometric Surface Contour (ft NAVD88)		  NOTE: 1. NAVD88 indicates North American Vertical Datum of 1988.	SCALE 1:18000	DRAWING TITLE POTENTIOMETRIC SURFACE CONTOUR MAP APRIL 15, 2019 PLANT GORGAS ASH POND	
GN-AP-MW-1 Well ID 382.90 Groundwater Elevation			DATE 1/17/2020	DRAWN BY KAR	FIGURE NO <b>FIGURE 6</b>





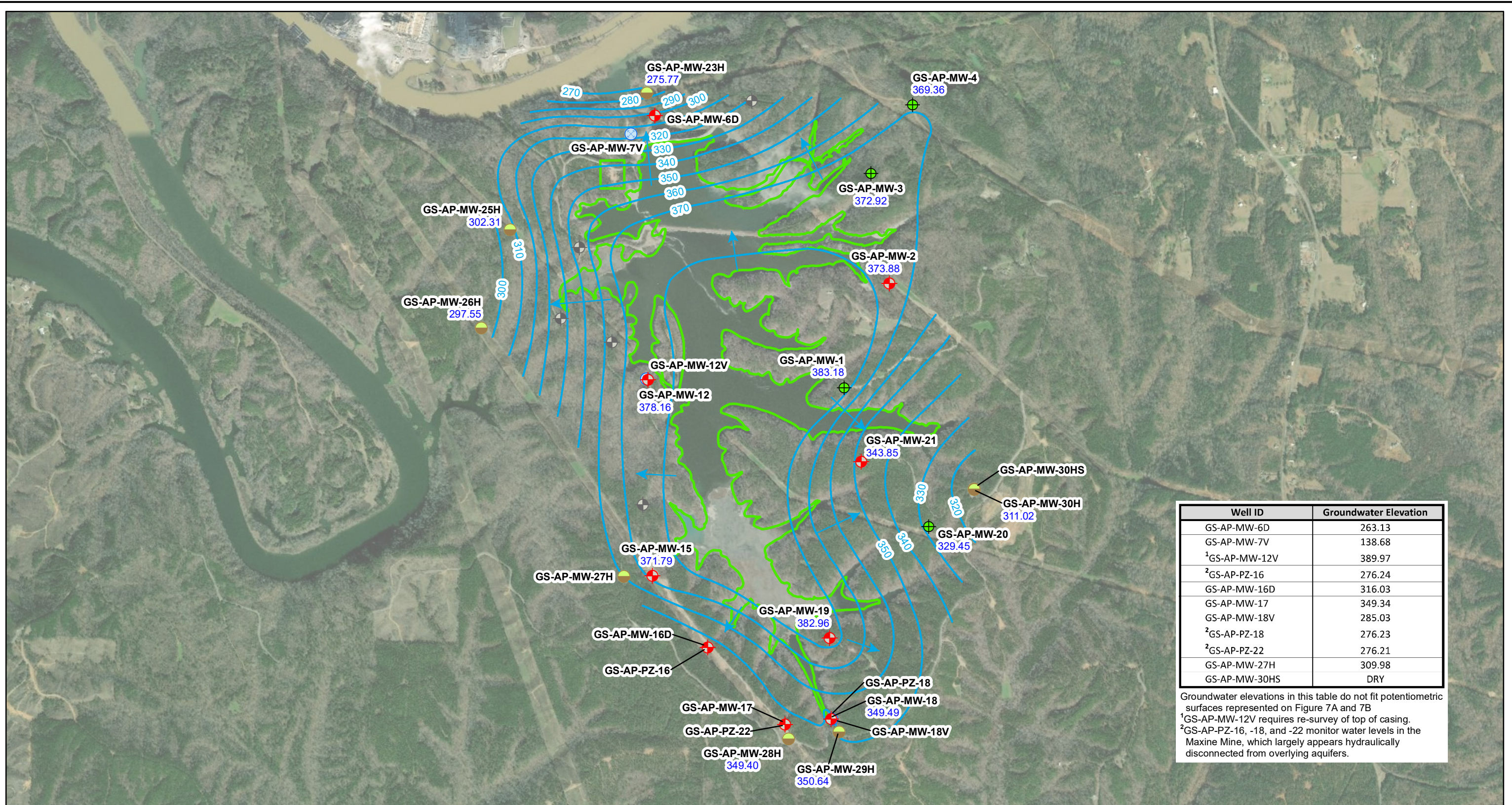
Legend	
	Upgradient Monitoring Well
	Downgradient Monitoring Well
	Horizontal Delineation
	Vertical Delineation Well
	Abandoned Well
	Ash Pond Boundary
	Potentiometric Surface Contour (ft NAVD88)
	Approximate Groundwater Flow Direction
<b>GS-AP-MW-7</b>	Well ID
<b>303.92</b>	Groundwater Elevation



NOTE: 1. NAVD88 indicates North American Vertical Datum of 1988.  
 2. MW-17V planned to be converted to upgradient location in revised GWMP to be submitted 4/15/20.  
 3. Generalized water table potentiometric surface map based upon groundwater elevations, surface water elevations, and topography.

SCALE	1:18000
DATE	1/20/2020
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CHECKED BY	GBD

DRAWING TITLE	
POTENTIOMETRIC SURFACE CONTOUR MAP (UPPER) WATER TABLE AQUIFER SEPTEMBER 23, 2019 PLANT GORGAS ASH POND	
FIGURE NO	<b>FIGURE 7A</b>



Well ID	Groundwater Elevation
GS-AP-MW-6D	263.13
GS-AP-MW-7V	138.68
<sup>1</sup> GS-AP-MW-12V	389.97
<sup>2</sup> GS-AP-PZ-16	276.24
GS-AP-MW-16D	316.03
GS-AP-MW-17	349.34
GS-AP-MW-18V	285.03
<sup>2</sup> GS-AP-PZ-18	276.23
<sup>2</sup> GS-AP-PZ-22	276.21
GS-AP-MW-27H	309.98
GS-AP-MW-30HS	DRY

Groundwater elevations in this table do not fit potentiometric surfaces represented on Figure 7A and 7B  
<sup>1</sup>GS-AP-MW-12V requires re-survey of top of casing.  
<sup>2</sup>GS-AP-PZ-16, -18, and -22 monitor water levels in the Maxine Mine, which largely appears hydraulically disconnected from overlying aquifers.

**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-1** Well ID  
**383.18** Groundwater Elevation



NOTES: 1. NAVD88 indicates North American Vertical Datum of 1988.  
 2. Monitoring Well GS-AP-MW-5 was inaccessible due to blockage by heavy equipment.  
 3. 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 September 2019 event.  
 4. Potentiometric contour lines were generalized for depiction and ease of reader.

SCALE	1:18000
DATE	1/20/2020
DRAWN BY	KAR
CHECKED BY	GBD

DRAWING TITLE  
**POTENTIOMETRIC SURFACE CONTOUR MAP  
 (DEEP) PRATT AQUIFER  
 SEPTEMBER 23, 2019  
 PLANT GORGAS ASH POND**

FIGURE NO  
**FIGURE 7B**

# 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	WL Only	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	328.21	308.21	20
GS-AP-MW-3	WL Only	3/4/2016	1323690.18	2067314.13	508.77	512.29	180.52	341.77	331.77	10
GS-AP-MW-4	WL Only	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	238.52	228.52	10
GS-AP-MW-6D	Downgradient	1/18/2016	1324547.48	2063881.96	271.39	274.50	64.48	220.42	210.42	10
GS-AP-MW-7	Downgradient	1/26/2016	1324250.98	2063518.48	310.05	313.45	100.49	223.36	213.36	10
GS-AP-MW-8	Upgradient	2/26/2016	1323405.23	2062398.47	431.63	434.61	64.59	390.42	370.42	20
GS-AP-MW-9	ABANDONED	4/22/2016	1322446.73	2062720.10	417.06	420.04	111.38	90.98	110.98	20
GS-AP-MW-10	ABANDONED	1/21/2016	1321310.86	2062441.08	464.94	468.41	144.87	124.47	144.47	20
GS-AP-MW-11	ABANDONED	2/4/2016	1320953.14	2063257.73	465.34	468.34	139.90	119.50	139.50	20
GS-AP-MW-12	Downgradient	4/20/2016	1320369.19	2063836.90	447.48	450.67	153.98	307.09	297.09	10
GS-AP-MW-13	ABANDONED	2/4/2016	1319377.84	2064083.37	461.03	464.20	113.57	93.17	113.17	20
GS-AP-MW-14	ABANDONED	1/30/2016	1318393.75	2063787.88	469.60	472.40	203.20	192.80	202.80	10
GS-AP-MW-15	Downgradient	2/8/2016	1317267.07	2063959.21	452.21	454.89	200.08	265.21	255.21	10
GS-AP-PZ-16	WL Only	3/16/2019	1316157.31	2064852.10	458.83	462.29	252.66	219.63	209.63	10
GS-AP-MW-16S	WL Only	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	258.44	238.44	20
GS-AP-MW-17	Downgradient	2/11/2016	1314955.86	2066094.14	528.78	531.88	248.85	293.43	283.43	10
GS-AP-PZ-18	WL Only	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	325.11	305.11	20
GS-AP-MW-19	Downgradient	4/29/2016	1316325.43	2066775.98	492.60	495.58	179.19	336.79	316.79	20
GS-AP-MW-21	Downgradient	2/20/2016	1319122.82	2067233.10	506.51	509.48	236.45	283.43	273.43	10
*GS-AP-MW-7V	WL Only	1/18/2019	1324251.90	2063504.32	309.46	312.14	202.68	119.86	109.86	10
**GS-AP-MW-12V	Vertical Delineation	1/9/2019	1320383.14	2063813.29	478.64	481.32	179.10	312.62	302.62	10
GS-AP-MW-17V	Vertical Delineation	1/20/2019	1314967.05	2066096.42	528.57	531.45	151.40	400.45	380.45	20
GS-AP-MW-18V	Vertical Delineation	1/30/2019	1315045.44	2066833.22	401.81	404.61	137.71	277.30	267.30	10
GS-AP-MW-20	WL Only	2/1/2019	1318122.87	2068319.23	525.18	528.15	249.97	287.18	278.18	10
GS-AP-PZ-22	WL Only	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	272.88	262.88	10
GS-AP-MW-24H	Horizontal Delineation	1/3/2019	1325034.25	2062579.09	258.38	261.35	62.80	208.95	198.95	10
*GS-AP-MW-25H	WL Only	1/2/2019	1322710.44	2061621.52	458.66	461.79	168.13	304.06	294.06	10
GS-AP-MW-26H	Horizontal Delineation	1/22/2019	1321144.11	2061189.28	391.68	394.68	193.60	211.48	201.48	10
*GS-AP-MW-27H	WL Only	2/12/2019	1317251.09	2063507.76	532.08	535.03	244.95	300.48	290.48	10
GS-AP-MW-28H	Horizontal Delineation	2/26/2019	1314721.29	2066153.32	513.84	513.82	229.70	294.52	284.52	10
GS-AP-MW-29H	Horizontal Delineation	2/5/2019	1314844.80	2066948.77	440.71	440.95	130.64	320.71	310.71	10
*GS-AP-MW-30H	WL Only	1/8/2019	1318714.64	2069028.11	579.62	582.49	295.87	297.02	287.02	10
*GS-AP-MW-30HS	WL Only	1/10/2019	1318721.10	2069023.99	579.84	582.53	47.19	545.74	535.74	10

Notes:

- Northing and easting are in feet relative to the State Plane Alabama West North America Datum of 1983.
- Elevations are in feet relative to the North American Vertical Datum of 1988.
- Top of screen and bottom of screen depths are calculated relative Top of Casing elevation and less the well sump length of 0.4'.
- \* Delineation wells GS-AP-MW-7V, GS-AP-MW-25H, GS-AP-MW-27H, GS-AP-MW-30H, and GS-AP-MW-30HS are utilized for water level data only.
- Survey for MW-12V is incorrect and will be updated upon re-survey

**Table 2.**  
**Monitoring Parameters and Reporting Limits**

Parameter	Analytical Method	Reporting Limit (Mg/L)
<b>Appendix III Parameters</b>		
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
<b>Appendix IV Parameters</b>		
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
*GS-AP-MW-7V	312.14	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	129.68	--	138.68
GS-AP-MW-12V	481.32	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	392.70	--	389.97
GS-AP-MW-17V	531.45	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	424.68	--	419.40
GS-AP-MW-18V	404.61	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	295.94	--	285.03
GS-AP-MW-23H	304.98	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	276.82	--	275.77
GS-AP-MW-24H	261.35	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	255.11	--	254.99
*GS-AP-MW-25H	461.79	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	301.10	--	292.31
GS-AP-MW-26H	394.68	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	299.13	--	297.55
*GS-AP-MW-27H	535.03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	299.24	--	512.98
GS-AP-MW-28H	513.82	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	359.02	--	349.40
GS-AP-MW-29H	440.95	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	359.98	--	350.64
*GS-AP-MW-30H	582.49	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	582.49	--	311.02
*GS-AP-MW-30HS	582.53	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	582.53	--	DRY

Notes:  
1. ft. AMSL - feet above mean sea level  
2. -- Not Measured

**Table 4**  
**Relative Percent Difference Calculations**

2019 1st Semi-Annual Monitoring Event				
Parameter	Units	Monitoring Point Identification		Relative Percent Difference (RPD %)
		GS-AP-MW-6D	GS-AP-MW-6D DUP	
<b>Boron</b>	mg/L	1.1	1.09	0.9
<b>Calcium</b>	mg/L	54	53.5	0.9
<b>Chloride</b>	mg/L	8.36	8.93	6.6
<b>Fluoride</b>	mg/L	0.156	0.193	21.2
<b>Sulfate</b>	mg/L	46.8	46.2	1.3
<b>TDS</b>	mg/L	285	277	2.8
<b>Arsenic</b>	mg/L	0.088	0.0869	1.3
<b>Barium</b>	mg/L	0.879	0.865	1.6
<b>Lithium</b>	mg/L	0.267	0.266	0.4

Parameter	Units	Monitoring Point Identification		Relative Percent Difference (RPD %)
		GS-AP-MW-18	GS-AP-MW-18 DUP	
<b>Boron</b>	mg/L	0.449	0.449	0.0
<b>Calcium</b>	mg/L	40.9	40.8	0.2
<b>Chloride</b>	mg/L	6.61	6.57	0.6
<b>Fluoride</b>	mg/L	0.632	0.638	0.9
<b>Sulfate</b>	mg/L	71.6	68.7	4.1
<b>TDS</b>	mg/L	347	358	3.1
<b>Barium</b>	mg/L	0.105	0.0963	8.6
<b>Lithium</b>	mg/L	0.0942	0.0943	0.1
<b>Molybdenum</b>	mg/L	0.0113	0.0114	0.9

**Table 4**  
**Relative Percent Difference Calculations**

<b>2019 2nd Semi-Annual Monitoring Event</b>				
<b>Parameter</b>	<b>Units</b>	<b>Monitoring Point Identification</b>		<b>Relative Percent Difference (RPD %)</b>
		<b>GS-AP-MW-6S</b>	<b>GS-AP-MW-6S DUP</b>	
<b>Boron</b>	mg/L	1.08	1.08	0.0
<b>Calcium</b>	mg/L	60	59.7	0.5
<b>Chloride</b>	mg/L	23.4	23.4	0.0
<b>Fluoride</b>	mg/L	0.142	0.135	5.1
<b>Sulfate</b>	mg/L	176	174	1.1
<b>TDS</b>	mg/L	381	378	0.8
<b>Arsenic</b>	mg/L	0.0105	0.0105	0.0
<b>Barium</b>	mg/L	0.124	0.121	2.4

<b>Parameter</b>	<b>Units</b>	<b>Monitoring Point Identification</b>		<b>Relative Percent Difference (RPD %)</b>
		<b>GS-AP-MW-19</b>	<b>GS-AP-MW-19 DUP</b>	
<b>Calcium</b>	mg/L	48.4	48.6	0.4
<b>Chloride</b>	mg/L	5.83	6.03	3.4
<b>Fluoride</b>	mg/L	0.307	0.314	2.3
<b>Sulfate</b>	mg/L	13.8	14.1	2.2
<b>TDS</b>	mg/L	302	307	1.6
<b>Barium</b>	mg/L	0.356	0.362	1.7
<b>Lithium</b>	mg/L	0.0392	0.0378	3.6



**Table 5.**  
**Summary of Background Levels and Groundwater Protection Standards**

<b>Analyte</b>	<b>Units</b>	<b>Background</b>	<b>Federal GWPS</b>	<b>State GWPS</b>
Antimony	mg/L	0.003	0.006	0.006
Arsenic	mg/L	0.005	0.01	0.01
Barium	mg/L	0.189	2	2
Beryllium	mg/L	0.003	0.004	0.004
Cadmium	mg/L	0.001	0.005	0.005
Chromium	mg/L	0.01	0.1	0.1
Cobalt	mg/L	0.01	0.006	0.006
Combined Radium-226/228	pCi/L	1.02; 1.063	5	5
Fluoride	mg/L	0.2281; 0.2258	4	4
Lead	mg/L	0.005	0.015	0.015
Lithium	mg/L	0.05	0.04	0.04
Mercury	mg/L	0.0005	0.002	0.002
Molybdenum	mg/L	0.01	0.1	0.1
Selenium	mg/L	0.01	0.05	0.05
Thallium	mg/L	0.001	0.002	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)(i)
4. Where two numbers are present, they denote the different background levels for each of the two semiannual monitoring events in the order that they were determined.

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

		APPENDIX III						
WELL	SAMPLE DATE	Boron	Calcium	Chloride	Fluoride	pH	Sulfate	TDS
<b>GWPS</b>		<b>N/R</b>	<b>N/R</b>	<b>N/R</b>	<b>4</b>	<b>N/R</b>	<b>N/R</b>	<b>N/R</b>
<b>UNITS</b>		<b>mg/L</b>	<b>mg/L</b>	<b>mg/L</b>	<b>mg/L</b>	<b>SU</b>	<b>mg/L</b>	<b>mg/L</b>
<b>GS-AP-MW-11</b>	<b>4/16/2019</b>	Non-Detect	46.7	8.06	0.177	6.93	23.2	226
<b>GS-AP-MW-12</b>	<b>4/16/2019</b>	0.0385(J)	38.3	3.22	0.188	7.41	13.3	193
<b>GS-AP-MW-13</b>	<b>4/16/2019</b>	Non-Detect	38.6	3.23	0.197	6.64	12.1	185
<b>GS-AP-MW-14</b>	<b>4/16/2019</b>	Non-Detect	39.5	7.7	0.204	7.03	16.9	184
<b>GS-AP-MW-15</b>	<b>4/17/2019</b>	0.0388(J)	8.53	5.2	0.463	10.76	9.02	354
<b>GS-AP-MW-16D</b>	<b>4/17/2019</b>	Non-Detect	32.3	2.82	0.171	7.33	14.1	207
<b>GS-AP-MW-17</b>	<b>4/17/2019</b>	0.0916(J)	3.86	12.7	0.354	8.36	76.6	540
<b>GS-AP-MW-18</b>	<b>4/17/2019</b>	0.449	40.9	6.61	0.632	7.58	71.6	347
<b>GS-AP-MW-19</b>	<b>4/17/2019</b>	0.0336(J)	38.4	7.27	0.27	8.06	14.3	296
<b>GS-AP-MW-2</b>	<b>4/17/2019</b>	0.165	0.511	9.5	0.868	9.26	48.6	341
<b>GS-AP-MW-21</b>	<b>4/17/2019</b>	0.0675(J)	2.88	32.3	0.272	11.71	215	582
<b>GS-AP-MW-6D</b>	<b>4/16/2019</b>	1.1	54	8.36	0.156	7.26	46.8	285
<b>GS-AP-MW-6S</b>	<b>4/16/2019</b>	0.961	57.1	23.1	0.147	6.82	195	382
<b>GS-AP-MW-7</b>	<b>4/23/2019</b>	1.5	13.8	5.16	0.111	7.83	156	354
<b>GS-AP-MW-8</b>	<b>4/16/2019</b>	Non-Detect	4.43	3.69	0.143	5.76	4.53	92
<b>GS-AP-MW-9</b>	<b>4/16/2019</b>	0.0979(J)	73.3	2.81	0.154	6.69	154	397

Notes:

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

Values are displayed as less than the PQL with a J.

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 measurement.

4. TDS - Total Dissolved Solids

5. N/R indicates a substance does not have an MCL or SMCL, but will be further evaluated statistically at the conclusion of all the background sampling events, as required by EPA's CCR rule.

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

		APPENDIX IV						
WELL	SAMPLE DATE	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt
<b>GWPS</b>		<b>0.006</b>	<b>0.01</b>	<b>2</b>	<b>0.004</b>	<b>0.005</b>	<b>0.1</b>	<b>0.01</b>
<b>UNITS</b>		<b>mg/L</b>	<b>mg/L</b>	<b>mg/L</b>	<b>mg/L</b>	<b>mg/L</b>	<b>mg/L</b>	<b>mg/L</b>
GS-AP-MW-11	4/16/2019	Non-Detect	Non-Detect	0.21	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-12	4/16/2019	Non-Detect	0.014	0.161	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-13	4/16/2019	Non-Detect	Non-Detect	0.16	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-14	4/16/2019	Non-Detect	0.0011(J)	0.305	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-15	4/17/2019	Non-Detect	0.00633	0.264	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-16D	4/17/2019	Non-Detect	Non-Detect	0.322	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-17	4/17/2019	Non-Detect	0.00343(J)	0.0946	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-18	4/17/2019	Non-Detect	0.00481(J)	0.105	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-19	4/17/2019	Non-Detect	0.00302(J)	0.316	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-2	4/17/2019	Non-Detect	Non-Detect	0.0576	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-21	4/17/2019	Non-Detect	Non-Detect	0.0914	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-6D	4/16/2019	0.000828(J)	0.088	0.879	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-6S	4/16/2019	Non-Detect	0.0164	0.124	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-7	4/23/2019	0.00105(J)	0.207	0.113	Non-Detect	Non-Detect	0.00435(J)	0.00231(J)
GS-AP-MW-8	4/16/2019	Non-Detect	Non-Detect	0.00459(J)	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-9	4/16/2019	Non-Detect	0.00403(J)	0.0256	Non-Detect	Non-Detect	Non-Detect	Non-Detect

Notes:

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

Values are displayed as less than the PQL with a J.

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 measurement.

4. TDS - Total Dissolved Solids

5. N/R indicates a substance does not have an MCL or SMCL, but will be further evaluated statistically at the conclusion of all the background sampling events, as required by EPA's CCR rule.

**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
<b>GWPS</b>		<b>5</b>	<b>4</b>	<b>0.015</b>	<b>0.05</b>	<b>0.002</b>	<b>0.1</b>	<b>0.05</b>	<b>0.002</b>
<b>UNITS</b>		<b>pCi/L</b>	<b>mg/L</b>	<b>mg/L</b>	<b>mg/L</b>	<b>mg/L</b>	<b>mg/L</b>	<b>mg/L</b>	<b>mg/L</b>
<b>GS-AP-MW-11</b>	<b>4/16/2019</b>	0.609(U)	0.177	Non-Detect	0.0129(J)	Non-Detect	Non-Detect	Non-Detect	Non-Detect
<b>GS-AP-MW-12</b>	<b>4/16/2019</b>	0.184(U)	0.188	Non-Detect	0.0261	Non-Detect	Non-Detect	Non-Detect	Non-Detect
<b>GS-AP-MW-13</b>	<b>4/16/2019</b>	0.506(U)	0.197	Non-Detect	0.0101(J)	Non-Detect	Non-Detect	Non-Detect	Non-Detect
<b>GS-AP-MW-14</b>	<b>4/16/2019</b>	0.408(U)	0.204	Non-Detect	0.0328	Non-Detect	Non-Detect	Non-Detect	Non-Detect
<b>GS-AP-MW-15</b>	<b>4/17/2019</b>	-0.11(U)	0.463	Non-Detect	0.19	Non-Detect	0.029	Non-Detect	Non-Detect
<b>GS-AP-MW-16D</b>	<b>4/17/2019</b>	0.121(U)	0.171	Non-Detect	0.0349	Non-Detect	Non-Detect	Non-Detect	Non-Detect
<b>GS-AP-MW-17</b>	<b>4/17/2019</b>	0.00935(U)	0.354	Non-Detect	0.0574	Non-Detect	0.00661(J)	Non-Detect	Non-Detect
<b>GS-AP-MW-18</b>	<b>4/17/2019</b>	0.196(U)	0.632	Non-Detect	0.0942	Non-Detect	0.0113	Non-Detect	Non-Detect
<b>GS-AP-MW-19</b>	<b>4/17/2019</b>	0.507(U)	0.27	Non-Detect	0.0429	Non-Detect	0.00703(J)	Non-Detect	Non-Detect
<b>GS-AP-MW-2</b>	<b>4/17/2019</b>	0.0905(U)	0.868	Non-Detect	0.0421	Non-Detect	0.00293(J)	Non-Detect	Non-Detect
<b>GS-AP-MW-21</b>	<b>4/17/2019</b>	0.47(U)	0.272	Non-Detect	0.312	Non-Detect	0.0885	Non-Detect	Non-Detect
<b>GS-AP-MW-6D</b>	<b>4/16/2019</b>	0.528	0.156	Non-Detect	0.267	Non-Detect	0.00747(J)	Non-Detect	Non-Detect
<b>GS-AP-MW-6S</b>	<b>4/16/2019</b>	1.11	0.147	Non-Detect	Non-Detect	Non-Detect	0.00246(J)	Non-Detect	Non-Detect
<b>GS-AP-MW-7</b>	<b>4/23/2019</b>	0.894	0.111	0.00207(J)	0.144	Non-Detect	0.185	Non-Detect	Non-Detect
<b>GS-AP-MW-8</b>	<b>4/16/2019</b>	0.733	0.143	Non-Detect	Non-Detect	Non-Detect	Non-Detect	Non-Detect	Non-Detect
<b>GS-AP-MW-9</b>	<b>4/16/2019</b>	-0.065(U)	0.154	Non-Detect	0.0673	Non-Detect	0.00462(J)	Non-Detect	Non-Detect

Notes:

1. J value indicates the result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less than the PQL with a J.
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 measurement.
4. TDS - Total Dissolved Solids
5. N/R indicates a substance does not have an MCL or SMCL, but will be further evaluated statistically at the conclusion of all the background sampling events, as required by EPA's CCR rule.

**Table 7.  
Second Semi-Annual Monitoring Event Analytical Summary**

		APPENDIX III						
WELL	SAMPLE DATE	Boron	Calcium	Chloride	Fluoride	pH	Sulfate	TDS
GWPS		N/R	N/R	N/R	4	N/R	N/R	N/R
UNITS		mg/L	mg/L	mg/L	mg/L	SU	mg/L	mg/L
GS-AP-MW-12	9/25/2019	0.122	48.1	6.68	0.168	7.38	25.5	253
GS-AP-MW-12V	9/25/2019	0.0347(J)	33.4	3.84	0.185	9.29	1.61	183
GS-AP-MW-15	9/24/2019	0.0607(J)	3.26	5.96	0.628	11.7	12.4	536
GS-AP-MW-16D	9/24/2019	Non-Detect	34.3	2.9	0.124	7.43	14.1	208
GS-AP-MW-17	9/23/2019	0.116	5.43	16.2	0.351	8.37	124	684
GS-AP-MW-17V	9/24/2019	0.0532(J)	29.7	3.69	0.245	7.65	11.8	365
GS-AP-MW-18	9/24/2019	0.883	57.4	12.3	0.578	7.49	119	372
GS-AP-MW-19	9/24/2019	0.0375(J)	48.4	5.83	0.307	7.8	13.8	302
GS-AP-MW-2	9/25/2019	0.153	0.581	12	0.86	9.31	47.7	358
GS-AP-MW-21	9/24/2019	0.0843(J)	2.47	36	0.209	11.24	224	630
GS-AP-MW-23H	9/23/2019	0.0641(J)	80.6	2.26	0.144	5.76	394	598
GS-AP-MW-24H	9/24/2019	0.0821(J)	46.5	2.89	0.201	6.59	15.3	253
GS-AP-MW-26H	9/23/2019	Non-Detect	29.6	2.35	0.146	7.25	16.9	278
GS-AP-MW-28H	9/25/2019	0.0784(J)	2.52	8.93	0.172	8.57	10.2	443
GS-AP-MW-29H	9/24/2019	0.0305(J)	32.8	3.11	0.183	7.11	32.6	389
GS-AP-MW-6D	9/23/2019	1.15	56.1	8.72	0.132	7.23	47.9	296
GS-AP-MW-6S	9/23/2019	1.08	60	23.4	0.142	6.51	176	381
GS-AP-MW-7	9/24/2019	1.6	13.4	5.76	0.106	7.38	145	344
GS-AP-MW-8	9/24/2019	Non-Detect	7.24	3.21	0.128	5.27	6.61	109

Notes:

1. J value indicates the result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less than the PQL with a J.
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 measurement.
4. TDS - Total Dissolved Solids
5. N/R indicates a substance does not have an MCL or SMCL, but will be further evaluated statistically at the conclusion of all the background sampling events, as required by EPA's CCR rule.

**Table 7.  
Second Semi-Annual Monitoring Event Analytical Summary**

		APPENDIX IV						
WELL	SAMPLE DATE	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt
GWPS		0.006	0.01	2	0.004	0.005	0.1	0.006
UNITS		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
GS-AP-MW-12	9/25/2019	Non-Detect	0.0135	0.202	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-12V	9/25/2019	0.0025(J)	0.00129(J)	1.06	Non-Detect	Non-Detect	0.00202(J)	Non-Detect
GS-AP-MW-15	9/24/2019	Non-Detect	0.011	0.0913	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-16D	9/24/2019	Non-Detect	Non-Detect	0.342	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-17	9/23/2019	Non-Detect	0.00631	0.135	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-17V	9/24/2019	Non-Detect	0.00149(J)	0.208	Non-Detect	Non-Detect	0.00405(J)	Non-Detect
GS-AP-MW-18	9/24/2019	Non-Detect	0.00854	0.0896	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-19	9/24/2019	Non-Detect	0.00289(J)	0.356	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-2	9/25/2019	Non-Detect	Non-Detect	0.065	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-21	9/24/2019	Non-Detect	Non-Detect	0.114	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-23H	9/23/2019	Non-Detect	0.0369	0.0148	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-24H	9/24/2019	Non-Detect	Non-Detect	1.04	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-26H	9/23/2019	Non-Detect	Non-Detect	0.922	Non-Detect	Non-Detect	0.00295(J)	Non-Detect
GS-AP-MW-28H	9/25/2019	Non-Detect	Non-Detect	0.0528	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-29H	9/24/2019	Non-Detect	0.00155(J)	0.712	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-6D	9/23/2019	Non-Detect	0.0876	0.903	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-6S	9/23/2019	Non-Detect	0.0105	0.124	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-7	9/24/2019	Non-Detect	0.233	0.0834	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-8	9/24/2019	Non-Detect	Non-Detect	0.0434	Non-Detect	Non-Detect	Non-Detect	0.00234(J)

Notes:

1. J value indicates the result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less than the PQL with a J.
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 measurement.
4. TDS - Total Dissolved Solids
5. N/R indicates a substance does not have an MCL or SMCL, but will be further evaluated statistically at the conclusion of all the background sampling events, as required by EPA's CCR rule.

**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
<b>GWPS</b>		<b>5</b>	<b>4</b>	<b>0.015</b>	<b>0.04</b>	<b>0.002</b>	<b>0.1</b>	<b>0.05</b>	<b>0.002</b>
<b>UNITS</b>		<b>pCi/L</b>	<b>mg/L</b>	<b>mg/L</b>	<b>mg/L</b>	<b>mg/L</b>	<b>mg/L</b>	<b>mg/L</b>	<b>mg/L</b>
GS-AP-MW-12	9/25/2019	0.442(U)	0.168	Non-Detect	0.028	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-12V	9/25/2019	1.03	0.185	Non-Detect	0.0611	Non-Detect	0.00942(J)	Non-Detect	Non-Detect
GS-AP-MW-15	9/24/2019	0.951	0.628	Non-Detect	0.469	Non-Detect	0.0597	Non-Detect	Non-Detect
GS-AP-MW-16D	9/24/2019	-0.033(U)	0.124	Non-Detect	0.0362	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-17	9/23/2019	0.983	0.351	Non-Detect	0.0583	Non-Detect	0.011	Non-Detect	Non-Detect
GS-AP-MW-17V	9/24/2019	0.373(U)	0.245	Non-Detect	0.0809	Non-Detect	0.00906(J)	Non-Detect	Non-Detect
GS-AP-MW-18	9/24/2019	0.375(U)	0.578	Non-Detect	0.114	Non-Detect	0.0504	Non-Detect	Non-Detect
GS-AP-MW-19	9/24/2019	0.664	0.307	Non-Detect	0.0392	Non-Detect	0.00562(J)	Non-Detect	Non-Detect
GS-AP-MW-2	9/25/2019	0.537(U)	0.86	Non-Detect	0.0457	Non-Detect	0.00803(J)	Non-Detect	Non-Detect
GS-AP-MW-21	9/24/2019	1.08	0.209	Non-Detect	0.276	Non-Detect	0.0613	Non-Detect	Non-Detect
GS-AP-MW-23H	9/23/2019	0.00709(U)	0.144	Non-Detect	0.0324	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-24H	9/24/2019	1.23	0.201	Non-Detect	0.0275	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-26H	9/23/2019	0.404(U)	0.146	0.00109(J)	0.0945	Non-Detect	Non-Detect	Non-Detect	Non-Detect
GS-AP-MW-28H	9/25/2019	0.648(U)	0.172	Non-Detect	0.0619	Non-Detect	0.00338(J)	Non-Detect	Non-Detect
GS-AP-MW-29H	9/24/2019	1.09	0.183	Non-Detect	0.0509	Non-Detect	0.00424(J)	Non-Detect	Non-Detect
GS-AP-MW-6D	9/23/2019	0.677	0.132	Non-Detect	0.264	Non-Detect	0.00758(J)	Non-Detect	Non-Detect
GS-AP-MW-6S	9/23/2019	1.06	0.142	Non-Detect	0.0105(J)	Non-Detect	0.00412(J)	Non-Detect	Non-Detect
GS-AP-MW-7	9/24/2019	0.618(U)	0.106	Non-Detect	0.156	Non-Detect	0.178	Non-Detect	Non-Detect
GS-AP-MW-8	9/24/2019	0.753	0.128	Non-Detect	Non-Detect	Non-Detect	Non-Detect	Non-Detect	Non-Detect

Notes:

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

Values are displayed as less than the PQL with a J.

4. TDS - Total Dissolved Solids

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 measurement.

4. TDS - Total Dissolved Solids

5. N/R indicates a substance does not have an MCL or SMCL, but will be further evaluated statistically at the conclusion of all the background sampling events, as required by EPA's CCR rule.

# Appendix A



August 16, 2019

Project No. 1789848

**Mr. Greg Dyer**

Southern Company Services  
3535 Colonnade Pkwy, BIN S-360-EC  
Birmingham, AL 35243

**RE: GROUNDWATER MONITORING WELL ABANDONMENT REPORT  
PLANT GORGAS, ALABAMA**

Dear Mr. Dyer:

Golder Associates Inc. (Golder) is submitting this Monitoring Well Decommissioning Report to Southern Company Services, Inc. (SCS) and Alabama Power Company (APC), which documents the activities related to decommissioning and removal of a groundwater monitoring wells at Plant Gorgas, Alabama. Well abandonment activities were conducted in general accordance with USEPA Region 4 Standard Operating Procedures and Alabama well construction standards described in Administrative Code R. 335-13 and the Alabama Environmental Investigation and Remediation Guidance (AEIRG; Revised 2017).

The field activities for this investigation were performed between July 11 and July 24, 2019. The field work consisted of the decommissioning of six groundwater monitoring wells. The decommissioned wells had been surveyed on June 3, 2016. A summary of the activities is presented below.

### **WELL DECOMMISSIONING**

A Golder geologist provided oversight for the decommissioning of the following groundwater monitoring wells:

- GS-AP-MW-05
- GS-AP-MW-09
- GS-AP-MW-10
- GS-AP-MW-11
- GS-AP-MW-13
- GS-AP-MW-14

A boring location plan is presented in Figure 1.

Prior to well decommissioning, Golder used a water level probe to measure the depth of the well and the depth to groundwater. The concrete pad and bollards were removed. The wells had been constructed using 2-inch diameter, flush threaded, Schedule 40 PVC casing and screen. Through the overburden, the 2-inch well casing was typically grouted within a 6-inch-diameter casing.

The wells were over-drilled with using a CME-45B rotary auger drill rig with tri-cone bit or drag bit attachment. The rig was supplied and operated by Mid-Atlantic Drilling, of Wilmington, North Carolina. After over-drilling the wells were backfilled with grout using a positive displacement method i.e. via tremie pipe lowered to the bottom of the over-drilled well. An experienced Golder geologist was present on site to observe and document well abandonment. A potable water source was used for the grout mix.

The drill bit encountered a piece of metal (potentially hitting the side of the casing) at 32 feet below ground surface (bgs) in GS-AP-MW-05, and resulted in over-drilling refusal at this depth. A tremie pipe was used to grout the hole from the achieved over drill depth. A driller's pipe wrench was encountered in the well annulus at 90 feet bgs in GS-AP-MW-13. The obstruction prevented further drilling advancement, and a tremie pipe was used to grout the hole from this over-drill depth.

A well construction summary is provided in table 1 and a well abandonment summary is presented in Table 2. The boring lithologic logs are presented in Appendix A.

Please contact David Hannam at (770) 496-1893 with any questions or concerns regarding this report.

Sincerely,

**Golder Associates Inc.**



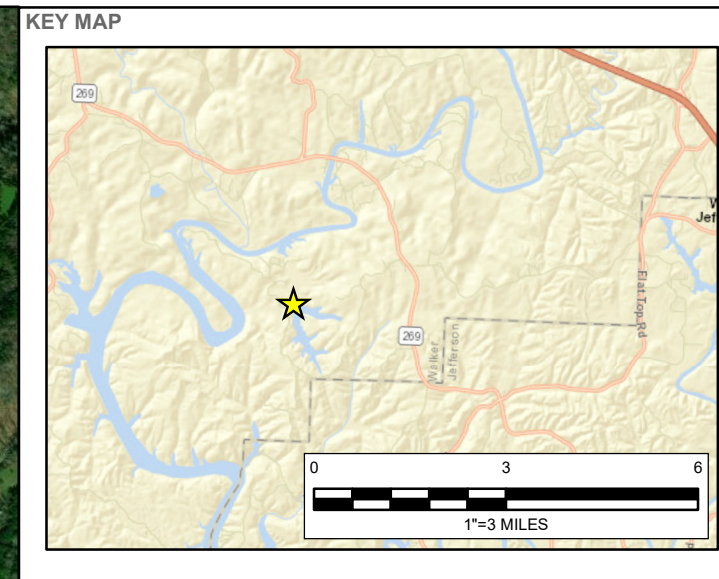
David Hannam  
*Senior Project Geologist*



Gregory L. Hebel, PhD, PE  
*Geotechnical Practice Leader & Principal*

DAH/GLH

Attachments: Figure 1 – Abandoned Well Location Map  
Table 1 – Monitoring Well Construction Summary  
Table 2 – Monitoring Well Abandonment Summary  
Appendix A – Well Boring and Construction Logs



**LEGEND**

- ABANDONED WELL LOCATIONS
- SITE LOCATION

**NOTES**

1. MONITROING WELL COORDINATES AND ELEVATIONS WERE SURVEYED BY FORD ENGINEERING SERVICES, PLLC AND REPORTED JUNE 3, 2016.

**REFERENCE**

SERVICE LAYER CREDITS: BING MAPS, ESRI, USGS

CLIENT  
SOUTHERN COMPANY

PROJECT  
PLANT GORGAS ASH POND CLOSURE

TITLE  
**WELL ABANDONMENT LOCATIONS**

CONSULTANT	YYYY-MM-DD	2019-08-09
<b>GOLDER</b>	DESIGNED	DWT
	PREPARED	SEB
	REVIEWED	GH
	APPROVED	GH

PROJECT NO. 1789848      CONTROL GOR 17010      FIGURE 1

PATH: C:\GIS\Southern Company\1789848 Plant Gorgas Release Environmental WellAbandonmentLocations.mxd PRINTED ON: 2019-08-14 AT: 11:33:31 AM

1in IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM ANSI B

**Table 1**  
**Monitoring Well Construction Summary**  
**Plant Gorgas**  
**Project Number: 1783439**

Well ID	Northing	Easting	Ground Elevation (ft MSL)	Total Depth of Boring (ft bgs)	Depth top of Screen (ft bgs)	Depth Base of Screen (ft bgs)
GS-AP-MW-5	1324811.043	2065409.728	487.17	320	136	146
GS-AP-MW-9	1322446.732	2062720.098	417.06	320	88	108
GS-AP-MW-10	1321310.864	2062441.077	464.94	177	120	140
GS-AP-MW-11	1320953.143	2063257.734	465.34	155	115	135
GS-AP-MW-13	1319377.844	2064083.371	461.03	180	90	110
GS-AP-MW-14	1318393.751	2063787.876	469.60	204	190	200

**Notes**

Holes drilled deeper than the base of the well werer backfilled beyond the filter pack with bentonite.

ft bgs: feet below ground surface

MSL: Mean Sea Level

**Table 2**  
**Monitoring Well Abandonment Summary**  
**Plant Gorgas**  
**Project Number 1783439**

Well ID	Date Abandoned	Base of Screen (ft bgs)	Measured Before Abandonment		Depth of Overdrill (ft bgs)	Backfill Materials	Notes
			Total Depth (ft bgs)	Water Level (ft bgs)			
GS-AP-MW-5	7/24/2019	145	145	130	35	25 lbs Portland Cement and 10 gal water, via tremie pipe.	Drill bit hit a piece of steel (potentially the casing) at 32 ft-bgs, and over-drilling could not pass below this level. Well tremmie grouted from this depth.
GS-AP-MW-9	7/13/2019	110	110	45	S	94 lbs Portland Cement, 50 lbs bentonite grout and 35 gal water, via tremie pipe.	
GS-AP-MW-10	7/13/2019	140	140	120	140	94 lbs Portland Cement, 30 lbs bentonite grout and 35 gal water, via tremie pipe.	
GS-AP-MW-11	7/13/2019	135	135	85	135	94 lbs Portland Cement, 25 lbs bentonite grout and 35 gal water, via tremie pipe.	
GS-AP-MW-13	7/13/2019	110	110	70	90	94 lbs Portland Cement, 25 lbs bentonite grout and 35 gal water, via tremie pipe.	Drilling refusal at 90 ft bgs where a driller's pipe wrench was recovered from the well annulus down hole. Over-drilling could not continue past this depth and tremie grouting occurred from this depth.
GS-AP-MW-14	7/24/2019	200	200	100	200	94 lbs Portland Cement, 25 lbs bentonite grout and 35 gal water, via tremie pipe.	

**Notes**

ft bgs: feet below ground surface

lbs: Pounds

gal: Gallons

**APPENDIX A**

# WELL BORING AND CONSTRUCITON LOGS

PROJECT No.: 154-4912

# RECORD OF SONIC HOLE: GS-AP-MW-05

LOCATION: Rattlesnake Lake - Gorgas

SHEET 1 OF 8  
DATUM: Ground Surface

DRILLING DATE:

INCLINATION: -90°      AZIMUTH: n/a

**Note: Well previously drilled with displacement bit, lithology not available**

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.												PIEZOMETER, STANDPIPE OR THERMISTOR INSTALLATION					
						INDICES				RECOVERY				DISCONTINUITY DATA									
						ROCK STRENGTH		WEATHERING		TOTAL CORE %		ROD %		TYPE AND SURFACE DESCRIPTION					J <sub>CON</sub>	J <sub>r</sub>	J <sub>a</sub>		
						R <sub>6</sub>	R <sub>4</sub>	R <sub>3</sub>	R <sub>2</sub>	W <sub>2</sub>	W <sub>3</sub>	W <sub>4</sub>	80	60	40	20	80		60	40	20	FRACTURE INDEX PER RUN	DIP WELL CORE AXIS (deg)
0		Ground Surface		0.00																			
5																							
10																							
15																							
20																							
25																							
30																							
35																							
40																							
		CONTINUED NEXT PAGE																					

WELL ABANDONED VIA OVERDRILLING AND GROUTING 07/23/19

Concrete Seal and Pad

Bentonite Grout Mix

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DEPTH SCALE  
1 in to 5 ft



LOGGED: CDL  
CHECKED: CDL





PROJECT No.: 154-4912

# RECORD OF SONIC HOLE: GS-AP-MW-05

SHEET 3 OF 8  
DATUM: Ground Surface

LOCATION: Rattlesnake Lake - Gorgas

DRILLING DATE:

INCLINATION: -90° AZIMUTH: n/a

Note: Well previously drilled with displacement bit, lithology not available

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

PIEZOMETER, STANDPIPE OR THERMISTOR INSTALLATION

DEPTH SCALE FEET	DRILLING RECORD	DESCRIPTION	SYMBOLIC LOG	ELEV. DEPTH (ft)	RUN No.	INDICES				RECOVERY				DISCONTINUITY DATA				Piezometer/Gauge Screen Cable	Last Core																		
						ROCK STRENGTH		WEATHERING		TOTAL CORE %		ROD %		FRACTURE INDEX PER RUN		DIP WELL CORE AXIS (deg)				TYPE AND SURFACE DESCRIPTION	J	Ur	Ja														
						R5	R4	R3	R2	R1	W2	W3	W4		80	60	20		80		60	20		Jn													
80																																					
85																																					
90																																					
95																																					
100																																					
105																																					
110																																					
115																																					
120																																					

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Bentonite Grout Mix

PelPlug Bentonite Pellets (5 gallons used)

DEPTH SCALE  
1 in to 5 ft



LOGGED: CDL  
CHECKED: CDL

WELL ABANDONED VIA OVERDRILLING AND GROUTING 07/23/19

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PROJECT No.: 154-4912

# RECORD OF SONIC HOLE: GS-AP-MW-05

SHEET 4 OF 8  
DATUM: Ground Surface

LOCATION: Rattlesnake Lake - Gorgas

DRILLING DATE:

INCLINATION: -90°      AZIMUTH: n/a

**Note: Well previously drilled with displacement bit, lithology not available**

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.												PIEZOMETER, STANDPIPE OR THERMISTOR INSTALLATION							
						INDICES				RECOVERY				DISCONTINUITY DATA											
						ROCK STRENGTH		WEATHERING		TOTAL CORE %		ROD %		FRACTURE INDEX PER RUN		DIP W/LL CORE AXIS (deg)			TYPE AND SURFACE DESCRIPTION						
						R5	R4	R3	R2	R1	W1	W2	W3	W4	80	60	20		80	60	20	F1	F2	F3	F4
120																									PelPlug Bentonite Pellets (5 gallons used)
125																									
130																									GP#1 Filter Media Sand (10 x 50lb bags used)
135																									
140																									2" PVC Sch 40 0.010 Slot PrePack Threaded Screen
145																									
150																									GP#1 Filter Media Sand
155																									
160																									Hole Plug Bentonite Chips 3/8"

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DEPTH SCALE  
1 in to 5 ft



LOGGED: CDL  
CHECKED: CDL

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WELL ABANDONED VIA OVERDRILLING AND GROUTING 07/23/19

LOCATION: Rattlesnake Lake - Gorgas

DRILLING DATE:

INCLINATION: -90°

AZIMUTH: n/a

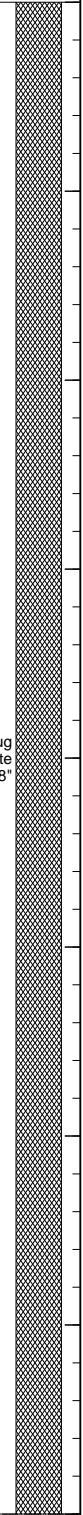
**Note: Well previously drilled with displacement bit, lithology not available**

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

PIEZOMETER,  
STANDPIPE  
OR  
THERMISTOR  
INSTALLATION

DEPTH SCALE FEET	DRILLING RECORD	DESCRIPTION	SYMBOLIC LOG	ELEV. DEPTH (ft)	RUN No.	INDICES				RECOVERY				DISCONTINUITY DATA				J <sub>CON</sub>	J <sub>ur</sub>	J <sub>Ja</sub>	Piezo/Breath Gauge Screen Core Loss Core																
						ROCK STRENGTH		WEATHERING		TOTAL CORE %		ROD %		FRACTURE INDEX PER RUN		DIP W/LL CORE (ARS) (9.0-30)						TYPE AND SURFACE DESCRIPTION															
						R <sub>6</sub>	R <sub>4</sub>	R <sub>3</sub>	R <sub>2</sub>	W <sub>2</sub>	W <sub>3</sub>	W <sub>4</sub>	80	60	40	20	80	60	40	20	F <sub>1</sub>	F <sub>2</sub>	F <sub>3</sub>	F <sub>4</sub>	F <sub>5</sub>	F <sub>6</sub>	F <sub>7</sub>	F <sub>8</sub>	F <sub>9</sub>	F <sub>10</sub>	F <sub>11</sub>	F <sub>12</sub>	F <sub>13</sub>	F <sub>14</sub>	F <sub>15</sub>		
200		CONTINUED NEXT PAGE																																			
160																																					
165																																					
170																																					
175																																					
180																																					
185																																					
190																																					
195																																					

WELL ABANDONED VIA OVERDRILLING AND GROUTING 07/23/19



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PROJECT No.: 154-4912

# RECORD OF SONIC HOLE: GS-AP-MW-05

SHEET 7 OF 8  
DATUM: Ground Surface

LOCATION: Rattlesnake Lake - Gorgas

DRILLING DATE:

INCLINATION: -90°      AZIMUTH: n/a

Note: Well previously drilled with displacement bit, lithology not available

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.														DISCONTINUITY DATA TYPE AND SURFACE DESCRIPTION	J <sub>CON</sub> J <sub>r</sub> J <sub>a</sub>	Piezo/Borehole Gauge Packer Cable Log Core	PIEZOMETER, STANDPIPE OR THERMISTOR INSTALLATION		
						INDICES				RECOVERY				DISCONTINUITY DATA											
						ROCK STRENGTH		WEATHERING		TOTAL CORE %		ROD %		FRACTURE INDEX PER RUN		DIP WELL CORE AXIS (deg)		DIP WELL CORE AXIS (deg)						DIP WELL CORE AXIS (deg)	
						R <sub>5</sub>	R <sub>4</sub>	R <sub>3</sub>	R <sub>2</sub>	W <sub>1</sub>	W <sub>2</sub>	W <sub>3</sub>	W <sub>4</sub>	R <sub>1</sub>	R <sub>2</sub>	R <sub>3</sub>	R <sub>4</sub>	R <sub>5</sub>	Fracture Index					Fracture Index	Fracture Index
240																									
245																									
250																									
255																									
260																									
265																									
270																									
275																									
280																									

WELL ABANDONED  
VIA OVERDRILLING  
AND GROUTING

Hole Plug  
Bentonite  
Chips 3/8"

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DEPTH SCALE  
1 in to 5 ft



LOGGED: CDL  
CHECKED: CDL

PROJECT No.: 154-4912

RECORD OF SONIC HOLE: GS-AP-MW-05

SHEET 8 OF 8  
DATUM: Ground Surface

LOCATION: Rattlesnake Lake - Gorgas

DRILLING DATE:

INCLINATION: -90° AZIMUTH: n/a

Note: Well previously drilled with displacement bit, lithology not available

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

PIEZOMETER, STANDPIPE OR THERMISTOR INSTALLATION

DEPTH SCALE FEET	DRILLING RECORD	DESCRIPTION	SYMBOLIC LOG	ELEV. DEPTH (ft)	RUN No.	INDICES		RECOVERY		DISCONTINUITY DATA			J <sub>CON</sub>	J <sub>UR</sub>	J <sub>JA</sub>	Piezo/Breath Gauge Screen Case Core	
						ROCK STRENGTH R <sub>6</sub> R <sub>4</sub> R <sub>3</sub> R <sub>2</sub> R <sub>1</sub>	WEATHERING W <sub>1</sub> W <sub>2</sub> W <sub>3</sub> W <sub>4</sub>	TOTAL CORE % 80 60 40 20	RQD % 80 60 40 20	FRACTURE INDEX PER RUN	DISCONTINUITY TYPE AND SURFACE DESCRIPTION	DIP W.I.L. CORE AXIS (deg)					0 (90)
280																	
285																	
290																	
295																	
300																	Hole Plug Bentonite Chips 3/8"
305																	
310																	
315																	
320																	

WELL ABANDONED VIA OVERDRILLING AND GROUTING 07/23/19

DEPTH SCALE  
1 in to 5 ft



LOGGED: CDL  
CHECKED: CDL

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PROJECT No.: 154-4912

### RECORD OF SONIC HOLE: GS-AP-MW-09

SHEET 1 OF 8  
DATUM: Ground Surface

LOCATION: Rattlesnake Lake - Gorgas

DRILLING DATE:

INCLINATION: -90°      AZIMUTH: n/a

Note: Well previously drilled with displacement bit, lithology not available

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.															J <sub>CON</sub>	J <sub>UR</sub>	J <sub>JA</sub>	Full Interval Gauge Section Core	Last Core	PIEZOMETER, STANDPIPE OR THERMISTOR INSTALLATION
						INDICES					RECOVERY					DISCONTINUITY DATA										
						R <sub>6</sub>	R <sub>4</sub>	R <sub>3</sub>	R <sub>2</sub>	R <sub>1</sub>	W <sub>2</sub>	W <sub>3</sub>	W <sub>4</sub>	A <sub>2</sub>	A <sub>3</sub>	A <sub>4</sub>	TOTAL CORE %	ROD %	FRACTURE INDEX PER RUN	DIP W/LL CORE AXIS (DEGR)						
0	Ground Surface			0.00																				Concrete Seal and Pad		
5																										
10																										
15																										
20																										
25																										
30																										
35																										
40																								Bentonite Grout Mix		

WELL ABANDONED  
VIA OVERDRILLING  
AND GROUTING

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DEPTH SCALE  
1 in to 5 ft



LOGGED: CDL  
CHECKED: CDL

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PROJECT No.: 154-4912

# RECORD OF SONIC HOLE: GS-AP-MW-09

SHEET 2 OF 8  
DATUM: Ground Surface

LOCATION: Rattlesnake Lake - Gorgas

DRILLING DATE:

INCLINATION: -90°      AZIMUTH: n/a

Note: Well previously drilled with displacement bit, lithology not available

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.												J CON	Ur	Ja	Piezo/Breacal Gauge Rocken Core	Piezometer, Standpipe OR Thermistor Installation													
						INDICES				RECOVERY				DISCONTINUITY DATA																					
						ROCK STRENGTH	WEATHERING			TOTAL CORE %	RQD			FRACTURE INDEX PER RUN	TYPE AND SURFACE DESCRIPTION																				
						R5	R4	R3	R2	R1	W1	W2	W3	W4	80	60	40	20	80	60	40	20	Jn	DIP Well Core Axis (deg)	0	30	60	90							
40																																			
45																																			
50																																			
55																																			
60																																			
65																																			
70																																			
75																																			
80																																			

WELL ABANDONED VIA OVERDRILLING AND GROUTING

Bentonite  
Grout Mix

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DEPTH SCALE  
1 in to 5 ft



LOGGED: CDL  
CHECKED: CDL

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PROJECT No.: 154-4912

**RECORD OF SONIC HOLE: GS-AP-MW-09**

SHEET 3 OF 8  
 DATUM: Ground Surface

LOCATION: Rattlesnake Lake - Gorgas

DRILLING DATE:

INCLINATION: -90°      AZIMUTH: n/a

**Note: Well previously drilled with displacement bit, lithology not available**

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.										Piezo/Breacal Gauge	Last Core	Piezometer, Standpipe or Thermistor Installation
						INDICES				RECOVERY				DISCONTINUITY DATA				
						ROCK STRENGTH R5 R4 R3 R2 R1	WEATHERING W1 W2 W3 W4	ALTERATION A1 A2 A3 A4	TOTAL CORE % 80 60 40 20	ROD % 80 60 40 20	FRACTURE INDEX PER RUN	Jn	DIP W.I.L. CORE AXIS (deg)	TYPE AND SURFACE DESCRIPTION	J.con			
80																		
85																		PeiPlug Bentonite Pellets (5 gallons used)
90																		GP#1 Filter Media Sand (10 x 50lb bags used)
95																		
100																		2" PVC Sch 40 0.010 Slot PrePack Threaded Screen
105																		
110																		GP#1 Filter Media Sand
115																		
120																		Hole Plug Bentonite Chips 3/8"

WELL ABANDONED VIA OVERDRILLING AND GROUTING 07175179

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DEPTH SCALE  
 1 in to 5 ft



LOGGED: CDL  
 CHECKED: CDL

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PROJECT No.: 154-4912

**RECORD OF SONIC HOLE: GS-AP-MW-09**

SHEET 4 OF 8  
DATUM: Ground Surface

LOCATION: Rattlesnake Lake - Gorgas

DRILLING DATE:

INCLINATION: -90°

AZIMUTH: n/a

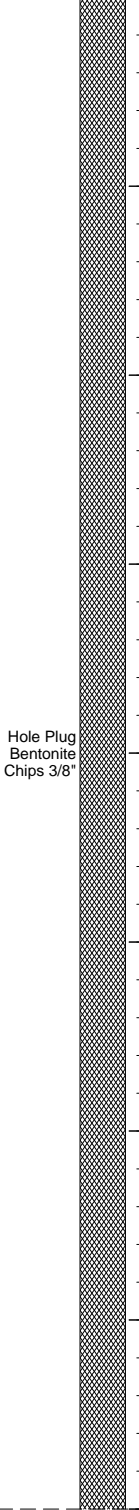
**Note: Well previously drilled with displacement bit, lithology not available**

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

PIEZOMETER,  
STANDPIPE  
OR  
THERMISTOR  
INSTALLATION

DEPTH SCALE FEET	DRILLING RECORD	DESCRIPTION	SYMBOLIC LOG	ELEV. DEPTH (ft)	RUN No.	INDICES										DISCONTINUITY DATA	J.con	Jr	Ja	Piezo/Breath Gauge Screen Case Curb	
						ROCK STRENGTH		WEATHERING				RECOVERY		FRACTURE INDEX PER RUN	DIP WELL CORE (ft)						TYPE AND SURFACE DESCRIPTION
						R5	R4	W1	W2	W3	W4	TOTAL CORE %	RQD %								
120																					
125																					
130																					
135																					
140																					
145																					
150																					
155																					
160																					

WELL ABANDONED VIA OVERDRILLING AND GROUTING



Hole Plug Bentonite Chips 3/8"

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DEPTH SCALE  
1 in to 5 ft



LOGGED: CDL  
CHECKED: CDL

PROJECT No.: 154-4912

**RECORD OF SONIC HOLE: GS-AP-MW-09**

SHEET 5 OF 8  
DATUM: Ground Surface

LOCATION: Rattlesnake Lake - Gorgas

DRILLING DATE:

INCLINATION: -90°

AZIMUTH: n/a

**Note: Well previously drilled with displacement bit, lithology not available**

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.												DISCONTINUITY DATA			PIEZOMETER, STANDPIPE OR THERMISTOR INSTALLATION																	
						INDICES				RECOVERY				DISCONTINUITY DATA				J	Ur	Ja																		
						ROCK STRENGTH		WEATHERING		TOTAL CORE %		RQD %		FRACTURE INDEX PER RUN		DIP WELL CORE AXIS (deg)		TYPE AND SURFACE DESCRIPTION																				
						R6	R4	R3	R2	R1	W2	W3	W4	80	60	40	20	80	60	40	20	Jn	DIP WELL CORE AXIS (deg)	0	30	60	90	J	Ur	Ja	Full	Section	Loss	Core				
160																																						
165																																						
170																																						
175																																						
180																																						
185																																						
190																																						
195																																						
200																																						

WELL ABANDONED  
VIA OVERDRILLING  
AND GROUTING

Hole Plug  
Bentonite  
Chips 3/8"

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DEPTH SCALE  
1 in to 5 ft



LOGGED: CDL  
CHECKED: CDL

### RECORD OF SONIC HOLE: GS-AP-MW-09

DRILLING DATE:

INCLINATION: -90°

AZIMUTH: n/a

Note: Well previously drilled with displacement bit, lithology not available

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.											Piezo/Borehole Gauge Open Core Lost Core	PIEZOMETER, STANDPIPE OR THERMISTOR INSTALLATION			
						INDICES				RECOVERY				DISCONTINUITY DATA							
						ROCK STRENGTH R6 R4 R3 R2 R1	WEATHERING W2 W3 W4			TOTAL CORE % 80 60 20	RQD % 80 60 20	FRACTURE INDEX PER RUN	Jn	Jcn	Jr	Ja			J		
200																					
205																					
210																					
215																					
220																					
225																					
230																					
235																					
240																					

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Hole Plug  
Bentonite  
Chips 3/8"

WELL ABANDONED VIA OVERDRILLING AND GROUTING 071517



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Note: Well previously drilled with displacement bit, lithology not available

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		RECOVERY		DISCONTINUITY DATA		Piezo/Borehole Gauge Swivel Core	PIEZOMETER, STANDPIPE OR THERMISTOR INSTALLATION								
						ROCK STRENGTH R5 R4 R3 R2 R1	WEATHERING W1 W2 W3 W4	TOTAL CORE % 80 60 40 20	ROD % 80 60 40 20	FRACTURE INDEX PER RUN	DIP W.I.L. CORE AXIS (deg) 0 30 60 90			TYPE AND SURFACE DESCRIPTION	J.con	Jr	Ja				
																		ALTERATION A1 A2 A3 A4	ALTERATION A1 A2 A3 A4	ALTERATION A1 A2 A3 A4	ALTERATION A1 A2 A3 A4
240																					
245																					
250																					
255																					
260																					
265																					
270																					
275																					
280																					

WELL ABANDONED VIA OVERDRILLING AND GROUTING 071517

Hole Plug Bentonite Chips 3/8"

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LOCATION: Rattlesnake Lake - Gorgas

DRILLING DATE:

INCLINATION: -90°

AZIMUTH: n/a

Note: Well previously drilled with displacement bit, lithology not available

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.																Piezo/Breath Gauge	Last Core	PIEZOMETER, STANDPIPE OR THERMISTOR INSTALLATION
						ROCK STRENGTH		WEATHERING INDICES				RECOVERY		RQD		FRACTURE INDEX	DISCONTINUITY DATA			J	Ur			
280																								
285																								
290																								
295																								
300																								
305																								
310																								
315																								
320																								

WELL ABANDONED VIA OVERDRILLING AND GROUTING

Hole Plug Bentonite Chips 3/8"

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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.										DISCONTINUITY DATA	J <sub>CON</sub>	J <sub>r</sub>	J <sub>a</sub>	Piezometer, Standpipe or Thermistor Installation	
						INDICES				RECOVERY				FRACTURE INDEX PER RUN							TYPE AND SURFACE DESCRIPTION
						ROCK STRENGTH	WEATHERING			TOTAL CORE %	RQD %	INDEX	PER RUN	DIP W.I.L. CORE (AZIS) (alpha)							
R5 R4 R3 R2 R1	W1 W2 W3 W4	W5 W6 W7 W8	W9 W10	80 60 40 20	80 60 40 20	0 10 20 30	0 10 20 30														
0		Ground Surface (OL) organic SILT; ~30% organics; olive gray; cohesive, w-PL, soft. [TOPSOIL]		0.40																	
1.40		(ML) SILT; some coarse to fine angular sand; some fine angular gravel; red orange; cohesive, w-PL, soft. [NATIVE]		1.40																	
2.60		(SP) SAND; fine angular sand; buff; non-cohesive, dry, very loose. [NATIVE]		2.60																	
5	Truck Mounted Sonic Drill (12") Sonic	(GP/SP) GRAVEL and SAND; fine to coarse, angular gravel and very fine to coarse, angular sand; some silt; reddish yellow to yellowish red; non-cohesive, dry, very loose. Poorly sorted due to weathering in situ. Soil to Saprolite transition zone. [WEATHERED BEDROCK]		8.00																	
10		Completely decomposed rock. Textures and beddings of parent rock are increasingly preserved with depth. FeOx staining and precipitation. [SAPROLITE/REGOLITH] [WEATHERED BEDROCK]		13.00																	
15		Completely weathered to moderately weathered, thinly bedded to laminated, gray, very fine grained, very weak to weak, SANDSTONE/SILTSTONE [Pottsville Formation]. Iron oxide weathering parallel to bedding. [BEDROCK]		14.90																	
15.40				15.40																	
17.40				17.40																	
18.00				18.00																	
18.50				18.50																	
19.60				19.60																	
20.50				20.50																	
21.20				21.20																	
22.20				22.20																	
22.70				22.70																	
24.00				24.00																	
25	Truck Mounted Sonic Drill (6.25") Sonic	Moderately weathered to fresh, thinly bedded to laminated, dark gray, very fine grained, medium strong SANDSTONE [Pottsville Formation]. [BEDROCK]		25.00																	
27.00				27.00																	
30																					
35																					
37.30				37.30																	
38.30				38.30																	
39.30				39.30																	

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WELL ABANDONED AND OVERDRILLING







# RECORD OF SONIC HOLE: GS-AP-MW-10

LOCATION: Rattlesnake Lake - Gorgas

DRILLING DATE: January 21, 2016

DRILLING CONTRACTOR: Cascade Drilling, L.P.

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.												Piezometer, Standpipe or Thermistor Installation
						INDICES				RECOVERY				DISCONTINUITY DATA				
						ROCK STRENGTH	WEATHERING			TOTAL CORE %	ROD %			FRACTURE INDEX PER RUN		DISCONTINUITY DATA		
R5 R4 R3 R2 R1	W1 W2 W3 W4	ALTERATION	4 3 2	80 60 40 20	80 60 40 20	Jn		Jr		Ja								
120		Fresh, thinly bedded to laminated, very dark gray to black with depth, very fine grained, very strong, SHALY SANDSTONE [Pottsville Formation], with mudstone interbeds. [BEDROCK] (continued)																
125																		
130		Driller notes extreme loss of core due to loose metal fragments from broken bit at bottom of hole. 125'-177'			12													
135																		
140																		
145																		
150																		
155																		
160																		

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WELL ABANDONED VIA OVERDRILLING AND GROUTING



PROJECT No.: 154-4912

**RECORD OF SONIC HOLE: GS-AP-MW-11**

SHEET 1 OF 4  
 DATUM: Ground Surface

LOCATION: Rattlesnake Lake - Gorgas

DRILLING DATE: January 21 - February 4, 2016  
 DRILLING CONTRACTOR: Cascade Drilling, L.P.

INCLINATION: -90°      AZIMUTH: n/a

DEPTH SCALE FEET	DRILLING RECORD	DESCRIPTION	SYMBOLIC LOG	ELEV. DEPTH (ft)	Refer to "Lithological and Geotechnical Soil and Rock Description Terminology" for accompanying legend and notes.										PIEZOMETER, STANDPIPE OR THERMISTOR INSTALLATION							
					RUN No.	INDICES				RECOVERY			DISCONTINUITY DATA									
						R5 ROCK STRENGTH	R4 R3 R2 R1	W1 WEATHERING ALTERATION	W2 W3 W4	TOTAL CORE %	RQD %	FRACTURE INDEX PER RUN	Jn DIP w.r.t. CORE AXIS (alpha) 0 (0) 90 (90)	Type and Surface Description	J.co	Jr	Ja					
0		Ground Surface (OL) organic SILT; ~30% organics; olive gray; cohesive, w-PL, soft. [TOPSOIL]  (ML) SILT; some coarse to fine angular sand; some fine angular gravel; red orange; cohesive, w-PL, soft. [NATIVE]  (GP/SP) GRAVEL and SAND; fine to coarse, angular gravel and very fine to coarse, angular sand; some silt; reddish yellow to yellowish red; non-cohesive, dry, very loose. Poorly sorted due to weathering in situ. Soil to Saprolite transition zone. [WEATHERED BEDROCK]		0.40																		
3.80																						
8.00		Completely decomposed rock. Textures and beddings of parent rock are increasingly preserved with depth. FeOx staining and precipitation. [SAPROLITE/REGOLITH] [WEATHERED BEDROCK]																				
14.00																						
18.40		Moderately weathered to slightly weathered, medium bedded to laminated, dark gray to yellow, fine to very fine grained, weak, SHALY SANDSTONE [Pottsville Formation]. [BEDROCK]		18.40 19.00 19.50																		
19.00		Completely weathered, medium bedded to laminated, dark gray to yellow, fine to very fine grained, extremely weak to very weak, SHALY SANDSTONE [Pottsville Formation]. [BEDROCK]																				
24.00		Moderately weathered to slightly weathered, medium bedded to laminated, dark gray to yellow, fine to very fine grained, weak, SHALY SANDSTONE [Pottsville Formation]. [BEDROCK]																				
27.00		Slightly weathered, thinly to medium bedded, gray, very fine grained, medium strong to strong, SANDSTONE [Pottsville Formation], with shaly beds. [BEDROCK]																				
35.70																						
37.00																						

WELL ABANDONED OVERDRILLING AND GROUTING

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DEPTH SCALE  
 1 in to 5 ft



LOGGED: CDL  
 CHECKED: CDL



# RECORD OF SONIC HOLE: GS-AP-MW-11

LOCATION: Rattlesnake Lake - Gorgas

DRILLING DATE: January 21 - February 4, 2016  
DRILLING CONTRACTOR: Cascade Drilling, L.P.

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.											DISCONTINUITY DATA	J <sub>CON</sub>	J <sub>UR</sub>	J <sub>JA</sub>	Piezometer/Standpipe or Thermistor Installation
						INDICES				RECOVERY			DISCONTINUITY DATA								
						ROCK STRENGTH R <sub>5</sub> R <sub>4</sub> R <sub>3</sub> R <sub>2</sub> R <sub>1</sub>	WEATHERING W <sub>2</sub> W <sub>3</sub> W <sub>4</sub>	ALTERATION A <sub>2</sub> A <sub>3</sub> A <sub>4</sub>	TOTAL CORE % 80 60 40 20	ROD % 80 60 40 20	FRACTURE INDEX PER RUN	DIP w.r.t. CORE AXIS (deg)	TYPE AND SURFACE DESCRIPTION	J <sub>CON</sub>	J <sub>UR</sub>	J <sub>JA</sub>					
80		Fresh, medium bedded to laminated, very dark gray, very fine grained, very strong, SHALY SANDSTONE [Pottsville Formation], with mudstone interbeds. [BEDROCK] (continued)																			
85																					
90																			Bentonite Grout Mix		
95																			PelPlug Bentonite Pellets (5 gallons used)		
100																					
105																			GP#1 Filter Media Sand (16 x 50lb bags used)		
110		Driller notes oil sheen and coal dust to surface.																			
115		Possible coal seam (Lost Core)																	2" PVC Sch 40 0.010 Slot PrePack Threaded Screen		
120																					

WELL ABANDONED VIA OVERDRILLING AND GROUTING

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PROJECT No.: 154-4912

# RECORD OF SONIC HOLE: GS-AP-MW-11

SHEET 4 OF 4  
DATUM: Ground Surface

LOCATION: Rattlesnake Lake - Gorgas

DRILLING DATE: January 21 - February 4, 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.



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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.										DISCONTINUITY DATA	J <sub>CON</sub> J <sub>r</sub> J <sub>a</sub>	Piezometer, Standpipe or Thermistor Installation										
						INDICES				RECOVERY			FRACTURE INDEX PER RUN						TYPE AND SURFACE DESCRIPTION									
						ROCK STRENGTH	WEATHERING			TOTAL CORE %	RQD %	FRACTURE INDEX	J <sub>n</sub>	J <sub>r</sub>	J <sub>a</sub>													
						R5	R4	R3	R2	R1	W1	W2	W3	W4	80	60	40	20	80	60	40	20	0	0	0			
						ALTERATION	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20		
0		Ground Surface (GP/SP) GRAVEL and SAND; fine to coarse, angular gravel and very fine to coarse, angular sand; some silt; reddish yellow to yellowish red; non-cohesive, dry, very loose. Poorly sorted due to weathering in situ. Soil to Saprolite transition zone. [WEATHERED BEDROCK]		0.00																								
5	Truck Mounted Sonic Drill (12')				1																							
6		Completely decomposed rock. Textures and beddings of parent rock are increasingly preserved with depth. FeOx staining and precipitation. [SAPROLITE/REGOLITH] [WEATHERED BEDROCK]		6.00																								
10																												
15																												
19.20		Highly weathered, medium bedded to laminated, very dark gray, fine to very fine grained, very weak, SHALY SANDSTONE [Pottsville Formation]. [BEDROCK]		19.20	2																							
21.40		Slightly weathered, medium bedded to laminated, very dark gray, fine to very fine grained, weak, SHALY SANDSTONE [Pottsville Formation]. [BEDROCK]		21.40																								
25	Track Mounted Sonic Drill (6.25')																											
25.40		Slightly weathered, medium bedded to laminated, very dark gray, fine to very fine grained, medium strong, SHALY SANDSTONE [Pottsville Formation]. [BEDROCK]		25.40																								
27.60																												
29.60																												
30.00		Bedding plane ~0 weathering, possible flow zone.			3																							
31.20																												
33.00																												
35.00																												
35.50																												
37.00																												
37.50																												
38.60																												

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WELL ABANDONED AND OVERDRILLING

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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.												Piezometer, Standpipe or Thermistor Installation			
						INDICES				RECOVERY				DISCONTINUITY DATA							
						ROCK STRENGTH	WEATHERING			TOTAL CORE %	RQD %	FRACTURE INDEX PER RUN	DISCONTINUITY DATA			J <sub>CON</sub>	J <sub>r</sub>		J <sub>a</sub>		
R5 R4 R3 R2 R1	W1 W2 W3 W4	ALTERATION 1 2 3 4	80 60 40 20	80 60 40 20	0 10 20 30	Jn	TYPE AND SURFACE DESCRIPTION														
80		Fresh, medium bedded to laminated, very dark gray, fine to very fine grained, very strong, SHALY SANDSTONE [Pottsville Formation], with mudstone interbeds. [BEDROCK] (continued)		8	8																
85		Small vertical fracture with FeOx staining.		9	9																
90		Bioturbation - burrow casts		10	10																
95		CONTINUED NEXT PAGE		11	11																

WELL ABANDONED VIA OVERDRILLING AND GROUTING

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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.											Full/Breakal Gauge Last Core	PIEZOMETER, STANDPIPE OR THERMISTOR INSTALLATION													
						INDICES				RECOVERY				DISCONTINUITY DATA																	
						ROCK STRENGTH		WEATHERING		TOTAL CORE %	ROD %		Fracture Index	TYPE AND SURFACE DESCRIPTION		J <sub>CON</sub>			J <sub>r</sub>	J <sub>a</sub>											
						R5	R4	R3	R2	R1	W1	W2	W3	W4	80	60			40	20	80	60	40	20	0	10	20	30	40	50	60
120		Fresh, medium bedded to laminated, very dark gray, fine to very fine grained, very strong, SHALY SANDSTONE [Pottsville Formation], with mudstone interbeds. [BEDROCK] (continued)		12																										120.10	
125																														121.40	
130																														125.00	
135		Driller notes oil sheen and coal dust to surface.																												128.55	
140	Track Mounted Sonic Drill (6.25") Sonic																													131.45	
145																														137.50	
150		Possible coal seam (Lost Core)																												138.20	
155																														142.50	
160		Possible coal seam (Lost Core)																												145.00	
																														147.10	
																														153.20	
																														153.90	
																														155.00	
																														157.70	
																														158.40	

WELL ABANDONED VIA OVERDRILLING AND GROUTING

DEPTH SCALE  
1 in to 5 ft



LOGGED: CDL  
CHECKED: CDL

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PROJECT No.: 154-4912

# RECORD OF SONIC HOLE: GS-AP-MW-13

SHEET 5 OF 5  
DATUM: Ground Surface

LOCATION: Rattlesnake Lake - Gorgas

DRILLING DATE: January 25 - February 4, 2016  
DRILLING CONTRACTOR: Cascade Drilling, L.P.

INCLINATION: -90°      AZIMUTH: n/a

DEPTH SCALE FEET	DRILLING RECORD	DESCRIPTION	SYMBOLIC LOG	ELEV. DEPTH (ft)	Refer to "Lithological and Geotechnical Soil and Rock Description Terminology" for accompanying legend and notes.															Piezometer, Standpipe OR Thermistor Installation				
					INDICES					RECOVERY					DISCONTINUITY DATA									
					ROCK STRENGTH		WEATHERING			TOTAL CORE %		ROD %			FRACTURE INDEX PER RUN		TYPE AND SURFACE DESCRIPTION							
R5	R4	R3	R2	R1	W1	W2	W3	W4	80	60	40	20	80	60	40	20	Jn	Jr	Ja	Jc	Jd	Je		
160	Track Mounted Sonic Drill (6.25") Sonic	Fresh, medium bedded to laminated, very dark gray, fine to very fine grained, very strong, SHALY SANDSTONE [Pottsville Formation], with mudstone interbeds. [BEDROCK] (continued)		16																Full Borehole Gauge 162.90 163.40 167.30 169.00 169.80 171.30 173.80 180.00 Bentonite Chips 3/8"				
165																								
170																								
175																								
180																								
185																								
190																								
195																								
200																								
				End of Borehole.		180.00																		

WELL ABANDONED VIA OVERDRILLING AND GROUTING

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DEPTH SCALE  
1 in to 5 ft



LOGGED: CDL  
CHECKED: CDL

PROJECT No.: 154-4912

# RECORD OF SONIC HOLE: GS-AP-MW-14

SHEET 1 OF 6  
DATUM: Ground Surface

LOCATION: Rattlesnake Lake - Gorgas

DRILLING DATE: January 27-30, 2016

DRILLING CONTRACTOR: Cascade Drilling, L.P.

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.										DISCONTINUITY DATA	J <sub>CON</sub> J <sub>r</sub> J <sub>a</sub>	Piezometer/Standpipe or Thermistor Installation		
						INDICES				RECOVERY				FRACTURE INDEX PER RUN					DIP W.I.L. CORE AXIS (deg)	TYPE AND SURFACE DESCRIPTION
						R5	R4	R3	R2	R1	WEATHERING W1 W2 W3 W4	TOTAL CORE %	RQD %	FR	FI					
0		Ground Surface		0.00																
0.90		Crusher Run GRAVEL [ROAD BASE FILL]		0.90																
		(ML) CLAYEY SILT; trace medium to fine angular sand; yellowish red; cohesive, w<PL, soft. [FILL]																		
3.40		(OL) organic SILT; ~30% organics; olive gray; cohesive, w<PL, soft. [TOPSOIL]		3.40																
6.00	Truck Mounted Sonic Drill (12')	Completely decomposed rock. Textures and beddings of parent rock are increasingly preserved with depth. FeOx staining and precipitation. [SAPROLITE/REGOLITH] [WEATHERED BEDROCK]		6.00																
		Slightly weathered to fresh, massive bedded, gray, fine to very fine grained, strong, SANDSTONE [Pottsville Formation]. [BEDROCK]																		
10																				
15																				
20																				
22.80	Truck Mounted Sonic Drill (6.25')	Fresh, thickly bedded to laminated, very dark gray, very fine grained, strong, shaly SANDSTONE [Pottsville Formation]. Dense shale beds. [BEDROCK]		22.80																
24.00				24.00																
25.60		Slightly weathered to fresh, massive bedded, gray, fine to very fine grained, strong, SANDSTONE [Pottsville Formation]. [BEDROCK]		25.60																
26.00				26.00																
27.40		Fresh, thickly bedded to laminated, fissile, very dark gray, very fine grained, strong, shaly SANDSTONE [Pottsville Formation]. [BEDROCK]		27.40																
31.70				31.70																
32.60				32.60																
33.20		Fresh, massive bedded, gray, fine to very fine grained, strong, SANDSTONE [Pottsville Formation]. [BEDROCK]		33.20																
33.80				33.80																
34.00				34.00																
34.80				34.80																
36.10		Fresh, thickly bedded to laminated, fissile, very dark gray, very fine grained, strong, shaly SANDSTONE [Pottsville Formation]. [BEDROCK]		36.10																
36.90				36.90																
39.40				39.40																

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DEPTH SCALE

1 in to 5 ft



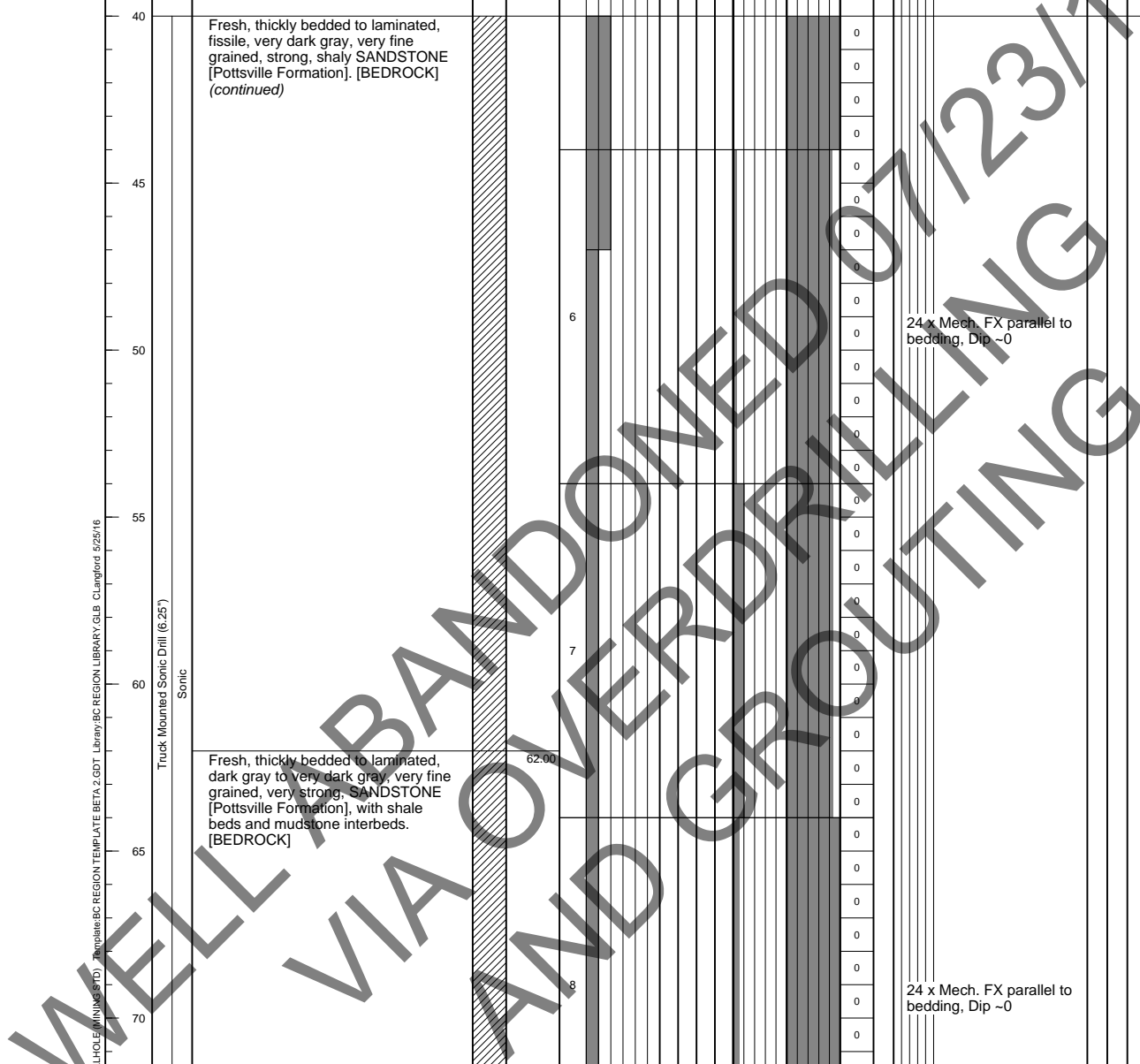
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WELL ABANDONED AND OVERDRILLING

DEPTH SCALE FEET	DRILLING RECORD	DESCRIPTION	SYMBOLIC LOG	ELEV. DEPTH (ft)	Refer to "Lithological and Geotechnical Soil and Rock Description Terminology" for accompanying legend and notes.												DISCONTINUITY DATA			PIEZOMETER, STANDPIPE OR THERMISTOR INSTALLATION							
					INDICES				RECOVERY				DISCONTINUITY DATA				J <sub>CON</sub>	J <sub>U</sub>	J <sub>A</sub>								
					ROCK STRENGTH		WEATHERING		TOTAL CORE %		ROD %		TYPE AND SURFACE DESCRIPTION		DIP (°)	J <sub>INDEX</sub> PER RUN					DIP (°) CORE AXIS (align)						
					R <sub>5</sub>	R <sub>4</sub>	W <sub>2</sub>	W <sub>3</sub>	W <sub>4</sub>	TOTAL	R <sub>OD</sub>	TYPE	DESCRIPTION														
40		Fresh, thickly bedded to laminated, fissile, very dark gray, very fine grained, strong, shaly SANDSTONE [Pottsville Formation]. [BEDROCK] (continued)	[Symbolic Log]	62.00																							
45																											
50																											
55																											
60	Truck Mounted Sonic Drill (6.25") Sonic				Fresh, thickly bedded to laminated, dark gray to very dark gray, very fine grained, very strong, SANDSTONE [Pottsville Formation], with shale beds and mudstone interbeds. [BEDROCK]	[Symbolic Log]	62.00																				
65																											
70																											
75																											
80																											



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PROJECT No.: 154-4912

# RECORD OF SONIC HOLE: GS-AP-MW-14

SHEET 3 OF 6  
DATUM: Ground Surface

LOCATION: Rattlesnake Lake - Gorgas

DRILLING DATE: January 27-30, 2016

DRILLING CONTRACTOR: Cascade Drilling, L.P.

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.										DISCONTINUITY DATA	J <sub>CON</sub>	J <sub>UR</sub>	J <sub>JA</sub>	Piezometer Standpipe or Thermistor Installation		
						INDICES				RECOVERY			FRACTURE INDEX PER RUN								DIP W.R.L. CORE AXIS (align) (°)	TYPE AND SURFACE DESCRIPTION
						ROCK STRENGTH	WEATHERING			TOTAL CORE %	RQD %	FRACTURE INDEX	PER RUN	DISCONTINUITY DATA								
R5	R4	R3	R2	R1	W1	W2	W3	W4	80	60	40	20	80	60	40	20	Jn	DIP W.R.L. CORE AXIS (align) (°)	TYPE AND SURFACE DESCRIPTION			
80		Fresh, thickly bedded to laminated, dark gray to very dark gray, very fine grained, very strong, SANDSTONE [Pottsville Formation], with shale beds and mudstone interbeds. [BEDROCK] (continued)																				
85		Fresh, thickly bedded to laminated, dark gray to very dark gray, very fine grained, very strong, SANDSTONE [Pottsville Formation], with few shale beds and mudstone interbeds. [BEDROCK]		84.00																		
90					10																	
93.20																						
94.00																						
95																						
95	Truck Mounted Sonic Drill (6.25")																					
100					11																	
104.88																						
105																						
107.88																						
110					12																	
113.10																						
114.00																						
115																						
115.00																						
120					13																	
120																						

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DEPTH SCALE  
1 in to 5 ft



LOGGED: CDL  
CHECKED: CDL

WELL ABANDONED VIA OVERDRILLING AND GROUTING

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PROJECT No.: 154-4912

# RECORD OF SONIC HOLE: GS-AP-MW-14

SHEET 4 OF 6  
DATUM: Ground Surface

LOCATION: Rattlesnake Lake - Gorgas

DRILLING DATE: January 27-30, 2016

DRILLING CONTRACTOR: Cascade Drilling, L.P.

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.										J <sub>CON</sub>	J <sub>UR</sub>	J <sub>JA</sub>	Piezometer/Standpipe or Thermistor Installation				
						INDICES				RECOVERY			DISCONTINUITY DATA										
						ROCK STRENGTH	WEATHERING			TOTAL CORE %	ROD %	FRACTURE INDEX PER RUN	TYPE AND SURFACE DESCRIPTION										
R5 R4 R3 R2 R1	W1 W2 W3 W4	W5 W6 W7 W8	W9 W10	80 60 40 20	80 60 40 20	0 20 40 60 80 100	J <sub>n</sub>	DIP w.r.t. CORE AXIS (align)															
						ALTERATION																	
120		Fresh, thickly bedded to laminated, dark gray to very dark gray, very fine grained, very strong, SANDSTONE [Pottsville Formation], with few shale beds and mudstone interbeds. [BEDROCK] (continued)	[Symbolic Log]		14																		
125																							
130																							
135																							
140	Truck Mounted Sonic Drill (6.25") Sonic																						
145																							
150																							
155																							
160						Fresh, thickly bedded to laminated, dark gray to very dark gray, very fine grained, very strong, SANDSTONE [Pottsville Formation], with prominent shale beds and mudstone interbeds. [BEDROCK]		155.60	17														

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DEPTH SCALE  
1 in to 5 ft



LOGGED: CDL  
CHECKED: CDL

WELL ABANDONED VIA OVERDRILLING AND GROUTING 07/23/19

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PROJECT No.: 154-4912

# RECORD OF SONIC HOLE: GS-AP-MW-14

SHEET 5 OF 6  
DATUM: Ground Surface

LOCATION: Rattlesnake Lake - Gorgas

DRILLING DATE: January 27-30, 2016

DRILLING CONTRACTOR: Cascade Drilling, L.P.

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.											Piezometer, Standpipe OR Thermistor Installation					
						INDICES				RECOVERY				DISCONTINUITY DATA			J <sub>CON</sub>	J <sub>R</sub>	J <sub>A</sub>	J <sub>INSTALL</sub>	Use Cable	
						ROCK STRENGTH		WEATHERING		TOTAL CORE %		ROD %		TYPE AND SURFACE DESCRIPTION								
						R <sub>5</sub>	R <sub>4</sub>	R <sub>3</sub>	R <sub>2</sub>	W <sub>1</sub>	W <sub>2</sub>	W <sub>3</sub>	W <sub>4</sub>	R <sub>100</sub>	R <sub>50</sub>	R <sub>20</sub>						R <sub>10</sub>
160		Fresh, thickly bedded to laminated, dark gray to very dark gray, very fine grained, very strong, SANDSTONE [Pottsville Formation], with prominent shale beds and mudstone interbeds. [BEDROCK] (continued)		160	18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	180.70	181.20
165						0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	163.30	164.00
170						0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	164.90	165.80
175		Fresh, massive bedded, gray, fine to very fine grained, strong, SANDSTONE [Pottsville Formation]. [BEDROCK]		174.00		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	165.80	166.30
175		Fresh, thickly bedded to laminated, dark gray to very dark gray, very fine grained, very strong, SANDSTONE [Pottsville Formation], with prominent shale beds and mudstone interbeds. [BEDROCK]		175.20		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	166.30	166.90
180		Fresh, laminated, black, very fine grained, very strong, SHALE [Pottsville Formation]. [BEDROCK]		179.00	19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	166.90	167.80
180						0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	167.80	169.00
185		Fresh, thickly bedded to laminated, gray, fine to very fine grained, strong, SANDSTONE [Pottsville Formation]. Some dissolution parallel to bedding. [BEDROCK]		184.00		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	169.00	169.90
185						0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	169.90	170.20
190						0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	170.20	171.80
190						0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	171.80	172.30
195						0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	172.30	173.00
195						0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	173.00	174.00
200		Driller notes oil sheen and coal dust to surface.				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	174.00	175.20
200						0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	175.20	176.20
200						0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	176.20	176.60
200						0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	176.60	177.50
200						0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	177.50	178.30
200						0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	178.30	179.00
200						0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	179.00	179.70
200						0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	179.70	180.30
200						0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	180.30	182.60
200						0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	182.60	184.00
200						0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	184.00	185.30
200						0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	185.30	185.90
200						0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	185.90	187.20
200						0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	187.20	187.60
200						0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	187.60	193.00
200						0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	193.00	

DEPTH SCALE  
1 in to 5 ft



LOGGED: CDL  
CHECKED: CDL

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WELL ABANDONED VIA OVERDRILLING AND GROUTING

10 x Mech. FX parallel to bedding, Dip ~0

21 x Mech. FX parallel to bedding, Dip ~0

Bentonite Grout Mix (50 gallons used)

PelPlug Bentonite Pellets (10 gallons used)

GP#1 Filter Media Sand (4 x 50lb bags used)

2" PVC Sch 40 0.010 Slot PrePack Threaded Screen

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# Appendix B



---

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 than or equal to the Method Detection Limit (MDL) and less than 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. GWPS is the Groundwater Protection Standard.
7. 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.
8. 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

WELL	SAMPLE DATE	APPENDIX III							APPENDIX IV														
		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
GWPS		N/R	N/R	N/R	4	N/R	N/R	N/R	0.006	0.01	2	0.004	0.005	0.1	0.006	5	4	0.015	0.04	0.002	0.1	0.05	0.002
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	µCi/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	1.4	n/a	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

# Analytical Data Summary

## Plant Gorgas Ash Pond

### Alabama Power Company

WELL	SAMPLE DATE	APPENDIX III							APPENDIX IV														
		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
GWPS		N/R	N/R	N/R	4	N/R	N/R	N/R	0.006	0.01	2	0.004	0.005	0.1	0.006	5	4	0.015	0.04	0.002	0.1	0.05	0.002
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	0.15	n/a	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

# Analytical Data Summary

## Plant Gorgas Ash Pond

### Alabama Power Company

WELL	SAMPLE DATE	APPENDIX III							APPENDIX IV														
		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
GWPS		N/R	N/R	N/R	4	N/R	N/R	N/R	0.006	0.01	2	0.004	0.005	0.1	0.006	5	4	0.015	0.04	0.002	0.1	0.05	0.002
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	0.1	n/a	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



# Analytical Data Summary

## Plant Gorgas Ash Pond

### Alabama Power Company

WELL	SAMPLE DATE	APPENDIX III							APPENDIX IV														
		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
GWPS		N/R	N/R	N/R	4	N/R	N/R	N/R	0.006	0.01	2	0.004	0.005	0.1	0.006	5	4	0.015	0.04	0.002	0.1	0.05	0.002
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	0.09(J)	n/a	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



# Analytical Data Summary

## Plant Gorgas Ash Pond

### Alabama Power Company

WELL	SAMPLE DATE	APPENDIX III							APPENDIX IV														
		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
GWPS		N/R	N/R	N/R	4	N/R	N/R	N/R	0.006	0.01	2	0.004	0.005	0.1	0.006	5	4	0.015	0.04	0.002	0.1	0.05	0.002
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	0.14	n/a	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

# Analytical Data Summary

## Plant Gorgas Ash Pond

### Alabama Power Company

WELL	SAMPLE DATE	APPENDIX III							APPENDIX IV														
		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
GWPS		N/R	N/R	N/R	4	N/R	N/R	N/R	0.006	0.01	2	0.004	0.005	0.1	0.006	5	4	0.015	0.04	0.002	0.1	0.05	0.002
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	0.14	n/a	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

# Analytical Data Summary

## Plant Gorgas Ash Pond

### Alabama Power Company

WELL	SAMPLE DATE	APPENDIX III							APPENDIX IV														
		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
GWPS		N/R	N/R	N/R	4	N/R	N/R	N/R	0.006	0.01	2	0.004	0.005	0.1	0.006	5	4	0.015	0.04	0.002	0.1	0.05	0.002
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	0.41	n/a	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

# Analytical Data Summary

## Plant Gorgas Ash Pond

### Alabama Power Company

WELL	SAMPLE DATE	APPENDIX III							APPENDIX IV														
		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
GWPS		N/R	N/R	N/R	4	N/R	N/R	N/R	0.006	0.01	2	0.004	0.005	0.1	0.006	5	4	0.015	0.04	0.002	0.1	0.05	0.002
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	0.18	n/a	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

# Analytical Data Summary

## Plant Gorgas Ash Pond

### Alabama Power Company

WELL	SAMPLE DATE	APPENDIX III							APPENDIX IV														
		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
GWPS		N/R	N/R	N/R	4	N/R	N/R	N/R	0.006	0.01	2	0.004	0.005	0.1	0.006	5	4	0.015	0.04	0.002	0.1	0.05	0.002
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	0.17	n/a	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

# Analytical Data Summary

## Plant Gorgas Ash Pond

### Alabama Power Company

WELL	SAMPLE DATE	APPENDIX III							APPENDIX IV														
		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
GWPS		N/R	N/R	N/R	4	N/R	N/R	N/R	0.006	0.01	2	0.004	0.005	0.1	0.006	5	4	0.015	0.04	0.002	0.1	0.05	0.002
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	0.9	n/a	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



# Analytical Data Summary

## Plant Gorgas Ash Pond

### Alabama Power Company

WELL	SAMPLE DATE	APPENDIX III							APPENDIX IV														
		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
GWPS		N/R	N/R	N/R	4	N/R	N/R	N/R	0.006	0.01	2	0.004	0.005	0.1	0.006	5	4	0.015	0.04	0.002	0.1	0.05	0.002
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	µCi/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	0.11	n/a	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

# Analytical Data Summary

## Plant Gorgas Ash Pond

### Alabama Power Company

WELL	SAMPLE DATE	APPENDIX III							APPENDIX IV														
		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
GWPS		N/R	N/R	N/R	4	N/R	N/R	N/R	0.006	0.01	2	0.004	0.005	0.1	0.006	5	4	0.015	0.04	0.002	0.1	0.05	0.002
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	0.24	n/a	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

# Analytical Data Summary

## Plant Gorgas Ash Pond

### Alabama Power Company

WELL	SAMPLE DATE	APPENDIX III							APPENDIX IV														
		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
GWPS		N/R	N/R	N/R	4	N/R	N/R	N/R	0.006	0.01	2	0.004	0.005	0.1	0.006	5	4	0.015	0.04	0.002	0.1	0.05	0.002
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	µCi/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	0.34	n/a	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

# Analytical Data Summary

## Plant Gorgas Ash Pond

### Alabama Power Company

WELL	SAMPLE DATE	APPENDIX III							APPENDIX IV														
		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
GWPS		N/R	N/R	N/R	4	N/R	N/R	N/R	0.006	0.01	2	0.004	0.005	0.1	0.006	5	4	0.015	0.04	0.002	0.1	0.05	0.002
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	0.35	n/a	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

# Analytical Data Summary

## Plant Gorgas Ash Pond

### Alabama Power Company

WELL	SAMPLE DATE	APPENDIX III							APPENDIX IV														
		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
GWPS		N/R	N/R	N/R	4	N/R	N/R	N/R	0.006	0.01	2	0.004	0.005	0.1	0.006	5	4	0.015	0.04	0.002	0.1	0.05	0.002
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	0.3	n/a	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

# Analytical Data Summary

## Plant Gorgas Ash Pond

### Alabama Power Company

WELL	SAMPLE DATE	APPENDIX III							APPENDIX IV														
		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
GWPS		N/R	N/R	N/R	4	N/R	N/R	N/R	0.006	0.01	2	0.004	0.005	0.1	0.006	5	4	0.015	0.04	0.002	0.1	0.05	0.002
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-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-17V	2/20/2019	0.0337(J)	30.6	3.56	0.239	8.03	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-18V	2/26/2019	0.109	13.6	7.13	0.165	8.02	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-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-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-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-28H	3/13/2019	0.0819(J)	3.42	8	0.187	8.46	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-29H	2/27/2019	0.0359(J)	12.1	3.09	0.218	8.28	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

# Appendix C

**1st**  
**Delineation**  
**Monitoring Event**





## **Gorgas Ash Pond**

### **Delineation 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).

MW-12V had 8 field pH readings that were qualified due to pH readings falling outside of the bracketed calibration range. The below qualifier was used:

- E – Estimated reported value exceeded calibration range

Turbidity requirements could not be met for well MW-28H and samples were collected with turbidity readings greater than 10 NTU. A second dissolved set of samples were collected for analysis. All other sample criteria were met before samples were collected.

Field quality control procedures were performed as follows:

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

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

# Analytical Report



**Sample Group :** WMWGORAP\_1205  
**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

The following data has been reviewed and approved by:

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: 2019.04.11 12:15:04 -0500

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: 2019.04.11 16:15:33 -0500



Total Metals ICP

Gorgas Ash Pond

WMWGORAP\_1205

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.

<u>Sample ID</u>	<u>Batch ID</u>	<u>Project ID</u>
AZ04555	640016	WMWGORAP_1205
AZ04743	640016	WMWGORAP_1205
AZ04744	640016	WMWGORAP_1205
AZ05265	640016	WMWGORAP_1205
AZ05266	640016	WMWGORAP_1205
AZ05267	640016	WMWGORAP_1205
AZ05268	640016	WMWGORAP_1205
AZ05269	640016	WMWGORAP_1205
AZ05270	640016	WMWGORAP_1205
AZ05271	640016	WMWGORAP_1205
AZ06914	642886	WMWGORAP_1205
AZ06915	642886	WMWGORAP_1205

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, except for the following:
    - AZ06915 Sodium MS/MSD spike level is less than 30% of the sample nominal concentration.
  - A matrix spike and matrix spike duplicate were digested and analyzed with each ICP batch. All acceptance criteria for precision were met.
7. All samples were analyzed at a x2.03 dilution to compensate for potential matrix effects. The following samples were diluted due to the analyzed sample concentration being greater than high standard of the calibration curve:

<u>Sample ID</u>	<u>Analyte</u>	<u>Dilution Factor</u>
AZ04555	Iron	x101.5
AZ04743	Sodium	x10.15
AZ05268	Sodium	x10.15
AZ05269	Sodium	x10.15
AZ05270	Sodium	x10.15
AZ06914	Sodium	x10.15
AZ06915	Sodium	x10.15
AZ06915MS	Sodium	x10.15
AZ06915MSD	Sodium	x10.15

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



Dissolved Metals ICP

Gorgas Ash Pond

WMWGORAP\_1205

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.

<u>Sample ID</u>	<u>Batch ID</u>	<u>Project ID</u>
AZ04555	640296	WMWGORAP_1205
AZ04743	640296	WMWGORAP_1205
AZ04744	640296	WMWGORAP_1205
AZ05265	640296	WMWGORAP_1205
AZ05266	640296	WMWGORAP_1205
AZ05267	640296	WMWGORAP_1205
AZ05268	640296	WMWGORAP_1205
AZ05269	640296	WMWGORAP_1205
AZ05270	640296	WMWGORAP_1205
AZ05271	640296	WMWGORAP_1205
AZ06914	642789	WMWGORAP_1205
AZ06915	642789	WMWGORAP_1205

4. All of the above samples were analyzed by EPA 200.7 and prepared by EPA 1638 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 at a x2.03 dilution to compensate for potential matrix effects. The following sample was diluted due to the analyzed sample concentration being greater than high standard of the calibration curve:

<u>Sample ID</u>	<u>Analyte</u>	<u>Dilution Factor</u>
AZ04555	Iron	x101.5

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



Total Metals ICPMS

Gorgas Ash Pond

WMWGORAP\_1205

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.

<u>Sample ID</u>	<u>Batch ID</u>	<u>Project ID</u>
AZ04555	642135	WMWGORAP_1205
AZ04743	642135	WMWGORAP_1205
AZ04744	642135	WMWGORAP_1205
AZ05265	642135	WMWGORAP_1205
AZ05266	642135	WMWGORAP_1205
AZ05267	642135	WMWGORAP_1205
AZ05268	642135	WMWGORAP_1205
AZ05269	642135	WMWGORAP_1205
AZ05270	642135	WMWGORAP_1205
AZ05271	642135	WMWGORAP_1205
AZ06914	642136	WMWGORAP_1205
AZ06915	642136	WMWGORAP_1205

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 at a x5.075 dilution to compensate for potential matrix effects.
  8. The raw data results are shown with dilution factors included.





Dissolved Metals ICPMS

Gorgas Ash Pond

WMWGORAP\_1205

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.

<u>Sample ID</u>	<u>Batch ID</u>	<u>Project ID</u>
AZ04555	641996	WMWGORAP_1205
AZ04743	641996	WMWGORAP_1205
AZ04744	641996	WMWGORAP_1205
AZ05265	641996	WMWGORAP_1205
AZ05266	641996	WMWGORAP_1205
AZ05267	641996	WMWGORAP_1205
AZ05268	641996	WMWGORAP_1205
AZ05269	641996	WMWGORAP_1205
AZ05270	641996	WMWGORAP_1205
AZ05271	641996	WMWGORAP_1205
AZ06914	641997	WMWGORAP_1205
AZ06915	641997	WMWGORAP_1205

4. All of the above samples were analyzed by EPA 200.8 and prepared by EPA 1638 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.
- 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 at a x5.075 dilution to compensate for potential matrix effects.
  8. The raw data results are shown with dilution factors included.



Mercury

Gorgas Ash Pond

WMWGORAP\_1205

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.

<u>Sample ID</u>	<u>Batch ID</u>	<u>Project ID</u>
AZ04555	641301	WMWGORAP_1205
AZ04743	641301	WMWGORAP_1205
AZ04744	641301	WMWGORAP_1205
AZ05265	641301	WMWGORAP_1205
AZ05266	641301	WMWGORAP_1205
AZ05267	641301	WMWGORAP_1205
AZ05268	641301	WMWGORAP_1205
AZ05269	641301	WMWGORAP_1205
AZ05270	641301	WMWGORAP_1205
AZ05271	641301	WMWGORAP_1205
AZ06914	642097	WMWGORAP_1205
AZ06915	642097	WMWGORAP_1205

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.



TDS

Gorgas Ash Pond

WMWGORAP\_1205

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.

<u>Sample ID</u>	<u>Batch ID</u>	<u>Project ID</u>
AZ04555	640121	WMWGORAP_1205
AZ04743	640121	WMWGORAP_1205
AZ04744	640121	WMWGORAP_1205
AZ05265	641066	WMWGORAP_1205
AZ05266	641066	WMWGORAP_1205
AZ05267	641066	WMWGORAP_1205
AZ05268	641066	WMWGORAP_1205
AZ05269	641066	WMWGORAP_1205
AZ05270	641066	WMWGORAP_1205
AZ05271	641066	WMWGORAP_1205
AZ06914	641804	WMWGORAP_1205
AZ06915	641804	WMWGORAP_1205

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:
  - AZ05265
  - AZ05271



Alkalinity

Gorgas Ash Pond

WMWGORAP\_1205

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.

<u>Sample ID</u>	<u>Batch ID</u>	<u>Project ID</u>
AZ04555	640362 & 640363	WMWGORAP_1205
AZ04743	640362 & 640363	WMWGORAP_1205
AZ04744	640362 & 640363	WMWGORAP_1205
AZ05266	640362 & 640363	WMWGORAP_1205
AZ05267	640362 & 640363	WMWGORAP_1205
AZ05268	640362 & 640363	WMWGORAP_1205
AZ05269	640362 & 640363	WMWGORAP_1205
AZ05270	640362 & 640363	WMWGORAP_1205
AZ06914	642294 & 642295	WMWGORAP_1205
AZ06915	642294 & 642295	WMWGORAP_1205

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.



Anions

Gorgas Ash Pond

WMWGORAP\_1205

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.

<u>Sample ID</u>	<u>Batch ID</u>	<u>Project ID</u>
AZ04555	640230, 639966, & 640367	WMWGORAP_1205
AZ04743	640230, 639966, & 640367	WMWGORAP_1205
AZ04744	640230, 639966, & 640367	WMWGORAP_1205
AZ05265	640238, 640130, & 640369	WMWGORAP_1205
AZ05266	640238, 640130, & 640369	WMWGORAP_1205
AZ05267	640238, 640130, & 640369	WMWGORAP_1205
AZ05268	640238, 640130, & 640369	WMWGORAP_1205
AZ05269	640238, 640130, & 640369	WMWGORAP_1205
AZ05270	640238, 640130, & 640369	WMWGORAP_1205
AZ05271	640238, 640130, & 640369	WMWGORAP_1205
AZ06914	643066, 642208, & 643092	WMWGORAP_1205
AZ06915	643066, 642208, & 643092	WMWGORAP_1205

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

<u>Sample ID</u>	<u>Analyte</u>	<u>Dilution Factor</u>
AZ04555	Sulfate	x20
AZ05268	Sulfate	x2

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  
 (205) 664-6032 or 6171  
 FAX (205) 257-1654

**Certificate Of Analysis**  **Alabama Power**



To: Dustin Brooks  
 Greg Dyer

Customer Account: WMWGORAP  
 Sample Date: 20-Feb-19  
 Customer ID:  
 Delivery Date: 21-Feb-19

Description: Gorgas Ash Pond - MW-23H

Laboratory ID Number: AZ04555

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
<b>Metals, Cyanide, Total Phenols</b>										
* Arsenic, Total	DLJ	3/21/2019	EPA 200.8		5.075	0.001	0.005		0.0306	mg/L
* Barium, Total	DLJ	3/21/2019	EPA 200.8		5.075	0.002	0.01		0.0227	mg/L
* Beryllium, Total	DLJ	3/21/2019	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Boron, Total	GAS	3/5/2019	EPA 200.7		2.03	0.02	0.1	J	0.0498	mg/L
* Calcium, Total	GAS	3/5/2019	EPA 200.7		2.03	0.1	0.5		64.5	mg/L
* Cadmium, Total	DLJ	3/21/2019	EPA 200.8		5.075	0.0003	0.001	U	Not Detected	mg/L
* Antimony, Total	DLJ	3/21/2019	EPA 200.8		5.075	0.0008	0.003	J	0.000809	mg/L
* Molybdenum, Total	DLJ	3/21/2019	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Lead, Total	DLJ	3/21/2019	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Cobalt, Total	DLJ	3/21/2019	EPA 200.8		5.075	0.002	0.005	U	Not Detected	mg/L
* Chromium, Total	DLJ	3/21/2019	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Iron, Dissolved	GAS	3/5/2019	EPA 200.7		101.5	1.015	5.075	K	48.5	mg/L
* Iron, Total	GAS	3/5/2019	EPA 200.7		101.5	1.015	5.075		49.7	mg/L
* Mercury, Total by CVAA	ABB	3/15/2019	EPA 245.1		1	0.0003	0.0005	U	Not Detected	mg/L
* Lithium, Total	GAS	3/5/2019	EPA 200.7		2.03	0.01	0.02		0.0310	mg/L
* Magnesium, Total	GAS	3/5/2019	EPA 200.7		2.03	0.1	0.5		32.9	mg/L
* Manganese, Dissolved	DLJ	3/21/2019	EPA 200.8		5.075	0.001	0.005	K	1.58	mg/L
* Manganese, Total	DLJ	3/21/2019	EPA 200.8		5.075	0.001	0.005		1.69	mg/L
* Potassium, Total	DLJ	3/21/2019	EPA 200.8		5.075	0.215	2.5	J	2.28	mg/L
* Sodium, Total	GAS	3/5/2019	EPA 200.7		2.03	0.1	0.5		17.4	mg/L
* Selenium, Total	DLJ	3/21/2019	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Thallium, Total	DLJ	3/21/2019	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L

**General Characteristics**

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.

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

\* Test results for these accredited parameters conform to the most current applicable TNI/NELAC requirements, with exceptions noted on this report.

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

**Comments:** The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified. LBM 04/10/2019

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

# Certificate Of Analysis



To: Dustin Brooks  
 Greg Dyer

Customer Account: WMWGORAP  
 Sample Date: 20-Feb-19  
 Customer ID:  
 Delivery Date: 21-Feb-19

Description: Gorgas Ash Pond - MW-23H

Laboratory ID Number: AZ04555

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
pH for Alkalinity	EMG	3/4/2019	SM 4500H+ B		1		4.00	6.50	SU
Alkalinity, Total as CaCO3	EMG	3/4/2019	SM 2320 B		1		0.1	51.5	mg/L
Carbonate Alkalinity, as CaCO3	EMG	3/4/2019	SM 4500CO2 D		1			0.02	mg/L
Bicarbonate Alkalinity, as CaCO3	EMG	3/4/2019	SM 4500CO2 D		1			51.5	mg/L
* Solids, Dissolved	CRB	3/2/2019	SM 2540C		1		25	560	mg/L
Filter Completion Date	CRB	2/26/2019	SM 2540C		1			02/26/2019	Date
* Chloride	JCC	3/1/2019	SM4500CI E		1	0.50	1	2.58	mg/L
* Fluoride	JCC	2/28/2019	SM4500F C		1	0.05	0.1	0.188	mg/L
* Sulfate	JCC	3/5/2019	SM4500SO4 E		20	10.00	20	352	mg/L

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

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 744 County Road 87, GSC#8  
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# Batch QC Summary



To: Dustin Brooks  
 Greg Dyer

Customer Account: WMWGORAP  
 Sample Date: 20-Feb-19  
 Customer ID:  
 Delivery Date: 21-Feb-19

Description: Gorgas Ash Pond - MW-23H

Laboratory ID Number: AZ04555

Sample	Analysis	Units	MB	MB		MS	MSD	LCS	LCS		Rec		Prec
				Limit	Spike				Limit	Rec	Limit	Prec	
AZ05271	Boron, Total	mg/L	-0.00444	0.044	1.00	1.01	1.03	1.02	0.85 to 1.15	101	70 to 130	1.93	20
AZ05271	Arsenic, Total	mg/L	0.00000436	0.0022	0.10	0.0945	0.0926	0.100	0.085 to 0.115	94.5	70 to 130	2.03	20
AZ05271	Chromium, Total	mg/L	0.0000752	0.0044	0.10	0.103	0.101	0.102	0.085 to 0.115	103	70 to 130	1.43	20
AZ05271	Potassium, Total	mg/L	-0.00441	0.473	10.0	10.4	10.4	10.5	8.5 to 11.5	104	70 to 130	0.398	20
AZ05271	Sodium, Total	mg/L	0.00435	0.22	5.00	5.06	5.16	5.21	4.25 to 5.75	101	70 to 130	1.87	20
AZ05271	Manganese, Dissolved	mg/L	0.00000258	0.0022	0.10	0.0982	0.103		0.085 to 0.115	98.2	70 to 130	4.37	20
AZ05271	Manganese, Total	mg/L	0.00000536	0.0022	0.10	0.103	0.0992	0.101	0.085 to 0.115	103	70 to 130	3.43	20
AZ05271	Lead, Total	mg/L	0.00000381	0.0022	0.10	0.105	0.102	0.108	0.085 to 0.115	105	70 to 130	2.98	20
AZ05271	Antimony, Total	mg/L	0.000284	0.00176	0.10	0.0993	0.101	0.0979	0.085 to 0.115	98.4	70 to 130	1.28	20
AZ05271	Cadmium, Total	mg/L	0.00000000	0.00066	0.10	0.102	0.102	0.103	0.085 to 0.115	102	70 to 130	0.463	20
AZ05271	Iron, Dissolved	mg/L	0.00371	0.022	0.2	0.202	0.197	0.200	0.17 to 0.23	101	70 to 130	2.52	20
AZ05271	Iron, Total	mg/L	0.00263	0.022	0.2	0.204	0.207	0.203	0.17 to 0.23	102	70 to 130	1.17	20
AZ05271	Molybdenum, Total	mg/L	0.00000769	0.0044	0.10	0.105	0.103	0.104	0.085 to 0.115	105	70 to 130	2.21	20
AZ05271	Thallium, Total	mg/L	0.00000096	0.00044	0.10	0.103	0.100	0.105	0.085 to 0.115	103	70 to 130	2.78	20
AZ05271	Beryllium, Total	mg/L	0.0000273	0.00132	0.10	0.0937	0.0919	0.0951	0.085 to 0.115	93.7	70 to 130	1.84	20
AZ05271	Selenium, Total	mg/L	0.000121	0.0044	0.10	0.102	0.100	0.105	0.085 to 0.115	102	70 to 130	2.01	20
AZ05271	Barium, Total	mg/L	0.00000490	0.0044	0.10	0.0922	0.0885	0.0943	0.085 to 0.115	92.2	70 to 130	4.01	20
AZ05271	Calcium, Total	mg/L	0.0250	0.22	5.00	5.22	5.35	5.23	4.25 to 5.75	104	70 to 130	2.44	20
AZ05271	Lithium, Total	mg/L	-0.0000636	0.022	0.20	0.200	0.202	0.200	0.17 to 0.23	100	70 to 130	0.814	20
AZ05271	Magnesium, Total	mg/L	-0.000776	0.22	5.00	5.25	5.36	5.27	4.25 to 5.75	105	70 to 130	2.10	20
AZ05271	Cobalt, Total	mg/L	-0.00000687	0.0044	0.10	0.108	0.105	0.107	0.085 to 0.115	108	70 to 130	2.32	20
AZ05271	Mercury, Total by CVAA	mg/L	-0.0000172	0.0005	0.004	0.00401	0.00399	0.00411	0.0034 to 0.0046	100	70 to 130	0.632	20

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\* Test results for these accredited parameters conform to the most current applicable TNI/NELAC requirements, with exceptions noted on this report.

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

**Comments:** The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified. LBM 04/10/2019

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

# Batch QC Summary



To: Dustin Brooks  
 Greg Dyer

Customer Account: WMWGORAP  
 Sample Date: 20-Feb-19  
 Customer ID:  
 Delivery Date: 21-Feb-19

Description: Gorgas Ash Pond - MW-23H

Laboratory ID Number: AZ04555

Sample	Analysis	Units	MB	Limit	Spike	MS	Sample Duplicate	LCS	LCS Limit	Rec	Limit	Prec	Prec Limit
AZ05270	pH for Alkalinity	SU					7.01		6.95 to 7.05				
AZ04744	Chloride	mg/L	-0.0352	0.50	10.0	14.3	3.72	10.0	9 to 11	105	80 to 120	1.34	20
AZ04744	Fluoride	mg/L	-0.00397	0.05	2.50	2.61	0.220	2.43	2.25 to 2.75	96.2	80 to 120	7.06	20
AZ05270	Alkalinity, Total as CaCO3	mg/L					252	49.8	45.0 to 55.0			0.151	10
AZ04555	Solids, Dissolved	mg/L	0.0000	25			568	53.0	40 to 60			0.709	5
AZ04744	Sulfate	mg/L	-0.256	0.50	20.0	20.2	0.501	19.9	18 to 22	101	80 to 120	0.00	20

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CC:

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

# Certificate Of Analysis Alabama Power



To: Dustin Brooks  
 Greg Dyer

Customer Account: WMWGORAP  
 Sample Date: 20-Feb-19  
 Customer ID:  
 Delivery Date: 22-Feb-19

Description: Gorgas Ash Pond - MW-17V

Laboratory ID Number: AZ04743

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
<b>Metals, Cyanide, Total Phenols</b>										
* Arsenic, Total	DLJ	3/21/2019	EPA 200.8		5.075	0.001	0.005	J	0.00110	mg/L
* Barium, Total	DLJ	3/21/2019	EPA 200.8		5.075	0.002	0.01		0.191	mg/L
* Beryllium, Total	DLJ	3/21/2019	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Boron, Total	GAS	3/5/2019	EPA 200.7		2.03	0.02	0.1	J	0.0337	mg/L
* Calcium, Total	GAS	3/5/2019	EPA 200.7		2.03	0.1	0.5		30.6	mg/L
* Cadmium, Total	DLJ	3/21/2019	EPA 200.8		5.075	0.0003	0.001	U	Not Detected	mg/L
* Antimony, Total	DLJ	3/21/2019	EPA 200.8		5.075	0.0008	0.003	J	0.00115	mg/L
* Molybdenum, Total	DLJ	3/21/2019	EPA 200.8		5.075	0.002	0.01	J	0.00577	mg/L
* Lead, Total	DLJ	3/21/2019	EPA 200.8		5.075	0.001	0.005	J	0.00189	mg/L
* Cobalt, Total	DLJ	3/21/2019	EPA 200.8		5.075	0.002	0.005	U	Not Detected	mg/L
* Chromium, Total	DLJ	3/21/2019	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Iron, Dissolved	GAS	3/4/2019	EPA 200.7		2.03	0.01	0.05	J	0.0449	mg/L
* Iron, Total	GAS	3/5/2019	EPA 200.7		2.03	0.01	0.05		1.25	mg/L
* Mercury, Total by CVAA	ABB	3/15/2019	EPA 245.1		1	0.0003	0.0005	U	Not Detected	mg/L
* Lithium, Total	GAS	3/5/2019	EPA 200.7		2.03	0.01	0.02		0.0671	mg/L
* Magnesium, Total	GAS	3/5/2019	EPA 200.7		2.03	0.1	0.5		11.1	mg/L
* Manganese, Dissolved	DLJ	3/21/2019	EPA 200.8		5.075	0.001	0.005	K	0.0976	mg/L
* Manganese, Total	DLJ	3/21/2019	EPA 200.8		5.075	0.001	0.005		0.109	mg/L
* Potassium, Total	DLJ	3/21/2019	EPA 200.8		5.075	0.215	2.5	J	2.01	mg/L
* Sodium, Total	GAS	3/5/2019	EPA 200.7		10.15	1.015	5.075		106	mg/L
* Selenium, Total	DLJ	3/21/2019	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Thallium, Total	DLJ	3/21/2019	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L

**General Characteristics**

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

**Comments:** The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified. LBM 04/10/2019

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

# Certificate Of Analysis



To: Dustin Brooks  
 Greg Dyer

Customer Account: WMWGORAP  
 Sample Date: 20-Feb-19  
 Customer ID:  
 Delivery Date: 22-Feb-19

Description: Gorgas Ash Pond - MW-17V

Laboratory ID Number: AZ04743

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
pH for Alkalinity	EMG	3/4/2019	SM 4500H+ B		1		4.00	8.03	SU
Alkalinity, Total as CaCO3	EMG	3/4/2019	SM 2320 B		1		0.1	299	mg/L
Carbonate Alkalinity, as CaCO3	EMG	3/4/2019	SM 4500CO2 D		1			2.98	mg/L
Bicarbonate Alkalinity, as CaCO3	EMG	3/4/2019	SM 4500CO2 D		1			296	mg/L
* Solids, Dissolved	CRB	3/2/2019	SM 2540C		1		25	346	mg/L
Filter Completion Date	CRB	2/26/2019	SM 2540C		1			02/26/2019	Date
* Chloride	JCC	3/1/2019	SM4500CI E		1	0.50	1	3.56	mg/L
* Fluoride	JCC	2/28/2019	SM4500F C		1	0.05	0.1	0.239	mg/L
* Sulfate	JCC	3/5/2019	SM4500SO4 E		1	0.50	1	15.2	mg/L

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Laboratory certification ID: E571114

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Expiration: June 30, 2019

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 FAX (205) 257-1654

# Batch QC Summary



To: Dustin Brooks  
 Greg Dyer

Customer Account: WMWGORAP  
 Sample Date: 20-Feb-19  
 Customer ID:  
 Delivery Date: 22-Feb-19

Description: Gorgas Ash Pond - MW-17V

Laboratory ID Number: AZ04743

Sample	Analysis	Units	MB	MB		MS	MSD	LCS	LCS		Rec		Prec Limit
				Limit	Spike				Limit	Rec	Limit	Prec	
AZ05271	Boron, Total	mg/L	-0.00444	0.044	1.00	1.01	1.03	1.02	0.85 to 1.15	101	70 to 130	1.93	20
AZ05271	Arsenic, Total	mg/L	0.00000436	0.0022	0.10	0.0945	0.0926	0.100	0.085 to 0.115	94.5	70 to 130	2.03	20
AZ05271	Chromium, Total	mg/L	0.0000752	0.0044	0.10	0.103	0.101	0.102	0.085 to 0.115	103	70 to 130	1.43	20
AZ05271	Potassium, Total	mg/L	-0.00441	0.473	10.0	10.4	10.4	10.5	8.5 to 11.5	104	70 to 130	0.398	20
AZ05271	Sodium, Total	mg/L	0.00435	0.22	5.00	5.06	5.16	5.21	4.25 to 5.75	101	70 to 130	1.87	20
AZ05271	Cadmium, Total	mg/L	0.00000000	0.00066	0.10	0.102	0.102	0.103	0.085 to 0.115	102	70 to 130	0.463	20
AZ05271	Iron, Dissolved	mg/L	0.00371	0.022	0.2	0.202	0.197	0.200	0.17 to 0.23	101	70 to 130	2.52	20
AZ05271	Iron, Total	mg/L	0.00263	0.022	0.2	0.204	0.207	0.203	0.17 to 0.23	102	70 to 130	1.17	20
AZ05271	Molybdenum, Total	mg/L	0.00000769	0.0044	0.10	0.105	0.103	0.104	0.085 to 0.115	105	70 to 130	2.21	20
AZ05271	Thallium, Total	mg/L	0.00000096	0.00044	0.10	0.103	0.100	0.105	0.085 to 0.115	103	70 to 130	2.78	20
AZ05271	Barium, Total	mg/L	0.00000490	0.0044	0.10	0.0922	0.0885	0.0943	0.085 to 0.115	92.2	70 to 130	4.01	20
AZ05271	Calcium, Total	mg/L	0.0250	0.22	5.00	5.22	5.35	5.23	4.25 to 5.75	104	70 to 130	2.44	20
AZ05271	Lithium, Total	mg/L	-0.0000636	0.022	0.20	0.200	0.202	0.200	0.17 to 0.23	100	70 to 130	0.814	20
AZ05271	Magnesium, Total	mg/L	-0.000776	0.22	5.00	5.25	5.36	5.27	4.25 to 5.75	105	70 to 130	2.10	20
AZ05271	Beryllium, Total	mg/L	0.0000273	0.00132	0.10	0.0937	0.0919	0.0951	0.085 to 0.115	93.7	70 to 130	1.84	20
AZ05271	Selenium, Total	mg/L	0.000121	0.0044	0.10	0.102	0.100	0.105	0.085 to 0.115	102	70 to 130	2.01	20
AZ05271	Cobalt, Total	mg/L	-0.00000687	0.0044	0.10	0.108	0.105	0.107	0.085 to 0.115	108	70 to 130	2.32	20
AZ05271	Mercury, Total by CVAA	mg/L	-0.0000172	0.0005	0.004	0.00401	0.00399	0.00411	0.0034 to 0.0046	100	70 to 130	0.632	20
AZ05271	Manganese, Dissolved	mg/L	0.00000258	0.0022	0.10	0.0982	0.103		0.085 to 0.115	98.2	70 to 130	4.37	20
AZ05271	Manganese, Total	mg/L	0.00000536	0.0022	0.10	0.103	0.0992	0.101	0.085 to 0.115	103	70 to 130	3.43	20
AZ05271	Lead, Total	mg/L	0.00000381	0.0022	0.10	0.105	0.102	0.108	0.085 to 0.115	105	70 to 130	2.98	20
AZ05271	Antimony, Total	mg/L	0.000284	0.00176	0.10	0.0993	0.101	0.0979	0.085 to 0.115	98.4	70 to 130	1.28	20

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

**Comments:** The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified. LBM 04/10/2019

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

# Batch QC Summary



To: Dustin Brooks  
 Greg Dyer

Customer Account: WMWGORAP  
 Sample Date: 20-Feb-19  
 Customer ID:  
 Delivery Date: 22-Feb-19

Description: Gorgas Ash Pond - MW-17V

Laboratory ID Number: AZ04743

Sample	Analysis	Units	MB	Limit	Spike	MS	Sample Duplicate	LCS	LCS Limit	Rec	Rec Limit	Prec	Prec Limit
AZ05270	pH for Alkalinity	SU					7.01		6.95 to 7.05				
AZ04744	Fluoride	mg/L	-0.00397	0.05	2.50	2.61	0.220	2.43	2.25 to 2.75	96.2	80 to 120	7.06	20
AZ04744	Chloride	mg/L	-0.0352	0.50	10.0	14.3	3.72	10.0	9 to 11	105	80 to 120	1.34	20
AZ04744	Sulfate	mg/L	-0.256	0.50	20.0	20.2	0.501	19.9	18 to 22	101	80 to 120	0.00	20
AZ05270	Alkalinity, Total as CaCO3	mg/L					252	49.8	45.0 to 55.0			0.151	10
AZ04555	Solids, Dissolved	mg/L	0.0000	25			568	53.0	40 to 60			0.709	5

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

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CC:



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

**Certificate Of Analysis**  **Alabama Power**



To: Dustin Brooks  
 Greg Dyer

Customer Account: WMWGORAP  
 Sample Date: 21-Feb-19  
 Customer ID:  
 Delivery Date: 22-Feb-19

Description: Gorgas Ash Pond - MW-12V

Laboratory ID Number: AZ04744

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
<b>Metals, Cyanide, Total Phenols</b>										
* Arsenic, Total	DLJ	3/21/2019	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Barium, Total	DLJ	3/21/2019	EPA 200.8		5.075	0.002	0.01		1.35	mg/L
* Beryllium, Total	DLJ	3/21/2019	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Boron, Total	GAS	3/5/2019	EPA 200.7		2.03	0.02	0.1	J	0.0303	mg/L
* Calcium, Total	GAS	3/5/2019	EPA 200.7		2.03	0.1	0.5		52.3	mg/L
* Cadmium, Total	DLJ	3/21/2019	EPA 200.8		5.075	0.0003	0.001	U	Not Detected	mg/L
* Antimony, Total	DLJ	3/21/2019	EPA 200.8		5.075	0.0008	0.003	J	0.000841	mg/L
* Molybdenum, Total	DLJ	3/21/2019	EPA 200.8		5.075	0.002	0.01	J	0.00253	mg/L
* Lead, Total	DLJ	3/21/2019	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Cobalt, Total	DLJ	3/21/2019	EPA 200.8		5.075	0.002	0.005	U	Not Detected	mg/L
* Chromium, Total	DLJ	3/21/2019	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Iron, Dissolved	GAS	3/4/2019	EPA 200.7		2.03	0.01	0.05	K	1.07	mg/L
* Iron, Total	GAS	3/5/2019	EPA 200.7		2.03	0.01	0.05		1.68	mg/L
* Mercury, Total by CVAA	ABB	3/15/2019	EPA 245.1		1	0.0003	0.0005	U	Not Detected	mg/L
* Lithium, Total	GAS	3/5/2019	EPA 200.7		2.03	0.01	0.02		0.0468	mg/L
* Magnesium, Total	GAS	3/5/2019	EPA 200.7		2.03	0.1	0.5		13.4	mg/L
* Manganese, Dissolved	DLJ	3/21/2019	EPA 200.8		5.075	0.001	0.005	K	0.0847	mg/L
* Manganese, Total	DLJ	3/21/2019	EPA 200.8		5.075	0.001	0.005		0.0928	mg/L
* Potassium, Total	DLJ	3/21/2019	EPA 200.8		5.075	0.215	2.5		5.63	mg/L
* Sodium, Total	GAS	3/5/2019	EPA 200.7		2.03	0.1	0.5		17.9	mg/L
* Selenium, Total	DLJ	3/21/2019	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Thallium, Total	DLJ	3/21/2019	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L

**General Characteristics**

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

**Comments:** The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified. LBM 04/10/2019

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

# Certificate Of Analysis



To: Dustin Brooks  
 Greg Dyer

Customer Account: WMWGORAP  
 Sample Date: 21-Feb-19  
 Customer ID:  
 Delivery Date: 22-Feb-19

Description: Gorgas Ash Pond - MW-12V

Laboratory ID Number: AZ04744

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
pH for Alkalinity	EMG	3/4/2019	SM 4500H+ B	1			4.00	7.82	SU
Alkalinity, Total as CaCO3	EMG	3/4/2019	SM 2320 B	1			0.1	169	mg/L
Carbonate Alkalinity, as CaCO3	EMG	3/4/2019	SM 4500CO2 D	1				1.04	mg/L
Bicarbonate Alkalinity, as CaCO3	EMG	3/4/2019	SM 4500CO2 D	1				168	mg/L
* Solids, Dissolved	CRB	3/2/2019	SM 2540C	1			25	237	mg/L
Filter Completion Date	CRB	2/26/2019	SM 2540C	1				02/26/2019	Date
* Chloride	JCC	3/1/2019	SM4500CI E	1		0.50	1	3.77	mg/L
* Fluoride	JCC	2/28/2019	SM4500F C	1		0.05	0.1	0.205	mg/L
* Sulfate	JCC	3/5/2019	SM4500SO4 E	1		0.50	1	U Not Detected	mg/L

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

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

# Batch QC Summary



To: Dustin Brooks  
 Greg Dyer

Customer Account: WMWGORAP  
 Sample Date: 21-Feb-19  
 Customer ID:  
 Delivery Date: 22-Feb-19

Description: Gorgas Ash Pond - MW-12V

Laboratory ID Number: AZ04744

Sample	Analysis	Units	MB		Spike	MS	MSD	LCS	LCS		Rec		Prec Limit	
			MB	Limit					Limit	Rec	Limit	Prec		
AZ05271	Boron, Total	mg/L	-0.00444	0.044	1.00	1.01	1.03	1.02	0.85 to 1.15		101	70 to 130 1.93		20
AZ05271	Arsenic, Total	mg/L	0.00000436	0.0022	0.10	0.0945	0.0926	0.100	0.085 to 0.115		94.5	70 to 130 2.03		20
AZ05271	Beryllium, Total	mg/L	0.0000273	0.00132	0.10	0.0937	0.0919	0.0951	0.085 to 0.115		93.7	70 to 130 1.84		20
AZ05271	Selenium, Total	mg/L	0.000121	0.0044	0.10	0.102	0.100	0.105	0.085 to 0.115		102	70 to 130 2.01		20
AZ05271	Cadmium, Total	mg/L	0.00000000	0.00066	0.10	0.102	0.102	0.103	0.085 to 0.115		102	70 to 130 0.463		20
AZ05271	Iron, Dissolved	mg/L	0.00371	0.022	0.2	0.202	0.197	0.200	0.17 to 0.23		101	70 to 130 2.52		20
AZ05271	Iron, Total	mg/L	0.00263	0.022	0.2	0.204	0.207	0.203	0.17 to 0.23		102	70 to 130 1.17		20
AZ05271	Molybdenum, Total	mg/L	0.00000769	0.0044	0.10	0.105	0.103	0.104	0.085 to 0.115		105	70 to 130 2.21		20
AZ05271	Thallium, Total	mg/L	0.00000096	0.00044	0.10	0.103	0.100	0.105	0.085 to 0.115		103	70 to 130 2.78		20
AZ05271	Cobalt, Total	mg/L	-0.00000687	0.0044	0.10	0.108	0.105	0.107	0.085 to 0.115		108	70 to 130 2.32		20
AZ05271	Mercury, Total by CVAA	mg/L	-0.0000172	0.0005	0.004	0.00401	0.00399	0.00411	0.0034 to 0.0046		100	70 to 130 0.632		20
AZ05271	Mangenes, Dissolved	mg/L	0.00000258	0.0022	0.10	0.0982	0.103		0.085 to 0.115		98.2	70 to 130 4.37		20
AZ05271	Mangenes, Total	mg/L	0.00000536	0.0022	0.10	0.103	0.0992	0.101	0.085 to 0.115		103	70 to 130 3.43		20
AZ05271	Lead, Total	mg/L	0.00000381	0.0022	0.10	0.105	0.102	0.108	0.085 to 0.115		105	70 to 130 2.98		20
AZ05271	Antimony, Total	mg/L	0.000284	0.00176	0.10	0.0993	0.101	0.0979	0.085 to 0.115		98.4	70 to 130 1.28		20
AZ05271	Chromium, Total	mg/L	0.0000752	0.0044	0.10	0.103	0.101	0.102	0.085 to 0.115		103	70 to 130 1.43		20
AZ05271	Potassium, Total	mg/L	-0.00441	0.473	10.0	10.4	10.4	10.5	8.5 to 11.5		104	70 to 130 0.398		20
AZ05271	Sodium, Total	mg/L	0.00435	0.22	5.00	5.06	5.16	5.21	4.25 to 5.75		101	70 to 130 1.87		20
AZ05271	Barium, Total	mg/L	0.00000490	0.0044	0.10	0.0922	0.0885	0.0943	0.085 to 0.115		92.2	70 to 130 4.01		20
AZ05271	Calcium, Total	mg/L	0.0250	0.22	5.00	5.22	5.35	5.23	4.25 to 5.75		104	70 to 130 2.44		20
AZ05271	Lithium, Total	mg/L	-0.0000636	0.022	0.20	0.200	0.202	0.200	0.17 to 0.23		100	70 to 130 0.814		20
AZ05271	Magnesium, Total	mg/L	-0.000776	0.22	5.00	5.25	5.36	5.27	4.25 to 5.75		105	70 to 130 2.10		20

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

**Comments:** The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified. LBM 04/10/2019

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

# Batch QC Summary



To: Dustin Brooks  
 Greg Dyer

Customer Account: WMWGORAP  
 Sample Date: 21-Feb-19  
 Customer ID:  
 Delivery Date: 22-Feb-19

Description: Gorgas Ash Pond - MW-12V

Laboratory ID Number: AZ04744

Sample	Analysis	Units	MB			Sample		LCS	Rec		Prec		
			MB	Limit	Spike	MS	Duplicate	LCS	Limit	Rec	Limit	Prec	
AZ04744	Chloride	mg/L	-0.0352	0.50	10.0	14.3	3.72	10.0	9 to 11	105	80 to 120	1.34	20
AZ04744	Sulfate	mg/L	-0.256	0.50	20.0	20.2	0.501	19.9	18 to 22	101	80 to 120	0.00	20
AZ04555	Solids, Dissolved	mg/L	0.0000	25			568	53.0	40 to 60			0.709	5
AZ05270	pH for Alkalinity	SU						7.01	6.95 to 7.05				
AZ04744	Fluoride	mg/L	-0.00397	0.05	2.50	2.61	0.220	2.43	2.25 to 2.75	96.2	80 to 120	7.06	20
AZ05270	Alkalinity, Total as CaCO3	mg/L					252	49.8	45.0 to 55.0			0.151	10

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**Certificate Of Analysis**  **Alabama Power**



To: Dustin Brooks  
 Greg Dyer

Customer Account: WMWGORAPFB  
 Sample Date: 26-Feb-19  
 Customer ID:  
 Delivery Date: 28-Feb-19

Description: Gorgas Ash Pond Field Blank

Laboratory ID Number: AZ05265

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
<b>Metals, Cyanide, Total Phenols</b>									
* Arsenic, Total	DLJ	3/21/2019	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Barium, Total	DLJ	3/21/2019	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Beryllium, Total	DLJ	3/21/2019	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	GAS	3/5/2019	EPA 200.7		2.03	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	GAS	3/5/2019	EPA 200.7		2.03	0.1	0.5	U Not Detected	mg/L
* Cadmium, Total	DLJ	3/21/2019	EPA 200.8		5.075	0.0003	0.001	U Not Detected	mg/L
* Antimony, Total	DLJ	3/21/2019	EPA 200.8		5.075	0.0008	0.003	J 0.000868	mg/L
* Molybdenum, Total	DLJ	3/21/2019	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	DLJ	3/21/2019	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Cobalt, Total	DLJ	3/21/2019	EPA 200.8		5.075	0.002	0.005	U Not Detected	mg/L
* Chromium, Total	DLJ	3/21/2019	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Iron, Dissolved	GAS	3/4/2019	EPA 200.7		2.03	0.01	0.05	U Not Detected	mg/L
* Iron, Total	GAS	3/5/2019	EPA 200.7		2.03	0.01	0.05	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	3/15/2019	EPA 245.1		1	0.0003	0.0005	U Not Detected	mg/L
* Lithium, Total	GAS	3/5/2019	EPA 200.7		2.03	0.01	0.02	U Not Detected	mg/L
* Magnesium, Total	GAS	3/5/2019	EPA 200.7		2.03	0.1	0.5	U Not Detected	mg/L
* Manganese, Dissolved	DLJ	3/21/2019	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Manganese, Total	DLJ	3/21/2019	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Potassium, Total	DLJ	3/21/2019	EPA 200.8		5.075	0.215	2.5	U Not Detected	mg/L
* Sodium, Total	GAS	3/5/2019	EPA 200.7		2.03	0.1	0.5	U Not Detected	mg/L
* Selenium, Total	DLJ	3/21/2019	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	DLJ	3/21/2019	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L

**General Characteristics**

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

**Comments:** The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified. LBM 04/10/2019

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

# Certificate Of Analysis Alabama Power



To: Dustin Brooks  
 Greg Dyer

Customer Account: WMWGORAPFB  
 Sample Date: 26-Feb-19  
 Customer ID:  
 Delivery Date: 28-Feb-19

Description: Gorgas Ash Pond Field Blank

Laboratory ID Number: AZ05265

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
* Solids, Dissolved	CRB	3/13/2019	SM 2540C		1		25	U Not Detected	mg/L
Filter Completion Date	CRB	3/5/2019	SM 2540C		1			03/05/2019	Date
* Chloride	JCC	3/1/2019	SM4500Cl E		1	0.50	1	U Not Detected	mg/L
* Fluoride	JCC	3/1/2019	SM4500F C		1	0.05	0.1	U Not Detected	mg/L
* Sulfate	JCC	3/5/2019	SM4500SO4 E		1	0.50	1	U Not Detected	mg/L

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

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# Batch QC Summary



To: Dustin Brooks  
 Greg Dyer

Customer Account: WMWGORAPFB  
 Sample Date: 26-Feb-19  
 Customer ID:  
 Delivery Date: 28-Feb-19

Description: Gorgas Ash Pond Field Blank

Laboratory ID Number: AZ05265

Sample	Analysis	Units	MB		Spike	MS	MSD	LCS	LCS		Rec		Prec Limit
			MB	Limit					Limit	Rec	Limit	Prec	
AZ05271	Boron, Total	mg/L	-0.00444	0.044	1.00	1.01	1.03	1.02	0.85 to 1.15	101	70 to 130	1.93	20
AZ05271	Arsenic, Total	mg/L	0.00000436	0.0022	0.10	0.0945	0.0926	0.100	0.085 to 0.115	94.5	70 to 130	2.03	20
AZ05271	Beryllium, Total	mg/L	0.0000273	0.00132	0.10	0.0937	0.0919	0.0951	0.085 to 0.115	93.7	70 to 130	1.84	20
AZ05271	Selenium, Total	mg/L	0.000121	0.0044	0.10	0.102	0.100	0.105	0.085 to 0.115	102	70 to 130	2.01	20
AZ05271	Chromium, Total	mg/L	0.0000752	0.0044	0.10	0.103	0.101	0.102	0.085 to 0.115	103	70 to 130	1.43	20
AZ05271	Potassium, Total	mg/L	-0.00441	0.473	10.0	10.4	10.4	10.5	8.5 to 11.5	104	70 to 130	0.398	20
AZ05271	Sodium, Total	mg/L	0.00435	0.22	5.00	5.06	5.16	5.21	4.25 to 5.75	101	70 to 130	1.87	20
AZ05271	Barium, Total	mg/L	0.00000490	0.0044	0.10	0.0922	0.0885	0.0943	0.085 to 0.115	92.2	70 to 130	4.01	20
AZ05271	Calcium, Total	mg/L	0.0250	0.22	5.00	5.22	5.35	5.23	4.25 to 5.75	104	70 to 130	2.44	20
AZ05271	Lithium, Total	mg/L	-0.0000636	0.022	0.20	0.200	0.202	0.200	0.17 to 0.23	100	70 to 130	0.814	20
AZ05271	Magnesium, Total	mg/L	-0.000776	0.22	5.00	5.25	5.36	5.27	4.25 to 5.75	105	70 to 130	2.10	20
AZ05271	Cadmium, Total	mg/L	0.00000000	0.00066	0.10	0.102	0.102	0.103	0.085 to 0.115	102	70 to 130	0.463	20
AZ05271	Iron, Dissolved	mg/L	0.00371	0.022	0.2	0.202	0.197	0.200	0.17 to 0.23	101	70 to 130	2.52	20
AZ05271	Iron, Total	mg/L	0.00263	0.022	0.2	0.204	0.207	0.203	0.17 to 0.23	102	70 to 130	1.17	20
AZ05271	Molybdenum, Total	mg/L	0.00000769	0.0044	0.10	0.105	0.103	0.104	0.085 to 0.115	105	70 to 130	2.21	20
AZ05271	Thallium, Total	mg/L	0.00000096	0.00044	0.10	0.103	0.100	0.105	0.085 to 0.115	103	70 to 130	2.78	20
AZ05271	Mangnese, Dissolved	mg/L	0.00000258	0.0022	0.10	0.0982	0.103		0.085 to 0.115	98.2	70 to 130	4.37	20
AZ05271	Mangnese, Total	mg/L	0.00000536	0.0022	0.10	0.103	0.0992	0.101	0.085 to 0.115	103	70 to 130	3.43	20
AZ05271	Lead, Total	mg/L	0.00000381	0.0022	0.10	0.105	0.102	0.108	0.085 to 0.115	105	70 to 130	2.98	20
AZ05271	Antimony, Total	mg/L	0.000284	0.00176	0.10	0.0993	0.101	0.0979	0.085 to 0.115	98.4	70 to 130	1.28	20
AZ05271	Cobalt, Total	mg/L	-0.00000687	0.0044	0.10	0.108	0.105	0.107	0.085 to 0.115	108	70 to 130	2.32	20
AZ05271	Mercury, Total by CVAA	mg/L	-0.0000172	0.0005	0.004	0.00401	0.00399	0.00411	0.0034 to 0.0046	100	70 to 130	0.632	20

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

**Comments:** The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified. LBM 04/10/2019

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

# Batch QC Summary



To: Dustin Brooks  
 Greg Dyer

Customer Account: WMWGORAPFB  
 Sample Date: 26-Feb-19  
 Customer ID:  
 Delivery Date: 28-Feb-19

Description: Gorgas Ash Pond Field Blank

Laboratory ID Number: AZ05265

Sample	Analysis	Units	MB	MB			Sample		LCS	Rec			Prec
				Limit	Spike	MS	Duplicate	LCS	Limit	Rec	Limit	Prec	Limit
AZ05271	Sulfate	mg/L	-0.125	0.50	20.0	20.1	-0.170	19.8	18 to 22	100	80 to 120	0.00	20
AZ05271	Chloride	mg/L	-0.0515	0.50	10.0	10.0	0.20	10.0	9 to 11	100	80 to 120	0.00	20
AZ05270	Solids, Dissolved	mg/L	1.00	25			264	53.0	40 to 60			0.377	5
AZ05271	Fluoride	mg/L	-0.0586	0.05	2.50	2.61	-0.0625	2.58	2.25 to 2.75	104	80 to 120	0.00	20

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**Certificate Of Analysis**  **Alabama Power**



To: Dustin Brooks  
 Greg Dyer

Customer Account: WMWGORAP  
 Sample Date: 26-Feb-19  
 Customer ID:  
 Delivery Date: 28-Feb-19

Description: Gorgas Ash Pond - MW-24H

Laboratory ID Number: AZ05266

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
<b>Metals, Cyanide, Total Phenols</b>										
* Arsenic, Total	DLJ	3/21/2019	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Barium, Total	DLJ	3/21/2019	EPA 200.8		5.075	0.002	0.01		0.887	mg/L
* Beryllium, Total	DLJ	3/21/2019	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Boron, Total	GAS	3/5/2019	EPA 200.7		2.03	0.02	0.1	J	0.0719	mg/L
* Calcium, Total	GAS	3/5/2019	EPA 200.7		2.03	0.1	0.5		46.0	mg/L
* Cadmium, Total	DLJ	3/21/2019	EPA 200.8		5.075	0.0003	0.001	U	Not Detected	mg/L
* Antimony, Total	DLJ	3/21/2019	EPA 200.8		5.075	0.0008	0.003	J	0.000918	mg/L
* Molybdenum, Total	DLJ	3/21/2019	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Lead, Total	DLJ	3/21/2019	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Cobalt, Total	DLJ	3/21/2019	EPA 200.8		5.075	0.002	0.005	U	Not Detected	mg/L
* Chromium, Total	DLJ	3/21/2019	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Iron, Dissolved	GAS	3/4/2019	EPA 200.7		2.03	0.01	0.05	K	1.97	mg/L
* Iron, Total	GAS	3/5/2019	EPA 200.7		2.03	0.01	0.05		2.79	mg/L
* Mercury, Total by CVAA	ABB	3/15/2019	EPA 245.1		1	0.0003	0.0005	U	Not Detected	mg/L
* Lithium, Total	GAS	3/5/2019	EPA 200.7		2.03	0.01	0.02		0.0282	mg/L
* Magnesium, Total	GAS	3/5/2019	EPA 200.7		2.03	0.1	0.5		15.1	mg/L
* Manganese, Dissolved	DLJ	3/21/2019	EPA 200.8		5.075	0.001	0.005	K	0.125	mg/L
* Manganese, Total	DLJ	3/21/2019	EPA 200.8		5.075	0.001	0.005		0.133	mg/L
* Potassium, Total	DLJ	3/21/2019	EPA 200.8		5.075	0.215	2.5	J	1.69	mg/L
* Sodium, Total	GAS	3/5/2019	EPA 200.7		2.03	0.1	0.5		31.9	mg/L
* Selenium, Total	DLJ	3/21/2019	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Thallium, Total	DLJ	3/21/2019	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L

**General Characteristics**

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

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 Calera, AL 35040  
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# Certificate Of Analysis Alabama Power



To: Dustin Brooks  
 Greg Dyer

Customer Account: WMWGORAP  
 Sample Date: 26-Feb-19  
 Customer ID:  
 Delivery Date: 28-Feb-19

Description: Gorgas Ash Pond - MW-24H

Laboratory ID Number: AZ05266

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
pH for Alkalinity	EMG	3/4/2019	SM 4500H+ B	1			4.00	7.26	SU
Alkalinity, Total as CaCO3	EMG	3/4/2019	SM 2320 B	1			0.1	225	mg/L
Carbonate Alkalinity, as CaCO3	EMG	3/4/2019	SM 4500CO2 D	1				0.38	mg/L
Bicarbonate Alkalinity, as CaCO3	EMG	3/4/2019	SM 4500CO2 D	1				225	mg/L
* Solids, Dissolved	CRB	3/13/2019	SM 2540C	1			25	249	mg/L
Filter Completion Date	CRB	3/5/2019	SM 2540C	1				03/05/2019	Date
* Chloride	JCC	3/1/2019	SM4500CI E	1		0.50	1	3.28	mg/L
* Fluoride	JCC	3/1/2019	SM4500F C	1		0.05	0.1	0.190	mg/L
* Sulfate	JCC	3/5/2019	SM4500SO4 E	1		0.50	1	10.9	mg/L

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 Delivery Date: 28-Feb-19

Description: Gorgas Ash Pond - MW-24H

Laboratory ID Number: AZ05266

Sample	Analysis	Units	MB		Spike	MS	MSD	LCS	LCS		Rec		Prec Limit
			MB	Limit					Limit	Rec	Limit	Prec	
AZ05271	Boron, Total	mg/L	-0.00444	0.044	1.00	1.01	1.03	1.02	0.85 to 1.15	101	70 to 130	1.93	20
AZ05271	Arsenic, Total	mg/L	0.00000436	0.0022	0.10	0.0945	0.0926	0.100	0.085 to 0.115	94.5	70 to 130	2.03	20
AZ05271	Beryllium, Total	mg/L	0.0000273	0.00132	0.10	0.0937	0.0919	0.0951	0.085 to 0.115	93.7	70 to 130	1.84	20
AZ05271	Selenium, Total	mg/L	0.000121	0.0044	0.10	0.102	0.100	0.105	0.085 to 0.115	102	70 to 130	2.01	20
AZ05271	Cobalt, Total	mg/L	-0.00000687	0.0044	0.10	0.108	0.105	0.107	0.085 to 0.115	108	70 to 130	2.32	20
AZ05271	Mercury, Total by CVAA	mg/L	-0.0000172	0.0005	0.004	0.00401	0.00399	0.00411	0.0034 to 0.0046	100	70 to 130	0.632	20
AZ05271	Manganese, Dissolved	mg/L	0.00000258	0.0022	0.10	0.0982	0.103		0.085 to 0.115	98.2	70 to 130	4.37	20
AZ05271	Manganese, Total	mg/L	0.00000536	0.0022	0.10	0.103	0.0992	0.101	0.085 to 0.115	103	70 to 130	3.43	20
AZ05271	Lead, Total	mg/L	0.00000381	0.0022	0.10	0.105	0.102	0.108	0.085 to 0.115	105	70 to 130	2.98	20
AZ05271	Antimony, Total	mg/L	0.000284	0.00176	0.10	0.0993	0.101	0.0979	0.085 to 0.115	98.4	70 to 130	1.28	20
AZ05271	Barium, Total	mg/L	0.00000490	0.0044	0.10	0.0922	0.0885	0.0943	0.085 to 0.115	92.2	70 to 130	4.01	20
AZ05271	Calcium, Total	mg/L	0.0250	0.22	5.00	5.22	5.35	5.23	4.25 to 5.75	104	70 to 130	2.44	20
AZ05271	Lithium, Total	mg/L	-0.0000636	0.022	0.20	0.200	0.202	0.200	0.17 to 0.23	100	70 to 130	0.814	20
AZ05271	Magnesium, Total	mg/L	-0.000776	0.22	5.00	5.25	5.36	5.27	4.25 to 5.75	105	70 to 130	2.10	20
AZ05271	Chromium, Total	mg/L	0.0000752	0.0044	0.10	0.103	0.101	0.102	0.085 to 0.115	103	70 to 130	1.43	20
AZ05271	Potassium, Total	mg/L	-0.00441	0.473	10.0	10.4	10.4	10.5	8.5 to 11.5	104	70 to 130	0.398	20
AZ05271	Sodium, Total	mg/L	0.00435	0.22	5.00	5.06	5.16	5.21	4.25 to 5.75	101	70 to 130	1.87	20
AZ05271	Cadmium, Total	mg/L	0.00000000	0.00066	0.10	0.102	0.102	0.103	0.085 to 0.115	102	70 to 130	0.463	20
AZ05271	Iron, Dissolved	mg/L	0.00371	0.022	0.2	0.202	0.197	0.200	0.17 to 0.23	101	70 to 130	2.52	20
AZ05271	Iron, Total	mg/L	0.00263	0.022	0.2	0.204	0.207	0.203	0.17 to 0.23	102	70 to 130	1.17	20
AZ05271	Molybdenum, Total	mg/L	0.00000769	0.0044	0.10	0.105	0.103	0.104	0.085 to 0.115	105	70 to 130	2.21	20
AZ05271	Thallium, Total	mg/L	0.00000096	0.00044	0.10	0.103	0.100	0.105	0.085 to 0.115	103	70 to 130	2.78	20

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# Batch QC Summary



To: Dustin Brooks  
 Greg Dyer

Customer Account: WMWGORAP  
 Sample Date: 26-Feb-19  
 Customer ID:  
 Delivery Date: 28-Feb-19

Description: Gorgas Ash Pond - MW-24H

Laboratory ID Number: AZ05266

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	LCS	LCS Limit	Rec	Rec Limit	Prec	Prec Limit
AZ05270	Solids, Dissolved	mg/L	1.00	25			264	53.0	40 to 60			0.377	5
AZ05271	Chloride	mg/L	-0.0515	0.50	10.0	10.0	0.20	10.0	9 to 11	100	80 to 120	0.00	20
AZ05270	pH for Alkalinity	SU						7.01	6.95 to 7.05				
AZ05271	Sulfate	mg/L	-0.125	0.50	20.0	20.1	-0.170	19.8	18 to 22	100	80 to 120	0.00	20
AZ05270	Alkalinity, Total as CaCO3	mg/L					252	49.8	45.0 to 55.0			0.151	10
AZ05271	Fluoride	mg/L	-0.0586	0.05	2.50	2.61	-0.0625	2.58	2.25 to 2.75	104	80 to 120	0.00	20

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**Certificate Of Analysis**  **Alabama Power**



To: Dustin Brooks  
 Greg Dyer

Customer Account: WMWGORAP  
 Sample Date: 26-Feb-19  
 Customer ID:  
 Delivery Date: 28-Feb-19

Description: Gorgas Ash Pond - MW-24H DUP

Laboratory ID Number: AZ05267

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
<b>Metals, Cyanide, Total Phenols</b>										
* Arsenic, Total	DLJ	3/21/2019	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Barium, Total	DLJ	3/21/2019	EPA 200.8		5.075	0.002	0.01		0.881	mg/L
* Beryllium, Total	DLJ	3/21/2019	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Boron, Total	GAS	3/5/2019	EPA 200.7		2.03	0.02	0.1	J	0.0725	mg/L
* Calcium, Total	GAS	3/5/2019	EPA 200.7		2.03	0.1	0.5		45.9	mg/L
* Cadmium, Total	DLJ	3/21/2019	EPA 200.8		5.075	0.0003	0.001	U	Not Detected	mg/L
* Antimony, Total	DLJ	3/21/2019	EPA 200.8		5.075	0.0008	0.003	J	0.000807	mg/L
* Molybdenum, Total	DLJ	3/21/2019	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Lead, Total	DLJ	3/21/2019	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Cobalt, Total	DLJ	3/21/2019	EPA 200.8		5.075	0.002	0.005	U	Not Detected	mg/L
* Chromium, Total	DLJ	3/21/2019	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Iron, Dissolved	GAS	3/4/2019	EPA 200.7		2.03	0.01	0.05	K	1.98	mg/L
* Iron, Total	GAS	3/5/2019	EPA 200.7		2.03	0.01	0.05		2.79	mg/L
* Mercury, Total by CVAA	ABB	3/15/2019	EPA 245.1		1	0.0003	0.0005	U	Not Detected	mg/L
* Lithium, Total	GAS	3/5/2019	EPA 200.7		2.03	0.01	0.02		0.0282	mg/L
* Magnesium, Total	GAS	3/5/2019	EPA 200.7		2.03	0.1	0.5		15.1	mg/L
* Manganese, Dissolved	DLJ	3/21/2019	EPA 200.8		5.075	0.001	0.005	K	0.122	mg/L
* Manganese, Total	DLJ	3/21/2019	EPA 200.8		5.075	0.001	0.005		0.130	mg/L
* Potassium, Total	DLJ	3/21/2019	EPA 200.8		5.075	0.215	2.5	J	1.65	mg/L
* Sodium, Total	GAS	3/5/2019	EPA 200.7		2.03	0.1	0.5		32.1	mg/L
* Selenium, Total	DLJ	3/21/2019	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Thallium, Total	DLJ	3/21/2019	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L

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 Greg Dyer

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 Customer ID:  
 Delivery Date: 28-Feb-19

Description: Gorgas Ash Pond - MW-24H DUP

Laboratory ID Number: AZ05267

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
pH for Alkalinity	EMG	3/4/2019	SM 4500H+ B	1			4.00	7.37	SU
Alkalinity, Total as CaCO3	EMG	3/4/2019	SM 2320 B	1			0.1	227	mg/L
Carbonate Alkalinity, as CaCO3	EMG	3/4/2019	SM 4500CO2 D	1				0.50	mg/L
Bicarbonate Alkalinity, as CaCO3	EMG	3/4/2019	SM 4500CO2 D	1				226	mg/L
* Solids, Dissolved	CRB	3/13/2019	SM 2540C	1			25	252	mg/L
Filter Completion Date	CRB	3/5/2019	SM 2540C	1				03/05/2019	Date
* Chloride	JCC	3/1/2019	SM4500CI E	1		0.50	1	3.33	mg/L
* Fluoride	JCC	3/1/2019	SM4500F C	1		0.05	0.1	0.194	mg/L
* Sulfate	JCC	3/5/2019	SM4500SO4 E	1		0.50	1	11.1	mg/L

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

\* Test results for these accredited parameters conform to the most current applicable TNI/NELAC requirements, with exceptions noted on this report.

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

**Comments:** The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified. LBM 04/10/2019

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

# Batch QC Summary



To: Dustin Brooks  
 Greg Dyer

Customer Account: WMWGORAP  
 Sample Date: 26-Feb-19  
 Customer ID:  
 Delivery Date: 28-Feb-19

Description: Gorgas Ash Pond - MW-24H DUP

Laboratory ID Number: AZ05267

Sample	Analysis	Units	MB		Spike	MS	MSD	LCS	LCS		Rec		Prec Limit
			MB	Limit					Limit	Rec	Limit	Prec	
AZ05271	Boron, Total	mg/L	-0.00444	0.044	1.00	1.01	1.03	1.02	0.85 to 1.15	101	70 to 130	1.93	20
AZ05271	Arsenic, Total	mg/L	0.00000436	0.0022	0.10	0.0945	0.0926	0.100	0.085 to 0.115	94.5	70 to 130	2.03	20
AZ05271	Beryllium, Total	mg/L	0.0000273	0.00132	0.10	0.0937	0.0919	0.0951	0.085 to 0.115	93.7	70 to 130	1.84	20
AZ05271	Selenium, Total	mg/L	0.000121	0.0044	0.10	0.102	0.100	0.105	0.085 to 0.115	102	70 to 130	2.01	20
AZ05271	Chromium, Total	mg/L	0.0000752	0.0044	0.10	0.103	0.101	0.102	0.085 to 0.115	103	70 to 130	1.43	20
AZ05271	Potassium, Total	mg/L	-0.00441	0.473	10.0	10.4	10.4	10.5	8.5 to 11.5	104	70 to 130	0.398	20
AZ05271	Sodium, Total	mg/L	0.00435	0.22	5.00	5.06	5.16	5.21	4.25 to 5.75	101	70 to 130	1.87	20
AZ05271	Cadmium, Total	mg/L	0.00000000	0.00066	0.10	0.102	0.102	0.103	0.085 to 0.115	102	70 to 130	0.463	20
AZ05271	Iron, Dissolved	mg/L	0.00371	0.022	0.2	0.202	0.197	0.200	0.17 to 0.23	101	70 to 130	2.52	20
AZ05271	Iron, Total	mg/L	0.00263	0.022	0.2	0.204	0.207	0.203	0.17 to 0.23	102	70 to 130	1.17	20
AZ05271	Molybdenum, Total	mg/L	0.00000769	0.0044	0.10	0.105	0.103	0.104	0.085 to 0.115	105	70 to 130	2.21	20
AZ05271	Thallium, Total	mg/L	0.00000096	0.00044	0.10	0.103	0.100	0.105	0.085 to 0.115	103	70 to 130	2.78	20
AZ05271	Cobalt, Total	mg/L	-0.00000687	0.0044	0.10	0.108	0.105	0.107	0.085 to 0.115	108	70 to 130	2.32	20
AZ05271	Mercury, Total by CVAA	mg/L	-0.0000172	0.0005	0.004	0.00401	0.00399	0.00411	0.0034 to 0.0046	100	70 to 130	0.632	20
AZ05271	Manganese, Dissolved	mg/L	0.00000258	0.0022	0.10	0.0982	0.103		0.085 to 0.115	98.2	70 to 130	4.37	20
AZ05271	Manganese, Total	mg/L	0.00000536	0.0022	0.10	0.103	0.0992	0.101	0.085 to 0.115	103	70 to 130	3.43	20
AZ05271	Lead, Total	mg/L	0.00000381	0.0022	0.10	0.105	0.102	0.108	0.085 to 0.115	105	70 to 130	2.98	20
AZ05271	Antimony, Total	mg/L	0.000284	0.00176	0.10	0.0993	0.101	0.0979	0.085 to 0.115	98.4	70 to 130	1.28	20
AZ05271	Barium, Total	mg/L	0.00000490	0.0044	0.10	0.0922	0.0885	0.0943	0.085 to 0.115	92.2	70 to 130	4.01	20
AZ05271	Calcium, Total	mg/L	0.0250	0.22	5.00	5.22	5.35	5.23	4.25 to 5.75	104	70 to 130	2.44	20
AZ05271	Lithium, Total	mg/L	-0.0000636	0.022	0.20	0.200	0.202	0.200	0.17 to 0.23	100	70 to 130	0.814	20
AZ05271	Magnesium, Total	mg/L	-0.000776	0.22	5.00	5.25	5.36	5.27	4.25 to 5.75	105	70 to 130	2.10	20

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

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

# Batch QC Summary



To: Dustin Brooks  
 Greg Dyer

Customer Account: WMWGORAP  
 Sample Date: 26-Feb-19  
 Customer ID:  
 Delivery Date: 28-Feb-19

Description: Gorgas Ash Pond - MW-24H DUP

Laboratory ID Number: AZ05267

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample		LCS Limit	Rec		Prec Limit	
							Duplicate	LCS		Rec	Limit		
AZ05271	Sulfate	mg/L	-0.125	0.50	20.0	20.1	-0.170	19.8	18 to 22	100	80 to 120	0.00	20
AZ05270	Solids, Dissolved	mg/L	1.00	25			264	53.0	40 to 60			0.377	5
AZ05270	pH for Alkalinity	SU						7.01	6.95 to 7.05				
AZ05271	Chloride	mg/L	-0.0515	0.50	10.0	10.0	0.20	10.0	9 to 11	100	80 to 120	0.00	20
AZ05270	Alkalinity, Total as CaCO3	mg/L					252	49.8	45.0 to 55.0			0.151	10
AZ05271	Fluoride	mg/L	-0.0586	0.05	2.50	2.61	-0.0625	2.58	2.25 to 2.75	104	80 to 120	0.00	20

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

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CC:



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

**Certificate Of Analysis**  **Alabama Power**



To: Dustin Brooks  
 Greg Dyer

Customer Account: WMWGORAP  
 Sample Date: 26-Feb-19  
 Customer ID:  
 Delivery Date: 28-Feb-19

Description: Gorgas Ash Pond - MW-18V

Laboratory ID Number: AZ05268

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
<b>Metals, Cyanide, Total Phenols</b>										
* Arsenic, Total	DLJ	3/21/2019	EPA 200.8		5.075	0.001	0.005	J	0.00368	mg/L
* Barium, Total	DLJ	3/21/2019	EPA 200.8		5.075	0.002	0.01		0.243	mg/L
* Beryllium, Total	DLJ	3/21/2019	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Boron, Total	GAS	3/5/2019	EPA 200.7		2.03	0.02	0.1		0.109	mg/L
* Calcium, Total	GAS	3/5/2019	EPA 200.7		2.03	0.1	0.5		13.6	mg/L
* Cadmium, Total	DLJ	3/21/2019	EPA 200.8		5.075	0.0003	0.001	U	Not Detected	mg/L
* Antimony, Total	DLJ	3/21/2019	EPA 200.8		5.075	0.0008	0.003	J	0.000980	mg/L
* Molybdenum, Total	DLJ	3/21/2019	EPA 200.8		5.075	0.002	0.01	J	0.00696	mg/L
* Lead, Total	DLJ	3/21/2019	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Cobalt, Total	DLJ	3/21/2019	EPA 200.8		5.075	0.002	0.005	U	Not Detected	mg/L
* Chromium, Total	DLJ	3/21/2019	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Iron, Dissolved	GAS	3/4/2019	EPA 200.7		2.03	0.01	0.05	K	0.288	mg/L
* Iron, Total	GAS	3/5/2019	EPA 200.7		2.03	0.01	0.05		0.834	mg/L
* Mercury, Total by CVAA	ABB	3/15/2019	EPA 245.1		1	0.0003	0.0005	U	Not Detected	mg/L
* Lithium, Total	GAS	3/5/2019	EPA 200.7		2.03	0.01	0.02		0.0423	mg/L
* Magnesium, Total	GAS	3/5/2019	EPA 200.7		2.03	0.1	0.5		4.21	mg/L
* Manganese, Dissolved	DLJ	3/21/2019	EPA 200.8		5.075	0.001	0.005	K	0.110	mg/L
* Manganese, Total	DLJ	3/21/2019	EPA 200.8		5.075	0.001	0.005		0.113	mg/L
* Potassium, Total	DLJ	3/21/2019	EPA 200.8		5.075	0.215	2.5	J	2.37	mg/L
* Sodium, Total	GAS	3/5/2019	EPA 200.7		10.15	1.015	5.075		93.5	mg/L
* Selenium, Total	DLJ	3/21/2019	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Thallium, Total	DLJ	3/21/2019	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L

**General Characteristics**

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

**Comments:** The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified. LBM 04/10/2019

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

# Certificate Of Analysis



To: Dustin Brooks  
 Greg Dyer

Customer Account: WMWGORAP  
 Sample Date: 26-Feb-19  
 Customer ID:  
 Delivery Date: 28-Feb-19

Description: Gorgas Ash Pond - MW-18V

Laboratory ID Number: AZ05268

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
pH for Alkalinity	EMG	3/4/2019	SM 4500H+ B		1		4.00	8.02	SU
Alkalinity, Total as CaCO3	EMG	3/4/2019	SM 2320 B		1		0.1	166	mg/L
Carbonate Alkalinity, as CaCO3	EMG	3/4/2019	SM 4500CO2 D		1			1.62	mg/L
Bicarbonate Alkalinity, as CaCO3	EMG	3/4/2019	SM 4500CO2 D		1			164	mg/L
* Solids, Dissolved	CRB	3/13/2019	SM 2540C		1		25	238	mg/L
Filter Completion Date	CRB	3/5/2019	SM 2540C		1			03/05/2019	Date
* Chloride	JCC	3/1/2019	SM4500CI E		1	0.50	1	7.13	mg/L
* Fluoride	JCC	3/1/2019	SM4500F C		1	0.05	0.1	0.165	mg/L
* Sulfate	JCC	3/5/2019	SM4500SO4 E		2	1.00	2	39.9	mg/L

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

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

# Batch QC Summary



To: Dustin Brooks  
 Greg Dyer

Customer Account: WMWGORAP  
 Sample Date: 26-Feb-19  
 Customer ID:  
 Delivery Date: 28-Feb-19

Description: Gorgas Ash Pond - MW-18V

Laboratory ID Number: AZ05268

Sample	Analysis	Units	MB		Spike	MS	MSD	LCS	LCS		Rec		Prec	Limit
			MB	Limit					Limit	Rec	Limit	Prec		
AZ05271	Boron, Total	mg/L	-0.00444	0.044	1.00	1.01	1.03	1.02	0.85 to 1.15	101	70 to 130	1.93	20	
AZ05271	Arsenic, Total	mg/L	0.00000436	0.0022	0.10	0.0945	0.0926	0.100	0.085 to 0.115	94.5	70 to 130	2.03	20	
AZ05271	Cobalt, Total	mg/L	-0.00000687	0.0044	0.10	0.108	0.105	0.107	0.085 to 0.115	108	70 to 130	2.32	20	
AZ05271	Mercury, Total by CVAA	mg/L	-0.0000172	0.0005	0.004	0.00401	0.00399	0.00411	0.0034 to 0.0046	100	70 to 130	0.632	20	
AZ05271	Mangnese, Dissolved	mg/L	0.00000258	0.0022	0.10	0.0982	0.103		0.085 to 0.115	98.2	70 to 130	4.37	20	
AZ05271	Mangnese, Total	mg/L	0.00000536	0.0022	0.10	0.103	0.0992	0.101	0.085 to 0.115	103	70 to 130	3.43	20	
AZ05271	Lead, Total	mg/L	0.00000381	0.0022	0.10	0.105	0.102	0.108	0.085 to 0.115	105	70 to 130	2.98	20	
AZ05271	Antimony, Total	mg/L	0.000284	0.00176	0.10	0.0993	0.101	0.0979	0.085 to 0.115	98.4	70 to 130	1.28	20	
AZ05271	Chromium, Total	mg/L	0.0000752	0.0044	0.10	0.103	0.101	0.102	0.085 to 0.115	103	70 to 130	1.43	20	
AZ05271	Potassium, Total	mg/L	-0.00441	0.473	10.0	10.4	10.4	10.5	8.5 to 11.5	104	70 to 130	0.398	20	
AZ05271	Sodium, Total	mg/L	0.00435	0.22	5.00	5.06	5.16	5.21	4.25 to 5.75	101	70 to 130	1.87	20	
AZ05271	Barium, Total	mg/L	0.00000490	0.0044	0.10	0.0922	0.0885	0.0943	0.085 to 0.115	92.2	70 to 130	4.01	20	
AZ05271	Calcium, Total	mg/L	0.0250	0.22	5.00	5.22	5.35	5.23	4.25 to 5.75	104	70 to 130	2.44	20	
AZ05271	Lithium, Total	mg/L	-0.0000636	0.022	0.20	0.200	0.202	0.200	0.17 to 0.23	100	70 to 130	0.814	20	
AZ05271	Magnesium, Total	mg/L	-0.000776	0.22	5.00	5.25	5.36	5.27	4.25 to 5.75	105	70 to 130	2.10	20	
AZ05271	Cadmium, Total	mg/L	0.00000000	0.00066	0.10	0.102	0.102	0.103	0.085 to 0.115	102	70 to 130	0.463	20	
AZ05271	Iron, Dissolved	mg/L	0.00371	0.022	0.2	0.202	0.197	0.200	0.17 to 0.23	101	70 to 130	2.52	20	
AZ05271	Iron, Total	mg/L	0.00263	0.022	0.2	0.204	0.207	0.203	0.17 to 0.23	102	70 to 130	1.17	20	
AZ05271	Molybdenum, Total	mg/L	0.00000769	0.0044	0.10	0.105	0.103	0.104	0.085 to 0.115	105	70 to 130	2.21	20	
AZ05271	Thallium, Total	mg/L	0.00000096	0.00044	0.10	0.103	0.100	0.105	0.085 to 0.115	103	70 to 130	2.78	20	
AZ05271	Beryllium, Total	mg/L	0.0000273	0.00132	0.10	0.0937	0.0919	0.0951	0.085 to 0.115	93.7	70 to 130	1.84	20	
AZ05271	Selenium, Total	mg/L	0.000121	0.0044	0.10	0.102	0.100	0.105	0.085 to 0.115	102	70 to 130	2.01	20	

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

**Comments:** The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified. LBM 04/10/2019

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 FAX (205) 257-1654

# Batch QC Summary



To: Dustin Brooks  
 Greg Dyer

Customer Account: WMWGORAP  
 Sample Date: 26-Feb-19  
 Customer ID:  
 Delivery Date: 28-Feb-19

Description: Gorgas Ash Pond - MW-18V

Laboratory ID Number: AZ05268

Sample	Analysis	Units	MB	MB			Sample		LCS	Rec			Prec
				Limit	Spike	MS	Duplicate	LCS	Limit	Rec	Limit	Prec	Limit
AZ05271	Chloride	mg/L	-0.0515	0.50	10.0	10.0	0.20	10.0	9 to 11	100	80 to 120	0.00	20
AZ05270	pH for Alkalinity	SU						7.01	6.95 to 7.05				
AZ05270	Solids, Dissolved	mg/L	1.00	25			264	53.0	40 to 60			0.377	5
AZ05271	Sulfate	mg/L	-0.125	0.50	20.0	20.1	-0.170	19.8	18 to 22	100	80 to 120	0.00	20
AZ05270	Alkalinity, Total as CaCO3	mg/L					252	49.8	45.0 to 55.0			0.151	10
AZ05271	Fluoride	mg/L	-0.0586	0.05	2.50	2.61	-0.0625	2.58	2.25 to 2.75	104	80 to 120	0.00	20

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CC:

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**Certificate Of Analysis**  **Alabama Power**



To: Dustin Brooks  
 Greg Dyer

Customer Account: WMWGORAP  
 Sample Date: 27-Feb-19  
 Customer ID:  
 Delivery Date: 28-Feb-19

Description: Gorgas Ash Pond - MW-29H

Laboratory ID Number: AZ05269

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
<b>Metals, Cyanide, Total Phenols</b>									
* Arsenic, Total	DLJ	3/21/2019	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Barium, Total	DLJ	3/21/2019	EPA 200.8		5.075	0.002	0.01	0.517	mg/L
* Beryllium, Total	DLJ	3/21/2019	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	GAS	3/5/2019	EPA 200.7		2.03	0.02	0.1	J 0.0359	mg/L
* Calcium, Total	GAS	3/5/2019	EPA 200.7		2.03	0.1	0.5	12.1	mg/L
* Cadmium, Total	DLJ	3/21/2019	EPA 200.8		5.075	0.0003	0.001	U Not Detected	mg/L
* Antimony, Total	DLJ	3/21/2019	EPA 200.8		5.075	0.0008	0.003	J 0.000932	mg/L
* Molybdenum, Total	DLJ	3/21/2019	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	DLJ	3/21/2019	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Cobalt, Total	DLJ	3/21/2019	EPA 200.8		5.075	0.002	0.005	U Not Detected	mg/L
* Chromium, Total	DLJ	3/21/2019	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Iron, Dissolved	GAS	3/4/2019	EPA 200.7		2.03	0.01	0.05	K 0.137	mg/L
* Iron, Total	GAS	3/5/2019	EPA 200.7		2.03	0.01	0.05	0.697	mg/L
* Mercury, Total by CVAA	ABB	3/15/2019	EPA 245.1		1	0.0003	0.0005	U Not Detected	mg/L
* Lithium, Total	GAS	3/5/2019	EPA 200.7		2.03	0.01	0.02	0.0700	mg/L
* Magnesium, Total	GAS	3/5/2019	EPA 200.7		2.03	0.1	0.5	4.32	mg/L
* Manganese, Dissolved	DLJ	3/21/2019	EPA 200.8		5.075	0.001	0.005	K 0.0134	mg/L
* Manganese, Total	DLJ	3/21/2019	EPA 200.8		5.075	0.001	0.005	0.0206	mg/L
* Potassium, Total	DLJ	3/21/2019	EPA 200.8		5.075	0.215	2.5	J 2.39	mg/L
* Sodium, Total	GAS	3/5/2019	EPA 200.7		10.15	1.015	5.075	163	mg/L
* Selenium, Total	DLJ	3/21/2019	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	DLJ	3/21/2019	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L

**General Characteristics**

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\* Test results for these accredited parameters conform to the most current applicable TNI/NELAC requirements, with exceptions noted on this report.

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

**Comments:** The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified. LBM 04/10/2019

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

# Certificate Of Analysis Alabama Power



To: Dustin Brooks  
 Greg Dyer

Customer Account: WMWGORAP  
 Sample Date: 27-Feb-19  
 Customer ID:  
 Delivery Date: 28-Feb-19

Description: Gorgas Ash Pond - MW-29H

Laboratory ID Number: AZ05269

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
pH for Alkalinity	EMG	3/4/2019	SM 4500H+ B		1		4.00	8.28	SU
Alkalinity, Total as CaCO3	EMG	3/4/2019	SM 2320 B		1		0.1	330	mg/L
Carbonate Alkalinity, as CaCO3	EMG	3/4/2019	SM 4500CO2 D		1			5.81	mg/L
Bicarbonate Alkalinity, as CaCO3	EMG	3/4/2019	SM 4500CO2 D		1			324	mg/L
* Solids, Dissolved	CRB	3/13/2019	SM 2540C		1		25	414	mg/L
Filter Completion Date	CRB	3/5/2019	SM 2540C		1			03/05/2019	Date
* Chloride	JCC	3/1/2019	SM4500CI E		1	0.50	1	3.09	mg/L
* Fluoride	JCC	3/1/2019	SM4500F C		1	0.05	0.1	0.218	mg/L
* Sulfate	JCC	3/5/2019	SM4500SO4 E		1	0.50	1	20.7	mg/L

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Laboratory certification ID: E571114

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# Batch QC Summary



To: Dustin Brooks  
 Greg Dyer

Customer Account: WMWGORAP  
 Sample Date: 27-Feb-19  
 Customer ID:  
 Delivery Date: 28-Feb-19

Description: Gorgas Ash Pond - MW-29H

Laboratory ID Number: AZ05269

Sample	Analysis	Units	MB		Spike	MS	MSD	LCS	LCS		Rec		Prec Limit	
			MB	Limit					Limit	Rec	Limit	Prec		
AZ05271	Boron, Total	mg/L	-0.00444	0.044	1.00	1.01	1.03	1.02	0.85 to 1.15		101	70 to 130 1.93		20
AZ05271	Arsenic, Total	mg/L	0.00000436	0.0022	0.10	0.0945	0.0926	0.100	0.085 to 0.115		94.5	70 to 130 2.03		20
AZ05271	Beryllium, Total	mg/L	0.0000273	0.00132	0.10	0.0937	0.0919	0.0951	0.085 to 0.115		93.7	70 to 130 1.84		20
AZ05271	Selenium, Total	mg/L	0.000121	0.0044	0.10	0.102	0.100	0.105	0.085 to 0.115		102	70 to 130 2.01		20
AZ05271	Mangenes, Dissolved	mg/L	0.00000258	0.0022	0.10	0.0982	0.103		0.085 to 0.115		98.2	70 to 130 4.37		20
AZ05271	Mangenes, Total	mg/L	0.00000536	0.0022	0.10	0.103	0.0992	0.101	0.085 to 0.115		103	70 to 130 3.43		20
AZ05271	Lead, Total	mg/L	0.00000381	0.0022	0.10	0.105	0.102	0.108	0.085 to 0.115		105	70 to 130 2.98		20
AZ05271	Antimony, Total	mg/L	0.000284	0.00176	0.10	0.0993	0.101	0.0979	0.085 to 0.115		98.4	70 to 130 1.28		20
AZ05271	Chromium, Total	mg/L	0.0000752	0.0044	0.10	0.103	0.101	0.102	0.085 to 0.115		103	70 to 130 1.43		20
AZ05271	Potassium, Total	mg/L	-0.00441	0.473	10.0	10.4	10.4	10.5	8.5 to 11.5		104	70 to 130 0.398		20
AZ05271	Sodium, Total	mg/L	0.00435	0.22	5.00	5.06	5.16	5.21	4.25 to 5.75		101	70 to 130 1.87		20
AZ05271	Cadmium, Total	mg/L	0.00000000	0.00066	0.10	0.102	0.102	0.103	0.085 to 0.115		102	70 to 130 0.463		20
AZ05271	Iron, Dissolved	mg/L	0.00371	0.022	0.2	0.202	0.197	0.200	0.17 to 0.23		101	70 to 130 2.52		20
AZ05271	Iron, Total	mg/L	0.00263	0.022	0.2	0.204	0.207	0.203	0.17 to 0.23		102	70 to 130 1.17		20
AZ05271	Molybdenum, Total	mg/L	0.00000769	0.0044	0.10	0.105	0.103	0.104	0.085 to 0.115		105	70 to 130 2.21		20
AZ05271	Thallium, Total	mg/L	0.00000096	0.00044	0.10	0.103	0.100	0.105	0.085 to 0.115		103	70 to 130 2.78		20
AZ05271	Cobalt, Total	mg/L	-0.00000687	0.0044	0.10	0.108	0.105	0.107	0.085 to 0.115		108	70 to 130 2.32		20
AZ05271	Mercury, Total by CVAA	mg/L	-0.0000172	0.0005	0.004	0.00401	0.00399	0.00411	0.0034 to 0.0046		100	70 to 130 0.632		20
AZ05271	Barium, Total	mg/L	0.00000490	0.0044	0.10	0.0922	0.0885	0.0943	0.085 to 0.115		92.2	70 to 130 4.01		20
AZ05271	Calcium, Total	mg/L	0.0250	0.22	5.00	5.22	5.35	5.23	4.25 to 5.75		104	70 to 130 2.44		20
AZ05271	Lithium, Total	mg/L	-0.0000636	0.022	0.20	0.200	0.202	0.200	0.17 to 0.23		100	70 to 130 0.814		20
AZ05271	Magnesium, Total	mg/L	-0.000776	0.22	5.00	5.25	5.36	5.27	4.25 to 5.75		105	70 to 130 2.10		20

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

**Comments:** The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified. LBM 04/10/2019

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

# Batch QC Summary



To: Dustin Brooks  
 Greg Dyer

Customer Account: WMWGORAP  
 Sample Date: 27-Feb-19  
 Customer ID:  
 Delivery Date: 28-Feb-19

Description: Gorgas Ash Pond - MW-29H

Laboratory ID Number: AZ05269

Sample	Analysis	Units	MB	Limit	Spike	MS	Sample Duplicate	LCS	LCS Limit	Rec	Rec Limit	Prec	Prec Limit
AZ05270	pH for Alkalinity	SU					7.01		6.95 to 7.05				
AZ05271	Sulfate	mg/L	-0.125	0.50	20.0	20.1	-0.170	19.8	18 to 22	100	80 to 120	0.00	20
AZ05270	Solids, Dissolved	mg/L	1.00	25			264	53.0	40 to 60			0.377	5
AZ05271	Chloride	mg/L	-0.0515	0.50	10.0	10.0	0.20	10.0	9 to 11	100	80 to 120	0.00	20
AZ05270	Alkalinity, Total as CaCO3	mg/L					252	49.8	45.0 to 55.0			0.151	10
AZ05271	Fluoride	mg/L	-0.0586	0.05	2.50	2.61	-0.0625	2.58	2.25 to 2.75	104	80 to 120	0.00	20

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CC:



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

**Certificate Of Analysis**  **Alabama Power**



To: Dustin Brooks  
 Greg Dyer

Customer Account: WMWGORAP  
 Sample Date: 27-Feb-19  
 Customer ID:  
 Delivery Date: 28-Feb-19

Description: Gorgas Ash Pond - MW-26H

Laboratory ID Number: AZ05270

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
<b>Metals, Cyanide, Total Phenols</b>									
* Arsenic, Total	DLJ	3/21/2019	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Barium, Total	DLJ	3/21/2019	EPA 200.8		5.075	0.002	0.01	0.622	mg/L
* Beryllium, Total	DLJ	3/21/2019	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	GAS	3/5/2019	EPA 200.7		2.03	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	GAS	3/5/2019	EPA 200.7		2.03	0.1	0.5	29.1	mg/L
* Cadmium, Total	DLJ	3/21/2019	EPA 200.8		5.075	0.0003	0.001	U Not Detected	mg/L
* Antimony, Total	DLJ	3/21/2019	EPA 200.8		5.075	0.0008	0.003	J 0.000940	mg/L
* Molybdenum, Total	DLJ	3/21/2019	EPA 200.8		5.075	0.002	0.01	J 0.00286	mg/L
* Lead, Total	DLJ	3/21/2019	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Cobalt, Total	DLJ	3/21/2019	EPA 200.8		5.075	0.002	0.005	U Not Detected	mg/L
* Chromium, Total	DLJ	3/21/2019	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Iron, Dissolved	GAS	3/4/2019	EPA 200.7		2.03	0.01	0.05	K 0.637	mg/L
* Iron, Total	GAS	3/5/2019	EPA 200.7		2.03	0.01	0.05	1.45	mg/L
* Mercury, Total by CVAA	ABB	3/15/2019	EPA 245.1		1	0.0003	0.0005	U Not Detected	mg/L
* Lithium, Total	GAS	3/5/2019	EPA 200.7		2.03	0.01	0.02	0.0966	mg/L
* Magnesium, Total	GAS	3/5/2019	EPA 200.7		2.03	0.1	0.5	11.5	mg/L
* Manganese, Dissolved	DLJ	3/21/2019	EPA 200.8		5.075	0.001	0.005	K 0.0423	mg/L
* Manganese, Total	DLJ	3/21/2019	EPA 200.8		5.075	0.001	0.005	0.0492	mg/L
* Potassium, Total	DLJ	3/21/2019	EPA 200.8		5.075	0.215	2.5	3.90	mg/L
* Sodium, Total	GAS	3/5/2019	EPA 200.7		10.15	1.015	5.075	81.3	mg/L
* Selenium, Total	DLJ	3/21/2019	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	DLJ	3/21/2019	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L

**General Characteristics**

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

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

# Certificate Of Analysis



To: Dustin Brooks  
 Greg Dyer

Customer Account: WMWGORAP  
 Sample Date: 27-Feb-19  
 Customer ID:  
 Delivery Date: 28-Feb-19

Description: Gorgas Ash Pond - MW-26H

Laboratory ID Number: AZ05270

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
pH for Alkalinity	EMG	3/4/2019	SM 4500H+ B	1			4.00	7.50	SU
Alkalinity, Total as CaCO3	EMG	3/4/2019	SM 2320 B	1			0.1	251	mg/L
Carbonate Alkalinity, as CaCO3	EMG	3/4/2019	SM 4500CO2 D	1				0.74	mg/L
Bicarbonate Alkalinity, as CaCO3	EMG	3/4/2019	SM 4500CO2 D	1				250	mg/L
* Solids, Dissolved	CRB	3/13/2019	SM 2540C	1			25	266	mg/L
Filter Completion Date	CRB	3/5/2019	SM 2540C	1				03/05/2019	Date
* Chloride	JCC	3/1/2019	SM4500CI E	1		0.50	1	2.87	mg/L
* Fluoride	JCC	3/1/2019	SM4500F C	1		0.05	0.1	0.140	mg/L
* Sulfate	JCC	3/5/2019	SM4500SO4 E	1		0.50	1	4.89	mg/L

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Laboratory certification ID: E571114

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Expiration: June 30, 2019

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# Batch QC Summary



To: Dustin Brooks  
 Greg Dyer

Customer Account: WMWGORAP  
 Sample Date: 27-Feb-19  
 Customer ID:  
 Delivery Date: 28-Feb-19

Description: Gorgas Ash Pond - MW-26H

Laboratory ID Number: AZ05270

Sample	Analysis	Units	MB		Spike	MS	MSD	LCS	LCS		Rec		Prec Limit	
			MB	Limit					Limit	Rec	Limit	Prec		
AZ05271	Boron, Total	mg/L	-0.00444	0.044	1.00	1.01	1.03	1.02	0.85 to 1.15		101	70 to 130 1.93		20
AZ05271	Arsenic, Total	mg/L	0.00000436	0.0022	0.10	0.0945	0.0926	0.100	0.085 to 0.115		94.5	70 to 130 2.03		20
AZ05271	Cobalt, Total	mg/L	-0.00000687	0.0044	0.10	0.108	0.105	0.107	0.085 to 0.115		108	70 to 130 2.32		20
AZ05271	Mercury, Total by CVAA	mg/L	-0.0000172	0.0005	0.004	0.00401	0.00399	0.00411	0.0034 to 0.0046		100	70 to 130 0.632		20
AZ05271	Barium, Total	mg/L	0.00000490	0.0044	0.10	0.0922	0.0885	0.0943	0.085 to 0.115		92.2	70 to 130 4.01		20
AZ05271	Calcium, Total	mg/L	0.0250	0.22	5.00	5.22	5.35	5.23	4.25 to 5.75		104	70 to 130 2.44		20
AZ05271	Lithium, Total	mg/L	-0.0000636	0.022	0.20	0.200	0.202	0.200	0.17 to 0.23		100	70 to 130 0.814		20
AZ05271	Magnesium, Total	mg/L	-0.000776	0.22	5.00	5.25	5.36	5.27	4.25 to 5.75		105	70 to 130 2.10		20
AZ05271	Chromium, Total	mg/L	0.0000752	0.0044	0.10	0.103	0.101	0.102	0.085 to 0.115		103	70 to 130 1.43		20
AZ05271	Potassium, Total	mg/L	-0.00441	0.473	10.0	10.4	10.4	10.5	8.5 to 11.5		104	70 to 130 0.398		20
AZ05271	Sodium, Total	mg/L	0.00435	0.22	5.00	5.06	5.16	5.21	4.25 to 5.75		101	70 to 130 1.87		20
AZ05271	Cadmium, Total	mg/L	0.00000000	0.00066	0.10	0.102	0.102	0.103	0.085 to 0.115		102	70 to 130 0.463		20
AZ05271	Iron, Dissolved	mg/L	0.00371	0.022	0.2	0.202	0.197	0.200	0.17 to 0.23		101	70 to 130 2.52		20
AZ05271	Iron, Total	mg/L	0.00263	0.022	0.2	0.204	0.207	0.203	0.17 to 0.23		102	70 to 130 1.17		20
AZ05271	Molybdenum, Total	mg/L	0.00000769	0.0044	0.10	0.105	0.103	0.104	0.085 to 0.115		105	70 to 130 2.21		20
AZ05271	Thallium, Total	mg/L	0.00000096	0.00044	0.10	0.103	0.100	0.105	0.085 to 0.115		103	70 to 130 2.78		20
AZ05271	Beryllium, Total	mg/L	0.0000273	0.00132	0.10	0.0937	0.0919	0.0951	0.085 to 0.115		93.7	70 to 130 1.84		20
AZ05271	Selenium, Total	mg/L	0.000121	0.0044	0.10	0.102	0.100	0.105	0.085 to 0.115		102	70 to 130 2.01		20
AZ05271	Mangenes, Dissolved	mg/L	0.00000258	0.0022	0.10	0.0982	0.103		0.085 to 0.115		98.2	70 to 130 4.37		20
AZ05271	Mangenes, Total	mg/L	0.00000536	0.0022	0.10	0.103	0.0992	0.101	0.085 to 0.115		103	70 to 130 3.43		20
AZ05271	Lead, Total	mg/L	0.00000381	0.0022	0.10	0.105	0.102	0.108	0.085 to 0.115		105	70 to 130 2.98		20
AZ05271	Antimony, Total	mg/L	0.000284	0.00176	0.10	0.0993	0.101	0.0979	0.085 to 0.115		98.4	70 to 130 1.28		20

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

**Comments:** The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified. LBM 04/10/2019

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 FAX (205) 257-1654

# Batch QC Summary



To: Dustin Brooks  
 Greg Dyer

Customer Account: WMWGORAP  
 Sample Date: 27-Feb-19  
 Customer ID:  
 Delivery Date: 28-Feb-19

Description: Gorgas Ash Pond - MW-26H

Laboratory ID Number: AZ05270

Sample	Analysis	Units	MB	Limit	Spike	MS	Sample Duplicate	LCS	LCS Limit	Rec	Rec Limit	Prec	Prec Limit
AZ05270	pH for Alkalinity	SU					7.01		6.95 to 7.05				
AZ05271	Sulfate	mg/L	-0.125	0.50	20.0	20.1	-0.170	19.8	18 to 22	100	80 to 120	0.00	20
AZ05270	Solids, Dissolved	mg/L	1.00	25			264	53.0	40 to 60			0.377	5
AZ05271	Chloride	mg/L	-0.0515	0.50	10.0	10.0	0.20	10.0	9 to 11	100	80 to 120	0.00	20
AZ05270	Alkalinity, Total as CaCO3	mg/L					252	49.8	45.0 to 55.0			0.151	10
AZ05271	Fluoride	mg/L	-0.0586	0.05	2.50	2.61	-0.0625	2.58	2.25 to 2.75	104	80 to 120	0.00	20

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CC:

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 Calera, AL 35040  
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**Certificate Of Analysis**  **Alabama Power**



To: Dustin Brooks  
 Greg Dyer

Customer Account: WMWGORAPEB  
 Sample Date: 27-Feb-19  
 Customer ID:  
 Delivery Date: 28-Feb-19

Description: Gorgas Ash Pond Equipment Blank

Laboratory ID Number: AZ05271

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
<b>Metals, Cyanide, Total Phenols</b>										
* Arsenic, Total	DLJ	3/21/2019	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Barium, Total	DLJ	3/21/2019	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Beryllium, Total	DLJ	3/21/2019	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Boron, Total	GAS	3/5/2019	EPA 200.7		2.03	0.02	0.1	U	Not Detected	mg/L
* Calcium, Total	GAS	3/5/2019	EPA 200.7		2.03	0.1	0.5	U	Not Detected	mg/L
* Cadmium, Total	DLJ	3/21/2019	EPA 200.8		5.075	0.0003	0.001	U	Not Detected	mg/L
* Antimony, Total	DLJ	3/21/2019	EPA 200.8		5.075	0.0008	0.003	J	0.000829	mg/L
* Molybdenum, Total	DLJ	3/21/2019	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Lead, Total	DLJ	3/21/2019	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Cobalt, Total	DLJ	3/21/2019	EPA 200.8		5.075	0.002	0.005	U	Not Detected	mg/L
* Chromium, Total	DLJ	3/21/2019	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Iron, Dissolved	GAS	3/4/2019	EPA 200.7		2.03	0.01	0.05	U	Not Detected	mg/L
* Iron, Total	GAS	3/5/2019	EPA 200.7		2.03	0.01	0.05	U	Not Detected	mg/L
* Mercury, Total by CVAA	ABB	3/15/2019	EPA 245.1		1	0.0003	0.0005	U	Not Detected	mg/L
* Lithium, Total	GAS	3/5/2019	EPA 200.7		2.03	0.01	0.02	U	Not Detected	mg/L
* Magnesium, Total	GAS	3/5/2019	EPA 200.7		2.03	0.1	0.5	U	Not Detected	mg/L
* Manganese, Dissolved	DLJ	3/21/2019	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Manganese, Total	DLJ	3/21/2019	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Potassium, Total	DLJ	3/21/2019	EPA 200.8		5.075	0.215	2.5	U	Not Detected	mg/L
* Sodium, Total	GAS	3/5/2019	EPA 200.7		2.03	0.1	0.5	U	Not Detected	mg/L
* Selenium, Total	DLJ	3/21/2019	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Thallium, Total	DLJ	3/21/2019	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L

**General Characteristics**

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

**Comments:** The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified. LBM 04/10/2019

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

# Certificate Of Analysis Alabama Power



To: Dustin Brooks  
 Greg Dyer

Customer Account: WMWGORAPEB  
 Sample Date: 27-Feb-19  
 Customer ID:  
 Delivery Date: 28-Feb-19

Description: Gorgas Ash Pond Equipment Blank

Laboratory ID Number: AZ05271

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
* Solids, Dissolved	CRB	3/13/2019	SM 2540C		1		25	U Not Detected	mg/L
Filter Completion Date	CRB	3/5/2019	SM 2540C		1			03/05/2019	Date
* Chloride	JCC	3/1/2019	SM4500Cl E		1	0.50	1	U Not Detected	mg/L
* Fluoride	JCC	3/1/2019	SM4500F C		1	0.05	0.1	U Not Detected	mg/L
* Sulfate	JCC	3/5/2019	SM4500SO4 E		1	0.50	1	U Not Detected	mg/L

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 Calera, AL 35040  
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# Batch QC Summary



To: Dustin Brooks  
 Greg Dyer

Customer Account: WMWGORAPEB  
 Sample Date: 27-Feb-19  
 Customer ID:  
 Delivery Date: 28-Feb-19

Description: Gorgas Ash Pond Equipment Blank

Laboratory ID Number: AZ05271

Sample	Analysis	Units	MB		Spike	MS	MSD	LCS	LCS		Rec		Prec Limit
			MB	Limit					Limit	Rec	Limit	Prec	
AZ05271	Boron, Total	mg/L	-0.00444	0.044	1.00	1.01	1.03	1.02	0.85 to 1.15	101	70 to 130	1.93	20
AZ05271	Arsenic, Total	mg/L	0.00000436	0.0022	0.10	0.0945	0.0926	0.100	0.085 to 0.115	94.5	70 to 130	2.03	20
AZ05271	Beryllium, Total	mg/L	0.0000273	0.00132	0.10	0.0937	0.0919	0.0951	0.085 to 0.115	93.7	70 to 130	1.84	20
AZ05271	Selenium, Total	mg/L	0.000121	0.0044	0.10	0.102	0.100	0.105	0.085 to 0.115	102	70 to 130	2.01	20
AZ05271	Chromium, Total	mg/L	0.0000752	0.0044	0.10	0.103	0.101	0.102	0.085 to 0.115	103	70 to 130	1.43	20
AZ05271	Potassium, Total	mg/L	-0.00441	0.473	10.0	10.4	10.4	10.5	8.5 to 11.5	104	70 to 130	0.398	20
AZ05271	Sodium, Total	mg/L	0.00435	0.22	5.00	5.06	5.16	5.21	4.25 to 5.75	101	70 to 130	1.87	20
AZ05271	Cobalt, Total	mg/L	-0.00000687	0.0044	0.10	0.108	0.105	0.107	0.085 to 0.115	108	70 to 130	2.32	20
AZ05271	Mercury, Total by CVAA	mg/L	-0.0000172	0.0005	0.004	0.00401	0.00399	0.00411	0.0034 to 0.0046	100	70 to 130	0.632	20
AZ05271	Barium, Total	mg/L	0.00000490	0.0044	0.10	0.0922	0.0885	0.0943	0.085 to 0.115	92.2	70 to 130	4.01	20
AZ05271	Calcium, Total	mg/L	0.0250	0.22	5.00	5.22	5.35	5.23	4.25 to 5.75	104	70 to 130	2.44	20
AZ05271	Lithium, Total	mg/L	-0.0000636	0.022	0.20	0.200	0.202	0.200	0.17 to 0.23	100	70 to 130	0.814	20
AZ05271	Magnesium, Total	mg/L	-0.000776	0.22	5.00	5.25	5.36	5.27	4.25 to 5.75	105	70 to 130	2.10	20
AZ05271	Cadmium, Total	mg/L	0.00000000	0.00066	0.10	0.102	0.102	0.103	0.085 to 0.115	102	70 to 130	0.463	20
AZ05271	Iron, Dissolved	mg/L	0.00371	0.022	0.2	0.202	0.197	0.200	0.17 to 0.23	101	70 to 130	2.52	20
AZ05271	Iron, Total	mg/L	0.00263	0.022	0.2	0.204	0.207	0.203	0.17 to 0.23	102	70 to 130	1.17	20
AZ05271	Molybdenum, Total	mg/L	0.00000769	0.0044	0.10	0.105	0.103	0.104	0.085 to 0.115	105	70 to 130	2.21	20
AZ05271	Thallium, Total	mg/L	0.00000096	0.00044	0.10	0.103	0.100	0.105	0.085 to 0.115	103	70 to 130	2.78	20
AZ05271	Mangnese, Dissolved	mg/L	0.00000258	0.0022	0.10	0.0982	0.103		0.085 to 0.115	98.2	70 to 130	4.37	20
AZ05271	Mangnese, Total	mg/L	0.00000536	0.0022	0.10	0.103	0.0992	0.101	0.085 to 0.115	103	70 to 130	3.43	20
AZ05271	Lead, Total	mg/L	0.00000381	0.0022	0.10	0.105	0.102	0.108	0.085 to 0.115	105	70 to 130	2.98	20
AZ05271	Antimony, Total	mg/L	0.000284	0.00176	0.10	0.0993	0.101	0.0979	0.085 to 0.115	98.4	70 to 130	1.28	20

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

**Comments:** The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified. LBM 04/10/2019

Alabama Power General Test Laboratory  
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 Calera, AL 35040  
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 FAX (205) 257-1654

## Batch QC Summary



To: Dustin Brooks  
 Greg Dyer

Customer Account: WMWGORAPEB  
 Sample Date: 27-Feb-19  
 Customer ID:  
 Delivery Date: 28-Feb-19

Description: Gorgas Ash Pond Equipment Blank

Laboratory ID Number: AZ05271

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	LCS	LCS Limit	Rec	Rec Limit	Prec	Prec Limit
AZ05270	Solids, Dissolved	mg/L	1.00	25			264	53.0	40 to 60			0.377	5
AZ05271	Sulfate	mg/L	-0.125	0.50	20.0	20.1	-0.170	19.8	18 to 22	100	80 to 120	0.00	20
AZ05271	Chloride	mg/L	-0.0515	0.50	10.0	10.0	0.20	10.0	9 to 11	100	80 to 120	0.00	20
AZ05271	Fluoride	mg/L	-0.0586	0.05	2.50	2.61	-0.0625	2.58	2.25 to 2.75	104	80 to 120	0.00	20

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CC:



Alabama Power General Test Laboratory  
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 Calera, AL 35040  
 (205) 664-6032 or 6171  
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# Certificate Of Analysis



To: Dustin Brooks  
 Greg Dyer

Customer Account: WMWGORAP  
 Sample Date: 13-Mar-19  
 Customer ID:  
 Delivery Date: 18-Mar-19

Description: Gorgas Ash Pond - MW-28H

Laboratory ID Number: AZ06914

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
<b>Metals, Cyanide, Total Phenols</b>										
* Arsenic, Total	DLJ	3/21/2019	EPA 200.8		5.075	0.001	0.005	J	0.00142	mg/L
* Barium, Total	DLJ	3/21/2019	EPA 200.8		5.075	0.002	0.01		0.164	mg/L
* Beryllium, Total	DLJ	3/21/2019	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Boron, Total	GAS	4/2/2019	EPA 200.7		2.03	0.02	0.1	J	0.0819	mg/L
* Calcium, Total	GAS	4/2/2019	EPA 200.7		2.03	0.1	0.5		3.42	mg/L
* Cadmium, Total	DLJ	3/21/2019	EPA 200.8		5.075	0.0003	0.001	U	Not Detected	mg/L
* Antimony, Total	DLJ	3/21/2019	EPA 200.8		5.075	0.0008	0.003	J	0.00241	mg/L
* Molybdenum, Total	DLJ	3/21/2019	EPA 200.8		5.075	0.002	0.01	J	0.00555	mg/L
* Lead, Total	DLJ	3/21/2019	EPA 200.8		5.075	0.001	0.005	J	0.00208	mg/L
* Cobalt, Total	DLJ	3/21/2019	EPA 200.8		5.075	0.002	0.005	U	Not Detected	mg/L
* Chromium, Total	DLJ	3/21/2019	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Iron, Dissolved	GAS	4/1/2019	EPA 200.7		2.03	0.01	0.05	J	0.0145	mg/L
* Iron, Total	GAS	4/2/2019	EPA 200.7		2.03	0.01	0.05		4.02	mg/L
* Mercury, Total by CVAA	ABB	3/25/2019	EPA 245.1		1	0.0003	0.0005	U	Not Detected	mg/L
* Lithium, Total	GAS	4/2/2019	EPA 200.7		2.03	0.01	0.02		0.0625	mg/L
* Magnesium, Total	GAS	4/2/2019	EPA 200.7		2.03	0.1	0.5		2.08	mg/L
* Manganese, Dissolved	DLJ	3/21/2019	EPA 200.8		5.075	0.001	0.005	J	0.00362	mg/L
* Manganese, Total	DLJ	3/21/2019	EPA 200.8		5.075	0.001	0.005		0.0187	mg/L
* Potassium, Total	DLJ	3/21/2019	EPA 200.8		5.075	0.215	2.5	J	1.19	mg/L
* Sodium, Total	GAS	4/2/2019	EPA 200.7		10.15	1.015	5.075		174	mg/L
* Selenium, Total	DLJ	3/21/2019	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Thallium, Total	DLJ	3/21/2019	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L

**General Characteristics**

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

**Comments:** The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified. LBM 04/10/2019

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

# Certificate Of Analysis



To: Dustin Brooks  
 Greg Dyer

Customer Account: WMWGORAP  
 Sample Date: 13-Mar-19  
 Customer ID:  
 Delivery Date: 18-Mar-19

Description: Gorgas Ash Pond - MW-28H

Laboratory ID Number: AZ06914

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
pH for Alkalinity	EMG	3/26/2019	SM 4500H+ B		1		4.00	8.46	SU
Alkalinity, Total as CaCO3	EMG	3/26/2019	SM 2320 B		1		0.1	319	mg/L
Carbonate Alkalinity, as CaCO3	EMG	3/26/2019	SM 4500CO2 D		1			8.42	mg/L
Bicarbonate Alkalinity, as CaCO3	EMG	3/26/2019	SM 4500CO2 D		1			310	mg/L
* Solids, Dissolved	CRB	3/20/2019	SM 2540C		1		25	514	mg/L
Filter Completion Date	CES	3/18/2019	SM 2540C		1			3/18/2019	Date
* Chloride	JCC	4/1/2019	SM4500CI E		1	0.50	1	8.00	mg/L
* Fluoride	JCC	3/25/2019	SM4500F C		1	0.05	0.1	0.187	mg/L
* Sulfate	JCC	4/2/2019	SM4500SO4 E		1	0.50	1	30.0	mg/L

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

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Alabama Power General Test Laboratory  
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# Batch QC Summary



To: Dustin Brooks  
 Greg Dyer

Customer Account: WMWGORAP  
 Sample Date: 13-Mar-19  
 Customer ID:  
 Delivery Date: 18-Mar-19

Description: Gorgas Ash Pond - MW-28H

Laboratory ID Number: AZ06914

Sample	Analysis	Units	MB		Spike	MS	MSD	LCS	LCS		Rec		Prec Limit	
			MB	Limit					Limit	Rec	Limit	Prec		
AZ06915	Iron, Total	mg/L	-0.000168	0.022	0.2	0.210	0.208	0.201	0.17 to 0.23		105	70 to 130 0.920		20
AZ06915	Arsenic, Total	mg/L	0.00000436	0.0022	0.10	0.0983	0.0960	0.100	0.085 to 0.115		97.2	70 to 130 2.41		20
AZ06915	Magnesium, Total	mg/L	-0.0160	0.22	5.00	5.84	5.83	5.27	4.25 to 5.75		107	70 to 130 0.216		20
AZ06915	Lead, Total	mg/L	0.00000381	0.0022	0.10	0.103	0.101	0.108	0.085 to 0.115		103	70 to 130 1.72		20
AZ06915	Selenium, Total	mg/L	0.000121	0.0044	0.10	0.102	0.100	0.105	0.085 to 0.115		102	70 to 130 1.92		20
AZ06915	Barium, Total	mg/L	0.00000490	0.0044	0.10	0.156	0.152	0.0943	0.085 to 0.115		92.3	70 to 130 2.91		20
AZ06915	Antimony, Total	mg/L	0.000284	0.00176	0.10	0.107	0.105	0.0979	0.085 to 0.115		105	70 to 130 2.05		20
AZ06915	Beryllium, Total	mg/L	0.0000273	0.00132	0.10	0.0933	0.0918	0.0951	0.085 to 0.115		93.3	70 to 130 1.62		20
AZ06915	Cobalt, Total	mg/L	-0.00000687	0.0044	0.10	0.107	0.105	0.107	0.085 to 0.115		107	70 to 130 2.26		20
AZ06915	Chromium, Total	mg/L	0.0000752	0.0044	0.10	0.101	0.0986	0.102	0.085 to 0.115		101	70 to 130 2.47		20
AZ06915	Molybdenum, Total	mg/L	0.00000769	0.0044	0.10	0.111	0.109	0.104	0.085 to 0.115		103	70 to 130 1.14		20
AZ06915	Iron, Dissolved	mg/L	0.000334	0.022	0.2	0.205	0.204	0.202	0.17 to 0.23		103	70 to 130 0.429		20
AZ06915	Mercury, Total by CVAA	mg/L	-0.00000310	0.0005	0.004	0.00377	0.00377	0.00380	0.0034 to 0.0046		94.2	70 to 130 0.0902		20
AZ06915	Potassium, Total	mg/L	-0.00441	0.473	10.0	11.3	11.4	10.5	8.5 to 11.5		103	70 to 130 0.712		20
AZ06915	Manganese, Total	mg/L	0.00000536	0.0022	0.10	0.104	0.103	0.101	0.085 to 0.115		100	70 to 130 0.719		20
AZ06915	Thallium, Total	mg/L	0.00000096	0.00044	0.10	0.101	0.0986	0.105	0.085 to 0.115		101	70 to 130 2.11		20
AZ06915	Boron, Total	mg/L	0.000385	0.044	1.00	1.07	1.06	0.991	0.85 to 1.15		101	70 to 130 1.30		20
AZ06915	Calcium, Total	mg/L	-0.0173	0.22	5.00	6.94	6.91	5.08	4.25 to 5.75		103	70 to 130 0.398		20
AZ06915	Cadmium, Total	mg/L	0.00000000	0.00066	0.10	0.102	0.101	0.103	0.085 to 0.115		102	70 to 130 0.353		20
AZ06915	Lithium, Total	mg/L	-0.0000115	0.022	0.20	0.293	0.289	0.198	0.17 to 0.23		117	70 to 130 1.23		20
AZ06915	Manganese, Dissolved	mg/L	-0.00000267	0.0022	0.10	0.104	0.106		0.085 to 0.115		100	70 to 130 2.08		20
AZ06915	Sodium, Total	mg/L	-0.00261	0.22	5.00	182	165	5.01	4.25 to 5.75		290	70 to 130 9.93		20

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

**Comments:** The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified. LBM 04/10/2019

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# Batch QC Summary



To: Dustin Brooks  
 Greg Dyer

Customer Account: WMWGORAP  
 Sample Date: 13-Mar-19  
 Customer ID:  
 Delivery Date: 18-Mar-19

Description: Gorgas Ash Pond - MW-28H

Laboratory ID Number: AZ06914

Sample	Analysis	Units	MB	Limit	Spike	MS	Sample Duplicate	LCS	LCS Limit	Rec	Rec Limit	Prec	Prec Limit
AZ06915	Solids, Dissolved	mg/L	-10.0	25			370	52.0	40 to 60			0.543	5
AZ06915	pH for Alkalinity	SU						7.01	6.95 to 7.05				
AZ06915	Fluoride	mg/L	0.0415	0.05	2.50	2.73	0.184	2.54	2.25 to 2.75	102	80 to 120	2.20	20
AZ06915	Alkalinity, Total as CaCO3	mg/L					314	50.0	45.0 to 55.0			0.408	10
AZ06915	Chloride	mg/L	0.0489	0.50	10.0	18.3	8.04	9.86	9 to 11	104	80 to 120	1.88	20
AZ06915	Sulfate	mg/L	-0.0435	0.50	20.0	32.3	13.0	19.9	18 to 22	97.0	80 to 120	0.772	20

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Laboratory certification ID: E571114

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Expiration: June 30, 2019

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CC:

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**Certificate Of Analysis**  **Alabama Power**



To: Dustin Brooks  
 Greg Dyer

Customer Account: WMWGORAP  
 Sample Date: 13-Mar-19  
 Customer ID:  
 Delivery Date: 18-Mar-19

Description: Gorgas Ash Pond - MW-28HDIS

Laboratory ID Number: AZ06915

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
<b>Metals, Cyanide, Total Phenols</b>									
* Arsenic, Total	DLJ	3/21/2019	EPA 200.8		5.075	0.001	0.005	J 0.00110	mg/L
* Barium, Total	DLJ	3/21/2019	EPA 200.8		5.075	0.002	0.01	0.0640	mg/L
* Beryllium, Total	DLJ	3/21/2019	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	GAS	4/2/2019	EPA 200.7		2.03	0.02	0.1	J 0.0644	mg/L
* Calcium, Total	GAS	4/2/2019	EPA 200.7		2.03	0.1	0.5	1.78	mg/L
* Cadmium, Total	DLJ	3/21/2019	EPA 200.8		5.075	0.0003	0.001	U Not Detected	mg/L
* Antimony, Total	DLJ	3/21/2019	EPA 200.8		5.075	0.0008	0.003	J 0.00214	mg/L
* Molybdenum, Total	DLJ	3/21/2019	EPA 200.8		5.075	0.002	0.01	J 0.00735	mg/L
* Lead, Total	DLJ	3/21/2019	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Cobalt, Total	DLJ	3/21/2019	EPA 200.8		5.075	0.002	0.005	U Not Detected	mg/L
* Chromium, Total	DLJ	3/21/2019	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Iron, Dissolved	GAS	4/1/2019	EPA 200.7		2.03	0.01	0.05	U Not Detected	mg/L
* Iron, Total	GAS	4/2/2019	EPA 200.7		2.03	0.01	0.05	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	3/25/2019	EPA 245.1		1	0.0003	0.0005	U Not Detected	mg/L
* Lithium, Total	GAS	4/2/2019	EPA 200.7		2.03	0.01	0.02	0.0584	mg/L
* Magnesium, Total	GAS	4/2/2019	EPA 200.7		2.03	0.1	0.5	J 0.489	mg/L
* Manganese, Dissolved	DLJ	3/21/2019	EPA 200.8		5.075	0.001	0.005	J 0.00346	mg/L
* Manganese, Total	DLJ	3/21/2019	EPA 200.8		5.075	0.001	0.005	J 0.00349	mg/L
* Potassium, Total	DLJ	3/21/2019	EPA 200.8		5.075	0.215	2.5	J 1.02	mg/L
* Sodium, Total	GAS	4/2/2019	EPA 200.7		10.15	1.015	5.075	168	mg/L
* Selenium, Total	DLJ	3/21/2019	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	DLJ	3/21/2019	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L

**General Characteristics**

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.

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

\* Test results for these accredited parameters conform to the most current applicable TNI/NELAC requirements, with exceptions noted on this report.

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

**Comments:** The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified. Matrix spike is invalid for Sodium due to sample concentration.  
 LBM 04/10/2019

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

# Certificate Of Analysis



To: Dustin Brooks  
 Greg Dyer

Customer Account: WMWGORAP  
 Sample Date: 13-Mar-19  
 Customer ID:  
 Delivery Date: 18-Mar-19

Description: Gorgas Ash Pond - MW-28HDIS

Laboratory ID Number: AZ06915

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
pH for Alkalinity	EMG	3/26/2019	SM 4500H+ B		1		4.00	8.50	SU
Alkalinity, Total as CaCO3	EMG	3/26/2019	SM 2320 B		1		0.1	313	mg/L
Carbonate Alkalinity, as CaCO3	EMG	3/26/2019	SM 4500CO2 D		1			9.03	mg/L
Bicarbonate Alkalinity, as CaCO3	EMG	3/26/2019	SM 4500CO2 D		1			304	mg/L
* Solids, Dissolved	CRB	3/20/2019	SM 2540C		1		25	366	mg/L
Filter Completion Date	CES	3/18/2019	SM 2540C		1			3/18/2019	Date
* Chloride	JCC	4/1/2019	SM4500Cl E		1	0.50	1	7.89	mg/L
* Fluoride	JCC	3/25/2019	SM4500F C		1	0.05	0.1	0.180	mg/L
* Sulfate	JCC	4/2/2019	SM4500SO4 E		1	0.50	1	12.9	mg/L

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

**Comments:** The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified. Matrix spike is invalid for Sodium due to sample concentration.  
 LBM 04/10/2019

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

# Batch QC Summary



To: Dustin Brooks  
 Greg Dyer

Customer Account: WMWGORAP  
 Sample Date: 13-Mar-19  
 Customer ID:  
 Delivery Date: 18-Mar-19

Description: Gorgas Ash Pond - MW-28HDIS

Laboratory ID Number: AZ06915

Sample	Analysis	Units	MB		Spike	MS	MSD	LCS	LCS		Rec		Prec Limit	
			MB	Limit					Limit	Rec	Limit	Prec		
AZ06915	Iron, Total	mg/L	-0.000168	0.022	0.2	0.210	0.208	0.201	0.17 to 0.23		105	70 to 130 0.920		20
AZ06915	Beryllium, Total	mg/L	0.0000273	0.00132	0.10	0.0933	0.0918	0.0951	0.085 to 0.115		93.3	70 to 130 1.62		20
AZ06915	Cobalt, Total	mg/L	-0.0000687	0.0044	0.10	0.107	0.105	0.107	0.085 to 0.115		107	70 to 130 2.26		20
AZ06915	Barium, Total	mg/L	0.0000490	0.0044	0.10	0.156	0.152	0.0943	0.085 to 0.115		92.3	70 to 130 2.91		20
AZ06915	Antimony, Total	mg/L	0.000284	0.00176	0.10	0.107	0.105	0.0979	0.085 to 0.115		105	70 to 130 2.05		20
AZ06915	Arsenic, Total	mg/L	0.0000436	0.0022	0.10	0.0983	0.0960	0.100	0.085 to 0.115		97.2	70 to 130 2.41		20
AZ06915	Magnesium, Total	mg/L	-0.0160	0.22	5.00	5.84	5.83	5.27	4.25 to 5.75		107	70 to 130 0.216		20
AZ06915	Lead, Total	mg/L	0.0000381	0.0022	0.10	0.103	0.101	0.108	0.085 to 0.115		103	70 to 130 1.72		20
AZ06915	Selenium, Total	mg/L	0.000121	0.0044	0.10	0.102	0.100	0.105	0.085 to 0.115		102	70 to 130 1.92		20
AZ06915	Chromium, Total	mg/L	0.0000752	0.0044	0.10	0.101	0.0986	0.102	0.085 to 0.115		101	70 to 130 2.47		20
AZ06915	Molybdenum, Total	mg/L	0.0000769	0.0044	0.10	0.111	0.109	0.104	0.085 to 0.115		103	70 to 130 1.14		20
AZ06915	Boron, Total	mg/L	0.000385	0.044	1.00	1.07	1.06	0.991	0.85 to 1.15		101	70 to 130 1.30		20
AZ06915	Calcium, Total	mg/L	-0.0173	0.22	5.00	6.94	6.91	5.08	4.25 to 5.75		103	70 to 130 0.398		20
AZ06915	Cadmium, Total	mg/L	0.0000000	0.00066	0.10	0.102	0.101	0.103	0.085 to 0.115		102	70 to 130 0.353		20
AZ06915	Lithium, Total	mg/L	-0.0000115	0.022	0.20	0.293	0.289	0.198	0.17 to 0.23		117	70 to 130 1.23		20
AZ06915	Manganese, Dissolved	mg/L	-0.0000267	0.0022	0.10	0.104	0.106		0.085 to 0.115		100	70 to 130 2.08		20
AZ06915	Sodium, Total	mg/L	-0.00261	0.22	5.00	182	165	5.01	4.25 to 5.75		290	70 to 130 9.93		20
AZ06915	Iron, Dissolved	mg/L	0.000334	0.022	0.2	0.205	0.204	0.202	0.17 to 0.23		103	70 to 130 0.429		20
AZ06915	Mercury, Total by CVAA	mg/L	-0.00000310	0.0005	0.004	0.00377	0.00377	0.00380	0.0034 to 0.0046		94.2	70 to 130 0.0902		20
AZ06915	Potassium, Total	mg/L	-0.00441	0.473	10.0	11.3	11.4	10.5	8.5 to 11.5		103	70 to 130 0.712		20
AZ06915	Manganese, Total	mg/L	0.00000536	0.0022	0.10	0.104	0.103	0.101	0.085 to 0.115		100	70 to 130 0.719		20
AZ06915	Thallium, Total	mg/L	0.00000096	0.00044	0.10	0.101	0.0986	0.105	0.085 to 0.115		101	70 to 130 2.11		20

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

**Comments:** The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified. Matrix spike is invalid for Sodium due to sample concentration.  
 LBM 04/10/2019

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

# Batch QC Summary



To: Dustin Brooks  
 Greg Dyer

Customer Account: WMWGORAP  
 Sample Date: 13-Mar-19  
 Customer ID:  
 Delivery Date: 18-Mar-19

Description: Gorgas Ash Pond - MW-28HDIS

Laboratory ID Number: AZ06915

Sample	Analysis	Units MB	MB Limit	Spike	MS	Sample Duplicate	LCS	LCS Limit	Rec	Rec Limit	Prec	Prec Limit
AZ06915	pH for Alkalinity	SU					7.01	6.95 to 7.05				
AZ06915	Solids, Dissolved	mg/L -10.0	25			370	52.0	40 to 60			0.543	5
AZ06915	Fluoride	mg/L 0.0415	0.05	2.50	2.73	0.184	2.54	2.25 to 2.75	102	80 to 120	2.20	20
AZ06915	Alkalinity, Total as CaCO3	mg/L				314	50.0	45.0 to 55.0			0.408	10
AZ06915	Chloride	mg/L 0.0489	0.50	10.0	18.3	8.04	9.86	9 to 11	104	80 to 120	1.88	20
AZ06915	Sulfate	mg/L -0.0435	0.50	20.0	32.3	13.0	19.9	18 to 22	97.0	80 to 120	0.772	20

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

**Comments:** The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified. Matrix spike is invalid for Sodium due to sample concentration.  
 LBM 04/10/2019

CC:





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
B	Analyte found in reagent blank. Indicates possible reagent or background contamination.
BA	Analyte found in reagent blank is = RL AND is > 1/10 the amount of the sample.
C	Analyte was verified by re-analysis.
D	All samples were stored at less than or equal to 6 °C and for no longer than 48 hours from time of sampling, unless otherwise noted.
E	Estimated reported value exceeded calibration range.
F	Water Field Group (WFG) qualifier; see comments for more information
FA	Field results were reviewed by the Water Field Group.
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.
J	Reported value is an estimate because concentration is less than reporting limit.
K	No MB or LCS were submitted with the sample for dissolved analysis.
L	Check standard is outside of specification limit.
LA	Analyte recovery in the check standard was above specification limit. Results may be biased high.
LL	Analyte recovery in the check standard was below specification limit. Results may be biased low.
M	LOQ verification analyzed with batch was outside of specification limit.
N	Organic constituents tentatively identified. Confirmation is needed.
P	Precision is out of specification limit.
R	Matrix spike recovery or matrix spike duplicate recovery is outside of specification limit.
RA	Matrix spike is invalid due to sample concentration.
S	Surrogate recovery is outside of specification limit.
T	Sample temperature is outside of specification limit.
U	Compound was analyzed, but not detected.



**Chain of Custody**  
**Groundwater**  
APC General Testing Laboratory

Field Complete  
 Lab Complete

Outside Lab

Lab ETA **02/20/2019 17:30**

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Site Representative	Che George	Requested By	Greg Dyer
Collector	Ben Rothschild	Location	Gorgas Ash Pond

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

Comments: Secured Samples in GSC Building #8 shipping lab at 1710 on 20FEB2019. Correcting bottle count to 6. LBM 03/06/2019

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-23H	2/20/19	11:15	6	Groundwater		AZ04555

Relinquished By	Received By	Date/Time
	Laura Midkiff <small>Digitally signed by Laura Midkiff, DN: cn=Laura Midkiff, ou=Alabama Power Company, ou=Environmental Affairs, email=lmidkiff@southernco.com, c=US Date: 2019.02.21 07:13:58 -06'00'</small>	02/21/2019 07:13

SmarTroll ID	6496-34170-1-1	All metals and radiological bottles have pH < 2 <input checked="" type="checkbox"/>
Turbidity ID	3901-20010-2-2	
Sample Event	1205	
Cooler Temp	0.5 degrees C	
Thermometer ID	5408-27568-2-2	
pH Strip ID	7260-39349-1-1	



**Chain of Custody**  
**Groundwater**

APC General Testing Laboratory

Field Complete

Outside Lab

Lab Complete

Lab ETA **02/21/2019 16:36**

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer		
	Site Representative		Che George	Requested By	Greg Dyer
	Collector		Anthony Goggins		Location

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

Comments: Relinquished to Biology Shipping Lab Building 8 secure location

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-17V	2/20/19	14:24	6	Groundwater		AZ04743
MW-12V	02/21/2019	13:55	6	Groundwater		AZ04744

Relinquished By	Received By	Date/Time
	Laura Midkiff <small>Digitally signed by Laura Midkiff, DN: cn=Laura Midkiff, ou=Alabama Power Company, ou=Environmental Affairs, email=lmidkiff@southernco.com, c=US Date: 2019.02.22 07:21:08 -06'00'</small>	02/22/2019 07:21

SmarTroll ID	7151-38849-2-1	All metals and radiological bottles have pH < 2 <input checked="" type="checkbox"/>		
Turbidity ID	5160-26211-1-1		Cooler Temp	0.7 degrees C
Sample Event	1205		Thermometer ID	5408-27568-2-2
			pH Strip ID	7260-39349-1-1



# Chain of Custody

## Groundwater

APC General Testing Laboratory

 Field Complete  
 Lab Complete

 Outside Lab

 Lab ETA 02/28/2019 09:00

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Site Representative	Che George	Requested By	Greg Dyer
Collector	Nick Pitts	Location	Gorgas Ash Pond

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

Comments Dissolved Metals 26H bottle was preserved with 2mL HNO3 on 2/28/19 @1000 by LBM. Lot #7043-38279-2-1

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
FB-1	2/26/19	11:20	5	Field Blank		AZ05265
MW-24H	02/26/2019	12:00	6	Groundwater		AZ05266
MW-24H Dup	02/26/2019	12:00	6	Sample Duplicate		AZ05267
MW-18V	02/26/2019	15:15	6	Groundwater		AZ05268
MW-29H	02/27/2019	12:00	6	Groundwater		AZ05269
MW-26H	02/27/2019	15:47	6	Groundwater		AZ05270
EB-1	02/27/2019	15:37	5	Equipment Blank		AZ05271

Relinquished By	Received By	Date/Time
<i>[Signature]</i>	<i>[Signature]</i>	02/28/2019 08:34

SmarTroll ID	7151-38850-2-2	All metals and radiological bottles have pH < 2 <input checked="" type="checkbox"/>	
Turbidity ID	3901-20009-2-1		
Sample Event	1205		
		Cooler Temp	0.5 degrees C
		Thermometer ID	5408-27568-2-2
		pH Strip ID	7260-39349-1-1



**Chain of Custody**  
**Groundwater**  
APC General Testing Laboratory

Field Complete  
 Lab Complete

Outside Lab

Lab ETA 03/14/2019 08:00

Requested Complete Date	Routine	Results To	Dustin Brooks,Greg Dyer
Site Representative	Che George	Requested By	Greg Dyer
Collector	Anthony Goggins	Location	Gorgas Ash Pond

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

Comments

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-28H	3/13/19	14:28	6	Groundwater		AZ06914
MW-28HDIS	03/13/2019	14:28	6	Groundwater		AZ06915

Relinquished By	Received By	Date/Time
		03/14/2019 08:15

SmarTroll ID	7151-38849-2-1	All metals and radiological bottles have pH < 2 <input checked="" type="checkbox"/>
Turbidity ID	5160-26211-1-1	
Sample Event	1205	
Cooler Temp	1.4 degrees C	
Thermometer ID	7044-38282-2-2	
pH Strip ID	6959-37705-30-26	



# Chain of Custody Groundwater

APC General Testing Laboratory

Field Complete  
 Lab Complete

Outside Lab

Lab ETA **02/20/2019 17:30**

Requested Complete Date	Routine	Results To	Dustin Brooks,Greg Dyer
Site Representative	Che George	Requested By	Greg Dyer
Collector	Ben Rothschadl	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 Secured Samples in GSC Building #8 shipping lab at 1710 on 20FEB2019.

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-23H	2/20/19	11:15	1	Groundwater		AZ04556

Relinquished By	Received By	Date/Time
	Laura Midkiff	02/21/2019 07:14
	<small>Digitally signed by Laura Midkiff DN: c=US, ou=Environmental Affairs, email=lbmidkiff@southernco.com, cn=US Date: 2019.02.21 07:14:09 -06'00'</small>	

SmarTroll ID	6496-34170-1-1	All metals and radiological bottles have pH < 2 <input checked="" type="checkbox"/>
Turbidity ID	3901-20010-2-2	
Sample Event	1205	
Cooler Temp	N/A	
Thermometer ID	N/A	
pH Strip ID	7260-39349-1-1	



**Chain of Custody**  
**Groundwater**  
APC General Testing Laboratory

Field Complete  
 Lab Complete

Outside Lab

Lab ETA **02/21/2019 16:36**

Requested Complete Date Site Representative Collector	Routine	Results To Requested By Location	Dustin Brooks,Greg Dyer
	Che George		Greg Dyer
	Anthony Goggins		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: Relinquished to Biology Shipping Lab Building 8 secure location

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-17V	2/20/19	14:24	1	Groundwater		AZ04745
MW-12V	02/21/2019	13:55	3	Groundwater		AZ04746

Relinquished By	Received By	Date/Time
	Laura Midkiff <small>Digitally signed by Laura Midkiff, DN: cn=Laura Midkiff, ou=Alabama Power Company, ou=Environmental Affairs, email=lmidkiff@southernco.com, c=US Date: 2019.02.22 07:21:01 -06'00'</small>	02/22/2019 07:21

SmarTroll ID	7151-38849-2-1	All metals and radiological bottles have pH < 2 <input checked="" type="checkbox"/>
Turbidity ID	5160-26211-1-1	
Sample Event	1205	
Cooler Temp	N/A	
Thermometer ID	N/A	
pH Strip ID	7260-39349-1-1	



# Chain of Custody Groundwater

APC General Testing Laboratory

Field Complete  
 Lab Complete

Outside Lab

Lab ETA 02/28/2019 09:00

Requested Complete Date Site Representative Collector	Routine	Results To	Dustin Brooks, Greg Dyer
	Che George	Requested By	Greg Dyer
	Nick Pitts	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-1	2/26/19	11:20	1	Field Blank		AZ05272
MW-24H	02/26/2019	12:00	1	Groundwater		AZ05273
MW-24H Dup	02/26/2019	12:00	1	Sample Duplicate		AZ05274
MW-18V	02/26/2019	15:15	1	Groundwater		AZ05275
MW-29H	02/27/2019	12:00	1	Groundwater		AZ05276
MW-26H	02/27/2019	15:47	1	Groundwater		AZ05277
EB-1	02/27/2019	15:37	1	Equipment Blank		AZ05278

Relinquished By	Received By	Date/Time
<i>[Signature]</i>	<i>Laura M... [Signature]</i>	02/28/2019 08:34

SmarTroll ID	7151-38850-2-2	All metals and radiological bottles have pH < 2 <input checked="" type="checkbox"/>
Turbidity ID	3901-20009-2-1	
Sample Event	1205	
Cooler Temp	N/A	
Thermometer ID	N/A	
pH Strip ID	7260-39349-1-1	





# Chain of Custody Groundwater

APC General Testing Laboratory

Field Complete  
 Lab Complete

Outside Lab

Lab ETA **03/14/2019 08:00**

Requested Complete Date	Routine	Results To	Dustin Brooks,Greg Dyer
Site Representative	Che George	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-28H	3/13/19	14:28	1	Groundwater		AZ06916
MW-28HDIS	03/13/2019	14:28	1	Groundwater		AZ06917

Relinquished By	Received By	Date/Time
		03/14/2019 08:15

SmarTroll ID	7151-38849-2-1
Turbidity ID	5160-26211-1-1
Sample Event	1205

All metals and radiological bottles have pH < 2

Cooler Temp	N/A
Thermometer ID	N/A
pH Strip ID	6959-37705-30-26

## ANALYTICAL REPORT

Eurofins TestAmerica, Pensacola  
3355 McLemore Drive  
Pensacola, FL 32514  
Tel: (850)474-1001

Laboratory Job ID: 400-167636-1  
Laboratory Sample Delivery Group: Gorgas Ash Pond 1205  
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:  
5/6/2019 11:27:41 AM

Cheyenne Whitmire, Project Manager II  
(850)471-6222  
[cheyenne.whitmire@testamericainc.com](mailto:cheyenne.whitmire@testamericainc.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.*



# Table of Contents

Cover Page . . . . .	1
Table of Contents . . . . .	2
Case Narrative . . . . .	3
Method Summary . . . . .	5
Sample Summary . . . . .	6
Client Sample Results . . . . .	7
Definitions . . . . .	19
Chronicle . . . . .	20
QC Association . . . . .	23
QC Sample Results . . . . .	24
Chain of Custody . . . . .	27
Receipt Checklists . . . . .	31
Certification Summary . . . . .	33

# Case Narrative

Client: Alabama Power General Test Laboratory  
Project/Site: CCR Plant Gorgas

Job ID: 400-167636-1  
SDG: Gorgas Ash Pond 1205

**Job ID: 400-167636-1**

**Laboratory: Eurofins TestAmerica, Pensacola**

## Narrative

### Job Narrative 400-167636-1

#### RAD

Method(s) 9315: Ra-226 Prep Batch 160-422964: 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. AZ05272 FB-1 (400-167636-1), AZ05273 MW-24H (400-167636-2), AZ05274 MW-24H DUP (400-167636-3), AZ05275 MW-18V (400-167636-4), AZ05276 MW-29H (400-167636-5), AZ05277 MW-26H (400-167636-6), AZ05278 EB-1 (400-167636-7), (LCS 160-422964/1-A), (MB 160-422964/18-A), (400-167635-A-2-C) and (400-167635-A-2-B DU)

Method(s) 9315: Ra-226 Prep Batch 160-423239: 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. AZ04745 MW-17V (400-167636-8), AZ04746 MW-12V (400-167636-9), AZ04556 MW-23H (400-167636-10), AZ06916 MW-28H (400-167636-11), AZ06917 MW-28HDIS (400-167636-12), (LCS 160-423239/1-A), (LCSD 160-423239/2-A) and (MB 160-423239/23-A)

Method(s) 9320: Ra-228 Prep Batch 160-422966: 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. AZ05272 FB-1 (400-167636-1), AZ05273 MW-24H (400-167636-2), AZ05274 MW-24H DUP (400-167636-3), AZ05275 MW-18V (400-167636-4), AZ05276 MW-29H (400-167636-5), AZ05277 MW-26H (400-167636-6), AZ05278 EB-1 (400-167636-7), (LCS 160-422966/1-A), (MB 160-422966/18-A), (400-167635-A-2-D) and (400-167635-A-2-E DU)

Method(s) 9320: Ra-228 Prep Batch 160-423240: 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. AZ04745 MW-17V (400-167636-8), AZ04746 MW-12V (400-167636-9), AZ04556 MW-23H (400-167636-10), AZ06916 MW-28H (400-167636-11), AZ06917 MW-28HDIS (400-167636-12), (LCS 160-423240/1-A) and (LCSD 160-423240/2-A)

Method(s) 9320: Ra-228 Prep Batch 160-423240: Ra-228 batch 423240 started counting on GFPC on 4/19/2019. The MB count associated with the batch failed to start. However, all the samples reported in this batch exhibited activity below the MDC. All other QC parameters are within limits. The laboratory does not believe this excursion adversely affects the sample data. AZ04745 MW-17V (400-167636-8), AZ04746 MW-12V (400-167636-9), AZ04556 MW-23H (400-167636-10), AZ06916 MW-28H (400-167636-11), AZ06917 MW-28HDIS (400-167636-12), (LCS 160-423240/1-A) and (LCSD 160-423240/2-A)

Method(s) PrecSep\_0: Radium-228 Prep Batch 160-422966. The following samples were reduced due to sedimentation that caused the samples to be discolored and opaque: AZ05273 MW-24H (400-167636-2), AZ05274 MW-24H DUP (400-167636-3) and AZ05276 MW-29H (400-167636-5)

Method(s) PrecSep\_0: Radium 228 Prep Batch 160-423240. The following samples were prepared at a reduced aliquot due to suspended solids: AZ04745 MW-17V (400-167636-8) and AZ06916 MW-28H (400-167636-11). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead of a sample duplicate (DUP) to demonstrate batch precision.

Method(s) PrecSep\_0: Radium 228 Prep Batch 160-423240. Insufficient sample volume was available to perform a sample duplicate for the following samples: AZ04746 MW-12V (400-167636-9), AZ04556 MW-23H (400-167636-10) and AZ06917 MW-28HDIS (400-167636-12). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead to demonstrate batch precision.

Method(s) PrecSep-21: Radium-226 Prep Batch 160-422964. The following samples were reduced due to sedimentation that caused the samples to be discolored and opaque: AZ05273 MW-24H (400-167636-2), AZ05274 MW-24H DUP (400-167636-3) and AZ05276 MW-29H (400-167636-5)

Method(s) PrecSep-21: Radium 226 Prep Batch 160-423239. The following samples were prepared at a reduced aliquot due to suspended solids: AZ04745 MW-17V (400-167636-8) and AZ06916 MW-28H (400-167636-11). A laboratory control sample/ laboratory

# Case Narrative

Client: Alabama Power General Test Laboratory  
Project/Site: CCR Plant Gorgas

Job ID: 400-167636-1  
SDG: Gorgas Ash Pond 1205

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## Job ID: 400-167636-1 (Continued)

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### Laboratory: Eurofins TestAmerica, Pensacola (Continued)

control sample duplicate (LCS/LCSD) were prepared instead of a sample duplicate (DUP) to demonstrate batch precision.

Method(s) PrecSep-21: Radium 226 Prep Batch 160-423239. Insufficient sample volume was available to perform a sample duplicate for the following samples: AZ04746 MW-12V (400-167636-9), AZ04556 MW-23H (400-167636-10) and AZ06917 MW-28HDIS (400-167636-12). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead to demonstrate batch precision.

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# Method Summary

Client: Alabama Power General Test Laboratory  
Project/Site: CCR Plant Gorgas

Job ID: 400-167636-1  
SDG: Gorgas Ash Pond 1205

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: 400-167636-1  
SDG: Gorgas Ash Pond 1205

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-167636-1	AZ05272 FB-1	Water	02/26/19 11:20	03/21/19 16:36
400-167636-2	AZ05273 MW-24H	Water	02/26/19 12:00	03/21/19 16:36
400-167636-3	AZ05274 MW-24H DUP	Water	02/26/19 12:00	03/21/19 16:36
400-167636-4	AZ05275 MW-18V	Water	02/26/19 15:15	03/21/19 16:36
400-167636-5	AZ05276 MW-29H	Water	02/27/19 12:00	03/21/19 16:36
400-167636-6	AZ05277 MW-26H	Water	02/27/19 15:47	03/21/19 16:36
400-167636-7	AZ05278 EB-1	Water	02/27/19 15:37	03/21/19 16:36
400-167636-8	AZ04745 MW-17V	Water	02/20/19 14:24	03/21/19 16:36
400-167636-9	AZ04746 MW-12V	Water	02/21/19 13:55	03/21/19 16:36
400-167636-10	AZ04556 MW-23H	Water	02/20/19 11:15	03/21/19 16:36
400-167636-11	AZ06916 MW-28H	Water	03/13/19 14:28	03/21/19 16:36
400-167636-12	AZ06917 MW-28HDIS	Water	03/13/19 14:28	03/21/19 16:36

# Client Sample Results

Client: Alabama Power General Test Laboratory  
 Project/Site: CCR Plant Gorgas

Job ID: 400-167636-1  
 SDG: Gorgas Ash Pond 1205

**Client Sample ID: AZ05272 FB-1**

**Lab Sample ID: 400-167636-1**

Date Collected: 02/26/19 11:20

Matrix: Water

Date Received: 03/21/19 16:36

**Method: 9315 - Radium-226 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0274	U	0.0531	0.0531	1.00	0.0959	pCi/L	04/07/19 14:31	04/30/19 12:47	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	98.2		40 - 110					04/07/19 14:31	04/30/19 12:47	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	0.202	0.203	1.00	0.315	pCi/L	04/07/19 14:31	04/18/19 08:41	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	98.2		40 - 110					04/07/19 14:31	04/18/19 08:41	1
Y Carrier	89.0		40 - 110					04/07/19 14:31	04/18/19 08:41	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	0.294	U	0.209	0.210	5.00	0.315	pCi/L		05/01/19 09:26	1



# Client Sample Results

Client: Alabama Power General Test Laboratory  
 Project/Site: CCR Plant Gorgas

Job ID: 400-167636-1  
 SDG: Gorgas Ash Pond 1205

**Client Sample ID: AZ05273 MW-24H**

**Lab Sample ID: 400-167636-2**

Date Collected: 02/26/19 12:00

Matrix: Water

Date Received: 03/21/19 16:36

**Method: 9315 - Radium-226 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
<b>Radium-226</b>	<b>0.299</b>		0.123	0.126	1.00	0.134	pCi/L	04/07/19 14:31	04/30/19 12:47	1
<b>Carrier</b>	<b>%Yield</b>	<b>Qualifier</b>	<b>Limits</b>					<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Ba Carrier	108		40 - 110					04/07/19 14:31	04/30/19 12:47	1

**Method: 9320 - Radium-228 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
<b>Radium-228</b>	<b>0.601</b>		0.319	0.324	1.00	0.479	pCi/L	04/07/19 14:31	04/18/19 08:41	1
<b>Carrier</b>	<b>%Yield</b>	<b>Qualifier</b>	<b>Limits</b>					<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Ba Carrier	108		40 - 110					04/07/19 14:31	04/18/19 08:41	1
Y Carrier	85.2		40 - 110					04/07/19 14:31	04/18/19 08:41	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
<b>Combined Radium 226 + 228</b>	<b>0.900</b>		0.342	0.348	5.00	0.479	pCi/L		05/01/19 09:26	1

# Client Sample Results

Client: Alabama Power General Test Laboratory  
 Project/Site: CCR Plant Gorgas

Job ID: 400-167636-1  
 SDG: Gorgas Ash Pond 1205

**Client Sample ID: AZ05274 MW-24H DUP**

**Lab Sample ID: 400-167636-3**

Date Collected: 02/26/19 12:00

Matrix: Water

Date Received: 03/21/19 16:36

**Method: 9315 - Radium-226 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
<b>Radium-226</b>	<b>0.353</b>		0.126	0.130	1.00	0.113	pCi/L	04/07/19 14:31	04/30/19 12:47	1
<b>Carrier</b>	<b>%Yield</b>	<b>Qualifier</b>	<b>Limits</b>					<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Ba Carrier	101		40 - 110					04/07/19 14:31	04/30/19 12:47	1

**Method: 9320 - Radium-228 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
<b>Radium-228</b>	<b>0.564</b>		0.309	0.314	1.00	0.464	pCi/L	04/07/19 14:31	04/18/19 08:43	1
<b>Carrier</b>	<b>%Yield</b>	<b>Qualifier</b>	<b>Limits</b>					<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Ba Carrier	101		40 - 110					04/07/19 14:31	04/18/19 08:43	1
Y Carrier	85.6		40 - 110					04/07/19 14:31	04/18/19 08:43	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
<b>Combined Radium 226 + 228</b>	<b>0.916</b>		0.334	0.340	5.00	0.464	pCi/L		05/01/19 09:26	1

# Client Sample Results

Client: Alabama Power General Test Laboratory  
 Project/Site: CCR Plant Gorgas

Job ID: 400-167636-1  
 SDG: Gorgas Ash Pond 1205

**Client Sample ID: AZ05275 MW-18V**

**Lab Sample ID: 400-167636-4**

Date Collected: 02/26/19 15:15

Matrix: Water

Date Received: 03/21/19 16:36

**Method: 9315 - Radium-226 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.134		0.0725	0.0735	1.00	0.0866	pCi/L	04/07/19 14:31	04/30/19 12:48	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	100		40 - 110					04/07/19 14:31	04/30/19 12:48	1

**Method: 9320 - Radium-228 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.144	U	0.198	0.199	1.00	0.331	pCi/L	04/07/19 14:31	04/18/19 08:43	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	100		40 - 110					04/07/19 14:31	04/18/19 08:43	1
Y Carrier	90.1		40 - 110					04/07/19 14:31	04/18/19 08:43	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	0.278	U	0.211	0.212	5.00	0.331	pCi/L		05/01/19 09:26	1

# Client Sample Results

Client: Alabama Power General Test Laboratory  
 Project/Site: CCR Plant Gorgas

Job ID: 400-167636-1  
 SDG: Gorgas Ash Pond 1205

**Client Sample ID: AZ05276 MW-29H**

**Lab Sample ID: 400-167636-5**

Date Collected: 02/27/19 12:00

Matrix: Water

Date Received: 03/21/19 16:36

**Method: 9315 - Radium-226 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
<b>Radium-226</b>	<b>0.263</b>		0.119	0.122	1.00	0.142	pCi/L	04/07/19 14:31	04/30/19 12:48	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	102		40 - 110					04/07/19 14:31	04/30/19 12:48	1

**Method: 9320 - Radium-228 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.293	U	0.291	0.292	1.00	0.472	pCi/L	04/07/19 14:31	04/18/19 08:43	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	102		40 - 110					04/07/19 14:31	04/18/19 08:43	1
Y Carrier	85.2		40 - 110					04/07/19 14:31	04/18/19 08:43	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
<b>Combined Radium 226 + 228</b>	<b>0.556</b>		0.314	0.316	5.00	0.472	pCi/L		05/01/19 09:26	1

# Client Sample Results

Client: Alabama Power General Test Laboratory  
 Project/Site: CCR Plant Gorgas

Job ID: 400-167636-1  
 SDG: Gorgas Ash Pond 1205

**Client Sample ID: AZ05277 MW-26H**

**Lab Sample ID: 400-167636-6**

Date Collected: 02/27/19 15:47

Matrix: Water

Date Received: 03/21/19 16:36

**Method: 9315 - Radium-226 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
<b>Radium-226</b>	<b>0.197</b>		0.0864	0.0882	1.00	0.0921	pCi/L	04/07/19 14:31	04/30/19 14:54	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	104		40 - 110					04/07/19 14:31	04/30/19 14:54	1

**Method: 9320 - Radium-228 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.295	U	0.196	0.198	1.00	0.302	pCi/L	04/07/19 14:31	04/18/19 08:43	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	104		40 - 110					04/07/19 14:31	04/18/19 08:43	1
Y Carrier	90.5		40 - 110					04/07/19 14:31	04/18/19 08:43	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
<b>Combined Radium 226 + 228</b>	<b>0.492</b>		0.214	0.217	5.00	0.302	pCi/L		05/01/19 09:26	1

# Client Sample Results

Client: Alabama Power General Test Laboratory  
 Project/Site: CCR Plant Gorgas

Job ID: 400-167636-1  
 SDG: Gorgas Ash Pond 1205

**Client Sample ID: AZ05278 EB-1**

**Lab Sample ID: 400-167636-7**

Date Collected: 02/27/19 15:37

Matrix: Water

Date Received: 03/21/19 16:36

**Method: 9315 - Radium-226 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.00877	U	0.0551	0.0551	1.00	0.109	pCi/L	04/07/19 14:31	04/30/19 14:54	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	96.2		40 - 110					04/07/19 14:31	04/30/19 14:54	1

**Method: 9320 - Radium-228 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.108	U	0.207	0.207	1.00	0.352	pCi/L	04/07/19 14:31	04/18/19 08:43	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	96.2		40 - 110					04/07/19 14:31	04/18/19 08:43	1
Y Carrier	86.7		40 - 110					04/07/19 14:31	04/18/19 08:43	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	0.117	U	0.214	0.214	5.00	0.352	pCi/L		05/01/19 09:26	1

# Client Sample Results

Client: Alabama Power General Test Laboratory  
 Project/Site: CCR Plant Gorgas

Job ID: 400-167636-1  
 SDG: Gorgas Ash Pond 1205

**Client Sample ID: AZ04745 MW-17V**

**Lab Sample ID: 400-167636-8**

Date Collected: 02/20/19 14:24

Matrix: Water

Date Received: 03/21/19 16:36

**Method: 9315 - Radium-226 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.245		0.0947	0.0973	1.00	0.0846	pCi/L	04/10/19 14:08	05/02/19 19:09	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	106		40 - 110					04/10/19 14:08	05/02/19 19:09	1

**Method: 9320 - Radium-228 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.153	U	0.265	0.265	1.00	0.450	pCi/L	04/10/19 14:10	04/19/19 15:18	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	106		40 - 110					04/10/19 14:10	04/19/19 15:18	1
Y Carrier	87.9		40 - 110					04/10/19 14:10	04/19/19 15:18	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	0.398	U	0.281	0.282	5.00	0.450	pCi/L		05/06/19 09:56	1

# Client Sample Results

Client: Alabama Power General Test Laboratory  
 Project/Site: CCR Plant Gorgas

Job ID: 400-167636-1  
 SDG: Gorgas Ash Pond 1205

**Client Sample ID: AZ04746 MW-12V**

**Lab Sample ID: 400-167636-9**

Date Collected: 02/21/19 13:55

Matrix: Water

Date Received: 03/21/19 16:36

**Method: 9315 - Radium-226 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.158		0.0722	0.0736	1.00	0.0709	pCi/L	04/10/19 14:08	05/02/19 19:09	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	109		40 - 110					04/10/19 14:08	05/02/19 19:09	1

**Method: 9320 - Radium-228 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.138	U	0.200	0.200	1.00	0.335	pCi/L	04/10/19 14:10	04/19/19 15:18	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	109		40 - 110					04/10/19 14:10	04/19/19 15:18	1
Y Carrier	84.5		40 - 110					04/10/19 14:10	04/19/19 15:18	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	0.296	U	0.213	0.213	5.00	0.335	pCi/L		05/06/19 09:56	1



# Client Sample Results

Client: Alabama Power General Test Laboratory  
 Project/Site: CCR Plant Gorgas

Job ID: 400-167636-1  
 SDG: Gorgas Ash Pond 1205

**Client Sample ID: AZ04556 MW-23H**

**Lab Sample ID: 400-167636-10**

Date Collected: 02/20/19 11:15

Matrix: Water

Date Received: 03/21/19 16:36

**Method: 9315 - Radium-226 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0282	U	0.0419	0.0420	1.00	0.0722	pCi/L	04/10/19 14:08	05/02/19 19:09	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	96.2		40 - 110					04/10/19 14:08	05/02/19 19:09	1

**Method: 9320 - Radium-228 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0477	U	0.249	0.249	1.00	0.437	pCi/L	04/10/19 14:10	04/19/19 15:20	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	96.2		40 - 110					04/10/19 14:10	04/19/19 15:20	1
Y Carrier	83.7		40 - 110					04/10/19 14:10	04/19/19 15:20	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	0.0759	U	0.253	0.253	5.00	0.437	pCi/L		05/06/19 09:56	1

# Client Sample Results

Client: Alabama Power General Test Laboratory  
 Project/Site: CCR Plant Gorgas

Job ID: 400-167636-1  
 SDG: Gorgas Ash Pond 1205

**Client Sample ID: AZ06916 MW-28H**

**Lab Sample ID: 400-167636-11**

Date Collected: 03/13/19 14:28

Matrix: Water

Date Received: 03/21/19 16:36

**Method: 9315 - Radium-226 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
<b>Radium-226</b>	<b>0.297</b>		0.135	0.138	1.00	0.140	pCi/L	04/10/19 14:08	05/02/19 19:09	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	67.0		40 - 110					04/10/19 14:08	05/02/19 19:09	1

**Method: 9320 - Radium-228 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.527	U	0.497	0.500	1.00	0.803	pCi/L	04/10/19 14:10	04/19/19 15:20	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	67.0		40 - 110					04/10/19 14:10	04/19/19 15:20	1
Y Carrier	85.2		40 - 110					04/10/19 14:10	04/19/19 15:20	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
<b>Combined Radium 226 + 228</b>	<b>0.824</b>		0.515	0.519	5.00	0.803	pCi/L		05/06/19 09:56	1

# Client Sample Results

Client: Alabama Power General Test Laboratory  
 Project/Site: CCR Plant Gorgas

Job ID: 400-167636-1  
 SDG: Gorgas Ash Pond 1205

**Client Sample ID: AZ06917 MW-28HDIS**

**Lab Sample ID: 400-167636-12**

Date Collected: 03/13/19 14:28

Matrix: Water

Date Received: 03/21/19 16:36

**Method: 9315 - Radium-226 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0520	U	0.0478	0.0480	1.00	0.0709	pCi/L	04/10/19 14:08	05/02/19 19:09	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	109		40 - 110					04/10/19 14:08	05/02/19 19:09	1

**Method: 9320 - Radium-228 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0841	U	0.218	0.218	1.00	0.375	pCi/L	04/10/19 14:10	04/19/19 15:20	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	109		40 - 110					04/10/19 14:10	04/19/19 15:20	1
Y Carrier	86.7		40 - 110					04/10/19 14:10	04/19/19 15:20	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	0.136	U	0.223	0.223	5.00	0.375	pCi/L		05/06/19 09:56	1

# Definitions/Glossary

Client: Alabama Power General Test Laboratory  
Project/Site: CCR Plant Gorgas

Job ID: 400-167636-1  
SDG: Gorgas Ash Pond 1205

## 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
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: 400-167636-1  
 SDG: Gorgas Ash Pond 1205

**Client Sample ID: AZ05272 FB-1**

**Lab Sample ID: 400-167636-1**

**Date Collected: 02/26/19 11:20**

**Matrix: Water**

**Date Received: 03/21/19 16:36**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			422964	04/07/19 14:31	MMO	TAL SL
Total/NA	Analysis	9315		1	426116	04/30/19 12:47	CDR	TAL SL
Total/NA	Prep	PrecSep_0			422966	04/07/19 14:31	MMO	TAL SL
Total/NA	Analysis	9320		1	424351	04/18/19 08:41	KLS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	426330	05/01/19 09:26	SMP	TAL SL

**Client Sample ID: AZ05273 MW-24H**

**Lab Sample ID: 400-167636-2**

**Date Collected: 02/26/19 12:00**

**Matrix: Water**

**Date Received: 03/21/19 16:36**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			422964	04/07/19 14:31	MMO	TAL SL
Total/NA	Analysis	9315		1	426116	04/30/19 12:47	CDR	TAL SL
Total/NA	Prep	PrecSep_0			422966	04/07/19 14:31	MMO	TAL SL
Total/NA	Analysis	9320		1	424351	04/18/19 08:41	KLS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	426330	05/01/19 09:26	SMP	TAL SL

**Client Sample ID: AZ05274 MW-24H DUP**

**Lab Sample ID: 400-167636-3**

**Date Collected: 02/26/19 12:00**

**Matrix: Water**

**Date Received: 03/21/19 16:36**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			422964	04/07/19 14:31	MMO	TAL SL
Total/NA	Analysis	9315		1	426116	04/30/19 12:47	CDR	TAL SL
Total/NA	Prep	PrecSep_0			422966	04/07/19 14:31	MMO	TAL SL
Total/NA	Analysis	9320		1	424353	04/18/19 08:43	CDR	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	426330	05/01/19 09:26	SMP	TAL SL

**Client Sample ID: AZ05275 MW-18V**

**Lab Sample ID: 400-167636-4**

**Date Collected: 02/26/19 15:15**

**Matrix: Water**

**Date Received: 03/21/19 16:36**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			422964	04/07/19 14:31	MMO	TAL SL
Total/NA	Analysis	9315		1	426116	04/30/19 12:48	CDR	TAL SL
Total/NA	Prep	PrecSep_0			422966	04/07/19 14:31	MMO	TAL SL
Total/NA	Analysis	9320		1	424353	04/18/19 08:43	CDR	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	426330	05/01/19 09:26	SMP	TAL SL

# Lab Chronicle

Client: Alabama Power General Test Laboratory  
 Project/Site: CCR Plant Gorgas

Job ID: 400-167636-1  
 SDG: Gorgas Ash Pond 1205

**Client Sample ID: AZ05276 MW-29H**

**Lab Sample ID: 400-167636-5**

**Date Collected: 02/27/19 12:00**

**Matrix: Water**

**Date Received: 03/21/19 16:36**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			422964	04/07/19 14:31	MMO	TAL SL
Total/NA	Analysis	9315		1	426116	04/30/19 12:48	CDR	TAL SL
Total/NA	Prep	PrecSep_0			422966	04/07/19 14:31	MMO	TAL SL
Total/NA	Analysis	9320		1	424353	04/18/19 08:43	CDR	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	426330	05/01/19 09:26	SMP	TAL SL

**Client Sample ID: AZ05277 MW-26H**

**Lab Sample ID: 400-167636-6**

**Date Collected: 02/27/19 15:47**

**Matrix: Water**

**Date Received: 03/21/19 16:36**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			422964	04/07/19 14:31	MMO	TAL SL
Total/NA	Analysis	9315		1	426116	04/30/19 14:54	CDR	TAL SL
Total/NA	Prep	PrecSep_0			422966	04/07/19 14:31	MMO	TAL SL
Total/NA	Analysis	9320		1	424353	04/18/19 08:43	CDR	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	426330	05/01/19 09:26	SMP	TAL SL

**Client Sample ID: AZ05278 EB-1**

**Lab Sample ID: 400-167636-7**

**Date Collected: 02/27/19 15:37**

**Matrix: Water**

**Date Received: 03/21/19 16:36**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			422964	04/07/19 14:31	MMO	TAL SL
Total/NA	Analysis	9315		1	426116	04/30/19 14:54	CDR	TAL SL
Total/NA	Prep	PrecSep_0			422966	04/07/19 14:31	MMO	TAL SL
Total/NA	Analysis	9320		1	424353	04/18/19 08:43	CDR	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	426330	05/01/19 09:26	SMP	TAL SL

**Client Sample ID: AZ04745 MW-17V**

**Lab Sample ID: 400-167636-8**

**Date Collected: 02/20/19 14:24**

**Matrix: Water**

**Date Received: 03/21/19 16:36**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			423239	04/10/19 14:08	CLP	TAL SL
Total/NA	Analysis	9315		1	426506	05/02/19 19:09	CDR	TAL SL
Total/NA	Prep	PrecSep_0			423240	04/10/19 14:10	CLP	TAL SL
Total/NA	Analysis	9320		1	424434	04/19/19 15:18	BLH	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	426773	05/06/19 09:56	SMP	TAL SL

# Lab Chronicle

Client: Alabama Power General Test Laboratory  
 Project/Site: CCR Plant Gorgas

Job ID: 400-167636-1  
 SDG: Gorgas Ash Pond 1205

**Client Sample ID: AZ04746 MW-12V**

**Lab Sample ID: 400-167636-9**

**Date Collected: 02/21/19 13:55**

**Matrix: Water**

**Date Received: 03/21/19 16:36**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			423239	04/10/19 14:08	CLP	TAL SL
Total/NA	Analysis	9315		1	426506	05/02/19 19:09	CDR	TAL SL
Total/NA	Prep	PrecSep_0			423240	04/10/19 14:10	CLP	TAL SL
Total/NA	Analysis	9320		1	424434	04/19/19 15:18	BLH	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	426773	05/06/19 09:56	SMP	TAL SL

**Client Sample ID: AZ04556 MW-23H**

**Lab Sample ID: 400-167636-10**

**Date Collected: 02/20/19 11:15**

**Matrix: Water**

**Date Received: 03/21/19 16:36**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			423239	04/10/19 14:08	CLP	TAL SL
Total/NA	Analysis	9315		1	426506	05/02/19 19:09	CDR	TAL SL
Total/NA	Prep	PrecSep_0			423240	04/10/19 14:10	CLP	TAL SL
Total/NA	Analysis	9320		1	424435	04/19/19 15:20	BLH	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	426773	05/06/19 09:56	SMP	TAL SL

**Client Sample ID: AZ06916 MW-28H**

**Lab Sample ID: 400-167636-11**

**Date Collected: 03/13/19 14:28**

**Matrix: Water**

**Date Received: 03/21/19 16:36**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			423239	04/10/19 14:08	CLP	TAL SL
Total/NA	Analysis	9315		1	426506	05/02/19 19:09	CDR	TAL SL
Total/NA	Prep	PrecSep_0			423240	04/10/19 14:10	CLP	TAL SL
Total/NA	Analysis	9320		1	424435	04/19/19 15:20	BLH	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	426773	05/06/19 09:56	SMP	TAL SL

**Client Sample ID: AZ06917 MW-28HDIS**

**Lab Sample ID: 400-167636-12**

**Date Collected: 03/13/19 14:28**

**Matrix: Water**

**Date Received: 03/21/19 16:36**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			423239	04/10/19 14:08	CLP	TAL SL
Total/NA	Analysis	9315		1	426506	05/02/19 19:09	CDR	TAL SL
Total/NA	Prep	PrecSep_0			423240	04/10/19 14:10	CLP	TAL SL
Total/NA	Analysis	9320		1	424435	04/19/19 15:20	BLH	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	426773	05/06/19 09:56	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: 400-167636-1  
 SDG: Gorgas Ash Pond 1205

## Rad

### Prep Batch: 422964

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-167636-1	AZ05272 FB-1	Total/NA	Water	PrecSep-21	
400-167636-2	AZ05273 MW-24H	Total/NA	Water	PrecSep-21	
400-167636-3	AZ05274 MW-24H DUP	Total/NA	Water	PrecSep-21	
400-167636-4	AZ05275 MW-18V	Total/NA	Water	PrecSep-21	
400-167636-5	AZ05276 MW-29H	Total/NA	Water	PrecSep-21	
400-167636-6	AZ05277 MW-26H	Total/NA	Water	PrecSep-21	
400-167636-7	AZ05278 EB-1	Total/NA	Water	PrecSep-21	
MB 160-422964/18-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-422964/1-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
400-167635-A-2-B DU	Duplicate	Total/NA	Water	PrecSep-21	

### Prep Batch: 422966

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-167636-1	AZ05272 FB-1	Total/NA	Water	PrecSep_0	
400-167636-2	AZ05273 MW-24H	Total/NA	Water	PrecSep_0	
400-167636-3	AZ05274 MW-24H DUP	Total/NA	Water	PrecSep_0	
400-167636-4	AZ05275 MW-18V	Total/NA	Water	PrecSep_0	
400-167636-5	AZ05276 MW-29H	Total/NA	Water	PrecSep_0	
400-167636-6	AZ05277 MW-26H	Total/NA	Water	PrecSep_0	
400-167636-7	AZ05278 EB-1	Total/NA	Water	PrecSep_0	
MB 160-422966/18-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-422966/1-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
400-167635-A-2-E DU	Duplicate	Total/NA	Water	PrecSep_0	

### Prep Batch: 423239

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-167636-8	AZ04745 MW-17V	Total/NA	Water	PrecSep-21	
400-167636-9	AZ04746 MW-12V	Total/NA	Water	PrecSep-21	
400-167636-10	AZ04556 MW-23H	Total/NA	Water	PrecSep-21	
400-167636-11	AZ06916 MW-28H	Total/NA	Water	PrecSep-21	
400-167636-12	AZ06917 MW-28HDIS	Total/NA	Water	PrecSep-21	
MB 160-423239/23-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-423239/1-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
LCSD 160-423239/2-A	Lab Control Sample Dup	Total/NA	Water	PrecSep-21	

### Prep Batch: 423240

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-167636-8	AZ04745 MW-17V	Total/NA	Water	PrecSep_0	
400-167636-9	AZ04746 MW-12V	Total/NA	Water	PrecSep_0	
400-167636-10	AZ04556 MW-23H	Total/NA	Water	PrecSep_0	
400-167636-11	AZ06916 MW-28H	Total/NA	Water	PrecSep_0	
400-167636-12	AZ06917 MW-28HDIS	Total/NA	Water	PrecSep_0	
LCS 160-423240/1-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
LCSD 160-423240/2-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: 400-167636-1  
 SDG: Gorgas Ash Pond 1205

## Method: 9315 - Radium-226 (GFPC)

**Lab Sample ID: MB 160-422964/18-A**  
**Matrix: Water**  
**Analysis Batch: 426116**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 422964**

Analyte	MB	MB	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	-0.007536	U	0.0355	0.0355	1.00	0.0835	pCi/L	04/07/19 14:31	04/30/19 14:55	1
Carrier	MB	MB	Limits		Prepared	Analyzed	Dil Fac			
Ba Carrier	%Yield	Qualifier	40 - 110							
	103				04/07/19 14:31	04/30/19 14:55	1			

**Lab Sample ID: LCS 160-422964/1-A**  
**Matrix: Water**  
**Analysis Batch: 426116**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 422964**

Analyte	Spike Added	LCS Result	LCS Qual	Total	RL	MDC	Unit	%Rec	%Rec. Limits
				Uncert. (2σ+/-)					
Radium-226	11.4	9.722		1.03	1.00	0.0960	pCi/L	86	75 - 125
Carrier	LCS	LCS	Limits		Prepared	Analyzed	Dil Fac		
Ba Carrier	%Yield	Qualifier	40 - 110						
	98.5								

**Lab Sample ID: 400-167635-A-2-B DU**  
**Matrix: Water**  
**Analysis Batch: 426116**

**Client Sample ID: Duplicate**  
**Prep Type: Total/NA**  
**Prep Batch: 422964**

Analyte	Sample	Sample	DU	DU	Total	RL	MDC	Unit	RER	RER Limit
	Result	Qual	Result	Qual	Uncert. (2σ+/-)					
Radium-226	0.118		0.1178		0.0793	1.00	0.108	pCi/L	0	1
Carrier	DU	DU	Limits		Prepared	Analyzed	Dil Fac			
Ba Carrier	%Yield	Qualifier	40 - 110							
	97.3									

**Lab Sample ID: MB 160-423239/23-A**  
**Matrix: Water**  
**Analysis Batch: 426506**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 423239**

Analyte	MB	MB	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	-0.001833	U	0.0315	0.0315	1.00	0.0713	pCi/L	04/10/19 14:08	05/02/19 21:51	1
Carrier	MB	MB	Limits		Prepared	Analyzed	Dil Fac			
Ba Carrier	%Yield	Qualifier	40 - 110							
	107				04/10/19 14:08	05/02/19 21:51	1			

**Lab Sample ID: LCS 160-423239/1-A**  
**Matrix: Water**  
**Analysis Batch: 426594**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 423239**

Analyte	Spike Added	LCS Result	LCS Qual	Total	RL	MDC	Unit	%Rec	%Rec. Limits
				Uncert. (2σ+/-)					
Radium-226	11.4	9.150		0.951	1.00	0.0762	pCi/L	81	75 - 125

# QC Sample Results

Client: Alabama Power General Test Laboratory  
 Project/Site: CCR Plant Gorgas

Job ID: 400-167636-1  
 SDG: Gorgas Ash Pond 1205

## Method: 9315 - Radium-226 (GFPC) (Continued)

**Lab Sample ID: LCS 160-423239/1-A**  
**Matrix: Water**  
**Analysis Batch: 426594**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 423239**

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	108		40 - 110

**Lab Sample ID: LCSD 160-423239/2-A**  
**Matrix: Water**  
**Analysis Batch: 426506**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**  
**Prep Batch: 423239**

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec.		RER	Limit
									Limits	RER		
Radium-226	11.4	8.705		0.904	1.00	0.0678	pCi/L	77	75 - 125	0.24		1

Carrier	LCSD %Yield	LCSD Qualifier	Limits
Ba Carrier	107		40 - 110

## Method: 9320 - Radium-228 (GFPC)

**Lab Sample ID: MB 160-422966/18-A**  
**Matrix: Water**  
**Analysis Batch: 424353**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 422966**

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac

Carrier	MB %Yield	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	103		40 - 110	04/07/19 14:31	04/18/19 08:43	1
Y Carrier	91.2		40 - 110	04/07/19 14:31	04/18/19 08:43	1

**Lab Sample ID: LCS 160-422966/1-A**  
**Matrix: Water**  
**Analysis Batch: 424351**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 422966**

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec.	
									Limits	
Radium-228	9.29	10.20		1.14	1.00	0.352	pCi/L	110	75 - 125	

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	98.5		40 - 110
Y Carrier	86.7		40 - 110

**Lab Sample ID: 400-167635-A-2-E DU**  
**Matrix: Water**  
**Analysis Batch: 424351**

**Client Sample ID: Duplicate**  
**Prep Type: Total/NA**  
**Prep Batch: 422966**

Analyte	Sample Result	Sample Qual	DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	RER	RER
										Limit
Radium-228	0.250	U	0.5271		0.240	1.00	0.333	pCi/L	0.60	1

# QC Sample Results

Client: Alabama Power General Test Laboratory  
 Project/Site: CCR Plant Gorgas

Job ID: 400-167636-1  
 SDG: Gorgas Ash Pond 1205

## Method: 9320 - Radium-228 (GFPC) (Continued)

**Lab Sample ID: 400-167635-A-2-E DU**  
**Matrix: Water**  
**Analysis Batch: 424351**

**Client Sample ID: Duplicate**  
**Prep Type: Total/NA**  
**Prep Batch: 422966**

Carrier	DU DU		Limits
	%Yield	Qualifier	
Ba Carrier	97.3		40 - 110
Y Carrier	86.4		40 - 110

**Lab Sample ID: LCS 160-423240/1-A**  
**Matrix: Water**  
**Analysis Batch: 424434**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 423240**

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits	
Radium-228	9.29	7.592		0.974	1.00	0.471	pCi/L	82	75 - 125	

Carrier	LCS LCS		Limits
	%Yield	Qualifier	
Ba Carrier	108		40 - 110
Y Carrier	67.7		40 - 110

**Lab Sample ID: LCSD 160-423240/2-A**  
**Matrix: Water**  
**Analysis Batch: 424434**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**  
**Prep Batch: 423240**

Analyte	Spike Added	LCSD Result	LCSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		RER	RER Limit
Radium-228	9.29	8.047		0.972	1.00	0.390	pCi/L	87	75 - 125	0.23	1	

Carrier	LCSD LCSD		Limits
	%Yield	Qualifier	
Ba Carrier	107		40 - 110
Y Carrier	82.2		40 - 110

## Method: Ra226\_Ra228 - Combined Radium-226 and Radium-228

**Lab Sample ID: 400-167635-A-2 DU**  
**Matrix: Water**  
**Analysis Batch: 426330**

**Client Sample ID: Duplicate**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qual	DU DU		Total Uncert. (2σ+/-)	RL	MDC	Unit	RER	RER Limit
			Result	Qual						
Combined Radium 226 + 228	0.369		0.6449		0.253	5.00	0.333	pCi/L	0.57	

**TestAmerica Pensacola**  
 3355 McLemore Drive  
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 Phone (850) 474-1001 Fax: (850) 478-2671

**TestAmerica**  
 THE LEADER IN ENVIRONMENTAL TESTING

**Chain of Custody Record**

<b>Client Information</b> Company: Alabama Power General Test Laboratory Address: 744 County Rd 87 GSC #8 City: Calera State, Zip: AL 35040 Phone: 205-664-6197(Tel) Email: lbmidkiff@southernco.com Project Name: CCR Site: Gorgas Ash Pond 1205		Lab PM: Whitmire, Cheyenne R E-Mail: cheyenne.whitmire@testamericainc.com		Carrier Tracking Note: COC No: 400-56525-24537.1 Page: Page 3 of 4 Job #:	
Due Date Requested: TAT Requested (days): PO #: WO #: Project #: 40007143 SSON#:		<b>Analysis Requested</b> Perform MS/MSD (Yes or No): Field Filtered Sample (Yes or No): Total Number of Containers:			
<b>Sample Identification</b> Sample Date Sample Time Sample Type (C=Comp, G=grab) Matrix (W=Water, S=Solid, O=Overstock, BT=Boiler, AA=)		Preservation Code: Special Instructions/Note: FB-1 (Field Blank) MW-24H MW-24H DUP (Sample Duplicate) MW-18V MW-29H MW-26H EB-1 (Equipment Blank)			
AZ05272 AZ05273 AZ05274 AZ05275 AZ05276 AZ05277 AZ05278		X X X X X X X			
Deliverable Requested: <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological <input type="checkbox"/> Deliverable Requested I, II, III, IV, Other (specify)					
Empty Kit Relinquished by: Laura Midkiff Relinquished by: Laura Midkiff Relinquished by: Relinquished by: Custody Seal No.: Δ Yes Δ No					
Date: 3/20/2019 7:15 Company: APC Date/Time: 3:21:19 Company:					




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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

<b>Client Information</b> Company: Alabama Power General Test Laboratory Address: 744 County Rd 87 GSC #8 City: Callera State, Zip: AL 35040 Phone: 205-664-6197(Tel) Email: lbmidkiff@southernco.com Project Name: CCR Site: Gorgas Ash Pond 1205		Lab PM: Whitmire, Cheyenne R E-Mail: cheyenne.whitmire@testamericainc.com		Carrier Tracking No(s): COC No: 400-56525-24537.1 Page: Page 1 of 4 Job #:	
<b>Due Date Requested:</b> TAT Requested (days): PO #: WO #: Project #: CCR: 40007143 SSOW#:		<b>Analysis Requested</b>  400-167637 COC		<b>Preservation Codes:</b> 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 Other: M - Hexane N - None O - ASNaO2 P - Na2OAS Q - Na2SO3 R - Na2SO4 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - ph-4-5 X - other (specify)	
<b>Sample Identification</b> AZ04556		<b>Sample Date:</b> 2/20/19 <b>Sample Time:</b> 11:15 <b>Sample Type:</b> G <b>Matrix (Weaver, Sheldahl, Beckman, AAS):</b> Water		<b>Field Filtered Sample (Yes or No):</b> X <b>Perform MS/MSD (Yes or No):</b> X SM 4500 F_C SM 4500 Cl_E SM 4500 SO4_E 9315_Ra226, 9320_Ra228, Ra226Ra228_GFPc	
<b>Special Instructions/Note:</b> MW-23H		<b>Total Number of Containers:</b> 1		<b>Special Instructions/Note:</b>	
<input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological Deliverable Requested I, II, III, IV, Other (specify)					
Empty Kit Relinquished by: Laura Midkiff Relinquished by: Laura Midkiff Relinquished by:					
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No Custody Seal No.:					
Date: 3/20/2019 7:15 Date/Time: 3-21-19 Date/Time: 08:28 Date/Time: 17.5°C Date/Time: 1636 Date/Time: 1636 Date/Time: 1636					
Method of Shipment:					
Return To Client: <input type="checkbox"/> Disposal By Lab: <input type="checkbox"/> Archive For: <input type="checkbox"/> Months:					
Special Instructions/QC Requirements:					
Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)					



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**Chain of Custody Record**

**TestAmerica**  
 THE LEADER IN ENVIRONMENTAL TESTING

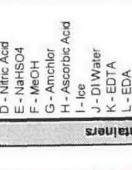
<b>Client Information</b> Client Contact: Laura Midkiff Phone: (850) 474-1001 Email: cheyenne.whitmire@testamericainc.com		<b>Lab PM</b> Whitmire, Cheyenne R Email: cheyenne.whitmire@testamericainc.com		Carrier Tracking Note(s) COC No: 400-56525-24537.1 Page: Page 4 of 4 Job #	
<b>Company</b> Alabama Power General Test Laboratory Address: 744 County Rd 87 GSC #8 City: Calera State, Zip: AL 35040 Phone: 205-664-6197 (Tel) Email: lmidkiff@southernco.com		<b>Due Date Requested:</b> TAT Requested (days): Routine PO # WO # Project # 40007143 CCR Site: Gorgas Ash Pond 1205		<b>Analysis Requested</b> Perform MS/MSD (Yes or No) <input checked="" type="checkbox"/> <input type="checkbox"/> Field Filtered Sample (Yes or No) <input checked="" type="checkbox"/> <input type="checkbox"/> Total Number of Containers: 1 Special Instructions/Note: MW-28H MW-28HDIS 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 Other: M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2SO4 S - H2SO4 T - TSP Dodecylhydrate U - Acetone V - MCAA W - ph 4-5 X - other (specify)	
<b>Sample Identification</b> AZ06916 AZ06917		Sample Date: 3/13/19 Sample Time: 14:28 Sample Type (C=Comp, G=grab): G Matrix (w/water, Solid, or tissue, etc.): Water		9315 Ra226, 9320 Ra228, Ra226Ra228_GFPc SM 4500 SO4_E SM 4500 Cl_E SM 4500 F_C	
<input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological Deliverable Requested I, II, III, IV, Other (specify)		Date: 3/20/2019 7:15 Company: APC		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months	
Empty Kit Relinquished by: Relinquished by: Laura Midkiff Date/Time:		Date/Time: 3/20/19 08:36 Company: APEN		Method of Shipment:	
Relinquished by:		Date/Time:		Company:	
Relinquished by:		Date/Time:		Company:	
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks: 7.5°C (RY)		Received by: [Signature] Date/Time: 3/20/19 08:36 Company: APEN	

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Chain of Custody Record

TestAmerica Pensacola  
3355 McLemore Drive  
Pensacola, FL 32514  
Phone (850) 474-1001 Fax (850) 478-2671

<b>Client Information</b> Client Contact: Laura Midkiff Company: Alabama Power General Test Laboratory Address: 744 County Rd 87 GSC #8 City: Callera State: AL 35040 Phone: 206-664-6197(Tel) Email: lmidkiff@southernco.com Project Name: CCR Site: Gorgas Ash Pond 1205		Lab PM: Whitmore, Cheyenne R E-Mail: cheyenne.whitmore@testamericainc.com Carrier Tracking No(s): Lab No: 400-56625-24537.1 Page: Page 2 of 4 Job #:	
<b>Due Date Requested:</b> TAT Requested (days): PO #: WO #: Project #: 40007143 SSOV#:		<b>Analysis Requested</b> Perform MS/MSD (Yes or No): Field Filtered Sample (Yes or No): 9315_R4226, 9320_R4228, R4226R4228_GFP SM 4500 SO4_E SM 4500 CL_E SM 4500 F_C	
<b>Sample Identification</b> AZ04745 AZ04746		Sample Date: 2/20/19 Sample Time: 14:24 2/21/19 13:55	Sample Type (C=Comp, G=grab): G Matrix (W=water, S=solid, D=diesel, A=air): Water Preservation Code:
Total Number of Containers: 1 Special Instructions/Note: MW-17V		Total Number of Containers: 3 Special Instructions/Note: MW-12V	



400-167640 COC

Non-Hazard  Flammable  Skin Irritant  Poison B  Unknown  Radiological  
 Deliverable Requested I, II, III, IV, Other (specify):

Empty Kit Relinquished by: Laura Midkiff  
 Relinquished by: Date: 3/20/2019 7:45 Company APC  
 Relinquished by: Date/Time: Company  
 Relinquished by: Date/Time: Company  
 Custody Seals Intact: Custody Seal No. Δ Yes Δ No

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)  
 Return To Client  Disposal By Lab  Archive For \_\_\_\_\_ Months

Special Instructions/QC Requirements:

Date: 3/21/19 16:36  
 Received by: [Signature] Company TAKEN  
 Date/Time: Company  
 Date/Time: Company  
 Cooler Temperature(s) °C and Other Remarks: 17.5°C 18.7



## Login Sample Receipt Checklist

Client: Alabama Power General Test Laboratory

Job Number: 400-167636-1  
SDG Number: Gorgas Ash Pond 1205

**Login Number: 167636**

**List Number: 1**

**Creator: Brown, Nathan**

**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	17.5°C IR7
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: 400-167636-1  
SDG Number: Gorgas Ash Pond 1205

**Login Number: 167636**

**List Number: 2**

**Creator: Hellm, Michael**

**List Source: Eurofins TestAmerica, St. Louis**

**List Creation: 03/25/19 08:46 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.	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	22.0
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?	N/A	
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.	N/A	
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: 400-167636-1  
 SDG: Gorgas Ash Pond 1205

## Laboratory: Eurofins TestAmerica, Pensacola

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
Alabama	State Program	4	40150	06-30-19
ANAB	ISO/IEC 17025		L2471	02-22-20
Arizona	State Program	9	AZ0710	01-12-20
Arkansas DEQ	State Program	6	88-0689	09-01-19
California	State Program	9	2510	06-30-19
Florida	NELAP	4	E81010	06-30-19
Georgia	State Program	4	E81010 (FL)	06-30-19
Illinois	NELAP	5	200041	10-09-19
Iowa	State Program	7	367	08-01-20
Kansas	NELAP	7	E-10253	10-31-19
Kentucky (UST)	State Program	4	53	06-30-19
Kentucky (WW)	State Program	4	98030	12-31-19
Louisiana	NELAP	6	30976	06-30-19
Louisiana (DW)	NELAP	6	LA017	12-31-19
Maryland	State Program	3	233	09-30-19
Massachusetts	State Program	1	M-FL094	06-30-19
Michigan	State Program	5	9912	06-30-19
New Jersey	NELAP	2	FL006	06-30-19
North Carolina (WW/SW)	State Program	4	314	12-31-19
Oklahoma	State Program	6	9810	08-31-19
Pennsylvania	NELAP	3	68-00467	01-31-20
Rhode Island	State Program	1	LAO00307	12-30-19
South Carolina	State Program	4	96026	06-30-19
Tennessee	State Program	4	TN02907	06-30-19
Texas	NELAP	6	T104704286-18-15	09-30-19
US Fish & Wildlife	Federal		LE058448-0	07-31-19
USDA	Federal		P330-18-00148	05-17-21
Virginia	NELAP	3	460166	06-14-19
Washington	State Program	10	C915	05-15-20
West Virginia DEP	State Program	3	136	07-31-19

# Accreditation/Certification Summary

Client: Alabama Power General Test Laboratory  
 Project/Site: CCR Plant Gorgas

Job ID: 400-167636-1  
 SDG: Gorgas Ash Pond 1205

## 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	EPA Region	Identification Number	Expiration Date
Alaska	State Program	10	MO00054	06-30-19
ANAB	DoD		L2305	04-06-22
Arizona	State Program	9	AZ0813	12-08-19
California	State Program	9	2886	06-30-19 *
Connecticut	State Program	1	PH-0241	03-31-21
Florida	NELAP	4	E87689	06-30-19 *
Hawaii	State Program	9	NA	06-30-19
Illinois	NELAP	5	200023	11-30-19
Iowa	State Program	7	373	12-01-20
Kansas	NELAP	7	E-10236	10-31-19
Kentucky (DW)	State Program	4	KY90125	12-31-19
Louisiana	NELAP	6	04080	06-30-19
Louisiana (DW)	NELAP	6	LA011	12-31-19
Maryland	State Program	3	310	09-30-19
Michigan	State Program	5	9005	06-30-19
Missouri	State Program	7	780	06-30-19
Nevada	State Program	9	MO000542018-1	07-31-19
New Jersey	NELAP	2	MO002	06-30-19 *
New York	NELAP	2	11616	03-31-20
North Dakota	State Program	8	R207	06-30-19 *
NRC	NRC		24-24817-01	12-31-22
Oklahoma	State Program	6	9997	08-31-19
Pennsylvania	NELAP	3	68-00540	02-28-20
South Carolina	State Program	4	85002001	06-30-19
Texas	NELAP	6	T104704193-18-13	07-31-19
US Fish & Wildlife	Federal		058448	07-31-19
USDA	Federal		P330-17-0028	02-02-20
Utah	NELAP	8	MO000542018-10	07-31-19
Virginia	NELAP	3	460230	06-14-19 *
Washington	State Program	10	C592	08-30-19
West Virginia DEP	State Program	3	381	08-31-19

\* Accreditation/Certification renewal pending - accreditation/certification considered valid.



**Alabama Power Company  
Plant Gorgas Ash Pond**

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-23H	2/20/2019 10:43	Conductivity	760.6	uS/cm
GS-AP-MW-23H	2/20/2019 10:43	DO	6.04	mg/L
GS-AP-MW-23H	2/20/2019 10:43	Depth to Water Detail	27.95	ft
GS-AP-MW-23H	2/20/2019 10:43	Oxidation Reduction Potention	-1.7	mv
GS-AP-MW-23H	2/20/2019 10:43	pH	6.05	pH
GS-AP-MW-23H	2/20/2019 10:43	Temperature	17.4	C
GS-AP-MW-23H	2/20/2019 10:43	Turbidity	17.4	NTU
GS-AP-MW-23H	2/20/2019 10:48	Conductivity	763.2	uS/cm
GS-AP-MW-23H	2/20/2019 10:48	DO	6.45	mg/L
GS-AP-MW-23H	2/20/2019 10:48	Depth to Water Detail	28	ft
GS-AP-MW-23H	2/20/2019 10:48	Oxidation Reduction Potention	-5.1	mv
GS-AP-MW-23H	2/20/2019 10:48	pH	6.07	pH
GS-AP-MW-23H	2/20/2019 10:48	Temperature	17.37	C
GS-AP-MW-23H	2/20/2019 10:48	Turbidity	12.5	NTU
GS-AP-MW-23H	2/20/2019 10:53	Conductivity	760.4	uS/cm
GS-AP-MW-23H	2/20/2019 10:53	DO	6.59	mg/L
GS-AP-MW-23H	2/20/2019 10:53	Depth to Water Detail	28.06	ft
GS-AP-MW-23H	2/20/2019 10:53	Oxidation Reduction Potention	-6.7	mv
GS-AP-MW-23H	2/20/2019 10:53	pH	6.1	pH
GS-AP-MW-23H	2/20/2019 10:53	Temperature	17.4	C
GS-AP-MW-23H	2/20/2019 10:53	Turbidity	11.16	NTU
GS-AP-MW-23H	2/20/2019 10:58	Conductivity	759.9	uS/cm
GS-AP-MW-23H	2/20/2019 10:58	DO	6.57	mg/L
GS-AP-MW-23H	2/20/2019 10:58	Depth to Water Detail	28.08	ft
GS-AP-MW-23H	2/20/2019 10:58	Oxidation Reduction Potention	-7.6	mv
GS-AP-MW-23H	2/20/2019 10:58	pH	6.11	pH
GS-AP-MW-23H	2/20/2019 10:58	Temperature	17.4	C
GS-AP-MW-23H	2/20/2019 10:58	Turbidity	9.66	NTU
GS-AP-MW-23H	2/20/2019 11:03	Conductivity	758.8	uS/cm
GS-AP-MW-23H	2/20/2019 11:03	DO	6.42	mg/L
GS-AP-MW-23H	2/20/2019 11:03	Depth to Water Detail	28.1	ft
GS-AP-MW-23H	2/20/2019 11:03	Oxidation Reduction Potention	-7.5	mv
GS-AP-MW-23H	2/20/2019 11:03	pH	6.13	pH
GS-AP-MW-23H	2/20/2019 11:03	Temperature	17.4	C
GS-AP-MW-23H	2/20/2019 11:03	Turbidity	5.92	NTU
GS-AP-MW-23H	2/20/2019 11:08	Conductivity	757.4	uS/cm
GS-AP-MW-23H	2/20/2019 11:08	DO	6.43	mg/L
GS-AP-MW-23H	2/20/2019 11:08	Depth to Water Detail	28.13	ft
GS-AP-MW-23H	2/20/2019 11:08	Oxidation Reduction Potention	-8.6	mv
GS-AP-MW-23H	2/20/2019 11:08	pH	6.15	pH
GS-AP-MW-23H	2/20/2019 11:08	Temperature	17.4	C
GS-AP-MW-23H	2/20/2019 11:08	Turbidity	5.9	NTU
GS-AP-MW-23H	2/20/2019 11:13	Conductivity	758.1	uS/cm
GS-AP-MW-23H	2/20/2019 11:13	DO	6.5	mg/L
GS-AP-MW-23H	2/20/2019 11:13	Depth to Water Detail	28.15	ft
GS-AP-MW-23H	2/20/2019 11:13	Oxidation Reduction Potention	-10.1	mv

**Alabama Power Company  
Plant Gorgas Ash Pond**

<b>WELL ID</b>	<b>READING TIME</b>	<b>DESCRIPTION</b>	<b>VALUE</b>	<b>UNIT</b>
GS-AP-MW-23H	2/20/2019 11:13	pH	6.17	pH
GS-AP-MW-23H	2/20/2019 11:13	Temperature	17.39	C
GS-AP-MW-23H	2/20/2019 11:13	Turbidity	4.33	NTU

**Alabama Power Company  
Plant Gorgas Ash Pond**

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-12V	2/21/2019 10:23	Conductivity	614.8	uS/cm
GS-AP-MW-12V	2/21/2019 10:23	DO	0.64	mg/L
GS-AP-MW-12V	2/21/2019 10:23	Depth to Water Detail	89.5	ft
GS-AP-MW-12V	2/21/2019 10:23	Oxidation Reduction Potention	-62.3	mv
GS-AP-MW-12V	2/21/2019 10:23	pH	11.17	pH
GS-AP-MW-12V	2/21/2019 10:23	Temperature	16.37	C
GS-AP-MW-12V	2/21/2019 10:23	Turbidity	109.7	NTU
GS-AP-MW-12V	2/21/2019 10:28	Conductivity	623.7	uS/cm
GS-AP-MW-12V	2/21/2019 10:28	DO	0.45	mg/L
GS-AP-MW-12V	2/21/2019 10:28	Depth to Water Detail	90.2	ft
GS-AP-MW-12V	2/21/2019 10:28	Oxidation Reduction Potention	-65.1	mv
GS-AP-MW-12V	2/21/2019 10:28	pH	11.21	pH
GS-AP-MW-12V	2/21/2019 10:28	Temperature	16.32	C
GS-AP-MW-12V	2/21/2019 10:28	Turbidity	92.4	NTU
GS-AP-MW-12V	2/21/2019 10:33	Conductivity	606.7	uS/cm
GS-AP-MW-12V	2/21/2019 10:33	DO	0.4	mg/L
GS-AP-MW-12V	2/21/2019 10:33	Depth to Water Detail	91	ft
GS-AP-MW-12V	2/21/2019 10:33	Oxidation Reduction Potention	-63.7	mv
GS-AP-MW-12V	2/21/2019 10:33	pH	11.18	pH
GS-AP-MW-12V	2/21/2019 10:33	Temperature	16.35	C
GS-AP-MW-12V	2/21/2019 10:33	Turbidity	94	NTU
GS-AP-MW-12V	2/21/2019 10:38	Conductivity	576.8	uS/cm
GS-AP-MW-12V	2/21/2019 10:38	DO	0.37	mg/L
GS-AP-MW-12V	2/21/2019 10:38	Depth to Water Detail	91.9	ft
GS-AP-MW-12V	2/21/2019 10:38	Oxidation Reduction Potention	-61.9	mv
GS-AP-MW-12V	2/21/2019 10:38	pH	11.11	pH
GS-AP-MW-12V	2/21/2019 10:38	Temperature	16.4	C
GS-AP-MW-12V	2/21/2019 10:38	Turbidity	95.7	NTU
GS-AP-MW-12V	2/21/2019 10:43	Conductivity	525.9	uS/cm
GS-AP-MW-12V	2/21/2019 10:43	DO	0.34	mg/L
GS-AP-MW-12V	2/21/2019 10:43	Depth to Water Detail	92.8	ft
GS-AP-MW-12V	2/21/2019 10:43	Oxidation Reduction Potention	-57.9	mv
GS-AP-MW-12V	2/21/2019 10:43	pH	10.95	pH
GS-AP-MW-12V	2/21/2019 10:43	Temperature	16.36	C
GS-AP-MW-12V	2/21/2019 10:43	Turbidity	69.4	NTU
GS-AP-MW-12V	2/21/2019 10:48	Conductivity	453.3	uS/cm
GS-AP-MW-12V	2/21/2019 10:48	DO	0.32	mg/L
GS-AP-MW-12V	2/21/2019 10:48	Depth to Water Detail	93.5	ft
GS-AP-MW-12V	2/21/2019 10:48	Oxidation Reduction Potention	-50.6	mv
GS-AP-MW-12V	2/21/2019 10:48	pH	10.57	pH
GS-AP-MW-12V	2/21/2019 10:48	Temperature	16.36	C
GS-AP-MW-12V	2/21/2019 10:48	Turbidity	62	NTU
GS-AP-MW-12V	2/21/2019 10:53	Conductivity	417.9	uS/cm
GS-AP-MW-12V	2/21/2019 10:53	DO	0.3	mg/L
GS-AP-MW-12V	2/21/2019 10:53	Depth to Water Detail	94.1	ft
GS-AP-MW-12V	2/21/2019 10:53	Oxidation Reduction Potention	-45.6	mv

**Alabama Power Company  
Plant Gorgas Ash Pond**

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-12V	2/21/2019 10:53	pH	10.31	pH
GS-AP-MW-12V	2/21/2019 10:53	Temperature	16.36	C
GS-AP-MW-12V	2/21/2019 10:53	Turbidity	52.4	NTU
GS-AP-MW-12V	2/21/2019 10:58	Conductivity	392.3	uS/cm
GS-AP-MW-12V	2/21/2019 10:58	DO	0.29	mg/L
GS-AP-MW-12V	2/21/2019 10:58	Depth to Water Detail	94.3	ft
GS-AP-MW-12V	2/21/2019 10:58	Oxidation Reduction Potention	-39.8	mv
GS-AP-MW-12V	2/21/2019 10:58	pH	10.02	pH
GS-AP-MW-12V	2/21/2019 10:58	Temperature	16.4	C
GS-AP-MW-12V	2/21/2019 10:58	Turbidity	50	NTU
GS-AP-MW-12V	2/21/2019 11:03	Conductivity	379.7	uS/cm
GS-AP-MW-12V	2/21/2019 11:03	DO	0.27	mg/L
GS-AP-MW-12V	2/21/2019 11:03	Depth to Water Detail	94.5	ft
GS-AP-MW-12V	2/21/2019 11:03	Oxidation Reduction Potention	-34.8	mv
GS-AP-MW-12V	2/21/2019 11:03	pH	9.76	pH
GS-AP-MW-12V	2/21/2019 11:03	Temperature	16.37	C
GS-AP-MW-12V	2/21/2019 11:03	Turbidity	49	NTU
GS-AP-MW-12V	2/21/2019 11:08	Conductivity	375.1	uS/cm
GS-AP-MW-12V	2/21/2019 11:08	DO	0.27	mg/L
GS-AP-MW-12V	2/21/2019 11:08	Depth to Water Detail	94.89	ft
GS-AP-MW-12V	2/21/2019 11:08	Oxidation Reduction Potention	-33.3	mv
GS-AP-MW-12V	2/21/2019 11:08	pH	9.6	pH
GS-AP-MW-12V	2/21/2019 11:08	Temperature	16.38	C
GS-AP-MW-12V	2/21/2019 11:08	Turbidity	37.2	NTU
GS-AP-MW-12V	2/21/2019 11:13	Conductivity	373.1	uS/cm
GS-AP-MW-12V	2/21/2019 11:13	DO	0.24	mg/L
GS-AP-MW-12V	2/21/2019 11:13	Depth to Water Detail	95.4	ft
GS-AP-MW-12V	2/21/2019 11:13	Oxidation Reduction Potention	-31	mv
GS-AP-MW-12V	2/21/2019 11:13	pH	9.41	pH
GS-AP-MW-12V	2/21/2019 11:13	Temperature	16.4	C
GS-AP-MW-12V	2/21/2019 11:13	Turbidity	30.6	NTU
GS-AP-MW-12V	2/21/2019 11:18	Conductivity	374.2	uS/cm
GS-AP-MW-12V	2/21/2019 11:18	DO	0.23	mg/L
GS-AP-MW-12V	2/21/2019 11:18	Depth to Water Detail	95.8	ft
GS-AP-MW-12V	2/21/2019 11:18	Oxidation Reduction Potention	-32.6	mv
GS-AP-MW-12V	2/21/2019 11:18	pH	9.26	pH
GS-AP-MW-12V	2/21/2019 11:18	Temperature	16.39	C
GS-AP-MW-12V	2/21/2019 11:18	Turbidity	33.3	NTU
GS-AP-MW-12V	2/21/2019 11:23	Conductivity	375.6	uS/cm
GS-AP-MW-12V	2/21/2019 11:23	DO	0.22	mg/L
GS-AP-MW-12V	2/21/2019 11:23	Depth to Water Detail	95.95	ft
GS-AP-MW-12V	2/21/2019 11:23	Oxidation Reduction Potention	-52.9	mv
GS-AP-MW-12V	2/21/2019 11:23	pH	9.13	pH
GS-AP-MW-12V	2/21/2019 11:23	Temperature	16.44	C
GS-AP-MW-12V	2/21/2019 11:23	Turbidity	31.6	NTU
GS-AP-MW-12V	2/21/2019 11:28	Conductivity	376.5	uS/cm

**Alabama Power Company  
Plant Gorgas Ash Pond**

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-12V	2/21/2019 11:28	DO	0.21	mg/L
GS-AP-MW-12V	2/21/2019 11:28	Depth to Water Detail	96.2	ft
GS-AP-MW-12V	2/21/2019 11:28	Oxidation Reduction Potention	-93.5	mv
GS-AP-MW-12V	2/21/2019 11:28	pH	9.05	pH
GS-AP-MW-12V	2/21/2019 11:28	Temperature	16.45	C
GS-AP-MW-12V	2/21/2019 11:28	Turbidity	34	NTU
GS-AP-MW-12V	2/21/2019 11:33	Conductivity	379.2	uS/cm
GS-AP-MW-12V	2/21/2019 11:33	DO	0.2	mg/L
GS-AP-MW-12V	2/21/2019 11:33	Depth to Water Detail	96.5	ft
GS-AP-MW-12V	2/21/2019 11:33	Oxidation Reduction Potention	-167.8	mv
GS-AP-MW-12V	2/21/2019 11:33	pH	8.92	pH
GS-AP-MW-12V	2/21/2019 11:33	Temperature	16.49	C
GS-AP-MW-12V	2/21/2019 11:33	Turbidity	31.2	NTU
GS-AP-MW-12V	2/21/2019 11:38	Conductivity	381.8	uS/cm
GS-AP-MW-12V	2/21/2019 11:38	DO	0.2	mg/L
GS-AP-MW-12V	2/21/2019 11:38	Depth to Water Detail	96.7	ft
GS-AP-MW-12V	2/21/2019 11:38	Oxidation Reduction Potention	-208.4	mv
GS-AP-MW-12V	2/21/2019 11:38	pH	8.84	pH
GS-AP-MW-12V	2/21/2019 11:38	Temperature	16.41	C
GS-AP-MW-12V	2/21/2019 11:38	Turbidity	32.8	NTU
GS-AP-MW-12V	2/21/2019 11:43	Conductivity	385.2	uS/cm
GS-AP-MW-12V	2/21/2019 11:43	DO	0.2	mg/L
GS-AP-MW-12V	2/21/2019 11:43	Depth to Water Detail	96.9	ft
GS-AP-MW-12V	2/21/2019 11:43	Oxidation Reduction Potention	-227.3	mv
GS-AP-MW-12V	2/21/2019 11:43	pH	8.7	pH
GS-AP-MW-12V	2/21/2019 11:43	Temperature	16.44	C
GS-AP-MW-12V	2/21/2019 11:43	Turbidity	27.3	NTU
GS-AP-MW-12V	2/21/2019 11:48	Conductivity	388.8	uS/cm
GS-AP-MW-12V	2/21/2019 11:48	DO	0.22	mg/L
GS-AP-MW-12V	2/21/2019 11:48	Depth to Water Detail	97.05	ft
GS-AP-MW-12V	2/21/2019 11:48	Oxidation Reduction Potention	-235.3	mv
GS-AP-MW-12V	2/21/2019 11:48	pH	8.58	pH
GS-AP-MW-12V	2/21/2019 11:48	Temperature	16.4	C
GS-AP-MW-12V	2/21/2019 11:48	Turbidity	29.8	NTU
GS-AP-MW-12V	2/21/2019 11:53	Conductivity	390.7	uS/cm
GS-AP-MW-12V	2/21/2019 11:53	DO	0.23	mg/L
GS-AP-MW-12V	2/21/2019 11:53	Depth to Water Detail	97.15	ft
GS-AP-MW-12V	2/21/2019 11:53	Oxidation Reduction Potention	-232.8	mv
GS-AP-MW-12V	2/21/2019 11:53	pH	8.49	pH
GS-AP-MW-12V	2/21/2019 11:53	Temperature	16.44	C
GS-AP-MW-12V	2/21/2019 11:53	Turbidity	26.4	NTU
GS-AP-MW-12V	2/21/2019 11:58	Conductivity	392.5	uS/cm
GS-AP-MW-12V	2/21/2019 11:58	DO	0.23	mg/L
GS-AP-MW-12V	2/21/2019 11:58	Depth to Water Detail	97.3	ft
GS-AP-MW-12V	2/21/2019 11:58	Oxidation Reduction Potention	-226.8	mv
GS-AP-MW-12V	2/21/2019 11:58	pH	8.38	pH



**Alabama Power Company  
Plant Gorgas Ash Pond**

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-12V	2/21/2019 11:58	Temperature	16.45	C
GS-AP-MW-12V	2/21/2019 11:58	Turbidity	22.2	NTU
GS-AP-MW-12V	2/21/2019 12:03	Conductivity	393.8	uS/cm
GS-AP-MW-12V	2/21/2019 12:03	DO	0.24	mg/L
GS-AP-MW-12V	2/21/2019 12:03	Depth to Water Detail	97.5	ft
GS-AP-MW-12V	2/21/2019 12:03	Oxidation Reduction Potention	-217	mv
GS-AP-MW-12V	2/21/2019 12:03	pH	8.28	pH
GS-AP-MW-12V	2/21/2019 12:03	Temperature	16.44	C
GS-AP-MW-12V	2/21/2019 12:03	Turbidity	23.1	NTU
GS-AP-MW-12V	2/21/2019 12:08	Conductivity	394.6	uS/cm
GS-AP-MW-12V	2/21/2019 12:08	DO	0.24	mg/L
GS-AP-MW-12V	2/21/2019 12:08	Depth to Water Detail	97.6	ft
GS-AP-MW-12V	2/21/2019 12:08	Oxidation Reduction Potention	-209.4	mv
GS-AP-MW-12V	2/21/2019 12:08	pH	8.19	pH
GS-AP-MW-12V	2/21/2019 12:08	Temperature	16.44	C
GS-AP-MW-12V	2/21/2019 12:08	Turbidity	22.1	NTU
GS-AP-MW-12V	2/21/2019 12:13	Conductivity	396.1	uS/cm
GS-AP-MW-12V	2/21/2019 12:13	DO	0.24	mg/L
GS-AP-MW-12V	2/21/2019 12:13	Depth to Water Detail	97.8	ft
GS-AP-MW-12V	2/21/2019 12:13	Oxidation Reduction Potention	-192	mv
GS-AP-MW-12V	2/21/2019 12:13	pH	8.05	pH
GS-AP-MW-12V	2/21/2019 12:13	Temperature	16.4	C
GS-AP-MW-12V	2/21/2019 12:13	Turbidity	21.4	NTU
GS-AP-MW-12V	2/21/2019 12:18	Conductivity	395.6	uS/cm
GS-AP-MW-12V	2/21/2019 12:18	DO	0.24	mg/L
GS-AP-MW-12V	2/21/2019 12:18	Depth to Water Detail	97.9	ft
GS-AP-MW-12V	2/21/2019 12:18	Oxidation Reduction Potention	-187.8	mv
GS-AP-MW-12V	2/21/2019 12:18	pH	8	pH
GS-AP-MW-12V	2/21/2019 12:18	Temperature	16.43	C
GS-AP-MW-12V	2/21/2019 12:18	Turbidity	16.9	NTU
GS-AP-MW-12V	2/21/2019 12:23	Conductivity	395.9	uS/cm
GS-AP-MW-12V	2/21/2019 12:23	DO	0.24	mg/L
GS-AP-MW-12V	2/21/2019 12:23	Depth to Water Detail	97.92	ft
GS-AP-MW-12V	2/21/2019 12:23	Oxidation Reduction Potention	-181.4	mv
GS-AP-MW-12V	2/21/2019 12:23	pH	7.94	pH
GS-AP-MW-12V	2/21/2019 12:23	Temperature	16.37	C
GS-AP-MW-12V	2/21/2019 12:23	Turbidity	16.8	NTU
GS-AP-MW-12V	2/21/2019 12:28	Conductivity	396.5	uS/cm
GS-AP-MW-12V	2/21/2019 12:28	DO	0.24	mg/L
GS-AP-MW-12V	2/21/2019 12:28	Depth to Water Detail	98	ft
GS-AP-MW-12V	2/21/2019 12:28	Oxidation Reduction Potention	-170.4	mv
GS-AP-MW-12V	2/21/2019 12:28	pH	7.85	pH
GS-AP-MW-12V	2/21/2019 12:28	Temperature	16.49	C
GS-AP-MW-12V	2/21/2019 12:28	Turbidity	17	NTU
GS-AP-MW-12V	2/21/2019 12:33	Conductivity	396.5	uS/cm
GS-AP-MW-12V	2/21/2019 12:33	DO	0.26	mg/L

**Alabama Power Company  
Plant Gorgas Ash Pond**

<b>WELL ID</b>	<b>READING TIME</b>	<b>DESCRIPTION</b>	<b>VALUE</b>	<b>UNIT</b>
GS-AP-MW-12V	2/21/2019 12:33	Depth to Water Detail	98.1	ft
GS-AP-MW-12V	2/21/2019 12:33	Oxidation Reduction Potention	-166.5	mv
GS-AP-MW-12V	2/21/2019 12:33	pH	7.81	pH
GS-AP-MW-12V	2/21/2019 12:33	Temperature	16.54	C
GS-AP-MW-12V	2/21/2019 12:33	Turbidity	17.9	NTU
GS-AP-MW-12V	2/21/2019 12:38	Conductivity	396.6	uS/cm
GS-AP-MW-12V	2/21/2019 12:38	DO	0.26	mg/L
GS-AP-MW-12V	2/21/2019 12:38	Depth to Water Detail	98.12	ft
GS-AP-MW-12V	2/21/2019 12:38	Oxidation Reduction Potention	-158.5	mv
GS-AP-MW-12V	2/21/2019 12:38	pH	7.75	pH
GS-AP-MW-12V	2/21/2019 12:38	Temperature	16.45	C
GS-AP-MW-12V	2/21/2019 12:38	Turbidity	15.3	NTU
GS-AP-MW-12V	2/21/2019 12:43	Conductivity	395.8	uS/cm
GS-AP-MW-12V	2/21/2019 12:43	DO	0.26	mg/L
GS-AP-MW-12V	2/21/2019 12:43	Depth to Water Detail	98.2	ft
GS-AP-MW-12V	2/21/2019 12:43	Oxidation Reduction Potention	-153.8	mv
GS-AP-MW-12V	2/21/2019 12:43	pH	7.71	pH
GS-AP-MW-12V	2/21/2019 12:43	Temperature	16.53	C
GS-AP-MW-12V	2/21/2019 12:43	Turbidity	16.5	NTU
GS-AP-MW-12V	2/21/2019 12:48	Conductivity	396.1	uS/cm
GS-AP-MW-12V	2/21/2019 12:48	DO	0.25	mg/L
GS-AP-MW-12V	2/21/2019 12:48	Depth to Water Detail	98.25	ft
GS-AP-MW-12V	2/21/2019 12:48	Oxidation Reduction Potention	-151.8	mv
GS-AP-MW-12V	2/21/2019 12:48	pH	7.7	pH
GS-AP-MW-12V	2/21/2019 12:48	Temperature	16.49	C
GS-AP-MW-12V	2/21/2019 12:48	Turbidity	14.2	NTU
GS-AP-MW-12V	2/21/2019 12:53	Conductivity	397.1	uS/cm
GS-AP-MW-12V	2/21/2019 12:53	DO	0.26	mg/L
GS-AP-MW-12V	2/21/2019 12:53	Depth to Water Detail	98.38	ft
GS-AP-MW-12V	2/21/2019 12:53	Oxidation Reduction Potention	-146.6	mv
GS-AP-MW-12V	2/21/2019 12:53	pH	7.64	pH
GS-AP-MW-12V	2/21/2019 12:53	Temperature	16.47	C
GS-AP-MW-12V	2/21/2019 12:53	Turbidity	18.9	NTU
GS-AP-MW-12V	2/21/2019 12:58	Conductivity	396.6	uS/cm
GS-AP-MW-12V	2/21/2019 12:58	DO	0.25	mg/L
GS-AP-MW-12V	2/21/2019 12:58	Depth to Water Detail	98.4	ft
GS-AP-MW-12V	2/21/2019 12:58	Oxidation Reduction Potention	-142.7	mv
GS-AP-MW-12V	2/21/2019 12:58	pH	7.62	pH
GS-AP-MW-12V	2/21/2019 12:58	Temperature	16.54	C
GS-AP-MW-12V	2/21/2019 12:58	Turbidity	13	NTU
GS-AP-MW-12V	2/21/2019 13:03	Conductivity	397	uS/cm
GS-AP-MW-12V	2/21/2019 13:03	DO	0.26	mg/L
GS-AP-MW-12V	2/21/2019 13:03	Depth to Water Detail	98.45	ft
GS-AP-MW-12V	2/21/2019 13:03	Oxidation Reduction Potention	-136.6	mv
GS-AP-MW-12V	2/21/2019 13:03	pH	7.58	pH
GS-AP-MW-12V	2/21/2019 13:03	Temperature	16.54	C

**Alabama Power Company  
Plant Gorgas Ash Pond**

<b>WELL ID</b>	<b>READING TIME</b>	<b>DESCRIPTION</b>	<b>VALUE</b>	<b>UNIT</b>
GS-AP-MW-12V	2/21/2019 13:03	Turbidity	13.4	NTU
GS-AP-MW-12V	2/21/2019 13:08	Conductivity	397	uS/cm
GS-AP-MW-12V	2/21/2019 13:08	DO	0.26	mg/L
GS-AP-MW-12V	2/21/2019 13:08	Depth to Water Detail	98.5	ft
GS-AP-MW-12V	2/21/2019 13:08	Oxidation Reduction Potention	-134.5	mv
GS-AP-MW-12V	2/21/2019 13:08	pH	7.56	pH
GS-AP-MW-12V	2/21/2019 13:08	Temperature	16.49	C
GS-AP-MW-12V	2/21/2019 13:08	Turbidity	13.9	NTU
GS-AP-MW-12V	2/21/2019 13:13	Conductivity	397.2	uS/cm
GS-AP-MW-12V	2/21/2019 13:13	DO	0.24	mg/L
GS-AP-MW-12V	2/21/2019 13:13	Depth to Water Detail	98.5	ft
GS-AP-MW-12V	2/21/2019 13:13	Oxidation Reduction Potention	-132.1	mv
GS-AP-MW-12V	2/21/2019 13:13	pH	7.55	pH
GS-AP-MW-12V	2/21/2019 13:13	Temperature	16.44	C
GS-AP-MW-12V	2/21/2019 13:13	Turbidity	13.1	NTU
GS-AP-MW-12V	2/21/2019 13:18	Conductivity	397.4	uS/cm
GS-AP-MW-12V	2/21/2019 13:18	DO	0.25	mg/L
GS-AP-MW-12V	2/21/2019 13:18	Depth to Water Detail	98.5	ft
GS-AP-MW-12V	2/21/2019 13:18	Oxidation Reduction Potention	-130.5	mv
GS-AP-MW-12V	2/21/2019 13:18	pH	7.54	pH
GS-AP-MW-12V	2/21/2019 13:18	Temperature	16.45	C
GS-AP-MW-12V	2/21/2019 13:18	Turbidity	11.4	NTU
GS-AP-MW-12V	2/21/2019 13:23	Conductivity	396.1	uS/cm
GS-AP-MW-12V	2/21/2019 13:23	DO	0.25	mg/L
GS-AP-MW-12V	2/21/2019 13:23	Depth to Water Detail	98.6	ft
GS-AP-MW-12V	2/21/2019 13:23	Oxidation Reduction Potention	-128.7	mv
GS-AP-MW-12V	2/21/2019 13:23	pH	7.52	pH
GS-AP-MW-12V	2/21/2019 13:23	Temperature	16.4	C
GS-AP-MW-12V	2/21/2019 13:23	Turbidity	12.2	NTU
GS-AP-MW-12V	2/21/2019 13:28	Conductivity	397.4	uS/cm
GS-AP-MW-12V	2/21/2019 13:28	DO	0.26	mg/L
GS-AP-MW-12V	2/21/2019 13:28	Depth to Water Detail	98.59	ft
GS-AP-MW-12V	2/21/2019 13:28	Oxidation Reduction Potention	-127.5	mv
GS-AP-MW-12V	2/21/2019 13:28	pH	7.52	pH
GS-AP-MW-12V	2/21/2019 13:28	Temperature	16.43	C
GS-AP-MW-12V	2/21/2019 13:28	Turbidity	12.4	NTU
GS-AP-MW-12V	2/21/2019 13:33	Conductivity	397.1	uS/cm
GS-AP-MW-12V	2/21/2019 13:33	DO	0.26	mg/L
GS-AP-MW-12V	2/21/2019 13:33	Depth to Water Detail	98.65	ft
GS-AP-MW-12V	2/21/2019 13:33	Oxidation Reduction Potention	-125.2	mv
GS-AP-MW-12V	2/21/2019 13:33	pH	7.5	pH
GS-AP-MW-12V	2/21/2019 13:33	Temperature	16.41	C
GS-AP-MW-12V	2/21/2019 13:33	Turbidity	11	NTU
GS-AP-MW-12V	2/21/2019 13:38	Conductivity	397.2	uS/cm
GS-AP-MW-12V	2/21/2019 13:38	DO	0.26	mg/L
GS-AP-MW-12V	2/21/2019 13:38	Depth to Water Detail	98.68	ft

**Alabama Power Company  
Plant Gorgas Ash Pond**

<b>WELL ID</b>	<b>READING TIME</b>	<b>DESCRIPTION</b>	<b>VALUE</b>	<b>UNIT</b>
GS-AP-MW-12V	2/21/2019 13:38	Oxidation Reduction Potention	-123.1	mv
GS-AP-MW-12V	2/21/2019 13:38	pH	7.48	pH
GS-AP-MW-12V	2/21/2019 13:38	Temperature	16.38	C
GS-AP-MW-12V	2/21/2019 13:38	Turbidity	11	NTU
GS-AP-MW-12V	2/21/2019 13:43	Conductivity	396.8	uS/cm
GS-AP-MW-12V	2/21/2019 13:43	DO	0.26	mg/L
GS-AP-MW-12V	2/21/2019 13:43	Depth to Water Detail	98.7	ft
GS-AP-MW-12V	2/21/2019 13:43	Oxidation Reduction Potention	-121.9	mv
GS-AP-MW-12V	2/21/2019 13:43	pH	7.48	pH
GS-AP-MW-12V	2/21/2019 13:43	Temperature	16.35	C
GS-AP-MW-12V	2/21/2019 13:43	Turbidity	11	NTU
GS-AP-MW-12V	2/21/2019 13:48	Conductivity	398.4	uS/cm
GS-AP-MW-12V	2/21/2019 13:48	DO	0.26	mg/L
GS-AP-MW-12V	2/21/2019 13:48	Depth to Water Detail	98.7	ft
GS-AP-MW-12V	2/21/2019 13:48	Oxidation Reduction Potention	-119.7	mv
GS-AP-MW-12V	2/21/2019 13:48	pH	7.47	pH
GS-AP-MW-12V	2/21/2019 13:48	Temperature	16.22	C
GS-AP-MW-12V	2/21/2019 13:48	Turbidity	12.2	NTU
GS-AP-MW-12V	2/21/2019 13:53	Conductivity	398.2	uS/cm
GS-AP-MW-12V	2/21/2019 13:53	DO	0.26	mg/L
GS-AP-MW-12V	2/21/2019 13:53	Depth to Water Detail	98.7	ft
GS-AP-MW-12V	2/21/2019 13:53	Oxidation Reduction Potention	-118.8	mv
GS-AP-MW-12V	2/21/2019 13:53	pH	7.46	pH
GS-AP-MW-12V	2/21/2019 13:53	Temperature	16.22	C
GS-AP-MW-12V	2/21/2019 13:53	Turbidity	9.89	NTU

**Alabama Power Company  
Plant Gorgas Ash Pond**

<b>WELL ID</b>	<b>READING TIME</b>	<b>DESCRIPTION</b>	<b>VALUE</b>	<b>UNIT</b>
GS-AP-MW-17V	2/20/2019 10:56	Conductivity	568.9	uS/cm
GS-AP-MW-17V	2/20/2019 10:56	DO	9.04	mg/L
GS-AP-MW-17V	2/20/2019 10:56	Depth to Water Detail	100.9	ft
GS-AP-MW-17V	2/20/2019 10:56	Oxidation Reduction Potention	-9.6	mv
GS-AP-MW-17V	2/20/2019 10:56	pH	7.59	pH
GS-AP-MW-17V	2/20/2019 10:56	Temperature	14.38	C
GS-AP-MW-17V	2/20/2019 10:56	Turbidity	67	NTU
GS-AP-MW-17V	2/20/2019 11:01	Conductivity	564.2	uS/cm
GS-AP-MW-17V	2/20/2019 11:01	DO	10.07	mg/L
GS-AP-MW-17V	2/20/2019 11:01	Depth to Water Detail	101.5	ft
GS-AP-MW-17V	2/20/2019 11:01	Oxidation Reduction Potention	16.1	mv
GS-AP-MW-17V	2/20/2019 11:01	pH	7.74	pH
GS-AP-MW-17V	2/20/2019 11:01	Temperature	14.47	C
GS-AP-MW-17V	2/20/2019 11:01	Turbidity	28	NTU
GS-AP-MW-17V	2/20/2019 11:06	Conductivity	564.2	uS/cm
GS-AP-MW-17V	2/20/2019 11:06	DO	10.69	mg/L
GS-AP-MW-17V	2/20/2019 11:06	Depth to Water Detail	103.5	ft
GS-AP-MW-17V	2/20/2019 11:06	Oxidation Reduction Potention	30	mv
GS-AP-MW-17V	2/20/2019 11:06	pH	7.85	pH
GS-AP-MW-17V	2/20/2019 11:06	Temperature	14.4	C
GS-AP-MW-17V	2/20/2019 11:06	Turbidity	71.9	NTU
GS-AP-MW-17V	2/20/2019 11:11	Conductivity	566.7	uS/cm
GS-AP-MW-17V	2/20/2019 11:11	DO	11	mg/L
GS-AP-MW-17V	2/20/2019 11:11	Depth to Water Detail	103.9	ft
GS-AP-MW-17V	2/20/2019 11:11	Oxidation Reduction Potention	38.5	mv
GS-AP-MW-17V	2/20/2019 11:11	pH	7.93	pH
GS-AP-MW-17V	2/20/2019 11:11	Temperature	14.83	C
GS-AP-MW-17V	2/20/2019 11:11	Turbidity	70.1	NTU
GS-AP-MW-17V	2/20/2019 11:16	Conductivity	564.6	uS/cm
GS-AP-MW-17V	2/20/2019 11:16	DO	11.05	mg/L
GS-AP-MW-17V	2/20/2019 11:16	Depth to Water Detail	104.2	ft
GS-AP-MW-17V	2/20/2019 11:16	Oxidation Reduction Potention	43.1	mv
GS-AP-MW-17V	2/20/2019 11:16	pH	7.95	pH
GS-AP-MW-17V	2/20/2019 11:16	Temperature	14.93	C
GS-AP-MW-17V	2/20/2019 11:16	Turbidity	69.4	NTU
GS-AP-MW-17V	2/20/2019 11:21	Conductivity	561.7	uS/cm
GS-AP-MW-17V	2/20/2019 11:21	DO	11.04	mg/L
GS-AP-MW-17V	2/20/2019 11:21	Depth to Water Detail	104.35	ft
GS-AP-MW-17V	2/20/2019 11:21	Oxidation Reduction Potention	46.7	mv
GS-AP-MW-17V	2/20/2019 11:21	pH	7.94	pH
GS-AP-MW-17V	2/20/2019 11:21	Temperature	15	C
GS-AP-MW-17V	2/20/2019 11:21	Turbidity	69.7	NTU
GS-AP-MW-17V	2/20/2019 11:26	Conductivity	579.4	uS/cm
GS-AP-MW-17V	2/20/2019 11:26	DO	10.78	mg/L
GS-AP-MW-17V	2/20/2019 11:26	Depth to Water Detail	105.25	ft
GS-AP-MW-17V	2/20/2019 11:26	Oxidation Reduction Potention	46.6	mv

**Alabama Power Company  
Plant Gorgas Ash Pond**

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-17V	2/20/2019 11:26	pH	7.92	pH
GS-AP-MW-17V	2/20/2019 11:26	Temperature	15.01	C
GS-AP-MW-17V	2/20/2019 11:26	Turbidity	52.3	NTU
GS-AP-MW-17V	2/20/2019 11:31	Conductivity	575.1	uS/cm
GS-AP-MW-17V	2/20/2019 11:31	DO	10.45	mg/L
GS-AP-MW-17V	2/20/2019 11:31	Depth to Water Detail	105.57	ft
GS-AP-MW-17V	2/20/2019 11:31	Oxidation Reduction Potention	43.3	mv
GS-AP-MW-17V	2/20/2019 11:31	pH	7.88	pH
GS-AP-MW-17V	2/20/2019 11:31	Temperature	15.03	C
GS-AP-MW-17V	2/20/2019 11:31	Turbidity	52	NTU
GS-AP-MW-17V	2/20/2019 11:36	Conductivity	567.8	uS/cm
GS-AP-MW-17V	2/20/2019 11:36	DO	10.33	mg/L
GS-AP-MW-17V	2/20/2019 11:36	Depth to Water Detail	105.8	ft
GS-AP-MW-17V	2/20/2019 11:36	Oxidation Reduction Potention	39.6	mv
GS-AP-MW-17V	2/20/2019 11:36	pH	7.87	pH
GS-AP-MW-17V	2/20/2019 11:36	Temperature	15.14	C
GS-AP-MW-17V	2/20/2019 11:36	Turbidity	42.3	NTU
GS-AP-MW-17V	2/20/2019 11:41	Conductivity	563.7	uS/cm
GS-AP-MW-17V	2/20/2019 11:41	DO	10.55	mg/L
GS-AP-MW-17V	2/20/2019 11:41	Depth to Water Detail	105.75	ft
GS-AP-MW-17V	2/20/2019 11:41	Oxidation Reduction Potention	33.1	mv
GS-AP-MW-17V	2/20/2019 11:41	pH	7.85	pH
GS-AP-MW-17V	2/20/2019 11:41	Temperature	15.2	C
GS-AP-MW-17V	2/20/2019 11:41	Turbidity	38.1	NTU
GS-AP-MW-17V	2/20/2019 11:46	Conductivity	573	uS/cm
GS-AP-MW-17V	2/20/2019 11:46	DO	9.98	mg/L
GS-AP-MW-17V	2/20/2019 11:46	Depth to Water Detail	106.2	ft
GS-AP-MW-17V	2/20/2019 11:46	Oxidation Reduction Potention	31.3	mv
GS-AP-MW-17V	2/20/2019 11:46	pH	7.85	pH
GS-AP-MW-17V	2/20/2019 11:46	Temperature	15.1	C
GS-AP-MW-17V	2/20/2019 11:46	Turbidity	39.7	NTU
GS-AP-MW-17V	2/20/2019 11:51	Conductivity	571.5	uS/cm
GS-AP-MW-17V	2/20/2019 11:51	DO	9.73	mg/L
GS-AP-MW-17V	2/20/2019 11:51	Depth to Water Detail	106.2	ft
GS-AP-MW-17V	2/20/2019 11:51	Oxidation Reduction Potention	27.8	mv
GS-AP-MW-17V	2/20/2019 11:51	pH	7.84	pH
GS-AP-MW-17V	2/20/2019 11:51	Temperature	15.14	C
GS-AP-MW-17V	2/20/2019 11:51	Turbidity	43.3	NTU
GS-AP-MW-17V	2/20/2019 11:56	Conductivity	567.4	uS/cm
GS-AP-MW-17V	2/20/2019 11:56	DO	9.63	mg/L
GS-AP-MW-17V	2/20/2019 11:56	Depth to Water Detail	106.55	ft
GS-AP-MW-17V	2/20/2019 11:56	Oxidation Reduction Potention	23.7	mv
GS-AP-MW-17V	2/20/2019 11:56	pH	7.84	pH
GS-AP-MW-17V	2/20/2019 11:56	Temperature	15.28	C
GS-AP-MW-17V	2/20/2019 11:56	Turbidity	29.5	NTU
GS-AP-MW-17V	2/20/2019 12:01	Conductivity	564.8	uS/cm

**Alabama Power Company  
Plant Gorgas Ash Pond**

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-17V	2/20/2019 12:01	DO	9.4	mg/L
GS-AP-MW-17V	2/20/2019 12:01	Depth to Water Detail	106.75	ft
GS-AP-MW-17V	2/20/2019 12:01	Oxidation Reduction Potention	14.5	mv
GS-AP-MW-17V	2/20/2019 12:01	pH	7.81	pH
GS-AP-MW-17V	2/20/2019 12:01	Temperature	15.23	C
GS-AP-MW-17V	2/20/2019 12:01	Turbidity	33	NTU
GS-AP-MW-17V	2/20/2019 12:06	Conductivity	563.2	uS/cm
GS-AP-MW-17V	2/20/2019 12:06	DO	9.32	mg/L
GS-AP-MW-17V	2/20/2019 12:06	Depth to Water Detail	106.9	ft
GS-AP-MW-17V	2/20/2019 12:06	Oxidation Reduction Potention	13.5	mv
GS-AP-MW-17V	2/20/2019 12:06	pH	7.82	pH
GS-AP-MW-17V	2/20/2019 12:06	Temperature	15.36	C
GS-AP-MW-17V	2/20/2019 12:06	Turbidity	27.7	NTU
GS-AP-MW-17V	2/20/2019 12:11	Conductivity	560.2	uS/cm
GS-AP-MW-17V	2/20/2019 12:11	DO	9.28	mg/L
GS-AP-MW-17V	2/20/2019 12:11	Depth to Water Detail	106.95	ft
GS-AP-MW-17V	2/20/2019 12:11	Oxidation Reduction Potention	9.4	mv
GS-AP-MW-17V	2/20/2019 12:11	pH	7.81	pH
GS-AP-MW-17V	2/20/2019 12:11	Temperature	15.41	C
GS-AP-MW-17V	2/20/2019 12:11	Turbidity	26.9	NTU
GS-AP-MW-17V	2/20/2019 12:16	Conductivity	557.5	uS/cm
GS-AP-MW-17V	2/20/2019 12:16	DO	9.11	mg/L
GS-AP-MW-17V	2/20/2019 12:16	Depth to Water Detail	107.2	ft
GS-AP-MW-17V	2/20/2019 12:16	Oxidation Reduction Potention	5.4	mv
GS-AP-MW-17V	2/20/2019 12:16	pH	7.79	pH
GS-AP-MW-17V	2/20/2019 12:16	Temperature	15.31	C
GS-AP-MW-17V	2/20/2019 12:16	Turbidity	24.8	NTU
GS-AP-MW-17V	2/20/2019 12:21	Conductivity	557	uS/cm
GS-AP-MW-17V	2/20/2019 12:21	DO	9.05	mg/L
GS-AP-MW-17V	2/20/2019 12:21	Depth to Water Detail	107.06	ft
GS-AP-MW-17V	2/20/2019 12:21	Oxidation Reduction Potention	-2.4	mv
GS-AP-MW-17V	2/20/2019 12:21	pH	7.78	pH
GS-AP-MW-17V	2/20/2019 12:21	Temperature	15.28	C
GS-AP-MW-17V	2/20/2019 12:21	Turbidity	21.5	NTU
GS-AP-MW-17V	2/20/2019 12:26	Conductivity	554	uS/cm
GS-AP-MW-17V	2/20/2019 12:26	DO	9.02	mg/L
GS-AP-MW-17V	2/20/2019 12:26	Depth to Water Detail	107.05	ft
GS-AP-MW-17V	2/20/2019 12:26	Oxidation Reduction Potention	-5.6	mv
GS-AP-MW-17V	2/20/2019 12:26	pH	7.78	pH
GS-AP-MW-17V	2/20/2019 12:26	Temperature	15.24	C
GS-AP-MW-17V	2/20/2019 12:26	Turbidity	19.4	NTU
GS-AP-MW-17V	2/20/2019 12:32	Conductivity	555.4	uS/cm
GS-AP-MW-17V	2/20/2019 12:32	DO	8.94	mg/L
GS-AP-MW-17V	2/20/2019 12:32	Depth to Water Detail	107.25	ft
GS-AP-MW-17V	2/20/2019 12:32	Oxidation Reduction Potention	-6.3	mv
GS-AP-MW-17V	2/20/2019 12:32	pH	7.78	pH

**Alabama Power Company  
Plant Gorgas Ash Pond**

<b>WELL ID</b>	<b>READING TIME</b>	<b>DESCRIPTION</b>	<b>VALUE</b>	<b>UNIT</b>
GS-AP-MW-17V	2/20/2019 12:32	Temperature	15.01	C
GS-AP-MW-17V	2/20/2019 12:32	Turbidity	20.2	NTU
GS-AP-MW-17V	2/20/2019 12:37	Conductivity	557	uS/cm
GS-AP-MW-17V	2/20/2019 12:37	DO	8.88	mg/L
GS-AP-MW-17V	2/20/2019 12:37	Depth to Water Detail	108	ft
GS-AP-MW-17V	2/20/2019 12:37	Oxidation Reduction Potention	-9.3	mv
GS-AP-MW-17V	2/20/2019 12:37	pH	7.76	pH
GS-AP-MW-17V	2/20/2019 12:37	Temperature	14.98	C
GS-AP-MW-17V	2/20/2019 12:37	Turbidity	21.1	NTU
GS-AP-MW-17V	2/20/2019 12:42	Conductivity	558.7	uS/cm
GS-AP-MW-17V	2/20/2019 12:42	DO	8.83	mg/L
GS-AP-MW-17V	2/20/2019 12:42	Depth to Water Detail	107.85	ft
GS-AP-MW-17V	2/20/2019 12:42	Oxidation Reduction Potention	-6	mv
GS-AP-MW-17V	2/20/2019 12:42	pH	7.78	pH
GS-AP-MW-17V	2/20/2019 12:42	Temperature	15.19	C
GS-AP-MW-17V	2/20/2019 12:42	Turbidity	20.3	NTU
GS-AP-MW-17V	2/20/2019 12:47	Conductivity	555.7	uS/cm
GS-AP-MW-17V	2/20/2019 12:47	DO	8.8	mg/L
GS-AP-MW-17V	2/20/2019 12:47	Depth to Water Detail	107.5	ft
GS-AP-MW-17V	2/20/2019 12:47	Oxidation Reduction Potention	-8.7	mv
GS-AP-MW-17V	2/20/2019 12:47	pH	7.77	pH
GS-AP-MW-17V	2/20/2019 12:47	Temperature	15.09	C
GS-AP-MW-17V	2/20/2019 12:47	Turbidity	17.2	NTU
GS-AP-MW-17V	2/20/2019 12:52	Conductivity	554.5	uS/cm
GS-AP-MW-17V	2/20/2019 12:52	DO	8.89	mg/L
GS-AP-MW-17V	2/20/2019 12:52	Depth to Water Detail	107.2	ft
GS-AP-MW-17V	2/20/2019 12:52	Oxidation Reduction Potention	-9.6	mv
GS-AP-MW-17V	2/20/2019 12:52	pH	7.77	pH
GS-AP-MW-17V	2/20/2019 12:52	Temperature	15.03	C
GS-AP-MW-17V	2/20/2019 12:52	Turbidity	16.3	NTU
GS-AP-MW-17V	2/20/2019 12:57	Conductivity	555.4	uS/cm
GS-AP-MW-17V	2/20/2019 12:57	DO	8.74	mg/L
GS-AP-MW-17V	2/20/2019 12:57	Depth to Water Detail	107.6	ft
GS-AP-MW-17V	2/20/2019 12:57	Oxidation Reduction Potention	-11.7	mv
GS-AP-MW-17V	2/20/2019 12:57	pH	7.77	pH
GS-AP-MW-17V	2/20/2019 12:57	Temperature	15.14	C
GS-AP-MW-17V	2/20/2019 12:57	Turbidity	15.6	NTU
GS-AP-MW-17V	2/20/2019 13:02	Conductivity	556.4	uS/cm
GS-AP-MW-17V	2/20/2019 13:02	DO	8.7	mg/L
GS-AP-MW-17V	2/20/2019 13:02	Depth to Water Detail	107.25	ft
GS-AP-MW-17V	2/20/2019 13:02	Oxidation Reduction Potention	-9.9	mv
GS-AP-MW-17V	2/20/2019 13:02	pH	7.78	pH
GS-AP-MW-17V	2/20/2019 13:02	Temperature	15.2	C
GS-AP-MW-17V	2/20/2019 13:02	Turbidity	15.8	NTU
GS-AP-MW-17V	2/20/2019 13:07	Conductivity	560	uS/cm
GS-AP-MW-17V	2/20/2019 13:07	DO	8.91	mg/L



**Alabama Power Company  
Plant Gorgas Ash Pond**

<b>WELL ID</b>	<b>READING TIME</b>	<b>DESCRIPTION</b>	<b>VALUE</b>	<b>UNIT</b>
GS-AP-MW-17V	2/20/2019 13:07	Depth to Water Detail	107	ft
GS-AP-MW-17V	2/20/2019 13:07	Oxidation Reduction Potention	-8	mv
GS-AP-MW-17V	2/20/2019 13:07	pH	7.78	pH
GS-AP-MW-17V	2/20/2019 13:07	Temperature	15.14	C
GS-AP-MW-17V	2/20/2019 13:07	Turbidity	16.7	NTU
GS-AP-MW-17V	2/20/2019 13:12	Conductivity	559.2	uS/cm
GS-AP-MW-17V	2/20/2019 13:12	DO	8.87	mg/L
GS-AP-MW-17V	2/20/2019 13:12	Depth to Water Detail	106.82	ft
GS-AP-MW-17V	2/20/2019 13:12	Oxidation Reduction Potention	-7	mv
GS-AP-MW-17V	2/20/2019 13:12	pH	7.78	pH
GS-AP-MW-17V	2/20/2019 13:12	Temperature	15.28	C
GS-AP-MW-17V	2/20/2019 13:12	Turbidity	14.7	NTU
GS-AP-MW-17V	2/20/2019 13:17	Conductivity	564.5	uS/cm
GS-AP-MW-17V	2/20/2019 13:17	DO	9.13	mg/L
GS-AP-MW-17V	2/20/2019 13:17	Depth to Water Detail	106.8	ft
GS-AP-MW-17V	2/20/2019 13:17	Oxidation Reduction Potention	-11.5	mv
GS-AP-MW-17V	2/20/2019 13:17	pH	7.77	pH
GS-AP-MW-17V	2/20/2019 13:17	Temperature	15.28	C
GS-AP-MW-17V	2/20/2019 13:17	Turbidity	15.3	NTU
GS-AP-MW-17V	2/20/2019 13:22	Conductivity	564.7	uS/cm
GS-AP-MW-17V	2/20/2019 13:22	DO	8.99	mg/L
GS-AP-MW-17V	2/20/2019 13:22	Depth to Water Detail	107.35	ft
GS-AP-MW-17V	2/20/2019 13:22	Oxidation Reduction Potention	-9.8	mv
GS-AP-MW-17V	2/20/2019 13:22	pH	7.77	pH
GS-AP-MW-17V	2/20/2019 13:22	Temperature	15.32	C
GS-AP-MW-17V	2/20/2019 13:22	Turbidity	13.9	NTU
GS-AP-MW-17V	2/20/2019 13:27	Conductivity	562.3	uS/cm
GS-AP-MW-17V	2/20/2019 13:27	DO	8.91	mg/L
GS-AP-MW-17V	2/20/2019 13:27	Depth to Water Detail	106.8	ft
GS-AP-MW-17V	2/20/2019 13:27	Oxidation Reduction Potention	-5.7	mv
GS-AP-MW-17V	2/20/2019 13:27	pH	7.78	pH
GS-AP-MW-17V	2/20/2019 13:27	Temperature	15.54	C
GS-AP-MW-17V	2/20/2019 13:27	Turbidity	18.7	NTU
GS-AP-MW-17V	2/20/2019 13:32	Conductivity	558.7	uS/cm
GS-AP-MW-17V	2/20/2019 13:32	DO	8.82	mg/L
GS-AP-MW-17V	2/20/2019 13:32	Depth to Water Detail	106.8	ft
GS-AP-MW-17V	2/20/2019 13:32	Oxidation Reduction Potention	-7.5	mv
GS-AP-MW-17V	2/20/2019 13:32	pH	7.78	pH
GS-AP-MW-17V	2/20/2019 13:32	Temperature	15.46	C
GS-AP-MW-17V	2/20/2019 13:32	Turbidity	13.8	NTU
GS-AP-MW-17V	2/20/2019 13:37	Conductivity	558	uS/cm
GS-AP-MW-17V	2/20/2019 13:37	DO	8.69	mg/L
GS-AP-MW-17V	2/20/2019 13:37	Depth to Water Detail	106.8	ft
GS-AP-MW-17V	2/20/2019 13:37	Oxidation Reduction Potention	-12.5	mv
GS-AP-MW-17V	2/20/2019 13:37	pH	7.77	pH
GS-AP-MW-17V	2/20/2019 13:37	Temperature	15.63	C

**Alabama Power Company  
Plant Gorgas Ash Pond**

<b>WELL ID</b>	<b>READING TIME</b>	<b>DESCRIPTION</b>	<b>VALUE</b>	<b>UNIT</b>
GS-AP-MW-17V	2/20/2019 13:37	Turbidity	11.3	NTU
GS-AP-MW-17V	2/20/2019 13:42	Conductivity	554.9	uS/cm
GS-AP-MW-17V	2/20/2019 13:42	DO	8.57	mg/L
GS-AP-MW-17V	2/20/2019 13:42	Depth to Water Detail	106.95	ft
GS-AP-MW-17V	2/20/2019 13:42	Oxidation Reduction Potention	-10.2	mv
GS-AP-MW-17V	2/20/2019 13:42	pH	7.76	pH
GS-AP-MW-17V	2/20/2019 13:42	Temperature	15.62	C
GS-AP-MW-17V	2/20/2019 13:42	Turbidity	13	NTU
GS-AP-MW-17V	2/20/2019 13:47	Conductivity	558.4	uS/cm
GS-AP-MW-17V	2/20/2019 13:47	DO	8.63	mg/L
GS-AP-MW-17V	2/20/2019 13:47	Depth to Water Detail	107.55	ft
GS-AP-MW-17V	2/20/2019 13:47	Oxidation Reduction Potention	-5.6	mv
GS-AP-MW-17V	2/20/2019 13:47	pH	7.78	pH
GS-AP-MW-17V	2/20/2019 13:47	Temperature	15.64	C
GS-AP-MW-17V	2/20/2019 13:47	Turbidity	14	NTU
GS-AP-MW-17V	2/20/2019 13:52	Conductivity	557.4	uS/cm
GS-AP-MW-17V	2/20/2019 13:52	DO	8.61	mg/L
GS-AP-MW-17V	2/20/2019 13:52	Depth to Water Detail	107.2	ft
GS-AP-MW-17V	2/20/2019 13:52	Oxidation Reduction Potention	0.8	mv
GS-AP-MW-17V	2/20/2019 13:52	pH	7.81	pH
GS-AP-MW-17V	2/20/2019 13:52	Temperature	15.48	C
GS-AP-MW-17V	2/20/2019 13:52	Turbidity	12.9	NTU
GS-AP-MW-17V	2/20/2019 13:57	Conductivity	559.4	uS/cm
GS-AP-MW-17V	2/20/2019 13:57	DO	8.7	mg/L
GS-AP-MW-17V	2/20/2019 13:57	Depth to Water Detail	107.82	ft
GS-AP-MW-17V	2/20/2019 13:57	Oxidation Reduction Potention	-2.5	mv
GS-AP-MW-17V	2/20/2019 13:57	pH	7.78	pH
GS-AP-MW-17V	2/20/2019 13:57	Temperature	15.48	C
GS-AP-MW-17V	2/20/2019 13:57	Turbidity	12.7	NTU
GS-AP-MW-17V	2/20/2019 14:02	Conductivity	560.7	uS/cm
GS-AP-MW-17V	2/20/2019 14:02	DO	8.61	mg/L
GS-AP-MW-17V	2/20/2019 14:02	Depth to Water Detail	107.8	ft
GS-AP-MW-17V	2/20/2019 14:02	Oxidation Reduction Potention	-7.1	mv
GS-AP-MW-17V	2/20/2019 14:02	pH	7.78	pH
GS-AP-MW-17V	2/20/2019 14:02	Temperature	15.55	C
GS-AP-MW-17V	2/20/2019 14:02	Turbidity	13.2	NTU
GS-AP-MW-17V	2/20/2019 14:07	Conductivity	559.1	uS/cm
GS-AP-MW-17V	2/20/2019 14:07	DO	8.57	mg/L
GS-AP-MW-17V	2/20/2019 14:07	Depth to Water Detail	108	ft
GS-AP-MW-17V	2/20/2019 14:07	Oxidation Reduction Potention	-4.1	mv
GS-AP-MW-17V	2/20/2019 14:07	pH	7.79	pH
GS-AP-MW-17V	2/20/2019 14:07	Temperature	15.6	C
GS-AP-MW-17V	2/20/2019 14:07	Turbidity	12.1	NTU
GS-AP-MW-17V	2/20/2019 14:12	Conductivity	560.6	uS/cm
GS-AP-MW-17V	2/20/2019 14:12	DO	8.62	mg/L
GS-AP-MW-17V	2/20/2019 14:12	Depth to Water Detail	107.5	ft

**Alabama Power Company  
Plant Gorgas Ash Pond**

<b>WELL ID</b>	<b>READING TIME</b>	<b>DESCRIPTION</b>	<b>VALUE</b>	<b>UNIT</b>
GS-AP-MW-17V	2/20/2019 14:12	Oxidation Reduction Potention	-6.8	mv
GS-AP-MW-17V	2/20/2019 14:12	pH	7.8	pH
GS-AP-MW-17V	2/20/2019 14:12	Temperature	15.54	C
GS-AP-MW-17V	2/20/2019 14:12	Turbidity	11.4	NTU
GS-AP-MW-17V	2/20/2019 14:17	Conductivity	559	uS/cm
GS-AP-MW-17V	2/20/2019 14:17	DO	8.56	mg/L
GS-AP-MW-17V	2/20/2019 14:17	Depth to Water Detail	107.75	ft
GS-AP-MW-17V	2/20/2019 14:17	Oxidation Reduction Potention	-10	mv
GS-AP-MW-17V	2/20/2019 14:17	pH	7.78	pH
GS-AP-MW-17V	2/20/2019 14:17	Temperature	15.55	C
GS-AP-MW-17V	2/20/2019 14:17	Turbidity	11.11	NTU
GS-AP-MW-17V	2/20/2019 14:22	Conductivity	557.5	uS/cm
GS-AP-MW-17V	2/20/2019 14:22	DO	8.52	mg/L
GS-AP-MW-17V	2/20/2019 14:22	Depth to Water Detail	107.63	ft
GS-AP-MW-17V	2/20/2019 14:22	Oxidation Reduction Potention	-17.2	mv
GS-AP-MW-17V	2/20/2019 14:22	pH	7.76	pH
GS-AP-MW-17V	2/20/2019 14:22	Temperature	15.62	C
GS-AP-MW-17V	2/20/2019 14:22	Turbidity	9.68	NTU

**Alabama Power Company  
Plant Gorgas Ash Pond**

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-18V	2/26/2019 13:12	Conductivity	400.5	uS/cm
GS-AP-MW-18V	2/26/2019 13:12	DO	0.84	mg/L
GS-AP-MW-18V	2/26/2019 13:12	Depth to Water Detail	112.71	ft
GS-AP-MW-18V	2/26/2019 13:12	Oxidation Reduction Potention	-145.9	mv
GS-AP-MW-18V	2/26/2019 13:12	pH	7.89	pH
GS-AP-MW-18V	2/26/2019 13:12	Temperature	17.12	C
GS-AP-MW-18V	2/26/2019 13:12	Turbidity	17.3	NTU
GS-AP-MW-18V	2/26/2019 13:17	Conductivity	400.6	uS/cm
GS-AP-MW-18V	2/26/2019 13:17	DO	1.2	mg/L
GS-AP-MW-18V	2/26/2019 13:17	Depth to Water Detail	113.23	ft
GS-AP-MW-18V	2/26/2019 13:17	Oxidation Reduction Potention	-139.9	mv
GS-AP-MW-18V	2/26/2019 13:17	pH	7.89	pH
GS-AP-MW-18V	2/26/2019 13:17	Temperature	17.01	C
GS-AP-MW-18V	2/26/2019 13:17	Turbidity	13.2	NTU
GS-AP-MW-18V	2/26/2019 13:22	Conductivity	400.2	uS/cm
GS-AP-MW-18V	2/26/2019 13:22	DO	1.55	mg/L
GS-AP-MW-18V	2/26/2019 13:22	Depth to Water Detail	113.66	ft
GS-AP-MW-18V	2/26/2019 13:22	Oxidation Reduction Potention	-131.8	mv
GS-AP-MW-18V	2/26/2019 13:22	pH	7.89	pH
GS-AP-MW-18V	2/26/2019 13:22	Temperature	16.85	C
GS-AP-MW-18V	2/26/2019 13:22	Turbidity	12	NTU
GS-AP-MW-18V	2/26/2019 13:27	Conductivity	400	uS/cm
GS-AP-MW-18V	2/26/2019 13:27	DO	1.88	mg/L
GS-AP-MW-18V	2/26/2019 13:27	Depth to Water Detail	114.05	ft
GS-AP-MW-18V	2/26/2019 13:27	Oxidation Reduction Potention	-125.2	mv
GS-AP-MW-18V	2/26/2019 13:27	pH	7.88	pH
GS-AP-MW-18V	2/26/2019 13:27	Temperature	16.76	C
GS-AP-MW-18V	2/26/2019 13:27	Turbidity	11.1	NTU
GS-AP-MW-18V	2/26/2019 13:32	Conductivity	399.5	uS/cm
GS-AP-MW-18V	2/26/2019 13:32	DO	2.19	mg/L
GS-AP-MW-18V	2/26/2019 13:32	Depth to Water Detail	114.44	ft
GS-AP-MW-18V	2/26/2019 13:32	Oxidation Reduction Potention	-118.6	mv
GS-AP-MW-18V	2/26/2019 13:32	pH	7.88	pH
GS-AP-MW-18V	2/26/2019 13:32	Temperature	16.88	C
GS-AP-MW-18V	2/26/2019 13:32	Turbidity	11.35	NTU
GS-AP-MW-18V	2/26/2019 13:37	Conductivity	398.7	uS/cm
GS-AP-MW-18V	2/26/2019 13:37	DO	2.44	mg/L
GS-AP-MW-18V	2/26/2019 13:37	Depth to Water Detail	114.82	ft
GS-AP-MW-18V	2/26/2019 13:37	Oxidation Reduction Potention	-112.5	mv
GS-AP-MW-18V	2/26/2019 13:37	pH	7.87	pH
GS-AP-MW-18V	2/26/2019 13:37	Temperature	16.94	C
GS-AP-MW-18V	2/26/2019 13:37	Turbidity	10.62	NTU
GS-AP-MW-18V	2/26/2019 13:42	Conductivity	398.6	uS/cm
GS-AP-MW-18V	2/26/2019 13:42	DO	2.65	mg/L
GS-AP-MW-18V	2/26/2019 13:42	Depth to Water Detail	115.1	ft
GS-AP-MW-18V	2/26/2019 13:42	Oxidation Reduction Potention	-107.8	mv

**Alabama Power Company  
Plant Gorgas Ash Pond**

<b>WELL ID</b>	<b>READING TIME</b>	<b>DESCRIPTION</b>	<b>VALUE</b>	<b>UNIT</b>
GS-AP-MW-18V	2/26/2019 13:42	pH	7.87	pH
GS-AP-MW-18V	2/26/2019 13:42	Temperature	16.88	C
GS-AP-MW-18V	2/26/2019 13:42	Turbidity	9.84	NTU
GS-AP-MW-18V	2/26/2019 13:47	Conductivity	398	uS/cm
GS-AP-MW-18V	2/26/2019 13:47	DO	2.85	mg/L
GS-AP-MW-18V	2/26/2019 13:47	Depth to Water Detail	115.42	ft
GS-AP-MW-18V	2/26/2019 13:47	Oxidation Reduction Potention	-104.3	mv
GS-AP-MW-18V	2/26/2019 13:47	pH	7.85	pH
GS-AP-MW-18V	2/26/2019 13:47	Temperature	16.93	C
GS-AP-MW-18V	2/26/2019 13:47	Turbidity	9.67	NTU
GS-AP-MW-18V	2/26/2019 13:52	Conductivity	398.2	uS/cm
GS-AP-MW-18V	2/26/2019 13:52	DO	3.03	mg/L
GS-AP-MW-18V	2/26/2019 13:52	Depth to Water Detail	115.78	ft
GS-AP-MW-18V	2/26/2019 13:52	Oxidation Reduction Potention	-101.4	mv
GS-AP-MW-18V	2/26/2019 13:52	pH	7.85	pH
GS-AP-MW-18V	2/26/2019 13:52	Temperature	17.2	C
GS-AP-MW-18V	2/26/2019 13:52	Turbidity	9.93	NTU
GS-AP-MW-18V	2/26/2019 13:57	Conductivity	397.6	uS/cm
GS-AP-MW-18V	2/26/2019 13:57	DO	3.16	mg/L
GS-AP-MW-18V	2/26/2019 13:57	Depth to Water Detail	116.04	ft
GS-AP-MW-18V	2/26/2019 13:57	Oxidation Reduction Potention	-98.4	mv
GS-AP-MW-18V	2/26/2019 13:57	pH	7.84	pH
GS-AP-MW-18V	2/26/2019 13:57	Temperature	17.19	C
GS-AP-MW-18V	2/26/2019 13:57	Turbidity	9.48	NTU
GS-AP-MW-18V	2/26/2019 14:02	Conductivity	397.3	uS/cm
GS-AP-MW-18V	2/26/2019 14:02	DO	3.31	mg/L
GS-AP-MW-18V	2/26/2019 14:02	Depth to Water Detail	116.32	ft
GS-AP-MW-18V	2/26/2019 14:02	Oxidation Reduction Potention	-96.8	mv
GS-AP-MW-18V	2/26/2019 14:02	pH	7.83	pH
GS-AP-MW-18V	2/26/2019 14:02	Temperature	17.32	C
GS-AP-MW-18V	2/26/2019 14:02	Turbidity	8.51	NTU
GS-AP-MW-18V	2/26/2019 14:07	Conductivity	397.2	uS/cm
GS-AP-MW-18V	2/26/2019 14:07	DO	3.4	mg/L
GS-AP-MW-18V	2/26/2019 14:07	Depth to Water Detail	116.58	ft
GS-AP-MW-18V	2/26/2019 14:07	Oxidation Reduction Potention	-95.2	mv
GS-AP-MW-18V	2/26/2019 14:07	pH	7.82	pH
GS-AP-MW-18V	2/26/2019 14:07	Temperature	17.12	C
GS-AP-MW-18V	2/26/2019 14:07	Turbidity	7.74	NTU
GS-AP-MW-18V	2/26/2019 14:12	Conductivity	397.7	uS/cm
GS-AP-MW-18V	2/26/2019 14:12	DO	3.48	mg/L
GS-AP-MW-18V	2/26/2019 14:12	Depth to Water Detail	116.81	ft
GS-AP-MW-18V	2/26/2019 14:12	Oxidation Reduction Potention	-95	mv
GS-AP-MW-18V	2/26/2019 14:12	pH	7.82	pH
GS-AP-MW-18V	2/26/2019 14:12	Temperature	17.3	C
GS-AP-MW-18V	2/26/2019 14:12	Turbidity	7.98	NTU
GS-AP-MW-18V	2/26/2019 14:17	Conductivity	397.5	uS/cm

**Alabama Power Company  
Plant Gorgas Ash Pond**

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-18V	2/26/2019 14:17	DO	3.56	mg/L
GS-AP-MW-18V	2/26/2019 14:17	Depth to Water Detail	117.04	ft
GS-AP-MW-18V	2/26/2019 14:17	Oxidation Reduction Potention	-94.1	mv
GS-AP-MW-18V	2/26/2019 14:17	pH	7.81	pH
GS-AP-MW-18V	2/26/2019 14:17	Temperature	17.59	C
GS-AP-MW-18V	2/26/2019 14:17	Turbidity	7.19	NTU
GS-AP-MW-18V	2/26/2019 14:22	Conductivity	396.1	uS/cm
GS-AP-MW-18V	2/26/2019 14:22	DO	3.59	mg/L
GS-AP-MW-18V	2/26/2019 14:22	Depth to Water Detail	117.27	ft
GS-AP-MW-18V	2/26/2019 14:22	Oxidation Reduction Potention	-93.9	mv
GS-AP-MW-18V	2/26/2019 14:22	pH	7.8	pH
GS-AP-MW-18V	2/26/2019 14:22	Temperature	17.72	C
GS-AP-MW-18V	2/26/2019 14:22	Turbidity	7.05	NTU
GS-AP-MW-18V	2/26/2019 14:27	Conductivity	396.4	uS/cm
GS-AP-MW-18V	2/26/2019 14:27	DO	3.61	mg/L
GS-AP-MW-18V	2/26/2019 14:27	Depth to Water Detail	117.5	ft
GS-AP-MW-18V	2/26/2019 14:27	Oxidation Reduction Potention	-94.4	mv
GS-AP-MW-18V	2/26/2019 14:27	pH	7.8	pH
GS-AP-MW-18V	2/26/2019 14:27	Temperature	17.54	C
GS-AP-MW-18V	2/26/2019 14:27	Turbidity	7.09	NTU
GS-AP-MW-18V	2/26/2019 14:32	Conductivity	396.6	uS/cm
GS-AP-MW-18V	2/26/2019 14:32	DO	3.66	mg/L
GS-AP-MW-18V	2/26/2019 14:32	Depth to Water Detail	117.75	ft
GS-AP-MW-18V	2/26/2019 14:32	Oxidation Reduction Potention	-94.4	mv
GS-AP-MW-18V	2/26/2019 14:32	pH	7.8	pH
GS-AP-MW-18V	2/26/2019 14:32	Temperature	17.41	C
GS-AP-MW-18V	2/26/2019 14:32	Turbidity	6.83	NTU
GS-AP-MW-18V	2/26/2019 14:37	Conductivity	397.1	uS/cm
GS-AP-MW-18V	2/26/2019 14:37	DO	3.68	mg/L
GS-AP-MW-18V	2/26/2019 14:37	Depth to Water Detail	117.92	ft
GS-AP-MW-18V	2/26/2019 14:37	Oxidation Reduction Potention	-95.2	mv
GS-AP-MW-18V	2/26/2019 14:37	pH	7.79	pH
GS-AP-MW-18V	2/26/2019 14:37	Temperature	17.28	C
GS-AP-MW-18V	2/26/2019 14:37	Turbidity	6.47	NTU
GS-AP-MW-18V	2/26/2019 14:42	Conductivity	397.3	uS/cm
GS-AP-MW-18V	2/26/2019 14:42	DO	3.68	mg/L
GS-AP-MW-18V	2/26/2019 14:42	Depth to Water Detail	118.17	ft
GS-AP-MW-18V	2/26/2019 14:42	Oxidation Reduction Potention	-95.6	mv
GS-AP-MW-18V	2/26/2019 14:42	pH	7.79	pH
GS-AP-MW-18V	2/26/2019 14:42	Temperature	17.14	C
GS-AP-MW-18V	2/26/2019 14:42	Turbidity	6.53	NTU
GS-AP-MW-18V	2/26/2019 14:47	Conductivity	397.1	uS/cm
GS-AP-MW-18V	2/26/2019 14:47	DO	3.65	mg/L
GS-AP-MW-18V	2/26/2019 14:47	Depth to Water Detail	118.38	ft
GS-AP-MW-18V	2/26/2019 14:47	Oxidation Reduction Potention	-96.2	mv
GS-AP-MW-18V	2/26/2019 14:47	pH	7.79	pH

**Alabama Power Company  
Plant Gorgas Ash Pond**

<b>WELL ID</b>	<b>READING TIME</b>	<b>DESCRIPTION</b>	<b>VALUE</b>	<b>UNIT</b>
GS-AP-MW-18V	2/26/2019 14:47	Temperature	17.03	C
GS-AP-MW-18V	2/26/2019 14:47	Turbidity	7.54	NTU
GS-AP-MW-18V	2/26/2019 14:52	Conductivity	397.4	uS/cm
GS-AP-MW-18V	2/26/2019 14:52	DO	3.6	mg/L
GS-AP-MW-18V	2/26/2019 14:52	Depth to Water Detail	118.54	ft
GS-AP-MW-18V	2/26/2019 14:52	Oxidation Reduction Potention	-96.4	mv
GS-AP-MW-18V	2/26/2019 14:52	pH	7.79	pH
GS-AP-MW-18V	2/26/2019 14:52	Temperature	17.05	C
GS-AP-MW-18V	2/26/2019 14:52	Turbidity	7.18	NTU
GS-AP-MW-18V	2/26/2019 14:57	Conductivity	397.4	uS/cm
GS-AP-MW-18V	2/26/2019 14:57	DO	3.56	mg/L
GS-AP-MW-18V	2/26/2019 14:57	Depth to Water Detail	118.72	ft
GS-AP-MW-18V	2/26/2019 14:57	Oxidation Reduction Potention	-97.2	mv
GS-AP-MW-18V	2/26/2019 14:57	pH	7.78	pH
GS-AP-MW-18V	2/26/2019 14:57	Temperature	17.18	C
GS-AP-MW-18V	2/26/2019 14:57	Turbidity	7.36	NTU
GS-AP-MW-18V	2/26/2019 15:02	Conductivity	397	uS/cm
GS-AP-MW-18V	2/26/2019 15:02	DO	3.47	mg/L
GS-AP-MW-18V	2/26/2019 15:02	Depth to Water Detail	118.92	ft
GS-AP-MW-18V	2/26/2019 15:02	Oxidation Reduction Potention	-98.5	mv
GS-AP-MW-18V	2/26/2019 15:02	pH	7.79	pH
GS-AP-MW-18V	2/26/2019 15:02	Temperature	17.36	C
GS-AP-MW-18V	2/26/2019 15:02	Turbidity	6.6	NTU
GS-AP-MW-18V	2/26/2019 15:07	Conductivity	397.1	uS/cm
GS-AP-MW-18V	2/26/2019 15:07	DO	3.42	mg/L
GS-AP-MW-18V	2/26/2019 15:07	Depth to Water Detail	119.06	ft
GS-AP-MW-18V	2/26/2019 15:07	Oxidation Reduction Potention	-99.1	mv
GS-AP-MW-18V	2/26/2019 15:07	pH	7.78	pH
GS-AP-MW-18V	2/26/2019 15:07	Temperature	17.45	C
GS-AP-MW-18V	2/26/2019 15:07	Turbidity	6.32	NTU
GS-AP-MW-18V	2/26/2019 15:12	Conductivity	396.9	uS/cm
GS-AP-MW-18V	2/26/2019 15:12	DO	3.3	mg/L
GS-AP-MW-18V	2/26/2019 15:12	Depth to Water Detail	119.2	ft
GS-AP-MW-18V	2/26/2019 15:12	Oxidation Reduction Potention	-100.1	mv
GS-AP-MW-18V	2/26/2019 15:12	pH	7.79	pH
GS-AP-MW-18V	2/26/2019 15:12	Temperature	17.32	C
GS-AP-MW-18V	2/26/2019 15:12	Turbidity	6.59	NTU

**Alabama Power Company  
Plant Gorgas Ash Pond**

<b>WELL ID</b>	<b>READING TIME</b>	<b>DESCRIPTION</b>	<b>VALUE</b>	<b>UNIT</b>
GS-AP-MW-24H	2/26/2019 9:51	Conductivity	435.3	uS/cm
GS-AP-MW-24H	2/26/2019 9:51	DO	0.03	mg/L
GS-AP-MW-24H	2/26/2019 9:51	Depth to Water Detail	5.98	ft
GS-AP-MW-24H	2/26/2019 9:51	Oxidation Reduction Potention	-74	mv
GS-AP-MW-24H	2/26/2019 9:51	pH	7.04	pH
GS-AP-MW-24H	2/26/2019 9:51	Temperature	17.32	C
GS-AP-MW-24H	2/26/2019 9:51	Turbidity	16.4	NTU
GS-AP-MW-24H	2/26/2019 9:56	Conductivity	435.4	uS/cm
GS-AP-MW-24H	2/26/2019 9:56	DO	0.03	mg/L
GS-AP-MW-24H	2/26/2019 9:56	Depth to Water Detail	5.98	ft
GS-AP-MW-24H	2/26/2019 9:56	Oxidation Reduction Potention	-72.8	mv
GS-AP-MW-24H	2/26/2019 9:56	pH	7.04	pH
GS-AP-MW-24H	2/26/2019 9:56	Temperature	17.37	C
GS-AP-MW-24H	2/26/2019 9:56	Turbidity	15.4	NTU
GS-AP-MW-24H	2/26/2019 10:06	Conductivity	434.4	uS/cm
GS-AP-MW-24H	2/26/2019 10:06	DO	0.03	mg/L
GS-AP-MW-24H	2/26/2019 10:06	Depth to Water Detail	5.98	ft
GS-AP-MW-24H	2/26/2019 10:06	Oxidation Reduction Potention	-73.4	mv
GS-AP-MW-24H	2/26/2019 10:06	pH	7.04	pH
GS-AP-MW-24H	2/26/2019 10:06	Temperature	17.41	C
GS-AP-MW-24H	2/26/2019 10:06	Turbidity	15.6	NTU
GS-AP-MW-24H	2/26/2019 10:11	Conductivity	434.2	uS/cm
GS-AP-MW-24H	2/26/2019 10:11	DO	0.03	mg/L
GS-AP-MW-24H	2/26/2019 10:11	Depth to Water Detail	5.98	ft
GS-AP-MW-24H	2/26/2019 10:11	Oxidation Reduction Potention	-72.4	mv
GS-AP-MW-24H	2/26/2019 10:11	pH	7.04	pH
GS-AP-MW-24H	2/26/2019 10:11	Temperature	17.46	C
GS-AP-MW-24H	2/26/2019 10:11	Turbidity	14.5	NTU
GS-AP-MW-24H	2/26/2019 10:16	Conductivity	433.9	uS/cm
GS-AP-MW-24H	2/26/2019 10:16	DO	0.03	mg/L
GS-AP-MW-24H	2/26/2019 10:16	Depth to Water Detail	5.98	ft
GS-AP-MW-24H	2/26/2019 10:16	Oxidation Reduction Potention	-73.1	mv
GS-AP-MW-24H	2/26/2019 10:16	pH	7.04	pH
GS-AP-MW-24H	2/26/2019 10:16	Temperature	17.51	C
GS-AP-MW-24H	2/26/2019 10:16	Turbidity	14.4	NTU
GS-AP-MW-24H	2/26/2019 10:21	Conductivity	433.4	uS/cm
GS-AP-MW-24H	2/26/2019 10:21	DO	0.03	mg/L
GS-AP-MW-24H	2/26/2019 10:21	Depth to Water Detail	5.98	ft
GS-AP-MW-24H	2/26/2019 10:21	Oxidation Reduction Potention	-72.8	mv
GS-AP-MW-24H	2/26/2019 10:21	pH	7.04	pH
GS-AP-MW-24H	2/26/2019 10:21	Temperature	17.51	C
GS-AP-MW-24H	2/26/2019 10:21	Turbidity	17.5	NTU
GS-AP-MW-24H	2/26/2019 10:26	Conductivity	433.6	uS/cm
GS-AP-MW-24H	2/26/2019 10:26	DO	0.03	mg/L
GS-AP-MW-24H	2/26/2019 10:26	Depth to Water Detail	5.98	ft
GS-AP-MW-24H	2/26/2019 10:26	Oxidation Reduction Potention	-72.5	mv



**Alabama Power Company  
Plant Gorgas Ash Pond**

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-24H	2/26/2019 10:26	pH	7.04	pH
GS-AP-MW-24H	2/26/2019 10:26	Temperature	17.52	C
GS-AP-MW-24H	2/26/2019 10:26	Turbidity	21.1	NTU
GS-AP-MW-24H	2/26/2019 10:31	Conductivity	433.4	uS/cm
GS-AP-MW-24H	2/26/2019 10:31	DO	0.03	mg/L
GS-AP-MW-24H	2/26/2019 10:31	Depth to Water Detail	5.98	ft
GS-AP-MW-24H	2/26/2019 10:31	Oxidation Reduction Potention	-72.3	mv
GS-AP-MW-24H	2/26/2019 10:31	pH	7.04	pH
GS-AP-MW-24H	2/26/2019 10:31	Temperature	17.51	C
GS-AP-MW-24H	2/26/2019 10:31	Turbidity	15.9	NTU
GS-AP-MW-24H	2/26/2019 10:36	Conductivity	433.4	uS/cm
GS-AP-MW-24H	2/26/2019 10:36	DO	0.03	mg/L
GS-AP-MW-24H	2/26/2019 10:36	Depth to Water Detail	5.98	ft
GS-AP-MW-24H	2/26/2019 10:36	Oxidation Reduction Potention	-72.1	mv
GS-AP-MW-24H	2/26/2019 10:36	pH	7.04	pH
GS-AP-MW-24H	2/26/2019 10:36	Temperature	17.5	C
GS-AP-MW-24H	2/26/2019 10:36	Turbidity	16.2	NTU
GS-AP-MW-24H	2/26/2019 10:41	Conductivity	433.8	uS/cm
GS-AP-MW-24H	2/26/2019 10:41	DO	0.03	mg/L
GS-AP-MW-24H	2/26/2019 10:41	Depth to Water Detail	5.98	ft
GS-AP-MW-24H	2/26/2019 10:41	Oxidation Reduction Potention	-71.4	mv
GS-AP-MW-24H	2/26/2019 10:41	pH	7.04	pH
GS-AP-MW-24H	2/26/2019 10:41	Temperature	17.48	C
GS-AP-MW-24H	2/26/2019 10:41	Turbidity	15.1	NTU
GS-AP-MW-24H	2/26/2019 10:46	Conductivity	433.6	uS/cm
GS-AP-MW-24H	2/26/2019 10:46	DO	0.03	mg/L
GS-AP-MW-24H	2/26/2019 10:46	Depth to Water Detail	5.98	ft
GS-AP-MW-24H	2/26/2019 10:46	Oxidation Reduction Potention	-71.1	mv
GS-AP-MW-24H	2/26/2019 10:46	pH	7.03	pH
GS-AP-MW-24H	2/26/2019 10:46	Temperature	17.5	C
GS-AP-MW-24H	2/26/2019 10:46	Turbidity	15.9	NTU
GS-AP-MW-24H	2/26/2019 10:51	Conductivity	433.1	uS/cm
GS-AP-MW-24H	2/26/2019 10:51	DO	0.03	mg/L
GS-AP-MW-24H	2/26/2019 10:51	Depth to Water Detail	5.98	ft
GS-AP-MW-24H	2/26/2019 10:51	Oxidation Reduction Potention	-71.2	mv
GS-AP-MW-24H	2/26/2019 10:51	pH	7.04	pH
GS-AP-MW-24H	2/26/2019 10:51	Temperature	17.53	C
GS-AP-MW-24H	2/26/2019 10:51	Turbidity	17.8	NTU
GS-AP-MW-24H	2/26/2019 10:56	Conductivity	433.2	uS/cm
GS-AP-MW-24H	2/26/2019 10:56	DO	0.03	mg/L
GS-AP-MW-24H	2/26/2019 10:56	Depth to Water Detail	5.98	ft
GS-AP-MW-24H	2/26/2019 10:56	Oxidation Reduction Potention	-71	mv
GS-AP-MW-24H	2/26/2019 10:56	pH	7.04	pH
GS-AP-MW-24H	2/26/2019 10:56	Temperature	17.59	C
GS-AP-MW-24H	2/26/2019 10:56	Turbidity	12.7	NTU
GS-AP-MW-24H	2/26/2019 11:01	Conductivity	432.9	uS/cm

**Alabama Power Company  
Plant Gorgas Ash Pond**

<b>WELL ID</b>	<b>READING TIME</b>	<b>DESCRIPTION</b>	<b>VALUE</b>	<b>UNIT</b>
GS-AP-MW-24H	2/26/2019 11:01	DO	0.03	mg/L
GS-AP-MW-24H	2/26/2019 11:01	Depth to Water Detail	5.98	ft
GS-AP-MW-24H	2/26/2019 11:01	Oxidation Reduction Potention	-70.6	mv
GS-AP-MW-24H	2/26/2019 11:01	pH	7.04	pH
GS-AP-MW-24H	2/26/2019 11:01	Temperature	17.61	C
GS-AP-MW-24H	2/26/2019 11:01	Turbidity	11.6	NTU
GS-AP-MW-24H	2/26/2019 11:06	Conductivity	433	uS/cm
GS-AP-MW-24H	2/26/2019 11:06	DO	0.03	mg/L
GS-AP-MW-24H	2/26/2019 11:06	Depth to Water Detail	5.98	ft
GS-AP-MW-24H	2/26/2019 11:06	Oxidation Reduction Potention	-70.3	mv
GS-AP-MW-24H	2/26/2019 11:06	pH	7.03	pH
GS-AP-MW-24H	2/26/2019 11:06	Temperature	17.59	C
GS-AP-MW-24H	2/26/2019 11:06	Turbidity	12.9	NTU
GS-AP-MW-24H	2/26/2019 11:11	Conductivity	433	uS/cm
GS-AP-MW-24H	2/26/2019 11:11	DO	0.03	mg/L
GS-AP-MW-24H	2/26/2019 11:11	Depth to Water Detail	5.98	ft
GS-AP-MW-24H	2/26/2019 11:11	Oxidation Reduction Potention	-70.2	mv
GS-AP-MW-24H	2/26/2019 11:11	pH	7.04	pH
GS-AP-MW-24H	2/26/2019 11:11	Temperature	17.58	C
GS-AP-MW-24H	2/26/2019 11:11	Turbidity	12.9	NTU
GS-AP-MW-24H	2/26/2019 11:16	Conductivity	433.2	uS/cm
GS-AP-MW-24H	2/26/2019 11:16	DO	0.03	mg/L
GS-AP-MW-24H	2/26/2019 11:16	Depth to Water Detail	5.98	ft
GS-AP-MW-24H	2/26/2019 11:16	Oxidation Reduction Potention	-70	mv
GS-AP-MW-24H	2/26/2019 11:16	pH	7.04	pH
GS-AP-MW-24H	2/26/2019 11:16	Temperature	17.63	C
GS-AP-MW-24H	2/26/2019 11:16	Turbidity	11.8	NTU
GS-AP-MW-24H	2/26/2019 11:21	Conductivity	432.9	uS/cm
GS-AP-MW-24H	2/26/2019 11:21	DO	0.03	mg/L
GS-AP-MW-24H	2/26/2019 11:21	Depth to Water Detail	5.98	ft
GS-AP-MW-24H	2/26/2019 11:21	Oxidation Reduction Potention	-69.3	mv
GS-AP-MW-24H	2/26/2019 11:21	pH	7.04	pH
GS-AP-MW-24H	2/26/2019 11:21	Temperature	17.64	C
GS-AP-MW-24H	2/26/2019 11:21	Turbidity	12.2	NTU
GS-AP-MW-24H	2/26/2019 11:26	Conductivity	433.2	uS/cm
GS-AP-MW-24H	2/26/2019 11:26	DO	0.03	mg/L
GS-AP-MW-24H	2/26/2019 11:26	Depth to Water Detail	5.98	ft
GS-AP-MW-24H	2/26/2019 11:26	Oxidation Reduction Potention	-69.4	mv
GS-AP-MW-24H	2/26/2019 11:26	pH	7.04	pH
GS-AP-MW-24H	2/26/2019 11:26	Temperature	17.66	C
GS-AP-MW-24H	2/26/2019 11:26	Turbidity	13.3	NTU
GS-AP-MW-24H	2/26/2019 11:31	Conductivity	432.8	uS/cm
GS-AP-MW-24H	2/26/2019 11:31	DO	0.03	mg/L
GS-AP-MW-24H	2/26/2019 11:31	Depth to Water Detail	5.98	ft
GS-AP-MW-24H	2/26/2019 11:31	Oxidation Reduction Potention	-69.4	mv
GS-AP-MW-24H	2/26/2019 11:31	pH	7.04	pH

**Alabama Power Company  
Plant Gorgas Ash Pond**

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-24H	2/26/2019 11:31	Temperature	17.68	C
GS-AP-MW-24H	2/26/2019 11:31	Turbidity	12	NTU
GS-AP-MW-24H	2/26/2019 11:36	Conductivity	433	uS/cm
GS-AP-MW-24H	2/26/2019 11:36	DO	0.03	mg/L
GS-AP-MW-24H	2/26/2019 11:36	Depth to Water Detail	5.98	ft
GS-AP-MW-24H	2/26/2019 11:36	Oxidation Reduction Potention	-69.2	mv
GS-AP-MW-24H	2/26/2019 11:36	pH	7.04	pH
GS-AP-MW-24H	2/26/2019 11:36	Temperature	17.68	C
GS-AP-MW-24H	2/26/2019 11:36	Turbidity	11.7	NTU
GS-AP-MW-24H	2/26/2019 11:41	Conductivity	433.3	uS/cm
GS-AP-MW-24H	2/26/2019 11:41	DO	0.03	mg/L
GS-AP-MW-24H	2/26/2019 11:41	Depth to Water Detail	5.98	ft
GS-AP-MW-24H	2/26/2019 11:41	Oxidation Reduction Potention	-68.8	mv
GS-AP-MW-24H	2/26/2019 11:41	pH	7.04	pH
GS-AP-MW-24H	2/26/2019 11:41	Temperature	17.64	C
GS-AP-MW-24H	2/26/2019 11:41	Turbidity	11.5	NTU
GS-AP-MW-24H	2/26/2019 11:46	Conductivity	433.1	uS/cm
GS-AP-MW-24H	2/26/2019 11:46	DO	0.03	mg/L
GS-AP-MW-24H	2/26/2019 11:46	Depth to Water Detail	5.98	ft
GS-AP-MW-24H	2/26/2019 11:46	Oxidation Reduction Potention	-68.7	mv
GS-AP-MW-24H	2/26/2019 11:46	pH	7.04	pH
GS-AP-MW-24H	2/26/2019 11:46	Temperature	17.65	C
GS-AP-MW-24H	2/26/2019 11:46	Turbidity	11.4	NTU
GS-AP-MW-24H	2/26/2019 11:51	Conductivity	433.1	uS/cm
GS-AP-MW-24H	2/26/2019 11:51	DO	0.02	mg/L
GS-AP-MW-24H	2/26/2019 11:51	Depth to Water Detail	5.98	ft
GS-AP-MW-24H	2/26/2019 11:51	Oxidation Reduction Potention	-68.6	mv
GS-AP-MW-24H	2/26/2019 11:51	pH	7.04	pH
GS-AP-MW-24H	2/26/2019 11:51	Temperature	17.64	C
GS-AP-MW-24H	2/26/2019 11:51	Turbidity	10.8	NTU
GS-AP-MW-24H	2/26/2019 11:56	Conductivity	433.3	uS/cm
GS-AP-MW-24H	2/26/2019 11:56	DO	0.03	mg/L
GS-AP-MW-24H	2/26/2019 11:56	Depth to Water Detail	5.98	ft
GS-AP-MW-24H	2/26/2019 11:56	Oxidation Reduction Potention	-68.4	mv
GS-AP-MW-24H	2/26/2019 11:56	pH	7.04	pH
GS-AP-MW-24H	2/26/2019 11:56	Temperature	17.58	C
GS-AP-MW-24H	2/26/2019 11:56	Turbidity	9.78	NTU

**Alabama Power Company  
Plant Gorgas Ash Pond**

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-26H	2/27/2019 13:09	Conductivity	451.3	uS/cm
GS-AP-MW-26H	2/27/2019 13:09	DO	0.79	mg/L
GS-AP-MW-26H	2/27/2019 13:09	Depth to Water Detail	98.6	ft
GS-AP-MW-26H	2/27/2019 13:09	Oxidation Reduction Potention	-109.2	mv
GS-AP-MW-26H	2/27/2019 13:09	pH	7.32	pH
GS-AP-MW-26H	2/27/2019 13:09	Temperature	20.06	C
GS-AP-MW-26H	2/27/2019 13:09	Turbidity	86	NTU
GS-AP-MW-26H	2/27/2019 13:14	Conductivity	451	uS/cm
GS-AP-MW-26H	2/27/2019 13:14	DO	2.26	mg/L
GS-AP-MW-26H	2/27/2019 13:14	Depth to Water Detail	99.5	ft
GS-AP-MW-26H	2/27/2019 13:14	Oxidation Reduction Potention	-101.6	mv
GS-AP-MW-26H	2/27/2019 13:14	pH	7.31	pH
GS-AP-MW-26H	2/27/2019 13:14	Temperature	20	C
GS-AP-MW-26H	2/27/2019 13:14	Turbidity	94.1	NTU
GS-AP-MW-26H	2/27/2019 13:19	Conductivity	449.9	uS/cm
GS-AP-MW-26H	2/27/2019 13:19	DO	3.61	mg/L
GS-AP-MW-26H	2/27/2019 13:19	Depth to Water Detail	100.31	ft
GS-AP-MW-26H	2/27/2019 13:19	Oxidation Reduction Potention	-92.5	mv
GS-AP-MW-26H	2/27/2019 13:19	pH	7.3	pH
GS-AP-MW-26H	2/27/2019 13:19	Temperature	19.99	C
GS-AP-MW-26H	2/27/2019 13:19	Turbidity	71.7	NTU
GS-AP-MW-26H	2/27/2019 13:24	Conductivity	451.1	uS/cm
GS-AP-MW-26H	2/27/2019 13:24	DO	4.98	mg/L
GS-AP-MW-26H	2/27/2019 13:24	Depth to Water Detail	101.09	ft
GS-AP-MW-26H	2/27/2019 13:24	Oxidation Reduction Potention	-84	mv
GS-AP-MW-26H	2/27/2019 13:24	pH	7.3	pH
GS-AP-MW-26H	2/27/2019 13:24	Temperature	19.91	C
GS-AP-MW-26H	2/27/2019 13:24	Turbidity	60.7	NTU
GS-AP-MW-26H	2/27/2019 13:29	Conductivity	447.8	uS/cm
GS-AP-MW-26H	2/27/2019 13:29	DO	5.87	mg/L
GS-AP-MW-26H	2/27/2019 13:29	Depth to Water Detail	101.83	ft
GS-AP-MW-26H	2/27/2019 13:29	Oxidation Reduction Potention	-79.1	mv
GS-AP-MW-26H	2/27/2019 13:29	pH	7.3	pH
GS-AP-MW-26H	2/27/2019 13:29	Temperature	19.98	C
GS-AP-MW-26H	2/27/2019 13:29	Turbidity	49	NTU
GS-AP-MW-26H	2/27/2019 13:34	Conductivity	450.3	uS/cm
GS-AP-MW-26H	2/27/2019 13:34	DO	6.51	mg/L
GS-AP-MW-26H	2/27/2019 13:34	Depth to Water Detail	102.5	ft
GS-AP-MW-26H	2/27/2019 13:34	Oxidation Reduction Potention	-75.1	mv
GS-AP-MW-26H	2/27/2019 13:34	pH	7.29	pH
GS-AP-MW-26H	2/27/2019 13:34	Temperature	19.88	C
GS-AP-MW-26H	2/27/2019 13:34	Turbidity	35.5	NTU
GS-AP-MW-26H	2/27/2019 13:39	Conductivity	449.3	uS/cm
GS-AP-MW-26H	2/27/2019 13:39	DO	6.82	mg/L
GS-AP-MW-26H	2/27/2019 13:39	Depth to Water Detail	103.13	ft
GS-AP-MW-26H	2/27/2019 13:39	Oxidation Reduction Potention	-72.8	mv

**Alabama Power Company  
Plant Gorgas Ash Pond**

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-26H	2/27/2019 13:39	pH	7.29	pH
GS-AP-MW-26H	2/27/2019 13:39	Temperature	20.02	C
GS-AP-MW-26H	2/27/2019 13:39	Turbidity	25.1	NTU
GS-AP-MW-26H	2/27/2019 13:44	Conductivity	447.6	uS/cm
GS-AP-MW-26H	2/27/2019 13:44	DO	7	mg/L
GS-AP-MW-26H	2/27/2019 13:44	Depth to Water Detail	103.66	ft
GS-AP-MW-26H	2/27/2019 13:44	Oxidation Reduction Potention	-70.7	mv
GS-AP-MW-26H	2/27/2019 13:44	pH	7.29	pH
GS-AP-MW-26H	2/27/2019 13:44	Temperature	19.96	C
GS-AP-MW-26H	2/27/2019 13:44	Turbidity	22.2	NTU
GS-AP-MW-26H	2/27/2019 13:49	Conductivity	449.8	uS/cm
GS-AP-MW-26H	2/27/2019 13:49	DO	7.22	mg/L
GS-AP-MW-26H	2/27/2019 13:49	Depth to Water Detail	104.19	ft
GS-AP-MW-26H	2/27/2019 13:49	Oxidation Reduction Potention	-69.2	mv
GS-AP-MW-26H	2/27/2019 13:49	pH	7.29	pH
GS-AP-MW-26H	2/27/2019 13:49	Temperature	19.99	C
GS-AP-MW-26H	2/27/2019 13:49	Turbidity	24.7	NTU
GS-AP-MW-26H	2/27/2019 13:54	Conductivity	450.5	uS/cm
GS-AP-MW-26H	2/27/2019 13:54	DO	7.27	mg/L
GS-AP-MW-26H	2/27/2019 13:54	Depth to Water Detail	104.62	ft
GS-AP-MW-26H	2/27/2019 13:54	Oxidation Reduction Potention	-67.6	mv
GS-AP-MW-26H	2/27/2019 13:54	pH	7.29	pH
GS-AP-MW-26H	2/27/2019 13:54	Temperature	19.72	C
GS-AP-MW-26H	2/27/2019 13:54	Turbidity	21.4	NTU
GS-AP-MW-26H	2/27/2019 13:59	Conductivity	450.1	uS/cm
GS-AP-MW-26H	2/27/2019 13:59	DO	7.37	mg/L
GS-AP-MW-26H	2/27/2019 13:59	Depth to Water Detail	105.15	ft
GS-AP-MW-26H	2/27/2019 13:59	Oxidation Reduction Potention	-66.6	mv
GS-AP-MW-26H	2/27/2019 13:59	pH	7.29	pH
GS-AP-MW-26H	2/27/2019 13:59	Temperature	19.51	C
GS-AP-MW-26H	2/27/2019 13:59	Turbidity	19.5	NTU
GS-AP-MW-26H	2/27/2019 14:04	Conductivity	452.2	uS/cm
GS-AP-MW-26H	2/27/2019 14:04	DO	7.56	mg/L
GS-AP-MW-26H	2/27/2019 14:04	Depth to Water Detail	105.5	ft
GS-AP-MW-26H	2/27/2019 14:04	Oxidation Reduction Potention	-65.7	mv
GS-AP-MW-26H	2/27/2019 14:04	pH	7.29	pH
GS-AP-MW-26H	2/27/2019 14:04	Temperature	19.37	C
GS-AP-MW-26H	2/27/2019 14:04	Turbidity	18.7	NTU
GS-AP-MW-26H	2/27/2019 14:09	Conductivity	451.5	uS/cm
GS-AP-MW-26H	2/27/2019 14:09	DO	7.61	mg/L
GS-AP-MW-26H	2/27/2019 14:09	Depth to Water Detail	105.96	ft
GS-AP-MW-26H	2/27/2019 14:09	Oxidation Reduction Potention	-64.3	mv
GS-AP-MW-26H	2/27/2019 14:09	pH	7.29	pH
GS-AP-MW-26H	2/27/2019 14:09	Temperature	19.36	C
GS-AP-MW-26H	2/27/2019 14:09	Turbidity	17.8	NTU
GS-AP-MW-26H	2/27/2019 14:14	Conductivity	452.6	uS/cm

**Alabama Power Company  
Plant Gorgas Ash Pond**

<b>WELL ID</b>	<b>READING TIME</b>	<b>DESCRIPTION</b>	<b>VALUE</b>	<b>UNIT</b>
GS-AP-MW-26H	2/27/2019 14:14	DO	7.56	mg/L
GS-AP-MW-26H	2/27/2019 14:14	Depth to Water Detail	106.35	ft
GS-AP-MW-26H	2/27/2019 14:14	Oxidation Reduction Potention	-63.6	mv
GS-AP-MW-26H	2/27/2019 14:14	pH	7.28	pH
GS-AP-MW-26H	2/27/2019 14:14	Temperature	19.33	C
GS-AP-MW-26H	2/27/2019 14:14	Turbidity	17.2	NTU
GS-AP-MW-26H	2/27/2019 14:19	Conductivity	450.5	uS/cm
GS-AP-MW-26H	2/27/2019 14:19	DO	7.48	mg/L
GS-AP-MW-26H	2/27/2019 14:19	Depth to Water Detail	106.69	ft
GS-AP-MW-26H	2/27/2019 14:19	Oxidation Reduction Potention	-62.7	mv
GS-AP-MW-26H	2/27/2019 14:19	pH	7.28	pH
GS-AP-MW-26H	2/27/2019 14:19	Temperature	19.41	C
GS-AP-MW-26H	2/27/2019 14:19	Turbidity	17.1	NTU
GS-AP-MW-26H	2/27/2019 14:24	Conductivity	449.8	uS/cm
GS-AP-MW-26H	2/27/2019 14:24	DO	7.41	mg/L
GS-AP-MW-26H	2/27/2019 14:24	Depth to Water Detail	107.03	ft
GS-AP-MW-26H	2/27/2019 14:24	Oxidation Reduction Potention	-62.5	mv
GS-AP-MW-26H	2/27/2019 14:24	pH	7.28	pH
GS-AP-MW-26H	2/27/2019 14:24	Temperature	19.28	C
GS-AP-MW-26H	2/27/2019 14:24	Turbidity	17.3	NTU
GS-AP-MW-26H	2/27/2019 14:29	Conductivity	450.7	uS/cm
GS-AP-MW-26H	2/27/2019 14:29	DO	7.38	mg/L
GS-AP-MW-26H	2/27/2019 14:29	Depth to Water Detail	107.32	ft
GS-AP-MW-26H	2/27/2019 14:29	Oxidation Reduction Potention	-62.4	mv
GS-AP-MW-26H	2/27/2019 14:29	pH	7.27	pH
GS-AP-MW-26H	2/27/2019 14:29	Temperature	19.44	C
GS-AP-MW-26H	2/27/2019 14:29	Turbidity	16.4	NTU
GS-AP-MW-26H	2/27/2019 14:34	Conductivity	448.4	uS/cm
GS-AP-MW-26H	2/27/2019 14:34	DO	7.28	mg/L
GS-AP-MW-26H	2/27/2019 14:34	Depth to Water Detail	107.6	ft
GS-AP-MW-26H	2/27/2019 14:34	Oxidation Reduction Potention	-61.4	mv
GS-AP-MW-26H	2/27/2019 14:34	pH	7.27	pH
GS-AP-MW-26H	2/27/2019 14:34	Temperature	19.32	C
GS-AP-MW-26H	2/27/2019 14:34	Turbidity	14.9	NTU
GS-AP-MW-26H	2/27/2019 14:39	Conductivity	449.1	uS/cm
GS-AP-MW-26H	2/27/2019 14:39	DO	7.4	mg/L
GS-AP-MW-26H	2/27/2019 14:39	Depth to Water Detail	107.87	ft
GS-AP-MW-26H	2/27/2019 14:39	Oxidation Reduction Potention	-60.9	mv
GS-AP-MW-26H	2/27/2019 14:39	pH	7.27	pH
GS-AP-MW-26H	2/27/2019 14:39	Temperature	19.24	C
GS-AP-MW-26H	2/27/2019 14:39	Turbidity	15.2	NTU
GS-AP-MW-26H	2/27/2019 14:44	Conductivity	449.2	uS/cm
GS-AP-MW-26H	2/27/2019 14:44	DO	7.29	mg/L
GS-AP-MW-26H	2/27/2019 14:44	Depth to Water Detail	108.12	ft
GS-AP-MW-26H	2/27/2019 14:44	Oxidation Reduction Potention	-60.7	mv
GS-AP-MW-26H	2/27/2019 14:44	pH	7.27	pH

**Alabama Power Company  
Plant Gorgas Ash Pond**

<b>WELL ID</b>	<b>READING TIME</b>	<b>DESCRIPTION</b>	<b>VALUE</b>	<b>UNIT</b>
GS-AP-MW-26H	2/27/2019 14:44	Temperature	19.28	C
GS-AP-MW-26H	2/27/2019 14:44	Turbidity	16.2	NTU
GS-AP-MW-26H	2/27/2019 14:49	Conductivity	450.3	uS/cm
GS-AP-MW-26H	2/27/2019 14:49	DO	7.21	mg/L
GS-AP-MW-26H	2/27/2019 14:49	Depth to Water Detail	108.38	ft
GS-AP-MW-26H	2/27/2019 14:49	Oxidation Reduction Potention	-60.2	mv
GS-AP-MW-26H	2/27/2019 14:49	pH	7.27	pH
GS-AP-MW-26H	2/27/2019 14:49	Temperature	19.26	C
GS-AP-MW-26H	2/27/2019 14:49	Turbidity	14.3	NTU
GS-AP-MW-26H	2/27/2019 14:55	Conductivity	449.1	uS/cm
GS-AP-MW-26H	2/27/2019 14:55	DO	7.28	mg/L
GS-AP-MW-26H	2/27/2019 14:55	Depth to Water Detail	108.58	ft
GS-AP-MW-26H	2/27/2019 14:55	Oxidation Reduction Potention	-60.2	mv
GS-AP-MW-26H	2/27/2019 14:55	pH	7.26	pH
GS-AP-MW-26H	2/27/2019 14:55	Temperature	19.26	C
GS-AP-MW-26H	2/27/2019 14:55	Turbidity	19.8	NTU
GS-AP-MW-26H	2/27/2019 15:00	Conductivity	448.5	uS/cm
GS-AP-MW-26H	2/27/2019 15:00	DO	7.32	mg/L
GS-AP-MW-26H	2/27/2019 15:00	Depth to Water Detail	108.71	ft
GS-AP-MW-26H	2/27/2019 15:00	Oxidation Reduction Potention	-59.3	mv
GS-AP-MW-26H	2/27/2019 15:00	pH	7.27	pH
GS-AP-MW-26H	2/27/2019 15:00	Temperature	19.11	C
GS-AP-MW-26H	2/27/2019 15:00	Turbidity	18.6	NTU
GS-AP-MW-26H	2/27/2019 15:05	Conductivity	448.4	uS/cm
GS-AP-MW-26H	2/27/2019 15:05	DO	7.25	mg/L
GS-AP-MW-26H	2/27/2019 15:05	Depth to Water Detail	108.97	ft
GS-AP-MW-26H	2/27/2019 15:05	Oxidation Reduction Potention	-59.1	mv
GS-AP-MW-26H	2/27/2019 15:05	pH	7.26	pH
GS-AP-MW-26H	2/27/2019 15:05	Temperature	19.12	C
GS-AP-MW-26H	2/27/2019 15:05	Turbidity	16.1	NTU
GS-AP-MW-26H	2/27/2019 15:10	Conductivity	448.7	uS/cm
GS-AP-MW-26H	2/27/2019 15:10	DO	7.58	mg/L
GS-AP-MW-26H	2/27/2019 15:10	Depth to Water Detail	109.1	ft
GS-AP-MW-26H	2/27/2019 15:10	Oxidation Reduction Potention	-58.9	mv
GS-AP-MW-26H	2/27/2019 15:10	pH	7.26	pH
GS-AP-MW-26H	2/27/2019 15:10	Temperature	19.25	C
GS-AP-MW-26H	2/27/2019 15:10	Turbidity	14.5	NTU
GS-AP-MW-26H	2/27/2019 15:15	Conductivity	450.6	uS/cm
GS-AP-MW-26H	2/27/2019 15:15	DO	7.96	mg/L
GS-AP-MW-26H	2/27/2019 15:15	Depth to Water Detail	109.28	ft
GS-AP-MW-26H	2/27/2019 15:15	Oxidation Reduction Potention	-57.6	mv
GS-AP-MW-26H	2/27/2019 15:15	pH	7.26	pH
GS-AP-MW-26H	2/27/2019 15:15	Temperature	19.06	C
GS-AP-MW-26H	2/27/2019 15:15	Turbidity	14.9	NTU
GS-AP-MW-26H	2/27/2019 15:20	Conductivity	448.5	uS/cm
GS-AP-MW-26H	2/27/2019 15:20	DO	7.88	mg/L

**Alabama Power Company  
Plant Gorgas Ash Pond**

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-26H	2/27/2019 15:20	Depth to Water Detail	109.47	ft
GS-AP-MW-26H	2/27/2019 15:20	Oxidation Reduction Potention	-57.3	mv
GS-AP-MW-26H	2/27/2019 15:20	pH	7.27	pH
GS-AP-MW-26H	2/27/2019 15:20	Temperature	18.99	C
GS-AP-MW-26H	2/27/2019 15:20	Turbidity	13.1	NTU
GS-AP-MW-26H	2/27/2019 15:25	Conductivity	448.9	uS/cm
GS-AP-MW-26H	2/27/2019 15:25	DO	7.58	mg/L
GS-AP-MW-26H	2/27/2019 15:25	Depth to Water Detail	109.62	ft
GS-AP-MW-26H	2/27/2019 15:25	Oxidation Reduction Potention	-57.5	mv
GS-AP-MW-26H	2/27/2019 15:25	pH	7.26	pH
GS-AP-MW-26H	2/27/2019 15:25	Temperature	18.86	C
GS-AP-MW-26H	2/27/2019 15:25	Turbidity	12.3	NTU
GS-AP-MW-26H	2/27/2019 15:30	Conductivity	449.7	uS/cm
GS-AP-MW-26H	2/27/2019 15:30	DO	7.45	mg/L
GS-AP-MW-26H	2/27/2019 15:30	Depth to Water Detail	109.69	ft
GS-AP-MW-26H	2/27/2019 15:30	Oxidation Reduction Potention	-57.8	mv
GS-AP-MW-26H	2/27/2019 15:30	pH	7.25	pH
GS-AP-MW-26H	2/27/2019 15:30	Temperature	18.84	C
GS-AP-MW-26H	2/27/2019 15:30	Turbidity	11.9	NTU
GS-AP-MW-26H	2/27/2019 15:35	Conductivity	448.9	uS/cm
GS-AP-MW-26H	2/27/2019 15:35	DO	7.26	mg/L
GS-AP-MW-26H	2/27/2019 15:35	Depth to Water Detail	109.85	ft
GS-AP-MW-26H	2/27/2019 15:35	Oxidation Reduction Potention	-57.6	mv
GS-AP-MW-26H	2/27/2019 15:35	pH	7.25	pH
GS-AP-MW-26H	2/27/2019 15:35	Temperature	18.75	C
GS-AP-MW-26H	2/27/2019 15:35	Turbidity	10.7	NTU
GS-AP-MW-26H	2/27/2019 15:40	Conductivity	448.2	uS/cm
GS-AP-MW-26H	2/27/2019 15:40	DO	7.18	mg/L
GS-AP-MW-26H	2/27/2019 15:40	Depth to Water Detail	109.98	ft
GS-AP-MW-26H	2/27/2019 15:40	Oxidation Reduction Potention	-57.6	mv
GS-AP-MW-26H	2/27/2019 15:40	pH	7.25	pH
GS-AP-MW-26H	2/27/2019 15:40	Temperature	18.79	C
GS-AP-MW-26H	2/27/2019 15:40	Turbidity	10.23	NTU
GS-AP-MW-26H	2/27/2019 15:45	Conductivity	449	uS/cm
GS-AP-MW-26H	2/27/2019 15:45	DO	7.21	mg/L
GS-AP-MW-26H	2/27/2019 15:45	Depth to Water Detail	110.03	ft
GS-AP-MW-26H	2/27/2019 15:45	Oxidation Reduction Potention	-57.1	mv
GS-AP-MW-26H	2/27/2019 15:45	pH	7.25	pH
GS-AP-MW-26H	2/27/2019 15:45	Temperature	18.65	C
GS-AP-MW-26H	2/27/2019 15:45	Turbidity	9.95	NTU



**Alabama Power Company  
Plant Gorgas Ash Pond**

<b>WELL ID</b>	<b>READING TIME</b>	<b>DESCRIPTION</b>	<b>VALUE</b>	<b>UNIT</b>
GS-AP-MW-29H	2/27/2019 8:49	Conductivity	632.3	uS/cm
GS-AP-MW-29H	2/27/2019 8:49	DO	0.49	mg/L
GS-AP-MW-29H	2/27/2019 8:49	Depth to Water Detail	78.89	ft
GS-AP-MW-29H	2/27/2019 8:49	Oxidation Reduction Potention	27.3	mv
GS-AP-MW-29H	2/27/2019 8:49	pH	7.82	pH
GS-AP-MW-29H	2/27/2019 8:49	Temperature	16.69	C
GS-AP-MW-29H	2/27/2019 8:49	Turbidity	103.2	NTU
GS-AP-MW-29H	2/27/2019 8:54	Conductivity	632.5	uS/cm
GS-AP-MW-29H	2/27/2019 8:54	DO	0.38	mg/L
GS-AP-MW-29H	2/27/2019 8:54	Depth to Water Detail	78.98	ft
GS-AP-MW-29H	2/27/2019 8:54	Oxidation Reduction Potention	11.3	mv
GS-AP-MW-29H	2/27/2019 8:54	pH	7.84	pH
GS-AP-MW-29H	2/27/2019 8:54	Temperature	16.69	C
GS-AP-MW-29H	2/27/2019 8:54	Turbidity	104.7	NTU
GS-AP-MW-29H	2/27/2019 8:59	Conductivity	631.5	uS/cm
GS-AP-MW-29H	2/27/2019 8:59	DO	0.33	mg/L
GS-AP-MW-29H	2/27/2019 8:59	Depth to Water Detail	79.03	ft
GS-AP-MW-29H	2/27/2019 8:59	Oxidation Reduction Potention	-2.4	mv
GS-AP-MW-29H	2/27/2019 8:59	pH	7.86	pH
GS-AP-MW-29H	2/27/2019 8:59	Temperature	16.74	C
GS-AP-MW-29H	2/27/2019 8:59	Turbidity	96	NTU
GS-AP-MW-29H	2/27/2019 9:04	Conductivity	626.1	uS/cm
GS-AP-MW-29H	2/27/2019 9:04	DO	0.25	mg/L
GS-AP-MW-29H	2/27/2019 9:04	Depth to Water Detail	79.74	ft
GS-AP-MW-29H	2/27/2019 9:04	Oxidation Reduction Potention	-37.1	mv
GS-AP-MW-29H	2/27/2019 9:04	pH	7.87	pH
GS-AP-MW-29H	2/27/2019 9:04	Temperature	16.92	C
GS-AP-MW-29H	2/27/2019 9:04	Turbidity	89.3	NTU
GS-AP-MW-29H	2/27/2019 9:09	Conductivity	624.3	uS/cm
GS-AP-MW-29H	2/27/2019 9:09	DO	0.17	mg/L
GS-AP-MW-29H	2/27/2019 9:09	Depth to Water Detail	80.32	ft
GS-AP-MW-29H	2/27/2019 9:09	Oxidation Reduction Potention	-67	mv
GS-AP-MW-29H	2/27/2019 9:09	pH	7.91	pH
GS-AP-MW-29H	2/27/2019 9:09	Temperature	16.94	C
GS-AP-MW-29H	2/27/2019 9:09	Turbidity	72.3	NTU
GS-AP-MW-29H	2/27/2019 9:14	Conductivity	622.3	uS/cm
GS-AP-MW-29H	2/27/2019 9:14	DO	0.15	mg/L
GS-AP-MW-29H	2/27/2019 9:14	Depth to Water Detail	80.66	ft
GS-AP-MW-29H	2/27/2019 9:14	Oxidation Reduction Potention	-90.3	mv
GS-AP-MW-29H	2/27/2019 9:14	pH	7.93	pH
GS-AP-MW-29H	2/27/2019 9:14	Temperature	16.94	C
GS-AP-MW-29H	2/27/2019 9:14	Turbidity	56.5	NTU
GS-AP-MW-29H	2/27/2019 9:19	Conductivity	623.6	uS/cm
GS-AP-MW-29H	2/27/2019 9:19	DO	0.14	mg/L
GS-AP-MW-29H	2/27/2019 9:19	Depth to Water Detail	80.92	ft
GS-AP-MW-29H	2/27/2019 9:19	Oxidation Reduction Potention	-104.5	mv

**Alabama Power Company  
Plant Gorgas Ash Pond**

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-29H	2/27/2019 9:19	pH	7.94	pH
GS-AP-MW-29H	2/27/2019 9:19	Temperature	16.94	C
GS-AP-MW-29H	2/27/2019 9:19	Turbidity	52.7	NTU
GS-AP-MW-29H	2/27/2019 9:24	Conductivity	622.6	uS/cm
GS-AP-MW-29H	2/27/2019 9:24	DO	0.14	mg/L
GS-AP-MW-29H	2/27/2019 9:24	Depth to Water Detail	81.07	ft
GS-AP-MW-29H	2/27/2019 9:24	Oxidation Reduction Potention	-115.6	mv
GS-AP-MW-29H	2/27/2019 9:24	pH	7.96	pH
GS-AP-MW-29H	2/27/2019 9:24	Temperature	16.97	C
GS-AP-MW-29H	2/27/2019 9:24	Turbidity	40.2	NTU
GS-AP-MW-29H	2/27/2019 9:29	Conductivity	623.4	uS/cm
GS-AP-MW-29H	2/27/2019 9:29	DO	0.13	mg/L
GS-AP-MW-29H	2/27/2019 9:29	Depth to Water Detail	81.2	ft
GS-AP-MW-29H	2/27/2019 9:29	Oxidation Reduction Potention	-123.5	mv
GS-AP-MW-29H	2/27/2019 9:29	pH	7.95	pH
GS-AP-MW-29H	2/27/2019 9:29	Temperature	17.01	C
GS-AP-MW-29H	2/27/2019 9:29	Turbidity	37.5	NTU
GS-AP-MW-29H	2/27/2019 9:34	Conductivity	623.7	uS/cm
GS-AP-MW-29H	2/27/2019 9:34	DO	0.12	mg/L
GS-AP-MW-29H	2/27/2019 9:34	Depth to Water Detail	81.28	ft
GS-AP-MW-29H	2/27/2019 9:34	Oxidation Reduction Potention	-128.4	mv
GS-AP-MW-29H	2/27/2019 9:34	pH	7.95	pH
GS-AP-MW-29H	2/27/2019 9:34	Temperature	17.01	C
GS-AP-MW-29H	2/27/2019 9:34	Turbidity	40.9	NTU
GS-AP-MW-29H	2/27/2019 9:39	Conductivity	624.7	uS/cm
GS-AP-MW-29H	2/27/2019 9:39	DO	0.12	mg/L
GS-AP-MW-29H	2/27/2019 9:39	Depth to Water Detail	81.36	ft
GS-AP-MW-29H	2/27/2019 9:39	Oxidation Reduction Potention	-130.7	mv
GS-AP-MW-29H	2/27/2019 9:39	pH	7.96	pH
GS-AP-MW-29H	2/27/2019 9:39	Temperature	17.01	C
GS-AP-MW-29H	2/27/2019 9:39	Turbidity	42	NTU
GS-AP-MW-29H	2/27/2019 9:44	Conductivity	624.5	uS/cm
GS-AP-MW-29H	2/27/2019 9:44	DO	0.12	mg/L
GS-AP-MW-29H	2/27/2019 9:44	Depth to Water Detail	81.42	ft
GS-AP-MW-29H	2/27/2019 9:44	Oxidation Reduction Potention	-134.5	mv
GS-AP-MW-29H	2/27/2019 9:44	pH	7.96	pH
GS-AP-MW-29H	2/27/2019 9:44	Temperature	17.01	C
GS-AP-MW-29H	2/27/2019 9:44	Turbidity	29	NTU
GS-AP-MW-29H	2/27/2019 9:49	Conductivity	626.1	uS/cm
GS-AP-MW-29H	2/27/2019 9:49	DO	0.12	mg/L
GS-AP-MW-29H	2/27/2019 9:49	Depth to Water Detail	81.47	ft
GS-AP-MW-29H	2/27/2019 9:49	Oxidation Reduction Potention	-135.2	mv
GS-AP-MW-29H	2/27/2019 9:49	pH	7.97	pH
GS-AP-MW-29H	2/27/2019 9:49	Temperature	17.01	C
GS-AP-MW-29H	2/27/2019 9:49	Turbidity	44	NTU
GS-AP-MW-29H	2/27/2019 9:54	Conductivity	626.1	uS/cm

**Alabama Power Company  
Plant Gorgas Ash Pond**

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-29H	2/27/2019 9:54	DO	0.11	mg/L
GS-AP-MW-29H	2/27/2019 9:54	Depth to Water Detail	81.51	ft
GS-AP-MW-29H	2/27/2019 9:54	Oxidation Reduction Potention	-134.2	mv
GS-AP-MW-29H	2/27/2019 9:54	pH	7.97	pH
GS-AP-MW-29H	2/27/2019 9:54	Temperature	17.05	C
GS-AP-MW-29H	2/27/2019 9:54	Turbidity	33.8	NTU
GS-AP-MW-29H	2/27/2019 9:59	Conductivity	626.9	uS/cm
GS-AP-MW-29H	2/27/2019 9:59	DO	0.11	mg/L
GS-AP-MW-29H	2/27/2019 9:59	Depth to Water Detail	81.52	ft
GS-AP-MW-29H	2/27/2019 9:59	Oxidation Reduction Potention	-134	mv
GS-AP-MW-29H	2/27/2019 9:59	pH	7.96	pH
GS-AP-MW-29H	2/27/2019 9:59	Temperature	17.06	C
GS-AP-MW-29H	2/27/2019 9:59	Turbidity	30.6	NTU
GS-AP-MW-29H	2/27/2019 10:09	Conductivity	626.4	uS/cm
GS-AP-MW-29H	2/27/2019 10:09	DO	0.11	mg/L
GS-AP-MW-29H	2/27/2019 10:09	Depth to Water Detail	81.57	ft
GS-AP-MW-29H	2/27/2019 10:09	Oxidation Reduction Potention	-137.2	mv
GS-AP-MW-29H	2/27/2019 10:09	pH	7.97	pH
GS-AP-MW-29H	2/27/2019 10:09	Temperature	17.11	C
GS-AP-MW-29H	2/27/2019 10:09	Turbidity	24.6	NTU
GS-AP-MW-29H	2/27/2019 10:14	Conductivity	623.4	uS/cm
GS-AP-MW-29H	2/27/2019 10:14	DO	0.11	mg/L
GS-AP-MW-29H	2/27/2019 10:14	Depth to Water Detail	81.57	ft
GS-AP-MW-29H	2/27/2019 10:14	Oxidation Reduction Potention	-138.2	mv
GS-AP-MW-29H	2/27/2019 10:14	pH	7.95	pH
GS-AP-MW-29H	2/27/2019 10:14	Temperature	17.14	C
GS-AP-MW-29H	2/27/2019 10:14	Turbidity	20.6	NTU
GS-AP-MW-29H	2/27/2019 10:19	Conductivity	626.4	uS/cm
GS-AP-MW-29H	2/27/2019 10:19	DO	0.11	mg/L
GS-AP-MW-29H	2/27/2019 10:19	Depth to Water Detail	81.57	ft
GS-AP-MW-29H	2/27/2019 10:19	Oxidation Reduction Potention	-140.4	mv
GS-AP-MW-29H	2/27/2019 10:19	pH	7.98	pH
GS-AP-MW-29H	2/27/2019 10:19	Temperature	17.15	C
GS-AP-MW-29H	2/27/2019 10:19	Turbidity	23.9	NTU
GS-AP-MW-29H	2/27/2019 10:24	Conductivity	624.6	uS/cm
GS-AP-MW-29H	2/27/2019 10:24	DO	0.1	mg/L
GS-AP-MW-29H	2/27/2019 10:24	Depth to Water Detail	81.62	ft
GS-AP-MW-29H	2/27/2019 10:24	Oxidation Reduction Potention	-139	mv
GS-AP-MW-29H	2/27/2019 10:24	pH	7.97	pH
GS-AP-MW-29H	2/27/2019 10:24	Temperature	17.19	C
GS-AP-MW-29H	2/27/2019 10:24	Turbidity	21.7	NTU
GS-AP-MW-29H	2/27/2019 10:29	Conductivity	625.5	uS/cm
GS-AP-MW-29H	2/27/2019 10:29	DO	0.1	mg/L
GS-AP-MW-29H	2/27/2019 10:29	Depth to Water Detail	81.62	ft
GS-AP-MW-29H	2/27/2019 10:29	Oxidation Reduction Potention	-140.2	mv
GS-AP-MW-29H	2/27/2019 10:29	pH	7.98	pH

**Alabama Power Company  
Plant Gorgas Ash Pond**

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-29H	2/27/2019 10:29	Temperature	17.21	C
GS-AP-MW-29H	2/27/2019 10:29	Turbidity	27.2	NTU
GS-AP-MW-29H	2/27/2019 10:34	Conductivity	625.1	uS/cm
GS-AP-MW-29H	2/27/2019 10:34	DO	0.1	mg/L
GS-AP-MW-29H	2/27/2019 10:34	Depth to Water Detail	81.67	ft
GS-AP-MW-29H	2/27/2019 10:34	Oxidation Reduction Potention	-139.9	mv
GS-AP-MW-29H	2/27/2019 10:34	pH	7.96	pH
GS-AP-MW-29H	2/27/2019 10:34	Temperature	17.23	C
GS-AP-MW-29H	2/27/2019 10:34	Turbidity	18.4	NTU
GS-AP-MW-29H	2/27/2019 10:39	Conductivity	625.4	uS/cm
GS-AP-MW-29H	2/27/2019 10:39	DO	0.1	mg/L
GS-AP-MW-29H	2/27/2019 10:39	Depth to Water Detail	81.67	ft
GS-AP-MW-29H	2/27/2019 10:39	Oxidation Reduction Potention	-140.2	mv
GS-AP-MW-29H	2/27/2019 10:39	pH	7.97	pH
GS-AP-MW-29H	2/27/2019 10:39	Temperature	17.26	C
GS-AP-MW-29H	2/27/2019 10:39	Turbidity	20	NTU
GS-AP-MW-29H	2/27/2019 10:44	Conductivity	625.8	uS/cm
GS-AP-MW-29H	2/27/2019 10:44	DO	0.1	mg/L
GS-AP-MW-29H	2/27/2019 10:44	Depth to Water Detail	81.67	ft
GS-AP-MW-29H	2/27/2019 10:44	Oxidation Reduction Potention	-141.5	mv
GS-AP-MW-29H	2/27/2019 10:44	pH	7.97	pH
GS-AP-MW-29H	2/27/2019 10:44	Temperature	17.27	C
GS-AP-MW-29H	2/27/2019 10:44	Turbidity	17	NTU
GS-AP-MW-29H	2/27/2019 10:49	Conductivity	625.1	uS/cm
GS-AP-MW-29H	2/27/2019 10:49	DO	0.1	mg/L
GS-AP-MW-29H	2/27/2019 10:49	Depth to Water Detail	81.69	ft
GS-AP-MW-29H	2/27/2019 10:49	Oxidation Reduction Potention	-141	mv
GS-AP-MW-29H	2/27/2019 10:49	pH	7.98	pH
GS-AP-MW-29H	2/27/2019 10:49	Temperature	17.27	C
GS-AP-MW-29H	2/27/2019 10:49	Turbidity	19.2	NTU
GS-AP-MW-29H	2/27/2019 10:54	Conductivity	626.5	uS/cm
GS-AP-MW-29H	2/27/2019 10:54	DO	0.1	mg/L
GS-AP-MW-29H	2/27/2019 10:54	Depth to Water Detail	81.72	ft
GS-AP-MW-29H	2/27/2019 10:54	Oxidation Reduction Potention	-141.1	mv
GS-AP-MW-29H	2/27/2019 10:54	pH	7.98	pH
GS-AP-MW-29H	2/27/2019 10:54	Temperature	17.28	C
GS-AP-MW-29H	2/27/2019 10:54	Turbidity	19.2	NTU
GS-AP-MW-29H	2/27/2019 10:59	Conductivity	626	uS/cm
GS-AP-MW-29H	2/27/2019 10:59	DO	0.1	mg/L
GS-AP-MW-29H	2/27/2019 10:59	Depth to Water Detail	81.72	ft
GS-AP-MW-29H	2/27/2019 10:59	Oxidation Reduction Potention	-141.6	mv
GS-AP-MW-29H	2/27/2019 10:59	pH	7.98	pH
GS-AP-MW-29H	2/27/2019 10:59	Temperature	17.29	C
GS-AP-MW-29H	2/27/2019 10:59	Turbidity	17	NTU
GS-AP-MW-29H	2/27/2019 11:04	Conductivity	624.4	uS/cm
GS-AP-MW-29H	2/27/2019 11:04	DO	0.09	mg/L

**Alabama Power Company  
Plant Gorgas Ash Pond**

<b>WELL ID</b>	<b>READING TIME</b>	<b>DESCRIPTION</b>	<b>VALUE</b>	<b>UNIT</b>
GS-AP-MW-29H	2/27/2019 11:04	Depth to Water Detail	81.72	ft
GS-AP-MW-29H	2/27/2019 11:04	Oxidation Reduction Potention	-142.7	mv
GS-AP-MW-29H	2/27/2019 11:04	pH	7.97	pH
GS-AP-MW-29H	2/27/2019 11:04	Temperature	17.32	C
GS-AP-MW-29H	2/27/2019 11:04	Turbidity	17.7	NTU
GS-AP-MW-29H	2/27/2019 11:09	Conductivity	625.9	uS/cm
GS-AP-MW-29H	2/27/2019 11:09	DO	0.1	mg/L
GS-AP-MW-29H	2/27/2019 11:09	Depth to Water Detail	81.73	ft
GS-AP-MW-29H	2/27/2019 11:09	Oxidation Reduction Potention	-144	mv
GS-AP-MW-29H	2/27/2019 11:09	pH	7.99	pH
GS-AP-MW-29H	2/27/2019 11:09	Temperature	17.32	C
GS-AP-MW-29H	2/27/2019 11:09	Turbidity	14.9	NTU
GS-AP-MW-29H	2/27/2019 11:14	Conductivity	625.4	uS/cm
GS-AP-MW-29H	2/27/2019 11:14	DO	0.09	mg/L
GS-AP-MW-29H	2/27/2019 11:14	Depth to Water Detail	81.73	ft
GS-AP-MW-29H	2/27/2019 11:14	Oxidation Reduction Potention	-144.2	mv
GS-AP-MW-29H	2/27/2019 11:14	pH	7.98	pH
GS-AP-MW-29H	2/27/2019 11:14	Temperature	17.36	C
GS-AP-MW-29H	2/27/2019 11:14	Turbidity	15	NTU
GS-AP-MW-29H	2/27/2019 11:19	Conductivity	624.2	uS/cm
GS-AP-MW-29H	2/27/2019 11:19	DO	0.1	mg/L
GS-AP-MW-29H	2/27/2019 11:19	Depth to Water Detail	81.74	ft
GS-AP-MW-29H	2/27/2019 11:19	Oxidation Reduction Potention	-143.7	mv
GS-AP-MW-29H	2/27/2019 11:19	pH	7.98	pH
GS-AP-MW-29H	2/27/2019 11:19	Temperature	17.41	C
GS-AP-MW-29H	2/27/2019 11:19	Turbidity	15.5	NTU
GS-AP-MW-29H	2/27/2019 11:24	Conductivity	624.9	uS/cm
GS-AP-MW-29H	2/27/2019 11:24	DO	0.09	mg/L
GS-AP-MW-29H	2/27/2019 11:24	Depth to Water Detail	81.75	ft
GS-AP-MW-29H	2/27/2019 11:24	Oxidation Reduction Potention	-145.1	mv
GS-AP-MW-29H	2/27/2019 11:24	pH	8	pH
GS-AP-MW-29H	2/27/2019 11:24	Temperature	17.53	C
GS-AP-MW-29H	2/27/2019 11:24	Turbidity	13.3	NTU
GS-AP-MW-29H	2/27/2019 11:29	Conductivity	621.9	uS/cm
GS-AP-MW-29H	2/27/2019 11:29	DO	0.09	mg/L
GS-AP-MW-29H	2/27/2019 11:29	Depth to Water Detail	81.75	ft
GS-AP-MW-29H	2/27/2019 11:29	Oxidation Reduction Potention	-144.8	mv
GS-AP-MW-29H	2/27/2019 11:29	pH	7.98	pH
GS-AP-MW-29H	2/27/2019 11:29	Temperature	17.68	C
GS-AP-MW-29H	2/27/2019 11:29	Turbidity	14.2	NTU
GS-AP-MW-29H	2/27/2019 11:34	Conductivity	621.4	uS/cm
GS-AP-MW-29H	2/27/2019 11:34	DO	0.09	mg/L
GS-AP-MW-29H	2/27/2019 11:34	Depth to Water Detail	81.75	ft
GS-AP-MW-29H	2/27/2019 11:34	Oxidation Reduction Potention	-146.2	mv
GS-AP-MW-29H	2/27/2019 11:34	pH	7.99	pH
GS-AP-MW-29H	2/27/2019 11:34	Temperature	17.81	C

**Alabama Power Company  
Plant Gorgas Ash Pond**

<b>WELL ID</b>	<b>READING TIME</b>	<b>DESCRIPTION</b>	<b>VALUE</b>	<b>UNIT</b>
GS-AP-MW-29H	2/27/2019 11:34	Turbidity	14.4	NTU
GS-AP-MW-29H	2/27/2019 11:39	Conductivity	619.7	uS/cm
GS-AP-MW-29H	2/27/2019 11:39	DO	0.09	mg/L
GS-AP-MW-29H	2/27/2019 11:39	Depth to Water Detail	81.75	ft
GS-AP-MW-29H	2/27/2019 11:39	Oxidation Reduction Potention	-146.4	mv
GS-AP-MW-29H	2/27/2019 11:39	pH	7.99	pH
GS-AP-MW-29H	2/27/2019 11:39	Temperature	17.91	C
GS-AP-MW-29H	2/27/2019 11:39	Turbidity	12.9	NTU
GS-AP-MW-29H	2/27/2019 11:45	Conductivity	621.2	uS/cm
GS-AP-MW-29H	2/27/2019 11:45	DO	0.09	mg/L
GS-AP-MW-29H	2/27/2019 11:45	Depth to Water Detail	81.75	ft
GS-AP-MW-29H	2/27/2019 11:45	Oxidation Reduction Potention	-146.6	mv
GS-AP-MW-29H	2/27/2019 11:45	pH	7.98	pH
GS-AP-MW-29H	2/27/2019 11:45	Temperature	17.95	C
GS-AP-MW-29H	2/27/2019 11:45	Turbidity	12.6	NTU
GS-AP-MW-29H	2/27/2019 11:50	Conductivity	620.3	uS/cm
GS-AP-MW-29H	2/27/2019 11:50	DO	0.09	mg/L
GS-AP-MW-29H	2/27/2019 11:50	Depth to Water Detail	81.75	ft
GS-AP-MW-29H	2/27/2019 11:50	Oxidation Reduction Potention	-146.8	mv
GS-AP-MW-29H	2/27/2019 11:50	pH	7.99	pH
GS-AP-MW-29H	2/27/2019 11:50	Temperature	17.99	C
GS-AP-MW-29H	2/27/2019 11:50	Turbidity	11.4	NTU
GS-AP-MW-29H	2/27/2019 11:55	Conductivity	621.2	uS/cm
GS-AP-MW-29H	2/27/2019 11:55	DO	0.08	mg/L
GS-AP-MW-29H	2/27/2019 11:55	Depth to Water Detail	81.75	ft
GS-AP-MW-29H	2/27/2019 11:55	Oxidation Reduction Potention	-148.2	mv
GS-AP-MW-29H	2/27/2019 11:55	pH	7.98	pH
GS-AP-MW-29H	2/27/2019 11:55	Temperature	17.99	C
GS-AP-MW-29H	2/27/2019 11:55	Turbidity	10.56	NTU
GS-AP-MW-29H	2/27/2019 12:00	Conductivity	620.3	uS/cm
GS-AP-MW-29H	2/27/2019 12:00	DO	0.08	mg/L
GS-AP-MW-29H	2/27/2019 12:00	Depth to Water Detail	81.75	ft
GS-AP-MW-29H	2/27/2019 12:00	Oxidation Reduction Potention	-150.1	mv
GS-AP-MW-29H	2/27/2019 12:00	pH	8.01	pH
GS-AP-MW-29H	2/27/2019 12:00	Temperature	18.03	C
GS-AP-MW-29H	2/27/2019 12:00	Turbidity	9.87	NTU

**Alabama Power Company  
Plant Gorgas Ash Pond**

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-28H	3/13/2019 11:30	Conductivity	545.8	uS/cm
GS-AP-MW-28H	3/13/2019 11:30	DO	2.49	mg/L
GS-AP-MW-28H	3/13/2019 11:30	Depth to Water Detail	155	ft
GS-AP-MW-28H	3/13/2019 11:30	Oxidation Reduction Potention	96.8	mv
GS-AP-MW-28H	3/13/2019 11:30	pH	8.19	pH
GS-AP-MW-28H	3/13/2019 11:30	Temperature	18.76	C
GS-AP-MW-28H	3/13/2019 11:30	Turbidity	46.3	NTU
GS-AP-MW-28H	3/13/2019 11:35	Conductivity	544.2	uS/cm
GS-AP-MW-28H	3/13/2019 11:35	DO	1.94	mg/L
GS-AP-MW-28H	3/13/2019 11:35	Depth to Water Detail	155.1	ft
GS-AP-MW-28H	3/13/2019 11:35	Oxidation Reduction Potention	75.1	mv
GS-AP-MW-28H	3/13/2019 11:35	pH	8.21	pH
GS-AP-MW-28H	3/13/2019 11:35	Temperature	18.86	C
GS-AP-MW-28H	3/13/2019 11:35	Turbidity	42.2	NTU
GS-AP-MW-28H	3/13/2019 11:40	Conductivity	547.5	uS/cm
GS-AP-MW-28H	3/13/2019 11:40	DO	1.69	mg/L
GS-AP-MW-28H	3/13/2019 11:40	Depth to Water Detail	155.1	ft
GS-AP-MW-28H	3/13/2019 11:40	Oxidation Reduction Potention	60	mv
GS-AP-MW-28H	3/13/2019 11:40	pH	8.23	pH
GS-AP-MW-28H	3/13/2019 11:40	Temperature	18.6	C
GS-AP-MW-28H	3/13/2019 11:40	Turbidity	37.6	NTU
GS-AP-MW-28H	3/13/2019 11:45	Conductivity	545.4	uS/cm
GS-AP-MW-28H	3/13/2019 11:45	DO	1.52	mg/L
GS-AP-MW-28H	3/13/2019 11:45	Depth to Water Detail	155.1	ft
GS-AP-MW-28H	3/13/2019 11:45	Oxidation Reduction Potention	54	mv
GS-AP-MW-28H	3/13/2019 11:45	pH	8.25	pH
GS-AP-MW-28H	3/13/2019 11:45	Temperature	18.78	C
GS-AP-MW-28H	3/13/2019 11:45	Turbidity	33.7	NTU
GS-AP-MW-28H	3/13/2019 11:50	Conductivity	547	uS/cm
GS-AP-MW-28H	3/13/2019 11:50	DO	1.43	mg/L
GS-AP-MW-28H	3/13/2019 11:50	Depth to Water Detail	155.1	ft
GS-AP-MW-28H	3/13/2019 11:50	Oxidation Reduction Potention	53.2	mv
GS-AP-MW-28H	3/13/2019 11:50	pH	8.26	pH
GS-AP-MW-28H	3/13/2019 11:50	Temperature	18.69	C
GS-AP-MW-28H	3/13/2019 11:50	Turbidity	34.1	NTU
GS-AP-MW-28H	3/13/2019 11:55	Conductivity	548.2	uS/cm
GS-AP-MW-28H	3/13/2019 11:55	DO	1.38	mg/L
GS-AP-MW-28H	3/13/2019 11:55	Depth to Water Detail	155.1	ft
GS-AP-MW-28H	3/13/2019 11:55	Oxidation Reduction Potention	51.6	mv
GS-AP-MW-28H	3/13/2019 11:55	pH	8.26	pH
GS-AP-MW-28H	3/13/2019 11:55	Temperature	18.88	C
GS-AP-MW-28H	3/13/2019 11:55	Turbidity	33	NTU
GS-AP-MW-28H	3/13/2019 12:00	Conductivity	550.4	uS/cm
GS-AP-MW-28H	3/13/2019 12:00	DO	1.36	mg/L
GS-AP-MW-28H	3/13/2019 12:00	Depth to Water Detail	155.1	ft
GS-AP-MW-28H	3/13/2019 12:00	Oxidation Reduction Potention	52.5	mv

**Alabama Power Company  
Plant Gorgas Ash Pond**

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-28H	3/13/2019 12:00	pH	8.27	pH
GS-AP-MW-28H	3/13/2019 12:00	Temperature	18.95	C
GS-AP-MW-28H	3/13/2019 12:00	Turbidity	31.8	NTU
GS-AP-MW-28H	3/13/2019 12:05	Conductivity	552.2	uS/cm
GS-AP-MW-28H	3/13/2019 12:05	DO	1.35	mg/L
GS-AP-MW-28H	3/13/2019 12:05	Depth to Water Detail	155.1	ft
GS-AP-MW-28H	3/13/2019 12:05	Oxidation Reduction Potention	50.4	mv
GS-AP-MW-28H	3/13/2019 12:05	pH	8.28	pH
GS-AP-MW-28H	3/13/2019 12:05	Temperature	18.89	C
GS-AP-MW-28H	3/13/2019 12:05	Turbidity	28.7	NTU
GS-AP-MW-28H	3/13/2019 12:10	Conductivity	555	uS/cm
GS-AP-MW-28H	3/13/2019 12:10	DO	1.27	mg/L
GS-AP-MW-28H	3/13/2019 12:10	Depth to Water Detail	155.1	ft
GS-AP-MW-28H	3/13/2019 12:10	Oxidation Reduction Potention	50.4	mv
GS-AP-MW-28H	3/13/2019 12:10	pH	8.28	pH
GS-AP-MW-28H	3/13/2019 12:10	Temperature	19.03	C
GS-AP-MW-28H	3/13/2019 12:10	Turbidity	29.1	NTU
GS-AP-MW-28H	3/13/2019 12:15	Conductivity	557.1	uS/cm
GS-AP-MW-28H	3/13/2019 12:15	DO	1.25	mg/L
GS-AP-MW-28H	3/13/2019 12:15	Depth to Water Detail	155.1	ft
GS-AP-MW-28H	3/13/2019 12:15	Oxidation Reduction Potention	50.5	mv
GS-AP-MW-28H	3/13/2019 12:15	pH	8.28	pH
GS-AP-MW-28H	3/13/2019 12:15	Temperature	18.99	C
GS-AP-MW-28H	3/13/2019 12:15	Turbidity	28.1	NTU
GS-AP-MW-28H	3/13/2019 12:20	Conductivity	554.8	uS/cm
GS-AP-MW-28H	3/13/2019 12:20	DO	1.23	mg/L
GS-AP-MW-28H	3/13/2019 12:20	Depth to Water Detail	155.1	ft
GS-AP-MW-28H	3/13/2019 12:20	Oxidation Reduction Potention	51.1	mv
GS-AP-MW-28H	3/13/2019 12:20	pH	8.28	pH
GS-AP-MW-28H	3/13/2019 12:20	Temperature	18.99	C
GS-AP-MW-28H	3/13/2019 12:20	Turbidity	27.6	NTU
GS-AP-MW-28H	3/13/2019 12:25	Conductivity	554.8	uS/cm
GS-AP-MW-28H	3/13/2019 12:25	DO	1.2	mg/L
GS-AP-MW-28H	3/13/2019 12:25	Depth to Water Detail	155.1	ft
GS-AP-MW-28H	3/13/2019 12:25	Oxidation Reduction Potention	50.6	mv
GS-AP-MW-28H	3/13/2019 12:25	pH	8.28	pH
GS-AP-MW-28H	3/13/2019 12:25	Temperature	18.95	C
GS-AP-MW-28H	3/13/2019 12:25	Turbidity	27.6	NTU
GS-AP-MW-28H	3/13/2019 12:30	Conductivity	557.2	uS/cm
GS-AP-MW-28H	3/13/2019 12:30	DO	1.18	mg/L
GS-AP-MW-28H	3/13/2019 12:30	Depth to Water Detail	155.1	ft
GS-AP-MW-28H	3/13/2019 12:30	Oxidation Reduction Potention	50.6	mv
GS-AP-MW-28H	3/13/2019 12:30	pH	8.28	pH
GS-AP-MW-28H	3/13/2019 12:30	Temperature	18.97	C
GS-AP-MW-28H	3/13/2019 12:30	Turbidity	26.7	NTU
GS-AP-MW-28H	3/13/2019 12:35	Conductivity	561.1	uS/cm



**Alabama Power Company  
Plant Gorgas Ash Pond**

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-28H	3/13/2019 12:35	DO	1.17	mg/L
GS-AP-MW-28H	3/13/2019 12:35	Depth to Water Detail	155.1	ft
GS-AP-MW-28H	3/13/2019 12:35	Oxidation Reduction Potention	51.7	mv
GS-AP-MW-28H	3/13/2019 12:35	pH	8.29	pH
GS-AP-MW-28H	3/13/2019 12:35	Temperature	19.08	C
GS-AP-MW-28H	3/13/2019 12:35	Turbidity	28.9	NTU
GS-AP-MW-28H	3/13/2019 12:40	Conductivity	560.2	uS/cm
GS-AP-MW-28H	3/13/2019 12:40	DO	1.17	mg/L
GS-AP-MW-28H	3/13/2019 12:40	Depth to Water Detail	155.1	ft
GS-AP-MW-28H	3/13/2019 12:40	Oxidation Reduction Potention	52.6	mv
GS-AP-MW-28H	3/13/2019 12:40	pH	8.29	pH
GS-AP-MW-28H	3/13/2019 12:40	Temperature	18.96	C
GS-AP-MW-28H	3/13/2019 12:40	Turbidity	28.9	NTU
GS-AP-MW-28H	3/13/2019 12:45	Conductivity	562.9	uS/cm
GS-AP-MW-28H	3/13/2019 12:45	DO	1.17	mg/L
GS-AP-MW-28H	3/13/2019 12:45	Depth to Water Detail	155.1	ft
GS-AP-MW-28H	3/13/2019 12:45	Oxidation Reduction Potention	51.8	mv
GS-AP-MW-28H	3/13/2019 12:45	pH	8.29	pH
GS-AP-MW-28H	3/13/2019 12:45	Temperature	18.94	C
GS-AP-MW-28H	3/13/2019 12:45	Turbidity	27	NTU
GS-AP-MW-28H	3/13/2019 12:50	Conductivity	561.6	uS/cm
GS-AP-MW-28H	3/13/2019 12:50	DO	1.15	mg/L
GS-AP-MW-28H	3/13/2019 12:50	Depth to Water Detail	155.1	ft
GS-AP-MW-28H	3/13/2019 12:50	Oxidation Reduction Potention	52.5	mv
GS-AP-MW-28H	3/13/2019 12:50	pH	8.29	pH
GS-AP-MW-28H	3/13/2019 12:50	Temperature	19.15	C
GS-AP-MW-28H	3/13/2019 12:50	Turbidity	27.2	NTU
GS-AP-MW-28H	3/13/2019 12:55	Conductivity	563.1	uS/cm
GS-AP-MW-28H	3/13/2019 12:55	DO	1.13	mg/L
GS-AP-MW-28H	3/13/2019 12:55	Depth to Water Detail	155.1	ft
GS-AP-MW-28H	3/13/2019 12:55	Oxidation Reduction Potention	51.7	mv
GS-AP-MW-28H	3/13/2019 12:55	pH	8.3	pH
GS-AP-MW-28H	3/13/2019 12:55	Temperature	19.12	C
GS-AP-MW-28H	3/13/2019 12:55	Turbidity	25.1	NTU
GS-AP-MW-28H	3/13/2019 13:00	Conductivity	563.6	uS/cm
GS-AP-MW-28H	3/13/2019 13:00	DO	1.09	mg/L
GS-AP-MW-28H	3/13/2019 13:00	Depth to Water Detail	155.1	ft
GS-AP-MW-28H	3/13/2019 13:00	Oxidation Reduction Potention	53.5	mv
GS-AP-MW-28H	3/13/2019 13:00	pH	8.3	pH
GS-AP-MW-28H	3/13/2019 13:00	Temperature	19.12	C
GS-AP-MW-28H	3/13/2019 13:00	Turbidity	25.2	NTU
GS-AP-MW-28H	3/13/2019 13:05	Conductivity	560.9	uS/cm
GS-AP-MW-28H	3/13/2019 13:05	DO	1.07	mg/L
GS-AP-MW-28H	3/13/2019 13:05	Depth to Water Detail	155.1	ft
GS-AP-MW-28H	3/13/2019 13:05	Oxidation Reduction Potention	54.5	mv
GS-AP-MW-28H	3/13/2019 13:05	pH	8.31	pH

**Alabama Power Company  
Plant Gorgas Ash Pond**

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-28H	3/13/2019 13:05	Temperature	19.03	C
GS-AP-MW-28H	3/13/2019 13:05	Turbidity	24	NTU
GS-AP-MW-28H	3/13/2019 13:10	Conductivity	558.3	uS/cm
GS-AP-MW-28H	3/13/2019 13:10	DO	1.06	mg/L
GS-AP-MW-28H	3/13/2019 13:10	Depth to Water Detail	155.1	ft
GS-AP-MW-28H	3/13/2019 13:10	Oxidation Reduction Potention	54.9	mv
GS-AP-MW-28H	3/13/2019 13:10	pH	8.3	pH
GS-AP-MW-28H	3/13/2019 13:10	Temperature	18.95	C
GS-AP-MW-28H	3/13/2019 13:10	Turbidity	25.2	NTU
GS-AP-MW-28H	3/13/2019 13:15	Conductivity	562	uS/cm
GS-AP-MW-28H	3/13/2019 13:15	DO	1.04	mg/L
GS-AP-MW-28H	3/13/2019 13:15	Depth to Water Detail	155.1	ft
GS-AP-MW-28H	3/13/2019 13:15	Oxidation Reduction Potention	52.6	mv
GS-AP-MW-28H	3/13/2019 13:15	pH	8.3	pH
GS-AP-MW-28H	3/13/2019 13:15	Temperature	18.82	C
GS-AP-MW-28H	3/13/2019 13:15	Turbidity	24.4	NTU
GS-AP-MW-28H	3/13/2019 13:20	Conductivity	566.4	uS/cm
GS-AP-MW-28H	3/13/2019 13:20	DO	1.03	mg/L
GS-AP-MW-28H	3/13/2019 13:20	Depth to Water Detail	155.1	ft
GS-AP-MW-28H	3/13/2019 13:20	Oxidation Reduction Potention	53.3	mv
GS-AP-MW-28H	3/13/2019 13:20	pH	8.29	pH
GS-AP-MW-28H	3/13/2019 13:20	Temperature	18.84	C
GS-AP-MW-28H	3/13/2019 13:20	Turbidity	25.1	NTU
GS-AP-MW-28H	3/13/2019 13:25	Conductivity	566.8	uS/cm
GS-AP-MW-28H	3/13/2019 13:25	DO	1.03	mg/L
GS-AP-MW-28H	3/13/2019 13:25	Depth to Water Detail	155.1	ft
GS-AP-MW-28H	3/13/2019 13:25	Oxidation Reduction Potention	51.7	mv
GS-AP-MW-28H	3/13/2019 13:25	pH	8.3	pH
GS-AP-MW-28H	3/13/2019 13:25	Temperature	18.87	C
GS-AP-MW-28H	3/13/2019 13:25	Turbidity	24.1	NTU
GS-AP-MW-28H	3/13/2019 13:30	Conductivity	566.5	uS/cm
GS-AP-MW-28H	3/13/2019 13:30	DO	1.02	mg/L
GS-AP-MW-28H	3/13/2019 13:30	Depth to Water Detail	155.1	ft
GS-AP-MW-28H	3/13/2019 13:30	Oxidation Reduction Potention	51	mv
GS-AP-MW-28H	3/13/2019 13:30	pH	8.3	pH
GS-AP-MW-28H	3/13/2019 13:30	Temperature	18.99	C
GS-AP-MW-28H	3/13/2019 13:30	Turbidity	24	NTU
GS-AP-MW-28H	3/13/2019 13:35	Conductivity	568	uS/cm
GS-AP-MW-28H	3/13/2019 13:35	DO	1	mg/L
GS-AP-MW-28H	3/13/2019 13:35	Depth to Water Detail	155.1	ft
GS-AP-MW-28H	3/13/2019 13:35	Oxidation Reduction Potention	51.1	mv
GS-AP-MW-28H	3/13/2019 13:35	pH	8.31	pH
GS-AP-MW-28H	3/13/2019 13:35	Temperature	19	C
GS-AP-MW-28H	3/13/2019 13:35	Turbidity	23.5	NTU
GS-AP-MW-28H	3/13/2019 13:40	Conductivity	567.5	uS/cm
GS-AP-MW-28H	3/13/2019 13:40	DO	0.97	mg/L

**Alabama Power Company  
Plant Gorgas Ash Pond**

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-28H	3/13/2019 13:40	Depth to Water Detail	155.1	ft
GS-AP-MW-28H	3/13/2019 13:40	Oxidation Reduction Potention	51	mv
GS-AP-MW-28H	3/13/2019 13:40	pH	8.3	pH
GS-AP-MW-28H	3/13/2019 13:40	Temperature	19.21	C
GS-AP-MW-28H	3/13/2019 13:40	Turbidity	23.6	NTU
GS-AP-MW-28H	3/13/2019 13:45	Conductivity	565.9	uS/cm
GS-AP-MW-28H	3/13/2019 13:45	DO	0.96	mg/L
GS-AP-MW-28H	3/13/2019 13:45	Depth to Water Detail	155.1	ft
GS-AP-MW-28H	3/13/2019 13:45	Oxidation Reduction Potention	54.2	mv
GS-AP-MW-28H	3/13/2019 13:45	pH	8.31	pH
GS-AP-MW-28H	3/13/2019 13:45	Temperature	19.26	C
GS-AP-MW-28H	3/13/2019 13:45	Turbidity	24.6	NTU
GS-AP-MW-28H	3/13/2019 13:50	Conductivity	568	uS/cm
GS-AP-MW-28H	3/13/2019 13:50	DO	0.94	mg/L
GS-AP-MW-28H	3/13/2019 13:50	Depth to Water Detail	155.1	ft
GS-AP-MW-28H	3/13/2019 13:50	Oxidation Reduction Potention	56	mv
GS-AP-MW-28H	3/13/2019 13:50	pH	8.3	pH
GS-AP-MW-28H	3/13/2019 13:50	Temperature	19.3	C
GS-AP-MW-28H	3/13/2019 13:50	Turbidity	24	NTU
GS-AP-MW-28H	3/13/2019 13:55	Conductivity	567.8	uS/cm
GS-AP-MW-28H	3/13/2019 13:55	DO	0.94	mg/L
GS-AP-MW-28H	3/13/2019 13:55	Depth to Water Detail	155.1	ft
GS-AP-MW-28H	3/13/2019 13:55	Oxidation Reduction Potention	58.6	mv
GS-AP-MW-28H	3/13/2019 13:55	pH	8.3	pH
GS-AP-MW-28H	3/13/2019 13:55	Temperature	19.46	C
GS-AP-MW-28H	3/13/2019 13:55	Turbidity	23.7	NTU
GS-AP-MW-28H	3/13/2019 14:00	Conductivity	565.7	uS/cm
GS-AP-MW-28H	3/13/2019 14:00	DO	0.95	mg/L
GS-AP-MW-28H	3/13/2019 14:00	Depth to Water Detail	155.1	ft
GS-AP-MW-28H	3/13/2019 14:00	Oxidation Reduction Potention	61.4	mv
GS-AP-MW-28H	3/13/2019 14:00	pH	8.3	pH
GS-AP-MW-28H	3/13/2019 14:00	Temperature	19.21	C
GS-AP-MW-28H	3/13/2019 14:00	Turbidity	23.4	NTU
GS-AP-MW-28H	3/13/2019 14:05	Conductivity	565.8	uS/cm
GS-AP-MW-28H	3/13/2019 14:05	DO	0.93	mg/L
GS-AP-MW-28H	3/13/2019 14:05	Depth to Water Detail	155.1	ft
GS-AP-MW-28H	3/13/2019 14:05	Oxidation Reduction Potention	58.1	mv
GS-AP-MW-28H	3/13/2019 14:05	pH	8.3	pH
GS-AP-MW-28H	3/13/2019 14:05	Temperature	19.15	C
GS-AP-MW-28H	3/13/2019 14:05	Turbidity	22.5	NTU
GS-AP-MW-28H	3/13/2019 14:10	Conductivity	567.4	uS/cm
GS-AP-MW-28H	3/13/2019 14:10	DO	0.92	mg/L
GS-AP-MW-28H	3/13/2019 14:10	Depth to Water Detail	155.1	ft
GS-AP-MW-28H	3/13/2019 14:10	Oxidation Reduction Potention	56.9	mv
GS-AP-MW-28H	3/13/2019 14:10	pH	8.3	pH
GS-AP-MW-28H	3/13/2019 14:10	Temperature	19.03	C

**Alabama Power Company  
Plant Gorgas Ash Pond**

<b>WELL ID</b>	<b>READING TIME</b>	<b>DESCRIPTION</b>	<b>VALUE</b>	<b>UNIT</b>
GS-AP-MW-28H	3/13/2019 14:10	Turbidity	22.4	NTU
GS-AP-MW-28H	3/13/2019 14:15	Conductivity	567.5	uS/cm
GS-AP-MW-28H	3/13/2019 14:15	DO	0.88	mg/L
GS-AP-MW-28H	3/13/2019 14:15	Depth to Water Detail	155.1	ft
GS-AP-MW-28H	3/13/2019 14:15	Oxidation Reduction Potention	52.2	mv
GS-AP-MW-28H	3/13/2019 14:15	pH	8.3	pH
GS-AP-MW-28H	3/13/2019 14:15	Temperature	18.94	C
GS-AP-MW-28H	3/13/2019 14:15	Turbidity	21.2	NTU
GS-AP-MW-28H	3/13/2019 14:21	Conductivity	567.7	uS/cm
GS-AP-MW-28H	3/13/2019 14:21	DO	0.88	mg/L
GS-AP-MW-28H	3/13/2019 14:21	Depth to Water Detail	155.1	ft
GS-AP-MW-28H	3/13/2019 14:21	Oxidation Reduction Potention	50.9	mv
GS-AP-MW-28H	3/13/2019 14:21	pH	8.3	pH
GS-AP-MW-28H	3/13/2019 14:21	Temperature	18.85	C
GS-AP-MW-28H	3/13/2019 14:21	Turbidity	21.3	NTU
GS-AP-MW-28H	3/13/2019 14:26	Conductivity	567.1	uS/cm
GS-AP-MW-28H	3/13/2019 14:26	DO	0.86	mg/L
GS-AP-MW-28H	3/13/2019 14:26	Depth to Water Detail	155.1	ft
GS-AP-MW-28H	3/13/2019 14:26	Oxidation Reduction Potention	50.3	mv
GS-AP-MW-28H	3/13/2019 14:26	pH	8.3	pH
GS-AP-MW-28H	3/13/2019 14:26	Temperature	19.04	C
GS-AP-MW-28H	3/13/2019 14:26	Turbidity	22.3	NTU

**1st**  
**Semi-Annual**  
**Monitoring Event**

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

## ***Field Case Narrative***



# **Gorgas Ash Pond**

## **2019 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).

Recent drilling and installation of delineation wells next to MW-7 and MW-18 resulted in elevated turbidity levels and longer pump times. Turbidity levels less than 10 NTU were not able to be achieved after extended pumping for well MW-7. A complete sample set for totals analysis was collected followed by a field filtered set for dissolved analysis.

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) 664-6247 or 6171  
FAX (205) 664-6108


# Analytical Report



**Sample Group :** WMWGORAP\_1216  
**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

The following data has been reviewed and approved by:

**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: 2019.06.06 09:36:01 -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: 2019.06.06 10:37:41 -05'00'



Metals ICP

Gorgas Ash Pond

WMWGORAP\_1216

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.

<u>Sample ID</u>	<u>Batch ID</u>	<u>Project ID</u>
AZ09832	644900	WMWGORAP_1216
AZ09833	644900	WMWGORAP_1216
AZ09834	644900	WMWGORAP_1216
AZ09835	644900	WMWGORAP_1216
AZ09836	644900	WMWGORAP_1216
AZ09837	644900	WMWGORAP_1216
AZ09838	644900	WMWGORAP_1216
AZ09839	644900	WMWGORAP_1216
AZ09840	644900	WMWGORAP_1216
AZ09841	644900	WMWGORAP_1216
AZ09842	644901	WMWGORAP_1216
AZ09843	644901	WMWGORAP_1216
AZ09844	644901	WMWGORAP_1216
AZ09845	644901	WMWGORAP_1216
AZ09846	644901	WMWGORAP_1216
AZ09847	644901	WMWGORAP_1216
AZ09848	644901	WMWGORAP_1216
AZ09849	644901	WMWGORAP_1216
AZ09850	644901	WMWGORAP_1216
AZ09851	644901	WMWGORAP_1216
AZ10372	644902	WMWGORAP_1216
AZ10373	644902	WMWGORAP_1216

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. All samples were analyzed at a x2.03 dilution to compensate for potential matrix effects.
  8. The raw data results are shown with dilution factors included.



Metals ICPMS

Gorgas Ash Pond

WMWGORAP\_1216

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.

<u>Sample ID</u>	<u>Batch ID</u>	<u>Project ID</u>
AZ09832	644621	WMWGORAP_1216
AZ09833	644621	WMWGORAP_1216
AZ09834	644621	WMWGORAP_1216
AZ09835	644621	WMWGORAP_1216
AZ09836	644621	WMWGORAP_1216
AZ09837	644621	WMWGORAP_1216
AZ09838	644621	WMWGORAP_1216
AZ09839	644621	WMWGORAP_1216
AZ09840	644621	WMWGORAP_1216
AZ09841	644621	WMWGORAP_1216
AZ09842	644622	WMWGORAP_1216
AZ09843	644622	WMWGORAP_1216
AZ09844	644622	WMWGORAP_1216
AZ09845	644622	WMWGORAP_1216
AZ09846	644622	WMWGORAP_1216
AZ09847	644622	WMWGORAP_1216
AZ09848	644622	WMWGORAP_1216
AZ09849	644622	WMWGORAP_1216
AZ09850	644622	WMWGORAP_1216
AZ09851	644622	WMWGORAP_1216
AZ10372	645368	WMWGORAP_1216
AZ10373	645368	WMWGORAP_1216

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 at a x5.075 dilution to compensate for potential matrix effects.
  8. The raw data results are shown with dilution factors included.



Mercury

Gorgas Ash Pond

WMWGORAP\_1216

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.

<u>Sample ID</u>	<u>Batch ID</u>	<u>Project ID</u>
AZ09832	645124	WMWGORAP_1216
AZ09833	645124	WMWGORAP_1216
AZ09834	645124	WMWGORAP_1216
AZ09835	645124	WMWGORAP_1216
AZ09836	645124	WMWGORAP_1216
AZ09837	645124	WMWGORAP_1216
AZ09838	645124	WMWGORAP_1216
AZ09839	645124	WMWGORAP_1216
AZ09840	645124	WMWGORAP_1216
AZ09841	645124	WMWGORAP_1216
AZ09842	645125	WMWGORAP_1216
AZ09843	645125	WMWGORAP_1216
AZ09844	645125	WMWGORAP_1216
AZ09845	645125	WMWGORAP_1216
AZ09846	645125	WMWGORAP_1216
AZ09847	645125	WMWGORAP_1216
AZ09848	645125	WMWGORAP_1216
AZ09849	645125	WMWGORAP_1216
AZ09850	645125	WMWGORAP_1216
AZ09851	645125	WMWGORAP_1216
AZ10372	645434	WMWGORAP_1216
AZ10373	645434	WMWGORAP_1216

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.
- The QC associated with samples AZ10372-73 is from project WMWGORLF\_1219.

### 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\_1216

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.

<u>Sample ID</u>	<u>Batch ID</u>	<u>Project ID</u>
AZ09832	644942	WMWGORAP_1216
AZ09833	644942	WMWGORAP_1216
AZ09834	644942	WMWGORAP_1216
AZ09835	644942	WMWGORAP_1216
AZ09836	644942	WMWGORAP_1216
AZ09837	644942	WMWGORAP_1216
AZ09838	644942	WMWGORAP_1216
AZ09839	644942	WMWGORAP_1216
AZ09840	644942	WMWGORAP_1216
AZ09841	644942	WMWGORAP_1216
AZ09842	644943	WMWGORAP_1216
AZ09843	644943	WMWGORAP_1216
AZ09844	644943	WMWGORAP_1216
AZ09845	644943	WMWGORAP_1216
AZ09846	644943	WMWGORAP_1216
AZ09847	644943	WMWGORAP_1216
AZ09848	644943	WMWGORAP_1216
AZ09849	644943	WMWGORAP_1216
AZ09850	644943	WMWGORAP_1216
AZ09851	644943	WMWGORAP_1216
AZ10372	645539	WMWGORAP_1216
AZ10373	645539	WMWGORAP_1216

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%, except for AZ09841.
- 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:
  - AZ09835
  - AZ09847
  - AZ09851



Anions

Gorgas Ash Pond

WMWGORAP\_1216

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.

<u>Sample ID</u>	<u>Batch ID</u>	<u>Project ID</u>
AZ09832	644880, 644850, & 644979	WMWGORAP_1216
AZ09833	644880, 644850, & 644979	WMWGORAP_1216
AZ09834	644880, 644850, & 644979	WMWGORAP_1216
AZ09835	644880, 644850, & 644979	WMWGORAP_1216
AZ09836	644880, 644850, & 644979	WMWGORAP_1216
AZ09837	644880, 644850, & 644979	WMWGORAP_1216
AZ09838	644880, 644850, & 644979	WMWGORAP_1216
AZ09839	644880, 644850, & 644979	WMWGORAP_1216
AZ09840	644880, 644850, & 644979	WMWGORAP_1216
AZ09841	644880, 644850, & 644979	WMWGORAP_1216
AZ09842	644881, 644851, & 644980	WMWGORAP_1216
AZ09843	644881, 644851, & 644980	WMWGORAP_1216
AZ09844	644881, 644851, & 644980	WMWGORAP_1216
AZ09845	644881, 644851, & 644980	WMWGORAP_1216
AZ09846	644881, 644851, & 644980	WMWGORAP_1216
AZ09847	644881, 644851, & 644980	WMWGORAP_1216
AZ09848	644881, 644851, & 644980	WMWGORAP_1216
AZ09849	644881, 644851, & 644980	WMWGORAP_1216
AZ09850	644881, 644851, & 644980	WMWGORAP_1216
AZ09851	644881, 644851, & 644980	WMWGORAP_1216
AZ10372	645072, 645025, & 644981	WMWGORAP_1216
AZ10373	645072, 645025, & 644981	WMWGORAP_1216

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

<u>Sample ID</u>	<u>Analyte</u>	<u>Dilution Factor</u>
AZ09832	Sulfate	x2
AZ09833	Sulfate	x2
AZ09834	Sulfate	x25
AZ09834	Chloride	x2
AZ09837	Sulfate	x10
AZ09843	Sulfate	x3
AZ09845	Sulfate	x5
AZ09846	Sulfate	x5
AZ09848	Sulfate	x10
AZ09850	Sulfate	x25
AZ09850	Chloride	x2
AZ10372	Sulfate	x25
AZ10373	Sulfate	x25

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  
 (205) 664-6247 or 6171  
 FAX (205) 664-6108

# Certificate Of Analysis Alabama Power



To: Dustin Brooks  
 Greg Dyer

Customer Account: WMWGORAP  
 Sample Date: 16-Apr-19  
 Customer ID:  
 Delivery Date: 18-Apr-19

Description: Gorgas Ash Pond - MW-6D

Laboratory ID Number: AZ09832

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
<b>Metals, Cyanide, Total Phenols</b>									
* Arsenic, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.001	0.005	0.0880	mg/L
* Barium, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.002	0.01	0.879	mg/L
* Beryllium, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	GAS	4/26/2019	EPA 200.7		2.03	0.03	0.1	1.10	mg/L
* Calcium, Total	GAS	4/26/2019	EPA 200.7		2.03	0.1	0.5	54.0	mg/L
* Cadmium, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.0003	0.001	U Not Detected	mg/L
* Antimony, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.0008	0.003	J 0.000828	mg/L
* Cobalt, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.002	0.005	U Not Detected	mg/L
* Chromium, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	5/2/2019	EPA 245.1		1	0.0003	0.0005	U Not Detected	mg/L
* Lithium, Total	GAS	4/26/2019	EPA 200.7		2.03	0.01	0.02	0.267	mg/L
* Molybdenum, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.002	0.01	J 0.00747	mg/L
* Lead, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
<b>General Characteristics</b>									
* Solids, Dissolved	CRB	4/25/2019	SM 2540C		1		25	285	mg/L
Filter Completion Date	CRB	4/19/2019	SM 2540C		1			04/19/2019	Date
* Chloride	JCC	4/24/2019	SM4500CI E		1	0.50	1	8.36	mg/L
* Fluoride	JCC	4/24/2019	SM4500F C		1	0.05	0.1	0.156	mg/L
* Sulfate	JCC	4/25/2019	SM4500SO4 E		2	1.00	2	46.8	mg/L
<b>Field Measurements</b>									
pH	AWG	4/16/2019						FA 7.26	SU

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.

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

\* Test results for these accredited parameters conform to the most current applicable TNI/NELAC requirements, with exceptions noted on this report.

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

**Comments:**

Alabama Power General Test Laboratory  
 744 County Road 87, GSC#8  
 Calera, AL 35040  
 (205) 664-6247 or 6171  
 FAX (205) 664-6108

# Batch QC Summary



To: Dustin Brooks  
 Greg Dyer

Customer Account: WMWGORAP  
 Sample Date: 16-Apr-19  
 Customer ID:  
 Delivery Date: 18-Apr-19

Description: Gorgas Ash Pond - MW-6D

Laboratory ID Number: AZ09832

Sample	Analysis	Units	MB		MS	MSD	LCS	LCS		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AZ09841	Cadmium, Total	mg/L	0.00000144	0.00066	0.10	0.0940	0.0948	0.0995	0.085 to 0.115	94.0	70 to 130	0.782	20
AZ09841	Antimony, Total	mg/L	0.000143	0.00176	0.10	0.0913	0.0918	0.0924	0.085 to 0.115	91.3	70 to 130	0.492	20
AZ09841	Beryllium, Total	mg/L	0.0000369	0.00132	0.10	0.0923	0.0930	0.0975	0.085 to 0.115	92.3	70 to 130	0.811	20
AZ09841	Cobalt, Total	mg/L	-0.00000090	0.0044	0.10	0.0888	0.0890	0.100	0.085 to 0.115	88.8	70 to 130	0.171	20
AZ09841	Lithium, Total	mg/L	-0.000355	0.019704	0.20	0.256	0.253	0.209	0.17 to 0.23	112	70 to 130	1.35	20
AZ09841	Boron, Total	mg/L	-0.00291	0.065025	1.00	1.00	0.996	0.972	0.85 to 1.15	100	70 to 130	0.663	20
AZ09841	Mercury, Total by CVAA	mg/L	0.0001	0.0005	0.004	0.00412	0.00409	0.00415	0.0034 to 0.0046	103	70 to 130	0.731	20
AZ09841	Thallium, Total	mg/L	0.00000243	0.00044	0.10	0.106	0.109	0.104	0.085 to 0.115	106	70 to 130	2.70	20
AZ09841	Barium, Total	mg/L	0.00000277	0.0044	0.10	0.388	0.393	0.0970	0.085 to 0.115	82.6	70 to 130	1.20	20
AZ09841	Molybdenum, Total	mg/L	0.00000463	0.0044	0.10	0.0951	0.0956	0.0968	0.085 to 0.115	95.1	70 to 130	0.549	20
AZ09841	Arsenic, Total	mg/L	0.00000418	0.0022	0.10	0.101	0.100	0.103	0.085 to 0.115	99.5	70 to 130	0.205	20
AZ09841	Chromium, Total	mg/L	0.00000244	0.0044	0.10	0.0972	0.0967	0.104	0.085 to 0.115	97.2	70 to 130	0.534	20
AZ09841	Lead, Total	mg/L	0.00000424	0.0022	0.10	0.0959	0.0999	0.102	0.085 to 0.115	95.9	70 to 130	4.08	20
AZ09841	Calcium, Total	mg/L	-0.0000301	0.216749	5.00	44.0	44.0	4.94	4.25 to 5.75	89.6	70 to 130	0.179	20
AZ09841	Selenium, Total	mg/L	0.0000879	0.0044	0.10	0.0954	0.0948	0.101	0.085 to 0.115	95.4	70 to 130	0.664	20

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

**Comments:**

Alabama Power General Test Laboratory  
 744 County Road 87, GSC#8  
 Calera, AL 35040  
 (205) 664-6247 or 6171  
 FAX (205) 664-6108

# Batch QC Summary



To: Dustin Brooks  
 Greg Dyer

Customer Account: WMWGORAP  
 Sample Date: 16-Apr-19  
 Customer ID:  
 Delivery Date: 18-Apr-19

Description: Gorgas Ash Pond - MW-6D

Laboratory ID Number: AZ09832

Sample	Analysis	Units	MB	MB			Sample		LCS	Rec		Prec	
				Limit	Spike	MS	Duplicate	LCS	Limit	Rec	Limit	Prec	Limit
AZ09841	Sulfate	mg/L	-0.392	0.50	20.0	36.1	16.8	19.4	18 to 22	96.0	80 to 120	0.593	20
AZ09841	Solids, Dissolved	mg/L	-3.00	25			213	48.0	40 to 60			7.30	5
AZ09841	Fluoride	mg/L	0.0471	0.05	2.50	2.70	0.205	2.47	2.25 to 2.75	99.8	80 to 120	0.489	20
AZ09841	Chloride	mg/L	-0.0984	0.50	10.0	18.4	7.74	10.0	9 to 11	107	80 to 120	0.518	20

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

**Comments:**

CC:

Alabama Power General Test Laboratory  
 744 County Road 87, GSC#8  
 Calera, AL 35040  
 (205) 664-6247 or 6171  
 FAX (205) 664-6108

# Certificate Of Analysis Alabama Power



To: Dustin Brooks  
 Greg Dyer

Customer Account: WMWGORAP  
 Sample Date: 16-Apr-19  
 Customer ID:  
 Delivery Date: 18-Apr-19

Description: Gorgas Ash Pond - MW-6D DUP

Laboratory ID Number: AZ09833

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
<b>Metals, Cyanide, Total Phenols</b>									
* Arsenic, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.001	0.005	0.0869	mg/L
* Barium, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.002	0.01	0.865	mg/L
* Beryllium, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	GAS	4/26/2019	EPA 200.7		2.03	0.03	0.1	1.09	mg/L
* Calcium, Total	GAS	4/26/2019	EPA 200.7		2.03	0.1	0.5	53.5	mg/L
* Cadmium, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.0003	0.001	U Not Detected	mg/L
* Antimony, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.0008	0.003	U Not Detected	mg/L
* Cobalt, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.002	0.005	U Not Detected	mg/L
* Chromium, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	5/2/2019	EPA 245.1		1	0.0003	0.0005	U Not Detected	mg/L
* Lithium, Total	GAS	4/26/2019	EPA 200.7		2.03	0.01	0.02	0.266	mg/L
* Molybdenum, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.002	0.01	J 0.00762	mg/L
* Lead, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
<b>General Characteristics</b>									
* Solids, Dissolved	CRB	4/25/2019	SM 2540C		1		25	277	mg/L
Filter Completion Date	CRB	4/19/2019	SM 2540C		1			04/19/2019	Date
* Chloride	JCC	4/24/2019	SM4500CI E		1	0.50	1	8.93	mg/L
* Fluoride	JCC	4/24/2019	SM4500F C		1	0.05	0.1	0.193	mg/L
* Sulfate	JCC	4/25/2019	SM4500SO4 E		2	1.00	2	46.2	mg/L
<b>Field Measurements</b>									
pH	AWG	4/16/2019						FA 7.26	SU

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.

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

\* Test results for these accredited parameters conform to the most current applicable TNI/NELAC requirements, with exceptions noted on this report.

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

**Comments:**

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 Calera, AL 35040  
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# Batch QC Summary



To: Dustin Brooks  
 Greg Dyer

Customer Account: WMWGORAP  
 Sample Date: 16-Apr-19  
 Customer ID:  
 Delivery Date: 18-Apr-19

Description: Gorgas Ash Pond - MW-6D DUP

Laboratory ID Number: AZ09833

Sample	Analysis	Units	MB		Spike	MS	MSD	LCS	LCS		Rec		Prec Limit	
			MB	Limit					Limit	Rec	Limit	Prec		
AZ09841	Antimony, Total	mg/L	0.000143	0.00176	0.10	0.0913	0.0918	0.0924	0.085 to 0.115		91.3	70 to 130	0.492	20
AZ09841	Cadmium, Total	mg/L	0.00000144	0.00066	0.10	0.0940	0.0948	0.0995	0.085 to 0.115		94.0	70 to 130	0.782	20
AZ09841	Barium, Total	mg/L	0.00000277	0.0044	0.10	0.388	0.393	0.0970	0.085 to 0.115		82.6	70 to 130	1.20	20
AZ09841	Molybdenum, Total	mg/L	0.00000463	0.0044	0.10	0.0951	0.0956	0.0968	0.085 to 0.115		95.1	70 to 130	0.549	20
AZ09841	Beryllium, Total	mg/L	0.0000369	0.00132	0.10	0.0923	0.0930	0.0975	0.085 to 0.115		92.3	70 to 130	0.811	20
AZ09841	Cobalt, Total	mg/L	-0.00000090	0.0044	0.10	0.0888	0.0890	0.100	0.085 to 0.115		88.8	70 to 130	0.171	20
AZ09841	Lithium, Total	mg/L	-0.000355	0.019704	0.20	0.256	0.253	0.209	0.17 to 0.23		112	70 to 130	1.35	20
AZ09841	Boron, Total	mg/L	-0.00291	0.065025	1.00	1.00	0.996	0.972	0.85 to 1.15		100	70 to 130	0.663	20
AZ09841	Mercury, Total by CVAA	mg/L	0.0001	0.0005	0.004	0.00412	0.00409	0.00415	0.0034 to 0.0046		103	70 to 130	0.731	20
AZ09841	Thallium, Total	mg/L	0.00000243	0.00044	0.10	0.106	0.109	0.104	0.085 to 0.115		106	70 to 130	2.70	20
AZ09841	Arsenic, Total	mg/L	0.00000418	0.0022	0.10	0.101	0.100	0.103	0.085 to 0.115		99.5	70 to 130	0.205	20
AZ09841	Chromium, Total	mg/L	0.00000244	0.0044	0.10	0.0972	0.0967	0.104	0.085 to 0.115		97.2	70 to 130	0.534	20
AZ09841	Lead, Total	mg/L	0.00000424	0.0022	0.10	0.0959	0.0999	0.102	0.085 to 0.115		95.9	70 to 130	4.08	20
AZ09841	Calcium, Total	mg/L	-0.0000301	0.216749	5.00	44.0	44.0	4.94	4.25 to 5.75		89.6	70 to 130	0.179	20
AZ09841	Selenium, Total	mg/L	0.0000879	0.0044	0.10	0.0954	0.0948	0.101	0.085 to 0.115		95.4	70 to 130	0.664	20

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

\* Test results for these accredited parameters conform to the most current applicable TNI/NELAC requirements, with exceptions noted on this report.

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

**Comments:**

Alabama Power General Test Laboratory  
 744 County Road 87, GSC#8  
 Calera, AL 35040  
 (205) 664-6247 or 6171  
 FAX (205) 664-6108

# Batch QC Summary



To: Dustin Brooks  
 Greg Dyer

Customer Account: WMWGORAP  
 Sample Date: 16-Apr-19  
 Customer ID:  
 Delivery Date: 18-Apr-19

Description: Gorgas Ash Pond - MW-6D DUP

Laboratory ID Number: AZ09833

Sample	Analysis	Units	MB	MB			Sample		LCS	Rec		Prec	
				Limit	Spike	MS	Duplicate	LCS	Limit	Rec	Limit	Prec	Limit
AZ09841	Fluoride	mg/L	0.0471	0.05	2.50	2.70	0.205	2.47	2.25 to 2.75	99.8	80 to 120	0.489	20
AZ09841	Chloride	mg/L	-0.0984	0.50	10.0	18.4	7.74	10.0	9 to 11	107	80 to 120	0.518	20
AZ09841	Solids, Dissolved	mg/L	-3.00	25			213	48.0	40 to 60			7.30	5
AZ09841	Sulfate	mg/L	-0.392	0.50	20.0	36.1	16.8	19.4	18 to 22	96.0	80 to 120	0.593	20

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.

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

\* Test results for these accredited parameters conform to the most current applicable TNI/NELAC requirements, with exceptions noted on this report.

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

**Comments:**

CC:

Alabama Power General Test Laboratory  
 744 County Road 87, GSC#8  
 Calera, AL 35040  
 (205) 664-6247 or 6171  
 FAX (205) 664-6108

**Certificate Of Analysis**  **Alabama Power**



To: Dustin Brooks  
 Greg Dyer

Customer Account: WMWGORAP  
 Sample Date: 16-Apr-19  
 Customer ID:  
 Delivery Date: 18-Apr-19

Description: Gorgas Ash Pond - MW-6S

Laboratory ID Number: AZ09834

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
<b>Metals, Cyanide, Total Phenols</b>									
* Arsenic, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.001	0.005	0.0164	mg/L
* Barium, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.002	0.01	0.124	mg/L
* Beryllium, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	GAS	4/26/2019	EPA 200.7		2.03	0.03	0.1	0.961	mg/L
* Calcium, Total	GAS	4/26/2019	EPA 200.7		2.03	0.1	0.5	57.1	mg/L
* Cadmium, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.0003	0.001	U Not Detected	mg/L
* Antimony, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.0008	0.003	U Not Detected	mg/L
* Cobalt, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.002	0.005	U Not Detected	mg/L
* Chromium, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	5/2/2019	EPA 245.1		1	0.0003	0.0005	U Not Detected	mg/L
* Lithium, Total	GAS	4/26/2019	EPA 200.7		2.03	0.01	0.02	U Not Detected	mg/L
* Molybdenum, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.002	0.01	J 0.00246	mg/L
* Lead, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
<b>General Characteristics</b>									
* Solids, Dissolved	CRB	4/25/2019	SM 2540C		1		25	382	mg/L
Filter Completion Date	CRB	4/19/2019	SM 2540C		1			04/19/2019	Date
* Chloride	JCC	4/24/2019	SM4500CI E		2	1.00	2	23.1	mg/L
* Fluoride	JCC	4/24/2019	SM4500F C		1	0.05	0.1	0.147	mg/L
* Sulfate	JCC	4/25/2019	SM4500SO4 E		25	12.50	25	195	mg/L
<b>Field Measurements</b>									
pH	AWG	4/16/2019						FA 6.82	SU

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

**Comments:**



Alabama Power General Test Laboratory  
 744 County Road 87, GSC#8  
 Calera, AL 35040  
 (205) 664-6247 or 6171  
 FAX (205) 664-6108

# Batch QC Summary



To: Dustin Brooks  
 Greg Dyer

Customer Account: WMWGORAP  
 Sample Date: 16-Apr-19  
 Customer ID:  
 Delivery Date: 18-Apr-19

Description: Gorgas Ash Pond - MW-6S

Laboratory ID Number: AZ09834

Sample	Analysis	Units	MB		Spike	MS	MSD	LCS	LCS		Rec		Prec Limit	
			MB	Limit					Limit	Rec	Limit			
AZ09841	Antimony, Total	mg/L	0.000143	0.00176	0.10	0.0913	0.0918	0.0924	0.085 to 0.115		91.3	70 to 130	0.492	20
AZ09841	Cadmium, Total	mg/L	0.00000144	0.00066	0.10	0.0940	0.0948	0.0995	0.085 to 0.115		94.0	70 to 130	0.782	20
AZ09841	Barium, Total	mg/L	0.00000277	0.0044	0.10	0.388	0.393	0.0970	0.085 to 0.115		82.6	70 to 130	1.20	20
AZ09841	Molybdenum, Total	mg/L	0.00000463	0.0044	0.10	0.0951	0.0956	0.0968	0.085 to 0.115		95.1	70 to 130	0.549	20
AZ09841	Boron, Total	mg/L	-0.00291	0.065025	1.00	1.00	0.996	0.972	0.85 to 1.15		100	70 to 130	0.663	20
AZ09841	Mercury, Total by CVAA	mg/L	0.0001	0.0005	0.004	0.00412	0.00409	0.00415	0.0034 to 0.0046		103	70 to 130	0.731	20
AZ09841	Thallium, Total	mg/L	0.00000243	0.00044	0.10	0.106	0.109	0.104	0.085 to 0.115		106	70 to 130	2.70	20
AZ09841	Arsenic, Total	mg/L	0.00000418	0.0022	0.10	0.101	0.100	0.103	0.085 to 0.115		99.5	70 to 130	0.205	20
AZ09841	Chromium, Total	mg/L	0.00000244	0.0044	0.10	0.0972	0.0967	0.104	0.085 to 0.115		97.2	70 to 130	0.534	20
AZ09841	Lead, Total	mg/L	0.00000424	0.0022	0.10	0.0959	0.0999	0.102	0.085 to 0.115		95.9	70 to 130	4.08	20
AZ09841	Beryllium, Total	mg/L	0.0000369	0.00132	0.10	0.0923	0.0930	0.0975	0.085 to 0.115		92.3	70 to 130	0.811	20
AZ09841	Cobalt, Total	mg/L	-0.00000090	0.0044	0.10	0.0888	0.0890	0.100	0.085 to 0.115		88.8	70 to 130	0.171	20
AZ09841	Lithium, Total	mg/L	-0.000355	0.019704	0.20	0.256	0.253	0.209	0.17 to 0.23		112	70 to 130	1.35	20
AZ09841	Calcium, Total	mg/L	-0.0000301	0.216749	5.00	44.0	44.0	4.94	4.25 to 5.75		89.6	70 to 130	0.179	20
AZ09841	Selenium, Total	mg/L	0.0000879	0.0044	0.10	0.0954	0.0948	0.101	0.085 to 0.115		95.4	70 to 130	0.664	20

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

Comments:

Alabama Power General Test Laboratory  
 744 County Road 87, GSC#8  
 Calera, AL 35040  
 (205) 664-6247 or 6171  
 FAX (205) 664-6108

# Batch QC Summary



To: Dustin Brooks  
 Greg Dyer

Customer Account: WMWGORAP  
 Sample Date: 16-Apr-19  
 Customer ID:  
 Delivery Date: 18-Apr-19

Description: Gorgas Ash Pond - MW-6S

Laboratory ID Number: AZ09834

Sample	Analysis	Units	MB	MB			Sample		LCS	Rec		Prec	
				Limit	Spike	MS	Duplicate	LCS	Limit	Rec	Limit	Prec	Limit
AZ09841	Fluoride	mg/L	0.0471	0.05	2.50	2.70	0.205	2.47	2.25 to 2.75	99.8	80 to 120	0.489	20
AZ09841	Sulfate	mg/L	-0.392	0.50	20.0	36.1	16.8	19.4	18 to 22	96.0	80 to 120	0.593	20
AZ09841	Solids, Dissolved	mg/L	-3.00	25			213	48.0	40 to 60			7.30	5
AZ09841	Chloride	mg/L	-0.0984	0.50	10.0	18.4	7.74	10.0	9 to 11	107	80 to 120	0.518	20

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

**Comments:**

CC:

Alabama Power General Test Laboratory  
 744 County Road 87, GSC#8  
 Calera, AL 35040  
 (205) 664-6247 or 6171  
 FAX (205) 664-6108

# Certificate Of Analysis Alabama Power



To: Dustin Brooks  
 Greg Dyer

Customer Account: WMWGORAPFB  
 Sample Date: 16-Apr-19  
 Customer ID:  
 Delivery Date: 18-Apr-19

Description: Gorgas Ash Pond Field Blank

Laboratory ID Number: AZ09835

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
<b>Metals, Cyanide, Total Phenols</b>										
* Arsenic, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Barium, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Beryllium, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Boron, Total	GAS	4/26/2019	EPA 200.7		2.03	0.03	0.1	U	Not Detected	mg/L
* Calcium, Total	GAS	4/26/2019	EPA 200.7		2.03	0.1	0.5	U	Not Detected	mg/L
* Cadmium, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.0003	0.001	U	Not Detected	mg/L
* Antimony, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.0008	0.003	U	Not Detected	mg/L
* Cobalt, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.002	0.005	U	Not Detected	mg/L
* Chromium, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	ABB	5/2/2019	EPA 245.1		1	0.0003	0.0005	U	Not Detected	mg/L
* Lithium, Total	GAS	4/26/2019	EPA 200.7		2.03	0.01	0.02	U	Not Detected	mg/L
* Molybdenum, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Lead, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Selenium, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Thallium, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
<b>General Characteristics</b>										
* Solids, Dissolved	CRB	4/25/2019	SM 2540C		1		25	U	Not Detected	mg/L
Filter Completion Date	CRB	4/19/2019	SM 2540C		1				04/19/2019	Date
* Chloride	JCC	4/24/2019	SM4500CI E		1	0.50	1	U	Not Detected	mg/L
* Fluoride	JCC	4/24/2019	SM4500F C		1	0.05	0.1	U	Not Detected	mg/L
* Sulfate	JCC	4/25/2019	SM4500SO4 E		1	0.50	1	U	Not Detected	mg/L

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

Comments:

Alabama Power General Test Laboratory  
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 Calera, AL 35040  
 (205) 664-6247 or 6171  
 FAX (205) 664-6108

# Batch QC Summary



To: Dustin Brooks  
 Greg Dyer

Customer Account: WMWGORAPFB  
 Sample Date: 16-Apr-19  
 Customer ID:  
 Delivery Date: 18-Apr-19

Description: Gorgas Ash Pond Field Blank

Laboratory ID Number: AZ09835

Sample	Analysis	Units	MB		MS	MSD	LCS	LCS Limit	Rec		Prec Limit		
			MB	Limit					Rec	Limit			
AZ09841	Cadmium, Total	mg/L	0.00000144	0.00066	0.10	0.0940	0.0948	0.0995	0.085 to 0.115	94.0	70 to 130	0.782	20
AZ09841	Antimony, Total	mg/L	0.000143	0.00176	0.10	0.0913	0.0918	0.0924	0.085 to 0.115	91.3	70 to 130	0.492	20
AZ09841	Calcium, Total	mg/L	-0.0000301	0.216749	5.00	44.0	44.0	4.94	4.25 to 5.75	89.6	70 to 130	0.179	20
AZ09841	Selenium, Total	mg/L	0.0000879	0.0044	0.10	0.0954	0.0948	0.101	0.085 to 0.115	95.4	70 to 130	0.664	20
AZ09841	Beryllium, Total	mg/L	0.0000369	0.00132	0.10	0.0923	0.0930	0.0975	0.085 to 0.115	92.3	70 to 130	0.811	20
AZ09841	Cobalt, Total	mg/L	-0.00000090	0.0044	0.10	0.0888	0.0890	0.100	0.085 to 0.115	88.8	70 to 130	0.171	20
AZ09841	Lithium, Total	mg/L	-0.000355	0.019704	0.20	0.256	0.253	0.209	0.17 to 0.23	112	70 to 130	1.35	20
AZ09841	Boron, Total	mg/L	-0.00291	0.065025	1.00	1.00	0.996	0.972	0.85 to 1.15	100	70 to 130	0.663	20
AZ09841	Mercury, Total by CVAA	mg/L	0.0001	0.0005	0.004	0.00412	0.00409	0.00415	0.0034 to 0.0046	103	70 to 130	0.731	20
AZ09841	Thallium, Total	mg/L	0.00000243	0.00044	0.10	0.106	0.109	0.104	0.085 to 0.115	106	70 to 130	2.70	20
AZ09841	Arsenic, Total	mg/L	0.00000418	0.0022	0.10	0.101	0.100	0.103	0.085 to 0.115	99.5	70 to 130	0.205	20
AZ09841	Chromium, Total	mg/L	0.00000244	0.0044	0.10	0.0972	0.0967	0.104	0.085 to 0.115	97.2	70 to 130	0.534	20
AZ09841	Lead, Total	mg/L	0.00000424	0.0022	0.10	0.0959	0.0999	0.102	0.085 to 0.115	95.9	70 to 130	4.08	20
AZ09841	Barium, Total	mg/L	0.00000277	0.0044	0.10	0.388	0.393	0.0970	0.085 to 0.115	82.6	70 to 130	1.20	20
AZ09841	Molybdenum, Total	mg/L	0.00000463	0.0044	0.10	0.0951	0.0956	0.0968	0.085 to 0.115	95.1	70 to 130	0.549	20

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

**Comments:**

Alabama Power General Test Laboratory  
 744 County Road 87, GSC#8  
 Calera, AL 35040  
 (205) 664-6247 or 6171  
 FAX (205) 664-6108

# Batch QC Summary



To: Dustin Brooks  
 Greg Dyer

Customer Account: WMWGORAPFB  
 Sample Date: 16-Apr-19  
 Customer ID:  
 Delivery Date: 18-Apr-19

Description: Gorgas Ash Pond Field Blank

Laboratory ID Number: AZ09835

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	LCS	LCS Limit	Rec	Rec Limit	Prec	Prec Limit
AZ09841	Solids, Dissolved	mg/L	-3.00	25			213	48.0	40 to 60			7.30	5
AZ09841	Chloride	mg/L	-0.0984	0.50	10.0	18.4	7.74	10.0	9 to 11	107	80 to 120	0.518	20
AZ09841	Fluoride	mg/L	0.0471	0.05	2.50	2.70	0.205	2.47	2.25 to 2.75	99.8	80 to 120	0.489	20
AZ09841	Sulfate	mg/L	-0.392	0.50	20.0	36.1	16.8	19.4	18 to 22	96.0	80 to 120	0.593	20

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

**Comments:**

CC:

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 (205) 664-6247 or 6171  
 FAX (205) 664-6108

**Certificate Of Analysis**  **Alabama Power**



To: Dustin Brooks  
 Greg Dyer

Customer Account: WMWGORAP  
 Sample Date: 16-Apr-19  
 Customer ID:  
 Delivery Date: 18-Apr-19

Description: Gorgas Ash Pond - MW-8

Laboratory ID Number: AZ09836

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
<b>Metals, Cyanide, Total Phenols</b>									
* Arsenic, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Barium, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.002	0.01	J 0.00459	mg/L
* Beryllium, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	GAS	4/26/2019	EPA 200.7		2.03	0.03	0.1	U Not Detected	mg/L
* Calcium, Total	GAS	4/26/2019	EPA 200.7		2.03	0.1	0.5	4.43	mg/L
* Cadmium, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.0003	0.001	U Not Detected	mg/L
* Antimony, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.0008	0.003	U Not Detected	mg/L
* Cobalt, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.002	0.005	U Not Detected	mg/L
* Chromium, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	5/2/2019	EPA 245.1		1	0.0003	0.0005	U Not Detected	mg/L
* Lithium, Total	GAS	4/26/2019	EPA 200.7		2.03	0.01	0.02	U Not Detected	mg/L
* Molybdenum, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
<b>General Characteristics</b>									
* Solids, Dissolved	CRB	4/25/2019	SM 2540C		1		25	92.0	mg/L
Filter Completion Date	CRB	4/19/2019	SM 2540C		1			04/19/2019	Date
* Chloride	JCC	4/24/2019	SM4500CI E		1	0.50	1	3.69	mg/L
* Fluoride	JCC	4/24/2019	SM4500F C		1	0.05	0.1	0.143	mg/L
* Sulfate	JCC	4/25/2019	SM4500SO4 E		1	0.50	1	4.53	mg/L
<b>Field Measurements</b>									
pH	AWG	4/16/2019						FA 5.76	SU

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

Comments:

Alabama Power General Test Laboratory  
 744 County Road 87, GSC#8  
 Calera, AL 35040  
 (205) 664-6247 or 6171  
 FAX (205) 664-6108

# Batch QC Summary



To: Dustin Brooks  
 Greg Dyer

Customer Account: WMWGORAP  
 Sample Date: 16-Apr-19  
 Customer ID:  
 Delivery Date: 18-Apr-19

Description: Gorgas Ash Pond - MW-8

Laboratory ID Number: AZ09836

Sample	Analysis	Units	MB		Spike	MS	MSD	LCS	LCS Limit	Rec		Prec Limit	
			MB	Limit						Rec	Limit		
AZ09841	Antimony, Total	mg/L	0.000143	0.00176	0.10	0.0913	0.0918	0.0924	0.085 to 0.115	91.3	70 to 130	0.492	20
AZ09841	Cadmium, Total	mg/L	0.00000144	0.00066	0.10	0.0940	0.0948	0.0995	0.085 to 0.115	94.0	70 to 130	0.782	20
AZ09841	Arsenic, Total	mg/L	0.00000418	0.0022	0.10	0.101	0.100	0.103	0.085 to 0.115	99.5	70 to 130	0.205	20
AZ09841	Chromium, Total	mg/L	0.00000244	0.0044	0.10	0.0972	0.0967	0.104	0.085 to 0.115	97.2	70 to 130	0.534	20
AZ09841	Lead, Total	mg/L	0.00000424	0.0022	0.10	0.0959	0.0999	0.102	0.085 to 0.115	95.9	70 to 130	4.08	20
AZ09841	Barium, Total	mg/L	0.00000277	0.0044	0.10	0.388	0.393	0.0970	0.085 to 0.115	82.6	70 to 130	1.20	20
AZ09841	Molybdenum, Total	mg/L	0.00000463	0.0044	0.10	0.0951	0.0956	0.0968	0.085 to 0.115	95.1	70 to 130	0.549	20
AZ09841	Boron, Total	mg/L	-0.00291	0.065025	1.00	1.00	0.996	0.972	0.85 to 1.15	100	70 to 130	0.663	20
AZ09841	Mercury, Total by CVAA	mg/L	0.0001	0.0005	0.004	0.00412	0.00409	0.00415	0.0034 to 0.0046	103	70 to 130	0.731	20
AZ09841	Thallium, Total	mg/L	0.00000243	0.00044	0.10	0.106	0.109	0.104	0.085 to 0.115	106	70 to 130	2.70	20
AZ09841	Beryllium, Total	mg/L	0.0000369	0.00132	0.10	0.0923	0.0930	0.0975	0.085 to 0.115	92.3	70 to 130	0.811	20
AZ09841	Cobalt, Total	mg/L	-0.00000090	0.0044	0.10	0.0888	0.0890	0.100	0.085 to 0.115	88.8	70 to 130	0.171	20
AZ09841	Lithium, Total	mg/L	-0.000355	0.019704	0.20	0.256	0.253	0.209	0.17 to 0.23	112	70 to 130	1.35	20
AZ09841	Calcium, Total	mg/L	-0.0000301	0.216749	5.00	44.0	44.0	4.94	4.25 to 5.75	89.6	70 to 130	0.179	20
AZ09841	Selenium, Total	mg/L	0.0000879	0.0044	0.10	0.0954	0.0948	0.101	0.085 to 0.115	95.4	70 to 130	0.664	20

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

\* Test results for these accredited parameters conform to the most current applicable TNI/NELAC requirements, with exceptions noted on this report.

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

**Comments:**

Alabama Power General Test Laboratory  
 744 County Road 87, GSC#8  
 Calera, AL 35040  
 (205) 664-6247 or 6171  
 FAX (205) 664-6108

# Batch QC Summary



To: Dustin Brooks  
 Greg Dyer

Customer Account: WMWGORAP  
 Sample Date: 16-Apr-19  
 Customer ID:  
 Delivery Date: 18-Apr-19

Description: Gorgas Ash Pond - MW-8

Laboratory ID Number: AZ09836

Sample	Analysis	Units	MB	MB			Sample		LCS	Rec			Prec
				Limit	Spike	MS	Duplicate	LCS	Limit	Rec	Limit	Prec	Limit
AZ09841	Solids, Dissolved	mg/L	-3.00	25			213	48.0	40 to 60			7.30	5
AZ09841	Sulfate	mg/L	-0.392	0.50	20.0	36.1	16.8	19.4	18 to 22	96.0	80 to 120	0.593	20
AZ09841	Chloride	mg/L	-0.0984	0.50	10.0	18.4	7.74	10.0	9 to 11	107	80 to 120	0.518	20
AZ09841	Fluoride	mg/L	0.0471	0.05	2.50	2.70	0.205	2.47	2.25 to 2.75	99.8	80 to 120	0.489	20

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\* Test results for these accredited parameters conform to the most current applicable TNI/NELAC requirements, with exceptions noted on this report.

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

**Comments:**

CC:



Alabama Power General Test Laboratory  
 744 County Road 87, GSC#8  
 Calera, AL 35040  
 (205) 664-6247 or 6171  
 FAX (205) 664-6108

**Certificate Of Analysis**  **Alabama Power**



To: Dustin Brooks  
 Greg Dyer

Customer Account: WMWGORAP  
 Sample Date: 16-Apr-19  
 Customer ID:  
 Delivery Date: 18-Apr-19

Description: Gorgas Ash Pond - MW-9

Laboratory ID Number: AZ09837

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
<b>Metals, Cyanide, Total Phenols</b>									
* Arsenic, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.001	0.005	J 0.00403	mg/L
* Barium, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.002	0.01	0.0256	mg/L
* Beryllium, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	GAS	4/26/2019	EPA 200.7		2.03	0.03	0.1	J 0.0979	mg/L
* Calcium, Total	GAS	4/26/2019	EPA 200.7		2.03	0.1	0.5	73.3	mg/L
* Cadmium, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.0003	0.001	U Not Detected	mg/L
* Antimony, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.0008	0.003	U Not Detected	mg/L
* Cobalt, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.002	0.005	U Not Detected	mg/L
* Chromium, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	5/2/2019	EPA 245.1		1	0.0003	0.0005	U Not Detected	mg/L
* Lithium, Total	GAS	4/26/2019	EPA 200.7		2.03	0.01	0.02	0.0673	mg/L
* Molybdenum, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.002	0.01	J 0.00462	mg/L
* Lead, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
<b>General Characteristics</b>									
* Solids, Dissolved	CRB	4/25/2019	SM 2540C		1		25	397	mg/L
Filter Completion Date	CRB	4/19/2019	SM 2540C		1			04/19/2019	Date
* Chloride	JCC	4/24/2019	SM4500CI E		1	0.50	1	2.81	mg/L
* Fluoride	JCC	4/24/2019	SM4500F C		1	0.05	0.1	0.154	mg/L
* Sulfate	JCC	4/25/2019	SM4500SO4 E		10	5.00	10	154	mg/L
<b>Field Measurements</b>									
pH	AWG	4/16/2019						FA 6.69	SU

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

**Comments:**

Alabama Power General Test Laboratory  
 744 County Road 87, GSC#8  
 Calera, AL 35040  
 (205) 664-6247 or 6171  
 FAX (205) 664-6108

# Batch QC Summary



To: Dustin Brooks  
 Greg Dyer

Customer Account: WMWGORAP  
 Sample Date: 16-Apr-19  
 Customer ID:  
 Delivery Date: 18-Apr-19

Description: Gorgas Ash Pond - MW-9

Laboratory ID Number: AZ09837

Sample	Analysis	Units	MB		MS	MSD	LCS	LCS Limit	Rec		Prec Limit		
			MB	Limit					Rec	Limit			
AZ09841	Antimony, Total	mg/L	0.000143	0.00176	0.10	0.0913	0.0918	0.0924	0.085 to 0.115	91.3	70 to 130	0.492	20
AZ09841	Cadmium, Total	mg/L	0.00000144	0.00066	0.10	0.0940	0.0948	0.0995	0.085 to 0.115	94.0	70 to 130	0.782	20
AZ09841	Barium, Total	mg/L	0.00000277	0.0044	0.10	0.388	0.393	0.0970	0.085 to 0.115	82.6	70 to 130	1.20	20
AZ09841	Molybdenum, Total	mg/L	0.00000463	0.0044	0.10	0.0951	0.0956	0.0968	0.085 to 0.115	95.1	70 to 130	0.549	20
AZ09841	Calcium, Total	mg/L	-0.0000301	0.216749	5.00	44.0	44.0	4.94	4.25 to 5.75	89.6	70 to 130	0.179	20
AZ09841	Selenium, Total	mg/L	0.0000879	0.0044	0.10	0.0954	0.0948	0.101	0.085 to 0.115	95.4	70 to 130	0.664	20
AZ09841	Boron, Total	mg/L	-0.00291	0.065025	1.00	1.00	0.996	0.972	0.85 to 1.15	100	70 to 130	0.663	20
AZ09841	Mercury, Total by CVAA	mg/L	0.0001	0.0005	0.004	0.00412	0.00409	0.00415	0.0034 to 0.0046	103	70 to 130	0.731	20
AZ09841	Thallium, Total	mg/L	0.00000243	0.00044	0.10	0.106	0.109	0.104	0.085 to 0.115	106	70 to 130	2.70	20
AZ09841	Arsenic, Total	mg/L	0.00000418	0.0022	0.10	0.101	0.100	0.103	0.085 to 0.115	99.5	70 to 130	0.205	20
AZ09841	Chromium, Total	mg/L	0.00000244	0.0044	0.10	0.0972	0.0967	0.104	0.085 to 0.115	97.2	70 to 130	0.534	20
AZ09841	Lead, Total	mg/L	0.00000424	0.0022	0.10	0.0959	0.0999	0.102	0.085 to 0.115	95.9	70 to 130	4.08	20
AZ09841	Beryllium, Total	mg/L	0.0000369	0.00132	0.10	0.0923	0.0930	0.0975	0.085 to 0.115	92.3	70 to 130	0.811	20
AZ09841	Cobalt, Total	mg/L	-0.00000090	0.0044	0.10	0.0888	0.0890	0.100	0.085 to 0.115	88.8	70 to 130	0.171	20
AZ09841	Lithium, Total	mg/L	-0.000355	0.019704	0.20	0.256	0.253	0.209	0.17 to 0.23	112	70 to 130	1.35	20

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

**Comments:**

Alabama Power General Test Laboratory  
 744 County Road 87, GSC#8  
 Calera, AL 35040  
 (205) 664-6247 or 6171  
 FAX (205) 664-6108

# Batch QC Summary



To: Dustin Brooks  
 Greg Dyer

Customer Account: WMWGORAP  
 Sample Date: 16-Apr-19  
 Customer ID:  
 Delivery Date: 18-Apr-19

Description: Gorgas Ash Pond - MW-9

Laboratory ID Number: AZ09837

Sample	Analysis	Units	MB	MB			Sample		LCS	Rec		Prec	
				Limit	Spike	MS	Duplicate	LCS	Limit	Rec	Limit	Prec	Limit
AZ09841	Fluoride	mg/L	0.0471	0.05	2.50	2.70	0.205	2.47	2.25 to 2.75	99.8	80 to 120	0.489	20
AZ09841	Chloride	mg/L	-0.0984	0.50	10.0	18.4	7.74	10.0	9 to 11	107	80 to 120	0.518	20
AZ09841	Solids, Dissolved	mg/L	-3.00	25			213	48.0	40 to 60			7.30	5
AZ09841	Sulfate	mg/L	-0.392	0.50	20.0	36.1	16.8	19.4	18 to 22	96.0	80 to 120	0.593	20

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.

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

**Comments:**

CC:

Alabama Power General Test Laboratory  
 744 County Road 87, GSC#8  
 Calera, AL 35040  
 (205) 664-6247 or 6171  
 FAX (205) 664-6108

**Certificate Of Analysis**  **Alabama Power**



To: Dustin Brooks  
 Greg Dyer

Customer Account: WMWGORAP  
 Sample Date: 16-Apr-19  
 Customer ID:  
 Delivery Date: 18-Apr-19

Description: Gorgas Ash Pond - MW-11

Laboratory ID Number: AZ09838

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
<b>Metals, Cyanide, Total Phenols</b>									
* Arsenic, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Barium, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.002	0.01	0.210	mg/L
* Beryllium, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	GAS	4/26/2019	EPA 200.7		2.03	0.03	0.1	U Not Detected	mg/L
* Calcium, Total	GAS	4/26/2019	EPA 200.7		2.03	0.1	0.5	46.7	mg/L
* Cadmium, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.0003	0.001	U Not Detected	mg/L
* Antimony, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.0008	0.003	U Not Detected	mg/L
* Cobalt, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.002	0.005	U Not Detected	mg/L
* Chromium, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	5/2/2019	EPA 245.1		1	0.0003	0.0005	U Not Detected	mg/L
* Lithium, Total	GAS	4/26/2019	EPA 200.7		2.03	0.01	0.02	J 0.0129	mg/L
* Molybdenum, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
<b>General Characteristics</b>									
* Solids, Dissolved	CRB	4/25/2019	SM 2540C		1		25	226	mg/L
Filter Completion Date	CRB	4/19/2019	SM 2540C		1			04/19/2019	Date
* Chloride	JCC	4/24/2019	SM4500CI E		1	0.50	1	8.06	mg/L
* Fluoride	JCC	4/24/2019	SM4500F C		1	0.05	0.1	0.177	mg/L
* Sulfate	JCC	4/25/2019	SM4500SO4 E		1	0.50	1	23.2	mg/L
<b>Field Measurements</b>									
pH	AWG	4/16/2019						FA 6.93	SU

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

Comments:

Alabama Power General Test Laboratory  
 744 County Road 87, GSC#8  
 Calera, AL 35040  
 (205) 664-6247 or 6171  
 FAX (205) 664-6108

# Batch QC Summary



To: Dustin Brooks  
 Greg Dyer

Customer Account: WMWGORAP  
 Sample Date: 16-Apr-19  
 Customer ID:  
 Delivery Date: 18-Apr-19

Description: Gorgas Ash Pond - MW-11

Laboratory ID Number: AZ09838

Sample	Analysis	Units	MB		MS	MSD	LCS	LCS Limit	Rec		Prec Limit		
			MB	Limit					Rec	Limit			
AZ09841	Antimony, Total	mg/L	0.000143	0.00176	0.10	0.0913	0.0918	0.0924	0.085 to 0.115	91.3	70 to 130	0.492	20
AZ09841	Cadmium, Total	mg/L	0.00000144	0.00066	0.10	0.0940	0.0948	0.0995	0.085 to 0.115	94.0	70 to 130	0.782	20
AZ09841	Calcium, Total	mg/L	-0.0000301	0.216749	5.00	44.0	44.0	4.94	4.25 to 5.75	89.6	70 to 130	0.179	20
AZ09841	Selenium, Total	mg/L	0.0000879	0.0044	0.10	0.0954	0.0948	0.101	0.085 to 0.115	95.4	70 to 130	0.664	20
AZ09841	Barium, Total	mg/L	0.00000277	0.0044	0.10	0.388	0.393	0.0970	0.085 to 0.115	82.6	70 to 130	1.20	20
AZ09841	Molybdenum, Total	mg/L	0.00000463	0.0044	0.10	0.0951	0.0956	0.0968	0.085 to 0.115	95.1	70 to 130	0.549	20
AZ09841	Beryllium, Total	mg/L	0.0000369	0.00132	0.10	0.0923	0.0930	0.0975	0.085 to 0.115	92.3	70 to 130	0.811	20
AZ09841	Cobalt, Total	mg/L	-0.00000090	0.0044	0.10	0.0888	0.0890	0.100	0.085 to 0.115	88.8	70 to 130	0.171	20
AZ09841	Lithium, Total	mg/L	-0.000355	0.019704	0.20	0.256	0.253	0.209	0.17 to 0.23	112	70 to 130	1.35	20
AZ09841	Arsenic, Total	mg/L	0.00000418	0.0022	0.10	0.101	0.100	0.103	0.085 to 0.115	99.5	70 to 130	0.205	20
AZ09841	Chromium, Total	mg/L	0.00000244	0.0044	0.10	0.0972	0.0967	0.104	0.085 to 0.115	97.2	70 to 130	0.534	20
AZ09841	Lead, Total	mg/L	0.00000424	0.0022	0.10	0.0959	0.0999	0.102	0.085 to 0.115	95.9	70 to 130	4.08	20
AZ09841	Boron, Total	mg/L	-0.00291	0.065025	1.00	1.00	0.996	0.972	0.85 to 1.15	100	70 to 130	0.663	20
AZ09841	Mercury, Total by CVAA	mg/L	0.0001	0.0005	0.004	0.00412	0.00409	0.00415	0.0034 to 0.0046	103	70 to 130	0.731	20
AZ09841	Thallium, Total	mg/L	0.00000243	0.00044	0.10	0.106	0.109	0.104	0.085 to 0.115	106	70 to 130	2.70	20

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

**Comments:**

Alabama Power General Test Laboratory  
 744 County Road 87, GSC#8  
 Calera, AL 35040  
 (205) 664-6247 or 6171  
 FAX (205) 664-6108

# Batch QC Summary



To: Dustin Brooks  
 Greg Dyer

Customer Account: WMWGORAP  
 Sample Date: 16-Apr-19  
 Customer ID:  
 Delivery Date: 18-Apr-19

Description: Gorgas Ash Pond - MW-11

Laboratory ID Number: AZ09838

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample		LCS Limit	Rec		Prec Limit	
							Duplicate	LCS		Rec	Limit		
AZ09841	Solids, Dissolved	mg/L	-3.00	25			213	48.0	40 to 60			7.30	5
AZ09841	Sulfate	mg/L	-0.392	0.50	20.0	36.1	16.8	19.4	18 to 22	96.0	80 to 120	0.593	20
AZ09841	Fluoride	mg/L	0.0471	0.05	2.50	2.70	0.205	2.47	2.25 to 2.75	99.8	80 to 120	0.489	20
AZ09841	Chloride	mg/L	-0.0984	0.50	10.0	18.4	7.74	10.0	9 to 11	107	80 to 120	0.518	20

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.

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

\* Test results for these accredited parameters conform to the most current applicable TNI/NELAC requirements, with exceptions noted on this report.

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

**Comments:**

CC:

Alabama Power General Test Laboratory  
 744 County Road 87, GSC#8  
 Calera, AL 35040  
 (205) 664-6247 or 6171  
 FAX (205) 664-6108

# Certificate Of Analysis Alabama Power



To: Dustin Brooks  
 Greg Dyer

Customer Account: WMWGORAP  
 Sample Date: 16-Apr-19  
 Customer ID:  
 Delivery Date: 18-Apr-19

Description: Gorgas Ash Pond - MW-12

Laboratory ID Number: AZ09839

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
<b>Metals, Cyanide, Total Phenols</b>									
* Arsenic, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.001	0.005	0.0140	mg/L
* Barium, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.002	0.01	0.161	mg/L
* Beryllium, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	GAS	4/26/2019	EPA 200.7		2.03	0.03	0.1	J 0.0385	mg/L
* Calcium, Total	GAS	4/26/2019	EPA 200.7		2.03	0.1	0.5	38.3	mg/L
* Cadmium, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.0003	0.001	U Not Detected	mg/L
* Antimony, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.0008	0.003	U Not Detected	mg/L
* Cobalt, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.002	0.005	U Not Detected	mg/L
* Chromium, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	5/2/2019	EPA 245.1		1	0.0003	0.0005	U Not Detected	mg/L
* Lithium, Total	GAS	4/26/2019	EPA 200.7		2.03	0.01	0.02	0.0261	mg/L
* Molybdenum, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
<b>General Characteristics</b>									
* Solids, Dissolved	CRB	4/25/2019	SM 2540C		1		25	193	mg/L
Filter Completion Date	CRB	4/19/2019	SM 2540C		1			04/19/2019	Date
* Chloride	JCC	4/24/2019	SM4500CI E		1	0.50	1	3.22	mg/L
* Fluoride	JCC	4/24/2019	SM4500F C		1	0.05	0.1	0.188	mg/L
* Sulfate	JCC	4/25/2019	SM4500SO4 E		1	0.50	1	13.3	mg/L
<b>Field Measurements</b>									
pH	AWG	4/16/2019						FA 7.41	SU

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

\* Test results for these accredited parameters conform to the most current applicable TNI/NELAC requirements, with exceptions noted on this report.

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

Comments:

Alabama Power General Test Laboratory  
 744 County Road 87, GSC#8  
 Calera, AL 35040  
 (205) 664-6247 or 6171  
 FAX (205) 664-6108

# Batch QC Summary



To: Dustin Brooks  
 Greg Dyer

Customer Account: WMWGORAP  
 Sample Date: 16-Apr-19  
 Customer ID:  
 Delivery Date: 18-Apr-19

Description: Gorgas Ash Pond - MW-12

Laboratory ID Number: AZ09839

Sample	Analysis	Units	MB		MS	MSD	LCS	LCS Limit	Rec		Prec	Prec Limit	
			MB	Limit					Rec	Limit			
AZ09841	Antimony, Total	mg/L	0.000143	0.00176	0.10	0.0913	0.0918	0.0924	0.085 to 0.115	91.3	70 to 130	0.492	20
AZ09841	Cadmium, Total	mg/L	0.00000144	0.00066	0.10	0.0940	0.0948	0.0995	0.085 to 0.115	94.0	70 to 130	0.782	20
AZ09841	Calcium, Total	mg/L	-0.0000301	0.216749	5.00	44.0	44.0	4.94	4.25 to 5.75	89.6	70 to 130	0.179	20
AZ09841	Selenium, Total	mg/L	0.0000879	0.0044	0.10	0.0954	0.0948	0.101	0.085 to 0.115	95.4	70 to 130	0.664	20
AZ09841	Arsenic, Total	mg/L	0.00000418	0.0022	0.10	0.101	0.100	0.103	0.085 to 0.115	99.5	70 to 130	0.205	20
AZ09841	Chromium, Total	mg/L	0.00000244	0.0044	0.10	0.0972	0.0967	0.104	0.085 to 0.115	97.2	70 to 130	0.534	20
AZ09841	Lead, Total	mg/L	0.00000424	0.0022	0.10	0.0959	0.0999	0.102	0.085 to 0.115	95.9	70 to 130	4.08	20
AZ09841	Beryllium, Total	mg/L	0.0000369	0.00132	0.10	0.0923	0.0930	0.0975	0.085 to 0.115	92.3	70 to 130	0.811	20
AZ09841	Cobalt, Total	mg/L	-0.00000090	0.0044	0.10	0.0888	0.0890	0.100	0.085 to 0.115	88.8	70 to 130	0.171	20
AZ09841	Lithium, Total	mg/L	-0.000355	0.019704	0.20	0.256	0.253	0.209	0.17 to 0.23	112	70 to 130	1.35	20
AZ09841	Barium, Total	mg/L	0.00000277	0.0044	0.10	0.388	0.393	0.0970	0.085 to 0.115	82.6	70 to 130	1.20	20
AZ09841	Molybdenum, Total	mg/L	0.00000463	0.0044	0.10	0.0951	0.0956	0.0968	0.085 to 0.115	95.1	70 to 130	0.549	20
AZ09841	Boron, Total	mg/L	-0.00291	0.065025	1.00	1.00	0.996	0.972	0.85 to 1.15	100	70 to 130	0.663	20
AZ09841	Mercury, Total by CVAA	mg/L	0.0001	0.0005	0.004	0.00412	0.00409	0.00415	0.0034 to 0.0046	103	70 to 130	0.731	20
AZ09841	Thallium, Total	mg/L	0.00000243	0.00044	0.10	0.106	0.109	0.104	0.085 to 0.115	106	70 to 130	2.70	20

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\* Test results for these accredited parameters conform to the most current applicable TNI/NELAC requirements, with exceptions noted on this report.

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

**Comments:**



Alabama Power General Test Laboratory  
 744 County Road 87, GSC#8  
 Calera, AL 35040  
 (205) 664-6247 or 6171  
 FAX (205) 664-6108

# Batch QC Summary



To: Dustin Brooks  
 Greg Dyer

Customer Account: WMWGORAP  
 Sample Date: 16-Apr-19  
 Customer ID:  
 Delivery Date: 18-Apr-19

Description: Gorgas Ash Pond - MW-12

Laboratory ID Number: AZ09839

Sample	Analysis	Units	MB	MB			Sample		LCS	Rec		Prec	
				Limit	Spike	MS	Duplicate	LCS	Limit	Rec	Limit	Prec	Limit
AZ09841	Fluoride	mg/L	0.0471	0.05	2.50	2.70	0.205	2.47	2.25 to 2.75	99.8	80 to 120	0.489	20
AZ09841	Chloride	mg/L	-0.0984	0.50	10.0	18.4	7.74	10.0	9 to 11	107	80 to 120	0.518	20
AZ09841	Solids, Dissolved	mg/L	-3.00	25			213	48.0	40 to 60			7.30	5
AZ09841	Sulfate	mg/L	-0.392	0.50	20.0	36.1	16.8	19.4	18 to 22	96.0	80 to 120	0.593	20

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

**Comments:**

CC:

Alabama Power General Test Laboratory  
 744 County Road 87, GSC#8  
 Calera, AL 35040  
 (205) 664-6247 or 6171  
 FAX (205) 664-6108

# Certificate Of Analysis Alabama Power



To: Dustin Brooks  
 Greg Dyer

Customer Account: WMWGORAP  
 Sample Date: 16-Apr-19  
 Customer ID:  
 Delivery Date: 18-Apr-19

Description: Gorgas Ash Pond - MW-13

Laboratory ID Number: AZ09840

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
<b>Metals, Cyanide, Total Phenols</b>									
* Arsenic, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Barium, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.002	0.01	0.160	mg/L
* Beryllium, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	GAS	4/26/2019	EPA 200.7		2.03	0.03	0.1	U Not Detected	mg/L
* Calcium, Total	GAS	4/26/2019	EPA 200.7		2.03	0.1	0.5	38.6	mg/L
* Cadmium, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.0003	0.001	U Not Detected	mg/L
* Antimony, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.0008	0.003	U Not Detected	mg/L
* Cobalt, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.002	0.005	U Not Detected	mg/L
* Chromium, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	5/2/2019	EPA 245.1		1	0.0003	0.0005	U Not Detected	mg/L
* Lithium, Total	GAS	4/26/2019	EPA 200.7		2.03	0.01	0.02	J 0.0101	mg/L
* Molybdenum, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
<b>General Characteristics</b>									
* Solids, Dissolved	CRB	4/25/2019	SM 2540C		1		25	185	mg/L
Filter Completion Date	CRB	4/19/2019	SM 2540C		1			04/19/2019	Date
* Chloride	JCC	4/24/2019	SM4500CI E		1	0.50	1	3.23	mg/L
* Fluoride	JCC	4/24/2019	SM4500F C		1	0.05	0.1	0.197	mg/L
* Sulfate	JCC	4/25/2019	SM4500SO4 E		1	0.50	1	12.1	mg/L
<b>Field Measurements</b>									
pH	AWG	4/16/2019						FA 6.64	SU

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

Comments:

Alabama Power General Test Laboratory  
 744 County Road 87, GSC#8  
 Calera, AL 35040  
 (205) 664-6247 or 6171  
 FAX (205) 664-6108

# Batch QC Summary



To: Dustin Brooks  
 Greg Dyer

Customer Account: WMWGORAP  
 Sample Date: 16-Apr-19  
 Customer ID:  
 Delivery Date: 18-Apr-19

Description: Gorgas Ash Pond - MW-13

Laboratory ID Number: AZ09840

Sample	Analysis	Units	MB		MS	MSD	LCS	LCS Limit	Rec		Prec	Prec Limit	
			MB	Limit					Rec	Limit			
AZ09841	Antimony, Total	mg/L	0.000143	0.00176	0.10	0.0913	0.0918	0.0924	0.085 to 0.115	91.3	70 to 130	0.492	20
AZ09841	Cadmium, Total	mg/L	0.00000144	0.00066	0.10	0.0940	0.0948	0.0995	0.085 to 0.115	94.0	70 to 130	0.782	20
AZ09841	Beryllium, Total	mg/L	0.0000369	0.00132	0.10	0.0923	0.0930	0.0975	0.085 to 0.115	92.3	70 to 130	0.811	20
AZ09841	Cobalt, Total	mg/L	-0.00000090	0.0044	0.10	0.0888	0.0890	0.100	0.085 to 0.115	88.8	70 to 130	0.171	20
AZ09841	Lithium, Total	mg/L	-0.000355	0.019704	0.20	0.256	0.253	0.209	0.17 to 0.23	112	70 to 130	1.35	20
AZ09841	Barium, Total	mg/L	0.00000277	0.0044	0.10	0.388	0.393	0.0970	0.085 to 0.115	82.6	70 to 130	1.20	20
AZ09841	Molybdenum, Total	mg/L	0.00000463	0.0044	0.10	0.0951	0.0956	0.0968	0.085 to 0.115	95.1	70 to 130	0.549	20
AZ09841	Arsenic, Total	mg/L	0.00000418	0.0022	0.10	0.101	0.100	0.103	0.085 to 0.115	99.5	70 to 130	0.205	20
AZ09841	Chromium, Total	mg/L	0.00000244	0.0044	0.10	0.0972	0.0967	0.104	0.085 to 0.115	97.2	70 to 130	0.534	20
AZ09841	Lead, Total	mg/L	0.00000424	0.0022	0.10	0.0959	0.0999	0.102	0.085 to 0.115	95.9	70 to 130	4.08	20
AZ09841	Calcium, Total	mg/L	-0.0000301	0.216749	5.00	44.0	44.0	4.94	4.25 to 5.75	89.6	70 to 130	0.179	20
AZ09841	Selenium, Total	mg/L	0.0000879	0.0044	0.10	0.0954	0.0948	0.101	0.085 to 0.115	95.4	70 to 130	0.664	20
AZ09841	Boron, Total	mg/L	-0.00291	0.065025	1.00	1.00	0.996	0.972	0.85 to 1.15	100	70 to 130	0.663	20
AZ09841	Mercury, Total by CVAA	mg/L	0.0001	0.0005	0.004	0.00412	0.00409	0.00415	0.0034 to 0.0046	103	70 to 130	0.731	20
AZ09841	Thallium, Total	mg/L	0.00000243	0.00044	0.10	0.106	0.109	0.104	0.085 to 0.115	106	70 to 130	2.70	20

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

**Comments:**

Alabama Power General Test Laboratory  
 744 County Road 87, GSC#8  
 Calera, AL 35040  
 (205) 664-6247 or 6171  
 FAX (205) 664-6108

# Batch QC Summary



To: Dustin Brooks  
 Greg Dyer

Customer Account: WMWGORAP  
 Sample Date: 16-Apr-19  
 Customer ID:  
 Delivery Date: 18-Apr-19

Description: Gorgas Ash Pond - MW-13

Laboratory ID Number: AZ09840

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	LCS	LCS Limit	Rec	Rec Limit	Prec	Prec Limit
AZ09841	Fluoride	mg/L	0.0471	0.05	2.50	2.70	0.205	2.47	2.25 to 2.75	99.8	80 to 120	0.489	20
AZ09841	Solids, Dissolved	mg/L	-3.00	25			213	48.0	40 to 60			7.30	5
AZ09841	Sulfate	mg/L	-0.392	0.50	20.0	36.1	16.8	19.4	18 to 22	96.0	80 to 120	0.593	20
AZ09841	Chloride	mg/L	-0.0984	0.50	10.0	18.4	7.74	10.0	9 to 11	107	80 to 120	0.518	20

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

**Comments:**

CC:

Alabama Power General Test Laboratory  
 744 County Road 87, GSC#8  
 Calera, AL 35040  
 (205) 664-6247 or 6171  
 FAX (205) 664-6108

# Certificate Of Analysis Alabama Power



To: Dustin Brooks  
 Greg Dyer

Customer Account: WMWGORAP  
 Sample Date: 16-Apr-19  
 Customer ID:  
 Delivery Date: 18-Apr-19

Description: Gorgas Ash Pond - MW-14

Laboratory ID Number: AZ09841

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
<b>Metals, Cyanide, Total Phenols</b>									
* Arsenic, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.001	0.005	J 0.00110	mg/L
* Barium, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.002	0.01	0.305	mg/L
* Beryllium, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	GAS	4/26/2019	EPA 200.7		2.03	0.03	0.1	U Not Detected	mg/L
* Calcium, Total	GAS	4/26/2019	EPA 200.7		2.03	0.1	0.5	39.5	mg/L
* Cadmium, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.0003	0.001	U Not Detected	mg/L
* Antimony, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.0008	0.003	U Not Detected	mg/L
* Cobalt, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.002	0.005	U Not Detected	mg/L
* Chromium, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	5/2/2019	EPA 245.1		1	0.0003	0.0005	U Not Detected	mg/L
* Lithium, Total	GAS	4/26/2019	EPA 200.7		2.03	0.01	0.02	0.0328	mg/L
* Molybdenum, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
<b>General Characteristics</b>									
* Solids, Dissolved	CRB	4/25/2019	SM 2540C		1		25	P 184	mg/L
Filter Completion Date	CRB	4/19/2019	SM 2540C		1			04/19/2019	Date
* Chloride	JCC	4/24/2019	SM4500CI E		1	0.50	1	7.70	mg/L
* Fluoride	JCC	4/24/2019	SM4500F C		1	0.05	0.1	0.204	mg/L
* Sulfate	JCC	4/25/2019	SM4500SO4 E		1	0.50	1	16.9	mg/L
<b>Field Measurements</b>									
pH	AWG	4/16/2019						FA 7.03	SU

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

**Comments:** TDS result is qualified due to precision failure. LBM 4/25/19

Alabama Power General Test Laboratory  
 744 County Road 87, GSC#8  
 Calera, AL 35040  
 (205) 664-6247 or 6171  
 FAX (205) 664-6108

# Batch QC Summary



To: Dustin Brooks  
 Greg Dyer

Customer Account: WMWGORAP  
 Sample Date: 16-Apr-19  
 Customer ID:  
 Delivery Date: 18-Apr-19

Description: Gorgas Ash Pond - MW-14

Laboratory ID Number: AZ09841

Sample	Analysis	Units	MB	MB		MS	MSD	LCS	LCS		Rec		Prec
				Limit	Spike				Limit	Rec	Limit	Prec	
AZ09841	Cadmium, Total	mg/L	0.00000144	0.00066	0.10	0.0940	0.0948	0.0995	0.085 to 0.115	94.0	70 to 130	0.782	20
AZ09841	Antimony, Total	mg/L	0.000143	0.00176	0.10	0.0913	0.0918	0.0924	0.085 to 0.115	91.3	70 to 130	0.492	20
AZ09841	Calcium, Total	mg/L	-0.0000301	0.216749	5.00	44.0	44.0	4.94	4.25 to 5.75	89.6	70 to 130	0.179	20
AZ09841	Selenium, Total	mg/L	0.0000879	0.0044	0.10	0.0954	0.0948	0.101	0.085 to 0.115	95.4	70 to 130	0.664	20
AZ09841	Barium, Total	mg/L	0.00000277	0.0044	0.10	0.388	0.393	0.0970	0.085 to 0.115	82.6	70 to 130	1.20	20
AZ09841	Molybdenum, Total	mg/L	0.00000463	0.0044	0.10	0.0951	0.0956	0.0968	0.085 to 0.115	95.1	70 to 130	0.549	20
AZ09841	Beryllium, Total	mg/L	0.0000369	0.00132	0.10	0.0923	0.0930	0.0975	0.085 to 0.115	92.3	70 to 130	0.811	20
AZ09841	Cobalt, Total	mg/L	-0.00000090	0.0044	0.10	0.0888	0.0890	0.100	0.085 to 0.115	88.8	70 to 130	0.171	20
AZ09841	Lithium, Total	mg/L	-0.000355	0.019704	0.20	0.256	0.253	0.209	0.17 to 0.23	112	70 to 130	1.35	20
AZ09841	Boron, Total	mg/L	-0.00291	0.065025	1.00	1.00	0.996	0.972	0.85 to 1.15	100	70 to 130	0.663	20
AZ09841	Mercury, Total by CVAA	mg/L	0.0001	0.0005	0.004	0.00412	0.00409	0.00415	0.0034 to 0.0046	103	70 to 130	0.731	20
AZ09841	Thallium, Total	mg/L	0.00000243	0.00044	0.10	0.106	0.109	0.104	0.085 to 0.115	106	70 to 130	2.70	20
AZ09841	Arsenic, Total	mg/L	0.00000418	0.0022	0.10	0.101	0.100	0.103	0.085 to 0.115	99.5	70 to 130	0.205	20
AZ09841	Chromium, Total	mg/L	0.00000244	0.0044	0.10	0.0972	0.0967	0.104	0.085 to 0.115	97.2	70 to 130	0.534	20
AZ09841	Lead, Total	mg/L	0.00000424	0.0022	0.10	0.0959	0.0999	0.102	0.085 to 0.115	95.9	70 to 130	4.08	20

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

Comments: TDS result is qualified due to precision failure. LBM 4/25/19

Alabama Power General Test Laboratory  
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 Calera, AL 35040  
 (205) 664-6247 or 6171  
 FAX (205) 664-6108

## Batch QC Summary



To: Dustin Brooks  
 Greg Dyer

Customer Account: WMWGORAP  
 Sample Date: 16-Apr-19  
 Customer ID:  
 Delivery Date: 18-Apr-19

Description: Gorgas Ash Pond - MW-14

Laboratory ID Number: AZ09841

Sample	Analysis	Units	MB	MB			Sample		LCS	Rec		Prec	
				Limit	Spike	MS	Duplicate	LCS	Limit	Rec	Limit	Prec	Limit
AZ09841	Chloride	mg/L	-0.0984	0.50	10.0	18.4	7.74	10.0	9 to 11	107	80 to 120	0.518	20
AZ09841	Fluoride	mg/L	0.0471	0.05	2.50	2.70	0.205	2.47	2.25 to 2.75	99.8	80 to 120	0.489	20
AZ09841	Solids, Dissolved	mg/L	-3.00	25			213	48.0	40 to 60			7.30	5
AZ09841	Sulfate	mg/L	-0.392	0.50	20.0	36.1	16.8	19.4	18 to 22	96.0	80 to 120	0.593	20

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

\* Test results for these accredited parameters conform to the most current applicable TNI/NELAC requirements, with exceptions noted on this report.

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

Comments: TDS result is qualified due to precision failure. LBM 4/25/19

CC:

Reported: 6/5/2019  
 Version: 2.0

Alabama Power General Test Laboratory  
 744 County Road 87, GSC#8  
 Calera, AL 35040  
 (205) 664-6247 or 6171  
 FAX (205) 664-6108

**Certificate Of Analysis**  **Alabama Power**



To: Dustin Brooks  
 Greg Dyer

Customer Account: WMWGORAP  
 Sample Date: 17-Apr-19  
 Customer ID:  
 Delivery Date: 18-Apr-19

Description: Gorgas Ash Pond - MW-16D

Laboratory ID Number: AZ09842

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
<b>Metals, Cyanide, Total Phenols</b>									
* Arsenic, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Barium, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.002	0.01	0.322	mg/L
* Beryllium, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	GAS	4/26/2019	EPA 200.7		2.03	0.03	0.1	U Not Detected	mg/L
* Calcium, Total	GAS	4/26/2019	EPA 200.7		2.03	0.1	0.5	32.3	mg/L
* Cadmium, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.0003	0.001	U Not Detected	mg/L
* Antimony, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.0008	0.003	U Not Detected	mg/L
* Cobalt, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.002	0.005	U Not Detected	mg/L
* Chromium, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	5/2/2019	EPA 245.1		1	0.0003	0.0005	U Not Detected	mg/L
* Lithium, Total	GAS	4/26/2019	EPA 200.7		2.03	0.01	0.02	0.0349	mg/L
* Molybdenum, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
<b>General Characteristics</b>									
* Solids, Dissolved	CRB	4/25/2019	SM 2540C		1		25	207	mg/L
Filter Completion Date	CRB	4/19/2019	SM 2540C		1			04/19/2019	Date
* Chloride	JCC	4/24/2019	SM4500CI E		1	0.50	1	2.82	mg/L
* Fluoride	JCC	4/24/2019	SM4500F C		1	0.05	0.1	0.171	mg/L
* Sulfate	JCC	4/25/2019	SM4500SO4 E		1	0.50	1	14.1	mg/L
<b>Field Measurements</b>									
pH	AWG	4/17/2019						FA 7.33	SU

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

**Comments:**



Alabama Power General Test Laboratory  
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 FAX (205) 664-6108

# Batch QC Summary



To: Dustin Brooks  
 Greg Dyer

Customer Account: WMWGORAP  
 Sample Date: 17-Apr-19  
 Customer ID:  
 Delivery Date: 18-Apr-19

Description: Gorgas Ash Pond - MW-16D

Laboratory ID Number: AZ09842

Sample	Analysis	Units	MB	MB		MS	MSD	LCS	LCS		Rec		Prec Limit	
				Limit	Spike				Limit	Rec	Limit	Prec		
AZ09851	Barium, Total	mg/L	0.00000277	0.0044	0.10	0.0935	0.0954	0.0970	0.085 to 0.115		93.5	70 to 130	2.03	20
AZ09851	Beryllium, Total	mg/L	0.0000369	0.00132	0.10	0.0918	0.0892	0.0975	0.085 to 0.115		91.8	70 to 130	2.85	20
AZ09851	Thallium, Total	mg/L	0.00000243	0.00044	0.10	0.110	0.110	0.104	0.085 to 0.115		110	70 to 130	0.119	20
AZ09851	Cobalt, Total	mg/L	-0.00000090	0.0044	0.10	0.0914	0.0926	0.100	0.085 to 0.115		91.4	70 to 130	1.30	20
AZ09851	Arsenic, Total	mg/L	0.00000418	0.0022	0.10	0.0983	0.101	0.103	0.085 to 0.115		98.3	70 to 130	2.66	20
AZ09851	Selenium, Total	mg/L	0.0000879	0.0044	0.10	0.0954	0.0994	0.101	0.085 to 0.115		95.4	70 to 130	4.14	20
AZ09851	Calcium, Total	mg/L	0.000189	0.216749	5.00	4.89	4.96	4.93	4.25 to 5.75		97.7	70 to 130	1.51	20
AZ09851	Molybdenum, Total	mg/L	0.00000463	0.0044	0.10	0.0968	0.0986	0.0968	0.085 to 0.115		96.8	70 to 130	1.77	20
AZ09851	Lead, Total	mg/L	0.00000424	0.0022	0.10	0.102	0.100	0.102	0.085 to 0.115		102	70 to 130	1.44	20
AZ09851	Boron, Total	mg/L	-0.00189	0.065025	1.00	0.967	0.979	0.972	0.85 to 1.15		96.7	70 to 130	1.25	20
AZ09851	Mercury, Total by CVAA	mg/L	0.00007	0.0005	0.004	0.00408	0.00408	0.00412	0.0034 to 0.0046		102	70 to 130	0.00	20
AZ09851	Lithium, Total	mg/L	-0.000339	0.019704	0.20	0.205	0.205	0.207	0.17 to 0.23		102	70 to 130	0.177	20
AZ09851	Cadmium, Total	mg/L	0.00000144	0.00066	0.10	0.0965	0.0961	0.0995	0.085 to 0.115		96.5	70 to 130	0.415	20
AZ09851	Chromium, Total	mg/L	0.00000244	0.0044	0.10	0.0980	0.100	0.104	0.085 to 0.115		98.0	70 to 130	2.08	20
AZ09851	Antimony, Total	mg/L	0.000143	0.00176	0.10	0.0925	0.0915	0.0924	0.085 to 0.115		92.5	70 to 130	1.12	20

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

**Comments:**

Alabama Power General Test Laboratory  
 744 County Road 87, GSC#8  
 Calera, AL 35040  
 (205) 664-6247 or 6171  
 FAX (205) 664-6108

## Batch QC Summary



To: Dustin Brooks  
 Greg Dyer

Customer Account: WMWGORAP  
 Sample Date: 17-Apr-19  
 Customer ID:  
 Delivery Date: 18-Apr-19

Description: Gorgas Ash Pond - MW-16D

Laboratory ID Number: AZ09842

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample		LCS Limit	Rec		Prec Limit	
							Duplicate	LCS		Rec	Limit		
AZ09851	Fluoride	mg/L	0.0346	0.05	2.50	2.40	0.0475	2.48	2.25 to 2.75	96.0	80 to 120	0.00	20
AZ09851	Chloride	mg/L	-0.0886	0.50	10.0	10.2	0.160	10.1	9 to 11	102	80 to 120	0.00	20
AZ09850	Solids, Dissolved	mg/L	-3.00	25			608	48.0	40 to 60			2.18	5
AZ09851	Sulfate	mg/L	-0.214	0.50	20.0	20.0	-0.265	19.6	18 to 22	100	80 to 120	0.00	20

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

**Comments:**

CC:

Alabama Power General Test Laboratory  
 744 County Road 87, GSC#8  
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# Certificate Of Analysis Alabama Power



To: Dustin Brooks  
 Greg Dyer

Customer Account: WMWGORAP  
 Sample Date: 17-Apr-19  
 Customer ID:  
 Delivery Date: 18-Apr-19

Description: Gorgas Ash Pond - MW-2

Laboratory ID Number: AZ09843

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
<b>Metals, Cyanide, Total Phenols</b>									
* Arsenic, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Barium, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.002	0.01	0.0576	mg/L
* Beryllium, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	GAS	4/26/2019	EPA 200.7		2.03	0.03	0.1	0.165	mg/L
* Calcium, Total	GAS	4/26/2019	EPA 200.7		2.03	0.1	0.5	0.511	mg/L
* Cadmium, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.0003	0.001	U Not Detected	mg/L
* Antimony, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.0008	0.003	U Not Detected	mg/L
* Cobalt, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.002	0.005	U Not Detected	mg/L
* Chromium, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	5/2/2019	EPA 245.1		1	0.0003	0.0005	U Not Detected	mg/L
* Lithium, Total	GAS	4/26/2019	EPA 200.7		2.03	0.01	0.02	0.0421	mg/L
* Molybdenum, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.002	0.01	J 0.00293	mg/L
* Lead, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
<b>General Characteristics</b>									
* Solids, Dissolved	CRB	4/25/2019	SM 2540C		1		25	341	mg/L
Filter Completion Date	CRB	4/19/2019	SM 2540C		1			04/19/2019	Date
* Chloride	JCC	4/24/2019	SM4500CI E		1	0.50	1	9.50	mg/L
* Fluoride	JCC	4/24/2019	SM4500F C		1	0.05	0.1	0.868	mg/L
* Sulfate	JCC	4/25/2019	SM4500SO4 E		3	1.50	3	48.6	mg/L
<b>Field Measurements</b>									
pH	AWG	4/17/2019						FA 9.26	SU

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

**Comments:**

Alabama Power General Test Laboratory  
 744 County Road 87, GSC#8  
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 FAX (205) 664-6108

# Batch QC Summary



To: Dustin Brooks  
 Greg Dyer

Customer Account: WMWGORAP  
 Sample Date: 17-Apr-19  
 Customer ID:  
 Delivery Date: 18-Apr-19

Description: Gorgas Ash Pond - MW-2

Laboratory ID Number: AZ09843

Sample	Analysis	Units	MB		Spike	MS	MSD	LCS	LCS		Rec		Prec	
			Limit	MB					Limit	Rec	Limit	Prec		
AZ09851	Thallium, Total	mg/L	0.00000243	0.00044	0.10	0.110	0.110	0.104	0.085 to 0.115		110	70 to 130 0.119		20
AZ09851	Cobalt, Total	mg/L	-0.00000090	0.0044	0.10	0.0914	0.0926	0.100	0.085 to 0.115		91.4	70 to 130 1.30		20
AZ09851	Barium, Total	mg/L	0.00000277	0.0044	0.10	0.0935	0.0954	0.0970	0.085 to 0.115		93.5	70 to 130 2.03		20
AZ09851	Arsenic, Total	mg/L	0.00000418	0.0022	0.10	0.0983	0.101	0.103	0.085 to 0.115		98.3	70 to 130 2.66		20
AZ09851	Selenium, Total	mg/L	0.0000879	0.0044	0.10	0.0954	0.0994	0.101	0.085 to 0.115		95.4	70 to 130 4.14		20
AZ09851	Beryllium, Total	mg/L	0.0000369	0.00132	0.10	0.0918	0.0892	0.0975	0.085 to 0.115		91.8	70 to 130 2.85		20
AZ09851	Cadmium, Total	mg/L	0.00000144	0.00066	0.10	0.0965	0.0961	0.0995	0.085 to 0.115		96.5	70 to 130 0.415		20
AZ09851	Chromium, Total	mg/L	0.00000244	0.0044	0.10	0.0980	0.100	0.104	0.085 to 0.115		98.0	70 to 130 2.08		20
AZ09851	Antimony, Total	mg/L	0.000143	0.00176	0.10	0.0925	0.0915	0.0924	0.085 to 0.115		92.5	70 to 130 1.12		20
AZ09851	Calcium, Total	mg/L	0.000189	0.216749	5.00	4.89	4.96	4.93	4.25 to 5.75		97.7	70 to 130 1.51		20
AZ09851	Molybdenum, Total	mg/L	0.00000463	0.0044	0.10	0.0968	0.0986	0.0968	0.085 to 0.115		96.8	70 to 130 1.77		20
AZ09851	Lead, Total	mg/L	0.00000424	0.0022	0.10	0.102	0.100	0.102	0.085 to 0.115		102	70 to 130 1.44		20
AZ09851	Boron, Total	mg/L	-0.00189	0.065025	1.00	0.967	0.979	0.972	0.85 to 1.15		96.7	70 to 130 1.25		20
AZ09851	Mercury, Total by CVAA	mg/L	0.00007	0.0005	0.004	0.00408	0.00408	0.00412	0.0034 to 0.0046		102	70 to 130 0.00		20
AZ09851	Lithium, Total	mg/L	-0.000339	0.019704	0.20	0.205	0.205	0.207	0.17 to 0.23		102	70 to 130 0.177		20

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\* Test results for these accredited parameters conform to the most current applicable TNI/NELAC requirements, with exceptions noted on this report.

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

**Comments:**

Alabama Power General Test Laboratory  
 744 County Road 87, GSC#8  
 Calera, AL 35040  
 (205) 664-6247 or 6171  
 FAX (205) 664-6108

# Batch QC Summary



To: Dustin Brooks  
 Greg Dyer

Customer Account: WMWGORAP  
 Sample Date: 17-Apr-19  
 Customer ID:  
 Delivery Date: 18-Apr-19

Description: Gorgas Ash Pond - MW-2

Laboratory ID Number: AZ09843

Sample	Analysis	Units	MB	MB			Sample		LCS	Rec			Prec
				Limit	Spike	MS	Duplicate	LCS	Limit	Rec	Limit	Prec	Limit
AZ09851	Fluoride	mg/L	0.0346	0.05	2.50	2.40	0.0475	2.48	2.25 to 2.75	96.0	80 to 120	0.00	20
AZ09851	Chloride	mg/L	-0.0886	0.50	10.0	10.2	0.160	10.1	9 to 11	102	80 to 120	0.00	20
AZ09850	Solids, Dissolved	mg/L	-3.00	25			608	48.0	40 to 60			2.18	5
AZ09851	Sulfate	mg/L	-0.214	0.50	20.0	20.0	-0.265	19.6	18 to 22	100	80 to 120	0.00	20

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.

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

\* Test results for these accredited parameters conform to the most current applicable TNI/NELAC requirements, with exceptions noted on this report.

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

**Comments:**

CC:

Alabama Power General Test Laboratory  
 744 County Road 87, GSC#8  
 Calera, AL 35040  
 (205) 664-6247 or 6171  
 FAX (205) 664-6108

**Certificate Of Analysis**  **Alabama Power**



To: Dustin Brooks  
 Greg Dyer

Customer Account: WMWGORAP  
 Sample Date: 17-Apr-19  
 Customer ID:  
 Delivery Date: 18-Apr-19

Description: Gorgas Ash Pond - MW-19

Laboratory ID Number: AZ09844

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
<b>Metals, Cyanide, Total Phenols</b>									
* Arsenic, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.001	0.005	J 0.00302	mg/L
* Barium, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.002	0.01	0.316	mg/L
* Beryllium, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	GAS	4/26/2019	EPA 200.7		2.03	0.03	0.1	J 0.0336	mg/L
* Calcium, Total	GAS	4/26/2019	EPA 200.7		2.03	0.1	0.5	38.4	mg/L
* Cadmium, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.0003	0.001	U Not Detected	mg/L
* Antimony, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.0008	0.003	U Not Detected	mg/L
* Cobalt, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.002	0.005	U Not Detected	mg/L
* Chromium, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	5/2/2019	EPA 245.1		1	0.0003	0.0005	U Not Detected	mg/L
* Lithium, Total	GAS	4/26/2019	EPA 200.7		2.03	0.01	0.02	0.0429	mg/L
* Molybdenum, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.002	0.01	J 0.00703	mg/L
* Lead, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
<b>General Characteristics</b>									
* Solids, Dissolved	CRB	4/25/2019	SM 2540C		1		25	296	mg/L
Filter Completion Date	CRB	4/19/2019	SM 2540C		1			04/19/2019	Date
* Chloride	JCC	4/24/2019	SM4500CI E		1	0.50	1	7.27	mg/L
* Fluoride	JCC	4/24/2019	SM4500F C		1	0.05	0.1	0.270	mg/L
* Sulfate	JCC	4/25/2019	SM4500SO4 E		1	0.50	1	14.3	mg/L
<b>Field Measurements</b>									
pH	AWG	4/17/2019						FA 8.06	SU

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

\* Test results for these accredited parameters conform to the most current applicable TNI/NELAC requirements, with exceptions noted on this report.

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

**Comments:**

Alabama Power General Test Laboratory  
 744 County Road 87, GSC#8  
 Calera, AL 35040  
 (205) 664-6247 or 6171  
 FAX (205) 664-6108

# Batch QC Summary



To: Dustin Brooks  
 Greg Dyer

Customer Account: WMWGORAP  
 Sample Date: 17-Apr-19  
 Customer ID:  
 Delivery Date: 18-Apr-19

Description: Gorgas Ash Pond - MW-19

Laboratory ID Number: AZ09844

Sample	Analysis	Units	MB		Spike	MS	MSD	LCS	LCS		Rec		Prec Limit	
			MB	Limit					Limit	Rec	Limit			
AZ09851	Thallium, Total	mg/L	0.00000243	0.00044	0.10	0.110	0.110	0.104	0.085 to 0.115		110	70 to 130	0.119	20
AZ09851	Barium, Total	mg/L	0.00000277	0.0044	0.10	0.0935	0.0954	0.0970	0.085 to 0.115		93.5	70 to 130	2.03	20
AZ09851	Beryllium, Total	mg/L	0.0000369	0.00132	0.10	0.0918	0.0892	0.0975	0.085 to 0.115		91.8	70 to 130	2.85	20
AZ09851	Cobalt, Total	mg/L	-0.00000090	0.0044	0.10	0.0914	0.0926	0.100	0.085 to 0.115		91.4	70 to 130	1.30	20
AZ09851	Arsenic, Total	mg/L	0.00000418	0.0022	0.10	0.0983	0.101	0.103	0.085 to 0.115		98.3	70 to 130	2.66	20
AZ09851	Selenium, Total	mg/L	0.0000879	0.0044	0.10	0.0954	0.0994	0.101	0.085 to 0.115		95.4	70 to 130	4.14	20
AZ09851	Calcium, Total	mg/L	0.000189	0.216749	5.00	4.89	4.96	4.93	4.25 to 5.75		97.7	70 to 130	1.51	20
AZ09851	Molybdenum, Total	mg/L	0.00000463	0.0044	0.10	0.0968	0.0986	0.0968	0.085 to 0.115		96.8	70 to 130	1.77	20
AZ09851	Lead, Total	mg/L	0.00000424	0.0022	0.10	0.102	0.100	0.102	0.085 to 0.115		102	70 to 130	1.44	20
AZ09851	Cadmium, Total	mg/L	0.00000144	0.00066	0.10	0.0965	0.0961	0.0995	0.085 to 0.115		96.5	70 to 130	0.415	20
AZ09851	Chromium, Total	mg/L	0.00000244	0.0044	0.10	0.0980	0.100	0.104	0.085 to 0.115		98.0	70 to 130	2.08	20
AZ09851	Antimony, Total	mg/L	0.000143	0.00176	0.10	0.0925	0.0915	0.0924	0.085 to 0.115		92.5	70 to 130	1.12	20
AZ09851	Boron, Total	mg/L	-0.00189	0.065025	1.00	0.967	0.979	0.972	0.85 to 1.15		96.7	70 to 130	1.25	20
AZ09851	Mercury, Total by CVAA	mg/L	0.00007	0.0005	0.004	0.00408	0.00408	0.00412	0.0034 to 0.0046		102	70 to 130	0.00	20
AZ09851	Lithium, Total	mg/L	-0.000339	0.019704	0.20	0.205	0.205	0.207	0.17 to 0.23		102	70 to 130	0.177	20

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

\* Test results for these accredited parameters conform to the most current applicable TNI/NELAC requirements, with exceptions noted on this report.

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

**Comments:**

Alabama Power General Test Laboratory  
 744 County Road 87, GSC#8  
 Calera, AL 35040  
 (205) 664-6247 or 6171  
 FAX (205) 664-6108

# Batch QC Summary



To: Dustin Brooks  
 Greg Dyer

Customer Account: WMWGORAP  
 Sample Date: 17-Apr-19  
 Customer ID:  
 Delivery Date: 18-Apr-19

Description: Gorgas Ash Pond - MW-19

Laboratory ID Number: AZ09844

Sample	Analysis	Units	MB	MB			Sample		LCS	Rec			Prec
				Limit	Spike	MS	Duplicate	LCS	Limit	Rec	Limit	Prec	Limit
AZ09851	Fluoride	mg/L	0.0346	0.05	2.50	2.40	0.0475	2.48	2.25 to 2.75	96.0	80 to 120	0.00	20
AZ09851	Chloride	mg/L	-0.0886	0.50	10.0	10.2	0.160	10.1	9 to 11	102	80 to 120	0.00	20
AZ09850	Solids, Dissolved	mg/L	-3.00	25			608	48.0	40 to 60			2.18	5
AZ09851	Sulfate	mg/L	-0.214	0.50	20.0	20.0	-0.265	19.6	18 to 22	100	80 to 120	0.00	20

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

**Comments:**

CC:



Alabama Power General Test Laboratory  
 744 County Road 87, GSC#8  
 Calera, AL 35040  
 (205) 664-6247 or 6171  
 FAX (205) 664-6108

# Certificate Of Analysis Alabama Power



To: Dustin Brooks  
 Greg Dyer

Customer Account: WMWGORAP  
 Sample Date: 17-Apr-19  
 Customer ID:  
 Delivery Date: 18-Apr-19

Description: Gorgas Ash Pond - MW-18

Laboratory ID Number: AZ09845

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
<b>Metals, Cyanide, Total Phenols</b>									
* Arsenic, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.001	0.005	J 0.00481	mg/L
* Barium, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.002	0.01	0.105	mg/L
* Beryllium, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	GAS	4/26/2019	EPA 200.7		2.03	0.03	0.1	0.449	mg/L
* Calcium, Total	GAS	4/26/2019	EPA 200.7		2.03	0.1	0.5	40.9	mg/L
* Cadmium, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.0003	0.001	U Not Detected	mg/L
* Antimony, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.0008	0.003	U Not Detected	mg/L
* Cobalt, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.002	0.005	U Not Detected	mg/L
* Chromium, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	5/2/2019	EPA 245.1		1	0.0003	0.0005	U Not Detected	mg/L
* Lithium, Total	GAS	4/26/2019	EPA 200.7		2.03	0.01	0.02	0.0942	mg/L
* Molybdenum, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.002	0.01	0.0113	mg/L
* Lead, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
<b>General Characteristics</b>									
* Solids, Dissolved	CRB	4/25/2019	SM 2540C		1		25	347	mg/L
Filter Completion Date	CRB	4/19/2019	SM 2540C		1			04/19/2019	Date
* Chloride	JCC	4/24/2019	SM4500CI E		1	0.50	1	6.61	mg/L
* Fluoride	JCC	4/24/2019	SM4500F C		1	0.05	0.1	0.632	mg/L
* Sulfate	JCC	4/25/2019	SM4500SO4 E		5	2.50	5	71.6	mg/L
<b>Field Measurements</b>									
pH	AWG	4/17/2019						FA 7.58	SU

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

**Comments:**

Alabama Power General Test Laboratory  
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 Calera, AL 35040  
 (205) 664-6247 or 6171  
 FAX (205) 664-6108

# Batch QC Summary



To: Dustin Brooks  
 Greg Dyer

Customer Account: WMWGORAP  
 Sample Date: 17-Apr-19  
 Customer ID:  
 Delivery Date: 18-Apr-19

Description: Gorgas Ash Pond - MW-18

Laboratory ID Number: AZ09845

Sample	Analysis	Units	MB		MS	MSD	LCS	LCS Limit	Rec		Prec Limit		
			MB	Limit					Rec	Limit			
AZ09851	Thallium, Total	mg/L	0.00000243	0.00044	0.10	0.110	0.110	0.104	0.085 to 0.115	110	70 to 130	0.119	20
AZ09851	Cobalt, Total	mg/L	-0.00000090	0.0044	0.10	0.0914	0.0926	0.100	0.085 to 0.115	91.4	70 to 130	1.30	20
AZ09851	Beryllium, Total	mg/L	0.0000369	0.00132	0.10	0.0918	0.0892	0.0975	0.085 to 0.115	91.8	70 to 130	2.85	20
AZ09851	Calcium, Total	mg/L	0.000189	0.216749	5.00	4.89	4.96	4.93	4.25 to 5.75	97.7	70 to 130	1.51	20
AZ09851	Molybdenum, Total	mg/L	0.00000463	0.0044	0.10	0.0968	0.0986	0.0968	0.085 to 0.115	96.8	70 to 130	1.77	20
AZ09851	Lead, Total	mg/L	0.00000424	0.0022	0.10	0.102	0.100	0.102	0.085 to 0.115	102	70 to 130	1.44	20
AZ09851	Arsenic, Total	mg/L	0.00000418	0.0022	0.10	0.0983	0.101	0.103	0.085 to 0.115	98.3	70 to 130	2.66	20
AZ09851	Selenium, Total	mg/L	0.0000879	0.0044	0.10	0.0954	0.0994	0.101	0.085 to 0.115	95.4	70 to 130	4.14	20
AZ09851	Cadmium, Total	mg/L	0.00000144	0.00066	0.10	0.0965	0.0961	0.0995	0.085 to 0.115	96.5	70 to 130	0.415	20
AZ09851	Chromium, Total	mg/L	0.00000244	0.0044	0.10	0.0980	0.100	0.104	0.085 to 0.115	98.0	70 to 130	2.08	20
AZ09851	Antimony, Total	mg/L	0.000143	0.00176	0.10	0.0925	0.0915	0.0924	0.085 to 0.115	92.5	70 to 130	1.12	20
AZ09851	Boron, Total	mg/L	-0.00189	0.065025	1.00	0.967	0.979	0.972	0.85 to 1.15	96.7	70 to 130	1.25	20
AZ09851	Mercury, Total by CVAA	mg/L	0.00007	0.0005	0.004	0.00408	0.00408	0.00412	0.0034 to 0.0046	102	70 to 130	0.00	20
AZ09851	Lithium, Total	mg/L	-0.000339	0.019704	0.20	0.205	0.205	0.207	0.17 to 0.23	102	70 to 130	0.177	20
AZ09851	Barium, Total	mg/L	0.00000277	0.0044	0.10	0.0935	0.0954	0.0970	0.085 to 0.115	93.5	70 to 130	2.03	20

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

**Comments:**

Alabama Power General Test Laboratory  
 744 County Road 87, GSC#8  
 Calera, AL 35040  
 (205) 664-6247 or 6171  
 FAX (205) 664-6108

# Batch QC Summary



To: Dustin Brooks  
 Greg Dyer

Customer Account: WMWGORAP  
 Sample Date: 17-Apr-19  
 Customer ID:  
 Delivery Date: 18-Apr-19

Description: Gorgas Ash Pond - MW-18

Laboratory ID Number: AZ09845

Sample	Analysis	Units	MB	MB			Sample		LCS	Rec			Prec
				Limit	Spike	MS	Duplicate	LCS	Limit	Rec	Limit	Prec	Limit
AZ09851	Fluoride	mg/L	0.0346	0.05	2.50	2.40	0.0475	2.48	2.25 to 2.75	96.0	80 to 120	0.00	20
AZ09851	Chloride	mg/L	-0.0886	0.50	10.0	10.2	0.160	10.1	9 to 11	102	80 to 120	0.00	20
AZ09850	Solids, Dissolved	mg/L	-3.00	25			608	48.0	40 to 60			2.18	5
AZ09851	Sulfate	mg/L	-0.214	0.50	20.0	20.0	-0.265	19.6	18 to 22	100	80 to 120	0.00	20

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

**Comments:**

CC:

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 Calera, AL 35040  
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 FAX (205) 664-6108

# Certificate Of Analysis Alabama Power



To: Dustin Brooks  
 Greg Dyer

Customer Account: WMWGORAP  
 Sample Date: 17-Apr-19  
 Customer ID:  
 Delivery Date: 18-Apr-19

Description: Gorgas Ash Pond - MW-18 DUP

Laboratory ID Number: AZ09846

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
<b>Metals, Cyanide, Total Phenols</b>									
* Arsenic, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.001	0.005	J 0.00420	mg/L
* Barium, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.002	0.01	0.0963	mg/L
* Beryllium, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	GAS	4/26/2019	EPA 200.7		2.03	0.03	0.1	0.449	mg/L
* Calcium, Total	GAS	4/26/2019	EPA 200.7		2.03	0.1	0.5	40.8	mg/L
* Cadmium, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.0003	0.001	U Not Detected	mg/L
* Antimony, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.0008	0.003	U Not Detected	mg/L
* Cobalt, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.002	0.005	U Not Detected	mg/L
* Chromium, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	5/2/2019	EPA 245.1		1	0.0003	0.0005	U Not Detected	mg/L
* Lithium, Total	GAS	4/26/2019	EPA 200.7		2.03	0.01	0.02	0.0943	mg/L
* Molybdenum, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.002	0.01	0.0114	mg/L
* Lead, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
<b>General Characteristics</b>									
* Solids, Dissolved	CRB	4/25/2019	SM 2540C		1		25	358	mg/L
Filter Completion Date	CRB	4/19/2019	SM 2540C		1			04/19/2019	Date
* Chloride	JCC	4/24/2019	SM4500CI E		1	0.50	1	6.57	mg/L
* Fluoride	JCC	4/24/2019	SM4500F C		1	0.05	0.1	0.638	mg/L
* Sulfate	JCC	4/25/2019	SM4500SO4 E		5	2.50	5	68.7	mg/L
<b>Field Measurements</b>									
pH	AWG	4/17/2019						FA 7.58	SU

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

**Comments:**

Alabama Power General Test Laboratory  
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 (205) 664-6247 or 6171  
 FAX (205) 664-6108

# Batch QC Summary



To: Dustin Brooks  
 Greg Dyer

Customer Account: WMWGORAP  
 Sample Date: 17-Apr-19  
 Customer ID:  
 Delivery Date: 18-Apr-19

Description: Gorgas Ash Pond - MW-18 DUP

Laboratory ID Number: AZ09846

Sample	Analysis	Units	MB		MS	MSD	LCS	LCS Limit	Rec		Prec	Prec Limit	
			MB	Limit					Rec	Limit			
AZ09851	Cobalt, Total	mg/L	-0.00000090	0.0044	0.10	0.0914	0.0926	0.100	0.085 to 0.115	91.4	70 to 130	1.30	20
AZ09851	Thallium, Total	mg/L	0.00000243	0.00044	0.10	0.110	0.110	0.104	0.085 to 0.115	110	70 to 130	0.119	20
AZ09851	Barium, Total	mg/L	0.00000277	0.0044	0.10	0.0935	0.0954	0.0970	0.085 to 0.115	93.5	70 to 130	2.03	20
AZ09851	Beryllium, Total	mg/L	0.0000369	0.00132	0.10	0.0918	0.0892	0.0975	0.085 to 0.115	91.8	70 to 130	2.85	20
AZ09851	Calcium, Total	mg/L	0.000189	0.216749	5.00	4.89	4.96	4.93	4.25 to 5.75	97.7	70 to 130	1.51	20
AZ09851	Molybdenum, Total	mg/L	0.00000463	0.0044	0.10	0.0968	0.0986	0.0968	0.085 to 0.115	96.8	70 to 130	1.77	20
AZ09851	Lead, Total	mg/L	0.00000424	0.0022	0.10	0.102	0.100	0.102	0.085 to 0.115	102	70 to 130	1.44	20
AZ09851	Cadmium, Total	mg/L	0.00000144	0.00066	0.10	0.0965	0.0961	0.0995	0.085 to 0.115	96.5	70 to 130	0.415	20
AZ09851	Chromium, Total	mg/L	0.00000244	0.0044	0.10	0.0980	0.100	0.104	0.085 to 0.115	98.0	70 to 130	2.08	20
AZ09851	Antimony, Total	mg/L	0.000143	0.00176	0.10	0.0925	0.0915	0.0924	0.085 to 0.115	92.5	70 to 130	1.12	20
AZ09851	Arsenic, Total	mg/L	0.00000418	0.0022	0.10	0.0983	0.101	0.103	0.085 to 0.115	98.3	70 to 130	2.66	20
AZ09851	Selenium, Total	mg/L	0.0000879	0.0044	0.10	0.0954	0.0994	0.101	0.085 to 0.115	95.4	70 to 130	4.14	20
AZ09851	Boron, Total	mg/L	-0.00189	0.065025	1.00	0.967	0.979	0.972	0.85 to 1.15	96.7	70 to 130	1.25	20
AZ09851	Mercury, Total by CVAA	mg/L	0.00007	0.0005	0.004	0.00408	0.00408	0.00412	0.0034 to 0.0046	102	70 to 130	0.00	20
AZ09851	Lithium, Total	mg/L	-0.000339	0.019704	0.20	0.205	0.205	0.207	0.17 to 0.23	102	70 to 130	0.177	20

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

**Comments:**

Alabama Power General Test Laboratory  
 744 County Road 87, GSC#8  
 Calera, AL 35040  
 (205) 664-6247 or 6171  
 FAX (205) 664-6108

# Batch QC Summary



To: Dustin Brooks  
 Greg Dyer

Customer Account: WMWGORAP  
 Sample Date: 17-Apr-19  
 Customer ID:  
 Delivery Date: 18-Apr-19

Description: Gorgas Ash Pond - MW-18 DUP

Laboratory ID Number: AZ09846

Sample	Analysis	Units	MB	MB			Sample		LCS	Rec			Prec
				Limit	Spike	MS	Duplicate	LCS	Limit	Rec	Limit	Prec	Limit
AZ09851	Fluoride	mg/L	0.0346	0.05	2.50	2.40	0.0475	2.48	2.25 to 2.75	96.0	80 to 120	0.00	20
AZ09851	Chloride	mg/L	-0.0886	0.50	10.0	10.2	0.160	10.1	9 to 11	102	80 to 120	0.00	20
AZ09850	Solids, Dissolved	mg/L	-3.00	25			608	48.0	40 to 60			2.18	5
AZ09851	Sulfate	mg/L	-0.214	0.50	20.0	20.0	-0.265	19.6	18 to 22	100	80 to 120	0.00	20

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

\* Test results for these accredited parameters conform to the most current applicable TNI/NELAC requirements, with exceptions noted on this report.

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

**Comments:**

CC:

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 744 County Road 87, GSC#8  
 Calera, AL 35040  
 (205) 664-6247 or 6171  
 FAX (205) 664-6108

# Certificate Of Analysis Alabama Power



To: Dustin Brooks  
 Greg Dyer

Customer Account: WMWGORAPEB  
 Sample Date: 17-Apr-19  
 Customer ID:  
 Delivery Date: 18-Apr-19

Description: Gorgas Ash Pond Equipment Blank

Laboratory ID Number: AZ09847

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
<b>Metals, Cyanide, Total Phenols</b>										
* Arsenic, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Barium, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Beryllium, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Boron, Total	GAS	4/26/2019	EPA 200.7		2.03	0.03	0.1	U	Not Detected	mg/L
* Calcium, Total	GAS	4/26/2019	EPA 200.7		2.03	0.1	0.5	U	Not Detected	mg/L
* Cadmium, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.0003	0.001	U	Not Detected	mg/L
* Antimony, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.0008	0.003	U	Not Detected	mg/L
* Cobalt, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.002	0.005	U	Not Detected	mg/L
* Chromium, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	ABB	5/2/2019	EPA 245.1		1	0.0003	0.0005	U	Not Detected	mg/L
* Lithium, Total	GAS	4/26/2019	EPA 200.7		2.03	0.01	0.02	U	Not Detected	mg/L
* Molybdenum, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Lead, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Selenium, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Thallium, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
<b>General Characteristics</b>										
* Solids, Dissolved	CRB	4/25/2019	SM 2540C		1		25	U	Not Detected	mg/L
Filter Completion Date	CRB	4/19/2019	SM 2540C		1				04/19/2019	Date
* Chloride	JCC	4/24/2019	SM4500CI E		1	0.50	1	U	Not Detected	mg/L
* Fluoride	JCC	4/24/2019	SM4500F C		1	0.05	0.1	J	0.0501	mg/L
* Sulfate	JCC	4/25/2019	SM4500SO4 E		1	0.50	1	U	Not Detected	mg/L

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

\* Test results for these accredited parameters conform to the most current applicable TNI/NELAC requirements, with exceptions noted on this report.

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

Comments:

Alabama Power General Test Laboratory  
 744 County Road 87, GSC#8  
 Calera, AL 35040  
 (205) 664-6247 or 6171  
 FAX (205) 664-6108

# Batch QC Summary



To: Dustin Brooks  
 Greg Dyer

Customer Account: WMWGORAPEB  
 Sample Date: 17-Apr-19  
 Customer ID:  
 Delivery Date: 18-Apr-19

Description: Gorgas Ash Pond Equipment Blank

Laboratory ID Number: AZ09847

Sample	Analysis	Units	MB		Spike	MS	MSD	LCS	LCS		Rec		Prec	Limit	
			MB	Limit					Limit	Rec	Limit	Prec			
AZ09851	Thallium, Total	mg/L	0.00000243	0.00044	0.10	0.110	0.110	0.104	0.085 to 0.115		110	70 to 130		0.119	20
AZ09851	Barium, Total	mg/L	0.00000277	0.0044	0.10	0.0935	0.0954	0.0970	0.085 to 0.115		93.5	70 to 130		2.03	20
AZ09851	Beryllium, Total	mg/L	0.0000369	0.00132	0.10	0.0918	0.0892	0.0975	0.085 to 0.115		91.8	70 to 130		2.85	20
AZ09851	Cobalt, Total	mg/L	-0.00000090	0.0044	0.10	0.0914	0.0926	0.100	0.085 to 0.115		91.4	70 to 130		1.30	20
AZ09851	Arsenic, Total	mg/L	0.00000418	0.0022	0.10	0.0983	0.101	0.103	0.085 to 0.115		98.3	70 to 130		2.66	20
AZ09851	Selenium, Total	mg/L	0.0000879	0.0044	0.10	0.0954	0.0994	0.101	0.085 to 0.115		95.4	70 to 130		4.14	20
AZ09851	Calcium, Total	mg/L	0.000189	0.216749	5.00	4.89	4.96	4.93	4.25 to 5.75		97.7	70 to 130		1.51	20
AZ09851	Molybdenum, Total	mg/L	0.00000463	0.0044	0.10	0.0968	0.0986	0.0968	0.085 to 0.115		96.8	70 to 130		1.77	20
AZ09851	Lead, Total	mg/L	0.00000424	0.0022	0.10	0.102	0.100	0.102	0.085 to 0.115		102	70 to 130		1.44	20
AZ09851	Boron, Total	mg/L	-0.00189	0.065025	1.00	0.967	0.979	0.972	0.85 to 1.15		96.7	70 to 130		1.25	20
AZ09851	Mercury, Total by CVAA	mg/L	0.00007	0.0005	0.004	0.00408	0.00408	0.00412	0.0034 to 0.0046		102	70 to 130		0.00	20
AZ09851	Lithium, Total	mg/L	-0.000339	0.019704	0.20	0.205	0.205	0.207	0.17 to 0.23		102	70 to 130		0.177	20
AZ09851	Cadmium, Total	mg/L	0.00000144	0.00066	0.10	0.0965	0.0961	0.0995	0.085 to 0.115		96.5	70 to 130		0.415	20
AZ09851	Chromium, Total	mg/L	0.00000244	0.0044	0.10	0.0980	0.100	0.104	0.085 to 0.115		98.0	70 to 130		2.08	20
AZ09851	Antimony, Total	mg/L	0.000143	0.00176	0.10	0.0925	0.0915	0.0924	0.085 to 0.115		92.5	70 to 130		1.12	20

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

**Comments:**



Alabama Power General Test Laboratory  
 744 County Road 87, GSC#8  
 Calera, AL 35040  
 (205) 664-6247 or 6171  
 FAX (205) 664-6108

## Batch QC Summary



To: Dustin Brooks  
 Greg Dyer

Customer Account: WMWGORAPEB  
 Sample Date: 17-Apr-19  
 Customer ID:  
 Delivery Date: 18-Apr-19

Description: Gorgas Ash Pond Equipment Blank

Laboratory ID Number: AZ09847

Sample	Analysis	Units	MB	MB			Sample		LCS	Rec			Prec
				Limit	Spike	MS	Duplicate	LCS	Limit	Rec	Limit	Prec	Limit
AZ09851	Chloride	mg/L	-0.0886	0.50	10.0	10.2	0.160	10.1	9 to 11	102	80 to 120	0.00	20
AZ09851	Fluoride	mg/L	0.0346	0.05	2.50	2.40	0.0475	2.48	2.25 to 2.75	96.0	80 to 120	0.00	20
AZ09850	Solids, Dissolved	mg/L	-3.00	25			608	48.0	40 to 60			2.18	5
AZ09851	Sulfate	mg/L	-0.214	0.50	20.0	20.0	-0.265	19.6	18 to 22	100	80 to 120	0.00	20

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

**Comments:**

CC:

Alabama Power General Test Laboratory  
 744 County Road 87, GSC#8  
 Calera, AL 35040  
 (205) 664-6247 or 6171  
 FAX (205) 664-6108

# Certificate Of Analysis Alabama Power



To: Dustin Brooks  
 Greg Dyer

Customer Account: WMWGORAP  
 Sample Date: 17-Apr-19  
 Customer ID:  
 Delivery Date: 18-Apr-19

Description: Gorgas Ash Pond - MW-17

Laboratory ID Number: AZ09848

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
<b>Metals, Cyanide, Total Phenols</b>										
* Arsenic, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.001	0.005	J	0.00343	mg/L
* Barium, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.002	0.01		0.0946	mg/L
* Beryllium, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Boron, Total	GAS	4/26/2019	EPA 200.7		2.03	0.03	0.1	J	0.0916	mg/L
* Calcium, Total	GAS	4/26/2019	EPA 200.7		2.03	0.1	0.5		3.86	mg/L
* Cadmium, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.0003	0.001	U	Not Detected	mg/L
* Antimony, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.0008	0.003	U	Not Detected	mg/L
* Cobalt, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.002	0.005	U	Not Detected	mg/L
* Chromium, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	ABB	5/2/2019	EPA 245.1		1	0.0003	0.0005	U	Not Detected	mg/L
* Lithium, Total	GAS	4/26/2019	EPA 200.7		2.03	0.01	0.02		0.0574	mg/L
* Molybdenum, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.002	0.01	J	0.00661	mg/L
* Lead, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Selenium, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Thallium, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
<b>General Characteristics</b>										
* Solids, Dissolved	CRB	4/25/2019	SM 2540C		1		50		540	mg/L
Filter Completion Date	CRB	4/19/2019	SM 2540C		1				04/19/2019	Date
* Chloride	JCC	4/24/2019	SM4500CI E		1	0.50	1		12.7	mg/L
* Fluoride	JCC	4/24/2019	SM4500F C		1	0.05	0.1		0.354	mg/L
* Sulfate	JCC	4/25/2019	SM4500SO4 E		10	5.00	10		76.6	mg/L
<b>Field Measurements</b>										
pH	SNP	4/17/2019							FA 8.36	SU

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

**Comments:**

Alabama Power General Test Laboratory  
 744 County Road 87, GSC#8  
 Calera, AL 35040  
 (205) 664-6247 or 6171  
 FAX (205) 664-6108

# Batch QC Summary



To: Dustin Brooks  
 Greg Dyer

Customer Account: WMWGORAP  
 Sample Date: 17-Apr-19  
 Customer ID:  
 Delivery Date: 18-Apr-19

Description: Gorgas Ash Pond - MW-17

Laboratory ID Number: AZ09848

Sample	Analysis	Units	MB	MB		MS	MSD	LCS	LCS Limit	Rec		Prec	Prec Limit
				Limit	Spike					Rec	Limit		
AZ09851	Barium, Total	mg/L	0.00000277	0.0044	0.10	0.0935	0.0954	0.0970	0.085 to 0.115	93.5	70 to 130	2.03	20
AZ09851	Thallium, Total	mg/L	0.00000243	0.00044	0.10	0.110	0.110	0.104	0.085 to 0.115	110	70 to 130	0.119	20
AZ09851	Cobalt, Total	mg/L	-0.00000090	0.0044	0.10	0.0914	0.0926	0.100	0.085 to 0.115	91.4	70 to 130	1.30	20
AZ09851	Calcium, Total	mg/L	0.000189	0.216749	5.00	4.89	4.96	4.93	4.25 to 5.75	97.7	70 to 130	1.51	20
AZ09851	Molybdenum, Total	mg/L	0.00000463	0.0044	0.10	0.0968	0.0986	0.0968	0.085 to 0.115	96.8	70 to 130	1.77	20
AZ09851	Lead, Total	mg/L	0.00000424	0.0022	0.10	0.102	0.100	0.102	0.085 to 0.115	102	70 to 130	1.44	20
AZ09851	Arsenic, Total	mg/L	0.00000418	0.0022	0.10	0.0983	0.101	0.103	0.085 to 0.115	98.3	70 to 130	2.66	20
AZ09851	Selenium, Total	mg/L	0.0000879	0.0044	0.10	0.0954	0.0994	0.101	0.085 to 0.115	95.4	70 to 130	4.14	20
AZ09851	Cadmium, Total	mg/L	0.00000144	0.00066	0.10	0.0965	0.0961	0.0995	0.085 to 0.115	96.5	70 to 130	0.415	20
AZ09851	Chromium, Total	mg/L	0.00000244	0.0044	0.10	0.0980	0.100	0.104	0.085 to 0.115	98.0	70 to 130	2.08	20
AZ09851	Antimony, Total	mg/L	0.000143	0.00176	0.10	0.0925	0.0915	0.0924	0.085 to 0.115	92.5	70 to 130	1.12	20
AZ09851	Boron, Total	mg/L	-0.00189	0.065025	1.00	0.967	0.979	0.972	0.85 to 1.15	96.7	70 to 130	1.25	20
AZ09851	Mercury, Total by CVAA	mg/L	0.00007	0.0005	0.004	0.00408	0.00408	0.00412	0.0034 to 0.0046	102	70 to 130	0.00	20
AZ09851	Lithium, Total	mg/L	-0.000339	0.019704	0.20	0.205	0.205	0.207	0.17 to 0.23	102	70 to 130	0.177	20
AZ09851	Beryllium, Total	mg/L	0.0000369	0.00132	0.10	0.0918	0.0892	0.0975	0.085 to 0.115	91.8	70 to 130	2.85	20

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

**Comments:**

Alabama Power General Test Laboratory  
 744 County Road 87, GSC#8  
 Calera, AL 35040  
 (205) 664-6247 or 6171  
 FAX (205) 664-6108

## Batch QC Summary



To: Dustin Brooks  
 Greg Dyer

Customer Account: WMWGORAP  
 Sample Date: 17-Apr-19  
 Customer ID:  
 Delivery Date: 18-Apr-19

Description: Gorgas Ash Pond - MW-17

Laboratory ID Number: AZ09848

Sample	Analysis	Units	MB	MB			Sample		LCS	Rec			Prec
				Limit	Spike	MS	Duplicate	LCS	Limit	Rec	Limit	Prec	Limit
AZ09851	Fluoride	mg/L	0.0346	0.05	2.50	2.40	0.0475	2.48	2.25 to 2.75	96.0	80 to 120	0.00	20
AZ09851	Chloride	mg/L	-0.0886	0.50	10.0	10.2	0.160	10.1	9 to 11	102	80 to 120	0.00	20
AZ09850	Solids, Dissolved	mg/L	-3.00	25			608	48.0	40 to 60			2.18	5
AZ09851	Sulfate	mg/L	-0.214	0.50	20.0	20.0	-0.265	19.6	18 to 22	100	80 to 120	0.00	20

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

**Comments:**

CC:

Alabama Power General Test Laboratory  
 744 County Road 87, GSC#8  
 Calera, AL 35040  
 (205) 664-6247 or 6171  
 FAX (205) 664-6108

# Certificate Of Analysis Alabama Power



To: Dustin Brooks  
 Greg Dyer

Customer Account: WMWGORAP  
 Sample Date: 17-Apr-19  
 Customer ID:  
 Delivery Date: 18-Apr-19

Description: Gorgas Ash Pond - MW-15

Laboratory ID Number: AZ09849

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
<b>Metals, Cyanide, Total Phenols</b>									
* Arsenic, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.001	0.005	0.00633	mg/L
* Barium, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.002	0.01	0.264	mg/L
* Beryllium, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	GAS	4/26/2019	EPA 200.7		2.03	0.03	0.1	J 0.0388	mg/L
* Calcium, Total	GAS	4/26/2019	EPA 200.7		2.03	0.1	0.5	8.53	mg/L
* Cadmium, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.0003	0.001	U Not Detected	mg/L
* Antimony, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.0008	0.003	U Not Detected	mg/L
* Cobalt, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.002	0.005	U Not Detected	mg/L
* Chromium, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	5/2/2019	EPA 245.1		1	0.0003	0.0005	U Not Detected	mg/L
* Lithium, Total	GAS	4/26/2019	EPA 200.7		2.03	0.01	0.02	0.190	mg/L
* Molybdenum, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.002	0.01	0.0290	mg/L
* Lead, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
<b>General Characteristics</b>									
* Solids, Dissolved	CRB	4/25/2019	SM 2540C		1		25	354	mg/L
Filter Completion Date	CRB	4/19/2019	SM 2540C		1			04/19/2019	Date
* Chloride	JCC	4/24/2019	SM4500CI E		1	0.50	1	5.20	mg/L
* Fluoride	JCC	4/24/2019	SM4500F C		1	0.05	0.1	0.463	mg/L
* Sulfate	JCC	4/25/2019	SM4500SO4 E		1	0.50	1	9.02	mg/L
<b>Field Measurements</b>									
pH	SNP	4/17/2019						FA 10.76	SU

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

**Comments:**

Alabama Power General Test Laboratory  
 744 County Road 87, GSC#8  
 Calera, AL 35040  
 (205) 664-6247 or 6171  
 FAX (205) 664-6108

# Batch QC Summary



To: Dustin Brooks  
 Greg Dyer

Customer Account: WMWGORAP  
 Sample Date: 17-Apr-19  
 Customer ID:  
 Delivery Date: 18-Apr-19

Description: Gorgas Ash Pond - MW-15

Laboratory ID Number: AZ09849

Sample	Analysis	Units	MB	MB		MS	MSD	LCS	LCS		Rec		Prec	Limit
				Limit	Spike				Limit	Rec	Limit	Prec		
AZ09851	Beryllium, Total	mg/L	0.0000369	0.00132	0.10	0.0918	0.0892	0.0975	0.085 to 0.115		91.8	70 to 130	2.85	20
AZ09851	Barium, Total	mg/L	0.00000277	0.0044	0.10	0.0935	0.0954	0.0970	0.085 to 0.115		93.5	70 to 130	2.03	20
AZ09851	Thallium, Total	mg/L	0.00000243	0.00044	0.10	0.110	0.110	0.104	0.085 to 0.115		110	70 to 130	0.119	20
AZ09851	Cobalt, Total	mg/L	-0.00000090	0.0044	0.10	0.0914	0.0926	0.100	0.085 to 0.115		91.4	70 to 130	1.30	20
AZ09851	Arsenic, Total	mg/L	0.00000418	0.0022	0.10	0.0983	0.101	0.103	0.085 to 0.115		98.3	70 to 130	2.66	20
AZ09851	Selenium, Total	mg/L	0.0000879	0.0044	0.10	0.0954	0.0994	0.101	0.085 to 0.115		95.4	70 to 130	4.14	20
AZ09851	Calcium, Total	mg/L	0.000189	0.216749	5.00	4.89	4.96	4.93	4.25 to 5.75		97.7	70 to 130	1.51	20
AZ09851	Molybdenum, Total	mg/L	0.00000463	0.0044	0.10	0.0968	0.0986	0.0968	0.085 to 0.115		96.8	70 to 130	1.77	20
AZ09851	Lead, Total	mg/L	0.00000424	0.0022	0.10	0.102	0.100	0.102	0.085 to 0.115		102	70 to 130	1.44	20
AZ09851	Cadmium, Total	mg/L	0.00000144	0.00066	0.10	0.0965	0.0961	0.0995	0.085 to 0.115		96.5	70 to 130	0.415	20
AZ09851	Chromium, Total	mg/L	0.00000244	0.0044	0.10	0.0980	0.100	0.104	0.085 to 0.115		98.0	70 to 130	2.08	20
AZ09851	Antimony, Total	mg/L	0.000143	0.00176	0.10	0.0925	0.0915	0.0924	0.085 to 0.115		92.5	70 to 130	1.12	20
AZ09851	Boron, Total	mg/L	-0.00189	0.065025	1.00	0.967	0.979	0.972	0.85 to 1.15		96.7	70 to 130	1.25	20
AZ09851	Mercury, Total by CVAA	mg/L	0.00007	0.0005	0.004	0.00408	0.00408	0.00412	0.0034 to 0.0046		102	70 to 130	0.00	20
AZ09851	Lithium, Total	mg/L	-0.000339	0.019704	0.20	0.205	0.205	0.207	0.17 to 0.23		102	70 to 130	0.177	20

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

**Comments:**

Alabama Power General Test Laboratory  
 744 County Road 87, GSC#8  
 Calera, AL 35040  
 (205) 664-6247 or 6171  
 FAX (205) 664-6108

# Batch QC Summary



To: Dustin Brooks  
 Greg Dyer

Customer Account: WMWGORAP  
 Sample Date: 17-Apr-19  
 Customer ID:  
 Delivery Date: 18-Apr-19

Description: Gorgas Ash Pond - MW-15

Laboratory ID Number: AZ09849

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	LCS	LCS Limit	Rec	Rec Limit	Prec	Prec Limit
AZ09851	Fluoride	mg/L	0.0346	0.05	2.50	2.40	0.0475	2.48	2.25 to 2.75	96.0	80 to 120	0.00	20
AZ09850	Solids, Dissolved	mg/L	-3.00	25			608	48.0	40 to 60			2.18	5
AZ09851	Sulfate	mg/L	-0.214	0.50	20.0	20.0	-0.265	19.6	18 to 22	100	80 to 120	0.00	20
AZ09851	Chloride	mg/L	-0.0886	0.50	10.0	10.2	0.160	10.1	9 to 11	102	80 to 120	0.00	20

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

\* Test results for these accredited parameters conform to the most current applicable TNI/NELAC requirements, with exceptions noted on this report.

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

**Comments:**

CC:

Alabama Power General Test Laboratory  
 744 County Road 87, GSC#8  
 Calera, AL 35040  
 (205) 664-6247 or 6171  
 FAX (205) 664-6108

# Certificate Of Analysis Alabama Power



To: Dustin Brooks  
 Greg Dyer

Customer Account: WMWGORAP  
 Sample Date: 17-Apr-19  
 Customer ID:  
 Delivery Date: 18-Apr-19

Description: Gorgas Ash Pond - MW-21

Laboratory ID Number: AZ09850

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
<b>Metals, Cyanide, Total Phenols</b>										
* Arsenic, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Barium, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.002	0.01		0.0914	mg/L
* Beryllium, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Boron, Total	GAS	4/26/2019	EPA 200.7		2.03	0.03	0.1	J	0.0675	mg/L
* Calcium, Total	GAS	4/26/2019	EPA 200.7		2.03	0.1	0.5		2.88	mg/L
* Cadmium, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.0003	0.001	U	Not Detected	mg/L
* Antimony, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.0008	0.003	U	Not Detected	mg/L
* Cobalt, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.002	0.005	U	Not Detected	mg/L
* Chromium, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	ABB	5/2/2019	EPA 245.1		1	0.0003	0.0005	U	Not Detected	mg/L
* Lithium, Total	GAS	4/26/2019	EPA 200.7		2.03	0.01	0.02		0.312	mg/L
* Molybdenum, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.002	0.01		0.0885	mg/L
* Lead, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Selenium, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Thallium, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
<b>General Characteristics</b>										
* Solids, Dissolved	CRB	4/25/2019	SM 2540C		1		50		582	mg/L
Filter Completion Date	CRB	4/19/2019	SM 2540C		1				04/19/2019	Date
* Chloride	JCC	4/24/2019	SM4500CI E		2	1.00	2		32.3	mg/L
* Fluoride	JCC	4/24/2019	SM4500F C		1	0.05	0.1		0.272	mg/L
* Sulfate	JCC	4/25/2019	SM4500SO4 E		25	12.50	25		215	mg/L
<b>Field Measurements</b>										
pH	SNP	4/17/2019							FA 11.71	SU

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

Comments:



Alabama Power General Test Laboratory  
 744 County Road 87, GSC#8  
 Calera, AL 35040  
 (205) 664-6247 or 6171  
 FAX (205) 664-6108

# Batch QC Summary



To: Dustin Brooks  
 Greg Dyer

Customer Account: WMWGORAP  
 Sample Date: 17-Apr-19  
 Customer ID:  
 Delivery Date: 18-Apr-19

Description: Gorgas Ash Pond - MW-21

Laboratory ID Number: AZ09850

Sample	Analysis	Units	MB		MS	MSD	LCS	LCS Limit	Rec		Prec	Prec Limit	
			MB	Limit					Rec	Limit			
AZ09851	Cobalt, Total	mg/L	-0.00000090	0.0044	0.10	0.0914	0.0926	0.100	0.085 to 0.115	91.4	70 to 130	1.30	20
AZ09851	Barium, Total	mg/L	0.00000277	0.0044	0.10	0.0935	0.0954	0.0970	0.085 to 0.115	93.5	70 to 130	2.03	20
AZ09851	Thallium, Total	mg/L	0.00000243	0.00044	0.10	0.110	0.110	0.104	0.085 to 0.115	110	70 to 130	0.119	20
AZ09851	Beryllium, Total	mg/L	0.0000369	0.00132	0.10	0.0918	0.0892	0.0975	0.085 to 0.115	91.8	70 to 130	2.85	20
AZ09851	Arsenic, Total	mg/L	0.00000418	0.0022	0.10	0.0983	0.101	0.103	0.085 to 0.115	98.3	70 to 130	2.66	20
AZ09851	Selenium, Total	mg/L	0.0000879	0.0044	0.10	0.0954	0.0994	0.101	0.085 to 0.115	95.4	70 to 130	4.14	20
AZ09851	Cadmium, Total	mg/L	0.00000144	0.00066	0.10	0.0965	0.0961	0.0995	0.085 to 0.115	96.5	70 to 130	0.415	20
AZ09851	Chromium, Total	mg/L	0.00000244	0.0044	0.10	0.0980	0.100	0.104	0.085 to 0.115	98.0	70 to 130	2.08	20
AZ09851	Antimony, Total	mg/L	0.000143	0.00176	0.10	0.0925	0.0915	0.0924	0.085 to 0.115	92.5	70 to 130	1.12	20
AZ09851	Calcium, Total	mg/L	0.000189	0.216749	5.00	4.89	4.96	4.93	4.25 to 5.75	97.7	70 to 130	1.51	20
AZ09851	Molybdenum, Total	mg/L	0.00000463	0.0044	0.10	0.0968	0.0986	0.0968	0.085 to 0.115	96.8	70 to 130	1.77	20
AZ09851	Lead, Total	mg/L	0.00000424	0.0022	0.10	0.102	0.100	0.102	0.085 to 0.115	102	70 to 130	1.44	20
AZ09851	Boron, Total	mg/L	-0.00189	0.065025	1.00	0.967	0.979	0.972	0.85 to 1.15	96.7	70 to 130	1.25	20
AZ09851	Mercury, Total by CVAA	mg/L	0.00007	0.0005	0.004	0.00408	0.00408	0.00412	0.0034 to 0.0046	102	70 to 130	0.00	20
AZ09851	Lithium, Total	mg/L	-0.000339	0.019704	0.20	0.205	0.205	0.207	0.17 to 0.23	102	70 to 130	0.177	20

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

**Comments:**

Alabama Power General Test Laboratory  
 744 County Road 87, GSC#8  
 Calera, AL 35040  
 (205) 664-6247 or 6171  
 FAX (205) 664-6108

# Batch QC Summary



To: Dustin Brooks  
 Greg Dyer

Customer Account: WMWGORAP  
 Sample Date: 17-Apr-19  
 Customer ID:  
 Delivery Date: 18-Apr-19

Description: Gorgas Ash Pond - MW-21

Laboratory ID Number: AZ09850

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample		LCS Limit	Rec		Prec Limit	
							Duplicate	LCS		Rec	Limit		
AZ09851	Chloride	mg/L	-0.0886	0.50	10.0	10.2	0.160	10.1	9 to 11	102	80 to 120	0.00	20
AZ09851	Fluoride	mg/L	0.0346	0.05	2.50	2.40	0.0475	2.48	2.25 to 2.75	96.0	80 to 120	0.00	20
AZ09850	Solids, Dissolved	mg/L	-3.00	25			608	48.0	40 to 60			2.18	5
AZ09851	Sulfate	mg/L	-0.214	0.50	20.0	20.0	-0.265	19.6	18 to 22	100	80 to 120	0.00	20

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

**Comments:**

CC:

Alabama Power General Test Laboratory  
 744 County Road 87, GSC#8  
 Calera, AL 35040  
 (205) 664-6247 or 6171  
 FAX (205) 664-6108

**Certificate Of Analysis**  **Alabama Power**



To: Dustin Brooks  
 Greg Dyer

Customer Account: WMWGORAPFB  
 Sample Date: 17-Apr-19  
 Customer ID:  
 Delivery Date: 18-Apr-19

Description: Gorgas Ash Pond Field Blank

Laboratory ID Number: AZ09851

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
<b>Metals, Cyanide, Total Phenols</b>										
* Arsenic, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Barium, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Beryllium, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Boron, Total	GAS	4/26/2019	EPA 200.7		2.03	0.03	0.1	U	Not Detected	mg/L
* Calcium, Total	GAS	4/26/2019	EPA 200.7		2.03	0.1	0.5	U	Not Detected	mg/L
* Cadmium, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.0003	0.001	U	Not Detected	mg/L
* Antimony, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.0008	0.003	U	Not Detected	mg/L
* Cobalt, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.002	0.005	U	Not Detected	mg/L
* Chromium, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	ABB	5/2/2019	EPA 245.1		1	0.0003	0.0005	U	Not Detected	mg/L
* Lithium, Total	GAS	4/26/2019	EPA 200.7		2.03	0.01	0.02	U	Not Detected	mg/L
* Molybdenum, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Lead, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Selenium, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Thallium, Total	DLJ	4/19/2019	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
<b>General Characteristics</b>										
* Solids, Dissolved	CRB	4/25/2019	SM 2540C		1		25	U	Not Detected	mg/L
Filter Completion Date	CRB	4/19/2019	SM 2540C		1				04/19/2019	Date
* Chloride	JCC	4/24/2019	SM4500CI E		1	0.50	1	U	Not Detected	mg/L
* Fluoride	JCC	4/24/2019	SM4500F C		1	0.05	0.1	U	Not Detected	mg/L
* Sulfate	JCC	4/25/2019	SM4500SO4 E		1	0.50	1	U	Not Detected	mg/L

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

Comments:

Alabama Power General Test Laboratory  
 744 County Road 87, GSC#8  
 Calera, AL 35040  
 (205) 664-6247 or 6171  
 FAX (205) 664-6108

# Batch QC Summary



To: Dustin Brooks  
 Greg Dyer

Customer Account: WMWGORAPFB  
 Sample Date: 17-Apr-19  
 Customer ID:  
 Delivery Date: 18-Apr-19

Description: Gorgas Ash Pond Field Blank

Laboratory ID Number: AZ09851

Sample	Analysis	Units	MB	MB		MS	MSD	LCS	LCS		Rec		Prec	
				Limit	Spike				Limit	Rec	Limit	Prec		
AZ09851	Beryllium, Total	mg/L	0.0000369	0.00132	0.10	0.0918	0.0892	0.0975	0.085 to 0.115		91.8	70 to 130	2.85	20
AZ09851	Barium, Total	mg/L	0.00000277	0.0044	0.10	0.0935	0.0954	0.0970	0.085 to 0.115		93.5	70 to 130	2.03	20
AZ09851	Thallium, Total	mg/L	0.00000243	0.00044	0.10	0.110	0.110	0.104	0.085 to 0.115		110	70 to 130	0.119	20
AZ09851	Cobalt, Total	mg/L	-0.00000090	0.0044	0.10	0.0914	0.0926	0.100	0.085 to 0.115		91.4	70 to 130	1.30	20
AZ09851	Calcium, Total	mg/L	0.000189	0.216749	5.00	4.89	4.96	4.93	4.25 to 5.75		97.7	70 to 130	1.51	20
AZ09851	Molybdenum, Total	mg/L	0.00000463	0.0044	0.10	0.0968	0.0986	0.0968	0.085 to 0.115		96.8	70 to 130	1.77	20
AZ09851	Lead, Total	mg/L	0.00000424	0.0022	0.10	0.102	0.100	0.102	0.085 to 0.115		102	70 to 130	1.44	20
AZ09851	Cadmium, Total	mg/L	0.00000144	0.00066	0.10	0.0965	0.0961	0.0995	0.085 to 0.115		96.5	70 to 130	0.415	20
AZ09851	Chromium, Total	mg/L	0.00000244	0.0044	0.10	0.0980	0.100	0.104	0.085 to 0.115		98.0	70 to 130	2.08	20
AZ09851	Antimony, Total	mg/L	0.000143	0.00176	0.10	0.0925	0.0915	0.0924	0.085 to 0.115		92.5	70 to 130	1.12	20
AZ09851	Arsenic, Total	mg/L	0.00000418	0.0022	0.10	0.0983	0.101	0.103	0.085 to 0.115		98.3	70 to 130	2.66	20
AZ09851	Selenium, Total	mg/L	0.0000879	0.0044	0.10	0.0954	0.0994	0.101	0.085 to 0.115		95.4	70 to 130	4.14	20
AZ09851	Boron, Total	mg/L	-0.00189	0.065025	1.00	0.967	0.979	0.972	0.85 to 1.15		96.7	70 to 130	1.25	20
AZ09851	Mercury, Total by CVAA	mg/L	0.00007	0.0005	0.004	0.00408	0.00408	0.00412	0.0034 to 0.0046		102	70 to 130	0.00	20
AZ09851	Lithium, Total	mg/L	-0.000339	0.019704	0.20	0.205	0.205	0.207	0.17 to 0.23		102	70 to 130	0.177	20

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\* Test results for these accredited parameters conform to the most current applicable TNI/NELAC requirements, with exceptions noted on this report.

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

**Comments:**

Alabama Power General Test Laboratory  
 744 County Road 87, GSC#8  
 Calera, AL 35040  
 (205) 664-6247 or 6171  
 FAX (205) 664-6108

# Batch QC Summary



To: Dustin Brooks  
 Greg Dyer

Customer Account: WMWGORAPFB  
 Sample Date: 17-Apr-19  
 Customer ID:  
 Delivery Date: 18-Apr-19

Description: Gorgas Ash Pond Field Blank

Laboratory ID Number: AZ09851

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample		LCS Limit	Rec		Prec Limit	
							Duplicate	LCS		Rec	Limit		
AZ09851	Fluoride	mg/L	0.0346	0.05	2.50	2.40	0.0475	2.48	2.25 to 2.75	96.0	80 to 120	0.00	20
AZ09851	Chloride	mg/L	-0.0886	0.50	10.0	10.2	0.160	10.1	9 to 11	102	80 to 120	0.00	20
AZ09850	Solids, Dissolved	mg/L	-3.00	25			608	48.0	40 to 60			2.18	5
AZ09851	Sulfate	mg/L	-0.214	0.50	20.0	20.0	-0.265	19.6	18 to 22	100	80 to 120	0.00	20

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\* Test results for these accredited parameters conform to the most current applicable TNI/NELAC requirements, with exceptions noted on this report.

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

**Comments:**

CC:

Alabama Power General Test Laboratory  
 744 County Road 87, GSC#8  
 Calera, AL 35040  
 (205) 664-6247 or 6171  
 FAX (205) 664-6108

**Certificate Of Analysis**  **Alabama Power**



To: Dustin Brooks  
 Greg Dyer

Customer Account: WMWGORAP  
 Sample Date: 23-Apr-19  
 Customer ID:  
 Delivery Date: 24-Apr-19

Description: Gorgas Ash Pond - MW-7

Laboratory ID Number: AZ10372

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
<b>Metals, Cyanide, Total Phenols</b>									
* Arsenic, Total	DLJ	4/29/2019	EPA 200.8		5.075	0.001	0.005	0.207	mg/L
* Barium, Total	DLJ	4/29/2019	EPA 200.8		5.075	0.002	0.01	0.113	mg/L
* Beryllium, Total	DLJ	4/29/2019	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	GAS	4/26/2019	EPA 200.7		2.03	0.03	0.1	1.50	mg/L
* Calcium, Total	GAS	4/26/2019	EPA 200.7		2.03	0.1	0.5	13.8	mg/L
* Cadmium, Total	DLJ	4/29/2019	EPA 200.8		5.075	0.0003	0.001	U Not Detected	mg/L
* Antimony, Total	DLJ	4/29/2019	EPA 200.8		5.075	0.0008	0.003	J 0.00105	mg/L
* Cobalt, Total	DLJ	4/29/2019	EPA 200.8		5.075	0.002	0.005	J 0.00231	mg/L
* Chromium, Total	DLJ	4/29/2019	EPA 200.8		5.075	0.002	0.01	J 0.00435	mg/L
* Mercury, Total by CVAA	ABB	5/2/2019	EPA 245.1		1	0.0003	0.0005	U Not Detected	mg/L
* Lithium, Total	GAS	4/26/2019	EPA 200.7		2.03	0.01	0.02	0.144	mg/L
* Molybdenum, Total	DLJ	4/29/2019	EPA 200.8		5.075	0.002	0.01	0.185	mg/L
* Lead, Total	DLJ	4/29/2019	EPA 200.8		5.075	0.001	0.005	J 0.00207	mg/L
* Selenium, Total	DLJ	4/29/2019	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	DLJ	4/29/2019	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
<b>General Characteristics</b>									
* Solids, Dissolved	CRB	5/3/2019	SM 2540C		1		25	354	mg/L
Filter Completion Date	CES	4/25/2019	SM 2540C		1			04/25/2019	Date
* Chloride	JCC	4/29/2019	SM4500CI E		1	0.50	1	5.16	mg/L
* Fluoride	JCC	4/26/2019	SM4500F C		1	0.05	0.1	0.111	mg/L
* Sulfate	JCC	4/25/2019	SM4500SO4 E		25	12.50	25	156	mg/L
<b>Field Measurements</b>									
pH	SNP	4/23/2019						FA 7.83	SU

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.

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

**Comments:**

Alabama Power General Test Laboratory  
 744 County Road 87, GSC#8  
 Calera, AL 35040  
 (205) 664-6247 or 6171  
 FAX (205) 664-6108

# Batch QC Summary



To: Dustin Brooks  
 Greg Dyer

Customer Account: WMWGORAP  
 Sample Date: 23-Apr-19  
 Customer ID:  
 Delivery Date: 24-Apr-19

Description: Gorgas Ash Pond - MW-7

Laboratory ID Number: AZ10372

Sample	Analysis	Units	MB		MS	MSD	LCS	LCS Limit	Rec		Prec	Prec Limit	
			MB	Limit					Rec	Limit			
AZ10373	Arsenic, Total	mg/L	0.0000109	0.0022	0.10	0.282	0.282	0.103	0.085 to 0.115	99.0	70 to 130	0.00	20
AZ10373	Barium, Total	mg/L	0.00000579	0.0044	0.10	0.142	0.142	0.0951	0.085 to 0.115	90.7	70 to 130	0.00	20
AZ10373	Beryllium, Total	mg/L	0.0000678	0.00132	0.10	0.0953	0.0993	0.0987	0.085 to 0.115	95.3	70 to 130	4.11	20
AZ10373	Boron, Total	mg/L	-0.00163	0.065025	1.00	2.49	2.48	0.962	0.85 to 1.15	99.0	70 to 130	0.0427	20
AZ10373	Calcium, Total	mg/L	-0.000554	0.216749	5.00	18.1	18.0	4.92	4.25 to 5.75	98.7	70 to 130	0.469	20
AZ10373	Cadmium, Total	mg/L	0.00000183	0.00066	0.10	0.100	0.0982	0.104	0.085 to 0.115	100	70 to 130	1.82	20
AZ10373	Cobalt, Total	mg/L	0.0000130	0.0044	0.10	0.104	0.104	0.108	0.085 to 0.115	104	70 to 130	0.00	20
AZ10373	Chromium, Total	mg/L	0.0000767	0.0044	0.10	0.100	0.101	0.103	0.085 to 0.115	100	70 to 130	0.995	20
AZ10373	Lithium, Total	mg/L	-0.000197	0.019704	0.20	0.355	0.353	0.199	0.17 to 0.23	107	70 to 130	0.456	20
AZ10373	Molybdenum, Total	mg/L	0.00000870	0.0044	0.10	0.269	0.268	0.0968	0.085 to 0.115	92.0	70 to 130	0.372	20
AZ10373	Lead, Total	mg/L	0.00000703	0.0022	0.10	0.101	0.0989	0.109	0.085 to 0.115	101	70 to 130	2.10	20
AZ10373	Antimony, Total	mg/L	0.000110	0.00176	0.10	0.0992	0.0996	0.0986	0.085 to 0.115	99.2	70 to 130	0.402	20
AZ10373	Selenium, Total	mg/L	0.0000845	0.0044	0.10	0.0985	0.0971	0.102	0.085 to 0.115	98.5	70 to 130	1.43	20
AZ10373	Thallium, Total	mg/L	0.00000597	0.00044	0.10	0.102	0.0996	0.107	0.085 to 0.115	102	70 to 130	2.38	20
AZ10388	Mercury, Total by CVAA	mg/L	0.00025	0.0005	0.004	0.00428	0.00432	0.00447	0.0034 to 0.0046	107	70 to 130	0.930	20

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

\* Test results for these accredited parameters conform to the most current applicable TNI/NELAC requirements, with exceptions noted on this report.

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

**Comments:**

Alabama Power General Test Laboratory  
 744 County Road 87, GSC#8  
 Calera, AL 35040  
 (205) 664-6247 or 6171  
 FAX (205) 664-6108

# Batch QC Summary



To: Dustin Brooks  
 Greg Dyer

Customer Account: WMWGORAP  
 Sample Date: 23-Apr-19  
 Customer ID:  
 Delivery Date: 24-Apr-19

Description: Gorgas Ash Pond - MW-7

Laboratory ID Number: AZ10372

Sample	Analysis	Units	MB	MB			Sample		LCS	Rec		Prec	
				Limit	Spike	MS	Duplicate	LCS	Limit	Rec	Limit	Prec	Limit
AZ10373	Chloride	mg/L	0.0602	0.50	10.0	16.0	5.68	10.1	9 to 11	102	80 to 120	1.22	20
AZ10373	Fluoride	mg/L	-0.017	0.05	2.50	2.63	0.158	2.60	2.25 to 2.75	99.6	80 to 120	11.4	20
AZ10373	Sulfate	mg/L	-0.462	0.50	500	640	156	19.5	18 to 22	96.2	80 to 120	1.90	20
AZ10373	Solids, Dissolved	mg/L	6.00	25			333	51.0	40 to 60			0.745	5

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

**Comments:**

CC:



Alabama Power General Test Laboratory  
 744 County Road 87, GSC#8  
 Calera, AL 35040  
 (205) 664-6247 or 6171  
 FAX (205) 664-6108

**Certificate Of Analysis**  **Alabama Power**



To: Dustin Brooks  
 Greg Dyer

Customer Account: WMWGORAP  
 Sample Date: 23-Apr-19  
 Customer ID:  
 Delivery Date: 24-Apr-19

Description: Gorgas Ash Pond - MW-7 DISS

Laboratory ID Number: AZ10373

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
<b>Metals, Cyanide, Total Phenols</b>									
* Arsenic, Total	DLJ	4/29/2019	EPA 200.8		5.075	0.001	0.005	0.183	mg/L
* Barium, Total	DLJ	4/29/2019	EPA 200.8		5.075	0.002	0.01	0.0513	mg/L
* Beryllium, Total	DLJ	4/29/2019	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	GAS	4/26/2019	EPA 200.7		2.03	0.03	0.1	1.50	mg/L
* Calcium, Total	GAS	4/26/2019	EPA 200.7		2.03	0.1	0.5	13.1	mg/L
* Cadmium, Total	DLJ	4/29/2019	EPA 200.8		5.075	0.0003	0.001	U Not Detected	mg/L
* Antimony, Total	DLJ	4/29/2019	EPA 200.8		5.075	0.0008	0.003	U Not Detected	mg/L
* Cobalt, Total	DLJ	4/29/2019	EPA 200.8		5.075	0.002	0.005	U Not Detected	mg/L
* Chromium, Total	DLJ	4/29/2019	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	5/2/2019	EPA 245.1		1	0.0003	0.0005	U Not Detected	mg/L
* Lithium, Total	GAS	4/26/2019	EPA 200.7		2.03	0.01	0.02	0.141	mg/L
* Molybdenum, Total	DLJ	4/29/2019	EPA 200.8		5.075	0.002	0.01	0.177	mg/L
* Lead, Total	DLJ	4/29/2019	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	DLJ	4/29/2019	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	DLJ	4/29/2019	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
<b>General Characteristics</b>									
* Solids, Dissolved	CRB	5/3/2019	SM 2540C		1		25	338	mg/L
Filter Completion Date	CES	4/25/2019	SM 2540C		1			04/25/2019	Date
* Chloride	JCC	4/29/2019	SM4500CI E		1	0.50	1	5.75	mg/L
* Fluoride	JCC	4/26/2019	SM4500F C		1	0.05	0.1	0.141	mg/L
* Sulfate	JCC	4/25/2019	SM4500SO4 E		25	12.50	25	159	mg/L

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

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 744 County Road 87, GSC#8  
 Calera, AL 35040  
 (205) 664-6247 or 6171  
 FAX (205) 664-6108

# Batch QC Summary



To: Dustin Brooks  
 Greg Dyer

Customer Account: WMWGORAP  
 Sample Date: 23-Apr-19  
 Customer ID:  
 Delivery Date: 24-Apr-19

Description: Gorgas Ash Pond - MW-7 DISS

Laboratory ID Number: AZ10373

Sample	Analysis	Units	MB		MS	MSD	LCS	LCS Limit	Rec		Prec Limit		
			MB	Limit					Rec	Limit			
AZ10373	Arsenic, Total	mg/L	0.0000109	0.0022	0.10	0.282	0.282	0.103	0.085 to 0.115	99.0	70 to 130	0.00	20
AZ10373	Barium, Total	mg/L	0.00000579	0.0044	0.10	0.142	0.142	0.0951	0.085 to 0.115	90.7	70 to 130	0.00	20
AZ10373	Beryllium, Total	mg/L	0.0000678	0.00132	0.10	0.0953	0.0993	0.0987	0.085 to 0.115	95.3	70 to 130	4.11	20
AZ10373	Boron, Total	mg/L	-0.00163	0.065025	1.00	2.49	2.48	0.962	0.85 to 1.15	99.0	70 to 130	0.0427	20
AZ10373	Calcium, Total	mg/L	-0.000554	0.216749	5.00	18.1	18.0	4.92	4.25 to 5.75	98.7	70 to 130	0.469	20
AZ10373	Cadmium, Total	mg/L	0.00000183	0.00066	0.10	0.100	0.0982	0.104	0.085 to 0.115	100	70 to 130	1.82	20
AZ10373	Cobalt, Total	mg/L	0.0000130	0.0044	0.10	0.104	0.104	0.108	0.085 to 0.115	104	70 to 130	0.00	20
AZ10373	Chromium, Total	mg/L	0.0000767	0.0044	0.10	0.100	0.101	0.103	0.085 to 0.115	100	70 to 130	0.995	20
AZ10373	Lithium, Total	mg/L	-0.000197	0.019704	0.20	0.355	0.353	0.199	0.17 to 0.23	107	70 to 130	0.456	20
AZ10373	Molybdenum, Total	mg/L	0.00000870	0.0044	0.10	0.269	0.268	0.0968	0.085 to 0.115	92.0	70 to 130	0.372	20
AZ10373	Lead, Total	mg/L	0.00000703	0.0022	0.10	0.101	0.0989	0.109	0.085 to 0.115	101	70 to 130	2.10	20
AZ10373	Antimony, Total	mg/L	0.000110	0.00176	0.10	0.0992	0.0996	0.0986	0.085 to 0.115	99.2	70 to 130	0.402	20
AZ10373	Selenium, Total	mg/L	0.0000845	0.0044	0.10	0.0985	0.0971	0.102	0.085 to 0.115	98.5	70 to 130	1.43	20
AZ10373	Thallium, Total	mg/L	0.00000597	0.00044	0.10	0.102	0.0996	0.107	0.085 to 0.115	102	70 to 130	2.38	20
AZ10388	Mercury, Total by CVAA	mg/L	0.00025	0.0005	0.004	0.00428	0.00432	0.00447	0.0034 to 0.0046	107	70 to 130	0.930	20

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

**Comments:**

Alabama Power General Test Laboratory  
 744 County Road 87, GSC#8  
 Calera, AL 35040  
 (205) 664-6247 or 6171  
 FAX (205) 664-6108

# Batch QC Summary



To: Dustin Brooks  
 Greg Dyer

Customer Account: WMWGORAP  
 Sample Date: 23-Apr-19  
 Customer ID:  
 Delivery Date: 24-Apr-19

Description: Gorgas Ash Pond - MW-7 DISS

Laboratory ID Number: AZ10373

Sample	Analysis	Units	MB	MB			Sample		LCS	Rec		Prec	
				Limit	Spike	MS	Duplicate	LCS	Limit	Rec	Limit	Prec	Limit
AZ10373	Chloride	mg/L	0.0602	0.50	10.0	16.0	5.68	10.1	9 to 11	102	80 to 120	1.22	20
AZ10373	Fluoride	mg/L	-0.017	0.05	2.50	2.63	0.158	2.60	2.25 to 2.75	99.6	80 to 120	11.4	20
AZ10373	Sulfate	mg/L	-0.462	0.50	500	640	156	19.5	18 to 22	96.2	80 to 120	1.90	20
AZ10373	Solids, Dissolved	mg/L	6.00	25			333	51.0	40 to 60			0.745	5

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.

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

\* Test results for these accredited parameters conform to the most current applicable TNI/NELAC requirements, with exceptions noted on this report.

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2019

**Comments:**

CC:



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
B	Analyte found in reagent blank. Indicates possible reagent or background contamination.
BA	Analyte found in reagent blank is = RL AND is > 1/10 the amount of the sample.
C	Analyte was verified by re-analysis.
D	All samples were stored at less than or equal to 6 °C and for no longer than 48 hours from time of sampling, unless otherwise noted.
E	Estimated reported value exceeded calibration range.
F	Water Field Group (WFG) qualifier; see comments for more information
FA	Field results were reviewed by the Water Field Group.
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.
J	Reported value is an estimate because concentration is less than reporting limit.
K	No MB or LCS were submitted with the sample for dissolved analysis.
L	Check standard is outside of specification limit.
LA	Analyte recovery in the check standard was above specification limit. Results may be biased high.
LL	Analyte recovery in the check standard was below specification limit. Results may be biased low.
M	LOQ verification analyzed with batch was outside of specification limit.
N	Organic constituents tentatively identified. Confirmation is needed.
P	Precision is out of specification limit.
R	Matrix spike recovery or matrix spike duplicate recovery is outside of specification limit.
RA	Matrix spike is invalid due to sample concentration.
S	Surrogate recovery is outside of specification limit.
T	Sample temperature is outside of specification limit.
U	Compound was analyzed, but not detected.



# Chain of Custody Groundwater

APC General Testing Laboratory

Field Complete

Outside Lab

Lab Complete

Lab ETA 04/18/2019 08:11

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Site Representative	Che George	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
MW-6D	4/16/19	10:41	4	Groundwater		AZ09832
MW-6DDup	04/16/2019	10:41	4	Sample Duplicate		AZ09833
MW-6S	04/16/2019	11:43	4	Groundwater		AZ09834
FB-2	04/16/2019	12:07	4	Field Blank		AZ09835
MW-8	04/16/2019	12:58	4	Groundwater		AZ09836
MW-9	04/16/2019	14:14	4	Groundwater		AZ09837
MW-11	04/16/2019	15:38	4	Groundwater		AZ09838
MW-12	04/16/2019	17:14	4	Groundwater		AZ09839
MW-13	04/16/2019	18:11	4	Groundwater		AZ09840
MW-14	04/16/2019	19:32	4	Groundwater		AZ09841
MW-16D	04/17/2019	10:07	4	Groundwater		AZ09842
MW-2	04/17/2019	13:25	4	Groundwater		AZ09843
MW-19	04/17/2019	14:34	4	Groundwater		AZ09844
MW-18	04/17/2019	18:08	4	Groundwater		AZ09845
MW-18Dup	04/17/2019	18:08	4	Groundwater		AZ09846
EB-1	04/17/2019	18:15	4	Equipment Blank		AZ09847

Relinquished By	Received By	Date/Time
		04/18/2019 08:32

SmarTroll ID	7151-38849-2-1	All metals and radiological bottles have pH < 2 <input checked="" type="checkbox"/>
Turbidity ID	5160-26211-1-1	Cooler Temp
Sample Event	1216	Thermometer ID
		pH Strip ID
		0.3 degrees C
		5408-27568-2-2
		7260-39349-1-1



# 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	Che George	Requested By	Greg Dyer
Collector	Nick Pitts	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	4/17/19	09:18	4	Groundwater		AZ09848
MW-15	04/17/2019	13:27	4	Groundwater		AZ09849
MW-21	04/17/2019	15:25	4	Groundwater		AZ09850
FB-1	04/17/2019	16:00	4	Field Blank		AZ09851

Relinquished By	Received By	Date/Time
		04/18/2019 13:16

SmarTroll ID	7151-38850-2-2	All metals and radiological bottles have pH < 2 <input checked="" type="checkbox"/>	
Turbidity ID	3901-20009-2-1		
Sample Event	1216		
		Cooler Temp	3.6 degrees C
		Thermometer ID	6603-34819-1-1
		pH Strip ID	7260-39349-1-1



**Chain of Custody**  
**Groundwater**  
APC General Testing Laboratory

Field Complete  
 Lab Complete

Outside Lab

Lab ETA **04/23/2019 16:00**

Requested Complete Date	Routine	Results To	Dustin Brooks,Greg Dyer
Site Representative	Che George	Requested By	Greg Dyer
Collector	Nick Pitts	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: Collected Field filtered set for MW-7

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-7	4/23/19	10:37	4	Groundwater		AZ10372
MW-7 Diss	04/23/2019	10:37	4	Groundwater		AZ10373

Relinquished By	Received By	Date/Time
		04/23/2019 14:35
		04/24/2019 07:41

SmarTroll ID	7151-38850-2-2
Turbidity ID	3901-20009-2-1
Sample Event	1216

All metals and radiological bottles have pH < 2

Cooler Temp	0.6 degrees C
Thermometer ID	5408-27568-2-2
pH Strip ID	7260-39349-1-1



# Chain of Custody Groundwater

APC General Testing Laboratory

Field Complete

Outside Lab

Lab Complete

Lab ETA 04/18/2019 08:11

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Site Representative	Che George	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	Radium Duplicate collected at MW-13
----------	-------------------------------------

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-6D	4/16/19	10:41	1	Groundwater		AZ09852
MW-6DDup	04/16/2019	10:41	1	Sample Duplicate		AZ09853
MW-6S	04/16/2019	11:43	1	Groundwater		AZ09854
FB-2	04/16/2019	12:07	1	Field Blank		AZ09855
MW-8	04/16/2019	12:58	1	Groundwater		AZ09856
MW-9	04/16/2019	14:14	1	Groundwater		AZ09857
MW-11	04/16/2019	15:38	1	Groundwater		AZ09858
MW-12	04/16/2019	17:14	1	Groundwater		AZ09859
MW-13	04/16/2019	18:11	3	Groundwater		AZ09860
MW-14	04/16/2019	19:32	1	Groundwater		AZ09861
MW-16D	04/17/2019	10:07	1	Groundwater		AZ09862
MW-2	04/17/2019	13:25	1	Groundwater		AZ09863
MW-19	04/17/2019	14:34	1	Groundwater		AZ09864
MW-18	04/17/2019	18:08	1	Groundwater		AZ09865
MW-18Dup	04/17/2019	18:08	1	Groundwater		AZ09866
EB-1	04/17/2019	18:15	1	Equipment Blank		AZ09867

Relinquished By	Received By	Date/Time
		04/18/2019 08:32

SmarTroll ID	7151-38849-2-1	All metals and radiological bottles have pH < 2 <input checked="" type="checkbox"/>
Turbidity ID	5160-26211-1-1	Cooler Temp
Sample Event	1216	Thermometer ID
		pH Strip ID
		7260-39349-1-1





# Chain of Custody Groundwater

APC General Testing Laboratory

Field Complete  
 Lab Complete

Outside Lab

Lab ETA 04/18/2019 13:20

Requested Complete Date	Routine		Results To	Dustin Brooks, Greg Dyer		
	Che George			Requested By	Greg Dyer	
	Nick Pitts				Location	
Collector		Gorgas Ash Pond				

Bottles	1	2	3	4	5	6	7	8
	Radium	1 L	N/A	N/A	N/A	N/A	N/A	N/A
	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Comments: Rad Dup on MW-15

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-17	4/17/19	09:18	1	Groundwater		AZ09868
MW-15	04/17/2019	13:27	3	Groundwater		AZ09869
MW-21	04/17/2019	15:25	1	Groundwater		AZ09870
FB-1	04/17/2019	16:00	1	Field Blank		AZ09871

Relinquished By	Received By	Date/Time
		04/18/2019 13:16

SmarTroll ID	7151-38850-2-2
Turbidity ID	3901-20009-2-1
Sample Event	1216

All metals and radiological bottles have pH < 2

Cooler Temp	N/A
Thermometer ID	N/A
pH Strip ID	7260-39349-1-1



# Chain of Custody

## Groundwater

APC General Testing Laboratory

Field Complete  
 Lab Complete

Outside Lab

Lab ETA 04/23/2019 16:00

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Site Representative	Che George	Requested By	Greg Dyer
Collector	Nick Pitts	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: Collected Field filtered set for MW-7.  
 Samples were relinquished by Dallas Gentry to Laura Midkiff on 04/24/19 at 07:41. Signatures were not saved. LBM 5/14/19

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-7	4/23/19	10:37	1	Groundwater		AZ10374
MW-7 Diss	04/23/2019	10:37	1	Groundwater		AZ10375

Relinquished By	Received By	Date/Time
<i>[Signature]</i>	<i>[Signature]</i>	04/23/2019 14:35

SmarTroll ID	7151-38850-2-2
Turbidity ID	3901-20009-2-1
Sample Event	1216

All metals and radiological bottles have pH < 2	<input checked="" type="checkbox"/>
Cooler Temp	N/A
Thermometer ID	N/A
pH Strip ID	7260-39349-1-1

## ANALYTICAL REPORT

Eurofins TestAmerica, Pensacola  
3355 McLemore Drive  
Pensacola, FL 32514  
Tel: (850)474-1001

Laboratory Job ID: 400-169112-1  
Laboratory Sample Delivery Group: Gorgas Ash Pond 1216  
Client Project/Site: CCR Plant Gorgas  
Revision: 1

For:  
Alabama Power General Test Laboratory  
744 County Rd 87  
GSC #8  
Calera, Alabama 35040

Attn: Laura Midkiff



Authorized for release by:  
8/7/2019 4:55:58 PM

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*Results relate only to the items tested and the sample(s) as received by the laboratory.*



# Table of Contents

Cover Page . . . . .	1
Table of Contents . . . . .	2
Case Narrative . . . . .	3
Method Summary . . . . .	5
Sample Summary . . . . .	6
Client Sample Results . . . . .	7
Definitions . . . . .	29
Chronicle . . . . .	30
QC Association . . . . .	36
QC Sample Results . . . . .	38
Chain of Custody . . . . .	43
Receipt Checklists . . . . .	46
Certification Summary . . . . .	49

# Case Narrative

Client: Alabama Power General Test Laboratory  
Project/Site: CCR Plant Gorgas

Job ID: 400-169112-1  
SDG: Gorgas Ash Pond 1216

**Job ID: 400-169112-1**

**Laboratory: Eurofins TestAmerica, Pensacola**

## Narrative

### Job Narrative 400-169112-1

#### RAD

Method(s) 9315: Ra-226 Prep Batch 160-430108. 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. AZ09854 MW-6S (400-169112-3), AZ09855 FB-2 (400-169112-4), AZ09856 MW-8 (400-169112-5), AZ09857 MW-9 (400-169112-6), AZ09858 MW-11 (400-169112-7), AZ09859 MW-12 (400-169112-8), AZ09860 MW-13 (400-169112-9), AZ09860 MW-13 (400-169112-9[DU]), AZ09861 MW-14 (400-169112-10), AZ09862 MW-16D (400-169112-11), AZ09863 MW-2 (400-169112-12), AZ09864 MW-19 (400-169112-13), AZ09865 MW-18 (400-169112-14), AZ09866 MW-18-DUP (400-169112-15), (LCS 160-430108/1-A) and (MB 160-430108/24-A)

Method(s) 9315: Ra-226 Prep Batch 160-430215. 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. AZ09852 MW-6D (400-169112-1), AZ09853 MW-6D DUP (400-169112-2), AZ09867 EB-1 (400-169112-16), AZ09868 MW-17 (400-169112-17), AZ09869 MW-15 (400-169112-18), AZ09869 MW-15 (400-169112-18[DU]), AZ09870 MW-21 (400-169112-19), AZ09871 FB-1 (400-169112-20), AZ10374 MW-7 (400-169112-21), AZ10374 MW-7 DISS (400-169112-22), (LCS 160-430215/1-A), (MB 160-430215/24-A), (400-169314-B-2-A), (400-169314-B-2-B MS) and (400-169314-B-2-C MSD)

Method(s) 9320: Ra-228 Prep Batch 160-430118. 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. AZ09854 MW-6S (400-169112-3), AZ09855 FB-2 (400-169112-4), AZ09856 MW-8 (400-169112-5), AZ09857 MW-9 (400-169112-6), AZ09858 MW-11 (400-169112-7), AZ09859 MW-12 (400-169112-8), AZ09860 MW-13 (400-169112-9), AZ09860 MW-13 (400-169112-9[DU]), AZ09861 MW-14 (400-169112-10), AZ09862 MW-16D (400-169112-11), AZ09863 MW-2 (400-169112-12), AZ09864 MW-19 (400-169112-13), AZ09865 MW-18 (400-169112-14), AZ09866 MW-18-DUP (400-169112-15), (LCS 160-430118/1-A) and (MB 160-430118/24-A)

Method(s) 9320: Ra-228 Prep Batch 160-430233. 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. AZ09852 MW-6D (400-169112-1), AZ09853 MW-6D DUP (400-169112-2), AZ09867 EB-1 (400-169112-16), AZ09868 MW-17 (400-169112-17), AZ09869 MW-15 (400-169112-18), AZ09869 MW-15 (400-169112-18[DU]), AZ09870 MW-21 (400-169112-19), AZ09871 FB-1 (400-169112-20), AZ10374 MW-7 (400-169112-21), AZ10374 MW-7 DISS (400-169112-22), (LCS 160-430233/1-A), (MB 160-430233/24-A), (400-169314-B-2-G), (400-169314-B-2-H MS) and (400-169314-B-2-I MSD)

Method(s) PrecSep\_0: Radium 228 Prep Batch 160-430118. The following samples were prepared at a reduced aliquot due to limited volume: AZ09854 MW-6S (400-169112-3), AZ09855 FB-2 (400-169112-4), AZ09856 MW-8 (400-169112-5), AZ09857 MW-9 (400-169112-6), AZ09858 MW-11 (400-169112-7), AZ09859 MW-12 (400-169112-8), AZ09860 MW-13 (400-169112-9), AZ09860 MW-13 (400-169112-9[DU]), AZ09861 MW-14 (400-169112-10), AZ09862 MW-16D (400-169112-11), AZ09863 MW-2 (400-169112-12), AZ09864 MW-19 (400-169112-13), AZ09865 MW-18 (400-169112-14) and AZ09866 MW-18-DUP (400-169112-15).

Method(s) PrecSep\_0: Radium 228 Prep Batch 160-430233. The following samples were prepared at a reduced aliquot due to limited volume: AZ09852 MW-6D (400-169112-1), AZ09853 MW-6D DUP (400-169112-2), AZ09867 EB-1 (400-169112-16), AZ09868 MW-17 (400-169112-17), AZ09869 MW-15 (400-169112-18), AZ09869 MW-15 (400-169112-18[DU]), AZ09870 MW-21 (400-169112-19), AZ09871 FB-1 (400-169112-20), AZ10374 MW-7 (400-169112-21) and AZ10374 MW-7 DISS (400-169112-22).

Method(s) PrecSep-21: Radium 226 Prep Batch 160-430108. The following samples were prepared at a reduced aliquot due to limited volume: AZ09854 MW-6S (400-169112-3), AZ09855 FB-2 (400-169112-4), AZ09856 MW-8 (400-169112-5), AZ09857 MW-9 (400-169112-6), AZ09858 MW-11 (400-169112-7), AZ09859 MW-12 (400-169112-8), AZ09860 MW-13 (400-169112-9), AZ09860 MW-13 (400-169112-9[DU]), AZ09861 MW-14 (400-169112-10), AZ09862 MW-16D (400-169112-11), AZ09863 MW-2 (400-169112-12), AZ09864 MW-19 (400-169112-13), AZ09865 MW-18 (400-169112-14) and AZ09866 MW-18-DUP (400-169112-15).

Method(s) PrecSep-21: Radium 226 Prep Batch 160-430215. The following samples were prepared at a reduced aliquot due to limited volume: AZ09852 MW-6D (400-169112-1), AZ09853 MW-6D DUP (400-169112-2), AZ09867 EB-1 (400-169112-16), AZ09868 MW-17

# Case Narrative

Client: Alabama Power General Test Laboratory  
Project/Site: CCR Plant Gorgas

Job ID: 400-169112-1  
SDG: Gorgas Ash Pond 1216

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## Job ID: 400-169112-1 (Continued)

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### Laboratory: Eurofins TestAmerica, Pensacola (Continued)

(400-169112-17), AZ09869 MW-15 (400-169112-18), AZ09869 MW-15 (400-169112-18[DUJ]), AZ09870 MW-21 (400-169112-19), AZ09871 FB-1 (400-169112-20), AZ10374 MW-7 (400-169112-21) and AZ10374 MW-7 DISS (400-169112-22).

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# Method Summary

Client: Alabama Power General Test Laboratory  
Project/Site: CCR Plant Gorgas

Job ID: 400-169112-1  
SDG: Gorgas Ash Pond 1216

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: 400-169112-1  
SDG: Gorgas Ash Pond 1216

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
400-169112-1	AZ09852 MW-6D	Water	04/16/19 10:41	04/22/19 17:15	
400-169112-2	AZ09853 MW-6D DUP	Water	04/16/19 10:41	04/22/19 17:15	
400-169112-3	AZ09854 MW-6S	Water	04/16/19 11:43	04/22/19 17:15	
400-169112-4	AZ09855 FB-2	Water	04/16/19 12:07	04/22/19 17:15	
400-169112-5	AZ09856 MW-8	Water	04/16/19 12:58	04/22/19 17:15	
400-169112-6	AZ09857 MW-9	Water	04/16/19 14:14	04/22/19 17:15	
400-169112-7	AZ09858 MW-11	Water	04/16/19 15:38	04/22/19 17:15	
400-169112-8	AZ09859 MW-12	Water	04/16/19 17:14	04/22/19 17:15	
400-169112-9	AZ09860 MW-13	Water	04/16/19 18:11	04/22/19 17:15	
400-169112-10	AZ09861 MW-14	Water	04/16/19 19:32	04/22/19 17:15	
400-169112-11	AZ09862 MW-16D	Water	04/17/19 10:07	04/22/19 17:15	
400-169112-12	AZ09863 MW-2	Water	04/17/19 13:25	04/22/19 17:15	
400-169112-13	AZ09864 MW-19	Water	04/17/19 14:34	04/22/19 17:15	
400-169112-14	AZ09865 MW-18	Water	04/17/19 18:08	04/22/19 17:15	
400-169112-15	AZ09866 MW-18-DUP	Water	04/17/19 18:08	04/22/19 17:15	
400-169112-16	AZ09867 EB-1	Water	04/17/19 18:15	04/22/19 17:15	
400-169112-17	AZ09868 MW-17	Water	04/17/19 09:18	04/22/19 17:15	
400-169112-18	AZ09869 MW-15	Water	04/17/19 13:27	04/22/19 17:15	
400-169112-19	AZ09870 MW-21	Water	04/17/19 15:25	04/22/19 17:15	
400-169112-20	AZ09871 FB-1	Water	04/17/19 16:00	04/22/19 17:15	
400-169112-21	AZ10374 MW-7	Water	04/23/19 10:37	04/29/19 15:30	
400-169112-22	AZ10375 MW-7 DISS	Water	04/23/19 10:37	04/29/19 15:30	



# Client Sample Results

Client: Alabama Power General Test Laboratory  
 Project/Site: CCR Plant Gorgas

Job ID: 400-169112-1  
 SDG: Gorgas Ash Pond 1216

**Client Sample ID: AZ09852 MW-6D**

**Lab Sample ID: 400-169112-1**

Date Collected: 04/16/19 10:41

Matrix: Water

Date Received: 04/22/19 17:15

**Method: 9315 - Radium-226 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.237		0.104	0.106	1.00	0.115	pCi/L	05/30/19 08:33	08/01/19 15:07	1
<b>Carrier</b>	<b>%Yield</b>	<b>Qualifier</b>	<b>Limits</b>					<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Ba Carrier	100		40 - 110					05/30/19 08:33	08/01/19 15:07	1

**Method: 9320 - Radium-228 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.290	U	0.285	0.287	1.00	0.461	pCi/L	05/30/19 10:03	07/16/19 12:41	1
<b>Carrier</b>	<b>%Yield</b>	<b>Qualifier</b>	<b>Limits</b>					<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Ba Carrier	100		40 - 110					05/30/19 10:03	07/16/19 12:41	1
Y Carrier	82.2		40 - 110					05/30/19 10:03	07/16/19 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	0.528		0.303	0.306	5.00	0.461	pCi/L		08/02/19 10:35	1

# Client Sample Results

Client: Alabama Power General Test Laboratory  
 Project/Site: CCR Plant Gorgas

Job ID: 400-169112-1  
 SDG: Gorgas Ash Pond 1216

**Client Sample ID: AZ09853 MW-6D DUP**

**Lab Sample ID: 400-169112-2**

Date Collected: 04/16/19 10:41

Matrix: Water

Date Received: 04/22/19 17:15

**Method: 9315 - Radium-226 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.174		0.0958	0.0971	1.00	0.116	pCi/L	05/30/19 08:33	08/01/19 15:07	1
<b>Carrier</b>	<b>%Yield</b>	<b>Qualifier</b>	<b>Limits</b>					<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Ba Carrier	89.5		40 - 110					05/30/19 08:33	08/01/19 15:07	1

**Method: 9320 - Radium-228 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.179	U	0.338	0.338	1.00	0.576	pCi/L	05/30/19 10:03	07/16/19 12:41	1
<b>Carrier</b>	<b>%Yield</b>	<b>Qualifier</b>	<b>Limits</b>					<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Ba Carrier	89.5		40 - 110					05/30/19 10:03	07/16/19 12:41	1
Y Carrier	86.4		40 - 110					05/30/19 10:03	07/16/19 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	0.353	U	0.351	0.352	5.00	0.576	pCi/L		08/02/19 10:35	1

# Client Sample Results

Client: Alabama Power General Test Laboratory  
 Project/Site: CCR Plant Gorgas

Job ID: 400-169112-1  
 SDG: Gorgas Ash Pond 1216

**Client Sample ID: AZ09854 MW-6S**

**Lab Sample ID: 400-169112-3**

Date Collected: 04/16/19 11:43

Matrix: Water

Date Received: 04/22/19 17:15

**Method: 9315 - Radium-226 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
<b>Radium-226</b>	<b>0.311</b>		0.119	0.122	1.00	0.118	pCi/L	05/29/19 08:36	07/31/19 10:15	1
<b>Carrier</b>	<b>%Yield</b>	<b>Qualifier</b>	<b>Limits</b>					<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Ba Carrier	86.7		40 - 110					05/29/19 08:36	07/31/19 10:15	1

**Method: 9320 - Radium-228 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
<b>Radium-228</b>	<b>0.804</b>		0.370	0.377	1.00	0.523	pCi/L	05/29/19 09:37	07/12/19 12:20	1
<b>Carrier</b>	<b>%Yield</b>	<b>Qualifier</b>	<b>Limits</b>					<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Ba Carrier	86.7		40 - 110					05/29/19 09:37	07/12/19 12:20	1
Y Carrier	81.1		40 - 110					05/29/19 09:37	07/12/19 12:20	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
<b>Combined Radium 226 + 228</b>	<b>1.11</b>		0.389	0.396	5.00	0.523	pCi/L		08/01/19 08:05	1

# Client Sample Results

Client: Alabama Power General Test Laboratory  
 Project/Site: CCR Plant Gorgas

Job ID: 400-169112-1  
 SDG: Gorgas Ash Pond 1216

**Client Sample ID: AZ09855 FB-2**

**Lab Sample ID: 400-169112-4**

Date Collected: 04/16/19 12:07

Matrix: Water

Date Received: 04/22/19 17:15

**Method: 9315 - Radium-226 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0305	U	0.0740	0.0740	1.00	0.137	pCi/L	05/29/19 08:36	07/31/19 10:15	1
<b>Carrier</b>	<b>%Yield</b>	<b>Qualifier</b>	<b>Limits</b>					<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Ba Carrier	97.5		40 - 110					05/29/19 08:36	07/31/19 10:15	1

**Method: 9320 - Radium-228 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.640		0.381	0.385	1.00	0.584	pCi/L	05/29/19 09:37	07/12/19 12:20	1
<b>Carrier</b>	<b>%Yield</b>	<b>Qualifier</b>	<b>Limits</b>					<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Ba Carrier	97.5		40 - 110					05/29/19 09:37	07/12/19 12:20	1
Y Carrier	86.4		40 - 110					05/29/19 09:37	07/12/19 12:20	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	0.670		0.388	0.392	5.00	0.584	pCi/L		08/01/19 08:05	1

# Client Sample Results

Client: Alabama Power General Test Laboratory  
 Project/Site: CCR Plant Gorgas

Job ID: 400-169112-1  
 SDG: Gorgas Ash Pond 1216

**Client Sample ID: AZ09856 MW-8**

**Lab Sample ID: 400-169112-5**

Date Collected: 04/16/19 12:58

Matrix: Water

Date Received: 04/22/19 17:15

**Method: 9315 - Radium-226 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0257	U	0.0688	0.0689	1.00	0.127	pCi/L	05/29/19 08:36	07/31/19 13:11	1
<b>Carrier</b>	<b>%Yield</b>	<b>Qualifier</b>	<b>Limits</b>					<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Ba Carrier	100		40 - 110					05/29/19 08:36	07/31/19 13:11	1

**Method: 9320 - Radium-228 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.707		0.351	0.357	1.00	0.513	pCi/L	05/29/19 09:37	07/12/19 12:20	1
<b>Carrier</b>	<b>%Yield</b>	<b>Qualifier</b>	<b>Limits</b>					<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Ba Carrier	100		40 - 110					05/29/19 09:37	07/12/19 12:20	1
Y Carrier	83.7		40 - 110					05/29/19 09:37	07/12/19 12:20	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	0.733		0.358	0.364	5.00	0.513	pCi/L		08/01/19 08:05	1

# Client Sample Results

Client: Alabama Power General Test Laboratory  
 Project/Site: CCR Plant Gorgas

Job ID: 400-169112-1  
 SDG: Gorgas Ash Pond 1216

**Client Sample ID: AZ09857 MW-9**

**Lab Sample ID: 400-169112-6**

Date Collected: 04/16/19 14:14

Matrix: Water

Date Received: 04/22/19 17:15

**Method: 9315 - Radium-226 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0420	U	0.0667	0.0668	1.00	0.116	pCi/L	05/29/19 08:36	07/31/19 13:13	1
<b>Carrier</b>	<b>%Yield</b>	<b>Qualifier</b>	<b>Limits</b>					<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Ba Carrier	89.5		40 - 110					05/29/19 08:36	07/31/19 13:13	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	0.367	0.367	1.00	0.669	pCi/L	05/29/19 09:37	07/12/19 12:20	1
<b>Carrier</b>	<b>%Yield</b>	<b>Qualifier</b>	<b>Limits</b>					<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Ba Carrier	89.5		40 - 110					05/29/19 09:37	07/12/19 12:20	1
Y Carrier	82.6		40 - 110					05/29/19 09:37	07/12/19 12:20	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	-0.0650	U	0.373	0.373	5.00	0.669	pCi/L		08/01/19 08:05	1

# Client Sample Results

Client: Alabama Power General Test Laboratory  
 Project/Site: CCR Plant Gorgas

Job ID: 400-169112-1  
 SDG: Gorgas Ash Pond 1216

**Client Sample ID: AZ09858 MW-11**

**Lab Sample ID: 400-169112-7**

Date Collected: 04/16/19 15:38

Matrix: Water

Date Received: 04/22/19 17:15

**Method: 9315 - Radium-226 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.169		0.0881	0.0894	1.00	0.0990	pCi/L	05/29/19 08:36	07/31/19 13:13	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	93.5		40 - 110					05/29/19 08:36	07/31/19 13:13	1

**Method: 9320 - Radium-228 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.440	U	0.500	0.502	1.00	0.823	pCi/L	05/29/19 09:37	07/12/19 13:51	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	93.5		40 - 110					05/29/19 09:37	07/12/19 13:51	1
Y Carrier	85.2		40 - 110					05/29/19 09:37	07/12/19 13:51	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	0.609	U	0.508	0.510	5.00	0.823	pCi/L		08/01/19 08:05	1

# Client Sample Results

Client: Alabama Power General Test Laboratory  
 Project/Site: CCR Plant Gorgas

Job ID: 400-169112-1  
 SDG: Gorgas Ash Pond 1216

**Client Sample ID: AZ09859 MW-12**

**Lab Sample ID: 400-169112-8**

Date Collected: 04/16/19 17:14

Matrix: Water

Date Received: 04/22/19 17:15

**Method: 9315 - Radium-226 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.156		0.0994	0.100	1.00	0.135	pCi/L	05/29/19 08:36	07/31/19 13:13	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.7		40 - 110					05/29/19 08:36	07/31/19 13:13	1

**Method: 9320 - Radium-228 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0280	U	0.454	0.454	1.00	0.803	pCi/L	05/29/19 09:37	07/12/19 13:51	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.7		40 - 110					05/29/19 09:37	07/12/19 13:51	1
Y Carrier	79.6		40 - 110					05/29/19 09:37	07/12/19 13:51	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	0.184	U	0.465	0.465	5.00	0.803	pCi/L		08/01/19 08:05	1



# Client Sample Results

Client: Alabama Power General Test Laboratory  
 Project/Site: CCR Plant Gorgas

Job ID: 400-169112-1  
 SDG: Gorgas Ash Pond 1216

**Client Sample ID: AZ09860 MW-13**

**Lab Sample ID: 400-169112-9**

Date Collected: 04/16/19 18:11

Matrix: Water

Date Received: 04/22/19 17:15

**Method: 9315 - Radium-226 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0597	U	0.0796	0.0798	1.00	0.133	pCi/L	05/29/19 08:36	07/31/19 13:13	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	97.7		40 - 110					05/29/19 08:36	07/31/19 13:13	1

**Method: 9320 - Radium-228 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.447	U	0.445	0.447	1.00	0.723	pCi/L	05/29/19 09:37	07/12/19 13:51	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	97.7		40 - 110					05/29/19 09:37	07/12/19 13:51	1
Y Carrier	79.6		40 - 110					05/29/19 09:37	07/12/19 13:51	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	0.506	U	0.452	0.454	5.00	0.723	pCi/L		08/01/19 08:05	1

# Client Sample Results

Client: Alabama Power General Test Laboratory  
 Project/Site: CCR Plant Gorgas

Job ID: 400-169112-1  
 SDG: Gorgas Ash Pond 1216

**Client Sample ID: AZ09861 MW-14**

**Lab Sample ID: 400-169112-10**

Date Collected: 04/16/19 19:32

Matrix: Water

Date Received: 04/22/19 17:15

**Method: 9315 - Radium-226 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.108	U	0.0811	0.0817	1.00	0.113	pCi/L	05/29/19 08:36	07/31/19 13:14	1
<b>Carrier</b>	<b>%Yield</b>	<b>Qualifier</b>	<b>Limits</b>					<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Ba Carrier	90.7		40 - 110					05/29/19 08:36	07/31/19 13:14	1

**Method: 9320 - Radium-228 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.299	U	0.446	0.446	1.00	0.747	pCi/L	05/29/19 09:37	07/12/19 13:52	1
<b>Carrier</b>	<b>%Yield</b>	<b>Qualifier</b>	<b>Limits</b>					<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Ba Carrier	90.7		40 - 110					05/29/19 09:37	07/12/19 13:52	1
Y Carrier	86.7		40 - 110					05/29/19 09:37	07/12/19 13:52	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	0.408	U	0.453	0.453	5.00	0.747	pCi/L		08/01/19 08:05	1

# Client Sample Results

Client: Alabama Power General Test Laboratory  
 Project/Site: CCR Plant Gorgas

Job ID: 400-169112-1  
 SDG: Gorgas Ash Pond 1216

**Client Sample ID: AZ09862 MW-16D**

**Lab Sample ID: 400-169112-11**

Date Collected: 04/17/19 10:07

Matrix: Water

Date Received: 04/22/19 17:15

**Method: 9315 - Radium-226 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.102	U	0.0941	0.0945	1.00	0.144	pCi/L	05/29/19 08:36	07/31/19 13:11	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.5		40 - 110					05/29/19 08:36	07/31/19 13:11	1

**Method: 9320 - Radium-228 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0193	U	0.402	0.402	1.00	0.715	pCi/L	05/29/19 09:37	07/12/19 13:52	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.5		40 - 110					05/29/19 09:37	07/12/19 13:52	1
Y Carrier	83.7		40 - 110					05/29/19 09:37	07/12/19 13:52	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	0.121	U	0.413	0.413	5.00	0.715	pCi/L		08/01/19 08:05	1

# Client Sample Results

Client: Alabama Power General Test Laboratory  
 Project/Site: CCR Plant Gorgas

Job ID: 400-169112-1  
 SDG: Gorgas Ash Pond 1216

**Client Sample ID: AZ09863 MW-2**

**Lab Sample ID: 400-169112-12**

Date Collected: 04/17/19 13:25

Matrix: Water

Date Received: 04/22/19 17:15

**Method: 9315 - Radium-226 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0139	U	0.0578	0.0579	1.00	0.115	pCi/L	05/29/19 08:36	07/31/19 15:07	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.4		40 - 110					05/29/19 08:36	07/31/19 15:07	1

**Method: 9320 - Radium-228 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0766	U	0.381	0.381	1.00	0.671	pCi/L	05/29/19 09:37	07/12/19 13:52	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.4		40 - 110					05/29/19 09:37	07/12/19 13:52	1
Y Carrier	85.2		40 - 110					05/29/19 09:37	07/12/19 13:52	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	0.0905	U	0.385	0.385	5.00	0.671	pCi/L		08/01/19 08:05	1

# Client Sample Results

Client: Alabama Power General Test Laboratory  
 Project/Site: CCR Plant Gorgas

Job ID: 400-169112-1  
 SDG: Gorgas Ash Pond 1216

**Client Sample ID: AZ09864 MW-19**

**Lab Sample ID: 400-169112-13**

Date Collected: 04/17/19 14:34

Matrix: Water

Date Received: 04/22/19 17:15

**Method: 9315 - Radium-226 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.194		0.0954	0.0970	1.00	0.103	pCi/L	05/29/19 08:36	07/31/19 15:07	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.4		40 - 110					05/29/19 08:36	07/31/19 15:07	1

**Method: 9320 - Radium-228 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.312	U	0.405	0.406	1.00	0.673	pCi/L	05/29/19 09:37	07/12/19 13:52	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.4		40 - 110					05/29/19 09:37	07/12/19 13:52	1
Y Carrier	84.1		40 - 110					05/29/19 09:37	07/12/19 13:52	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	0.507	U	0.416	0.417	5.00	0.673	pCi/L		08/01/19 08:05	1

# Client Sample Results

Client: Alabama Power General Test Laboratory  
 Project/Site: CCR Plant Gorgas

Job ID: 400-169112-1  
 SDG: Gorgas Ash Pond 1216

**Client Sample ID: AZ09865 MW-18**

**Lab Sample ID: 400-169112-14**

Date Collected: 04/17/19 18:08

Matrix: Water

Date Received: 04/22/19 17:15

**Method: 9315 - Radium-226 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0901	U	0.0831	0.0835	1.00	0.128	pCi/L	05/29/19 08:36	07/31/19 15:07	1
<b>Carrier</b>	<b>%Yield</b>	<b>Qualifier</b>	<b>Limits</b>					<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Ba Carrier	97.5		40 - 110					05/29/19 08:36	07/31/19 15:07	1

**Method: 9320 - Radium-228 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.106	U	0.350	0.350	1.00	0.609	pCi/L	05/29/19 09:37	07/12/19 13:52	1
<b>Carrier</b>	<b>%Yield</b>	<b>Qualifier</b>	<b>Limits</b>					<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Ba Carrier	97.5		40 - 110					05/29/19 09:37	07/12/19 13:52	1
Y Carrier	89.0		40 - 110					05/29/19 09:37	07/12/19 13:52	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	0.360	0.360	5.00	0.609	pCi/L		08/01/19 08:05	1

# Client Sample Results

Client: Alabama Power General Test Laboratory  
 Project/Site: CCR Plant Gorgas

Job ID: 400-169112-1  
 SDG: Gorgas Ash Pond 1216

**Client Sample ID: AZ09866 MW-18-DUP**

**Lab Sample ID: 400-169112-15**

Date Collected: 04/17/19 18:08

Matrix: Water

Date Received: 04/22/19 17:15

**Method: 9315 - Radium-226 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0671	U	0.0801	0.0804	1.00	0.131	pCi/L	05/29/19 08:36	07/31/19 15:07	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	99.7		40 - 110					05/29/19 08:36	07/31/19 15:07	1

**Method: 9320 - Radium-228 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.186	U	0.364	0.364	1.00	0.620	pCi/L	05/29/19 09:37	07/12/19 13:52	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	99.7		40 - 110					05/29/19 09:37	07/12/19 13:52	1
Y Carrier	86.0		40 - 110					05/29/19 09:37	07/12/19 13:52	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	0.253	U	0.373	0.373	5.00	0.620	pCi/L		08/01/19 08:05	1

# Client Sample Results

Client: Alabama Power General Test Laboratory  
 Project/Site: CCR Plant Gorgas

Job ID: 400-169112-1  
 SDG: Gorgas Ash Pond 1216

**Client Sample ID: AZ09867 EB-1**

**Lab Sample ID: 400-169112-16**

Date Collected: 04/17/19 18:15

Matrix: Water

Date Received: 04/22/19 17:15

**Method: 9315 - Radium-226 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.0100	U	0.0665	0.0665	1.00	0.141	pCi/L	05/30/19 08:33	08/01/19 09:22	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.1		40 - 110					05/30/19 08:33	08/01/19 09:22	1

**Method: 9320 - Radium-228 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.277	U	0.355	0.356	1.00	0.590	pCi/L	05/30/19 10:03	07/16/19 12:35	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.1		40 - 110					05/30/19 10:03	07/16/19 12:35	1
Y Carrier	83.4		40 - 110					05/30/19 10:03	07/16/19 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	0.267	U	0.361	0.362	5.00	0.590	pCi/L		08/02/19 10:35	1



# Client Sample Results

Client: Alabama Power General Test Laboratory  
 Project/Site: CCR Plant Gorgas

Job ID: 400-169112-1  
 SDG: Gorgas Ash Pond 1216

**Client Sample ID: AZ09868 MW-17**

**Lab Sample ID: 400-169112-17**

Date Collected: 04/17/19 09:18

Matrix: Water

Date Received: 04/22/19 17:15

**Method: 9315 - Radium-226 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.000922	U	0.0612	0.0612	1.00	0.129	pCi/L	05/30/19 08:33	08/01/19 09:24	1
<b>Carrier</b>	<b>%Yield</b>	<b>Qualifier</b>	<b>Limits</b>					<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Ba Carrier	87.0		40 - 110					05/30/19 08:33	08/01/19 09:24	1

**Method: 9320 - Radium-228 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0103	U	0.371	0.371	1.00	0.660	pCi/L	05/30/19 10:03	07/16/19 12:35	1
<b>Carrier</b>	<b>%Yield</b>	<b>Qualifier</b>	<b>Limits</b>					<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Ba Carrier	87.0		40 - 110					05/30/19 10:03	07/16/19 12:35	1
Y Carrier	81.1		40 - 110					05/30/19 10:03	07/16/19 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	0.00935	U	0.376	0.376	5.00	0.660	pCi/L		08/02/19 10:35	1

# Client Sample Results

Client: Alabama Power General Test Laboratory  
 Project/Site: CCR Plant Gorgas

Job ID: 400-169112-1  
 SDG: Gorgas Ash Pond 1216

**Client Sample ID: AZ09869 MW-15**

**Lab Sample ID: 400-169112-18**

Date Collected: 04/17/19 13:27

Matrix: Water

Date Received: 04/22/19 17:15

**Method: 9315 - Radium-226 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0383	U	0.0633	0.0634	1.00	0.111	pCi/L	05/30/19 08:33	08/01/19 09:24	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	95.5		40 - 110					05/30/19 08:33	08/01/19 09:24	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	0.292	0.292	1.00	0.551	pCi/L	05/30/19 10:03	07/16/19 12:35	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	95.5		40 - 110					05/30/19 10:03	07/16/19 12:35	1
Y Carrier	82.2		40 - 110					05/30/19 10:03	07/16/19 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	-0.110	U	0.299	0.299	5.00	0.551	pCi/L		08/02/19 10:35	1

# Client Sample Results

Client: Alabama Power General Test Laboratory  
 Project/Site: CCR Plant Gorgas

Job ID: 400-169112-1  
 SDG: Gorgas Ash Pond 1216

**Client Sample ID: AZ09870 MW-21**

**Lab Sample ID: 400-169112-19**

Date Collected: 04/17/19 15:25

Matrix: Water

Date Received: 04/22/19 17:15

**Method: 9315 - Radium-226 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.248		0.125	0.127	1.00	0.152	pCi/L	05/30/19 08:33	08/01/19 09:26	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.4		40 - 110					05/30/19 08:33	08/01/19 09:26	1

**Method: 9320 - Radium-228 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.221	U	0.342	0.342	1.00	0.575	pCi/L	05/30/19 10:03	07/16/19 12:36	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.4		40 - 110					05/30/19 10:03	07/16/19 12:36	1
Y Carrier	84.5		40 - 110					05/30/19 10:03	07/16/19 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	0.470	U	0.364	0.365	5.00	0.575	pCi/L		08/02/19 10:35	1

# Client Sample Results

Client: Alabama Power General Test Laboratory  
 Project/Site: CCR Plant Gorgas

Job ID: 400-169112-1  
 SDG: Gorgas Ash Pond 1216

**Client Sample ID: AZ09871 FB-1**

**Lab Sample ID: 400-169112-20**

Date Collected: 04/17/19 16:00

Matrix: Water

Date Received: 04/22/19 17:15

**Method: 9315 - Radium-226 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.00715	U	0.0493	0.0493	1.00	0.104	pCi/L	05/30/19 08:33	08/01/19 11:22	1
<b>Carrier</b>	<b>%Yield</b>	<b>Qualifier</b>	<b>Limits</b>					<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Ba Carrier	90.4		40 - 110					05/30/19 08:33	08/01/19 11:22	1

**Method: 9320 - Radium-228 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.158	U	0.408	0.408	1.00	0.701	pCi/L	05/30/19 10:03	07/16/19 12:36	1
<b>Carrier</b>	<b>%Yield</b>	<b>Qualifier</b>	<b>Limits</b>					<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Ba Carrier	90.4		40 - 110					05/30/19 10:03	07/16/19 12:36	1
Y Carrier	76.6		40 - 110					05/30/19 10:03	07/16/19 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	0.165	U	0.411	0.411	5.00	0.701	pCi/L		08/02/19 10:35	1

# Client Sample Results

Client: Alabama Power General Test Laboratory  
 Project/Site: CCR Plant Gorgas

Job ID: 400-169112-1  
 SDG: Gorgas Ash Pond 1216

**Client Sample ID: AZ10374 MW-7**

**Lab Sample ID: 400-169112-21**

Date Collected: 04/23/19 10:37

Matrix: Water

Date Received: 04/29/19 15:30

**Method: 9315 - Radium-226 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
<b>Radium-226</b>	<b>0.208</b>		0.111	0.113	1.00	0.141	pCi/L	05/30/19 08:33	08/01/19 11:23	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.1		40 - 110					05/30/19 08:33	08/01/19 11:23	1

**Method: 9320 - Radium-228 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
<b>Radium-228</b>	<b>0.686</b>		0.359	0.365	1.00	0.525	pCi/L	05/30/19 10:03	07/16/19 12:36	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.1		40 - 110					05/30/19 10:03	07/16/19 12:36	1
Y Carrier	83.0		40 - 110					05/30/19 10:03	07/16/19 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
<b>Combined Radium 226 + 228</b>	<b>0.894</b>		0.376	0.382	5.00	0.525	pCi/L		08/02/19 10:35	1

# Client Sample Results

Client: Alabama Power General Test Laboratory  
 Project/Site: CCR Plant Gorgas

Job ID: 400-169112-1  
 SDG: Gorgas Ash Pond 1216

**Client Sample ID: AZ10375 MW-7 DISS**

**Lab Sample ID: 400-169112-22**

Date Collected: 04/23/19 10:37

Matrix: Water

Date Received: 04/29/19 15:30

**Method: 9315 - Radium-226 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.000864	U	0.0573	0.0573	1.00	0.121	pCi/L	05/30/19 08:33	08/01/19 11:23	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.4		40 - 110					05/30/19 08:33	08/01/19 11:23	1

**Method: 9320 - Radium-228 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0411	U	0.301	0.301	1.00	0.533	pCi/L	05/30/19 10:03	07/16/19 12:36	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.4		40 - 110					05/30/19 10:03	07/16/19 12:36	1
Y Carrier	89.7		40 - 110					05/30/19 10:03	07/16/19 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	0.0403	U	0.306	0.306	5.00	0.533	pCi/L		08/02/19 10:35	1

# Definitions/Glossary

Client: Alabama Power General Test Laboratory  
Project/Site: CCR Plant Gorgas

Job ID: 400-169112-1  
SDG: Gorgas Ash Pond 1216

## 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
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: 400-169112-1  
SDG: Gorgas Ash Pond 1216

## Client Sample ID: AZ09852 MW-6D

## Lab Sample ID: 400-169112-1

Date Collected: 04/16/19 10:41

Matrix: Water

Date Received: 04/22/19 17:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			430215	05/30/19 08:33	EJQ	TAL SL
Total/NA	Analysis	9315		1	437612	08/01/19 15:07	CDR	TAL SL
Total/NA	Prep	PrecSep_0			430233	05/30/19 10:03	EJQ	TAL SL
Total/NA	Analysis	9320		1	434918	07/16/19 12:41	CDR	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	437725	08/02/19 10:35	SMP	TAL SL

## Client Sample ID: AZ09853 MW-6D DUP

## Lab Sample ID: 400-169112-2

Date Collected: 04/16/19 10:41

Matrix: Water

Date Received: 04/22/19 17:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			430215	05/30/19 08:33	EJQ	TAL SL
Total/NA	Analysis	9315		1	437612	08/01/19 15:07	CDR	TAL SL
Total/NA	Prep	PrecSep_0			430233	05/30/19 10:03	EJQ	TAL SL
Total/NA	Analysis	9320		1	434918	07/16/19 12:41	CDR	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	437725	08/02/19 10:35	SMP	TAL SL

## Client Sample ID: AZ09854 MW-6S

## Lab Sample ID: 400-169112-3

Date Collected: 04/16/19 11:43

Matrix: Water

Date Received: 04/22/19 17:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			430108	05/29/19 08:36	EJQ	TAL SL
Total/NA	Analysis	9315		1	437243	07/31/19 10:15	CDR	TAL SL
Total/NA	Prep	PrecSep_0			430118	05/29/19 09:37	EJQ	TAL SL
Total/NA	Analysis	9320		1	434754	07/12/19 12:20	CDR	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	437438	08/01/19 08:05	SMP	TAL SL

## Client Sample ID: AZ09855 FB-2

## Lab Sample ID: 400-169112-4

Date Collected: 04/16/19 12:07

Matrix: Water

Date Received: 04/22/19 17:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			430108	05/29/19 08:36	EJQ	TAL SL
Total/NA	Analysis	9315		1	437386	07/31/19 10:15	CDR	TAL SL
Total/NA	Prep	PrecSep_0			430118	05/29/19 09:37	EJQ	TAL SL
Total/NA	Analysis	9320		1	434754	07/12/19 12:20	CDR	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	437438	08/01/19 08:05	SMP	TAL SL



# Lab Chronicle

Client: Alabama Power General Test Laboratory  
Project/Site: CCR Plant Gorgas

Job ID: 400-169112-1  
SDG: Gorgas Ash Pond 1216

**Client Sample ID: AZ09856 MW-8**

**Lab Sample ID: 400-169112-5**

**Date Collected: 04/16/19 12:58**

**Matrix: Water**

**Date Received: 04/22/19 17:15**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			430108	05/29/19 08:36	EJQ	TAL SL
Total/NA	Analysis	9315		1	437386	07/31/19 13:11	CDR	TAL SL
Total/NA	Prep	PrecSep_0			430118	05/29/19 09:37	EJQ	TAL SL
Total/NA	Analysis	9320		1	434754	07/12/19 12:20	CDR	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	437438	08/01/19 08:05	SMP	TAL SL

**Client Sample ID: AZ09857 MW-9**

**Lab Sample ID: 400-169112-6**

**Date Collected: 04/16/19 14:14**

**Matrix: Water**

**Date Received: 04/22/19 17:15**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			430108	05/29/19 08:36	EJQ	TAL SL
Total/NA	Analysis	9315		1	437243	07/31/19 13:13	CDR	TAL SL
Total/NA	Prep	PrecSep_0			430118	05/29/19 09:37	EJQ	TAL SL
Total/NA	Analysis	9320		1	434754	07/12/19 12:20	CDR	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	437438	08/01/19 08:05	SMP	TAL SL

**Client Sample ID: AZ09858 MW-11**

**Lab Sample ID: 400-169112-7**

**Date Collected: 04/16/19 15:38**

**Matrix: Water**

**Date Received: 04/22/19 17:15**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			430108	05/29/19 08:36	EJQ	TAL SL
Total/NA	Analysis	9315		1	437243	07/31/19 13:13	CDR	TAL SL
Total/NA	Prep	PrecSep_0			430118	05/29/19 09:37	EJQ	TAL SL
Total/NA	Analysis	9320		1	434752	07/12/19 13:51	CDR	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	437438	08/01/19 08:05	SMP	TAL SL

**Client Sample ID: AZ09859 MW-12**

**Lab Sample ID: 400-169112-8**

**Date Collected: 04/16/19 17:14**

**Matrix: Water**

**Date Received: 04/22/19 17:15**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			430108	05/29/19 08:36	EJQ	TAL SL
Total/NA	Analysis	9315		1	437243	07/31/19 13:13	CDR	TAL SL
Total/NA	Prep	PrecSep_0			430118	05/29/19 09:37	EJQ	TAL SL
Total/NA	Analysis	9320		1	434752	07/12/19 13:51	CDR	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	437438	08/01/19 08:05	SMP	TAL SL

# Lab Chronicle

Client: Alabama Power General Test Laboratory  
 Project/Site: CCR Plant Gorgas

Job ID: 400-169112-1  
 SDG: Gorgas Ash Pond 1216

## Client Sample ID: AZ09860 MW-13

## Lab Sample ID: 400-169112-9

Date Collected: 04/16/19 18:11

Matrix: Water

Date Received: 04/22/19 17:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			430108	05/29/19 08:36	EJQ	TAL SL
Total/NA	Analysis	9315		1	437243	07/31/19 13:13	CDR	TAL SL
Total/NA	Prep	PrecSep_0			430118	05/29/19 09:37	EJQ	TAL SL
Total/NA	Analysis	9320		1	434752	07/12/19 13:51	CDR	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	437438	08/01/19 08:05	SMP	TAL SL

## Client Sample ID: AZ09861 MW-14

## Lab Sample ID: 400-169112-10

Date Collected: 04/16/19 19:32

Matrix: Water

Date Received: 04/22/19 17:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			430108	05/29/19 08:36	EJQ	TAL SL
Total/NA	Analysis	9315		1	437243	07/31/19 13:14	CDR	TAL SL
Total/NA	Prep	PrecSep_0			430118	05/29/19 09:37	EJQ	TAL SL
Total/NA	Analysis	9320		1	434752	07/12/19 13:52	CDR	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	437438	08/01/19 08:05	SMP	TAL SL

## Client Sample ID: AZ09862 MW-16D

## Lab Sample ID: 400-169112-11

Date Collected: 04/17/19 10:07

Matrix: Water

Date Received: 04/22/19 17:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			430108	05/29/19 08:36	EJQ	TAL SL
Total/NA	Analysis	9315		1	437386	07/31/19 13:11	CDR	TAL SL
Total/NA	Prep	PrecSep_0			430118	05/29/19 09:37	EJQ	TAL SL
Total/NA	Analysis	9320		1	434752	07/12/19 13:52	CDR	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	437438	08/01/19 08:05	SMP	TAL SL

## Client Sample ID: AZ09863 MW-2

## Lab Sample ID: 400-169112-12

Date Collected: 04/17/19 13:25

Matrix: Water

Date Received: 04/22/19 17:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			430108	05/29/19 08:36	EJQ	TAL SL
Total/NA	Analysis	9315		1	437243	07/31/19 15:07	CDR	TAL SL
Total/NA	Prep	PrecSep_0			430118	05/29/19 09:37	EJQ	TAL SL
Total/NA	Analysis	9320		1	434752	07/12/19 13:52	CDR	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	437438	08/01/19 08:05	SMP	TAL SL

# Lab Chronicle

Client: Alabama Power General Test Laboratory  
Project/Site: CCR Plant Gorgas

Job ID: 400-169112-1  
SDG: Gorgas Ash Pond 1216

## Client Sample ID: AZ09864 MW-19

## Lab Sample ID: 400-169112-13

Date Collected: 04/17/19 14:34

Matrix: Water

Date Received: 04/22/19 17:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			430108	05/29/19 08:36	EJQ	TAL SL
Total/NA	Analysis	9315		1	437243	07/31/19 15:07	CDR	TAL SL
Total/NA	Prep	PrecSep_0			430118	05/29/19 09:37	EJQ	TAL SL
Total/NA	Analysis	9320		1	434752	07/12/19 13:52	CDR	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	437438	08/01/19 08:05	SMP	TAL SL

## Client Sample ID: AZ09865 MW-18

## Lab Sample ID: 400-169112-14

Date Collected: 04/17/19 18:08

Matrix: Water

Date Received: 04/22/19 17:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			430108	05/29/19 08:36	EJQ	TAL SL
Total/NA	Analysis	9315		1	437243	07/31/19 15:07	CDR	TAL SL
Total/NA	Prep	PrecSep_0			430118	05/29/19 09:37	EJQ	TAL SL
Total/NA	Analysis	9320		1	434752	07/12/19 13:52	CDR	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	437438	08/01/19 08:05	SMP	TAL SL

## Client Sample ID: AZ09866 MW-18-DUP

## Lab Sample ID: 400-169112-15

Date Collected: 04/17/19 18:08

Matrix: Water

Date Received: 04/22/19 17:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			430108	05/29/19 08:36	EJQ	TAL SL
Total/NA	Analysis	9315		1	437243	07/31/19 15:07	CDR	TAL SL
Total/NA	Prep	PrecSep_0			430118	05/29/19 09:37	EJQ	TAL SL
Total/NA	Analysis	9320		1	434752	07/12/19 13:52	CDR	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	437438	08/01/19 08:05	SMP	TAL SL

## Client Sample ID: AZ09867 EB-1

## Lab Sample ID: 400-169112-16

Date Collected: 04/17/19 18:15

Matrix: Water

Date Received: 04/22/19 17:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			430215	05/30/19 08:33	EJQ	TAL SL
Total/NA	Analysis	9315		1	437612	08/01/19 09:22	CDR	TAL SL
Total/NA	Prep	PrecSep_0			430233	05/30/19 10:03	EJQ	TAL SL
Total/NA	Analysis	9320		1	435022	07/16/19 12:35	CDR	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	437725	08/02/19 10:35	SMP	TAL SL

# Lab Chronicle

Client: Alabama Power General Test Laboratory  
 Project/Site: CCR Plant Gorgas

Job ID: 400-169112-1  
 SDG: Gorgas Ash Pond 1216

## Client Sample ID: AZ09868 MW-17

## Lab Sample ID: 400-169112-17

Date Collected: 04/17/19 09:18

Matrix: Water

Date Received: 04/22/19 17:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			430215	05/30/19 08:33	EJQ	TAL SL
Total/NA	Analysis	9315		1	437612	08/01/19 09:24	CDR	TAL SL
Total/NA	Prep	PrecSep_0			430233	05/30/19 10:03	EJQ	TAL SL
Total/NA	Analysis	9320		1	435022	07/16/19 12:35	CDR	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	437725	08/02/19 10:35	SMP	TAL SL

## Client Sample ID: AZ09869 MW-15

## Lab Sample ID: 400-169112-18

Date Collected: 04/17/19 13:27

Matrix: Water

Date Received: 04/22/19 17:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			430215	05/30/19 08:33	EJQ	TAL SL
Total/NA	Analysis	9315		1	437612	08/01/19 09:24	CDR	TAL SL
Total/NA	Prep	PrecSep_0			430233	05/30/19 10:03	EJQ	TAL SL
Total/NA	Analysis	9320		1	435022	07/16/19 12:35	CDR	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	437725	08/02/19 10:35	SMP	TAL SL

## Client Sample ID: AZ09870 MW-21

## Lab Sample ID: 400-169112-19

Date Collected: 04/17/19 15:25

Matrix: Water

Date Received: 04/22/19 17:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			430215	05/30/19 08:33	EJQ	TAL SL
Total/NA	Analysis	9315		1	437593	08/01/19 09:26	CDR	TAL SL
Total/NA	Prep	PrecSep_0			430233	05/30/19 10:03	EJQ	TAL SL
Total/NA	Analysis	9320		1	435022	07/16/19 12:36	CDR	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	437725	08/02/19 10:35	SMP	TAL SL

## Client Sample ID: AZ09871 FB-1

## Lab Sample ID: 400-169112-20

Date Collected: 04/17/19 16:00

Matrix: Water

Date Received: 04/22/19 17:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			430215	05/30/19 08:33	EJQ	TAL SL
Total/NA	Analysis	9315		1	437612	08/01/19 11:22	CDR	TAL SL
Total/NA	Prep	PrecSep_0			430233	05/30/19 10:03	EJQ	TAL SL
Total/NA	Analysis	9320		1	435022	07/16/19 12:36	CDR	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	437725	08/02/19 10:35	SMP	TAL SL

# Lab Chronicle

Client: Alabama Power General Test Laboratory  
 Project/Site: CCR Plant Gorgas

Job ID: 400-169112-1  
 SDG: Gorgas Ash Pond 1216

**Client Sample ID: AZ10374 MW-7**

**Lab Sample ID: 400-169112-21**

**Date Collected: 04/23/19 10:37**

**Matrix: Water**

**Date Received: 04/29/19 15:30**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			430215	05/30/19 08:33	EJQ	TAL SL
Total/NA	Analysis	9315		1	437612	08/01/19 11:23	CDR	TAL SL
Total/NA	Prep	PrecSep_0			430233	05/30/19 10:03	EJQ	TAL SL
Total/NA	Analysis	9320		1	435022	07/16/19 12:36	CDR	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	437725	08/02/19 10:35	SMP	TAL SL

**Client Sample ID: AZ10375 MW-7 DISS**

**Lab Sample ID: 400-169112-22**

**Date Collected: 04/23/19 10:37**

**Matrix: Water**

**Date Received: 04/29/19 15:30**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			430215	05/30/19 08:33	EJQ	TAL SL
Total/NA	Analysis	9315		1	437612	08/01/19 11:23	CDR	TAL SL
Total/NA	Prep	PrecSep_0			430233	05/30/19 10:03	EJQ	TAL SL
Total/NA	Analysis	9320		1	435022	07/16/19 12:36	CDR	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	437725	08/02/19 10:35	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: 400-169112-1  
 SDG: Gorgas Ash Pond 1216

## Rad

### Prep Batch: 430108

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-169112-3	AZ09854 MW-6S	Total/NA	Water	PrecSep-21	
400-169112-4	AZ09855 FB-2	Total/NA	Water	PrecSep-21	
400-169112-5	AZ09856 MW-8	Total/NA	Water	PrecSep-21	
400-169112-6	AZ09857 MW-9	Total/NA	Water	PrecSep-21	
400-169112-7	AZ09858 MW-11	Total/NA	Water	PrecSep-21	
400-169112-8	AZ09859 MW-12	Total/NA	Water	PrecSep-21	
400-169112-9	AZ09860 MW-13	Total/NA	Water	PrecSep-21	
400-169112-10	AZ09861 MW-14	Total/NA	Water	PrecSep-21	
400-169112-11	AZ09862 MW-16D	Total/NA	Water	PrecSep-21	
400-169112-12	AZ09863 MW-2	Total/NA	Water	PrecSep-21	
400-169112-13	AZ09864 MW-19	Total/NA	Water	PrecSep-21	
400-169112-14	AZ09865 MW-18	Total/NA	Water	PrecSep-21	
400-169112-15	AZ09866 MW-18-DUP	Total/NA	Water	PrecSep-21	
MB 160-430108/24-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-430108/1-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
400-169112-9 DU	AZ09860 MW-13	Total/NA	Water	PrecSep-21	

### Prep Batch: 430118

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-169112-3	AZ09854 MW-6S	Total/NA	Water	PrecSep_0	
400-169112-4	AZ09855 FB-2	Total/NA	Water	PrecSep_0	
400-169112-5	AZ09856 MW-8	Total/NA	Water	PrecSep_0	
400-169112-6	AZ09857 MW-9	Total/NA	Water	PrecSep_0	
400-169112-7	AZ09858 MW-11	Total/NA	Water	PrecSep_0	
400-169112-8	AZ09859 MW-12	Total/NA	Water	PrecSep_0	
400-169112-9	AZ09860 MW-13	Total/NA	Water	PrecSep_0	
400-169112-10	AZ09861 MW-14	Total/NA	Water	PrecSep_0	
400-169112-11	AZ09862 MW-16D	Total/NA	Water	PrecSep_0	
400-169112-12	AZ09863 MW-2	Total/NA	Water	PrecSep_0	
400-169112-13	AZ09864 MW-19	Total/NA	Water	PrecSep_0	
400-169112-14	AZ09865 MW-18	Total/NA	Water	PrecSep_0	
400-169112-15	AZ09866 MW-18-DUP	Total/NA	Water	PrecSep_0	
MB 160-430118/24-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-430118/1-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
400-169112-9 DU	AZ09860 MW-13	Total/NA	Water	PrecSep_0	

### Prep Batch: 430215

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-169112-1	AZ09852 MW-6D	Total/NA	Water	PrecSep-21	
400-169112-2	AZ09853 MW-6D DUP	Total/NA	Water	PrecSep-21	
400-169112-16	AZ09867 EB-1	Total/NA	Water	PrecSep-21	
400-169112-17	AZ09868 MW-17	Total/NA	Water	PrecSep-21	
400-169112-18	AZ09869 MW-15	Total/NA	Water	PrecSep-21	
400-169112-19	AZ09870 MW-21	Total/NA	Water	PrecSep-21	
400-169112-20	AZ09871 FB-1	Total/NA	Water	PrecSep-21	
400-169112-21	AZ10374 MW-7	Total/NA	Water	PrecSep-21	
400-169112-22	AZ10375 MW-7 DISS	Total/NA	Water	PrecSep-21	
MB 160-430215/24-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-430215/1-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
400-169314-B-2-B MS	Matrix Spike	Total/NA	Water	PrecSep-21	
400-169314-B-2-C MSD	Matrix Spike Duplicate	Total/NA	Water	PrecSep-21	

# QC Association Summary

Client: Alabama Power General Test Laboratory  
 Project/Site: CCR Plant Gorgas

Job ID: 400-169112-1  
 SDG: Gorgas Ash Pond 1216

## Rad (Continued)

### Prep Batch: 430215 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-169112-18 DU	AZ09869 MW-15	Total/NA	Water	PrecSep-21	

### Prep Batch: 430233

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-169112-1	AZ09852 MW-6D	Total/NA	Water	PrecSep_0	
400-169112-2	AZ09853 MW-6D DUP	Total/NA	Water	PrecSep_0	
400-169112-16	AZ09867 EB-1	Total/NA	Water	PrecSep_0	
400-169112-17	AZ09868 MW-17	Total/NA	Water	PrecSep_0	
400-169112-18	AZ09869 MW-15	Total/NA	Water	PrecSep_0	
400-169112-19	AZ09870 MW-21	Total/NA	Water	PrecSep_0	
400-169112-20	AZ09871 FB-1	Total/NA	Water	PrecSep_0	
400-169112-21	AZ10374 MW-7	Total/NA	Water	PrecSep_0	
400-169112-22	AZ10375 MW-7 DISS	Total/NA	Water	PrecSep_0	
MB 160-430233/24-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-430233/1-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
400-169314-B-2-H MS	Matrix Spike	Total/NA	Water	PrecSep_0	
400-169314-B-2-I MSD	Matrix Spike Duplicate	Total/NA	Water	PrecSep_0	
400-169112-18 DU	AZ09869 MW-15	Total/NA	Water	PrecSep_0	

# QC Sample Results

Client: Alabama Power General Test Laboratory  
 Project/Site: CCR Plant Gorgas

Job ID: 400-169112-1  
 SDG: Gorgas Ash Pond 1216

## Method: 9315 - Radium-226 (GFPC)

**Lab Sample ID: MB 160-430108/24-A**  
**Matrix: Water**  
**Analysis Batch: 437243**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 430108**

Analyte	MB MB		Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.007540	U	0.0581	0.0581	1.00	0.117	pCi/L	05/29/19 08:36	07/31/19 15:07	1
Carrier	MB MB		Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	%Yield	Qualifier	40 - 110					05/29/19 08:36	07/31/19 15:07	1
	95.8									

**Lab Sample ID: LCS 160-430108/1-A**  
**Matrix: Water**  
**Analysis Batch: 437243**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 430108**

Analyte	Spike Added	LCS Result	LCS Qual	Total	RL	MDC	Unit	%Rec	%Rec. Limits
				Uncert. (2σ+/-)					
Radium-226	15.1	12.95		1.34	1.00	0.119	pCi/L	86	75 - 125
Carrier	LCS	LCS	Limits						
Ba Carrier	%Yield	Qualifier	40 - 110						
	93.5								

**Lab Sample ID: 400-169112-9 DU**  
**Matrix: Water**  
**Analysis Batch: 437243**

**Client Sample ID: AZ09860 MW-13**  
**Prep Type: Total/NA**  
**Prep Batch: 430108**

Analyte	Sample Sample		DU	DU	Total	RL	MDC	Unit	RER	RER Limit
	Result	Qual	Result	Qual	Uncert. (2σ+/-)					
Radium-226	0.0597	U	0.09278	U	0.0803	1.00	0.119	pCi/L	0.21	1
Carrier	DU DU		Limits							
Ba Carrier	%Yield	Qualifier	40 - 110							
	93.8									

**Lab Sample ID: MB 160-430215/24-A**  
**Matrix: Water**  
**Analysis Batch: 437612**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 430215**

Analyte	MB MB		Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.02675	U	0.0459	0.0459	1.00	0.0816	pCi/L	05/30/19 08:33	08/01/19 17:57	1
Carrier	MB MB		Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	%Yield	Qualifier	40 - 110					05/30/19 08:33	08/01/19 17:57	1
	84.7									

**Lab Sample ID: LCS 160-430215/1-A**  
**Matrix: Water**  
**Analysis Batch: 437612**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 430215**

Analyte	Spike Added	LCS Result	LCS Qual	Total	RL	MDC	Unit	%Rec	%Rec. Limits
				Uncert. (2σ+/-)					
Radium-226	11.4	10.60		1.09	1.00	0.0757	pCi/L	93	75 - 125

Eurofins TestAmerica, Pensacola



# QC Sample Results

Client: Alabama Power General Test Laboratory  
Project/Site: CCR Plant Gorgas

Job ID: 400-169112-1  
SDG: Gorgas Ash Pond 1216

## Method: 9315 - Radium-226 (GFPC) (Continued)

Lab Sample ID: LCS 160-430215/1-A  
Matrix: Water  
Analysis Batch: 437612

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA  
Prep Batch: 430215

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	93.5		40 - 110

Lab Sample ID: 400-169314-B-2-B MS  
Matrix: Water  
Analysis Batch: 437612

Client Sample ID: Matrix Spike  
Prep Type: Total/NA  
Prep Batch: 430215

Analyte	Sample Result	Sample Qual	Spike Added	MS Result	MS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
												RER	Limit
Radium-226	0.00156	U	11.3	10.36		1.07	1.00	0.0875	pCi/L	91	75 - 138		
Carrier	MS %Yield	MS Qualifier	Limits										
Ba Carrier	89.5		40 - 110										

Lab Sample ID: 400-169314-B-2-C MSD  
Matrix: Water  
Analysis Batch: 437612

Client Sample ID: Matrix Spike Duplicate  
Prep Type: Total/NA  
Prep Batch: 430215

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	0.00156	U	11.3	9.524		1.00	1.00	0.0812	pCi/L	84	75 - 138	0.40	1
Carrier	MSD %Yield	MSD Qualifier	Limits										
Ba Carrier	85.3		40 - 110										

Lab Sample ID: 400-169112-18 DU  
Matrix: Water  
Analysis Batch: 437587

Client Sample ID: AZ09869 MW-15  
Prep Type: Total/NA  
Prep Batch: 430215

Analyte	Sample Result	Sample Qual	DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	RER	RER		
										RER	Limit	
Radium-226	0.0383	U	0.06625	U	0.0894	1.00	0.150	pCi/L	0.18		1	
Carrier	DU %Yield	DU Qualifier	Limits									
Ba Carrier	84.2		40 - 110									

## Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-430118/24-A  
Matrix: Water  
Analysis Batch: 434753

Client Sample ID: Method Blank  
Prep Type: Total/NA  
Prep Batch: 430118

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac	
											Radium-228
Carrier	MB %Yield	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac					
Ba Carrier	95.8		40 - 110	05/29/19 09:37	07/12/19 12:08	1					

Eurofins TestAmerica, Pensacola

# QC Sample Results

Client: Alabama Power General Test Laboratory  
 Project/Site: CCR Plant Gorgas

Job ID: 400-169112-1  
 SDG: Gorgas Ash Pond 1216

## Method: 9320 - Radium-228 (GFPC) (Continued)

**Lab Sample ID: MB 160-430118/24-A**  
**Matrix: Water**  
**Analysis Batch: 434753**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 430118**

Carrier	MB %Yield	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Y Carrier	83.0		40 - 110	05/29/19 09:37	07/12/19 12:08	1

**Lab Sample ID: LCS 160-430118/1-A**  
**Matrix: Water**  
**Analysis Batch: 434787**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 430118**

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits
Radium-228	12.0	11.80		1.41	1.00	0.511	pCi/L	98	75 - 125

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	93.5		40 - 110
Y Carrier	85.2		40 - 110

**Lab Sample ID: 400-169112-9 DU**  
**Matrix: Water**  
**Analysis Batch: 434752**

**Client Sample ID: AZ09860 MW-13**  
**Prep Type: Total/NA**  
**Prep Batch: 430118**

Analyte	Sample Result	Sample Qual	DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	RER	RER Limit
Radium-228	0.447	U	0.2326	U	0.423	1.00	0.715	pCi/L	0.25	1

Carrier	DU %Yield	DU Qualifier	Limits
Ba Carrier	93.8		40 - 110
Y Carrier	83.4		40 - 110

**Lab Sample ID: MB 160-430233/24-A**  
**Matrix: Water**  
**Analysis Batch: 435021**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 430233**

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.07299	U	0.288	0.288	1.00	0.524	pCi/L	05/30/19 10:03	07/16/19 12:32	1

Carrier	MB %Yield	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	84.7		40 - 110	05/30/19 10:03	07/16/19 12:32	1
Y Carrier	84.1		40 - 110	05/30/19 10:03	07/16/19 12:32	1

**Lab Sample ID: LCS 160-430233/1-A**  
**Matrix: Water**  
**Analysis Batch: 435022**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 430233**

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits
Radium-228	9.02	8.768		1.06	1.00	0.457	pCi/L	97	75 - 125

# QC Sample Results

Client: Alabama Power General Test Laboratory  
 Project/Site: CCR Plant Gorgas

Job ID: 400-169112-1  
 SDG: Gorgas Ash Pond 1216

## Method: 9320 - Radium-228 (GFPC) (Continued)

**Lab Sample ID: LCS 160-430233/1-A**  
**Matrix: Water**  
**Analysis Batch: 435022**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 430233**

Carrier	LCS		Limits
	%Yield	Qualifier	
Ba Carrier	93.5		40 - 110
Y Carrier	82.6		40 - 110

**Lab Sample ID: 400-169314-B-2-H MS**  
**Matrix: Water**  
**Analysis Batch: 435022**

**Client Sample ID: Matrix Spike**  
**Prep Type: Total/NA**  
**Prep Batch: 430233**

Analyte	Sample	Sample	Spike	MS	MS	Total	RL	MDC	Unit	%Rec	%Rec.	Limits
	Result	Qual		Result	Qual							
Radium-228	-0.0232	U	9.02	8.181		1.02	1.00	0.462	pCi/L	91	45 - 150	

Carrier	MS		Limits
	%Yield	Qualifier	
Ba Carrier	89.5		40 - 110
Y Carrier	84.9		40 - 110

**Lab Sample ID: 400-169314-B-2-I MSD**  
**Matrix: Water**  
**Analysis Batch: 435021**

**Client Sample ID: Matrix Spike Duplicate**  
**Prep Type: Total/NA**  
**Prep Batch: 430233**

Analyte	Sample	Sample	Spike	MSD	MSD	Total	RL	MDC	Unit	%Rec	%Rec.	Limits	RER	RER
	Result	Qual		Result	Qual								Uncert. (2σ+/-)	RER
Radium-228	-0.0232	U	9.01	9.256		1.12	1.00	0.491	pCi/L	103	45 - 150	0.50	1	

Carrier	MSD		Limits
	%Yield	Qualifier	
Ba Carrier	85.3		40 - 110
Y Carrier	86.7		40 - 110

**Lab Sample ID: 400-169112-18 DU**  
**Matrix: Water**  
**Analysis Batch: 435022**

**Client Sample ID: AZ09869 MW-15**  
**Prep Type: Total/NA**  
**Prep Batch: 430233**

Analyte	Sample	Sample	DU	DU	Total	RL	MDC	Unit	RER	RER	Limit
	Result	Qual		Result							
Radium-228	-0.148	U	0.3146	U	0.391	1.00	0.647	pCi/L	0.68	1	

Carrier	DU		Limits
	%Yield	Qualifier	
Ba Carrier	84.2		40 - 110
Y Carrier	75.9		40 - 110

# QC Sample Results

Client: Alabama Power General Test Laboratory  
 Project/Site: CCR Plant Gorgas

Job ID: 400-169112-1  
 SDG: Gorgas Ash Pond 1216

## Method: Ra226\_Ra228 - Combined Radium-226 and Radium-228

**Lab Sample ID: 400-169112-9 DU**  
**Matrix: Water**  
**Analysis Batch: 437438**

**Client Sample ID: AZ09860 MW-13**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qual	DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	RER	RER Limit
Combined Radium 226 + 228	0.506	U	0.3254	U	0.431	5.00	0.715	pCi/L	0.20	

**Lab Sample ID: 400-169112-18 DU**  
**Matrix: Water**  
**Analysis Batch: 437725**

**Client Sample ID: AZ09869 MW-15**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qual	DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	RER	RER Limit
Combined Radium 226 + 228	-0.110	U	0.3808	U	0.401	5.00	0.647	pCi/L	0.70	

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**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

<b>Client Information (Sub Contract Lab)</b>		Lab PM: Whitmire, Chyenne R		Carrier Tracking Note(s)	
Client Contact: Laura Miedorf		Phone: 904-444-1111		State of Origin: Alabama	
Company: Alabama Power General Test Laboratory		E-Mail: chyenne.whitmire@testamericainc.com		COC No: 400-56525-24537.1	
Address: 744 County Rd 87 GSCH8		City: Calera		Page: Page 1 of 2	
State, Zip: AL 35040		Phone: 205-664-6197		Job #:	
Email: lamiedorf@southernco.com		Project #:		Preservation Codes:	
CCR		SSOW#		M - Hexane N - None O - AsNaO2 P - Na2CO3 Q - Na2SO3 R - Na2S2O3 S - H2SO4 T - TSP Dodecahydrate U - Acetic Acid V - MCA W - pH 4-5 X - EDTA Y - EDA Z - other (specify)	
Site: Gorgas Ash Pond 1216		Due Date Requested:		Analysis Requested:	
		TAT Requested (days):		SM 4500 F.C	
		FO #:		SM 4500 CL.E	
		WO #:		SM 4500 S.O4.E	
		Project #:		9315_Ra226_9320_Ra228_Ra228Ra228_GFP	
		CCR		40007143	
		Site		400-169112 COC	
		Sample Date		Field Filtered Sample (Yes or No)	
		Sample Time		Perform MS/MSD (Yes or No)	
		Sample Type (C=comp, G=grab)		Preservation Code:	
		Matrix (Water, Solid, Onsite, LRT-Test, AM)		Special Instructions/Note:	
Sample Identification - Client ID (Lab ID)		Sample Date		Total Number of Containers	
AZ09852	4/16/19	10:41	G	Water	1 MW-6D
AZ09853	4/16/19	10:41	G	Water	1 MW-6D DUP (Sample Duplicate)
AZ09854	4/16/19	11:43	G	Water	1 MW-6S
AZ09855	4/16/19	12:07	G	Water	1 FB-2 (Field Blank)
AZ09856	4/16/19	12:58	G	Water	1 MW-8
AZ09857	4/16/19	14:14	G	Water	1 MW-9
AZ09858	4/16/19	15:38	G	Water	1 MW-11
AZ09859	4/16/19	17:14	G	Water	1 MW-12
AZ09860	4/16/19	18:11	G	Water	3 MW-13
AZ09861	4/16/19	19:32	G	Water	1 MW-14
AZ09862	4/17/19	10:07	G	Water	1 MW-16D
AZ09863	4/17/19	13:25	G	Water	1 MW-2
AZ09864	4/17/19	14:34	G	Water	1 MW-19
AZ09865	4/17/19	18:08	G	Water	1 MW-18
AZ09866	4/17/19	18:08	G	Water	1 MW-18 DUP (Sample Duplicate)
AZ09867	4/17/19	18:15	G	Water	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 our 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/test/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  
 Deliverable Requested: I, II, III, IV, Other (specify) \_\_\_\_\_  
 Primary Deliverable Bank: 2

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)  
 Return to Client  Disposal By Lab  Archive For \_\_\_\_\_ Months

**EmpoX Kit Relinquished by:** Laura Miedorf  
 Relinquished by: \_\_\_\_\_  
 Relinquished by: \_\_\_\_\_  
 Relinquished by: \_\_\_\_\_

**EmpoX Kit Relinquished by:** Laura Miedorf  
 Relinquished by: \_\_\_\_\_  
 Relinquished by: \_\_\_\_\_  
 Relinquished by: \_\_\_\_\_

Date: 04/16/2019 16:10  
 Date/Time: 4-22-19 17:15  
 Date/Time: \_\_\_\_\_  
 Date/Time: \_\_\_\_\_

Date: 04/16/2019 16:10  
 Date/Time: 4-22-19 17:15  
 Date/Time: \_\_\_\_\_  
 Date/Time: \_\_\_\_\_





TestAmerica Pensacola

3355 McLemore Drive  
Pensacola, FL 32514  
Phone: (850) 474-1001 Fax: (850) 478-2671

Chain of Custody Record



**Client Information (Sub Contract Lab)**

Sampler: Nick Pitts  
Client Contact: Laura Miskif  
Address: Alabama Power General Test Laboratory  
744 County Rd B7 GSC#8  
City: Callera  
State: AL  
PO #: 35040  
Phone: 205-564-6197  
Email: lnmiskif@southamerica.com  
Project Name: CCR  
Site: Gorgas Ash Pond 1216

Lab PI: Whitire, Chylene R  
E-Mail: chylene.whitire@testamerica.com

Carrier Tracking Note: 400-169112 COC

COC No: 400-56525-24537-1  
Page: Page 1 of 1  
Job #:

Preservation Codes:  
M - Hexane  
N - NaOH  
O - Na2O2  
P - Na2O4S  
Q - Na2SO3  
R - Na2SO4  
S - H2SO4  
T - TSP Dodecahydrate  
U - Acetone  
V - Water  
W - H2O2  
X - EDA  
Z - other (specify)

Analysis Re:  
915\_Ra228\_920\_Ra228\_Ra228Ra228\_GFPc

Sample ID (Lab ID)	Sample Date	Sample Time	Sample Type (C-comp, G-grab)	Matrix (Residue, Swab, Effluent, etc.)	Field Filtered Sample (Yes or No)	Performs MS/MSD (Yes or No)	SM 4500 F.C	SM 4500 C.E	SM 4500 SO4.E	X	X	Total Number of Containers	Special Instructions/Note:
AZ10374	4/23/19	10:37	G	Water						X	X	1	MN-7
AZ10375	4/23/19	10:37	G	Water						X	X	1	MN-7 Dics

Note: Since laboratory accreditation are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon our 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/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 accreditation are current to date, return the signed Chain of Custody attesting to said compliance to TestAmerica Laboratories, Inc.

Possible Hazard Identification  
Unconfirmed

Deliverable Requested: I, III, IV, Other (specify)  Primary Deliverable Rank: 2

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)  
 Return To Client  Disposal By Lab  Archive For \_\_\_\_\_ Months

Relinquished by: Laura Miskif  
Relinquished by: \_\_\_\_\_  
Relinquished by: \_\_\_\_\_

Relinquished by: \_\_\_\_\_  
Relinquished by: \_\_\_\_\_

Custody Seal Intact: \_\_\_\_\_ Custody Seal No.: \_\_\_\_\_

Date/Time: 04/23/2019 15:55  
Date/Time: \_\_\_\_\_  
Date/Time: \_\_\_\_\_

Water APC Company Company  
Water APC Company Company

Received by: \_\_\_\_\_  
Received by: \_\_\_\_\_

Date/Time: 4/29/19 15:30  
Date/Time: \_\_\_\_\_  
Date/Time: \_\_\_\_\_

Company: \_\_\_\_\_  
Company: \_\_\_\_\_  
Company: \_\_\_\_\_

Method of Shipment: \_\_\_\_\_  
Date/Time: \_\_\_\_\_

23.7°C  
MS

Ver: 09/20/2016

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13

## Login Sample Receipt Checklist

Client: Alabama Power General Test Laboratory

Job Number: 400-169112-1  
SDG Number: Gorgas Ash Pond 1216

**Login Number: 169112**

**List Source: Eurofins TestAmerica, Pensacola**

**List Number: 1**

**Creator: Shannon, Jonathon W**

Question	Answer	Comment
Radioactivity wasn't checked or is <math>\leq</math> 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	22.1°C, 21.8°C IR8
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 <math><6\text{mm}</math> (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: 400-169112-1  
SDG Number: Gorgas Ash Pond 1216

**Login Number: 169112**

**List Number: 2**

**Creator: Hellm, Michael**

**List Source: Eurofins TestAmerica, St. Louis**

**List Creation: 04/26/19 03:44 PM**

Question	Answer	Comment
Radioactivity wasn't checked or is <math>\leq</math> 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	18.0
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?	N/A	
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 <math><6\text{mm}</math> (1/4").	N/A	
Multiphasic samples are not present.	N/A	
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: 400-169112-1  
SDG Number: Gorgas Ash Pond 1216

**Login Number: 169112**

**List Number: 3**

**Creator: Hellm, Michael**

**List Source: Eurofins TestAmerica, St. Louis**

**List Creation: 05/02/19 12:45 PM**

Question	Answer	Comment
Radioactivity wasn't checked or is <math>\leq</math> 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	21.0
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?	N/A	
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 <math><6\text{mm}</math> (1/4").	N/A	
Multiphasic samples are not present.	N/A	
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: 400-169112-1  
 SDG: Gorgas Ash Pond 1216

## Laboratory: Eurofins TestAmerica, Pensacola

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
Alabama	State		40150	07-01-20
Alabama	State Program	4	40150	06-30-20
ANAB	ISO/IEC 17025		L2471	02-22-20
ANAB	ISO/IEC 17025		L2471	02-22-20
Arizona	State		AZ0710	01-12-20
Arizona	State Program	9	AZ0710	01-12-20
Arkansas DEQ	State Program	6	88-0689	09-01-19
California	State Program	9	2510	06-30-20
Florida	NELAP	4	E81010	06-30-20
Florida	NELAP		E81010	06-30-20
Georgia	State Program	4	E81010 (FL)	06-30-20
Illinois	NELAP	5	200041	10-09-19
Illinois	NELAP		004586	10-09-19
Iowa	State Program	7	367	08-01-20
Kansas	NELAP	7	E-10253	10-31-19
Kentucky (UST)	State Program	4	53	06-30-20
Kentucky (WW)	State Program	4	98030	12-31-19
Louisiana	NELAP	6	30976	06-30-20
Louisiana (DW)	NELAP	6	LA017	12-31-19
Maryland	State Program	3	233	09-30-20
Massachusetts	State Program	1	M-FL094	06-30-20
Michigan	State		9912	05-06-20
Michigan	State Program	5	9912	05-06-20
New Jersey	NELAP	2	FL006	06-30-20
New Jersey	NELAP		FL006	07-30-20
North Carolina (WW/SW)	State Program	4	314	12-31-19
Oklahoma	State		9810-186	08-31-19
Oklahoma	State Program	6	9810	08-31-19
Pennsylvania	NELAP	3	68-00467	01-31-20
Pennsylvania	NELAP		68-00467	01-31-20
Rhode Island	State Program	1	LAO00307	12-30-19
South Carolina	State Program	4	96026	06-30-19 *
Tennessee	State Program	4	TN02907	06-30-20
Texas	NELAP	6	T104704286-18-15	09-30-19
Texas	NELAP		T104704286	09-30-19
US Fish & Wildlife	Federal		LE058448-0	07-31-20
USDA	Federal		P330-18-00148	05-17-21
Virginia	NELAP	3	460166	06-14-20
Washington	State Program	10	C915	05-15-20

\* Accreditation/Certification renewal pending - accreditation/certification considered valid.

# Accreditation/Certification Summary

Client: Alabama Power General Test Laboratory  
 Project/Site: CCR Plant Gorgas

Job ID: 400-169112-1  
 SDG: Gorgas Ash Pond 1216

## 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	EPA Region	Identification Number	Expiration Date
ANAB	Dept. of Defense ELAP		L2305	04-06-22
ANAB	DoD		L2305	04-06-22
ANAB	DOE		L2305.01	04-06-22
Arizona	State		AZ0813	12-08-19
Arizona	State Program	9	AZ0813	12-08-19
California	State Program	9	2886	06-30-20
Connecticut	State Program	1	PH-0241	03-31-21
Florida	NELAP	4	E87689	06-30-20
Florida	NELAP		E87689	06-30-20
Hawaii	State Program	9	NA	06-30-19 *
Illinois	NELAP	5	200023	11-30-19
Illinois	NELAP		004553	11-30-19
Iowa	State Program	7	373	12-01-20
Kansas	NELAP	7	E-10236	10-31-19
Kentucky (DW)	State		KY90125	12-31-19
Kentucky (DW)	State Program	4	KY90125	12-31-19
Louisiana	NELAP	6	04080	06-30-20
Louisiana (DW)	NELAP	6	LA011	12-31-19
Louisiana (DW)	State		LA011	12-31-19
Maryland	State		310	09-30-20
Maryland	State Program	3	310	09-30-20
Michigan	State Program	5	9005	06-30-19 *
Missouri	State		780	06-30-22
Missouri	State Program	7	780	06-30-20
New Jersey	NELAP	2	MO002	06-30-20
New Jersey	NELAP		MO002	06-30-20
New York	NELAP	2	11616	03-31-20
New York	NELAP		11616	04-01-20
North Dakota	State Program	8	R207	06-30-20
NRC	NRC		24-24817-01	12-31-22
Oklahoma	State		9997	08-31-19
Oklahoma	State Program	6	9997	08-31-19 *
Pennsylvania	NELAP	3	68-00540	02-28-20
Pennsylvania	NELAP		68-00540	02-28-20
South Carolina	State Program	4	85002001	06-30-20
Texas	NELAP	6	T104704193-18-13	07-31-19 *
Texas	NELAP		T104704193-19-13	07-31-20
US Fish & Wildlife	Federal		058448	07-31-20
USDA	Federal		P330-17-0028	02-02-20
Utah	NELAP	8	MO000542018-10	07-31-19 *
Virginia	NELAP	3	460230	06-14-20
Virginia	NELAP		10310	06-14-20
Washington	State Program	10	C592	08-30-19
West Virginia DEP	State Program	3	381	08-31-19 *

\* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Eurofins TestAmerica, Pensacola

**Alabama Power Company  
Plant Gorgas Ash Pond**

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-11	4/16/2019 15:05	Conductivity	423.3	uS/cm
GS-AP-MW-11	4/16/2019 15:05	Depth to Water Detail	87.74	ft
GS-AP-MW-11	4/16/2019 15:05	DO	1.54	mg/L
GS-AP-MW-11	4/16/2019 15:05	Oxidation Reduction Potention	-32	mv
GS-AP-MW-11	4/16/2019 15:05	pH	7.05	pH
GS-AP-MW-11	4/16/2019 15:05	Temperature	19.83	C
GS-AP-MW-11	4/16/2019 15:05	Turbidity	4.77	NTU
GS-AP-MW-11	4/16/2019 15:10	Conductivity	418.2	uS/cm
GS-AP-MW-11	4/16/2019 15:10	Depth to Water Detail	88.06	ft
GS-AP-MW-11	4/16/2019 15:10	DO	0.9	mg/L
GS-AP-MW-11	4/16/2019 15:10	Oxidation Reduction Potention	-5.6	mv
GS-AP-MW-11	4/16/2019 15:10	pH	6.98	pH
GS-AP-MW-11	4/16/2019 15:10	Temperature	19.57	C
GS-AP-MW-11	4/16/2019 15:10	Turbidity	4.41	NTU
GS-AP-MW-11	4/16/2019 15:15	Conductivity	415.9	uS/cm
GS-AP-MW-11	4/16/2019 15:15	Depth to Water Detail	88.52	ft
GS-AP-MW-11	4/16/2019 15:15	DO	0.76	mg/L
GS-AP-MW-11	4/16/2019 15:15	Oxidation Reduction Potention	9.2	mv
GS-AP-MW-11	4/16/2019 15:15	pH	6.95	pH
GS-AP-MW-11	4/16/2019 15:15	Temperature	19.7	C
GS-AP-MW-11	4/16/2019 15:15	Turbidity	2.84	NTU
GS-AP-MW-11	4/16/2019 15:20	Conductivity	414.7	uS/cm
GS-AP-MW-11	4/16/2019 15:20	Depth to Water Detail	88.79	ft
GS-AP-MW-11	4/16/2019 15:20	DO	0.7	mg/L
GS-AP-MW-11	4/16/2019 15:20	Oxidation Reduction Potention	15.7	mv
GS-AP-MW-11	4/16/2019 15:20	pH	6.94	pH
GS-AP-MW-11	4/16/2019 15:20	Temperature	19.69	C
GS-AP-MW-11	4/16/2019 15:20	Turbidity	3.07	NTU
GS-AP-MW-11	4/16/2019 15:25	Conductivity	414.8	uS/cm
GS-AP-MW-11	4/16/2019 15:25	Depth to Water Detail	89.02	ft
GS-AP-MW-11	4/16/2019 15:25	DO	0.67	mg/L
GS-AP-MW-11	4/16/2019 15:25	Oxidation Reduction Potention	20.4	mv
GS-AP-MW-11	4/16/2019 15:25	pH	6.94	pH
GS-AP-MW-11	4/16/2019 15:25	Temperature	19.68	C
GS-AP-MW-11	4/16/2019 15:25	Turbidity	2.79	NTU
GS-AP-MW-11	4/16/2019 15:30	Conductivity	415.2	uS/cm
GS-AP-MW-11	4/16/2019 15:30	Depth to Water Detail	89.2	ft
GS-AP-MW-11	4/16/2019 15:30	DO	0.66	mg/L
GS-AP-MW-11	4/16/2019 15:30	Oxidation Reduction Potention	22.8	mv
GS-AP-MW-11	4/16/2019 15:30	pH	6.93	pH
GS-AP-MW-11	4/16/2019 15:30	Temperature	19.52	C
GS-AP-MW-11	4/16/2019 15:30	Turbidity	3.37	NTU
GS-AP-MW-11	4/16/2019 15:35	Conductivity	414.4	uS/cm
GS-AP-MW-11	4/16/2019 15:35	Depth to Water Detail	89.25	ft

**Alabama Power Company  
Plant Gorgas Ash Pond**

<b>WELL ID</b>	<b>READING TIME</b>	<b>DESCRIPTION</b>	<b>VALUE</b>	<b>UNIT</b>
GS-AP-MW-11	4/16/2019 15:35	DO	0.66	mg/L
GS-AP-MW-11	4/16/2019 15:35	Oxidation Reduction Potention	21.7	mv
GS-AP-MW-11	4/16/2019 15:35	pH	6.93	pH
GS-AP-MW-11	4/16/2019 15:35	Temperature	19.66	C
GS-AP-MW-11	4/16/2019 15:35	Turbidity	2.81	NTU

**Alabama Power Company  
Plant Gorgas Ash Pond**

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-12	4/16/2019 16:37	Conductivity	358.1	uS/cm
GS-AP-MW-12	4/16/2019 16:37	Depth to Water Detail	76.11	ft
GS-AP-MW-12	4/16/2019 16:37	DO	0.68	mg/L
GS-AP-MW-12	4/16/2019 16:37	Oxidation Reduction Potention	-107.8	mv
GS-AP-MW-12	4/16/2019 16:37	pH	7.4	pH
GS-AP-MW-12	4/16/2019 16:37	Temperature	20.5	C
GS-AP-MW-12	4/16/2019 16:37	Turbidity	1.53	NTU
GS-AP-MW-12	4/16/2019 16:42	Conductivity	359.1	uS/cm
GS-AP-MW-12	4/16/2019 16:42	Depth to Water Detail	76.25	ft
GS-AP-MW-12	4/16/2019 16:42	DO	0.63	mg/L
GS-AP-MW-12	4/16/2019 16:42	Oxidation Reduction Potention	-106	mv
GS-AP-MW-12	4/16/2019 16:42	pH	7.42	pH
GS-AP-MW-12	4/16/2019 16:42	Temperature	19.92	C
GS-AP-MW-12	4/16/2019 16:42	Turbidity	1.35	NTU
GS-AP-MW-12	4/16/2019 16:47	Conductivity	359.1	uS/cm
GS-AP-MW-12	4/16/2019 16:47	Depth to Water Detail	76.44	ft
GS-AP-MW-12	4/16/2019 16:47	DO	0.62	mg/L
GS-AP-MW-12	4/16/2019 16:47	Oxidation Reduction Potention	-103.1	mv
GS-AP-MW-12	4/16/2019 16:47	pH	7.42	pH
GS-AP-MW-12	4/16/2019 16:47	Temperature	19.75	C
GS-AP-MW-12	4/16/2019 16:47	Turbidity	1.35	NTU
GS-AP-MW-12	4/16/2019 16:52	Conductivity	358.7	uS/cm
GS-AP-MW-12	4/16/2019 16:52	Depth to Water Detail	76.6	ft
GS-AP-MW-12	4/16/2019 16:52	DO	0.62	mg/L
GS-AP-MW-12	4/16/2019 16:52	Oxidation Reduction Potention	-100.4	mv
GS-AP-MW-12	4/16/2019 16:52	pH	7.43	pH
GS-AP-MW-12	4/16/2019 16:52	Temperature	19.35	C
GS-AP-MW-12	4/16/2019 16:52	Turbidity	1.23	NTU
GS-AP-MW-12	4/16/2019 16:57	Conductivity	359.2	uS/cm
GS-AP-MW-12	4/16/2019 16:57	Depth to Water Detail	76.79	ft
GS-AP-MW-12	4/16/2019 16:57	DO	0.64	mg/L
GS-AP-MW-12	4/16/2019 16:57	Oxidation Reduction Potention	-102.3	mv
GS-AP-MW-12	4/16/2019 16:57	pH	7.42	pH
GS-AP-MW-12	4/16/2019 16:57	Temperature	19.3	C
GS-AP-MW-12	4/16/2019 16:57	Turbidity	1.17	NTU
GS-AP-MW-12	4/16/2019 17:02	Conductivity	358.2	uS/cm
GS-AP-MW-12	4/16/2019 17:02	Depth to Water Detail	76.9	ft
GS-AP-MW-12	4/16/2019 17:02	DO	0.66	mg/L
GS-AP-MW-12	4/16/2019 17:02	Oxidation Reduction Potention	-103.9	mv
GS-AP-MW-12	4/16/2019 17:02	pH	7.41	pH
GS-AP-MW-12	4/16/2019 17:02	Temperature	19.34	C
GS-AP-MW-12	4/16/2019 17:02	Turbidity	1.23	NTU
GS-AP-MW-12	4/16/2019 17:07	Conductivity	358	uS/cm
GS-AP-MW-12	4/16/2019 17:07	Depth to Water Detail	76.91	ft

**Alabama Power Company  
Plant Gorgas Ash Pond**

<b>WELL ID</b>	<b>READING TIME</b>	<b>DESCRIPTION</b>	<b>VALUE</b>	<b>UNIT</b>
GS-AP-MW-12	4/16/2019 17:07	DO	0.72	mg/L
GS-AP-MW-12	4/16/2019 17:07	Oxidation Reduction Potention	-104.3	mv
GS-AP-MW-12	4/16/2019 17:07	pH	7.41	pH
GS-AP-MW-12	4/16/2019 17:07	Temperature	19.57	C
GS-AP-MW-12	4/16/2019 17:07	Turbidity	1.27	NTU
GS-AP-MW-12	4/16/2019 17:12	Conductivity	357.9	uS/cm
GS-AP-MW-12	4/16/2019 17:12	Depth to Water Detail	76.91	ft
GS-AP-MW-12	4/16/2019 17:12	DO	0.74	mg/L
GS-AP-MW-12	4/16/2019 17:12	Oxidation Reduction Potention	-103.5	mv
GS-AP-MW-12	4/16/2019 17:12	pH	7.41	pH
GS-AP-MW-12	4/16/2019 17:12	Temperature	19.74	C
GS-AP-MW-12	4/16/2019 17:12	Turbidity	1.39	NTU



**Alabama Power Company  
Plant Gorgas Ash Pond**

<b>WELL ID</b>	<b>READING TIME</b>	<b>DESCRIPTION</b>	<b>VALUE</b>	<b>UNIT</b>
GS-AP-MW-13	4/16/2019 17:54	Conductivity	324	uS/cm
GS-AP-MW-13	4/16/2019 17:54	Depth to Water Detail	68.35	ft
GS-AP-MW-13	4/16/2019 17:54	DO	0.72	mg/L
GS-AP-MW-13	4/16/2019 17:54	Oxidation Reduction Potential	77.1	mv
GS-AP-MW-13	4/16/2019 17:54	pH	6.69	pH
GS-AP-MW-13	4/16/2019 17:54	Temperature	17.47	C
GS-AP-MW-13	4/16/2019 17:54	Turbidity	1.22	NTU
GS-AP-MW-13	4/16/2019 17:59	Conductivity	324.8	uS/cm
GS-AP-MW-13	4/16/2019 17:59	Depth to Water Detail	68.35	ft
GS-AP-MW-13	4/16/2019 17:59	DO	0.58	mg/L
GS-AP-MW-13	4/16/2019 17:59	Oxidation Reduction Potential	82	mv
GS-AP-MW-13	4/16/2019 17:59	pH	6.65	pH
GS-AP-MW-13	4/16/2019 17:59	Temperature	17.34	C
GS-AP-MW-13	4/16/2019 17:59	Turbidity	2.08	NTU
GS-AP-MW-13	4/16/2019 18:04	Conductivity	327.3	uS/cm
GS-AP-MW-13	4/16/2019 18:04	Depth to Water Detail	68.35	ft
GS-AP-MW-13	4/16/2019 18:04	DO	0.43	mg/L
GS-AP-MW-13	4/16/2019 18:04	Oxidation Reduction Potential	78.9	mv
GS-AP-MW-13	4/16/2019 18:04	pH	6.65	pH
GS-AP-MW-13	4/16/2019 18:04	Temperature	17.16	C
GS-AP-MW-13	4/16/2019 18:04	Turbidity	1.66	NTU
GS-AP-MW-13	4/16/2019 18:09	Conductivity	327.5	uS/cm
GS-AP-MW-13	4/16/2019 18:09	Depth to Water Detail	68.35	ft
GS-AP-MW-13	4/16/2019 18:09	DO	0.35	mg/L
GS-AP-MW-13	4/16/2019 18:09	Oxidation Reduction Potential	77.4	mv
GS-AP-MW-13	4/16/2019 18:09	pH	6.64	pH
GS-AP-MW-13	4/16/2019 18:09	Temperature	17.16	C
GS-AP-MW-13	4/16/2019 18:09	Turbidity	1.5	NTU

**Alabama Power Company  
Plant Gorgas Ash Pond**

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-14	4/16/2019 18:45	Conductivity	381.8	uS/cm
GS-AP-MW-14	4/16/2019 18:45	Depth to Water Detail	101.81	ft
GS-AP-MW-14	4/16/2019 18:45	DO	1.1	mg/L
GS-AP-MW-14	4/16/2019 18:45	Oxidation Reduction Potention	-84.3	mv
GS-AP-MW-14	4/16/2019 18:45	pH	7.15	pH
GS-AP-MW-14	4/16/2019 18:45	Temperature	17.79	C
GS-AP-MW-14	4/16/2019 18:45	Turbidity	1.56	NTU
GS-AP-MW-14	4/16/2019 18:50	Conductivity	408.4	uS/cm
GS-AP-MW-14	4/16/2019 18:50	Depth to Water Detail	102.42	ft
GS-AP-MW-14	4/16/2019 18:50	DO	0.5	mg/L
GS-AP-MW-14	4/16/2019 18:50	Oxidation Reduction Potention	-87	mv
GS-AP-MW-14	4/16/2019 18:50	pH	7.13	pH
GS-AP-MW-14	4/16/2019 18:50	Temperature	17.52	C
GS-AP-MW-14	4/16/2019 18:50	Turbidity	2.5	NTU
GS-AP-MW-14	4/16/2019 18:55	Conductivity	416	uS/cm
GS-AP-MW-14	4/16/2019 18:55	Depth to Water Detail	102.5	ft
GS-AP-MW-14	4/16/2019 18:55	DO	0.39	mg/L
GS-AP-MW-14	4/16/2019 18:55	Oxidation Reduction Potention	-102.3	mv
GS-AP-MW-14	4/16/2019 18:55	pH	7.14	pH
GS-AP-MW-14	4/16/2019 18:55	Temperature	17.42	C
GS-AP-MW-14	4/16/2019 18:55	Turbidity	2.54	NTU
GS-AP-MW-14	4/16/2019 19:00	Conductivity	415.1	uS/cm
GS-AP-MW-14	4/16/2019 19:00	Depth to Water Detail	102.9	ft
GS-AP-MW-14	4/16/2019 19:00	DO	0.35	mg/L
GS-AP-MW-14	4/16/2019 19:00	Oxidation Reduction Potention	-106.4	mv
GS-AP-MW-14	4/16/2019 19:00	pH	7.14	pH
GS-AP-MW-14	4/16/2019 19:00	Temperature	17.34	C
GS-AP-MW-14	4/16/2019 19:00	Turbidity	2.58	NTU
GS-AP-MW-14	4/16/2019 19:05	Conductivity	412.5	uS/cm
GS-AP-MW-14	4/16/2019 19:05	Depth to Water Detail	103.19	ft
GS-AP-MW-14	4/16/2019 19:05	DO	0.34	mg/L
GS-AP-MW-14	4/16/2019 19:05	Oxidation Reduction Potention	-103.7	mv
GS-AP-MW-14	4/16/2019 19:05	pH	7.13	pH
GS-AP-MW-14	4/16/2019 19:05	Temperature	17.25	C
GS-AP-MW-14	4/16/2019 19:05	Turbidity	2.41	NTU
GS-AP-MW-14	4/16/2019 19:10	Conductivity	408.9	uS/cm
GS-AP-MW-14	4/16/2019 19:10	Depth to Water Detail	103.39	ft
GS-AP-MW-14	4/16/2019 19:10	DO	0.33	mg/L
GS-AP-MW-14	4/16/2019 19:10	Oxidation Reduction Potention	-98.5	mv
GS-AP-MW-14	4/16/2019 19:10	pH	7.1	pH
GS-AP-MW-14	4/16/2019 19:10	Temperature	17.2	C
GS-AP-MW-14	4/16/2019 19:10	Turbidity	2.48	NTU
GS-AP-MW-14	4/16/2019 19:15	Conductivity	406.9	uS/cm
GS-AP-MW-14	4/16/2019 19:15	Depth to Water Detail	103.63	ft

**Alabama Power Company  
Plant Gorgas Ash Pond**

<b>WELL ID</b>	<b>READING TIME</b>	<b>DESCRIPTION</b>	<b>VALUE</b>	<b>UNIT</b>
GS-AP-MW-14	4/16/2019 19:15	DO	0.33	mg/L
GS-AP-MW-14	4/16/2019 19:15	Oxidation Reduction Potention	-94.6	mv
GS-AP-MW-14	4/16/2019 19:15	pH	7.08	pH
GS-AP-MW-14	4/16/2019 19:15	Temperature	17.16	C
GS-AP-MW-14	4/16/2019 19:15	Turbidity	2.4	NTU
GS-AP-MW-14	4/16/2019 19:20	Conductivity	403.8	uS/cm
GS-AP-MW-14	4/16/2019 19:20	Depth to Water Detail	103.79	ft
GS-AP-MW-14	4/16/2019 19:20	DO	0.34	mg/L
GS-AP-MW-14	4/16/2019 19:20	Oxidation Reduction Potention	-89.7	mv
GS-AP-MW-14	4/16/2019 19:20	pH	7.06	pH
GS-AP-MW-14	4/16/2019 19:20	Temperature	17.15	C
GS-AP-MW-14	4/16/2019 19:20	Turbidity	2.31	NTU
GS-AP-MW-14	4/16/2019 19:25	Conductivity	400.6	uS/cm
GS-AP-MW-14	4/16/2019 19:25	Depth to Water Detail	103.96	ft
GS-AP-MW-14	4/16/2019 19:25	DO	0.34	mg/L
GS-AP-MW-14	4/16/2019 19:25	Oxidation Reduction Potention	-83.7	mv
GS-AP-MW-14	4/16/2019 19:25	pH	7.04	pH
GS-AP-MW-14	4/16/2019 19:25	Temperature	17.1	C
GS-AP-MW-14	4/16/2019 19:25	Turbidity	1.84	NTU
GS-AP-MW-14	4/16/2019 19:30	Conductivity	398.8	uS/cm
GS-AP-MW-14	4/16/2019 19:30	Depth to Water Detail	104.09	ft
GS-AP-MW-14	4/16/2019 19:30	DO	0.36	mg/L
GS-AP-MW-14	4/16/2019 19:30	Oxidation Reduction Potention	-79.3	mv
GS-AP-MW-14	4/16/2019 19:30	pH	7.03	pH
GS-AP-MW-14	4/16/2019 19:30	Temperature	17.07	C
GS-AP-MW-14	4/16/2019 19:30	Turbidity	2.25	NTU

**Alabama Power Company  
Plant Gorgas Ash Pond**

<b>WELL ID</b>	<b>READING TIME</b>	<b>DESCRIPTION</b>	<b>VALUE</b>	<b>UNIT</b>
GS-AP-MW-15	4/17/2019 10:34	Conductivity	1574.2	uS/cm
GS-AP-MW-15	4/17/2019 10:34	Depth to Water Detail	82.83	ft
GS-AP-MW-15	4/17/2019 10:34	DO	0.56	mg/L
GS-AP-MW-15	4/17/2019 10:34	Oxidation Reduction Potention	-103.3	mv
GS-AP-MW-15	4/17/2019 10:34	pH	11.67	pH
GS-AP-MW-15	4/17/2019 10:34	Temperature	18.98	C
GS-AP-MW-15	4/17/2019 10:34	Turbidity	1.02	NTU
GS-AP-MW-15	4/17/2019 10:39	Conductivity	1661.7	uS/cm
GS-AP-MW-15	4/17/2019 10:39	Depth to Water Detail	83.64	ft
GS-AP-MW-15	4/17/2019 10:39	DO	0.49	mg/L
GS-AP-MW-15	4/17/2019 10:39	Oxidation Reduction Potention	-104.6	mv
GS-AP-MW-15	4/17/2019 10:39	pH	11.71	pH
GS-AP-MW-15	4/17/2019 10:39	Temperature	18.88	C
GS-AP-MW-15	4/17/2019 10:39	Turbidity	0.5	NTU
GS-AP-MW-15	4/17/2019 10:44	Conductivity	1668.1	uS/cm
GS-AP-MW-15	4/17/2019 10:44	Depth to Water Detail	84.24	ft
GS-AP-MW-15	4/17/2019 10:44	DO	0.46	mg/L
GS-AP-MW-15	4/17/2019 10:44	Oxidation Reduction Potention	-103.1	mv
GS-AP-MW-15	4/17/2019 10:44	pH	11.72	pH
GS-AP-MW-15	4/17/2019 10:44	Temperature	18.79	C
GS-AP-MW-15	4/17/2019 10:44	Turbidity	0.35	NTU
GS-AP-MW-15	4/17/2019 10:49	Conductivity	1672.3	uS/cm
GS-AP-MW-15	4/17/2019 10:49	Depth to Water Detail	84.92	ft
GS-AP-MW-15	4/17/2019 10:49	DO	0.46	mg/L
GS-AP-MW-15	4/17/2019 10:49	Oxidation Reduction Potention	-102.3	mv
GS-AP-MW-15	4/17/2019 10:49	pH	11.73	pH
GS-AP-MW-15	4/17/2019 10:49	Temperature	18.8	C
GS-AP-MW-15	4/17/2019 10:49	Turbidity	0.28	NTU
GS-AP-MW-15	4/17/2019 10:54	Conductivity	1668.4	uS/cm
GS-AP-MW-15	4/17/2019 10:54	Depth to Water Detail	85.62	ft
GS-AP-MW-15	4/17/2019 10:54	DO	0.47	mg/L
GS-AP-MW-15	4/17/2019 10:54	Oxidation Reduction Potention	-101.6	mv
GS-AP-MW-15	4/17/2019 10:54	pH	11.74	pH
GS-AP-MW-15	4/17/2019 10:54	Temperature	18.81	C
GS-AP-MW-15	4/17/2019 10:54	Turbidity	0.35	NTU
GS-AP-MW-15	4/17/2019 10:59	Conductivity	1665.4	uS/cm
GS-AP-MW-15	4/17/2019 10:59	Depth to Water Detail	86.06	ft
GS-AP-MW-15	4/17/2019 10:59	DO	0.47	mg/L
GS-AP-MW-15	4/17/2019 10:59	Oxidation Reduction Potention	-100.8	mv
GS-AP-MW-15	4/17/2019 10:59	pH	11.73	pH
GS-AP-MW-15	4/17/2019 10:59	Temperature	18.88	C
GS-AP-MW-15	4/17/2019 10:59	Turbidity	0.38	NTU
GS-AP-MW-15	4/17/2019 11:04	Conductivity	1663.9	uS/cm
GS-AP-MW-15	4/17/2019 11:04	Depth to Water Detail	86.56	ft

**Alabama Power Company  
Plant Gorgas Ash Pond**

<b>WELL ID</b>	<b>READING TIME</b>	<b>DESCRIPTION</b>	<b>VALUE</b>	<b>UNIT</b>
GS-AP-MW-15	4/17/2019 11:04	DO	0.49	mg/L
GS-AP-MW-15	4/17/2019 11:04	Oxidation Reduction Potention	-100.3	mv
GS-AP-MW-15	4/17/2019 11:04	pH	11.74	pH
GS-AP-MW-15	4/17/2019 11:04	Temperature	18.88	C
GS-AP-MW-15	4/17/2019 11:04	Turbidity	0.27	NTU
GS-AP-MW-15	4/17/2019 11:09	Conductivity	1651.9	uS/cm
GS-AP-MW-15	4/17/2019 11:09	Depth to Water Detail	87.1	ft
GS-AP-MW-15	4/17/2019 11:09	DO	0.49	mg/L
GS-AP-MW-15	4/17/2019 11:09	Oxidation Reduction Potention	-99.8	mv
GS-AP-MW-15	4/17/2019 11:09	pH	11.73	pH
GS-AP-MW-15	4/17/2019 11:09	Temperature	19.06	C
GS-AP-MW-15	4/17/2019 11:09	Turbidity	0.28	NTU
GS-AP-MW-15	4/17/2019 11:14	Conductivity	1636.7	uS/cm
GS-AP-MW-15	4/17/2019 11:14	Depth to Water Detail	87.52	ft
GS-AP-MW-15	4/17/2019 11:14	DO	0.5	mg/L
GS-AP-MW-15	4/17/2019 11:14	Oxidation Reduction Potention	-98.8	mv
GS-AP-MW-15	4/17/2019 11:14	pH	11.71	pH
GS-AP-MW-15	4/17/2019 11:14	Temperature	19.33	C
GS-AP-MW-15	4/17/2019 11:14	Turbidity	0.47	NTU
GS-AP-MW-15	4/17/2019 11:19	Conductivity	1633.5	uS/cm
GS-AP-MW-15	4/17/2019 11:19	Depth to Water Detail	87.85	ft
GS-AP-MW-15	4/17/2019 11:19	DO	0.5	mg/L
GS-AP-MW-15	4/17/2019 11:19	Oxidation Reduction Potention	-98.1	mv
GS-AP-MW-15	4/17/2019 11:19	pH	11.72	pH
GS-AP-MW-15	4/17/2019 11:19	Temperature	19.33	C
GS-AP-MW-15	4/17/2019 11:19	Turbidity	0.56	NTU
GS-AP-MW-15	4/17/2019 11:24	Conductivity	1617.6	uS/cm
GS-AP-MW-15	4/17/2019 11:24	Depth to Water Detail	88.16	ft
GS-AP-MW-15	4/17/2019 11:24	DO	0.5	mg/L
GS-AP-MW-15	4/17/2019 11:24	Oxidation Reduction Potention	-97.3	mv
GS-AP-MW-15	4/17/2019 11:24	pH	11.71	pH
GS-AP-MW-15	4/17/2019 11:24	Temperature	19.42	C
GS-AP-MW-15	4/17/2019 11:24	Turbidity	0.33	NTU
GS-AP-MW-15	4/17/2019 11:29	Conductivity	1599.7	uS/cm
GS-AP-MW-15	4/17/2019 11:29	Depth to Water Detail	88.46	ft
GS-AP-MW-15	4/17/2019 11:29	DO	0.53	mg/L
GS-AP-MW-15	4/17/2019 11:29	Oxidation Reduction Potention	-96.7	mv
GS-AP-MW-15	4/17/2019 11:29	pH	11.71	pH
GS-AP-MW-15	4/17/2019 11:29	Temperature	19.36	C
GS-AP-MW-15	4/17/2019 11:29	Turbidity	0.53	NTU
GS-AP-MW-15	4/17/2019 11:34	Conductivity	1586.5	uS/cm
GS-AP-MW-15	4/17/2019 11:34	Depth to Water Detail	88.73	ft
GS-AP-MW-15	4/17/2019 11:34	DO	0.53	mg/L
GS-AP-MW-15	4/17/2019 11:34	Oxidation Reduction Potention	-96.1	mv

**Alabama Power Company  
Plant Gorgas Ash Pond**

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-15	4/17/2019 11:34	pH	11.7	pH
GS-AP-MW-15	4/17/2019 11:34	Temperature	19.5	C
GS-AP-MW-15	4/17/2019 11:34	Turbidity	0.64	NTU
GS-AP-MW-15	4/17/2019 11:39	Conductivity	1552.7	uS/cm
GS-AP-MW-15	4/17/2019 11:39	Depth to Water Detail	88.96	ft
GS-AP-MW-15	4/17/2019 11:39	DO	0.55	mg/L
GS-AP-MW-15	4/17/2019 11:39	Oxidation Reduction Potention	-95.8	mv
GS-AP-MW-15	4/17/2019 11:39	pH	11.69	pH
GS-AP-MW-15	4/17/2019 11:39	Temperature	19.49	C
GS-AP-MW-15	4/17/2019 11:39	Turbidity	0.35	NTU
GS-AP-MW-15	4/17/2019 11:44	Conductivity	1534.5	uS/cm
GS-AP-MW-15	4/17/2019 11:44	Depth to Water Detail	89.2	ft
GS-AP-MW-15	4/17/2019 11:44	DO	0.53	mg/L
GS-AP-MW-15	4/17/2019 11:44	Oxidation Reduction Potention	-94.7	mv
GS-AP-MW-15	4/17/2019 11:44	pH	11.69	pH
GS-AP-MW-15	4/17/2019 11:44	Temperature	19.46	C
GS-AP-MW-15	4/17/2019 11:44	Turbidity	0.4	NTU
GS-AP-MW-15	4/17/2019 11:49	Conductivity	1516.2	uS/cm
GS-AP-MW-15	4/17/2019 11:49	Depth to Water Detail	89.44	ft
GS-AP-MW-15	4/17/2019 11:49	DO	0.54	mg/L
GS-AP-MW-15	4/17/2019 11:49	Oxidation Reduction Potention	-95	mv
GS-AP-MW-15	4/17/2019 11:49	pH	11.67	pH
GS-AP-MW-15	4/17/2019 11:49	Temperature	19.55	C
GS-AP-MW-15	4/17/2019 11:49	Turbidity	0.6	NTU
GS-AP-MW-15	4/17/2019 11:54	Conductivity	1458.5	uS/cm
GS-AP-MW-15	4/17/2019 11:54	Depth to Water Detail	89.58	ft
GS-AP-MW-15	4/17/2019 11:54	DO	0.55	mg/L
GS-AP-MW-15	4/17/2019 11:54	Oxidation Reduction Potention	-94.3	mv
GS-AP-MW-15	4/17/2019 11:54	pH	11.65	pH
GS-AP-MW-15	4/17/2019 11:54	Temperature	19.55	C
GS-AP-MW-15	4/17/2019 11:54	Turbidity	0.48	NTU
GS-AP-MW-15	4/17/2019 11:59	Conductivity	1396.4	uS/cm
GS-AP-MW-15	4/17/2019 11:59	Depth to Water Detail	89.75	ft
GS-AP-MW-15	4/17/2019 11:59	DO	0.55	mg/L
GS-AP-MW-15	4/17/2019 11:59	Oxidation Reduction Potention	-94.1	mv
GS-AP-MW-15	4/17/2019 11:59	pH	11.62	pH
GS-AP-MW-15	4/17/2019 11:59	Temperature	19.42	C
GS-AP-MW-15	4/17/2019 11:59	Turbidity	0.91	NTU
GS-AP-MW-15	4/17/2019 12:04	Conductivity	1323	uS/cm
GS-AP-MW-15	4/17/2019 12:04	Depth to Water Detail	90	ft
GS-AP-MW-15	4/17/2019 12:04	DO	0.54	mg/L
GS-AP-MW-15	4/17/2019 12:04	Oxidation Reduction Potention	-92.7	mv
GS-AP-MW-15	4/17/2019 12:04	pH	11.58	pH
GS-AP-MW-15	4/17/2019 12:04	Temperature	19.24	C

**Alabama Power Company  
Plant Gorgas Ash Pond**

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-15	4/17/2019 12:04	Turbidity	0.63	NTU
GS-AP-MW-15	4/17/2019 12:09	Conductivity	1282.5	uS/cm
GS-AP-MW-15	4/17/2019 12:09	Depth to Water Detail	90.17	ft
GS-AP-MW-15	4/17/2019 12:09	DO	0.55	mg/L
GS-AP-MW-15	4/17/2019 12:09	Oxidation Reduction Potention	-93.1	mv
GS-AP-MW-15	4/17/2019 12:09	pH	11.55	pH
GS-AP-MW-15	4/17/2019 12:09	Temperature	19.24	C
GS-AP-MW-15	4/17/2019 12:09	Turbidity	0.82	NTU
GS-AP-MW-15	4/17/2019 12:14	Conductivity	1225.6	uS/cm
GS-AP-MW-15	4/17/2019 12:14	Depth to Water Detail	90.29	ft
GS-AP-MW-15	4/17/2019 12:14	DO	0.56	mg/L
GS-AP-MW-15	4/17/2019 12:14	Oxidation Reduction Potention	-93.3	mv
GS-AP-MW-15	4/17/2019 12:14	pH	11.51	pH
GS-AP-MW-15	4/17/2019 12:14	Temperature	19.41	C
GS-AP-MW-15	4/17/2019 12:14	Turbidity	0.42	NTU
GS-AP-MW-15	4/17/2019 12:19	Conductivity	1176.1	uS/cm
GS-AP-MW-15	4/17/2019 12:19	Depth to Water Detail	90.42	ft
GS-AP-MW-15	4/17/2019 12:19	DO	0.56	mg/L
GS-AP-MW-15	4/17/2019 12:19	Oxidation Reduction Potention	-93.8	mv
GS-AP-MW-15	4/17/2019 12:19	pH	11.45	pH
GS-AP-MW-15	4/17/2019 12:19	Temperature	19.55	C
GS-AP-MW-15	4/17/2019 12:19	Turbidity	0.63	NTU
GS-AP-MW-15	4/17/2019 12:24	Conductivity	1136.4	uS/cm
GS-AP-MW-15	4/17/2019 12:24	Depth to Water Detail	90.56	ft
GS-AP-MW-15	4/17/2019 12:24	DO	0.56	mg/L
GS-AP-MW-15	4/17/2019 12:24	Oxidation Reduction Potention	-93	mv
GS-AP-MW-15	4/17/2019 12:24	pH	11.43	pH
GS-AP-MW-15	4/17/2019 12:24	Temperature	19.57	C
GS-AP-MW-15	4/17/2019 12:24	Turbidity	0.49	NTU
GS-AP-MW-15	4/17/2019 12:29	Conductivity	1081.7	uS/cm
GS-AP-MW-15	4/17/2019 12:29	Depth to Water Detail	90.66	ft
GS-AP-MW-15	4/17/2019 12:29	DO	0.57	mg/L
GS-AP-MW-15	4/17/2019 12:29	Oxidation Reduction Potention	-92.5	mv
GS-AP-MW-15	4/17/2019 12:29	pH	11.38	pH
GS-AP-MW-15	4/17/2019 12:29	Temperature	19.5	C
GS-AP-MW-15	4/17/2019 12:29	Turbidity	0.73	NTU
GS-AP-MW-15	4/17/2019 12:34	Conductivity	1024.8	uS/cm
GS-AP-MW-15	4/17/2019 12:34	Depth to Water Detail	90.79	ft
GS-AP-MW-15	4/17/2019 12:34	DO	0.56	mg/L
GS-AP-MW-15	4/17/2019 12:34	Oxidation Reduction Potention	-92	mv
GS-AP-MW-15	4/17/2019 12:34	pH	11.33	pH
GS-AP-MW-15	4/17/2019 12:34	Temperature	19.33	C
GS-AP-MW-15	4/17/2019 12:34	Turbidity	0.48	NTU
GS-AP-MW-15	4/17/2019 12:39	Conductivity	974.7	uS/cm

**Alabama Power Company  
Plant Gorgas Ash Pond**

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-15	4/17/2019 12:39	Depth to Water Detail	90.85	ft
GS-AP-MW-15	4/17/2019 12:39	DO	0.56	mg/L
GS-AP-MW-15	4/17/2019 12:39	Oxidation Reduction Potention	-91.7	mv
GS-AP-MW-15	4/17/2019 12:39	pH	11.26	pH
GS-AP-MW-15	4/17/2019 12:39	Temperature	19.08	C
GS-AP-MW-15	4/17/2019 12:39	Turbidity	0.77	NTU
GS-AP-MW-15	4/17/2019 12:45	Conductivity	926.1	uS/cm
GS-AP-MW-15	4/17/2019 12:45	Depth to Water Detail	90.99	ft
GS-AP-MW-15	4/17/2019 12:45	DO	0.56	mg/L
GS-AP-MW-15	4/17/2019 12:45	Oxidation Reduction Potention	-92	mv
GS-AP-MW-15	4/17/2019 12:45	pH	11.2	pH
GS-AP-MW-15	4/17/2019 12:45	Temperature	19.04	C
GS-AP-MW-15	4/17/2019 12:45	Turbidity	0.81	NTU
GS-AP-MW-15	4/17/2019 12:50	Conductivity	895.1	uS/cm
GS-AP-MW-15	4/17/2019 12:50	Depth to Water Detail	91.09	ft
GS-AP-MW-15	4/17/2019 12:50	DO	0.56	mg/L
GS-AP-MW-15	4/17/2019 12:50	Oxidation Reduction Potention	-92.4	mv
GS-AP-MW-15	4/17/2019 12:50	pH	11.16	pH
GS-AP-MW-15	4/17/2019 12:50	Temperature	19.17	C
GS-AP-MW-15	4/17/2019 12:50	Turbidity	0.31	NTU
GS-AP-MW-15	4/17/2019 12:55	Conductivity	860.7	uS/cm
GS-AP-MW-15	4/17/2019 12:55	Depth to Water Detail	91.25	ft
GS-AP-MW-15	4/17/2019 12:55	DO	0.56	mg/L
GS-AP-MW-15	4/17/2019 12:55	Oxidation Reduction Potention	-91.8	mv
GS-AP-MW-15	4/17/2019 12:55	pH	11.09	pH
GS-AP-MW-15	4/17/2019 12:55	Temperature	19.06	C
GS-AP-MW-15	4/17/2019 12:55	Turbidity	0.34	NTU
GS-AP-MW-15	4/17/2019 13:00	Conductivity	828.6	uS/cm
GS-AP-MW-15	4/17/2019 13:00	Depth to Water Detail	91.35	ft
GS-AP-MW-15	4/17/2019 13:00	DO	0.56	mg/L
GS-AP-MW-15	4/17/2019 13:00	Oxidation Reduction Potention	-92.3	mv
GS-AP-MW-15	4/17/2019 13:00	pH	11.03	pH
GS-AP-MW-15	4/17/2019 13:00	Temperature	18.99	C
GS-AP-MW-15	4/17/2019 13:00	Turbidity	0.53	NTU
GS-AP-MW-15	4/17/2019 13:05	Conductivity	798.1	uS/cm
GS-AP-MW-15	4/17/2019 13:05	Depth to Water Detail	91.4	ft
GS-AP-MW-15	4/17/2019 13:05	DO	0.56	mg/L
GS-AP-MW-15	4/17/2019 13:05	Oxidation Reduction Potention	-91.8	mv
GS-AP-MW-15	4/17/2019 13:05	pH	10.96	pH
GS-AP-MW-15	4/17/2019 13:05	Temperature	19.1	C
GS-AP-MW-15	4/17/2019 13:05	Turbidity	0.72	NTU
GS-AP-MW-15	4/17/2019 13:10	Conductivity	772.3	uS/cm
GS-AP-MW-15	4/17/2019 13:10	Depth to Water Detail	91.47	ft
GS-AP-MW-15	4/17/2019 13:10	DO	0.56	mg/L



**Alabama Power Company  
Plant Gorgas Ash Pond**

<b>WELL ID</b>	<b>READING TIME</b>	<b>DESCRIPTION</b>	<b>VALUE</b>	<b>UNIT</b>
GS-AP-MW-15	4/17/2019 13:10	Oxidation Reduction Potention	-91.3	mv
GS-AP-MW-15	4/17/2019 13:10	pH	10.9	pH
GS-AP-MW-15	4/17/2019 13:10	Temperature	19.04	C
GS-AP-MW-15	4/17/2019 13:10	Turbidity	0.5	NTU
GS-AP-MW-15	4/17/2019 13:15	Conductivity	752	uS/cm
GS-AP-MW-15	4/17/2019 13:15	Depth to Water Detail	91.53	ft
GS-AP-MW-15	4/17/2019 13:15	DO	0.55	mg/L
GS-AP-MW-15	4/17/2019 13:15	Oxidation Reduction Potention	-91.2	mv
GS-AP-MW-15	4/17/2019 13:15	pH	10.85	pH
GS-AP-MW-15	4/17/2019 13:15	Temperature	19.07	C
GS-AP-MW-15	4/17/2019 13:15	Turbidity	0.56	NTU
GS-AP-MW-15	4/17/2019 13:20	Conductivity	732.7	uS/cm
GS-AP-MW-15	4/17/2019 13:20	Depth to Water Detail	91.59	ft
GS-AP-MW-15	4/17/2019 13:20	DO	0.55	mg/L
GS-AP-MW-15	4/17/2019 13:20	Oxidation Reduction Potention	-92.9	mv
GS-AP-MW-15	4/17/2019 13:20	pH	10.8	pH
GS-AP-MW-15	4/17/2019 13:20	Temperature	18.97	C
GS-AP-MW-15	4/17/2019 13:20	Turbidity	0.54	NTU
GS-AP-MW-15	4/17/2019 13:25	Conductivity	717.5	uS/cm
GS-AP-MW-15	4/17/2019 13:25	Depth to Water Detail	91.71	ft
GS-AP-MW-15	4/17/2019 13:25	DO	0.55	mg/L
GS-AP-MW-15	4/17/2019 13:25	Oxidation Reduction Potention	-90.7	mv
GS-AP-MW-15	4/17/2019 13:25	pH	10.76	pH
GS-AP-MW-15	4/17/2019 13:25	Temperature	18.91	C
GS-AP-MW-15	4/17/2019 13:25	Turbidity	0.88	NTU

**Alabama Power Company  
Plant Gorgas Ash Pond**

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-16D	4/17/2019 9:35	Conductivity	355.7	uS/cm
GS-AP-MW-16D	4/17/2019 9:35	Depth to Water Detail	137.37	ft
GS-AP-MW-16D	4/17/2019 9:35	DO	5	mg/L
GS-AP-MW-16D	4/17/2019 9:35	Oxidation Reduction Potention	-25.9	mv
GS-AP-MW-16D	4/17/2019 9:35	pH	7.02	pH
GS-AP-MW-16D	4/17/2019 9:35	Temperature	17.84	C
GS-AP-MW-16D	4/17/2019 9:35	Turbidity	1.56	NTU
GS-AP-MW-16D	4/17/2019 9:40	Conductivity	358.2	uS/cm
GS-AP-MW-16D	4/17/2019 9:40	Depth to Water Detail	137.7	ft
GS-AP-MW-16D	4/17/2019 9:40	DO	1.72	mg/L
GS-AP-MW-16D	4/17/2019 9:40	Oxidation Reduction Potention	-51.6	mv
GS-AP-MW-16D	4/17/2019 9:40	pH	7.17	pH
GS-AP-MW-16D	4/17/2019 9:40	Temperature	17.91	C
GS-AP-MW-16D	4/17/2019 9:40	Turbidity	1.32	NTU
GS-AP-MW-16D	4/17/2019 9:45	Conductivity	359	uS/cm
GS-AP-MW-16D	4/17/2019 9:45	Depth to Water Detail	137.92	ft
GS-AP-MW-16D	4/17/2019 9:45	DO	0.78	mg/L
GS-AP-MW-16D	4/17/2019 9:45	Oxidation Reduction Potention	-58.6	mv
GS-AP-MW-16D	4/17/2019 9:45	pH	7.26	pH
GS-AP-MW-16D	4/17/2019 9:45	Temperature	17.96	C
GS-AP-MW-16D	4/17/2019 9:45	Turbidity	1.26	NTU
GS-AP-MW-16D	4/17/2019 9:50	Conductivity	359.7	uS/cm
GS-AP-MW-16D	4/17/2019 9:50	Depth to Water Detail	138.13	ft
GS-AP-MW-16D	4/17/2019 9:50	DO	0.59	mg/L
GS-AP-MW-16D	4/17/2019 9:50	Oxidation Reduction Potention	-60.6	mv
GS-AP-MW-16D	4/17/2019 9:50	pH	7.29	pH
GS-AP-MW-16D	4/17/2019 9:50	Temperature	18.07	C
GS-AP-MW-16D	4/17/2019 9:50	Turbidity	1.31	NTU
GS-AP-MW-16D	4/17/2019 9:55	Conductivity	359	uS/cm
GS-AP-MW-16D	4/17/2019 9:55	Depth to Water Detail	138.29	ft
GS-AP-MW-16D	4/17/2019 9:55	DO	0.52	mg/L
GS-AP-MW-16D	4/17/2019 9:55	Oxidation Reduction Potention	-61.1	mv
GS-AP-MW-16D	4/17/2019 9:55	pH	7.31	pH
GS-AP-MW-16D	4/17/2019 9:55	Temperature	18.04	C
GS-AP-MW-16D	4/17/2019 9:55	Turbidity	1.3	NTU
GS-AP-MW-16D	4/17/2019 10:00	Conductivity	360.3	uS/cm
GS-AP-MW-16D	4/17/2019 10:00	Depth to Water Detail	138.42	ft
GS-AP-MW-16D	4/17/2019 10:00	DO	0.52	mg/L
GS-AP-MW-16D	4/17/2019 10:00	Oxidation Reduction Potention	-61.2	mv
GS-AP-MW-16D	4/17/2019 10:00	pH	7.32	pH
GS-AP-MW-16D	4/17/2019 10:00	Temperature	18.15	C
GS-AP-MW-16D	4/17/2019 10:00	Turbidity	1.12	NTU
GS-AP-MW-16D	4/17/2019 10:05	Conductivity	359.8	uS/cm
GS-AP-MW-16D	4/17/2019 10:05	Depth to Water Detail	138.49	ft

**Alabama Power Company  
Plant Gorgas Ash Pond**

<b>WELL ID</b>	<b>READING TIME</b>	<b>DESCRIPTION</b>	<b>VALUE</b>	<b>UNIT</b>
GS-AP-MW-16D	4/17/2019 10:05	DO	0.52	mg/L
GS-AP-MW-16D	4/17/2019 10:05	Oxidation Reduction Potention	-60.6	mv
GS-AP-MW-16D	4/17/2019 10:05	pH	7.33	pH
GS-AP-MW-16D	4/17/2019 10:05	Temperature	18.24	C
GS-AP-MW-16D	4/17/2019 10:05	Turbidity	1.15	NTU

**Alabama Power Company  
Plant Gorgas Ash Pond**

<b>WELL ID</b>	<b>READING TIME</b>	<b>DESCRIPTION</b>	<b>VALUE</b>	<b>UNIT</b>
GS-AP-MW-17	4/17/2019 8:51	Conductivity	753.9	uS/cm
GS-AP-MW-17	4/17/2019 8:51	Depth to Water Detail	172.09	ft
GS-AP-MW-17	4/17/2019 8:51	DO	3.58	mg/L
GS-AP-MW-17	4/17/2019 8:51	Oxidation Reduction Potention	-89.3	mv
GS-AP-MW-17	4/17/2019 8:51	pH	7.74	pH
GS-AP-MW-17	4/17/2019 8:51	Temperature	17.16	C
GS-AP-MW-17	4/17/2019 8:51	Turbidity	10.09	NTU
GS-AP-MW-17	4/17/2019 8:56	Conductivity	860.1	uS/cm
GS-AP-MW-17	4/17/2019 8:56	Depth to Water Detail	172.09	ft
GS-AP-MW-17	4/17/2019 8:56	DO	1.61	mg/L
GS-AP-MW-17	4/17/2019 8:56	Oxidation Reduction Potention	-114.8	mv
GS-AP-MW-17	4/17/2019 8:56	pH	7.95	pH
GS-AP-MW-17	4/17/2019 8:56	Temperature	17.1	C
GS-AP-MW-17	4/17/2019 8:56	Turbidity	22.6	NTU
GS-AP-MW-17	4/17/2019 9:01	Conductivity	957.2	uS/cm
GS-AP-MW-17	4/17/2019 9:01	Depth to Water Detail	172.15	ft
GS-AP-MW-17	4/17/2019 9:01	DO	0.95	mg/L
GS-AP-MW-17	4/17/2019 9:01	Oxidation Reduction Potention	-110.3	mv
GS-AP-MW-17	4/17/2019 9:01	pH	8.15	pH
GS-AP-MW-17	4/17/2019 9:01	Temperature	17	C
GS-AP-MW-17	4/17/2019 9:01	Turbidity	16.1	NTU
GS-AP-MW-17	4/17/2019 9:06	Conductivity	1028.1	uS/cm
GS-AP-MW-17	4/17/2019 9:06	Depth to Water Detail	172.18	ft
GS-AP-MW-17	4/17/2019 9:06	DO	0.49	mg/L
GS-AP-MW-17	4/17/2019 9:06	Oxidation Reduction Potention	-107.5	mv
GS-AP-MW-17	4/17/2019 9:06	pH	8.3	pH
GS-AP-MW-17	4/17/2019 9:06	Temperature	17.05	C
GS-AP-MW-17	4/17/2019 9:06	Turbidity	12.4	NTU
GS-AP-MW-17	4/17/2019 9:11	Conductivity	1030.1	uS/cm
GS-AP-MW-17	4/17/2019 9:11	Depth to Water Detail	172.22	ft
GS-AP-MW-17	4/17/2019 9:11	DO	0.34	mg/L
GS-AP-MW-17	4/17/2019 9:11	Oxidation Reduction Potention	-108.2	mv
GS-AP-MW-17	4/17/2019 9:11	pH	8.34	pH
GS-AP-MW-17	4/17/2019 9:11	Temperature	17.05	C
GS-AP-MW-17	4/17/2019 9:11	Turbidity	11.6	NTU
GS-AP-MW-17	4/17/2019 9:16	Conductivity	1009	uS/cm
GS-AP-MW-17	4/17/2019 9:16	Depth to Water Detail	172.28	ft
GS-AP-MW-17	4/17/2019 9:16	DO	0.3	mg/L
GS-AP-MW-17	4/17/2019 9:16	Oxidation Reduction Potention	-113.4	mv
GS-AP-MW-17	4/17/2019 9:16	pH	8.36	pH
GS-AP-MW-17	4/17/2019 9:16	Temperature	17.01	C
GS-AP-MW-17	4/17/2019 9:16	Turbidity	7.67	NTU

**Alabama Power Company  
Plant Gorgas Ash Pond**

<b>WELL ID</b>	<b>READING TIME</b>	<b>DESCRIPTION</b>	<b>VALUE</b>	<b>UNIT</b>
GS-AP-MW-18	4/17/2019 15:15	Conductivity	515.4	uS/cm
GS-AP-MW-18	4/17/2019 15:15	Depth to Water Detail	52.1	ft
GS-AP-MW-18	4/17/2019 15:15	DO	0.15	mg/L
GS-AP-MW-18	4/17/2019 15:15	Oxidation Reduction Potention	-84	mv
GS-AP-MW-18	4/17/2019 15:15	pH	7.21	pH
GS-AP-MW-18	4/17/2019 15:15	Temperature	16.98	C
GS-AP-MW-18	4/17/2019 15:15	Turbidity	39.8	NTU
GS-AP-MW-18	4/17/2019 15:20	Conductivity	515.8	uS/cm
GS-AP-MW-18	4/17/2019 15:20	Depth to Water Detail	53.3	ft
GS-AP-MW-18	4/17/2019 15:20	DO	0.15	mg/L
GS-AP-MW-18	4/17/2019 15:20	Oxidation Reduction Potention	-81.6	mv
GS-AP-MW-18	4/17/2019 15:20	pH	7.2	pH
GS-AP-MW-18	4/17/2019 15:20	Temperature	17.01	C
GS-AP-MW-18	4/17/2019 15:20	Turbidity	33.7	NTU
GS-AP-MW-18	4/17/2019 15:25	Conductivity	518	uS/cm
GS-AP-MW-18	4/17/2019 15:25	Depth to Water Detail	56.3	ft
GS-AP-MW-18	4/17/2019 15:25	DO	0.15	mg/L
GS-AP-MW-18	4/17/2019 15:25	Oxidation Reduction Potention	-86.9	mv
GS-AP-MW-18	4/17/2019 15:25	pH	7.24	pH
GS-AP-MW-18	4/17/2019 15:25	Temperature	16.89	C
GS-AP-MW-18	4/17/2019 15:25	Turbidity	33.1	NTU
GS-AP-MW-18	4/17/2019 15:30	Conductivity	520.8	uS/cm
GS-AP-MW-18	4/17/2019 15:30	Depth to Water Detail	57.85	ft
GS-AP-MW-18	4/17/2019 15:30	DO	0.14	mg/L
GS-AP-MW-18	4/17/2019 15:30	Oxidation Reduction Potention	-91.6	mv
GS-AP-MW-18	4/17/2019 15:30	pH	7.26	pH
GS-AP-MW-18	4/17/2019 15:30	Temperature	16.88	C
GS-AP-MW-18	4/17/2019 15:30	Turbidity	49.7	NTU
GS-AP-MW-18	4/17/2019 15:35	Conductivity	524	uS/cm
GS-AP-MW-18	4/17/2019 15:35	Depth to Water Detail	59.45	ft
GS-AP-MW-18	4/17/2019 15:35	DO	0.14	mg/L
GS-AP-MW-18	4/17/2019 15:35	Oxidation Reduction Potention	-94.2	mv
GS-AP-MW-18	4/17/2019 15:35	pH	7.28	pH
GS-AP-MW-18	4/17/2019 15:35	Temperature	16.94	C
GS-AP-MW-18	4/17/2019 15:35	Turbidity	49.4	NTU
GS-AP-MW-18	4/17/2019 15:40	Conductivity	527.2	uS/cm
GS-AP-MW-18	4/17/2019 15:40	Depth to Water Detail	61.4	ft
GS-AP-MW-18	4/17/2019 15:40	DO	0.14	mg/L
GS-AP-MW-18	4/17/2019 15:40	Oxidation Reduction Potention	-94.6	mv
GS-AP-MW-18	4/17/2019 15:40	pH	7.29	pH
GS-AP-MW-18	4/17/2019 15:40	Temperature	16.91	C
GS-AP-MW-18	4/17/2019 15:40	Turbidity	44.3	NTU
GS-AP-MW-18	4/17/2019 15:45	Conductivity	530.6	uS/cm
GS-AP-MW-18	4/17/2019 15:45	Depth to Water Detail	62.53	ft

**Alabama Power Company  
Plant Gorgas Ash Pond**

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-18	4/17/2019 15:45	DO	0.15	mg/L
GS-AP-MW-18	4/17/2019 15:45	Oxidation Reduction Potention	-95.5	mv
GS-AP-MW-18	4/17/2019 15:45	pH	7.31	pH
GS-AP-MW-18	4/17/2019 15:45	Temperature	16.84	C
GS-AP-MW-18	4/17/2019 15:45	Turbidity	46.5	NTU
GS-AP-MW-18	4/17/2019 15:50	Conductivity	530	uS/cm
GS-AP-MW-18	4/17/2019 15:50	Depth to Water Detail	64.34	ft
GS-AP-MW-18	4/17/2019 15:50	DO	0.15	mg/L
GS-AP-MW-18	4/17/2019 15:50	Oxidation Reduction Potention	-95.6	mv
GS-AP-MW-18	4/17/2019 15:50	pH	7.31	pH
GS-AP-MW-18	4/17/2019 15:50	Temperature	16.83	C
GS-AP-MW-18	4/17/2019 15:50	Turbidity	31.4	NTU
GS-AP-MW-18	4/17/2019 15:55	Conductivity	532.8	uS/cm
GS-AP-MW-18	4/17/2019 15:55	Depth to Water Detail	65.73	ft
GS-AP-MW-18	4/17/2019 15:55	DO	0.15	mg/L
GS-AP-MW-18	4/17/2019 15:55	Oxidation Reduction Potention	-95.9	mv
GS-AP-MW-18	4/17/2019 15:55	pH	7.32	pH
GS-AP-MW-18	4/17/2019 15:55	Temperature	16.76	C
GS-AP-MW-18	4/17/2019 15:55	Turbidity	24.7	NTU
GS-AP-MW-18	4/17/2019 16:00	Conductivity	534.3	uS/cm
GS-AP-MW-18	4/17/2019 16:00	Depth to Water Detail	68.54	ft
GS-AP-MW-18	4/17/2019 16:00	DO	0.14	mg/L
GS-AP-MW-18	4/17/2019 16:00	Oxidation Reduction Potention	-95.6	mv
GS-AP-MW-18	4/17/2019 16:00	pH	7.33	pH
GS-AP-MW-18	4/17/2019 16:00	Temperature	16.71	C
GS-AP-MW-18	4/17/2019 16:00	Turbidity	50	NTU
GS-AP-MW-18	4/17/2019 16:05	Conductivity	537.5	uS/cm
GS-AP-MW-18	4/17/2019 16:05	Depth to Water Detail	68.73	ft
GS-AP-MW-18	4/17/2019 16:05	DO	0.14	mg/L
GS-AP-MW-18	4/17/2019 16:05	Oxidation Reduction Potention	-95.1	mv
GS-AP-MW-18	4/17/2019 16:05	pH	7.34	pH
GS-AP-MW-18	4/17/2019 16:05	Temperature	16.7	C
GS-AP-MW-18	4/17/2019 16:05	Turbidity	67	NTU
GS-AP-MW-18	4/17/2019 16:10	Conductivity	535.1	uS/cm
GS-AP-MW-18	4/17/2019 16:10	Depth to Water Detail	70.25	ft
GS-AP-MW-18	4/17/2019 16:10	DO	0.14	mg/L
GS-AP-MW-18	4/17/2019 16:10	Oxidation Reduction Potention	-94	mv
GS-AP-MW-18	4/17/2019 16:10	pH	7.35	pH
GS-AP-MW-18	4/17/2019 16:10	Temperature	16.69	C
GS-AP-MW-18	4/17/2019 16:10	Turbidity	64.1	NTU
GS-AP-MW-18	4/17/2019 16:15	Conductivity	537.2	uS/cm
GS-AP-MW-18	4/17/2019 16:15	Depth to Water Detail	71.53	ft
GS-AP-MW-18	4/17/2019 16:15	DO	0.14	mg/L
GS-AP-MW-18	4/17/2019 16:15	Oxidation Reduction Potention	-92.5	mv

**Alabama Power Company  
Plant Gorgas Ash Pond**

<b>WELL ID</b>	<b>READING TIME</b>	<b>DESCRIPTION</b>	<b>VALUE</b>	<b>UNIT</b>
GS-AP-MW-18	4/17/2019 16:15	pH	7.35	pH
GS-AP-MW-18	4/17/2019 16:15	Temperature	16.69	C
GS-AP-MW-18	4/17/2019 16:15	Turbidity	37.1	NTU
GS-AP-MW-18	4/17/2019 16:20	Conductivity	539.2	uS/cm
GS-AP-MW-18	4/17/2019 16:20	Depth to Water Detail	72.45	ft
GS-AP-MW-18	4/17/2019 16:20	DO	0.14	mg/L
GS-AP-MW-18	4/17/2019 16:20	Oxidation Reduction Potention	-91.7	mv
GS-AP-MW-18	4/17/2019 16:20	pH	7.36	pH
GS-AP-MW-18	4/17/2019 16:20	Temperature	16.67	C
GS-AP-MW-18	4/17/2019 16:20	Turbidity	31.1	NTU
GS-AP-MW-18	4/17/2019 16:25	Conductivity	541.5	uS/cm
GS-AP-MW-18	4/17/2019 16:25	Depth to Water Detail	73.55	ft
GS-AP-MW-18	4/17/2019 16:25	DO	0.14	mg/L
GS-AP-MW-18	4/17/2019 16:25	Oxidation Reduction Potention	-91.6	mv
GS-AP-MW-18	4/17/2019 16:25	pH	7.37	pH
GS-AP-MW-18	4/17/2019 16:25	Temperature	16.66	C
GS-AP-MW-18	4/17/2019 16:25	Turbidity	30	NTU
GS-AP-MW-18	4/17/2019 16:30	Conductivity	545.1	uS/cm
GS-AP-MW-18	4/17/2019 16:30	Depth to Water Detail	74.39	ft
GS-AP-MW-18	4/17/2019 16:30	DO	0.14	mg/L
GS-AP-MW-18	4/17/2019 16:30	Oxidation Reduction Potention	-91.8	mv
GS-AP-MW-18	4/17/2019 16:30	pH	7.38	pH
GS-AP-MW-18	4/17/2019 16:30	Temperature	16.64	C
GS-AP-MW-18	4/17/2019 16:30	Turbidity	36.8	NTU
GS-AP-MW-18	4/17/2019 16:35	Conductivity	545.6	uS/cm
GS-AP-MW-18	4/17/2019 16:35	Depth to Water Detail	75.72	ft
GS-AP-MW-18	4/17/2019 16:35	DO	0.14	mg/L
GS-AP-MW-18	4/17/2019 16:35	Oxidation Reduction Potention	-90.8	mv
GS-AP-MW-18	4/17/2019 16:35	pH	7.38	pH
GS-AP-MW-18	4/17/2019 16:35	Temperature	16.63	C
GS-AP-MW-18	4/17/2019 16:35	Turbidity	26.6	NTU
GS-AP-MW-18	4/17/2019 16:41	Conductivity	546.1	uS/cm
GS-AP-MW-18	4/17/2019 16:41	Depth to Water Detail	76.6	ft
GS-AP-MW-18	4/17/2019 16:41	DO	0.14	mg/L
GS-AP-MW-18	4/17/2019 16:41	Oxidation Reduction Potention	-90.6	mv
GS-AP-MW-18	4/17/2019 16:41	pH	7.39	pH
GS-AP-MW-18	4/17/2019 16:41	Temperature	16.63	C
GS-AP-MW-18	4/17/2019 16:41	Turbidity	21.5	NTU
GS-AP-MW-18	4/17/2019 16:46	Conductivity	548.6	uS/cm
GS-AP-MW-18	4/17/2019 16:46	Depth to Water Detail	77.6	ft
GS-AP-MW-18	4/17/2019 16:46	DO	0.14	mg/L
GS-AP-MW-18	4/17/2019 16:46	Oxidation Reduction Potention	-94.4	mv
GS-AP-MW-18	4/17/2019 16:46	pH	7.41	pH
GS-AP-MW-18	4/17/2019 16:46	Temperature	16.63	C

**Alabama Power Company  
Plant Gorgas Ash Pond**

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-18	4/17/2019 16:46	Turbidity	62	NTU
GS-AP-MW-18	4/17/2019 16:51	Conductivity	550.2	uS/cm
GS-AP-MW-18	4/17/2019 16:51	Depth to Water Detail	78.45	ft
GS-AP-MW-18	4/17/2019 16:51	DO	0.13	mg/L
GS-AP-MW-18	4/17/2019 16:51	Oxidation Reduction Potention	-92.9	mv
GS-AP-MW-18	4/17/2019 16:51	pH	7.42	pH
GS-AP-MW-18	4/17/2019 16:51	Temperature	16.64	C
GS-AP-MW-18	4/17/2019 16:51	Turbidity	56.1	NTU
GS-AP-MW-18	4/17/2019 16:56	Conductivity	552	uS/cm
GS-AP-MW-18	4/17/2019 16:56	Depth to Water Detail	78.56	ft
GS-AP-MW-18	4/17/2019 16:56	DO	0.14	mg/L
GS-AP-MW-18	4/17/2019 16:56	Oxidation Reduction Potention	-91.5	mv
GS-AP-MW-18	4/17/2019 16:56	pH	7.42	pH
GS-AP-MW-18	4/17/2019 16:56	Temperature	16.63	C
GS-AP-MW-18	4/17/2019 16:56	Turbidity	26.6	NTU
GS-AP-MW-18	4/17/2019 17:01	Conductivity	555	uS/cm
GS-AP-MW-18	4/17/2019 17:01	Depth to Water Detail	78.7	ft
GS-AP-MW-18	4/17/2019 17:01	DO	0.15	mg/L
GS-AP-MW-18	4/17/2019 17:01	Oxidation Reduction Potention	-93.5	mv
GS-AP-MW-18	4/17/2019 17:01	pH	7.43	pH
GS-AP-MW-18	4/17/2019 17:01	Temperature	16.62	C
GS-AP-MW-18	4/17/2019 17:01	Turbidity	42	NTU
GS-AP-MW-18	4/17/2019 17:06	Conductivity	557.6	uS/cm
GS-AP-MW-18	4/17/2019 17:06	Depth to Water Detail	78.7	ft
GS-AP-MW-18	4/17/2019 17:06	DO	0.15	mg/L
GS-AP-MW-18	4/17/2019 17:06	Oxidation Reduction Potention	-92.6	mv
GS-AP-MW-18	4/17/2019 17:06	pH	7.43	pH
GS-AP-MW-18	4/17/2019 17:06	Temperature	16.62	C
GS-AP-MW-18	4/17/2019 17:06	Turbidity	18.8	NTU
GS-AP-MW-18	4/17/2019 17:11	Conductivity	555.6	uS/cm
GS-AP-MW-18	4/17/2019 17:11	Depth to Water Detail	79.1	ft
GS-AP-MW-18	4/17/2019 17:11	DO	0.16	mg/L
GS-AP-MW-18	4/17/2019 17:11	Oxidation Reduction Potention	-93.1	mv
GS-AP-MW-18	4/17/2019 17:11	pH	7.43	pH
GS-AP-MW-18	4/17/2019 17:11	Temperature	16.61	C
GS-AP-MW-18	4/17/2019 17:11	Turbidity	13.9	NTU
GS-AP-MW-18	4/17/2019 17:16	Conductivity	560.7	uS/cm
GS-AP-MW-18	4/17/2019 17:16	Depth to Water Detail	79.31	ft
GS-AP-MW-18	4/17/2019 17:16	DO	0.21	mg/L
GS-AP-MW-18	4/17/2019 17:16	Oxidation Reduction Potention	-93.9	mv
GS-AP-MW-18	4/17/2019 17:16	pH	7.44	pH
GS-AP-MW-18	4/17/2019 17:16	Temperature	16.6	C
GS-AP-MW-18	4/17/2019 17:16	Turbidity	10.24	NTU
GS-AP-MW-18	4/17/2019 17:21	Conductivity	568.1	uS/cm



**Alabama Power Company  
Plant Gorgas Ash Pond**

<b>WELL ID</b>	<b>READING TIME</b>	<b>DESCRIPTION</b>	<b>VALUE</b>	<b>UNIT</b>
GS-AP-MW-18	4/17/2019 17:21	Depth to Water Detail	79.64	ft
GS-AP-MW-18	4/17/2019 17:21	DO	0.22	mg/L
GS-AP-MW-18	4/17/2019 17:21	Oxidation Reduction Potention	-97.3	mv
GS-AP-MW-18	4/17/2019 17:21	pH	7.46	pH
GS-AP-MW-18	4/17/2019 17:21	Temperature	16.58	C
GS-AP-MW-18	4/17/2019 17:21	Turbidity	17.2	NTU
GS-AP-MW-18	4/17/2019 17:26	Conductivity	571.9	uS/cm
GS-AP-MW-18	4/17/2019 17:26	Depth to Water Detail	79.45	ft
GS-AP-MW-18	4/17/2019 17:26	DO	0.33	mg/L
GS-AP-MW-18	4/17/2019 17:26	Oxidation Reduction Potention	-98.3	mv
GS-AP-MW-18	4/17/2019 17:26	pH	7.47	pH
GS-AP-MW-18	4/17/2019 17:26	Temperature	16.73	C
GS-AP-MW-18	4/17/2019 17:26	Turbidity	16.9	NTU
GS-AP-MW-18	4/17/2019 17:31	Conductivity	569.6	uS/cm
GS-AP-MW-18	4/17/2019 17:31	Depth to Water Detail	79.1	ft
GS-AP-MW-18	4/17/2019 17:31	DO	0.33	mg/L
GS-AP-MW-18	4/17/2019 17:31	Oxidation Reduction Potention	-101.2	mv
GS-AP-MW-18	4/17/2019 17:31	pH	7.49	pH
GS-AP-MW-18	4/17/2019 17:31	Temperature	16.71	C
GS-AP-MW-18	4/17/2019 17:31	Turbidity	54	NTU
GS-AP-MW-18	4/17/2019 17:36	Conductivity	568.9	uS/cm
GS-AP-MW-18	4/17/2019 17:36	Depth to Water Detail	78.55	ft
GS-AP-MW-18	4/17/2019 17:36	DO	0.3	mg/L
GS-AP-MW-18	4/17/2019 17:36	Oxidation Reduction Potention	-109	mv
GS-AP-MW-18	4/17/2019 17:36	pH	7.52	pH
GS-AP-MW-18	4/17/2019 17:36	Temperature	16.75	C
GS-AP-MW-18	4/17/2019 17:36	Turbidity	54.3	NTU
GS-AP-MW-18	4/17/2019 17:41	Conductivity	569.9	uS/cm
GS-AP-MW-18	4/17/2019 17:41	Depth to Water Detail	77.95	ft
GS-AP-MW-18	4/17/2019 17:41	DO	0.28	mg/L
GS-AP-MW-18	4/17/2019 17:41	Oxidation Reduction Potention	-114.2	mv
GS-AP-MW-18	4/17/2019 17:41	pH	7.55	pH
GS-AP-MW-18	4/17/2019 17:41	Temperature	16.76	C
GS-AP-MW-18	4/17/2019 17:41	Turbidity	40.5	NTU
GS-AP-MW-18	4/17/2019 17:46	Conductivity	570.4	uS/cm
GS-AP-MW-18	4/17/2019 17:46	Depth to Water Detail	77.05	ft
GS-AP-MW-18	4/17/2019 17:46	DO	0.27	mg/L
GS-AP-MW-18	4/17/2019 17:46	Oxidation Reduction Potention	-116.5	mv
GS-AP-MW-18	4/17/2019 17:46	pH	7.56	pH
GS-AP-MW-18	4/17/2019 17:46	Temperature	16.8	C
GS-AP-MW-18	4/17/2019 17:46	Turbidity	30.02	NTU
GS-AP-MW-18	4/17/2019 17:51	Conductivity	571.8	uS/cm
GS-AP-MW-18	4/17/2019 17:51	Depth to Water Detail	76.3	ft
GS-AP-MW-18	4/17/2019 17:51	DO	0.27	mg/L

**Alabama Power Company  
Plant Gorgas Ash Pond**

<b>WELL ID</b>	<b>READING TIME</b>	<b>DESCRIPTION</b>	<b>VALUE</b>	<b>UNIT</b>
GS-AP-MW-18	4/17/2019 17:51	Oxidation Reduction Potention	-118	mv
GS-AP-MW-18	4/17/2019 17:51	pH	7.57	pH
GS-AP-MW-18	4/17/2019 17:51	Temperature	16.81	C
GS-AP-MW-18	4/17/2019 17:51	Turbidity	22.4	NTU
GS-AP-MW-18	4/17/2019 17:56	Conductivity	573.8	uS/cm
GS-AP-MW-18	4/17/2019 17:56	Depth to Water Detail	75.7	ft
GS-AP-MW-18	4/17/2019 17:56	DO	0.27	mg/L
GS-AP-MW-18	4/17/2019 17:56	Oxidation Reduction Potention	-119.1	mv
GS-AP-MW-18	4/17/2019 17:56	pH	7.57	pH
GS-AP-MW-18	4/17/2019 17:56	Temperature	16.76	C
GS-AP-MW-18	4/17/2019 17:56	Turbidity	14.4	NTU
GS-AP-MW-18	4/17/2019 18:01	Conductivity	575.6	uS/cm
GS-AP-MW-18	4/17/2019 18:01	Depth to Water Detail	75.11	ft
GS-AP-MW-18	4/17/2019 18:01	DO	0.27	mg/L
GS-AP-MW-18	4/17/2019 18:01	Oxidation Reduction Potention	-120.4	mv
GS-AP-MW-18	4/17/2019 18:01	pH	7.58	pH
GS-AP-MW-18	4/17/2019 18:01	Temperature	16.75	C
GS-AP-MW-18	4/17/2019 18:01	Turbidity	12	NTU
GS-AP-MW-18	4/17/2019 18:06	Conductivity	576.2	uS/cm
GS-AP-MW-18	4/17/2019 18:06	Depth to Water Detail	74.45	ft
GS-AP-MW-18	4/17/2019 18:06	DO	0.27	mg/L
GS-AP-MW-18	4/17/2019 18:06	Oxidation Reduction Potention	-121.8	mv
GS-AP-MW-18	4/17/2019 18:06	pH	7.58	pH
GS-AP-MW-18	4/17/2019 18:06	Temperature	16.74	C
GS-AP-MW-18	4/17/2019 18:06	Turbidity	9.34	NTU

**Alabama Power Company  
Plant Gorgas Ash Pond**

<b>WELL ID</b>	<b>READING TIME</b>	<b>DESCRIPTION</b>	<b>VALUE</b>	<b>UNIT</b>
GS-AP-MW-19	4/17/2019 14:17	Conductivity	490.3	uS/cm
GS-AP-MW-19	4/17/2019 14:17	Depth to Water Detail	111.5	ft
GS-AP-MW-19	4/17/2019 14:17	DO	0.32	mg/L
GS-AP-MW-19	4/17/2019 14:17	Oxidation Reduction Potential	-124.6	mv
GS-AP-MW-19	4/17/2019 14:17	pH	8.09	pH
GS-AP-MW-19	4/17/2019 14:17	Temperature	18.5	C
GS-AP-MW-19	4/17/2019 14:17	Turbidity	1.7	NTU
GS-AP-MW-19	4/17/2019 14:22	Conductivity	490	uS/cm
GS-AP-MW-19	4/17/2019 14:22	Depth to Water Detail	111.5	ft
GS-AP-MW-19	4/17/2019 14:22	DO	0.24	mg/L
GS-AP-MW-19	4/17/2019 14:22	Oxidation Reduction Potential	-150.1	mv
GS-AP-MW-19	4/17/2019 14:22	pH	8.11	pH
GS-AP-MW-19	4/17/2019 14:22	Temperature	18.41	C
GS-AP-MW-19	4/17/2019 14:22	Turbidity	1.49	NTU
GS-AP-MW-19	4/17/2019 14:27	Conductivity	494.3	uS/cm
GS-AP-MW-19	4/17/2019 14:27	Depth to Water Detail	111.5	ft
GS-AP-MW-19	4/17/2019 14:27	DO	0.23	mg/L
GS-AP-MW-19	4/17/2019 14:27	Oxidation Reduction Potential	-159.2	mv
GS-AP-MW-19	4/17/2019 14:27	pH	8.08	pH
GS-AP-MW-19	4/17/2019 14:27	Temperature	18.23	C
GS-AP-MW-19	4/17/2019 14:27	Turbidity	1.61	NTU
GS-AP-MW-19	4/17/2019 14:32	Conductivity	499.3	uS/cm
GS-AP-MW-19	4/17/2019 14:32	Depth to Water Detail	111.5	ft
GS-AP-MW-19	4/17/2019 14:32	DO	0.23	mg/L
GS-AP-MW-19	4/17/2019 14:32	Oxidation Reduction Potential	-165.2	mv
GS-AP-MW-19	4/17/2019 14:32	pH	8.06	pH
GS-AP-MW-19	4/17/2019 14:32	Temperature	18.14	C
GS-AP-MW-19	4/17/2019 14:32	Turbidity	1.48	NTU

**Alabama Power Company  
Plant Gorgas Ash Pond**

<b>WELL ID</b>	<b>READING TIME</b>	<b>DESCRIPTION</b>	<b>VALUE</b>	<b>UNIT</b>
GS-AP-MW-2	4/17/2019 13:03	Conductivity	649.7	uS/cm
GS-AP-MW-2	4/17/2019 13:03	Depth to Water Detail	146.65	ft
GS-AP-MW-2	4/17/2019 13:03	DO	2.33	mg/L
GS-AP-MW-2	4/17/2019 13:03	Oxidation Reduction Potention	-95.4	mv
GS-AP-MW-2	4/17/2019 13:03	pH	8.77	pH
GS-AP-MW-2	4/17/2019 13:03	Temperature	18.63	C
GS-AP-MW-2	4/17/2019 13:03	Turbidity	24.3	NTU
GS-AP-MW-2	4/17/2019 13:08	Conductivity	592.1	uS/cm
GS-AP-MW-2	4/17/2019 13:08	Depth to Water Detail	146.65	ft
GS-AP-MW-2	4/17/2019 13:08	DO	0.82	mg/L
GS-AP-MW-2	4/17/2019 13:08	Oxidation Reduction Potention	-39.5	mv
GS-AP-MW-2	4/17/2019 13:08	pH	9.13	pH
GS-AP-MW-2	4/17/2019 13:08	Temperature	18.37	C
GS-AP-MW-2	4/17/2019 13:08	Turbidity	3.45	NTU
GS-AP-MW-2	4/17/2019 13:13	Conductivity	578.7	uS/cm
GS-AP-MW-2	4/17/2019 13:13	Depth to Water Detail	146.65	ft
GS-AP-MW-2	4/17/2019 13:13	DO	0.56	mg/L
GS-AP-MW-2	4/17/2019 13:13	Oxidation Reduction Potention	-24.6	mv
GS-AP-MW-2	4/17/2019 13:13	pH	9.22	pH
GS-AP-MW-2	4/17/2019 13:13	Temperature	18.23	C
GS-AP-MW-2	4/17/2019 13:13	Turbidity	2.86	NTU
GS-AP-MW-2	4/17/2019 13:18	Conductivity	574.1	uS/cm
GS-AP-MW-2	4/17/2019 13:18	Depth to Water Detail	146.65	ft
GS-AP-MW-2	4/17/2019 13:18	DO	0.49	mg/L
GS-AP-MW-2	4/17/2019 13:18	Oxidation Reduction Potention	-22.4	mv
GS-AP-MW-2	4/17/2019 13:18	pH	9.25	pH
GS-AP-MW-2	4/17/2019 13:18	Temperature	18.1	C
GS-AP-MW-2	4/17/2019 13:18	Turbidity	2.79	NTU
GS-AP-MW-2	4/17/2019 13:23	Conductivity	571.1	uS/cm
GS-AP-MW-2	4/17/2019 13:23	Depth to Water Detail	146.65	ft
GS-AP-MW-2	4/17/2019 13:23	DO	0.46	mg/L
GS-AP-MW-2	4/17/2019 13:23	Oxidation Reduction Potention	-21.2	mv
GS-AP-MW-2	4/17/2019 13:23	pH	9.26	pH
GS-AP-MW-2	4/17/2019 13:23	Temperature	18.01	C
GS-AP-MW-2	4/17/2019 13:23	Turbidity	2.23	NTU

**Alabama Power Company  
Plant Gorgas Ash Pond**

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-21	4/17/2019 14:55	Conductivity	880.6	uS/cm
GS-AP-MW-21	4/17/2019 14:55	Depth to Water Detail	160.95	ft
GS-AP-MW-21	4/17/2019 14:55	DO	6.99	mg/L
GS-AP-MW-21	4/17/2019 14:55	Oxidation Reduction Potention	65.3	mv
GS-AP-MW-21	4/17/2019 14:55	pH	10.23	pH
GS-AP-MW-21	4/17/2019 14:55	Temperature	20.93	C
GS-AP-MW-21	4/17/2019 14:55	Turbidity	1.14	NTU
GS-AP-MW-21	4/17/2019 15:00	Conductivity	1043	uS/cm
GS-AP-MW-21	4/17/2019 15:00	Depth to Water Detail	161.05	ft
GS-AP-MW-21	4/17/2019 15:00	DO	2.75	mg/L
GS-AP-MW-21	4/17/2019 15:00	Oxidation Reduction Potention	15.3	mv
GS-AP-MW-21	4/17/2019 15:00	pH	11.2	pH
GS-AP-MW-21	4/17/2019 15:00	Temperature	19.9	C
GS-AP-MW-21	4/17/2019 15:00	Turbidity	1.36	NTU
GS-AP-MW-21	4/17/2019 15:05	Conductivity	1580.5	uS/cm
GS-AP-MW-21	4/17/2019 15:05	Depth to Water Detail	161.15	ft
GS-AP-MW-21	4/17/2019 15:05	DO	1.14	mg/L
GS-AP-MW-21	4/17/2019 15:05	Oxidation Reduction Potention	-5.3	mv
GS-AP-MW-21	4/17/2019 15:05	pH	11.66	pH
GS-AP-MW-21	4/17/2019 15:05	Temperature	19.53	C
GS-AP-MW-21	4/17/2019 15:05	Turbidity	1.38	NTU
GS-AP-MW-21	4/17/2019 15:10	Conductivity	1724.3	uS/cm
GS-AP-MW-21	4/17/2019 15:10	Depth to Water Detail	161.22	ft
GS-AP-MW-21	4/17/2019 15:10	DO	0.79	mg/L
GS-AP-MW-21	4/17/2019 15:10	Oxidation Reduction Potention	-14.7	mv
GS-AP-MW-21	4/17/2019 15:10	pH	11.72	pH
GS-AP-MW-21	4/17/2019 15:10	Temperature	19.33	C
GS-AP-MW-21	4/17/2019 15:10	Turbidity	1.44	NTU
GS-AP-MW-21	4/17/2019 15:15	Conductivity	1741	uS/cm
GS-AP-MW-21	4/17/2019 15:15	Depth to Water Detail	161.25	ft
GS-AP-MW-21	4/17/2019 15:15	DO	0.71	mg/L
GS-AP-MW-21	4/17/2019 15:15	Oxidation Reduction Potention	-25.1	mv
GS-AP-MW-21	4/17/2019 15:15	pH	11.73	pH
GS-AP-MW-21	4/17/2019 15:15	Temperature	19.2	C
GS-AP-MW-21	4/17/2019 15:15	Turbidity	0.7	NTU
GS-AP-MW-21	4/17/2019 15:20	Conductivity	1699	uS/cm
GS-AP-MW-21	4/17/2019 15:20	Depth to Water Detail	161.29	ft
GS-AP-MW-21	4/17/2019 15:20	DO	0.67	mg/L
GS-AP-MW-21	4/17/2019 15:20	Oxidation Reduction Potention	-36.3	mv
GS-AP-MW-21	4/17/2019 15:20	pH	11.71	pH
GS-AP-MW-21	4/17/2019 15:20	Temperature	19.11	C
GS-AP-MW-21	4/17/2019 15:20	Turbidity	0.6	NTU

**Alabama Power Company  
Plant Gorgas Ash Pond**

<b>WELL ID</b>	<b>READING TIME</b>	<b>DESCRIPTION</b>	<b>VALUE</b>	<b>UNIT</b>
GS-AP-MW-6D	4/16/2019 10:24	Conductivity	485.1	uS/cm
GS-AP-MW-6D	4/16/2019 10:24	Depth to Water Detail	11.86	ft
GS-AP-MW-6D	4/16/2019 10:24	DO	0.28	mg/L
GS-AP-MW-6D	4/16/2019 10:24	Oxidation Reduction Potential	-118.4	mv
GS-AP-MW-6D	4/16/2019 10:24	pH	7.24	pH
GS-AP-MW-6D	4/16/2019 10:24	Temperature	16.37	C
GS-AP-MW-6D	4/16/2019 10:24	Turbidity	1.94	NTU
GS-AP-MW-6D	4/16/2019 10:29	Conductivity	486.6	uS/cm
GS-AP-MW-6D	4/16/2019 10:29	Depth to Water Detail	11.86	ft
GS-AP-MW-6D	4/16/2019 10:29	DO	0.22	mg/L
GS-AP-MW-6D	4/16/2019 10:29	Oxidation Reduction Potential	-118.8	mv
GS-AP-MW-6D	4/16/2019 10:29	pH	7.25	pH
GS-AP-MW-6D	4/16/2019 10:29	Temperature	16.44	C
GS-AP-MW-6D	4/16/2019 10:29	Turbidity	1.18	NTU
GS-AP-MW-6D	4/16/2019 10:34	Conductivity	488.1	uS/cm
GS-AP-MW-6D	4/16/2019 10:34	Depth to Water Detail	11.86	ft
GS-AP-MW-6D	4/16/2019 10:34	DO	0.22	mg/L
GS-AP-MW-6D	4/16/2019 10:34	Oxidation Reduction Potential	-118.6	mv
GS-AP-MW-6D	4/16/2019 10:34	pH	7.25	pH
GS-AP-MW-6D	4/16/2019 10:34	Temperature	16.46	C
GS-AP-MW-6D	4/16/2019 10:34	Turbidity	1.2	NTU
GS-AP-MW-6D	4/16/2019 10:39	Conductivity	488.9	uS/cm
GS-AP-MW-6D	4/16/2019 10:39	Depth to Water Detail	11.86	ft
GS-AP-MW-6D	4/16/2019 10:39	DO	0.21	mg/L
GS-AP-MW-6D	4/16/2019 10:39	Oxidation Reduction Potential	-118.1	mv
GS-AP-MW-6D	4/16/2019 10:39	pH	7.26	pH
GS-AP-MW-6D	4/16/2019 10:39	Temperature	16.53	C
GS-AP-MW-6D	4/16/2019 10:39	Turbidity	1.03	NTU

**Alabama Power Company  
Plant Gorgas Ash Pond**

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-6S	4/16/2019 11:11	Conductivity	636.7	uS/cm
GS-AP-MW-6S	4/16/2019 11:11	Depth to Water Detail	17.96	ft
GS-AP-MW-6S	4/16/2019 11:11	DO	0.17	mg/L
GS-AP-MW-6S	4/16/2019 11:11	Oxidation Reduction Potention	-105.8	mv
GS-AP-MW-6S	4/16/2019 11:11	pH	6.81	pH
GS-AP-MW-6S	4/16/2019 11:11	Temperature	16.22	C
GS-AP-MW-6S	4/16/2019 11:11	Turbidity	17	NTU
GS-AP-MW-6S	4/16/2019 11:16	Conductivity	637.1	uS/cm
GS-AP-MW-6S	4/16/2019 11:16	Depth to Water Detail	17.96	ft
GS-AP-MW-6S	4/16/2019 11:16	DO	0.15	mg/L
GS-AP-MW-6S	4/16/2019 11:16	Oxidation Reduction Potention	-101.6	mv
GS-AP-MW-6S	4/16/2019 11:16	pH	6.82	pH
GS-AP-MW-6S	4/16/2019 11:16	Temperature	16.14	C
GS-AP-MW-6S	4/16/2019 11:16	Turbidity	26.2	NTU
GS-AP-MW-6S	4/16/2019 11:21	Conductivity	637.8	uS/cm
GS-AP-MW-6S	4/16/2019 11:21	Depth to Water Detail	17.96	ft
GS-AP-MW-6S	4/16/2019 11:21	DO	0.13	mg/L
GS-AP-MW-6S	4/16/2019 11:21	Oxidation Reduction Potention	-98.3	mv
GS-AP-MW-6S	4/16/2019 11:21	pH	6.81	pH
GS-AP-MW-6S	4/16/2019 11:21	Temperature	16.09	C
GS-AP-MW-6S	4/16/2019 11:21	Turbidity	13.5	NTU
GS-AP-MW-6S	4/16/2019 11:26	Conductivity	637.9	uS/cm
GS-AP-MW-6S	4/16/2019 11:26	Depth to Water Detail	17.96	ft
GS-AP-MW-6S	4/16/2019 11:26	DO	0.12	mg/L
GS-AP-MW-6S	4/16/2019 11:26	Oxidation Reduction Potention	-96	mv
GS-AP-MW-6S	4/16/2019 11:26	pH	6.81	pH
GS-AP-MW-6S	4/16/2019 11:26	Temperature	16.09	C
GS-AP-MW-6S	4/16/2019 11:26	Turbidity	10.34	NTU
GS-AP-MW-6S	4/16/2019 11:31	Conductivity	637.9	uS/cm
GS-AP-MW-6S	4/16/2019 11:31	Depth to Water Detail	17.96	ft
GS-AP-MW-6S	4/16/2019 11:31	DO	0.12	mg/L
GS-AP-MW-6S	4/16/2019 11:31	Oxidation Reduction Potention	-94.2	mv
GS-AP-MW-6S	4/16/2019 11:31	pH	6.82	pH
GS-AP-MW-6S	4/16/2019 11:31	Temperature	16.1	C
GS-AP-MW-6S	4/16/2019 11:31	Turbidity	8.16	NTU
GS-AP-MW-6S	4/16/2019 11:36	Conductivity	637.6	uS/cm
GS-AP-MW-6S	4/16/2019 11:36	Depth to Water Detail	17.96	ft
GS-AP-MW-6S	4/16/2019 11:36	DO	0.12	mg/L
GS-AP-MW-6S	4/16/2019 11:36	Oxidation Reduction Potention	-92.4	mv
GS-AP-MW-6S	4/16/2019 11:36	pH	6.82	pH
GS-AP-MW-6S	4/16/2019 11:36	Temperature	16.09	C
GS-AP-MW-6S	4/16/2019 11:36	Turbidity	8.56	NTU
GS-AP-MW-6S	4/16/2019 11:41	Conductivity	637	uS/cm
GS-AP-MW-6S	4/16/2019 11:41	Depth to Water Detail	17.96	ft

**Alabama Power Company  
Plant Gorgas Ash Pond**

<b>WELL ID</b>	<b>READING TIME</b>	<b>DESCRIPTION</b>	<b>VALUE</b>	<b>UNIT</b>
GS-AP-MW-6S	4/16/2019 11:41	DO	0.11	mg/L
GS-AP-MW-6S	4/16/2019 11:41	Oxidation Reduction Potention	-90.6	mv
GS-AP-MW-6S	4/16/2019 11:41	pH	6.82	pH
GS-AP-MW-6S	4/16/2019 11:41	Temperature	16.09	C
GS-AP-MW-6S	4/16/2019 11:41	Turbidity	7.83	NTU



**Alabama Power Company  
Plant Gorgas Ash Pond**

<b>WELL ID</b>	<b>READING TIME</b>	<b>DESCRIPTION</b>	<b>VALUE</b>	<b>UNIT</b>
GS-AP-MW-7	4/23/2019 8:25	Conductivity	524.6	uS/cm
GS-AP-MW-7	4/23/2019 8:25	Depth to Water Detail	9.13	ft
GS-AP-MW-7	4/23/2019 8:25	DO	2.5	mg/L
GS-AP-MW-7	4/23/2019 8:25	Oxidation Reduction Potention	-76.7	mv
GS-AP-MW-7	4/23/2019 8:25	pH	7.41	pH
GS-AP-MW-7	4/23/2019 8:25	Temperature	17.45	C
GS-AP-MW-7	4/23/2019 8:25	Turbidity	29.9	NTU
GS-AP-MW-7	4/23/2019 8:30	Conductivity	526.8	uS/cm
GS-AP-MW-7	4/23/2019 8:30	Depth to Water Detail	9.26	ft
GS-AP-MW-7	4/23/2019 8:30	DO	1.3	mg/L
GS-AP-MW-7	4/23/2019 8:30	Oxidation Reduction Potention	-103.5	mv
GS-AP-MW-7	4/23/2019 8:30	pH	7.63	pH
GS-AP-MW-7	4/23/2019 8:30	Temperature	17.24	C
GS-AP-MW-7	4/23/2019 8:30	Turbidity	72.9	NTU
GS-AP-MW-7	4/23/2019 8:35	Conductivity	526.3	uS/cm
GS-AP-MW-7	4/23/2019 8:35	Depth to Water Detail	9.26	ft
GS-AP-MW-7	4/23/2019 8:35	DO	0.86	mg/L
GS-AP-MW-7	4/23/2019 8:35	Oxidation Reduction Potention	-115.6	mv
GS-AP-MW-7	4/23/2019 8:35	pH	7.7	pH
GS-AP-MW-7	4/23/2019 8:35	Temperature	17.36	C
GS-AP-MW-7	4/23/2019 8:35	Turbidity	640	NTU
GS-AP-MW-7	4/23/2019 8:40	Conductivity	523.9	uS/cm
GS-AP-MW-7	4/23/2019 8:40	Depth to Water Detail	9.3	ft
GS-AP-MW-7	4/23/2019 8:40	DO	0.64	mg/L
GS-AP-MW-7	4/23/2019 8:40	Oxidation Reduction Potention	-121.3	mv
GS-AP-MW-7	4/23/2019 8:40	pH	7.72	pH
GS-AP-MW-7	4/23/2019 8:40	Temperature	17.57	C
GS-AP-MW-7	4/23/2019 8:40	Turbidity	642	NTU
GS-AP-MW-7	4/23/2019 8:45	Conductivity	524.2	uS/cm
GS-AP-MW-7	4/23/2019 8:45	Depth to Water Detail	9.3	ft
GS-AP-MW-7	4/23/2019 8:45	DO	0.5	mg/L
GS-AP-MW-7	4/23/2019 8:45	Oxidation Reduction Potention	-125.3	mv
GS-AP-MW-7	4/23/2019 8:45	pH	7.75	pH
GS-AP-MW-7	4/23/2019 8:45	Temperature	17.56	C
GS-AP-MW-7	4/23/2019 8:45	Turbidity	710	NTU
GS-AP-MW-7	4/23/2019 8:50	Conductivity	523.6	uS/cm
GS-AP-MW-7	4/23/2019 8:50	Depth to Water Detail	9.34	ft
GS-AP-MW-7	4/23/2019 8:50	DO	0.44	mg/L
GS-AP-MW-7	4/23/2019 8:50	Oxidation Reduction Potention	-128.4	mv
GS-AP-MW-7	4/23/2019 8:50	pH	7.76	pH
GS-AP-MW-7	4/23/2019 8:50	Temperature	17.81	C
GS-AP-MW-7	4/23/2019 8:50	Turbidity	735	NTU
GS-AP-MW-7	4/23/2019 8:55	Conductivity	525.7	uS/cm
GS-AP-MW-7	4/23/2019 8:55	Depth to Water Detail	9.32	ft

**Alabama Power Company  
Plant Gorgas Ash Pond**

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-7	4/23/2019 8:55	DO	0.41	mg/L
GS-AP-MW-7	4/23/2019 8:55	Oxidation Reduction Potention	-129.2	mv
GS-AP-MW-7	4/23/2019 8:55	pH	7.76	pH
GS-AP-MW-7	4/23/2019 8:55	Temperature	17.67	C
GS-AP-MW-7	4/23/2019 8:55	Turbidity	776	NTU
GS-AP-MW-7	4/23/2019 9:00	Conductivity	525.5	uS/cm
GS-AP-MW-7	4/23/2019 9:00	Depth to Water Detail	9.34	ft
GS-AP-MW-7	4/23/2019 9:00	DO	0.39	mg/L
GS-AP-MW-7	4/23/2019 9:00	Oxidation Reduction Potention	-131.8	mv
GS-AP-MW-7	4/23/2019 9:00	pH	7.79	pH
GS-AP-MW-7	4/23/2019 9:00	Temperature	17.76	C
GS-AP-MW-7	4/23/2019 9:00	Turbidity	788	NTU
GS-AP-MW-7	4/23/2019 9:05	Conductivity	525.7	uS/cm
GS-AP-MW-7	4/23/2019 9:05	Depth to Water Detail	9.34	ft
GS-AP-MW-7	4/23/2019 9:05	DO	0.39	mg/L
GS-AP-MW-7	4/23/2019 9:05	Oxidation Reduction Potention	-132.4	mv
GS-AP-MW-7	4/23/2019 9:05	pH	7.79	pH
GS-AP-MW-7	4/23/2019 9:05	Temperature	17.86	C
GS-AP-MW-7	4/23/2019 9:05	Turbidity	727	NTU
GS-AP-MW-7	4/23/2019 9:10	Conductivity	522.1	uS/cm
GS-AP-MW-7	4/23/2019 9:10	Depth to Water Detail	9.64	ft
GS-AP-MW-7	4/23/2019 9:10	DO	0.27	mg/L
GS-AP-MW-7	4/23/2019 9:10	Oxidation Reduction Potention	-134.4	mv
GS-AP-MW-7	4/23/2019 9:10	pH	7.8	pH
GS-AP-MW-7	4/23/2019 9:10	Temperature	17.74	C
GS-AP-MW-7	4/23/2019 9:10	Turbidity	680	NTU
GS-AP-MW-7	4/23/2019 9:15	Conductivity	527.3	uS/cm
GS-AP-MW-7	4/23/2019 9:15	Depth to Water Detail	9.83	ft
GS-AP-MW-7	4/23/2019 9:15	DO	0.2	mg/L
GS-AP-MW-7	4/23/2019 9:15	Oxidation Reduction Potention	-150.4	mv
GS-AP-MW-7	4/23/2019 9:15	pH	7.82	pH
GS-AP-MW-7	4/23/2019 9:15	Temperature	17.28	C
GS-AP-MW-7	4/23/2019 9:15	Turbidity	678	NTU
GS-AP-MW-7	4/23/2019 9:20	Conductivity	526.8	uS/cm
GS-AP-MW-7	4/23/2019 9:20	Depth to Water Detail	9.92	ft
GS-AP-MW-7	4/23/2019 9:20	DO	0.22	mg/L
GS-AP-MW-7	4/23/2019 9:20	Oxidation Reduction Potention	-146.3	mv
GS-AP-MW-7	4/23/2019 9:20	pH	7.82	pH
GS-AP-MW-7	4/23/2019 9:20	Temperature	17.38	C
GS-AP-MW-7	4/23/2019 9:20	Turbidity	0	NTU
GS-AP-MW-7	4/23/2019 9:25	Conductivity	525.3	uS/cm
GS-AP-MW-7	4/23/2019 9:25	Depth to Water Detail	10.02	ft
GS-AP-MW-7	4/23/2019 9:25	DO	0.21	mg/L
GS-AP-MW-7	4/23/2019 9:25	Oxidation Reduction Potention	-143.7	mv

**Alabama Power Company  
Plant Gorgas Ash Pond**

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-7	4/23/2019 9:25	pH	7.83	pH
GS-AP-MW-7	4/23/2019 9:25	Temperature	17.37	C
GS-AP-MW-7	4/23/2019 9:25	Turbidity	0	NTU
GS-AP-MW-7	4/23/2019 9:30	Conductivity	526.5	uS/cm
GS-AP-MW-7	4/23/2019 9:30	Depth to Water Detail	10.05	ft
GS-AP-MW-7	4/23/2019 9:30	DO	0.23	mg/L
GS-AP-MW-7	4/23/2019 9:30	Oxidation Reduction Potention	-148.4	mv
GS-AP-MW-7	4/23/2019 9:30	pH	7.83	pH
GS-AP-MW-7	4/23/2019 9:30	Temperature	17.24	C
GS-AP-MW-7	4/23/2019 9:30	Turbidity	76.1	NTU
GS-AP-MW-7	4/23/2019 9:35	Conductivity	528	uS/cm
GS-AP-MW-7	4/23/2019 9:35	Depth to Water Detail	10.05	ft
GS-AP-MW-7	4/23/2019 9:35	DO	0.25	mg/L
GS-AP-MW-7	4/23/2019 9:35	Oxidation Reduction Potention	-141.3	mv
GS-AP-MW-7	4/23/2019 9:35	pH	7.83	pH
GS-AP-MW-7	4/23/2019 9:35	Temperature	17.16	C
GS-AP-MW-7	4/23/2019 9:35	Turbidity	77.1	NTU
GS-AP-MW-7	4/23/2019 9:40	Conductivity	527.2	uS/cm
GS-AP-MW-7	4/23/2019 9:40	Depth to Water Detail	10.05	ft
GS-AP-MW-7	4/23/2019 9:40	DO	0.24	mg/L
GS-AP-MW-7	4/23/2019 9:40	Oxidation Reduction Potention	-141.1	mv
GS-AP-MW-7	4/23/2019 9:40	pH	7.83	pH
GS-AP-MW-7	4/23/2019 9:40	Temperature	17.15	C
GS-AP-MW-7	4/23/2019 9:40	Turbidity	66.7	NTU
GS-AP-MW-7	4/23/2019 9:45	Conductivity	526.1	uS/cm
GS-AP-MW-7	4/23/2019 9:45	Depth to Water Detail	10.08	ft
GS-AP-MW-7	4/23/2019 9:45	DO	0.25	mg/L
GS-AP-MW-7	4/23/2019 9:45	Oxidation Reduction Potention	-140.3	mv
GS-AP-MW-7	4/23/2019 9:45	pH	7.82	pH
GS-AP-MW-7	4/23/2019 9:45	Temperature	17.23	C
GS-AP-MW-7	4/23/2019 9:45	Turbidity	62.6	NTU
GS-AP-MW-7	4/23/2019 9:50	Conductivity	525.4	uS/cm
GS-AP-MW-7	4/23/2019 9:50	Depth to Water Detail	10.13	ft
GS-AP-MW-7	4/23/2019 9:50	DO	0.24	mg/L
GS-AP-MW-7	4/23/2019 9:50	Oxidation Reduction Potention	-141	mv
GS-AP-MW-7	4/23/2019 9:50	pH	7.83	pH
GS-AP-MW-7	4/23/2019 9:50	Temperature	17.2	C
GS-AP-MW-7	4/23/2019 9:50	Turbidity	63.4	NTU
GS-AP-MW-7	4/23/2019 9:55	Conductivity	526.1	uS/cm
GS-AP-MW-7	4/23/2019 9:55	Depth to Water Detail	10.2	ft
GS-AP-MW-7	4/23/2019 9:55	DO	0.24	mg/L
GS-AP-MW-7	4/23/2019 9:55	Oxidation Reduction Potention	-140.8	mv
GS-AP-MW-7	4/23/2019 9:55	pH	7.82	pH
GS-AP-MW-7	4/23/2019 9:55	Temperature	17.19	C

**Alabama Power Company  
Plant Gorgas Ash Pond**

<b>WELL ID</b>	<b>READING TIME</b>	<b>DESCRIPTION</b>	<b>VALUE</b>	<b>UNIT</b>
GS-AP-MW-7	4/23/2019 9:55	Turbidity	62.3	NTU
GS-AP-MW-7	4/23/2019 10:00	Conductivity	527.5	uS/cm
GS-AP-MW-7	4/23/2019 10:00	Depth to Water Detail	10.25	ft
GS-AP-MW-7	4/23/2019 10:00	DO	0.26	mg/L
GS-AP-MW-7	4/23/2019 10:00	Oxidation Reduction Potention	-140.3	mv
GS-AP-MW-7	4/23/2019 10:00	pH	7.81	pH
GS-AP-MW-7	4/23/2019 10:00	Temperature	17.19	C
GS-AP-MW-7	4/23/2019 10:00	Turbidity	51.7	NTU
GS-AP-MW-7	4/23/2019 10:05	Conductivity	525.2	uS/cm
GS-AP-MW-7	4/23/2019 10:05	Depth to Water Detail	10.28	ft
GS-AP-MW-7	4/23/2019 10:05	DO	0.24	mg/L
GS-AP-MW-7	4/23/2019 10:05	Oxidation Reduction Potention	-141.3	mv
GS-AP-MW-7	4/23/2019 10:05	pH	7.82	pH
GS-AP-MW-7	4/23/2019 10:05	Temperature	17.33	C
GS-AP-MW-7	4/23/2019 10:05	Turbidity	44.5	NTU
GS-AP-MW-7	4/23/2019 10:10	Conductivity	523.6	uS/cm
GS-AP-MW-7	4/23/2019 10:10	Depth to Water Detail	10.31	ft
GS-AP-MW-7	4/23/2019 10:10	DO	0.24	mg/L
GS-AP-MW-7	4/23/2019 10:10	Oxidation Reduction Potention	-141	mv
GS-AP-MW-7	4/23/2019 10:10	pH	7.82	pH
GS-AP-MW-7	4/23/2019 10:10	Temperature	17.45	C
GS-AP-MW-7	4/23/2019 10:10	Turbidity	56.7	NTU
GS-AP-MW-7	4/23/2019 10:15	Conductivity	524.2	uS/cm
GS-AP-MW-7	4/23/2019 10:15	Depth to Water Detail	10.34	ft
GS-AP-MW-7	4/23/2019 10:15	DO	0.23	mg/L
GS-AP-MW-7	4/23/2019 10:15	Oxidation Reduction Potention	-141.8	mv
GS-AP-MW-7	4/23/2019 10:15	pH	7.83	pH
GS-AP-MW-7	4/23/2019 10:15	Temperature	17.49	C
GS-AP-MW-7	4/23/2019 10:15	Turbidity	50.1	NTU
GS-AP-MW-7	4/23/2019 10:20	Conductivity	524.3	uS/cm
GS-AP-MW-7	4/23/2019 10:20	Depth to Water Detail	10.36	ft
GS-AP-MW-7	4/23/2019 10:20	DO	0.23	mg/L
GS-AP-MW-7	4/23/2019 10:20	Oxidation Reduction Potention	-141.9	mv
GS-AP-MW-7	4/23/2019 10:20	pH	7.82	pH
GS-AP-MW-7	4/23/2019 10:20	Temperature	17.5	C
GS-AP-MW-7	4/23/2019 10:20	Turbidity	57.6	NTU
GS-AP-MW-7	4/23/2019 10:25	Conductivity	523.9	uS/cm
GS-AP-MW-7	4/23/2019 10:25	Depth to Water Detail	10.38	ft
GS-AP-MW-7	4/23/2019 10:25	DO	0.25	mg/L
GS-AP-MW-7	4/23/2019 10:25	Oxidation Reduction Potention	-141	mv
GS-AP-MW-7	4/23/2019 10:25	pH	7.82	pH
GS-AP-MW-7	4/23/2019 10:25	Temperature	17.76	C
GS-AP-MW-7	4/23/2019 10:25	Turbidity	45.4	NTU
GS-AP-MW-7	4/23/2019 10:30	Conductivity	523.3	uS/cm

**Alabama Power Company  
Plant Gorgas Ash Pond**

<b>WELL ID</b>	<b>READING TIME</b>	<b>DESCRIPTION</b>	<b>VALUE</b>	<b>UNIT</b>
GS-AP-MW-7	4/23/2019 10:30	Depth to Water Detail	10.4	ft
GS-AP-MW-7	4/23/2019 10:30	DO	0.24	mg/L
GS-AP-MW-7	4/23/2019 10:30	Oxidation Reduction Potention	-141.8	mv
GS-AP-MW-7	4/23/2019 10:30	pH	7.83	pH
GS-AP-MW-7	4/23/2019 10:30	Temperature	17.67	C
GS-AP-MW-7	4/23/2019 10:30	Turbidity	49.2	NTU
GS-AP-MW-7	4/23/2019 10:35	Conductivity	523.8	uS/cm
GS-AP-MW-7	4/23/2019 10:35	Depth to Water Detail	10.43	ft
GS-AP-MW-7	4/23/2019 10:35	DO	0.24	mg/L
GS-AP-MW-7	4/23/2019 10:35	Oxidation Reduction Potention	-141.4	mv
GS-AP-MW-7	4/23/2019 10:35	pH	7.83	pH
GS-AP-MW-7	4/23/2019 10:35	Temperature	17.51	C
GS-AP-MW-7	4/23/2019 10:35	Turbidity	47.1	NTU

**Alabama Power Company  
Plant Gorgas Ash Pond**

<b>WELL ID</b>	<b>READING TIME</b>	<b>DESCRIPTION</b>	<b>VALUE</b>	<b>UNIT</b>
GS-AP-MW-8	4/16/2019 12:41	Conductivity	137.2	uS/cm
GS-AP-MW-8	4/16/2019 12:41	Depth to Water Detail	44.14	ft
GS-AP-MW-8	4/16/2019 12:41	DO	0.89	mg/L
GS-AP-MW-8	4/16/2019 12:41	Oxidation Reduction Potential	141	mv
GS-AP-MW-8	4/16/2019 12:41	pH	5.8	pH
GS-AP-MW-8	4/16/2019 12:41	Temperature	19.73	C
GS-AP-MW-8	4/16/2019 12:41	Turbidity	19.1	NTU
GS-AP-MW-8	4/16/2019 12:46	Conductivity	137.4	uS/cm
GS-AP-MW-8	4/16/2019 12:46	Depth to Water Detail	44.3	ft
GS-AP-MW-8	4/16/2019 12:46	DO	0.81	mg/L
GS-AP-MW-8	4/16/2019 12:46	Oxidation Reduction Potential	151.9	mv
GS-AP-MW-8	4/16/2019 12:46	pH	5.78	pH
GS-AP-MW-8	4/16/2019 12:46	Temperature	19.66	C
GS-AP-MW-8	4/16/2019 12:46	Turbidity	5.03	NTU
GS-AP-MW-8	4/16/2019 12:51	Conductivity	136.6	uS/cm
GS-AP-MW-8	4/16/2019 12:51	Depth to Water Detail	44.34	ft
GS-AP-MW-8	4/16/2019 12:51	DO	0.78	mg/L
GS-AP-MW-8	4/16/2019 12:51	Oxidation Reduction Potential	159.9	mv
GS-AP-MW-8	4/16/2019 12:51	pH	5.77	pH
GS-AP-MW-8	4/16/2019 12:51	Temperature	19.59	C
GS-AP-MW-8	4/16/2019 12:51	Turbidity	2.37	NTU
GS-AP-MW-8	4/16/2019 12:56	Conductivity	136.4	uS/cm
GS-AP-MW-8	4/16/2019 12:56	Depth to Water Detail	44.46	ft
GS-AP-MW-8	4/16/2019 12:56	DO	0.76	mg/L
GS-AP-MW-8	4/16/2019 12:56	Oxidation Reduction Potential	164.6	mv
GS-AP-MW-8	4/16/2019 12:56	pH	5.76	pH
GS-AP-MW-8	4/16/2019 12:56	Temperature	19.61	C
GS-AP-MW-8	4/16/2019 12:56	Turbidity	1.55	NTU

**Alabama Power Company  
Plant Gorgas Ash Pond**

<b>WELL ID</b>	<b>READING TIME</b>	<b>DESCRIPTION</b>	<b>VALUE</b>	<b>UNIT</b>
GS-AP-MW-9	4/16/2019 13:47	Conductivity	598.5	uS/cm
GS-AP-MW-9	4/16/2019 13:47	Depth to Water Detail	45.44	ft
GS-AP-MW-9	4/16/2019 13:47	DO	0.91	mg/L
GS-AP-MW-9	4/16/2019 13:47	Oxidation Reduction Potention	-57.3	mv
GS-AP-MW-9	4/16/2019 13:47	pH	6.72	pH
GS-AP-MW-9	4/16/2019 13:47	Temperature	19.7	C
GS-AP-MW-9	4/16/2019 13:47	Turbidity	3	NTU
GS-AP-MW-9	4/16/2019 13:52	Conductivity	607.8	uS/cm
GS-AP-MW-9	4/16/2019 13:52	Depth to Water Detail	45.55	ft
GS-AP-MW-9	4/16/2019 13:52	DO	0.69	mg/L
GS-AP-MW-9	4/16/2019 13:52	Oxidation Reduction Potention	-46.7	mv
GS-AP-MW-9	4/16/2019 13:52	pH	6.68	pH
GS-AP-MW-9	4/16/2019 13:52	Temperature	19.3	C
GS-AP-MW-9	4/16/2019 13:52	Turbidity	1.94	NTU
GS-AP-MW-9	4/16/2019 13:57	Conductivity	610	uS/cm
GS-AP-MW-9	4/16/2019 13:57	Depth to Water Detail	45.75	ft
GS-AP-MW-9	4/16/2019 13:57	DO	0.59	mg/L
GS-AP-MW-9	4/16/2019 13:57	Oxidation Reduction Potention	-42.8	mv
GS-AP-MW-9	4/16/2019 13:57	pH	6.68	pH
GS-AP-MW-9	4/16/2019 13:57	Temperature	19.08	C
GS-AP-MW-9	4/16/2019 13:57	Turbidity	1.42	NTU
GS-AP-MW-9	4/16/2019 14:02	Conductivity	611.2	uS/cm
GS-AP-MW-9	4/16/2019 14:02	Depth to Water Detail	45.84	ft
GS-AP-MW-9	4/16/2019 14:02	DO	0.54	mg/L
GS-AP-MW-9	4/16/2019 14:02	Oxidation Reduction Potention	-40.1	mv
GS-AP-MW-9	4/16/2019 14:02	pH	6.68	pH
GS-AP-MW-9	4/16/2019 14:02	Temperature	19.01	C
GS-AP-MW-9	4/16/2019 14:02	Turbidity	1.42	NTU
GS-AP-MW-9	4/16/2019 14:07	Conductivity	610.7	uS/cm
GS-AP-MW-9	4/16/2019 14:07	Depth to Water Detail	45.91	ft
GS-AP-MW-9	4/16/2019 14:07	DO	0.52	mg/L
GS-AP-MW-9	4/16/2019 14:07	Oxidation Reduction Potention	-37.9	mv
GS-AP-MW-9	4/16/2019 14:07	pH	6.68	pH
GS-AP-MW-9	4/16/2019 14:07	Temperature	18.94	C
GS-AP-MW-9	4/16/2019 14:07	Turbidity	1.43	NTU
GS-AP-MW-9	4/16/2019 14:12	Conductivity	610.9	uS/cm
GS-AP-MW-9	4/16/2019 14:12	Depth to Water Detail	45.96	ft
GS-AP-MW-9	4/16/2019 14:12	DO	0.51	mg/L
GS-AP-MW-9	4/16/2019 14:12	Oxidation Reduction Potention	-36.1	mv
GS-AP-MW-9	4/16/2019 14:12	pH	6.69	pH
GS-AP-MW-9	4/16/2019 14:12	Temperature	18.86	C
GS-AP-MW-9	4/16/2019 14:12	Turbidity	1.41	NTU

**2nd**  
**Semi-Annual**  
**Monitoring Event**



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

## **Field Case Narrative**



# **Gorgas Ash Pond**

## **2019 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 and MW-26H. A complete sample set for totals analysis was collected followed by a field filtered set for dissolved analysis.

Well MW-18V could not be sampled due to drawdown. The well was pumped dry at 100 ml/min and only recovered 1 foot the following day.

The first 19 pH field readings for well MW-12V were qualified due to pH readings falling outside of the bracketed calibration range. The below qualifier was used:

- E – 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***



**Sample Group :** WMWGORAP\_1241

**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

November 04, 2019

Dear Dustin Brooks,

Enclosed are the analytical results for sample(s) received by the laboratory on September 26, 2019. 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=lmidkiff@southernco.com, c=US  
Date: 2019.11.04 14:52:54 -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: 2019.11.05 08:34:44 -06'00'



### REPORT OF LABORATORY ANALYSIS

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



Total Metals ICP

Gorgas Ash Pond

WMWGORAP\_1241

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.

<u>Sample ID</u>	<u>Batch ID</u>	<u>Project ID</u>
AZ21811	656832	WMWGORAP_1241
AZ21812	656832	WMWGORAP_1241
AZ21813	656832	WMWGORAP_1241
AZ21814	656832	WMWGORAP_1241
AZ21815	656832	WMWGORAP_1241
AZ21816	656832	WMWGORAP_1241
AZ21817	656832	WMWGORAP_1241
AZ21818	656832	WMWGORAP_1241
AZ21819	656832	WMWGORAP_1241
AZ21820	656832	WMWGORAP_1241
AZ21821	656833	WMWGORAP_1241
AZ21822	656833	WMWGORAP_1241
AZ21823	656833	WMWGORAP_1241
AZ21824	656833	WMWGORAP_1241
AZ21825	656833	WMWGORAP_1241
AZ21826	656833	WMWGORAP_1241
AZ21827	656833	WMWGORAP_1241
AZ21828	656833	WMWGORAP_1241
AZ21829	656833	WMWGORAP_1241
AZ21831	656833	WMWGORAP_1241
AZ21832	656834	WMWGORAP_1241
AZ21833	656834	WMWGORAP_1241
AZ21835	656834	WMWGORAP_1241
AZ21836	656834	WMWGORAP_1241

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:

<u>Sample ID</u>	<u>Analyte</u>	<u>Dilution Factor</u>
AZ21813	Calcium	20.3
AZ21814	Calcium	20.3
AZ21815	Calcium	20.3
AZ21816	Calcium	20.3
AZ21819	Calcium	20.3
AZ21820	Calcium	20.3
AZ21822	Calcium	20.3
AZ21831	Calcium	20.3
AZ21835	Calcium	20.3

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

Dissolved Metals ICP

Gorgas Ash Pond

WMWGORAP\_1241

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.

<u>Sample ID</u>	<u>Batch ID</u>	<u>Project ID</u>
AZ21830	656858	WMWGORAP_1241
AZ21834	656859	WMWGORAP_1241

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.



Total Metals ICPMS

Gorgas Ash Pond

WMWGORAP\_1241

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.

<u>Sample ID</u>	<u>Batch ID</u>	<u>Project ID</u>
AZ21811	657033	WMWGORAP_1241
AZ21812	657033	WMWGORAP_1241
AZ21813	657033	WMWGORAP_1241
AZ21814	657033	WMWGORAP_1241
AZ21815	657033	WMWGORAP_1241
AZ21816	657033	WMWGORAP_1241
AZ21817	657033	WMWGORAP_1241
AZ21818	657033	WMWGORAP_1241
AZ21819	657033	WMWGORAP_1241
AZ21820	657033	WMWGORAP_1241
AZ21821	657034	WMWGORAP_1241
AZ21822	657034	WMWGORAP_1241
AZ21823	657034	WMWGORAP_1241
AZ21824	657034	WMWGORAP_1241
AZ21825	657034	WMWGORAP_1241
AZ21826	657034	WMWGORAP_1241
AZ21827	657034	WMWGORAP_1241
AZ21828	657034	WMWGORAP_1241
AZ21829	657034	WMWGORAP_1241
AZ21831	657034	WMWGORAP_1241
AZ21832	657035	WMWGORAP_1241
AZ21833	657035	WMWGORAP_1241
AZ21835	657035	WMWGORAP_1241
AZ21836	657035	WMWGORAP_1241

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.

Dissolved Metals ICPMS

Gorgas Ash Pond

WMWGORAP\_1241

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.

<u>Sample ID</u>	<u>Batch ID</u>	<u>Project ID</u>
AZ21830	657096	WMWGORAP_1241
AZ21834	657096	WMWGORAP_1241

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 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.

Mercury

Gorgas Ash Pond

WMWGORAP\_1241

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.

<u>Sample ID</u>	<u>Batch ID</u>	<u>Project ID</u>
AZ21811	656788	WMWGORAP_1241
AZ21812	656788	WMWGORAP_1241
AZ21813	656788	WMWGORAP_1241
AZ21814	656788	WMWGORAP_1241
AZ21815	656788	WMWGORAP_1241
AZ21816	656788	WMWGORAP_1241
AZ21817	656788	WMWGORAP_1241
AZ21818	656788	WMWGORAP_1241
AZ21819	656788	WMWGORAP_1241
AZ21820	656788	WMWGORAP_1241
AZ21821	656789	WMWGORAP_1241
AZ21822	656789	WMWGORAP_1241
AZ21823	656789	WMWGORAP_1241
AZ21824	656789	WMWGORAP_1241
AZ21825	656789	WMWGORAP_1241
AZ21826	656789	WMWGORAP_1241
AZ21827	656789	WMWGORAP_1241
AZ21828	656789	WMWGORAP_1241
AZ21829	656789	WMWGORAP_1241
AZ21831	656789	WMWGORAP_1241
AZ21832	656790	WMWGORAP_1241
AZ21833	656790	WMWGORAP_1241
AZ21835	656790	WMWGORAP_1241
AZ21836	656790	WMWGORAP_1241

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.

## Case Narrative

Dissolved Mercury

Gorgas Ash Pond

WMWGORAP\_1241

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.

<u>Sample ID</u>	<u>Batch ID</u>	<u>Project ID</u>
AZ21830	656792	WMWGORAP_1241
AZ21834	656792	WMWGORAP_1241

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



## Anions

### Gorgas Ash Pond

#### WMWGORAP\_1241

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.

<u>Sample ID</u>	<u>Batch ID</u>	<u>Project ID</u>
AZ21811	657266, 657273, & 656700	WMWGORAP_1241
AZ21812	657266, 657273, & 656700	WMWGORAP_1241
AZ21813	657266, 657273, & 656700	WMWGORAP_1241
AZ21814	657266, 657273, & 656700	WMWGORAP_1241
AZ21815	657266, 657273, & 656700	WMWGORAP_1241
AZ21816	657266, 657273, & 656700	WMWGORAP_1241
AZ21817	657266, 657273, & 656700	WMWGORAP_1241
AZ21818	657266, 657273, & 656700	WMWGORAP_1241
AZ21819	657266, 657273, & 656700	WMWGORAP_1241
AZ21820	657266, 657273, & 656700	WMWGORAP_1241
AZ21821	657267, 657274, & 656701	WMWGORAP_1241
AZ21822	657267, 657274, & 656701	WMWGORAP_1241
AZ21823	657267, 657274, & 656701	WMWGORAP_1241
AZ21824	657267, 657274, & 656701	WMWGORAP_1241
AZ21825	657267, 657274, & 656701	WMWGORAP_1241
AZ21826	657267, 657274, & 656701	WMWGORAP_1241
AZ21827	657267, 657274, & 656701	WMWGORAP_1241
AZ21828	657267, 657274, & 656701	WMWGORAP_1241
AZ21829	657267, 657274, & 656701	WMWGORAP_1241
AZ21830	657267, 657274, & 656701	WMWGORAP_1241
AZ21831	657268, 657275, & 656702	WMWGORAP_1241
AZ21832	657268, 657275, & 656702	WMWGORAP_1241
AZ21833	657268, 657275, & 656702	WMWGORAP_1241
AZ21834	657268, 657275, & 656702	WMWGORAP_1241
AZ21835	657268, 657275, & 656702	WMWGORAP_1241
AZ21836	657268, 657275, & 656702	WMWGORAP_1241

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 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:

<u>Sample ID</u>	<u>Analyte</u>	<u>Dilution Factor</u>
AZ21813	Sulfate	4
AZ21814	Sulfate & Chloride	20 & 2
AZ21815	Sulfate & Chloride	20 & 2
AZ21816	Sulfate	80
AZ21823	Sulfate	4
AZ21825	Sulfate	10
AZ21827	Sulfate & Chloride	25 & 2
AZ21829	Sulfate	10
AZ21830	Sulfate	20
AZ21835	Sulfate	10

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

TDS

Gorgas Ash Pond

WMWGORAP\_1241

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.

<u>Sample ID</u>	<u>Batch ID</u>	<u>Project ID</u>
AZ21811	656773	WMWGORAP_1241
AZ21812	656773	WMWGORAP_1241
AZ21813	656693	WMWGORAP_1241
AZ21814	656693	WMWGORAP_1241
AZ21815	656693	WMWGORAP_1241
AZ21816	656693	WMWGORAP_1241
AZ21817	656773	WMWGORAP_1241
AZ21818	656773	WMWGORAP_1241
AZ21819	656773	WMWGORAP_1241
AZ21820	656773	WMWGORAP_1241
AZ21821	656773	WMWGORAP_1241
AZ21822	656773	WMWGORAP_1241
AZ21823	656773	WMWGORAP_1241
AZ21824	656773	WMWGORAP_1241
AZ21825	656693	WMWGORAP_1241
AZ21826	656783	WMWGORAP_1241
AZ21827	656783	WMWGORAP_1241
AZ21828	656783	WMWGORAP_1241
AZ21829	656783	WMWGORAP_1241
AZ21830	656783	WMWGORAP_1241
AZ21831	656783	WMWGORAP_1241
AZ21832	656783	WMWGORAP_1241
AZ21833	656693	WMWGORAP_1241
AZ21834	656693	WMWGORAP_1241
AZ21835	656783	WMWGORAP_1241
AZ21836	656783	WMWGORAP_1241

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:
  - AZ21812
  - AZ21821
  - AZ21832

# Certificate Of Analysis

**Description:** Gorgas Ash Pond - MW-28H

**Location Code:** WMWGORAP  
**Collected:** 9/25/19 11:42  
**Customer ID:**  
**Submittal Date:** 9/26/19 09:28

**Laboratory ID Number:** AZ21811

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
<b>Analytical Method: EPA 200.7</b>			<b>Analyst: RDA</b>		<b>Preparation Method: EPA 1638</b>				
* Boron, Total	10/1/19 16:40	10/2/19 12:11		1.015	0.0784	mg/L	0.03	0.1	J
* Calcium, Total	10/1/19 16:40	10/2/19 12:11		1.015	2.52	mg/L	0.1	0.5	
* Lithium, Total	10/1/19 16:40	10/2/19 12:11		1.015	0.0619	mg/L	0.01	0.02	
<b>Analytical Method: EPA 200.8</b>			<b>Analyst: DLJ</b>		<b>Preparation Method: EPA 1638</b>				
* Antimony, Total	9/26/19 15:18	9/27/19 10:31		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	9/26/19 15:18	9/27/19 10:31		1.015	Not Detected	mg/L	0.001	0.005	U
* Barium, Total	9/26/19 15:18	9/27/19 10:31		1.015	0.0528	mg/L	0.002	0.01	
* Beryllium, Total	9/26/19 15:18	9/27/19 10:31		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	9/26/19 15:18	9/27/19 10:31		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	9/26/19 15:18	9/27/19 10:31		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	9/26/19 15:18	9/27/19 10:31		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	9/26/19 15:18	9/27/19 10:31		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	9/26/19 15:18	9/27/19 10:31		1.015	0.00338	mg/L	0.002	0.01	J
* Selenium, Total	9/26/19 15:18	9/27/19 10:31		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	9/26/19 15:18	9/27/19 10:31		1.015	Not Detected	mg/L	0.0002	0.001	U
<b>Analytical Method: EPA 245.1</b>			<b>Analyst: GAS</b>						
* Mercury, Total by CVAA	9/30/19 12:00	10/1/19 10:41		1	Not Detected	mg/L	0.0003	0.0005	U
<b>Analytical Method: SM 2540C</b>			<b>Analyst: TJW</b>						
* Solids, Dissolved	9/27/19 15:00	9/30/19 15:50		1	443	mg/L		25	
<b>Analytical Method: SM4500Cl E</b>			<b>Analyst: JCC</b>						
* Chloride	10/2/19 09:28	10/2/19 09:28		1	8.93	mg/L	0.50	1	
<b>Analytical Method: SM4500F G 2017</b>			<b>Analyst: JCC</b>						
* Fluoride	10/2/19 14:12	10/2/19 14:12		1	0.172	mg/L	0.05	0.1	
<b>Analytical Method: SM4500SO4 E</b>			<b>Analyst: JCC</b>						
* Sulfate	9/26/19 14:12	9/26/19 14:12		1	10.2	mg/L	0.50	1	
<b>Analytical Method: Field Measurements</b>			<b>Analyst: SNP</b>						
Conductivity	9/25/19 11:35	9/25/19 11:35			635.22	uS/cm			FA
pH	9/25/19 11:35	9/25/19 11:35			8.57	SU			FA
Temperature	9/25/19 11:35	9/25/19 11:35			21.58	C			FA
Turbidity	9/25/19 11:35	9/25/19 11:35			5.92	NTU			FA

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

**Comments:**

# Batch QC Summary

**Customer Account:** WMWGORAP  
**Sample Date:** 9/25/19 11:42  
**Customer ID:**  
**Delivery Date:** 9/26/19 09:28

**Description:** Gorgas Ash Pond - MW-28H

**Laboratory ID Number:** AZ21811

Sample	Analysis	Units	MB		Spike	MS	MSD	Standard		Rec		Prec	Limit
			MB	Limit				Standard	Limit	Rec	Prec		
AZ21820	Calcium, Total	mg/L	0.000127	0.1518	5.00	53.6	53.9	5.13	4.25 to 5.75	99.9	70 to 130	0.493	20
AZ21820	Arsenic, Total	mg/L	0.00000378	0.0001474	0.10	0.104	0.105	0.104	0.085 to 0.115	101	70 to 130	1.22	20
AZ21820	Beryllium, Total	mg/L	0.0000139	0.00088	0.10	0.101	0.104	0.102	0.085 to 0.115	101	70 to 130	2.36	20
AZ21820	Cobalt, Total	mg/L	-0.0000750	0.0001474	0.10	0.105	0.106	0.109	0.085 to 0.115	105	70 to 130	0.252	20
AZ21820	Lead, Total	mg/L	-0.00000318	0.0001474	0.10	0.101	0.100	0.102	0.085 to 0.115	101	70 to 130	0.288	20
AZ21820	Antimony, Total	mg/L	0.0000939	0.00066	0.10	0.0990	0.101	0.0941	0.085 to 0.115	99.0	70 to 130	1.92	20
AZ21820	Cadmium, Total	mg/L	-0.00000011	0.0001474	0.10	0.102	0.104	0.102	0.085 to 0.115	102	70 to 130	1.55	20
AZ21820	Chromium, Total	mg/L	0.0000230	0.00044	0.10	0.0982	0.0994	0.103	0.085 to 0.115	98.2	70 to 130	1.29	20
AZ21820	Barium, Total	mg/L	-0.00000553	0.0002	0.10	0.455	0.457	0.101	0.085 to 0.115	93.1	70 to 130	0.420	20
AZ21820	Mercury, Total by CVAA	mg/L	0.0000401	0.0005	0.004	0.00420	0.00407	0.00403	0.0034 to 0.0046	105	70 to 130	2.97	20
AZ21820	Lithium, Total	mg/L	-0.00000737	0.0154	0.20	0.260	0.261	0.202	0.17 to 0.23	111	70 to 130	0.485	20
AZ21820	Selenium, Total	mg/L	0.0000196	0.00066	0.10	0.100	0.101	0.105	0.085 to 0.115	100	70 to 130	0.511	20
AZ21820	Thallium, Total	mg/L	-0.0000690	0.0001474	0.10	0.103	0.103	0.103	0.085 to 0.115	103	70 to 130	0.195	20
AZ21820	Boron, Total	mg/L	0.00221	0.0650254	1.00	1.06	1.07	1.00	0.85 to 1.15	103	70 to 130	0.743	20
AZ21820	Molybdenum, Total	mg/L	-0.00000160	0.0001474	0.10	0.101	0.101	0.0947	0.085 to 0.115	95.8	70 to 130	0.171	20

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.

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

\* Test results for these accredited parameters meet all 2003 NELAC and 2009 TNI requirements, with exceptions noted on this report

Laboratory certification ID: E571114  
 Issued By: State of Florida, Department of Health  
 Expiration: June 30, 2018

**Comments:**

## Batch QC Summary

**Customer Account:** WMWGORAP

**Sample Date:** 9/25/19 11:42

**Customer ID:**

**Delivery Date:** 9/26/19 09:28

**Description:** Gorgas Ash Pond - MW-28H

**Laboratory ID Number:** AZ21811

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Limit	Prec	Prec Limit
AZ21820	Sulfate	mg/L	-0.401	0.50	20.0	32.7	14.0	19.4	18 to 22	93.0	80 to 120	0.712	20
AZ21819	Fluoride	mg/L	0.0298	0.05	2.50	2.84	0.312	2.61	2.25 to 2.75	101	80 to 120	1.62	20
AZ21819	Chloride	mg/L	0.0158	0.50	10.0	16.1	6.02	10.0	9 to 11	103	80 to 120	3.21	20
AZ21824	Solids, Dissolved	mg/L	0.0000	25			184	53.0	40 to 60			0.272	5

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

\* Test results for these accredited parameters meet all 2003 NELAC and 2009 TNI requirements, with exceptions noted on this report

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2017

**Comments:**

# Certificate Of Analysis

**Description:** Gorgas Ash Pond Field Blank

**Location Code:** WMWGORAPFB  
**Collected:** 9/25/19 11:35  
**Customer ID:**  
**Submittal Date:** 9/26/19 09:28

**Laboratory ID Number:** AZ21812

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
<b>Analytical Method: EPA 200.7</b>		<b>Analyst: RDA</b>			<b>Preparation Method: EPA 1638</b>				
* Boron, Total	10/1/19 16:40	10/2/19 12:14		1.015	Not Detected	mg/L	0.03	0.1	U
* Calcium, Total	10/1/19 16:40	10/2/19 12:14		1.015	Not Detected	mg/L	0.1	0.5	U
* Lithium, Total	10/1/19 16:40	10/2/19 12:14		1.015	Not Detected	mg/L	0.01	0.02	U
<b>Analytical Method: EPA 200.8</b>		<b>Analyst: DLJ</b>			<b>Preparation Method: EPA 1638</b>				
* Antimony, Total	9/26/19 15:18	9/27/19 10:34		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	9/26/19 15:18	9/27/19 10:34		1.015	Not Detected	mg/L	0.001	0.005	U
* Barium, Total	9/26/19 15:18	9/27/19 10:34		1.015	Not Detected	mg/L	0.002	0.01	U
* Beryllium, Total	9/26/19 15:18	9/27/19 10:34		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	9/26/19 15:18	9/27/19 10:34		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	9/26/19 15:18	9/27/19 10:34		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	9/26/19 15:18	9/27/19 10:34		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	9/26/19 15:18	9/27/19 10:34		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	9/26/19 15:18	9/27/19 10:34		1.015	Not Detected	mg/L	0.002	0.01	U
* Selenium, Total	9/26/19 15:18	9/27/19 10:34		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	9/26/19 15:18	9/27/19 10:34		1.015	Not Detected	mg/L	0.0002	0.001	U
<b>Analytical Method: EPA 245.1</b>		<b>Analyst: GAS</b>							
* Mercury, Total by CVAA	9/30/19 12:00	10/1/19 10:43		1	Not Detected	mg/L	0.0003	0.0005	U
<b>Analytical Method: SM 2540C</b>		<b>Analyst: TJW</b>							
* Solids, Dissolved	9/27/19 15:00	9/30/19 15:50		1	Not Detected	mg/L		25	U
<b>Analytical Method: SM4500CI E</b>		<b>Analyst: JCC</b>							
* Chloride	10/2/19 09:29	10/2/19 09:29		1	Not Detected	mg/L	0.50	1	U
<b>Analytical Method: SM4500F G 2017</b>		<b>Analyst: JCC</b>							
* Fluoride	10/2/19 14:13	10/2/19 14:13		1	Not Detected	mg/L	0.05	0.1	U
<b>Analytical Method: SM4500SO4 E</b>		<b>Analyst: JCC</b>							
* Sulfate	9/26/19 14:14	9/26/19 14:14		1	Not Detected	mg/L	0.50	1	U

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

**Comments:**



# Batch QC Summary

**Customer Account:** WMWGORAPFB  
**Sample Date:** 9/25/19 11:35  
**Customer ID:**  
**Delivery Date:** 9/26/19 09:28

**Description:** Gorgas Ash Pond Field Blank

**Laboratory ID Number:** AZ21812

Sample	Analysis	Units	MB		Spike	MS	MSD	Standard		Rec		Prec	Limit
			MB	Limit				Standard	Limit	Rec	Prec		
AZ21820	Calcium, Total	mg/L	0.000127	0.1518	5.00	53.6	53.9	5.13	4.25 to 5.75	99.9	70 to 130	0.493	20
AZ21820	Arsenic, Total	mg/L	0.00000378	0.0001474	0.10	0.104	0.105	0.104	0.085 to 0.115	101	70 to 130	1.22	20
AZ21820	Beryllium, Total	mg/L	0.0000139	0.00088	0.10	0.101	0.104	0.102	0.085 to 0.115	101	70 to 130	2.36	20
AZ21820	Cobalt, Total	mg/L	-0.0000750	0.0001474	0.10	0.105	0.106	0.109	0.085 to 0.115	105	70 to 130	0.252	20
AZ21820	Lead, Total	mg/L	-0.00000318	0.0001474	0.10	0.101	0.100	0.102	0.085 to 0.115	101	70 to 130	0.288	20
AZ21820	Antimony, Total	mg/L	0.0000939	0.00066	0.10	0.0990	0.101	0.0941	0.085 to 0.115	99.0	70 to 130	1.92	20
AZ21820	Boron, Total	mg/L	0.00221	0.0650254	1.00	1.06	1.07	1.00	0.85 to 1.15	103	70 to 130	0.743	20
AZ21820	Molybdenum, Total	mg/L	-0.00000160	0.0001474	0.10	0.101	0.101	0.0947	0.085 to 0.115	95.8	70 to 130	0.171	20
AZ21820	Cadmium, Total	mg/L	-0.00000011	0.0001474	0.10	0.102	0.104	0.102	0.085 to 0.115	102	70 to 130	1.55	20
AZ21820	Chromium, Total	mg/L	0.0000230	0.00044	0.10	0.0982	0.0994	0.103	0.085 to 0.115	98.2	70 to 130	1.29	20
AZ21820	Barium, Total	mg/L	-0.00000553	0.0002	0.10	0.455	0.457	0.101	0.085 to 0.115	93.1	70 to 130	0.420	20
AZ21820	Mercury, Total by CVAA	mg/L	0.0000401	0.0005	0.004	0.00420	0.00407	0.00403	0.0034 to 0.0046	105	70 to 130	2.97	20
AZ21820	Lithium, Total	mg/L	-0.00000737	0.0154	0.20	0.260	0.261	0.202	0.17 to 0.23	111	70 to 130	0.485	20
AZ21820	Selenium, Total	mg/L	0.0000196	0.00066	0.10	0.100	0.101	0.105	0.085 to 0.115	100	70 to 130	0.511	20
AZ21820	Thallium, Total	mg/L	-0.0000690	0.0001474	0.10	0.103	0.103	0.103	0.085 to 0.115	103	70 to 130	0.195	20

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.

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

\* Test results for these accredited parameters meet all 2003 NELAC and 2009 TNI requirements, with exceptions noted on this report

Laboratory certification ID: E571114  
 Issued By: State of Florida, Department of Health  
 Expiration: June 30, 2018

**Comments:**

## Batch QC Summary

**Customer Account:** WMWGORAPFB

**Sample Date:** 9/25/19 11:35

**Customer ID:**

**Delivery Date:** 9/26/19 09:28

**Description:** Gorgas Ash Pond Field Blank

**Laboratory ID Number:** AZ21812

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Limit	Prec	Prec Limit
AZ21820	Sulfate	mg/L	-0.401	0.50	20.0	32.7	14.0	19.4	18 to 22	93.0	80 to 120	0.712	20
AZ21819	Fluoride	mg/L	0.0298	0.05	2.50	2.84	0.312	2.61	2.25 to 2.75	101	80 to 120	1.62	20
AZ21819	Chloride	mg/L	0.0158	0.50	10.0	16.1	6.02	10.0	9 to 11	103	80 to 120	3.21	20
AZ21824	Solids, Dissolved	mg/L	0.0000	25			184	53.0	40 to 60			0.272	5

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.

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

\* Test results for these accredited parameters meet all 2003 NELAC and 2009 TNI requirements, with exceptions noted on this report

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2017

**Comments:**

# Certificate Of Analysis

**Description:** Gorgas Ash Pond - MW-6D

**Location Code:** WMWGORAP  
**Collected:** 9/23/19 13:31  
**Customer ID:**  
**Submittal Date:** 9/26/19 09:28

**Laboratory ID Number:** AZ21813

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
<b>Analytical Method: EPA 200.7</b>			<b>Analyst: RDA</b>		<b>Preparation Method: EPA 1638</b>				
* Boron, Total	10/1/19 16:40	10/2/19 12:17		1.015	1.15	mg/L	0.03	0.1	
* Calcium, Total	10/1/19 16:40	10/2/19 14:43		20.3	56.1	mg/L	2.03	10.15	
* Lithium, Total	10/1/19 16:40	10/2/19 12:17		1.015	0.264	mg/L	0.01	0.02	
<b>Analytical Method: EPA 200.8</b>			<b>Analyst: DLJ</b>		<b>Preparation Method: EPA 1638</b>				
* Antimony, Total	9/26/19 15:18	9/27/19 10:36		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	9/26/19 15:18	9/27/19 10:36		1.015	0.0876	mg/L	0.001	0.005	
* Barium, Total	9/26/19 15:18	9/27/19 10:36		1.015	0.903	mg/L	0.002	0.01	
* Beryllium, Total	9/26/19 15:18	9/27/19 10:36		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	9/26/19 15:18	9/27/19 10:36		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	9/26/19 15:18	9/27/19 10:36		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	9/26/19 15:18	9/27/19 10:36		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	9/26/19 15:18	9/27/19 10:36		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	9/26/19 15:18	9/27/19 10:36		1.015	0.00758	mg/L	0.002	0.01	J
* Selenium, Total	9/26/19 15:18	9/27/19 10:36		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	9/26/19 15:18	9/27/19 10:36		1.015	Not Detected	mg/L	0.0002	0.001	U
<b>Analytical Method: EPA 245.1</b>			<b>Analyst: GAS</b>						
* Mercury, Total by CVAA	9/30/19 12:00	10/1/19 10:46		1	Not Detected	mg/L	0.0003	0.0005	U
<b>Analytical Method: SM 2540C</b>			<b>Analyst: TJW</b>						
* Solids, Dissolved	9/26/19 15:13	9/30/19 10:10		1	296	mg/L		25	
<b>Analytical Method: SM4500Cl E</b>			<b>Analyst: JCC</b>						
* Chloride	10/2/19 09:30	10/2/19 09:30		1	8.72	mg/L	0.50	1	
<b>Analytical Method: SM4500F G 2017</b>			<b>Analyst: JCC</b>						
* Fluoride	10/2/19 14:14	10/2/19 14:14		1	0.132	mg/L	0.05	0.1	
<b>Analytical Method: SM4500SO4 E</b>			<b>Analyst: JCC</b>						
* Sulfate	9/26/19 14:27	9/26/19 14:27		4	47.9	mg/L	2.00	4	
<b>Analytical Method: Field Measurements</b>			<b>Analyst: DKG</b>						
Conductivity	9/23/19 13:26	9/23/19 13:26			490.82	uS/cm			FA
pH	9/23/19 13:26	9/23/19 13:26			7.23	SU			FA
Temperature	9/23/19 13:26	9/23/19 13:26			21.22	C			FA
Turbidity	9/23/19 13:26	9/23/19 13:26			0.51	NTU			FA

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

**Comments:**

# Batch QC Summary

**Customer Account:** WMWGORAP  
**Sample Date:** 9/23/19 13:31  
**Customer ID:**  
**Delivery Date:** 9/26/19 09:28

**Description:** Gorgas Ash Pond - MW-6D

**Laboratory ID Number:** AZ21813

Sample	Analysis	Units	MB		Spike	MS	MSD	Standard		Rec		Prec	Limit
			MB	Limit				Standard	Limit	Rec	Limit		
AZ21820	Calcium, Total	mg/L	0.000127	0.1518	5.00	53.6	53.9	5.13	4.25 to 5.75	99.9	70 to 130	0.493	20
AZ21820	Arsenic, Total	mg/L	0.00000378	0.0001474	0.10	0.104	0.105	0.104	0.085 to 0.115	101	70 to 130	1.22	20
AZ21820	Cadmium, Total	mg/L	-0.00000011	0.0001474	0.10	0.102	0.104	0.102	0.085 to 0.115	102	70 to 130	1.55	20
AZ21820	Chromium, Total	mg/L	0.0000230	0.00044	0.10	0.0982	0.0994	0.103	0.085 to 0.115	98.2	70 to 130	1.29	20
AZ21820	Barium, Total	mg/L	-0.00000553	0.0002	0.10	0.455	0.457	0.101	0.085 to 0.115	93.1	70 to 130	0.420	20
AZ21820	Mercury, Total by CVAA	mg/L	0.0000401	0.0005	0.004	0.00420	0.00407	0.00403	0.0034 to 0.0046	105	70 to 130	2.97	20
AZ21820	Beryllium, Total	mg/L	0.0000139	0.00088	0.10	0.101	0.104	0.102	0.085 to 0.115	101	70 to 130	2.36	20
AZ21820	Cobalt, Total	mg/L	-0.0000750	0.0001474	0.10	0.105	0.106	0.109	0.085 to 0.115	105	70 to 130	0.252	20
AZ21820	Lead, Total	mg/L	-0.00000318	0.0001474	0.10	0.101	0.100	0.102	0.085 to 0.115	101	70 to 130	0.288	20
AZ21820	Antimony, Total	mg/L	0.0000939	0.00066	0.10	0.0990	0.101	0.0941	0.085 to 0.115	99.0	70 to 130	1.92	20
AZ21820	Lithium, Total	mg/L	-0.00000737	0.0154	0.20	0.260	0.261	0.202	0.17 to 0.23	111	70 to 130	0.485	20
AZ21820	Selenium, Total	mg/L	0.0000196	0.00066	0.10	0.100	0.101	0.105	0.085 to 0.115	100	70 to 130	0.511	20
AZ21820	Thallium, Total	mg/L	-0.0000690	0.0001474	0.10	0.103	0.103	0.103	0.085 to 0.115	103	70 to 130	0.195	20
AZ21820	Boron, Total	mg/L	0.00221	0.0650254	1.00	1.06	1.07	1.00	0.85 to 1.15	103	70 to 130	0.743	20
AZ21820	Molybdenum, Total	mg/L	-0.00000160	0.0001474	0.10	0.101	0.101	0.0947	0.085 to 0.115	95.8	70 to 130	0.171	20

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.

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

\* Test results for these accredited parameters meet all 2003 NELAC and 2009 TNI requirements, with exceptions noted on this report

Laboratory certification ID: E571114  
 Issued By: State of Florida, Department of Health  
 Expiration: June 30, 2018

**Comments:**

## Batch QC Summary

**Customer Account:** WMWGORAP

**Sample Date:** 9/23/19 13:31

**Customer ID:**

**Delivery Date:** 9/26/19 09:28

**Description:** Gorgas Ash Pond - MW-6D

**Laboratory ID Number:** AZ21813

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Limit	Prec	Prec Limit
AZ21834	Solids, Dissolved	mg/L	0.0000	25			281	50.0	40 to 60			1.44	5
AZ21820	Sulfate	mg/L	-0.401	0.50	20.0	32.7	14.0	19.4	18 to 22	93.0	80 to 120	0.712	20
AZ21819	Chloride	mg/L	0.0158	0.50	10.0	16.1	6.02	10.0	9 to 11	103	80 to 120	3.21	20
AZ21819	Fluoride	mg/L	0.0298	0.05	2.50	2.84	0.312	2.61	2.25 to 2.75	101	80 to 120	1.62	20

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

\* Test results for these accredited parameters meet all 2003 NELAC and 2009 TNI requirements, with exceptions noted on this report

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2017

**Comments:**

# Certificate Of Analysis

**Description:** Gorgas Ash Pond - MW-6S

**Location Code:** WMWGORAP  
**Collected:** 9/23/19 14:41  
**Customer ID:**  
**Submittal Date:** 9/26/19 09:28

**Laboratory ID Number:** AZ21814

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
<b>Analytical Method: EPA 200.7</b>			<b>Analyst: RDA</b>		<b>Preparation Method: EPA 1638</b>				
* Boron, Total	10/1/19 16:40	10/2/19 12:20		1.015	1.08	mg/L	0.03	0.1	
* Calcium, Total	10/1/19 16:40	10/2/19 14:46		20.3	60.0	mg/L	2.03	10.15	
* Lithium, Total	10/1/19 16:40	10/2/19 12:20		1.015	0.0105	mg/L	0.01	0.02	J
<b>Analytical Method: EPA 200.8</b>			<b>Analyst: DLJ</b>		<b>Preparation Method: EPA 1638</b>				
* Antimony, Total	9/26/19 15:18	9/27/19 10:39		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	9/26/19 15:18	9/27/19 10:39		1.015	0.0105	mg/L	0.001	0.005	
* Barium, Total	9/26/19 15:18	9/27/19 10:39		1.015	0.124	mg/L	0.002	0.01	
* Beryllium, Total	9/26/19 15:18	9/27/19 10:39		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	9/26/19 15:18	9/27/19 10:39		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	9/26/19 15:18	9/27/19 10:39		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	9/26/19 15:18	9/27/19 10:39		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	9/26/19 15:18	9/27/19 10:39		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	9/26/19 15:18	9/27/19 10:39		1.015	0.00412	mg/L	0.002	0.01	J
* Selenium, Total	9/26/19 15:18	9/27/19 10:39		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	9/26/19 15:18	9/27/19 10:39		1.015	Not Detected	mg/L	0.0002	0.001	U
<b>Analytical Method: EPA 245.1</b>			<b>Analyst: GAS</b>						
* Mercury, Total by CVAA	9/30/19 12:00	10/1/19 10:48		1	Not Detected	mg/L	0.0003	0.0005	U
<b>Analytical Method: SM 2540C</b>			<b>Analyst: TJW</b>						
* Solids, Dissolved	9/26/19 15:13	9/30/19 10:10		1	381	mg/L		25	
<b>Analytical Method: SM4500Cl E</b>			<b>Analyst: JCC</b>						
* Chloride	10/2/19 09:42	10/2/19 09:42		2	23.4	mg/L	1.00	2	
<b>Analytical Method: SM4500F G 2017</b>			<b>Analyst: JCC</b>						
* Fluoride	10/2/19 14:15	10/2/19 14:15		1	0.142	mg/L	0.05	0.1	
<b>Analytical Method: SM4500SO4 E</b>			<b>Analyst: JCC</b>						
* Sulfate	9/26/19 14:28	9/26/19 14:28		20	176	mg/L	10.00	20	
<b>Analytical Method: Field Measurements</b>			<b>Analyst: DKG</b>						
Conductivity	9/23/19 14:36	9/23/19 14:36			618.86	uS/cm			FA
pH	9/23/19 14:36	9/23/19 14:36			6.51	SU			FA
Temperature	9/23/19 14:36	9/23/19 14:36			21.36	C			FA
Turbidity	9/23/19 14:36	9/23/19 14:36			6.56	NTU			FA

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

**Comments:**

# Batch QC Summary

**Customer Account:** WMWGORAP  
**Sample Date:** 9/23/19 14:41  
**Customer ID:**  
**Delivery Date:** 9/26/19 09:28

**Description:** Gorgas Ash Pond - MW-6S

**Laboratory ID Number:** AZ21814

Sample	Analysis	Units	MB		Spike	MS	MSD	Standard		Rec		Prec	Limit
			MB	Limit				Standard	Limit	Rec	Limit		
AZ21820	Calcium, Total	mg/L	0.000127	0.1518	5.00	53.6	53.9	5.13	4.25 to 5.75	99.9	70 to 130	0.493	20
AZ21820	Arsenic, Total	mg/L	0.00000378	0.0001474	0.10	0.104	0.105	0.104	0.085 to 0.115	101	70 to 130	1.22	20
AZ21820	Beryllium, Total	mg/L	0.0000139	0.00088	0.10	0.101	0.104	0.102	0.085 to 0.115	101	70 to 130	2.36	20
AZ21820	Cobalt, Total	mg/L	-0.0000750	0.0001474	0.10	0.105	0.106	0.109	0.085 to 0.115	105	70 to 130	0.252	20
AZ21820	Lead, Total	mg/L	-0.00000318	0.0001474	0.10	0.101	0.100	0.102	0.085 to 0.115	101	70 to 130	0.288	20
AZ21820	Antimony, Total	mg/L	0.0000939	0.00066	0.10	0.0990	0.101	0.0941	0.085 to 0.115	99.0	70 to 130	1.92	20
AZ21820	Boron, Total	mg/L	0.00221	0.0650254	1.00	1.06	1.07	1.00	0.85 to 1.15	103	70 to 130	0.743	20
AZ21820	Molybdenum, Total	mg/L	-0.00000160	0.0001474	0.10	0.101	0.101	0.0947	0.085 to 0.115	95.8	70 to 130	0.171	20
AZ21820	Cadmium, Total	mg/L	-0.00000011	0.0001474	0.10	0.102	0.104	0.102	0.085 to 0.115	102	70 to 130	1.55	20
AZ21820	Chromium, Total	mg/L	0.0000230	0.00044	0.10	0.0982	0.0994	0.103	0.085 to 0.115	98.2	70 to 130	1.29	20
AZ21820	Barium, Total	mg/L	-0.00000553	0.0002	0.10	0.455	0.457	0.101	0.085 to 0.115	93.1	70 to 130	0.420	20
AZ21820	Mercury, Total by CVAA	mg/L	0.0000401	0.0005	0.004	0.00420	0.00407	0.00403	0.0034 to 0.0046	105	70 to 130	2.97	20
AZ21820	Lithium, Total	mg/L	-0.00000737	0.0154	0.20	0.260	0.261	0.202	0.17 to 0.23	111	70 to 130	0.485	20
AZ21820	Selenium, Total	mg/L	0.0000196	0.00066	0.10	0.100	0.101	0.105	0.085 to 0.115	100	70 to 130	0.511	20
AZ21820	Thallium, Total	mg/L	-0.0000690	0.0001474	0.10	0.103	0.103	0.103	0.085 to 0.115	103	70 to 130	0.195	20

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.

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

\* Test results for these accredited parameters meet all 2003 NELAC and 2009 TNI requirements, with exceptions noted on this report

Laboratory certification ID: E571114  
 Issued By: State of Florida, Department of Health  
 Expiration: June 30, 2018

**Comments:**

## Batch QC Summary

**Customer Account:** WMWGORAP

**Sample Date:** 9/23/19 14:41

**Customer ID:**

**Delivery Date:** 9/26/19 09:28

**Description:** Gorgas Ash Pond - MW-6S

**Laboratory ID Number:** AZ21814

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
AZ21834	Solids, Dissolved	mg/L	0.0000	25			281	50.0	40 to 60			1.44	5
AZ21820	Sulfate	mg/L	-0.401	0.50	20.0	32.7	14.0	19.4	18 to 22	93.0	80 to 120	0.712	20
AZ21819	Fluoride	mg/L	0.0298	0.05	2.50	2.84	0.312	2.61	2.25 to 2.75	101	80 to 120	1.62	20
AZ21819	Chloride	mg/L	0.0158	0.50	10.0	16.1	6.02	10.0	9 to 11	103	80 to 120	3.21	20

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.

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

\* Test results for these accredited parameters meet all 2003 NELAC and 2009 TNI requirements, with exceptions noted on this report

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2017

**Comments:**



# Certificate Of Analysis

**Description:** Gorgas Ash Pond - MW-6S DUP

**Location Code:** WMWGORAP  
**Collected:** 9/23/19 14:41  
**Customer ID:**  
**Submittal Date:** 9/26/19 09:28

**Laboratory ID Number:** AZ21815

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
<b>Analytical Method: EPA 200.7</b>			<b>Analyst: RDA</b>		<b>Preparation Method: EPA 1638</b>				
* Boron, Total	10/1/19 16:40	10/2/19 12:23		1.015	1.08	mg/L	0.03	0.1	
* Calcium, Total	10/1/19 16:40	10/2/19 14:49		20.3	59.7	mg/L	2.03	10.15	
* Lithium, Total	10/1/19 16:40	10/2/19 12:23		1.015	0.0117	mg/L	0.01	0.02	J
<b>Analytical Method: EPA 200.8</b>			<b>Analyst: DLJ</b>		<b>Preparation Method: EPA 1638</b>				
* Antimony, Total	9/26/19 15:18	9/27/19 10:42		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	9/26/19 15:18	9/27/19 10:42		1.015	0.0105	mg/L	0.001	0.005	
* Barium, Total	9/26/19 15:18	9/27/19 10:42		1.015	0.121	mg/L	0.002	0.01	
* Beryllium, Total	9/26/19 15:18	9/27/19 10:42		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	9/26/19 15:18	9/27/19 10:42		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	9/26/19 15:18	9/27/19 10:42		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	9/26/19 15:18	9/27/19 10:42		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	9/26/19 15:18	9/27/19 10:42		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	9/26/19 15:18	9/27/19 10:42		1.015	0.00448	mg/L	0.002	0.01	J
* Selenium, Total	9/26/19 15:18	9/27/19 10:42		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	9/26/19 15:18	9/27/19 10:42		1.015	Not Detected	mg/L	0.0002	0.001	U
<b>Analytical Method: EPA 245.1</b>			<b>Analyst: GAS</b>						
* Mercury, Total by CVAA	9/30/19 12:00	10/1/19 10:51		1	Not Detected	mg/L	0.0003	0.0005	U
<b>Analytical Method: SM 2540C</b>			<b>Analyst: TJW</b>						
* Solids, Dissolved	9/26/19 15:13	9/30/19 10:10		1	378	mg/L		25	
<b>Analytical Method: SM4500Cl E</b>			<b>Analyst: JCC</b>						
* Chloride	10/2/19 09:43	10/2/19 09:43		2	23.4	mg/L	1.00	2	
<b>Analytical Method: SM4500F G 2017</b>			<b>Analyst: JCC</b>						
* Fluoride	10/2/19 14:16	10/2/19 14:16		1	0.135	mg/L	0.05	0.1	
<b>Analytical Method: SM4500SO4 E</b>			<b>Analyst: JCC</b>						
* Sulfate	9/26/19 14:29	9/26/19 14:29		20	174	mg/L	10.00	20	
<b>Analytical Method: Field Measurements</b>			<b>Analyst: DKG</b>						
Conductivity	9/23/19 14:36	9/23/19 14:36			618.86	uS/cm			FA
pH	9/23/19 14:36	9/23/19 14:36			6.51	SU			FA
Temperature	9/23/19 14:36	9/23/19 14:36			21.36	C			FA
Turbidity	9/23/19 14:36	9/23/19 14:36			6.56	NTU			FA

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

**Comments:**

# Batch QC Summary

**Customer Account:** WMWGORAP  
**Sample Date:** 9/23/19 14:41  
**Customer ID:**  
**Delivery Date:** 9/26/19 09:28

**Description:** Gorgas Ash Pond - MW-6S DUP

**Laboratory ID Number:** AZ21815

Sample	Analysis	Units	MB		Spike	MS	MSD	Standard	Standard Limit	Rec		Prec	Limit
			MB	Limit						Rec	Limit		
AZ21820	Arsenic, Total	mg/L	0.0000378	0.0001474	0.10	0.104	0.105	0.104	0.085 to 0.115	101	70 to 130	1.22	20
AZ21820	Calcium, Total	mg/L	0.000127	0.1518	5.00	53.6	53.9	5.13	4.25 to 5.75	99.9	70 to 130	0.493	20
AZ21820	Lithium, Total	mg/L	-0.00000737	0.0154	0.20	0.260	0.261	0.202	0.17 to 0.23	111	70 to 130	0.485	20
AZ21820	Selenium, Total	mg/L	0.0000196	0.00066	0.10	0.100	0.101	0.105	0.085 to 0.115	100	70 to 130	0.511	20
AZ21820	Thallium, Total	mg/L	-0.0000690	0.0001474	0.10	0.103	0.103	0.103	0.085 to 0.115	103	70 to 130	0.195	20
AZ21820	Cadmium, Total	mg/L	-0.00000011	0.0001474	0.10	0.102	0.104	0.102	0.085 to 0.115	102	70 to 130	1.55	20
AZ21820	Chromium, Total	mg/L	0.0000230	0.00044	0.10	0.0982	0.0994	0.103	0.085 to 0.115	98.2	70 to 130	1.29	20
AZ21820	Barium, Total	mg/L	-0.00000553	0.0002	0.10	0.455	0.457	0.101	0.085 to 0.115	93.1	70 to 130	0.420	20
AZ21820	Mercury, Total by CVAA	mg/L	0.0000401	0.0005	0.004	0.00420	0.00407	0.00403	0.0034 to 0.0046	105	70 to 130	2.97	20
AZ21820	Beryllium, Total	mg/L	0.0000139	0.00088	0.10	0.101	0.104	0.102	0.085 to 0.115	101	70 to 130	2.36	20
AZ21820	Cobalt, Total	mg/L	-0.0000750	0.0001474	0.10	0.105	0.106	0.109	0.085 to 0.115	105	70 to 130	0.252	20
AZ21820	Lead, Total	mg/L	-0.00000318	0.0001474	0.10	0.101	0.100	0.102	0.085 to 0.115	101	70 to 130	0.288	20
AZ21820	Antimony, Total	mg/L	0.0000939	0.00066	0.10	0.0990	0.101	0.0941	0.085 to 0.115	99.0	70 to 130	1.92	20
AZ21820	Boron, Total	mg/L	0.00221	0.0650254	1.00	1.06	1.07	1.00	0.85 to 1.15	103	70 to 130	0.743	20
AZ21820	Molybdenum, Total	mg/L	-0.00000160	0.0001474	0.10	0.101	0.101	0.0947	0.085 to 0.115	95.8	70 to 130	0.171	20

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.

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

\* Test results for these accredited parameters meet all 2003 NELAC and 2009 TNI requirements, with exceptions noted on this report

Laboratory certification ID: E571114  
 Issued By: State of Florida, Department of Health  
 Expiration: June 30, 2018

**Comments:**

## Batch QC Summary

**Customer Account:** WMWGORAP

**Sample Date:** 9/23/19 14:41

**Customer ID:**

**Delivery Date:** 9/26/19 09:28

**Description:** Gorgas Ash Pond - MW-6S DUP

**Laboratory ID Number:** AZ21815

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
AZ21834	Solids, Dissolved	mg/L	0.0000	25			281	50.0	40 to 60			1.44	5
AZ21820	Sulfate	mg/L	-0.401	0.50	20.0	32.7	14.0	19.4	18 to 22	93.0	80 to 120	0.712	20
AZ21819	Chloride	mg/L	0.0158	0.50	10.0	16.1	6.02	10.0	9 to 11	103	80 to 120	3.21	20
AZ21819	Fluoride	mg/L	0.0298	0.05	2.50	2.84	0.312	2.61	2.25 to 2.75	101	80 to 120	1.62	20

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\* Test results for these accredited parameters meet all 2003 NELAC and 2009 TNI requirements, with exceptions noted on this report

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2017

**Comments:**

# Certificate Of Analysis

**Description:** Gorgas Ash Pond - MW-23H

**Location Code:** WMWGORAP  
**Collected:** 9/23/19 16:14  
**Customer ID:**  
**Submittal Date:** 9/26/19 09:28

**Laboratory ID Number:** AZ21816

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
<b>Analytical Method: EPA 200.7</b>			<b>Analyst: RDA</b>		<b>Preparation Method: EPA 1638</b>				
* Boron, Total	10/1/19 16:40	10/2/19 12:26		1.015	0.0641	mg/L	0.03	0.1	J
* Calcium, Total	10/1/19 16:40	10/2/19 14:52		20.3	80.6	mg/L	2.03	10.15	
* Lithium, Total	10/1/19 16:40	10/2/19 12:26		1.015	0.0324	mg/L	0.01	0.02	
<b>Analytical Method: EPA 200.8</b>			<b>Analyst: DLJ</b>		<b>Preparation Method: EPA 1638</b>				
* Antimony, Total	9/26/19 15:18	9/27/19 10:44		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	9/26/19 15:18	9/27/19 10:44		1.015	0.0369	mg/L	0.001	0.005	
* Barium, Total	9/26/19 15:18	9/27/19 10:44		1.015	0.0148	mg/L	0.002	0.01	
* Beryllium, Total	9/26/19 15:18	9/27/19 10:44		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	9/26/19 15:18	9/27/19 10:44		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	9/26/19 15:18	9/27/19 10:44		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	9/26/19 15:18	9/27/19 10:44		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	9/26/19 15:18	9/27/19 10:44		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	9/26/19 15:18	9/27/19 10:44		1.015	Not Detected	mg/L	0.002	0.01	U
* Selenium, Total	9/26/19 15:18	9/27/19 10:44		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	9/26/19 15:18	9/27/19 10:44		1.015	Not Detected	mg/L	0.0002	0.001	U
<b>Analytical Method: EPA 245.1</b>			<b>Analyst: GAS</b>						
* Mercury, Total by CVAA	9/30/19 12:00	10/1/19 10:53		1	Not Detected	mg/L	0.0003	0.0005	U
<b>Analytical Method: SM 2540C</b>			<b>Analyst: TJW</b>						
* Solids, Dissolved	9/26/19 15:13	9/30/19 10:10		1	598	mg/L		50	
<b>Analytical Method: SM4500Cl E</b>			<b>Analyst: JCC</b>						
* Chloride	10/2/19 09:34	10/2/19 09:34		1	2.26	mg/L	0.50	1	
<b>Analytical Method: SM4500F G 2017</b>			<b>Analyst: JCC</b>						
* Fluoride	10/2/19 14:18	10/2/19 14:18		1	0.144	mg/L	0.05	0.1	
<b>Analytical Method: SM4500SO4 E</b>			<b>Analyst: JCC</b>						
* Sulfate	9/26/19 14:30	9/26/19 14:30		80	394	mg/L	40.00	80	
<b>Analytical Method: Field Measurements</b>			<b>Analyst: DKG</b>						
Conductivity	9/23/19 16:09	9/23/19 16:09			790.10	uS/cm			FA
pH	9/23/19 16:09	9/23/19 16:09			5.76	SU			FA
Temperature	9/23/19 16:09	9/23/19 16:09			18.55	C			FA
Turbidity	9/23/19 16:09	9/23/19 16:09			1.31	NTU			FA

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

**Comments:**

# Batch QC Summary

**Customer Account:** WMWGORAP  
**Sample Date:** 9/23/19 16:14  
**Customer ID:**  
**Delivery Date:** 9/26/19 09:28

**Description:** Gorgas Ash Pond - MW-23H

**Laboratory ID Number:** AZ21816

Sample	Analysis	Units	MB		Spike	MS	MSD	Standard		Rec		Prec	Limit
			MB	Limit				Standard	Limit	Rec	Limit		
AZ21820	Calcium, Total	mg/L	0.000127	0.1518	5.00	53.6	53.9	5.13	4.25 to 5.75	99.9	70 to 130	0.493	20
AZ21820	Arsenic, Total	mg/L	0.00000378	0.0001474	0.10	0.104	0.105	0.104	0.085 to 0.115	101	70 to 130	1.22	20
AZ21820	Cadmium, Total	mg/L	-0.00000011	0.0001474	0.10	0.102	0.104	0.102	0.085 to 0.115	102	70 to 130	1.55	20
AZ21820	Chromium, Total	mg/L	0.0000230	0.00044	0.10	0.0982	0.0994	0.103	0.085 to 0.115	98.2	70 to 130	1.29	20
AZ21820	Boron, Total	mg/L	0.00221	0.0650254	1.00	1.06	1.07	1.00	0.85 to 1.15	103	70 to 130	0.743	20
AZ21820	Molybdenum, Total	mg/L	-0.00000160	0.0001474	0.10	0.101	0.101	0.0947	0.085 to 0.115	95.8	70 to 130	0.171	20
AZ21820	Beryllium, Total	mg/L	0.0000139	0.00088	0.10	0.101	0.104	0.102	0.085 to 0.115	101	70 to 130	2.36	20
AZ21820	Cobalt, Total	mg/L	-0.0000750	0.0001474	0.10	0.105	0.106	0.109	0.085 to 0.115	105	70 to 130	0.252	20
AZ21820	Lead, Total	mg/L	-0.00000318	0.0001474	0.10	0.101	0.100	0.102	0.085 to 0.115	101	70 to 130	0.288	20
AZ21820	Antimony, Total	mg/L	0.0000939	0.00066	0.10	0.0990	0.101	0.0941	0.085 to 0.115	99.0	70 to 130	1.92	20
AZ21820	Barium, Total	mg/L	-0.00000553	0.0002	0.10	0.455	0.457	0.101	0.085 to 0.115	93.1	70 to 130	0.420	20
AZ21820	Mercury, Total by CVAA	mg/L	0.0000401	0.0005	0.004	0.00420	0.00407	0.00403	0.0034 to 0.0046	105	70 to 130	2.97	20
AZ21820	Lithium, Total	mg/L	-0.00000737	0.0154	0.20	0.260	0.261	0.202	0.17 to 0.23	111	70 to 130	0.485	20
AZ21820	Selenium, Total	mg/L	0.0000196	0.00066	0.10	0.100	0.101	0.105	0.085 to 0.115	100	70 to 130	0.511	20
AZ21820	Thallium, Total	mg/L	-0.0000690	0.0001474	0.10	0.103	0.103	0.103	0.085 to 0.115	103	70 to 130	0.195	20

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

\* Test results for these accredited parameters meet all 2003 NELAC and 2009 TNI requirements, with exceptions noted on this report

Laboratory certification ID: E571114  
 Issued By: State of Florida, Department of Health  
 Expiration: June 30, 2018

**Comments:**

## Batch QC Summary

**Customer Account:** WMWGORAP

**Sample Date:** 9/23/19 16:14

**Customer ID:**

**Delivery Date:** 9/26/19 09:28

**Description:** Gorgas Ash Pond - MW-23H

**Laboratory ID Number:** AZ21816

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Limit	Prec	Prec Limit
AZ21834	Solids, Dissolved	mg/L	0.0000	25			281	50.0	40 to 60			1.44	5
AZ21820	Sulfate	mg/L	-0.401	0.50	20.0	32.7	14.0	19.4	18 to 22	93.0	80 to 120	0.712	20
AZ21819	Chloride	mg/L	0.0158	0.50	10.0	16.1	6.02	10.0	9 to 11	103	80 to 120	3.21	20
AZ21819	Fluoride	mg/L	0.0298	0.05	2.50	2.84	0.312	2.61	2.25 to 2.75	101	80 to 120	1.62	20

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\* Test results for these accredited parameters meet all 2003 NELAC and 2009 TNI requirements, with exceptions noted on this report

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2017

**Comments:**

# Certificate Of Analysis

**Description:** Gorgas Ash Pond - MW-17V

**Location Code:** WMWGORAP  
**Collected:** 9/24/19 11:50  
**Customer ID:**  
**Submittal Date:** 9/26/19 09:28

**Laboratory ID Number:** AZ21817

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
<b>Analytical Method: EPA 200.7</b>			<b>Analyst: RDA</b>		<b>Preparation Method: EPA 1638</b>				
* Boron, Total	10/1/19 16:40	10/2/19 12:29		1.015	0.0532	mg/L	0.03	0.1	J
* Calcium, Total	10/1/19 16:40	10/2/19 12:29		1.015	29.7	mg/L	0.1	0.5	
* Lithium, Total	10/1/19 16:40	10/2/19 12:29		1.015	0.0809	mg/L	0.01	0.02	
<b>Analytical Method: EPA 200.8</b>			<b>Analyst: DLJ</b>		<b>Preparation Method: EPA 1638</b>				
* Antimony, Total	9/26/19 15:18	9/27/19 10:47		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	9/26/19 15:18	9/27/19 10:47		1.015	0.00149	mg/L	0.001	0.005	J
* Barium, Total	9/26/19 15:18	9/27/19 10:47		1.015	0.208	mg/L	0.002	0.01	
* Beryllium, Total	9/26/19 15:18	9/27/19 10:47		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	9/26/19 15:18	9/27/19 10:47		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	9/26/19 15:18	9/27/19 10:47		1.015	0.00405	mg/L	0.002	0.01	J
* Cobalt, Total	9/26/19 15:18	9/27/19 10:47		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	9/26/19 15:18	9/27/19 10:47		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	9/26/19 15:18	9/27/19 10:47		1.015	0.00906	mg/L	0.002	0.01	J
* Selenium, Total	9/26/19 15:18	9/27/19 10:47		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	9/26/19 15:18	9/27/19 10:47		1.015	Not Detected	mg/L	0.0002	0.001	U
<b>Analytical Method: EPA 245.1</b>			<b>Analyst: GAS</b>						
* Mercury, Total by CVAA	9/30/19 12:00	10/1/19 10:55		1	Not Detected	mg/L	0.0003	0.0005	U
<b>Analytical Method: SM 2540C</b>			<b>Analyst: TJW</b>						
* Solids, Dissolved	9/27/19 15:00	9/30/19 15:50		1	365	mg/L		25	
<b>Analytical Method: SM4500Cl E</b>			<b>Analyst: JCC</b>						
* Chloride	10/2/19 09:35	10/2/19 09:35		1	3.69	mg/L	0.50	1	
<b>Analytical Method: SM4500F G 2017</b>			<b>Analyst: JCC</b>						
* Fluoride	10/2/19 14:19	10/2/19 14:19		1	0.245	mg/L	0.05	0.1	
<b>Analytical Method: SM4500SO4 E</b>			<b>Analyst: JCC</b>						
* Sulfate	9/26/19 14:20	9/26/19 14:20		1	11.8	mg/L	0.50	1	
<b>Analytical Method: Field Measurements</b>			<b>Analyst: DKG</b>						
Conductivity	9/24/19 11:47	9/24/19 11:47			602.84	uS/cm			FA
pH	9/24/19 11:47	9/24/19 11:47			7.65	SU			FA
Temperature	9/24/19 11:47	9/24/19 11:47			19.44	C			FA
Turbidity	9/24/19 11:47	9/24/19 11:47			1.35	NTU			FA

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

**Comments:**

# Batch QC Summary

**Customer Account:** WMWGORAP

**Sample Date:** 9/24/19 11:50

**Customer ID:**

**Delivery Date:** 9/26/19 09:28

**Description:** Gorgas Ash Pond - MW-17V

**Laboratory ID Number:** AZ21817

Sample	Analysis	Units	MB		Spike	MS	MSD	Standard		Rec		Prec	Limit
			MB	Limit				Standard	Limit	Rec	Limit		
AZ21820	Calcium, Total	mg/L	0.000127	0.1518	5.00	53.6	53.9	5.13	4.25 to 5.75	99.9	70 to 130	0.493	20
AZ21820	Arsenic, Total	mg/L	0.00000378	0.0001474	0.10	0.104	0.105	0.104	0.085 to 0.115	101	70 to 130	1.22	20
AZ21820	Cadmium, Total	mg/L	-0.00000011	0.0001474	0.10	0.102	0.104	0.102	0.085 to 0.115	102	70 to 130	1.55	20
AZ21820	Chromium, Total	mg/L	0.0000230	0.00044	0.10	0.0982	0.0994	0.103	0.085 to 0.115	98.2	70 to 130	1.29	20
AZ21820	Beryllium, Total	mg/L	0.0000139	0.00088	0.10	0.101	0.104	0.102	0.085 to 0.115	101	70 to 130	2.36	20
AZ21820	Cobalt, Total	mg/L	-0.0000750	0.0001474	0.10	0.105	0.106	0.109	0.085 to 0.115	105	70 to 130	0.252	20
AZ21820	Lead, Total	mg/L	-0.00000318	0.0001474	0.10	0.101	0.100	0.102	0.085 to 0.115	101	70 to 130	0.288	20
AZ21820	Antimony, Total	mg/L	0.0000939	0.00066	0.10	0.0990	0.101	0.0941	0.085 to 0.115	99.0	70 to 130	1.92	20
AZ21820	Barium, Total	mg/L	-0.00000553	0.0002	0.10	0.455	0.457	0.101	0.085 to 0.115	93.1	70 to 130	0.420	20
AZ21820	Mercury, Total by CVAA	mg/L	0.0000401	0.0005	0.004	0.00420	0.00407	0.00403	0.0034 to 0.0046	105	70 to 130	2.97	20
AZ21820	Lithium, Total	mg/L	-0.00000737	0.0154	0.20	0.260	0.261	0.202	0.17 to 0.23	111	70 to 130	0.485	20
AZ21820	Selenium, Total	mg/L	0.0000196	0.00066	0.10	0.100	0.101	0.105	0.085 to 0.115	100	70 to 130	0.511	20
AZ21820	Thallium, Total	mg/L	-0.0000690	0.0001474	0.10	0.103	0.103	0.103	0.085 to 0.115	103	70 to 130	0.195	20
AZ21820	Boron, Total	mg/L	0.00221	0.0650254	1.00	1.06	1.07	1.00	0.85 to 1.15	103	70 to 130	0.743	20
AZ21820	Molybdenum, Total	mg/L	-0.00000160	0.0001474	0.10	0.101	0.101	0.0947	0.085 to 0.115	95.8	70 to 130	0.171	20

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

\* Test results for these accredited parameters meet all 2003 NELAC and 2009 TNI requirements, with exceptions noted on this report

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

**Comments:**



## Batch QC Summary

**Customer Account:** WMWGORAP

**Sample Date:** 9/24/19 11:50

**Customer ID:**

**Delivery Date:** 9/26/19 09:28

**Description:** Gorgas Ash Pond - MW-17V

**Laboratory ID Number:** AZ21817

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Limit	Prec	Prec Limit
AZ21819	Chloride	mg/L	0.0158	0.50	10.0	16.1	6.02	10.0	9 to 11	103	80 to 120	3.21	20
AZ21819	Fluoride	mg/L	0.0298	0.05	2.50	2.84	0.312	2.61	2.25 to 2.75	101	80 to 120	1.62	20
AZ21820	Sulfate	mg/L	-0.401	0.50	20.0	32.7	14.0	19.4	18 to 22	93.0	80 to 120	0.712	20
AZ21824	Solids, Dissolved	mg/L	0.0000	25			184	53.0	40 to 60			0.272	5

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

\* Test results for these accredited parameters meet all 2003 NELAC and 2009 TNI requirements, with exceptions noted on this report

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2017

**Comments:**

# Certificate Of Analysis

**Description:** Gorgas Ash Pond - MW-16D

**Location Code:** WMWGORAP  
**Collected:** 9/24/19 14:00  
**Customer ID:**  
**Submittal Date:** 9/26/19 09:28

**Laboratory ID Number:** AZ21818

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
<b>Analytical Method: EPA 200.7</b>			<b>Analyst: RDA</b>		<b>Preparation Method: EPA 1638</b>				
* Boron, Total	10/1/19 16:40	10/2/19 12:31		1.015	Not Detected	mg/L	0.03	0.1	U
* Calcium, Total	10/1/19 16:40	10/2/19 12:31		1.015	34.3	mg/L	0.1	0.5	
* Lithium, Total	10/1/19 16:40	10/2/19 12:31		1.015	0.0362	mg/L	0.01	0.02	
<b>Analytical Method: EPA 200.8</b>			<b>Analyst: DLJ</b>		<b>Preparation Method: EPA 1638</b>				
* Antimony, Total	9/26/19 15:18	9/27/19 10:50		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	9/26/19 15:18	9/27/19 10:50		1.015	Not Detected	mg/L	0.001	0.005	U
* Barium, Total	9/26/19 15:18	9/27/19 10:50		1.015	0.342	mg/L	0.002	0.01	
* Beryllium, Total	9/26/19 15:18	9/27/19 10:50		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	9/26/19 15:18	9/27/19 10:50		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	9/26/19 15:18	9/27/19 10:50		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	9/26/19 15:18	9/27/19 10:50		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	9/26/19 15:18	9/27/19 10:50		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	9/26/19 15:18	9/27/19 10:50		1.015	Not Detected	mg/L	0.002	0.01	U
* Selenium, Total	9/26/19 15:18	9/27/19 10:50		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	9/26/19 15:18	9/27/19 10:50		1.015	Not Detected	mg/L	0.0002	0.001	U
<b>Analytical Method: EPA 245.1</b>			<b>Analyst: GAS</b>						
* Mercury, Total by CVAA	9/30/19 12:00	10/1/19 10:58		1	Not Detected	mg/L	0.0003	0.0005	U
<b>Analytical Method: SM 2540C</b>			<b>Analyst: TJW</b>						
* Solids, Dissolved	9/27/19 15:00	9/30/19 15:50		1	208	mg/L		25	
<b>Analytical Method: SM4500Cl E</b>			<b>Analyst: JCC</b>						
* Chloride	10/2/19 09:36	10/2/19 09:36		1	2.90	mg/L	0.50	1	
<b>Analytical Method: SM4500F G 2017</b>			<b>Analyst: JCC</b>						
* Fluoride	10/2/19 14:20	10/2/19 14:20		1	0.124	mg/L	0.05	0.1	
<b>Analytical Method: SM4500SO4 E</b>			<b>Analyst: JCC</b>						
* Sulfate	9/26/19 14:21	9/26/19 14:21		1	14.1	mg/L	0.50	1	
<b>Analytical Method: Field Measurements</b>			<b>Analyst: DKG</b>						
Conductivity	9/24/19 13:56	9/24/19 13:56			360.37	uS/cm			FA
pH	9/24/19 13:56	9/24/19 13:56			7.43	SU			FA
Temperature	9/24/19 13:56	9/24/19 13:56			21.20	C			FA
Turbidity	9/24/19 13:56	9/24/19 13:56			0.44	NTU			FA

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

**Comments:**

# Batch QC Summary

**Customer Account:** WMWGORAP  
**Sample Date:** 9/24/19 14:00  
**Customer ID:**  
**Delivery Date:** 9/26/19 09:28

**Description:** Gorgas Ash Pond - MW-16D

**Laboratory ID Number:** AZ21818

Sample	Analysis	Units	MB		Spike	MS	MSD	Standard		Rec		Prec	Limit
			MB	Limit				Standard	Limit	Rec	Limit		
AZ21820	Calcium, Total	mg/L	0.000127	0.1518	5.00	53.6	53.9	5.13	4.25 to 5.75	99.9	70 to 130	0.493	20
AZ21820	Arsenic, Total	mg/L	0.00000378	0.0001474	0.10	0.104	0.105	0.104	0.085 to 0.115	101	70 to 130	1.22	20
AZ21820	Boron, Total	mg/L	0.00221	0.0650254	1.00	1.06	1.07	1.00	0.85 to 1.15	103	70 to 130	0.743	20
AZ21820	Molybdenum, Total	mg/L	-0.00000160	0.0001474	0.10	0.101	0.101	0.0947	0.085 to 0.115	95.8	70 to 130	0.171	20
AZ21820	Barium, Total	mg/L	-0.00000553	0.0002	0.10	0.455	0.457	0.101	0.085 to 0.115	93.1	70 to 130	0.420	20
AZ21820	Mercury, Total by CVAA	mg/L	0.0000401	0.0005	0.004	0.00420	0.00407	0.00403	0.0034 to 0.0046	105	70 to 130	2.97	20
AZ21820	Beryllium, Total	mg/L	0.0000139	0.00088	0.10	0.101	0.104	0.102	0.085 to 0.115	101	70 to 130	2.36	20
AZ21820	Cobalt, Total	mg/L	-0.0000750	0.0001474	0.10	0.105	0.106	0.109	0.085 to 0.115	105	70 to 130	0.252	20
AZ21820	Lead, Total	mg/L	-0.00000318	0.0001474	0.10	0.101	0.100	0.102	0.085 to 0.115	101	70 to 130	0.288	20
AZ21820	Antimony, Total	mg/L	0.0000939	0.00066	0.10	0.0990	0.101	0.0941	0.085 to 0.115	99.0	70 to 130	1.92	20
AZ21820	Cadmium, Total	mg/L	-0.00000011	0.0001474	0.10	0.102	0.104	0.102	0.085 to 0.115	102	70 to 130	1.55	20
AZ21820	Chromium, Total	mg/L	0.0000230	0.00044	0.10	0.0982	0.0994	0.103	0.085 to 0.115	98.2	70 to 130	1.29	20
AZ21820	Lithium, Total	mg/L	-0.00000737	0.0154	0.20	0.260	0.261	0.202	0.17 to 0.23	111	70 to 130	0.485	20
AZ21820	Selenium, Total	mg/L	0.0000196	0.00066	0.10	0.100	0.101	0.105	0.085 to 0.115	100	70 to 130	0.511	20
AZ21820	Thallium, Total	mg/L	-0.0000690	0.0001474	0.10	0.103	0.103	0.103	0.085 to 0.115	103	70 to 130	0.195	20

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.

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

\* Test results for these accredited parameters meet all 2003 NELAC and 2009 TNI requirements, with exceptions noted on this report

Laboratory certification ID: E571114  
 Issued By: State of Florida, Department of Health  
 Expiration: June 30, 2018

**Comments:**

## Batch QC Summary

**Customer Account:** WMWGORAP

**Sample Date:** 9/24/19 14:00

**Customer ID:**

**Delivery Date:** 9/26/19 09:28

**Description:** Gorgas Ash Pond - MW-16D

**Laboratory ID Number:** AZ21818

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Limit	Prec	Prec Limit
AZ21819	Chloride	mg/L	0.0158	0.50	10.0	16.1	6.02	10.0	9 to 11	103	80 to 120	3.21	20
AZ21824	Solids, Dissolved	mg/L	0.0000	25			184	53.0	40 to 60			0.272	5
AZ21819	Fluoride	mg/L	0.0298	0.05	2.50	2.84	0.312	2.61	2.25 to 2.75	101	80 to 120	1.62	20
AZ21820	Sulfate	mg/L	-0.401	0.50	20.0	32.7	14.0	19.4	18 to 22	93.0	80 to 120	0.712	20

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\* Test results for these accredited parameters meet all 2003 NELAC and 2009 TNI requirements, with exceptions noted on this report

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2017

**Comments:**

# Certificate Of Analysis

**Description:** Gorgas Ash Pond - MW-19

**Location Code:** WMWGORAP  
**Collected:** 9/24/19 15:50  
**Customer ID:**  
**Submittal Date:** 9/26/19 09:28

**Laboratory ID Number:** AZ21819

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
<b>Analytical Method: EPA 200.7</b>			<b>Analyst: RDA</b>		<b>Preparation Method: EPA 1638</b>				
* Boron, Total	10/1/19 16:40	10/2/19 12:34		1.015	0.0375	mg/L	0.03	0.1	J
* Calcium, Total	10/1/19 16:40	10/2/19 14:57		20.3	48.4	mg/L	2.03	10.15	
* Lithium, Total	10/1/19 16:40	10/2/19 12:34		1.015	0.0392	mg/L	0.01	0.02	
<b>Analytical Method: EPA 200.8</b>			<b>Analyst: DLJ</b>		<b>Preparation Method: EPA 1638</b>				
* Antimony, Total	9/26/19 15:18	9/27/19 10:53		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	9/26/19 15:18	9/27/19 10:53		1.015	0.00289	mg/L	0.001	0.005	J
* Barium, Total	9/26/19 15:18	9/27/19 10:53		1.015	0.356	mg/L	0.002	0.01	
* Beryllium, Total	9/26/19 15:18	9/27/19 10:53		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	9/26/19 15:18	9/27/19 10:53		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	9/26/19 15:18	9/27/19 10:53		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	9/26/19 15:18	9/27/19 10:53		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	9/26/19 15:18	9/27/19 10:53		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	9/26/19 15:18	9/27/19 10:53		1.015	0.00562	mg/L	0.002	0.01	J
* Selenium, Total	9/26/19 15:18	9/27/19 10:53		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	9/26/19 15:18	9/27/19 10:53		1.015	Not Detected	mg/L	0.0002	0.001	U
<b>Analytical Method: EPA 245.1</b>			<b>Analyst: GAS</b>						
* Mercury, Total by CVAA	9/30/19 12:00	10/1/19 11:00		1	Not Detected	mg/L	0.0003	0.0005	U
<b>Analytical Method: SM 2540C</b>			<b>Analyst: TJW</b>						
* Solids, Dissolved	9/27/19 15:00	9/30/19 15:50		1	302	mg/L		25	
<b>Analytical Method: SM4500Cl E</b>			<b>Analyst: JCC</b>						
* Chloride	10/2/19 09:38	10/2/19 09:38		1	5.83	mg/L	0.50	1	
<b>Analytical Method: SM4500F G 2017</b>			<b>Analyst: JCC</b>						
* Fluoride	10/2/19 14:22	10/2/19 14:22		1	0.307	mg/L	0.05	0.1	
<b>Analytical Method: SM4500SO4 E</b>			<b>Analyst: JCC</b>						
* Sulfate	9/26/19 14:22	9/26/19 14:22		1	13.8	mg/L	0.50	1	
<b>Analytical Method: Field Measurements</b>			<b>Analyst: DKG</b>						
Conductivity	9/24/19 15:46	9/24/19 15:46			508.01	uS/cm			FA
pH	9/24/19 15:46	9/24/19 15:46			7.80	SU			FA
Temperature	9/24/19 15:46	9/24/19 15:46			18.95	C			FA
Turbidity	9/24/19 15:46	9/24/19 15:46			0.73	NTU			FA

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

**Comments:**

# Batch QC Summary

**Customer Account:** WMWGORAP  
**Sample Date:** 9/24/19 15:50  
**Customer ID:**  
**Delivery Date:** 9/26/19 09:28

**Description:** Gorgas Ash Pond - MW-19

**Laboratory ID Number:** AZ21819

Sample	Analysis	Units	MB		Spike	MS	MSD	Standard		Rec		Prec	Limit
			MB	Limit				Standard	Limit	Rec	Prec		
AZ21820	Calcium, Total	mg/L	0.000127	0.1518	5.00	53.6	53.9	5.13	4.25 to 5.75	99.9	70 to 130	0.493	20
AZ21820	Arsenic, Total	mg/L	0.00000378	0.0001474	0.10	0.104	0.105	0.104	0.085 to 0.115	101	70 to 130	1.22	20
AZ21820	Cadmium, Total	mg/L	-0.00000011	0.0001474	0.10	0.102	0.104	0.102	0.085 to 0.115	102	70 to 130	1.55	20
AZ21820	Chromium, Total	mg/L	0.0000230	0.00044	0.10	0.0982	0.0994	0.103	0.085 to 0.115	98.2	70 to 130	1.29	20
AZ21820	Lithium, Total	mg/L	-0.00000737	0.0154	0.20	0.260	0.261	0.202	0.17 to 0.23	111	70 to 130	0.485	20
AZ21820	Selenium, Total	mg/L	0.0000196	0.00066	0.10	0.100	0.101	0.105	0.085 to 0.115	100	70 to 130	0.511	20
AZ21820	Thallium, Total	mg/L	-0.0000690	0.0001474	0.10	0.103	0.103	0.103	0.085 to 0.115	103	70 to 130	0.195	20
AZ21820	Barium, Total	mg/L	-0.00000553	0.0002	0.10	0.455	0.457	0.101	0.085 to 0.115	93.1	70 to 130	0.420	20
AZ21820	Mercury, Total by CVAA	mg/L	0.0000401	0.0005	0.004	0.00420	0.00407	0.00403	0.0034 to 0.0046	105	70 to 130	2.97	20
AZ21820	Beryllium, Total	mg/L	0.0000139	0.00088	0.10	0.101	0.104	0.102	0.085 to 0.115	101	70 to 130	2.36	20
AZ21820	Cobalt, Total	mg/L	-0.0000750	0.0001474	0.10	0.105	0.106	0.109	0.085 to 0.115	105	70 to 130	0.252	20
AZ21820	Lead, Total	mg/L	-0.00000318	0.0001474	0.10	0.101	0.100	0.102	0.085 to 0.115	101	70 to 130	0.288	20
AZ21820	Antimony, Total	mg/L	0.0000939	0.00066	0.10	0.0990	0.101	0.0941	0.085 to 0.115	99.0	70 to 130	1.92	20
AZ21820	Boron, Total	mg/L	0.00221	0.0650254	1.00	1.06	1.07	1.00	0.85 to 1.15	103	70 to 130	0.743	20
AZ21820	Molybdenum, Total	mg/L	-0.00000160	0.0001474	0.10	0.101	0.101	0.0947	0.085 to 0.115	95.8	70 to 130	0.171	20

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

\* Test results for these accredited parameters meet all 2003 NELAC and 2009 TNI requirements, with exceptions noted on this report

Laboratory certification ID: E571114  
 Issued By: State of Florida, Department of Health  
 Expiration: June 30, 2018

**Comments:**

## Batch QC Summary

**Customer Account:** WMWGORAP

**Sample Date:** 9/24/19 15:50

**Customer ID:**

**Delivery Date:** 9/26/19 09:28

**Description:** Gorgas Ash Pond - MW-19

**Laboratory ID Number:** AZ21819

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
AZ21820	Sulfate	mg/L	-0.401	0.50	20.0	32.7	14.0	19.4	18 to 22	93.0	80 to 120	0.712	20
AZ21819	Chloride	mg/L	0.0158	0.50	10.0	16.1	6.02	10.0	9 to 11	103	80 to 120	3.21	20
AZ21819	Fluoride	mg/L	0.0298	0.05	2.50	2.84	0.312	2.61	2.25 to 2.75	101	80 to 120	1.62	20
AZ21824	Solids, Dissolved	mg/L	0.0000	25			184	53.0	40 to 60			0.272	5

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\* Test results for these accredited parameters meet all 2003 NELAC and 2009 TNI requirements, with exceptions noted on this report

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2017

**Comments:**

# Certificate Of Analysis

**Description:** Gorgas Ash Pond - MW-19 DUP

**Location Code:** WMWGORAP  
**Collected:** 9/24/19 15:50  
**Customer ID:**  
**Submittal Date:** 9/26/19 09:28

**Laboratory ID Number:** AZ21820

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
<b>Analytical Method: EPA 200.7</b>			<b>Analyst: RDA</b>		<b>Preparation Method: EPA 1638</b>				
* Boron, Total	10/1/19 16:40	10/2/19 12:37		1.015	0.0366	mg/L	0.03	0.1	J
* Calcium, Total	10/1/19 16:40	10/2/19 15:00		20.3	48.6	mg/L	2.03	10.15	
* Lithium, Total	10/1/19 16:40	10/2/19 12:37		1.015	0.0378	mg/L	0.01	0.02	
<b>Analytical Method: EPA 200.8</b>			<b>Analyst: DLJ</b>		<b>Preparation Method: EPA 1638</b>				
* Antimony, Total	9/26/19 15:18	9/27/19 10:56		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	9/26/19 15:18	9/27/19 10:56		1.015	0.00280	mg/L	0.001	0.005	J
* Barium, Total	9/26/19 15:18	9/27/19 10:56		1.015	0.362	mg/L	0.002	0.01	
* Beryllium, Total	9/26/19 15:18	9/27/19 10:56		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	9/26/19 15:18	9/27/19 10:56		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	9/26/19 15:18	9/27/19 10:56		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	9/26/19 15:18	9/27/19 10:56		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	9/26/19 15:18	9/27/19 10:56		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	9/26/19 15:18	9/27/19 10:56		1.015	0.00540	mg/L	0.002	0.01	J
* Selenium, Total	9/26/19 15:18	9/27/19 10:56		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	9/26/19 15:18	9/27/19 10:56		1.015	Not Detected	mg/L	0.0002	0.001	U
<b>Analytical Method: EPA 245.1</b>			<b>Analyst: GAS</b>						
* Mercury, Total by CVAA	9/30/19 12:00	10/1/19 11:02		1	Not Detected	mg/L	0.0003	0.0005	U
<b>Analytical Method: SM 2540C</b>			<b>Analyst: TJW</b>						
* Solids, Dissolved	9/27/19 15:00	9/30/19 15:50		1	307	mg/L		25	
<b>Analytical Method: SM4500Cl E</b>			<b>Analyst: JCC</b>						
* Chloride	10/2/19 09:37	10/2/19 09:37		1	6.03	mg/L	0.50	1	
<b>Analytical Method: SM4500F G 2017</b>			<b>Analyst: JCC</b>						
* Fluoride	10/2/19 14:21	10/2/19 14:21		1	0.314	mg/L	0.05	0.1	
<b>Analytical Method: SM4500SO4 E</b>			<b>Analyst: JCC</b>						
* Sulfate	9/26/19 14:23	9/26/19 14:23		1	14.1	mg/L	0.50	1	
<b>Analytical Method: Field Measurements</b>			<b>Analyst: DKG</b>						
Conductivity	9/24/19 15:46	9/24/19 15:46			508.01	uS/cm			FA
pH	9/24/19 15:46	9/24/19 15:46			7.80	SU			FA
Temperature	9/24/19 15:46	9/24/19 15:46			18.95	C			FA
Turbidity	9/24/19 15:46	9/24/19 15:46			0.73	NTU			FA

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

**Comments:**



# Batch QC Summary

**Customer Account:** WMWGORAP  
**Sample Date:** 9/24/19 15:50  
**Customer ID:**  
**Delivery Date:** 9/26/19 09:28

**Description:** Gorgas Ash Pond - MW-19 DUP

**Laboratory ID Number:** AZ21820

Sample	Analysis	Units	MB		Spike	MS	MSD	Standard	Standard Limit	Rec		Prec Limit	
			MB	Limit						Rec	Limit		
AZ21820	Arsenic, Total	mg/L	0.0000378	0.0001474	0.10	0.104	0.105	0.104	0.085 to 0.115	101	70 to 130	1.22	20
AZ21820	Calcium, Total	mg/L	0.000127	0.1518	5.00	53.6	53.9	5.13	4.25 to 5.75	99.9	70 to 130	0.493	20
AZ21820	Cadmium, Total	mg/L	-0.00000011	0.0001474	0.10	0.102	0.104	0.102	0.085 to 0.115	102	70 to 130	1.55	20
AZ21820	Chromium, Total	mg/L	0.0000230	0.00044	0.10	0.0982	0.0994	0.103	0.085 to 0.115	98.2	70 to 130	1.29	20
AZ21820	Lithium, Total	mg/L	-0.0000737	0.0154	0.20	0.260	0.261	0.202	0.17 to 0.23	111	70 to 130	0.485	20
AZ21820	Selenium, Total	mg/L	0.0000196	0.00066	0.10	0.100	0.101	0.105	0.085 to 0.115	100	70 to 130	0.511	20
AZ21820	Thallium, Total	mg/L	-0.0000690	0.0001474	0.10	0.103	0.103	0.103	0.085 to 0.115	103	70 to 130	0.195	20
AZ21820	Boron, Total	mg/L	0.00221	0.0650254	1.00	1.06	1.07	1.00	0.85 to 1.15	103	70 to 130	0.743	20
AZ21820	Molybdenum, Total	mg/L	-0.00000160	0.0001474	0.10	0.101	0.101	0.0947	0.085 to 0.115	95.8	70 to 130	0.171	20
AZ21820	Beryllium, Total	mg/L	0.0000139	0.00088	0.10	0.101	0.104	0.102	0.085 to 0.115	101	70 to 130	2.36	20
AZ21820	Cobalt, Total	mg/L	-0.0000750	0.0001474	0.10	0.105	0.106	0.109	0.085 to 0.115	105	70 to 130	0.252	20
AZ21820	Lead, Total	mg/L	-0.00000318	0.0001474	0.10	0.101	0.100	0.102	0.085 to 0.115	101	70 to 130	0.288	20
AZ21820	Antimony, Total	mg/L	0.0000939	0.00066	0.10	0.0990	0.101	0.0941	0.085 to 0.115	99.0	70 to 130	1.92	20
AZ21820	Barium, Total	mg/L	-0.00000553	0.0002	0.10	0.455	0.457	0.101	0.085 to 0.115	93.1	70 to 130	0.420	20
AZ21820	Mercury, Total by CVAA	mg/L	0.0000401	0.0005	0.004	0.00420	0.00407	0.00403	0.0034 to 0.0046	105	70 to 130	2.97	20

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

\* Test results for these accredited parameters meet all 2003 NELAC and 2009 TNI requirements, with exceptions noted on this report

Laboratory certification ID: E571114  
 Issued By: State of Florida, Department of Health  
 Expiration: June 30, 2018

**Comments:**

## Batch QC Summary

**Customer Account:** WMWGORAP

**Sample Date:** 9/24/19 15:50

**Customer ID:**

**Delivery Date:** 9/26/19 09:28

**Description:** Gorgas Ash Pond - MW-19 DUP

**Laboratory ID Number:** AZ21820

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
AZ21820	Sulfate	mg/L	-0.401	0.50	20.0	32.7	14.0	19.4	18 to 22	93.0	80 to 120	0.712	20
AZ21824	Solids, Dissolved	mg/L	0.0000	25			184	53.0	40 to 60			0.272	5
AZ21819	Fluoride	mg/L	0.0298	0.05	2.50	2.84	0.312	2.61	2.25 to 2.75	101	80 to 120	1.62	20
AZ21819	Chloride	mg/L	0.0158	0.50	10.0	16.1	6.02	10.0	9 to 11	103	80 to 120	3.21	20

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\* Test results for these accredited parameters meet all 2003 NELAC and 2009 TNI requirements, with exceptions noted on this report

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2017

**Comments:**

# Certificate Of Analysis

**Description:** Gorgas Ash Pond Field Blank

**Location Code:** WMWGORAPFB  
**Collected:** 9/24/19 16:50  
**Customer ID:**  
**Submittal Date:** 9/26/19 09:28

**Laboratory ID Number:** AZ21821

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
<b>Analytical Method: EPA 200.7</b>			<b>Analyst: RDA</b>		<b>Preparation Method: EPA 1638</b>				
* Boron, Total	10/1/19 16:40	10/2/19 12:52		1.015	Not Detected	mg/L	0.03	0.1	U
* Calcium, Total	10/1/19 16:40	10/2/19 12:52		1.015	Not Detected	mg/L	0.1	0.5	U
* Lithium, Total	10/1/19 16:40	10/2/19 12:52		1.015	Not Detected	mg/L	0.01	0.02	U
<b>Analytical Method: EPA 200.8</b>			<b>Analyst: DLJ</b>		<b>Preparation Method: EPA 1638</b>				
* Antimony, Total	9/26/19 15:18	9/27/19 11:11		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	9/26/19 15:18	9/27/19 11:11		1.015	Not Detected	mg/L	0.001	0.005	U
* Barium, Total	9/26/19 15:18	9/27/19 11:11		1.015	Not Detected	mg/L	0.002	0.01	U
* Beryllium, Total	9/26/19 15:18	9/27/19 11:11		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	9/26/19 15:18	9/27/19 11:11		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	9/26/19 15:18	9/27/19 11:11		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	9/26/19 15:18	9/27/19 11:11		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	9/26/19 15:18	9/27/19 11:11		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	9/26/19 15:18	9/27/19 11:11		1.015	Not Detected	mg/L	0.002	0.01	U
* Selenium, Total	9/26/19 15:18	9/27/19 11:11		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	9/26/19 15:18	9/27/19 11:11		1.015	Not Detected	mg/L	0.0002	0.001	U
<b>Analytical Method: EPA 245.1</b>			<b>Analyst: ABB</b>						
* Mercury, Total by CVAA	10/2/19 09:15	10/3/19 10:52		1	Not Detected	mg/L	0.0003	0.0005	U
<b>Analytical Method: SM 2540C</b>			<b>Analyst: TJW</b>						
* Solids, Dissolved	9/27/19 15:00	9/30/19 15:50		1	Not Detected	mg/L		25	U
<b>Analytical Method: SM4500CI E</b>			<b>Analyst: JCC</b>						
* Chloride	10/2/19 09:56	10/2/19 09:56		1	Not Detected	mg/L	0.50	1	U
<b>Analytical Method: SM4500F G 2017</b>			<b>Analyst: JCC</b>						
* Fluoride	10/2/19 14:34	10/2/19 14:34		1	Not Detected	mg/L	0.05	0.1	U
<b>Analytical Method: SM4500SO4 E</b>			<b>Analyst: JCC</b>						
* Sulfate	9/26/19 14:53	9/26/19 14:53		1	Not Detected	mg/L	0.50	1	U

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

**Comments:**

# Batch QC Summary

**Customer Account:** WMWGORAPFB  
**Sample Date:** 9/24/19 16:50  
**Customer ID:**  
**Delivery Date:** 9/26/19 09:28

**Description:** Gorgas Ash Pond Field Blank

**Laboratory ID Number:** AZ21821

Sample	Analysis	Units	MB		Spike	MS	MSD	Standard		Rec		Prec	Limit
			MB	Limit				Standard	Limit	Rec	Prec		
AZ21831	Beryllium, Total	mg/L	0.0000139	0.00088	0.10	0.0980	0.100	0.102	0.085 to 0.115	98.0	70 to 130	2.14	20
AZ21831	Cadmium, Total	mg/L	-0.00000011	0.0001474	0.10	0.101	0.103	0.102	0.085 to 0.115	101	70 to 130	1.81	20
AZ21831	Arsenic, Total	mg/L	0.00000378	0.0001474	0.10	0.116	0.115	0.104	0.085 to 0.115	102	70 to 130	0.569	20
AZ21831	Antimony, Total	mg/L	0.0000939	0.00066	0.10	0.101	0.102	0.0941	0.085 to 0.115	101	70 to 130	1.02	20
AZ21831	Boron, Total	mg/L	0.00221	0.0650254	1.00	1.15	1.16	1.00	0.85 to 1.15	103	70 to 130	1.06	20
AZ21831	Lithium, Total	mg/L	-0.00000737	0.0154	0.20	0.247	0.248	0.202	0.17 to 0.23	109	70 to 130	0.457	20
AZ21831	Molybdenum, Total	mg/L	-0.00000160	0.0001474	0.10	0.0993	0.0991	0.0947	0.085 to 0.115	99.3	70 to 130	0.155	20
AZ21831	Cobalt, Total	mg/L	-0.0000750	0.0001474	0.10	0.106	0.106	0.109	0.085 to 0.115	106	70 to 130	0.185	20
AZ21831	Mercury, Total by CVAA	mg/L	0.0000492	0.0005	0.004	0.00392	0.00380	0.00413	0.0034 to 0.0046	98.0	70 to 130	3.23	20
AZ21831	Thallium, Total	mg/L	-0.0000690	0.0001474	0.10	0.105	0.104	0.103	0.085 to 0.115	105	70 to 130	1.34	20
AZ21831	Lead, Total	mg/L	-0.00000318	0.0001474	0.10	0.103	0.101	0.102	0.085 to 0.115	103	70 to 130	2.56	20
AZ21831	Selenium, Total	mg/L	0.0000196	0.00066	0.10	0.102	0.101	0.105	0.085 to 0.115	102	70 to 130	0.620	20
AZ21831	Barium, Total	mg/L	-0.00000553	0.0002	0.10	0.309	0.299	0.101	0.085 to 0.115	107	70 to 130	3.11	20
AZ21831	Calcium, Total	mg/L	0.000127	0.1518	5.00	54.0	54.0	5.13	4.25 to 5.75	118	70 to 130	0.0439	20
AZ21831	Chromium, Total	mg/L	0.0000230	0.00044	0.10	0.100	0.0996	0.103	0.085 to 0.115	100	70 to 130	0.588	20

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.

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

\* Test results for these accredited parameters meet all 2003 NELAC and 2009 TNI requirements, with exceptions noted on this report

Laboratory certification ID: E571114  
 Issued By: State of Florida, Department of Health  
 Expiration: June 30, 2018

**Comments:**

## Batch QC Summary

**Customer Account:** WMWGORAPFB

**Sample Date:** 9/24/19 16:50

**Customer ID:**

**Delivery Date:** 9/26/19 09:28

**Description:** Gorgas Ash Pond Field Blank

**Laboratory ID Number:** AZ21821

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
AZ21829	Fluoride	mg/L	0.0301	0.05	2.50	2.69	0.107	2.60	2.25 to 2.75	103	80 to 120	0.939	20
AZ21830	Sulfate	mg/L	-0.230	0.50	400	513	147	19.1	18 to 22	91.5	80 to 120	0.00	20
AZ21829	Chloride	mg/L	0.00811	0.50	10.0	16.2	5.85	10.0	9 to 11	104	80 to 120	1.55	20
AZ21824	Solids, Dissolved	mg/L	0.0000	25			184	53.0	40 to 60			0.272	5

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

\* Test results for these accredited parameters meet all 2003 NELAC and 2009 TNI requirements, with exceptions noted on this report

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2017

**Comments:**

# Certificate Of Analysis

**Description:** Gorgas Ash Pond - MW-24H

**Location Code:** WMWGORAP  
**Collected:** 9/24/19 18:23  
**Customer ID:**  
**Submittal Date:** 9/26/19 09:28

**Laboratory ID Number:** AZ21822

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
<b>Analytical Method: EPA 200.7</b>			<b>Analyst: RDA</b>		<b>Preparation Method: EPA 1638</b>				
* Boron, Total	10/1/19 16:40	10/2/19 12:55		1.015	0.0821	mg/L	0.03	0.1	J
* Calcium, Total	10/1/19 16:40	10/2/19 15:15		20.3	46.5	mg/L	2.03	10.15	
* Lithium, Total	10/1/19 16:40	10/2/19 12:55		1.015	0.0275	mg/L	0.01	0.02	
<b>Analytical Method: EPA 200.8</b>			<b>Analyst: DLJ</b>		<b>Preparation Method: EPA 1638</b>				
* Antimony, Total	9/26/19 15:18	9/27/19 11:14		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	9/26/19 15:18	9/27/19 11:14		1.015	Not Detected	mg/L	0.001	0.005	U
* Barium, Total	9/26/19 15:18	9/27/19 11:14		1.015	1.04	mg/L	0.002	0.01	
* Beryllium, Total	9/26/19 15:18	9/27/19 11:14		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	9/26/19 15:18	9/27/19 11:14		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	9/26/19 15:18	9/27/19 11:14		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	9/26/19 15:18	9/27/19 11:14		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	9/26/19 15:18	9/27/19 11:14		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	9/26/19 15:18	9/27/19 11:14		1.015	Not Detected	mg/L	0.002	0.01	U
* Selenium, Total	9/26/19 15:18	9/27/19 11:14		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	9/26/19 15:18	9/27/19 11:14		1.015	Not Detected	mg/L	0.0002	0.001	U
<b>Analytical Method: EPA 245.1</b>			<b>Analyst: ABB</b>						
* Mercury, Total by CVAA	10/2/19 09:15	10/3/19 10:54		1	Not Detected	mg/L	0.0003	0.0005	U
<b>Analytical Method: SM 2540C</b>			<b>Analyst: TJW</b>						
* Solids, Dissolved	9/27/19 15:00	9/30/19 15:50		1	253	mg/L		25	
<b>Analytical Method: SM4500Cl E</b>			<b>Analyst: JCC</b>						
* Chloride	10/2/19 09:57	10/2/19 09:57		1	2.89	mg/L	0.50	1	
<b>Analytical Method: SM4500F G 2017</b>			<b>Analyst: JCC</b>						
* Fluoride	10/2/19 14:35	10/2/19 14:35		1	0.201	mg/L	0.05	0.1	
<b>Analytical Method: SM4500SO4 E</b>			<b>Analyst: JCC</b>						
* Sulfate	9/26/19 14:54	9/26/19 14:54		1	15.3	mg/L	0.50	1	
<b>Analytical Method: Field Measurements</b>			<b>Analyst: DKG</b>						
Conductivity	9/24/19 18:20	9/24/19 18:20			427.42	uS/cm			FA
pH	9/24/19 18:20	9/24/19 18:20			6.59	SU			FA
Temperature	9/24/19 18:20	9/24/19 18:20			19.49	C			FA
Turbidity	9/24/19 18:20	9/24/19 18:20			9.47	NTU			FA

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

**Comments:**

# Batch QC Summary

**Customer Account:** WMWGORAP  
**Sample Date:** 9/24/19 18:23  
**Customer ID:**  
**Delivery Date:** 9/26/19 09:28

**Description:** Gorgas Ash Pond - MW-24H

**Laboratory ID Number:** AZ21822

Sample	Analysis	Units	MB		Spike	MS	MSD	Standard		Rec		Prec	Limit
			MB	Limit				Standard	Limit	Rec	Limit		
AZ21831	Barium, Total	mg/L	-0.0000553	0.0002	0.10	0.309	0.299	0.101	0.085 to 0.115	107	70 to 130	3.11	20
AZ21831	Calcium, Total	mg/L	0.000127	0.1518	5.00	54.0	54.0	5.13	4.25 to 5.75	118	70 to 130	0.0439	20
AZ21831	Chromium, Total	mg/L	0.0000230	0.00044	0.10	0.100	0.0996	0.103	0.085 to 0.115	100	70 to 130	0.588	20
AZ21831	Lead, Total	mg/L	-0.00000318	0.0001474	0.10	0.103	0.101	0.102	0.085 to 0.115	103	70 to 130	2.56	20
AZ21831	Selenium, Total	mg/L	0.0000196	0.00066	0.10	0.102	0.101	0.105	0.085 to 0.115	102	70 to 130	0.620	20
AZ21831	Arsenic, Total	mg/L	0.00000378	0.0001474	0.10	0.116	0.115	0.104	0.085 to 0.115	102	70 to 130	0.569	20
AZ21831	Antimony, Total	mg/L	0.0000939	0.00066	0.10	0.101	0.102	0.0941	0.085 to 0.115	101	70 to 130	1.02	20
AZ21831	Cobalt, Total	mg/L	-0.0000750	0.0001474	0.10	0.106	0.106	0.109	0.085 to 0.115	106	70 to 130	0.185	20
AZ21831	Mercury, Total by CVAA	mg/L	0.0000492	0.0005	0.004	0.00392	0.00380	0.00413	0.0034 to 0.0046	98.0	70 to 130	3.23	20
AZ21831	Thallium, Total	mg/L	-0.0000690	0.0001474	0.10	0.105	0.104	0.103	0.085 to 0.115	105	70 to 130	1.34	20
AZ21831	Beryllium, Total	mg/L	0.0000139	0.00088	0.10	0.0980	0.100	0.102	0.085 to 0.115	98.0	70 to 130	2.14	20
AZ21831	Cadmium, Total	mg/L	-0.00000011	0.0001474	0.10	0.101	0.103	0.102	0.085 to 0.115	101	70 to 130	1.81	20
AZ21831	Boron, Total	mg/L	0.00221	0.0650254	1.00	1.15	1.16	1.00	0.85 to 1.15	103	70 to 130	1.06	20
AZ21831	Lithium, Total	mg/L	-0.00000737	0.0154	0.20	0.247	0.248	0.202	0.17 to 0.23	109	70 to 130	0.457	20
AZ21831	Molybdenum, Total	mg/L	-0.00000160	0.0001474	0.10	0.0993	0.0991	0.0947	0.085 to 0.115	99.3	70 to 130	0.155	20

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.

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

\* Test results for these accredited parameters meet all 2003 NELAC and 2009 TNI requirements, with exceptions noted on this report

Laboratory certification ID: E571114  
 Issued By: State of Florida, Department of Health  
 Expiration: June 30, 2018

**Comments:**

## Batch QC Summary

**Customer Account:** WMWGORAP

**Sample Date:** 9/24/19 18:23

**Customer ID:**

**Delivery Date:** 9/26/19 09:28

**Description:** Gorgas Ash Pond - MW-24H

**Laboratory ID Number:** AZ21822

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Limit	Prec	Prec Limit
AZ21824	Solids, Dissolved	mg/L	0.0000	25			184	53.0	40 to 60			0.272	5
AZ21829	Fluoride	mg/L	0.0301	0.05	2.50	2.69	0.107	2.60	2.25 to 2.75	103	80 to 120	0.939	20
AZ21829	Chloride	mg/L	0.00811	0.50	10.0	16.2	5.85	10.0	9 to 11	104	80 to 120	1.55	20
AZ21830	Sulfate	mg/L	-0.230	0.50	400	513	147	19.1	18 to 22	91.5	80 to 120	0.00	20

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.

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

\* Test results for these accredited parameters meet all 2003 NELAC and 2009 TNI requirements, with exceptions noted on this report

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2017

**Comments:**



# Certificate Of Analysis

**Description:** Gorgas Ash Pond - MW-2

**Location Code:** WMWGORAP  
**Collected:** 9/25/19 09:27  
**Customer ID:**  
**Submittal Date:** 9/26/19 09:28

**Laboratory ID Number:** AZ21823

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
<b>Analytical Method: EPA 200.7</b>			<b>Analyst: RDA</b>		<b>Preparation Method: EPA 1638</b>				
* Boron, Total	10/1/19 16:40	10/2/19 12:58		1.015	0.153	mg/L	0.03	0.1	
* Calcium, Total	10/1/19 16:40	10/2/19 12:58		1.015	0.581	mg/L	0.1	0.5	
* Lithium, Total	10/1/19 16:40	10/2/19 12:58		1.015	0.0457	mg/L	0.01	0.02	
<b>Analytical Method: EPA 200.8</b>			<b>Analyst: DLJ</b>		<b>Preparation Method: EPA 1638</b>				
* Antimony, Total	9/26/19 15:18	9/27/19 11:17		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	9/26/19 15:18	9/27/19 11:17		1.015	Not Detected	mg/L	0.001	0.005	U
* Barium, Total	9/26/19 15:18	9/27/19 11:17		1.015	0.0650	mg/L	0.002	0.01	
* Beryllium, Total	9/26/19 15:18	9/27/19 11:17		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	9/26/19 15:18	9/27/19 11:17		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	9/26/19 15:18	9/27/19 11:17		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	9/26/19 15:18	9/27/19 11:17		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	9/26/19 15:18	9/27/19 11:17		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	9/26/19 15:18	9/27/19 11:17		1.015	0.00803	mg/L	0.002	0.01	J
* Selenium, Total	9/26/19 15:18	9/27/19 11:17		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	9/26/19 15:18	9/27/19 11:17		1.015	Not Detected	mg/L	0.0002	0.001	U
<b>Analytical Method: EPA 245.1</b>			<b>Analyst: ABB</b>						
* Mercury, Total by CVAA	10/2/19 09:15	10/3/19 10:57		1	Not Detected	mg/L	0.0003	0.0005	U
<b>Analytical Method: SM 2540C</b>			<b>Analyst: TJW</b>						
* Solids, Dissolved	9/27/19 15:00	9/30/19 15:50		1	358	mg/L		25	
<b>Analytical Method: SM4500CI E</b>			<b>Analyst: JCC</b>						
* Chloride	10/2/19 09:59	10/2/19 09:59		1	12.0	mg/L	0.50	1	
<b>Analytical Method: SM4500F G 2017</b>			<b>Analyst: JCC</b>						
* Fluoride	10/2/19 14:37	10/2/19 14:37		1	0.860	mg/L	0.05	0.1	
<b>Analytical Method: SM4500SO4 E</b>			<b>Analyst: JCC</b>						
* Sulfate	9/26/19 15:03	9/26/19 15:03		4	47.7	mg/L	2.00	4	
<b>Analytical Method: Field Measurements</b>			<b>Analyst: DKG</b>						
Conductivity	9/25/19 09:22	9/25/19 09:22			589.15	uS/cm			FA
pH	9/25/19 09:22	9/25/19 09:22			9.31	SU			FA
Temperature	9/25/19 09:22	9/25/19 09:22			18.95	C			FA
Turbidity	9/25/19 09:22	9/25/19 09:22			1.19	NTU			FA

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

**Comments:**

# Batch QC Summary

**Customer Account:** WMWGORAP  
**Sample Date:** 9/25/19 09:27  
**Customer ID:**  
**Delivery Date:** 9/26/19 09:28

**Description:** Gorgas Ash Pond - MW-2

**Laboratory ID Number:** AZ21823

Sample	Analysis	Units	MB		Spike	MS	MSD	Standard		Rec		Prec	Limit
			MB	Limit				Standard	Limit	Rec	Prec		
AZ21831	Lead, Total	mg/L	-0.00000318	0.0001474	0.10	0.103	0.101	0.102	0.085 to 0.115	103	70 to 130	2.56	20
AZ21831	Selenium, Total	mg/L	0.0000196	0.00066	0.10	0.102	0.101	0.105	0.085 to 0.115	102	70 to 130	0.620	20
AZ21831	Arsenic, Total	mg/L	0.00000378	0.0001474	0.10	0.116	0.115	0.104	0.085 to 0.115	102	70 to 130	0.569	20
AZ21831	Antimony, Total	mg/L	0.0000939	0.00066	0.10	0.101	0.102	0.0941	0.085 to 0.115	101	70 to 130	1.02	20
AZ21831	Boron, Total	mg/L	0.00221	0.0650254	1.00	1.15	1.16	1.00	0.85 to 1.15	103	70 to 130	1.06	20
AZ21831	Lithium, Total	mg/L	-0.00000737	0.0154	0.20	0.247	0.248	0.202	0.17 to 0.23	109	70 to 130	0.457	20
AZ21831	Molybdenum, Total	mg/L	-0.00000160	0.0001474	0.10	0.0993	0.0991	0.0947	0.085 to 0.115	99.3	70 to 130	0.155	20
AZ21831	Beryllium, Total	mg/L	0.0000139	0.00088	0.10	0.0980	0.100	0.102	0.085 to 0.115	98.0	70 to 130	2.14	20
AZ21831	Cadmium, Total	mg/L	-0.00000011	0.0001474	0.10	0.101	0.103	0.102	0.085 to 0.115	101	70 to 130	1.81	20
AZ21831	Barium, Total	mg/L	-0.00000553	0.0002	0.10	0.309	0.299	0.101	0.085 to 0.115	107	70 to 130	3.11	20
AZ21831	Calcium, Total	mg/L	0.000127	0.1518	5.00	54.0	54.0	5.13	4.25 to 5.75	118	70 to 130	0.0439	20
AZ21831	Chromium, Total	mg/L	0.0000230	0.00044	0.10	0.100	0.0996	0.103	0.085 to 0.115	100	70 to 130	0.588	20
AZ21831	Cobalt, Total	mg/L	-0.0000750	0.0001474	0.10	0.106	0.106	0.109	0.085 to 0.115	106	70 to 130	0.185	20
AZ21831	Mercury, Total by CVAA	mg/L	0.0000492	0.0005	0.004	0.00392	0.00380	0.00413	0.0034 to 0.0046	98.0	70 to 130	3.23	20
AZ21831	Thallium, Total	mg/L	-0.0000690	0.0001474	0.10	0.105	0.104	0.103	0.085 to 0.115	105	70 to 130	1.34	20

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.

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

\* Test results for these accredited parameters meet all 2003 NELAC and 2009 TNI requirements, with exceptions noted on this report

Laboratory certification ID: E571114  
 Issued By: State of Florida, Department of Health  
 Expiration: June 30, 2018

**Comments:**

## Batch QC Summary

**Customer Account:** WMWGORAP

**Sample Date:** 9/25/19 09:27

**Customer ID:**

**Delivery Date:** 9/26/19 09:28

**Description:** Gorgas Ash Pond - MW-2

**Laboratory ID Number:** AZ21823

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Limit	Prec	Prec Limit
AZ21829	Fluoride	mg/L	0.0301	0.05	2.50	2.69	0.107	2.60	2.25 to 2.75	103	80 to 120	0.939	20
AZ21830	Sulfate	mg/L	-0.230	0.50	400	513	147	19.1	18 to 22	91.5	80 to 120	0.00	20
AZ21829	Chloride	mg/L	0.00811	0.50	10.0	16.2	5.85	10.0	9 to 11	104	80 to 120	1.55	20
AZ21824	Solids, Dissolved	mg/L	0.0000	25			184	53.0	40 to 60			0.272	5

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\* Test results for these accredited parameters meet all 2003 NELAC and 2009 TNI requirements, with exceptions noted on this report

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2017

**Comments:**

# Certificate Of Analysis

**Description:** Gorgas Ash Pond - MW-12V

**Location Code:** WMWGORAP  
**Collected:** 9/25/19 13:32  
**Customer ID:**  
**Submittal Date:** 9/26/19 09:28

**Laboratory ID Number:** AZ21824

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
<b>Analytical Method: EPA 200.7</b>			<b>Analyst: RDA</b>		<b>Preparation Method: EPA 1638</b>				
* Boron, Total	10/1/19 16:40	10/2/19 13:01		1.015	0.0347	mg/L	0.03	0.1	J
* Calcium, Total	10/1/19 16:40	10/2/19 13:01		1.015	33.4	mg/L	0.1	0.5	
* Lithium, Total	10/1/19 16:40	10/2/19 13:01		1.015	0.0611	mg/L	0.01	0.02	
<b>Analytical Method: EPA 200.8</b>			<b>Analyst: DLJ</b>		<b>Preparation Method: EPA 1638</b>				
* Antimony, Total	9/26/19 15:18	9/27/19 11:19		1.015	0.00250	mg/L	0.0008	0.003	J
* Arsenic, Total	9/26/19 15:18	9/27/19 11:19		1.015	0.00129	mg/L	0.001	0.005	J
* Barium, Total	9/26/19 15:18	9/27/19 11:19		1.015	1.06	mg/L	0.002	0.01	
* Beryllium, Total	9/26/19 15:18	9/27/19 11:19		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	9/26/19 15:18	9/27/19 11:19		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	9/26/19 15:18	9/27/19 11:19		1.015	0.00202	mg/L	0.002	0.01	J
* Cobalt, Total	9/26/19 15:18	9/27/19 11:19		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	9/26/19 15:18	9/27/19 11:19		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	9/26/19 15:18	9/27/19 11:19		1.015	0.00942	mg/L	0.002	0.01	J
* Selenium, Total	9/26/19 15:18	9/27/19 11:19		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	9/26/19 15:18	9/27/19 11:19		1.015	Not Detected	mg/L	0.0002	0.001	U
<b>Analytical Method: EPA 245.1</b>			<b>Analyst: ABB</b>						
* Mercury, Total by CVAA	10/2/19 09:15	10/3/19 10:59		1	Not Detected	mg/L	0.0003	0.0005	U
<b>Analytical Method: SM 2540C</b>			<b>Analyst: TJW</b>						
* Solids, Dissolved	9/27/19 15:00	9/30/19 15:50		1	183	mg/L		25	
<b>Analytical Method: SM4500Cl E</b>			<b>Analyst: JCC</b>						
* Chloride	10/2/19 10:00	10/2/19 10:00		1	3.84	mg/L	0.50	1	
<b>Analytical Method: SM4500F G 2017</b>			<b>Analyst: JCC</b>						
* Fluoride	10/2/19 14:38	10/2/19 14:38		1	0.185	mg/L	0.05	0.1	
<b>Analytical Method: SM4500SO4 E</b>			<b>Analyst: JCC</b>						
* Sulfate	9/26/19 14:56	9/26/19 14:56		1	1.61	mg/L	0.50	1	
<b>Analytical Method: Field Measurements</b>			<b>Analyst: DKG</b>						
Conductivity	9/25/19 13:27	9/25/19 13:27			281.91	uS/cm			FA
pH	9/25/19 13:27	9/25/19 13:27			9.29	SU			FA
Temperature	9/25/19 13:27	9/25/19 13:27			23.36	C			FA
Turbidity	9/25/19 13:27	9/25/19 13:27			9.54	NTU			FA

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

**Comments:**

# Batch QC Summary

**Customer Account:** WMWGORAP  
**Sample Date:** 9/25/19 13:32  
**Customer ID:**  
**Delivery Date:** 9/26/19 09:28

**Description:** Gorgas Ash Pond - MW-12V

**Laboratory ID Number:** AZ21824

Sample	Analysis	Units	MB		Spike	MS	MSD	Standard		Rec		Prec	Limit
			MB	Limit				Standard	Limit	Rec	Prec		
AZ21831	Beryllium, Total	mg/L	0.0000139	0.00088	0.10	0.0980	0.100	0.102	0.085 to 0.115	98.0	70 to 130	2.14	20
AZ21831	Cadmium, Total	mg/L	-0.00000011	0.0001474	0.10	0.101	0.103	0.102	0.085 to 0.115	101	70 to 130	1.81	20
AZ21831	Cobalt, Total	mg/L	-0.0000750	0.0001474	0.10	0.106	0.106	0.109	0.085 to 0.115	106	70 to 130	0.185	20
AZ21831	Mercury, Total by CVAA	mg/L	0.0000492	0.0005	0.004	0.00392	0.00380	0.00413	0.0034 to 0.0046	98.0	70 to 130	3.23	20
AZ21831	Thallium, Total	mg/L	-0.0000690	0.0001474	0.10	0.105	0.104	0.103	0.085 to 0.115	105	70 to 130	1.34	20
AZ21831	Lead, Total	mg/L	-0.00000318	0.0001474	0.10	0.103	0.101	0.102	0.085 to 0.115	103	70 to 130	2.56	20
AZ21831	Selenium, Total	mg/L	0.0000196	0.00066	0.10	0.102	0.101	0.105	0.085 to 0.115	102	70 to 130	0.620	20
AZ21831	Arsenic, Total	mg/L	0.00000378	0.0001474	0.10	0.116	0.115	0.104	0.085 to 0.115	102	70 to 130	0.569	20
AZ21831	Antimony, Total	mg/L	0.0000939	0.00066	0.10	0.101	0.102	0.0941	0.085 to 0.115	101	70 to 130	1.02	20
AZ21831	Boron, Total	mg/L	0.00221	0.0650254	1.00	1.15	1.16	1.00	0.85 to 1.15	103	70 to 130	1.06	20
AZ21831	Lithium, Total	mg/L	-0.00000737	0.0154	0.20	0.247	0.248	0.202	0.17 to 0.23	109	70 to 130	0.457	20
AZ21831	Molybdenum, Total	mg/L	-0.00000160	0.0001474	0.10	0.0993	0.0991	0.0947	0.085 to 0.115	99.3	70 to 130	0.155	20
AZ21831	Barium, Total	mg/L	-0.00000553	0.0002	0.10	0.309	0.299	0.101	0.085 to 0.115	107	70 to 130	3.11	20
AZ21831	Calcium, Total	mg/L	0.000127	0.1518	5.00	54.0	54.0	5.13	4.25 to 5.75	118	70 to 130	0.0439	20
AZ21831	Chromium, Total	mg/L	0.0000230	0.00044	0.10	0.100	0.0996	0.103	0.085 to 0.115	100	70 to 130	0.588	20

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Laboratory certification ID: E571114  
 Issued By: State of Florida, Department of Health  
 Expiration: June 30, 2018

**Comments:**

## Batch QC Summary

**Customer Account:** WMWGORAP

**Sample Date:** 9/25/19 13:32

**Customer ID:**

**Delivery Date:** 9/26/19 09:28

**Description:** Gorgas Ash Pond - MW-12V

**Laboratory ID Number:** AZ21824

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
AZ21829	Fluoride	mg/L	0.0301	0.05	2.50	2.69	0.107	2.60	2.25 to 2.75	103	80 to 120	0.939	20
AZ21829	Chloride	mg/L	0.00811	0.50	10.0	16.2	5.85	10.0	9 to 11	104	80 to 120	1.55	20
AZ21824	Solids, Dissolved	mg/L	0.0000	25			184	53.0	40 to 60			0.272	5
AZ21830	Sulfate	mg/L	-0.230	0.50	400	513	147	19.1	18 to 22	91.5	80 to 120	0.00	20

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2017

**Comments:**

# Certificate Of Analysis

**Description:** Gorgas Ash Pond - MW-17

**Location Code:** WMWGORAP  
**Collected:** 9/23/19 14:21  
**Customer ID:**  
**Submittal Date:** 9/26/19 09:28

**Laboratory ID Number:** AZ21825

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
<b>Analytical Method: EPA 200.7</b>			<b>Analyst: RDA</b>		<b>Preparation Method: EPA 1638</b>				
* Boron, Total	10/1/19 16:40	10/2/19 13:04		1.015	0.116	mg/L	0.03	0.1	
* Calcium, Total	10/1/19 16:40	10/2/19 13:04		1.015	5.43	mg/L	0.1	0.5	
* Lithium, Total	10/1/19 16:40	10/2/19 13:04		1.015	0.0583	mg/L	0.01	0.02	
<b>Analytical Method: EPA 200.8</b>			<b>Analyst: DLJ</b>		<b>Preparation Method: EPA 1638</b>				
* Antimony, Total	9/26/19 15:18	9/27/19 11:22		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	9/26/19 15:18	9/27/19 11:22		1.015	0.00631	mg/L	0.001	0.005	
* Barium, Total	9/26/19 15:18	9/27/19 11:22		1.015	0.135	mg/L	0.002	0.01	
* Beryllium, Total	9/26/19 15:18	9/27/19 11:22		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	9/26/19 15:18	9/27/19 11:22		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	9/26/19 15:18	9/27/19 11:22		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	9/26/19 15:18	9/27/19 11:22		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	9/26/19 15:18	9/27/19 11:22		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	9/26/19 15:18	9/27/19 11:22		1.015	0.0110	mg/L	0.002	0.01	
* Selenium, Total	9/26/19 15:18	9/27/19 11:22		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	9/26/19 15:18	9/27/19 11:22		1.015	Not Detected	mg/L	0.0002	0.001	U
<b>Analytical Method: EPA 245.1</b>			<b>Analyst: ABB</b>						
* Mercury, Total by CVAA	10/2/19 09:15	10/3/19 11:02		1	Not Detected	mg/L	0.0003	0.0005	U
<b>Analytical Method: SM 2540C</b>			<b>Analyst: TJW</b>						
* Solids, Dissolved	9/26/19 15:13	9/30/19 10:10		1	684	mg/L		50	
<b>Analytical Method: SM4500Cl E</b>			<b>Analyst: JCC</b>						
* Chloride	10/2/19 10:01	10/2/19 10:01		1	16.2	mg/L	0.50	1	
<b>Analytical Method: SM4500F G 2017</b>			<b>Analyst: JCC</b>						
* Fluoride	10/2/19 14:39	10/2/19 14:39		1	0.351	mg/L	0.05	0.1	
<b>Analytical Method: SM4500SO4 E</b>			<b>Analyst: JCC</b>						
* Sulfate	9/26/19 15:05	9/26/19 15:05		10	124	mg/L	5.00	10	
<b>Analytical Method: Field Measurements</b>			<b>Analyst: AWG</b>						
Conductivity	9/23/19 14:19	9/23/19 14:19			1154.99	uS/cm			FA
pH	9/23/19 14:19	9/23/19 14:19			8.37	SU			FA
Temperature	9/23/19 14:19	9/23/19 14:19			21.40	C			FA
Turbidity	9/23/19 14:19	9/23/19 14:19			1.77	NTU			FA

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

**Comments:**

# Batch QC Summary

**Customer Account:** WMWGORAP  
**Sample Date:** 9/23/19 14:21  
**Customer ID:**  
**Delivery Date:** 9/26/19 09:28

**Description:** Gorgas Ash Pond - MW-17

**Laboratory ID Number:** AZ21825

Sample	Analysis	Units	MB		Spike	MS	MSD	Standard		Rec		Prec	Limit
			MB	Limit				Standard	Limit	Rec	Prec		
AZ21831	Beryllium, Total	mg/L	0.0000139	0.00088	0.10	0.0980	0.100	0.102	0.085 to 0.115	98.0	70 to 130	2.14	20
AZ21831	Cadmium, Total	mg/L	-0.00000011	0.0001474	0.10	0.101	0.103	0.102	0.085 to 0.115	101	70 to 130	1.81	20
AZ21831	Arsenic, Total	mg/L	0.00000378	0.0001474	0.10	0.116	0.115	0.104	0.085 to 0.115	102	70 to 130	0.569	20
AZ21831	Antimony, Total	mg/L	0.0000939	0.00066	0.10	0.101	0.102	0.0941	0.085 to 0.115	101	70 to 130	1.02	20
AZ21831	Lead, Total	mg/L	-0.00000318	0.0001474	0.10	0.103	0.101	0.102	0.085 to 0.115	103	70 to 130	2.56	20
AZ21831	Selenium, Total	mg/L	0.0000196	0.00066	0.10	0.102	0.101	0.105	0.085 to 0.115	102	70 to 130	0.620	20
AZ21831	Boron, Total	mg/L	0.00221	0.0650254	1.00	1.15	1.16	1.00	0.85 to 1.15	103	70 to 130	1.06	20
AZ21831	Lithium, Total	mg/L	-0.00000737	0.0154	0.20	0.247	0.248	0.202	0.17 to 0.23	109	70 to 130	0.457	20
AZ21831	Molybdenum, Total	mg/L	-0.00000160	0.0001474	0.10	0.0993	0.0991	0.0947	0.085 to 0.115	99.3	70 to 130	0.155	20
AZ21831	Barium, Total	mg/L	-0.00000553	0.0002	0.10	0.309	0.299	0.101	0.085 to 0.115	107	70 to 130	3.11	20
AZ21831	Calcium, Total	mg/L	0.000127	0.1518	5.00	54.0	54.0	5.13	4.25 to 5.75	118	70 to 130	0.0439	20
AZ21831	Chromium, Total	mg/L	0.0000230	0.00044	0.10	0.100	0.0996	0.103	0.085 to 0.115	100	70 to 130	0.588	20
AZ21831	Cobalt, Total	mg/L	-0.0000750	0.0001474	0.10	0.106	0.106	0.109	0.085 to 0.115	106	70 to 130	0.185	20
AZ21831	Mercury, Total by CVAA	mg/L	0.0000492	0.0005	0.004	0.00392	0.00380	0.00413	0.0034 to 0.0046	98.0	70 to 130	3.23	20
AZ21831	Thallium, Total	mg/L	-0.0000690	0.0001474	0.10	0.105	0.104	0.103	0.085 to 0.115	105	70 to 130	1.34	20

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

\* Test results for these accredited parameters meet all 2003 NELAC and 2009 TNI requirements, with exceptions noted on this report

Laboratory certification ID: E571114  
 Issued By: State of Florida, Department of Health  
 Expiration: June 30, 2018

**Comments:**



## Batch QC Summary

**Customer Account:** WMWGORAP

**Sample Date:** 9/23/19 14:21

**Customer ID:**

**Delivery Date:** 9/26/19 09:28

**Description:** Gorgas Ash Pond - MW-17

**Laboratory ID Number:** AZ21825

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Limit	Prec	Prec Limit
AZ21834	Solids, Dissolved	mg/L	0.0000	25			281	50.0	40 to 60			1.44	5
AZ21829	Fluoride	mg/L	0.0301	0.05	2.50	2.69	0.107	2.60	2.25 to 2.75	103	80 to 120	0.939	20
AZ21830	Sulfate	mg/L	-0.230	0.50	400	513	147	19.1	18 to 22	91.5	80 to 120	0.00	20
AZ21829	Chloride	mg/L	0.00811	0.50	10.0	16.2	5.85	10.0	9 to 11	104	80 to 120	1.55	20

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\* Test results for these accredited parameters meet all 2003 NELAC and 2009 TNI requirements, with exceptions noted on this report

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2017

**Comments:**

# Certificate Of Analysis

**Description:** Gorgas Ash Pond - MW-15

**Location Code:** WMWGORAP  
**Collected:** 9/24/19 08:00  
**Customer ID:**  
**Submittal Date:** 9/26/19 09:28

**Laboratory ID Number:** AZ21826

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
<b>Analytical Method: EPA 200.7</b>			<b>Analyst: RDA</b>		<b>Preparation Method: EPA 1638</b>				
* Boron, Total	10/1/19 16:40	10/2/19 13:07		1.015	0.0607	mg/L	0.03	0.1	J
* Calcium, Total	10/1/19 16:40	10/2/19 13:07		1.015	3.26	mg/L	0.1	0.5	
* Lithium, Total	10/1/19 16:40	10/2/19 13:07		1.015	0.469	mg/L	0.01	0.02	
<b>Analytical Method: EPA 200.8</b>			<b>Analyst: DLJ</b>		<b>Preparation Method: EPA 1638</b>				
* Antimony, Total	9/26/19 15:18	9/27/19 11:25		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	9/26/19 15:18	9/27/19 11:25		1.015	0.0110	mg/L	0.001	0.005	
* Barium, Total	9/26/19 15:18	9/27/19 11:25		1.015	0.0913	mg/L	0.002	0.01	
* Beryllium, Total	9/26/19 15:18	9/27/19 11:25		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	9/26/19 15:18	9/27/19 11:25		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	9/26/19 15:18	9/27/19 11:25		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	9/26/19 15:18	9/27/19 11:25		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	9/26/19 15:18	9/27/19 11:25		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	9/26/19 15:18	9/27/19 11:25		1.015	0.0597	mg/L	0.002	0.01	
* Selenium, Total	9/26/19 15:18	9/27/19 11:25		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	9/26/19 15:18	9/27/19 11:25		1.015	Not Detected	mg/L	0.0002	0.001	U
<b>Analytical Method: EPA 245.1</b>			<b>Analyst: ABB</b>						
* Mercury, Total by CVAA	10/2/19 09:15	10/3/19 11:04		1	Not Detected	mg/L	0.0003	0.0005	U
<b>Analytical Method: SM 2540C</b>			<b>Analyst: TJW</b>						
* Solids, Dissolved	9/27/19 15:00	9/30/19 15:50		1	536	mg/L		75.8	
<b>Analytical Method: SM4500Cl E</b>			<b>Analyst: JCC</b>						
* Chloride	10/2/19 10:02	10/2/19 10:02		1	5.96	mg/L	0.50	1	
<b>Analytical Method: SM4500F G 2017</b>			<b>Analyst: JCC</b>						
* Fluoride	10/2/19 14:40	10/2/19 14:40		1	0.628	mg/L	0.05	0.1	
<b>Analytical Method: SM4500SO4 E</b>			<b>Analyst: JCC</b>						
* Sulfate	9/26/19 14:59	9/26/19 14:59		1	12.4	mg/L	0.50	1	
<b>Analytical Method: Field Measurements</b>			<b>Analyst: AWG</b>						
Conductivity	9/24/19 07:55	9/24/19 07:55			1529.84	uS/cm			FA
pH	9/24/19 07:55	9/24/19 07:55			11.70	SU			FA
Temperature	9/24/19 07:55	9/24/19 07:55			19.54	C			FA
Turbidity	9/24/19 07:55	9/24/19 07:55			0.7	NTU			FA

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

**Comments:**

# Batch QC Summary

**Customer Account:** WMWGORAP  
**Sample Date:** 9/24/19 08:00  
**Customer ID:**  
**Delivery Date:** 9/26/19 09:28

**Description:** Gorgas Ash Pond - MW-15

**Laboratory ID Number:** AZ21826

Sample	Analysis	Units	MB		Spike	MS	MSD	Standard		Rec		Prec	Limit
			MB	Limit				Standard	Limit	Rec	Prec		
AZ21831	Beryllium, Total	mg/L	0.0000139	0.00088	0.10	0.0980	0.100	0.102	0.085 to 0.115	98.0	70 to 130	2.14	20
AZ21831	Cadmium, Total	mg/L	-0.00000011	0.0001474	0.10	0.101	0.103	0.102	0.085 to 0.115	101	70 to 130	1.81	20
AZ21831	Cobalt, Total	mg/L	-0.0000750	0.0001474	0.10	0.106	0.106	0.109	0.085 to 0.115	106	70 to 130	0.185	20
AZ21831	Mercury, Total by CVAA	mg/L	0.0000492	0.0005	0.004	0.00392	0.00380	0.00413	0.0034 to 0.0046	98.0	70 to 130	3.23	20
AZ21831	Thallium, Total	mg/L	-0.0000690	0.0001474	0.10	0.105	0.104	0.103	0.085 to 0.115	105	70 to 130	1.34	20
AZ21831	Lead, Total	mg/L	-0.00000318	0.0001474	0.10	0.103	0.101	0.102	0.085 to 0.115	103	70 to 130	2.56	20
AZ21831	Selenium, Total	mg/L	0.0000196	0.00066	0.10	0.102	0.101	0.105	0.085 to 0.115	102	70 to 130	0.620	20
AZ21831	Boron, Total	mg/L	0.00221	0.0650254	1.00	1.15	1.16	1.00	0.85 to 1.15	103	70 to 130	1.06	20
AZ21831	Lithium, Total	mg/L	-0.00000737	0.0154	0.20	0.247	0.248	0.202	0.17 to 0.23	109	70 to 130	0.457	20
AZ21831	Molybdenum, Total	mg/L	-0.00000160	0.0001474	0.10	0.0993	0.0991	0.0947	0.085 to 0.115	99.3	70 to 130	0.155	20
AZ21831	Barium, Total	mg/L	-0.00000553	0.0002	0.10	0.309	0.299	0.101	0.085 to 0.115	107	70 to 130	3.11	20
AZ21831	Calcium, Total	mg/L	0.000127	0.1518	5.00	54.0	54.0	5.13	4.25 to 5.75	118	70 to 130	0.0439	20
AZ21831	Chromium, Total	mg/L	0.0000230	0.00044	0.10	0.100	0.0996	0.103	0.085 to 0.115	100	70 to 130	0.588	20
AZ21831	Arsenic, Total	mg/L	0.00000378	0.0001474	0.10	0.116	0.115	0.104	0.085 to 0.115	102	70 to 130	0.569	20
AZ21831	Antimony, Total	mg/L	0.0000939	0.00066	0.10	0.101	0.102	0.0941	0.085 to 0.115	101	70 to 130	1.02	20

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.

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

\* Test results for these accredited parameters meet all 2003 NELAC and 2009 TNI requirements, with exceptions noted on this report

Laboratory certification ID: E571114  
 Issued By: State of Florida, Department of Health  
 Expiration: June 30, 2018

**Comments:**

## Batch QC Summary

**Customer Account:** WMWGORAP

**Sample Date:** 9/24/19 08:00

**Customer ID:**

**Delivery Date:** 9/26/19 09:28

**Description:** Gorgas Ash Pond - MW-15

**Laboratory ID Number:** AZ21826

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Limit	Prec	Prec Limit
AZ21829	Fluoride	mg/L	0.0301	0.05	2.50	2.69	0.107	2.60	2.25 to 2.75	103	80 to 120	0.939	20
AZ21830	Sulfate	mg/L	-0.230	0.50	400	513	147	19.1	18 to 22	91.5	80 to 120	0.00	20
AZ21829	Chloride	mg/L	0.00811	0.50	10.0	16.2	5.85	10.0	9 to 11	104	80 to 120	1.55	20
AZ21835	Solids, Dissolved	mg/L	0.0000	25			374	53.0	40 to 60			0.268	5

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\* Test results for these accredited parameters meet all 2003 NELAC and 2009 TNI requirements, with exceptions noted on this report

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2017

**Comments:**

# Certificate Of Analysis

**Description:** Gorgas Ash Pond - MW-21

**Location Code:** WMWGORAP  
**Collected:** 9/24/19 10:28  
**Customer ID:**  
**Submittal Date:** 9/26/19 09:28

**Laboratory ID Number:** AZ21827

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
<b>Analytical Method: EPA 200.7</b>			<b>Analyst: RDA</b>		<b>Preparation Method: EPA 1638</b>				
* Boron, Total	10/1/19 16:40	10/2/19 13:10		1.015	0.0843	mg/L	0.03	0.1	J
* Calcium, Total	10/1/19 16:40	10/2/19 13:10		1.015	2.47	mg/L	0.1	0.5	
* Lithium, Total	10/1/19 16:40	10/2/19 13:10		1.015	0.276	mg/L	0.01	0.02	
<b>Analytical Method: EPA 200.8</b>			<b>Analyst: DLJ</b>		<b>Preparation Method: EPA 1638</b>				
* Antimony, Total	9/26/19 15:18	9/27/19 11:27		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	9/26/19 15:18	9/27/19 11:27		1.015	Not Detected	mg/L	0.001	0.005	U
* Barium, Total	9/26/19 15:18	9/27/19 11:27		1.015	0.114	mg/L	0.002	0.01	
* Beryllium, Total	9/26/19 15:18	9/27/19 11:27		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	9/26/19 15:18	9/27/19 11:27		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	9/26/19 15:18	9/27/19 11:27		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	9/26/19 15:18	9/27/19 11:27		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	9/26/19 15:18	9/27/19 11:27		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	9/26/19 15:18	9/27/19 11:27		1.015	0.0613	mg/L	0.002	0.01	
* Selenium, Total	9/26/19 15:18	9/27/19 11:27		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	9/26/19 15:18	9/27/19 11:27		1.015	Not Detected	mg/L	0.0002	0.001	U
<b>Analytical Method: EPA 245.1</b>			<b>Analyst: ABB</b>						
* Mercury, Total by CVAA	10/2/19 09:15	10/3/19 11:06		1	Not Detected	mg/L	0.0003	0.0005	U
<b>Analytical Method: SM 2540C</b>			<b>Analyst: TJW</b>						
* Solids, Dissolved	9/27/19 15:00	9/30/19 15:50		1	630	mg/L		50	
<b>Analytical Method: SM4500Cl E</b>			<b>Analyst: JCC</b>						
* Chloride	10/2/19 10:11	10/2/19 10:11		2	36.0	mg/L	1.00	2	
<b>Analytical Method: SM4500F G 2017</b>			<b>Analyst: JCC</b>						
* Fluoride	10/2/19 14:41	10/2/19 14:41		1	0.209	mg/L	0.05	0.1	
<b>Analytical Method: SM4500SO4 E</b>			<b>Analyst: JCC</b>						
* Sulfate	9/26/19 15:06	9/26/19 15:06		25	224	mg/L	12.50	25	
<b>Analytical Method: Field Measurements</b>			<b>Analyst: AWG</b>						
Conductivity	9/24/19 10:24	9/24/19 10:24			1324.40	uS/cm			FA
pH	9/24/19 10:24	9/24/19 10:24			11.24	SU			FA
Temperature	9/24/19 10:24	9/24/19 10:24			20.09	C			FA
Turbidity	9/24/19 10:24	9/24/19 10:24			0.38	NTU			FA

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

**Comments:**

# Batch QC Summary

**Customer Account:** WMWGORAP  
**Sample Date:** 9/24/19 10:28  
**Customer ID:**  
**Delivery Date:** 9/26/19 09:28

**Description:** Gorgas Ash Pond - MW-21

**Laboratory ID Number:** AZ21827

Sample	Analysis	Units	MB		Spike	MS	MSD	Standard	Standard Limit	Rec		Prec Limit	
			MB	Limit						Rec	Limit		
AZ21831	Lead, Total	mg/L	-0.00000318	0.0001474	0.10	0.103	0.101	0.102	0.085 to 0.115	103	70 to 130	2.56	20
AZ21831	Selenium, Total	mg/L	0.0000196	0.00066	0.10	0.102	0.101	0.105	0.085 to 0.115	102	70 to 130	0.620	20
AZ21831	Boron, Total	mg/L	0.00221	0.0650254	1.00	1.15	1.16	1.00	0.85 to 1.15	103	70 to 130	1.06	20
AZ21831	Lithium, Total	mg/L	-0.00000737	0.0154	0.20	0.247	0.248	0.202	0.17 to 0.23	109	70 to 130	0.457	20
AZ21831	Molybdenum, Total	mg/L	-0.00000160	0.0001474	0.10	0.0993	0.0991	0.0947	0.085 to 0.115	99.3	70 to 130	0.155	20
AZ21831	Arsenic, Total	mg/L	0.00000378	0.0001474	0.10	0.116	0.115	0.104	0.085 to 0.115	102	70 to 130	0.569	20
AZ21831	Antimony, Total	mg/L	0.0000939	0.00066	0.10	0.101	0.102	0.0941	0.085 to 0.115	101	70 to 130	1.02	20
AZ21831	Beryllium, Total	mg/L	0.0000139	0.00088	0.10	0.0980	0.100	0.102	0.085 to 0.115	98.0	70 to 130	2.14	20
AZ21831	Cadmium, Total	mg/L	-0.00000011	0.0001474	0.10	0.101	0.103	0.102	0.085 to 0.115	101	70 to 130	1.81	20
AZ21831	Barium, Total	mg/L	-0.00000553	0.0002	0.10	0.309	0.299	0.101	0.085 to 0.115	107	70 to 130	3.11	20
AZ21831	Calcium, Total	mg/L	0.000127	0.1518	5.00	54.0	54.0	5.13	4.25 to 5.75	118	70 to 130	0.0439	20
AZ21831	Chromium, Total	mg/L	0.0000230	0.00044	0.10	0.100	0.0996	0.103	0.085 to 0.115	100	70 to 130	0.588	20
AZ21831	Cobalt, Total	mg/L	-0.0000750	0.0001474	0.10	0.106	0.106	0.109	0.085 to 0.115	106	70 to 130	0.185	20
AZ21831	Mercury, Total by CVAA	mg/L	0.0000492	0.0005	0.004	0.00392	0.00380	0.00413	0.0034 to 0.0046	98.0	70 to 130	3.23	20
AZ21831	Thallium, Total	mg/L	-0.0000690	0.0001474	0.10	0.105	0.104	0.103	0.085 to 0.115	105	70 to 130	1.34	20

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

\* Test results for these accredited parameters meet all 2003 NELAC and 2009 TNI requirements, with exceptions noted on this report

Laboratory certification ID: E571114  
 Issued By: State of Florida, Department of Health  
 Expiration: June 30, 2018

**Comments:**

## Batch QC Summary

**Customer Account:** WMWGORAP

**Sample Date:** 9/24/19 10:28

**Customer ID:**

**Delivery Date:** 9/26/19 09:28

**Description:** Gorgas Ash Pond - MW-21

**Laboratory ID Number:** AZ21827

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Limit	Prec	Prec Limit
AZ21829	Fluoride	mg/L	0.0301	0.05	2.50	2.69	0.107	2.60	2.25 to 2.75	103	80 to 120	0.939	20
AZ21830	Sulfate	mg/L	-0.230	0.50	400	513	147	19.1	18 to 22	91.5	80 to 120	0.00	20
AZ21829	Chloride	mg/L	0.00811	0.50	10.0	16.2	5.85	10.0	9 to 11	104	80 to 120	1.55	20
AZ21835	Solids, Dissolved	mg/L	0.0000	25			374	53.0	40 to 60			0.268	5

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\* Test results for these accredited parameters meet all 2003 NELAC and 2009 TNI requirements, with exceptions noted on this report

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2017

**Comments:**

# Certificate Of Analysis

**Description:** Gorgas Ash Pond - MW-29H

**Location Code:** WMWGORAP  
**Collected:** 9/24/19 13:18  
**Customer ID:**  
**Submittal Date:** 9/26/19 09:28

**Laboratory ID Number:** AZ21828

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
<b>Analytical Method: EPA 200.7</b>			<b>Analyst: RDA</b>		<b>Preparation Method: EPA 1638</b>				
* Boron, Total	10/1/19 16:40	10/2/19 13:13		1.015	0.0305	mg/L	0.03	0.1	J
* Calcium, Total	10/1/19 16:40	10/2/19 13:13		1.015	32.8	mg/L	0.1	0.5	
* Lithium, Total	10/1/19 16:40	10/2/19 13:13		1.015	0.0509	mg/L	0.01	0.02	
<b>Analytical Method: EPA 200.8</b>			<b>Analyst: DLJ</b>		<b>Preparation Method: EPA 1638</b>				
* Antimony, Total	9/26/19 15:18	9/27/19 11:30		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	9/26/19 15:18	9/27/19 11:30		1.015	0.00155	mg/L	0.001	0.005	J
* Barium, Total	9/26/19 15:18	9/27/19 11:30		1.015	0.712	mg/L	0.002	0.01	
* Beryllium, Total	9/26/19 15:18	9/27/19 11:30		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	9/26/19 15:18	9/27/19 11:30		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	9/26/19 15:18	9/27/19 11:30		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	9/26/19 15:18	9/27/19 11:30		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	9/26/19 15:18	9/27/19 11:30		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	9/26/19 15:18	9/27/19 11:30		1.015	0.00424	mg/L	0.002	0.01	J
* Selenium, Total	9/26/19 15:18	9/27/19 11:30		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	9/26/19 15:18	9/27/19 11:30		1.015	Not Detected	mg/L	0.0002	0.001	U
<b>Analytical Method: EPA 245.1</b>			<b>Analyst: ABB</b>						
* Mercury, Total by CVAA	10/2/19 09:15	10/3/19 11:09		1	Not Detected	mg/L	0.0003	0.0005	U
<b>Analytical Method: SM 2540C</b>			<b>Analyst: TJW</b>						
* Solids, Dissolved	9/27/19 15:00	9/30/19 15:50		1	389	mg/L		25	
<b>Analytical Method: SM4500Cl E</b>			<b>Analyst: JCC</b>						
* Chloride	10/2/19 10:05	10/2/19 10:05		1	3.11	mg/L	0.50	1	
<b>Analytical Method: SM4500F G 2017</b>			<b>Analyst: JCC</b>						
* Fluoride	10/2/19 14:43	10/2/19 14:43		1	0.183	mg/L	0.05	0.1	
<b>Analytical Method: SM4500SO4 E</b>			<b>Analyst: JCC</b>						
* Sulfate	9/26/19 15:01	9/26/19 15:01		1	32.6	mg/L	0.50	1	
<b>Analytical Method: Field Measurements</b>			<b>Analyst: AWG</b>						
Conductivity	9/24/19 13:14	9/24/19 13:14			625.07	uS/cm			FA
pH	9/24/19 13:14	9/24/19 13:14			7.11	SU			FA
Temperature	9/24/19 13:14	9/24/19 13:14			20.61	C			FA
Turbidity	9/24/19 13:14	9/24/19 13:14			2.52	NTU			FA

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

**Comments:**



# Batch QC Summary

**Customer Account:** WMWGORAP  
**Sample Date:** 9/24/19 13:18  
**Customer ID:**  
**Delivery Date:** 9/26/19 09:28

**Description:** Gorgas Ash Pond - MW-29H

**Laboratory ID Number:** AZ21828

Sample	Analysis	Units	MB		Spike	MS	MSD	Standard		Rec		Prec	Limit
			MB	Limit				Standard	Limit	Rec	Prec		
AZ21831	Beryllium, Total	mg/L	0.0000139	0.00088	0.10	0.0980	0.100	0.102	0.085 to 0.115	98.0	70 to 130	2.14	20
AZ21831	Cadmium, Total	mg/L	-0.00000011	0.0001474	0.10	0.101	0.103	0.102	0.085 to 0.115	101	70 to 130	1.81	20
AZ21831	Cobalt, Total	mg/L	-0.0000750	0.0001474	0.10	0.106	0.106	0.109	0.085 to 0.115	106	70 to 130	0.185	20
AZ21831	Mercury, Total by CVAA	mg/L	0.0000492	0.0005	0.004	0.00392	0.00380	0.00413	0.0034 to 0.0046	98.0	70 to 130	3.23	20
AZ21831	Thallium, Total	mg/L	-0.0000690	0.0001474	0.10	0.105	0.104	0.103	0.085 to 0.115	105	70 to 130	1.34	20
AZ21831	Boron, Total	mg/L	0.00221	0.0650254	1.00	1.15	1.16	1.00	0.85 to 1.15	103	70 to 130	1.06	20
AZ21831	Lithium, Total	mg/L	-0.00000737	0.0154	0.20	0.247	0.248	0.202	0.17 to 0.23	109	70 to 130	0.457	20
AZ21831	Molybdenum, Total	mg/L	-0.00000160	0.0001474	0.10	0.0993	0.0991	0.0947	0.085 to 0.115	99.3	70 to 130	0.155	20
AZ21831	Lead, Total	mg/L	-0.00000318	0.0001474	0.10	0.103	0.101	0.102	0.085 to 0.115	103	70 to 130	2.56	20
AZ21831	Selenium, Total	mg/L	0.0000196	0.00066	0.10	0.102	0.101	0.105	0.085 to 0.115	102	70 to 130	0.620	20
AZ21831	Barium, Total	mg/L	-0.00000553	0.0002	0.10	0.309	0.299	0.101	0.085 to 0.115	107	70 to 130	3.11	20
AZ21831	Calcium, Total	mg/L	0.000127	0.1518	5.00	54.0	54.0	5.13	4.25 to 5.75	118	70 to 130	0.0439	20
AZ21831	Chromium, Total	mg/L	0.0000230	0.00044	0.10	0.100	0.0996	0.103	0.085 to 0.115	100	70 to 130	0.588	20
AZ21831	Arsenic, Total	mg/L	0.00000378	0.0001474	0.10	0.116	0.115	0.104	0.085 to 0.115	102	70 to 130	0.569	20
AZ21831	Antimony, Total	mg/L	0.0000939	0.00066	0.10	0.101	0.102	0.0941	0.085 to 0.115	101	70 to 130	1.02	20

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

\* Test results for these accredited parameters meet all 2003 NELAC and 2009 TNI requirements, with exceptions noted on this report

Laboratory certification ID: E571114  
 Issued By: State of Florida, Department of Health  
 Expiration: June 30, 2018

**Comments:**

## Batch QC Summary

**Customer Account:** WMWGORAP

**Sample Date:** 9/24/19 13:18

**Customer ID:**

**Delivery Date:** 9/26/19 09:28

**Description:** Gorgas Ash Pond - MW-29H

**Laboratory ID Number:** AZ21828

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Limit	Prec	Prec Limit
AZ21829	Fluoride	mg/L	0.0301	0.05	2.50	2.69	0.107	2.60	2.25 to 2.75	103	80 to 120	0.939	20
AZ21830	Sulfate	mg/L	-0.230	0.50	400	513	147	19.1	18 to 22	91.5	80 to 120	0.00	20
AZ21829	Chloride	mg/L	0.00811	0.50	10.0	16.2	5.85	10.0	9 to 11	104	80 to 120	1.55	20
AZ21835	Solids, Dissolved	mg/L	0.0000	25			374	53.0	40 to 60			0.268	5

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2017

**Comments:**

# Certificate Of Analysis

**Description:** Gorgas Ash Pond - MW-7

**Location Code:** WMWGORAP  
**Collected:** 9/24/19 17:45  
**Customer ID:**  
**Submittal Date:** 9/26/19 09:29

**Laboratory ID Number:** AZ21829

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
<b>Analytical Method: EPA 200.7</b>			<b>Analyst: RDA</b>		<b>Preparation Method: EPA 1638</b>				
* Boron, Total	10/1/19 16:40	10/2/19 13:15		1.015	1.60	mg/L	0.03	0.1	
* Calcium, Total	10/1/19 16:40	10/2/19 13:15		1.015	13.4	mg/L	0.1	0.5	
* Lithium, Total	10/1/19 16:40	10/2/19 13:15		1.015	0.156	mg/L	0.01	0.02	
<b>Analytical Method: EPA 200.8</b>			<b>Analyst: DLJ</b>		<b>Preparation Method: EPA 1638</b>				
* Antimony, Total	9/26/19 15:18	9/27/19 11:33		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	9/26/19 15:18	9/27/19 11:33		1.015	0.233	mg/L	0.001	0.005	
* Barium, Total	9/26/19 15:18	9/27/19 11:33		1.015	0.0834	mg/L	0.002	0.01	
* Beryllium, Total	9/26/19 15:18	9/27/19 11:33		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	9/26/19 15:18	9/27/19 11:33		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	9/26/19 15:18	9/27/19 11:33		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	9/26/19 15:18	9/27/19 11:33		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	9/26/19 15:18	9/27/19 11:33		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	9/26/19 15:18	9/27/19 11:33		1.015	0.178	mg/L	0.002	0.01	
* Selenium, Total	9/26/19 15:18	9/27/19 11:33		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	9/26/19 15:18	9/27/19 11:33		1.015	Not Detected	mg/L	0.0002	0.001	U
<b>Analytical Method: EPA 245.1</b>			<b>Analyst: ABB</b>						
* Mercury, Total by CVAA	10/2/19 09:15	10/3/19 11:11		1	Not Detected	mg/L	0.0003	0.0005	U
<b>Analytical Method: SM 2540C</b>			<b>Analyst: TJW</b>						
* Solids, Dissolved	9/27/19 15:00	9/30/19 15:50		1	344	mg/L		25	
<b>Analytical Method: SM4500Cl E</b>			<b>Analyst: JCC</b>						
* Chloride	10/2/19 10:07	10/2/19 10:07		1	5.76	mg/L	0.50	1	
<b>Analytical Method: SM4500F G 2017</b>			<b>Analyst: JCC</b>						
* Fluoride	10/2/19 14:45	10/2/19 14:45		1	0.106	mg/L	0.05	0.1	
<b>Analytical Method: SM4500SO4 E</b>			<b>Analyst: JCC</b>						
* Sulfate	9/26/19 15:07	9/26/19 15:07		10	145	mg/L	5.00	10	
<b>Analytical Method: Field Measurements</b>			<b>Analyst: AWG</b>						
Conductivity	9/24/19 17:41	9/24/19 17:41			528.85	uS/cm			FA
pH	9/24/19 17:41	9/24/19 17:41			7.38	SU			FA
Temperature	9/24/19 17:41	9/24/19 17:41			18.23	C			FA
Turbidity	9/24/19 17:41	9/24/19 17:41			24.4	NTU			FA

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

**Comments:**

# Batch QC Summary

**Customer Account:** WMWGORAP  
**Sample Date:** 9/24/19 17:45  
**Customer ID:**  
**Delivery Date:** 9/26/19 09:29

**Description:** Gorgas Ash Pond - MW-7

**Laboratory ID Number:** AZ21829

Sample	Analysis	Units	MB					Standard		Rec		Prec	Limit
			MB	Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit		
AZ21831	Beryllium, Total	mg/L	0.0000139	0.00088	0.10	0.0980	0.100	0.102	0.085 to 0.115	98.0	70 to 130	2.14	20
AZ21831	Cadmium, Total	mg/L	-0.00000011	0.0001474	0.10	0.101	0.103	0.102	0.085 to 0.115	101	70 to 130	1.81	20
AZ21831	Arsenic, Total	mg/L	0.00000378	0.0001474	0.10	0.116	0.115	0.104	0.085 to 0.115	102	70 to 130	0.569	20
AZ21831	Antimony, Total	mg/L	0.0000939	0.00066	0.10	0.101	0.102	0.0941	0.085 to 0.115	101	70 to 130	1.02	20
AZ21831	Lead, Total	mg/L	-0.00000318	0.0001474	0.10	0.103	0.101	0.102	0.085 to 0.115	103	70 to 130	2.56	20
AZ21831	Selenium, Total	mg/L	0.0000196	0.00066	0.10	0.102	0.101	0.105	0.085 to 0.115	102	70 to 130	0.620	20
AZ21831	Boron, Total	mg/L	0.00221	0.0650254	1.00	1.15	1.16	1.00	0.85 to 1.15	103	70 to 130	1.06	20
AZ21831	Lithium, Total	mg/L	-0.00000737	0.0154	0.20	0.247	0.248	0.202	0.17 to 0.23	109	70 to 130	0.457	20
AZ21831	Molybdenum, Total	mg/L	-0.00000160	0.0001474	0.10	0.0993	0.0991	0.0947	0.085 to 0.115	99.3	70 to 130	0.155	20
AZ21831	Cobalt, Total	mg/L	-0.0000750	0.0001474	0.10	0.106	0.106	0.109	0.085 to 0.115	106	70 to 130	0.185	20
AZ21831	Mercury, Total by CVAA	mg/L	0.0000492	0.0005	0.004	0.00392	0.00380	0.00413	0.0034 to 0.0046	98.0	70 to 130	3.23	20
AZ21831	Thallium, Total	mg/L	-0.0000690	0.0001474	0.10	0.105	0.104	0.103	0.085 to 0.115	105	70 to 130	1.34	20
AZ21831	Barium, Total	mg/L	-0.00000553	0.0002	0.10	0.309	0.299	0.101	0.085 to 0.115	107	70 to 130	3.11	20
AZ21831	Calcium, Total	mg/L	0.000127	0.1518	5.00	54.0	54.0	5.13	4.25 to 5.75	118	70 to 130	0.0439	20
AZ21831	Chromium, Total	mg/L	0.0000230	0.00044	0.10	0.100	0.0996	0.103	0.085 to 0.115	100	70 to 130	0.588	20

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.

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

\* Test results for these accredited parameters meet all 2003 NELAC and 2009 TNI requirements, with exceptions noted on this report

Laboratory certification ID: E571114  
 Issued By: State of Florida, Department of Health  
 Expiration: June 30, 2018

**Comments:**

## Batch QC Summary

**Customer Account:** WMWGORAP

**Sample Date:** 9/24/19 17:45

**Customer ID:**

**Delivery Date:** 9/26/19 09:29

**Description:** Gorgas Ash Pond - MW-7

**Laboratory ID Number:** AZ21829

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Limit	Prec	Prec Limit
AZ21829	Fluoride	mg/L	0.0301	0.05	2.50	2.69	0.107	2.60	2.25 to 2.75	103	80 to 120	0.939	20
AZ21830	Sulfate	mg/L	-0.230	0.50	400	513	147	19.1	18 to 22	91.5	80 to 120	0.00	20
AZ21829	Chloride	mg/L	0.00811	0.50	10.0	16.2	5.85	10.0	9 to 11	104	80 to 120	1.55	20
AZ21835	Solids, Dissolved	mg/L	0.0000	25			374	53.0	40 to 60			0.268	5

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\* Test results for these accredited parameters meet all 2003 NELAC and 2009 TNI requirements, with exceptions noted on this report

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2017

**Comments:**

# Certificate Of Analysis

**Description:** Gorgas Ash Pond - MW-7 DISS

**Location Code:** WMWGORAP  
**Collected:** 9/24/19 17:45  
**Customer ID:**  
**Submittal Date:** 9/26/19 09:29

**Laboratory ID Number:** AZ21830

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
<b>Analytical Method: EPA 200.7</b>		<b>Analyst: RDA</b>							
* Boron, Dissolved	10/2/19 08:00	10/2/19 12:46		1.015	1.54	mg/L	0.03	0.1	
* Calcium, Dissolved	10/2/19 08:00	10/2/19 12:46		1.015	13.6	mg/L	0.1	0.5	
* Lithium, Dissolved	10/2/19 08:00	10/2/19 12:46		1.015	0.156	mg/L	0.01	0.02	
<b>Analytical Method: EPA 200.8</b>		<b>Analyst: DLJ</b>							
* Antimony, Dissolved	9/27/19 11:30	9/27/19 14:07		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Dissolved	9/27/19 11:30	9/27/19 14:07		1.015	0.206	mg/L	0.001	0.005	
* Barium, Dissolved	9/27/19 11:30	9/27/19 14:07		1.015	0.0610	mg/L	0.002	0.01	
* Beryllium, Dissolved	9/27/19 11:30	9/27/19 14:07		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Dissolved	9/27/19 11:30	9/27/19 14:07		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Dissolved	9/27/19 11:30	9/27/19 14:07		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Dissolved	9/27/19 11:30	9/27/19 14:07		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Dissolved	9/27/19 11:30	9/27/19 14:07		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Dissolved	9/27/19 11:30	9/27/19 14:07		1.015	0.173	mg/L	0.002	0.01	
* Selenium, Dissolved	9/27/19 11:30	9/27/19 14:07		1.015	0.0309	mg/L	0.002	0.01	
* Thallium, Dissolved	9/27/19 11:30	9/27/19 14:07		1.015	Not Detected	mg/L	0.0002	0.001	U
<b>Analytical Method: EPA 245.1</b>		<b>Analyst: GAS</b>							
* Mercury, Dissolved by CVAA	9/30/19 12:00	10/1/19 12:20		1	Not Detected	mg/L	0.0003	0.0005	U
<b>Analytical Method: SM 2540C</b>		<b>Analyst: TJW</b>							
* Solids, Dissolved	9/27/19 15:00	9/30/19 15:50		1	337	mg/L		25	
<b>Analytical Method: SM4500CI E</b>		<b>Analyst: JCC</b>							
* Chloride	10/2/19 10:06	10/2/19 10:06		1	5.91	mg/L	0.50	1	
<b>Analytical Method: SM4500F G 2017</b>		<b>Analyst: JCC</b>							
* Fluoride	10/2/19 14:44	10/2/19 14:44		1	0.108	mg/L	0.05	0.1	
<b>Analytical Method: SM4500SO4 E</b>		<b>Analyst: JCC</b>							
* Sulfate	9/26/19 15:23	9/26/19 15:23		20	147	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 10/25/19

# Batch QC Summary

**Customer Account:** WMWGORAP  
**Sample Date:** 9/24/19 17:45  
**Customer ID:**  
**Delivery Date:** 9/26/19 09:29

**Description:** Gorgas Ash Pond - MW-7 DISS

**Laboratory ID Number:** AZ21830

Sample	Analysis	Units	MB		Spike	MS	MSD	Standard		Rec		Prec	Limit
			MB	Limit				Standard	Limit	Rec	Prec		
AZ21830	Thallium, Dissolved	mg/L	-0.0000676	0.0001474	0.10	0.101	0.100	0.105	0.085 to 0.115	101	70 to 130	1.08	20
AZ21830	Cadmium, Dissolved	mg/L	0.00000581	0.0001474	0.10	0.103	0.101	0.104	0.085 to 0.115	103	70 to 130	1.44	20
AZ21830	Cobalt, Dissolved	mg/L	-0.0000754	0.0001474	0.10	0.107	0.107	0.108	0.085 to 0.115	107	70 to 130	0.529	20
AZ21830	Selenium, Dissolved	mg/L	0.0000829	0.00066	0.10	0.101	0.101	0.103	0.085 to 0.115	70.1	70 to 130	0.537	20
AZ21830	Arsenic, Dissolved	mg/L	0.00000644	0.0001474	0.10	0.304	0.305	0.100	0.085 to 0.115	98.3	70 to 130	0.144	20
AZ21830	Lead, Dissolved	mg/L	-0.00000338	0.0001474	0.10	0.0999	0.0989	0.103	0.085 to 0.115	99.9	70 to 130	1.03	20
AZ21830	Boron, Dissolved	mg/L	0.00176	0.0650254	1.00	2.52	2.52	0.983	0.85 to 1.15	98.2	70 to 130	0.289	20
AZ21830	Calcium, Dissolved	mg/L	0.000773	0.1518	5.00	18.6	18.4	5.08	4.25 to 5.75	100	70 to 130	0.962	20
AZ21830	Chromium, Dissolved	mg/L	-0.0000499	0.00044	0.10	0.0987	0.0987	0.101	0.085 to 0.115	98.7	70 to 130	0.0323	20
AZ21834	Mercury, Dissolved by	mg/L	0.0000250	0.0005	0.004	0.00423	0.00422	0.00405	0.0034 to 0.0046	106	70 to 130	0.173	20
AZ21830	Barium, Dissolved	mg/L	0.0000234	0.0002	0.10	0.163	0.162	0.105	0.085 to 0.115	102	70 to 130	0.426	20
AZ21830	Beryllium, Dissolved	mg/L	0.0000114	0.00088	0.10	0.0972	0.0991	0.0949	0.085 to 0.115	97.2	70 to 130	1.93	20
AZ21830	Lithium, Dissolved	mg/L	-0.0000254	0.0154	0.20	0.381	0.380	0.200	0.17 to 0.23	113	70 to 130	0.370	20
AZ21830	Molybdenum, Dissolved	mg/L	0.0000130	0.0001474	0.10	0.271	0.267	0.0983	0.085 to 0.115	98.1	70 to 130	1.56	20
AZ21830	Antimony, Dissolved	mg/L	0.000122	0.00066	0.10	0.0927	0.0929	0.0972	0.085 to 0.115	92.7	70 to 130	0.243	20

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.

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

\* Test results for these accredited parameters meet all 2003 NELAC and 2009 TNI requirements, with exceptions noted on this report

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

**Comments:** The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified. LBM 10/25/19

## Batch QC Summary

**Customer Account:** WMWGORAP

**Sample Date:** 9/24/19 17:45

**Customer ID:**

**Delivery Date:** 9/26/19 09:29

**Description:** Gorgas Ash Pond - MW-7 DISS

**Laboratory ID Number:** AZ21830

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
AZ21829	Fluoride	mg/L	0.0301	0.05	2.50	2.69	0.107	2.60	2.25 to 2.75	103	80 to 120	0.939	20
AZ21830	Sulfate	mg/L	-0.230	0.50	400	513	147	19.1	18 to 22	91.5	80 to 120	0.00	20
AZ21829	Chloride	mg/L	0.00811	0.50	10.0	16.2	5.85	10.0	9 to 11	104	80 to 120	1.55	20
AZ21835	Solids, Dissolved	mg/L	0.0000	25			374	53.0	40 to 60			0.268	5

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.

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

\* Test results for these accredited parameters meet all 2003 NELAC and 2009 TNI requirements, with exceptions noted on this report

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2017

**Comments:** The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified. LBM 10/25/19



# Certificate Of Analysis

**Description:** Gorgas Ash Pond - MW-12

**Location Code:** WMWGORAP  
**Collected:** 9/25/19 10:02  
**Customer ID:**  
**Submittal Date:** 9/26/19 09:29

**Laboratory ID Number:** AZ21831

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
<b>Analytical Method: EPA 200.7</b>			<b>Analyst: RDA</b>		<b>Preparation Method: EPA 1638</b>				
* Boron, Total	10/1/19 16:40	10/2/19 13:18		1.015	0.122	mg/L	0.03	0.1	
* Calcium, Total	10/1/19 16:40	10/2/19 15:36		20.3	48.1	mg/L	2.03	10.15	
* Lithium, Total	10/1/19 16:40	10/2/19 13:18		1.015	0.0280	mg/L	0.01	0.02	
<b>Analytical Method: EPA 200.8</b>			<b>Analyst: DLJ</b>		<b>Preparation Method: EPA 1638</b>				
* Antimony, Total	9/26/19 15:18	9/27/19 11:35		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	9/26/19 15:18	9/27/19 11:35		1.015	0.0135	mg/L	0.001	0.005	
* Barium, Total	9/26/19 15:18	9/27/19 11:35		1.015	0.202	mg/L	0.002	0.01	
* Beryllium, Total	9/26/19 15:18	9/27/19 11:35		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	9/26/19 15:18	9/27/19 11:35		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	9/26/19 15:18	9/27/19 11:35		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	9/26/19 15:18	9/27/19 11:35		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	9/26/19 15:18	9/27/19 11:35		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	9/26/19 15:18	9/27/19 11:35		1.015	Not Detected	mg/L	0.002	0.01	U
* Selenium, Total	9/26/19 15:18	9/27/19 11:35		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	9/26/19 15:18	9/27/19 11:35		1.015	Not Detected	mg/L	0.0002	0.001	U
<b>Analytical Method: EPA 245.1</b>			<b>Analyst: ABB</b>						
* Mercury, Total by CVAA	10/2/19 09:15	10/3/19 11:13		1	Not Detected	mg/L	0.0003	0.0005	U
<b>Analytical Method: SM 2540C</b>			<b>Analyst: TJW</b>						
* Solids, Dissolved	9/27/19 15:00	9/30/19 15:50		1	253	mg/L		25	
<b>Analytical Method: SM4500Cl E</b>			<b>Analyst: JCC</b>						
* Chloride	10/2/19 10:22	10/2/19 10:22		1	6.68	mg/L	0.50	1	
<b>Analytical Method: SM4500F G 2017</b>			<b>Analyst: JCC</b>						
* Fluoride	10/2/19 14:58	10/2/19 14:58		1	0.168	mg/L	0.05	0.1	
<b>Analytical Method: SM4500SO4 E</b>			<b>Analyst: JCC</b>						
* Sulfate	9/26/19 15:54	9/26/19 15:54		1	25.5	mg/L	0.50	1	
<b>Analytical Method: Field Measurements</b>			<b>Analyst: AWG</b>						
Conductivity	9/25/19 09:58	9/25/19 09:58			394.56	uS/cm			FA
pH	9/25/19 09:58	9/25/19 09:58			7.38	SU			FA
Temperature	9/25/19 09:58	9/25/19 09:58			22.10	C			FA
Turbidity	9/25/19 09:58	9/25/19 09:58			1.17	NTU			FA

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

**Comments:**

# Batch QC Summary

**Customer Account:** WMWGORAP  
**Sample Date:** 9/25/19 10:02  
**Customer ID:**  
**Delivery Date:** 9/26/19 09:29

**Description:** Gorgas Ash Pond - MW-12

**Laboratory ID Number:** AZ21831

Sample	Analysis	Units	MB		Spike	MS	MSD	Standard		Rec		Prec	Limit
			MB	Limit				Standard	Limit	Rec	Limit		
AZ21831	Beryllium, Total	mg/L	0.0000139	0.00088	0.10	0.0980	0.100	0.102	0.085 to 0.115	98.0	70 to 130	2.14	20
AZ21831	Cadmium, Total	mg/L	-0.00000011	0.0001474	0.10	0.101	0.103	0.102	0.085 to 0.115	101	70 to 130	1.81	20
AZ21831	Arsenic, Total	mg/L	0.00000378	0.0001474	0.10	0.116	0.115	0.104	0.085 to 0.115	102	70 to 130	0.569	20
AZ21831	Antimony, Total	mg/L	0.0000939	0.00066	0.10	0.101	0.102	0.0941	0.085 to 0.115	101	70 to 130	1.02	20
AZ21831	Barium, Total	mg/L	-0.00000553	0.0002	0.10	0.309	0.299	0.101	0.085 to 0.115	107	70 to 130	3.11	20
AZ21831	Calcium, Total	mg/L	0.000127	0.1518	5.00	54.0	54.0	5.13	4.25 to 5.75	118	70 to 130	0.0439	20
AZ21831	Chromium, Total	mg/L	0.0000230	0.00044	0.10	0.100	0.0996	0.103	0.085 to 0.115	100	70 to 130	0.588	20
AZ21831	Lead, Total	mg/L	-0.00000318	0.0001474	0.10	0.103	0.101	0.102	0.085 to 0.115	103	70 to 130	2.56	20
AZ21831	Selenium, Total	mg/L	0.0000196	0.00066	0.10	0.102	0.101	0.105	0.085 to 0.115	102	70 to 130	0.620	20
AZ21831	Boron, Total	mg/L	0.00221	0.0650254	1.00	1.15	1.16	1.00	0.85 to 1.15	103	70 to 130	1.06	20
AZ21831	Lithium, Total	mg/L	-0.00000737	0.0154	0.20	0.247	0.248	0.202	0.17 to 0.23	109	70 to 130	0.457	20
AZ21831	Molybdenum, Total	mg/L	-0.00000160	0.0001474	0.10	0.0993	0.0991	0.0947	0.085 to 0.115	99.3	70 to 130	0.155	20
AZ21831	Cobalt, Total	mg/L	-0.0000750	0.0001474	0.10	0.106	0.106	0.109	0.085 to 0.115	106	70 to 130	0.185	20
AZ21831	Mercury, Total by CVAA	mg/L	0.0000492	0.0005	0.004	0.00392	0.00380	0.00413	0.0034 to 0.0046	98.0	70 to 130	3.23	20
AZ21831	Thallium, Total	mg/L	-0.0000690	0.0001474	0.10	0.105	0.104	0.103	0.085 to 0.115	105	70 to 130	1.34	20

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

\* Test results for these accredited parameters meet all 2003 NELAC and 2009 TNI requirements, with exceptions noted on this report

Laboratory certification ID: E571114  
 Issued By: State of Florida, Department of Health  
 Expiration: June 30, 2018

**Comments:**

## Batch QC Summary

**Customer Account:** WMWGORAP  
**Sample Date:** 9/25/19 10:02  
**Customer ID:**  
**Delivery Date:** 9/26/19 09:29

**Description:** Gorgas Ash Pond - MW-12

**Laboratory ID Number:** AZ21831

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Limit	Prec	Prec Limit
AZ21836	Sulfate	mg/L	-0.439	0.50	20.0	24.9	6.83	19.1	18 to 22	91.4	80 to 120	3.27	20
AZ21835	Solids, Dissolved	mg/L	0.0000	25			374	53.0	40 to 60			0.268	5
AZ21835	Chloride	mg/L	0.0333	0.50	10.0	21.7	12.3	10.0	9 to 11	94.0	80 to 120	0.00	20
AZ21835	Fluoride	mg/L	0.032	0.05	2.50	3.16	0.574	2.59	2.25 to 2.75	103	80 to 120	0.694	20

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2017

**Comments:**

# Certificate Of Analysis

**Description:** Gorgas Ash Pond Equipment Blank

**Location Code:** WMWGORAPEB  
**Collected:** 9/25/19 11:20  
**Customer ID:**  
**Submittal Date:** 9/26/19 09:29

**Laboratory ID Number:** AZ21832

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
<b>Analytical Method: EPA 200.7</b>			<b>Analyst: RDA</b>		<b>Preparation Method: EPA 1638</b>				
* Boron, Total	10/1/19 16:40	10/2/19 13:39		1.015	Not Detected	mg/L	0.03	0.1	U
* Calcium, Total	10/1/19 16:40	10/2/19 13:39		1.015	Not Detected	mg/L	0.1	0.5	U
* Lithium, Total	10/1/19 16:40	10/2/19 13:39		1.015	Not Detected	mg/L	0.01	0.02	U
<b>Analytical Method: EPA 200.8</b>			<b>Analyst: DLJ</b>		<b>Preparation Method: EPA 1638</b>				
* Antimony, Total	9/26/19 15:18	9/27/19 11:56		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	9/26/19 15:18	9/27/19 11:56		1.015	Not Detected	mg/L	0.001	0.005	U
* Barium, Total	9/26/19 15:18	9/27/19 11:56		1.015	Not Detected	mg/L	0.002	0.01	U
* Beryllium, Total	9/26/19 15:18	9/27/19 11:56		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	9/26/19 15:18	9/27/19 11:56		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	9/26/19 15:18	9/27/19 11:56		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	9/26/19 15:18	9/27/19 11:56		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	9/26/19 15:18	9/27/19 11:56		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	9/26/19 15:18	9/27/19 11:56		1.015	Not Detected	mg/L	0.002	0.01	U
* Selenium, Total	9/26/19 15:18	9/27/19 11:56		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	9/26/19 15:18	9/27/19 11:56		1.015	Not Detected	mg/L	0.0002	0.001	U
<b>Analytical Method: EPA 245.1</b>			<b>Analyst: GAS</b>						
* Mercury, Total by CVAA	9/30/19 12:00	10/1/19 11:57		1	Not Detected	mg/L	0.0003	0.0005	U
<b>Analytical Method: SM 2540C</b>			<b>Analyst: TJW</b>						
* Solids, Dissolved	9/27/19 15:00	9/30/19 15:50		1	Not Detected	mg/L		25	U
<b>Analytical Method: SM4500CI E</b>			<b>Analyst: JCC</b>						
* Chloride	10/2/19 10:24	10/2/19 10:24		1	Not Detected	mg/L	0.50	1	U
<b>Analytical Method: SM4500F G 2017</b>			<b>Analyst: JCC</b>						
* Fluoride	10/2/19 14:59	10/2/19 14:59		1	Not Detected	mg/L	0.05	0.1	U
<b>Analytical Method: SM4500SO4 E</b>			<b>Analyst: JCC</b>						
* Sulfate	9/26/19 15:55	9/26/19 15:55		1	Not Detected	mg/L	0.50	1	U

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

**Comments:**

# Batch QC Summary

**Customer Account:** WMWGORAPEB

**Sample Date:** 9/25/19 11:20

**Customer ID:**

**Delivery Date:** 9/26/19 09:29

**Description:** Gorgas Ash Pond Equipment Blank

**Laboratory ID Number:** AZ21832

Sample	Analysis	Units	MB		Spike	MS	MSD	Standard		Rec		Prec	Limit
			MB	Limit				Standard	Limit	Rec	Prec		
AZ21836	Selenium, Total	mg/L	0.00000033	0.00066	0.10	0.0994	0.0982	0.103	0.085 to 0.115	99.4	70 to 130	1.21	20
AZ21836	Beryllium, Total	mg/L	0.0000160	0.00088	0.10	0.0993	0.100	0.0985	0.085 to 0.115	99.3	70 to 130	0.778	20
AZ21836	Chromium, Total	mg/L	0.00000001	0.00044	0.10	0.104	0.102	0.102	0.085 to 0.115	104	70 to 130	1.89	20
AZ21836	Antimony, Total	mg/L	0.000102	0.00066	0.10	0.100	0.101	0.0984	0.085 to 0.115	100	70 to 130	0.542	20
AZ21836	Thallium, Total	mg/L	-0.0000665	0.0001474	0.10	0.105	0.103	0.104	0.085 to 0.115	105	70 to 130	2.23	20
AZ21836	Arsenic, Total	mg/L	0.00000389	0.0001474	0.10	0.104	0.102	0.101	0.085 to 0.115	104	70 to 130	1.87	20
AZ21836	Lithium, Total	mg/L	0.0000854	0.0154	0.20	0.216	0.218	0.203	0.17 to 0.23	108	70 to 130	0.760	20
AZ21836	Barium, Total	mg/L	-0.0000102	0.0002	0.10	0.144	0.145	0.104	0.085 to 0.115	101	70 to 130	1.00	20
AZ21836	Cadmium, Total	mg/L	-0.00000296	0.0001474	0.10	0.107	0.104	0.105	0.085 to 0.115	107	70 to 130	2.58	20
AZ21836	Lead, Total	mg/L	-0.00000074	0.0001474	0.10	0.104	0.101	0.101	0.085 to 0.115	104	70 to 130	3.06	20
AZ21836	Calcium, Total	mg/L	0.00144	0.1518	5.00	12.3	12.5	5.24	4.25 to 5.75	102	70 to 130	1.11	20
AZ21836	Mercury, Total by CVAA	mg/L	0.0000267	0.0005	0.004	0.00412	0.00472	0.00405	0.0034 to 0.0046	103	70 to 130	13.5	20
AZ21836	Boron, Total	mg/L	0.00287	0.0650254	1.00	1.04	1.05	1.02	0.85 to 1.15	104	70 to 130	0.650	20
AZ21836	Cobalt, Total	mg/L	-0.0000739	0.0001474	0.10	0.112	0.110	0.110	0.085 to 0.115	110	70 to 130	2.10	20
AZ21836	Molybdenum, Total	mg/L	0.00000643	0.0001474	0.10	0.0975	0.0961	0.0996	0.085 to 0.115	97.5	70 to 130	1.47	20

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

**Comments:**

## Batch QC Summary

**Customer Account:** WMWGORAPEB

**Sample Date:** 9/25/19 11:20

**Customer ID:**

**Delivery Date:** 9/26/19 09:29

**Description:** Gorgas Ash Pond Equipment Blank

**Laboratory ID Number:** AZ21832

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Limit	Prec	Prec Limit
AZ21836	Sulfate	mg/L	-0.439	0.50	20.0	24.9	6.83	19.1	18 to 22	91.4	80 to 120	3.27	20
AZ21835	Solids, Dissolved	mg/L	0.0000	25			374	53.0	40 to 60			0.268	5
AZ21835	Chloride	mg/L	0.0333	0.50	10.0	21.7	12.3	10.0	9 to 11	94.0	80 to 120	0.00	20
AZ21835	Fluoride	mg/L	0.032	0.05	2.50	3.16	0.574	2.59	2.25 to 2.75	103	80 to 120	0.694	20

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2017

**Comments:**

# Certificate Of Analysis

**Description:** Gorgas Ash Pond - MW-26H

**Location Code:** WMWGORAP  
**Collected:** 9/23/19 17:00  
**Customer ID:**  
**Submittal Date:** 9/26/19 09:29

**Laboratory ID Number:** AZ21833

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
<b>Analytical Method: EPA 200.7</b>			<b>Analyst: RDA</b>		<b>Preparation Method: EPA 1638</b>				
* Boron, Total	10/1/19 16:40	10/2/19 13:42		1.015	Not Detected	mg/L	0.03	0.1	U
* Calcium, Total	10/1/19 16:40	10/2/19 13:42		1.015	29.6	mg/L	0.1	0.5	
* Lithium, Total	10/1/19 16:40	10/2/19 13:42		1.015	0.0945	mg/L	0.01	0.02	
<b>Analytical Method: EPA 200.8</b>			<b>Analyst: DLJ</b>		<b>Preparation Method: EPA 1638</b>				
* Antimony, Total	9/26/19 15:18	9/27/19 11:59		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	9/26/19 15:18	9/27/19 11:59		1.015	Not Detected	mg/L	0.001	0.005	U
* Barium, Total	9/26/19 15:18	9/27/19 11:59		1.015	0.922	mg/L	0.002	0.01	
* Beryllium, Total	9/26/19 15:18	9/27/19 11:59		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	9/26/19 15:18	9/27/19 11:59		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	9/26/19 15:18	9/27/19 11:59		1.015	0.00295	mg/L	0.002	0.01	J
* Cobalt, Total	9/26/19 15:18	9/27/19 11:59		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	9/26/19 15:18	9/27/19 11:59		1.015	0.00109	mg/L	0.001	0.005	J
* Molybdenum, Total	9/26/19 15:18	9/27/19 11:59		1.015	Not Detected	mg/L	0.002	0.01	U
* Selenium, Total	9/26/19 15:18	9/27/19 11:59		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	9/26/19 15:18	9/27/19 11:59		1.015	Not Detected	mg/L	0.0002	0.001	U
<b>Analytical Method: EPA 245.1</b>			<b>Analyst: GAS</b>						
* Mercury, Total by CVAA	9/30/19 12:00	10/1/19 11:59		1	Not Detected	mg/L	0.0003	0.0005	U
<b>Analytical Method: SM 2540C</b>			<b>Analyst: TJW</b>						
* Solids, Dissolved	9/26/19 15:13	9/30/19 10:10		1	278	mg/L		25	
<b>Analytical Method: SM4500Cl E</b>			<b>Analyst: JCC</b>						
* Chloride	10/2/19 10:25	10/2/19 10:25		1	2.35	mg/L	0.50	1	
<b>Analytical Method: SM4500F G 2017</b>			<b>Analyst: JCC</b>						
* Fluoride	10/2/19 15:00	10/2/19 15:00		1	0.146	mg/L	0.05	0.1	
<b>Analytical Method: SM4500SO4 E</b>			<b>Analyst: JCC</b>						
* Sulfate	9/26/19 16:04	9/26/19 16:04		1	16.9	mg/L	0.50	1	
<b>Analytical Method: Field Measurements</b>			<b>Analyst: TJD</b>						
Conductivity	9/23/19 16:56	9/23/19 16:56			468.15	uS/cm			FA
pH	9/23/19 16:56	9/23/19 16:56			7.25	SU			FA
Temperature	9/23/19 16:56	9/23/19 16:56			22.21	C			FA
Turbidity	9/23/19 16:56	9/23/19 16:56			45	NTU			FA

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

**Comments:**

# Batch QC Summary

**Customer Account:** WMWGORAP  
**Sample Date:** 9/23/19 17:00  
**Customer ID:**  
**Delivery Date:** 9/26/19 09:29

**Description:** Gorgas Ash Pond - MW-26H

**Laboratory ID Number:** AZ21833

Sample	Analysis	Units	MB		Spike	MS	MSD	Standard		Rec		Prec	Limit
			MB	Limit				Standard	Limit	Rec	Prec		
AZ21836	Selenium, Total	mg/L	0.00000033	0.00066	0.10	0.0994	0.0982	0.103	0.085 to 0.115	99.4	70 to 130	1.21	20
AZ21836	Beryllium, Total	mg/L	0.0000160	0.00088	0.10	0.0993	0.100	0.0985	0.085 to 0.115	99.3	70 to 130	0.778	20
AZ21836	Chromium, Total	mg/L	0.00000001	0.00044	0.10	0.104	0.102	0.102	0.085 to 0.115	104	70 to 130	1.89	20
AZ21836	Arsenic, Total	mg/L	0.00000389	0.0001474	0.10	0.104	0.102	0.101	0.085 to 0.115	104	70 to 130	1.87	20
AZ21836	Lithium, Total	mg/L	0.0000854	0.0154	0.20	0.216	0.218	0.203	0.17 to 0.23	108	70 to 130	0.760	20
AZ21836	Barium, Total	mg/L	-0.0000102	0.0002	0.10	0.144	0.145	0.104	0.085 to 0.115	101	70 to 130	1.00	20
AZ21836	Cadmium, Total	mg/L	-0.00000296	0.0001474	0.10	0.107	0.104	0.105	0.085 to 0.115	107	70 to 130	2.58	20
AZ21836	Lead, Total	mg/L	-0.00000074	0.0001474	0.10	0.104	0.101	0.101	0.085 to 0.115	104	70 to 130	3.06	20
AZ21836	Calcium, Total	mg/L	0.00144	0.1518	5.00	12.3	12.5	5.24	4.25 to 5.75	102	70 to 130	1.11	20
AZ21836	Mercury, Total by CVAA	mg/L	0.0000267	0.0005	0.004	0.00412	0.00472	0.00405	0.0034 to 0.0046	103	70 to 130	13.5	20
AZ21836	Antimony, Total	mg/L	0.000102	0.00066	0.10	0.100	0.101	0.0984	0.085 to 0.115	100	70 to 130	0.542	20
AZ21836	Thallium, Total	mg/L	-0.0000665	0.0001474	0.10	0.105	0.103	0.104	0.085 to 0.115	105	70 to 130	2.23	20
AZ21836	Boron, Total	mg/L	0.00287	0.0650254	1.00	1.04	1.05	1.02	0.85 to 1.15	104	70 to 130	0.650	20
AZ21836	Cobalt, Total	mg/L	-0.0000739	0.0001474	0.10	0.112	0.110	0.110	0.085 to 0.115	110	70 to 130	2.10	20
AZ21836	Molybdenum, Total	mg/L	0.00000643	0.0001474	0.10	0.0975	0.0961	0.0996	0.085 to 0.115	97.5	70 to 130	1.47	20

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Laboratory certification ID: E571114  
 Issued By: State of Florida, Department of Health  
 Expiration: June 30, 2018

**Comments:**



## Batch QC Summary

**Customer Account:** WMWGORAP

**Sample Date:** 9/23/19 17:00

**Customer ID:**

**Delivery Date:** 9/26/19 09:29

**Description:** Gorgas Ash Pond - MW-26H

**Laboratory ID Number:** AZ21833

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Limit	Prec	Prec Limit
AZ21834	Solids, Dissolved	mg/L	0.0000	25			281	50.0	40 to 60			1.44	5
AZ21836	Sulfate	mg/L	-0.439	0.50	20.0	24.9	6.83	19.1	18 to 22	91.4	80 to 120	3.27	20
AZ21835	Chloride	mg/L	0.0333	0.50	10.0	21.7	12.3	10.0	9 to 11	94.0	80 to 120	0.00	20
AZ21835	Fluoride	mg/L	0.032	0.05	2.50	3.16	0.574	2.59	2.25 to 2.75	103	80 to 120	0.694	20

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\* Test results for these accredited parameters meet all 2003 NELAC and 2009 TNI requirements, with exceptions noted on this report

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2017

**Comments:**

# Certificate Of Analysis

**Description:** Gorgas Ash Pond - MW-26H DISS

**Location Code:** WMWGORAP  
**Collected:** 9/23/19 17:00  
**Customer ID:**  
**Submittal Date:** 9/26/19 09:29

**Laboratory ID Number:** AZ21834

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
<b>Analytical Method: EPA 200.7</b>		<b>Analyst: RDA</b>							
* Boron, Dissolved	10/2/19 08:00	10/2/19 13:12		1.015	Not Detected	mg/L	0.03	0.1	U
* Calcium, Dissolved	10/2/19 08:00	10/2/19 13:12		1.015	28.4	mg/L	0.1	0.5	
* Lithium, Dissolved	10/2/19 08:00	10/2/19 13:12		1.015	0.0933	mg/L	0.01	0.02	
<b>Analytical Method: EPA 200.8</b>		<b>Analyst: DLJ</b>							
* Antimony, Dissolved	9/27/19 11:30	9/27/19 14:18		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Dissolved	9/27/19 11:30	9/27/19 14:18		1.015	Not Detected	mg/L	0.001	0.005	U
* Barium, Dissolved	9/27/19 11:30	9/27/19 14:18		1.015	0.895	mg/L	0.002	0.01	
* Beryllium, Dissolved	9/27/19 11:30	9/27/19 14:18		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Dissolved	9/27/19 11:30	9/27/19 14:18		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Dissolved	9/27/19 11:30	9/27/19 14:18		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Dissolved	9/27/19 11:30	9/27/19 14:18		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Dissolved	9/27/19 11:30	9/27/19 14:18		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Dissolved	9/27/19 11:30	9/27/19 14:18		1.015	Not Detected	mg/L	0.002	0.01	U
* Selenium, Dissolved	9/27/19 11:30	9/27/19 14:18		1.015	0.00208	mg/L	0.002	0.01	J
* Thallium, Dissolved	9/27/19 11:30	9/27/19 14:18		1.015	Not Detected	mg/L	0.0002	0.001	U
<b>Analytical Method: EPA 245.1</b>		<b>Analyst: GAS</b>							
* Mercury, Dissolved by CVAA	9/30/19 12:00	10/1/19 12:23		1	Not Detected	mg/L	0.0003	0.0005	U
<b>Analytical Method: SM 2540C</b>		<b>Analyst: TJW</b>							
* Solids, Dissolved	9/26/19 15:13	9/30/19 10:10		1	273	mg/L		25	
<b>Analytical Method: SM4500Cl E</b>		<b>Analyst: JCC</b>							
* Chloride	10/2/19 10:26	10/2/19 10:26		1	2.57	mg/L	0.50	1	
<b>Analytical Method: SM4500F G 2017</b>		<b>Analyst: JCC</b>							
* Fluoride	10/2/19 15:02	10/2/19 15:02		1	0.148	mg/L	0.05	0.1	
<b>Analytical Method: SM4500SO4 E</b>		<b>Analyst: JCC</b>							
* Sulfate	9/26/19 16:05	9/26/19 16:05		1	7.24	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 10/25/19

# Batch QC Summary

**Customer Account:** WMWGORAP  
**Sample Date:** 9/23/19 17:00  
**Customer ID:**  
**Delivery Date:** 9/26/19 09:29

**Description:** Gorgas Ash Pond - MW-26H DISS

**Laboratory ID Number:** AZ21834

Sample	Analysis	Units	MB		Spike	MS	MSD	Standard	Standard Limit	Rec		Prec Limit	
			MB	Limit						Rec	Limit		
AZ21830	Selenium, Dissolved	mg/L	0.0000829	0.00066	0.10	0.101	0.101	0.103	0.085 to 0.115	70.1	70 to 130	0.537	20
AZ21830	Thallium, Dissolved	mg/L	-0.0000676	0.0001474	0.10	0.101	0.100	0.105	0.085 to 0.115	101	70 to 130	1.08	20
AZ21830	Cobalt, Dissolved	mg/L	-0.0000754	0.0001474	0.10	0.107	0.107	0.108	0.085 to 0.115	107	70 to 130	0.529	20
AZ21830	Cadmium, Dissolved	mg/L	0.00000581	0.0001474	0.10	0.103	0.101	0.104	0.085 to 0.115	103	70 to 130	1.44	20
AZ21830	Barium, Dissolved	mg/L	0.0000234	0.0002	0.10	0.163	0.162	0.105	0.085 to 0.115	102	70 to 130	0.426	20
AZ21830	Beryllium, Dissolved	mg/L	0.0000114	0.00088	0.10	0.0972	0.0991	0.0949	0.085 to 0.115	97.2	70 to 130	1.93	20
AZ21834	Calcium, Dissolved	mg/L	0.00156	0.1518	5.00	33.4	33.5	5.17	4.25 to 5.75	98.7	70 to 130	0.307	20
AZ21830	Arsenic, Dissolved	mg/L	0.00000644	0.0001474	0.10	0.304	0.305	0.100	0.085 to 0.115	98.3	70 to 130	0.144	20
AZ21830	Lead, Dissolved	mg/L	-0.00000338	0.0001474	0.10	0.0999	0.0989	0.103	0.085 to 0.115	99.9	70 to 130	1.03	20
AZ21834	Boron, Dissolved	mg/L	0.00194	0.0650254	1.00	1.00	1.01	0.979	0.85 to 1.15	100	70 to 130	0.345	20
AZ21830	Chromium, Dissolved	mg/L	-0.0000499	0.00044	0.10	0.0987	0.0987	0.101	0.085 to 0.115	98.7	70 to 130	0.0323	20
AZ21834	Mercury, Dissolved by	mg/L	0.0000250	0.0005	0.004	0.00423	0.00422	0.00405	0.0034 to 0.0046	106	70 to 130	0.173	20
AZ21834	Lithium, Dissolved	mg/L	-0.000139	0.0154	0.20	0.309	0.308	0.203	0.17 to 0.23	108	70 to 130	0.196	20
AZ21830	Molybdenum, Dissolved	mg/L	0.0000130	0.0001474	0.10	0.271	0.267	0.0983	0.085 to 0.115	98.1	70 to 130	1.56	20
AZ21830	Antimony, Dissolved	mg/L	0.000122	0.00066	0.10	0.0927	0.0929	0.0972	0.085 to 0.115	92.7	70 to 130	0.243	20

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.

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

\* Test results for these accredited parameters meet all 2003 NELAC and 2009 TNI requirements, with exceptions noted on this report

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

**Comments:** The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified. LBM 10/25/19

## Batch QC Summary

**Customer Account:** WMWGORAP

**Sample Date:** 9/23/19 17:00

**Customer ID:**

**Delivery Date:** 9/26/19 09:29

**Description:** Gorgas Ash Pond - MW-26H DISS

**Laboratory ID Number:** AZ21834

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
AZ21834	Solids, Dissolved	mg/L	0.0000	25			281	50.0	40 to 60			1.44	5
AZ21836	Sulfate	mg/L	-0.439	0.50	20.0	24.9	6.83	19.1	18 to 22	91.4	80 to 120	3.27	20
AZ21835	Chloride	mg/L	0.0333	0.50	10.0	21.7	12.3	10.0	9 to 11	94.0	80 to 120	0.00	20
AZ21835	Fluoride	mg/L	0.032	0.05	2.50	3.16	0.574	2.59	2.25 to 2.75	103	80 to 120	0.694	20

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\* Test results for these accredited parameters meet all 2003 NELAC and 2009 TNI requirements, with exceptions noted on this report

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2017

**Comments:** The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified. LBM 10/25/19

# Certificate Of Analysis

**Description:** Gorgas Ash Pond - MW-18

**Location Code:** WMWGORAP  
**Collected:** 9/24/19 11:45  
**Customer ID:**  
**Submittal Date:** 9/26/19 09:29

**Laboratory ID Number:** AZ21835

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
<b>Analytical Method: EPA 200.7</b>			<b>Analyst: RDA</b>		<b>Preparation Method: EPA 1638</b>				
* Boron, Total	10/1/19 16:40	10/2/19 13:45		1.015	0.883	mg/L	0.03	0.1	
* Calcium, Total	10/1/19 16:40	10/2/19 15:53		20.3	57.4	mg/L	2.03	10.15	
* Lithium, Total	10/1/19 16:40	10/2/19 13:45		1.015	0.114	mg/L	0.01	0.02	
<b>Analytical Method: EPA 200.8</b>			<b>Analyst: DLJ</b>		<b>Preparation Method: EPA 1638</b>				
* Antimony, Total	9/26/19 15:18	9/27/19 12:02		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	9/26/19 15:18	9/27/19 12:02		1.015	0.00854	mg/L	0.001	0.005	
* Barium, Total	9/26/19 15:18	9/27/19 12:02		1.015	0.0896	mg/L	0.002	0.01	
* Beryllium, Total	9/26/19 15:18	9/27/19 12:02		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	9/26/19 15:18	9/27/19 12:02		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	9/26/19 15:18	9/27/19 12:02		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	9/26/19 15:18	9/27/19 12:02		1.015	Not Detected	mg/L	0.002	0.005	U
* Lead, Total	9/26/19 15:18	9/27/19 12:02		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	9/26/19 15:18	9/27/19 12:02		1.015	0.0504	mg/L	0.002	0.01	
* Selenium, Total	9/26/19 15:18	9/27/19 12:02		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	9/26/19 15:18	9/27/19 12:02		1.015	Not Detected	mg/L	0.0002	0.001	U
<b>Analytical Method: EPA 245.1</b>			<b>Analyst: GAS</b>						
* Mercury, Total by CVAA	9/30/19 12:00	10/1/19 12:01		1	Not Detected	mg/L	0.0003	0.0005	U
<b>Analytical Method: SM 2540C</b>			<b>Analyst: TJW</b>						
* Solids, Dissolved	9/27/19 15:00	9/30/19 15:50		1	372	mg/L		25	
<b>Analytical Method: SM4500CI E</b>			<b>Analyst: JCC</b>						
* Chloride	10/2/19 10:28	10/2/19 10:28		1	12.3	mg/L	0.50	1	
<b>Analytical Method: SM4500F G 2017</b>			<b>Analyst: JCC</b>						
* Fluoride	10/2/19 15:04	10/2/19 15:04		1	0.578	mg/L	0.05	0.1	
<b>Analytical Method: SM4500SO4 E</b>			<b>Analyst: JCC</b>						
* Sulfate	9/26/19 15:59	9/26/19 15:59		10	119	mg/L	5.00	10	
<b>Analytical Method: Field Measurements</b>			<b>Analyst: TJD</b>						
Conductivity	9/24/19 11:42	9/24/19 11:42			570.59	uS/cm			FA
pH	9/24/19 11:42	9/24/19 11:42			7.49	SU			FA
Temperature	9/24/19 11:42	9/24/19 11:42			17.51	C			FA
Turbidity	9/24/19 11:42	9/24/19 11:42			9.64	NTU			FA

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

**Comments:**

# Batch QC Summary

**Customer Account:** WMWGORAP  
**Sample Date:** 9/24/19 11:45  
**Customer ID:**  
**Delivery Date:** 9/26/19 09:29

**Description:** Gorgas Ash Pond - MW-18

**Laboratory ID Number:** AZ21835

Sample	Analysis	Units	MB		Spike	MS	MSD	Standard		Rec		Prec	Limit
			MB	Limit				Standard	Limit	Rec	Prec		
AZ21836	Selenium, Total	mg/L	0.00000033	0.00066	0.10	0.0994	0.0982	0.103	0.085 to 0.115	99.4	70 to 130	1.21	20
AZ21836	Beryllium, Total	mg/L	0.0000160	0.00088	0.10	0.0993	0.100	0.0985	0.085 to 0.115	99.3	70 to 130	0.778	20
AZ21836	Chromium, Total	mg/L	0.00000001	0.00044	0.10	0.104	0.102	0.102	0.085 to 0.115	104	70 to 130	1.89	20
AZ21836	Antimony, Total	mg/L	0.000102	0.00066	0.10	0.100	0.101	0.0984	0.085 to 0.115	100	70 to 130	0.542	20
AZ21836	Thallium, Total	mg/L	-0.0000665	0.0001474	0.10	0.105	0.103	0.104	0.085 to 0.115	105	70 to 130	2.23	20
AZ21836	Boron, Total	mg/L	0.00287	0.0650254	1.00	1.04	1.05	1.02	0.85 to 1.15	104	70 to 130	0.650	20
AZ21836	Cobalt, Total	mg/L	-0.0000739	0.0001474	0.10	0.112	0.110	0.110	0.085 to 0.115	110	70 to 130	2.10	20
AZ21836	Molybdenum, Total	mg/L	0.00000643	0.0001474	0.10	0.0975	0.0961	0.0996	0.085 to 0.115	97.5	70 to 130	1.47	20
AZ21836	Calcium, Total	mg/L	0.00144	0.1518	5.00	12.3	12.5	5.24	4.25 to 5.75	102	70 to 130	1.11	20
AZ21836	Mercury, Total by CVAA	mg/L	0.0000267	0.0005	0.004	0.00412	0.00472	0.00405	0.0034 to 0.0046	103	70 to 130	13.5	20
AZ21836	Arsenic, Total	mg/L	0.00000389	0.0001474	0.10	0.104	0.102	0.101	0.085 to 0.115	104	70 to 130	1.87	20
AZ21836	Lithium, Total	mg/L	0.0000854	0.0154	0.20	0.216	0.218	0.203	0.17 to 0.23	108	70 to 130	0.760	20
AZ21836	Barium, Total	mg/L	-0.0000102	0.0002	0.10	0.144	0.145	0.104	0.085 to 0.115	101	70 to 130	1.00	20
AZ21836	Cadmium, Total	mg/L	-0.00000296	0.0001474	0.10	0.107	0.104	0.105	0.085 to 0.115	107	70 to 130	2.58	20
AZ21836	Lead, Total	mg/L	-0.00000074	0.0001474	0.10	0.104	0.101	0.101	0.085 to 0.115	104	70 to 130	3.06	20

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.

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

\* Test results for these accredited parameters meet all 2003 NELAC and 2009 TNI requirements, with exceptions noted on this report

Laboratory certification ID: E571114  
 Issued By: State of Florida, Department of Health  
 Expiration: June 30, 2018

**Comments:**

## Batch QC Summary

**Customer Account:** WMWGORAP

**Sample Date:** 9/24/19 11:45

**Customer ID:**

**Delivery Date:** 9/26/19 09:29

**Description:** Gorgas Ash Pond - MW-18

**Laboratory ID Number:** AZ21835

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Limit	Prec	Prec Limit
AZ21836	Sulfate	mg/L	-0.439	0.50	20.0	24.9	6.83	19.1	18 to 22	91.4	80 to 120	3.27	20
AZ21835	Solids, Dissolved	mg/L	0.0000	25			374	53.0	40 to 60			0.268	5
AZ21835	Chloride	mg/L	0.0333	0.50	10.0	21.7	12.3	10.0	9 to 11	94.0	80 to 120	0.00	20
AZ21835	Fluoride	mg/L	0.032	0.05	2.50	3.16	0.574	2.59	2.25 to 2.75	103	80 to 120	0.694	20

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2017

**Comments:**

# Certificate Of Analysis

**Description:** Gorgas Ash Pond - MW-8

**Location Code:** WMWGORAP  
**Collected:** 9/24/19 18:02  
**Customer ID:**  
**Submittal Date:** 9/26/19 09:29

**Laboratory ID Number:** AZ21836

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
<b>Analytical Method: EPA 200.7</b>			<b>Analyst: RDA</b>		<b>Preparation Method: EPA 1638</b>				
* Boron, Total	10/1/19 16:40	10/2/19 13:48		1.015	Not Detected	mg/L	0.03	0.1	U
* Calcium, Total	10/1/19 16:40	10/2/19 13:48		1.015	7.24	mg/L	0.1	0.5	
* Lithium, Total	10/1/19 16:40	10/2/19 13:48		1.015	Not Detected	mg/L	0.01	0.02	U
<b>Analytical Method: EPA 200.8</b>			<b>Analyst: DLJ</b>		<b>Preparation Method: EPA 1638</b>				
* Antimony, Total	9/26/19 15:18	9/27/19 12:04		1.015	Not Detected	mg/L	0.0008	0.003	U
* Arsenic, Total	9/26/19 15:18	9/27/19 12:04		1.015	Not Detected	mg/L	0.001	0.005	U
* Barium, Total	9/26/19 15:18	9/27/19 12:04		1.015	0.0434	mg/L	0.002	0.01	
* Beryllium, Total	9/26/19 15:18	9/27/19 12:04		1.015	Not Detected	mg/L	0.0006	0.003	U
* Cadmium, Total	9/26/19 15:18	9/27/19 12:04		1.015	Not Detected	mg/L	0.0003	0.001	U
* Chromium, Total	9/26/19 15:18	9/27/19 12:04		1.015	Not Detected	mg/L	0.002	0.01	U
* Cobalt, Total	9/26/19 15:18	9/27/19 12:04		1.015	0.00234	mg/L	0.002	0.005	J
* Lead, Total	9/26/19 15:18	9/27/19 12:04		1.015	Not Detected	mg/L	0.001	0.005	U
* Molybdenum, Total	9/26/19 15:18	9/27/19 12:04		1.015	Not Detected	mg/L	0.002	0.01	U
* Selenium, Total	9/26/19 15:18	9/27/19 12:04		1.015	Not Detected	mg/L	0.002	0.01	U
* Thallium, Total	9/26/19 15:18	9/27/19 12:04		1.015	Not Detected	mg/L	0.0002	0.001	U
<b>Analytical Method: EPA 245.1</b>			<b>Analyst: GAS</b>						
* Mercury, Total by CVAA	9/30/19 12:00	10/1/19 12:04		1	Not Detected	mg/L	0.0003	0.0005	U
<b>Analytical Method: SM 2540C</b>			<b>Analyst: TJW</b>						
* Solids, Dissolved	9/27/19 15:00	9/30/19 15:50		1	109	mg/L		25	
<b>Analytical Method: SM4500CI E</b>			<b>Analyst: JCC</b>						
* Chloride	10/2/19 10:27	10/2/19 10:27		1	3.21	mg/L	0.50	1	
<b>Analytical Method: SM4500F G 2017</b>			<b>Analyst: JCC</b>						
* Fluoride	10/2/19 15:03	10/2/19 15:03		1	0.128	mg/L	0.05	0.1	
<b>Analytical Method: SM4500SO4 E</b>			<b>Analyst: JCC</b>						
* Sulfate	9/26/19 16:06	9/26/19 16:06		1	6.61	mg/L	0.50	1	
<b>Analytical Method: Field Measurements</b>			<b>Analyst: TJD</b>						
Conductivity	9/24/19 17:58	9/24/19 17:58			125.57	uS/cm			FA
pH	9/24/19 17:58	9/24/19 17:58			5.27	SU			FA
Temperature	9/24/19 17:58	9/24/19 17:58			19.60	C			FA
Turbidity	9/24/19 17:58	9/24/19 17:58			2.89	NTU			FA

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

**Comments:**



# Batch QC Summary

**Customer Account:** WMWGORAP  
**Sample Date:** 9/24/19 18:02  
**Customer ID:**  
**Delivery Date:** 9/26/19 09:29

**Description:** Gorgas Ash Pond - MW-8

**Laboratory ID Number:** AZ21836

Sample	Analysis	Units	MB		Spike	MS	MSD	Standard		Rec		Prec	Limit
			MB	Limit				Standard	Limit	Rec	Prec		
AZ21836	Selenium, Total	mg/L	0.00000033	0.00066	0.10	0.0994	0.0982	0.103	0.085 to 0.115	99.4	70 to 130	1.21	20
AZ21836	Beryllium, Total	mg/L	0.0000160	0.00088	0.10	0.0993	0.100	0.0985	0.085 to 0.115	99.3	70 to 130	0.778	20
AZ21836	Chromium, Total	mg/L	0.00000001	0.00044	0.10	0.104	0.102	0.102	0.085 to 0.115	104	70 to 130	1.89	20
AZ21836	Arsenic, Total	mg/L	0.00000389	0.0001474	0.10	0.104	0.102	0.101	0.085 to 0.115	104	70 to 130	1.87	20
AZ21836	Lithium, Total	mg/L	0.0000854	0.0154	0.20	0.216	0.218	0.203	0.17 to 0.23	108	70 to 130	0.760	20
AZ21836	Barium, Total	mg/L	-0.0000102	0.0002	0.10	0.144	0.145	0.104	0.085 to 0.115	101	70 to 130	1.00	20
AZ21836	Cadmium, Total	mg/L	-0.00000296	0.0001474	0.10	0.107	0.104	0.105	0.085 to 0.115	107	70 to 130	2.58	20
AZ21836	Lead, Total	mg/L	-0.00000074	0.0001474	0.10	0.104	0.101	0.101	0.085 to 0.115	104	70 to 130	3.06	20
AZ21836	Antimony, Total	mg/L	0.000102	0.00066	0.10	0.100	0.101	0.0984	0.085 to 0.115	100	70 to 130	0.542	20
AZ21836	Thallium, Total	mg/L	-0.0000665	0.0001474	0.10	0.105	0.103	0.104	0.085 to 0.115	105	70 to 130	2.23	20
AZ21836	Calcium, Total	mg/L	0.00144	0.1518	5.00	12.3	12.5	5.24	4.25 to 5.75	102	70 to 130	1.11	20
AZ21836	Mercury, Total by CVAA	mg/L	0.0000267	0.0005	0.004	0.00412	0.00472	0.00405	0.0034 to 0.0046	103	70 to 130	13.5	20
AZ21836	Boron, Total	mg/L	0.00287	0.0650254	1.00	1.04	1.05	1.02	0.85 to 1.15	104	70 to 130	0.650	20
AZ21836	Cobalt, Total	mg/L	-0.0000739	0.0001474	0.10	0.112	0.110	0.110	0.085 to 0.115	110	70 to 130	2.10	20
AZ21836	Molybdenum, Total	mg/L	0.00000643	0.0001474	0.10	0.0975	0.0961	0.0996	0.085 to 0.115	97.5	70 to 130	1.47	20

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

\* Test results for these accredited parameters meet all 2003 NELAC and 2009 TNI requirements, with exceptions noted on this report

Laboratory certification ID: E571114  
 Issued By: State of Florida, Department of Health  
 Expiration: June 30, 2018

**Comments:**

## Batch QC Summary

**Customer Account:** WMWGORAP

**Sample Date:** 9/24/19 18:02

**Customer ID:**

**Delivery Date:** 9/26/19 09:29

**Description:** Gorgas Ash Pond - MW-8

**Laboratory ID Number:** AZ21836

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Limit	Prec	Prec Limit
AZ21835	Solids, Dissolved	mg/L	0.0000	25			374	53.0	40 to 60			0.268	5
AZ21836	Sulfate	mg/L	-0.439	0.50	20.0	24.9	6.83	19.1	18 to 22	91.4	80 to 120	3.27	20
AZ21835	Chloride	mg/L	0.0333	0.50	10.0	21.7	12.3	10.0	9 to 11	94.0	80 to 120	0.00	20
AZ21835	Fluoride	mg/L	0.032	0.05	2.50	3.16	0.574	2.59	2.25 to 2.75	103	80 to 120	0.694	20

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2017

**Comments:**

## 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  
 Lab Complete

Outside Lab

Lab ETA

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Site Representative	Che George	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 26H. Adding extra s to MW-26H Dis for EDD creation. LBM 10/24/19

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-26H	9/23/19	17:00	4	Groundwater		AZ21833
MW-26H Diss	09/23/2019	17:00	4	Groundwater		AZ21834
MW-18	09/24/2019	11:45	4	Groundwater		AZ21835
MW-8	09/24/2019	18:02	4	Groundwater		AZ21836

Relinquished By	Received By	Date/Time
<i>HAB</i>	<i>Rena Miller</i>	09/26/2019 07:50

SmarTroll ID	7586-41445-5-4	All metals and radiological bottles have pH < 2	<input checked="" type="checkbox"/>
Turbidity ID	4677-23342-4-1	Cooler Temp	0.7 degrees C
Sample Event	1241	Thermometer ID	5408-27568-2-2
		pH Strip ID	7267-39374-6-6



# 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	Che George	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: Correcting MW-23H time to 16:14. LBM 9/26/19

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-6D	9/23/19	13:31	4	Groundwater		AZ21813
MW-6S	09/23/2019	14:41	4	Groundwater		AZ21814
MW-6S dup	09/23/2019	14:41	4	Sample Duplicate		AZ21815
MW-23H	09/23/2019	16:14	4	Groundwater		AZ21816
MW-17V	09/24/2019	11:50	4	Groundwater		AZ21817
MW-16D	09/24/2019	14:00	4	Groundwater		AZ21818
MW-19	09/24/2019	15:50	4	Groundwater		AZ21819
MW-19 dup	09/24/2019	15:50	4	Sample Duplicate		AZ21820
FB-1	09/24/2019	16:50	4	Field Blank		AZ21821
MW-24H	09/24/2019	18:23	4	Groundwater		AZ21822
MW-2	09/25/2019	09:27	4	Groundwater		AZ21823
MW-12V	09/25/2019	13:32	4	Groundwater		AZ21824

Relinquished By	Received By	Date/Time
		09/26/2019 07:55

SmarTroll ID	7586-41446-5-5	All metals and radiological bottles have pH < 2 <input checked="" type="checkbox"/>
Turbidity ID	7081-38476-1-1	
Sample Event	1241	
Cooler Temp	0.3 degrees C; 0.4 degrees C	
Thermometer ID	5408-27568-2-2	
pH Strip ID	7267-39374-6-6	



# Chain of Custody Groundwater

APC General Testing Laboratory

Field Complete

Outside Lab

Lab Complete

Lab ETA **09/26/2019 07:49**

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Site Representative	Che George	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: Dissolved Set collected at MW-7. Adding extra s to MW-7 DIS for EDD creation. LBM 10/24/19

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-17	9/23/19	14:21	4	Groundwater		AZ21825
MW-15	09/24/2019	08:00	4	Groundwater		AZ21826
MW-21	09/24/2019	10:28	4	Groundwater		AZ21827
MW-29H	09/24/2019	13:18	4	Groundwater		AZ21828
MW-7	09/24/2019	17:45	4	Groundwater		AZ21829
MW-7 DISS	09/24/2019	17:45	4	Groundwater		AZ21830
MW-12	09/25/2019	10:02	4	Groundwater		AZ21831
EB-1	09/25/2019	11:20	4	Equipment Blank		AZ21832

Relinquished By	Received By	Date/Time
		09/26/2019 08:08

SmarTroll ID	7586-41442-5-1	All metals and radiological bottles have pH < 2 <input checked="" type="checkbox"/>
Turbidity ID	5160-26211-1-1	
Sample Event	1241	
Cooler Temp	0.3 degrees C	
Thermometer ID	5408-27568-2-2	
pH Strip ID	7267-39374-6-6	



# Chain of Custody Groundwater

APC General Testing Laboratory

Field Complete

Outside Lab

Lab Complete

Lab ETA 09/26/2019 09:00

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Site Representative	Che George	Requested By	Greg Dyer
Collector	Nick Pitts	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-28H	9/25/19	11:42	4	Groundwater		AZ21811
FB-2	09/25/2019	11:35	4	Field Blank		AZ21812

Relinquished By	Received By	Date/Time
		09/26/2019 08:57

SmarTroll ID	7586-41444-5-3	All metals and radiological bottles have pH < 2	<input checked="" type="checkbox"/>
Turbidity ID	3901-20010-2-2	Cooler Temp	0.4 degrees C
Sample Event	1241	Thermometer ID	5408-27568-2-2
		pH Strip ID	7267-39374-6-6



# 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		Che George	Requested By	Greg Dyer
	Collector		TJ Daugherty		Location

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 26H. Radium Dup collected at MW-18

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-26H	9/23/19	17:00	1	Groundwater		AZ21859
MW-26H Dis	09/23/2019	17:00	1	Groundwater		AZ21860
MW-18	09/24/2019	11:45	3	Groundwater		AZ21861
MW-8	09/24/2019	18:02	1	Groundwater		AZ21862

Relinquished By	Received By	Date/Time
<i>[Signature]</i>	<i>[Signature]</i>	09/26/2019 07:50

SmarTroll ID	7586-41445-5-4
Turbidity ID	4677-23342-4-1
Sample Event	1241

All metals and radiological bottles have pH < 2

Cooler Temp	N/A
Thermometer ID	N/A
pH Strip ID	7267-39374-6-6





# Chain of Custody Groundwater

APC General Testing Laboratory

Field Complete  
 Lab Complete

Outside Lab

Lab ETA 09/26/2019 08:04

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Site Representative	Che George	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: Dissolved Set collected at MW-7

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-17	9/23/19	14:21	1	Groundwater		AZ21851
MW-15	09/24/2019	08:00	1	Groundwater		AZ21852
MW-21	09/24/2019	10:28	1	Groundwater		AZ21853
MW-29H	09/24/2019	13:18	1	Groundwater		AZ21854
MW-7	09/24/2019	17:45	1	Groundwater		AZ21855
MW-7DIS	09/24/2019	17:45	1	Groundwater		AZ21856
MW-12	09/25/2019	10:02	1	Groundwater		AZ21857
EB-1	09/25/2019	11:20	1	Equipment Blank		AZ21858

Relinquished By	Received By	Date/Time
		09/26/2019 08:08

SmarTroll ID	7586-41442-5-1	All metals and radiological bottles have pH < 2 <input checked="" type="checkbox"/>
Turbidity ID	5160-26211-1-1	Cooler Temp
Sample Event	1241	Thermometer ID
		pH Strip ID
		7267-39374-6-6





# 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	Che George	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 duplicate collected at MW-23H. Correcting time to 16:14 on MW-23H. LBM 9/26/19

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-6D	9/23/19	13:31	1	Groundwater		AZ21839
MW-6S	09/23/2019	14:41	1	Groundwater		AZ21840
MW-6S dup	09/23/2019	14:41	1	Sample Duplicate		AZ21841
MW-23H	09/23/2019	16:14	3	Groundwater		AZ21842
MW-17V	09/24/2019	11:50	1	Groundwater		AZ21843
MW-16D	09/24/2019	14:00	1	Groundwater		AZ21844
MW-19	09/24/2019	15:50	1	Groundwater		AZ21845
MW-19 dup	09/24/2019	15:50	1	Sample Duplicate		AZ21846
FB-1	09/24/2019	16:50	1	Field Blank		AZ21847
MW-24H	09/24/2019	18:23	1	Groundwater		AZ21848
MW-2	09/25/2019	09:27	1	Groundwater		AZ21849
MW-12V	09/25/2019	13:32	1	Groundwater		AZ21850

Relinquished By	Received By	Date/Time
		09/26/2019 07:55

SmarTroll ID	7586-41446-5-5	All metals and radiological bottles have pH < 2 <input checked="" type="checkbox"/>
Turbidity ID	7081-38476-1-1	
Sample Event	1241	
Cooler Temp	N/A	
Thermometer ID	N/A	
pH Strip ID	7267-39374-6-6	

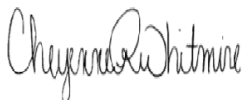
## ANALYTICAL REPORT

Eurofins TestAmerica, Pensacola  
3355 McLemore Drive  
Pensacola, FL 32514  
Tel: (850)474-1001

Laboratory Job ID: 400-177218-1  
Laboratory Sample Delivery Group: Gorgas Ash Pond 1241  
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:  
10/30/2019 1:32:20 PM

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*Results relate only to the items tested and the sample(s) as received by the laboratory.*



# Table of Contents

Cover Page . . . . .	1
Table of Contents . . . . .	2
Case Narrative . . . . .	3
Method Summary . . . . .	5
Sample Summary . . . . .	6
Client Sample Results . . . . .	7
Definitions . . . . .	33
Chronicle . . . . .	34
QC Association . . . . .	41
QC Sample Results . . . . .	43
Chain of Custody . . . . .	48
Receipt Checklists . . . . .	52
Certification Summary . . . . .	54

# Case Narrative

Client: Alabama Power General Test Laboratory  
Project/Site: CCR Plant Gorgas

Job ID: 400-177218-1  
SDG: Gorgas Ash Pond 1241

**Job ID: 400-177218-1**

**Laboratory: Eurofins TestAmerica, Pensacola**

## Narrative

### Job Narrative 400-177218-1

#### RAD

Method 9315: Radium-226 prep batch 160-445182. 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. AZ21837 MW-28H (400-177218-1), AZ21838 FB-2 (400-177218-2), AZ21839 MW-6D (400-177218-3), AZ21840 MW-6S (400-177218-4), AZ21841 MW-6S DUP (400-177218-5), AZ21842 MW-23H (400-177218-6), AZ21842 MW-23H (400-177218-6[DUJ]), AZ21843 MW-17V (400-177218-7), AZ21844 MW-16D (400-177218-8), AZ21845 MW-19 (400-177218-9), AZ21846 MW-19 DUP (400-177218-10), AZ21847 FB-1 (400-177218-11), AZ21848 MW-24H (400-177218-12), AZ21849 MW-2 (400-177218-13), AZ21850 MW-12V (400-177218-14), AZ21851 MW-17 (400-177218-15), AZ21852 MW-15 (400-177218-16), AZ21853 MW-21 (400-177218-17), AZ21854 MW-29H (400-177218-18), AZ21855 MW-7 (400-177218-19), (LCS 160-445182/1-A) and (MB 160-445182/22-A)

Method 9315: Radium-226 prep batch 160-445193. 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. AZ21856 MW-7 DIS (400-177218-20), AZ21857 MW-12 (400-177218-21), AZ21858 EB-1 (400-177218-22), AZ21859 MW-26H (400-177218-23), AZ21860 MW-26H DIS (400-177218-24), AZ21861 MW-18 (400-177218-25), AZ21861 MW-18 (400-177218-25[DUJ]), AZ21862 MW-8 (400-177218-26), (LCS 160-445193/1-A), (MB 160-445193/22-A), (240-119817-I-5-A), (240-119817-B-5-A MS) and (240-119817-B-5-B MSD)

Method 9320: Radium-228 Prep Batch 160-445188. 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. AZ21837 MW-28H (400-177218-1), AZ21838 FB-2 (400-177218-2), AZ21839 MW-6D (400-177218-3), AZ21840 MW-6S (400-177218-4), AZ21841 MW-6S DUP (400-177218-5), AZ21842 MW-23H (400-177218-6), AZ21842 MW-23H (400-177218-6[DUJ]), AZ21843 MW-17V (400-177218-7), AZ21844 MW-16D (400-177218-8), AZ21845 MW-19 (400-177218-9), AZ21846 MW-19 DUP (400-177218-10), AZ21847 FB-1 (400-177218-11), AZ21848 MW-24H (400-177218-12), AZ21849 MW-2 (400-177218-13), AZ21850 MW-12V (400-177218-14), AZ21851 MW-17 (400-177218-15), AZ21852 MW-15 (400-177218-16), AZ21853 MW-21 (400-177218-17), AZ21854 MW-29H (400-177218-18), AZ21855 MW-7 (400-177218-19), (LCS 160-445188/1-A) and (MB 160-445188/22-A)

Method 9320: Radium-228 Prep Batch 160-445201. 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. AZ21856 MW-7 DIS (400-177218-20), AZ21857 MW-12 (400-177218-21), AZ21858 EB-1 (400-177218-22), AZ21859 MW-26H (400-177218-23), AZ21860 MW-26H DIS (400-177218-24), AZ21861 MW-18 (400-177218-25), AZ21861 MW-18 (400-177218-25[DUJ]), AZ21862 MW-8 (400-177218-26), (LCS 160-445201/1-A), (MB 160-445201/22-A), (240-119817-I-5-B), (240-119817-B-5-C MS) and (240-119817-B-5-D MSD)

Method PrecSep\_0: Radium 228 Prep Batch 160-445188. The following samples were prepared at a reduced aliquot due insufficient volume: AZ21837 MW-28H (400-177218-1), AZ21838 FB-2 (400-177218-2), AZ21839 MW-6D (400-177218-3), AZ21840 MW-6S (400-177218-4), AZ21841 MW-6S DUP (400-177218-5), AZ21842 MW-23H (400-177218-6), AZ21842 MW-23H (400-177218-6[DUJ]), AZ21843 MW-17V (400-177218-7), AZ21844 MW-16D (400-177218-8), AZ21845 MW-19 (400-177218-9), AZ21846 MW-19 DUP (400-177218-10), AZ21847 FB-1 (400-177218-11), AZ21848 MW-24H (400-177218-12), AZ21849 MW-2 (400-177218-13), AZ21850 MW-12V (400-177218-14), AZ21851 MW-17 (400-177218-15), AZ21852 MW-15 (400-177218-16), AZ21853 MW-21 (400-177218-17), AZ21854 MW-29H (400-177218-18) and AZ21855 MW-7 (400-177218-19). Samples 400-177218-A-1, 400-177218-A-12 and 400-177218-A-19 had white cloudy discoloration.

Method PrecSep\_0: Radium 228 Prep Batch 160-445201. The following samples were prepared at a reduced aliquot due insufficient volume: AZ21856 MW-7 DIS (400-177218-20), AZ21857 MW-12 (400-177218-21), AZ21858 EB-1 (400-177218-22), AZ21859 MW-26H (400-177218-23), AZ21860 MW-26H DIS (400-177218-24), AZ21861 MW-18 (400-177218-25), AZ21861 MW-18 (400-177218-25[DUJ]) and AZ21862 MW-8 (400-177218-26). Samples 400-177218-A-23 and 240-119817-D-1 had white cloudy discoloration.

Method PrecSep-21: Radium 226 Prep Batch 160-445182. The following samples were prepared at a reduced aliquot due insufficient volume: AZ21837 MW-28H (400-177218-1), AZ21838 FB-2 (400-177218-2), AZ21839 MW-6D (400-177218-3), AZ21840 MW-6S (400-177218-4), AZ21841 MW-6S DUP (400-177218-5), AZ21842 MW-23H (400-177218-6), AZ21842 MW-23H (400-177218-6[DUJ]),

# Case Narrative

Client: Alabama Power General Test Laboratory  
Project/Site: CCR Plant Gorgas

Job ID: 400-177218-1  
SDG: Gorgas Ash Pond 1241

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## Job ID: 400-177218-1 (Continued)

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### Laboratory: Eurofins TestAmerica, Pensacola (Continued)

AZ21843 MW-17V (400-177218-7), AZ21844 MW-16D (400-177218-8), AZ21845 MW-19 (400-177218-9), AZ21846 MW-19 DUP (400-177218-10), AZ21847 FB-1 (400-177218-11), AZ21848 MW-24H (400-177218-12), AZ21849 MW-2 (400-177218-13), AZ21850 MW-12V (400-177218-14), AZ21851 MW-17 (400-177218-15), AZ21852 MW-15 (400-177218-16), AZ21853 MW-21 (400-177218-17), AZ21854 MW-29H (400-177218-18) and AZ21855 MW-7 (400-177218-19). Samples 400-177218-A-1, 400-177218-A-12 and 400-177218-A-19 had white cloudy discoloration.

Method PrecSep-21: Radium 226 Prep Batch 160-445193. The following samples were prepared at a reduced aliquot due insufficient volume: AZ21856 MW-7 DIS (400-177218-20), AZ21857 MW-12 (400-177218-21), AZ21858 EB-1 (400-177218-22), AZ21859 MW-26H (400-177218-23), AZ21860 MW-26H DIS (400-177218-24), AZ21861 MW-18 (400-177218-25), AZ21861 MW-18 (400-177218-25[DU]) and AZ21862 MW-8 (400-177218-26). Samples 400-177218-A-23 and 240-119817-D-1 had white cloudy discoloration.



# Method Summary

Client: Alabama Power General Test Laboratory  
Project/Site: CCR Plant Gorgas

Job ID: 400-177218-1  
SDG: Gorgas Ash Pond 1241

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: 400-177218-1  
SDG: Gorgas Ash Pond 1241

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
400-177218-1	AZ21837 MW-28H	Water	09/25/19 11:42	09/30/19 13:50	
400-177218-2	AZ21838 FB-2	Water	09/25/19 11:35	09/30/19 13:50	
400-177218-3	AZ21839 MW-6D	Water	09/23/19 13:31	09/30/19 13:50	
400-177218-4	AZ21840 MW-6S	Water	09/23/19 14:41	09/30/19 13:50	
400-177218-5	AZ21841 MW-6S DUP	Water	09/23/19 14:41	09/30/19 13:50	
400-177218-6	AZ21842 MW-23H	Water	09/23/19 16:14	09/30/19 13:50	
400-177218-7	AZ21843 MW-17V	Water	09/24/19 11:50	09/30/19 13:50	
400-177218-8	AZ21844 MW-16D	Water	09/24/19 14:00	09/30/19 13:50	
400-177218-9	AZ21845 MW-19	Water	09/24/19 15:50	09/30/19 13:50	
400-177218-10	AZ21846 MW-19 DUP	Water	09/24/19 15:50	09/30/19 13:50	
400-177218-11	AZ21847 FB-1	Water	09/24/19 16:50	09/30/19 13:50	
400-177218-12	AZ21848 MW-24H	Water	09/24/19 18:23	09/30/19 13:50	
400-177218-13	AZ21849 MW-2	Water	09/25/19 09:27	09/30/19 13:50	
400-177218-14	AZ21850 MW-12V	Water	09/25/19 13:32	09/30/19 13:50	
400-177218-15	AZ21851 MW-17	Water	09/23/19 14:21	09/30/19 13:50	
400-177218-16	AZ21852 MW-15	Water	09/24/19 08:00	09/30/19 13:50	
400-177218-17	AZ21853 MW-21	Water	09/24/19 10:28	09/30/19 13:50	
400-177218-18	AZ21854 MW-29H	Water	09/24/19 13:18	09/30/19 13:50	
400-177218-19	AZ21855 MW-7	Water	09/24/19 17:45	09/30/19 13:50	
400-177218-20	AZ21856 MW-7 DIS	Water	09/24/19 17:45	09/30/19 13:50	
400-177218-21	AZ21857 MW-12	Water	09/25/19 10:02	09/30/19 13:50	
400-177218-22	AZ21858 EB-1	Water	09/25/19 11:20	09/30/19 13:50	
400-177218-23	AZ21859 MW-26H	Water	09/23/19 17:00	09/30/19 13:50	
400-177218-24	AZ21860 MW-26H DIS	Water	09/23/19 17:00	09/30/19 13:50	
400-177218-25	AZ21861 MW-18	Water	09/24/19 11:45	09/30/19 13:50	
400-177218-26	AZ21862 MW-8	Water	09/24/19 18:02	09/30/19 13:50	

# Client Sample Results

Client: Alabama Power General Test Laboratory  
 Project/Site: CCR Plant Gorgas

Job ID: 400-177218-1  
 SDG: Gorgas Ash Pond 1241

**Client Sample ID: AZ21837 MW-28H**

**Lab Sample ID: 400-177218-1**

Date Collected: 09/25/19 11:42

Matrix: Water

Date Received: 09/30/19 13:50

**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		0.145	0.147	1.00	0.192	pCi/L	10/04/19 12:53	10/28/19 11:12	1
<b>Carrier</b>	<b>%Yield</b>	<b>Qualifier</b>	<b>Limits</b>					<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Ba Carrier	75.1		40 - 110					10/04/19 12:53	10/28/19 11:12	1

**Method: 9320 - Radium-228 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.383	U	0.457	0.458	1.00	0.754	pCi/L	10/04/19 13:40	10/18/19 13:48	1
<b>Carrier</b>	<b>%Yield</b>	<b>Qualifier</b>	<b>Limits</b>					<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Ba Carrier	75.1		40 - 110					10/04/19 13:40	10/18/19 13:48	1
Y Carrier	69.9		40 - 110					10/04/19 13:40	10/18/19 13:48	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	0.648	U	0.479	0.481	5.00	0.754	pCi/L		10/30/19 08:25	1

# Client Sample Results

Client: Alabama Power General Test Laboratory  
 Project/Site: CCR Plant Gorgas

Job ID: 400-177218-1  
 SDG: Gorgas Ash Pond 1241

**Client Sample ID: AZ21838 FB-2**

**Lab Sample ID: 400-177218-2**

Date Collected: 09/25/19 11:35

Matrix: Water

Date Received: 09/30/19 13:50

**Method: 9315 - Radium-226 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.290		0.147	0.149	1.00	0.193	pCi/L	10/04/19 12:53	10/28/19 11:13	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	83.3		40 - 110					10/04/19 12:53	10/28/19 11:13	1

**Method: 9320 - Radium-228 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.378	U	0.400	0.401	1.00	0.654	pCi/L	10/04/19 13:40	10/18/19 13:48	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	83.3		40 - 110					10/04/19 13:40	10/18/19 13:48	1
Y Carrier	74.0		40 - 110					10/04/19 13:40	10/18/19 13:48	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	0.668		0.426	0.428	5.00	0.654	pCi/L		10/30/19 08:25	1

# Client Sample Results

Client: Alabama Power General Test Laboratory  
 Project/Site: CCR Plant Gorgas

Job ID: 400-177218-1  
 SDG: Gorgas Ash Pond 1241

**Client Sample ID: AZ21839 MW-6D**

**Lab Sample ID: 400-177218-3**

Date Collected: 09/23/19 13:31

Matrix: Water

Date Received: 09/30/19 13:50

**Method: 9315 - Radium-226 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
<b>Radium-226</b>	<b>0.344</b>		0.144	0.148	1.00	0.174	pCi/L	10/04/19 12:53	10/28/19 11:13	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.1		40 - 110					10/04/19 12:53	10/28/19 11:13	1

**Method: 9320 - Radium-228 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.332	U	0.331	0.332	1.00	0.537	pCi/L	10/04/19 13:40	10/18/19 13:48	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.1		40 - 110					10/04/19 13:40	10/18/19 13:48	1
Y Carrier	74.8		40 - 110					10/04/19 13:40	10/18/19 13:48	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
<b>Combined Radium 226 + 228</b>	<b>0.677</b>		0.361	0.363	5.00	0.537	pCi/L		10/30/19 08:25	1

# Client Sample Results

Client: Alabama Power General Test Laboratory  
 Project/Site: CCR Plant Gorgas

Job ID: 400-177218-1  
 SDG: Gorgas Ash Pond 1241

**Client Sample ID: AZ21840 MW-6S**

**Lab Sample ID: 400-177218-4**

Date Collected: 09/23/19 14:41

Matrix: Water

Date Received: 09/30/19 13:50

**Method: 9315 - Radium-226 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
<b>Radium-226</b>	<b>0.449</b>		0.173	0.178	1.00	0.211	pCi/L	10/04/19 12:53	10/28/19 11:13	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	89.0		40 - 110					10/04/19 12:53	10/28/19 11:13	1

**Method: 9320 - Radium-228 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.612	U	0.403	0.407	1.00	0.624	pCi/L	10/04/19 13:40	10/18/19 13:48	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	89.0		40 - 110					10/04/19 13:40	10/18/19 13:48	1
Y Carrier	71.4		40 - 110					10/04/19 13:40	10/18/19 13:48	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
<b>Combined Radium 226 + 228</b>	<b>1.06</b>		0.439	0.444	5.00	0.624	pCi/L		10/30/19 08:25	1

# Client Sample Results

Client: Alabama Power General Test Laboratory  
 Project/Site: CCR Plant Gorgas

Job ID: 400-177218-1  
 SDG: Gorgas Ash Pond 1241

**Client Sample ID: AZ21841 MW-6S DUP**

**Lab Sample ID: 400-177218-5**

Date Collected: 09/23/19 14:41

Matrix: Water

Date Received: 09/30/19 13:50

**Method: 9315 - Radium-226 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.220		0.124	0.125	1.00	0.164	pCi/L	10/04/19 12:53	10/28/19 11:13	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.4		40 - 110					10/04/19 12:53	10/28/19 11:13	1

**Method: 9320 - Radium-228 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.278	U	0.356	0.357	1.00	0.591	pCi/L	10/04/19 13:40	10/18/19 13:49	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.4		40 - 110					10/04/19 13:40	10/18/19 13:49	1
Y Carrier	74.8		40 - 110					10/04/19 13:40	10/18/19 13:49	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	0.498	U	0.377	0.378	5.00	0.591	pCi/L		10/30/19 08:25	1

# Client Sample Results

Client: Alabama Power General Test Laboratory  
 Project/Site: CCR Plant Gorgas

Job ID: 400-177218-1  
 SDG: Gorgas Ash Pond 1241

**Client Sample ID: AZ21842 MW-23H**

**Lab Sample ID: 400-177218-6**

Date Collected: 09/23/19 16:14

Matrix: Water

Date Received: 09/30/19 13:50

**Method: 9315 - Radium-226 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.104	U	0.0982	0.0986	1.00	0.152	pCi/L	10/04/19 12:53	10/28/19 11:13	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.1		40 - 110					10/04/19 12:53	10/28/19 11:13	1

**Method: 9320 - Radium-228 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.0966	U	0.318	0.318	1.00	0.586	pCi/L	10/04/19 13:40	10/18/19 13:49	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.1		40 - 110					10/04/19 13:40	10/18/19 13:49	1
Y Carrier	74.8		40 - 110					10/04/19 13:40	10/18/19 13:49	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	0.00709	U	0.333	0.333	5.00	0.586	pCi/L		10/30/19 08:25	1

# Client Sample Results

Client: Alabama Power General Test Laboratory  
 Project/Site: CCR Plant Gorgas

Job ID: 400-177218-1  
 SDG: Gorgas Ash Pond 1241

**Client Sample ID: AZ21843 MW-17V**

**Lab Sample ID: 400-177218-7**

Date Collected: 09/24/19 11:50

Matrix: Water

Date Received: 09/30/19 13:50

**Method: 9315 - Radium-226 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.223		0.116	0.118	1.00	0.140	pCi/L	10/04/19 12:53	10/28/19 11:13	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	83.9		40 - 110					10/04/19 12:53	10/28/19 11:13	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	0.338	0.338	1.00	0.580	pCi/L	10/04/19 13:40	10/18/19 13:49	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	83.9		40 - 110					10/04/19 13:40	10/18/19 13:49	1
Y Carrier	77.4		40 - 110					10/04/19 13:40	10/18/19 13:49	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	0.373	U	0.357	0.358	5.00	0.580	pCi/L		10/30/19 08:25	1



# Client Sample Results

Client: Alabama Power General Test Laboratory  
 Project/Site: CCR Plant Gorgas

Job ID: 400-177218-1  
 SDG: Gorgas Ash Pond 1241

**Client Sample ID: AZ21844 MW-16D**

**Lab Sample ID: 400-177218-8**

Date Collected: 09/24/19 14:00

Matrix: Water

Date Received: 09/30/19 13:50

**Method: 9315 - Radium-226 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.161	U	0.119	0.120	1.00	0.175	pCi/L	10/04/19 12:53	10/28/19 11:14	1
<b>Carrier</b>	<b>%Yield</b>	<b>Qualifier</b>	<b>Limits</b>					<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Ba Carrier	85.0		40 - 110					10/04/19 12:53	10/28/19 11:14	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	0.337	0.337	1.00	0.638	pCi/L	10/04/19 13:40	10/18/19 13:49	1
<b>Carrier</b>	<b>%Yield</b>	<b>Qualifier</b>	<b>Limits</b>					<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Ba Carrier	85.0		40 - 110					10/04/19 13:40	10/18/19 13:49	1
Y Carrier	69.9		40 - 110					10/04/19 13:40	10/18/19 13:49	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	-0.0330	U	0.357	0.358	5.00	0.638	pCi/L		10/30/19 08:25	1

# Client Sample Results

Client: Alabama Power General Test Laboratory  
 Project/Site: CCR Plant Gorgas

Job ID: 400-177218-1  
 SDG: Gorgas Ash Pond 1241

**Client Sample ID: AZ21845 MW-19**

**Lab Sample ID: 400-177218-9**

Date Collected: 09/24/19 15:50

Matrix: Water

Date Received: 09/30/19 13:50

**Method: 9315 - Radium-226 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
<b>Radium-226</b>	<b>0.309</b>		0.140	0.143	1.00	0.166	pCi/L	10/04/19 12:53	10/28/19 11:14	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.1		40 - 110					10/04/19 12:53	10/28/19 11:14	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	0.315	0.316	1.00	0.502	pCi/L	10/04/19 13:40	10/18/19 13:49	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.1		40 - 110					10/04/19 13:40	10/18/19 13:49	1
Y Carrier	77.8		40 - 110					10/04/19 13:40	10/18/19 13:49	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
<b>Combined Radium 226 + 228</b>	<b>0.664</b>		0.345	0.347	5.00	0.502	pCi/L		10/30/19 08:25	1

# Client Sample Results

Client: Alabama Power General Test Laboratory  
 Project/Site: CCR Plant Gorgas

Job ID: 400-177218-1  
 SDG: Gorgas Ash Pond 1241

**Client Sample ID: AZ21846 MW-19 DUP**

**Lab Sample ID: 400-177218-10**

Date Collected: 09/24/19 15:50

Matrix: Water

Date Received: 09/30/19 13:50

**Method: 9315 - Radium-226 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
<b>Radium-226</b>	<b>0.413</b>		0.155	0.160	1.00	0.173	pCi/L	10/04/19 12:53	10/28/19 11:14	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	85.3		40 - 110					10/04/19 12:53	10/28/19 11:14	1

**Method: 9320 - Radium-228 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
<b>Radium-228</b>	<b>0.635</b>		0.368	0.373	1.00	0.554	pCi/L	10/04/19 13:40	10/18/19 13:49	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	85.3		40 - 110					10/04/19 13:40	10/18/19 13:49	1
Y Carrier	75.1		40 - 110					10/04/19 13:40	10/18/19 13:49	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
<b>Combined Radium 226 + 228</b>	<b>1.05</b>		0.399	0.406	5.00	0.554	pCi/L		10/30/19 08:25	1

# Client Sample Results

Client: Alabama Power General Test Laboratory  
 Project/Site: CCR Plant Gorgas

Job ID: 400-177218-1  
 SDG: Gorgas Ash Pond 1241

**Client Sample ID: AZ21847 FB-1**

**Lab Sample ID: 400-177218-11**

Date Collected: 09/24/19 16:50

Matrix: Water

Date Received: 09/30/19 13:50

**Method: 9315 - Radium-226 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.266		0.147	0.149	1.00	0.200	pCi/L	10/04/19 12:53	10/28/19 11:14	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	85.3		40 - 110					10/04/19 12:53	10/28/19 11:14	1

**Method: 9320 - Radium-228 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.271	U	0.361	0.362	1.00	0.684	pCi/L	10/04/19 13:40	10/18/19 13:49	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	85.3		40 - 110					10/04/19 13:40	10/18/19 13:49	1
Y Carrier	72.1		40 - 110					10/04/19 13:40	10/18/19 13:49	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	-0.00533	U	0.390	0.391	5.00	0.684	pCi/L		10/30/19 08:25	1

# Client Sample Results

Client: Alabama Power General Test Laboratory  
 Project/Site: CCR Plant Gorgas

Job ID: 400-177218-1  
 SDG: Gorgas Ash Pond 1241

**Client Sample ID: AZ21848 MW-24H**

**Lab Sample ID: 400-177218-12**

Date Collected: 09/24/19 18:23

Matrix: Water

Date Received: 09/30/19 13:50

**Method: 9315 - Radium-226 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.622		0.181	0.190	1.00	0.174	pCi/L	10/04/19 12:53	10/28/19 11:14	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.7		40 - 110					10/04/19 12:53	10/28/19 11:14	1

**Method: 9320 - Radium-228 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.605	U	0.424	0.427	1.00	0.667	pCi/L	10/04/19 13:40	10/18/19 13:51	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.7		40 - 110					10/04/19 13:40	10/18/19 13:51	1
Y Carrier	74.4		40 - 110					10/04/19 13:40	10/18/19 13:51	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	1.23		0.461	0.467	5.00	0.667	pCi/L		10/30/19 08:25	1

# Client Sample Results

Client: Alabama Power General Test Laboratory  
 Project/Site: CCR Plant Gorgas

Job ID: 400-177218-1  
 SDG: Gorgas Ash Pond 1241

**Client Sample ID: AZ21849 MW-2**

**Lab Sample ID: 400-177218-13**

Date Collected: 09/25/19 09:27

Matrix: Water

Date Received: 09/30/19 13:50

**Method: 9315 - Radium-226 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.344		0.153	0.156	1.00	0.185	pCi/L	10/04/19 12:53	10/28/19 11:15	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	85.3		40 - 110					10/04/19 12:53	10/28/19 11:15	1

**Method: 9320 - Radium-228 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.193	U	0.431	0.431	1.00	0.735	pCi/L	10/04/19 13:40	10/18/19 13:51	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	85.3		40 - 110					10/04/19 13:40	10/18/19 13:51	1
Y Carrier	69.9		40 - 110					10/04/19 13:40	10/18/19 13:51	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	0.537	U	0.457	0.458	5.00	0.735	pCi/L		10/30/19 08:25	1

# Client Sample Results

Client: Alabama Power General Test Laboratory  
 Project/Site: CCR Plant Gorgas

Job ID: 400-177218-1  
 SDG: Gorgas Ash Pond 1241

**Client Sample ID: AZ21850 MW-12V**

**Lab Sample ID: 400-177218-14**

Date Collected: 09/25/19 13:32

Matrix: Water

Date Received: 09/30/19 13:50

**Method: 9315 - Radium-226 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
<b>Radium-226</b>	<b>0.694</b>		0.188	0.198	1.00	0.166	pCi/L	10/04/19 12:53	10/28/19 11:14	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.5		40 - 110					10/04/19 12:53	10/28/19 11:14	1

**Method: 9320 - Radium-228 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.337	U	0.373	0.374	1.00	0.612	pCi/L	10/04/19 13:40	10/18/19 13:51	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.5		40 - 110					10/04/19 13:40	10/18/19 13:51	1
Y Carrier	78.1		40 - 110					10/04/19 13:40	10/18/19 13:51	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
<b>Combined Radium 226 + 228</b>	<b>1.03</b>		0.418	0.423	5.00	0.612	pCi/L		10/30/19 08:25	1

# Client Sample Results

Client: Alabama Power General Test Laboratory  
 Project/Site: CCR Plant Gorgas

Job ID: 400-177218-1  
 SDG: Gorgas Ash Pond 1241

**Client Sample ID: AZ21851 MW-17**

**Lab Sample ID: 400-177218-15**

Date Collected: 09/23/19 14:21

Matrix: Water

Date Received: 09/30/19 13:50

**Method: 9315 - Radium-226 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
<b>Radium-226</b>	<b>0.288</b>		0.146	0.148	1.00	0.191	pCi/L	10/04/19 12:53	10/28/19 11:17	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	81.4		40 - 110					10/04/19 12:53	10/28/19 11:17	1

**Method: 9320 - Radium-228 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.695	U	0.463	0.467	1.00	0.726	pCi/L	10/04/19 13:40	10/18/19 13:51	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	81.4		40 - 110					10/04/19 13:40	10/18/19 13:51	1
Y Carrier	80.4		40 - 110					10/04/19 13:40	10/18/19 13:51	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
<b>Combined Radium 226 + 228</b>	<b>0.983</b>		0.485	0.490	5.00	0.726	pCi/L		10/30/19 08:25	1



# Client Sample Results

Client: Alabama Power General Test Laboratory  
 Project/Site: CCR Plant Gorgas

Job ID: 400-177218-1  
 SDG: Gorgas Ash Pond 1241

**Client Sample ID: AZ21852 MW-15**

**Lab Sample ID: 400-177218-16**

Date Collected: 09/24/19 08:00

Matrix: Water

Date Received: 09/30/19 13:50

**Method: 9315 - Radium-226 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
<b>Radium-226</b>	<b>0.420</b>		0.153	0.158	1.00	0.164	pCi/L	10/04/19 12:53	10/28/19 11:17	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	86.7		40 - 110					10/04/19 12:53	10/28/19 11:17	1

**Method: 9320 - Radium-228 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.530	U	0.432	0.435	1.00	0.688	pCi/L	10/04/19 13:40	10/18/19 13:51	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	86.7		40 - 110					10/04/19 13:40	10/18/19 13:51	1
Y Carrier	68.8		40 - 110					10/04/19 13:40	10/18/19 13:51	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
<b>Combined Radium 226 + 228</b>	<b>0.951</b>		0.458	0.463	5.00	0.688	pCi/L		10/30/19 08:25	1

# Client Sample Results

Client: Alabama Power General Test Laboratory  
 Project/Site: CCR Plant Gorgas

Job ID: 400-177218-1  
 SDG: Gorgas Ash Pond 1241

**Client Sample ID: AZ21853 MW-21**

**Lab Sample ID: 400-177218-17**

Date Collected: 09/24/19 10:28

Matrix: Water

Date Received: 09/30/19 13:50

**Method: 9315 - Radium-226 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
<b>Radium-226</b>	<b>0.482</b>		0.162	0.167	1.00	0.169	pCi/L	10/04/19 12:53	10/28/19 13:36	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	87.0		40 - 110					10/04/19 12:53	10/28/19 13:36	1

**Method: 9320 - Radium-228 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.594	U	0.472	0.475	1.00	0.751	pCi/L	10/04/19 13:40	10/18/19 13:51	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	87.0		40 - 110					10/04/19 13:40	10/18/19 13:51	1
Y Carrier	64.7		40 - 110					10/04/19 13:40	10/18/19 13:51	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
<b>Combined Radium 226 + 228</b>	<b>1.08</b>		0.499	0.504	5.00	0.751	pCi/L		10/30/19 08:25	1

# Client Sample Results

Client: Alabama Power General Test Laboratory  
 Project/Site: CCR Plant Gorgas

Job ID: 400-177218-1  
 SDG: Gorgas Ash Pond 1241

**Client Sample ID: AZ21854 MW-29H**

**Lab Sample ID: 400-177218-18**

Date Collected: 09/24/19 13:18

Matrix: Water

Date Received: 09/30/19 13:50

**Method: 9315 - Radium-226 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
<b>Radium-226</b>	<b>0.500</b>		0.170	0.176	1.00	0.187	pCi/L	10/04/19 12:53	10/28/19 13:36	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	89.3		40 - 110					10/04/19 12:53	10/28/19 13:36	1

**Method: 9320 - Radium-228 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.590	U	0.444	0.447	1.00	0.703	pCi/L	10/04/19 13:40	10/18/19 13:51	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	89.3		40 - 110					10/04/19 13:40	10/18/19 13:51	1
Y Carrier	70.3		40 - 110					10/04/19 13:40	10/18/19 13:51	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
<b>Combined Radium 226 + 228</b>	<b>1.09</b>		0.475	0.480	5.00	0.703	pCi/L		10/30/19 08:25	1

# Client Sample Results

Client: Alabama Power General Test Laboratory  
 Project/Site: CCR Plant Gorgas

Job ID: 400-177218-1  
 SDG: Gorgas Ash Pond 1241

**Client Sample ID: AZ21855 MW-7**

**Lab Sample ID: 400-177218-19**

Date Collected: 09/24/19 17:45

Matrix: Water

Date Received: 09/30/19 13:50

**Method: 9315 - Radium-226 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.311		0.142	0.145	1.00	0.173	pCi/L	10/04/19 12:53	10/28/19 13:36	1
<b>Carrier</b>	<b>%Yield</b>	<b>Qualifier</b>	<b>Limits</b>					<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Ba Carrier	84.5		40 - 110					10/04/19 12:53	10/28/19 13:36	1

**Method: 9320 - Radium-228 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.307	U	0.457	0.457	1.00	0.764	pCi/L	10/04/19 13:40	10/18/19 13:51	1
<b>Carrier</b>	<b>%Yield</b>	<b>Qualifier</b>	<b>Limits</b>					<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Ba Carrier	84.5		40 - 110					10/04/19 13:40	10/18/19 13:51	1
Y Carrier	72.5		40 - 110					10/04/19 13:40	10/18/19 13:51	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	0.618	U	0.479	0.479	5.00	0.764	pCi/L		10/30/19 08:25	1

# Client Sample Results

Client: Alabama Power General Test Laboratory  
 Project/Site: CCR Plant Gorgas

Job ID: 400-177218-1  
 SDG: Gorgas Ash Pond 1241

**Client Sample ID: AZ21856 MW-7 DIS**

**Lab Sample ID: 400-177218-20**

Date Collected: 09/24/19 17:45

Matrix: Water

Date Received: 09/30/19 13:50

**Method: 9315 - Radium-226 (GFPC) - Dissolved**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.384		0.186	0.189	1.00	0.234	pCi/L	10/04/19 14:45	10/28/19 05:36	1
<b>Carrier</b>	<b>%Yield</b>	<b>Qualifier</b>	<b>Limits</b>					<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Ba Carrier	80.8		40 - 110					10/04/19 14:45	10/28/19 05:36	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	-0.0441	U	0.393	0.393	1.00	0.709	pCi/L	10/04/19 15:30	10/22/19 13:12	1
<b>Carrier</b>	<b>%Yield</b>	<b>Qualifier</b>	<b>Limits</b>					<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Ba Carrier	80.8		40 - 110					10/04/19 15:30	10/22/19 13:12	1
Y Carrier	76.6		40 - 110					10/04/19 15:30	10/22/19 13:12	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	0.340	U	0.435	0.436	5.00	0.709	pCi/L		10/30/19 08:28	1

# Client Sample Results

Client: Alabama Power General Test Laboratory  
 Project/Site: CCR Plant Gorgas

Job ID: 400-177218-1  
 SDG: Gorgas Ash Pond 1241

**Client Sample ID: AZ21857 MW-12**

**Lab Sample ID: 400-177218-21**

Date Collected: 09/25/19 10:02

Matrix: Water

Date Received: 09/30/19 13:50

**Method: 9315 - Radium-226 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.606		0.209	0.216	1.00	0.222	pCi/L	10/04/19 14:45	10/28/19 05:36	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	84.5		40 - 110					10/04/19 14:45	10/28/19 05:36	1

**Method: 9320 - Radium-228 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.164	U	0.392	0.392	1.00	0.723	pCi/L	10/04/19 15:30	10/22/19 13:12	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	84.5		40 - 110					10/04/19 15:30	10/22/19 13:12	1
Y Carrier	72.9		40 - 110					10/04/19 15:30	10/22/19 13:12	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	0.442	U	0.444	0.448	5.00	0.723	pCi/L		10/30/19 08:25	1

# Client Sample Results

Client: Alabama Power General Test Laboratory  
 Project/Site: CCR Plant Gorgas

Job ID: 400-177218-1  
 SDG: Gorgas Ash Pond 1241

**Client Sample ID: AZ21858 EB-1**

**Lab Sample ID: 400-177218-22**

Date Collected: 09/25/19 11:20

Matrix: Water

Date Received: 09/30/19 13:50

**Method: 9315 - Radium-226 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.255		0.166	0.167	1.00	0.236	pCi/L	10/04/19 14:45	10/28/19 05:37	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	77.7		40 - 110					10/04/19 14:45	10/28/19 05:37	1

**Method: 9320 - Radium-228 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0407	U	0.426	0.426	1.00	0.756	pCi/L	10/04/19 15:30	10/22/19 13:12	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	77.7		40 - 110					10/04/19 15:30	10/22/19 13:12	1
Y Carrier	71.0		40 - 110					10/04/19 15:30	10/22/19 13:12	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	0.295	U	0.457	0.458	5.00	0.756	pCi/L		10/30/19 08:25	1

# Client Sample Results

Client: Alabama Power General Test Laboratory  
 Project/Site: CCR Plant Gorgas

Job ID: 400-177218-1  
 SDG: Gorgas Ash Pond 1241

**Client Sample ID: AZ21859 MW-26H**

**Lab Sample ID: 400-177218-23**

Date Collected: 09/23/19 17:00

Matrix: Water

Date Received: 09/30/19 13:50

**Method: 9315 - Radium-226 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.355		0.178	0.181	1.00	0.223	pCi/L	10/04/19 14:45	10/28/19 05:37	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	73.4		40 - 110					10/04/19 14:45	10/28/19 05:37	1

**Method: 9320 - Radium-228 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0492	U	0.406	0.406	1.00	0.721	pCi/L	10/04/19 15:30	10/22/19 13:12	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	73.4		40 - 110					10/04/19 15:30	10/22/19 13:12	1
Y Carrier	75.9		40 - 110					10/04/19 15:30	10/22/19 13:12	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	0.404	U	0.443	0.445	5.00	0.721	pCi/L		10/30/19 08:25	1



# Client Sample Results

Client: Alabama Power General Test Laboratory  
 Project/Site: CCR Plant Gorgas

Job ID: 400-177218-1  
 SDG: Gorgas Ash Pond 1241

**Client Sample ID: AZ21860 MW-26H DIS**

**Lab Sample ID: 400-177218-24**

Date Collected: 09/23/19 17:00

Matrix: Water

Date Received: 09/30/19 13:50

**Method: 9315 - Radium-226 (GFPC) - Dissolved**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.424		0.177	0.181	1.00	0.207	pCi/L	10/04/19 14:45	10/28/19 08:14	1
<b>Carrier</b>	<b>%Yield</b>	<b>Qualifier</b>	<b>Limits</b>					<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Ba Carrier	83.3		40 - 110					10/04/19 14:45	10/28/19 08:14	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	0.141	U	0.346	0.346	1.00	0.597	pCi/L	10/04/19 15:30	10/22/19 13:12	1
<b>Carrier</b>	<b>%Yield</b>	<b>Qualifier</b>	<b>Limits</b>					<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Ba Carrier	83.3		40 - 110					10/04/19 15:30	10/22/19 13:12	1
Y Carrier	79.6		40 - 110					10/04/19 15:30	10/22/19 13:12	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	0.564	U	0.389	0.390	5.00	0.597	pCi/L		10/30/19 08:28	1

# Client Sample Results

Client: Alabama Power General Test Laboratory  
 Project/Site: CCR Plant Gorgas

Job ID: 400-177218-1  
 SDG: Gorgas Ash Pond 1241

**Client Sample ID: AZ21861 MW-18**

**Lab Sample ID: 400-177218-25**

Date Collected: 09/24/19 11:45

Matrix: Water

Date Received: 09/30/19 13:50

**Method: 9315 - Radium-226 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.322		0.170	0.172	1.00	0.227	pCi/L	10/04/19 14:45	10/28/19 08:14	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	86.7		40 - 110					10/04/19 14:45	10/28/19 08:14	1

**Method: 9320 - Radium-228 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0528	U	0.412	0.412	1.00	0.726	pCi/L	10/04/19 15:30	10/22/19 13:12	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	86.7		40 - 110					10/04/19 15:30	10/22/19 13:12	1
Y Carrier	69.5		40 - 110					10/04/19 15:30	10/22/19 13:12	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	0.375	U	0.446	0.446	5.00	0.726	pCi/L		10/30/19 08:25	1

# Client Sample Results

Client: Alabama Power General Test Laboratory  
 Project/Site: CCR Plant Gorgas

Job ID: 400-177218-1  
 SDG: Gorgas Ash Pond 1241

**Client Sample ID: AZ21862 MW-8**

**Lab Sample ID: 400-177218-26**

Date Collected: 09/24/19 18:02

Matrix: Water

Date Received: 09/30/19 13:50

**Method: 9315 - Radium-226 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
<b>Radium-226</b>	<b>0.366</b>		0.181	0.184	1.00	0.235	pCi/L	10/04/19 14:45	10/28/19 08:14	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	80.5		40 - 110					10/04/19 14:45	10/28/19 08:14	1

**Method: 9320 - Radium-228 (GFPC)**

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.386	U	0.408	0.410	1.00	0.667	pCi/L	10/04/19 15:30	10/22/19 13:12	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	80.5		40 - 110					10/04/19 15:30	10/22/19 13:12	1
Y Carrier	79.6		40 - 110					10/04/19 15:30	10/22/19 13:12	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
<b>Combined Radium 226 + 228</b>	<b>0.753</b>		0.446	0.449	5.00	0.667	pCi/L		10/30/19 08:25	1

# Definitions/Glossary

Client: Alabama Power General Test Laboratory  
Project/Site: CCR Plant Gorgas

Job ID: 400-177218-1  
SDG: Gorgas Ash Pond 1241

## 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.
α	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: 400-177218-1  
SDG: Gorgas Ash Pond 1241

**Client Sample ID: AZ21837 MW-28H**

**Lab Sample ID: 400-177218-1**

**Date Collected: 09/25/19 11:42**

**Matrix: Water**

**Date Received: 09/30/19 13:50**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			445182	10/04/19 12:53	ORM	TAL SL
Total/NA	Analysis	9315		1	447982	10/28/19 11:12	KLS	TAL SL
Total/NA	Prep	PrecSep_0			445188	10/04/19 13:40	ORM	TAL SL
Total/NA	Analysis	9320		1	446867	10/18/19 13:48	AJD	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	448326	10/30/19 08:25	SMP	TAL SL

**Client Sample ID: AZ21838 FB-2**

**Lab Sample ID: 400-177218-2**

**Date Collected: 09/25/19 11:35**

**Matrix: Water**

**Date Received: 09/30/19 13:50**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			445182	10/04/19 12:53	ORM	TAL SL
Total/NA	Analysis	9315		1	447982	10/28/19 11:13	KLS	TAL SL
Total/NA	Prep	PrecSep_0			445188	10/04/19 13:40	ORM	TAL SL
Total/NA	Analysis	9320		1	446867	10/18/19 13:48	AJD	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	448326	10/30/19 08:25	SMP	TAL SL

**Client Sample ID: AZ21839 MW-6D**

**Lab Sample ID: 400-177218-3**

**Date Collected: 09/23/19 13:31**

**Matrix: Water**

**Date Received: 09/30/19 13:50**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			445182	10/04/19 12:53	ORM	TAL SL
Total/NA	Analysis	9315		1	447982	10/28/19 11:13	KLS	TAL SL
Total/NA	Prep	PrecSep_0			445188	10/04/19 13:40	ORM	TAL SL
Total/NA	Analysis	9320		1	446867	10/18/19 13:48	AJD	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	448326	10/30/19 08:25	SMP	TAL SL

**Client Sample ID: AZ21840 MW-6S**

**Lab Sample ID: 400-177218-4**

**Date Collected: 09/23/19 14:41**

**Matrix: Water**

**Date Received: 09/30/19 13:50**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			445182	10/04/19 12:53	ORM	TAL SL
Total/NA	Analysis	9315		1	447982	10/28/19 11:13	KLS	TAL SL
Total/NA	Prep	PrecSep_0			445188	10/04/19 13:40	ORM	TAL SL
Total/NA	Analysis	9320		1	446867	10/18/19 13:48	AJD	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	448326	10/30/19 08:25	SMP	TAL SL

# Lab Chronicle

Client: Alabama Power General Test Laboratory  
Project/Site: CCR Plant Gorgas

Job ID: 400-177218-1  
SDG: Gorgas Ash Pond 1241

**Client Sample ID: AZ21841 MW-6S DUP**

**Lab Sample ID: 400-177218-5**

**Date Collected: 09/23/19 14:41**

**Matrix: Water**

**Date Received: 09/30/19 13:50**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			445182	10/04/19 12:53	ORM	TAL SL
Total/NA	Analysis	9315		1	447982	10/28/19 11:13	KLS	TAL SL
Total/NA	Prep	PrecSep_0			445188	10/04/19 13:40	ORM	TAL SL
Total/NA	Analysis	9320		1	446867	10/18/19 13:49	AJD	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	448326	10/30/19 08:25	SMP	TAL SL

**Client Sample ID: AZ21842 MW-23H**

**Lab Sample ID: 400-177218-6**

**Date Collected: 09/23/19 16:14**

**Matrix: Water**

**Date Received: 09/30/19 13:50**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			445182	10/04/19 12:53	ORM	TAL SL
Total/NA	Analysis	9315		1	447982	10/28/19 11:13	KLS	TAL SL
Total/NA	Prep	PrecSep_0			445188	10/04/19 13:40	ORM	TAL SL
Total/NA	Analysis	9320		1	446867	10/18/19 13:49	AJD	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	448326	10/30/19 08:25	SMP	TAL SL

**Client Sample ID: AZ21843 MW-17V**

**Lab Sample ID: 400-177218-7**

**Date Collected: 09/24/19 11:50**

**Matrix: Water**

**Date Received: 09/30/19 13:50**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			445182	10/04/19 12:53	ORM	TAL SL
Total/NA	Analysis	9315		1	447982	10/28/19 11:13	KLS	TAL SL
Total/NA	Prep	PrecSep_0			445188	10/04/19 13:40	ORM	TAL SL
Total/NA	Analysis	9320		1	446867	10/18/19 13:49	AJD	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	448326	10/30/19 08:25	SMP	TAL SL

**Client Sample ID: AZ21844 MW-16D**

**Lab Sample ID: 400-177218-8**

**Date Collected: 09/24/19 14:00**

**Matrix: Water**

**Date Received: 09/30/19 13:50**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			445182	10/04/19 12:53	ORM	TAL SL
Total/NA	Analysis	9315		1	447982	10/28/19 11:14	KLS	TAL SL
Total/NA	Prep	PrecSep_0			445188	10/04/19 13:40	ORM	TAL SL
Total/NA	Analysis	9320		1	446867	10/18/19 13:49	AJD	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	448326	10/30/19 08:25	SMP	TAL SL

# Lab Chronicle

Client: Alabama Power General Test Laboratory  
 Project/Site: CCR Plant Gorgas

Job ID: 400-177218-1  
 SDG: Gorgas Ash Pond 1241

**Client Sample ID: AZ21845 MW-19**

**Lab Sample ID: 400-177218-9**

**Date Collected: 09/24/19 15:50**

**Matrix: Water**

**Date Received: 09/30/19 13:50**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			445182	10/04/19 12:53	ORM	TAL SL
Total/NA	Analysis	9315		1	447982	10/28/19 11:14	KLS	TAL SL
Total/NA	Prep	PrecSep_0			445188	10/04/19 13:40	ORM	TAL SL
Total/NA	Analysis	9320		1	446867	10/18/19 13:49	AJD	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	448326	10/30/19 08:25	SMP	TAL SL

**Client Sample ID: AZ21846 MW-19 DUP**

**Lab Sample ID: 400-177218-10**

**Date Collected: 09/24/19 15:50**

**Matrix: Water**

**Date Received: 09/30/19 13:50**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			445182	10/04/19 12:53	ORM	TAL SL
Total/NA	Analysis	9315		1	447982	10/28/19 11:14	KLS	TAL SL
Total/NA	Prep	PrecSep_0			445188	10/04/19 13:40	ORM	TAL SL
Total/NA	Analysis	9320		1	446867	10/18/19 13:49	AJD	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	448326	10/30/19 08:25	SMP	TAL SL

**Client Sample ID: AZ21847 FB-1**

**Lab Sample ID: 400-177218-11**

**Date Collected: 09/24/19 16:50**

**Matrix: Water**

**Date Received: 09/30/19 13:50**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			445182	10/04/19 12:53	ORM	TAL SL
Total/NA	Analysis	9315		1	447982	10/28/19 11:14	KLS	TAL SL
Total/NA	Prep	PrecSep_0			445188	10/04/19 13:40	ORM	TAL SL
Total/NA	Analysis	9320		1	446867	10/18/19 13:49	AJD	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	448326	10/30/19 08:25	SMP	TAL SL

**Client Sample ID: AZ21848 MW-24H**

**Lab Sample ID: 400-177218-12**

**Date Collected: 09/24/19 18:23**

**Matrix: Water**

**Date Received: 09/30/19 13:50**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			445182	10/04/19 12:53	ORM	TAL SL
Total/NA	Analysis	9315		1	447982	10/28/19 11:14	KLS	TAL SL
Total/NA	Prep	PrecSep_0			445188	10/04/19 13:40	ORM	TAL SL
Total/NA	Analysis	9320		1	446862	10/18/19 13:51	AJD	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	448326	10/30/19 08:25	SMP	TAL SL

# Lab Chronicle

Client: Alabama Power General Test Laboratory  
 Project/Site: CCR Plant Gorgas

Job ID: 400-177218-1  
 SDG: Gorgas Ash Pond 1241

**Client Sample ID: AZ21849 MW-2**

**Lab Sample ID: 400-177218-13**

**Date Collected: 09/25/19 09:27**

**Matrix: Water**

**Date Received: 09/30/19 13:50**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			445182	10/04/19 12:53	ORM	TAL SL
Total/NA	Analysis	9315		1	447982	10/28/19 11:15	KLS	TAL SL
Total/NA	Prep	PrecSep_0			445188	10/04/19 13:40	ORM	TAL SL
Total/NA	Analysis	9320		1	446862	10/18/19 13:51	AJD	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	448326	10/30/19 08:25	SMP	TAL SL

**Client Sample ID: AZ21850 MW-12V**

**Lab Sample ID: 400-177218-14**

**Date Collected: 09/25/19 13:32**

**Matrix: Water**

**Date Received: 09/30/19 13:50**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			445182	10/04/19 12:53	ORM	TAL SL
Total/NA	Analysis	9315		1	447982	10/28/19 11:14	KLS	TAL SL
Total/NA	Prep	PrecSep_0			445188	10/04/19 13:40	ORM	TAL SL
Total/NA	Analysis	9320		1	446862	10/18/19 13:51	AJD	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	448326	10/30/19 08:25	SMP	TAL SL

**Client Sample ID: AZ21851 MW-17**

**Lab Sample ID: 400-177218-15**

**Date Collected: 09/23/19 14:21**

**Matrix: Water**

**Date Received: 09/30/19 13:50**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			445182	10/04/19 12:53	ORM	TAL SL
Total/NA	Analysis	9315		1	448065	10/28/19 11:17	KLS	TAL SL
Total/NA	Prep	PrecSep_0			445188	10/04/19 13:40	ORM	TAL SL
Total/NA	Analysis	9320		1	446862	10/18/19 13:51	AJD	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	448326	10/30/19 08:25	SMP	TAL SL

**Client Sample ID: AZ21852 MW-15**

**Lab Sample ID: 400-177218-16**

**Date Collected: 09/24/19 08:00**

**Matrix: Water**

**Date Received: 09/30/19 13:50**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			445182	10/04/19 12:53	ORM	TAL SL
Total/NA	Analysis	9315		1	448065	10/28/19 11:17	KLS	TAL SL
Total/NA	Prep	PrecSep_0			445188	10/04/19 13:40	ORM	TAL SL
Total/NA	Analysis	9320		1	446862	10/18/19 13:51	AJD	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	448326	10/30/19 08:25	SMP	TAL SL



# Lab Chronicle

Client: Alabama Power General Test Laboratory  
 Project/Site: CCR Plant Gorgas

Job ID: 400-177218-1  
 SDG: Gorgas Ash Pond 1241

**Client Sample ID: AZ21853 MW-21**

**Lab Sample ID: 400-177218-17**

**Date Collected: 09/24/19 10:28**

**Matrix: Water**

**Date Received: 09/30/19 13:50**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			445182	10/04/19 12:53	ORM	TAL SL
Total/NA	Analysis	9315		1	447982	10/28/19 13:36	KLS	TAL SL
Total/NA	Prep	PrecSep_0			445188	10/04/19 13:40	ORM	TAL SL
Total/NA	Analysis	9320		1	446862	10/18/19 13:51	AJD	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	448326	10/30/19 08:25	SMP	TAL SL

**Client Sample ID: AZ21854 MW-29H**

**Lab Sample ID: 400-177218-18**

**Date Collected: 09/24/19 13:18**

**Matrix: Water**

**Date Received: 09/30/19 13:50**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			445182	10/04/19 12:53	ORM	TAL SL
Total/NA	Analysis	9315		1	447982	10/28/19 13:36	KLS	TAL SL
Total/NA	Prep	PrecSep_0			445188	10/04/19 13:40	ORM	TAL SL
Total/NA	Analysis	9320		1	446862	10/18/19 13:51	AJD	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	448326	10/30/19 08:25	SMP	TAL SL

**Client Sample ID: AZ21855 MW-7**

**Lab Sample ID: 400-177218-19**

**Date Collected: 09/24/19 17:45**

**Matrix: Water**

**Date Received: 09/30/19 13:50**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			445182	10/04/19 12:53	ORM	TAL SL
Total/NA	Analysis	9315		1	447982	10/28/19 13:36	KLS	TAL SL
Total/NA	Prep	PrecSep_0			445188	10/04/19 13:40	ORM	TAL SL
Total/NA	Analysis	9320		1	446862	10/18/19 13:51	AJD	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	448326	10/30/19 08:25	SMP	TAL SL

**Client Sample ID: AZ21856 MW-7 DIS**

**Lab Sample ID: 400-177218-20**

**Date Collected: 09/24/19 17:45**

**Matrix: Water**

**Date Received: 09/30/19 13:50**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	PrecSep-21			445193	10/04/19 14:45	ORM	TAL SL
Dissolved	Analysis	9315		1	447982	10/28/19 05:36	KLS	TAL SL
Dissolved	Prep	PrecSep_0			445201	10/04/19 15:30	ORM	TAL SL
Dissolved	Analysis	9320		1	447241	10/22/19 13:12	JCB	TAL SL
Dissolved	Analysis	Ra226_Ra228 (D)		1	448327	10/30/19 08:28	SMP	TAL SL

# Lab Chronicle

Client: Alabama Power General Test Laboratory  
Project/Site: CCR Plant Gorgas

Job ID: 400-177218-1  
SDG: Gorgas Ash Pond 1241

**Client Sample ID: AZ21857 MW-12**

**Lab Sample ID: 400-177218-21**

**Date Collected: 09/25/19 10:02**

**Matrix: Water**

**Date Received: 09/30/19 13:50**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			445193	10/04/19 14:45	ORM	TAL SL
Total/NA	Analysis	9315		1	447982	10/28/19 05:36	KLS	TAL SL
Total/NA	Prep	PrecSep_0			445201	10/04/19 15:30	ORM	TAL SL
Total/NA	Analysis	9320		1	447241	10/22/19 13:12	JCB	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	448326	10/30/19 08:25	SMP	TAL SL

**Client Sample ID: AZ21858 EB-1**

**Lab Sample ID: 400-177218-22**

**Date Collected: 09/25/19 11:20**

**Matrix: Water**

**Date Received: 09/30/19 13:50**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			445193	10/04/19 14:45	ORM	TAL SL
Total/NA	Analysis	9315		1	448065	10/28/19 05:37	KLS	TAL SL
Total/NA	Prep	PrecSep_0			445201	10/04/19 15:30	ORM	TAL SL
Total/NA	Analysis	9320		1	447241	10/22/19 13:12	JCB	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	448326	10/30/19 08:25	SMP	TAL SL

**Client Sample ID: AZ21859 MW-26H**

**Lab Sample ID: 400-177218-23**

**Date Collected: 09/23/19 17:00**

**Matrix: Water**

**Date Received: 09/30/19 13:50**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			445193	10/04/19 14:45	ORM	TAL SL
Total/NA	Analysis	9315		1	448065	10/28/19 05:37	KLS	TAL SL
Total/NA	Prep	PrecSep_0			445201	10/04/19 15:30	ORM	TAL SL
Total/NA	Analysis	9320		1	447241	10/22/19 13:12	JCB	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	448326	10/30/19 08:25	SMP	TAL SL

**Client Sample ID: AZ21860 MW-26H DIS**

**Lab Sample ID: 400-177218-24**

**Date Collected: 09/23/19 17:00**

**Matrix: Water**

**Date Received: 09/30/19 13:50**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	PrecSep-21			445193	10/04/19 14:45	ORM	TAL SL
Dissolved	Analysis	9315		1	447982	10/28/19 08:14	KLS	TAL SL
Dissolved	Prep	PrecSep_0			445201	10/04/19 15:30	ORM	TAL SL
Dissolved	Analysis	9320		1	447241	10/22/19 13:12	JCB	TAL SL
Dissolved	Analysis	Ra226_Ra228 (D)		1	448327	10/30/19 08:28	SMP	TAL SL

# Lab Chronicle

Client: Alabama Power General Test Laboratory  
Project/Site: CCR Plant Gorgas

Job ID: 400-177218-1  
SDG: Gorgas Ash Pond 1241

**Client Sample ID: AZ21861 MW-18**

**Lab Sample ID: 400-177218-25**

**Date Collected: 09/24/19 11:45**

**Matrix: Water**

**Date Received: 09/30/19 13:50**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			445193	10/04/19 14:45	ORM	TAL SL
Total/NA	Analysis	9315		1	447982	10/28/19 08:14	KLS	TAL SL
Total/NA	Prep	PrecSep_0			445201	10/04/19 15:30	ORM	TAL SL
Total/NA	Analysis	9320		1	447241	10/22/19 13:12	JCB	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	448326	10/30/19 08:25	SMP	TAL SL

**Client Sample ID: AZ21862 MW-8**

**Lab Sample ID: 400-177218-26**

**Date Collected: 09/24/19 18:02**

**Matrix: Water**

**Date Received: 09/30/19 13:50**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			445193	10/04/19 14:45	ORM	TAL SL
Total/NA	Analysis	9315		1	447982	10/28/19 08:14	KLS	TAL SL
Total/NA	Prep	PrecSep_0			445201	10/04/19 15:30	ORM	TAL SL
Total/NA	Analysis	9320		1	447241	10/22/19 13:12	JCB	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	448326	10/30/19 08:25	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: 400-177218-1  
 SDG: Gorgas Ash Pond 1241

## Rad

### Prep Batch: 445182

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-177218-1	AZ21837 MW-28H	Total/NA	Water	PrecSep-21	
400-177218-2	AZ21838 FB-2	Total/NA	Water	PrecSep-21	
400-177218-3	AZ21839 MW-6D	Total/NA	Water	PrecSep-21	
400-177218-4	AZ21840 MW-6S	Total/NA	Water	PrecSep-21	
400-177218-5	AZ21841 MW-6S DUP	Total/NA	Water	PrecSep-21	
400-177218-6	AZ21842 MW-23H	Total/NA	Water	PrecSep-21	
400-177218-7	AZ21843 MW-17V	Total/NA	Water	PrecSep-21	
400-177218-8	AZ21844 MW-16D	Total/NA	Water	PrecSep-21	
400-177218-9	AZ21845 MW-19	Total/NA	Water	PrecSep-21	
400-177218-10	AZ21846 MW-19 DUP	Total/NA	Water	PrecSep-21	
400-177218-11	AZ21847 FB-1	Total/NA	Water	PrecSep-21	
400-177218-12	AZ21848 MW-24H	Total/NA	Water	PrecSep-21	
400-177218-13	AZ21849 MW-2	Total/NA	Water	PrecSep-21	
400-177218-14	AZ21850 MW-12V	Total/NA	Water	PrecSep-21	
400-177218-15	AZ21851 MW-17	Total/NA	Water	PrecSep-21	
400-177218-16	AZ21852 MW-15	Total/NA	Water	PrecSep-21	
400-177218-17	AZ21853 MW-21	Total/NA	Water	PrecSep-21	
400-177218-18	AZ21854 MW-29H	Total/NA	Water	PrecSep-21	
400-177218-19	AZ21855 MW-7	Total/NA	Water	PrecSep-21	
MB 160-445182/22-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-445182/1-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
400-177218-6 DU	AZ21842 MW-23H	Total/NA	Water	PrecSep-21	

### Prep Batch: 445188

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-177218-1	AZ21837 MW-28H	Total/NA	Water	PrecSep_0	
400-177218-2	AZ21838 FB-2	Total/NA	Water	PrecSep_0	
400-177218-3	AZ21839 MW-6D	Total/NA	Water	PrecSep_0	
400-177218-4	AZ21840 MW-6S	Total/NA	Water	PrecSep_0	
400-177218-5	AZ21841 MW-6S DUP	Total/NA	Water	PrecSep_0	
400-177218-6	AZ21842 MW-23H	Total/NA	Water	PrecSep_0	
400-177218-7	AZ21843 MW-17V	Total/NA	Water	PrecSep_0	
400-177218-8	AZ21844 MW-16D	Total/NA	Water	PrecSep_0	
400-177218-9	AZ21845 MW-19	Total/NA	Water	PrecSep_0	
400-177218-10	AZ21846 MW-19 DUP	Total/NA	Water	PrecSep_0	
400-177218-11	AZ21847 FB-1	Total/NA	Water	PrecSep_0	
400-177218-12	AZ21848 MW-24H	Total/NA	Water	PrecSep_0	
400-177218-13	AZ21849 MW-2	Total/NA	Water	PrecSep_0	
400-177218-14	AZ21850 MW-12V	Total/NA	Water	PrecSep_0	
400-177218-15	AZ21851 MW-17	Total/NA	Water	PrecSep_0	
400-177218-16	AZ21852 MW-15	Total/NA	Water	PrecSep_0	
400-177218-17	AZ21853 MW-21	Total/NA	Water	PrecSep_0	
400-177218-18	AZ21854 MW-29H	Total/NA	Water	PrecSep_0	
400-177218-19	AZ21855 MW-7	Total/NA	Water	PrecSep_0	
MB 160-445188/22-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-445188/1-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
400-177218-6 DU	AZ21842 MW-23H	Total/NA	Water	PrecSep_0	

### Prep Batch: 445193

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-177218-20	AZ21856 MW-7 DIS	Dissolved	Water	PrecSep-21	

# QC Association Summary

Client: Alabama Power General Test Laboratory  
 Project/Site: CCR Plant Gorgas

Job ID: 400-177218-1  
 SDG: Gorgas Ash Pond 1241

## Rad (Continued)

### Prep Batch: 445193 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-177218-21	AZ21857 MW-12	Total/NA	Water	PrecSep-21	
400-177218-22	AZ21858 EB-1	Total/NA	Water	PrecSep-21	
400-177218-23	AZ21859 MW-26H	Total/NA	Water	PrecSep-21	
400-177218-24	AZ21860 MW-26H DIS	Dissolved	Water	PrecSep-21	
400-177218-25	AZ21861 MW-18	Total/NA	Water	PrecSep-21	
400-177218-26	AZ21862 MW-8	Total/NA	Water	PrecSep-21	
MB 160-445193/22-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-445193/1-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
240-119817-B-5-A MS	Matrix Spike	Total/NA	Water	PrecSep-21	
240-119817-B-5-B MSD	Matrix Spike Duplicate	Total/NA	Water	PrecSep-21	
400-177218-25 DU	AZ21861 MW-18	Total/NA	Water	PrecSep-21	

### Prep Batch: 445201

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-177218-20	AZ21856 MW-7 DIS	Dissolved	Water	PrecSep_0	
400-177218-21	AZ21857 MW-12	Total/NA	Water	PrecSep_0	
400-177218-22	AZ21858 EB-1	Total/NA	Water	PrecSep_0	
400-177218-23	AZ21859 MW-26H	Total/NA	Water	PrecSep_0	
400-177218-24	AZ21860 MW-26H DIS	Dissolved	Water	PrecSep_0	
400-177218-25	AZ21861 MW-18	Total/NA	Water	PrecSep_0	
400-177218-26	AZ21862 MW-8	Total/NA	Water	PrecSep_0	
MB 160-445201/22-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-445201/1-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
240-119817-B-5-C MS	Matrix Spike	Total/NA	Water	PrecSep_0	
240-119817-B-5-D MSD	Matrix Spike Duplicate	Total/NA	Water	PrecSep_0	
400-177218-25 DU	AZ21861 MW-18	Total/NA	Water	PrecSep_0	

# QC Sample Results

Client: Alabama Power General Test Laboratory  
 Project/Site: CCR Plant Gorgas

Job ID: 400-177218-1  
 SDG: Gorgas Ash Pond 1241

## Method: 9315 - Radium-226 (GFPC)

**Lab Sample ID: MB 160-445182/22-A**  
**Matrix: Water**  
**Analysis Batch: 447982**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 445182**

Analyte	MB MB		Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.1781	U	0.125	0.126	1.00	0.183	pCi/L	10/04/19 12:59	10/28/19 13:36	1
Carrier	MB MB		Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	%Yield	Qualifier	40 - 110					10/04/19 12:59	10/28/19 13:36	1
	88.4									

**Lab Sample ID: LCS 160-445182/1-A**  
**Matrix: Water**  
**Analysis Batch: 447982**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 445182**

Analyte	Spike Added	LCS Result	LCS Qual	Total	RL	MDC	Unit	%Rec	%Rec. Limits
				Uncert. (2σ+/-)					
Radium-226	15.1	12.28		1.30	1.00	0.175	pCi/L	81	75 - 125
Carrier	LCS %Yield	LCS Qualifier	Limits						
Ba Carrier	97.2		40 - 110						

**Lab Sample ID: 400-177218-6 DU**  
**Matrix: Water**  
**Analysis Batch: 447982**

**Client Sample ID: AZ21842 MW-23H**  
**Prep Type: Total/NA**  
**Prep Batch: 445182**

Analyte	Sample Sample		DU	DU	Total	RL	MDC	Unit	RER	RER Limit
	Result	Qual	Result	Qual	Uncert. (2σ+/-)					
Radium-226	0.104	U	0.2998		0.136	1.00	0.160	pCi/L	0.84	1
Carrier	DU %Yield	DU Qualifier	Limits							
Ba Carrier	91.5		40 - 110							

**Lab Sample ID: MB 160-445193/22-A**  
**Matrix: Water**  
**Analysis Batch: 447982**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 445193**

Analyte	MB MB		Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.1487	U	0.104	0.105	1.00	0.149	pCi/L	10/04/19 14:45	10/28/19 11:09	1
Carrier	MB MB		Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	%Yield	Qualifier	40 - 110					10/04/19 14:45	10/28/19 11:09	1
	86.7									

**Lab Sample ID: LCS 160-445193/1-A**  
**Matrix: Water**  
**Analysis Batch: 447982**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 445193**

Analyte	Spike Added	LCS Result	LCS Qual	Total	RL	MDC	Unit	%Rec	%Rec. Limits
				Uncert. (2σ+/-)					
Radium-226	11.4	11.65		1.25	1.00	0.190	pCi/L	103	75 - 125

# QC Sample Results

Client: Alabama Power General Test Laboratory  
 Project/Site: CCR Plant Gorgas

Job ID: 400-177218-1  
 SDG: Gorgas Ash Pond 1241

## Method: 9315 - Radium-226 (GFPC) (Continued)

**Lab Sample ID: LCS 160-445193/1-A**  
**Matrix: Water**  
**Analysis Batch: 447982**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 445193**

	LCS	LCS	
Carrier	%Yield	Qualifier	Limits
Ba Carrier	79.7		40 - 110

**Lab Sample ID: 240-119817-B-5-A MS**  
**Matrix: Water**  
**Analysis Batch: 447982**

**Client Sample ID: Matrix Spike**  
**Prep Type: Total/NA**  
**Prep Batch: 445193**

Analyte	Sample Result	Sample Qual	Spike Added	MS Result	MS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
												RER	Limit
Radium-226	0.174		11.3	11.64		1.25	1.00	0.171	pCi/L	101	75 - 138		

	MS	MS	
Carrier	%Yield	Qualifier	Limits
Ba Carrier	81.4		40 - 110

**Lab Sample ID: 240-119817-B-5-B MSD**  
**Matrix: Water**  
**Analysis Batch: 448065**

**Client Sample ID: Matrix Spike Duplicate**  
**Prep Type: Total/NA**  
**Prep Batch: 445193**

Analyte	Sample Result	Sample Qual	Spike Added	MSD Result	MSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits	RER	RER Limit

	MSD	MSD	
Carrier	%Yield	Qualifier	Limits
Ba Carrier	73.4		40 - 110

**Lab Sample ID: 400-177218-25 DU**  
**Matrix: Water**  
**Analysis Batch: 447982**

**Client Sample ID: AZ21861 MW-18**  
**Prep Type: Total/NA**  
**Prep Batch: 445193**

Analyte	Sample Result	Sample Qual	DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	RER	RER Limit

	DU	DU	
Carrier	%Yield	Qualifier	Limits
Ba Carrier	84.5		40 - 110

## Method: 9320 - Radium-228 (GFPC)

**Lab Sample ID: MB 160-445188/22-A**  
**Matrix: Water**  
**Analysis Batch: 446862**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 445188**

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac

	MB	MB	
Carrier	%Yield	Qualifier	Limits
Ba Carrier	88.4		40 - 110

	Prepared	Analyzed	Dil Fac
	10/04/19 13:40	10/18/19 13:51	1

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# QC Sample Results

Client: Alabama Power General Test Laboratory  
 Project/Site: CCR Plant Gorgas

Job ID: 400-177218-1  
 SDG: Gorgas Ash Pond 1241

## Method: 9320 - Radium-228 (GFPC) (Continued)

**Lab Sample ID: MB 160-445188/22-A**  
**Matrix: Water**  
**Analysis Batch: 446862**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 445188**

Carrier	MB %Yield	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Y Carrier	66.9		40 - 110	10/04/19 13:40	10/18/19 13:51	1

**Lab Sample ID: LCS 160-445188/1-A**  
**Matrix: Water**  
**Analysis Batch: 446867**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 445188**

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits
Radium-228	12.6	14.03		1.61	1.00	0.584	pCi/L	111	75 - 125

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	97.2		40 - 110
Y Carrier	71.4		40 - 110

**Lab Sample ID: 400-177218-6 DU**  
**Matrix: Water**  
**Analysis Batch: 446867**

**Client Sample ID: AZ21842 MW-23H**  
**Prep Type: Total/NA**  
**Prep Batch: 445188**

Analyte	Sample Result	Sample Qual	DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	RER	RER Limit
Radium-228	-0.0966	U	0.0000	U	0.285	1.00	0.514	pCi/L	0.16	1

Carrier	DU %Yield	DU Qualifier	Limits
Ba Carrier	91.5		40 - 110
Y Carrier	74.8		40 - 110

**Lab Sample ID: MB 160-445201/22-A**  
**Matrix: Water**  
**Analysis Batch: 447135**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 445201**

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.3107	U	0.308	0.309	1.00	0.500	pCi/L	10/04/19 15:30	10/22/19 13:16	1

Carrier	MB %Yield	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	86.7		40 - 110	10/04/19 15:30	10/22/19 13:16	1
Y Carrier	75.9		40 - 110	10/04/19 15:30	10/22/19 13:16	1

**Lab Sample ID: LCS 160-445201/1-A**  
**Matrix: Water**  
**Analysis Batch: 447241**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 445201**

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits
Radium-228	9.47	10.29		1.25	1.00	0.546	pCi/L	109	75 - 125



# QC Sample Results

Client: Alabama Power General Test Laboratory  
 Project/Site: CCR Plant Gorgas

Job ID: 400-177218-1  
 SDG: Gorgas Ash Pond 1241

## Method: 9320 - Radium-228 (GFPC) (Continued)

**Lab Sample ID: LCS 160-445201/1-A**  
**Matrix: Water**  
**Analysis Batch: 447241**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 445201**

Carrier	LCS LCS		Limits
	%Yield	Qualifier	
Ba Carrier	79.7		40 - 110
Y Carrier	77.4		40 - 110

**Lab Sample ID: 240-119817-B-5-C MS**  
**Matrix: Water**  
**Analysis Batch: 447135**

**Client Sample ID: Matrix Spike**  
**Prep Type: Total/NA**  
**Prep Batch: 445201**

Analyte	Sample Result	Sample Qual	Spike Added	MS Result	MS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
												RER	Limit
Radium-228	-0.111	U	9.47	10.56		1.36	1.00	0.691	pCi/L	112	45 - 150		

Carrier	MS MS		Limits
	%Yield	Qualifier	
Ba Carrier	81.4		40 - 110
Y Carrier	60.6		40 - 110

**Lab Sample ID: 240-119817-B-5-D MSD**  
**Matrix: Water**  
**Analysis Batch: 447135**

**Client Sample ID: Matrix Spike Duplicate**  
**Prep Type: Total/NA**  
**Prep Batch: 445201**

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	-0.111	U	9.46	12.05		1.42	1.00	0.585	pCi/L	127	45 - 150	0.54	1

Carrier	MSD MSD		Limits
	%Yield	Qualifier	
Ba Carrier	73.4		40 - 110
Y Carrier	85.6		40 - 110

**Lab Sample ID: 400-177218-25 DU**  
**Matrix: Water**  
**Analysis Batch: 447241**

**Client Sample ID: AZ21861 MW-18**  
**Prep Type: Total/NA**  
**Prep Batch: 445201**

Analyte	Sample Result	Sample Qual	DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	RER	RER	Limit

Carrier	DU DU		Limits
	%Yield	Qualifier	
Ba Carrier	84.5		40 - 110
Y Carrier	80.0		40 - 110

# QC Sample Results

Client: Alabama Power General Test Laboratory  
 Project/Site: CCR Plant Gorgas

Job ID: 400-177218-1  
 SDG: Gorgas Ash Pond 1241

## Method: Ra226\_Ra228 - Combined Radium-226 and Radium-228

**Lab Sample ID: 400-177218-6 DU**  
**Matrix: Water**  
**Analysis Batch: 448326**

**Client Sample ID: AZ21842 MW-23H**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qual	DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	RER	RER Limit
Combined Radium 226 + 228	0.00709	U	0.2998	U	0.316	5.00	0.514	pCi/L	0.45	

**Lab Sample ID: 400-177218-25 DU**  
**Matrix: Water**  
**Analysis Batch: 448326**

**Client Sample ID: AZ21861 MW-18**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qual	DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	RER	RER Limit
Combined Radium 226 + 228	0.375	U	0.4129	U	0.401	5.00	0.639	pCi/L	0.05	

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**TestAmerica Pensacola**

3355 McLemore Drive  
Pensacola, FL 32514  
Phone (850) 474-1001 Fax (850) 478-2671

**Chain of Custody Record**



THE LEADER IN ENVIRONMENTAL TESTING



400-177218 COC

<b>Client Information (Sub Contract Lab)</b> Client Contact: Nick Pitts Laura Mickif Company: Alabama Power General Test Laboratory Address: 744 County Rd 87 SSC#8 City: Calera State, Zip: AL, 35040 Phone: 205-664-6197 Email: lbmickif@southernco.com Project Name: 40007143 CCR Site: Gorgas Ash Pond 1241		Lab PM: Whitmore, Cheyenne R E-Mail: cheyenne.whitmore@testamerica.com State of Origin: Alabama Accreditation: (See note)		Carrier Tracking Note: COC No: 400-56525-24537.1 Page: Page 1 of 4 Job #:	
<b>Due Date Requested:</b> TAT Requested (days): Routine PO #: WO #: Project #: 40007143 SSOW#:		<b>Analysis Requested</b> 9315_Ra226, 9320_Ra228, Ra226Ra228_CFPc SM 4500 F.C SM 4500 CLF SM 4500 SO4_E			
<b>Sample Identification - Client ID (Lab ID)</b> AZ21837 AZ21838		Matrix (Water, Groundwater, Surface Water, Wastewater, Other)		Preservation Code G G	
Sample Type (C=Comp, G=Grab) Sample Date 9/25/19 9/25/19		Field Filtered Sample (Yes or No) Perform MS/MSD (Yes or No)		Total Number of Containers 1 MW-28H 1 FB-2 (Field Blank)	
Special Instructions/Note:					
Preservation Codes: M - Hexane N - Nona O - Octane P - N2SO3 Q - Nitric Acid R - NaHSO4 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH-5 X - EDA Z - other (specify)					

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance items 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/test/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  
 Deliverable Requested: I, II, III, IV, Other (specify) 43589 Special Instructions/COC Requirements

Relinquished by: Laura Mickif Date/Time: 09/27/19 8:00 Company: APC	Received by: [Signature] Date/Time: 9/30/19 13:50 Company: [Signature]
Relinquished by: [Signature] Date/Time: [Signature]	Received by: [Signature] Date/Time: [Signature]
Custody Seals Intact: [Signature] Custody Seal No.: [Signature]	

Cooler Temperature(s): 29.2°C, 29.2°C  
 Other Remarks: 30.2°C, 29.2°C  
 Date: 09/20/2016



**Chain of Custody Record**

Client Information (Sub Contract Lab)		Sampler		Lab PM		Carrier Tracking Notes		COC No.	
Alabama Power General Test Laboratory		Dallas Gentry		Whitniré, Cheyenne R		Alabama		400-56525-24537.1	
744 County Rd 87 SSC#8		Phone:		E-Mail		State of Origin		Page	
City: Calera		Phone:		Cheyenne.whitniré@testamericainc.com		Alabama		Page 2 of 4	
State: AL		PO #		WO #		Accreditations Required (See note)		Job #	
Zip: AL 35040		Project #		40007143					
Phone: 205-664-6197		SSOV#							
Email: lmidikt@southernco.com		Site:		Gorgas Ash Pond 1241					
Project Name: CCR		Due Date Requested:							
Site: Gorgas Ash Pond 1241		FAT Requested (days):		Routine					

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Preservation Code	Field Filtered Sample (Yes or No)	Form MS/MSD (Yes or No)	SM 4500 F.C	SM 4500 CL E	SM 4500 SO4 E	9315 Ra226, 9320 Ra228, Ra226Ra228, CFPc	Analysis Requested		Special Instructions/Note:
											Total Number of Containers	Other:	
AZZ1839	9/23/19	13:31	G	Water						X		1 MW-6D	
AZZ1840	9/23/19	14:41	G	Water						X		1 MW-6S	
AZZ1841	9/23/19	14:41	G	Water						X		1 MW-6S DUP (Sample Duplicate)	
AZZ1842	9/23/19	16:14	G	Water	X					X		3 MW-23H	
AZZ1843	9/24/19	11:50	G	Water						X		1 MW-17V	
AZZ1844	9/24/19	14:00	G	Water						X		1 MW-16D	
AZZ1845	9/24/19	15:50	G	Water						X		1 MW-19	
AZZ1846	9/24/19	15:50	G	Water						X		1 MW-19 DUP (Samples Duplicate)	
AZZ1847	9/24/19	16:50	G	Water						X		1 FB-1 (Field Blank)	
AZZ1848	9/24/19	18:23	G	Water						X		1 MW-24H	
AZZ1849	9/25/19	09:27	G	Water						X		1 MW-2	
AZZ1850	9/25/19	13:32	G	Water						X		1 MW-12V	

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte, & accreditation compliance upon our subcontract laboratories. If the laboratory files not currently maintain accreditation in the State of Origin listed above for analysis/test/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  
 Deliverable Requested: I, II, III, IV, Other (specify)

**Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)**  
 Return To Client  Disposal By Lab  Archive For \_\_\_\_\_ Months  
 43593 Special Instructions/OC Requirements

Empty Kit Relinquished by:	Date	Time	Method of Shipment	Company
Relinquished by: Laura Wight	Date/Time: 09/27/19 8:00		Water	Company
Relinquished by:	Date/Time:		A-P-C	Company
Relinquished by:	Date/Time:		Company	Company
Relinquished by:	Date/Time:		Company	Company

Custody Seals Intact: Custody Seal No.:  
 Cooler Temperature(s) °C and Other Remarks:  
 Ver: 10/20/2016



Chain of Custody Record

<b>Client Information (Sub Contract Lab)</b> Client Contact: Laura Midkiff Company: Alabama Power General Test Laboratory Address: 744 County Rd 87 GSC#8 City: Calera State/Zip: AL, 35040 Phone: 205-664-6197 Email: lmidkiff@southernco.com Project Name: CCR SSO#: Site: Gorgas Ash Pond 1241		<b>Sampler:</b> Anthony Goggins Lab PM: Whitmore, Chyenne R Phone: Chyenne Whitmore@tstamerica.com State of Origin: Alabama Accreditations Required (See Note)		COC No: 400-56525-24537.1 Page: Page 3 of 4 Job #:	
<b>Due Date Requested:</b> TAT Requested (days): Routine PO #: 40007143 WO #: 40007143 Project #: 40007143 SSO#: Site: Gorgas Ash Pond 1241		<b>Analysis Requested</b> Perform MS/MSD (Yes or No) <input checked="" type="checkbox"/> Field Filtered Sample (Yes or No) <input checked="" type="checkbox"/> Total Number of Containers <input checked="" type="checkbox"/>			
<b>Sample Identification - Client ID (Lab ID)</b>		<b>Special Instructions/Note:</b>			
AZ21851	9/23/19	14:21	G	Water	MW-17
AZ21852	9/24/19	08:00	G	Water	MW-15
AZ21853	9/24/19	10:28	G	Water	MW-21
AZ21854	9/24/19	13:18	G	Water	MW-29H
AZ21855	9/24/19	17:45	G	Water	MW-7
AZ21856	9/24/19	17:45	G	Water	MW-7 DIS
AZ21857	9/25/19	10:02	G	Water	MW-12
AZ21858	9/25/19	11:20	G	Water	EB-1 (Equipment Blank)
SM 4500 F.C SM 4500 C.E SM 4500 S.O4.E 9315_Ra228_9320_Ra228_Ra228Ra228_GFPc		Preservation Codes: A - HCl M - Herane B - NaOH N - NaOH C - Zp Acetate O - AsH2O2 P - Na2CO3 D - Nitric Acid Q - Na2SO3 E - NaHSO4 R - Na2S2O3 F - MeOH G - Amchlor H - Ascorbic Acid I - Ice J - Water K - EDTA L - EDA W - pH 4.5 Z - other (specify)			
Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analysis & accreditation compliance upon our 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/test/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.					
<b>Possible Hazard Identification</b> Unconfirmed Deliverable Requested: I, III, IV, Other (specify)					
Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months					
43559 Special Instructions/OC Requirements					
<b>Empty Kit Relinquished By:</b> Laura Midkiff Relinquished by:		Date/Time: 09/27/19 8:00 Date/Time:		Method of Shipment: UPS Date/Time: 9/30/19 1:30 PM Company:	
Relinquished by:		Date/Time:		Company:	
Relinquished by:		Date/Time:		Company:	
Custody Seals Intact: Custody Seal No.:					



Chain of Custody Record

<b>Client Information (Sub Contract Lab)</b> Client Contact: Laura Miedki Company: Alabama Power General Test Laboratory Address: 744 County Rd 87 GSC#8 City: Callera State, Zip: AL, 35040 Phone: 205-664-6197 Email: lmidki@alpower.com Project Name: 40007143 CCR Site: Gorgas Ash Pond 1241		Lab PM: Whitmire, Chyenne R E-Mail: chyenne.whitmire@testamericainc.com State of Origin: Alabama Accreditation: Required (See note)		Carrier Tracking No(s): 400-56525-24537.1 Page: Page 4 of 4 Job #:							
Due Date Requested: TAT Requested (days): Routine PO #: WO #: Project #: SSOV#		Analysis Requested 9315_Ra228_9202_Ra228_Ra228a228_GFPc SM 4500 SO4 E SM 4500 Cl E SM 4500 F C Field Filtered Sample (Yes or No) <input checked="" type="checkbox"/> Field Filtered MS/MSD (Yes or No) <input checked="" type="checkbox"/> Total Number of Containers <input checked="" type="checkbox"/>									
Sample Identification - Client ID (Lab ID) AZ21859 AZ21860 AZ21861 AZ21862		Sample Date 9/23/19 9/23/19 9/24/19 9/24/19		Sample Type (C=Comp, G=grab) G G G G		Matrix (Water, Overstabil, BTA-Tissue, ACh) Water Water Water Water		Preservation Code MW-26H MW-26H DIS MW-18 MW-8		Special Instructions/Note: MW-26H MW-26H DIS MW-18 MW-8	
Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, matrix & accreditation compliance upon our 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/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 Deliverable Requested: I, III, IV, Other (specify) 43588 Special Instructions/OC Requirements											
Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months											
Empty Kit Relinquished by: Relinquished by: Laura Miedki Date/Time: 09/27/19 8:50 Method of Shipment: Water APC Received by: [Signature] Date/Time: 09/30/19 1350 Company: [Signature] Company Relinquished by: Relinquished by: Date/Time: Date/Time: Company: Company Custody Seals Intact: Custody Seal No.: Cooler Temperature(s) °C and Other Remarks: 29.2° C/AH Ver: 09/20/2016											



## Login Sample Receipt Checklist

Client: Alabama Power General Test Laboratory

Job Number: 400-177218-1  
SDG Number: Gorgas Ash Pond 1241

**Login Number: 177218**

**List Number: 1**

**Creator: Perez, Trina M**

**List Source: Eurofins TestAmerica, Pensacola**

Question	Answer	Comment
Radioactivity wasn't checked or is <math>\leq</math> 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	30.2°C, 29.2°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 <math><6\text{mm}</math> (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: 400-177218-1  
SDG Number: Gorgas Ash Pond 1241

**Login Number: 177218**

**List Number: 2**

**Creator: Hellm, Michael**

**List Source: Eurofins TestAmerica, St. Louis**

**List Creation: 10/03/19 10:08 AM**

Question	Answer	Comment
Radioactivity wasn't checked or is <math>\leq</math> 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	19.0
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?	N/A	
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 <math><6\text{mm}</math> (1/4").	N/A	
Multiphasic samples are not present.	N/A	
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: 400-177218-1  
 SDG: Gorgas Ash Pond 1241

## 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	02-22-20
Arizona	State	AZ0710	01-12-20
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
Iowa	State	367	08-01-20
Iowa	State Program	367	08-01-20
Kansas	NELAP	E-10253	08-16-20
Kentucky (UST)	State	53	06-30-20
Kentucky (UST)	State Program	53	06-30-20
Kentucky (WW)	State	KY98030	12-30-19
Louisiana	NELAP	30976	06-30-20
Louisiana	NELAP	30976	06-30-20
Louisiana (DW)	NELAP	LA017	12-31-19
Louisiana (DW)	State	<cert No.>	12-31-19
Maryland	State	233	09-30-20
Massachusetts	State	M-FL094	06-30-20
Michigan	State	9912	05-06-20
Minnesota	NELAP	012-999-481	12-31-19
New Jersey	NELAP	FL006	07-30-20
North Carolina (WW/SW)	State	314	12-31-19
North Carolina (WW/SW)	State Program	314	12-31-19
Oklahoma	State	9810-186	08-31-20
Pennsylvania	NELAP	68-00467	01-31-20
Rhode Island	State	LAO00307	12-30-19
Rhode Island	State Program	LAO00307	12-30-19
South Carolina	State	96026002	06-30-20
South Carolina	State Program	96026	06-30-20
Tennessee	State	TN02907	06-30-20
Texas	NELAP	T104704286	09-30-20
US Fish & Wildlife	Federal	LE058448-0	07-31-20
US Fish & Wildlife	US Federal Programs	LE058448	06-07-20
USDA	Federal	P330-18-00148	05-17-21
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: 400-177218-1  
 SDG: Gorgas Ash Pond 1241

## 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	12-08-19
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	11-30-19
Iowa	State	373	09-17-20
Iowa	State Program	373	12-01-20
Kansas	NELAP	E-10236	10-31-19 *
Kentucky (DW)	State	KY90125	12-31-19
Louisiana	NELAP	04080	06-30-20
Louisiana (DW)	State	LA011	12-31-19
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	04-01-20
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	02-28-20
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	02-02-20
Utah	NELAP	MO000542019-11	07-31-20
Virginia	NELAP	10310	06-14-20
Washington	State	C592	08-30-20
Washington	State Program	C592	08-30-20
West Virginia DEP	State	381	10-31-19
West Virginia DEP	State Program	381	10-31-19 *

\* Accreditation/Certification renewal pending - accreditation/certification considered valid.



**Alabama Power Company  
Plant Gorgas Ash Pond**

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-8	9/24/2019 17:08	Conductivity	110.29	uS/cm
GS-AP-MW-8	9/24/2019 17:08	DO	2.53	mg/L
GS-AP-MW-8	9/24/2019 17:08	Depth to Water Detail	47.72	ft
GS-AP-MW-8	9/24/2019 17:08	Oxidation Reduction Potention	22.12	mv
GS-AP-MW-8	9/24/2019 17:08	pH	5.62	pH
GS-AP-MW-8	9/24/2019 17:08	Temperature	20.21	C
GS-AP-MW-8	9/24/2019 17:08	Turbidity	20.3	NTU
GS-AP-MW-8	9/24/2019 17:13	Conductivity	109.01	uS/cm
GS-AP-MW-8	9/24/2019 17:13	DO	2.57	mg/L
GS-AP-MW-8	9/24/2019 17:13	Depth to Water Detail	48.08	ft
GS-AP-MW-8	9/24/2019 17:13	Oxidation Reduction Potention	50.76	mv
GS-AP-MW-8	9/24/2019 17:13	pH	5.36	pH
GS-AP-MW-8	9/24/2019 17:13	Temperature	19.92	C
GS-AP-MW-8	9/24/2019 17:13	Turbidity	27.3	NTU
GS-AP-MW-8	9/24/2019 17:18	Conductivity	109.21	uS/cm
GS-AP-MW-8	9/24/2019 17:18	DO	2.51	mg/L
GS-AP-MW-8	9/24/2019 17:18	Depth to Water Detail	48.33	ft
GS-AP-MW-8	9/24/2019 17:18	Oxidation Reduction Potention	69.13	mv
GS-AP-MW-8	9/24/2019 17:18	pH	5.21	pH
GS-AP-MW-8	9/24/2019 17:18	Temperature	20.04	C
GS-AP-MW-8	9/24/2019 17:18	Turbidity	18.6	NTU
GS-AP-MW-8	9/24/2019 17:23	Conductivity	107.61	uS/cm
GS-AP-MW-8	9/24/2019 17:23	DO	2.47	mg/L
GS-AP-MW-8	9/24/2019 17:23	Depth to Water Detail	48.51	ft
GS-AP-MW-8	9/24/2019 17:23	Oxidation Reduction Potention	77.97	mv
GS-AP-MW-8	9/24/2019 17:23	pH	5.15	pH
GS-AP-MW-8	9/24/2019 17:23	Temperature	19.84	C
GS-AP-MW-8	9/24/2019 17:23	Turbidity	12.2	NTU
GS-AP-MW-8	9/24/2019 17:28	Conductivity	106.82	uS/cm
GS-AP-MW-8	9/24/2019 17:28	DO	2.41	mg/L
GS-AP-MW-8	9/24/2019 17:28	Depth to Water Detail	48.7	ft
GS-AP-MW-8	9/24/2019 17:28	Oxidation Reduction Potention	83.08	mv
GS-AP-MW-8	9/24/2019 17:28	pH	5.14	pH
GS-AP-MW-8	9/24/2019 17:28	Temperature	19.84	C
GS-AP-MW-8	9/24/2019 17:28	Turbidity	10.21	NTU
GS-AP-MW-8	9/24/2019 17:33	Conductivity	107.87	uS/cm
GS-AP-MW-8	9/24/2019 17:33	DO	2.27	mg/L
GS-AP-MW-8	9/24/2019 17:33	Depth to Water Detail	48.91	ft
GS-AP-MW-8	9/24/2019 17:33	Oxidation Reduction Potention	85.97	mv
GS-AP-MW-8	9/24/2019 17:33	pH	5.15	pH
GS-AP-MW-8	9/24/2019 17:33	Temperature	20.03	C
GS-AP-MW-8	9/24/2019 17:33	Turbidity	8.73	NTU
GS-AP-MW-8	9/24/2019 17:38	Conductivity	111.03	uS/cm
GS-AP-MW-8	9/24/2019 17:38	DO	2.01	mg/L
GS-AP-MW-8	9/24/2019 17:38	Depth to Water Detail	49.12	ft
GS-AP-MW-8	9/24/2019 17:38	Oxidation Reduction Potention	87.39	mv

**Alabama Power Company  
Plant Gorgas Ash Pond**

<b>WELL ID</b>	<b>READING TIME</b>	<b>DESCRIPTION</b>	<b>VALUE</b>	<b>UNIT</b>
GS-AP-MW-8	9/24/2019 17:38	pH	5.19	pH
GS-AP-MW-8	9/24/2019 17:38	Temperature	19.89	C
GS-AP-MW-8	9/24/2019 17:38	Turbidity	4.57	NTU
GS-AP-MW-8	9/24/2019 17:43	Conductivity	118.51	uS/cm
GS-AP-MW-8	9/24/2019 17:43	DO	1.69	mg/L
GS-AP-MW-8	9/24/2019 17:43	Depth to Water Detail	49.25	ft
GS-AP-MW-8	9/24/2019 17:43	Oxidation Reduction Potention	87.4	mv
GS-AP-MW-8	9/24/2019 17:43	pH	5.22	pH
GS-AP-MW-8	9/24/2019 17:43	Temperature	20.05	C
GS-AP-MW-8	9/24/2019 17:43	Turbidity	2.89	NTU
GS-AP-MW-8	9/24/2019 17:48	Conductivity	122.5	uS/cm
GS-AP-MW-8	9/24/2019 17:48	DO	1.59	mg/L
GS-AP-MW-8	9/24/2019 17:48	Depth to Water Detail	49.4	ft
GS-AP-MW-8	9/24/2019 17:48	Oxidation Reduction Potention	86.59	mv
GS-AP-MW-8	9/24/2019 17:48	pH	5.25	pH
GS-AP-MW-8	9/24/2019 17:48	Temperature	19.88	C
GS-AP-MW-8	9/24/2019 17:48	Turbidity	2.97	NTU
GS-AP-MW-8	9/24/2019 17:53	Conductivity	123.84	uS/cm
GS-AP-MW-8	9/24/2019 17:53	DO	1.57	mg/L
GS-AP-MW-8	9/24/2019 17:53	Depth to Water Detail	49.54	ft
GS-AP-MW-8	9/24/2019 17:53	Oxidation Reduction Potention	86.37	mv
GS-AP-MW-8	9/24/2019 17:53	pH	5.26	pH
GS-AP-MW-8	9/24/2019 17:53	Temperature	19.65	C
GS-AP-MW-8	9/24/2019 17:53	Turbidity	2.91	NTU
GS-AP-MW-8	9/24/2019 17:58	Conductivity	125.57	uS/cm
GS-AP-MW-8	9/24/2019 17:58	DO	1.54	mg/L
GS-AP-MW-8	9/24/2019 17:58	Depth to Water Detail	49.69	ft
GS-AP-MW-8	9/24/2019 17:58	Oxidation Reduction Potention	86.36	mv
GS-AP-MW-8	9/24/2019 17:58	pH	5.27	pH
GS-AP-MW-8	9/24/2019 17:58	Temperature	19.6	C
GS-AP-MW-8	9/24/2019 17:58	Turbidity	2.89	NTU

**Alabama Power Company  
Plant Gorgas Ash Pond**

<b>WELL ID</b>	<b>READING TIME</b>	<b>DESCRIPTION</b>	<b>VALUE</b>	<b>UNIT</b>
GS-AP-MW-18	9/24/2019 11:02	Conductivity	571.97	uS/cm
GS-AP-MW-18	9/24/2019 11:02	DO	0.12	mg/L
GS-AP-MW-18	9/24/2019 11:02	Depth to Water Detail	56.74	ft
GS-AP-MW-18	9/24/2019 11:02	Oxidation Reduction Potention	63.15	mv
GS-AP-MW-18	9/24/2019 11:02	pH	7.34	pH
GS-AP-MW-18	9/24/2019 11:02	Temperature	17.39	C
GS-AP-MW-18	9/24/2019 11:02	Turbidity	2.13	NTU
GS-AP-MW-18	9/24/2019 11:07	Conductivity	569.38	uS/cm
GS-AP-MW-18	9/24/2019 11:07	DO	0.11	mg/L
GS-AP-MW-18	9/24/2019 11:07	Depth to Water Detail	58.22	ft
GS-AP-MW-18	9/24/2019 11:07	Oxidation Reduction Potention	55.77	mv
GS-AP-MW-18	9/24/2019 11:07	pH	7.37	pH
GS-AP-MW-18	9/24/2019 11:07	Temperature	17.58	C
GS-AP-MW-18	9/24/2019 11:07	Turbidity	19.3	NTU
GS-AP-MW-18	9/24/2019 11:12	Conductivity	568.9	uS/cm
GS-AP-MW-18	9/24/2019 11:12	DO	0.12	mg/L
GS-AP-MW-18	9/24/2019 11:12	Depth to Water Detail	58.53	ft
GS-AP-MW-18	9/24/2019 11:12	Oxidation Reduction Potention	53.11	mv
GS-AP-MW-18	9/24/2019 11:12	pH	7.35	pH
GS-AP-MW-18	9/24/2019 11:12	Temperature	17.64	C
GS-AP-MW-18	9/24/2019 11:12	Turbidity	20	NTU
GS-AP-MW-18	9/24/2019 11:17	Conductivity	569.16	uS/cm
GS-AP-MW-18	9/24/2019 11:17	DO	0.12	mg/L
GS-AP-MW-18	9/24/2019 11:17	Depth to Water Detail	58.34	ft
GS-AP-MW-18	9/24/2019 11:17	Oxidation Reduction Potention	49.88	mv
GS-AP-MW-18	9/24/2019 11:17	pH	7.35	pH
GS-AP-MW-18	9/24/2019 11:17	Temperature	17.58	C
GS-AP-MW-18	9/24/2019 11:17	Turbidity	20.08	NTU
GS-AP-MW-18	9/24/2019 11:22	Conductivity	567.32	uS/cm
GS-AP-MW-18	9/24/2019 11:22	DO	0.12	mg/L
GS-AP-MW-18	9/24/2019 11:22	Depth to Water Detail	58.76	ft
GS-AP-MW-18	9/24/2019 11:22	Oxidation Reduction Potention	43.04	mv
GS-AP-MW-18	9/24/2019 11:22	pH	7.41	pH
GS-AP-MW-18	9/24/2019 11:22	Temperature	17.64	C
GS-AP-MW-18	9/24/2019 11:22	Turbidity	23	NTU
GS-AP-MW-18	9/24/2019 11:27	Conductivity	569.84	uS/cm
GS-AP-MW-18	9/24/2019 11:27	DO	0.12	mg/L
GS-AP-MW-18	9/24/2019 11:27	Depth to Water Detail	58.83	ft
GS-AP-MW-18	9/24/2019 11:27	Oxidation Reduction Potention	36.95	mv
GS-AP-MW-18	9/24/2019 11:27	pH	7.45	pH
GS-AP-MW-18	9/24/2019 11:27	Temperature	17.6	C
GS-AP-MW-18	9/24/2019 11:27	Turbidity	12.8	NTU
GS-AP-MW-18	9/24/2019 11:32	Conductivity	569.35	uS/cm
GS-AP-MW-18	9/24/2019 11:32	DO	0.12	mg/L
GS-AP-MW-18	9/24/2019 11:32	Depth to Water Detail	58.91	ft
GS-AP-MW-18	9/24/2019 11:32	Oxidation Reduction Potention	30.99	mv

**Alabama Power Company  
Plant Gorgas Ash Pond**

<b>WELL ID</b>	<b>READING TIME</b>	<b>DESCRIPTION</b>	<b>VALUE</b>	<b>UNIT</b>
GS-AP-MW-18	9/24/2019 11:32	pH	7.49	pH
GS-AP-MW-18	9/24/2019 11:32	Temperature	17.63	C
GS-AP-MW-18	9/24/2019 11:32	Turbidity	12.9	NTU
GS-AP-MW-18	9/24/2019 11:37	Conductivity	569.46	uS/cm
GS-AP-MW-18	9/24/2019 11:37	DO	0.11	mg/L
GS-AP-MW-18	9/24/2019 11:37	Depth to Water Detail	59.04	ft
GS-AP-MW-18	9/24/2019 11:37	Oxidation Reduction Potention	25.31	mv
GS-AP-MW-18	9/24/2019 11:37	pH	7.51	pH
GS-AP-MW-18	9/24/2019 11:37	Temperature	17.63	C
GS-AP-MW-18	9/24/2019 11:37	Turbidity	11.5	NTU
GS-AP-MW-18	9/24/2019 11:42	Conductivity	570.59	uS/cm
GS-AP-MW-18	9/24/2019 11:42	DO	0.12	mg/L
GS-AP-MW-18	9/24/2019 11:42	Depth to Water Detail	59.14	ft
GS-AP-MW-18	9/24/2019 11:42	Oxidation Reduction Potention	22.63	mv
GS-AP-MW-18	9/24/2019 11:42	pH	7.49	pH
GS-AP-MW-18	9/24/2019 11:42	Temperature	17.51	C
GS-AP-MW-18	9/24/2019 11:42	Turbidity	9.64	NTU

**Alabama Power Company  
Plant Gorgas Ash Pond**

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-26H	9/23/2019 14:51	Conductivity	585.2	uS/cm
GS-AP-MW-26H	9/23/2019 14:51	DO	0.43	mg/L
GS-AP-MW-26H	9/23/2019 14:51	Depth to Water Detail	99.43	ft
GS-AP-MW-26H	9/23/2019 14:51	Oxidation Reduction Potention	51.88	mv
GS-AP-MW-26H	9/23/2019 14:51	pH	7.2	pH
GS-AP-MW-26H	9/23/2019 14:51	Temperature	22.67	C
GS-AP-MW-26H	9/23/2019 14:51	Turbidity	46.1	NTU
GS-AP-MW-26H	9/23/2019 14:56	Conductivity	524.13	uS/cm
GS-AP-MW-26H	9/23/2019 14:56	DO	0.55	mg/L
GS-AP-MW-26H	9/23/2019 14:56	Depth to Water Detail	100.11	ft
GS-AP-MW-26H	9/23/2019 14:56	Oxidation Reduction Potention	31.46	mv
GS-AP-MW-26H	9/23/2019 14:56	pH	7.18	pH
GS-AP-MW-26H	9/23/2019 14:56	Temperature	23.57	C
GS-AP-MW-26H	9/23/2019 14:56	Turbidity	41.4	NTU
GS-AP-MW-26H	9/23/2019 15:01	Conductivity	494.63	uS/cm
GS-AP-MW-26H	9/23/2019 15:01	DO	0.66	mg/L
GS-AP-MW-26H	9/23/2019 15:01	Depth to Water Detail	101.28	ft
GS-AP-MW-26H	9/23/2019 15:01	Oxidation Reduction Potention	17.7	mv
GS-AP-MW-26H	9/23/2019 15:01	pH	7.22	pH
GS-AP-MW-26H	9/23/2019 15:01	Temperature	23.25	C
GS-AP-MW-26H	9/23/2019 15:01	Turbidity	34.1	NTU
GS-AP-MW-26H	9/23/2019 15:06	Conductivity	483.09	uS/cm
GS-AP-MW-26H	9/23/2019 15:06	DO	0.7	mg/L
GS-AP-MW-26H	9/23/2019 15:06	Depth to Water Detail	101.43	ft
GS-AP-MW-26H	9/23/2019 15:06	Oxidation Reduction Potention	10.08	mv
GS-AP-MW-26H	9/23/2019 15:06	pH	7.23	pH
GS-AP-MW-26H	9/23/2019 15:06	Temperature	23.4	C
GS-AP-MW-26H	9/23/2019 15:06	Turbidity	34.3	NTU
GS-AP-MW-26H	9/23/2019 15:11	Conductivity	479.74	uS/cm
GS-AP-MW-26H	9/23/2019 15:11	DO	0.76	mg/L
GS-AP-MW-26H	9/23/2019 15:11	Depth to Water Detail	101.71	ft
GS-AP-MW-26H	9/23/2019 15:11	Oxidation Reduction Potention	3.42	mv
GS-AP-MW-26H	9/23/2019 15:11	pH	7.22	pH
GS-AP-MW-26H	9/23/2019 15:11	Temperature	23.32	C
GS-AP-MW-26H	9/23/2019 15:11	Turbidity	39.4	NTU
GS-AP-MW-26H	9/23/2019 15:16	Conductivity	473.52	uS/cm
GS-AP-MW-26H	9/23/2019 15:16	DO	0.79	mg/L
GS-AP-MW-26H	9/23/2019 15:16	Depth to Water Detail	102.04	ft
GS-AP-MW-26H	9/23/2019 15:16	Oxidation Reduction Potention	-7.62	mv
GS-AP-MW-26H	9/23/2019 15:16	pH	7.22	pH
GS-AP-MW-26H	9/23/2019 15:16	Temperature	23.26	C
GS-AP-MW-26H	9/23/2019 15:16	Turbidity	43.9	NTU
GS-AP-MW-26H	9/23/2019 15:21	Conductivity	471.23	uS/cm
GS-AP-MW-26H	9/23/2019 15:21	DO	0.88	mg/L
GS-AP-MW-26H	9/23/2019 15:21	Depth to Water Detail	102.56	ft
GS-AP-MW-26H	9/23/2019 15:21	Oxidation Reduction Potention	-20.47	mv

**Alabama Power Company  
Plant Gorgas Ash Pond**

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-26H	9/23/2019 15:21	pH	7.23	pH
GS-AP-MW-26H	9/23/2019 15:21	Temperature	22.95	C
GS-AP-MW-26H	9/23/2019 15:21	Turbidity	50.7	NTU
GS-AP-MW-26H	9/23/2019 15:26	Conductivity	475.69	uS/cm
GS-AP-MW-26H	9/23/2019 15:26	DO	0.91	mg/L
GS-AP-MW-26H	9/23/2019 15:26	Depth to Water Detail	102.87	ft
GS-AP-MW-26H	9/23/2019 15:26	Oxidation Reduction Potention	-33.76	mv
GS-AP-MW-26H	9/23/2019 15:26	pH	7.24	pH
GS-AP-MW-26H	9/23/2019 15:26	Temperature	23.47	C
GS-AP-MW-26H	9/23/2019 15:26	Turbidity	54.4	NTU
GS-AP-MW-26H	9/23/2019 15:31	Conductivity	476.06	uS/cm
GS-AP-MW-26H	9/23/2019 15:31	DO	0.98	mg/L
GS-AP-MW-26H	9/23/2019 15:31	Depth to Water Detail	102.94	ft
GS-AP-MW-26H	9/23/2019 15:31	Oxidation Reduction Potention	-44.15	mv
GS-AP-MW-26H	9/23/2019 15:31	pH	7.24	pH
GS-AP-MW-26H	9/23/2019 15:31	Temperature	23.6	C
GS-AP-MW-26H	9/23/2019 15:31	Turbidity	54.1	NTU
GS-AP-MW-26H	9/23/2019 15:36	Conductivity	476.92	uS/cm
GS-AP-MW-26H	9/23/2019 15:36	DO	0.99	mg/L
GS-AP-MW-26H	9/23/2019 15:36	Depth to Water Detail	103.52	ft
GS-AP-MW-26H	9/23/2019 15:36	Oxidation Reduction Potention	-50.2	mv
GS-AP-MW-26H	9/23/2019 15:36	pH	7.22	pH
GS-AP-MW-26H	9/23/2019 15:36	Temperature	23.49	C
GS-AP-MW-26H	9/23/2019 15:36	Turbidity	55.8	NTU
GS-AP-MW-26H	9/23/2019 15:41	Conductivity	474.23	uS/cm
GS-AP-MW-26H	9/23/2019 15:41	DO	1	mg/L
GS-AP-MW-26H	9/23/2019 15:41	Depth to Water Detail	103.98	ft
GS-AP-MW-26H	9/23/2019 15:41	Oxidation Reduction Potention	-57.23	mv
GS-AP-MW-26H	9/23/2019 15:41	pH	7.25	pH
GS-AP-MW-26H	9/23/2019 15:41	Temperature	22.81	C
GS-AP-MW-26H	9/23/2019 15:41	Turbidity	52.1	NTU
GS-AP-MW-26H	9/23/2019 15:46	Conductivity	474.57	uS/cm
GS-AP-MW-26H	9/23/2019 15:46	DO	1.09	mg/L
GS-AP-MW-26H	9/23/2019 15:46	Depth to Water Detail	104.04	ft
GS-AP-MW-26H	9/23/2019 15:46	Oxidation Reduction Potention	-61.52	mv
GS-AP-MW-26H	9/23/2019 15:46	pH	7.23	pH
GS-AP-MW-26H	9/23/2019 15:46	Temperature	23.04	C
GS-AP-MW-26H	9/23/2019 15:46	Turbidity	48.7	NTU
GS-AP-MW-26H	9/23/2019 15:51	Conductivity	473.13	uS/cm
GS-AP-MW-26H	9/23/2019 15:51	DO	1.05	mg/L
GS-AP-MW-26H	9/23/2019 15:51	Depth to Water Detail	104.29	ft
GS-AP-MW-26H	9/23/2019 15:51	Oxidation Reduction Potention	-66.37	mv
GS-AP-MW-26H	9/23/2019 15:51	pH	7.25	pH
GS-AP-MW-26H	9/23/2019 15:51	Temperature	22.44	C
GS-AP-MW-26H	9/23/2019 15:51	Turbidity	49.4	NTU
GS-AP-MW-26H	9/23/2019 15:56	Conductivity	474.26	uS/cm



**Alabama Power Company  
Plant Gorgas Ash Pond**

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-26H	9/23/2019 15:56	DO	1.11	mg/L
GS-AP-MW-26H	9/23/2019 15:56	Depth to Water Detail	104.45	ft
GS-AP-MW-26H	9/23/2019 15:56	Oxidation Reduction Potention	-69.67	mv
GS-AP-MW-26H	9/23/2019 15:56	pH	7.23	pH
GS-AP-MW-26H	9/23/2019 15:56	Temperature	22.4	C
GS-AP-MW-26H	9/23/2019 15:56	Turbidity	46.3	NTU
GS-AP-MW-26H	9/23/2019 16:01	Conductivity	470.16	uS/cm
GS-AP-MW-26H	9/23/2019 16:01	DO	1.12	mg/L
GS-AP-MW-26H	9/23/2019 16:01	Depth to Water Detail	104.8	ft
GS-AP-MW-26H	9/23/2019 16:01	Oxidation Reduction Potention	-70.58	mv
GS-AP-MW-26H	9/23/2019 16:01	pH	7.2	pH
GS-AP-MW-26H	9/23/2019 16:01	Temperature	22.06	C
GS-AP-MW-26H	9/23/2019 16:01	Turbidity	46.2	NTU
GS-AP-MW-26H	9/23/2019 16:06	Conductivity	472.75	uS/cm
GS-AP-MW-26H	9/23/2019 16:06	DO	1.14	mg/L
GS-AP-MW-26H	9/23/2019 16:06	Depth to Water Detail	104.96	ft
GS-AP-MW-26H	9/23/2019 16:06	Oxidation Reduction Potention	-77.12	mv
GS-AP-MW-26H	9/23/2019 16:06	pH	7.24	pH
GS-AP-MW-26H	9/23/2019 16:06	Temperature	22.21	C
GS-AP-MW-26H	9/23/2019 16:06	Turbidity	44.2	NTU
GS-AP-MW-26H	9/23/2019 16:11	Conductivity	469.35	uS/cm
GS-AP-MW-26H	9/23/2019 16:11	DO	1.13	mg/L
GS-AP-MW-26H	9/23/2019 16:11	Depth to Water Detail	105.17	ft
GS-AP-MW-26H	9/23/2019 16:11	Oxidation Reduction Potention	-79.05	mv
GS-AP-MW-26H	9/23/2019 16:11	pH	7.23	pH
GS-AP-MW-26H	9/23/2019 16:11	Temperature	22.36	C
GS-AP-MW-26H	9/23/2019 16:11	Turbidity	44.5	NTU
GS-AP-MW-26H	9/23/2019 16:16	Conductivity	469.07	uS/cm
GS-AP-MW-26H	9/23/2019 16:16	DO	1.18	mg/L
GS-AP-MW-26H	9/23/2019 16:16	Depth to Water Detail	105.3	ft
GS-AP-MW-26H	9/23/2019 16:16	Oxidation Reduction Potention	-81.8	mv
GS-AP-MW-26H	9/23/2019 16:16	pH	7.25	pH
GS-AP-MW-26H	9/23/2019 16:16	Temperature	22.19	C
GS-AP-MW-26H	9/23/2019 16:16	Turbidity	48.6	NTU
GS-AP-MW-26H	9/23/2019 16:21	Conductivity	470.28	uS/cm
GS-AP-MW-26H	9/23/2019 16:21	DO	1.2	mg/L
GS-AP-MW-26H	9/23/2019 16:21	Depth to Water Detail	105.46	ft
GS-AP-MW-26H	9/23/2019 16:21	Oxidation Reduction Potention	-82.8	mv
GS-AP-MW-26H	9/23/2019 16:21	pH	7.24	pH
GS-AP-MW-26H	9/23/2019 16:21	Temperature	22.03	C
GS-AP-MW-26H	9/23/2019 16:21	Turbidity	43.7	NTU
GS-AP-MW-26H	9/23/2019 16:26	Conductivity	468.52	uS/cm
GS-AP-MW-26H	9/23/2019 16:26	DO	1.13	mg/L
GS-AP-MW-26H	9/23/2019 16:26	Depth to Water Detail	105.74	ft
GS-AP-MW-26H	9/23/2019 16:26	Oxidation Reduction Potention	-81.6	mv
GS-AP-MW-26H	9/23/2019 16:26	pH	7.2	pH

**Alabama Power Company  
Plant Gorgas Ash Pond**

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-26H	9/23/2019 16:26	Temperature	21.67	C
GS-AP-MW-26H	9/23/2019 16:26	Turbidity	44.5	NTU
GS-AP-MW-26H	9/23/2019 16:31	Conductivity	468.87	uS/cm
GS-AP-MW-26H	9/23/2019 16:31	DO	1.19	mg/L
GS-AP-MW-26H	9/23/2019 16:31	Depth to Water Detail	105.83	ft
GS-AP-MW-26H	9/23/2019 16:31	Oxidation Reduction Potention	-85.71	mv
GS-AP-MW-26H	9/23/2019 16:31	pH	7.25	pH
GS-AP-MW-26H	9/23/2019 16:31	Temperature	21.92	C
GS-AP-MW-26H	9/23/2019 16:31	Turbidity	49	NTU
GS-AP-MW-26H	9/23/2019 16:36	Conductivity	469.63	uS/cm
GS-AP-MW-26H	9/23/2019 16:36	DO	1.25	mg/L
GS-AP-MW-26H	9/23/2019 16:36	Depth to Water Detail	105.94	ft
GS-AP-MW-26H	9/23/2019 16:36	Oxidation Reduction Potention	-85.84	mv
GS-AP-MW-26H	9/23/2019 16:36	pH	7.24	pH
GS-AP-MW-26H	9/23/2019 16:36	Temperature	22.01	C
GS-AP-MW-26H	9/23/2019 16:36	Turbidity	48.4	NTU
GS-AP-MW-26H	9/23/2019 16:41	Conductivity	469.42	uS/cm
GS-AP-MW-26H	9/23/2019 16:41	DO	1.19	mg/L
GS-AP-MW-26H	9/23/2019 16:41	Depth to Water Detail	105.96	ft
GS-AP-MW-26H	9/23/2019 16:41	Oxidation Reduction Potention	-85.04	mv
GS-AP-MW-26H	9/23/2019 16:41	pH	7.21	pH
GS-AP-MW-26H	9/23/2019 16:41	Temperature	22.35	C
GS-AP-MW-26H	9/23/2019 16:41	Turbidity	46.6	NTU
GS-AP-MW-26H	9/23/2019 16:46	Conductivity	472.09	uS/cm
GS-AP-MW-26H	9/23/2019 16:46	DO	1.17	mg/L
GS-AP-MW-26H	9/23/2019 16:46	Depth to Water Detail	106.04	ft
GS-AP-MW-26H	9/23/2019 16:46	Oxidation Reduction Potention	-88.59	mv
GS-AP-MW-26H	9/23/2019 16:46	pH	7.25	pH
GS-AP-MW-26H	9/23/2019 16:46	Temperature	22.44	C
GS-AP-MW-26H	9/23/2019 16:46	Turbidity	45.2	NTU
GS-AP-MW-26H	9/23/2019 16:51	Conductivity	469.38	uS/cm
GS-AP-MW-26H	9/23/2019 16:51	DO	1.26	mg/L
GS-AP-MW-26H	9/23/2019 16:51	Depth to Water Detail	106.14	ft
GS-AP-MW-26H	9/23/2019 16:51	Oxidation Reduction Potention	-87.98	mv
GS-AP-MW-26H	9/23/2019 16:51	pH	7.24	pH
GS-AP-MW-26H	9/23/2019 16:51	Temperature	22.17	C
GS-AP-MW-26H	9/23/2019 16:51	Turbidity	43.5	NTU
GS-AP-MW-26H	9/23/2019 16:56	Conductivity	468.15	uS/cm
GS-AP-MW-26H	9/23/2019 16:56	DO	1.2	mg/L
GS-AP-MW-26H	9/23/2019 16:56	Depth to Water Detail	106.16	ft
GS-AP-MW-26H	9/23/2019 16:56	Oxidation Reduction Potention	-88.6	mv
GS-AP-MW-26H	9/23/2019 16:56	pH	7.25	pH
GS-AP-MW-26H	9/23/2019 16:56	Temperature	22.21	C
GS-AP-MW-26H	9/23/2019 16:56	Turbidity	45	NTU

**Alabama Power Company  
Plant Gorgas Ash Pond**

<b>WELL ID</b>	<b>READING TIME</b>	<b>DESCRIPTION</b>	<b>VALUE</b>	<b>UNIT</b>
GS-AP-MW-7	9/24/2019 15:36	Conductivity	542.32	uS/cm
GS-AP-MW-7	9/24/2019 15:36	DO	0.96	mg/L
GS-AP-MW-7	9/24/2019 15:36	Depth to Water Detail	9.81	ft
GS-AP-MW-7	9/24/2019 15:36	Oxidation Reduction Potention	-193.68	mv
GS-AP-MW-7	9/24/2019 15:36	pH	7.56	pH
GS-AP-MW-7	9/24/2019 15:36	Temperature	24.54	C
GS-AP-MW-7	9/24/2019 15:36	Turbidity	12.5	NTU
GS-AP-MW-7	9/24/2019 15:41	Conductivity	538.62	uS/cm
GS-AP-MW-7	9/24/2019 15:41	DO	0.81	mg/L
GS-AP-MW-7	9/24/2019 15:41	Depth to Water Detail	9.81	ft
GS-AP-MW-7	9/24/2019 15:41	Oxidation Reduction Potention	-168.59	mv
GS-AP-MW-7	9/24/2019 15:41	pH	7.37	pH
GS-AP-MW-7	9/24/2019 15:41	Temperature	24.13	C
GS-AP-MW-7	9/24/2019 15:41	Turbidity	8.46	NTU
GS-AP-MW-7	9/24/2019 15:46	Conductivity	532.62	uS/cm
GS-AP-MW-7	9/24/2019 15:46	DO	0.76	mg/L
GS-AP-MW-7	9/24/2019 15:46	Depth to Water Detail	9.81	ft
GS-AP-MW-7	9/24/2019 15:46	Oxidation Reduction Potention	-153.39	mv
GS-AP-MW-7	9/24/2019 15:46	pH	7.25	pH
GS-AP-MW-7	9/24/2019 15:46	Temperature	23.59	C
GS-AP-MW-7	9/24/2019 15:46	Turbidity	6.47	NTU
GS-AP-MW-7	9/24/2019 15:51	Conductivity	540.44	uS/cm
GS-AP-MW-7	9/24/2019 15:51	DO	0.71	mg/L
GS-AP-MW-7	9/24/2019 15:51	Depth to Water Detail	9.81	ft
GS-AP-MW-7	9/24/2019 15:51	Oxidation Reduction Potention	-148.91	mv
GS-AP-MW-7	9/24/2019 15:51	pH	7.25	pH
GS-AP-MW-7	9/24/2019 15:51	Temperature	23.97	C
GS-AP-MW-7	9/24/2019 15:51	Turbidity	12.2	NTU
GS-AP-MW-7	9/24/2019 15:56	Conductivity	536.36	uS/cm
GS-AP-MW-7	9/24/2019 15:56	DO	0.68	mg/L
GS-AP-MW-7	9/24/2019 15:56	Depth to Water Detail	9.81	ft
GS-AP-MW-7	9/24/2019 15:56	Oxidation Reduction Potention	-147.74	mv
GS-AP-MW-7	9/24/2019 15:56	pH	7.29	pH
GS-AP-MW-7	9/24/2019 15:56	Temperature	23.57	C
GS-AP-MW-7	9/24/2019 15:56	Turbidity	16.5	NTU
GS-AP-MW-7	9/24/2019 16:01	Conductivity	535.23	uS/cm
GS-AP-MW-7	9/24/2019 16:01	DO	0.62	mg/L
GS-AP-MW-7	9/24/2019 16:01	Depth to Water Detail	9.81	ft
GS-AP-MW-7	9/24/2019 16:01	Oxidation Reduction Potention	-147.26	mv
GS-AP-MW-7	9/24/2019 16:01	pH	7.31	pH
GS-AP-MW-7	9/24/2019 16:01	Temperature	23.58	C
GS-AP-MW-7	9/24/2019 16:01	Turbidity	19.8	NTU
GS-AP-MW-7	9/24/2019 16:06	Conductivity	536.87	uS/cm
GS-AP-MW-7	9/24/2019 16:06	DO	0.61	mg/L
GS-AP-MW-7	9/24/2019 16:06	Depth to Water Detail	9.81	ft
GS-AP-MW-7	9/24/2019 16:06	Oxidation Reduction Potention	-147.64	mv

**Alabama Power Company  
Plant Gorgas Ash Pond**

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-7	9/24/2019 16:06	pH	7.34	pH
GS-AP-MW-7	9/24/2019 16:06	Temperature	23.53	C
GS-AP-MW-7	9/24/2019 16:06	Turbidity	22.9	NTU
GS-AP-MW-7	9/24/2019 16:11	Conductivity	537.39	uS/cm
GS-AP-MW-7	9/24/2019 16:11	DO	0.65	mg/L
GS-AP-MW-7	9/24/2019 16:11	Depth to Water Detail	9.86	ft
GS-AP-MW-7	9/24/2019 16:11	Oxidation Reduction Potention	-146.12	mv
GS-AP-MW-7	9/24/2019 16:11	pH	7.33	pH
GS-AP-MW-7	9/24/2019 16:11	Temperature	23.18	C
GS-AP-MW-7	9/24/2019 16:11	Turbidity	28.8	NTU
GS-AP-MW-7	9/24/2019 16:16	Conductivity	535.18	uS/cm
GS-AP-MW-7	9/24/2019 16:16	DO	0.6	mg/L
GS-AP-MW-7	9/24/2019 16:16	Depth to Water Detail	9.89	ft
GS-AP-MW-7	9/24/2019 16:16	Oxidation Reduction Potention	-143.94	mv
GS-AP-MW-7	9/24/2019 16:16	pH	7.31	pH
GS-AP-MW-7	9/24/2019 16:16	Temperature	23.2	C
GS-AP-MW-7	9/24/2019 16:16	Turbidity	26.2	NTU
GS-AP-MW-7	9/24/2019 16:21	Conductivity	534.74	uS/cm
GS-AP-MW-7	9/24/2019 16:21	DO	0.61	mg/L
GS-AP-MW-7	9/24/2019 16:21	Depth to Water Detail	9.89	ft
GS-AP-MW-7	9/24/2019 16:21	Oxidation Reduction Potention	-142.95	mv
GS-AP-MW-7	9/24/2019 16:21	pH	7.29	pH
GS-AP-MW-7	9/24/2019 16:21	Temperature	23.08	C
GS-AP-MW-7	9/24/2019 16:21	Turbidity	27.6	NTU
GS-AP-MW-7	9/24/2019 16:26	Conductivity	534.8	uS/cm
GS-AP-MW-7	9/24/2019 16:26	DO	0.63	mg/L
GS-AP-MW-7	9/24/2019 16:26	Depth to Water Detail	9.89	ft
GS-AP-MW-7	9/24/2019 16:26	Oxidation Reduction Potention	-141.77	mv
GS-AP-MW-7	9/24/2019 16:26	pH	7.28	pH
GS-AP-MW-7	9/24/2019 16:26	Temperature	22.85	C
GS-AP-MW-7	9/24/2019 16:26	Turbidity	27.9	NTU
GS-AP-MW-7	9/24/2019 16:31	Conductivity	535.43	uS/cm
GS-AP-MW-7	9/24/2019 16:31	DO	0.62	mg/L
GS-AP-MW-7	9/24/2019 16:31	Depth to Water Detail	9.89	ft
GS-AP-MW-7	9/24/2019 16:31	Oxidation Reduction Potention	-139.44	mv
GS-AP-MW-7	9/24/2019 16:31	pH	7.27	pH
GS-AP-MW-7	9/24/2019 16:31	Temperature	23.05	C
GS-AP-MW-7	9/24/2019 16:31	Turbidity	33.7	NTU
GS-AP-MW-7	9/24/2019 16:36	Conductivity	534.13	uS/cm
GS-AP-MW-7	9/24/2019 16:36	DO	0.63	mg/L
GS-AP-MW-7	9/24/2019 16:36	Depth to Water Detail	9.89	ft
GS-AP-MW-7	9/24/2019 16:36	Oxidation Reduction Potention	-138.23	mv
GS-AP-MW-7	9/24/2019 16:36	pH	7.26	pH
GS-AP-MW-7	9/24/2019 16:36	Temperature	22.63	C
GS-AP-MW-7	9/24/2019 16:36	Turbidity	35.8	NTU
GS-AP-MW-7	9/24/2019 16:41	Conductivity	532.42	uS/cm

**Alabama Power Company  
Plant Gorgas Ash Pond**

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-7	9/24/2019 16:41	DO	0.63	mg/L
GS-AP-MW-7	9/24/2019 16:41	Depth to Water Detail	9.89	ft
GS-AP-MW-7	9/24/2019 16:41	Oxidation Reduction Potention	-138.42	mv
GS-AP-MW-7	9/24/2019 16:41	pH	7.26	pH
GS-AP-MW-7	9/24/2019 16:41	Temperature	21.98	C
GS-AP-MW-7	9/24/2019 16:41	Turbidity	34.1	NTU
GS-AP-MW-7	9/24/2019 16:46	Conductivity	533.17	uS/cm
GS-AP-MW-7	9/24/2019 16:46	DO	0.63	mg/L
GS-AP-MW-7	9/24/2019 16:46	Depth to Water Detail	9.89	ft
GS-AP-MW-7	9/24/2019 16:46	Oxidation Reduction Potention	-138.4	mv
GS-AP-MW-7	9/24/2019 16:46	pH	7.27	pH
GS-AP-MW-7	9/24/2019 16:46	Temperature	22.35	C
GS-AP-MW-7	9/24/2019 16:46	Turbidity	33.2	NTU
GS-AP-MW-7	9/24/2019 16:51	Conductivity	533.25	uS/cm
GS-AP-MW-7	9/24/2019 16:51	DO	0.64	mg/L
GS-AP-MW-7	9/24/2019 16:51	Depth to Water Detail	9.89	ft
GS-AP-MW-7	9/24/2019 16:51	Oxidation Reduction Potention	-139.48	mv
GS-AP-MW-7	9/24/2019 16:51	pH	7.27	pH
GS-AP-MW-7	9/24/2019 16:51	Temperature	21.98	C
GS-AP-MW-7	9/24/2019 16:51	Turbidity	36.1	NTU
GS-AP-MW-7	9/24/2019 16:56	Conductivity	531.11	uS/cm
GS-AP-MW-7	9/24/2019 16:56	DO	0.66	mg/L
GS-AP-MW-7	9/24/2019 16:56	Depth to Water Detail	9.89	ft
GS-AP-MW-7	9/24/2019 16:56	Oxidation Reduction Potention	-138.96	mv
GS-AP-MW-7	9/24/2019 16:56	pH	7.28	pH
GS-AP-MW-7	9/24/2019 16:56	Temperature	21.71	C
GS-AP-MW-7	9/24/2019 16:56	Turbidity	36.4	NTU
GS-AP-MW-7	9/24/2019 17:01	Conductivity	529.21	uS/cm
GS-AP-MW-7	9/24/2019 17:01	DO	0.26	mg/L
GS-AP-MW-7	9/24/2019 17:01	Depth to Water Detail	10.55	ft
GS-AP-MW-7	9/24/2019 17:01	Oxidation Reduction Potention	-148.54	mv
GS-AP-MW-7	9/24/2019 17:01	pH	7.32	pH
GS-AP-MW-7	9/24/2019 17:01	Temperature	18.64	C
GS-AP-MW-7	9/24/2019 17:01	Turbidity	39.6	NTU
GS-AP-MW-7	9/24/2019 17:06	Conductivity	528.79	uS/cm
GS-AP-MW-7	9/24/2019 17:06	DO	0.24	mg/L
GS-AP-MW-7	9/24/2019 17:06	Depth to Water Detail	10.66	ft
GS-AP-MW-7	9/24/2019 17:06	Oxidation Reduction Potention	-157.43	mv
GS-AP-MW-7	9/24/2019 17:06	pH	7.39	pH
GS-AP-MW-7	9/24/2019 17:06	Temperature	18.33	C
GS-AP-MW-7	9/24/2019 17:06	Turbidity	35.9	NTU
GS-AP-MW-7	9/24/2019 17:11	Conductivity	529.17	uS/cm
GS-AP-MW-7	9/24/2019 17:11	DO	0.23	mg/L
GS-AP-MW-7	9/24/2019 17:11	Depth to Water Detail	10.66	ft
GS-AP-MW-7	9/24/2019 17:11	Oxidation Reduction Potention	-164.18	mv
GS-AP-MW-7	9/24/2019 17:11	pH	7.44	pH

**Alabama Power Company  
Plant Gorgas Ash Pond**

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-7	9/24/2019 17:11	Temperature	18.5	C
GS-AP-MW-7	9/24/2019 17:11	Turbidity	40.5	NTU
GS-AP-MW-7	9/24/2019 17:16	Conductivity	529.47	uS/cm
GS-AP-MW-7	9/24/2019 17:16	DO	0.23	mg/L
GS-AP-MW-7	9/24/2019 17:16	Depth to Water Detail	10.61	ft
GS-AP-MW-7	9/24/2019 17:16	Oxidation Reduction Potention	-166.51	mv
GS-AP-MW-7	9/24/2019 17:16	pH	7.46	pH
GS-AP-MW-7	9/24/2019 17:16	Temperature	18.42	C
GS-AP-MW-7	9/24/2019 17:16	Turbidity	28	NTU
GS-AP-MW-7	9/24/2019 17:21	Conductivity	529.04	uS/cm
GS-AP-MW-7	9/24/2019 17:21	DO	0.24	mg/L
GS-AP-MW-7	9/24/2019 17:21	Depth to Water Detail	10.61	ft
GS-AP-MW-7	9/24/2019 17:21	Oxidation Reduction Potention	-166.46	mv
GS-AP-MW-7	9/24/2019 17:21	pH	7.44	pH
GS-AP-MW-7	9/24/2019 17:21	Temperature	18.53	C
GS-AP-MW-7	9/24/2019 17:21	Turbidity	26.7	NTU
GS-AP-MW-7	9/24/2019 17:26	Conductivity	528.86	uS/cm
GS-AP-MW-7	9/24/2019 17:26	DO	0.23	mg/L
GS-AP-MW-7	9/24/2019 17:26	Depth to Water Detail	10.89	ft
GS-AP-MW-7	9/24/2019 17:26	Oxidation Reduction Potention	-167.43	mv
GS-AP-MW-7	9/24/2019 17:26	pH	7.44	pH
GS-AP-MW-7	9/24/2019 17:26	Temperature	18.33	C
GS-AP-MW-7	9/24/2019 17:26	Turbidity	31.1	NTU
GS-AP-MW-7	9/24/2019 17:31	Conductivity	529.15	uS/cm
GS-AP-MW-7	9/24/2019 17:31	DO	0.23	mg/L
GS-AP-MW-7	9/24/2019 17:31	Depth to Water Detail	10.89	ft
GS-AP-MW-7	9/24/2019 17:31	Oxidation Reduction Potention	-166.91	mv
GS-AP-MW-7	9/24/2019 17:31	pH	7.43	pH
GS-AP-MW-7	9/24/2019 17:31	Temperature	18.22	C
GS-AP-MW-7	9/24/2019 17:31	Turbidity	25.1	NTU
GS-AP-MW-7	9/24/2019 17:36	Conductivity	528.81	uS/cm
GS-AP-MW-7	9/24/2019 17:36	DO	0.24	mg/L
GS-AP-MW-7	9/24/2019 17:36	Depth to Water Detail	10.89	ft
GS-AP-MW-7	9/24/2019 17:36	Oxidation Reduction Potention	-166.42	mv
GS-AP-MW-7	9/24/2019 17:36	pH	7.41	pH
GS-AP-MW-7	9/24/2019 17:36	Temperature	18.34	C
GS-AP-MW-7	9/24/2019 17:36	Turbidity	26.2	NTU
GS-AP-MW-7	9/24/2019 17:41	Conductivity	528.85	uS/cm
GS-AP-MW-7	9/24/2019 17:41	DO	0.23	mg/L
GS-AP-MW-7	9/24/2019 17:41	Depth to Water Detail	10.89	ft
GS-AP-MW-7	9/24/2019 17:41	Oxidation Reduction Potention	-165.22	mv
GS-AP-MW-7	9/24/2019 17:41	pH	7.38	pH
GS-AP-MW-7	9/24/2019 17:41	Temperature	18.23	C
GS-AP-MW-7	9/24/2019 17:41	Turbidity	24.4	NTU

**Alabama Power Company  
Plant Gorgas Ash Pond**

<b>WELL ID</b>	<b>READING TIME</b>	<b>DESCRIPTION</b>	<b>VALUE</b>	<b>UNIT</b>
GS-AP-MW-12	9/25/2019 9:08	Conductivity	395.73	uS/cm
GS-AP-MW-12	9/25/2019 9:08	DO	0.24	mg/L
GS-AP-MW-12	9/25/2019 9:08	Depth to Water Detail	76.1	ft
GS-AP-MW-12	9/25/2019 9:08	Oxidation Reduction Potention	-131.5	mv
GS-AP-MW-12	9/25/2019 9:08	pH	7.38	pH
GS-AP-MW-12	9/25/2019 9:08	Temperature	18.26	C
GS-AP-MW-12	9/25/2019 9:08	Turbidity	9.09	NTU
GS-AP-MW-12	9/25/2019 9:13	Conductivity	390.61	uS/cm
GS-AP-MW-12	9/25/2019 9:13	DO	0.19	mg/L
GS-AP-MW-12	9/25/2019 9:13	Depth to Water Detail	77.98	ft
GS-AP-MW-12	9/25/2019 9:13	Oxidation Reduction Potention	-139.53	mv
GS-AP-MW-12	9/25/2019 9:13	pH	7.39	pH
GS-AP-MW-12	9/25/2019 9:13	Temperature	18.16	C
GS-AP-MW-12	9/25/2019 9:13	Turbidity	2.51	NTU
GS-AP-MW-12	9/25/2019 9:18	Conductivity	376.86	uS/cm
GS-AP-MW-12	9/25/2019 9:18	DO	0.2	mg/L
GS-AP-MW-12	9/25/2019 9:18	Depth to Water Detail	79.75	ft
GS-AP-MW-12	9/25/2019 9:18	Oxidation Reduction Potention	-142.57	mv
GS-AP-MW-12	9/25/2019 9:18	pH	7.39	pH
GS-AP-MW-12	9/25/2019 9:18	Temperature	18.01	C
GS-AP-MW-12	9/25/2019 9:18	Turbidity	2.25	NTU
GS-AP-MW-12	9/25/2019 9:23	Conductivity	374.43	uS/cm
GS-AP-MW-12	9/25/2019 9:23	DO	0.21	mg/L
GS-AP-MW-12	9/25/2019 9:23	Depth to Water Detail	81.71	ft
GS-AP-MW-12	9/25/2019 9:23	Oxidation Reduction Potention	-147.34	mv
GS-AP-MW-12	9/25/2019 9:23	pH	7.4	pH
GS-AP-MW-12	9/25/2019 9:23	Temperature	18.26	C
GS-AP-MW-12	9/25/2019 9:23	Turbidity	2.43	NTU
GS-AP-MW-12	9/25/2019 9:28	Conductivity	374.46	uS/cm
GS-AP-MW-12	9/25/2019 9:28	DO	0.21	mg/L
GS-AP-MW-12	9/25/2019 9:28	Depth to Water Detail	82.5	ft
GS-AP-MW-12	9/25/2019 9:28	Oxidation Reduction Potention	-152.31	mv
GS-AP-MW-12	9/25/2019 9:28	pH	7.43	pH
GS-AP-MW-12	9/25/2019 9:28	Temperature	18.16	C
GS-AP-MW-12	9/25/2019 9:28	Turbidity	2.83	NTU
GS-AP-MW-12	9/25/2019 9:33	Conductivity	378.11	uS/cm
GS-AP-MW-12	9/25/2019 9:33	DO	0.38	mg/L
GS-AP-MW-12	9/25/2019 9:33	Depth to Water Detail	82.45	ft
GS-AP-MW-12	9/25/2019 9:33	Oxidation Reduction Potention	-154.6	mv
GS-AP-MW-12	9/25/2019 9:33	pH	7.43	pH
GS-AP-MW-12	9/25/2019 9:33	Temperature	19.87	C
GS-AP-MW-12	9/25/2019 9:33	Turbidity	1.91	NTU
GS-AP-MW-12	9/25/2019 9:38	Conductivity	379.16	uS/cm
GS-AP-MW-12	9/25/2019 9:38	DO	0.47	mg/L
GS-AP-MW-12	9/25/2019 9:38	Depth to Water Detail	82.35	ft
GS-AP-MW-12	9/25/2019 9:38	Oxidation Reduction Potention	-152.65	mv

**Alabama Power Company  
Plant Gorgas Ash Pond**

<b>WELL ID</b>	<b>READING TIME</b>	<b>DESCRIPTION</b>	<b>VALUE</b>	<b>UNIT</b>
GS-AP-MW-12	9/25/2019 9:38	pH	7.43	pH
GS-AP-MW-12	9/25/2019 9:38	Temperature	21.08	C
GS-AP-MW-12	9/25/2019 9:38	Turbidity	1.7	NTU
GS-AP-MW-12	9/25/2019 9:43	Conductivity	379.53	uS/cm
GS-AP-MW-12	9/25/2019 9:43	DO	0.53	mg/L
GS-AP-MW-12	9/25/2019 9:43	Depth to Water Detail	81.9	ft
GS-AP-MW-12	9/25/2019 9:43	Oxidation Reduction Potention	-150.64	mv
GS-AP-MW-12	9/25/2019 9:43	pH	7.43	pH
GS-AP-MW-12	9/25/2019 9:43	Temperature	21.3	C
GS-AP-MW-12	9/25/2019 9:43	Turbidity	0.97	NTU
GS-AP-MW-12	9/25/2019 9:48	Conductivity	381.49	uS/cm
GS-AP-MW-12	9/25/2019 9:48	DO	0.62	mg/L
GS-AP-MW-12	9/25/2019 9:48	Depth to Water Detail	81.4	ft
GS-AP-MW-12	9/25/2019 9:48	Oxidation Reduction Potention	-148.02	mv
GS-AP-MW-12	9/25/2019 9:48	pH	7.42	pH
GS-AP-MW-12	9/25/2019 9:48	Temperature	21.98	C
GS-AP-MW-12	9/25/2019 9:48	Turbidity	1.43	NTU
GS-AP-MW-12	9/25/2019 9:53	Conductivity	389.05	uS/cm
GS-AP-MW-12	9/25/2019 9:53	DO	0.77	mg/L
GS-AP-MW-12	9/25/2019 9:53	Depth to Water Detail	81.1	ft
GS-AP-MW-12	9/25/2019 9:53	Oxidation Reduction Potention	-142.39	mv
GS-AP-MW-12	9/25/2019 9:53	pH	7.4	pH
GS-AP-MW-12	9/25/2019 9:53	Temperature	22.09	C
GS-AP-MW-12	9/25/2019 9:53	Turbidity	1.34	NTU
GS-AP-MW-12	9/25/2019 9:58	Conductivity	394.56	uS/cm
GS-AP-MW-12	9/25/2019 9:58	DO	0.79	mg/L
GS-AP-MW-12	9/25/2019 9:58	Depth to Water Detail	80.6	ft
GS-AP-MW-12	9/25/2019 9:58	Oxidation Reduction Potention	-138.02	mv
GS-AP-MW-12	9/25/2019 9:58	pH	7.38	pH
GS-AP-MW-12	9/25/2019 9:58	Temperature	22.1	C
GS-AP-MW-12	9/25/2019 9:58	Turbidity	1.17	NTU



**Alabama Power Company  
Plant Gorgas Ash Pond**

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-15	9/24/2019 7:30	Conductivity	1562.99	uS/cm
GS-AP-MW-15	9/24/2019 7:30	DO	0.26	mg/L
GS-AP-MW-15	9/24/2019 7:30	Depth to Water Detail	88.05	ft
GS-AP-MW-15	9/24/2019 7:30	Oxidation Reduction Potention	-94.75	mv
GS-AP-MW-15	9/24/2019 7:30	pH	11.71	pH
GS-AP-MW-15	9/24/2019 7:30	Temperature	17.97	C
GS-AP-MW-15	9/24/2019 7:30	Turbidity	3.44	NTU
GS-AP-MW-15	9/24/2019 7:35	Conductivity	1552.81	uS/cm
GS-AP-MW-15	9/24/2019 7:35	DO	0.26	mg/L
GS-AP-MW-15	9/24/2019 7:35	Depth to Water Detail	90.65	ft
GS-AP-MW-15	9/24/2019 7:35	Oxidation Reduction Potention	-127.45	mv
GS-AP-MW-15	9/24/2019 7:35	pH	11.71	pH
GS-AP-MW-15	9/24/2019 7:35	Temperature	17.85	C
GS-AP-MW-15	9/24/2019 7:35	Turbidity	1.4	NTU
GS-AP-MW-15	9/24/2019 7:40	Conductivity	1541.75	uS/cm
GS-AP-MW-15	9/24/2019 7:40	DO	0.28	mg/L
GS-AP-MW-15	9/24/2019 7:40	Depth to Water Detail	92.04	ft
GS-AP-MW-15	9/24/2019 7:40	Oxidation Reduction Potention	-150.07	mv
GS-AP-MW-15	9/24/2019 7:40	pH	11.72	pH
GS-AP-MW-15	9/24/2019 7:40	Temperature	17.77	C
GS-AP-MW-15	9/24/2019 7:40	Turbidity	1.15	NTU
GS-AP-MW-15	9/24/2019 7:45	Conductivity	1533.33	uS/cm
GS-AP-MW-15	9/24/2019 7:45	DO	0.51	mg/L
GS-AP-MW-15	9/24/2019 7:45	Depth to Water Detail	92.1	ft
GS-AP-MW-15	9/24/2019 7:45	Oxidation Reduction Potention	-164.87	mv
GS-AP-MW-15	9/24/2019 7:45	pH	11.66	pH
GS-AP-MW-15	9/24/2019 7:45	Temperature	19.14	C
GS-AP-MW-15	9/24/2019 7:45	Turbidity	0.95	NTU
GS-AP-MW-15	9/24/2019 7:50	Conductivity	1528.07	uS/cm
GS-AP-MW-15	9/24/2019 7:50	DO	0.58	mg/L
GS-AP-MW-15	9/24/2019 7:50	Depth to Water Detail	92	ft
GS-AP-MW-15	9/24/2019 7:50	Oxidation Reduction Potention	-176.7	mv
GS-AP-MW-15	9/24/2019 7:50	pH	11.69	pH
GS-AP-MW-15	9/24/2019 7:50	Temperature	19.51	C
GS-AP-MW-15	9/24/2019 7:50	Turbidity	0.97	NTU
GS-AP-MW-15	9/24/2019 7:55	Conductivity	1529.84	uS/cm
GS-AP-MW-15	9/24/2019 7:55	DO	0.67	mg/L
GS-AP-MW-15	9/24/2019 7:55	Depth to Water Detail	91.96	ft
GS-AP-MW-15	9/24/2019 7:55	Oxidation Reduction Potention	-183.37	mv
GS-AP-MW-15	9/24/2019 7:55	pH	11.7	pH
GS-AP-MW-15	9/24/2019 7:55	Temperature	19.54	C
GS-AP-MW-15	9/24/2019 7:55	Turbidity	0.7	NTU

**Alabama Power Company  
Plant Gorgas Ash Pond**

<b>WELL ID</b>	<b>READING TIME</b>	<b>DESCRIPTION</b>	<b>VALUE</b>	<b>UNIT</b>
GS-AP-MW-17	9/23/2019 13:59	Conductivity	979.23	uS/cm
GS-AP-MW-17	9/23/2019 13:59	DO	1.72	mg/L
GS-AP-MW-17	9/23/2019 13:59	Depth to Water Detail	182.68	ft
GS-AP-MW-17	9/23/2019 13:59	Oxidation Reduction Potention	-160.88	mv
GS-AP-MW-17	9/23/2019 13:59	pH	7.91	pH
GS-AP-MW-17	9/23/2019 13:59	Temperature	21.35	C
GS-AP-MW-17	9/23/2019 13:59	Turbidity	3.2	NTU
GS-AP-MW-17	9/23/2019 14:04	Conductivity	1106.08	uS/cm
GS-AP-MW-17	9/23/2019 14:04	DO	0.58	mg/L
GS-AP-MW-17	9/23/2019 14:04	Depth to Water Detail	182.68	ft
GS-AP-MW-17	9/23/2019 14:04	Oxidation Reduction Potention	-181.39	mv
GS-AP-MW-17	9/23/2019 14:04	pH	8.2	pH
GS-AP-MW-17	9/23/2019 14:04	Temperature	21.77	C
GS-AP-MW-17	9/23/2019 14:04	Turbidity	3.89	NTU
GS-AP-MW-17	9/23/2019 14:09	Conductivity	1155.27	uS/cm
GS-AP-MW-17	9/23/2019 14:09	DO	0.4	mg/L
GS-AP-MW-17	9/23/2019 14:09	Depth to Water Detail	182.68	ft
GS-AP-MW-17	9/23/2019 14:09	Oxidation Reduction Potention	-181.22	mv
GS-AP-MW-17	9/23/2019 14:09	pH	8.33	pH
GS-AP-MW-17	9/23/2019 14:09	Temperature	21.94	C
GS-AP-MW-17	9/23/2019 14:09	Turbidity	3.28	NTU
GS-AP-MW-17	9/23/2019 14:14	Conductivity	1162.6	uS/cm
GS-AP-MW-17	9/23/2019 14:14	DO	0.35	mg/L
GS-AP-MW-17	9/23/2019 14:14	Depth to Water Detail	182.68	ft
GS-AP-MW-17	9/23/2019 14:14	Oxidation Reduction Potention	-178.37	mv
GS-AP-MW-17	9/23/2019 14:14	pH	8.36	pH
GS-AP-MW-17	9/23/2019 14:14	Temperature	21.28	C
GS-AP-MW-17	9/23/2019 14:14	Turbidity	2.47	NTU
GS-AP-MW-17	9/23/2019 14:19	Conductivity	1154.99	uS/cm
GS-AP-MW-17	9/23/2019 14:19	DO	0.32	mg/L
GS-AP-MW-17	9/23/2019 14:19	Depth to Water Detail	182.68	ft
GS-AP-MW-17	9/23/2019 14:19	Oxidation Reduction Potention	-176.2	mv
GS-AP-MW-17	9/23/2019 14:19	pH	8.37	pH
GS-AP-MW-17	9/23/2019 14:19	Temperature	21.4	C
GS-AP-MW-17	9/23/2019 14:19	Turbidity	1.77	NTU

**Alabama Power Company  
Plant Gorgas Ash Pond**

<b>WELL ID</b>	<b>READING TIME</b>	<b>DESCRIPTION</b>	<b>VALUE</b>	<b>UNIT</b>
GS-AP-MW-21	9/24/2019 9:29	Conductivity	1124.08	uS/cm
GS-AP-MW-21	9/24/2019 9:29	DO	3.39	mg/L
GS-AP-MW-21	9/24/2019 9:29	Depth to Water Detail	166.26	ft
GS-AP-MW-21	9/24/2019 9:29	Oxidation Reduction Potention	-44.99	mv
GS-AP-MW-21	9/24/2019 9:29	pH	10.88	pH
GS-AP-MW-21	9/24/2019 9:29	Temperature	20.31	C
GS-AP-MW-21	9/24/2019 9:29	Turbidity	1.03	NTU
GS-AP-MW-21	9/24/2019 9:34	Conductivity	1521.12	uS/cm
GS-AP-MW-21	9/24/2019 9:34	DO	1.68	mg/L
GS-AP-MW-21	9/24/2019 9:34	Depth to Water Detail	166.32	ft
GS-AP-MW-21	9/24/2019 9:34	Oxidation Reduction Potention	-66.19	mv
GS-AP-MW-21	9/24/2019 9:34	pH	11.45	pH
GS-AP-MW-21	9/24/2019 9:34	Temperature	20.16	C
GS-AP-MW-21	9/24/2019 9:34	Turbidity	0.63	NTU
GS-AP-MW-21	9/24/2019 9:39	Conductivity	1662.85	uS/cm
GS-AP-MW-21	9/24/2019 9:39	DO	1.08	mg/L
GS-AP-MW-21	9/24/2019 9:39	Depth to Water Detail	166.35	ft
GS-AP-MW-21	9/24/2019 9:39	Oxidation Reduction Potention	-88.01	mv
GS-AP-MW-21	9/24/2019 9:39	pH	11.56	pH
GS-AP-MW-21	9/24/2019 9:39	Temperature	20.13	C
GS-AP-MW-21	9/24/2019 9:39	Turbidity	0.64	NTU
GS-AP-MW-21	9/24/2019 9:44	Conductivity	1676.22	uS/cm
GS-AP-MW-21	9/24/2019 9:44	DO	0.94	mg/L
GS-AP-MW-21	9/24/2019 9:44	Depth to Water Detail	166.36	ft
GS-AP-MW-21	9/24/2019 9:44	Oxidation Reduction Potention	-102.52	mv
GS-AP-MW-21	9/24/2019 9:44	pH	11.55	pH
GS-AP-MW-21	9/24/2019 9:44	Temperature	20	C
GS-AP-MW-21	9/24/2019 9:44	Turbidity	0.74	NTU
GS-AP-MW-21	9/24/2019 9:49	Conductivity	1640.39	uS/cm
GS-AP-MW-21	9/24/2019 9:49	DO	0.86	mg/L
GS-AP-MW-21	9/24/2019 9:49	Depth to Water Detail	166.38	ft
GS-AP-MW-21	9/24/2019 9:49	Oxidation Reduction Potention	-112.9	mv
GS-AP-MW-21	9/24/2019 9:49	pH	11.52	pH
GS-AP-MW-21	9/24/2019 9:49	Temperature	20.08	C
GS-AP-MW-21	9/24/2019 9:49	Turbidity	0.5	NTU
GS-AP-MW-21	9/24/2019 9:54	Conductivity	1594.4	uS/cm
GS-AP-MW-21	9/24/2019 9:54	DO	0.85	mg/L
GS-AP-MW-21	9/24/2019 9:54	Depth to Water Detail	166.42	ft
GS-AP-MW-21	9/24/2019 9:54	Oxidation Reduction Potention	-121	mv
GS-AP-MW-21	9/24/2019 9:54	pH	11.48	pH
GS-AP-MW-21	9/24/2019 9:54	Temperature	20.03	C
GS-AP-MW-21	9/24/2019 9:54	Turbidity	0.45	NTU
GS-AP-MW-21	9/24/2019 9:59	Conductivity	1534.28	uS/cm
GS-AP-MW-21	9/24/2019 9:59	DO	0.84	mg/L
GS-AP-MW-21	9/24/2019 9:59	Depth to Water Detail	166.42	ft
GS-AP-MW-21	9/24/2019 9:59	Oxidation Reduction Potention	-127.64	mv

**Alabama Power Company  
Plant Gorgas Ash Pond**

<b>WELL ID</b>	<b>READING TIME</b>	<b>DESCRIPTION</b>	<b>VALUE</b>	<b>UNIT</b>
GS-AP-MW-21	9/24/2019 9:59	pH	11.43	pH
GS-AP-MW-21	9/24/2019 9:59	Temperature	20.24	C
GS-AP-MW-21	9/24/2019 9:59	Turbidity	0.42	NTU
GS-AP-MW-21	9/24/2019 10:04	Conductivity	1482.64	uS/cm
GS-AP-MW-21	9/24/2019 10:04	DO	0.82	mg/L
GS-AP-MW-21	9/24/2019 10:04	Depth to Water Detail	166.42	ft
GS-AP-MW-21	9/24/2019 10:04	Oxidation Reduction Potention	-132.87	mv
GS-AP-MW-21	9/24/2019 10:04	pH	11.39	pH
GS-AP-MW-21	9/24/2019 10:04	Temperature	20.17	C
GS-AP-MW-21	9/24/2019 10:04	Turbidity	0.49	NTU
GS-AP-MW-21	9/24/2019 10:09	Conductivity	1425.17	uS/cm
GS-AP-MW-21	9/24/2019 10:09	DO	0.83	mg/L
GS-AP-MW-21	9/24/2019 10:09	Depth to Water Detail	166.43	ft
GS-AP-MW-21	9/24/2019 10:09	Oxidation Reduction Potention	-136.89	mv
GS-AP-MW-21	9/24/2019 10:09	pH	11.34	pH
GS-AP-MW-21	9/24/2019 10:09	Temperature	20.15	C
GS-AP-MW-21	9/24/2019 10:09	Turbidity	0.39	NTU
GS-AP-MW-21	9/24/2019 10:14	Conductivity	1375.84	uS/cm
GS-AP-MW-21	9/24/2019 10:14	DO	0.83	mg/L
GS-AP-MW-21	9/24/2019 10:14	Depth to Water Detail	166.45	ft
GS-AP-MW-21	9/24/2019 10:14	Oxidation Reduction Potention	-140.15	mv
GS-AP-MW-21	9/24/2019 10:14	pH	11.28	pH
GS-AP-MW-21	9/24/2019 10:14	Temperature	20.08	C
GS-AP-MW-21	9/24/2019 10:14	Turbidity	0.42	NTU
GS-AP-MW-21	9/24/2019 10:19	Conductivity	1350.63	uS/cm
GS-AP-MW-21	9/24/2019 10:19	DO	0.84	mg/L
GS-AP-MW-21	9/24/2019 10:19	Depth to Water Detail	166.45	ft
GS-AP-MW-21	9/24/2019 10:19	Oxidation Reduction Potention	-142.89	mv
GS-AP-MW-21	9/24/2019 10:19	pH	11.26	pH
GS-AP-MW-21	9/24/2019 10:19	Temperature	20.08	C
GS-AP-MW-21	9/24/2019 10:19	Turbidity	0.44	NTU
GS-AP-MW-21	9/24/2019 10:24	Conductivity	1324.4	uS/cm
GS-AP-MW-21	9/24/2019 10:24	DO	0.83	mg/L
GS-AP-MW-21	9/24/2019 10:24	Depth to Water Detail	166.45	ft
GS-AP-MW-21	9/24/2019 10:24	Oxidation Reduction Potention	-145.23	mv
GS-AP-MW-21	9/24/2019 10:24	pH	11.24	pH
GS-AP-MW-21	9/24/2019 10:24	Temperature	20.09	C
GS-AP-MW-21	9/24/2019 10:24	Turbidity	0.38	NTU

**Alabama Power Company  
Plant Gorgas Ash Pond**

<b>WELL ID</b>	<b>READING TIME</b>	<b>DESCRIPTION</b>	<b>VALUE</b>	<b>UNIT</b>
GS-AP-MW-29H	9/24/2019 12:49	Conductivity	697.25	uS/cm
GS-AP-MW-29H	9/24/2019 12:49	DO	0.85	mg/L
GS-AP-MW-29H	9/24/2019 12:49	Depth to Water Detail	91.9	ft
GS-AP-MW-29H	9/24/2019 12:49	Oxidation Reduction Potention	-170.36	mv
GS-AP-MW-29H	9/24/2019 12:49	pH	7.55	pH
GS-AP-MW-29H	9/24/2019 12:49	Temperature	21.73	C
GS-AP-MW-29H	9/24/2019 12:49	Turbidity	12.2	NTU
GS-AP-MW-29H	9/24/2019 12:54	Conductivity	674.73	uS/cm
GS-AP-MW-29H	9/24/2019 12:54	DO	0.56	mg/L
GS-AP-MW-29H	9/24/2019 12:54	Depth to Water Detail	92	ft
GS-AP-MW-29H	9/24/2019 12:54	Oxidation Reduction Potention	-157.39	mv
GS-AP-MW-29H	9/24/2019 12:54	pH	7.3	pH
GS-AP-MW-29H	9/24/2019 12:54	Temperature	20.54	C
GS-AP-MW-29H	9/24/2019 12:54	Turbidity	4.89	NTU
GS-AP-MW-29H	9/24/2019 12:59	Conductivity	657.63	uS/cm
GS-AP-MW-29H	9/24/2019 12:59	DO	0.5	mg/L
GS-AP-MW-29H	9/24/2019 12:59	Depth to Water Detail	92.14	ft
GS-AP-MW-29H	9/24/2019 12:59	Oxidation Reduction Potention	-141.35	mv
GS-AP-MW-29H	9/24/2019 12:59	pH	7.06	pH
GS-AP-MW-29H	9/24/2019 12:59	Temperature	20.32	C
GS-AP-MW-29H	9/24/2019 12:59	Turbidity	3.28	NTU
GS-AP-MW-29H	9/24/2019 13:04	Conductivity	644.92	uS/cm
GS-AP-MW-29H	9/24/2019 13:04	DO	0.45	mg/L
GS-AP-MW-29H	9/24/2019 13:04	Depth to Water Detail	92.15	ft
GS-AP-MW-29H	9/24/2019 13:04	Oxidation Reduction Potention	-137.48	mv
GS-AP-MW-29H	9/24/2019 13:04	pH	7.07	pH
GS-AP-MW-29H	9/24/2019 13:04	Temperature	20.28	C
GS-AP-MW-29H	9/24/2019 13:04	Turbidity	2.92	NTU
GS-AP-MW-29H	9/24/2019 13:09	Conductivity	631.92	uS/cm
GS-AP-MW-29H	9/24/2019 13:09	DO	0.44	mg/L
GS-AP-MW-29H	9/24/2019 13:09	Depth to Water Detail	92.15	ft
GS-AP-MW-29H	9/24/2019 13:09	Oxidation Reduction Potention	-136.32	mv
GS-AP-MW-29H	9/24/2019 13:09	pH	7.09	pH
GS-AP-MW-29H	9/24/2019 13:09	Temperature	20.52	C
GS-AP-MW-29H	9/24/2019 13:09	Turbidity	2.88	NTU
GS-AP-MW-29H	9/24/2019 13:14	Conductivity	625.07	uS/cm
GS-AP-MW-29H	9/24/2019 13:14	DO	0.43	mg/L
GS-AP-MW-29H	9/24/2019 13:14	Depth to Water Detail	92.15	ft
GS-AP-MW-29H	9/24/2019 13:14	Oxidation Reduction Potention	-134.16	mv
GS-AP-MW-29H	9/24/2019 13:14	pH	7.11	pH
GS-AP-MW-29H	9/24/2019 13:14	Temperature	20.61	C
GS-AP-MW-29H	9/24/2019 13:14	Turbidity	2.52	NTU

**Alabama Power Company  
Plant Gorgas Ash Pond**

<b>WELL ID</b>	<b>READING TIME</b>	<b>DESCRIPTION</b>	<b>VALUE</b>	<b>UNIT</b>
GS-AP-MW-2	9/25/2019 8:57	Conductivity	570.26	uS/cm
GS-AP-MW-2	9/25/2019 8:57	DO	2.35	mg/L
GS-AP-MW-2	9/25/2019 8:57	Depth to Water Detail	148.98	ft
GS-AP-MW-2	9/25/2019 8:57	Oxidation Reduction Potention	-17.32	mv
GS-AP-MW-2	9/25/2019 8:57	pH	8.99	pH
GS-AP-MW-2	9/25/2019 8:57	Temperature	18.75	C
GS-AP-MW-2	9/25/2019 8:57	Turbidity	1.5	NTU
GS-AP-MW-2	9/25/2019 9:02	Conductivity	588.7	uS/cm
GS-AP-MW-2	9/25/2019 9:02	DO	1.11	mg/L
GS-AP-MW-2	9/25/2019 9:02	Depth to Water Detail	149.14	ft
GS-AP-MW-2	9/25/2019 9:02	Oxidation Reduction Potention	-27.09	mv
GS-AP-MW-2	9/25/2019 9:02	pH	9.26	pH
GS-AP-MW-2	9/25/2019 9:02	Temperature	18.66	C
GS-AP-MW-2	9/25/2019 9:02	Turbidity	1.07	NTU
GS-AP-MW-2	9/25/2019 9:07	Conductivity	593.92	uS/cm
GS-AP-MW-2	9/25/2019 9:07	DO	0.95	mg/L
GS-AP-MW-2	9/25/2019 9:07	Depth to Water Detail	149.15	ft
GS-AP-MW-2	9/25/2019 9:07	Oxidation Reduction Potention	-35.7	mv
GS-AP-MW-2	9/25/2019 9:07	pH	9.31	pH
GS-AP-MW-2	9/25/2019 9:07	Temperature	18.78	C
GS-AP-MW-2	9/25/2019 9:07	Turbidity	0.92	NTU
GS-AP-MW-2	9/25/2019 9:12	Conductivity	593.67	uS/cm
GS-AP-MW-2	9/25/2019 9:12	DO	0.88	mg/L
GS-AP-MW-2	9/25/2019 9:12	Depth to Water Detail	149.17	ft
GS-AP-MW-2	9/25/2019 9:12	Oxidation Reduction Potention	-43.98	mv
GS-AP-MW-2	9/25/2019 9:12	pH	9.34	pH
GS-AP-MW-2	9/25/2019 9:12	Temperature	18.88	C
GS-AP-MW-2	9/25/2019 9:12	Turbidity	0.94	NTU
GS-AP-MW-2	9/25/2019 9:17	Conductivity	592.16	uS/cm
GS-AP-MW-2	9/25/2019 9:17	DO	0.84	mg/L
GS-AP-MW-2	9/25/2019 9:17	Depth to Water Detail	149.18	ft
GS-AP-MW-2	9/25/2019 9:17	Oxidation Reduction Potention	-50.39	mv
GS-AP-MW-2	9/25/2019 9:17	pH	9.34	pH
GS-AP-MW-2	9/25/2019 9:17	Temperature	19.09	C
GS-AP-MW-2	9/25/2019 9:17	Turbidity	0.95	NTU
GS-AP-MW-2	9/25/2019 9:22	Conductivity	589.15	uS/cm
GS-AP-MW-2	9/25/2019 9:22	DO	0.83	mg/L
GS-AP-MW-2	9/25/2019 9:22	Depth to Water Detail	149.19	ft
GS-AP-MW-2	9/25/2019 9:22	Oxidation Reduction Potention	-54.31	mv
GS-AP-MW-2	9/25/2019 9:22	pH	9.31	pH
GS-AP-MW-2	9/25/2019 9:22	Temperature	18.95	C
GS-AP-MW-2	9/25/2019 9:22	Turbidity	1.19	NTU

**Alabama Power Company  
Plant Gorgas Ash Pond**

<b>WELL ID</b>	<b>READING TIME</b>	<b>DESCRIPTION</b>	<b>VALUE</b>	<b>UNIT</b>
GS-AP-MW-6D	9/23/2019 13:11	Conductivity	488.35	uS/cm
GS-AP-MW-6D	9/23/2019 13:11	DO	0.17	mg/L
GS-AP-MW-6D	9/23/2019 13:11	Depth to Water Detail	11.55	ft
GS-AP-MW-6D	9/23/2019 13:11	Oxidation Reduction Potention	65.55	mv
GS-AP-MW-6D	9/23/2019 13:11	pH	7.11	pH
GS-AP-MW-6D	9/23/2019 13:11	Temperature	21.65	C
GS-AP-MW-6D	9/23/2019 13:11	Turbidity	0.54	NTU
GS-AP-MW-6D	9/23/2019 13:16	Conductivity	487.65	uS/cm
GS-AP-MW-6D	9/23/2019 13:16	DO	0.14	mg/L
GS-AP-MW-6D	9/23/2019 13:16	Depth to Water Detail	11.6	ft
GS-AP-MW-6D	9/23/2019 13:16	Oxidation Reduction Potention	60.81	mv
GS-AP-MW-6D	9/23/2019 13:16	pH	7.11	pH
GS-AP-MW-6D	9/23/2019 13:16	Temperature	21.56	C
GS-AP-MW-6D	9/23/2019 13:16	Turbidity	0.46	NTU
GS-AP-MW-6D	9/23/2019 13:21	Conductivity	490.35	uS/cm
GS-AP-MW-6D	9/23/2019 13:21	DO	0.14	mg/L
GS-AP-MW-6D	9/23/2019 13:21	Depth to Water Detail	11.61	ft
GS-AP-MW-6D	9/23/2019 13:21	Oxidation Reduction Potention	52.99	mv
GS-AP-MW-6D	9/23/2019 13:21	pH	7.19	pH
GS-AP-MW-6D	9/23/2019 13:21	Temperature	21.3	C
GS-AP-MW-6D	9/23/2019 13:21	Turbidity	0.47	NTU
GS-AP-MW-6D	9/23/2019 13:26	Conductivity	490.82	uS/cm
GS-AP-MW-6D	9/23/2019 13:26	DO	0.14	mg/L
GS-AP-MW-6D	9/23/2019 13:26	Depth to Water Detail	11.63	ft
GS-AP-MW-6D	9/23/2019 13:26	Oxidation Reduction Potention	47.06	mv
GS-AP-MW-6D	9/23/2019 13:26	pH	7.23	pH
GS-AP-MW-6D	9/23/2019 13:26	Temperature	21.22	C
GS-AP-MW-6D	9/23/2019 13:26	Turbidity	0.51	NTU

**Alabama Power Company  
Plant Gorgas Ash Pond**

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-6S	9/23/2019 14:11	Conductivity	621.86	uS/cm
GS-AP-MW-6S	9/23/2019 14:11	DO	0.19	mg/L
GS-AP-MW-6S	9/23/2019 14:11	Depth to Water Detail	17.44	ft
GS-AP-MW-6S	9/23/2019 14:11	Oxidation Reduction Potention	38.04	mv
GS-AP-MW-6S	9/23/2019 14:11	pH	6.35	pH
GS-AP-MW-6S	9/23/2019 14:11	Temperature	21.05	C
GS-AP-MW-6S	9/23/2019 14:11	Turbidity	16.2	NTU
GS-AP-MW-6S	9/23/2019 14:16	Conductivity	621.09	uS/cm
GS-AP-MW-6S	9/23/2019 14:16	DO	0.14	mg/L
GS-AP-MW-6S	9/23/2019 14:16	Depth to Water Detail	17.44	ft
GS-AP-MW-6S	9/23/2019 14:16	Oxidation Reduction Potention	21.68	mv
GS-AP-MW-6S	9/23/2019 14:16	pH	6.37	pH
GS-AP-MW-6S	9/23/2019 14:16	Temperature	21.1	C
GS-AP-MW-6S	9/23/2019 14:16	Turbidity	6.87	NTU
GS-AP-MW-6S	9/23/2019 14:21	Conductivity	620.85	uS/cm
GS-AP-MW-6S	9/23/2019 14:21	DO	0.11	mg/L
GS-AP-MW-6S	9/23/2019 14:21	Depth to Water Detail	17.44	ft
GS-AP-MW-6S	9/23/2019 14:21	Oxidation Reduction Potention	0	mv
GS-AP-MW-6S	9/23/2019 14:21	pH	6.4	pH
GS-AP-MW-6S	9/23/2019 14:21	Temperature	21.21	C
GS-AP-MW-6S	9/23/2019 14:21	Turbidity	13.8	NTU
GS-AP-MW-6S	9/23/2019 14:26	Conductivity	618.47	uS/cm
GS-AP-MW-6S	9/23/2019 14:26	DO	0.1	mg/L
GS-AP-MW-6S	9/23/2019 14:26	Depth to Water Detail	17.44	ft
GS-AP-MW-6S	9/23/2019 14:26	Oxidation Reduction Potention	-21.15	mv
GS-AP-MW-6S	9/23/2019 14:26	pH	6.44	pH
GS-AP-MW-6S	9/23/2019 14:26	Temperature	21.22	C
GS-AP-MW-6S	9/23/2019 14:26	Turbidity	8.94	NTU
GS-AP-MW-6S	9/23/2019 14:31	Conductivity	619.01	uS/cm
GS-AP-MW-6S	9/23/2019 14:31	DO	0.1	mg/L
GS-AP-MW-6S	9/23/2019 14:31	Depth to Water Detail	17.44	ft
GS-AP-MW-6S	9/23/2019 14:31	Oxidation Reduction Potention	-38.35	mv
GS-AP-MW-6S	9/23/2019 14:31	pH	6.48	pH
GS-AP-MW-6S	9/23/2019 14:31	Temperature	21.22	C
GS-AP-MW-6S	9/23/2019 14:31	Turbidity	6.14	NTU
GS-AP-MW-6S	9/23/2019 14:36	Conductivity	618.86	uS/cm
GS-AP-MW-6S	9/23/2019 14:36	DO	0.09	mg/L
GS-AP-MW-6S	9/23/2019 14:36	Depth to Water Detail	17.44	ft
GS-AP-MW-6S	9/23/2019 14:36	Oxidation Reduction Potention	-50.9	mv
GS-AP-MW-6S	9/23/2019 14:36	pH	6.51	pH
GS-AP-MW-6S	9/23/2019 14:36	Temperature	21.36	C
GS-AP-MW-6S	9/23/2019 14:36	Turbidity	6.56	NTU



**Alabama Power Company  
Plant Gorgas Ash Pond**

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-12V	9/25/2019 11:02	Conductivity	960.76	uS/cm
GS-AP-MW-12V	9/25/2019 11:02	DO	1.09	mg/L
GS-AP-MW-12V	9/25/2019 11:02	Depth to Water Detail	93.28	ft
GS-AP-MW-12V	9/25/2019 11:02	Oxidation Reduction Potention	-270.33	mv
GS-AP-MW-12V	9/25/2019 11:02	pH	11.66	pH
GS-AP-MW-12V	9/25/2019 11:02	Temperature	22.2	C
GS-AP-MW-12V	9/25/2019 11:02	Turbidity	39.5	NTU
GS-AP-MW-12V	9/25/2019 11:07	Conductivity	991.82	uS/cm
GS-AP-MW-12V	9/25/2019 11:07	DO	0.98	mg/L
GS-AP-MW-12V	9/25/2019 11:07	Depth to Water Detail	93.83	ft
GS-AP-MW-12V	9/25/2019 11:07	Oxidation Reduction Potention	-286.83	mv
GS-AP-MW-12V	9/25/2019 11:07	pH	11.68	pH
GS-AP-MW-12V	9/25/2019 11:07	Temperature	22.35	C
GS-AP-MW-12V	9/25/2019 11:07	Turbidity	29.6	NTU
GS-AP-MW-12V	9/25/2019 11:12	Conductivity	967.95	uS/cm
GS-AP-MW-12V	9/25/2019 11:12	DO	0.96	mg/L
GS-AP-MW-12V	9/25/2019 11:12	Depth to Water Detail	94.41	ft
GS-AP-MW-12V	9/25/2019 11:12	Oxidation Reduction Potention	-296.6	mv
GS-AP-MW-12V	9/25/2019 11:12	pH	11.68	pH
GS-AP-MW-12V	9/25/2019 11:12	Temperature	22.38	C
GS-AP-MW-12V	9/25/2019 11:12	Turbidity	23.3	NTU
GS-AP-MW-12V	9/25/2019 11:17	Conductivity	934.5	uS/cm
GS-AP-MW-12V	9/25/2019 11:17	DO	1.03	mg/L
GS-AP-MW-12V	9/25/2019 11:17	Depth to Water Detail	94.84	ft
GS-AP-MW-12V	9/25/2019 11:17	Oxidation Reduction Potention	-300.31	mv
GS-AP-MW-12V	9/25/2019 11:17	pH	11.64	pH
GS-AP-MW-12V	9/25/2019 11:17	Temperature	22.86	C
GS-AP-MW-12V	9/25/2019 11:17	Turbidity	20.7	NTU
GS-AP-MW-12V	9/25/2019 11:22	Conductivity	900.1	uS/cm
GS-AP-MW-12V	9/25/2019 11:22	DO	1.06	mg/L
GS-AP-MW-12V	9/25/2019 11:22	Depth to Water Detail	95.23	ft
GS-AP-MW-12V	9/25/2019 11:22	Oxidation Reduction Potention	-303.16	mv
GS-AP-MW-12V	9/25/2019 11:22	pH	11.63	pH
GS-AP-MW-12V	9/25/2019 11:22	Temperature	22.69	C
GS-AP-MW-12V	9/25/2019 11:22	Turbidity	25.3	NTU
GS-AP-MW-12V	9/25/2019 11:27	Conductivity	847.65	uS/cm
GS-AP-MW-12V	9/25/2019 11:27	DO	1.08	mg/L
GS-AP-MW-12V	9/25/2019 11:27	Depth to Water Detail	95.56	ft
GS-AP-MW-12V	9/25/2019 11:27	Oxidation Reduction Potention	-304.38	mv
GS-AP-MW-12V	9/25/2019 11:27	pH	11.59	pH
GS-AP-MW-12V	9/25/2019 11:27	Temperature	22.88	C
GS-AP-MW-12V	9/25/2019 11:27	Turbidity	23.7	NTU
GS-AP-MW-12V	9/25/2019 11:32	Conductivity	791.8	uS/cm
GS-AP-MW-12V	9/25/2019 11:32	DO	1.1	mg/L
GS-AP-MW-12V	9/25/2019 11:32	Depth to Water Detail	95.58	ft
GS-AP-MW-12V	9/25/2019 11:32	Oxidation Reduction Potention	-305.15	mv

**Alabama Power Company  
Plant Gorgas Ash Pond**

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-12V	9/25/2019 11:32	pH	11.55	pH
GS-AP-MW-12V	9/25/2019 11:32	Temperature	22.89	C
GS-AP-MW-12V	9/25/2019 11:32	Turbidity	27.3	NTU
GS-AP-MW-12V	9/25/2019 11:37	Conductivity	746.95	uS/cm
GS-AP-MW-12V	9/25/2019 11:37	DO	1.12	mg/L
GS-AP-MW-12V	9/25/2019 11:37	Depth to Water Detail	96.09	ft
GS-AP-MW-12V	9/25/2019 11:37	Oxidation Reduction Potention	-304.71	mv
GS-AP-MW-12V	9/25/2019 11:37	pH	11.5	pH
GS-AP-MW-12V	9/25/2019 11:37	Temperature	23.35	C
GS-AP-MW-12V	9/25/2019 11:37	Turbidity	26.1	NTU
GS-AP-MW-12V	9/25/2019 11:42	Conductivity	672.66	uS/cm
GS-AP-MW-12V	9/25/2019 11:42	DO	1.12	mg/L
GS-AP-MW-12V	9/25/2019 11:42	Depth to Water Detail	96.28	ft
GS-AP-MW-12V	9/25/2019 11:42	Oxidation Reduction Potention	-304.01	mv
GS-AP-MW-12V	9/25/2019 11:42	pH	11.44	pH
GS-AP-MW-12V	9/25/2019 11:42	Temperature	23.46	C
GS-AP-MW-12V	9/25/2019 11:42	Turbidity	30.2	NTU
GS-AP-MW-12V	9/25/2019 11:47	Conductivity	600.62	uS/cm
GS-AP-MW-12V	9/25/2019 11:47	DO	1.14	mg/L
GS-AP-MW-12V	9/25/2019 11:47	Depth to Water Detail	96.46	ft
GS-AP-MW-12V	9/25/2019 11:47	Oxidation Reduction Potention	-301.64	mv
GS-AP-MW-12V	9/25/2019 11:47	pH	11.35	pH
GS-AP-MW-12V	9/25/2019 11:47	Temperature	23.69	C
GS-AP-MW-12V	9/25/2019 11:47	Turbidity	29.2	NTU
GS-AP-MW-12V	9/25/2019 11:52	Conductivity	538.27	uS/cm
GS-AP-MW-12V	9/25/2019 11:52	DO	1.12	mg/L
GS-AP-MW-12V	9/25/2019 11:52	Depth to Water Detail	96.65	ft
GS-AP-MW-12V	9/25/2019 11:52	Oxidation Reduction Potention	-300.13	mv
GS-AP-MW-12V	9/25/2019 11:52	pH	11.26	pH
GS-AP-MW-12V	9/25/2019 11:52	Temperature	23.87	C
GS-AP-MW-12V	9/25/2019 11:52	Turbidity	28.9	NTU
GS-AP-MW-12V	9/25/2019 11:57	Conductivity	437.61	uS/cm
GS-AP-MW-12V	9/25/2019 11:57	DO	1.14	mg/L
GS-AP-MW-12V	9/25/2019 11:57	Depth to Water Detail	96.81	ft
GS-AP-MW-12V	9/25/2019 11:57	Oxidation Reduction Potention	-296.34	mv
GS-AP-MW-12V	9/25/2019 11:57	pH	11.11	pH
GS-AP-MW-12V	9/25/2019 11:57	Temperature	23.92	C
GS-AP-MW-12V	9/25/2019 11:57	Turbidity	30.4	NTU
GS-AP-MW-12V	9/25/2019 12:02	Conductivity	399.53	uS/cm
GS-AP-MW-12V	9/25/2019 12:02	DO	1.18	mg/L
GS-AP-MW-12V	9/25/2019 12:02	Depth to Water Detail	96.92	ft
GS-AP-MW-12V	9/25/2019 12:02	Oxidation Reduction Potention	-294.6	mv
GS-AP-MW-12V	9/25/2019 12:02	pH	11.02	pH
GS-AP-MW-12V	9/25/2019 12:02	Temperature	23.68	C
GS-AP-MW-12V	9/25/2019 12:02	Turbidity	30.8	NTU
GS-AP-MW-12V	9/25/2019 12:07	Conductivity	365.01	uS/cm

**Alabama Power Company  
Plant Gorgas Ash Pond**

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-12V	9/25/2019 12:07	DO	1.18	mg/L
GS-AP-MW-12V	9/25/2019 12:07	Depth to Water Detail	97.04	ft
GS-AP-MW-12V	9/25/2019 12:07	Oxidation Reduction Potention	-292.68	mv
GS-AP-MW-12V	9/25/2019 12:07	pH	10.92	pH
GS-AP-MW-12V	9/25/2019 12:07	Temperature	23.36	C
GS-AP-MW-12V	9/25/2019 12:07	Turbidity	29.2	NTU
GS-AP-MW-12V	9/25/2019 12:12	Conductivity	339	uS/cm
GS-AP-MW-12V	9/25/2019 12:12	DO	1.2	mg/L
GS-AP-MW-12V	9/25/2019 12:12	Depth to Water Detail	97.11	ft
GS-AP-MW-12V	9/25/2019 12:12	Oxidation Reduction Potention	-288.54	mv
GS-AP-MW-12V	9/25/2019 12:12	pH	10.79	pH
GS-AP-MW-12V	9/25/2019 12:12	Temperature	23.67	C
GS-AP-MW-12V	9/25/2019 12:12	Turbidity	28.9	NTU
GS-AP-MW-12V	9/25/2019 12:17	Conductivity	329.18	uS/cm
GS-AP-MW-12V	9/25/2019 12:17	DO	1.22	mg/L
GS-AP-MW-12V	9/25/2019 12:17	Depth to Water Detail	97.18	ft
GS-AP-MW-12V	9/25/2019 12:17	Oxidation Reduction Potention	-287.14	mv
GS-AP-MW-12V	9/25/2019 12:17	pH	10.73	pH
GS-AP-MW-12V	9/25/2019 12:17	Temperature	23.81	C
GS-AP-MW-12V	9/25/2019 12:17	Turbidity	26.3	NTU
GS-AP-MW-12V	9/25/2019 12:22	Conductivity	307.5	uS/cm
GS-AP-MW-12V	9/25/2019 12:22	DO	1.23	mg/L
GS-AP-MW-12V	9/25/2019 12:22	Depth to Water Detail	97.28	ft
GS-AP-MW-12V	9/25/2019 12:22	Oxidation Reduction Potention	-280.77	mv
GS-AP-MW-12V	9/25/2019 12:22	pH	10.56	pH
GS-AP-MW-12V	9/25/2019 12:22	Temperature	24.18	C
GS-AP-MW-12V	9/25/2019 12:22	Turbidity	24.9	NTU
GS-AP-MW-12V	9/25/2019 12:27	Conductivity	289.17	uS/cm
GS-AP-MW-12V	9/25/2019 12:27	DO	1.24	mg/L
GS-AP-MW-12V	9/25/2019 12:27	Depth to Water Detail	97.3	ft
GS-AP-MW-12V	9/25/2019 12:27	Oxidation Reduction Potention	-272.3	mv
GS-AP-MW-12V	9/25/2019 12:27	pH	10.36	pH
GS-AP-MW-12V	9/25/2019 12:27	Temperature	24.49	C
GS-AP-MW-12V	9/25/2019 12:27	Turbidity	23.6	NTU
GS-AP-MW-12V	9/25/2019 12:32	Conductivity	278.16	uS/cm
GS-AP-MW-12V	9/25/2019 12:32	DO	1.26	mg/L
GS-AP-MW-12V	9/25/2019 12:32	Depth to Water Detail	97.33	ft
GS-AP-MW-12V	9/25/2019 12:32	Oxidation Reduction Potention	-262.38	mv
GS-AP-MW-12V	9/25/2019 12:32	pH	10.17	pH
GS-AP-MW-12V	9/25/2019 12:32	Temperature	24.41	C
GS-AP-MW-12V	9/25/2019 12:32	Turbidity	21.3	NTU
GS-AP-MW-12V	9/25/2019 12:37	Conductivity	272.52	uS/cm
GS-AP-MW-12V	9/25/2019 12:37	DO	1.25	mg/L
GS-AP-MW-12V	9/25/2019 12:37	Depth to Water Detail	97.39	ft
GS-AP-MW-12V	9/25/2019 12:37	Oxidation Reduction Potention	-253.16	mv
GS-AP-MW-12V	9/25/2019 12:37	pH	9.98	pH

**Alabama Power Company  
Plant Gorgas Ash Pond**

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-12V	9/25/2019 12:37	Temperature	24.54	C
GS-AP-MW-12V	9/25/2019 12:37	Turbidity	16.8	NTU
GS-AP-MW-12V	9/25/2019 12:42	Conductivity	271.4	uS/cm
GS-AP-MW-12V	9/25/2019 12:42	DO	1.28	mg/L
GS-AP-MW-12V	9/25/2019 12:42	Depth to Water Detail	97.42	ft
GS-AP-MW-12V	9/25/2019 12:42	Oxidation Reduction Potention	-244.18	mv
GS-AP-MW-12V	9/25/2019 12:42	pH	9.81	pH
GS-AP-MW-12V	9/25/2019 12:42	Temperature	24.95	C
GS-AP-MW-12V	9/25/2019 12:42	Turbidity	18.1	NTU
GS-AP-MW-12V	9/25/2019 12:47	Conductivity	271.51	uS/cm
GS-AP-MW-12V	9/25/2019 12:47	DO	1.28	mg/L
GS-AP-MW-12V	9/25/2019 12:47	Depth to Water Detail	97.44	ft
GS-AP-MW-12V	9/25/2019 12:47	Oxidation Reduction Potention	-235.89	mv
GS-AP-MW-12V	9/25/2019 12:47	pH	9.66	pH
GS-AP-MW-12V	9/25/2019 12:47	Temperature	25.01	C
GS-AP-MW-12V	9/25/2019 12:47	Turbidity	15.9	NTU
GS-AP-MW-12V	9/25/2019 12:52	Conductivity	270.82	uS/cm
GS-AP-MW-12V	9/25/2019 12:52	DO	1.26	mg/L
GS-AP-MW-12V	9/25/2019 12:52	Depth to Water Detail	97.46	ft
GS-AP-MW-12V	9/25/2019 12:52	Oxidation Reduction Potention	-229	mv
GS-AP-MW-12V	9/25/2019 12:52	pH	9.58	pH
GS-AP-MW-12V	9/25/2019 12:52	Temperature	24.96	C
GS-AP-MW-12V	9/25/2019 12:52	Turbidity	14.8	NTU
GS-AP-MW-12V	9/25/2019 12:57	Conductivity	272.07	uS/cm
GS-AP-MW-12V	9/25/2019 12:57	DO	1.27	mg/L
GS-AP-MW-12V	9/25/2019 12:57	Depth to Water Detail	97.46	ft
GS-AP-MW-12V	9/25/2019 12:57	Oxidation Reduction Potention	-227.13	mv
GS-AP-MW-12V	9/25/2019 12:57	pH	9.53	pH
GS-AP-MW-12V	9/25/2019 12:57	Temperature	24.69	C
GS-AP-MW-12V	9/25/2019 12:57	Turbidity	13.6	NTU
GS-AP-MW-12V	9/25/2019 13:02	Conductivity	275.15	uS/cm
GS-AP-MW-12V	9/25/2019 13:02	DO	1.28	mg/L
GS-AP-MW-12V	9/25/2019 13:02	Depth to Water Detail	97.48	ft
GS-AP-MW-12V	9/25/2019 13:02	Oxidation Reduction Potention	-224.87	mv
GS-AP-MW-12V	9/25/2019 13:02	pH	9.49	pH
GS-AP-MW-12V	9/25/2019 13:02	Temperature	24.53	C
GS-AP-MW-12V	9/25/2019 13:02	Turbidity	13.3	NTU
GS-AP-MW-12V	9/25/2019 13:07	Conductivity	276.51	uS/cm
GS-AP-MW-12V	9/25/2019 13:07	DO	1.27	mg/L
GS-AP-MW-12V	9/25/2019 13:07	Depth to Water Detail	97.48	ft
GS-AP-MW-12V	9/25/2019 13:07	Oxidation Reduction Potention	-222.77	mv
GS-AP-MW-12V	9/25/2019 13:07	pH	9.45	pH
GS-AP-MW-12V	9/25/2019 13:07	Temperature	24.56	C
GS-AP-MW-12V	9/25/2019 13:07	Turbidity	12.3	NTU
GS-AP-MW-12V	9/25/2019 13:12	Conductivity	277.44	uS/cm
GS-AP-MW-12V	9/25/2019 13:12	DO	1.28	mg/L

**Alabama Power Company  
Plant Gorgas Ash Pond**

<b>WELL ID</b>	<b>READING TIME</b>	<b>DESCRIPTION</b>	<b>VALUE</b>	<b>UNIT</b>
GS-AP-MW-12V	9/25/2019 13:12	Depth to Water Detail	97.52	ft
GS-AP-MW-12V	9/25/2019 13:12	Oxidation Reduction Potention	-221.42	mv
GS-AP-MW-12V	9/25/2019 13:12	pH	9.43	pH
GS-AP-MW-12V	9/25/2019 13:12	Temperature	24.52	C
GS-AP-MW-12V	9/25/2019 13:12	Turbidity	11.2	NTU
GS-AP-MW-12V	9/25/2019 13:17	Conductivity	278.04	uS/cm
GS-AP-MW-12V	9/25/2019 13:17	DO	1.28	mg/L
GS-AP-MW-12V	9/25/2019 13:17	Depth to Water Detail	97.53	ft
GS-AP-MW-12V	9/25/2019 13:17	Oxidation Reduction Potention	-219.62	mv
GS-AP-MW-12V	9/25/2019 13:17	pH	9.4	pH
GS-AP-MW-12V	9/25/2019 13:17	Temperature	24	C
GS-AP-MW-12V	9/25/2019 13:17	Turbidity	10.89	NTU
GS-AP-MW-12V	9/25/2019 13:22	Conductivity	279.3	uS/cm
GS-AP-MW-12V	9/25/2019 13:22	DO	1.28	mg/L
GS-AP-MW-12V	9/25/2019 13:22	Depth to Water Detail	97.55	ft
GS-AP-MW-12V	9/25/2019 13:22	Oxidation Reduction Potention	-217.63	mv
GS-AP-MW-12V	9/25/2019 13:22	pH	9.35	pH
GS-AP-MW-12V	9/25/2019 13:22	Temperature	24.24	C
GS-AP-MW-12V	9/25/2019 13:22	Turbidity	10.67	NTU
GS-AP-MW-12V	9/25/2019 13:27	Conductivity	281.91	uS/cm
GS-AP-MW-12V	9/25/2019 13:27	DO	1.28	mg/L
GS-AP-MW-12V	9/25/2019 13:27	Depth to Water Detail	97.58	ft
GS-AP-MW-12V	9/25/2019 13:27	Oxidation Reduction Potention	-213.19	mv
GS-AP-MW-12V	9/25/2019 13:27	pH	9.29	pH
GS-AP-MW-12V	9/25/2019 13:27	Temperature	23.36	C
GS-AP-MW-12V	9/25/2019 13:27	Turbidity	9.54	NTU

**Alabama Power Company  
Plant Gorgas Ash Pond**

<b>WELL ID</b>	<b>READING TIME</b>	<b>DESCRIPTION</b>	<b>VALUE</b>	<b>UNIT</b>
GS-AP-MW-16D	9/24/2019 13:11	Conductivity	360.06	uS/cm
GS-AP-MW-16D	9/24/2019 13:11	DO	2.51	mg/L
GS-AP-MW-16D	9/24/2019 13:11	Depth to Water Detail	147.43	ft
GS-AP-MW-16D	9/24/2019 13:11	Oxidation Reduction Potention	-19.07	mv
GS-AP-MW-16D	9/24/2019 13:11	pH	7.28	pH
GS-AP-MW-16D	9/24/2019 13:11	Temperature	21.13	C
GS-AP-MW-16D	9/24/2019 13:11	Turbidity	0.99	NTU
GS-AP-MW-16D	9/24/2019 13:16	Conductivity	362.53	uS/cm
GS-AP-MW-16D	9/24/2019 13:16	DO	0.86	mg/L
GS-AP-MW-16D	9/24/2019 13:16	Depth to Water Detail	147.98	ft
GS-AP-MW-16D	9/24/2019 13:16	Oxidation Reduction Potention	-34	mv
GS-AP-MW-16D	9/24/2019 13:16	pH	7.34	pH
GS-AP-MW-16D	9/24/2019 13:16	Temperature	21.56	C
GS-AP-MW-16D	9/24/2019 13:16	Turbidity	0.57	NTU
GS-AP-MW-16D	9/24/2019 13:21	Conductivity	362.08	uS/cm
GS-AP-MW-16D	9/24/2019 13:21	DO	0.53	mg/L
GS-AP-MW-16D	9/24/2019 13:21	Depth to Water Detail	148.28	ft
GS-AP-MW-16D	9/24/2019 13:21	Oxidation Reduction Potention	-42.74	mv
GS-AP-MW-16D	9/24/2019 13:21	pH	7.37	pH
GS-AP-MW-16D	9/24/2019 13:21	Temperature	21.46	C
GS-AP-MW-16D	9/24/2019 13:21	Turbidity	0.55	NTU
GS-AP-MW-16D	9/24/2019 13:26	Conductivity	361.53	uS/cm
GS-AP-MW-16D	9/24/2019 13:26	DO	0.46	mg/L
GS-AP-MW-16D	9/24/2019 13:26	Depth to Water Detail	148.64	ft
GS-AP-MW-16D	9/24/2019 13:26	Oxidation Reduction Potention	-48.86	mv
GS-AP-MW-16D	9/24/2019 13:26	pH	7.37	pH
GS-AP-MW-16D	9/24/2019 13:26	Temperature	21.36	C
GS-AP-MW-16D	9/24/2019 13:26	Turbidity	0.48	NTU
GS-AP-MW-16D	9/24/2019 13:31	Conductivity	361.84	uS/cm
GS-AP-MW-16D	9/24/2019 13:31	DO	0.45	mg/L
GS-AP-MW-16D	9/24/2019 13:31	Depth to Water Detail	148.87	ft
GS-AP-MW-16D	9/24/2019 13:31	Oxidation Reduction Potention	-54.38	mv
GS-AP-MW-16D	9/24/2019 13:31	pH	7.4	pH
GS-AP-MW-16D	9/24/2019 13:31	Temperature	21.31	C
GS-AP-MW-16D	9/24/2019 13:31	Turbidity	0.49	NTU
GS-AP-MW-16D	9/24/2019 13:36	Conductivity	360.13	uS/cm
GS-AP-MW-16D	9/24/2019 13:36	DO	0.44	mg/L
GS-AP-MW-16D	9/24/2019 13:36	Depth to Water Detail	149.06	ft
GS-AP-MW-16D	9/24/2019 13:36	Oxidation Reduction Potention	-58.12	mv
GS-AP-MW-16D	9/24/2019 13:36	pH	7.41	pH
GS-AP-MW-16D	9/24/2019 13:36	Temperature	21.14	C
GS-AP-MW-16D	9/24/2019 13:36	Turbidity	0.51	NTU
GS-AP-MW-16D	9/24/2019 13:41	Conductivity	361.57	uS/cm
GS-AP-MW-16D	9/24/2019 13:41	DO	0.44	mg/L
GS-AP-MW-16D	9/24/2019 13:41	Depth to Water Detail	149.23	ft
GS-AP-MW-16D	9/24/2019 13:41	Oxidation Reduction Potention	-59.02	mv

**Alabama Power Company  
Plant Gorgas Ash Pond**

<b>WELL ID</b>	<b>READING TIME</b>	<b>DESCRIPTION</b>	<b>VALUE</b>	<b>UNIT</b>
GS-AP-MW-16D	9/24/2019 13:41	pH	7.38	pH
GS-AP-MW-16D	9/24/2019 13:41	Temperature	21.48	C
GS-AP-MW-16D	9/24/2019 13:41	Turbidity	0.56	NTU
GS-AP-MW-16D	9/24/2019 13:46	Conductivity	360.53	uS/cm
GS-AP-MW-16D	9/24/2019 13:46	DO	0.45	mg/L
GS-AP-MW-16D	9/24/2019 13:46	Depth to Water Detail	149.38	ft
GS-AP-MW-16D	9/24/2019 13:46	Oxidation Reduction Potention	-63.12	mv
GS-AP-MW-16D	9/24/2019 13:46	pH	7.43	pH
GS-AP-MW-16D	9/24/2019 13:46	Temperature	21.23	C
GS-AP-MW-16D	9/24/2019 13:46	Turbidity	0.43	NTU
GS-AP-MW-16D	9/24/2019 13:51	Conductivity	358.82	uS/cm
GS-AP-MW-16D	9/24/2019 13:51	DO	0.43	mg/L
GS-AP-MW-16D	9/24/2019 13:51	Depth to Water Detail	149.53	ft
GS-AP-MW-16D	9/24/2019 13:51	Oxidation Reduction Potention	-63.39	mv
GS-AP-MW-16D	9/24/2019 13:51	pH	7.41	pH
GS-AP-MW-16D	9/24/2019 13:51	Temperature	21.24	C
GS-AP-MW-16D	9/24/2019 13:51	Turbidity	0.42	NTU
GS-AP-MW-16D	9/24/2019 13:56	Conductivity	360.37	uS/cm
GS-AP-MW-16D	9/24/2019 13:56	DO	0.45	mg/L
GS-AP-MW-16D	9/24/2019 13:56	Depth to Water Detail	149.63	ft
GS-AP-MW-16D	9/24/2019 13:56	Oxidation Reduction Potention	-65.9	mv
GS-AP-MW-16D	9/24/2019 13:56	pH	7.43	pH
GS-AP-MW-16D	9/24/2019 13:56	Temperature	21.2	C
GS-AP-MW-16D	9/24/2019 13:56	Turbidity	0.44	NTU

**Alabama Power Company  
Plant Gorgas Ash Pond**

<b>WELL ID</b>	<b>READING TIME</b>	<b>DESCRIPTION</b>	<b>VALUE</b>	<b>UNIT</b>
GS-AP-MW-17V	9/24/2019 8:12	Conductivity	752.79	uS/cm
GS-AP-MW-17V	9/24/2019 8:12	DO	0.57	mg/L
GS-AP-MW-17V	9/24/2019 8:12	Depth to Water Detail	113.67	ft
GS-AP-MW-17V	9/24/2019 8:12	Oxidation Reduction Potention	-40.4	mv
GS-AP-MW-17V	9/24/2019 8:12	pH	7.43	pH
GS-AP-MW-17V	9/24/2019 8:12	Temperature	19.36	C
GS-AP-MW-17V	9/24/2019 8:12	Turbidity	6.45	NTU
GS-AP-MW-17V	9/24/2019 8:17	Conductivity	748.6	uS/cm
GS-AP-MW-17V	9/24/2019 8:17	DO	0.43	mg/L
GS-AP-MW-17V	9/24/2019 8:17	Depth to Water Detail	114.25	ft
GS-AP-MW-17V	9/24/2019 8:17	Oxidation Reduction Potention	-106.29	mv
GS-AP-MW-17V	9/24/2019 8:17	pH	7.51	pH
GS-AP-MW-17V	9/24/2019 8:17	Temperature	19.24	C
GS-AP-MW-17V	9/24/2019 8:17	Turbidity	3.76	NTU
GS-AP-MW-17V	9/24/2019 8:22	Conductivity	750.6	uS/cm
GS-AP-MW-17V	9/24/2019 8:22	DO	0.38	mg/L
GS-AP-MW-17V	9/24/2019 8:22	Depth to Water Detail	115.08	ft
GS-AP-MW-17V	9/24/2019 8:22	Oxidation Reduction Potention	-137.38	mv
GS-AP-MW-17V	9/24/2019 8:22	pH	7.54	pH
GS-AP-MW-17V	9/24/2019 8:22	Temperature	19.1	C
GS-AP-MW-17V	9/24/2019 8:22	Turbidity	3.37	NTU
GS-AP-MW-17V	9/24/2019 8:27	Conductivity	744.73	uS/cm
GS-AP-MW-17V	9/24/2019 8:27	DO	0.37	mg/L
GS-AP-MW-17V	9/24/2019 8:27	Depth to Water Detail	115.61	ft
GS-AP-MW-17V	9/24/2019 8:27	Oxidation Reduction Potention	-155.1	mv
GS-AP-MW-17V	9/24/2019 8:27	pH	7.56	pH
GS-AP-MW-17V	9/24/2019 8:27	Temperature	19.12	C
GS-AP-MW-17V	9/24/2019 8:27	Turbidity	3.67	NTU
GS-AP-MW-17V	9/24/2019 8:32	Conductivity	751.53	uS/cm
GS-AP-MW-17V	9/24/2019 8:32	DO	0.4	mg/L
GS-AP-MW-17V	9/24/2019 8:32	Depth to Water Detail	116.03	ft
GS-AP-MW-17V	9/24/2019 8:32	Oxidation Reduction Potention	-167.57	mv
GS-AP-MW-17V	9/24/2019 8:32	pH	7.59	pH
GS-AP-MW-17V	9/24/2019 8:32	Temperature	19.09	C
GS-AP-MW-17V	9/24/2019 8:32	Turbidity	3.13	NTU
GS-AP-MW-17V	9/24/2019 8:37	Conductivity	749.86	uS/cm
GS-AP-MW-17V	9/24/2019 8:37	DO	0.39	mg/L
GS-AP-MW-17V	9/24/2019 8:37	Depth to Water Detail	116.53	ft
GS-AP-MW-17V	9/24/2019 8:37	Oxidation Reduction Potention	-172.47	mv
GS-AP-MW-17V	9/24/2019 8:37	pH	7.58	pH
GS-AP-MW-17V	9/24/2019 8:37	Temperature	19.17	C
GS-AP-MW-17V	9/24/2019 8:37	Turbidity	2.69	NTU
GS-AP-MW-17V	9/24/2019 8:42	Conductivity	746.77	uS/cm
GS-AP-MW-17V	9/24/2019 8:42	DO	0.42	mg/L
GS-AP-MW-17V	9/24/2019 8:42	Depth to Water Detail	117.08	ft
GS-AP-MW-17V	9/24/2019 8:42	Oxidation Reduction Potention	-175.49	mv



**Alabama Power Company  
Plant Gorgas Ash Pond**

<b>WELL ID</b>	<b>READING TIME</b>	<b>DESCRIPTION</b>	<b>VALUE</b>	<b>UNIT</b>
GS-AP-MW-17V	9/24/2019 8:42	pH	7.59	pH
GS-AP-MW-17V	9/24/2019 8:42	Temperature	19.22	C
GS-AP-MW-17V	9/24/2019 8:42	Turbidity	2.2	NTU
GS-AP-MW-17V	9/24/2019 8:47	Conductivity	728.11	uS/cm
GS-AP-MW-17V	9/24/2019 8:47	DO	0.4	mg/L
GS-AP-MW-17V	9/24/2019 8:47	Depth to Water Detail	117.56	ft
GS-AP-MW-17V	9/24/2019 8:47	Oxidation Reduction Potention	-175.53	mv
GS-AP-MW-17V	9/24/2019 8:47	pH	7.58	pH
GS-AP-MW-17V	9/24/2019 8:47	Temperature	19.2	C
GS-AP-MW-17V	9/24/2019 8:47	Turbidity	2.21	NTU
GS-AP-MW-17V	9/24/2019 8:52	Conductivity	707.62	uS/cm
GS-AP-MW-17V	9/24/2019 8:52	DO	0.41	mg/L
GS-AP-MW-17V	9/24/2019 8:52	Depth to Water Detail	118.08	ft
GS-AP-MW-17V	9/24/2019 8:52	Oxidation Reduction Potention	-173.9	mv
GS-AP-MW-17V	9/24/2019 8:52	pH	7.56	pH
GS-AP-MW-17V	9/24/2019 8:52	Temperature	19.24	C
GS-AP-MW-17V	9/24/2019 8:52	Turbidity	2.18	NTU
GS-AP-MW-17V	9/24/2019 8:57	Conductivity	679.03	uS/cm
GS-AP-MW-17V	9/24/2019 8:57	DO	0.43	mg/L
GS-AP-MW-17V	9/24/2019 8:57	Depth to Water Detail	118.71	ft
GS-AP-MW-17V	9/24/2019 8:57	Oxidation Reduction Potention	-173.14	mv
GS-AP-MW-17V	9/24/2019 8:57	pH	7.59	pH
GS-AP-MW-17V	9/24/2019 8:57	Temperature	19.36	C
GS-AP-MW-17V	9/24/2019 8:57	Turbidity	1.79	NTU
GS-AP-MW-17V	9/24/2019 9:02	Conductivity	654.89	uS/cm
GS-AP-MW-17V	9/24/2019 9:02	DO	0.42	mg/L
GS-AP-MW-17V	9/24/2019 9:02	Depth to Water Detail	119.41	ft
GS-AP-MW-17V	9/24/2019 9:02	Oxidation Reduction Potention	-170.09	mv
GS-AP-MW-17V	9/24/2019 9:02	pH	7.59	pH
GS-AP-MW-17V	9/24/2019 9:02	Temperature	19.27	C
GS-AP-MW-17V	9/24/2019 9:02	Turbidity	2.07	NTU
GS-AP-MW-17V	9/24/2019 9:07	Conductivity	649.23	uS/cm
GS-AP-MW-17V	9/24/2019 9:07	DO	0.44	mg/L
GS-AP-MW-17V	9/24/2019 9:07	Depth to Water Detail	119.77	ft
GS-AP-MW-17V	9/24/2019 9:07	Oxidation Reduction Potention	-168.62	mv
GS-AP-MW-17V	9/24/2019 9:07	pH	7.61	pH
GS-AP-MW-17V	9/24/2019 9:07	Temperature	19.68	C
GS-AP-MW-17V	9/24/2019 9:07	Turbidity	2.21	NTU
GS-AP-MW-17V	9/24/2019 9:12	Conductivity	652.01	uS/cm
GS-AP-MW-17V	9/24/2019 9:12	DO	0.46	mg/L
GS-AP-MW-17V	9/24/2019 9:12	Depth to Water Detail	120.15	ft
GS-AP-MW-17V	9/24/2019 9:12	Oxidation Reduction Potention	-167.13	mv
GS-AP-MW-17V	9/24/2019 9:12	pH	7.61	pH
GS-AP-MW-17V	9/24/2019 9:12	Temperature	19.53	C
GS-AP-MW-17V	9/24/2019 9:12	Turbidity	1.85	NTU
GS-AP-MW-17V	9/24/2019 9:17	Conductivity	658.14	uS/cm

**Alabama Power Company  
Plant Gorgas Ash Pond**

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-17V	9/24/2019 9:17	DO	0.47	mg/L
GS-AP-MW-17V	9/24/2019 9:17	Depth to Water Detail	120.67	ft
GS-AP-MW-17V	9/24/2019 9:17	Oxidation Reduction Potention	-164.41	mv
GS-AP-MW-17V	9/24/2019 9:17	pH	7.58	pH
GS-AP-MW-17V	9/24/2019 9:17	Temperature	19.52	C
GS-AP-MW-17V	9/24/2019 9:17	Turbidity	1.77	NTU
GS-AP-MW-17V	9/24/2019 9:22	Conductivity	662.26	uS/cm
GS-AP-MW-17V	9/24/2019 9:22	DO	0.72	mg/L
GS-AP-MW-17V	9/24/2019 9:22	Depth to Water Detail	121.17	ft
GS-AP-MW-17V	9/24/2019 9:22	Oxidation Reduction Potention	-154.44	mv
GS-AP-MW-17V	9/24/2019 9:22	pH	7.62	pH
GS-AP-MW-17V	9/24/2019 9:22	Temperature	19.03	C
GS-AP-MW-17V	9/24/2019 9:22	Turbidity	1.72	NTU
GS-AP-MW-17V	9/24/2019 9:27	Conductivity	654.92	uS/cm
GS-AP-MW-17V	9/24/2019 9:27	DO	0.58	mg/L
GS-AP-MW-17V	9/24/2019 9:27	Depth to Water Detail	121.5	ft
GS-AP-MW-17V	9/24/2019 9:27	Oxidation Reduction Potention	-159.15	mv
GS-AP-MW-17V	9/24/2019 9:27	pH	7.61	pH
GS-AP-MW-17V	9/24/2019 9:27	Temperature	19.16	C
GS-AP-MW-17V	9/24/2019 9:27	Turbidity	1.69	NTU
GS-AP-MW-17V	9/24/2019 9:32	Conductivity	650.38	uS/cm
GS-AP-MW-17V	9/24/2019 9:32	DO	0.54	mg/L
GS-AP-MW-17V	9/24/2019 9:32	Depth to Water Detail	122.09	ft
GS-AP-MW-17V	9/24/2019 9:32	Oxidation Reduction Potention	-160.8	mv
GS-AP-MW-17V	9/24/2019 9:32	pH	7.62	pH
GS-AP-MW-17V	9/24/2019 9:32	Temperature	19.12	C
GS-AP-MW-17V	9/24/2019 9:32	Turbidity	1.77	NTU
GS-AP-MW-17V	9/24/2019 9:37	Conductivity	646.55	uS/cm
GS-AP-MW-17V	9/24/2019 9:37	DO	0.49	mg/L
GS-AP-MW-17V	9/24/2019 9:37	Depth to Water Detail	122.28	ft
GS-AP-MW-17V	9/24/2019 9:37	Oxidation Reduction Potention	-162.68	mv
GS-AP-MW-17V	9/24/2019 9:37	pH	7.63	pH
GS-AP-MW-17V	9/24/2019 9:37	Temperature	19.07	C
GS-AP-MW-17V	9/24/2019 9:37	Turbidity	1.8	NTU
GS-AP-MW-17V	9/24/2019 9:42	Conductivity	645.47	uS/cm
GS-AP-MW-17V	9/24/2019 9:42	DO	0.51	mg/L
GS-AP-MW-17V	9/24/2019 9:42	Depth to Water Detail	122.7	ft
GS-AP-MW-17V	9/24/2019 9:42	Oxidation Reduction Potention	-162.09	mv
GS-AP-MW-17V	9/24/2019 9:42	pH	7.61	pH
GS-AP-MW-17V	9/24/2019 9:42	Temperature	19.09	C
GS-AP-MW-17V	9/24/2019 9:42	Turbidity	1.96	NTU
GS-AP-MW-17V	9/24/2019 9:47	Conductivity	642.21	uS/cm
GS-AP-MW-17V	9/24/2019 9:47	DO	0.49	mg/L
GS-AP-MW-17V	9/24/2019 9:47	Depth to Water Detail	123.11	ft
GS-AP-MW-17V	9/24/2019 9:47	Oxidation Reduction Potention	-163.62	mv
GS-AP-MW-17V	9/24/2019 9:47	pH	7.64	pH

**Alabama Power Company  
Plant Gorgas Ash Pond**

<b>WELL ID</b>	<b>READING TIME</b>	<b>DESCRIPTION</b>	<b>VALUE</b>	<b>UNIT</b>
GS-AP-MW-17V	9/24/2019 9:47	Temperature	19.09	C
GS-AP-MW-17V	9/24/2019 9:47	Turbidity	2.18	NTU
GS-AP-MW-17V	9/24/2019 9:52	Conductivity	644	uS/cm
GS-AP-MW-17V	9/24/2019 9:52	DO	0.49	mg/L
GS-AP-MW-17V	9/24/2019 9:52	Depth to Water Detail	123.5	ft
GS-AP-MW-17V	9/24/2019 9:52	Oxidation Reduction Potention	-164.23	mv
GS-AP-MW-17V	9/24/2019 9:52	pH	7.63	pH
GS-AP-MW-17V	9/24/2019 9:52	Temperature	19.07	C
GS-AP-MW-17V	9/24/2019 9:52	Turbidity	1.96	NTU
GS-AP-MW-17V	9/24/2019 9:57	Conductivity	641.44	uS/cm
GS-AP-MW-17V	9/24/2019 9:57	DO	0.48	mg/L
GS-AP-MW-17V	9/24/2019 9:57	Depth to Water Detail	123.91	ft
GS-AP-MW-17V	9/24/2019 9:57	Oxidation Reduction Potention	-162.06	mv
GS-AP-MW-17V	9/24/2019 9:57	pH	7.6	pH
GS-AP-MW-17V	9/24/2019 9:57	Temperature	19.16	C
GS-AP-MW-17V	9/24/2019 9:57	Turbidity	1.84	NTU
GS-AP-MW-17V	9/24/2019 10:02	Conductivity	637.16	uS/cm
GS-AP-MW-17V	9/24/2019 10:02	DO	0.49	mg/L
GS-AP-MW-17V	9/24/2019 10:02	Depth to Water Detail	124.23	ft
GS-AP-MW-17V	9/24/2019 10:02	Oxidation Reduction Potention	-163.99	mv
GS-AP-MW-17V	9/24/2019 10:02	pH	7.64	pH
GS-AP-MW-17V	9/24/2019 10:02	Temperature	19.16	C
GS-AP-MW-17V	9/24/2019 10:02	Turbidity	1.78	NTU
GS-AP-MW-17V	9/24/2019 10:07	Conductivity	632.6	uS/cm
GS-AP-MW-17V	9/24/2019 10:07	DO	0.49	mg/L
GS-AP-MW-17V	9/24/2019 10:07	Depth to Water Detail	124.7	ft
GS-AP-MW-17V	9/24/2019 10:07	Oxidation Reduction Potention	-163.04	mv
GS-AP-MW-17V	9/24/2019 10:07	pH	7.63	pH
GS-AP-MW-17V	9/24/2019 10:07	Temperature	19.12	C
GS-AP-MW-17V	9/24/2019 10:07	Turbidity	1.84	NTU
GS-AP-MW-17V	9/24/2019 10:12	Conductivity	638.12	uS/cm
GS-AP-MW-17V	9/24/2019 10:12	DO	0.48	mg/L
GS-AP-MW-17V	9/24/2019 10:12	Depth to Water Detail	125.02	ft
GS-AP-MW-17V	9/24/2019 10:12	Oxidation Reduction Potention	-163.52	mv
GS-AP-MW-17V	9/24/2019 10:12	pH	7.64	pH
GS-AP-MW-17V	9/24/2019 10:12	Temperature	19.22	C
GS-AP-MW-17V	9/24/2019 10:12	Turbidity	1.53	NTU
GS-AP-MW-17V	9/24/2019 10:17	Conductivity	638.41	uS/cm
GS-AP-MW-17V	9/24/2019 10:17	DO	0.49	mg/L
GS-AP-MW-17V	9/24/2019 10:17	Depth to Water Detail	125.31	ft
GS-AP-MW-17V	9/24/2019 10:17	Oxidation Reduction Potention	-163.64	mv
GS-AP-MW-17V	9/24/2019 10:17	pH	7.64	pH
GS-AP-MW-17V	9/24/2019 10:17	Temperature	19.16	C
GS-AP-MW-17V	9/24/2019 10:17	Turbidity	1.66	NTU
GS-AP-MW-17V	9/24/2019 10:22	Conductivity	637.34	uS/cm
GS-AP-MW-17V	9/24/2019 10:22	DO	0.48	mg/L

**Alabama Power Company  
Plant Gorgas Ash Pond**

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-17V	9/24/2019 10:22	Depth to Water Detail	125.72	ft
GS-AP-MW-17V	9/24/2019 10:22	Oxidation Reduction Potention	-161.46	mv
GS-AP-MW-17V	9/24/2019 10:22	pH	7.6	pH
GS-AP-MW-17V	9/24/2019 10:22	Temperature	19.17	C
GS-AP-MW-17V	9/24/2019 10:22	Turbidity	1.74	NTU
GS-AP-MW-17V	9/24/2019 10:27	Conductivity	635.75	uS/cm
GS-AP-MW-17V	9/24/2019 10:27	DO	0.48	mg/L
GS-AP-MW-17V	9/24/2019 10:27	Depth to Water Detail	126.11	ft
GS-AP-MW-17V	9/24/2019 10:27	Oxidation Reduction Potention	-163.04	mv
GS-AP-MW-17V	9/24/2019 10:27	pH	7.64	pH
GS-AP-MW-17V	9/24/2019 10:27	Temperature	19.18	C
GS-AP-MW-17V	9/24/2019 10:27	Turbidity	1.39	NTU
GS-AP-MW-17V	9/24/2019 10:32	Conductivity	633.71	uS/cm
GS-AP-MW-17V	9/24/2019 10:32	DO	0.49	mg/L
GS-AP-MW-17V	9/24/2019 10:32	Depth to Water Detail	126.46	ft
GS-AP-MW-17V	9/24/2019 10:32	Oxidation Reduction Potention	-162.47	mv
GS-AP-MW-17V	9/24/2019 10:32	pH	7.63	pH
GS-AP-MW-17V	9/24/2019 10:32	Temperature	19.17	C
GS-AP-MW-17V	9/24/2019 10:32	Turbidity	1.44	NTU
GS-AP-MW-17V	9/24/2019 10:37	Conductivity	632.42	uS/cm
GS-AP-MW-17V	9/24/2019 10:37	DO	0.45	mg/L
GS-AP-MW-17V	9/24/2019 10:37	Depth to Water Detail	126.78	ft
GS-AP-MW-17V	9/24/2019 10:37	Oxidation Reduction Potention	-162.98	mv
GS-AP-MW-17V	9/24/2019 10:37	pH	7.64	pH
GS-AP-MW-17V	9/24/2019 10:37	Temperature	19.23	C
GS-AP-MW-17V	9/24/2019 10:37	Turbidity	1.15	NTU
GS-AP-MW-17V	9/24/2019 10:42	Conductivity	631.74	uS/cm
GS-AP-MW-17V	9/24/2019 10:42	DO	0.49	mg/L
GS-AP-MW-17V	9/24/2019 10:42	Depth to Water Detail	127.13	ft
GS-AP-MW-17V	9/24/2019 10:42	Oxidation Reduction Potention	-162.67	mv
GS-AP-MW-17V	9/24/2019 10:42	pH	7.64	pH
GS-AP-MW-17V	9/24/2019 10:42	Temperature	19.26	C
GS-AP-MW-17V	9/24/2019 10:42	Turbidity	1.24	NTU
GS-AP-MW-17V	9/24/2019 10:47	Conductivity	629.48	uS/cm
GS-AP-MW-17V	9/24/2019 10:47	DO	0.49	mg/L
GS-AP-MW-17V	9/24/2019 10:47	Depth to Water Detail	127.49	ft
GS-AP-MW-17V	9/24/2019 10:47	Oxidation Reduction Potention	-160.04	mv
GS-AP-MW-17V	9/24/2019 10:47	pH	7.61	pH
GS-AP-MW-17V	9/24/2019 10:47	Temperature	19.4	C
GS-AP-MW-17V	9/24/2019 10:47	Turbidity	1.28	NTU
GS-AP-MW-17V	9/24/2019 10:52	Conductivity	624.95	uS/cm
GS-AP-MW-17V	9/24/2019 10:52	DO	0.49	mg/L
GS-AP-MW-17V	9/24/2019 10:52	Depth to Water Detail	127.81	ft
GS-AP-MW-17V	9/24/2019 10:52	Oxidation Reduction Potention	-160.88	mv
GS-AP-MW-17V	9/24/2019 10:52	pH	7.64	pH
GS-AP-MW-17V	9/24/2019 10:52	Temperature	19.38	C

**Alabama Power Company  
Plant Gorgas Ash Pond**

<b>WELL ID</b>	<b>READING TIME</b>	<b>DESCRIPTION</b>	<b>VALUE</b>	<b>UNIT</b>
GS-AP-MW-17V	9/24/2019 10:52	Turbidity	1.24	NTU
GS-AP-MW-17V	9/24/2019 10:57	Conductivity	624.48	uS/cm
GS-AP-MW-17V	9/24/2019 10:57	DO	0.5	mg/L
GS-AP-MW-17V	9/24/2019 10:57	Depth to Water Detail	128.14	ft
GS-AP-MW-17V	9/24/2019 10:57	Oxidation Reduction Potention	-160.28	mv
GS-AP-MW-17V	9/24/2019 10:57	pH	7.63	pH
GS-AP-MW-17V	9/24/2019 10:57	Temperature	19.38	C
GS-AP-MW-17V	9/24/2019 10:57	Turbidity	1.07	NTU
GS-AP-MW-17V	9/24/2019 11:02	Conductivity	623.79	uS/cm
GS-AP-MW-17V	9/24/2019 11:02	DO	0.45	mg/L
GS-AP-MW-17V	9/24/2019 11:02	Depth to Water Detail	128.43	ft
GS-AP-MW-17V	9/24/2019 11:02	Oxidation Reduction Potention	-160.4	mv
GS-AP-MW-17V	9/24/2019 11:02	pH	7.63	pH
GS-AP-MW-17V	9/24/2019 11:02	Temperature	19.2	C
GS-AP-MW-17V	9/24/2019 11:02	Turbidity	1.12	NTU
GS-AP-MW-17V	9/24/2019 11:07	Conductivity	628.59	uS/cm
GS-AP-MW-17V	9/24/2019 11:07	DO	0.45	mg/L
GS-AP-MW-17V	9/24/2019 11:07	Depth to Water Detail	128.84	ft
GS-AP-MW-17V	9/24/2019 11:07	Oxidation Reduction Potention	-158.2	mv
GS-AP-MW-17V	9/24/2019 11:07	pH	7.58	pH
GS-AP-MW-17V	9/24/2019 11:07	Temperature	19.51	C
GS-AP-MW-17V	9/24/2019 11:07	Turbidity	1.08	NTU
GS-AP-MW-17V	9/24/2019 11:12	Conductivity	625.92	uS/cm
GS-AP-MW-17V	9/24/2019 11:12	DO	0.46	mg/L
GS-AP-MW-17V	9/24/2019 11:12	Depth to Water Detail	129.11	ft
GS-AP-MW-17V	9/24/2019 11:12	Oxidation Reduction Potention	-160.31	mv
GS-AP-MW-17V	9/24/2019 11:12	pH	7.64	pH
GS-AP-MW-17V	9/24/2019 11:12	Temperature	19.42	C
GS-AP-MW-17V	9/24/2019 11:12	Turbidity	0.96	NTU
GS-AP-MW-17V	9/24/2019 11:17	Conductivity	602.01	uS/cm
GS-AP-MW-17V	9/24/2019 11:17	DO	0.21	mg/L
GS-AP-MW-17V	9/24/2019 11:17	Depth to Water Detail	130.68	ft
GS-AP-MW-17V	9/24/2019 11:17	Oxidation Reduction Potention	-156.38	mv
GS-AP-MW-17V	9/24/2019 11:17	pH	7.58	pH
GS-AP-MW-17V	9/24/2019 11:17	Temperature	17.78	C
GS-AP-MW-17V	9/24/2019 11:17	Turbidity	1.19	NTU
GS-AP-MW-17V	9/24/2019 11:22	Conductivity	587.35	uS/cm
GS-AP-MW-17V	9/24/2019 11:22	DO	0.18	mg/L
GS-AP-MW-17V	9/24/2019 11:22	Depth to Water Detail	131.71	ft
GS-AP-MW-17V	9/24/2019 11:22	Oxidation Reduction Potention	-153.53	mv
GS-AP-MW-17V	9/24/2019 11:22	pH	7.62	pH
GS-AP-MW-17V	9/24/2019 11:22	Temperature	17.76	C
GS-AP-MW-17V	9/24/2019 11:22	Turbidity	1.08	NTU
GS-AP-MW-17V	9/24/2019 11:27	Conductivity	586.16	uS/cm
GS-AP-MW-17V	9/24/2019 11:27	DO	0.35	mg/L
GS-AP-MW-17V	9/24/2019 11:27	Depth to Water Detail	131.85	ft

**Alabama Power Company  
Plant Gorgas Ash Pond**

<b>WELL ID</b>	<b>READING TIME</b>	<b>DESCRIPTION</b>	<b>VALUE</b>	<b>UNIT</b>
GS-AP-MW-17V	9/24/2019 11:27	Oxidation Reduction Potention	-152.52	mv
GS-AP-MW-17V	9/24/2019 11:27	pH	7.66	pH
GS-AP-MW-17V	9/24/2019 11:27	Temperature	19.5	C
GS-AP-MW-17V	9/24/2019 11:27	Turbidity	1.14	NTU
GS-AP-MW-17V	9/24/2019 11:32	Conductivity	590.8	uS/cm
GS-AP-MW-17V	9/24/2019 11:32	DO	0.43	mg/L
GS-AP-MW-17V	9/24/2019 11:32	Depth to Water Detail	131.98	ft
GS-AP-MW-17V	9/24/2019 11:32	Oxidation Reduction Potention	-151.6	mv
GS-AP-MW-17V	9/24/2019 11:32	pH	7.65	pH
GS-AP-MW-17V	9/24/2019 11:32	Temperature	19.64	C
GS-AP-MW-17V	9/24/2019 11:32	Turbidity	1.31	NTU
GS-AP-MW-17V	9/24/2019 11:37	Conductivity	597.11	uS/cm
GS-AP-MW-17V	9/24/2019 11:37	DO	0.52	mg/L
GS-AP-MW-17V	9/24/2019 11:37	Depth to Water Detail	132.13	ft
GS-AP-MW-17V	9/24/2019 11:37	Oxidation Reduction Potention	-149.84	mv
GS-AP-MW-17V	9/24/2019 11:37	pH	7.63	pH
GS-AP-MW-17V	9/24/2019 11:37	Temperature	19.63	C
GS-AP-MW-17V	9/24/2019 11:37	Turbidity	1.21	NTU
GS-AP-MW-17V	9/24/2019 11:42	Conductivity	601.05	uS/cm
GS-AP-MW-17V	9/24/2019 11:42	DO	0.57	mg/L
GS-AP-MW-17V	9/24/2019 11:42	Depth to Water Detail	132.26	ft
GS-AP-MW-17V	9/24/2019 11:42	Oxidation Reduction Potention	-151.16	mv
GS-AP-MW-17V	9/24/2019 11:42	pH	7.65	pH
GS-AP-MW-17V	9/24/2019 11:42	Temperature	19.49	C
GS-AP-MW-17V	9/24/2019 11:42	Turbidity	1.24	NTU
GS-AP-MW-17V	9/24/2019 11:47	Conductivity	602.84	uS/cm
GS-AP-MW-17V	9/24/2019 11:47	DO	0.56	mg/L
GS-AP-MW-17V	9/24/2019 11:47	Depth to Water Detail	132.41	ft
GS-AP-MW-17V	9/24/2019 11:47	Oxidation Reduction Potention	-152.12	mv
GS-AP-MW-17V	9/24/2019 11:47	pH	7.65	pH
GS-AP-MW-17V	9/24/2019 11:47	Temperature	19.44	C
GS-AP-MW-17V	9/24/2019 11:47	Turbidity	1.35	NTU

**Alabama Power Company  
Plant Gorgas Ash Pond**

<b>WELL ID</b>	<b>READING TIME</b>	<b>DESCRIPTION</b>	<b>VALUE</b>	<b>UNIT</b>
GS-AP-MW-19	9/24/2019 15:31	Conductivity	499.57	uS/cm
GS-AP-MW-19	9/24/2019 15:31	DO	0.49	mg/L
GS-AP-MW-19	9/24/2019 15:31	Depth to Water Detail	112.82	ft
GS-AP-MW-19	9/24/2019 15:31	Oxidation Reduction Potention	-47.22	mv
GS-AP-MW-19	9/24/2019 15:31	pH	8.03	pH
GS-AP-MW-19	9/24/2019 15:31	Temperature	19.61	C
GS-AP-MW-19	9/24/2019 15:31	Turbidity	0.76	NTU
GS-AP-MW-19	9/24/2019 15:36	Conductivity	498.02	uS/cm
GS-AP-MW-19	9/24/2019 15:36	DO	0.26	mg/L
GS-AP-MW-19	9/24/2019 15:36	Depth to Water Detail	112.89	ft
GS-AP-MW-19	9/24/2019 15:36	Oxidation Reduction Potention	-58.17	mv
GS-AP-MW-19	9/24/2019 15:36	pH	7.83	pH
GS-AP-MW-19	9/24/2019 15:36	Temperature	18.96	C
GS-AP-MW-19	9/24/2019 15:36	Turbidity	0.49	NTU
GS-AP-MW-19	9/24/2019 15:41	Conductivity	498.94	uS/cm
GS-AP-MW-19	9/24/2019 15:41	DO	0.23	mg/L
GS-AP-MW-19	9/24/2019 15:41	Depth to Water Detail	112.89	ft
GS-AP-MW-19	9/24/2019 15:41	Oxidation Reduction Potention	-72.23	mv
GS-AP-MW-19	9/24/2019 15:41	pH	7.77	pH
GS-AP-MW-19	9/24/2019 15:41	Temperature	18.9	C
GS-AP-MW-19	9/24/2019 15:41	Turbidity	0.46	NTU
GS-AP-MW-19	9/24/2019 15:46	Conductivity	508.01	uS/cm
GS-AP-MW-19	9/24/2019 15:46	DO	0.22	mg/L
GS-AP-MW-19	9/24/2019 15:46	Depth to Water Detail	112.89	ft
GS-AP-MW-19	9/24/2019 15:46	Oxidation Reduction Potention	-91.5	mv
GS-AP-MW-19	9/24/2019 15:46	pH	7.8	pH
GS-AP-MW-19	9/24/2019 15:46	Temperature	18.95	C
GS-AP-MW-19	9/24/2019 15:46	Turbidity	0.73	NTU

**Alabama Power Company  
Plant Gorgas Ash Pond**

<b>WELL ID</b>	<b>READING TIME</b>	<b>DESCRIPTION</b>	<b>VALUE</b>	<b>UNIT</b>
GS-AP-MW-23H	9/23/2019 15:54	Conductivity	776.74	uS/cm
GS-AP-MW-23H	9/23/2019 15:54	DO	0.24	mg/L
GS-AP-MW-23H	9/23/2019 15:54	Depth to Water Detail	29.81	ft
GS-AP-MW-23H	9/23/2019 15:54	Oxidation Reduction Potention	8.98	mv
GS-AP-MW-23H	9/23/2019 15:54	pH	5.77	pH
GS-AP-MW-23H	9/23/2019 15:54	Temperature	18.96	C
GS-AP-MW-23H	9/23/2019 15:54	Turbidity	7.27	NTU
GS-AP-MW-23H	9/23/2019 15:59	Conductivity	775.92	uS/cm
GS-AP-MW-23H	9/23/2019 15:59	DO	0.23	mg/L
GS-AP-MW-23H	9/23/2019 15:59	Depth to Water Detail	29.82	ft
GS-AP-MW-23H	9/23/2019 15:59	Oxidation Reduction Potention	10.41	mv
GS-AP-MW-23H	9/23/2019 15:59	pH	5.72	pH
GS-AP-MW-23H	9/23/2019 15:59	Temperature	18.75	C
GS-AP-MW-23H	9/23/2019 15:59	Turbidity	3.24	NTU
GS-AP-MW-23H	9/23/2019 16:04	Conductivity	788.2	uS/cm
GS-AP-MW-23H	9/23/2019 16:04	DO	0.22	mg/L
GS-AP-MW-23H	9/23/2019 16:04	Depth to Water Detail	29.82	ft
GS-AP-MW-23H	9/23/2019 16:04	Oxidation Reduction Potention	6.69	mv
GS-AP-MW-23H	9/23/2019 16:04	pH	5.73	pH
GS-AP-MW-23H	9/23/2019 16:04	Temperature	18.73	C
GS-AP-MW-23H	9/23/2019 16:04	Turbidity	1.81	NTU
GS-AP-MW-23H	9/23/2019 16:09	Conductivity	790.1	uS/cm
GS-AP-MW-23H	9/23/2019 16:09	DO	0.21	mg/L
GS-AP-MW-23H	9/23/2019 16:09	Depth to Water Detail	29.82	ft
GS-AP-MW-23H	9/23/2019 16:09	Oxidation Reduction Potention	3.02	mv
GS-AP-MW-23H	9/23/2019 16:09	pH	5.76	pH
GS-AP-MW-23H	9/23/2019 16:09	Temperature	18.55	C
GS-AP-MW-23H	9/23/2019 16:09	Turbidity	1.31	NTU



**Alabama Power Company  
Plant Gorgas Ash Pond**

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-24H	9/24/2019 17:45	Conductivity	433.41	uS/cm
GS-AP-MW-24H	9/24/2019 17:45	DO	0.26	mg/L
GS-AP-MW-24H	9/24/2019 17:45	Depth to Water Detail	6.5	ft
GS-AP-MW-24H	9/24/2019 17:45	Oxidation Reduction Potention	-68.42	mv
GS-AP-MW-24H	9/24/2019 17:45	pH	6.9	pH
GS-AP-MW-24H	9/24/2019 17:45	Temperature	19.95	C
GS-AP-MW-24H	9/24/2019 17:45	Turbidity	21.8	NTU
GS-AP-MW-24H	9/24/2019 17:50	Conductivity	432.44	uS/cm
GS-AP-MW-24H	9/24/2019 17:50	DO	0.23	mg/L
GS-AP-MW-24H	9/24/2019 17:50	Depth to Water Detail	6.51	ft
GS-AP-MW-24H	9/24/2019 17:50	Oxidation Reduction Potention	-57.3	mv
GS-AP-MW-24H	9/24/2019 17:50	pH	6.67	pH
GS-AP-MW-24H	9/24/2019 17:50	Temperature	19.9	C
GS-AP-MW-24H	9/24/2019 17:50	Turbidity	17.3	NTU
GS-AP-MW-24H	9/24/2019 17:55	Conductivity	430.88	uS/cm
GS-AP-MW-24H	9/24/2019 17:55	DO	0.22	mg/L
GS-AP-MW-24H	9/24/2019 17:55	Depth to Water Detail	6.51	ft
GS-AP-MW-24H	9/24/2019 17:55	Oxidation Reduction Potention	-53.19	mv
GS-AP-MW-24H	9/24/2019 17:55	pH	6.57	pH
GS-AP-MW-24H	9/24/2019 17:55	Temperature	19.82	C
GS-AP-MW-24H	9/24/2019 17:55	Turbidity	14.7	NTU
GS-AP-MW-24H	9/24/2019 18:00	Conductivity	429.99	uS/cm
GS-AP-MW-24H	9/24/2019 18:00	DO	0.21	mg/L
GS-AP-MW-24H	9/24/2019 18:00	Depth to Water Detail	6.51	ft
GS-AP-MW-24H	9/24/2019 18:00	Oxidation Reduction Potention	-52.82	mv
GS-AP-MW-24H	9/24/2019 18:00	pH	6.56	pH
GS-AP-MW-24H	9/24/2019 18:00	Temperature	19.75	C
GS-AP-MW-24H	9/24/2019 18:00	Turbidity	14.2	NTU
GS-AP-MW-24H	9/24/2019 18:05	Conductivity	428.76	uS/cm
GS-AP-MW-24H	9/24/2019 18:05	DO	0.21	mg/L
GS-AP-MW-24H	9/24/2019 18:05	Depth to Water Detail	6.51	ft
GS-AP-MW-24H	9/24/2019 18:05	Oxidation Reduction Potention	-53.04	mv
GS-AP-MW-24H	9/24/2019 18:05	pH	6.57	pH
GS-AP-MW-24H	9/24/2019 18:05	Temperature	19.65	C
GS-AP-MW-24H	9/24/2019 18:05	Turbidity	12.8	NTU
GS-AP-MW-24H	9/24/2019 18:10	Conductivity	427.24	uS/cm
GS-AP-MW-24H	9/24/2019 18:10	DO	0.21	mg/L
GS-AP-MW-24H	9/24/2019 18:10	Depth to Water Detail	6.51	ft
GS-AP-MW-24H	9/24/2019 18:10	Oxidation Reduction Potention	-53.39	mv
GS-AP-MW-24H	9/24/2019 18:10	pH	6.57	pH
GS-AP-MW-24H	9/24/2019 18:10	Temperature	19.59	C
GS-AP-MW-24H	9/24/2019 18:10	Turbidity	12.3	NTU
GS-AP-MW-24H	9/24/2019 18:15	Conductivity	427.91	uS/cm
GS-AP-MW-24H	9/24/2019 18:15	DO	0.21	mg/L
GS-AP-MW-24H	9/24/2019 18:15	Depth to Water Detail	6.51	ft
GS-AP-MW-24H	9/24/2019 18:15	Oxidation Reduction Potention	-54.05	mv

**Alabama Power Company  
Plant Gorgas Ash Pond**

<b>WELL ID</b>	<b>READING TIME</b>	<b>DESCRIPTION</b>	<b>VALUE</b>	<b>UNIT</b>
GS-AP-MW-24H	9/24/2019 18:15	pH	6.58	pH
GS-AP-MW-24H	9/24/2019 18:15	Temperature	19.52	C
GS-AP-MW-24H	9/24/2019 18:15	Turbidity	10.75	NTU
GS-AP-MW-24H	9/24/2019 18:20	Conductivity	427.42	uS/cm
GS-AP-MW-24H	9/24/2019 18:20	DO	0.2	mg/L
GS-AP-MW-24H	9/24/2019 18:20	Depth to Water Detail	6.51	ft
GS-AP-MW-24H	9/24/2019 18:20	Oxidation Reduction Potention	-54.07	mv
GS-AP-MW-24H	9/24/2019 18:20	pH	6.59	pH
GS-AP-MW-24H	9/24/2019 18:20	Temperature	19.49	C
GS-AP-MW-24H	9/24/2019 18:20	Turbidity	9.47	NTU

**Alabama Power Company  
Plant Gorgas Ash Pond**

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-28H	9/25/2019 10:30	Conductivity	733.37	uS/cm
GS-AP-MW-28H	9/25/2019 10:30	DO	2.09	mg/L
GS-AP-MW-28H	9/25/2019 10:30	Depth to Water Detail	164.7	ft
GS-AP-MW-28H	9/25/2019 10:30	Oxidation Reduction Potention	-53.56	mv
GS-AP-MW-28H	9/25/2019 10:30	pH	8.05	pH
GS-AP-MW-28H	9/25/2019 10:30	Temperature	20.62	C
GS-AP-MW-28H	9/25/2019 10:30	Turbidity	24.1	NTU
GS-AP-MW-28H	9/25/2019 10:35	Conductivity	722.62	uS/cm
GS-AP-MW-28H	9/25/2019 10:35	DO	0.88	mg/L
GS-AP-MW-28H	9/25/2019 10:35	Depth to Water Detail	164.7	ft
GS-AP-MW-28H	9/25/2019 10:35	Oxidation Reduction Potention	-148.48	mv
GS-AP-MW-28H	9/25/2019 10:35	pH	8.25	pH
GS-AP-MW-28H	9/25/2019 10:35	Temperature	20.72	C
GS-AP-MW-28H	9/25/2019 10:35	Turbidity	14.7	NTU
GS-AP-MW-28H	9/25/2019 10:40	Conductivity	717.28	uS/cm
GS-AP-MW-28H	9/25/2019 10:40	DO	0.58	mg/L
GS-AP-MW-28H	9/25/2019 10:40	Depth to Water Detail	164.7	ft
GS-AP-MW-28H	9/25/2019 10:40	Oxidation Reduction Potention	-0.9	mv
GS-AP-MW-28H	9/25/2019 10:40	pH	8.39	pH
GS-AP-MW-28H	9/25/2019 10:40	Temperature	20.84	C
GS-AP-MW-28H	9/25/2019 10:40	Turbidity	11.7	NTU
GS-AP-MW-28H	9/25/2019 10:45	Conductivity	712.91	uS/cm
GS-AP-MW-28H	9/25/2019 10:45	DO	0.46	mg/L
GS-AP-MW-28H	9/25/2019 10:45	Depth to Water Detail	164.72	ft
GS-AP-MW-28H	9/25/2019 10:45	Oxidation Reduction Potention	-129.36	mv
GS-AP-MW-28H	9/25/2019 10:45	pH	8.47	pH
GS-AP-MW-28H	9/25/2019 10:45	Temperature	20.73	C
GS-AP-MW-28H	9/25/2019 10:45	Turbidity	11.1	NTU
GS-AP-MW-28H	9/25/2019 10:50	Conductivity	703.95	uS/cm
GS-AP-MW-28H	9/25/2019 10:50	DO	0.41	mg/L
GS-AP-MW-28H	9/25/2019 10:50	Depth to Water Detail	164.72	ft
GS-AP-MW-28H	9/25/2019 10:50	Oxidation Reduction Potention	18.59	mv
GS-AP-MW-28H	9/25/2019 10:50	pH	8.52	pH
GS-AP-MW-28H	9/25/2019 10:50	Temperature	20.9	C
GS-AP-MW-28H	9/25/2019 10:50	Turbidity	13.4	NTU
GS-AP-MW-28H	9/25/2019 10:55	Conductivity	702.13	uS/cm
GS-AP-MW-28H	9/25/2019 10:55	DO	0.37	mg/L
GS-AP-MW-28H	9/25/2019 10:55	Depth to Water Detail	164.72	ft
GS-AP-MW-28H	9/25/2019 10:55	Oxidation Reduction Potention	43.73	mv
GS-AP-MW-28H	9/25/2019 10:55	pH	8.53	pH
GS-AP-MW-28H	9/25/2019 10:55	Temperature	21.09	C
GS-AP-MW-28H	9/25/2019 10:55	Turbidity	11.3	NTU
GS-AP-MW-28H	9/25/2019 11:00	Conductivity	686.2	uS/cm
GS-AP-MW-28H	9/25/2019 11:00	DO	0.35	mg/L
GS-AP-MW-28H	9/25/2019 11:00	Depth to Water Detail	164.72	ft
GS-AP-MW-28H	9/25/2019 11:00	Oxidation Reduction Potention	21.97	mv

**Alabama Power Company  
Plant Gorgas Ash Pond**

WELL ID	READING TIME	DESCRIPTION	VALUE	UNIT
GS-AP-MW-28H	9/25/2019 11:00	pH	8.55	pH
GS-AP-MW-28H	9/25/2019 11:00	Temperature	20.87	C
GS-AP-MW-28H	9/25/2019 11:00	Turbidity	7.36	NTU
GS-AP-MW-28H	9/25/2019 11:05	Conductivity	685.77	uS/cm
GS-AP-MW-28H	9/25/2019 11:05	DO	0.32	mg/L
GS-AP-MW-28H	9/25/2019 11:05	Depth to Water Detail	164.72	ft
GS-AP-MW-28H	9/25/2019 11:05	Oxidation Reduction Potention	-214.38	mv
GS-AP-MW-28H	9/25/2019 11:05	pH	8.56	pH
GS-AP-MW-28H	9/25/2019 11:05	Temperature	21	C
GS-AP-MW-28H	9/25/2019 11:05	Turbidity	7.77	NTU
GS-AP-MW-28H	9/25/2019 11:10	Conductivity	670.31	uS/cm
GS-AP-MW-28H	9/25/2019 11:10	DO	0.32	mg/L
GS-AP-MW-28H	9/25/2019 11:10	Depth to Water Detail	164.72	ft
GS-AP-MW-28H	9/25/2019 11:10	Oxidation Reduction Potention	-221.25	mv
GS-AP-MW-28H	9/25/2019 11:10	pH	8.57	pH
GS-AP-MW-28H	9/25/2019 11:10	Temperature	21.23	C
GS-AP-MW-28H	9/25/2019 11:10	Turbidity	7.37	NTU
GS-AP-MW-28H	9/25/2019 11:15	Conductivity	637.35	uS/cm
GS-AP-MW-28H	9/25/2019 11:15	DO	0.31	mg/L
GS-AP-MW-28H	9/25/2019 11:15	Depth to Water Detail	164.72	ft
GS-AP-MW-28H	9/25/2019 11:15	Oxidation Reduction Potention	-229.67	mv
GS-AP-MW-28H	9/25/2019 11:15	pH	8.56	pH
GS-AP-MW-28H	9/25/2019 11:15	Temperature	21.35	C
GS-AP-MW-28H	9/25/2019 11:15	Turbidity	6.7	NTU
GS-AP-MW-28H	9/25/2019 11:20	Conductivity	625.98	uS/cm
GS-AP-MW-28H	9/25/2019 11:20	DO	0.34	mg/L
GS-AP-MW-28H	9/25/2019 11:20	Depth to Water Detail	164.72	ft
GS-AP-MW-28H	9/25/2019 11:20	Oxidation Reduction Potention	-229.9	mv
GS-AP-MW-28H	9/25/2019 11:20	pH	8.57	pH
GS-AP-MW-28H	9/25/2019 11:20	Temperature	21.88	C
GS-AP-MW-28H	9/25/2019 11:20	Turbidity	5.96	NTU
GS-AP-MW-28H	9/25/2019 11:25	Conductivity	634.14	uS/cm
GS-AP-MW-28H	9/25/2019 11:25	DO	0.46	mg/L
GS-AP-MW-28H	9/25/2019 11:25	Depth to Water Detail	164.72	ft
GS-AP-MW-28H	9/25/2019 11:25	Oxidation Reduction Potention	-201.36	mv
GS-AP-MW-28H	9/25/2019 11:25	pH	8.55	pH
GS-AP-MW-28H	9/25/2019 11:25	Temperature	24.68	C
GS-AP-MW-28H	9/25/2019 11:25	Turbidity	5.47	NTU
GS-AP-MW-28H	9/25/2019 11:30	Conductivity	658.13	uS/cm
GS-AP-MW-28H	9/25/2019 11:30	DO	0.35	mg/L
GS-AP-MW-28H	9/25/2019 11:30	Depth to Water Detail	164.72	ft
GS-AP-MW-28H	9/25/2019 11:30	Oxidation Reduction Potention	-227.21	mv
GS-AP-MW-28H	9/25/2019 11:30	pH	8.57	pH
GS-AP-MW-28H	9/25/2019 11:30	Temperature	22.1	C
GS-AP-MW-28H	9/25/2019 11:30	Turbidity	5.89	NTU
GS-AP-MW-28H	9/25/2019 11:35	Conductivity	635.22	uS/cm

**Alabama Power Company  
Plant Gorgas Ash Pond**

<b>WELL ID</b>	<b>READING TIME</b>	<b>DESCRIPTION</b>	<b>VALUE</b>	<b>UNIT</b>
GS-AP-MW-28H	9/25/2019 11:35	DO	0.32	mg/L
GS-AP-MW-28H	9/25/2019 11:35	Depth to Water Detail	164.72	ft
GS-AP-MW-28H	9/25/2019 11:35	Oxidation Reduction Potention	-235.98	mv
GS-AP-MW-28H	9/25/2019 11:35	pH	8.57	pH
GS-AP-MW-28H	9/25/2019 11:35	Temperature	21.58	C
GS-AP-MW-28H	9/25/2019 11:35	Turbidity	5.92	NTU

# Appendix D

**1st**  
**Semi-Annual**  
**Monitoring Event**

# Interwell Prediction Limits - Significant Results

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond Printed 6/7/2019, 8:19 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	4/17/2019	0.165	Yes	24	95.83	n/a	0.03229	NP Inter (NDs)
Boron (mg/L)	GS-AP-MW-6D	0.1	n/a	4/16/2019	1.09	Yes	24	95.83	n/a	0.03229	NP Inter (NDs)
Boron (mg/L)	GS-AP-MW-7	0.1	n/a	4/23/2019	1.5	Yes	24	95.83	n/a	0.03229	NP Inter (NDs)
Boron (mg/L)	GS-AP-MW-18	0.1	n/a	4/17/2019	0.449	Yes	24	95.83	n/a	0.03229	NP Inter (NDs)
Boron (mg/L)	GS-AP-MW-6S	0.1	n/a	4/16/2019	0.961	Yes	24	95.83	n/a	0.03229	NP Inter (NDs)
Calcium (mg/L)	GS-AP-MW-6D	48.1	n/a	4/16/2019	53.5	Yes	24	0	n/a	0.03229	NP Inter (normality)
Calcium (mg/L)	GS-AP-MW-9	48.1	n/a	4/16/2019	73.3	Yes	24	0	n/a	0.03229	NP Inter (normality)
Calcium (mg/L)	GS-AP-MW-6S	48.1	n/a	4/16/2019	57.1	Yes	24	0	n/a	0.03229	NP Inter (normality)
Chloride (mg/L)	GS-AP-MW-2	4.062	n/a	4/17/2019	9.5	Yes	24	0	No	0.01	Param Inter
Chloride (mg/L)	GS-AP-MW-6D	4.062	n/a	4/16/2019	8.93	Yes	24	0	No	0.01	Param Inter
Chloride (mg/L)	GS-AP-MW-7	4.062	n/a	4/23/2019	5.16	Yes	24	0	No	0.01	Param Inter
Chloride (mg/L)	GS-AP-MW-11	4.062	n/a	4/16/2019	8.06	Yes	24	0	No	0.01	Param Inter
Chloride (mg/L)	GS-AP-MW-14	4.062	n/a	4/16/2019	7.7	Yes	24	0	No	0.01	Param Inter
Chloride (mg/L)	GS-AP-MW-15	4.062	n/a	4/17/2019	5.2	Yes	24	0	No	0.01	Param Inter
Chloride (mg/L)	GS-AP-MW-17	4.062	n/a	4/17/2019	12.7	Yes	24	0	No	0.01	Param Inter
Chloride (mg/L)	GS-AP-MW-18	4.062	n/a	4/17/2019	6.57	Yes	24	0	No	0.01	Param Inter
Chloride (mg/L)	GS-AP-MW-19	4.062	n/a	4/17/2019	7.27	Yes	24	0	No	0.01	Param Inter
Chloride (mg/L)	GS-AP-MW-21	4.062	n/a	4/17/2019	32.3	Yes	24	0	No	0.01	Param Inter
Chloride (mg/L)	GS-AP-MW-6S	4.062	n/a	4/16/2019	23.1	Yes	24	0	No	0.01	Param Inter
Fluoride (mg/L)	GS-AP-MW-2	0.2406	n/a	4/17/2019	0.868	Yes	26	3.846	No	0.01	Param Inter
Fluoride (mg/L)	GS-AP-MW-15	0.2406	n/a	4/17/2019	0.463	Yes	26	3.846	No	0.01	Param Inter
Fluoride (mg/L)	GS-AP-MW-17	0.2406	n/a	4/17/2019	0.354	Yes	26	3.846	No	0.01	Param Inter
Fluoride (mg/L)	GS-AP-MW-18	0.2406	n/a	4/17/2019	0.638	Yes	26	3.846	No	0.01	Param Inter
Fluoride (mg/L)	GS-AP-MW-19	0.2406	n/a	4/17/2019	0.27	Yes	26	3.846	No	0.01	Param Inter
Fluoride (mg/L)	GS-AP-MW-21	0.2406	n/a	4/17/2019	0.272	Yes	26	3.846	No	0.01	Param Inter
pH (SU)	GS-AP-MW-2	6.85	5.67	4/17/2019	9.26	Yes	26	0	n/a	0.0606	NP Inter (normality)
pH (SU)	GS-AP-MW-6D	6.85	5.67	4/16/2019	7.26	Yes	26	0	n/a	0.0606	NP Inter (normality)
pH (SU)	GS-AP-MW-7	6.85	5.67	4/23/2019	7.83	Yes	26	0	n/a	0.0606	NP Inter (normality)
pH (SU)	GS-AP-MW-11	6.85	5.67	4/16/2019	6.93	Yes	26	0	n/a	0.0606	NP Inter (normality)
pH (SU)	GS-AP-MW-12	6.85	5.67	4/16/2019	7.41	Yes	26	0	n/a	0.0606	NP Inter (normality)
pH (SU)	GS-AP-MW-14	6.85	5.67	4/16/2019	7.03	Yes	26	0	n/a	0.0606	NP Inter (normality)
pH (SU)	GS-AP-MW-15	6.85	5.67	4/17/2019	10.76	Yes	26	0	n/a	0.0606	NP Inter (normality)
pH (SU)	GS-AP-MW-16D	6.85	5.67	4/17/2019	7.33	Yes	26	0	n/a	0.0606	NP Inter (normality)
pH (SU)	GS-AP-MW-17	6.85	5.67	4/17/2019	8.36	Yes	26	0	n/a	0.0606	NP Inter (normality)
pH (SU)	GS-AP-MW-18	6.85	5.67	4/17/2019	7.58	Yes	26	0	n/a	0.0606	NP Inter (normality)
pH (SU)	GS-AP-MW-19	6.85	5.67	4/17/2019	8.06	Yes	26	0	n/a	0.0606	NP Inter (normality)
pH (SU)	GS-AP-MW-21	6.85	5.67	4/17/2019	11.71	Yes	26	0	n/a	0.0606	NP Inter (normality)
Sulfate (mg/L)	GS-AP-MW-2	12.1	n/a	4/17/2019	48.6	Yes	24	4.167	n/a	0.03229	NP Inter (normality)
Sulfate (mg/L)	GS-AP-MW-6D	12.1	n/a	4/16/2019	46.2	Yes	24	4.167	n/a	0.03229	NP Inter (normality)
Sulfate (mg/L)	GS-AP-MW-7	12.1	n/a	4/23/2019	156	Yes	24	4.167	n/a	0.03229	NP Inter (normality)
Sulfate (mg/L)	GS-AP-MW-9	12.1	n/a	4/16/2019	154	Yes	24	4.167	n/a	0.03229	NP Inter (normality)
Sulfate (mg/L)	GS-AP-MW-11	12.1	n/a	4/16/2019	23.2	Yes	24	4.167	n/a	0.03229	NP Inter (normality)
Sulfate (mg/L)	GS-AP-MW-12	12.1	n/a	4/16/2019	13.3	Yes	24	4.167	n/a	0.03229	NP Inter (normality)
Sulfate (mg/L)	GS-AP-MW-14	12.1	n/a	4/16/2019	16.9	Yes	24	4.167	n/a	0.03229	NP Inter (normality)
Sulfate (mg/L)	GS-AP-MW-16D	12.1	n/a	4/17/2019	14.1	Yes	24	4.167	n/a	0.03229	NP Inter (normality)
Sulfate (mg/L)	GS-AP-MW-17	12.1	n/a	4/17/2019	76.6	Yes	24	4.167	n/a	0.03229	NP Inter (normality)
Sulfate (mg/L)	GS-AP-MW-18	12.1	n/a	4/17/2019	68.7	Yes	24	4.167	n/a	0.03229	NP Inter (normality)
Sulfate (mg/L)	GS-AP-MW-19	12.1	n/a	4/17/2019	14.3	Yes	24	4.167	n/a	0.03229	NP Inter (normality)
Sulfate (mg/L)	GS-AP-MW-21	12.1	n/a	4/17/2019	215	Yes	24	4.167	n/a	0.03229	NP Inter (normality)
Sulfate (mg/L)	GS-AP-MW-6S	12.1	n/a	4/16/2019	195	Yes	24	4.167	n/a	0.03229	NP Inter (normality)
TDS (mg/L)	GS-AP-MW-2	226	n/a	4/17/2019	341	Yes	24	0	n/a	0.03229	NP Inter (normality)
TDS (mg/L)	GS-AP-MW-6D	226	n/a	4/16/2019	277	Yes	24	0	n/a	0.03229	NP Inter (normality)
TDS (mg/L)	GS-AP-MW-7	226	n/a	4/23/2019	354	Yes	24	0	n/a	0.03229	NP Inter (normality)
TDS (mg/L)	GS-AP-MW-9	226	n/a	4/16/2019	397	Yes	24	0	n/a	0.03229	NP Inter (normality)
TDS (mg/L)	GS-AP-MW-15	226	n/a	4/17/2019	354	Yes	24	0	n/a	0.03229	NP Inter (normality)
TDS (mg/L)	GS-AP-MW-17	226	n/a	4/17/2019	540	Yes	24	0	n/a	0.03229	NP Inter (normality)
TDS (mg/L)	GS-AP-MW-18	226	n/a	4/17/2019	358	Yes	24	0	n/a	0.03229	NP Inter (normality)
TDS (mg/L)	GS-AP-MW-19	226	n/a	4/17/2019	296	Yes	24	0	n/a	0.03229	NP Inter (normality)
TDS (mg/L)	GS-AP-MW-21	226	n/a	4/17/2019	582	Yes	24	0	n/a	0.03229	NP Inter (normality)
TDS (mg/L)	GS-AP-MW-6S	226	n/a	4/16/2019	382	Yes	24	0	n/a	0.03229	NP Inter (normality)



# Interwell Prediction Limits - All Results

Plant William C Gorgas    Client: Southern Company    Data: Gorgas Ash Pond    Printed 6/7/2019, 8:19 AM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg.N	%NDs	Transform	Alpha	Method
<b>Boron (mg/L)</b>	<b>GS-AP-MW-2</b>	<b>0.1</b>	<b>n/a</b>	<b>4/17/2019</b>	<b>0.165</b>	<b>Yes</b>	<b>24</b>	<b>95.83</b>	<b>n/a</b>	<b>0.03229</b>	<b>NP Inter (NDs)</b>
<b>Boron (mg/L)</b>	<b>GS-AP-MW-6D</b>	<b>0.1</b>	<b>n/a</b>	<b>4/16/2019</b>	<b>1.09</b>	<b>Yes</b>	<b>24</b>	<b>95.83</b>	<b>n/a</b>	<b>0.03229</b>	<b>NP Inter (NDs)</b>
<b>Boron (mg/L)</b>	<b>GS-AP-MW-7</b>	<b>0.1</b>	<b>n/a</b>	<b>4/23/2019</b>	<b>1.5</b>	<b>Yes</b>	<b>24</b>	<b>95.83</b>	<b>n/a</b>	<b>0.03229</b>	<b>NP Inter (NDs)</b>
Boron (mg/L)	GS-AP-MW-9	0.1	n/a	4/16/2019	0.0979	No	24	95.83	n/a	0.03229	NP Inter (NDs)
Boron (mg/L)	GS-AP-MW-11	0.1	n/a	4/16/2019	0.1ND	No	24	95.83	n/a	0.03229	NP Inter (NDs)
Boron (mg/L)	GS-AP-MW-12	0.1	n/a	4/16/2019	0.0385	No	24	95.83	n/a	0.03229	NP Inter (NDs)
Boron (mg/L)	GS-AP-MW-14	0.1	n/a	4/16/2019	0.1ND	No	24	95.83	n/a	0.03229	NP Inter (NDs)
Boron (mg/L)	GS-AP-MW-15	0.1	n/a	4/17/2019	0.0388	No	24	95.83	n/a	0.03229	NP Inter (NDs)
Boron (mg/L)	GS-AP-MW-16D	0.1	n/a	4/17/2019	0.1ND	No	24	95.83	n/a	0.03229	NP Inter (NDs)
Boron (mg/L)	GS-AP-MW-17	0.1	n/a	4/17/2019	0.0916	No	24	95.83	n/a	0.03229	NP Inter (NDs)
<b>Boron (mg/L)</b>	<b>GS-AP-MW-18</b>	<b>0.1</b>	<b>n/a</b>	<b>4/17/2019</b>	<b>0.449</b>	<b>Yes</b>	<b>24</b>	<b>95.83</b>	<b>n/a</b>	<b>0.03229</b>	<b>NP Inter (NDs)</b>
Boron (mg/L)	GS-AP-MW-19	0.1	n/a	4/17/2019	0.0336	No	24	95.83	n/a	0.03229	NP Inter (NDs)
Boron (mg/L)	GS-AP-MW-21	0.1	n/a	4/17/2019	0.0675	No	24	95.83	n/a	0.03229	NP Inter (NDs)
<b>Boron (mg/L)</b>	<b>GS-AP-MW-6S</b>	<b>0.1</b>	<b>n/a</b>	<b>4/16/2019</b>	<b>0.961</b>	<b>Yes</b>	<b>24</b>	<b>95.83</b>	<b>n/a</b>	<b>0.03229</b>	<b>NP Inter (NDs)</b>
Calcium (mg/L)	GS-AP-MW-2	48.1	n/a	4/17/2019	0.511	No	24	0	n/a	0.03229	NP Inter (normality)
<b>Calcium (mg/L)</b>	<b>GS-AP-MW-6D</b>	<b>48.1</b>	<b>n/a</b>	<b>4/16/2019</b>	<b>53.5</b>	<b>Yes</b>	<b>24</b>	<b>0</b>	<b>n/a</b>	<b>0.03229</b>	<b>NP Inter (normality)</b>
Calcium (mg/L)	GS-AP-MW-7	48.1	n/a	4/23/2019	13.8	No	24	0	n/a	0.03229	NP Inter (normality)
<b>Calcium (mg/L)</b>	<b>GS-AP-MW-9</b>	<b>48.1</b>	<b>n/a</b>	<b>4/16/2019</b>	<b>73.3</b>	<b>Yes</b>	<b>24</b>	<b>0</b>	<b>n/a</b>	<b>0.03229</b>	<b>NP Inter (normality)</b>
Calcium (mg/L)	GS-AP-MW-11	48.1	n/a	4/16/2019	46.7	No	24	0	n/a	0.03229	NP Inter (normality)
Calcium (mg/L)	GS-AP-MW-12	48.1	n/a	4/16/2019	38.3	No	24	0	n/a	0.03229	NP Inter (normality)
Calcium (mg/L)	GS-AP-MW-14	48.1	n/a	4/16/2019	39.5	No	24	0	n/a	0.03229	NP Inter (normality)
Calcium (mg/L)	GS-AP-MW-15	48.1	n/a	4/17/2019	8.53	No	24	0	n/a	0.03229	NP Inter (normality)
Calcium (mg/L)	GS-AP-MW-16D	48.1	n/a	4/17/2019	32.3	No	24	0	n/a	0.03229	NP Inter (normality)
Calcium (mg/L)	GS-AP-MW-17	48.1	n/a	4/17/2019	3.86	No	24	0	n/a	0.03229	NP Inter (normality)
Calcium (mg/L)	GS-AP-MW-18	48.1	n/a	4/17/2019	40.8	No	24	0	n/a	0.03229	NP Inter (normality)
Calcium (mg/L)	GS-AP-MW-19	48.1	n/a	4/17/2019	38.4	No	24	0	n/a	0.03229	NP Inter (normality)
Calcium (mg/L)	GS-AP-MW-21	48.1	n/a	4/17/2019	2.88	No	24	0	n/a	0.03229	NP Inter (normality)
<b>Calcium (mg/L)</b>	<b>GS-AP-MW-6S</b>	<b>48.1</b>	<b>n/a</b>	<b>4/16/2019</b>	<b>57.1</b>	<b>Yes</b>	<b>24</b>	<b>0</b>	<b>n/a</b>	<b>0.03229</b>	<b>NP Inter (normality)</b>
<b>Chloride (mg/L)</b>	<b>GS-AP-MW-2</b>	<b>4.062</b>	<b>n/a</b>	<b>4/17/2019</b>	<b>9.5</b>	<b>Yes</b>	<b>24</b>	<b>0</b>	<b>No</b>	<b>0.01</b>	<b>Param Inter</b>
<b>Chloride (mg/L)</b>	<b>GS-AP-MW-6D</b>	<b>4.062</b>	<b>n/a</b>	<b>4/16/2019</b>	<b>8.93</b>	<b>Yes</b>	<b>24</b>	<b>0</b>	<b>No</b>	<b>0.01</b>	<b>Param Inter</b>
<b>Chloride (mg/L)</b>	<b>GS-AP-MW-7</b>	<b>4.062</b>	<b>n/a</b>	<b>4/23/2019</b>	<b>5.16</b>	<b>Yes</b>	<b>24</b>	<b>0</b>	<b>No</b>	<b>0.01</b>	<b>Param Inter</b>
Chloride (mg/L)	GS-AP-MW-9	4.062	n/a	4/16/2019	2.81	No	24	0	No	0.01	Param Inter
<b>Chloride (mg/L)</b>	<b>GS-AP-MW-11</b>	<b>4.062</b>	<b>n/a</b>	<b>4/16/2019</b>	<b>8.06</b>	<b>Yes</b>	<b>24</b>	<b>0</b>	<b>No</b>	<b>0.01</b>	<b>Param Inter</b>
Chloride (mg/L)	GS-AP-MW-12	4.062	n/a	4/16/2019	3.22	No	24	0	No	0.01	Param Inter
<b>Chloride (mg/L)</b>	<b>GS-AP-MW-14</b>	<b>4.062</b>	<b>n/a</b>	<b>4/16/2019</b>	<b>7.7</b>	<b>Yes</b>	<b>24</b>	<b>0</b>	<b>No</b>	<b>0.01</b>	<b>Param Inter</b>
<b>Chloride (mg/L)</b>	<b>GS-AP-MW-15</b>	<b>4.062</b>	<b>n/a</b>	<b>4/17/2019</b>	<b>5.2</b>	<b>Yes</b>	<b>24</b>	<b>0</b>	<b>No</b>	<b>0.01</b>	<b>Param Inter</b>
Chloride (mg/L)	GS-AP-MW-16D	4.062	n/a	4/17/2019	2.82	No	24	0	No	0.01	Param Inter
<b>Chloride (mg/L)</b>	<b>GS-AP-MW-17</b>	<b>4.062</b>	<b>n/a</b>	<b>4/17/2019</b>	<b>12.7</b>	<b>Yes</b>	<b>24</b>	<b>0</b>	<b>No</b>	<b>0.01</b>	<b>Param Inter</b>
<b>Chloride (mg/L)</b>	<b>GS-AP-MW-18</b>	<b>4.062</b>	<b>n/a</b>	<b>4/17/2019</b>	<b>6.57</b>	<b>Yes</b>	<b>24</b>	<b>0</b>	<b>No</b>	<b>0.01</b>	<b>Param Inter</b>
<b>Chloride (mg/L)</b>	<b>GS-AP-MW-19</b>	<b>4.062</b>	<b>n/a</b>	<b>4/17/2019</b>	<b>7.27</b>	<b>Yes</b>	<b>24</b>	<b>0</b>	<b>No</b>	<b>0.01</b>	<b>Param Inter</b>
<b>Chloride (mg/L)</b>	<b>GS-AP-MW-21</b>	<b>4.062</b>	<b>n/a</b>	<b>4/17/2019</b>	<b>32.3</b>	<b>Yes</b>	<b>24</b>	<b>0</b>	<b>No</b>	<b>0.01</b>	<b>Param Inter</b>
<b>Chloride (mg/L)</b>	<b>GS-AP-MW-6S</b>	<b>4.062</b>	<b>n/a</b>	<b>4/16/2019</b>	<b>23.1</b>	<b>Yes</b>	<b>24</b>	<b>0</b>	<b>No</b>	<b>0.01</b>	<b>Param Inter</b>
<b>Fluoride (mg/L)</b>	<b>GS-AP-MW-2</b>	<b>0.2406</b>	<b>n/a</b>	<b>4/17/2019</b>	<b>0.868</b>	<b>Yes</b>	<b>26</b>	<b>3.846</b>	<b>No</b>	<b>0.01</b>	<b>Param Inter</b>
Fluoride (mg/L)	GS-AP-MW-6D	0.2406	n/a	4/16/2019	0.193	No	26	3.846	No	0.01	Param Inter
Fluoride (mg/L)	GS-AP-MW-7	0.2406	n/a	4/23/2019	0.111	No	26	3.846	No	0.01	Param Inter
Fluoride (mg/L)	GS-AP-MW-9	0.2406	n/a	4/16/2019	0.154	No	26	3.846	No	0.01	Param Inter
Fluoride (mg/L)	GS-AP-MW-11	0.2406	n/a	4/16/2019	0.177	No	26	3.846	No	0.01	Param Inter
Fluoride (mg/L)	GS-AP-MW-12	0.2406	n/a	4/16/2019	0.188	No	26	3.846	No	0.01	Param Inter
Fluoride (mg/L)	GS-AP-MW-14	0.2406	n/a	4/16/2019	0.204	No	26	3.846	No	0.01	Param Inter
<b>Fluoride (mg/L)</b>	<b>GS-AP-MW-15</b>	<b>0.2406</b>	<b>n/a</b>	<b>4/17/2019</b>	<b>0.463</b>	<b>Yes</b>	<b>26</b>	<b>3.846</b>	<b>No</b>	<b>0.01</b>	<b>Param Inter</b>
Fluoride (mg/L)	GS-AP-MW-16D	0.2406	n/a	4/17/2019	0.171	No	26	3.846	No	0.01	Param Inter
<b>Fluoride (mg/L)</b>	<b>GS-AP-MW-17</b>	<b>0.2406</b>	<b>n/a</b>	<b>4/17/2019</b>	<b>0.354</b>	<b>Yes</b>	<b>26</b>	<b>3.846</b>	<b>No</b>	<b>0.01</b>	<b>Param Inter</b>
<b>Fluoride (mg/L)</b>	<b>GS-AP-MW-18</b>	<b>0.2406</b>	<b>n/a</b>	<b>4/17/2019</b>	<b>0.638</b>	<b>Yes</b>	<b>26</b>	<b>3.846</b>	<b>No</b>	<b>0.01</b>	<b>Param Inter</b>
<b>Fluoride (mg/L)</b>	<b>GS-AP-MW-19</b>	<b>0.2406</b>	<b>n/a</b>	<b>4/17/2019</b>	<b>0.27</b>	<b>Yes</b>	<b>26</b>	<b>3.846</b>	<b>No</b>	<b>0.01</b>	<b>Param Inter</b>
<b>Fluoride (mg/L)</b>	<b>GS-AP-MW-21</b>	<b>0.2406</b>	<b>n/a</b>	<b>4/17/2019</b>	<b>0.272</b>	<b>Yes</b>	<b>26</b>	<b>3.846</b>	<b>No</b>	<b>0.01</b>	<b>Param Inter</b>
Fluoride (mg/L)	GS-AP-MW-6S	0.2406	n/a	4/16/2019	0.147	No	26	3.846	No	0.01	Param Inter
<b>pH (SU)</b>	<b>GS-AP-MW-2</b>	<b>6.85</b>	<b>5.67</b>	<b>4/17/2019</b>	<b>9.26</b>	<b>Yes</b>	<b>26</b>	<b>0</b>	<b>n/a</b>	<b>0.0606</b>	<b>NP Inter (normality)</b>
<b>pH (SU)</b>	<b>GS-AP-MW-6D</b>	<b>6.85</b>	<b>5.67</b>	<b>4/16/2019</b>	<b>7.26</b>	<b>Yes</b>	<b>26</b>	<b>0</b>	<b>n/a</b>	<b>0.0606</b>	<b>NP Inter (normality)</b>
<b>pH (SU)</b>	<b>GS-AP-MW-7</b>	<b>6.85</b>	<b>5.67</b>	<b>4/23/2019</b>	<b>7.83</b>	<b>Yes</b>	<b>26</b>	<b>0</b>	<b>n/a</b>	<b>0.0606</b>	<b>NP Inter (normality)</b>
pH (SU)	GS-AP-MW-9	6.85	5.67	4/16/2019	6.69	No	26	0	n/a	0.0606	NP Inter (normality)
<b>pH (SU)</b>	<b>GS-AP-MW-11</b>	<b>6.85</b>	<b>5.67</b>	<b>4/16/2019</b>	<b>6.93</b>	<b>Yes</b>	<b>26</b>	<b>0</b>	<b>n/a</b>	<b>0.0606</b>	<b>NP Inter (normality)</b>
<b>pH (SU)</b>	<b>GS-AP-MW-12</b>	<b>6.85</b>	<b>5.67</b>	<b>4/16/2019</b>	<b>7.41</b>	<b>Yes</b>	<b>26</b>	<b>0</b>	<b>n/a</b>	<b>0.0606</b>	<b>NP Inter (normality)</b>
<b>pH (SU)</b>	<b>GS-AP-MW-14</b>	<b>6.85</b>	<b>5.67</b>	<b>4/16/2019</b>	<b>7.03</b>	<b>Yes</b>	<b>26</b>	<b>0</b>	<b>n/a</b>	<b>0.0606</b>	<b>NP Inter (normality)</b>
<b>pH (SU)</b>	<b>GS-AP-MW-15</b>	<b>6.85</b>	<b>5.67</b>	<b>4/17/2019</b>	<b>10.76</b>	<b>Yes</b>	<b>26</b>	<b>0</b>	<b>n/a</b>	<b>0.0606</b>	<b>NP Inter (normality)</b>
<b>pH (SU)</b>	<b>GS-AP-MW-16D</b>	<b>6.85</b>	<b>5.67</b>	<b>4/17/2019</b>	<b>7.33</b>	<b>Yes</b>	<b>26</b>	<b>0</b>	<b>n/a</b>	<b>0.0606</b>	<b>NP Inter (normality)</b>
<b>pH (SU)</b>	<b>GS-AP-MW-17</b>	<b>6.85</b>	<b>5.67</b>	<b>4/17/2019</b>	<b>8.36</b>	<b>Yes</b>	<b>26</b>	<b>0</b>	<b>n/a</b>	<b>0.0606</b>	<b>NP Inter (normality)</b>
<b>pH (SU)</b>	<b>GS-AP-MW-18</b>	<b>6.85</b>	<b>5.67</b>	<b>4/17/2019</b>	<b>7.58</b>	<b>Yes</b>	<b>26</b>	<b>0</b>	<b>n/a</b>	<b>0.0606</b>	<b>NP Inter (normality)</b>
<b>pH (SU)</b>	<b>GS-AP-MW-19</b>	<b>6.85</b>	<b>5.67</b>	<b>4/17/2019</b>	<b>8.06</b>	<b>Yes</b>	<b>26</b>	<b>0</b>	<b>n/a</b>	<b>0.0606</b>	<b>NP Inter (normality)</b>

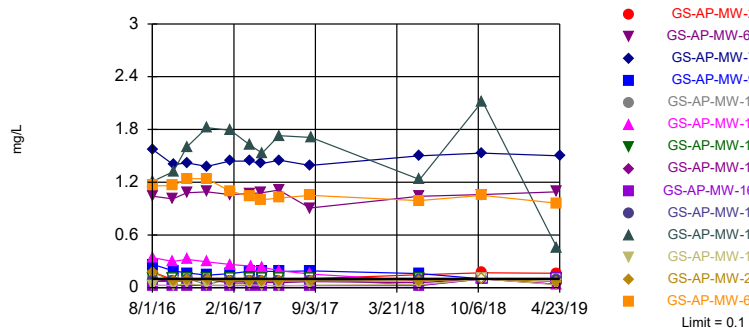
# Interwell Prediction Limits - All Results

Plant William C Gorgas   Client: Southern Company   Data: Gorgas Ash Pond   Printed 6/7/2019, 8:19 AM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg.N	%NDs	Transform	Alpha	Method
pH (SU)	GS-AP-MW-21	6.85	5.67	4/17/2019	11.71	Yes	26	0	n/a	0.0606	NP Inter (normality)
pH (SU)	GS-AP-MW-6S	6.85	5.67	4/16/2019	6.82	No	26	0	n/a	0.0606	NP Inter (normality)
Sulfate (mg/L)	GS-AP-MW-2	12.1	n/a	4/17/2019	48.6	Yes	24	4.167	n/a	0.03229	NP Inter (normality)
Sulfate (mg/L)	GS-AP-MW-6D	12.1	n/a	4/16/2019	46.2	Yes	24	4.167	n/a	0.03229	NP Inter (normality)
Sulfate (mg/L)	GS-AP-MW-7	12.1	n/a	4/23/2019	156	Yes	24	4.167	n/a	0.03229	NP Inter (normality)
Sulfate (mg/L)	GS-AP-MW-9	12.1	n/a	4/16/2019	154	Yes	24	4.167	n/a	0.03229	NP Inter (normality)
Sulfate (mg/L)	GS-AP-MW-11	12.1	n/a	4/16/2019	23.2	Yes	24	4.167	n/a	0.03229	NP Inter (normality)
Sulfate (mg/L)	GS-AP-MW-12	12.1	n/a	4/16/2019	13.3	Yes	24	4.167	n/a	0.03229	NP Inter (normality)
Sulfate (mg/L)	GS-AP-MW-14	12.1	n/a	4/16/2019	16.9	Yes	24	4.167	n/a	0.03229	NP Inter (normality)
Sulfate (mg/L)	GS-AP-MW-15	12.1	n/a	4/17/2019	9.02	No	24	4.167	n/a	0.03229	NP Inter (normality)
Sulfate (mg/L)	GS-AP-MW-16D	12.1	n/a	4/17/2019	14.1	Yes	24	4.167	n/a	0.03229	NP Inter (normality)
Sulfate (mg/L)	GS-AP-MW-17	12.1	n/a	4/17/2019	76.6	Yes	24	4.167	n/a	0.03229	NP Inter (normality)
Sulfate (mg/L)	GS-AP-MW-18	12.1	n/a	4/17/2019	68.7	Yes	24	4.167	n/a	0.03229	NP Inter (normality)
Sulfate (mg/L)	GS-AP-MW-19	12.1	n/a	4/17/2019	14.3	Yes	24	4.167	n/a	0.03229	NP Inter (normality)
Sulfate (mg/L)	GS-AP-MW-21	12.1	n/a	4/17/2019	215	Yes	24	4.167	n/a	0.03229	NP Inter (normality)
Sulfate (mg/L)	GS-AP-MW-6S	12.1	n/a	4/16/2019	195	Yes	24	4.167	n/a	0.03229	NP Inter (normality)
TDS (mg/L)	GS-AP-MW-2	226	n/a	4/17/2019	341	Yes	24	0	n/a	0.03229	NP Inter (normality)
TDS (mg/L)	GS-AP-MW-6D	226	n/a	4/16/2019	277	Yes	24	0	n/a	0.03229	NP Inter (normality)
TDS (mg/L)	GS-AP-MW-7	226	n/a	4/23/2019	354	Yes	24	0	n/a	0.03229	NP Inter (normality)
TDS (mg/L)	GS-AP-MW-9	226	n/a	4/16/2019	397	Yes	24	0	n/a	0.03229	NP Inter (normality)
TDS (mg/L)	GS-AP-MW-11	226	n/a	4/16/2019	226	No	24	0	n/a	0.03229	NP Inter (normality)
TDS (mg/L)	GS-AP-MW-12	226	n/a	4/16/2019	193	No	24	0	n/a	0.03229	NP Inter (normality)
TDS (mg/L)	GS-AP-MW-14	226	n/a	4/16/2019	184	No	24	0	n/a	0.03229	NP Inter (normality)
TDS (mg/L)	GS-AP-MW-15	226	n/a	4/17/2019	354	Yes	24	0	n/a	0.03229	NP Inter (normality)
TDS (mg/L)	GS-AP-MW-16D	226	n/a	4/17/2019	207	No	24	0	n/a	0.03229	NP Inter (normality)
TDS (mg/L)	GS-AP-MW-17	226	n/a	4/17/2019	540	Yes	24	0	n/a	0.03229	NP Inter (normality)
TDS (mg/L)	GS-AP-MW-18	226	n/a	4/17/2019	358	Yes	24	0	n/a	0.03229	NP Inter (normality)
TDS (mg/L)	GS-AP-MW-19	226	n/a	4/17/2019	296	Yes	24	0	n/a	0.03229	NP Inter (normality)
TDS (mg/L)	GS-AP-MW-21	226	n/a	4/17/2019	582	Yes	24	0	n/a	0.03229	NP Inter (normality)
TDS (mg/L)	GS-AP-MW-6S	226	n/a	4/16/2019	382	Yes	24	0	n/a	0.03229	NP Inter (normality)

Exceeds Limit: GS-AP-MW-2, GS-AP-MW-6D, GS-AP-MW-7, GS-AP-MW-18, GS-AP-

Prediction Limit  
Interwell Non-parametric

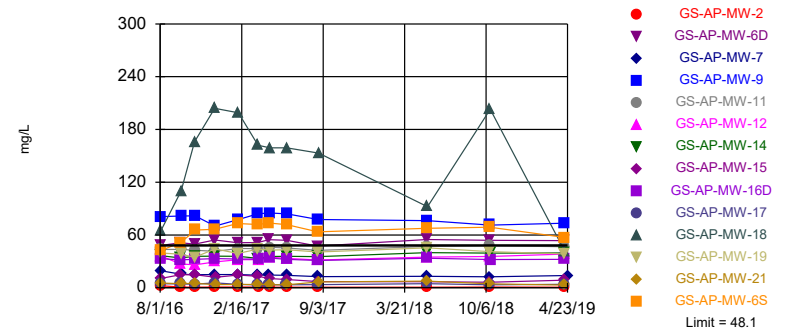


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 24 background values. 95.83% NDs. Report alpha = 0.3684. Individual comparison alpha = 0.03229. Most recent point for each compliance well compared to limit. Insufficient data to test for seasonality; data will not be deseasonalized.

Constituent: Boron Analysis Run 6/7/2019 8:17 AM View: PLs - Interwell  
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

Exceeds Limit: GS-AP-MW-6D, GS-AP-MW-9, GS-AP-MW-6S

Prediction Limit  
Interwell Non-parametric

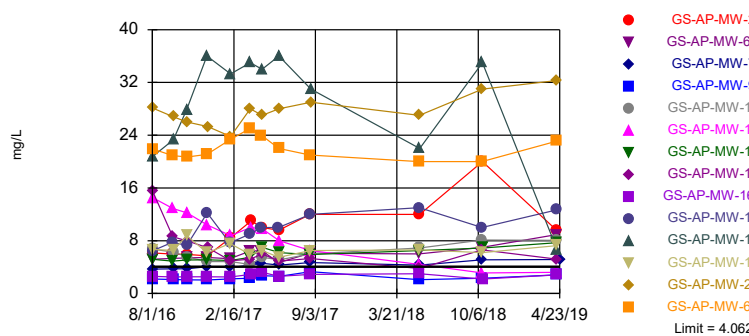


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.05 alpha level. Limit is highest of 24 background values. Report alpha = 0.3684. Individual comparison alpha = 0.03229. Most recent point for each compliance well compared to limit. Insufficient data to test for seasonality; data will not be deseasonalized.

Constituent: Calcium Analysis Run 6/7/2019 8:17 AM View: PLs - Interwell  
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

Exceeds Limit: GS-AP-MW-2, GS-AP-MW-6D, GS-AP-MW-7, GS-AP-MW-11, GS-AP-

Prediction Limit  
Interwell Parametric

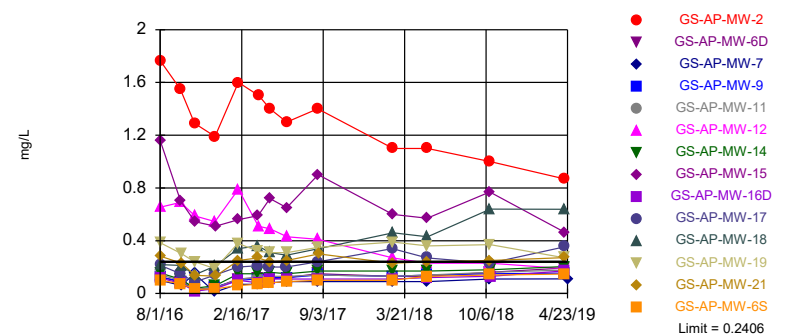


Background Data Summary: Mean=3.208, Std. Dev.=0.3347, n=24. Insufficient data to test for seasonality; not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9521, critical = 0.916. Report alpha = 0.1313. Individual comparison alpha = 0.01. Most recent point for each compliance well compared to limit.

Constituent: Chloride Analysis Run 6/7/2019 8:17 AM View: PLs - Interwell  
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

Exceeds Limit: GS-AP-MW-2, GS-AP-MW-15, GS-AP-MW-17, GS-AP-MW-18...

Prediction Limit  
Interwell Parametric

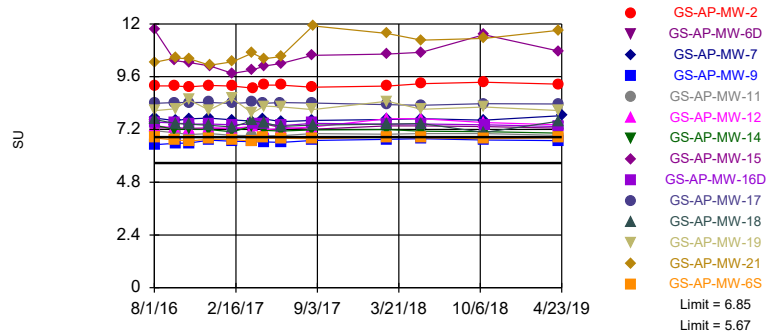


Background Data Summary: Mean=0.1164, Std. Dev.=0.04903, n=26, 3.846% NDs. Insufficient data to test for seasonality; not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9538, critical = 0.92. Report alpha = 0.1313. Individual comparison alpha = 0.01. Most recent point for each compliance well compared to limit.

Constituent: Fluoride Analysis Run 6/7/2019 8:17 AM View: PLs - Interwell  
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

Exceeds Limit: GS-AP-MW-2, GS-AP-MW-6D, GS-AP-MW-7, GS-AP-MW-11...

Prediction Limit  
Interwell Non-parametric

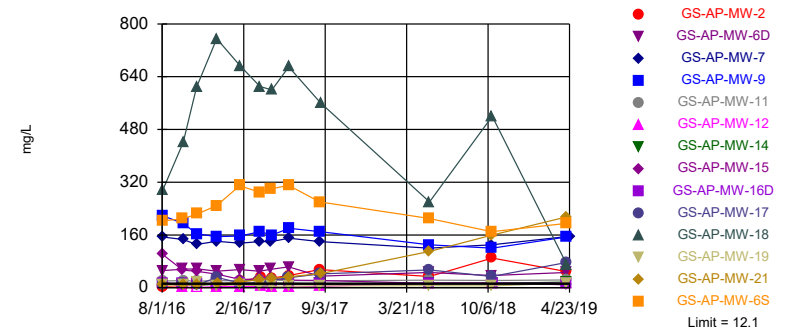


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.05 alpha level. Limits are highest and lowest of 26 background values. Report alpha = 0.7. Individual comparison alpha = 0.0606. Most recent point for each compliance well compared to limit. Insufficient data to test for seasonality; data will not be deseasonalized.

Constituent: pH Analysis Run 6/7/2019 8:17 AM View: PLs - Interwell  
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

Exceeds Limit: GS-AP-MW-2, GS-AP-MW-6D, GS-AP-MW-7, GS-AP-MW-9, GS-AP-M...

Prediction Limit  
Interwell Non-parametric

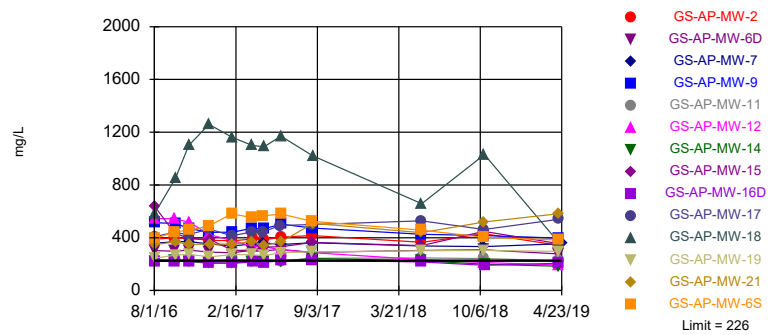


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.05 alpha level. Limit is highest of 24 background values. 4.167% NDs. Report alpha = 0.3684. Individual comparison alpha = 0.03229. Most recent point for each compliance well compared to limit. Insufficient data to test for seasonality; data will not be deseasonalized.

Constituent: Sulfate Analysis Run 6/7/2019 8:17 AM View: PLs - Interwell  
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

Exceeds Limit: GS-AP-MW-2, GS-AP-MW-6D, GS-AP-MW-7, GS-AP-MW-9, GS-AP-M...

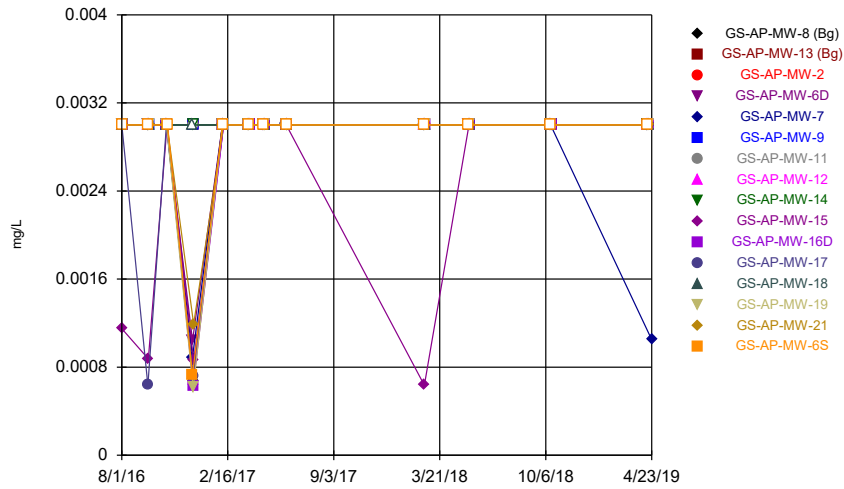
Prediction Limit  
Interwell Non-parametric



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 0.05 alpha level. Limit is highest of 24 background values. Report alpha = 0.3684. Individual comparison alpha = 0.03229. Most recent point for each compliance well compared to limit. Insufficient data to test for seasonality; data will not be deseasonalized.

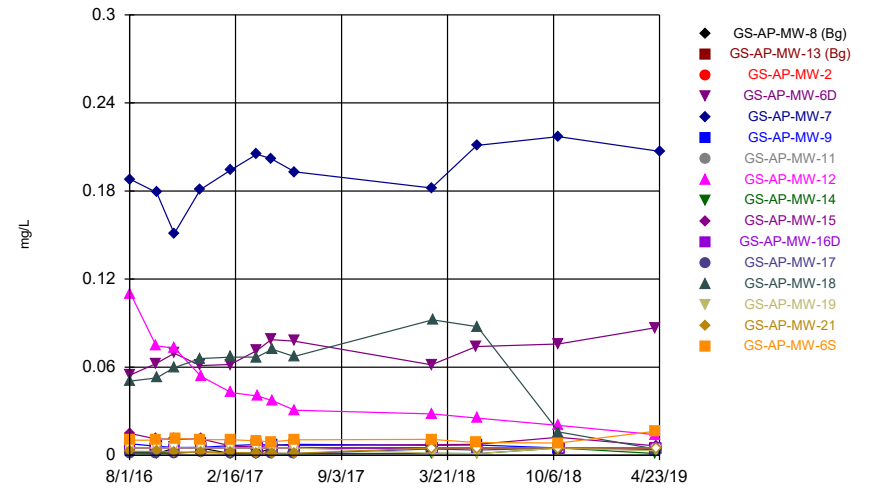
Constituent: TDS Analysis Run 6/7/2019 8:17 AM View: PLs - Interwell  
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

### Time Series



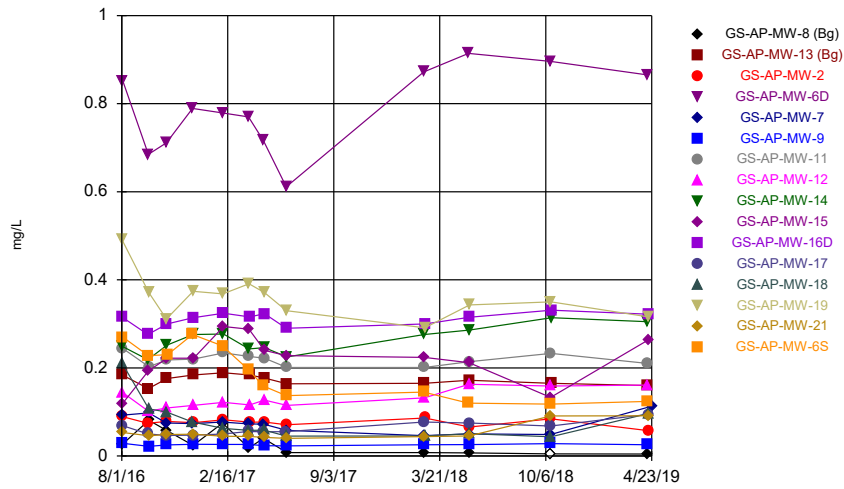
Constituent: Antimony Analysis Run 6/7/2019 8:20 AM View: Time Series - All Wells  
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

### Time Series



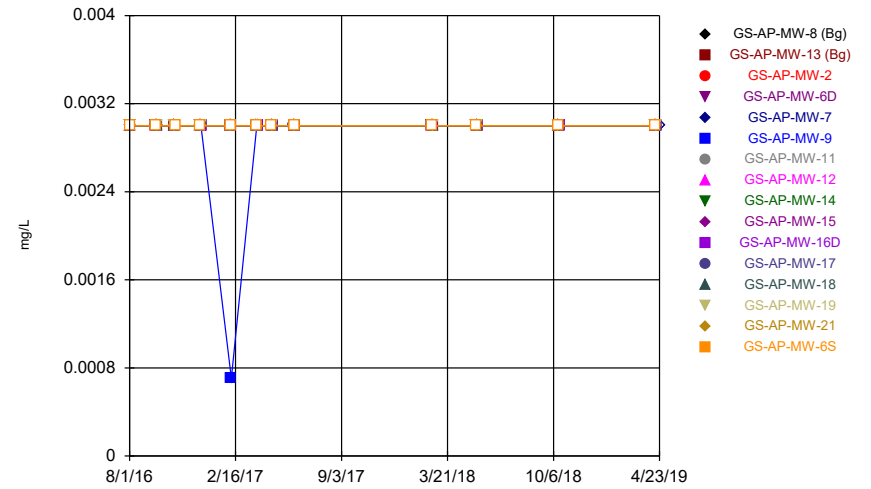
Constituent: Arsenic Analysis Run 6/7/2019 8:20 AM View: Time Series - All Wells  
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

### Time Series



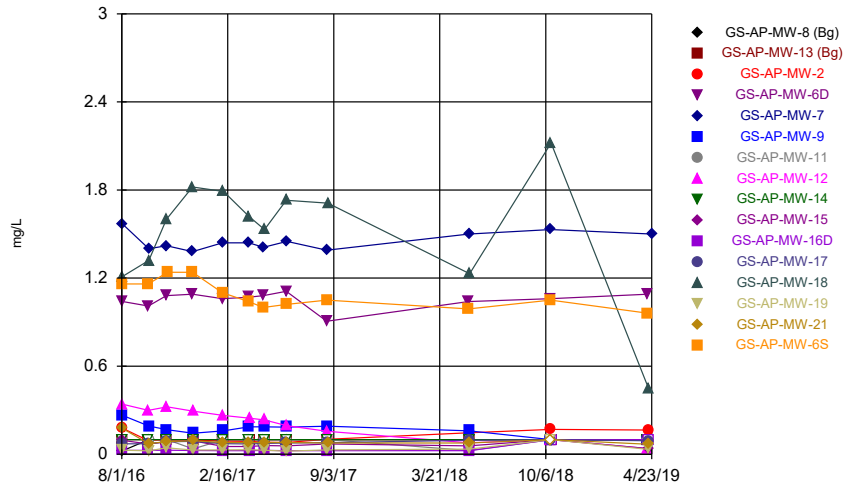
Constituent: Barium Analysis Run 6/7/2019 8:20 AM View: Time Series - All Wells  
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

### Time Series



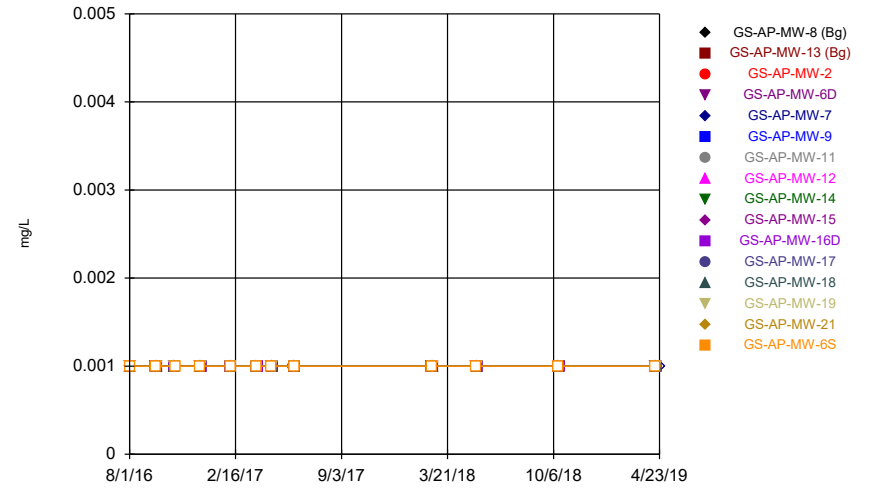
Constituent: Beryllium Analysis Run 6/7/2019 8:20 AM View: Time Series - All Wells  
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

### Time Series



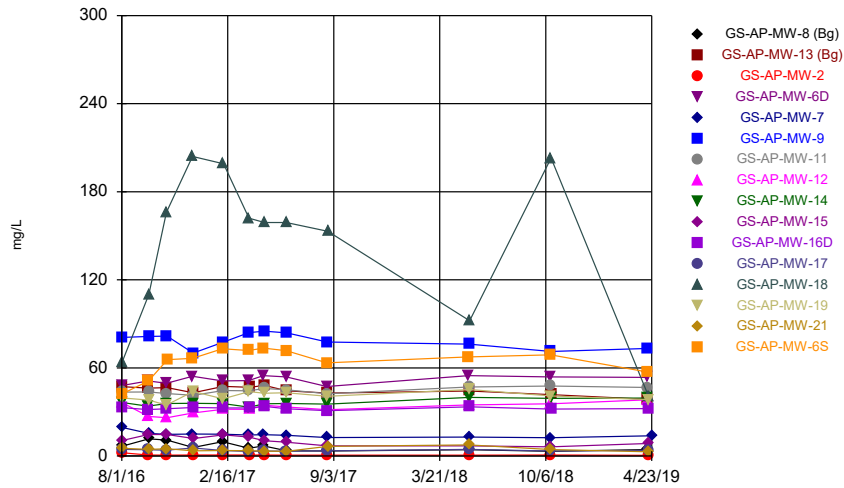
Constituent: Boron Analysis Run 6/7/2019 8:20 AM View: Time Series - All Wells  
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

### Time Series



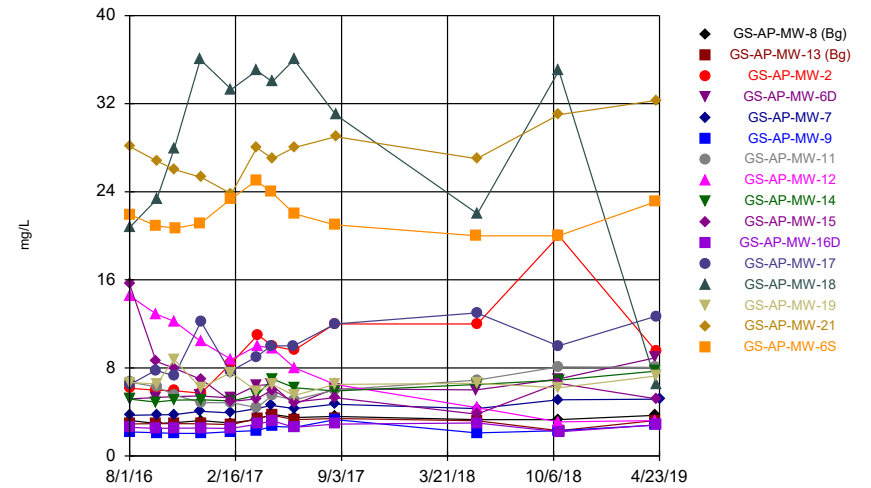
Constituent: Cadmium Analysis Run 6/7/2019 8:21 AM View: Time Series - All Wells  
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

### Time Series



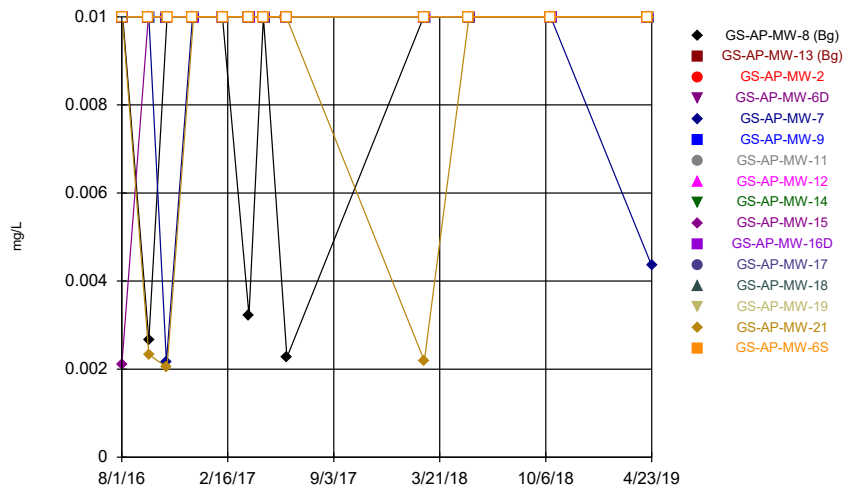
Constituent: Calcium Analysis Run 6/7/2019 8:21 AM View: Time Series - All Wells  
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

### Time Series



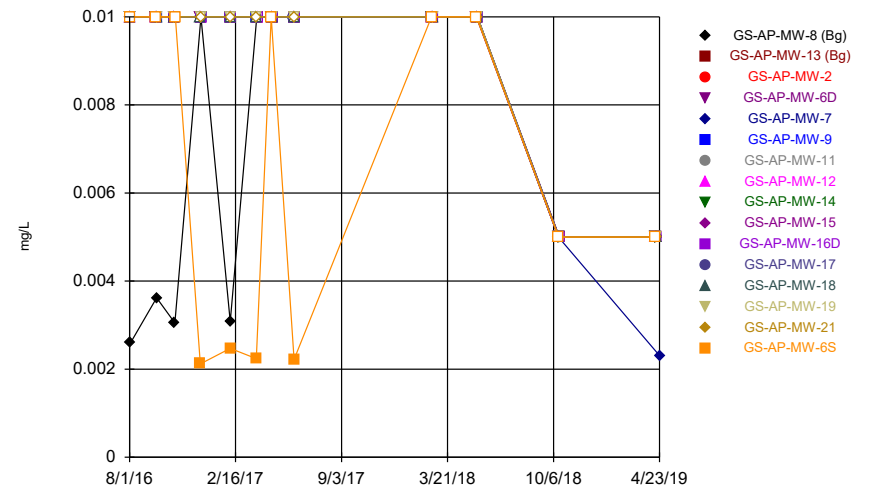
Constituent: Chloride Analysis Run 6/7/2019 8:21 AM View: Time Series - All Wells  
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

### Time Series



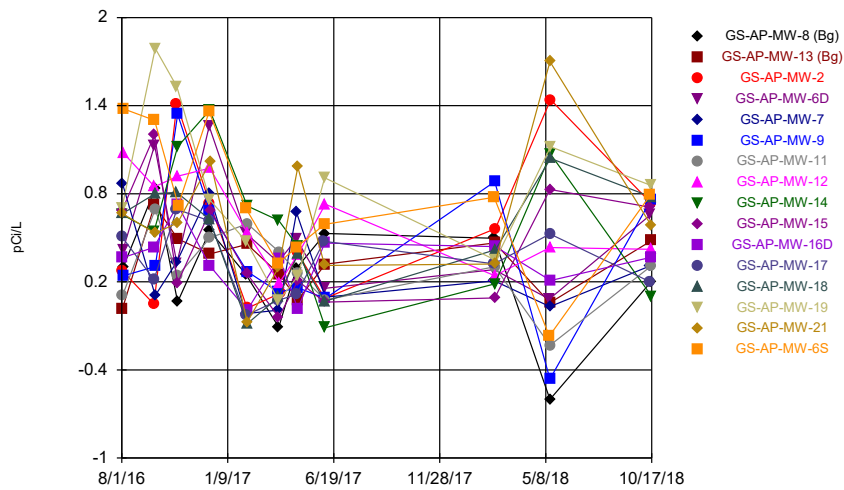
Constituent: Chromium Analysis Run 6/7/2019 8:21 AM View: Time Series - All Wells  
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

### Time Series



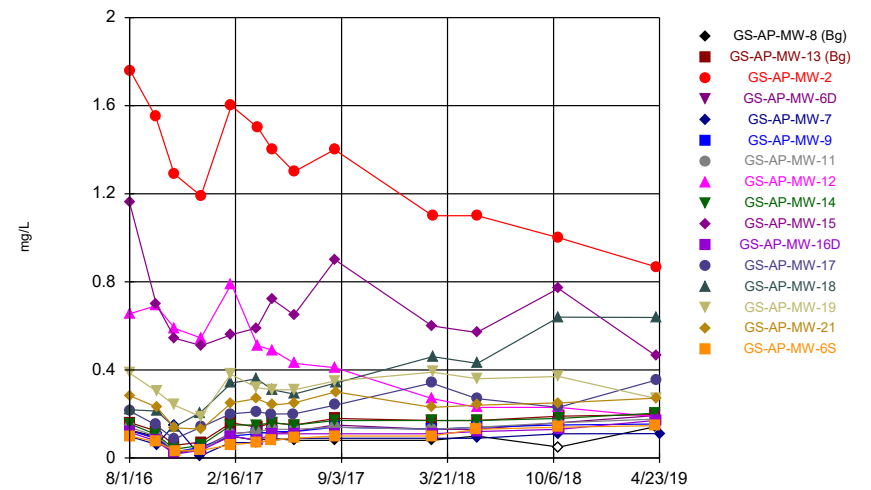
Constituent: Cobalt Analysis Run 6/7/2019 8:21 AM View: Time Series - All Wells  
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

### Time Series



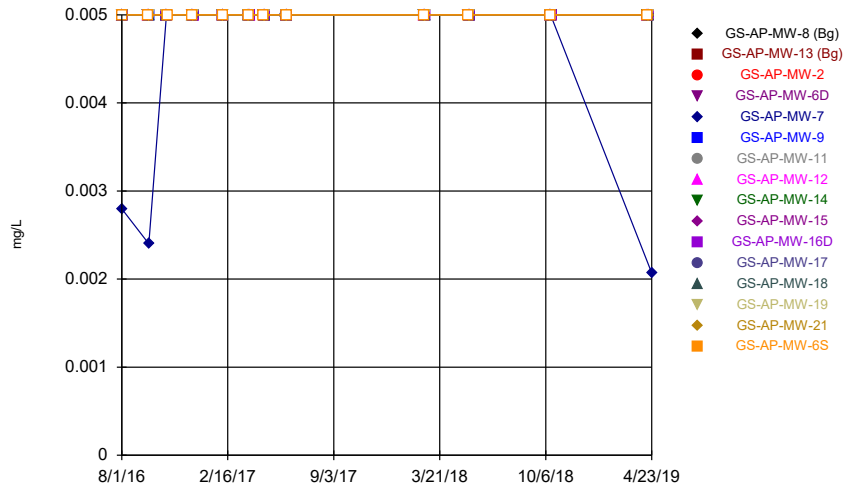
Constituent: Combined Radium 226 + 228 Analysis Run 6/7/2019 8:21 AM View: Time Series - All Wells  
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

### Time Series



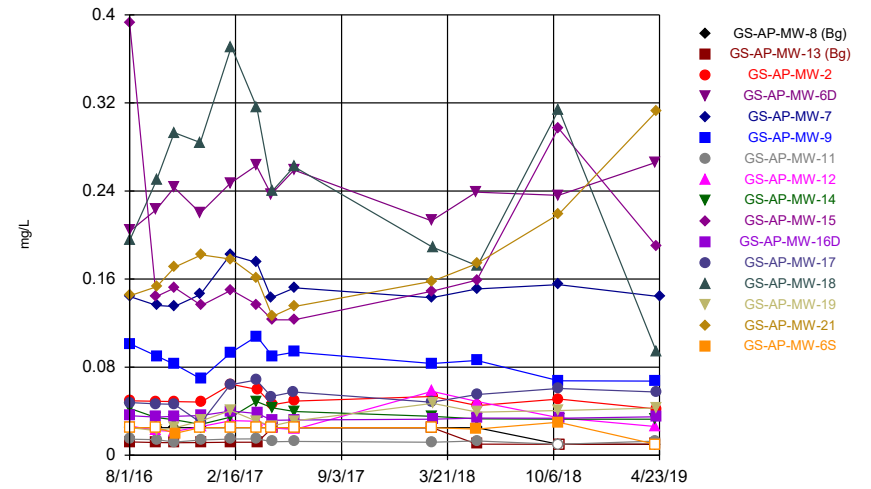
Constituent: Fluoride Analysis Run 6/7/2019 8:21 AM View: Time Series - All Wells  
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

Time Series



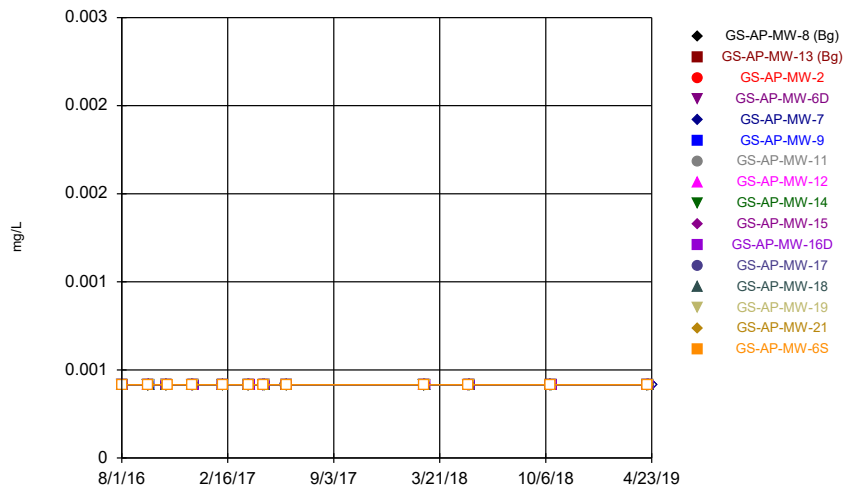
Constituent: Lead Analysis Run 6/7/2019 8:21 AM View: Time Series - All Wells  
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

Time Series



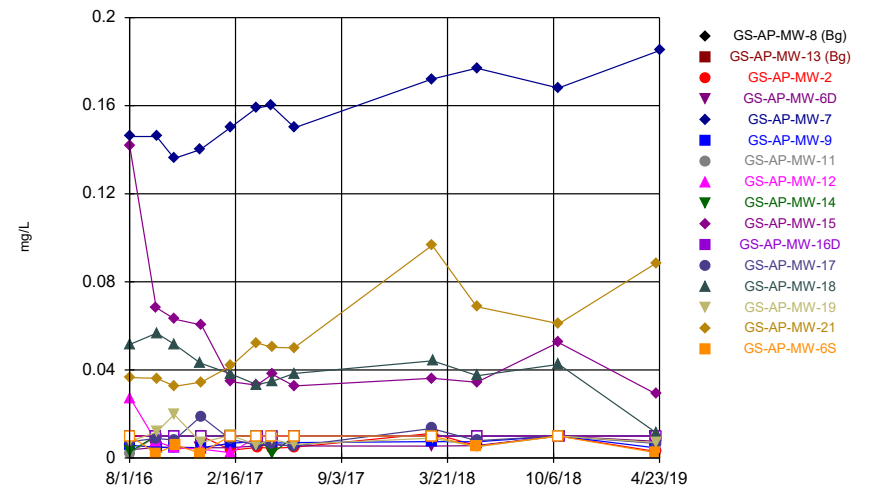
Constituent: Lithium Analysis Run 6/7/2019 8:21 AM View: Time Series - All Wells  
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

Time Series



Constituent: Mercury Analysis Run 6/7/2019 8:21 AM View: Time Series - All Wells  
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

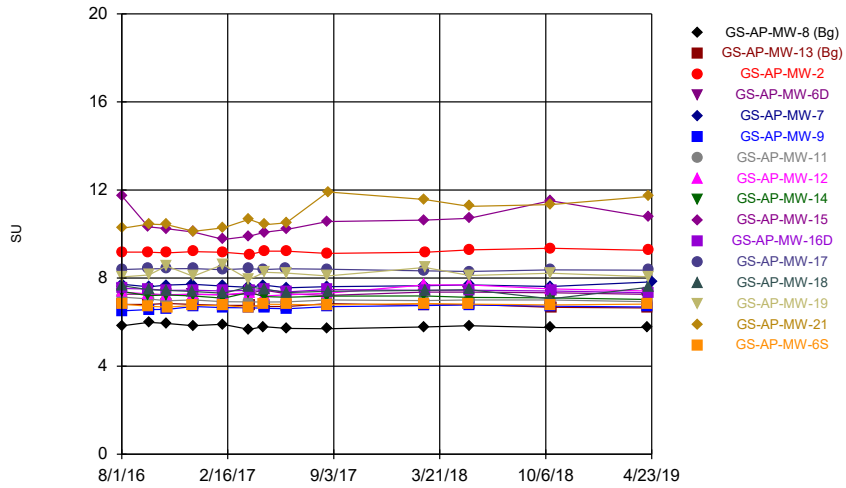
Time Series



Constituent: Molybdenum Analysis Run 6/7/2019 8:21 AM View: Time Series - All Wells  
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

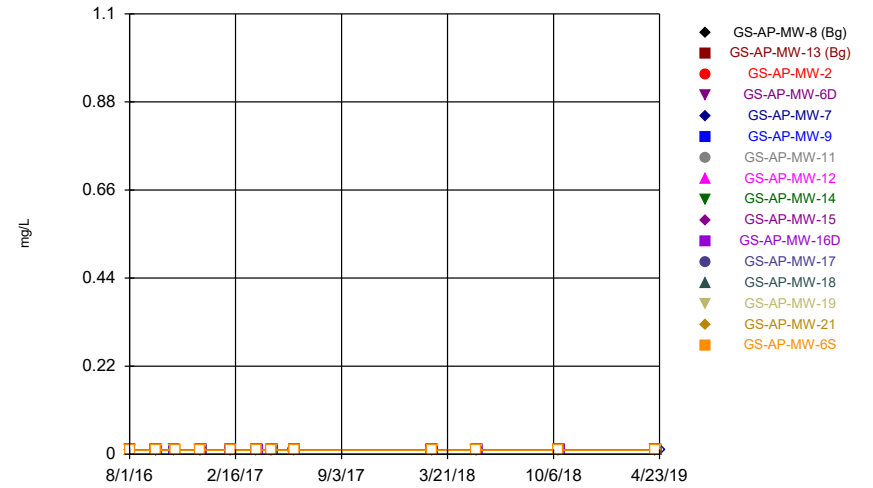


Time Series



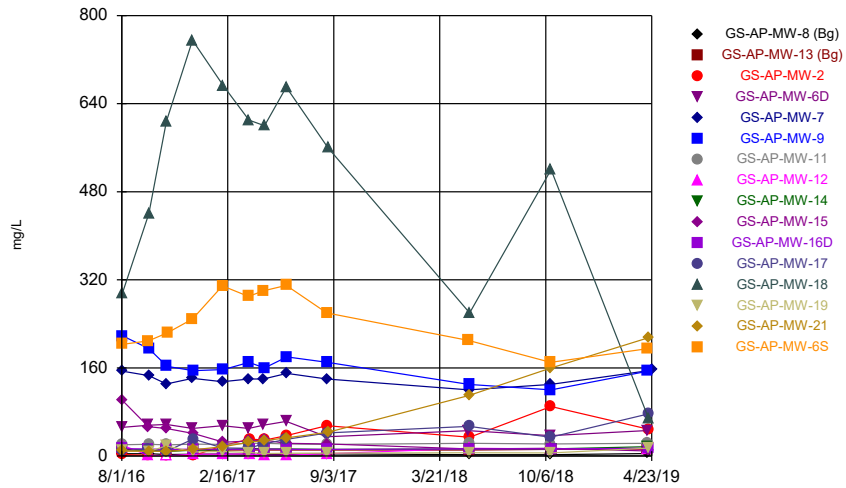
Constituent: pH Analysis Run 6/7/2019 8:21 AM View: Time Series - All Wells  
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

Time Series



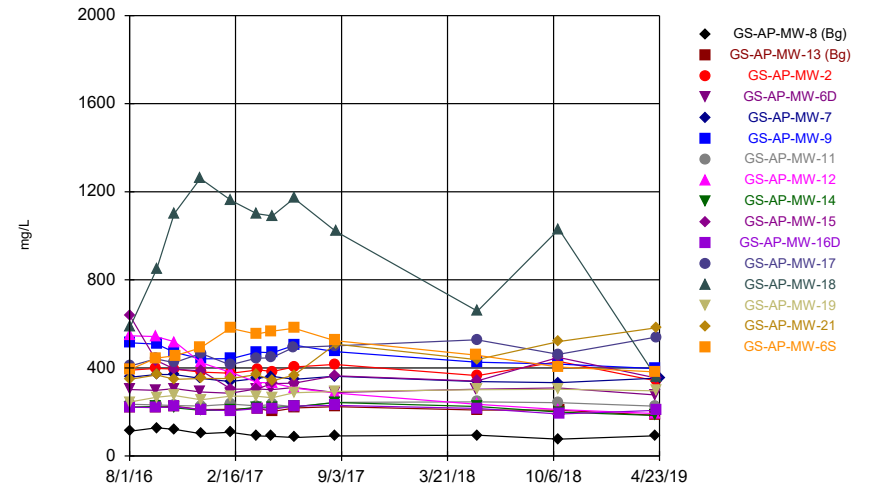
Constituent: Selenium Analysis Run 6/7/2019 8:21 AM View: Time Series - All Wells  
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

Time Series



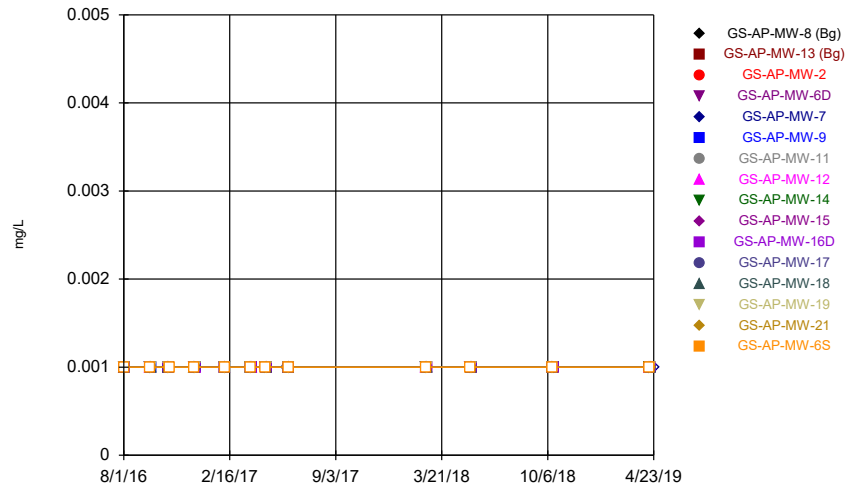
Constituent: Sulfate Analysis Run 6/7/2019 8:21 AM View: Time Series - All Wells  
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

Time Series



Constituent: TDS Analysis Run 6/7/2019 8:21 AM View: Time Series - All Wells  
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

### Time Series



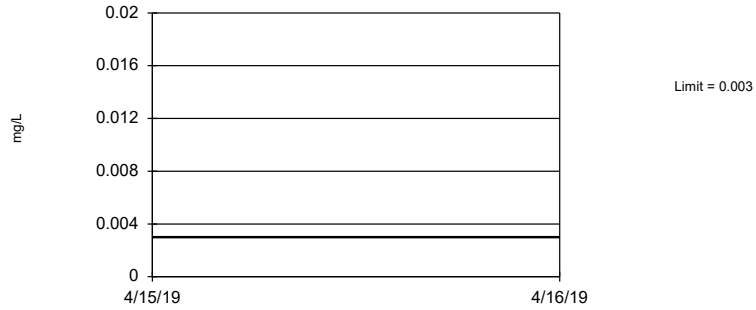
Constituent: Thallium    Analysis Run 6/7/2019 8:21 AM    View: Time Series - All Wells  
Plant William C Gorgas    Client: Southern Company    Data: Gorgas Ash Pond

# Upper Tolerance Limits

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond Printed 6/7/2019, 8:26 AM

Constituent	Upper Lim.	Bq N	Bq Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	0.003	24	n/a	n/a	95.83	n/a	n/a	0.292	NP Inter(NDs)
Arsenic (mg/L)	0.005	24	n/a	n/a	83.33	n/a	n/a	0.292	NP Inter(NDs)
Barium (mg/L)	0.189	24	n/a	n/a	4.167	n/a	n/a	0.292	NP Inter(normal...
Beryllium (mg/L)	0.003	24	n/a	n/a	100	n/a	n/a	0.292	NP Inter(NDs)
Cadmium (mg/L)	0.001	24	n/a	n/a	100	n/a	n/a	0.292	NP Inter(NDs)
Chromium (mg/L)	0.01	24	n/a	n/a	87.5	n/a	n/a	0.292	NP Inter(NDs)
Cobalt (mg/L)	0.01	24	n/a	n/a	83.33	n/a	n/a	0.292	NP Inter(NDs)
Combined Radium 226 + 228 (pCi/L)	1.02	22	0.2971	0.3077	0	None	No	0.05	Inter
Fluoride (mg/L)	0.2281	26	0.1164	0.04903	3.846	None	No	0.05	Inter
Lead (mg/L)	0.005	24	n/a	n/a	100	n/a	n/a	0.292	NP Inter(NDs)
Lithium (mg/L)	0.05	24	n/a	n/a	66.67	n/a	n/a	0.292	NP Inter(NDs)
Mercury (mg/L)	0.0005	24	n/a	n/a	100	n/a	n/a	0.292	NP Inter(NDs)
Molybdenum (mg/L)	0.01	24	n/a	n/a	100	n/a	n/a	0.292	NP Inter(NDs)
Selenium (mg/L)	0.01	24	n/a	n/a	100	n/a	n/a	0.292	NP Inter(NDs)
Thallium (mg/L)	0.001	24	n/a	n/a	100	n/a	n/a	0.292	NP Inter(NDs)

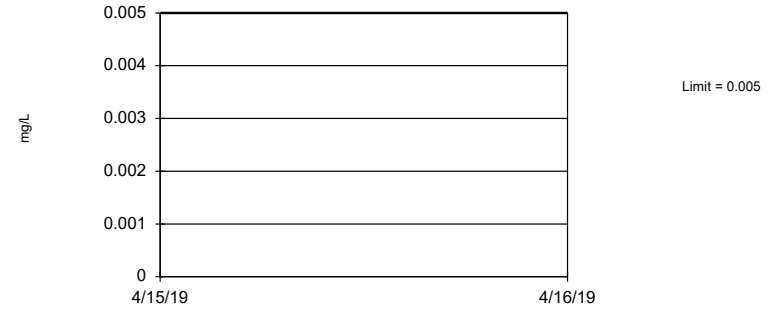
### Tolerance Limit Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. Limit is highest of 24 background values. 95.83% NDs. 82.62% coverage at alpha=0.01; 88.09% coverage at alpha=0.05; 97.07% coverage at alpha=0.5. Report alpha = 0.292.

Constituent: Antimony Analysis Run 6/7/2019 8:25 AM View: UTL's App IV  
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

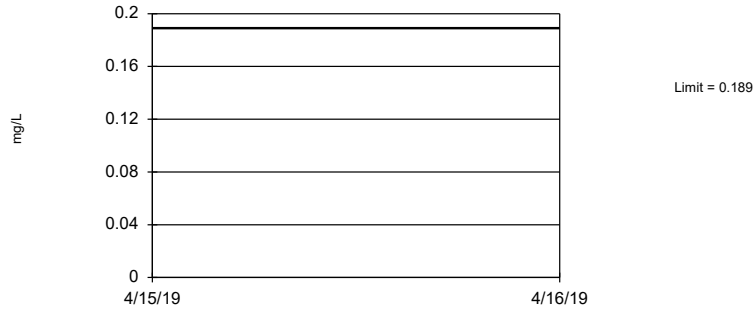
### Tolerance Limit Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. Limit is highest of 24 background values. 83.33% NDs. 82.62% coverage at alpha=0.01; 88.09% coverage at alpha=0.05; 97.07% coverage at alpha=0.5. Report alpha = 0.292.

Constituent: Arsenic Analysis Run 6/7/2019 8:25 AM View: UTL's App IV  
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

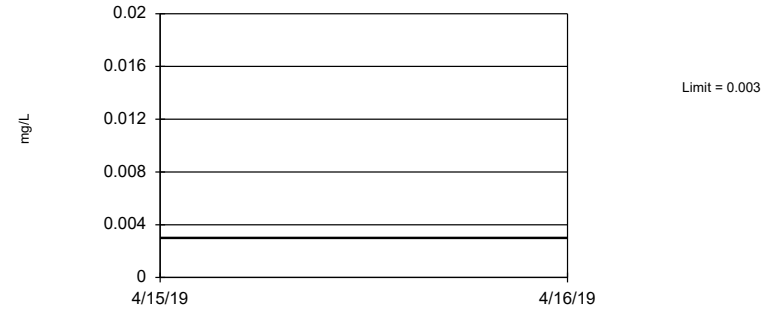
### Tolerance Limit Interwell Non-parametric



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 0.05 alpha level. Limit is highest of 24 background values. 4.167% NDs. 82.62% coverage at alpha=0.01; 88.09% coverage at alpha=0.05; 97.07% coverage at alpha=0.5. Report alpha = 0.292.

Constituent: Barium Analysis Run 6/7/2019 8:25 AM View: UTL's App IV  
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

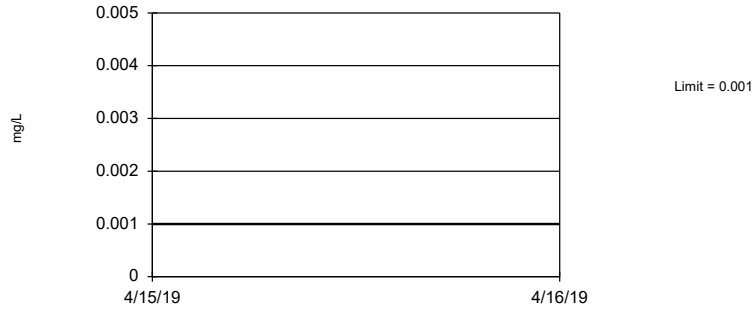
### Tolerance Limit Interwell Non-parametric



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. 82.62% coverage at alpha=0.01; 88.09% coverage at alpha=0.05; 97.07% coverage at alpha=0.5. Report alpha = 0.292.

Constituent: Beryllium Analysis Run 6/7/2019 8:25 AM View: UTL's App IV  
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

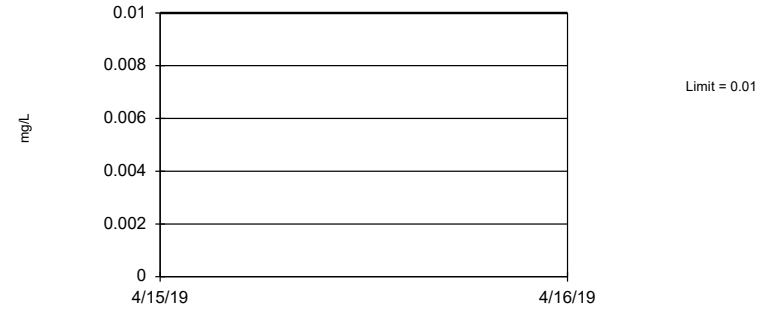
Tolerance Limit  
Interwell Non-parametric



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. 82.62% coverage at alpha=0.01; 88.09% coverage at alpha=0.05; 97.07% coverage at alpha=0.5. Report alpha = 0.292.

Constituent: Cadmium Analysis Run 6/7/2019 8:25 AM View: UTL's App IV  
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

Tolerance Limit  
Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. Limit is highest of 24 background values. 87.5% NDs. 82.62% coverage at alpha=0.01; 88.09% coverage at alpha=0.05; 97.07% coverage at alpha=0.5. Report alpha = 0.292.

Constituent: Chromium Analysis Run 6/7/2019 8:25 AM View: UTL's App IV  
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

Tolerance Limit  
Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. Limit is highest of 24 background values. 83.33% NDs. 82.62% coverage at alpha=0.01; 88.09% coverage at alpha=0.05; 97.07% coverage at alpha=0.5. Report alpha = 0.292.

Constituent: Cobalt Analysis Run 6/7/2019 8:25 AM View: UTL's App IV  
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

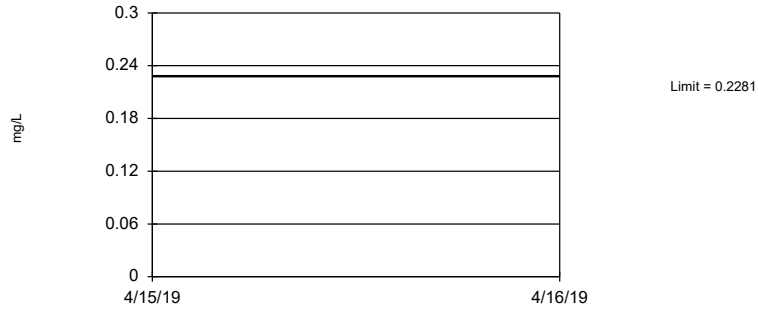
Tolerance Limit  
Interwell Parametric



95% coverage. Background Data Summary: Mean=0.2971, Std. Dev.=0.3077, n=22. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.935, critical = 0.911. Report alpha = 0.05.

Constituent: Combined Radium 226 + 228 Analysis Run 6/7/2019 8:25 AM View: UTL's App IV  
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

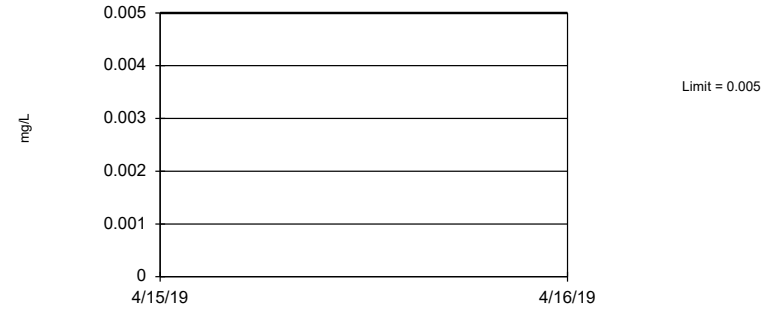
### Tolerance Limit Interwell Parametric



95% coverage. Background Data Summary: Mean=0.1164, Std. Dev.=0.04903, n=26, 3.846% NDs. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9538, critical = 0.92. Report alpha = 0.05.

Constituent: Fluoride Analysis Run 6/7/2019 8:25 AM View: UTL's App IV  
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

### 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. 82.62% coverage at alpha=0.01; 88.09% coverage at alpha=0.05; 97.07% coverage at alpha=0.5. Report alpha = 0.292.

Constituent: Lead Analysis Run 6/7/2019 8:25 AM View: UTL's App IV  
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

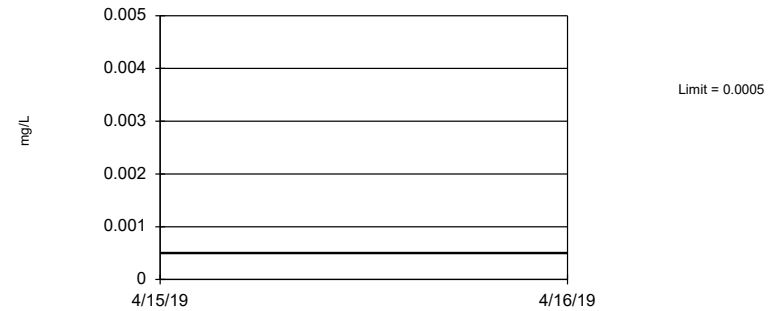
### Tolerance Limit Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 50%. Limit is highest of 24 background values. 66.67% NDs. 82.62% coverage at alpha=0.01; 88.09% coverage at alpha=0.05; 97.07% coverage at alpha=0.5. Report alpha = 0.292.

Constituent: Lithium Analysis Run 6/7/2019 8:25 AM View: UTL's App IV  
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

### 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. 82.62% coverage at alpha=0.01; 88.09% coverage at alpha=0.05; 97.07% coverage at alpha=0.5. Report alpha = 0.292.

Constituent: Mercury Analysis Run 6/7/2019 8:25 AM View: UTL's App IV  
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

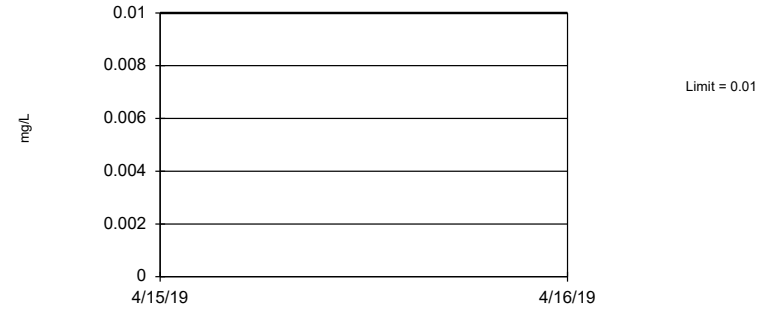
### Tolerance Limit Interwell Non-parametric



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. 82.62% coverage at alpha=0.01; 88.09% coverage at alpha=0.05; 97.07% coverage at alpha=0.5. Report alpha = 0.292.

Constituent: Molybdenum Analysis Run 6/7/2019 8:25 AM View: UTL's App IV  
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

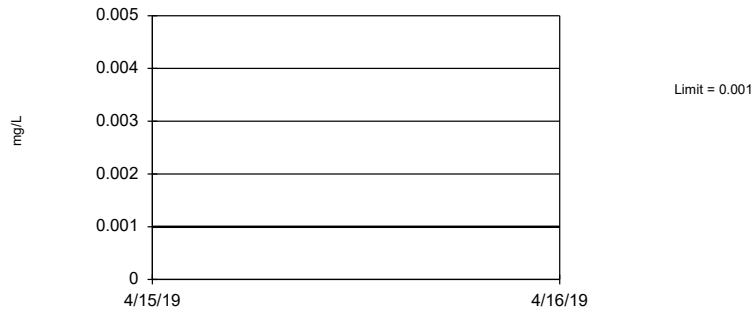
### Tolerance Limit Interwell Non-parametric



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. 82.62% coverage at alpha=0.01; 88.09% coverage at alpha=0.05; 97.07% coverage at alpha=0.5. Report alpha = 0.292.

Constituent: Selenium Analysis Run 6/7/2019 8:25 AM View: UTL's App IV  
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

### 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. 82.62% coverage at alpha=0.01; 88.09% coverage at alpha=0.05; 97.07% coverage at alpha=0.5. Report alpha = 0.292.

Constituent: Thallium Analysis Run 6/7/2019 8:25 AM View: UTL's App 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 6/7/2019, 8:30 AM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	%NDs	Transform	Alpha	Method
Arsenic (mg/L)	GS-AP-MW-6D	0.07703	0.06222	0.01	Yes	12	0	No	0.01	Param.
Arsenic (mg/L)	GS-AP-MW-7	0.2066	0.1784	0.01	Yes	12	0	No	0.01	Param.
Arsenic (mg/L)	GS-AP-MW-12	0.06761	0.02405	0.01	Yes	12	0	No	0.01	Param.
Arsenic (mg/L)	GS-AP-MW-18	0.07871	0.03825	0.01	Yes	12	0	No	0.01	Param.
Lithium (mg/L)	GS-AP-MW-6D	0.253	0.222	0.05	Yes	12	0	No	0.01	Param.
Lithium (mg/L)	GS-AP-MW-7	0.175	0.136	0.05	Yes	12	0	No	0.01	NP (normality)
Lithium (mg/L)	GS-AP-MW-9	0.09621	0.07589	0.05	Yes	12	0	No	0.01	Param.
Lithium (mg/L)	GS-AP-MW-15	0.297	0.123	0.05	Yes	12	0	No	0.01	NP (normality)
Lithium (mg/L)	GS-AP-MW-18	0.308	0.1889	0.05	Yes	12	0	No	0.01	Param.
Lithium (mg/L)	GS-AP-MW-21	0.2064	0.1419	0.05	Yes	12	0	ln(x)	0.01	Param.
Molybdenum (mg/L)	GS-AP-MW-7	0.1695	0.1453	0.1	Yes	12	0	No	0.01	Param.



# Confidence Intervals - All Results

Plant William C Gorgas    Client: Southern Company    Data: Gorgas Ash Pond    Printed 6/7/2019, 8:30 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	12	100	No	0.01	NP (NDs)
Antimony (mg/L)	GS-AP-MW-6D	0.003	0.00104	0.006	No	12	91.67	No	0.01	NP (NDs)
Antimony (mg/L)	GS-AP-MW-7	0.003	0.00105	0.006	No	12	83.33	No	0.01	NP (NDs)
Antimony (mg/L)	GS-AP-MW-9	0.003	0.003	0.006	No	12	100	No	0.01	NP (NDs)
Antimony (mg/L)	GS-AP-MW-11	0.003	0.003	0.006	No	12	100	No	0.01	NP (NDs)
Antimony (mg/L)	GS-AP-MW-12	0.003	0.000681	0.006	No	12	91.67	No	0.01	NP (NDs)
Antimony (mg/L)	GS-AP-MW-14	0.003	0.003	0.006	No	12	100	No	0.01	NP (NDs)
Antimony (mg/L)	GS-AP-MW-15	0.003	0.000858	0.006	No	12	66.67	No	0.01	NP (NDs)
Antimony (mg/L)	GS-AP-MW-16D	0.003	0.000633	0.006	No	12	91.67	No	0.01	NP (NDs)
Antimony (mg/L)	GS-AP-MW-17	0.003	0.00072	0.006	No	12	83.33	No	0.01	NP (NDs)
Antimony (mg/L)	GS-AP-MW-18	0.003	0.003	0.006	No	12	100	No	0.01	NP (NDs)
Antimony (mg/L)	GS-AP-MW-19	0.003	0.000613	0.006	No	12	91.67	No	0.01	NP (NDs)
Antimony (mg/L)	GS-AP-MW-21	0.003	0.00119	0.006	No	12	91.67	No	0.01	NP (NDs)
Antimony (mg/L)	GS-AP-MW-6S	0.003	0.000727	0.006	No	12	91.67	No	0.01	NP (NDs)
Arsenic (mg/L)	GS-AP-MW-2	0.005	0.005	0.01	No	12	100	No	0.01	NP (NDs)
<b>Arsenic (mg/L)</b>	<b>GS-AP-MW-6D</b>	<b>0.07703</b>	<b>0.06222</b>	<b>0.01</b>	<b>Yes</b>	<b>12</b>	<b>0</b>	<b>No</b>	<b>0.01</b>	<b>Param.</b>
<b>Arsenic (mg/L)</b>	<b>GS-AP-MW-7</b>	<b>0.2066</b>	<b>0.1784</b>	<b>0.01</b>	<b>Yes</b>	<b>12</b>	<b>0</b>	<b>No</b>	<b>0.01</b>	<b>Param.</b>
Arsenic (mg/L)	GS-AP-MW-9	0.007208	0.005399	0.01	No	12	8.333	No	0.01	Param.
Arsenic (mg/L)	GS-AP-MW-11	0.005	0.005	0.01	No	12	100	No	0.01	NP (NDs)
<b>Arsenic (mg/L)</b>	<b>GS-AP-MW-12</b>	<b>0.06761</b>	<b>0.02405</b>	<b>0.01</b>	<b>Yes</b>	<b>12</b>	<b>0</b>	<b>No</b>	<b>0.01</b>	<b>Param.</b>
Arsenic (mg/L)	GS-AP-MW-14	0.00199	0.0011	0.01	No	12	8.333	No	0.01	NP (normality)
Arsenic (mg/L)	GS-AP-MW-15	0.01127	0.006534	0.01	No	12	0	No	0.01	Param.
Arsenic (mg/L)	GS-AP-MW-16D	0.005	0.005	0.01	No	12	100	No	0.01	NP (NDs)
Arsenic (mg/L)	GS-AP-MW-17	0.00424	0.00115	0.01	No	12	8.333	No	0.01	NP (normality)
<b>Arsenic (mg/L)</b>	<b>GS-AP-MW-18</b>	<b>0.07871</b>	<b>0.03825</b>	<b>0.01</b>	<b>Yes</b>	<b>12</b>	<b>0</b>	<b>No</b>	<b>0.01</b>	<b>Param.</b>
Arsenic (mg/L)	GS-AP-MW-19	0.005	0.00138	0.01	No	12	75	No	0.01	NP (NDs)
Arsenic (mg/L)	GS-AP-MW-21	0.005	0.00135	0.01	No	12	33.33	No	0.01	NP (Cohens/xfrm)
Arsenic (mg/L)	GS-AP-MW-6S	0.0115	0.00864	0.01	No	12	0	No	0.01	NP (normality)
Barium (mg/L)	GS-AP-MW-2	0.08367	0.06966	2	No	12	0	No	0.01	Param.
Barium (mg/L)	GS-AP-MW-6D	0.8624	0.7142	2	No	12	0	No	0.01	Param.
Barium (mg/L)	GS-AP-MW-7	0.08936	0.05706	2	No	12	0	No	0.01	Param.
Barium (mg/L)	GS-AP-MW-9	0.02723	0.02396	2	No	12	0	No	0.01	Param.
Barium (mg/L)	GS-AP-MW-11	0.2299	0.2079	2	No	12	0	No	0.01	Param.
Barium (mg/L)	GS-AP-MW-12	0.1472	0.1136	2	No	12	0	No	0.01	Param.
Barium (mg/L)	GS-AP-MW-14	0.2874	0.2406	2	No	12	0	No	0.01	Param.
Barium (mg/L)	GS-AP-MW-15	0.2617	0.1778	2	No	12	0	No	0.01	Param.
Barium (mg/L)	GS-AP-MW-16D	0.3231	0.298	2	No	12	0	No	0.01	Param.
Barium (mg/L)	GS-AP-MW-17	0.07371	0.05041	2	No	12	0	No	0.01	Param.
Barium (mg/L)	GS-AP-MW-18	0.1023	0.0491	2	No	12	0	ln(x)	0.01	Param.
Barium (mg/L)	GS-AP-MW-19	0.3995	0.3185	2	No	12	0	No	0.01	Param.
Barium (mg/L)	GS-AP-MW-21	0.0909	0.0424	2	No	12	0	No	0.01	NP (normality)
Barium (mg/L)	GS-AP-MW-6S	0.2354	0.1401	2	No	12	0	No	0.01	Param.
Beryllium (mg/L)	GS-AP-MW-2	0.003	0.003	0.004	No	12	100	No	0.01	NP (NDs)
Beryllium (mg/L)	GS-AP-MW-6D	0.003	0.003	0.004	No	12	100	No	0.01	NP (NDs)
Beryllium (mg/L)	GS-AP-MW-7	0.003	0.003	0.004	No	12	100	No	0.01	NP (NDs)
Beryllium (mg/L)	GS-AP-MW-9	0.003	0.000705	0.004	No	12	91.67	No	0.01	NP (NDs)
Beryllium (mg/L)	GS-AP-MW-11	0.003	0.003	0.004	No	12	100	No	0.01	NP (NDs)
Beryllium (mg/L)	GS-AP-MW-12	0.003	0.003	0.004	No	12	100	No	0.01	NP (NDs)
Beryllium (mg/L)	GS-AP-MW-14	0.003	0.003	0.004	No	12	100	No	0.01	NP (NDs)
Beryllium (mg/L)	GS-AP-MW-15	0.003	0.003	0.004	No	12	100	No	0.01	NP (NDs)
Beryllium (mg/L)	GS-AP-MW-16D	0.003	0.003	0.004	No	12	100	No	0.01	NP (NDs)
Beryllium (mg/L)	GS-AP-MW-17	0.003	0.003	0.004	No	12	100	No	0.01	NP (NDs)
Beryllium (mg/L)	GS-AP-MW-18	0.003	0.003	0.004	No	12	100	No	0.01	NP (NDs)
Beryllium (mg/L)	GS-AP-MW-19	0.003	0.003	0.004	No	12	100	No	0.01	NP (NDs)
Beryllium (mg/L)	GS-AP-MW-21	0.003	0.003	0.004	No	12	100	No	0.01	NP (NDs)
Beryllium (mg/L)	GS-AP-MW-6S	0.003	0.003	0.004	No	12	100	No	0.01	NP (NDs)
Cadmium (mg/L)	GS-AP-MW-2	0.001	0.001	0.005	No	12	100	No	0.01	NP (NDs)
Cadmium (mg/L)	GS-AP-MW-6D	0.001	0.001	0.005	No	12	100	No	0.01	NP (NDs)
Cadmium (mg/L)	GS-AP-MW-7	0.001	0.001	0.005	No	12	100	No	0.01	NP (NDs)
Cadmium (mg/L)	GS-AP-MW-9	0.001	0.001	0.005	No	12	100	No	0.01	NP (NDs)
Cadmium (mg/L)	GS-AP-MW-11	0.001	0.001	0.005	No	12	100	No	0.01	NP (NDs)
Cadmium (mg/L)	GS-AP-MW-12	0.001	0.001	0.005	No	12	100	No	0.01	NP (NDs)
Cadmium (mg/L)	GS-AP-MW-14	0.001	0.001	0.005	No	12	100	No	0.01	NP (NDs)
Cadmium (mg/L)	GS-AP-MW-15	0.001	0.001	0.005	No	12	100	No	0.01	NP (NDs)
Cadmium (mg/L)	GS-AP-MW-16D	0.001	0.001	0.005	No	12	100	No	0.01	NP (NDs)
Cadmium (mg/L)	GS-AP-MW-17	0.001	0.001	0.005	No	12	100	No	0.01	NP (NDs)
Cadmium (mg/L)	GS-AP-MW-18	0.001	0.001	0.005	No	12	100	No	0.01	NP (NDs)
Cadmium (mg/L)	GS-AP-MW-19	0.001	0.001	0.005	No	12	100	No	0.01	NP (NDs)

# Confidence Intervals - All Results

Plant William C Gorgas    Client: Southern Company    Data: Gorgas Ash Pond    Printed 6/7/2019, 8:30 AM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	%NDs	Transform	Alpha	Method
Cadmium (mg/L)	GS-AP-MW-21	0.001	0.001	0.005	No	12	100	No	0.01	NP (NDs)
Cadmium (mg/L)	GS-AP-MW-6S	0.001	0.001	0.005	No	12	100	No	0.01	NP (NDs)
Chromium (mg/L)	GS-AP-MW-2	0.01	0.01	0.1	No	12	100	No	0.01	NP (NDs)
Chromium (mg/L)	GS-AP-MW-6D	0.01	0.01	0.1	No	12	100	No	0.01	NP (NDs)
Chromium (mg/L)	GS-AP-MW-7	0.01	0.00435	0.1	No	12	83.33	No	0.01	NP (NDs)
Chromium (mg/L)	GS-AP-MW-9	0.01	0.01	0.1	No	12	100	No	0.01	NP (NDs)
Chromium (mg/L)	GS-AP-MW-11	0.01	0.01	0.1	No	12	100	No	0.01	NP (NDs)
Chromium (mg/L)	GS-AP-MW-12	0.01	0.01	0.1	No	12	100	No	0.01	NP (NDs)
Chromium (mg/L)	GS-AP-MW-14	0.01	0.01	0.1	No	12	100	No	0.01	NP (NDs)
Chromium (mg/L)	GS-AP-MW-15	0.01	0.00209	0.1	No	12	91.67	No	0.01	NP (NDs)
Chromium (mg/L)	GS-AP-MW-16D	0.01	0.01	0.1	No	12	100	No	0.01	NP (NDs)
Chromium (mg/L)	GS-AP-MW-17	0.01	0.01	0.1	No	12	100	No	0.01	NP (NDs)
Chromium (mg/L)	GS-AP-MW-18	0.01	0.01	0.1	No	12	100	No	0.01	NP (NDs)
Chromium (mg/L)	GS-AP-MW-19	0.01	0.01	0.1	No	12	100	No	0.01	NP (NDs)
Chromium (mg/L)	GS-AP-MW-21	0.01	0.00219	0.1	No	12	75	No	0.01	NP (NDs)
Chromium (mg/L)	GS-AP-MW-6S	0.01	0.01	0.1	No	12	100	No	0.01	NP (NDs)
Cobalt (mg/L)	GS-AP-MW-2	0.01	0.005	0.01	No	12	100	No	0.01	NP (NDs)
Cobalt (mg/L)	GS-AP-MW-6D	0.01	0.005	0.01	No	12	100	No	0.01	NP (NDs)
Cobalt (mg/L)	GS-AP-MW-7	0.01	0.005	0.01	No	12	91.67	No	0.01	NP (NDs)
Cobalt (mg/L)	GS-AP-MW-9	0.01	0.005	0.01	No	12	100	No	0.01	NP (NDs)
Cobalt (mg/L)	GS-AP-MW-11	0.01	0.005	0.01	No	12	100	No	0.01	NP (NDs)
Cobalt (mg/L)	GS-AP-MW-12	0.01	0.005	0.01	No	12	100	No	0.01	NP (NDs)
Cobalt (mg/L)	GS-AP-MW-14	0.01	0.005	0.01	No	12	100	No	0.01	NP (NDs)
Cobalt (mg/L)	GS-AP-MW-15	0.01	0.005	0.01	No	12	100	No	0.01	NP (NDs)
Cobalt (mg/L)	GS-AP-MW-16D	0.01	0.005	0.01	No	12	100	No	0.01	NP (NDs)
Cobalt (mg/L)	GS-AP-MW-17	0.01	0.005	0.01	No	12	100	No	0.01	NP (NDs)
Cobalt (mg/L)	GS-AP-MW-18	0.01	0.005	0.01	No	12	100	No	0.01	NP (NDs)
Cobalt (mg/L)	GS-AP-MW-19	0.01	0.005	0.01	No	12	100	No	0.01	NP (NDs)
Cobalt (mg/L)	GS-AP-MW-21	0.01	0.005	0.01	No	12	100	No	0.01	NP (NDs)
Cobalt (mg/L)	GS-AP-MW-6S	0.01	0.00222	0.01	No	12	66.67	No	0.01	NP (NDs)
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-2	0.9569	0.103	5	No	11	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-6D	0.8276	0.2039	5	No	11	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-7	0.5827	0.03955	5	No	11	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-9	0.8035	-0.004383	5	No	11	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-11	0.5111	0.08002	5	No	11	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-12	0.8717	0.3574	5	No	11	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-14	0.9881	0.2321	5	No	11	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-15	0.7728	0.1131	5	No	11	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-16D	0.5063	0.1661	5	No	11	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-17	0.5375	0.1379	5	No	11	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-18	0.8113	0.2083	5	No	11	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-19	1.24	0.3581	5	No	11	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-21	1.025	0.2374	5	No	11	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-6S	1.14	0.3537	5	No	11	0	No	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-2	1.503	1.121	4	No	13	0	No	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-6D	0.1494	0.08123	4	No	13	0	No	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-7	0.1101	0.0622	4	No	13	7.692	No	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-9	0.1398	0.08385	4	No	13	0	No	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-11	0.1486	0.09737	4	No	13	0	x^2	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-12	0.6072	0.3202	4	No	13	0	No	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-14	0.176	0.1194	4	No	13	0	x^2	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-15	0.7976	0.538	4	No	13	0	sqrt(x)	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-16D	0.1286	0.06968	4	No	13	0	No	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-17	0.2731	0.163	4	No	13	0	No	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-18	0.4687	0.237	4	No	13	0	No	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-19	0.3665	0.2759	4	No	13	0	No	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-21	0.2723	0.2073	4	No	13	0	x^2	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-6S	0.1159	0.06197	4	No	13	0	No	0.01	Param.
Lead (mg/L)	GS-AP-MW-2	0.005	0.005	0.015	No	12	100	No	0.01	NP (NDs)
Lead (mg/L)	GS-AP-MW-6D	0.005	0.005	0.015	No	12	100	No	0.01	NP (NDs)
Lead (mg/L)	GS-AP-MW-7	0.005	0.0024	0.015	No	12	75	No	0.01	NP (NDs)
Lead (mg/L)	GS-AP-MW-9	0.005	0.005	0.015	No	12	100	No	0.01	NP (NDs)
Lead (mg/L)	GS-AP-MW-11	0.005	0.005	0.015	No	12	100	No	0.01	NP (NDs)
Lead (mg/L)	GS-AP-MW-12	0.005	0.005	0.015	No	12	100	No	0.01	NP (NDs)
Lead (mg/L)	GS-AP-MW-14	0.005	0.005	0.015	No	12	100	No	0.01	NP (NDs)
Lead (mg/L)	GS-AP-MW-15	0.005	0.005	0.015	No	12	100	No	0.01	NP (NDs)
Lead (mg/L)	GS-AP-MW-16D	0.005	0.005	0.015	No	12	100	No	0.01	NP (NDs)
Lead (mg/L)	GS-AP-MW-17	0.005	0.005	0.015	No	12	100	No	0.01	NP (NDs)

# Confidence Intervals - All Results

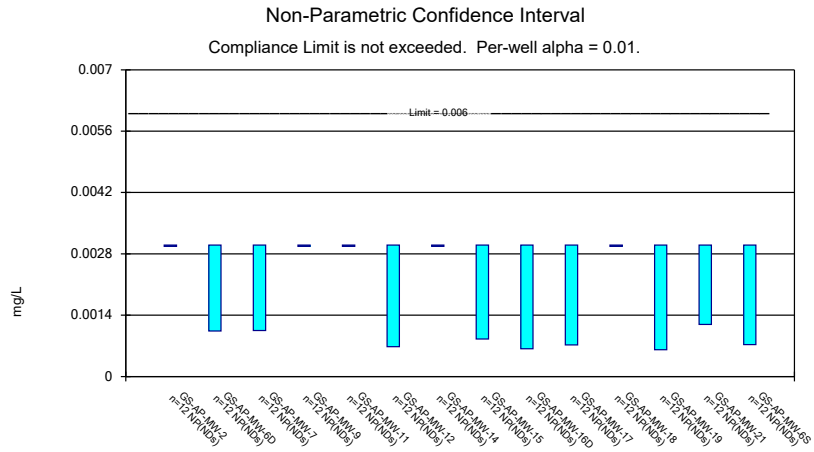
Plant William C Gorgas    Client: Southern Company    Data: Gorgas Ash Pond    Printed 6/7/2019, 8:30 AM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	%NDs	Transform	Alpha	Method
Lead (mg/L)	GS-AP-MW-18	0.005	0.005	0.015	No	12	100	No	0.01	NP (NDs)
Lead (mg/L)	GS-AP-MW-19	0.005	0.005	0.015	No	12	100	No	0.01	NP (NDs)
Lead (mg/L)	GS-AP-MW-21	0.005	0.005	0.015	No	12	100	No	0.01	NP (NDs)
Lead (mg/L)	GS-AP-MW-6S	0.005	0.005	0.015	No	12	100	No	0.01	NP (NDs)
Lithium (mg/L)	GS-AP-MW-2	0.05538	0.04568	0.05	No	12	0	No	0.01	Param.
<b>Lithium (mg/L)</b>	<b>GS-AP-MW-6D</b>	<b>0.253</b>	<b>0.222</b>	<b>0.05</b>	<b>Yes</b>	<b>12</b>	<b>0</b>	<b>No</b>	<b>0.01</b>	<b>Param.</b>
Lithium (mg/L)	GS-AP-MW-7	0.175	0.136	0.05	Yes	12	0	No	0.01	NP (normality)
Lithium (mg/L)	GS-AP-MW-9	0.09621	0.07589	0.05	Yes	12	0	No	0.01	Param.
Lithium (mg/L)	GS-AP-MW-11	0.01421	0.01193	0.05	No	12	8.333	No	0.01	Param.
Lithium (mg/L)	GS-AP-MW-12	0.0489	0.0225	0.05	No	12	0	No	0.01	NP (normality)
Lithium (mg/L)	GS-AP-MW-14	0.04105	0.03183	0.05	No	12	0	No	0.01	Param.
<b>Lithium (mg/L)</b>	<b>GS-AP-MW-15</b>	<b>0.297</b>	<b>0.123</b>	<b>0.05</b>	<b>Yes</b>	<b>12</b>	<b>0</b>	<b>No</b>	<b>0.01</b>	<b>NP (normality)</b>
Lithium (mg/L)	GS-AP-MW-16D	0.0368	0.03299	0.05	No	12	0	No	0.01	Param.
Lithium (mg/L)	GS-AP-MW-17	0.06088	0.04491	0.05	No	12	0	No	0.01	Param.
<b>Lithium (mg/L)</b>	<b>GS-AP-MW-18</b>	<b>0.308</b>	<b>0.1889</b>	<b>0.05</b>	<b>Yes</b>	<b>12</b>	<b>0</b>	<b>No</b>	<b>0.01</b>	<b>Param.</b>
Lithium (mg/L)	GS-AP-MW-19	0.03999	0.02709	0.05	No	12	0	No	0.01	Param.
<b>Lithium (mg/L)</b>	<b>GS-AP-MW-21</b>	<b>0.2064</b>	<b>0.1419</b>	<b>0.05</b>	<b>Yes</b>	<b>12</b>	<b>0</b>	<b>ln(x)</b>	<b>0.01</b>	<b>Param.</b>
Lithium (mg/L)	GS-AP-MW-6S	0.03	0.0199	0.05	No	12	75	No	0.01	NP (NDs)
Mercury (mg/L)	GS-AP-MW-2	0.0005	0.0005	0.002	No	12	100	No	0.01	NP (NDs)
Mercury (mg/L)	GS-AP-MW-6D	0.0005	0.0005	0.002	No	12	100	No	0.01	NP (NDs)
Mercury (mg/L)	GS-AP-MW-7	0.0005	0.0005	0.002	No	12	100	No	0.01	NP (NDs)
Mercury (mg/L)	GS-AP-MW-9	0.0005	0.0005	0.002	No	12	100	No	0.01	NP (NDs)
Mercury (mg/L)	GS-AP-MW-11	0.0005	0.0005	0.002	No	12	100	No	0.01	NP (NDs)
Mercury (mg/L)	GS-AP-MW-12	0.0005	0.0005	0.002	No	12	100	No	0.01	NP (NDs)
Mercury (mg/L)	GS-AP-MW-14	0.0005	0.0005	0.002	No	12	100	No	0.01	NP (NDs)
Mercury (mg/L)	GS-AP-MW-15	0.0005	0.0005	0.002	No	12	100	No	0.01	NP (NDs)
Mercury (mg/L)	GS-AP-MW-16D	0.0005	0.0005	0.002	No	12	100	No	0.01	NP (NDs)
Mercury (mg/L)	GS-AP-MW-17	0.0005	0.0005	0.002	No	12	100	No	0.01	NP (NDs)
Mercury (mg/L)	GS-AP-MW-18	0.0005	0.0005	0.002	No	12	100	No	0.01	NP (NDs)
Mercury (mg/L)	GS-AP-MW-19	0.0005	0.0005	0.002	No	12	100	No	0.01	NP (NDs)
Mercury (mg/L)	GS-AP-MW-21	0.0005	0.0005	0.002	No	12	100	No	0.01	NP (NDs)
Mercury (mg/L)	GS-AP-MW-6S	0.0005	0.0005	0.002	No	12	100	No	0.01	NP (NDs)
Molybdenum (mg/L)	GS-AP-MW-2	0.0112	0.00359	0.1	No	12	41.67	No	0.01	NP (normality)
Molybdenum (mg/L)	GS-AP-MW-6D	0.006864	0.004485	0.1	No	12	8.333	sqrt(x)	0.01	Param.
<b>Molybdenum (mg/L)</b>	<b>GS-AP-MW-7</b>	<b>0.1695</b>	<b>0.1453</b>	<b>0.1</b>	<b>Yes</b>	<b>12</b>	<b>0</b>	<b>No</b>	<b>0.01</b>	<b>Param.</b>
Molybdenum (mg/L)	GS-AP-MW-9	0.007719	0.005171	0.1	No	12	8.333	No	0.01	Param.
Molybdenum (mg/L)	GS-AP-MW-11	0.01	0.00217	0.1	No	12	91.67	No	0.01	NP (NDs)
Molybdenum (mg/L)	GS-AP-MW-12	0.0269	0.00411	0.1	No	12	58.33	No	0.01	NP (NDs)
Molybdenum (mg/L)	GS-AP-MW-14	0.01	0.00283	0.1	No	12	83.33	No	0.01	NP (NDs)
Molybdenum (mg/L)	GS-AP-MW-15	0.0683	0.0327	0.1	No	12	0	No	0.01	NP (normality)
Molybdenum (mg/L)	GS-AP-MW-16D	0.01	0.01	0.1	No	12	100	No	0.01	NP (NDs)
Molybdenum (mg/L)	GS-AP-MW-17	0.01149	0.006231	0.1	No	12	8.333	sqrt(x)	0.01	Param.
Molybdenum (mg/L)	GS-AP-MW-18	0.04938	0.03114	0.1	No	12	0	No	0.01	Param.
Molybdenum (mg/L)	GS-AP-MW-19	0.01161	0.006221	0.1	No	12	8.333	sqrt(x)	0.01	Param.
Molybdenum (mg/L)	GS-AP-MW-21	0.07066	0.0375	0.1	No	12	0	No	0.01	Param.
Molybdenum (mg/L)	GS-AP-MW-6S	0.01	0.00214	0.1	No	12	58.33	No	0.01	NP (NDs)
Selenium (mg/L)	GS-AP-MW-2	0.01	0.01	0.05	No	12	100	No	0.01	NP (NDs)
Selenium (mg/L)	GS-AP-MW-6D	0.01	0.01	0.05	No	12	100	No	0.01	NP (NDs)
Selenium (mg/L)	GS-AP-MW-7	0.01	0.01	0.05	No	12	100	No	0.01	NP (NDs)
Selenium (mg/L)	GS-AP-MW-9	0.01	0.01	0.05	No	12	100	No	0.01	NP (NDs)
Selenium (mg/L)	GS-AP-MW-11	0.01	0.01	0.05	No	12	100	No	0.01	NP (NDs)
Selenium (mg/L)	GS-AP-MW-12	0.01	0.01	0.05	No	12	100	No	0.01	NP (NDs)
Selenium (mg/L)	GS-AP-MW-14	0.01	0.01	0.05	No	12	100	No	0.01	NP (NDs)
Selenium (mg/L)	GS-AP-MW-15	0.01	0.01	0.05	No	12	100	No	0.01	NP (NDs)
Selenium (mg/L)	GS-AP-MW-16D	0.01	0.01	0.05	No	12	100	No	0.01	NP (NDs)
Selenium (mg/L)	GS-AP-MW-17	0.01	0.01	0.05	No	12	100	No	0.01	NP (NDs)
Selenium (mg/L)	GS-AP-MW-18	0.01	0.01	0.05	No	12	100	No	0.01	NP (NDs)
Selenium (mg/L)	GS-AP-MW-19	0.01	0.01	0.05	No	12	100	No	0.01	NP (NDs)
Selenium (mg/L)	GS-AP-MW-21	0.01	0.01	0.05	No	12	100	No	0.01	NP (NDs)
Selenium (mg/L)	GS-AP-MW-6S	0.01	0.01	0.05	No	12	100	No	0.01	NP (NDs)
Thallium (mg/L)	GS-AP-MW-2	0.001	0.001	0.002	No	12	100	No	0.01	NP (NDs)
Thallium (mg/L)	GS-AP-MW-6D	0.001	0.001	0.002	No	12	100	No	0.01	NP (NDs)
Thallium (mg/L)	GS-AP-MW-7	0.001	0.001	0.002	No	12	100	No	0.01	NP (NDs)
Thallium (mg/L)	GS-AP-MW-9	0.001	0.001	0.002	No	12	100	No	0.01	NP (NDs)
Thallium (mg/L)	GS-AP-MW-11	0.001	0.001	0.002	No	12	100	No	0.01	NP (NDs)
Thallium (mg/L)	GS-AP-MW-12	0.001	0.001	0.002	No	12	100	No	0.01	NP (NDs)
Thallium (mg/L)	GS-AP-MW-14	0.001	0.001	0.002	No	12	100	No	0.01	NP (NDs)
Thallium (mg/L)	GS-AP-MW-15	0.001	0.001	0.002	No	12	100	No	0.01	NP (NDs)

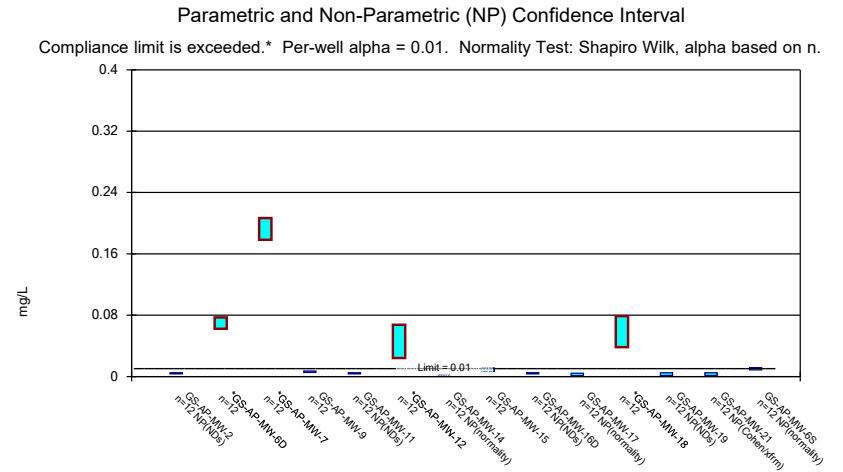
# Confidence Intervals - All Results

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond Printed 6/7/2019, 8:30 AM

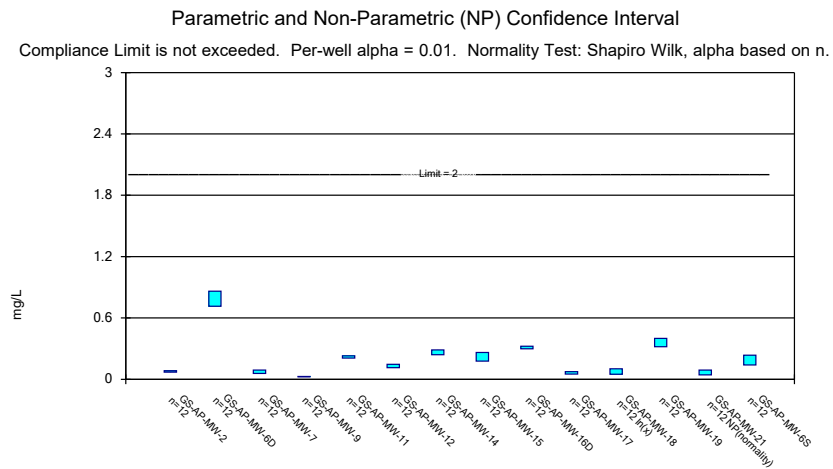
<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Compliance</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Thallium (mg/L)	GS-AP-MW-16D	0.001	0.001	0.002	No	12	100	No	0.01	NP (NDs)
Thallium (mg/L)	GS-AP-MW-17	0.001	0.001	0.002	No	12	100	No	0.01	NP (NDs)
Thallium (mg/L)	GS-AP-MW-18	0.001	0.001	0.002	No	12	100	No	0.01	NP (NDs)
Thallium (mg/L)	GS-AP-MW-19	0.001	0.001	0.002	No	12	100	No	0.01	NP (NDs)
Thallium (mg/L)	GS-AP-MW-21	0.001	0.001	0.002	No	12	100	No	0.01	NP (NDs)
Thallium (mg/L)	GS-AP-MW-6S	0.001	0.001	0.002	No	12	100	No	0.01	NP (NDs)



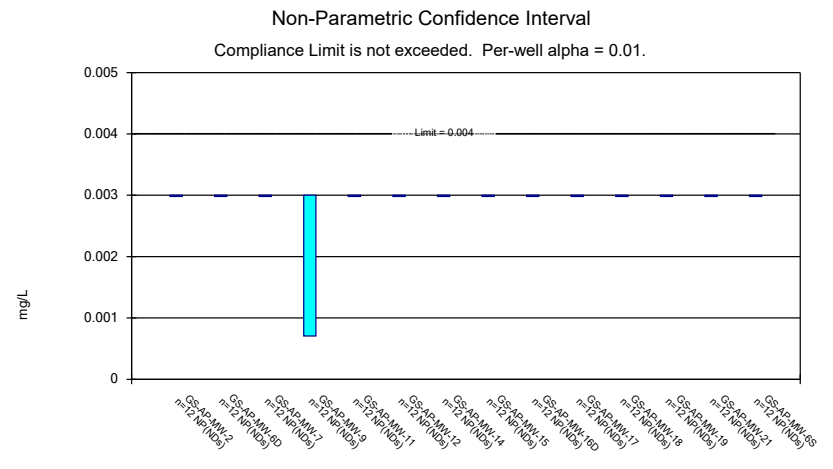
Constituent: Antimony Analysis Run 6/7/2019 8:28 AM View: Confidence Intervals  
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond



Constituent: Arsenic Analysis Run 6/7/2019 8:28 AM View: Confidence Intervals  
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond



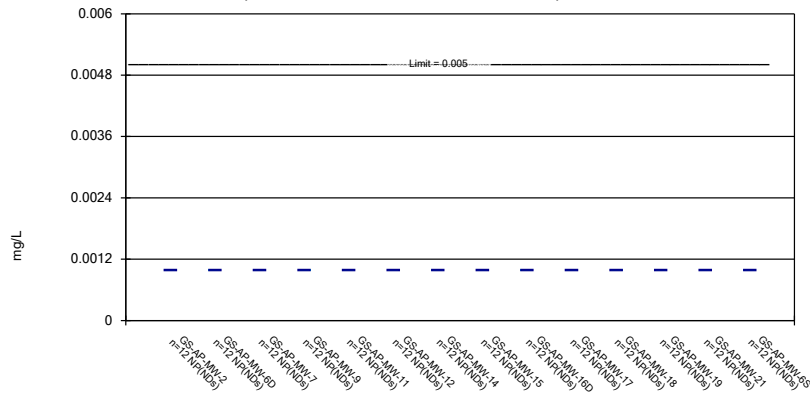
Constituent: Barium Analysis Run 6/7/2019 8:28 AM View: Confidence Intervals  
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond



Constituent: Beryllium Analysis Run 6/7/2019 8:28 AM View: Confidence Intervals  
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

### Non-Parametric Confidence Interval

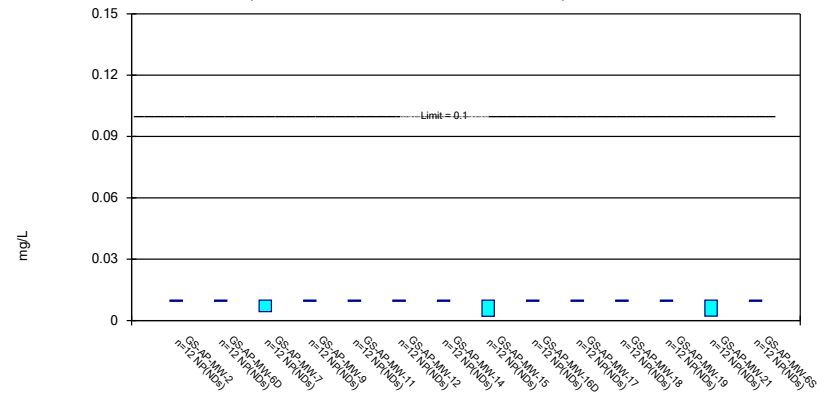
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Cadmium Analysis Run 6/7/2019 8:28 AM View: Confidence Intervals  
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

### Non-Parametric Confidence Interval

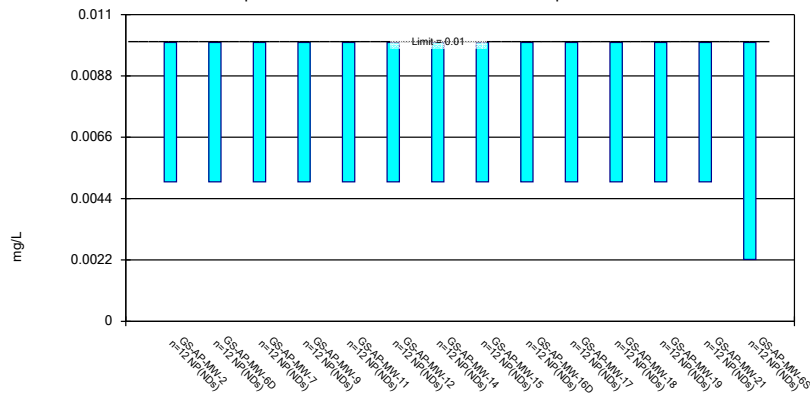
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Chromium Analysis Run 6/7/2019 8:28 AM View: Confidence Intervals  
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

### Non-Parametric Confidence Interval

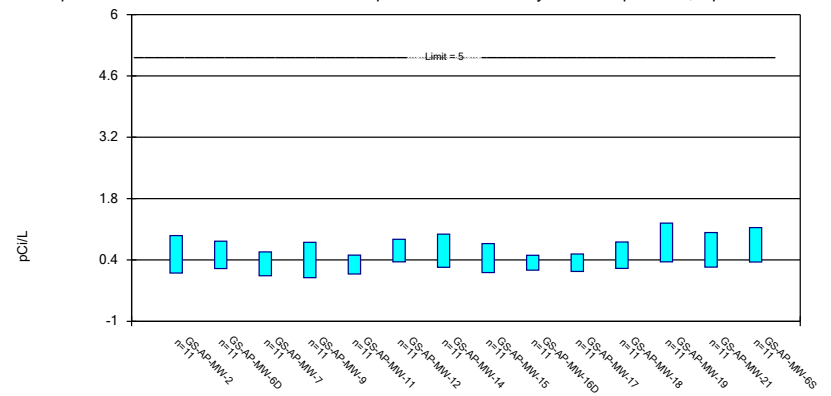
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Cobalt Analysis Run 6/7/2019 8:28 AM View: Confidence Intervals  
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

### Parametric Confidence Interval

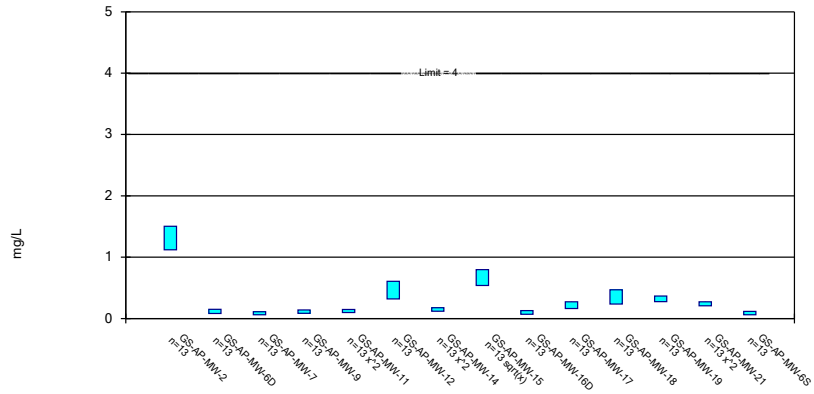
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Combined Radium 226 + 228 Analysis Run 6/7/2019 8:28 AM View: Confidence Intervals  
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

### Parametric Confidence Interval

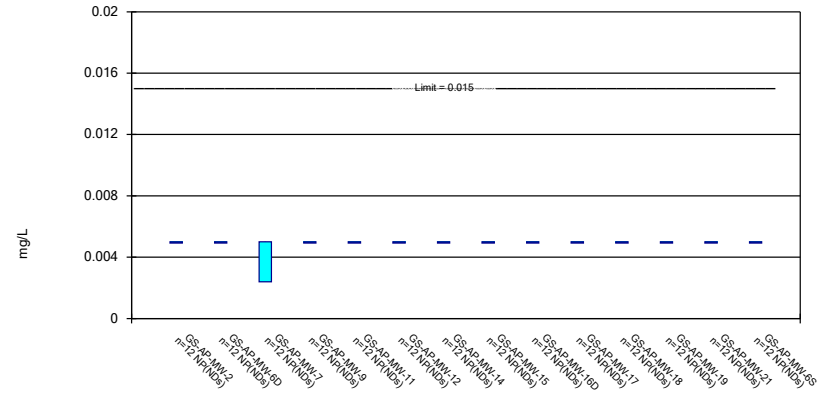
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Fluoride Analysis Run 6/7/2019 8:28 AM View: Confidence Intervals  
 Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

### Non-Parametric Confidence Interval

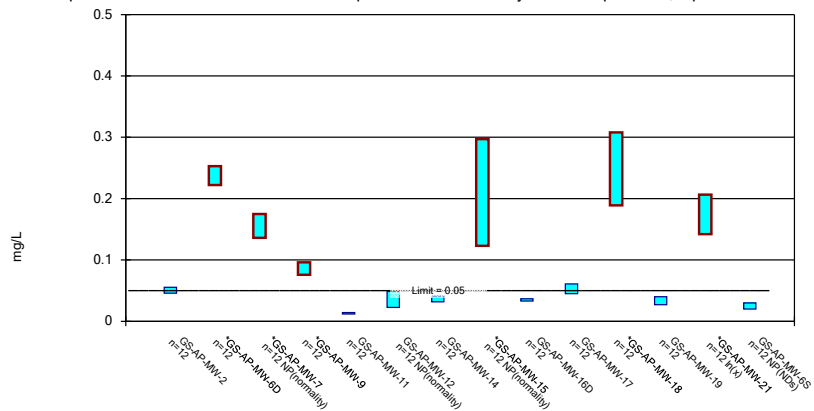
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Lead Analysis Run 6/7/2019 8:28 AM View: Confidence Intervals  
 Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

### Parametric and Non-Parametric (NP) Confidence Interval

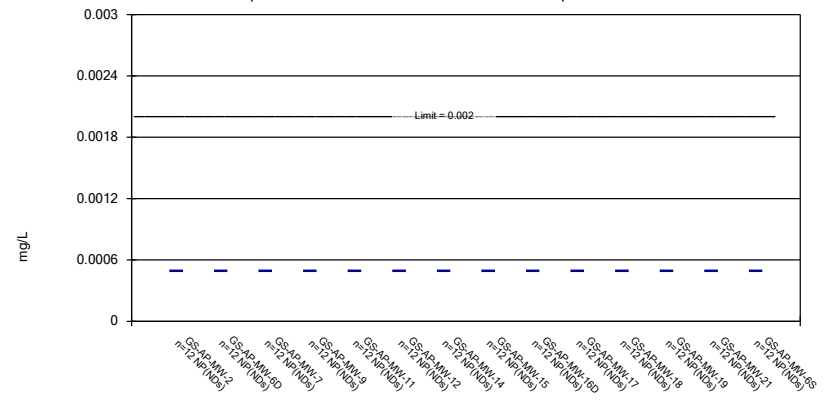
Compliance limit is exceeded.\* Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Lithium Analysis Run 6/7/2019 8:29 AM View: Confidence Intervals  
 Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

### Non-Parametric Confidence Interval

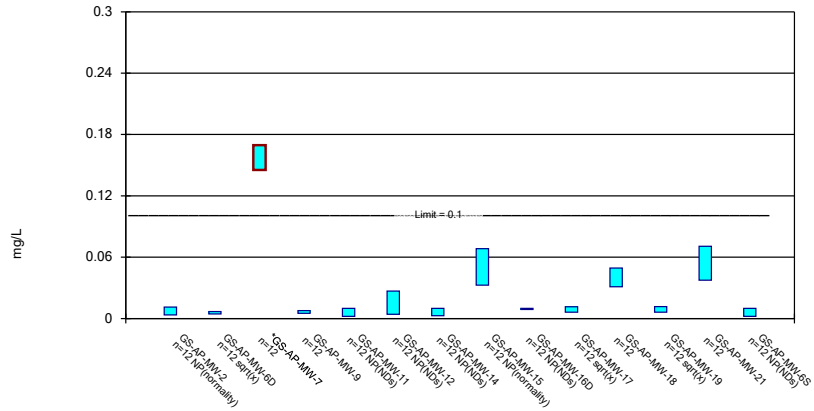
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Mercury Analysis Run 6/7/2019 8:29 AM View: Confidence Intervals  
 Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

### Parametric and Non-Parametric (NP) Confidence Interval

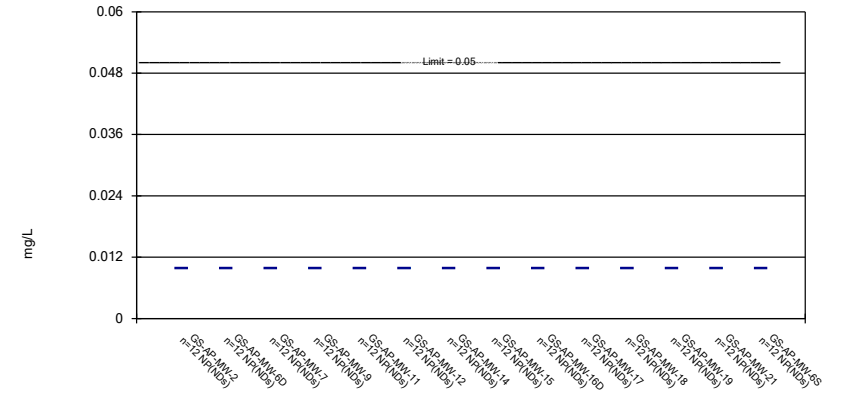
Compliance limit is exceeded.\* Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Molybdenum Analysis Run 6/7/2019 8:29 AM View: Confidence Intervals  
 Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

### Non-Parametric Confidence Interval

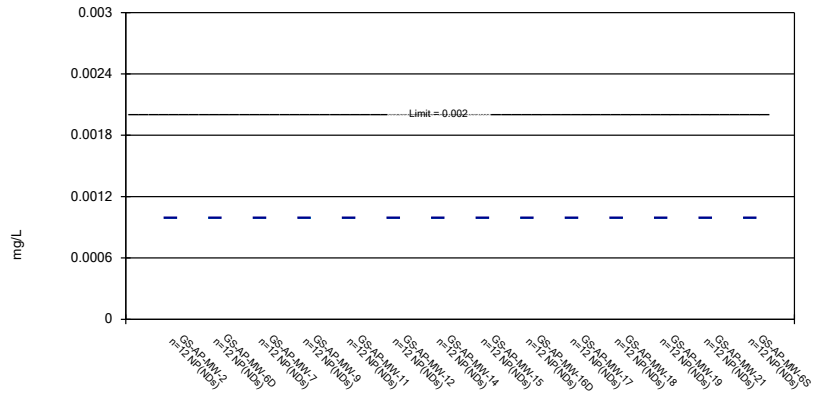
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Selenium Analysis Run 6/7/2019 8:29 AM View: Confidence Intervals  
 Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

### Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Thallium Analysis Run 6/7/2019 8:29 AM View: Confidence Intervals  
 Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond



**2nd**  
**Semi-Annual**  
**Monitoring Event**

# Interwell Prediction Limit - Significant Results

Plant William C Gorgas    Client: Southern Company    Data: Gorgas Ash Pond    Printed 1/17/2020, 2:09 PM

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	9/25/2019	0.153	Yes	25	96	n/a	0.00248	NP Inter (NDs) 1 of 2
Boron (mg/L)	GS-AP-MW-6D	0.1	n/a	9/23/2019	1.15	Yes	25	96	n/a	0.00248	NP Inter (NDs) 1 of 2
Boron (mg/L)	GS-AP-MW-6S	0.1	n/a	9/23/2019	1.08	Yes	25	96	n/a	0.00248	NP Inter (NDs) 1 of 2
Boron (mg/L)	GS-AP-MW-7	0.1	n/a	9/24/2019	1.6	Yes	25	96	n/a	0.00248	NP Inter (NDs) 1 of 2
Boron (mg/L)	GS-AP-MW-12	0.1	n/a	9/25/2019	0.122	Yes	25	96	n/a	0.00248	NP Inter (NDs) 1 of 2
Boron (mg/L)	GS-AP-MW-17	0.1	n/a	9/23/2019	0.116	Yes	25	96	n/a	0.00248	NP Inter (NDs) 1 of 2
Boron (mg/L)	GS-AP-MW-18	0.1	n/a	9/24/2019	0.883	Yes	25	96	n/a	0.00248	NP Inter (NDs) 1 of 2
Calcium (mg/L)	GS-AP-MW-6D	48.1	n/a	9/23/2019	56.1	Yes	25	0	n/a	0.00248	NP Inter (normality) ...
Calcium (mg/L)	GS-AP-MW-6S	48.1	n/a	9/23/2019	60	Yes	25	0	n/a	0.00248	NP Inter (normality) ...
Calcium (mg/L)	GS-AP-MW-18	48.1	n/a	9/24/2019	57.4	Yes	25	0	n/a	0.00248	NP Inter (normality) ...
Calcium (mg/L)	GS-AP-MW-19	48.1	n/a	9/24/2019	48.4	Yes	25	0	n/a	0.00248	NP Inter (normality) ...
Chloride (mg/L)	GS-AP-MW-2	3.954	n/a	9/25/2019	12	Yes	25	0	No	0.000...	Param Inter 1 of 2
Chloride (mg/L)	GS-AP-MW-6D	3.954	n/a	9/23/2019	8.72	Yes	25	0	No	0.000...	Param Inter 1 of 2
Chloride (mg/L)	GS-AP-MW-6S	3.954	n/a	9/23/2019	23.4	Yes	25	0	No	0.000...	Param Inter 1 of 2
Chloride (mg/L)	GS-AP-MW-7	3.954	n/a	9/24/2019	5.76	Yes	25	0	No	0.000...	Param Inter 1 of 2
Chloride (mg/L)	GS-AP-MW-12	3.954	n/a	9/25/2019	6.68	Yes	25	0	No	0.000...	Param Inter 1 of 2
Chloride (mg/L)	GS-AP-MW-15	3.954	n/a	9/24/2019	5.96	Yes	25	0	No	0.000...	Param Inter 1 of 2
Chloride (mg/L)	GS-AP-MW-17	3.954	n/a	9/23/2019	16.2	Yes	25	0	No	0.000...	Param Inter 1 of 2
Chloride (mg/L)	GS-AP-MW-18	3.954	n/a	9/24/2019	12.3	Yes	25	0	No	0.000...	Param Inter 1 of 2
Chloride (mg/L)	GS-AP-MW-19	3.954	n/a	9/24/2019	5.83	Yes	25	0	No	0.000...	Param Inter 1 of 2
Chloride (mg/L)	GS-AP-MW-21	3.954	n/a	9/24/2019	36	Yes	25	0	No	0.000...	Param Inter 1 of 2
Fluoride (mg/L)	GS-AP-MW-2	0.2234	n/a	9/25/2019	0.86	Yes	27	0	No	0.000...	Param Inter 1 of 2
Fluoride (mg/L)	GS-AP-MW-15	0.2234	n/a	9/24/2019	0.628	Yes	27	0	No	0.000...	Param Inter 1 of 2
Fluoride (mg/L)	GS-AP-MW-17	0.2234	n/a	9/23/2019	0.351	Yes	27	0	No	0.000...	Param Inter 1 of 2
Fluoride (mg/L)	GS-AP-MW-18	0.2234	n/a	9/24/2019	0.578	Yes	27	0	No	0.000...	Param Inter 1 of 2
Fluoride (mg/L)	GS-AP-MW-19	0.2234	n/a	9/24/2019	0.307	Yes	27	0	No	0.000...	Param Inter 1 of 2
pH (SU)	GS-AP-MW-2	6.85	5.27	9/25/2019	9.31	Yes	27	0	n/a	0.004426	NP Inter (normality) ...
pH (SU)	GS-AP-MW-6D	6.85	5.27	9/23/2019	7.23	Yes	27	0	n/a	0.004426	NP Inter (normality) ...
pH (SU)	GS-AP-MW-7	6.85	5.27	9/24/2019	7.38	Yes	27	0	n/a	0.004426	NP Inter (normality) ...
pH (SU)	GS-AP-MW-12	6.85	5.27	9/25/2019	7.38	Yes	27	0	n/a	0.004426	NP Inter (normality) ...
pH (SU)	GS-AP-MW-15	6.85	5.27	9/24/2019	11.7	Yes	27	0	n/a	0.004426	NP Inter (normality) ...
pH (SU)	GS-AP-MW-16D	6.85	5.27	9/24/2019	7.43	Yes	27	0	n/a	0.004426	NP Inter (normality) ...
pH (SU)	GS-AP-MW-17	6.85	5.27	9/23/2019	8.37	Yes	27	0	n/a	0.004426	NP Inter (normality) ...
pH (SU)	GS-AP-MW-18	6.85	5.27	9/24/2019	7.49	Yes	27	0	n/a	0.004426	NP Inter (normality) ...
pH (SU)	GS-AP-MW-19	6.85	5.27	9/24/2019	7.8	Yes	27	0	n/a	0.004426	NP Inter (normality) ...
pH (SU)	GS-AP-MW-21	6.85	5.27	9/24/2019	11.24	Yes	27	0	n/a	0.004426	NP Inter (normality) ...
Sulfate (mg/L)	GS-AP-MW-2	12.1	n/a	9/25/2019	47.7	Yes	25	0	n/a	0.00248	NP Inter (normality) ...
Sulfate (mg/L)	GS-AP-MW-6D	12.1	n/a	9/23/2019	47.9	Yes	25	0	n/a	0.00248	NP Inter (normality) ...
Sulfate (mg/L)	GS-AP-MW-6S	12.1	n/a	9/23/2019	176	Yes	25	0	n/a	0.00248	NP Inter (normality) ...
Sulfate (mg/L)	GS-AP-MW-7	12.1	n/a	9/24/2019	145	Yes	25	0	n/a	0.00248	NP Inter (normality) ...
Sulfate (mg/L)	GS-AP-MW-12	12.1	n/a	9/25/2019	25.5	Yes	25	0	n/a	0.00248	NP Inter (normality) ...
Sulfate (mg/L)	GS-AP-MW-15	12.1	n/a	9/24/2019	12.4	Yes	25	0	n/a	0.00248	NP Inter (normality) ...
Sulfate (mg/L)	GS-AP-MW-16D	12.1	n/a	9/24/2019	14.1	Yes	25	0	n/a	0.00248	NP Inter (normality) ...
Sulfate (mg/L)	GS-AP-MW-17	12.1	n/a	9/23/2019	124	Yes	25	0	n/a	0.00248	NP Inter (normality) ...
Sulfate (mg/L)	GS-AP-MW-18	12.1	n/a	9/24/2019	119	Yes	25	0	n/a	0.00248	NP Inter (normality) ...
Sulfate (mg/L)	GS-AP-MW-19	12.1	n/a	9/24/2019	13.8	Yes	25	0	n/a	0.00248	NP Inter (normality) ...
Sulfate (mg/L)	GS-AP-MW-21	12.1	n/a	9/24/2019	224	Yes	25	0	n/a	0.00248	NP Inter (normality) ...
TDS (mg/L)	GS-AP-MW-2	226	n/a	9/25/2019	358	Yes	25	0	n/a	0.00248	NP Inter (normality) ...
TDS (mg/L)	GS-AP-MW-6D	226	n/a	9/23/2019	296	Yes	25	0	n/a	0.00248	NP Inter (normality) ...
TDS (mg/L)	GS-AP-MW-6S	226	n/a	9/23/2019	381	Yes	25	0	n/a	0.00248	NP Inter (normality) ...
TDS (mg/L)	GS-AP-MW-7	226	n/a	9/24/2019	344	Yes	25	0	n/a	0.00248	NP Inter (normality) ...
TDS (mg/L)	GS-AP-MW-12	226	n/a	9/25/2019	253	Yes	25	0	n/a	0.00248	NP Inter (normality) ...
TDS (mg/L)	GS-AP-MW-15	226	n/a	9/24/2019	536	Yes	25	0	n/a	0.00248	NP Inter (normality) ...
TDS (mg/L)	GS-AP-MW-17	226	n/a	9/23/2019	684	Yes	25	0	n/a	0.00248	NP Inter (normality) ...
TDS (mg/L)	GS-AP-MW-18	226	n/a	9/24/2019	372	Yes	25	0	n/a	0.00248	NP Inter (normality) ...
TDS (mg/L)	GS-AP-MW-19	226	n/a	9/24/2019	302	Yes	25	0	n/a	0.00248	NP Inter (normality) ...
TDS (mg/L)	GS-AP-MW-21	226	n/a	9/24/2019	630	Yes	25	0	n/a	0.00248	NP Inter (normality) ...

# Interwell Prediction Limit - All Results

Plant William C Gorgas   Client: Southern Company   Data: Gorgas Ash Pond   Printed 1/17/2020, 2:09 PM

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	9/25/2019	0.153	Yes	25	96	n/a	0.00248	NP Inter (NDs) 1 of 2
Boron (mg/L)	GS-AP-MW-6D	0.1	n/a	9/23/2019	1.15	Yes	25	96	n/a	0.00248	NP Inter (NDs) 1 of 2
Boron (mg/L)	GS-AP-MW-6S	0.1	n/a	9/23/2019	1.08	Yes	25	96	n/a	0.00248	NP Inter (NDs) 1 of 2
Boron (mg/L)	GS-AP-MW-7	0.1	n/a	9/24/2019	1.6	Yes	25	96	n/a	0.00248	NP Inter (NDs) 1 of 2
Boron (mg/L)	GS-AP-MW-12	0.1	n/a	9/25/2019	0.122	Yes	25	96	n/a	0.00248	NP Inter (NDs) 1 of 2
Boron (mg/L)	GS-AP-MW-15	0.1	n/a	9/24/2019	0.0607	No	25	96	n/a	0.00248	NP Inter (NDs) 1 of 2
Boron (mg/L)	GS-AP-MW-16D	0.1	n/a	9/24/2019	0.1ND	No	25	96	n/a	0.00248	NP Inter (NDs) 1 of 2
Boron (mg/L)	GS-AP-MW-17	0.1	n/a	9/23/2019	0.116	Yes	25	96	n/a	0.00248	NP Inter (NDs) 1 of 2
Boron (mg/L)	GS-AP-MW-18	0.1	n/a	9/24/2019	0.883	Yes	25	96	n/a	0.00248	NP Inter (NDs) 1 of 2
Boron (mg/L)	GS-AP-MW-19	0.1	n/a	9/24/2019	0.0375	No	25	96	n/a	0.00248	NP Inter (NDs) 1 of 2
Boron (mg/L)	GS-AP-MW-21	0.1	n/a	9/24/2019	0.0843	No	25	96	n/a	0.00248	NP Inter (NDs) 1 of 2
Calcium (mg/L)	GS-AP-MW-2	48.1	n/a	9/25/2019	0.581	No	25	0	n/a	0.00248	NP Inter (normality) ...
Calcium (mg/L)	GS-AP-MW-6D	48.1	n/a	9/23/2019	56.1	Yes	25	0	n/a	0.00248	NP Inter (normality) ...
Calcium (mg/L)	GS-AP-MW-6S	48.1	n/a	9/23/2019	60	Yes	25	0	n/a	0.00248	NP Inter (normality) ...
Calcium (mg/L)	GS-AP-MW-7	48.1	n/a	9/24/2019	13.4	No	25	0	n/a	0.00248	NP Inter (normality) ...
Calcium (mg/L)	GS-AP-MW-12	48.1	n/a	9/25/2019	48.1	No	25	0	n/a	0.00248	NP Inter (normality) ...
Calcium (mg/L)	GS-AP-MW-15	48.1	n/a	9/24/2019	3.26	No	25	0	n/a	0.00248	NP Inter (normality) ...
Calcium (mg/L)	GS-AP-MW-16D	48.1	n/a	9/24/2019	34.3	No	25	0	n/a	0.00248	NP Inter (normality) ...
Calcium (mg/L)	GS-AP-MW-17	48.1	n/a	9/23/2019	5.43	No	25	0	n/a	0.00248	NP Inter (normality) ...
Calcium (mg/L)	GS-AP-MW-18	48.1	n/a	9/24/2019	57.4	Yes	25	0	n/a	0.00248	NP Inter (normality) ...
Calcium (mg/L)	GS-AP-MW-19	48.1	n/a	9/24/2019	48.4	Yes	25	0	n/a	0.00248	NP Inter (normality) ...
Calcium (mg/L)	GS-AP-MW-21	48.1	n/a	9/24/2019	2.47	No	25	0	n/a	0.00248	NP Inter (normality) ...
Chloride (mg/L)	GS-AP-MW-2	3.954	n/a	9/25/2019	12	Yes	25	0	No	0.000...	Param Inter 1 of 2
Chloride (mg/L)	GS-AP-MW-6D	3.954	n/a	9/23/2019	8.72	Yes	25	0	No	0.000...	Param Inter 1 of 2
Chloride (mg/L)	GS-AP-MW-6S	3.954	n/a	9/23/2019	23.4	Yes	25	0	No	0.000...	Param Inter 1 of 2
Chloride (mg/L)	GS-AP-MW-7	3.954	n/a	9/24/2019	5.76	Yes	25	0	No	0.000...	Param Inter 1 of 2
Chloride (mg/L)	GS-AP-MW-12	3.954	n/a	9/25/2019	6.68	Yes	25	0	No	0.000...	Param Inter 1 of 2
Chloride (mg/L)	GS-AP-MW-15	3.954	n/a	9/24/2019	5.96	Yes	25	0	No	0.000...	Param Inter 1 of 2
Chloride (mg/L)	GS-AP-MW-16D	3.954	n/a	9/24/2019	2.9	No	25	0	No	0.000...	Param Inter 1 of 2
Chloride (mg/L)	GS-AP-MW-17	3.954	n/a	9/23/2019	16.2	Yes	25	0	No	0.000...	Param Inter 1 of 2
Chloride (mg/L)	GS-AP-MW-18	3.954	n/a	9/24/2019	12.3	Yes	25	0	No	0.000...	Param Inter 1 of 2
Chloride (mg/L)	GS-AP-MW-19	3.954	n/a	9/24/2019	5.83	Yes	25	0	No	0.000...	Param Inter 1 of 2
Chloride (mg/L)	GS-AP-MW-21	3.954	n/a	9/24/2019	36	Yes	25	0	No	0.000...	Param Inter 1 of 2
Fluoride (mg/L)	GS-AP-MW-2	0.2234	n/a	9/25/2019	0.86	Yes	27	0	No	0.000...	Param Inter 1 of 2
Fluoride (mg/L)	GS-AP-MW-6D	0.2234	n/a	9/23/2019	0.132	No	27	0	No	0.000...	Param Inter 1 of 2
Fluoride (mg/L)	GS-AP-MW-6S	0.2234	n/a	9/23/2019	0.142	No	27	0	No	0.000...	Param Inter 1 of 2
Fluoride (mg/L)	GS-AP-MW-7	0.2234	n/a	9/24/2019	0.106	No	27	0	No	0.000...	Param Inter 1 of 2
Fluoride (mg/L)	GS-AP-MW-12	0.2234	n/a	9/25/2019	0.168	No	27	0	No	0.000...	Param Inter 1 of 2
Fluoride (mg/L)	GS-AP-MW-15	0.2234	n/a	9/24/2019	0.628	Yes	27	0	No	0.000...	Param Inter 1 of 2
Fluoride (mg/L)	GS-AP-MW-16D	0.2234	n/a	9/24/2019	0.124	No	27	0	No	0.000...	Param Inter 1 of 2
Fluoride (mg/L)	GS-AP-MW-17	0.2234	n/a	9/23/2019	0.351	Yes	27	0	No	0.000...	Param Inter 1 of 2
Fluoride (mg/L)	GS-AP-MW-18	0.2234	n/a	9/24/2019	0.578	Yes	27	0	No	0.000...	Param Inter 1 of 2
Fluoride (mg/L)	GS-AP-MW-19	0.2234	n/a	9/24/2019	0.307	Yes	27	0	No	0.000...	Param Inter 1 of 2
Fluoride (mg/L)	GS-AP-MW-21	0.2234	n/a	9/24/2019	0.209	No	27	0	No	0.000...	Param Inter 1 of 2
pH (SU)	GS-AP-MW-2	6.85	5.27	9/25/2019	9.31	Yes	27	0	n/a	0.004426	NP Inter (normality) ...
pH (SU)	GS-AP-MW-6D	6.85	5.27	9/23/2019	7.23	Yes	27	0	n/a	0.004426	NP Inter (normality) ...
pH (SU)	GS-AP-MW-6S	6.85	5.27	9/23/2019	6.51	No	27	0	n/a	0.004426	NP Inter (normality) ...
pH (SU)	GS-AP-MW-7	6.85	5.27	9/24/2019	7.38	Yes	27	0	n/a	0.004426	NP Inter (normality) ...
pH (SU)	GS-AP-MW-12	6.85	5.27	9/25/2019	7.38	Yes	27	0	n/a	0.004426	NP Inter (normality) ...
pH (SU)	GS-AP-MW-15	6.85	5.27	9/24/2019	11.7	Yes	27	0	n/a	0.004426	NP Inter (normality) ...
pH (SU)	GS-AP-MW-16D	6.85	5.27	9/24/2019	7.43	Yes	27	0	n/a	0.004426	NP Inter (normality) ...
pH (SU)	GS-AP-MW-17	6.85	5.27	9/23/2019	8.37	Yes	27	0	n/a	0.004426	NP Inter (normality) ...
pH (SU)	GS-AP-MW-18	6.85	5.27	9/24/2019	7.49	Yes	27	0	n/a	0.004426	NP Inter (normality) ...
pH (SU)	GS-AP-MW-19	6.85	5.27	9/24/2019	7.8	Yes	27	0	n/a	0.004426	NP Inter (normality) ...
pH (SU)	GS-AP-MW-21	6.85	5.27	9/24/2019	11.24	Yes	27	0	n/a	0.004426	NP Inter (normality) ...
Sulfate (mg/L)	GS-AP-MW-2	12.1	n/a	9/25/2019	47.7	Yes	25	0	n/a	0.00248	NP Inter (normality) ...
Sulfate (mg/L)	GS-AP-MW-6D	12.1	n/a	9/23/2019	47.9	Yes	25	0	n/a	0.00248	NP Inter (normality) ...
Sulfate (mg/L)	GS-AP-MW-6S	12.1	n/a	9/23/2019	176	Yes	25	0	n/a	0.00248	NP Inter (normality) ...
Sulfate (mg/L)	GS-AP-MW-7	12.1	n/a	9/24/2019	145	Yes	25	0	n/a	0.00248	NP Inter (normality) ...
Sulfate (mg/L)	GS-AP-MW-12	12.1	n/a	9/25/2019	25.5	Yes	25	0	n/a	0.00248	NP Inter (normality) ...
Sulfate (mg/L)	GS-AP-MW-15	12.1	n/a	9/24/2019	12.4	Yes	25	0	n/a	0.00248	NP Inter (normality) ...
Sulfate (mg/L)	GS-AP-MW-16D	12.1	n/a	9/24/2019	14.1	Yes	25	0	n/a	0.00248	NP Inter (normality) ...
Sulfate (mg/L)	GS-AP-MW-17	12.1	n/a	9/23/2019	124	Yes	25	0	n/a	0.00248	NP Inter (normality) ...
Sulfate (mg/L)	GS-AP-MW-18	12.1	n/a	9/24/2019	119	Yes	25	0	n/a	0.00248	NP Inter (normality) ...
Sulfate (mg/L)	GS-AP-MW-19	12.1	n/a	9/24/2019	13.8	Yes	25	0	n/a	0.00248	NP Inter (normality) ...
Sulfate (mg/L)	GS-AP-MW-21	12.1	n/a	9/24/2019	224	Yes	25	0	n/a	0.00248	NP Inter (normality) ...
TDS (mg/L)	GS-AP-MW-2	226	n/a	9/25/2019	358	Yes	25	0	n/a	0.00248	NP Inter (normality) ...
TDS (mg/L)	GS-AP-MW-6D	226	n/a	9/23/2019	296	Yes	25	0	n/a	0.00248	NP Inter (normality) ...

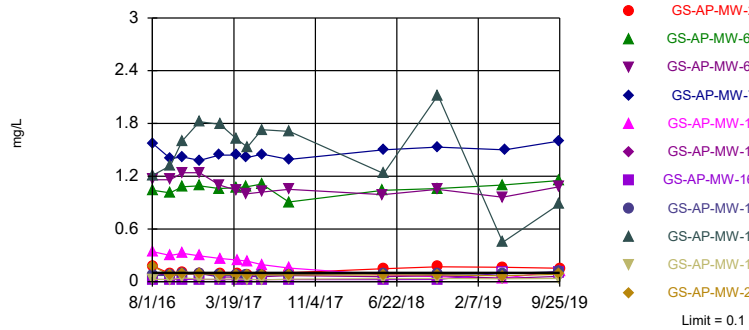
# Interwell Prediction Limit - All Results

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond Printed 1/17/2020, 2:09 PM

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	9/23/2019	381	Yes	25	0	n/a	0.00248	NP Inter (normality) ...
TDS (mg/L)	GS-AP-MW-7	226	n/a	9/24/2019	344	Yes	25	0	n/a	0.00248	NP Inter (normality) ...
TDS (mg/L)	GS-AP-MW-12	226	n/a	9/25/2019	253	Yes	25	0	n/a	0.00248	NP Inter (normality) ...
TDS (mg/L)	GS-AP-MW-15	226	n/a	9/24/2019	536	Yes	25	0	n/a	0.00248	NP Inter (normality) ...
TDS (mg/L)	GS-AP-MW-16D	226	n/a	9/24/2019	208	No	25	0	n/a	0.00248	NP Inter (normality) ...
TDS (mg/L)	GS-AP-MW-17	226	n/a	9/23/2019	684	Yes	25	0	n/a	0.00248	NP Inter (normality) ...
TDS (mg/L)	GS-AP-MW-18	226	n/a	9/24/2019	372	Yes	25	0	n/a	0.00248	NP Inter (normality) ...
TDS (mg/L)	GS-AP-MW-19	226	n/a	9/24/2019	302	Yes	25	0	n/a	0.00248	NP Inter (normality) ...
TDS (mg/L)	GS-AP-MW-21	226	n/a	9/24/2019	630	Yes	25	0	n/a	0.00248	NP Inter (normality) ...

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-17, GS-AP-MW-18

Prediction Limit  
Interwell Non-parametric

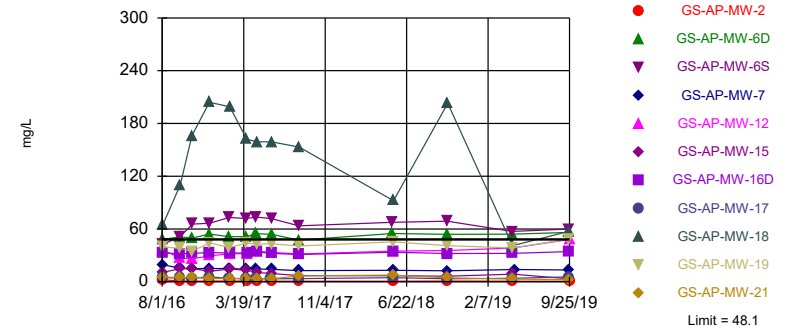


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 25 background values. 96% NDs. Annual per-constituent alpha = 0.06716. Individual comparison alpha = 0.00248 (1 of 2). Comparing 11 points to limit. Assumes 3 future values. Insufficient data to test for seasonality; data will not be deseasonalized.

Constituent: Boron Analysis Run 1/17/2020 2:07 PM View: Interwell PL  
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

Exceeds Limit: GS-AP-MW-6D, GS-AP-MW-6S, GS-AP-MW-18, GS-AP-MW-19

Prediction Limit  
Interwell Non-parametric

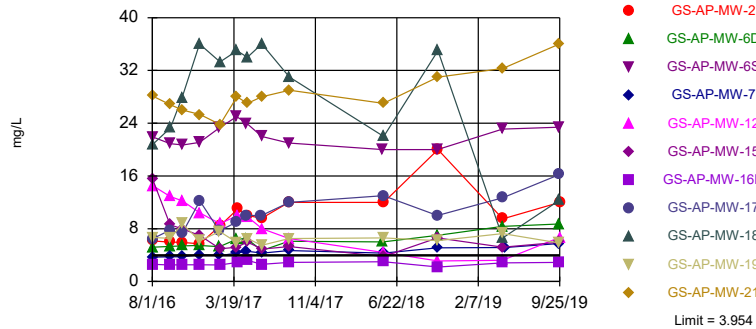


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 25 background values. Annual per-constituent alpha = 0.06716. Individual comparison alpha = 0.00248 (1 of 2). Comparing 11 points to limit. Assumes 3 future values. Insufficient data to test for seasonality; data will not be deseasonalized.

Constituent: Calcium Analysis Run 1/17/2020 2:07 PM View: Interwell PL  
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

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

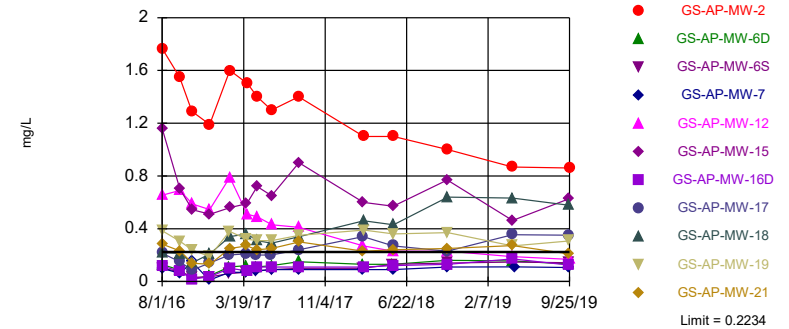


Background Data Summary: Mean=3.208, Std. Dev.=0.3276, n=25. Insufficient data to test for seasonality; not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9508, critical = 0.888. Kappa = 2.277 (c=7, w=14, 1 of 2, event alpha = 0.05132). Report alpha = 0.007498. Individual comparison alpha = 0.0005374. Comparing 11 points to limit. Assumes 3 future values.

Constituent: Chloride Analysis Run 1/17/2020 2:07 PM View: Interwell PL  
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

Exceeds Limit: GS-AP-MW-2, GS-AP-MW-15, GS-AP-MW-17, GS-AP-MW-18, GS-AP-MW-19

Prediction Limit  
Interwell Parametric



Background Data Summary: Mean=0.1183, Std. Dev.=0.04659, n=27. Insufficient data to test for seasonality; not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9626, critical = 0.894. Kappa = 2.257 (c=7, w=14, 1 of 2, event alpha = 0.05132). Report alpha = 0.007498. Individual comparison alpha = 0.0005374. Comparing 11 points to limit. Assumes 3 future values.

Constituent: Fluoride Analysis Run 1/17/2020 2:07 PM View: Interwell PL  
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

# Prediction Limit

Constituent: Boron (mg/L) Analysis Run 1/17/2020 2:09 PM View: Interwell PL

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-15	GS-AP-MW-16D	GS-AP-MW-17	GS-AP-MW-19	GS-AP-MW-7	GS-AP-MW-18	GS-AP-MW-2	GS-AP-MW-21	GS-AP-MW-13 (bg)
8/1/2016	0.0955 (J)	0.0266 (J)	0.0712 (J)	0.0279 (J)					
8/2/2016					1.57	1.21	0.178	0.176	<0.1
8/3/2016									
9/19/2016		0.0262 (J)	0.0716 (J)				0.0937 (J)		
9/20/2016	0.0706 (J)								<0.1
9/21/2016				0.0235 (J)	1.4	1.32		0.0723 (J)	
10/24/2016			0.0858 (J)	0.0444 (J)	1.42	1.6	0.0986 (J)		
10/25/2016	0.0849 (J)	0.0273 (J)						0.0867 (J)	<0.1
10/26/2016									
12/12/2016					1.38	1.82			
12/13/2016		0.0258 (J)	0.0875 (J)	0.0285 (J)			0.0965 (J)		<0.1
12/14/2016	0.0914 (J)							0.092 (J)	
2/6/2017			0.0729 (J)		1.44				
2/7/2017				0.03 (J)					
2/8/2017	0.0524 (J)	0.0249 (J)				1.79	0.0896 (J)	0.0803 (J)	<0.1
3/27/2017			0.0706 (J)						
3/28/2017	0.0532 (J)			0.0309 (J)	1.44	1.62		0.0804 (J)	
3/29/2017		0.0247 (J)							<0.1
3/30/2017							0.0871 (J)		
4/24/2017			0.0737 (J)		1.41				
4/26/2017	0.0598 (J)	0.0264 (J)		0.0273 (J)		1.53	0.0818 (J)	0.0801 (J)	<0.1
6/5/2017			0.0767 (J)						
6/6/2017	0.0576 (J)	0.0247 (J)		0.0212 (J)		1.73	0.0805 (J)	0.0795 (J)	
6/7/2017					1.45				<0.1
8/21/2017					1.39		0.102		
8/22/2017	0.0702 (J)	0.0246 (J)	0.0786 (J)	0.0294 (J)					<0.1
8/23/2017						1.71		0.0764 (J)	
5/14/2018									
5/15/2018	0.0567 (J)		0.0953 (J)		1.5			0.0769 (J)	<0.1
5/16/2018		0.0247 (J)		0.0356 (J)		1.23	0.147		
10/15/2018	0.07 (J)		0.0842 (J)		1.53				
10/16/2018				0.0363 (J)		2.12	0.169	0.0764 (J)	
10/17/2018		0.0251 (J)							<0.1
4/16/2019									<0.1
4/17/2019	0.0388 (J)	<0.1	0.0916 (J)	0.0336 (J)		0.449	0.165	0.0675 (J)	
4/23/2019					1.5				
9/23/2019			0.116						
9/24/2019	0.0607 (J)	<0.1		0.0375 (J)	1.6	0.883		0.0843 (J)	
9/25/2019							0.153		

# Prediction Limit

Constituent: Boron (mg/L) Analysis Run 1/17/2020 2:09 PM 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	0.34	1.16	1.04	0.0239 (J)
9/19/2016				
9/20/2016	0.299	1.16	1.01	
9/21/2016				<0.1
10/24/2016			1.08	
10/25/2016	0.323			<0.1
10/26/2016		1.24		
12/12/2016		1.24	1.09	
12/13/2016	0.294			<0.1
12/14/2016				
2/6/2017		1.1	1.06	<0.1
2/7/2017				
2/8/2017	0.264			
3/27/2017		1.04	1.07	
3/28/2017				<0.1
3/29/2017	0.246			
3/30/2017				
4/24/2017		1	1.08	<0.1
4/26/2017	0.234			
6/5/2017				
6/6/2017		1.02	1.11	
6/7/2017	0.194			<0.1
8/21/2017		1.05	0.906	<0.1
8/22/2017	0.156			
8/23/2017				
5/14/2018		0.99	1.04	
5/15/2018	0.0781 (J)			<0.1
5/16/2018				
10/15/2018		1.05	1.06	
10/16/2018	0.057 (J)			<0.1
10/17/2018				
4/16/2019	0.0385 (J)	0.961	1.1	<0.1
4/17/2019				
4/23/2019				
9/23/2019		1.08	1.15	
9/24/2019				<0.1
9/25/2019	0.122			

# Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 1/17/2020 2:09 PM View: Interwell PL

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-15	GS-AP-MW-16D	GS-AP-MW-17	GS-AP-MW-19	GS-AP-MW-7	GS-AP-MW-18	GS-AP-MW-2	GS-AP-MW-21	GS-AP-MW-13 (bg)
8/1/2016	10.5	33	4.52	39.6					
8/2/2016					19.4	64.2	2.25	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	15.4	110		4.51	
10/24/2016			4.02	34.7	14.8	166	0.635		
10/25/2016	14.7	32.2						4.92	46.6
10/26/2016									
12/12/2016					15	204			
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	14.4	32.7				199	0.722	3.75	47.5
3/27/2017			3.13						
3/28/2017	12.9			43.9	14.3	162		3.63	
3/29/2017		32.7							46.8
3/30/2017							0.686		
4/24/2017			3.41		14.5				
4/26/2017	10.4	33.8		42.8		159	0.646	3.3	48.1
6/5/2017			3.32						
6/6/2017	9.41	32.2		43.1		159	0.569	3.24	
6/7/2017					14.1				44.4
8/21/2017					12.6		0.634		
8/22/2017	6.89	30.9	3.52	40.7					42.9
8/23/2017						153		6.6	
5/14/2018									
5/15/2018	6.86		4.53		12.9			7.57	44.3
5/16/2018		33.5		45.3		92.1	0.588		
10/15/2018	6.28		3.38		12.5				
10/16/2018				40.9		203	0.714	4.4	
10/17/2018		32							41.8
4/16/2019									38.6
4/17/2019	8.53	32.3	3.86	38.4		40.9	0.511	2.88	
4/23/2019					13.8				
9/23/2019			5.43						
9/24/2019	3.26	34.3		48.4 (D)	13.4	57.4		2.47	
9/25/2019							0.581		



# Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 1/17/2020 2:09 PM 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	36.1	42.5	48.1	6.85
9/19/2016				
9/20/2016	27	51.1	51.2	
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		66.5	54.3	
12/13/2016	29.4			5.86
12/14/2016				
2/6/2017		73.1	51.2	9.76
2/7/2017				
2/8/2017	31.9			
3/27/2017		71.9	51.4	
3/28/2017				5.28
3/29/2017	31.8			
3/30/2017				
4/24/2017		73.5	54.7	6.89
4/26/2017	34.6			
6/5/2017				
6/6/2017		71.8	53.9	
6/7/2017	33.4			3.58
8/21/2017		63.5	47.3	3.38
8/22/2017	31.5			
8/23/2017				
5/14/2018		67.5	54.8	
5/15/2018	34.8			4.25
5/16/2018				
10/15/2018		68.9	53.9	
10/16/2018	35.6			3.21
10/17/2018				
4/16/2019	38.3	57.1	54	4.43
4/17/2019				
4/23/2019				
9/23/2019		60 (D)	56.1	
9/24/2019				7.24
9/25/2019	48.1			

# Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 1/17/2020 2:09 PM View: Interwell PL

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-12	GS-AP-MW-15	GS-AP-MW-16D
8/1/2016								15.6	2.6
8/2/2016		2.91	6.15			3.7			
8/3/2016	3.21			5.2	21.9		14.5		
9/19/2016			5.98						2.51
9/20/2016		2.94		5.31	20.9		12.9	8.6	
9/21/2016	2.95					3.74			
10/24/2016			5.93	5.4		3.75			
10/25/2016	3.03	2.94					12.2	7.96	2.53
10/26/2016					20.7				
12/12/2016				5.46	21.1	4.06			
12/13/2016	3.21	2.93	5.7				10.4		2.53
12/14/2016								6.94	
2/6/2017	3			5.28	23.3	3.92			
2/7/2017									
2/8/2017		2.85	8.44				8.77	4.96	2.5
3/27/2017				6.4 (D)	25 (D)				
3/28/2017	3.3 (D)					4.3 (D)		5.2 (D)	
3/29/2017		3.4 (D)					10 (D)		2.9 (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)				9.8 (D)	6 (D)	3.2 (D)
6/5/2017									
6/6/2017			9.6	4.7	22			4.9	2.6
6/7/2017	3.5	3.3				4.3	8		
8/21/2017	3.6		12	6.1	21	4.7			
8/22/2017		3.4					6.5	5.3	2.9
8/23/2017									
5/14/2018				6	20				
5/15/2018	3.3	3.2				4.3	4.4	3.8	
5/16/2018			12						3
10/15/2018				7	20	5.1		6.6	
10/16/2018	3.3		20				3.1		
10/17/2018		2.3							2.2
4/16/2019	3.69	3.23		8.36	23.1		3.22		
4/17/2019			9.5					5.2	2.82
4/23/2019						5.16			
9/23/2019				8.72	23.4 (D)				
9/24/2019	3.21					5.76		5.96	2.9
9/25/2019			12				6.68		

# Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 1/17/2020 2:09 PM View: Interwell PL  
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-17	GS-AP-MW-18	GS-AP-MW-19	GS-AP-MW-21
8/1/2016	6.47		6.67	
8/2/2016		20.8		28.1
8/3/2016				
9/19/2016	7.78			
9/20/2016				
9/21/2016		23.3	6.54	26.8
10/24/2016	7.29	27.9	8.77	
10/25/2016				26
10/26/2016				
12/12/2016		36		
12/13/2016	12.2		6.16	
12/14/2016				25.3
2/6/2017	7.68			
2/7/2017			7.57	
2/8/2017		33.3		23.8
3/27/2017	9 (D)			
3/28/2017		35 (D)	5.9 (D)	28 (D)
3/29/2017				
3/30/2017				
4/24/2017	10 (D)			
4/26/2017		34 (D)	6.5 (D)	27 (D)
6/5/2017	10			
6/6/2017		36	5.5	28
6/7/2017				
8/21/2017				
8/22/2017	12		6.5	
8/23/2017		31		29
5/14/2018				
5/15/2018	13			27
5/16/2018		22	6.6	
10/15/2018	10			
10/16/2018		35	6.2	31
10/17/2018				
4/16/2019				
4/17/2019	12.7	6.61	7.27	32.3
4/23/2019				
9/23/2019	16.2			
9/24/2019		12.3	5.83 (D)	36
9/25/2019				

# Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 1/17/2020 2:09 PM View: Interwell PL

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-12	GS-AP-MW-15	GS-AP-MW-16D
8/1/2016								1.16	0.117 (J)
8/2/2016		0.161 (J)	1.76			0.098 (J)			
8/3/2016	0.125 (J)			0.127 (J)	0.099 (J)		0.656		
9/19/2016			1.55						0.078 (J)
9/20/2016		0.122 (J)		0.087 (J)	0.074 (J)		0.691	0.7	
9/21/2016	0.098 (J)					0.061 (J)			
10/24/2016			1.29	0.019 (J)		<0.3			
10/25/2016	0.025 (J)	0.058 (J)					0.588	0.544	0.018 (J)
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				0.545		0.035 (J)
12/14/2016								0.51	
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)				0.79 (D)	0.56 (D)	0.1 (D)
3/27/2017				0.12 (D)	0.07 (JD)				
3/28/2017	0.08 (JD)					0.07 (JD)		0.59 (D)	
3/29/2017		0.14 (D)					0.51 (D)		0.08 (JD)
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)				0.49 (D)	0.72 (D)	0.11 (D)
6/5/2017									
6/6/2017			1.3	0.12	0.09 (J)			0.65	0.11
6/7/2017	0.08 (J)	0.15				0.09 (J)	0.43		
8/21/2017	0.08 (J)		1.4	0.15	0.1	0.09 (J)			
8/22/2017		0.18					0.41	0.9	0.11
8/23/2017									
2/19/2018	0.08 (J)			0.13	0.1	0.09 (J)			
2/20/2018		0.17					0.27	0.6	
2/21/2018			1.1						0.11
5/14/2018				0.13	0.13				
5/15/2018	0.1	0.17				0.09 (J)	0.23	0.57	
5/16/2018			1.1						0.12
10/15/2018				0.16	0.14	0.11		0.77	
10/16/2018	0.09 (J)		1				0.23		
10/17/2018		0.19							0.13
4/16/2019	0.143	0.197		0.156	0.147		0.188		
4/17/2019			0.868					0.463	0.171
4/23/2019						0.111			
9/23/2019				0.132	0.142 (D)				
9/24/2019	0.128					0.106		0.628	0.124
9/25/2019			0.86				0.168		

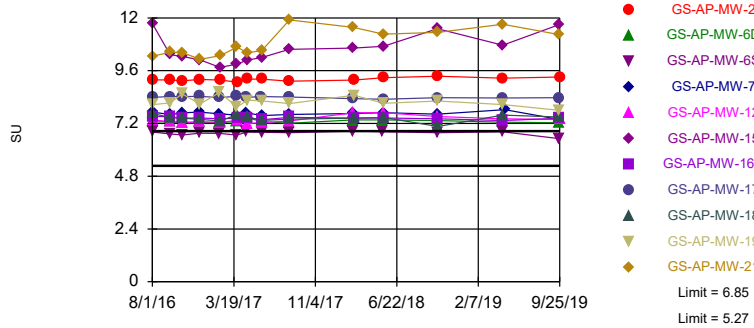
# Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 1/17/2020 2:09 PM View: Interwell PL  
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-17	GS-AP-MW-18	GS-AP-MW-19	GS-AP-MW-21
8/1/2016	0.214 (J)		0.385	
8/2/2016		0.219 (J)		0.282 (J)
8/3/2016				
9/19/2016	0.151 (J)			
9/20/2016				
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				0.137 (J)
10/26/2016				
12/12/2016		0.206 (J)		
12/13/2016	0.14 (J)		0.188 (J)	
12/14/2016				0.131 (J)
2/6/2017	0.2 (D)			
2/7/2017			0.38 (D)	
2/8/2017		0.34 (D)		0.25 (D)
3/27/2017	0.21 (D)			
3/28/2017		0.36 (D)	0.32 (D)	0.27 (D)
3/29/2017				
3/30/2017				
4/24/2017	0.2 (D)			
4/26/2017		0.31 (D)	0.31 (D)	0.24 (D)
6/5/2017	0.2			
6/6/2017		0.29	0.31	0.25
6/7/2017				
8/21/2017				
8/22/2017	0.24		0.35	
8/23/2017		0.34		0.3
2/19/2018	0.34			
2/20/2018				0.23
2/21/2018		0.46	0.39	
5/14/2018				
5/15/2018	0.27			0.24
5/16/2018		0.43	0.36	
10/15/2018	0.23			
10/16/2018		0.64	0.37	0.25
10/17/2018				
4/16/2019				
4/17/2019	0.354	0.632	0.27	0.272
4/23/2019				
9/23/2019	0.351			
9/24/2019		0.578	0.307 (D)	0.209
9/25/2019				

Exceeds Limits: GS-AP-MW-2, GS-AP-MW-6D, GS-AP-MW-7, GS-AP-MW-12, GS-AP-MW-15, GS-AP-MW-16D, GS-AP-MW-17,...

Prediction Limit  
Interwell Non-parametric

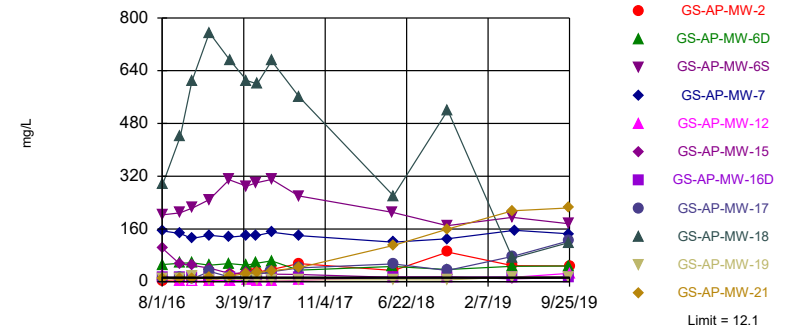


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limits are highest and lowest of 27 background values. Annual per-constituent alpha = 0.1203. Individual comparison alpha = 0.004426 (1 of 2). Comparing 11 points to limit. Assumes 3 future values. Insufficient data to test for seasonality; data will not be deseasonalized.

Constituent: pH Analysis Run 1/17/2020 2:07 PM View: Interwell PL  
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

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

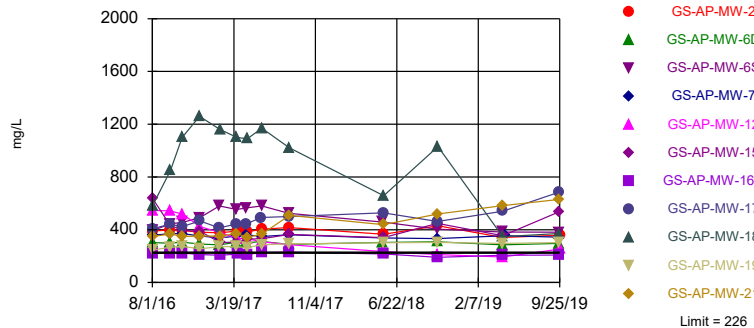


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 25 background values. Annual per-constituent alpha = 0.06716. Individual comparison alpha = 0.00248 (1 of 2). Comparing 11 points to limit. Assumes 3 future values. Insufficient data to test for seasonality; data will not be deseasonalized.

Constituent: Sulfate Analysis Run 1/17/2020 2:07 PM View: Interwell PL  
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

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 25 background values. Annual per-constituent alpha = 0.06716. Individual comparison alpha = 0.00248 (1 of 2). Comparing 11 points to limit. Assumes 3 future values. Insufficient data to test for seasonality; data will not be deseasonalized.

Constituent: TDS Analysis Run 1/17/2020 2:07 PM View: Interwell PL  
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

# Prediction Limit

Constituent: pH (SU) Analysis Run 1/17/2020 2:09 PM 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	8.05	11.74	7.53	8.39					
8/2/2016					9.18	10.26	7.65	7.72	6.8
8/3/2016									
9/19/2016			7.5	8.42	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	9.14		7.44	7.68	
10/25/2016		10.24	7.44			10.42			6.85
10/26/2016									
12/12/2016							7.39	7.72	
12/13/2016	8.08		7.45	8.43	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		9.75	7.41		9.17	10.28	7.31		6.76
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	10.08	7.47		9.22	10.42	7.5		6.71
6/5/2017				8.42					
6/6/2017	8.23	10.2	7.37		9.22	10.51	7.34		
6/7/2017								7.56	6.71
8/21/2017					9.12			7.61	
8/22/2017	8.1	10.57	7.48	8.4					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		9.17		7.44		
5/14/2018									
5/15/2018		10.71		8.3		11.26		7.69	6.8
5/16/2018	8.12		7.45		9.28		7.47		
10/15/2018		11.51		8.37				7.62	
10/16/2018	8.22				9.35	11.34	7.06		
10/17/2018			7.41						6.67
4/16/2019									6.64
4/17/2019	8.06	10.76	7.33	8.36	9.26	11.71	7.58		
4/23/2019								7.83	
9/23/2019				8.37					
9/24/2019	7.8	11.7	7.43			11.24	7.49	7.38	
9/25/2019					9.31				

# Prediction Limit

Constituent: pH (SU) Analysis Run 1/17/2020 2:09 PM 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	5.84	7.27	7.36	6.81
9/19/2016				
9/20/2016		7.27	7.28	6.72
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	5.9	7.24		6.75
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	5.79	7.46		6.81
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	5.7	7.21		6.78
8/22/2017			7.31	
8/23/2017				
2/19/2018	5.78	7.36		6.85
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				
4/16/2019	5.76	7.26	7.41	6.82
4/17/2019				
4/23/2019				
9/23/2019		7.23		6.51
9/24/2019	5.27			
9/25/2019			7.38	



# Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 1/17/2020 2:09 PM View: Interwell PL

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-15	GS-AP-MW-16D	GS-AP-MW-17	GS-AP-MW-19	GS-AP-MW-7	GS-AP-MW-18	GS-AP-MW-2	GS-AP-MW-21	GS-AP-MW-13 (bg)
8/1/2016	102	13.4	9.56	9.02					
8/2/2016					154	295	2.87	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	146	440		8.71	
10/24/2016			8.58	18.5	131	608	<1		
10/25/2016	49.8	11.6						8.54	10.1
10/26/2016									
12/12/2016					141	755			
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	25	12.2				672	19.4	17	10.9
3/27/2017			14 (D)						
3/28/2017	27 (D)			6.4 (D)	140 (D)	610 (D)		25 (D)	
3/29/2017		12 (D)							11 (D)
3/30/2017							31 (D)		
4/24/2017			22 (D)		140 (D)				
4/26/2017	29 (D)	13 (D)		4.6 (JD)		600 (D)	29 (D)	28 (D)	11 (D)
6/5/2017			30						
6/6/2017	23	12		5.2		670	37	33	
6/7/2017					150				11
8/21/2017					140		55		
8/22/2017	22	12	42	5.3					11
8/23/2017						560		43	
5/14/2018									
5/15/2018	13		54		120			110	11
5/16/2018		13		6		260	34		
10/15/2018	14		34		130				
10/16/2018				5.6		520	90	160	
10/17/2018		13							12
4/16/2019									12.1
4/17/2019	9.02	14.1	76.6	14.3		71.6	48.6	215	
4/23/2019					156				
9/23/2019			124						
9/24/2019	12.4	14.1		13.8 (D)	145	119		224	
9/25/2019							47.7		

# Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 1/17/2020 2:09 PM 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	19.2	203	52	4.2
9/19/2016				
9/20/2016	1.42	209	56	
9/21/2016				4.27
10/24/2016			57.5	
10/25/2016	<1			2.78
10/26/2016		224		
12/12/2016		249	50	
12/13/2016	3.21			3.18
12/14/2016				
2/6/2017		309	54.9	3.74
2/7/2017				
2/8/2017	3.3			
3/27/2017		290 (D)	50 (D)	
3/28/2017				3.4 (JD)
3/29/2017	3.8 (JD)			
3/30/2017				
4/24/2017		300 (D)	56 (D)	2.7 (JD)
4/26/2017	1.4 (JD)			
6/5/2017				
6/6/2017		310	63	
6/7/2017	1.7 (J)			2.7 (J)
8/21/2017		260	35	3.9 (J)
8/22/2017	4.2 (J)			
8/23/2017				
5/14/2018		210	46	
5/15/2018	14			2.5 (J)
5/16/2018				
10/15/2018		170	37	
10/16/2018	13			2.4 (J)
10/17/2018				
4/16/2019	13.3	195	46.8	4.53
4/17/2019				
4/23/2019				
9/23/2019		176 (D)	47.9	
9/24/2019				6.61
9/25/2019	25.5			

# Prediction Limit

Constituent: TDS (mg/L) Analysis Run 1/17/2020 2:09 PM View: Interwell PL

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-15	GS-AP-MW-16D	GS-AP-MW-17	GS-AP-MW-19	GS-AP-MW-7	GS-AP-MW-18	GS-AP-MW-2	GS-AP-MW-21	GS-AP-MW-13 (bg)
8/1/2016	640	222	408	245					
8/2/2016					358	586	390	348	221
8/3/2016									
9/19/2016		220	441				398		
9/20/2016	434								221
9/21/2016				267	370	848		368	
10/24/2016			424	275	370	1100	395		
10/25/2016	394	223						348	226
10/26/2016									
12/12/2016					353	1260			
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	303	206				1160	376	352	212
3/27/2017			444						
3/28/2017	305			271	352	1100		370	
3/29/2017		215							217
3/30/2017							391		
4/24/2017			446		362				
4/26/2017	329	212		265		1090	384	342	202
6/5/2017			493						
6/6/2017	331	227		287		1170	404	367	
6/7/2017					348				218
8/21/2017					362		416		
8/22/2017	364	230	500	293					224
8/23/2017						1020		508	
5/14/2018									
5/15/2018	340		528		338			438	209
5/16/2018		216		301		658	365		
10/15/2018	448 (D)		462 (D)		333 (D)				
10/16/2018				303 (D)		1030 (D)	430 (D)	520 (D)	
10/17/2018		191 (D)							208 (D)
4/16/2019									185
4/17/2019	354	207	540	296		347	341	582	
4/23/2019					354				
9/23/2019			684						
9/24/2019	536	208		302	344	372		630	
9/25/2019							358		

# Prediction Limit

Constituent: TDS (mg/L) Analysis Run 1/17/2020 2:09 PM 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	546	394	302	113
9/19/2016				
9/20/2016	542	444	298	
9/21/2016				128
10/24/2016			306	
10/25/2016	518			121
10/26/2016		456		
12/12/2016		491	291	
12/13/2016	424			101
12/14/2016				
2/6/2017		580	285	108
2/7/2017				
2/8/2017	379			
3/27/2017		554	305	
3/28/2017				91
3/29/2017	334			
3/30/2017				
4/24/2017		566	301	89.3
4/26/2017	332			
6/5/2017				
6/6/2017		580	311	
6/7/2017	308			84
8/21/2017		524	289	91.3
8/22/2017	286			
8/23/2017				
5/14/2018		458	303	
5/15/2018	235			94.7
5/16/2018				
10/15/2018		404 (D)	309 (D)	
10/16/2018	211 (D)			76.7 (D)
10/17/2018				
4/16/2019	193	382	285	92
4/17/2019				
4/23/2019				
9/23/2019		381	296	
9/24/2019				109
9/25/2019	253			

# Trend Test Summary Table

Plant William C Gorgas   Client: Southern Company   Data: Gorgas Ash Pond   Printed 1/17/2020, 2:17 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	GS-AP-MW-8 (bg)	0	12	43	No	13	92.31	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	0.01533	10	43	No	13	0	n/a	n/a	0.01	NP
Boron (mg/L)	GS-AP-MW-6D	0.02311	23	43	No	13	0	n/a	n/a	0.01	NP
Boron (mg/L)	GS-AP-MW-6S	-0.06858	-37	-43	No	13	0	n/a	n/a	0.01	NP
Boron (mg/L)	GS-AP-MW-7	0.05111	30	43	No	13	0	n/a	n/a	0.01	NP
<b>Boron (mg/L)</b>	<b>GS-AP-MW-12</b>	<b>-0.1278</b>	<b>-70</b>	<b>-43</b>	<b>Yes</b>	<b>13</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
<b>Boron (mg/L)</b>	<b>GS-AP-MW-17</b>	<b>0.007817</b>	<b>44</b>	<b>43</b>	<b>Yes</b>	<b>13</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Boron (mg/L)	GS-AP-MW-18	-0.1214	-6	-43	No	13	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GS-AP-MW-8 (bg)	-2.217	-34	-43	No	13	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	1.619	38	43	No	13	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GS-AP-MW-6S	1.489	6	43	No	13	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GS-AP-MW-18	-17.94	-21	-43	No	13	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GS-AP-MW-19	2.043	22	43	No	13	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GS-AP-MW-8 (bg)	0.1539	30	43	No	13	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	3.613	43	43	No	13	0	n/a	n/a	0.01	NP
<b>Chloride (mg/L)</b>	<b>GS-AP-MW-6D</b>	<b>0.9288</b>	<b>48</b>	<b>43</b>	<b>Yes</b>	<b>13</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Chloride (mg/L)	GS-AP-MW-6S	0.07351	3	43	No	13	0	n/a	n/a	0.01	NP
<b>Chloride (mg/L)</b>	<b>GS-AP-MW-7</b>	<b>0.6229</b>	<b>67</b>	<b>43</b>	<b>Yes</b>	<b>13</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
<b>Chloride (mg/L)</b>	<b>GS-AP-MW-12</b>	<b>-4.349</b>	<b>-64</b>	<b>-43</b>	<b>Yes</b>	<b>13</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Chloride (mg/L)	GS-AP-MW-15	-1.443	-35	-43	No	13	0	n/a	n/a	0.01	NP
<b>Chloride (mg/L)</b>	<b>GS-AP-MW-17</b>	<b>2.817</b>	<b>53</b>	<b>43</b>	<b>Yes</b>	<b>13</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Chloride (mg/L)	GS-AP-MW-18	-0.7613	-6	-43	No	13	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GS-AP-MW-19	-0.2082	-19	-43	No	13	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GS-AP-MW-21	2.428	40	43	No	13	0	n/a	n/a	0.01	NP
Fluoride (mg/L)	GS-AP-MW-8 (bg)	0.009456	23	48	No	14	0	n/a	n/a	0.01	NP
<b>Fluoride (mg/L)</b>	<b>GS-AP-MW-13 (bg)</b>	<b>0.02914</b>	<b>48</b>	<b>43</b>	<b>Yes</b>	<b>13</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
<b>Fluoride (mg/L)</b>	<b>GS-AP-MW-2</b>	<b>-0.2648</b>	<b>-65</b>	<b>-48</b>	<b>Yes</b>	<b>14</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Fluoride (mg/L)	GS-AP-MW-15	-0.01768	-3	-48	No	14	0	n/a	n/a	0.01	NP
<b>Fluoride (mg/L)</b>	<b>GS-AP-MW-17</b>	<b>0.06999</b>	<b>56</b>	<b>48</b>	<b>Yes</b>	<b>14</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
<b>Fluoride (mg/L)</b>	<b>GS-AP-MW-18</b>	<b>0.1521</b>	<b>60</b>	<b>48</b>	<b>Yes</b>	<b>14</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Fluoride (mg/L)	GS-AP-MW-19	0.009631	6	48	No	14	0	n/a	n/a	0.01	NP
pH (SU)	GS-AP-MW-8 (bg)	-0.0911	-44	-48	No	14	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	0.05448	38	48	No	14	0	n/a	n/a	0.01	NP
pH (SU)	GS-AP-MW-6D	0	3	48	No	14	0	n/a	n/a	0.01	NP
pH (SU)	GS-AP-MW-7	-0.03037	-11	-48	No	14	0	n/a	n/a	0.01	NP
pH (SU)	GS-AP-MW-12	0.05984	28	48	No	14	0	n/a	n/a	0.01	NP
pH (SU)	GS-AP-MW-15	0.3476	35	48	No	14	0	n/a	n/a	0.01	NP
pH (SU)	GS-AP-MW-16D	-0.03177	-38	-48	No	14	0	n/a	n/a	0.01	NP
pH (SU)	GS-AP-MW-17	-0.02166	-39	-48	No	14	0	n/a	n/a	0.01	NP
pH (SU)	GS-AP-MW-18	-0.02114	-7	-48	No	14	0	n/a	n/a	0.01	NP
pH (SU)	GS-AP-MW-19	-0.05268	-15	-48	No	14	0	n/a	n/a	0.01	NP
<b>pH (SU)</b>	<b>GS-AP-MW-21</b>	<b>0.5209</b>	<b>50</b>	<b>48</b>	<b>Yes</b>	<b>14</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Sulfate (mg/L)	GS-AP-MW-8 (bg)	-0.1847	-7	-43	No	13	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
<b>Sulfate (mg/L)</b>	<b>GS-AP-MW-2</b>	<b>26.95</b>	<b>51</b>	<b>43</b>	<b>Yes</b>	<b>13</b>	<b>15.38</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Sulfate (mg/L)	GS-AP-MW-6D	-3.193	-26	-43	No	13	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GS-AP-MW-6S	-11.35	-10	-43	No	13	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GS-AP-MW-7	-0.9773	-7	-43	No	13	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GS-AP-MW-12	4.629	36	43	No	13	7.692	n/a	n/a	0.01	NP
<b>Sulfate (mg/L)</b>	<b>GS-AP-MW-15</b>	<b>-16.84</b>	<b>-68</b>	<b>-43</b>	<b>Yes</b>	<b>13</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Sulfate (mg/L)	GS-AP-MW-16D	0.3283	21	43	No	13	0	n/a	n/a	0.01	NP
<b>Sulfate (mg/L)</b>	<b>GS-AP-MW-17</b>	<b>25.23</b>	<b>60</b>	<b>43</b>	<b>Yes</b>	<b>13</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Sulfate (mg/L)	GS-AP-MW-18	-109.6	-28	-43	No	13	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GS-AP-MW-19	-1.242	-14	-43	No	13	0	n/a	n/a	0.01	NP
<b>Sulfate (mg/L)</b>	<b>GS-AP-MW-21</b>	<b>63.41</b>	<b>72</b>	<b>43</b>	<b>Yes</b>	<b>13</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
TDS (mg/L)	GS-AP-MW-8 (bg)	-12.19	-30	-43	No	13	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	-9.732	-12	-43	No	13	0	n/a	n/a	0.01	NP
TDS (mg/L)	GS-AP-MW-6D	-1.427	-5	-43	No	13	0	n/a	n/a	0.01	NP
TDS (mg/L)	GS-AP-MW-6S	-22.1	-11	-43	No	13	0	n/a	n/a	0.01	NP
TDS (mg/L)	GS-AP-MW-7	-8.693	-31	-43	No	13	0	n/a	n/a	0.01	NP
<b>TDS (mg/L)</b>	<b>GS-AP-MW-12</b>	<b>-132.3</b>	<b>-72</b>	<b>-43</b>	<b>Yes</b>	<b>13</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
TDS (mg/L)	GS-AP-MW-15	0.3576	0	43	No	13	0	n/a	n/a	0.01	NP
<b>TDS (mg/L)</b>	<b>GS-AP-MW-17</b>	<b>55.92</b>	<b>58</b>	<b>43</b>	<b>Yes</b>	<b>13</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>

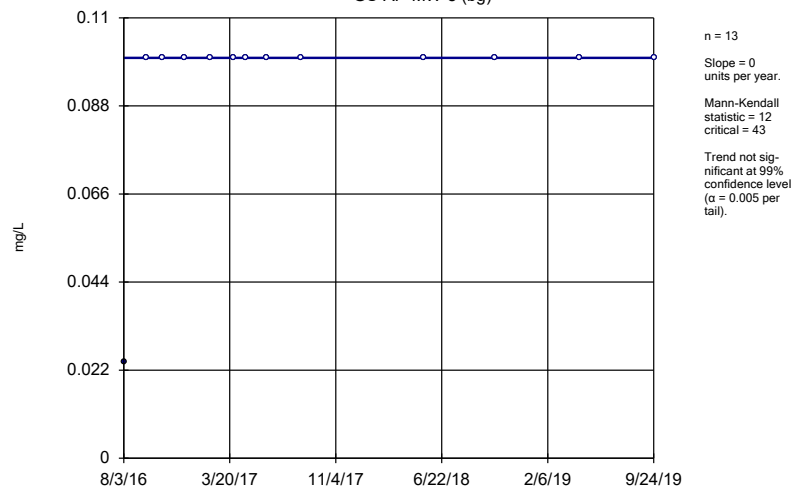
# Trend Test Summary Table

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond Printed 1/17/2020, 2:17 PM

<u>Constituent</u>	<u>Well</u>	<u>Slope</u>	<u>Calc.</u>	<u>Critical</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Normality</u>	<u>Xform</u>	<u>Alpha</u>	<u>Method</u>
TDS (mg/L)	GS-AP-MW-18	-125.3	-23	-43	No	13	0	n/a	n/a	0.01	NP
<b>TDS (mg/L)</b>	<b>GS-AP-MW-19</b>	<b>17.45</b>	<b>54</b>	<b>43</b>	<b>Yes</b>	<b>13</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
TDS (mg/L)	GS-AP-MW-21	84.86	52	43	Yes	13	0	n/a	n/a	0.01	NP

### Sen's Slope Estimator

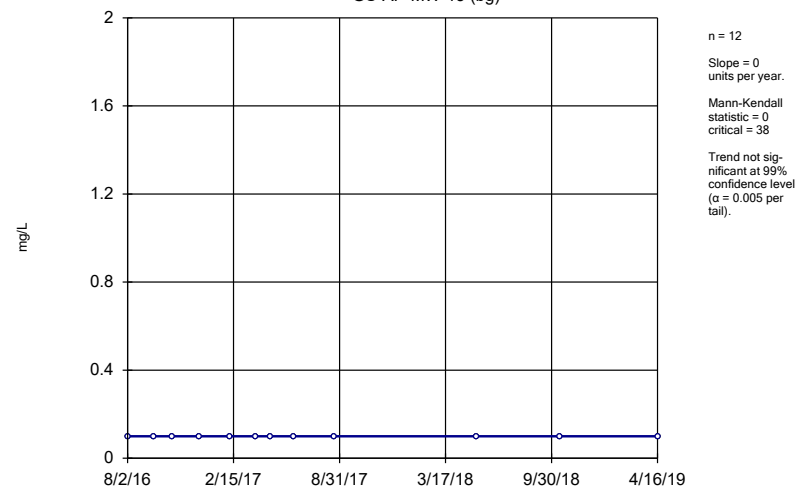
GS-AP-MW-8 (bg)



Constituent: Boron Analysis Run 1/17/2020 2:14 PM View: Trend Test  
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

### Sen's Slope Estimator

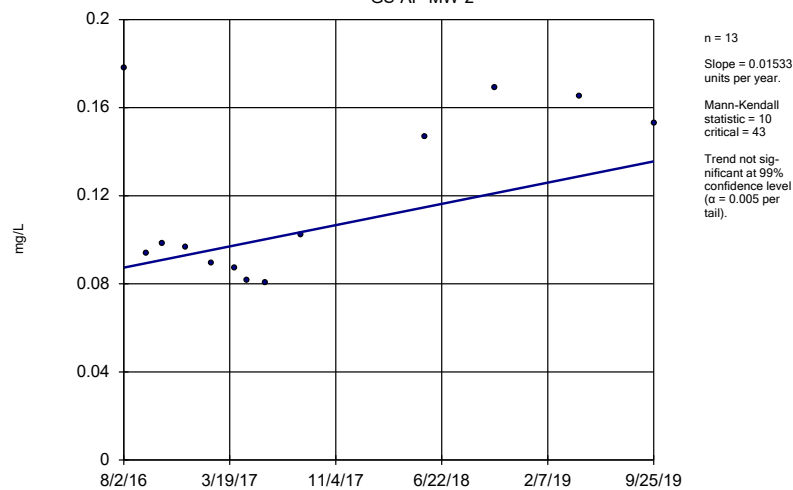
GS-AP-MW-13 (bg)



Constituent: Boron Analysis Run 1/17/2020 2:14 PM View: Trend Test  
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

### Sen's Slope Estimator

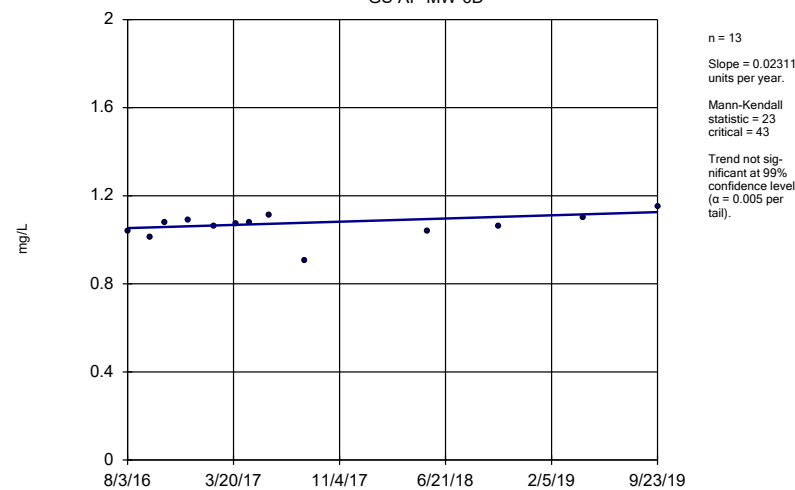
GS-AP-MW-2



Constituent: Boron Analysis Run 1/17/2020 2:14 PM View: Trend Test  
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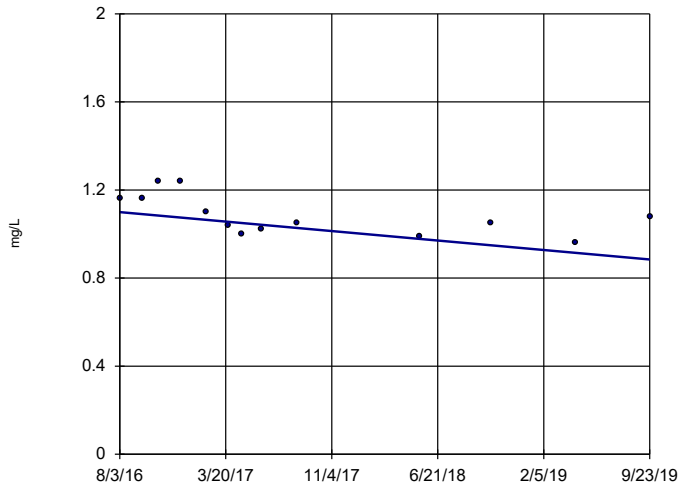
### Sen's Slope Estimator

GS-AP-MW-6D



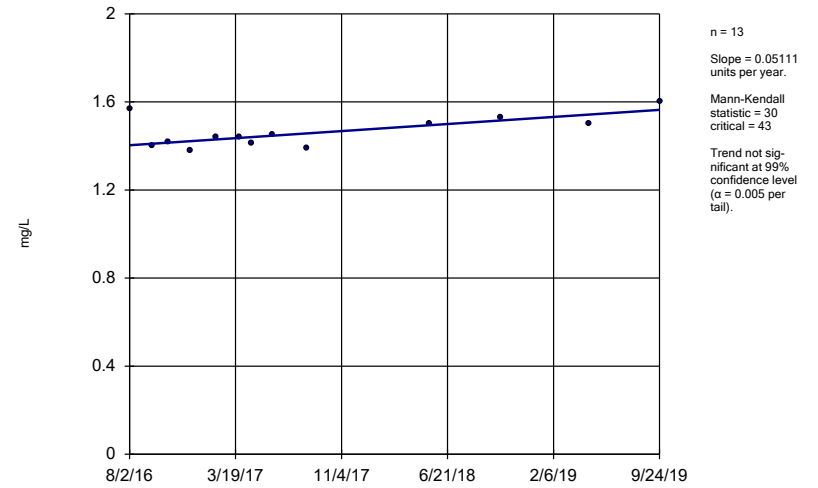
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### Sen's Slope Estimator GS-AP-MW-6S



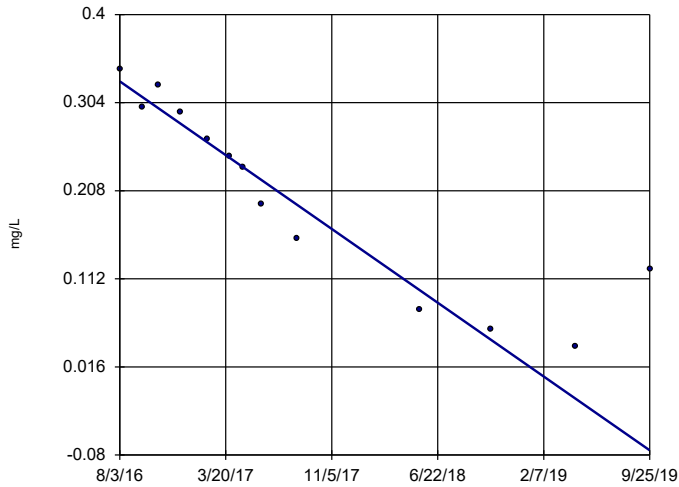
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Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

### Sen's Slope Estimator GS-AP-MW-7



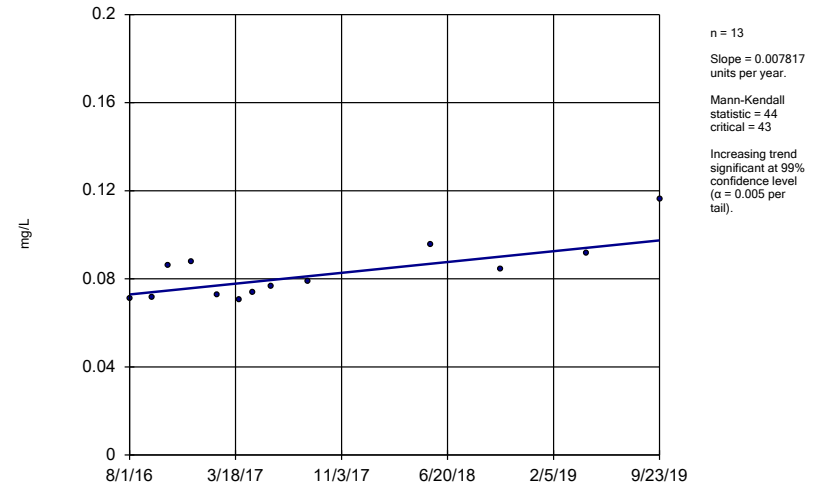
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Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

### Sen's Slope Estimator GS-AP-MW-12



Constituent: Boron Analysis Run 1/17/2020 2:14 PM View: Trend Test  
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

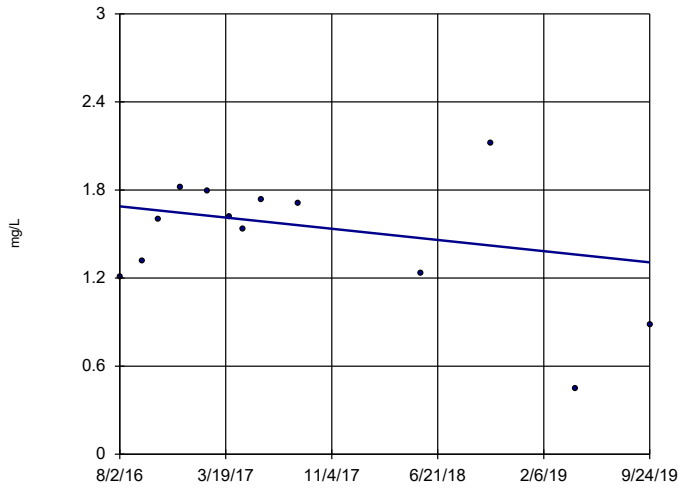
### Sen's Slope Estimator GS-AP-MW-17



Constituent: Boron Analysis Run 1/17/2020 2:14 PM View: Trend Test  
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond



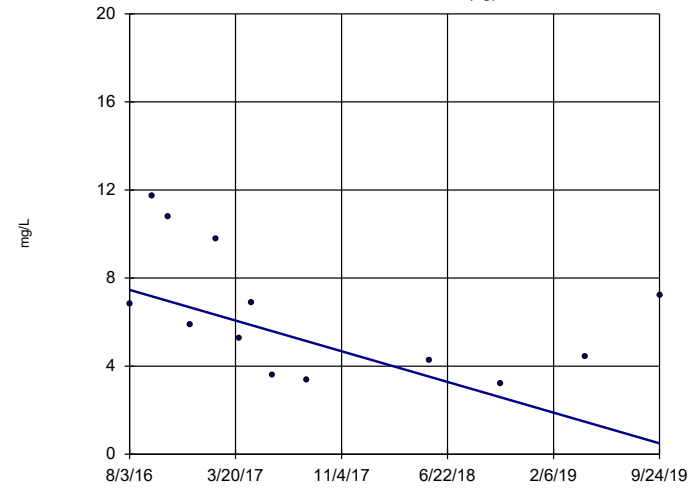
### Sen's Slope Estimator GS-AP-MW-18



n = 13  
 Slope = -0.1214  
 units per year.  
 Mann-Kendall  
 statistic = -6  
 critical = -43  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 (α = 0.005 per  
 tail).

Constituent: Boron Analysis Run 1/17/2020 2:14 PM View: Trend Test  
 Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

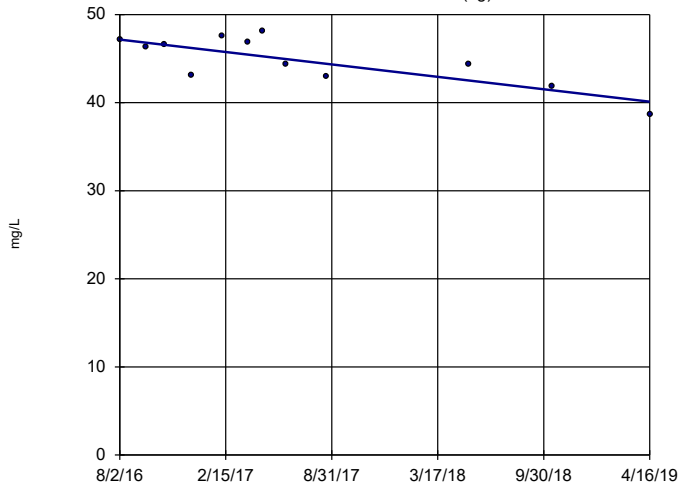
### Sen's Slope Estimator GS-AP-MW-8 (bg)



n = 13  
 Slope = -2.217  
 units per year.  
 Mann-Kendall  
 statistic = -34  
 critical = -43  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 (α = 0.005 per  
 tail).

Constituent: Calcium Analysis Run 1/17/2020 2:14 PM View: Trend Test  
 Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

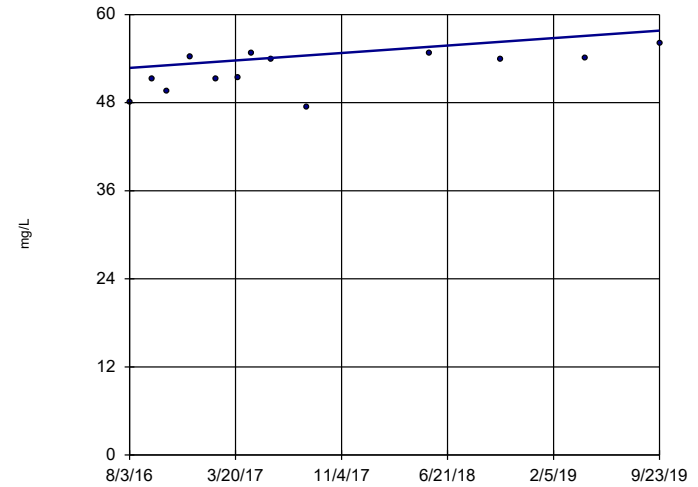
### Sen's Slope Estimator GS-AP-MW-13 (bg)



n = 12  
 Slope = -2.607  
 units per year.  
 Mann-Kendall  
 statistic = -32  
 critical = -38  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 (α = 0.005 per  
 tail).

Constituent: Calcium Analysis Run 1/17/2020 2:14 PM View: Trend Test  
 Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

### Sen's Slope Estimator GS-AP-MW-6D

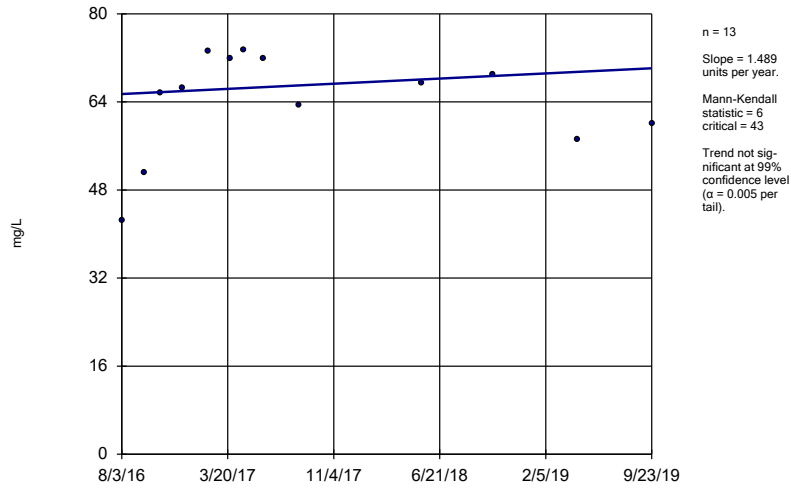


n = 13  
 Slope = 1.619  
 units per year.  
 Mann-Kendall  
 statistic = 38  
 critical = 43  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 (α = 0.005 per  
 tail).

Constituent: Calcium Analysis Run 1/17/2020 2:14 PM View: Trend Test  
 Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

### Sen's Slope Estimator

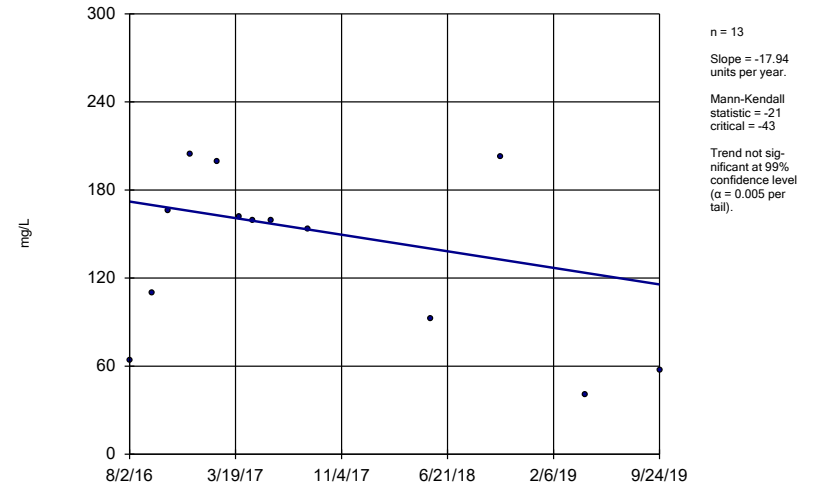
GS-AP-MW-6S



Constituent: Calcium Analysis Run 1/17/2020 2:14 PM View: Trend Test  
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

### Sen's Slope Estimator

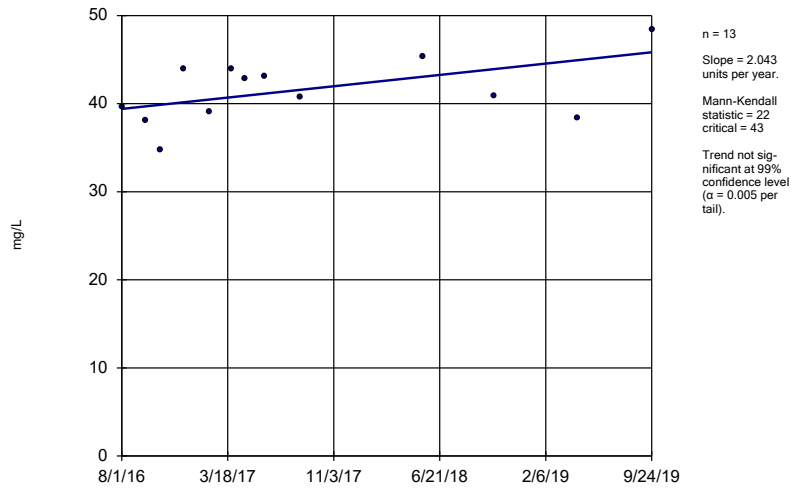
GS-AP-MW-18



Constituent: Calcium Analysis Run 1/17/2020 2:14 PM View: Trend Test  
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

### Sen's Slope Estimator

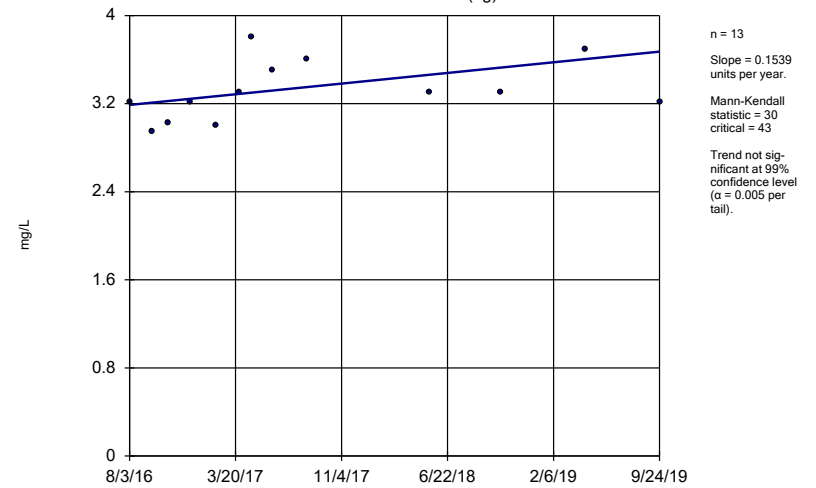
GS-AP-MW-19



Constituent: Calcium Analysis Run 1/17/2020 2:14 PM View: Trend Test  
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

### Sen's Slope Estimator

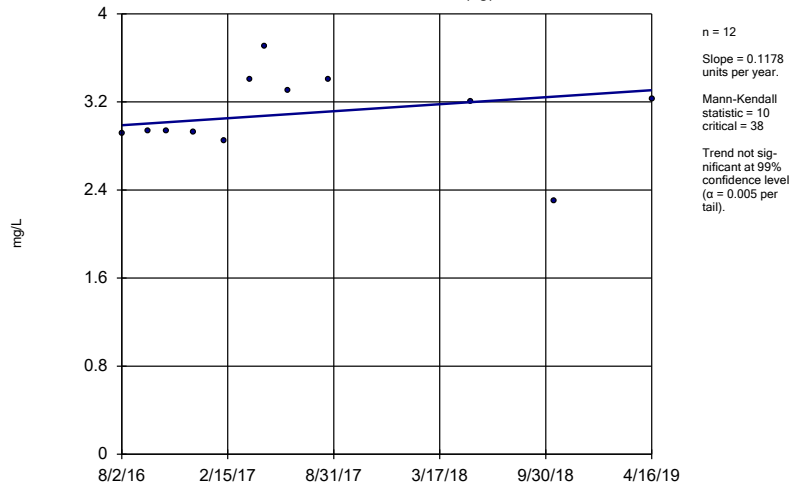
GS-AP-MW-8 (bg)



Constituent: Chloride Analysis Run 1/17/2020 2:14 PM View: Trend Test  
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

### Sen's Slope Estimator

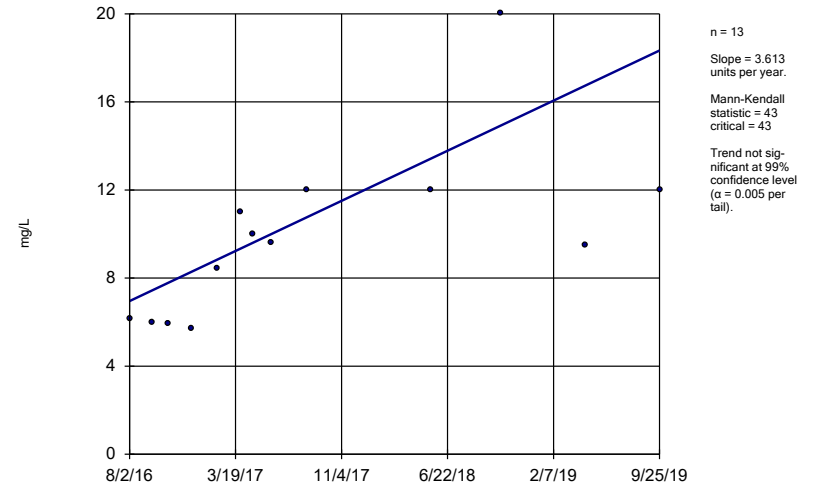
GS-AP-MW-13 (bg)



Constituent: Chloride Analysis Run 1/17/2020 2:14 PM View: Trend Test  
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### Sen's Slope Estimator

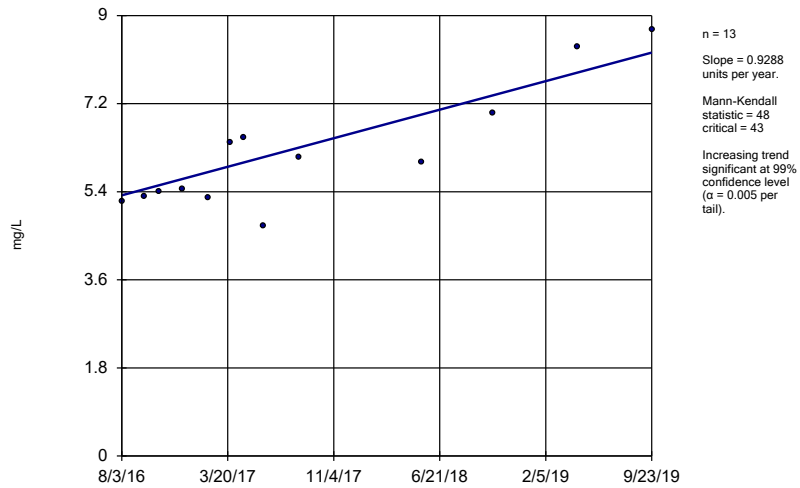
GS-AP-MW-2



Constituent: Chloride Analysis Run 1/17/2020 2:14 PM View: Trend Test  
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

### Sen's Slope Estimator

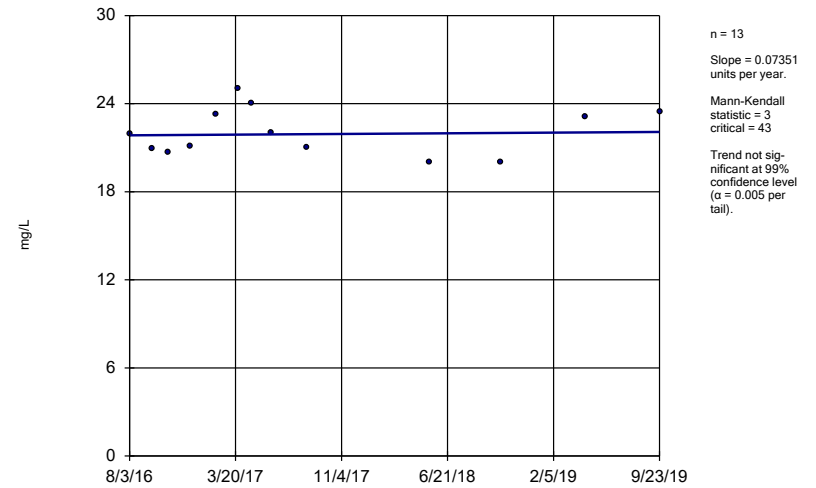
GS-AP-MW-6D



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### Sen's Slope Estimator

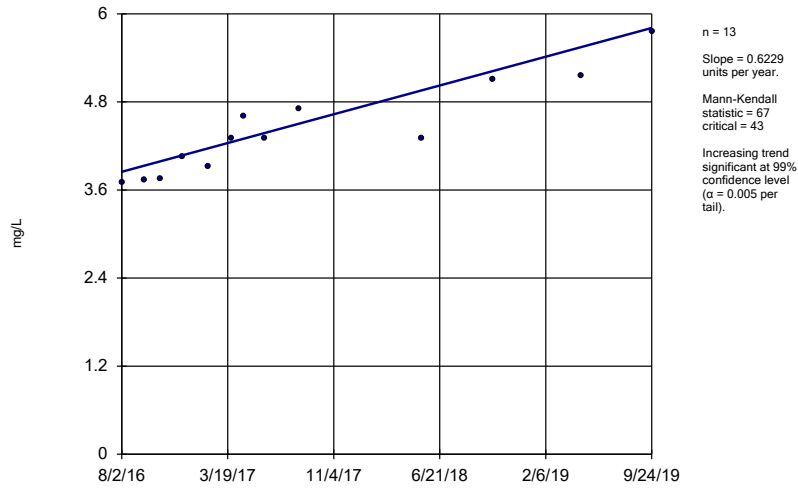
GS-AP-MW-6S



Constituent: Chloride Analysis Run 1/17/2020 2:14 PM View: Trend Test  
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

### Sen's Slope Estimator

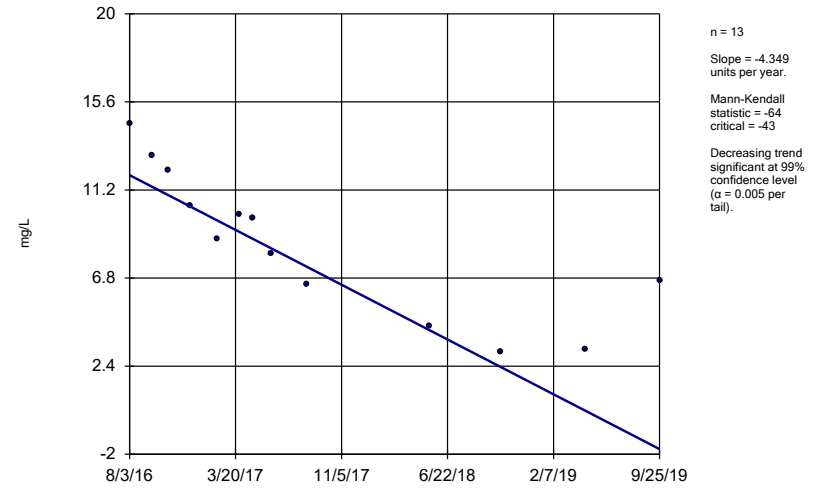
GS-AP-MW-7



Constituent: Chloride Analysis Run 1/17/2020 2:14 PM View: Trend Test  
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

### Sen's Slope Estimator

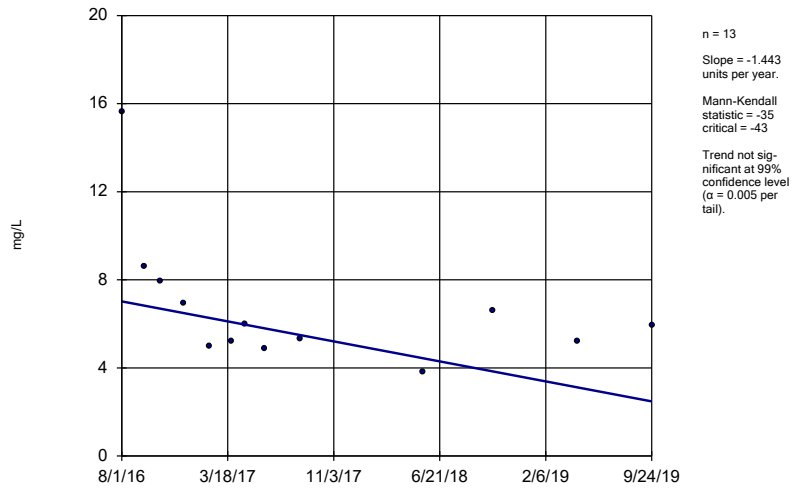
GS-AP-MW-12



Constituent: Chloride Analysis Run 1/17/2020 2:14 PM View: Trend Test  
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

### Sen's Slope Estimator

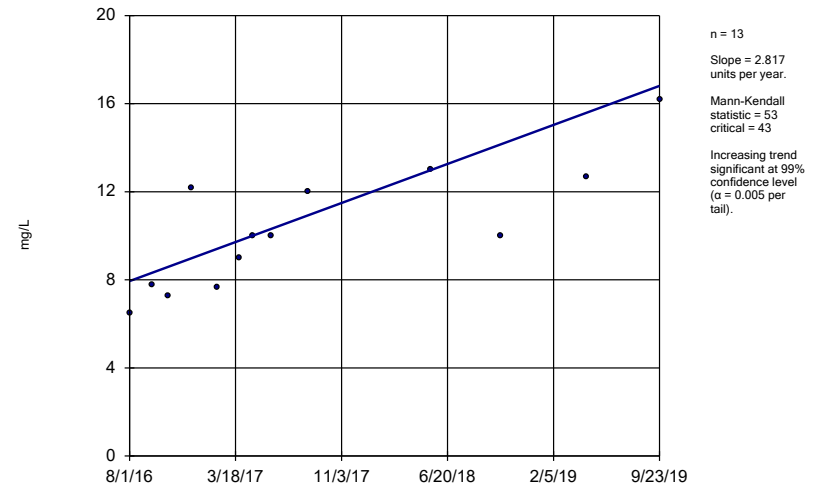
GS-AP-MW-15



Constituent: Chloride Analysis Run 1/17/2020 2:14 PM View: Trend Test  
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

### Sen's Slope Estimator

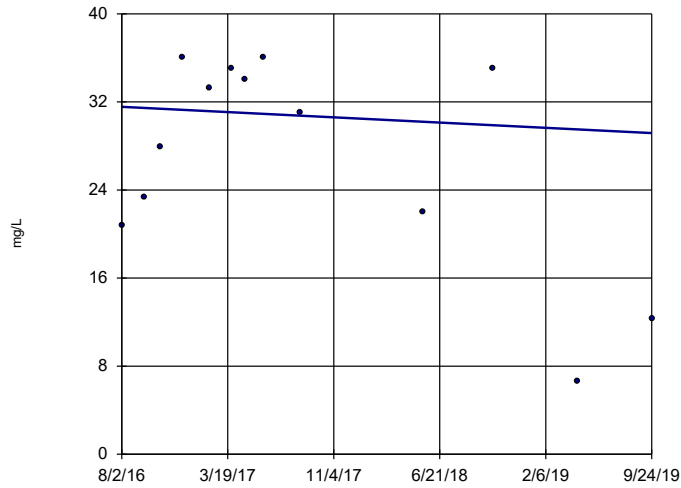
GS-AP-MW-17



Constituent: Chloride Analysis Run 1/17/2020 2:14 PM View: Trend Test  
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

### Sen's Slope Estimator

GS-AP-MW-18

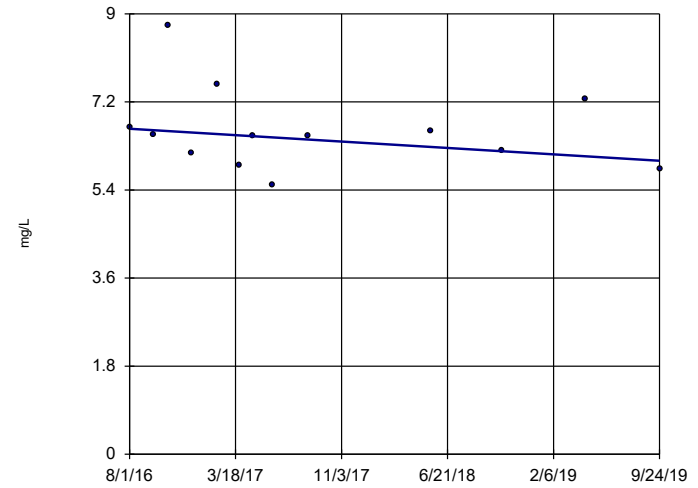


n = 13  
 Slope = -0.7613  
 units per year.  
 Mann-Kendall  
 statistic = -6  
 critical = -43  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 (α = 0.005 per  
 tail).

Constituent: Chloride Analysis Run 1/17/2020 2:14 PM View: Trend Test  
 Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

### Sen's Slope Estimator

GS-AP-MW-19

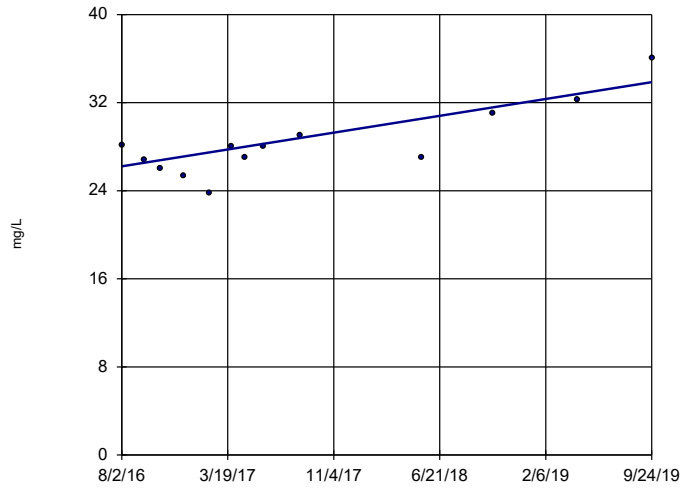


n = 13  
 Slope = -0.2082  
 units per year.  
 Mann-Kendall  
 statistic = -19  
 critical = -43  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 (α = 0.005 per  
 tail).

Constituent: Chloride Analysis Run 1/17/2020 2:15 PM View: Trend Test  
 Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

### Sen's Slope Estimator

GS-AP-MW-21

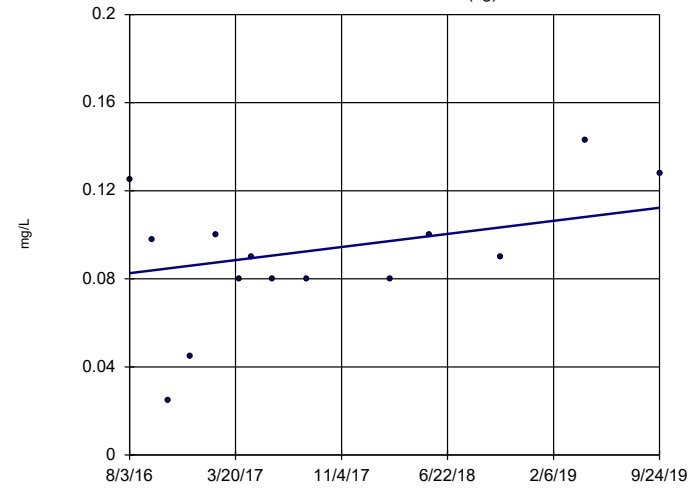


n = 13  
 Slope = 2.428  
 units per year.  
 Mann-Kendall  
 statistic = 40  
 critical = 43  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 (α = 0.005 per  
 tail).

Constituent: Chloride Analysis Run 1/17/2020 2:15 PM View: Trend Test  
 Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

### Sen's Slope Estimator

GS-AP-MW-8 (bg)

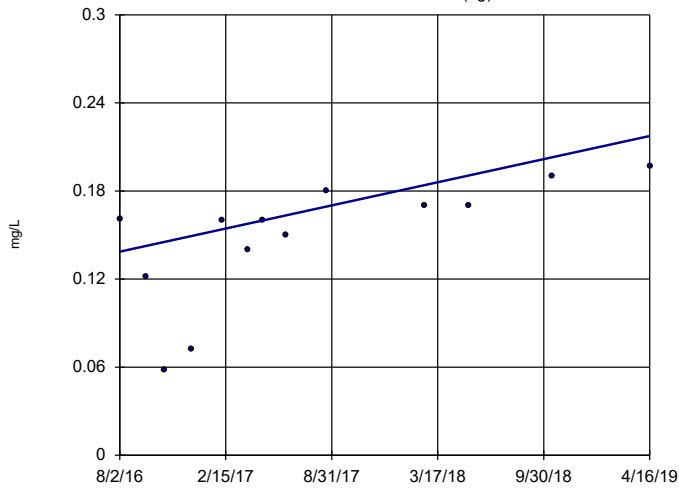


n = 14  
 Slope = 0.009456  
 units per year.  
 Mann-Kendall  
 statistic = 23  
 critical = 48  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 (α = 0.005 per  
 tail).

Constituent: Fluoride Analysis Run 1/17/2020 2:15 PM View: Trend Test  
 Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

### Sen's Slope Estimator

GS-AP-MW-13 (bg)

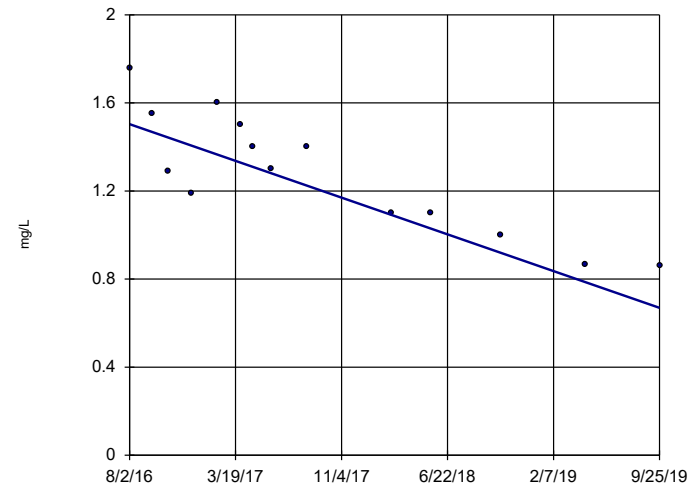


n = 13  
 Slope = 0.02914  
 units per year.  
 Mann-Kendall  
 statistic = 48  
 critical = 43  
 Increasing trend  
 significant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).

Constituent: Fluoride Analysis Run 1/17/2020 2:15 PM View: Trend Test  
 Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

### Sen's Slope Estimator

GS-AP-MW-2

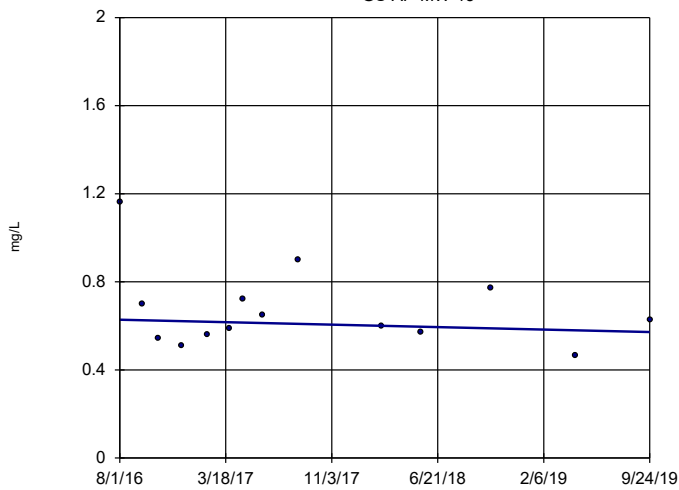


n = 14  
 Slope = -0.2648  
 units per year.  
 Mann-Kendall  
 statistic = -65  
 critical = -48  
 Decreasing trend  
 significant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).

Constituent: Fluoride Analysis Run 1/17/2020 2:15 PM View: Trend Test  
 Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

### Sen's Slope Estimator

GS-AP-MW-15

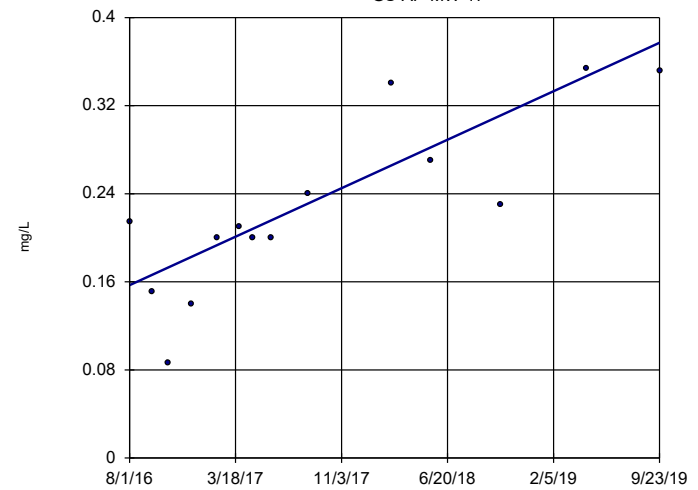


n = 14  
 Slope = -0.01768  
 units per year.  
 Mann-Kendall  
 statistic = -3  
 critical = -48  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).

Constituent: Fluoride Analysis Run 1/17/2020 2:15 PM View: Trend Test  
 Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

### Sen's Slope Estimator

GS-AP-MW-17

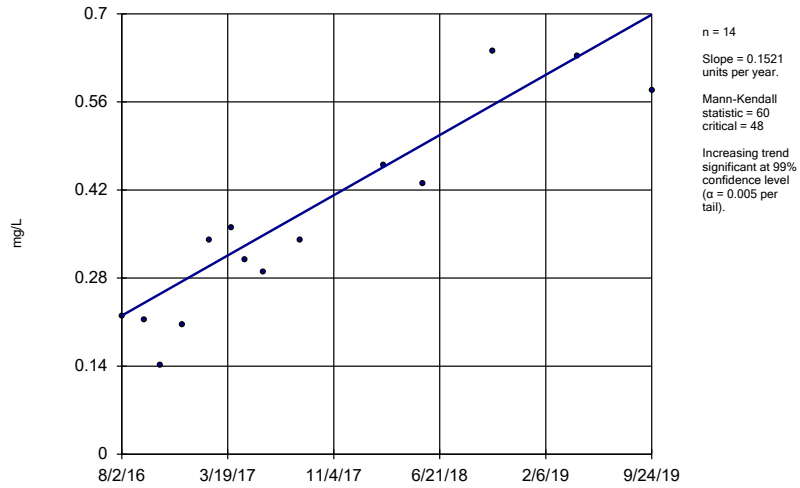


n = 14  
 Slope = 0.06999  
 units per year.  
 Mann-Kendall  
 statistic = 56  
 critical = 48  
 Increasing trend  
 significant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).

Constituent: Fluoride Analysis Run 1/17/2020 2:15 PM View: Trend Test  
 Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

### Sen's Slope Estimator

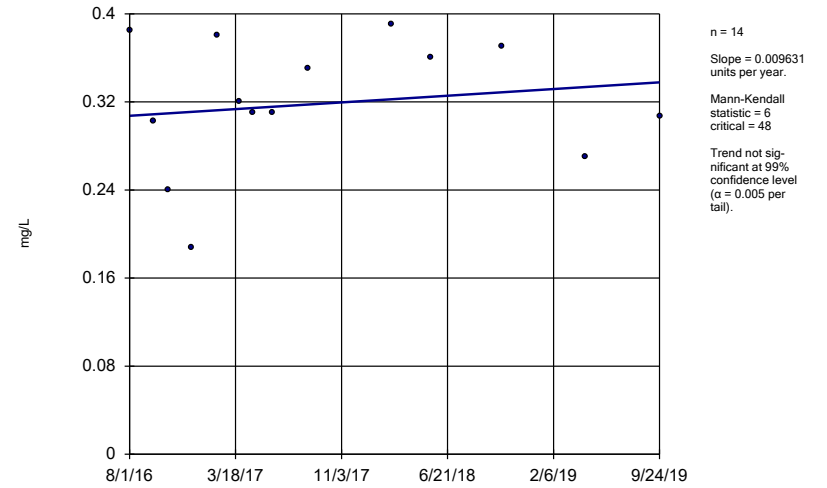
GS-AP-MW-18



Constituent: Fluoride Analysis Run 1/17/2020 2:15 PM View: Trend Test  
 Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

### Sen's Slope Estimator

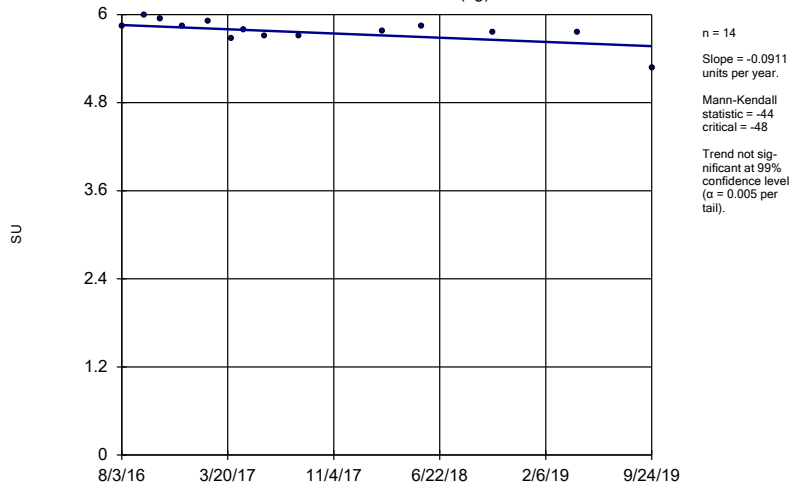
GS-AP-MW-19



Constituent: Fluoride Analysis Run 1/17/2020 2:15 PM View: Trend Test  
 Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

### Sen's Slope Estimator

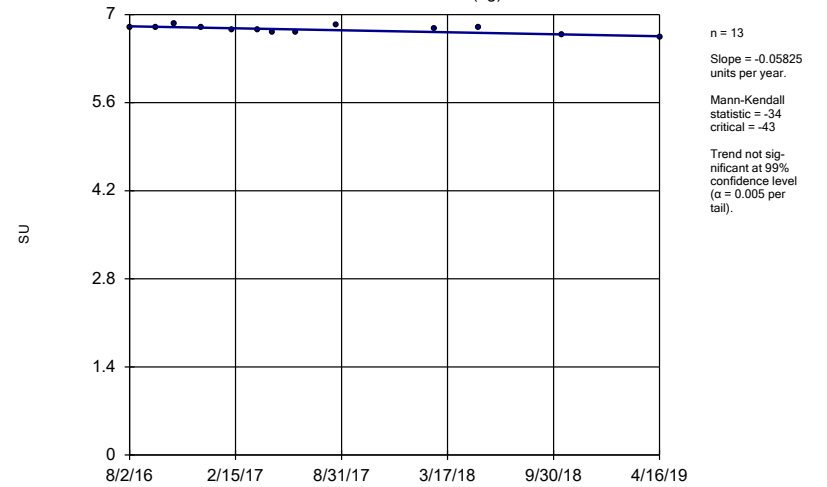
GS-AP-MW-8 (bg)



Constituent: pH Analysis Run 1/17/2020 2:15 PM View: Trend Test  
 Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

### Sen's Slope Estimator

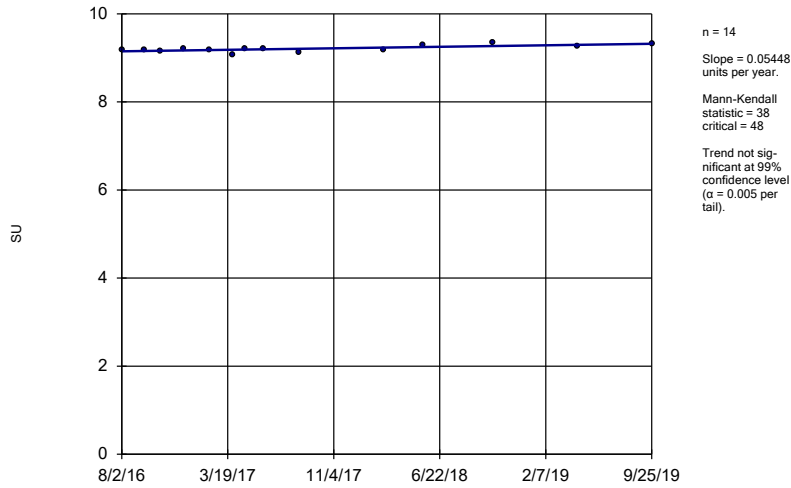
GS-AP-MW-13 (bg)



Constituent: pH Analysis Run 1/17/2020 2:15 PM View: Trend Test  
 Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

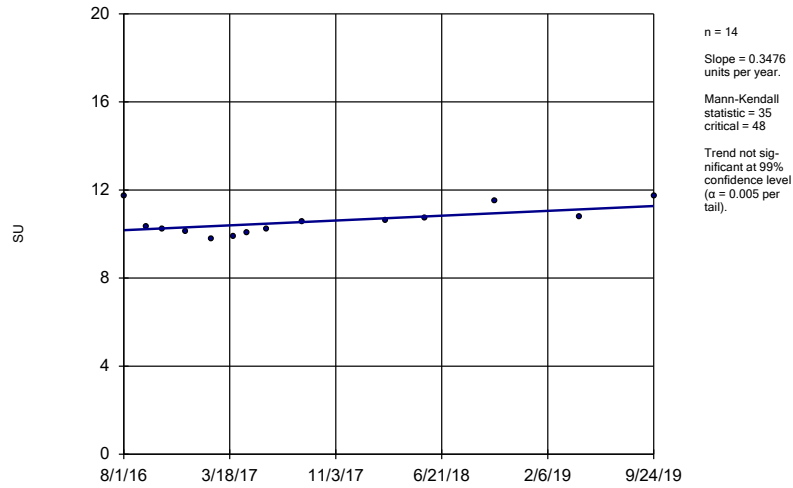
### Sen's Slope Estimator

GS-AP-MW-2



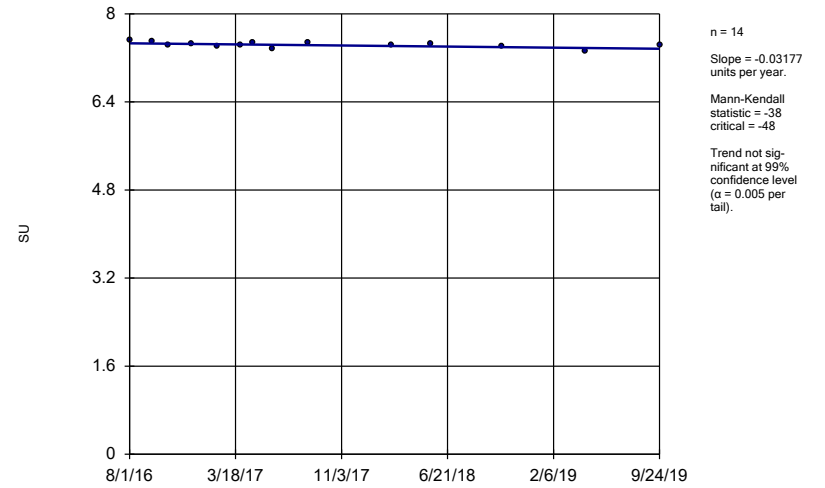


### Sen's Slope Estimator GS-AP-MW-15



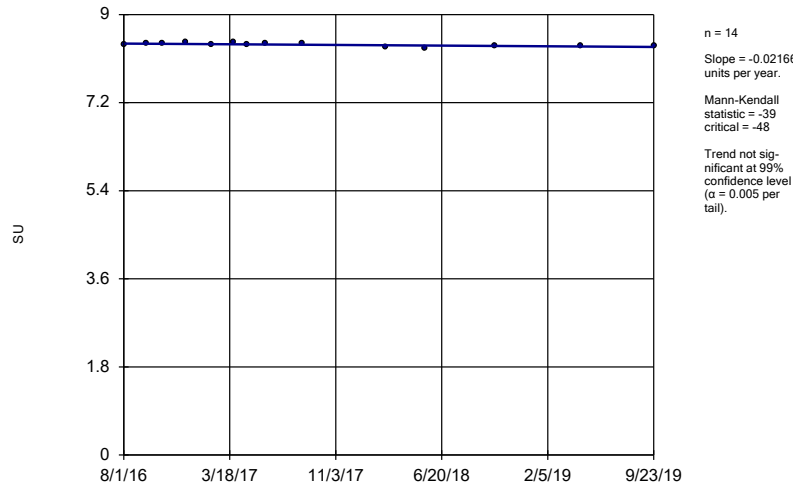
Constituent: pH Analysis Run 1/17/2020 2:15 PM View: Trend Test  
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

### Sen's Slope Estimator GS-AP-MW-16D



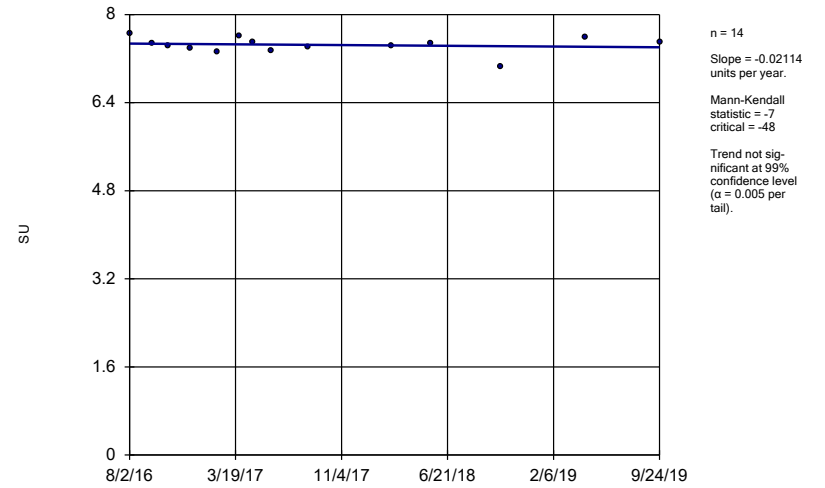
Constituent: pH Analysis Run 1/17/2020 2:15 PM View: Trend Test  
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

### Sen's Slope Estimator GS-AP-MW-17



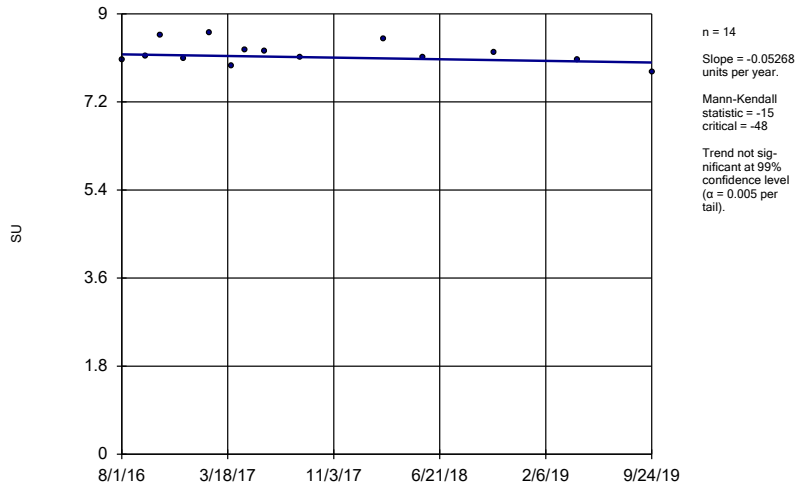
Constituent: pH Analysis Run 1/17/2020 2:15 PM View: Trend Test  
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

### Sen's Slope Estimator GS-AP-MW-18



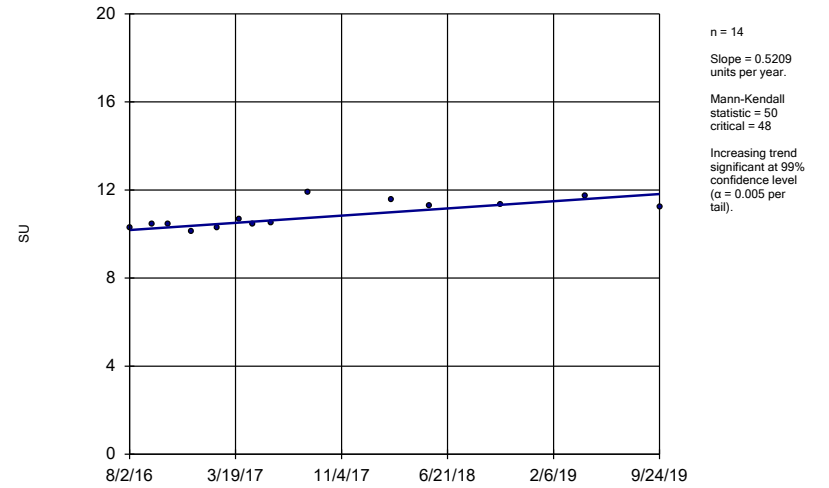
Constituent: pH Analysis Run 1/17/2020 2:15 PM View: Trend Test  
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sen's Slope Estimator  
GS-AP-MW-19



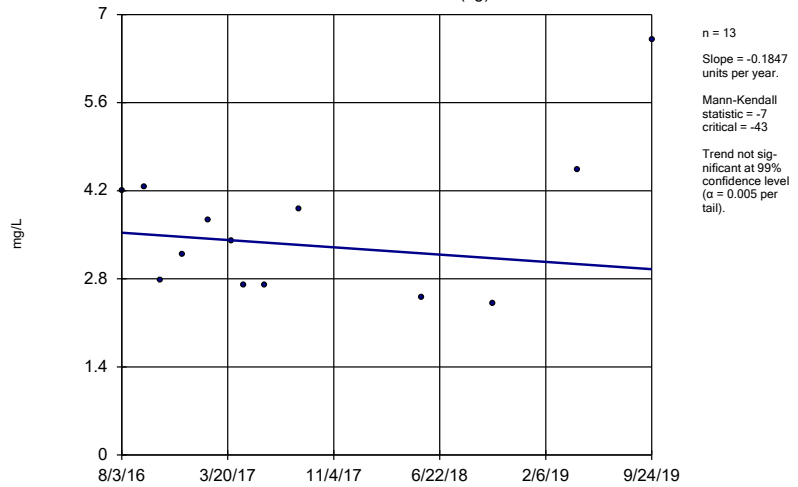
Constituent: pH Analysis Run 1/17/2020 2:15 PM View: Trend Test  
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sen's Slope Estimator  
GS-AP-MW-21



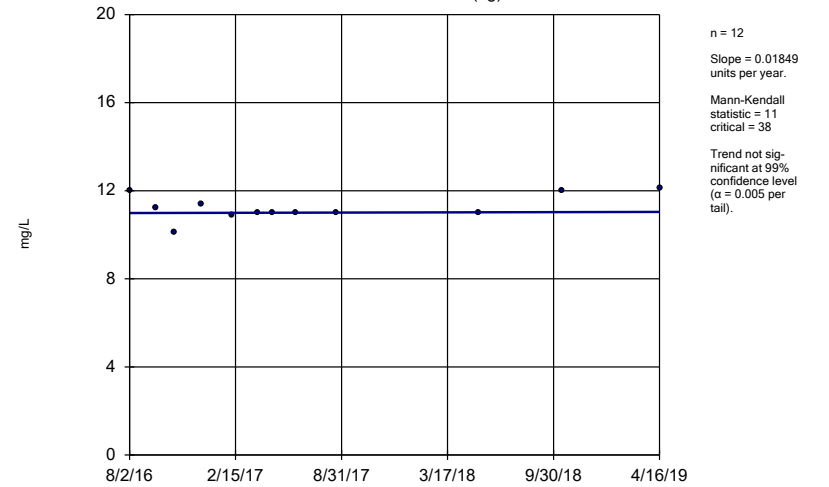
Constituent: pH Analysis Run 1/17/2020 2:15 PM View: Trend Test  
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sen's Slope Estimator  
GS-AP-MW-8 (bg)



Constituent: Sulfate Analysis Run 1/17/2020 2:15 PM View: Trend Test  
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

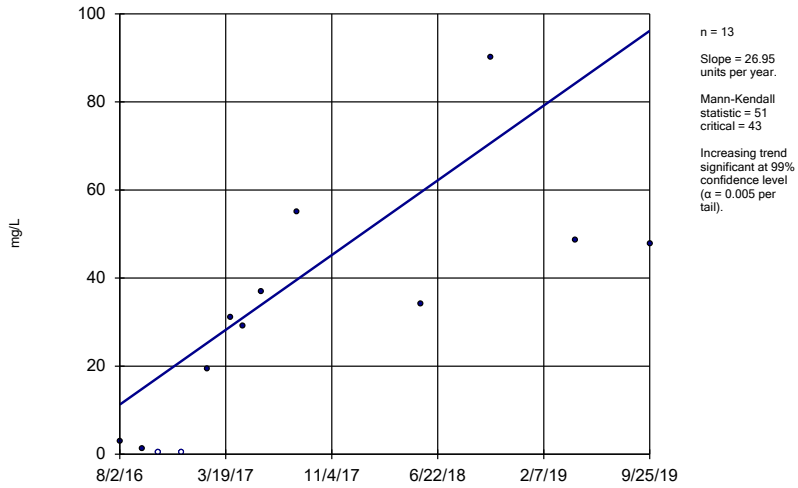
Sen's Slope Estimator  
GS-AP-MW-13 (bg)



Constituent: Sulfate Analysis Run 1/17/2020 2:15 PM View: Trend Test  
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

### Sen's Slope Estimator

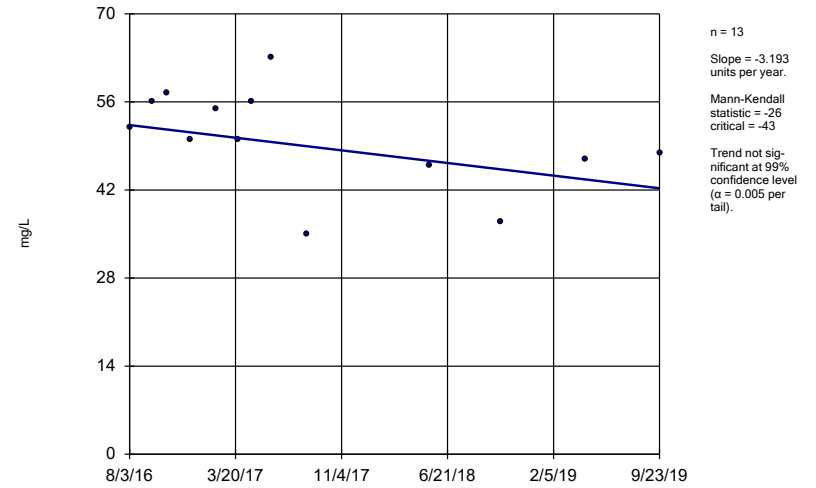
GS-AP-MW-2



Constituent: Sulfate Analysis Run 1/17/2020 2:15 PM View: Trend Test  
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

### Sen's Slope Estimator

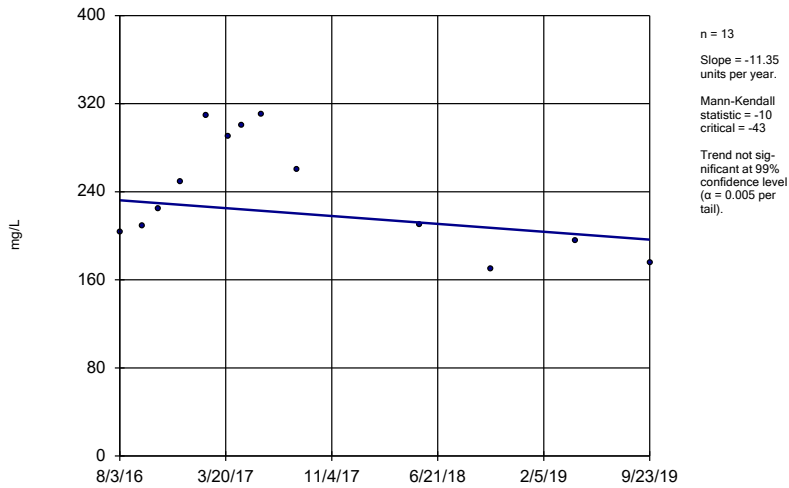
GS-AP-MW-6D



Constituent: Sulfate Analysis Run 1/17/2020 2:15 PM View: Trend Test  
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

### Sen's Slope Estimator

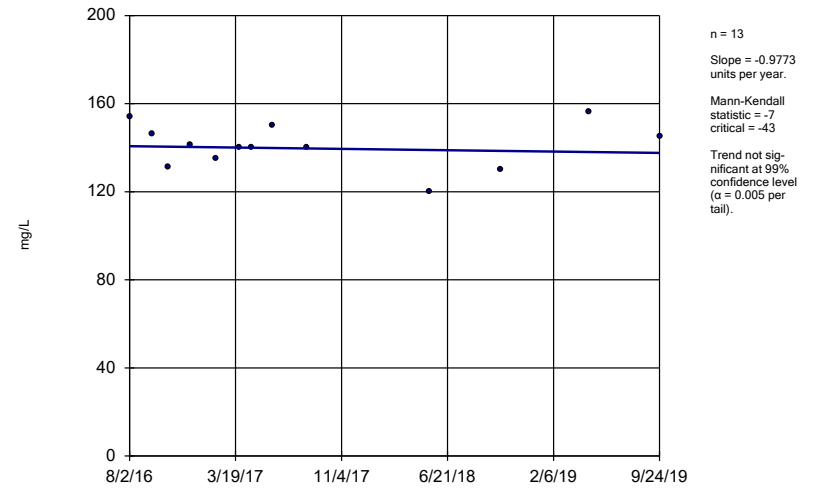
GS-AP-MW-6S



Constituent: Sulfate Analysis Run 1/17/2020 2:15 PM View: Trend Test  
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

### Sen's Slope Estimator

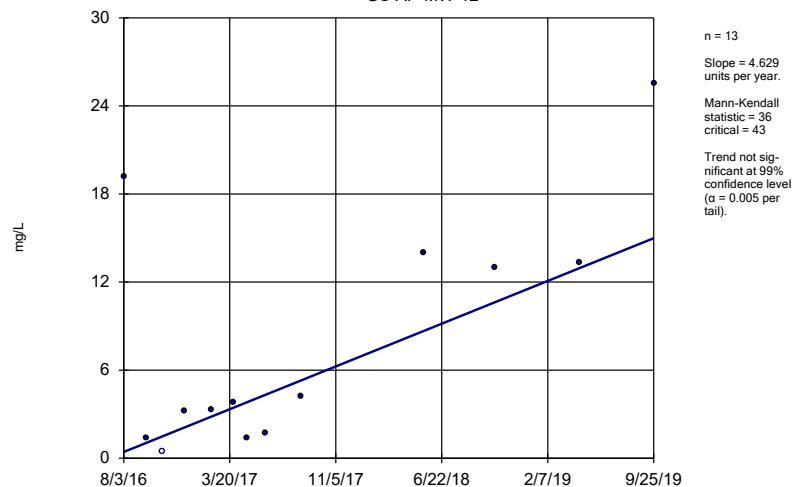
GS-AP-MW-7



Constituent: Sulfate Analysis Run 1/17/2020 2:15 PM View: Trend Test  
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

### Sen's Slope Estimator

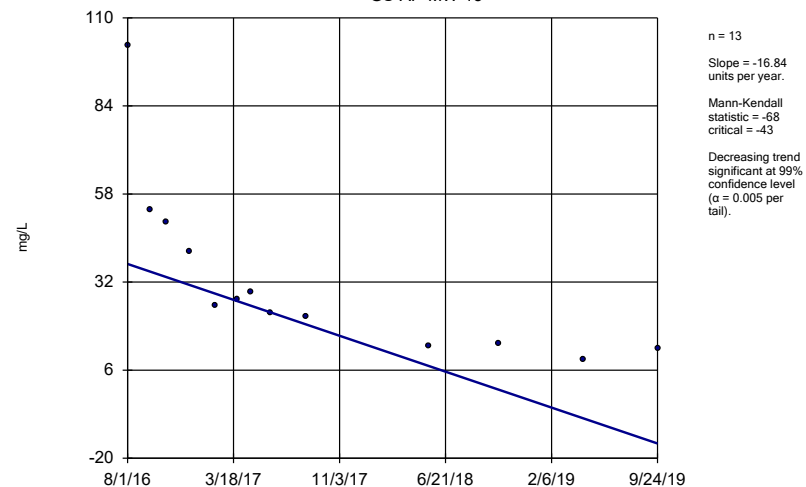
GS-AP-MW-12



Constituent: Sulfate Analysis Run 1/17/2020 2:15 PM View: Trend Test  
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

### Sen's Slope Estimator

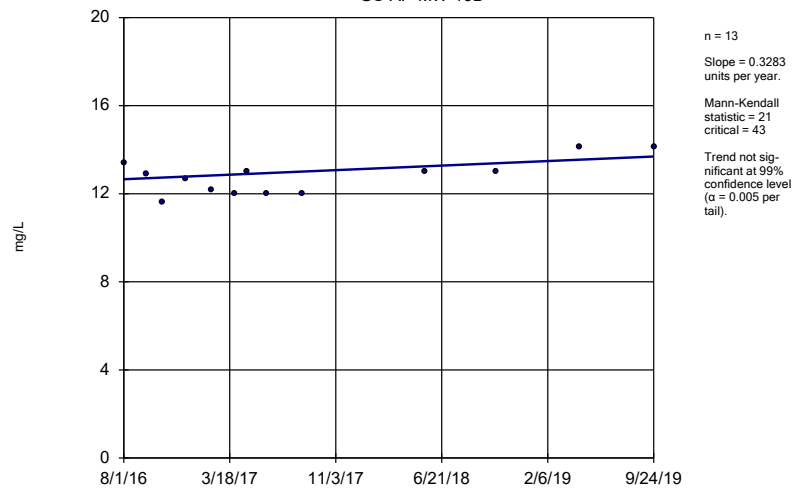
GS-AP-MW-15



Constituent: Sulfate Analysis Run 1/17/2020 2:15 PM View: Trend Test  
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

### Sen's Slope Estimator

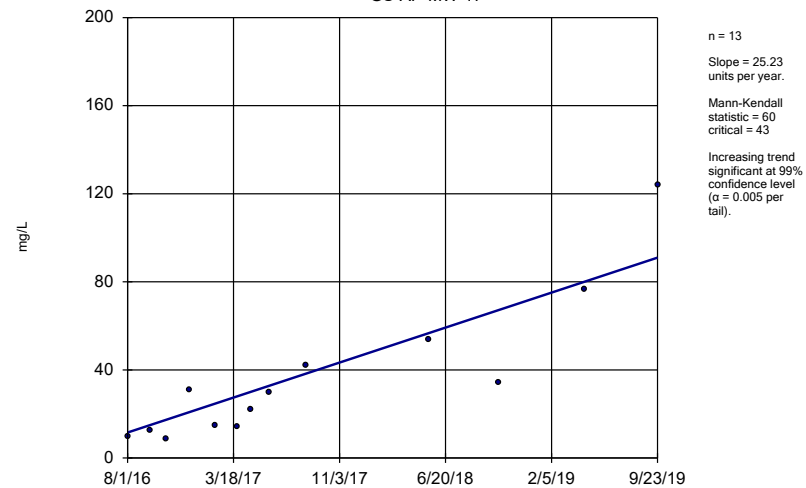
GS-AP-MW-16D



Constituent: Sulfate Analysis Run 1/17/2020 2:15 PM View: Trend Test  
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

### Sen's Slope Estimator

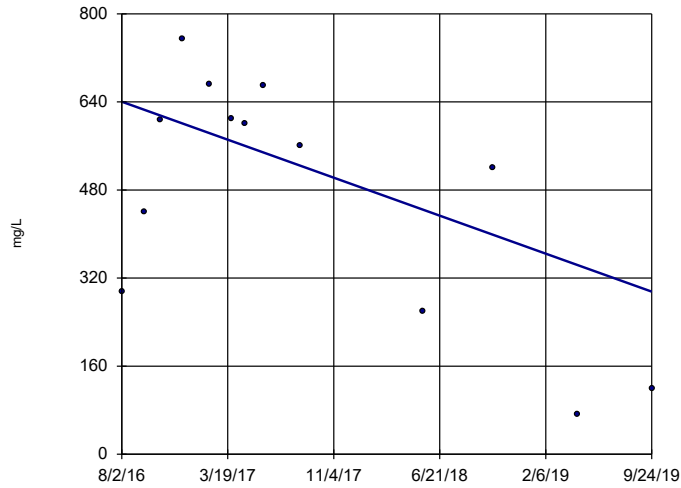
GS-AP-MW-17



Constituent: Sulfate Analysis Run 1/17/2020 2:15 PM View: Trend Test  
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

### Sen's Slope Estimator

GS-AP-MW-18

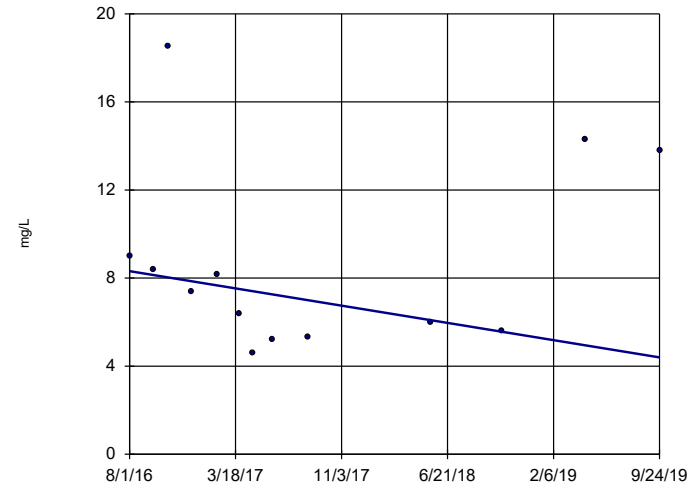


n = 13  
 Slope = -109.6  
 units per year.  
 Mann-Kendall  
 statistic = -28  
 critical = -43  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 (α = 0.005 per  
 tail).

Constituent: Sulfate Analysis Run 1/17/2020 2:15 PM View: Trend Test  
 Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

### Sen's Slope Estimator

GS-AP-MW-19

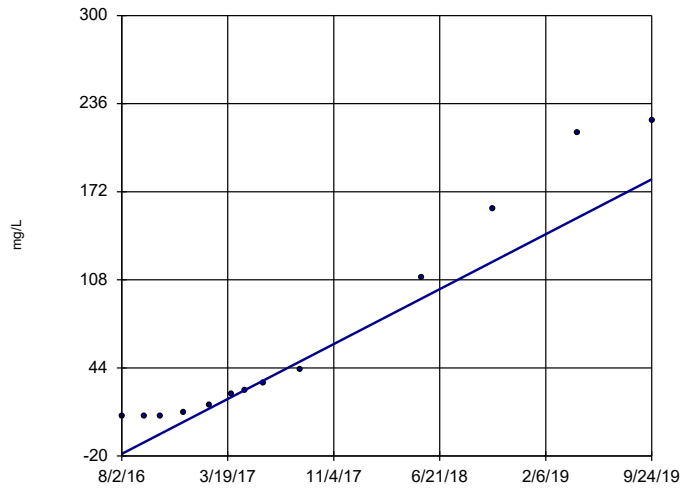


n = 13  
 Slope = -1.242  
 units per year.  
 Mann-Kendall  
 statistic = -14  
 critical = -43  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 (α = 0.005 per  
 tail).

Constituent: Sulfate Analysis Run 1/17/2020 2:15 PM View: Trend Test  
 Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

### Sen's Slope Estimator

GS-AP-MW-21

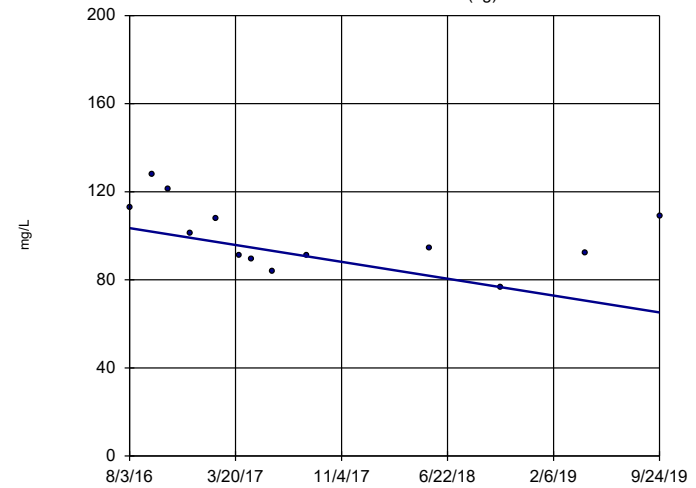


n = 13  
 Slope = 63.41  
 units per year.  
 Mann-Kendall  
 statistic = 72  
 critical = 43  
 Increasing trend  
 significant at 99%  
 confidence level  
 (α = 0.005 per  
 tail).

Constituent: Sulfate Analysis Run 1/17/2020 2:16 PM View: Trend Test  
 Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

### Sen's Slope Estimator

GS-AP-MW-8 (bg)

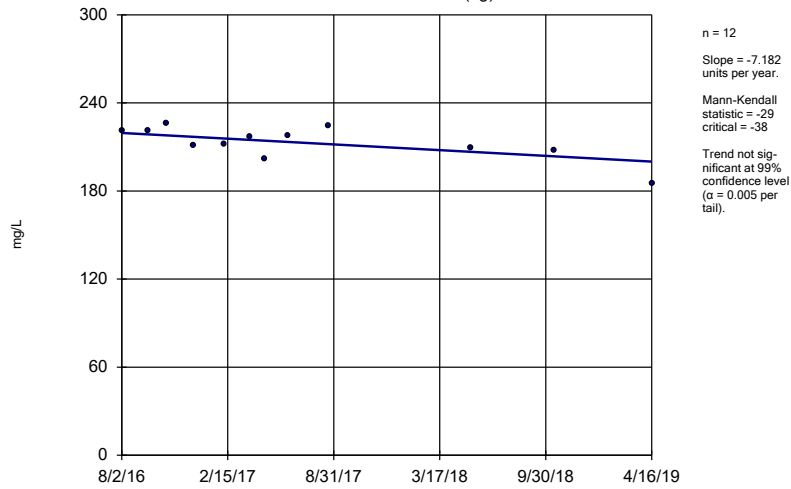


n = 13  
 Slope = -12.19  
 units per year.  
 Mann-Kendall  
 statistic = -30  
 critical = -43  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 (α = 0.005 per  
 tail).

Constituent: TDS Analysis Run 1/17/2020 2:16 PM View: Trend Test  
 Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

### Sen's Slope Estimator

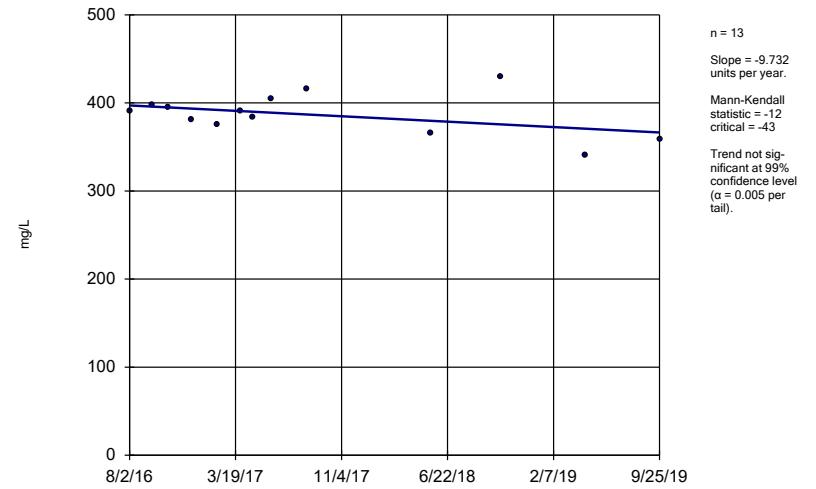
GS-AP-MW-13 (bg)



Constituent: TDS Analysis Run 1/17/2020 2:16 PM View: Trend Test  
 Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

### Sen's Slope Estimator

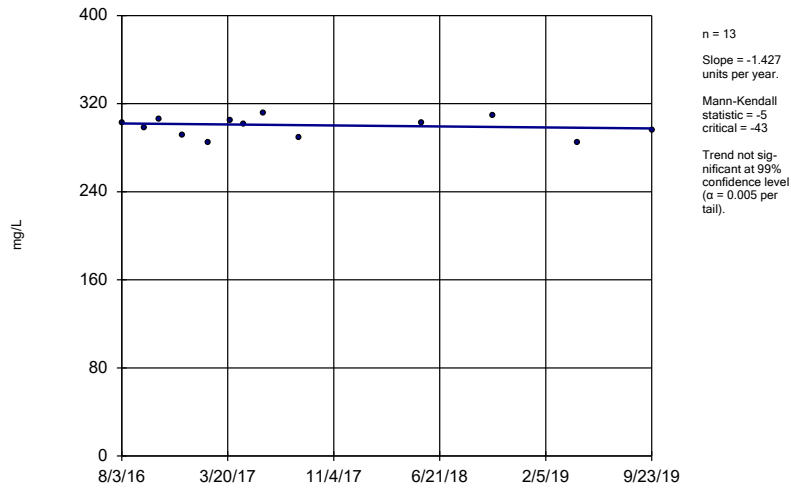
GS-AP-MW-2



Constituent: TDS Analysis Run 1/17/2020 2:16 PM View: Trend Test  
 Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

### Sen's Slope Estimator

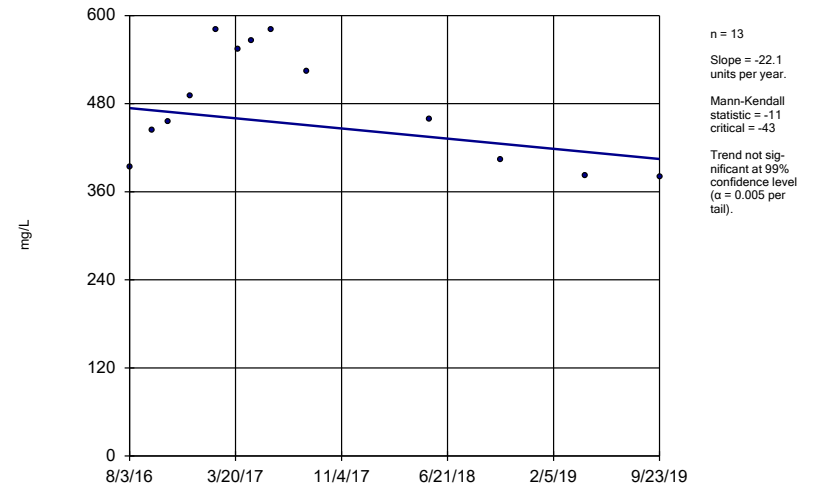
GS-AP-MW-6D



Constituent: TDS Analysis Run 1/17/2020 2:16 PM View: Trend Test  
 Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

### Sen's Slope Estimator

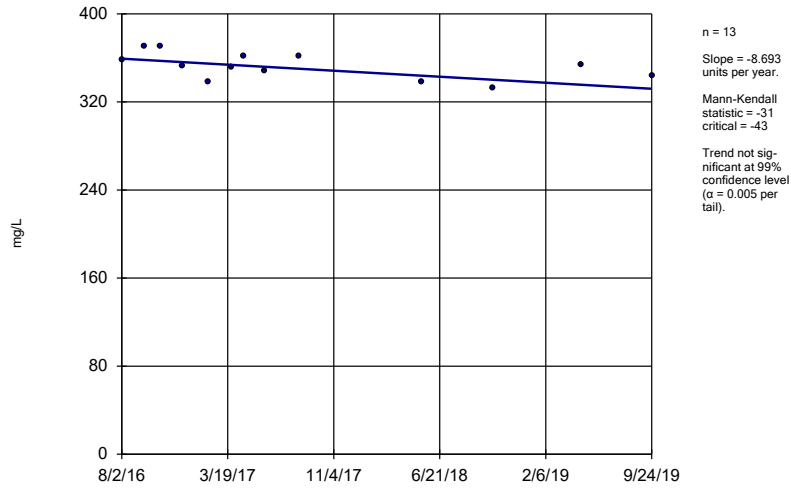
GS-AP-MW-6S



Constituent: TDS Analysis Run 1/17/2020 2:16 PM View: Trend Test  
 Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

### Sen's Slope Estimator

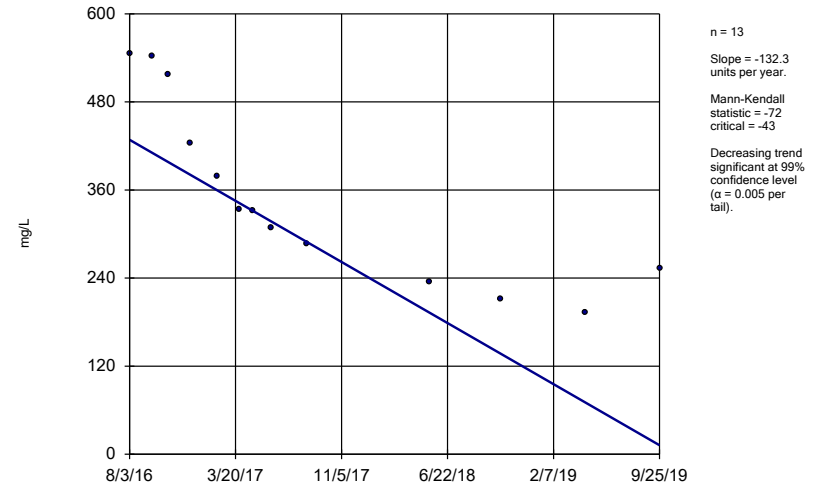
GS-AP-MW-7



Constituent: TDS Analysis Run 1/17/2020 2:16 PM View: Trend Test  
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

### Sen's Slope Estimator

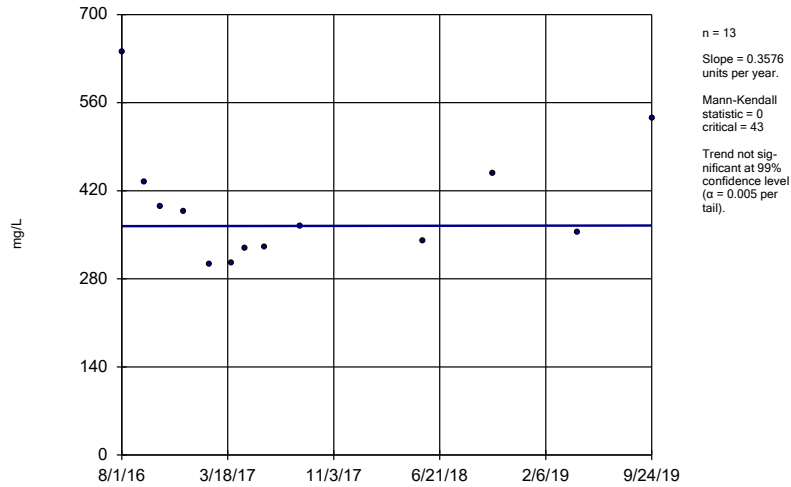
GS-AP-MW-12



Constituent: TDS Analysis Run 1/17/2020 2:16 PM View: Trend Test  
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

### Sen's Slope Estimator

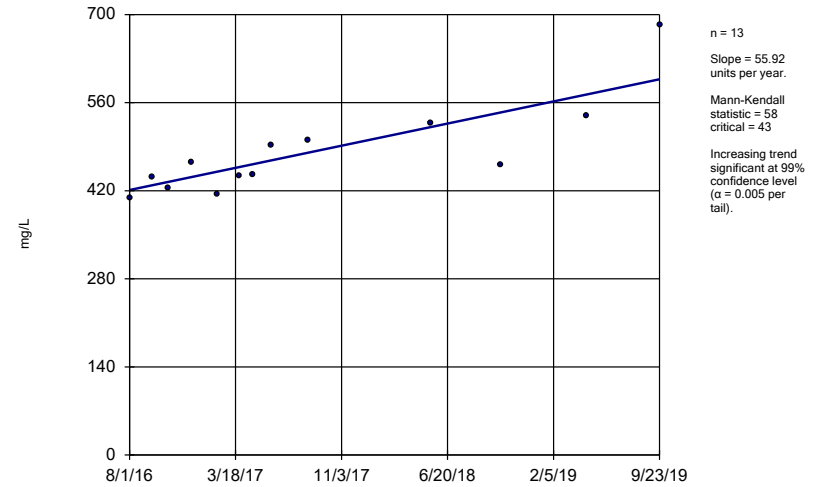
GS-AP-MW-15



Constituent: TDS Analysis Run 1/17/2020 2:16 PM View: Trend Test  
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

### Sen's Slope Estimator

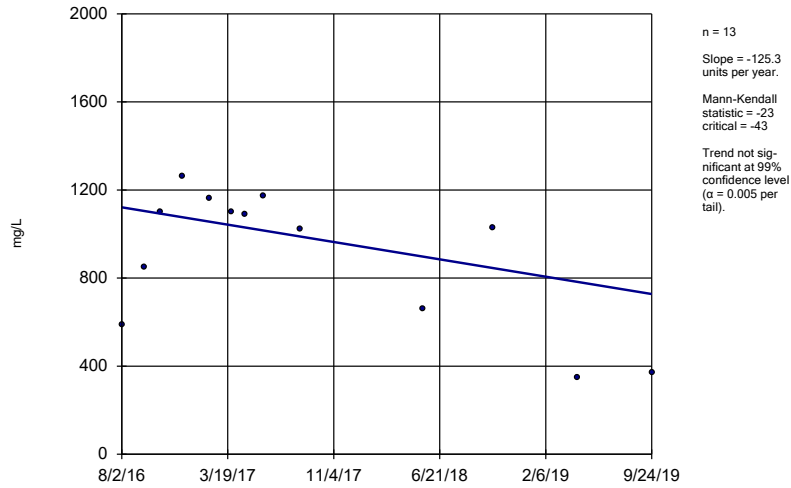
GS-AP-MW-17



Constituent: TDS Analysis Run 1/17/2020 2:16 PM View: Trend Test  
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

### Sen's Slope Estimator

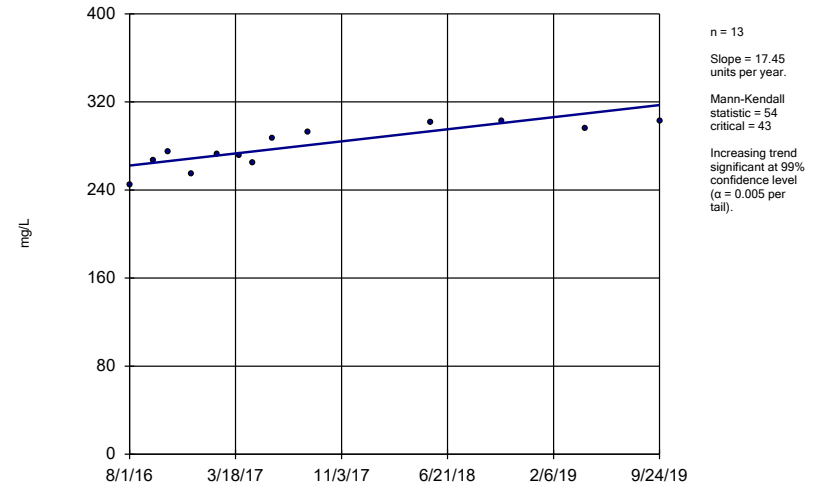
GS-AP-MW-18



Constituent: TDS Analysis Run 1/17/2020 2:16 PM View: Trend Test  
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

### Sen's Slope Estimator

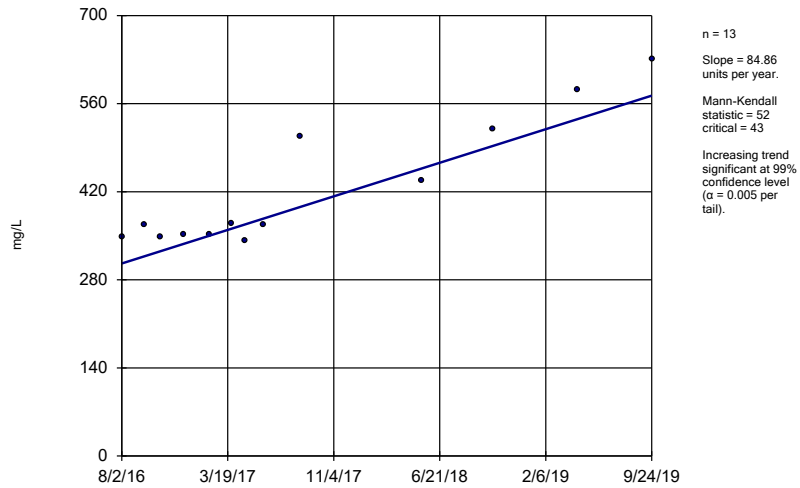
GS-AP-MW-19



Constituent: TDS Analysis Run 1/17/2020 2:16 PM View: Trend Test  
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

### Sen's Slope Estimator

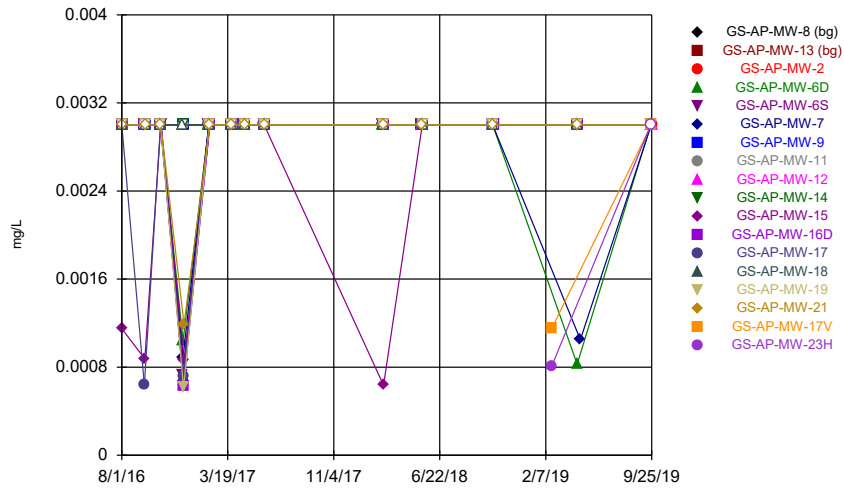
GS-AP-MW-21



Constituent: TDS Analysis Run 1/17/2020 2:16 PM View: Trend Test  
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

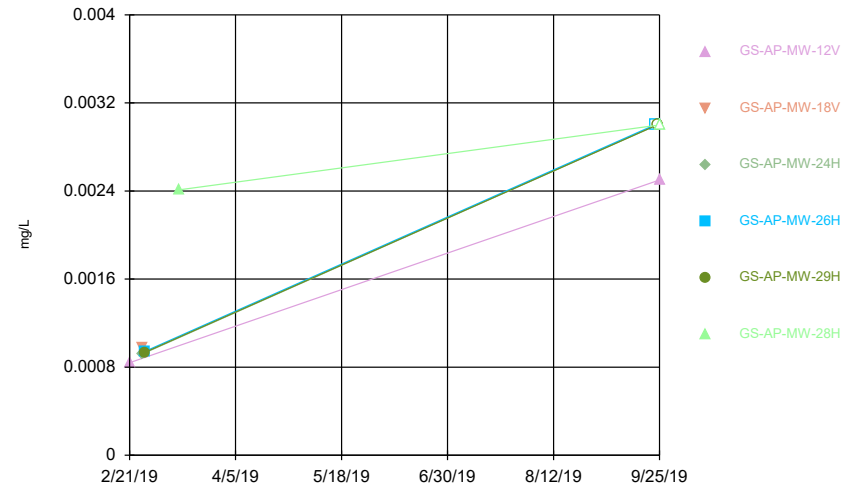


Time Series



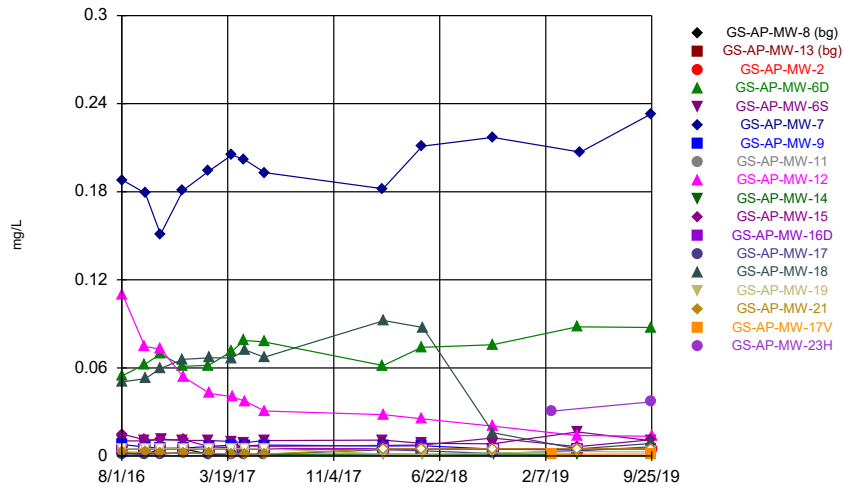
Constituent: Antimony Analysis Run 1/17/2020 2:19 PM View: Time Series  
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

Time Series



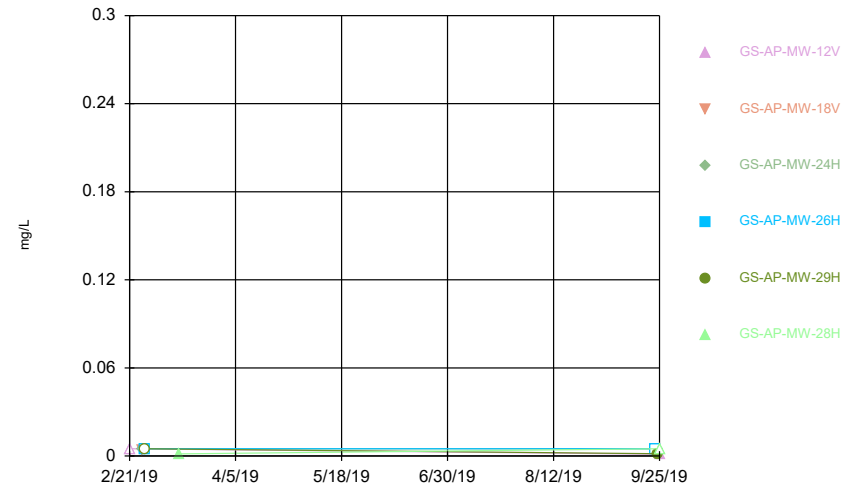
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Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

Time Series



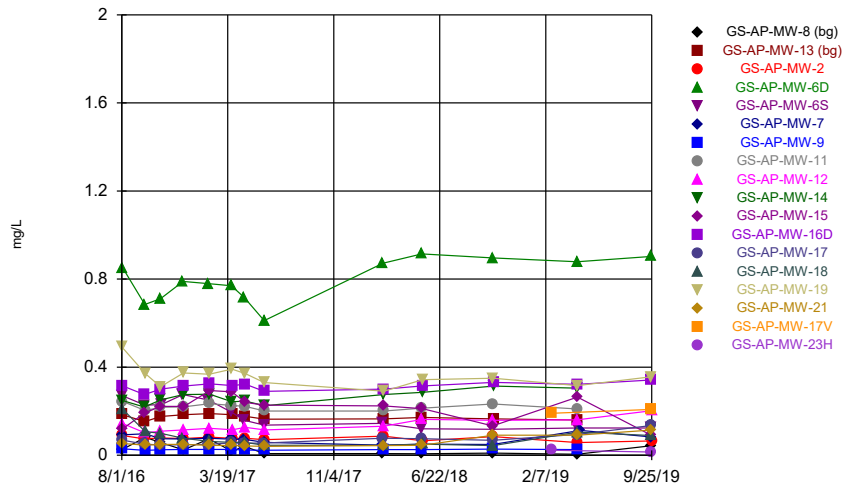
Constituent: Arsenic Analysis Run 1/17/2020 2:19 PM View: Time Series  
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

Time Series



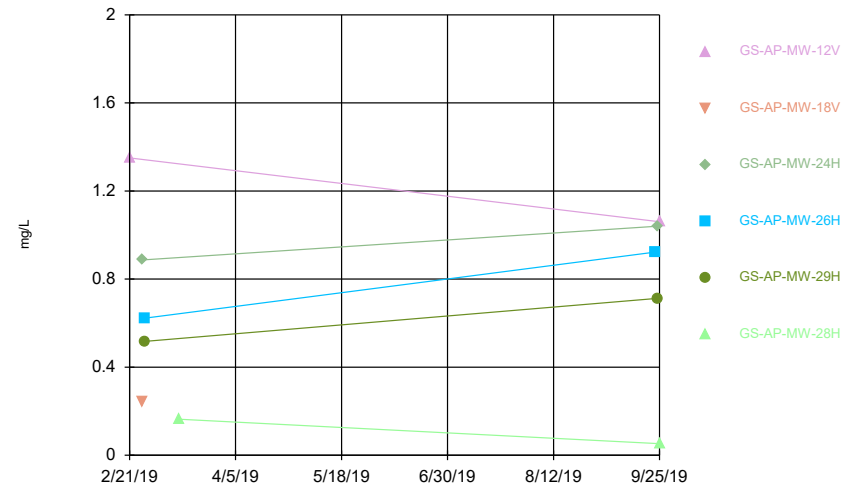
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Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

Time Series



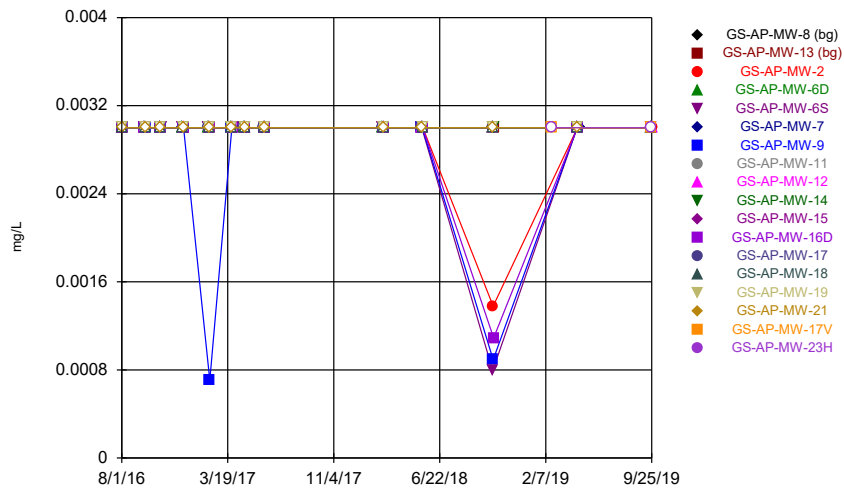
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Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

Time Series



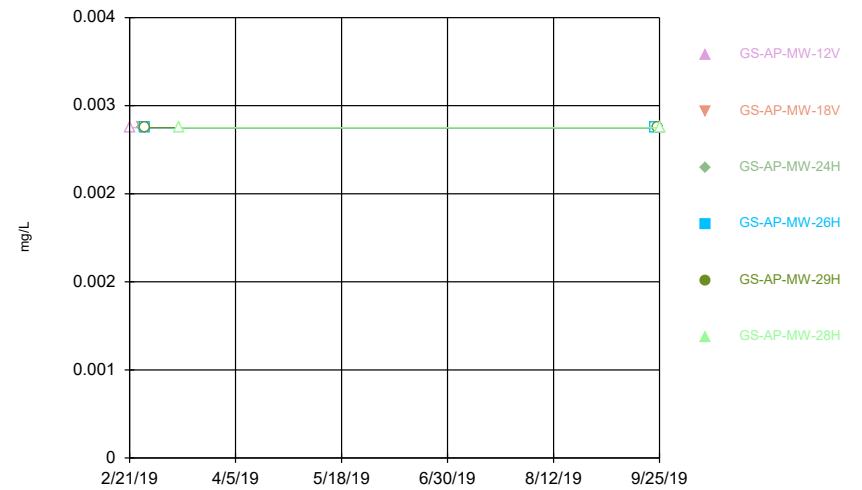
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Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

Time Series



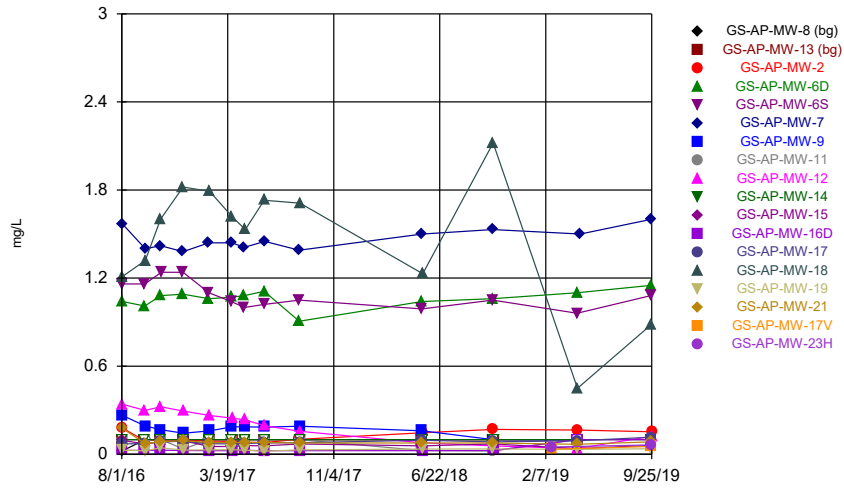
Constituent: Beryllium Analysis Run 1/17/2020 2:20 PM View: Time Series  
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

Time Series



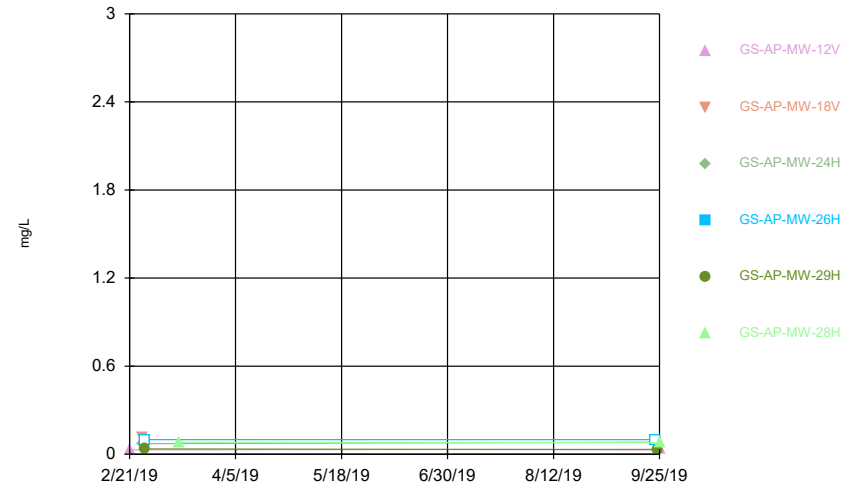
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Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

Time Series



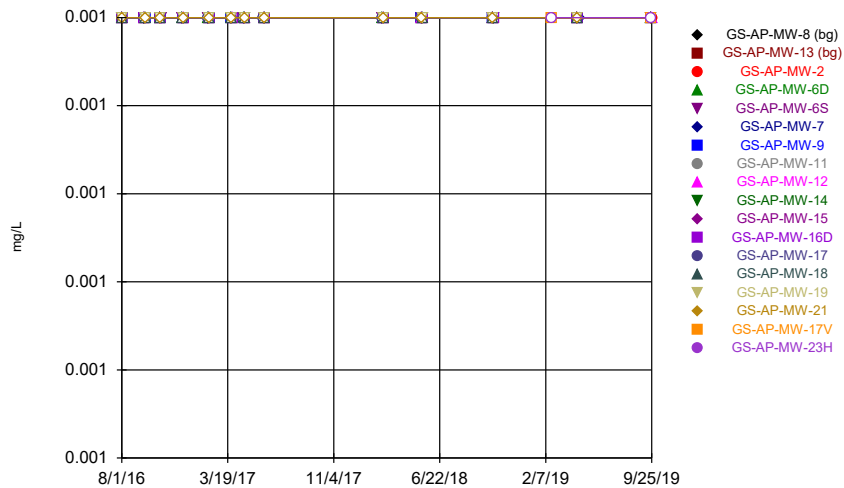
Constituent: Boron Analysis Run 1/17/2020 2:20 PM View: Time Series  
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

Time Series



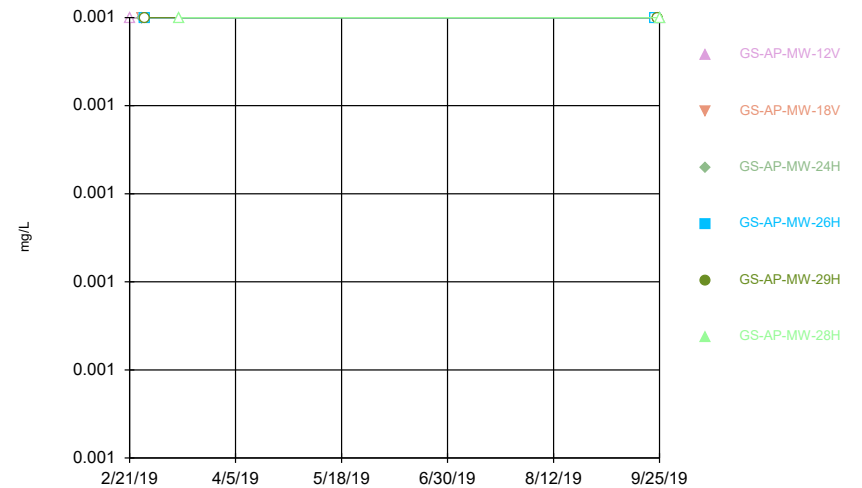
Constituent: Boron Analysis Run 1/17/2020 2:20 PM View: Time Series  
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

Time Series



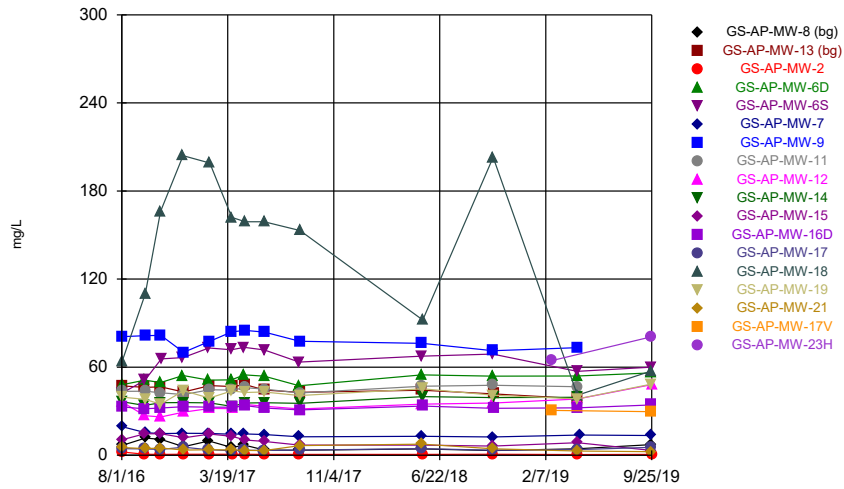
Constituent: Cadmium Analysis Run 1/17/2020 2:20 PM View: Time Series  
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

Time Series



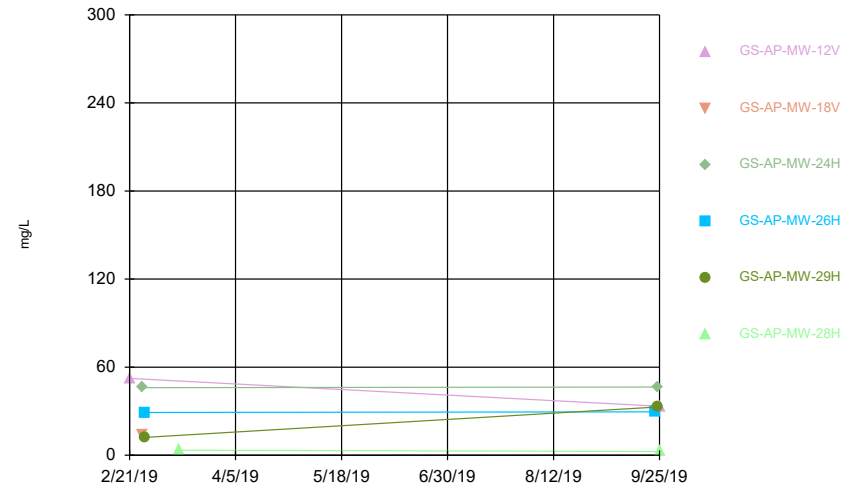
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Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

Time Series



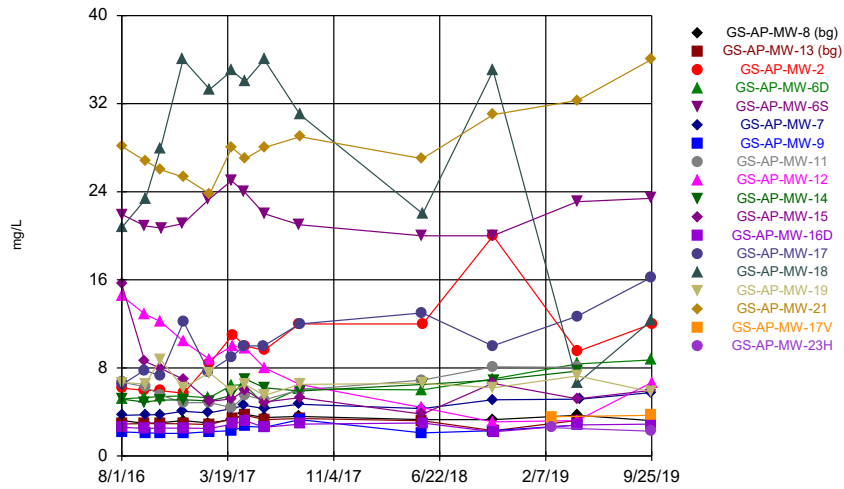
Constituent: Calcium Analysis Run 1/17/2020 2:20 PM View: Time Series  
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

Time Series



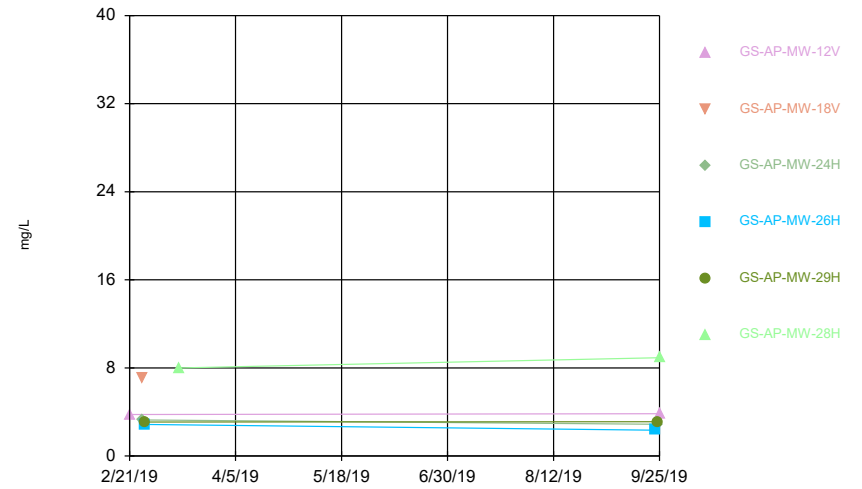
Constituent: Calcium Analysis Run 1/17/2020 2:20 PM View: Time Series  
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

Time Series



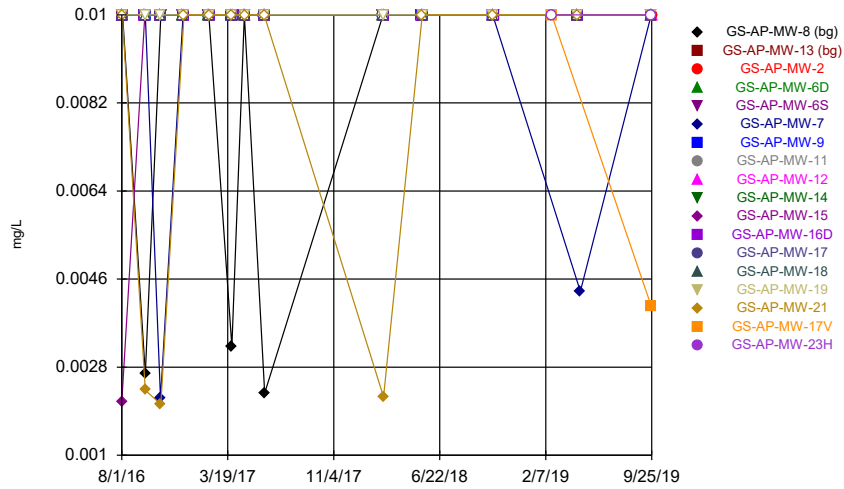
Constituent: Chloride Analysis Run 1/17/2020 2:20 PM View: Time Series  
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

Time Series

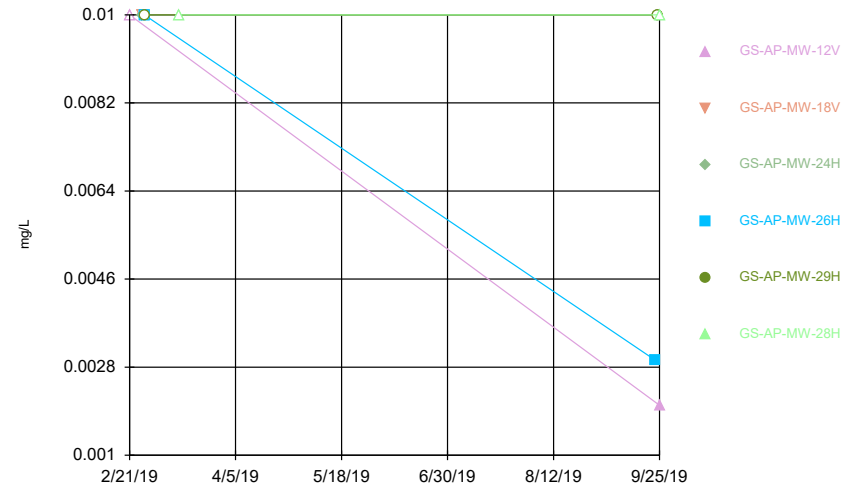


Constituent: Chloride Analysis Run 1/17/2020 2:20 PM View: Time Series  
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

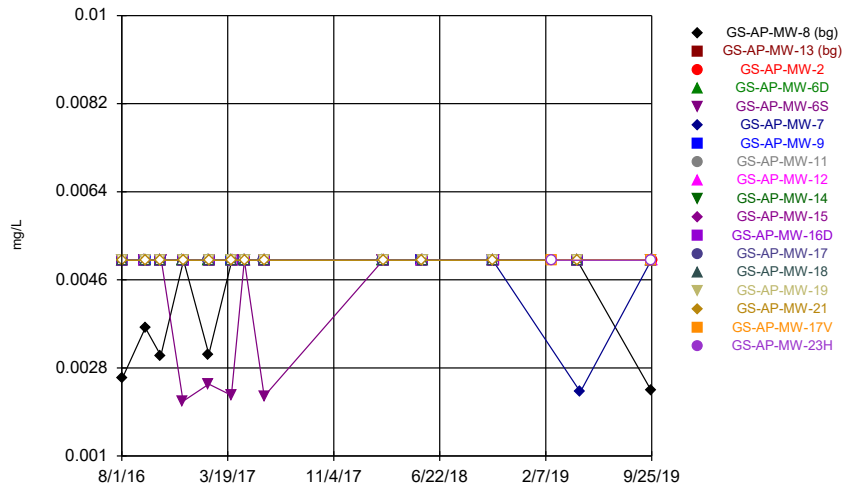
Time Series



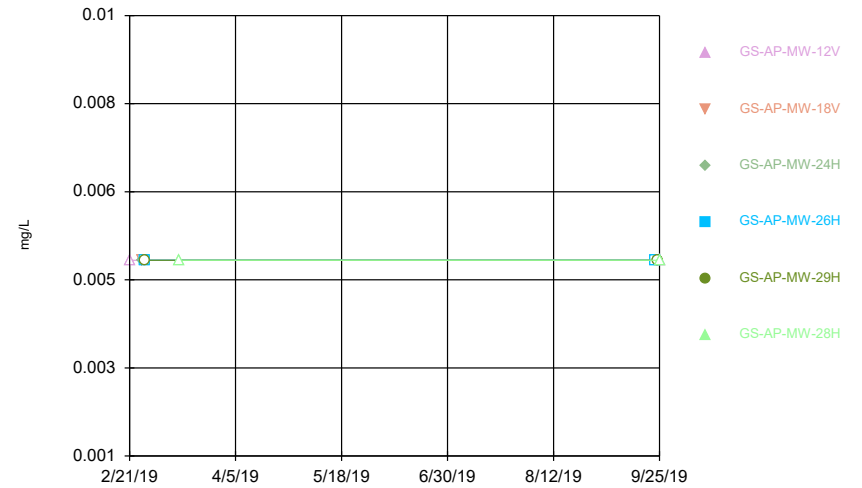
Time Series



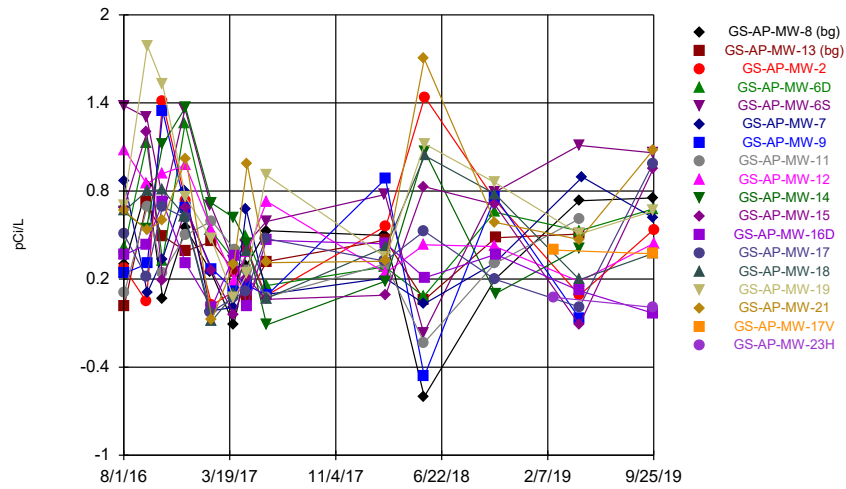
Time Series



Time Series

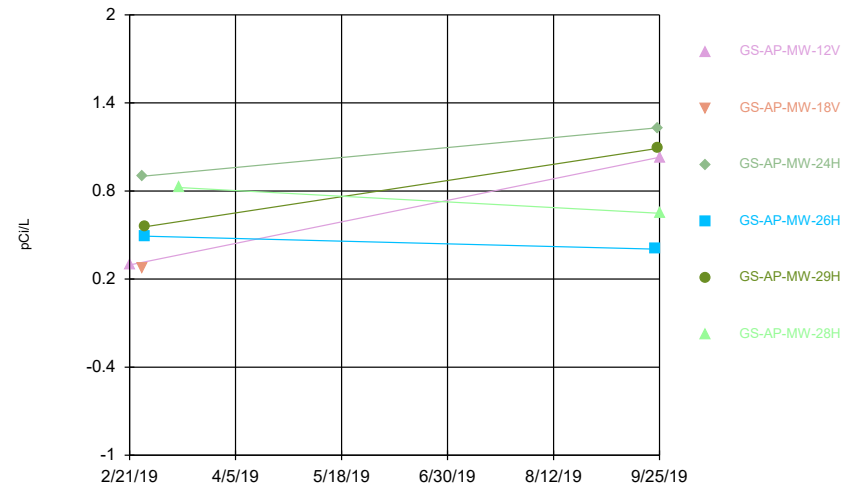


Time Series



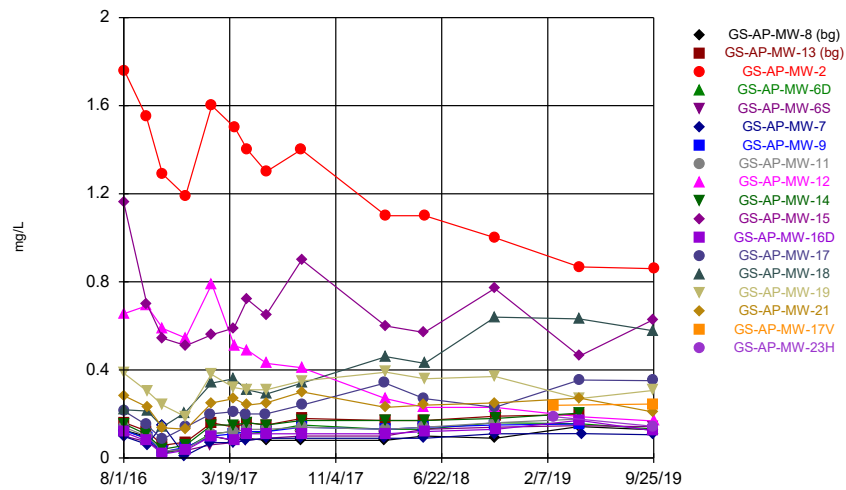
Constituent: Combined Radium 226 + 228 Analysis Run 1/17/2020 2:20 PM View: Time Series  
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

Time Series



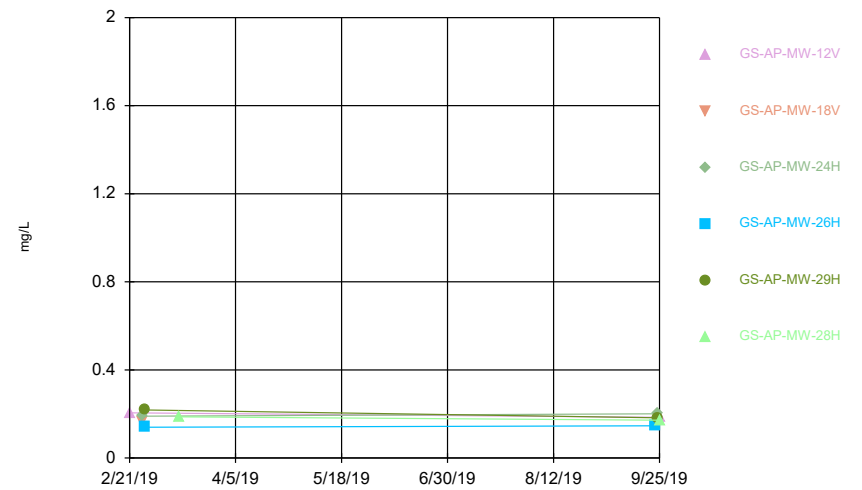
Constituent: Combined Radium 226 + 228 Analysis Run 1/17/2020 2:20 PM View: Time Series  
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

Time Series



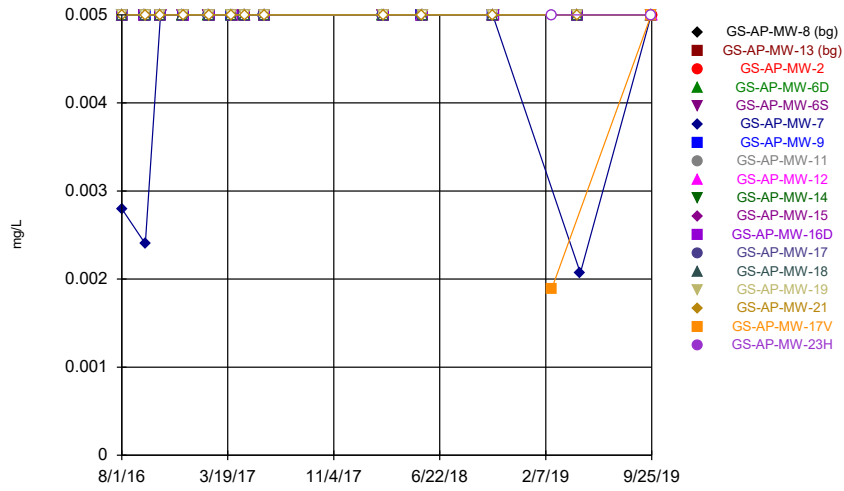
Constituent: Fluoride Analysis Run 1/17/2020 2:20 PM View: Time Series  
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

Time Series



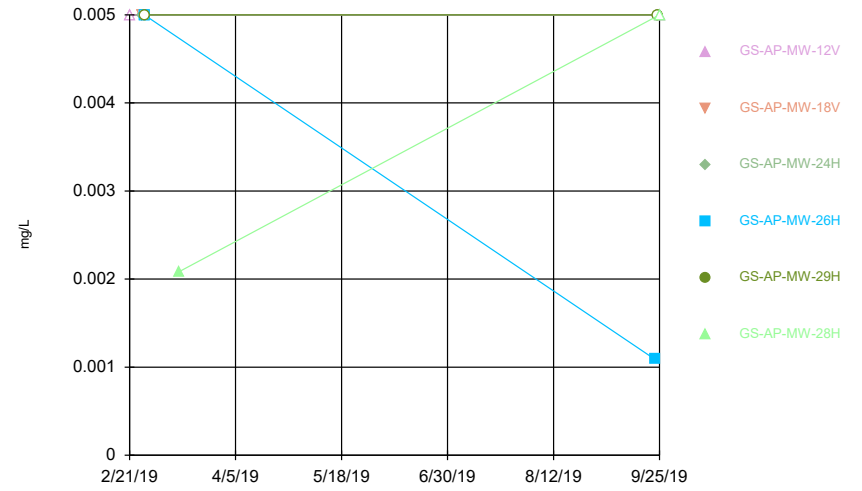
Constituent: Fluoride Analysis Run 1/17/2020 2:21 PM View: Time Series  
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

Time Series



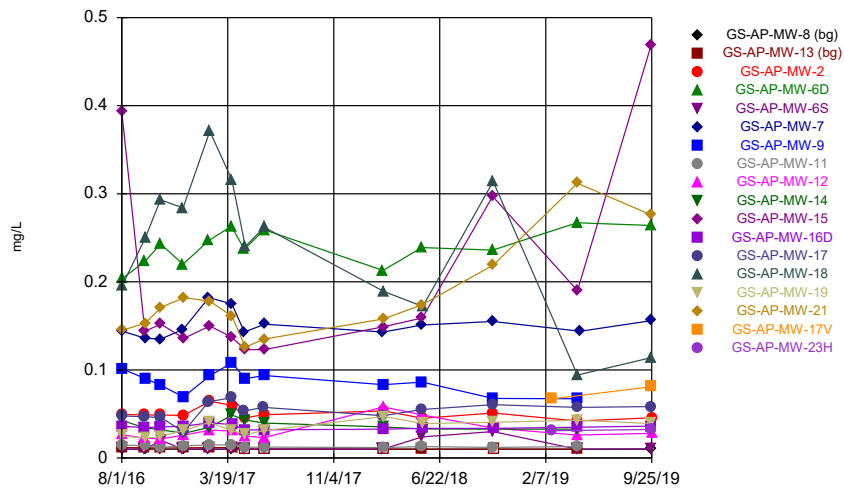
Constituent: Lead Analysis Run 1/17/2020 2:21 PM View: Time Series  
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

Time Series



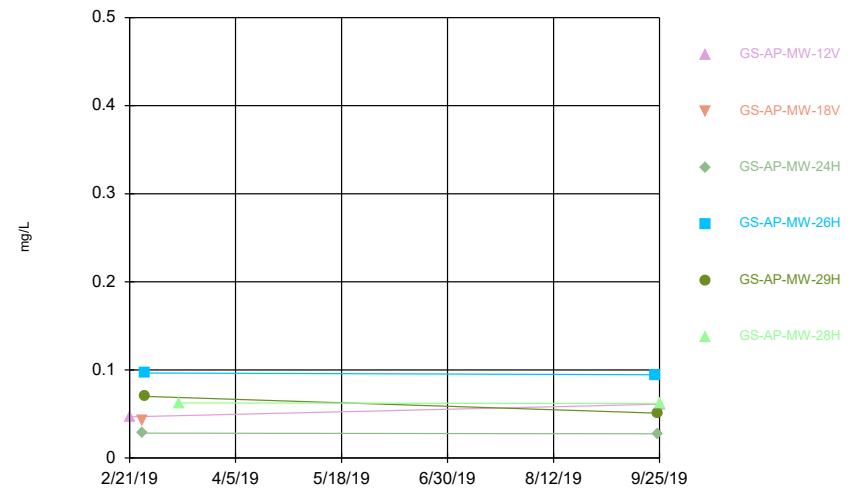
Constituent: Lead Analysis Run 1/17/2020 2:21 PM View: Time Series  
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

Time Series



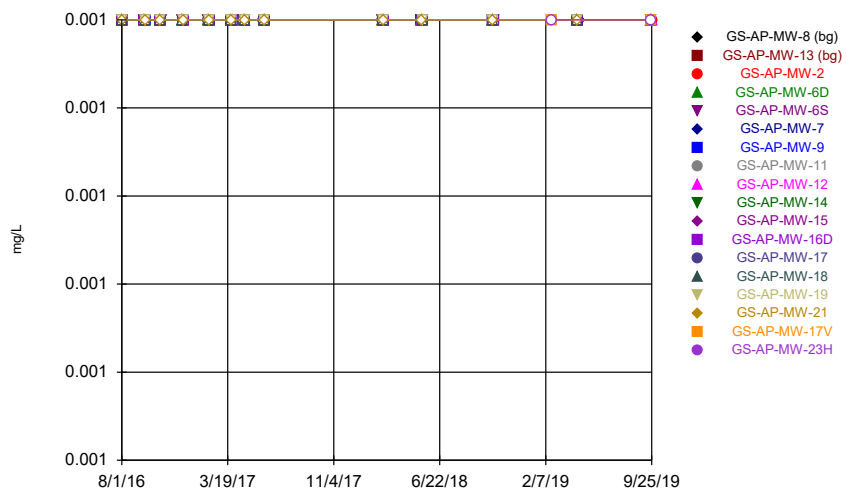
Constituent: Lithium Analysis Run 1/17/2020 2:21 PM View: Time Series  
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

Time Series



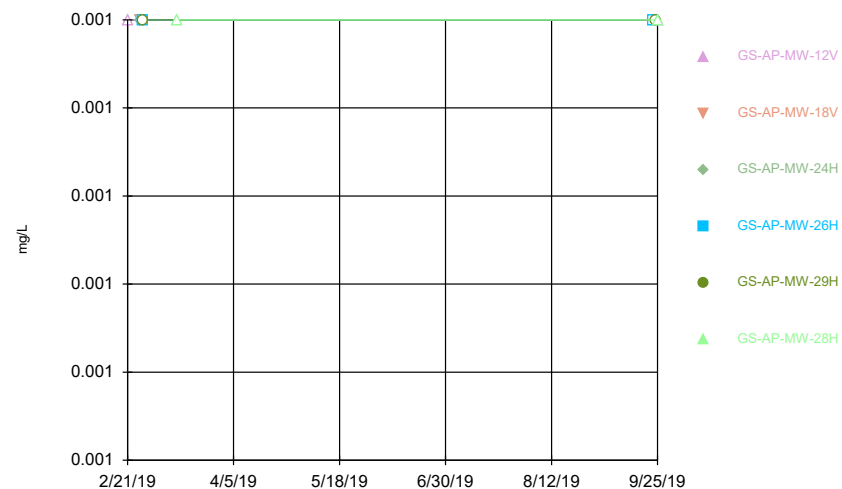
Constituent: Lithium Analysis Run 1/17/2020 2:21 PM View: Time Series  
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

### Time Series



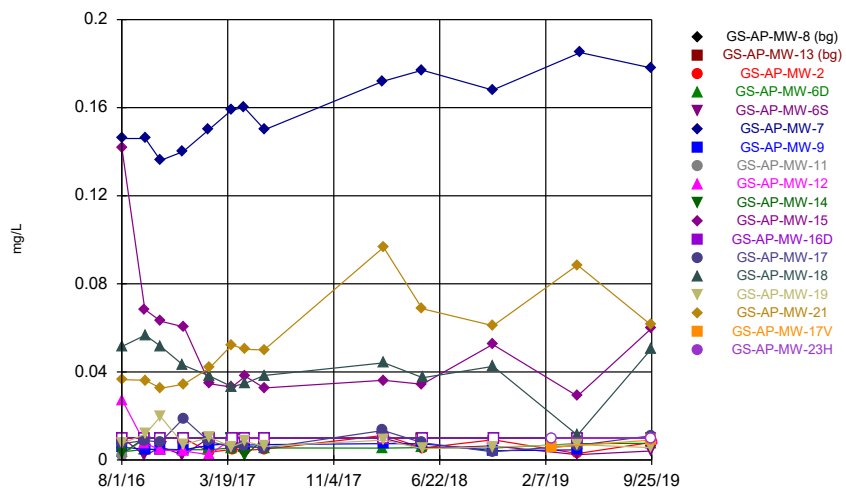
Constituent: Mercury Analysis Run 1/17/2020 2:21 PM View: Time Series  
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

### Time Series



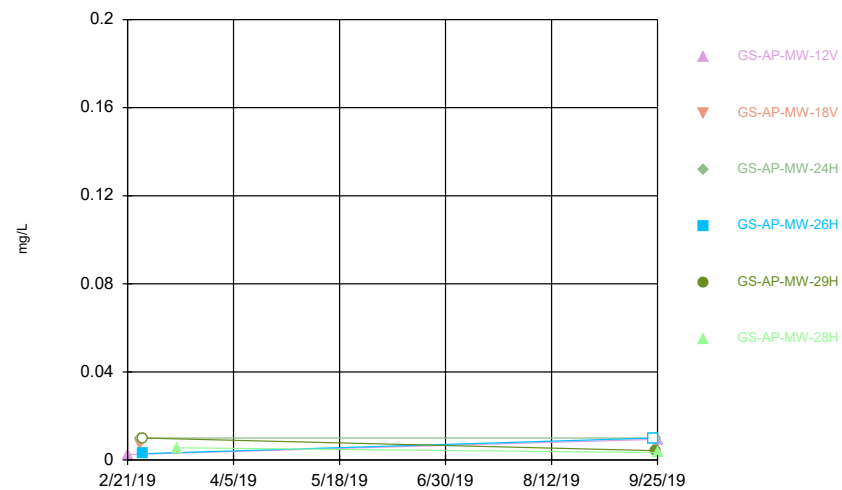
Constituent: Mercury Analysis Run 1/17/2020 2:21 PM View: Time Series  
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

### Time Series



Constituent: Molybdenum Analysis Run 1/17/2020 2:21 PM View: Time Series  
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

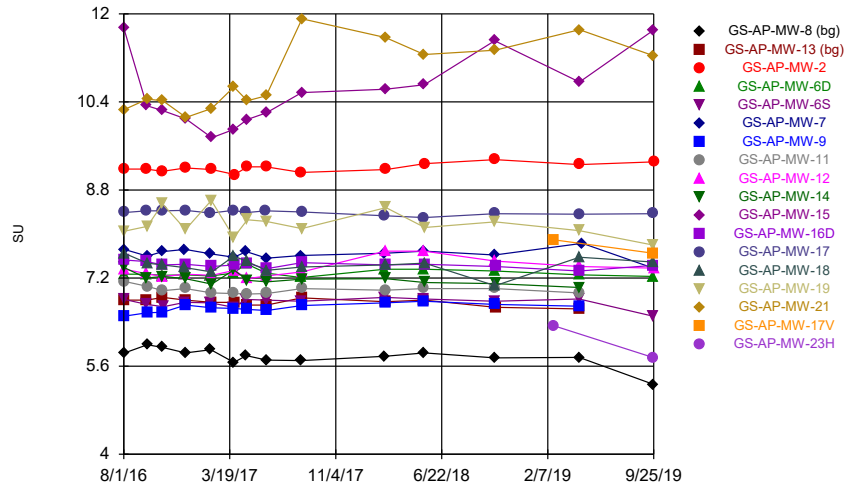
### Time Series



Constituent: Molybdenum Analysis Run 1/17/2020 2:21 PM View: Time Series  
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

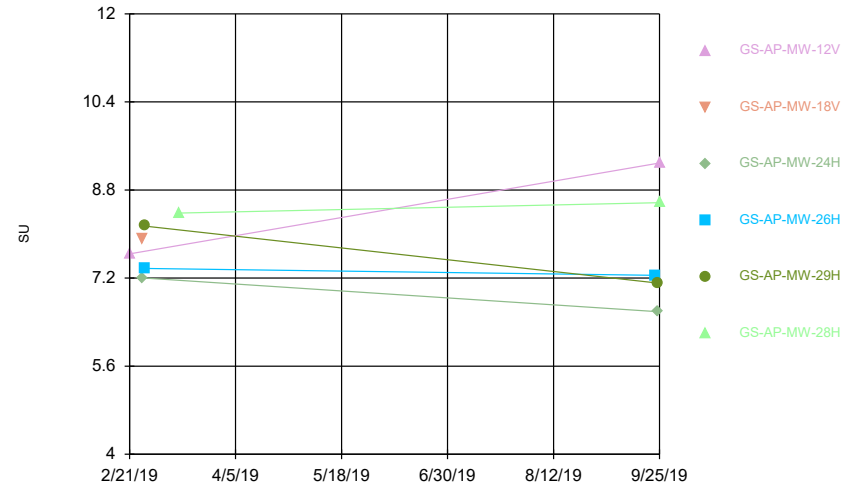


Time Series



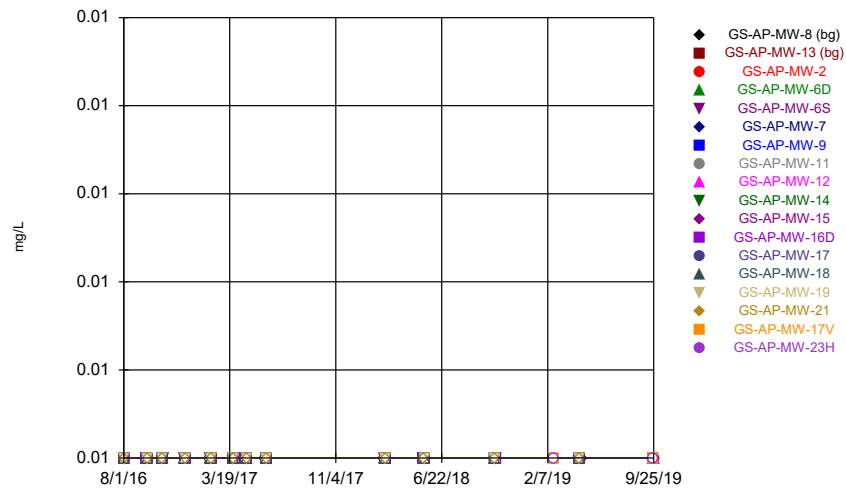
Constituent: pH Analysis Run 1/17/2020 2:21 PM View: Time Series  
 Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

Time Series



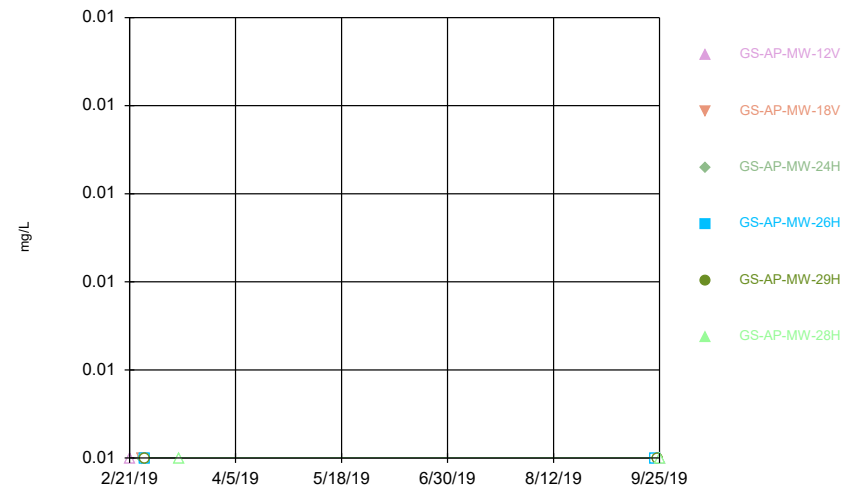
Constituent: pH Analysis Run 1/17/2020 2:21 PM View: Time Series  
 Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

Time Series



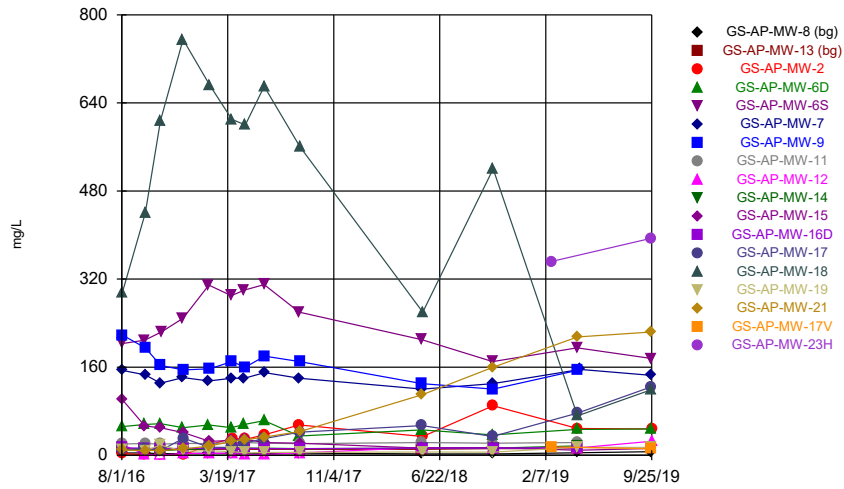
Constituent: Selenium Analysis Run 1/17/2020 2:21 PM View: Time Series  
 Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

Time Series



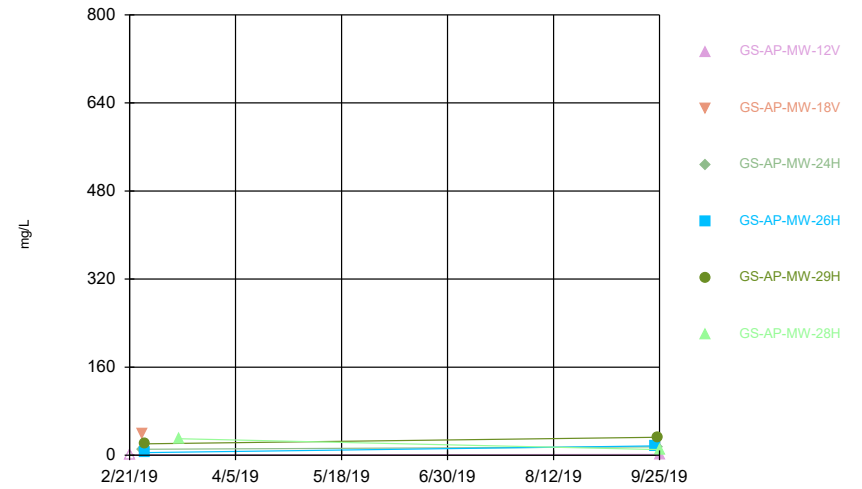
Constituent: Selenium Analysis Run 1/17/2020 2:21 PM View: Time Series  
 Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

### Time Series



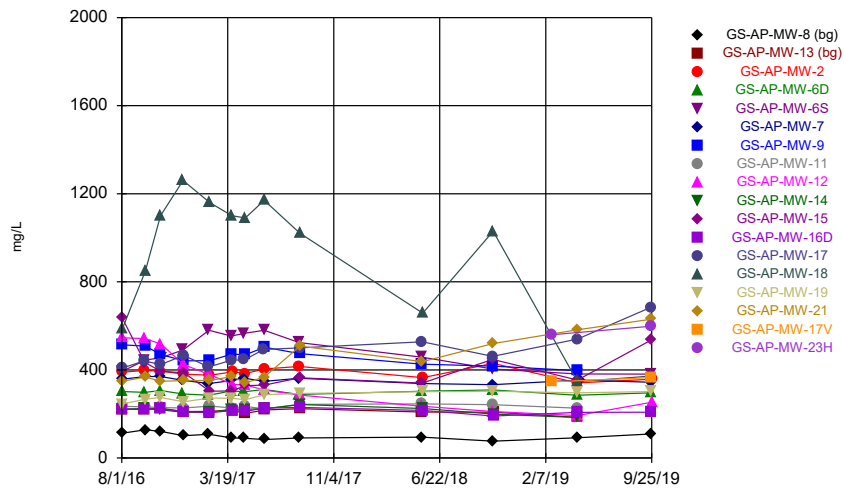
Constituent: Sulfate Analysis Run 1/17/2020 2:21 PM View: Time Series  
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

### Time Series



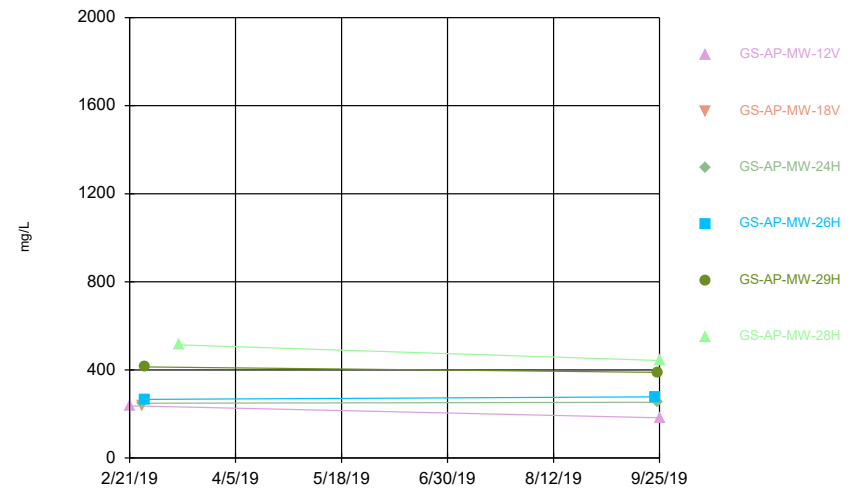
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Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

### Time Series



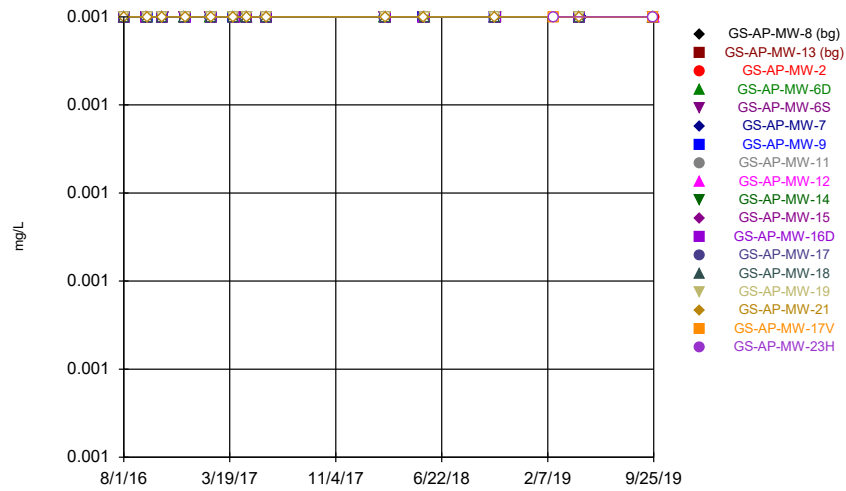
Constituent: TDS Analysis Run 1/17/2020 2:21 PM View: Time Series  
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

### Time Series



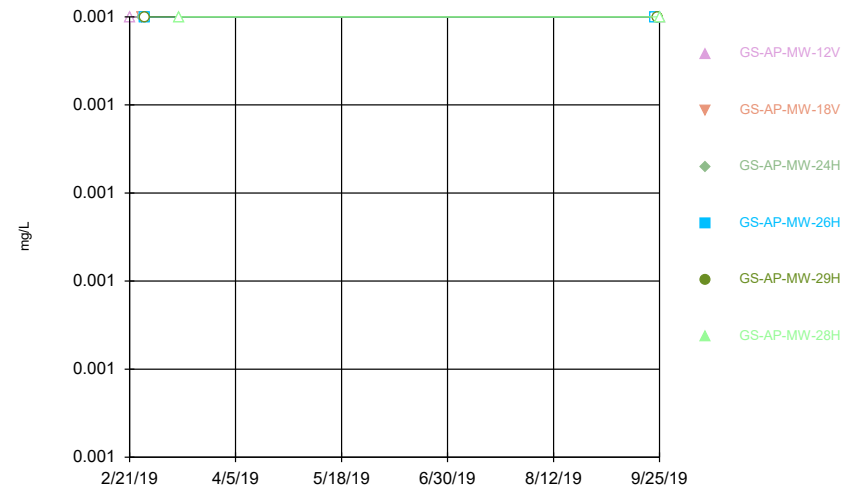
Constituent: TDS Analysis Run 1/17/2020 2:21 PM View: Time Series  
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

### Time Series



Constituent: Thallium Analysis Run 1/17/2020 2:21 PM View: Time Series  
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

### Time Series



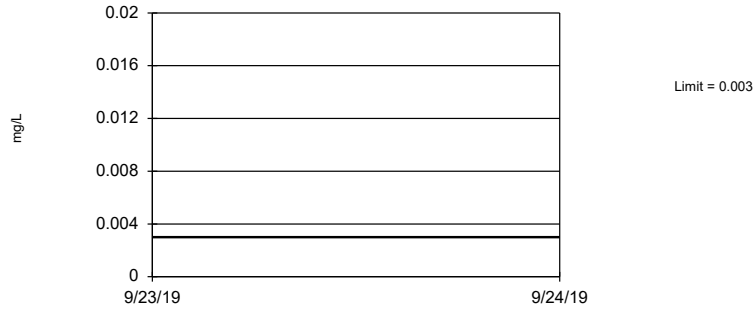
Constituent: Thallium Analysis Run 1/17/2020 2:21 PM View: Time Series  
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

# Upper Tolerance Limits - Appendix IV

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond Printed 1/17/2020, 2:24 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	25	n/a	n/a	96	n/a	n/a	0.2774	NP Inter(NDs)
Arsenic (mg/L)	0.005	n/a	25	n/a	n/a	84	n/a	n/a	0.2774	NP Inter(NDs)
Barium (mg/L)	0.189	n/a	25	n/a	n/a	0	n/a	n/a	0.2774	NP Inter(normal...
Beryllium (mg/L)	0.003	n/a	25	n/a	n/a	100	n/a	n/a	0.2774	NP Inter(NDs)
Cadmium (mg/L)	0.001	n/a	25	n/a	n/a	100	n/a	n/a	0.2774	NP Inter(NDs)
Chromium (mg/L)	0.01	n/a	25	n/a	n/a	88	n/a	n/a	0.2774	NP Inter(NDs)
Cobalt (mg/L)	0.005	n/a	25	n/a	n/a	80	n/a	n/a	0.2774	NP Inter(NDs)
Combined Radium 226 + 228 (pCi/L)	1.063	n/a	25	0.3412	0.315	0	None	No	0.05	Inter
Fluoride (mg/L)	0.2237	n/a	27	0.1183	0.04659	0	None	No	0.05	Inter
Lead (mg/L)	0.005	n/a	25	n/a	n/a	100	n/a	n/a	0.2774	NP Inter(NDs)
Lithium (mg/L)	0.02	n/a	25	n/a	n/a	68	n/a	n/a	0.2774	NP Inter(normal...
Mercury (mg/L)	0.0005	n/a	25	n/a	n/a	100	n/a	n/a	0.2774	NP Inter(NDs)
Molybdenum (mg/L)	0.01	n/a	25	n/a	n/a	100	n/a	n/a	0.2774	NP Inter(NDs)
Selenium (mg/L)	0.01	n/a	25	n/a	n/a	100	n/a	n/a	0.2774	NP Inter(NDs)
Thallium (mg/L)	0.001	n/a	25	n/a	n/a	100	n/a	n/a	0.2774	NP Inter(NDs)

### Tolerance Limit Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 75%. Limit is highest of 25 background values. 96% NDs. 83.01% coverage at alpha=0.01; 88.87% coverage at alpha=0.05; 97.07% coverage at alpha=0.5. Report alpha = 0.2774.

Constituent: Antimony Analysis Run 1/17/2020 2:23 PM View: UTL's - Appendix IV  
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

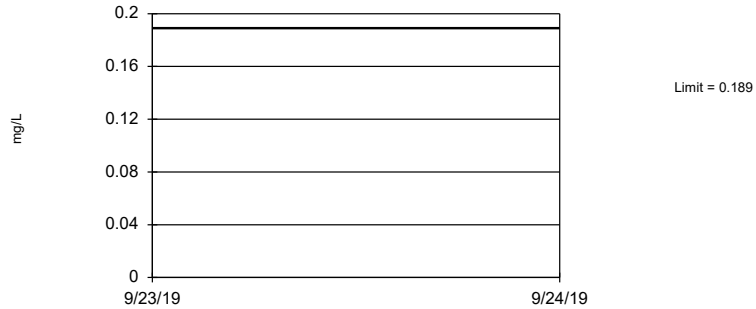
### Tolerance Limit Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 75%. Limit is highest of 25 background values. 84% NDs. 83.01% coverage at alpha=0.01; 88.87% coverage at alpha=0.05; 97.07% coverage at alpha=0.5. Report alpha = 0.2774.

Constituent: Arsenic Analysis Run 1/17/2020 2:23 PM View: UTL's - Appendix IV  
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

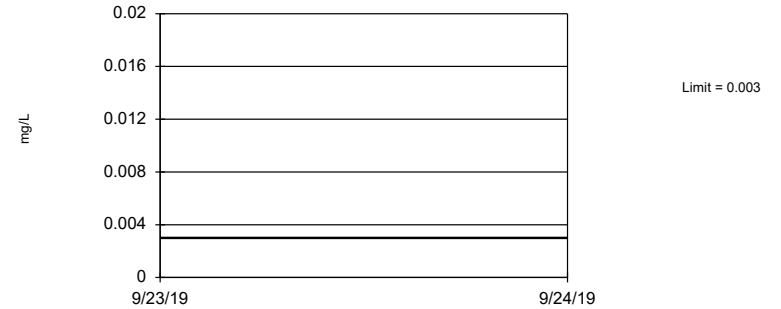
### Tolerance Limit Interwell Non-parametric



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 25 background values. 83.01% coverage at alpha=0.01; 88.87% coverage at alpha=0.05; 97.07% coverage at alpha=0.5. Report alpha = 0.2774.

Constituent: Barium Analysis Run 1/17/2020 2:23 PM View: UTL's - Appendix IV  
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

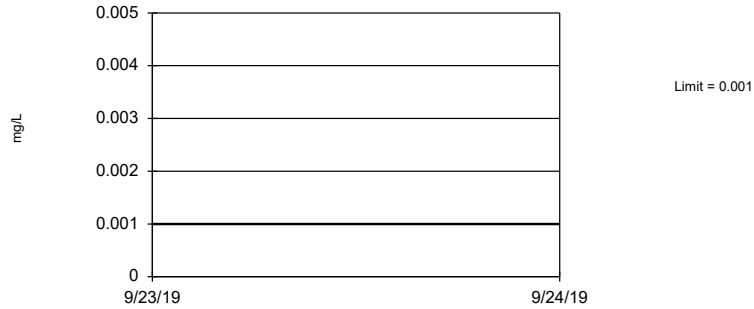
### Tolerance Limit Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 75%. All background values were censored; limit is most recent reporting limit. 83.01% coverage at alpha=0.01; 88.87% coverage at alpha=0.05; 97.07% coverage at alpha=0.5. Report alpha = 0.2774.

Constituent: Beryllium Analysis Run 1/17/2020 2:23 PM View: UTL's - Appendix IV  
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

Tolerance Limit  
Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 75%. All background values were censored; limit is most recent reporting limit. 83.01% coverage at alpha=0.01; 88.87% coverage at alpha=0.05; 97.07% coverage at alpha=0.5. Report alpha = 0.2774.

Constituent: Cadmium Analysis Run 1/17/2020 2:23 PM View: UTL's - Appendix IV  
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

Tolerance Limit  
Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 75%. Limit is highest of 25 background values. 88% NDs. 83.01% coverage at alpha=0.01; 88.87% coverage at alpha=0.05; 97.07% coverage at alpha=0.5. Report alpha = 0.2774.

Constituent: Chromium Analysis Run 1/17/2020 2:23 PM View: UTL's - Appendix IV  
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

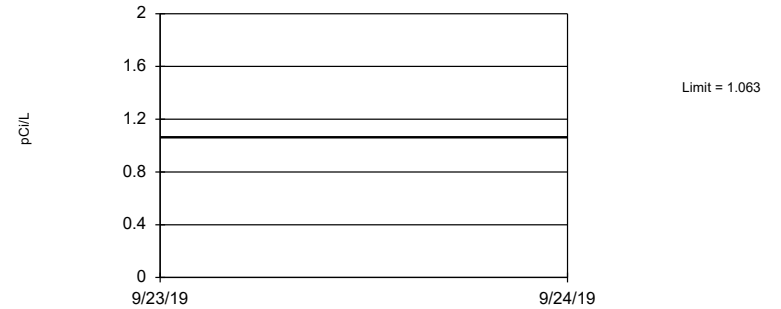
Tolerance Limit  
Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 75%. Limit is highest of 25 background values. 80% NDs. 83.01% coverage at alpha=0.01; 88.87% coverage at alpha=0.05; 97.07% coverage at alpha=0.5. Report alpha = 0.2774.

Constituent: Cobalt Analysis Run 1/17/2020 2:23 PM View: UTL's - Appendix IV  
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

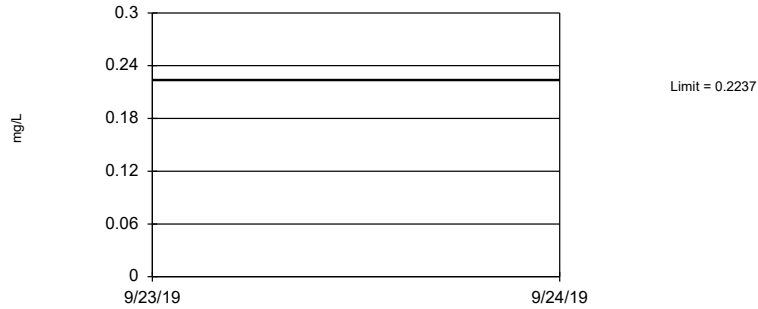
Tolerance Limit  
Interwell Parametric



95% coverage. Background Data Summary: Mean=0.3412, Std. Dev.=0.315, n=25. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9357, critical = 0.888. Report alpha = 0.05.

Constituent: Combined Radium 226 + 228 Analysis Run 1/17/2020 2:23 PM View: UTL's - Appendix IV  
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

### Tolerance Limit Interwell Parametric



95% coverage. Background Data Summary: Mean=0.1183, Std. Dev.=0.04659, n=27. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9626, critical = 0.894. Report alpha = 0.05.

Constituent: Fluoride Analysis Run 1/17/2020 2:23 PM View: UTL's - Appendix IV  
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

### Tolerance Limit Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 75%. All background values were censored; limit is most recent reporting limit. 83.01% coverage at alpha=0.01; 88.87% coverage at alpha=0.05; 97.07% coverage at alpha=0.5. Report alpha = 0.2774.

Constituent: Lead Analysis Run 1/17/2020 2:23 PM View: UTL's - Appendix IV  
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

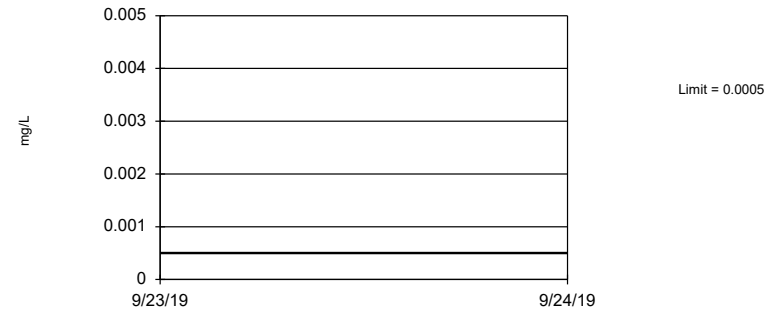
### Tolerance Limit Interwell Non-parametric



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 25 background values. 68% NDs. 83.01% coverage at alpha=0.01; 88.87% coverage at alpha=0.05; 97.07% coverage at alpha=0.5. Report alpha = 0.2774.

Constituent: Lithium Analysis Run 1/17/2020 2:23 PM View: UTL's - Appendix IV  
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

### Tolerance Limit Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 75%. All background values were censored; limit is most recent reporting limit. 83.01% coverage at alpha=0.01; 88.87% coverage at alpha=0.05; 97.07% coverage at alpha=0.5. Report alpha = 0.2774.

Constituent: Mercury Analysis Run 1/17/2020 2:23 PM View: UTL's - Appendix IV  
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

### Tolerance Limit Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 75%. All background values were censored; limit is most recent reporting limit. 83.01% coverage at alpha=0.01; 88.87% coverage at alpha=0.05; 97.07% coverage at alpha=0.5. Report alpha = 0.2774.

Constituent: Molybdenum Analysis Run 1/17/2020 2:23 PM View: UTL's - Appendix IV  
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

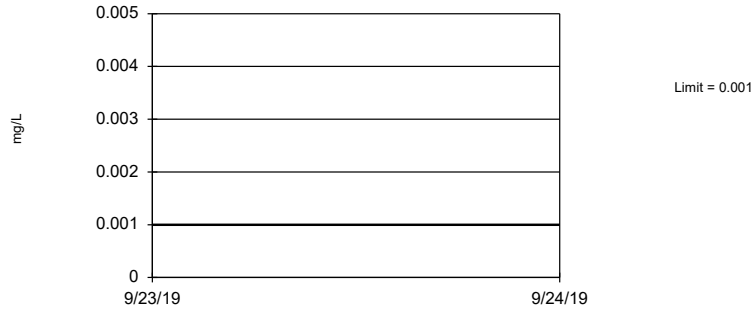
### Tolerance Limit Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 75%. All background values were censored; limit is most recent reporting limit. 83.01% coverage at alpha=0.01; 88.87% coverage at alpha=0.05; 97.07% coverage at alpha=0.5. Report alpha = 0.2774.

Constituent: Selenium Analysis Run 1/17/2020 2:23 PM View: UTL's - Appendix IV  
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

### Tolerance Limit Interwell Non-parametric



Non-parametric test used in lieu of parametric tolerance limit because censored data exceeded 75%. All background values were censored; limit is most recent reporting limit. 83.01% coverage at alpha=0.01; 88.87% coverage at alpha=0.05; 97.07% coverage at alpha=0.5. Report alpha = 0.2774.

Constituent: Thallium Analysis Run 1/17/2020 2:23 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 1/17/2020, 2:30 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	%NDs	Transform	Alpha	Method
Arsenic (mg/L)	GS-AP-MW-6D	0.07887	0.06331	0.01	Yes	13	0	No	0.01	Param.
Arsenic (mg/L)	GS-AP-MW-7	0.2109	0.1803	0.01	Yes	13	0	No	0.01	Param.
Arsenic (mg/L)	GS-AP-MW-12	0.0642	0.02249	0.01	Yes	13	0	No	0.01	Param.
Arsenic (mg/L)	GS-AP-MW-18	0.07567	0.03371	0.01	Yes	13	0	No	0.01	Param.
Lithium (mg/L)	GS-AP-MW-2	0.05467	0.04565	0.04	Yes	13	0	No	0.01	Param.
Lithium (mg/L)	GS-AP-MW-6D	0.2548	0.2245	0.04	Yes	13	0	No	0.01	Param.
Lithium (mg/L)	GS-AP-MW-7	0.1609	0.1407	0.04	Yes	13	0	sqrt(x)	0.01	Param.
Lithium (mg/L)	GS-AP-MW-9	0.09621	0.07589	0.04	Yes	12	0	No	0.01	Param.
Lithium (mg/L)	GS-AP-MW-15	0.393	0.136	0.04	Yes	13	0	No	0.01	NP (normality)
Lithium (mg/L)	GS-AP-MW-17	0.06064	0.04598	0.04	Yes	13	0	No	0.01	Param.
Lithium (mg/L)	GS-AP-MW-18	0.2988	0.1774	0.04	Yes	13	0	No	0.01	Param.
Lithium (mg/L)	GS-AP-MW-21	0.2202	0.1449	0.04	Yes	13	0	sqrt(x)	0.01	Param.
Molybdenum (mg/L)	GS-AP-MW-7	0.1708	0.1472	0.1	Yes	13	0	No	0.01	Param.

# Confidence Intervals - All Results

Plant William C Gorgas    Client: Southern Company    Data: Gorgas Ash Pond    Printed 1/17/2020, 2:30 PM

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	13	100	No	0.01	NP (NDs)
Antimony (mg/L)	GS-AP-MW-6D	0.003	0.00104	0.006	No	13	84.62	No	0.01	NP (NDs)
Antimony (mg/L)	GS-AP-MW-6S	0.003	0.000727	0.006	No	13	92.31	No	0.01	NP (NDs)
Antimony (mg/L)	GS-AP-MW-7	0.003	0.00105	0.006	No	13	84.62	No	0.01	NP (NDs)
Antimony (mg/L)	GS-AP-MW-9	0.003	0.003	0.006	No	12	100	No	0.01	NP (NDs)
Antimony (mg/L)	GS-AP-MW-11	0.003	0.003	0.006	No	12	100	No	0.01	NP (NDs)
Antimony (mg/L)	GS-AP-MW-12	0.003	0.000681	0.006	No	13	92.31	No	0.01	NP (NDs)
Antimony (mg/L)	GS-AP-MW-14	0.003	0.003	0.006	No	12	100	No	0.01	NP (NDs)
Antimony (mg/L)	GS-AP-MW-15	0.003	0.000858	0.006	No	13	69.23	No	0.01	NP (normality)
Antimony (mg/L)	GS-AP-MW-16D	0.003	0.000633	0.006	No	13	92.31	No	0.01	NP (NDs)
Antimony (mg/L)	GS-AP-MW-17	0.003	0.00072	0.006	No	13	84.62	No	0.01	NP (NDs)
Antimony (mg/L)	GS-AP-MW-18	0.003	0.003	0.006	No	13	100	No	0.01	NP (NDs)
Antimony (mg/L)	GS-AP-MW-19	0.003	0.000613	0.006	No	13	92.31	No	0.01	NP (NDs)
Antimony (mg/L)	GS-AP-MW-21	0.003	0.00119	0.006	No	13	92.31	No	0.01	NP (NDs)
Arsenic (mg/L)	GS-AP-MW-2	0.005	0.005	0.01	No	13	100	No	0.01	NP (NDs)
<b>Arsenic (mg/L)</b>	<b>GS-AP-MW-6D</b>	<b>0.07887</b>	<b>0.06331</b>	<b>0.01</b>	<b>Yes</b>	<b>13</b>	<b>0</b>	<b>No</b>	<b>0.01</b>	<b>Param.</b>
Arsenic (mg/L)	GS-AP-MW-6S	0.0115	0.00864	0.01	No	13	0	No	0.01	NP (normality)
<b>Arsenic (mg/L)</b>	<b>GS-AP-MW-7</b>	<b>0.2109</b>	<b>0.1803</b>	<b>0.01</b>	<b>Yes</b>	<b>13</b>	<b>0</b>	<b>No</b>	<b>0.01</b>	<b>Param.</b>
Arsenic (mg/L)	GS-AP-MW-9	0.007209	0.005353	0.01	No	12	0	No	0.01	Param.
Arsenic (mg/L)	GS-AP-MW-11	0.005	0.005	0.01	No	12	100	No	0.01	NP (NDs)
<b>Arsenic (mg/L)</b>	<b>GS-AP-MW-12</b>	<b>0.0642</b>	<b>0.02249</b>	<b>0.01</b>	<b>Yes</b>	<b>13</b>	<b>0</b>	<b>No</b>	<b>0.01</b>	<b>Param.</b>
Arsenic (mg/L)	GS-AP-MW-14	0.001719	0.001181	0.01	No	12	0	No	0.01	Param.
Arsenic (mg/L)	GS-AP-MW-15	0.01125	0.006872	0.01	No	13	0	No	0.01	Param.
Arsenic (mg/L)	GS-AP-MW-16D	0.005	0.005	0.01	No	13	100	No	0.01	NP (NDs)
Arsenic (mg/L)	GS-AP-MW-17	0.003078	0.001311	0.01	No	13	0	ln(x)	0.01	Param.
<b>Arsenic (mg/L)</b>	<b>GS-AP-MW-18</b>	<b>0.07567</b>	<b>0.03371</b>	<b>0.01</b>	<b>Yes</b>	<b>13</b>	<b>0</b>	<b>No</b>	<b>0.01</b>	<b>Param.</b>
Arsenic (mg/L)	GS-AP-MW-19	0.005	0.00138	0.01	No	13	61.54	No	0.01	NP (normality)
Arsenic (mg/L)	GS-AP-MW-21	0.005	0.00135	0.01	No	13	38.46	No	0.01	NP (normality)
Barium (mg/L)	GS-AP-MW-2	0.08257	0.06897	2	No	13	0	No	0.01	Param.
Barium (mg/L)	GS-AP-MW-6D	0.8702	0.7263	2	No	13	0	No	0.01	Param.
Barium (mg/L)	GS-AP-MW-6S	0.2253	0.1367	2	No	13	0	sqrt(x)	0.01	Param.
Barium (mg/L)	GS-AP-MW-7	0.0888	0.05919	2	No	13	0	No	0.01	Param.
Barium (mg/L)	GS-AP-MW-9	0.02723	0.02396	2	No	12	0	No	0.01	Param.
Barium (mg/L)	GS-AP-MW-11	0.2299	0.2079	2	No	12	0	No	0.01	Param.
Barium (mg/L)	GS-AP-MW-12	0.1571	0.1147	2	No	13	0	No	0.01	Param.
Barium (mg/L)	GS-AP-MW-14	0.2874	0.2406	2	No	12	0	No	0.01	Param.
Barium (mg/L)	GS-AP-MW-15	0.2563	0.1635	2	No	13	0	No	0.01	Param.
Barium (mg/L)	GS-AP-MW-16D	0.3261	0.2999	2	No	13	0	No	0.01	Param.
Barium (mg/L)	GS-AP-MW-17	0.08114	0.05115	2	No	13	0	ln(x)	0.01	Param.
Barium (mg/L)	GS-AP-MW-18	0.1058	0.05104	2	No	13	0	x^(1/3)	0.01	Param.
Barium (mg/L)	GS-AP-MW-19	0.3955	0.322	2	No	13	0	No	0.01	Param.
Barium (mg/L)	GS-AP-MW-21	0.0914	0.0424	2	No	13	0	No	0.01	NP (normality)
Beryllium (mg/L)	GS-AP-MW-2	0.003	0.00138	0.004	No	13	92.31	No	0.01	NP (NDs)
Beryllium (mg/L)	GS-AP-MW-6D	0.003	0.003	0.004	No	13	100	No	0.01	NP (NDs)
Beryllium (mg/L)	GS-AP-MW-6S	0.003	0.000794	0.004	No	13	92.31	No	0.01	NP (NDs)
Beryllium (mg/L)	GS-AP-MW-7	0.003	0.003	0.004	No	13	100	No	0.01	NP (NDs)
Beryllium (mg/L)	GS-AP-MW-9	0.003	0.000893	0.004	No	12	83.33	No	0.01	NP (NDs)
Beryllium (mg/L)	GS-AP-MW-11	0.003	0.003	0.004	No	12	100	No	0.01	NP (NDs)
Beryllium (mg/L)	GS-AP-MW-12	0.003	0.003	0.004	No	13	100	No	0.01	NP (NDs)
Beryllium (mg/L)	GS-AP-MW-14	0.003	0.003	0.004	No	12	100	No	0.01	NP (NDs)
Beryllium (mg/L)	GS-AP-MW-15	0.003	0.003	0.004	No	13	100	No	0.01	NP (NDs)
Beryllium (mg/L)	GS-AP-MW-16D	0.003	0.00109	0.004	No	13	92.31	No	0.01	NP (NDs)
Beryllium (mg/L)	GS-AP-MW-17	0.003	0.003	0.004	No	13	100	No	0.01	NP (NDs)
Beryllium (mg/L)	GS-AP-MW-18	0.003	0.003	0.004	No	13	100	No	0.01	NP (NDs)
Beryllium (mg/L)	GS-AP-MW-19	0.003	0.003	0.004	No	13	100	No	0.01	NP (NDs)
Beryllium (mg/L)	GS-AP-MW-21	0.003	0.003	0.004	No	13	100	No	0.01	NP (NDs)
Cadmium (mg/L)	GS-AP-MW-2	0.001	0.001	0.005	No	13	100	No	0.01	NP (NDs)
Cadmium (mg/L)	GS-AP-MW-6D	0.001	0.001	0.005	No	13	100	No	0.01	NP (NDs)
Cadmium (mg/L)	GS-AP-MW-6S	0.001	0.001	0.005	No	13	100	No	0.01	NP (NDs)
Cadmium (mg/L)	GS-AP-MW-7	0.001	0.001	0.005	No	13	100	No	0.01	NP (NDs)
Cadmium (mg/L)	GS-AP-MW-9	0.001	0.001	0.005	No	12	100	No	0.01	NP (NDs)
Cadmium (mg/L)	GS-AP-MW-11	0.001	0.001	0.005	No	12	100	No	0.01	NP (NDs)
Cadmium (mg/L)	GS-AP-MW-12	0.001	0.001	0.005	No	13	100	No	0.01	NP (NDs)
Cadmium (mg/L)	GS-AP-MW-14	0.001	0.001	0.005	No	12	100	No	0.01	NP (NDs)
Cadmium (mg/L)	GS-AP-MW-15	0.001	0.001	0.005	No	13	100	No	0.01	NP (NDs)
Cadmium (mg/L)	GS-AP-MW-16D	0.001	0.001	0.005	No	13	100	No	0.01	NP (NDs)
Cadmium (mg/L)	GS-AP-MW-17	0.001	0.001	0.005	No	13	100	No	0.01	NP (NDs)
Cadmium (mg/L)	GS-AP-MW-18	0.001	0.001	0.005	No	13	100	No	0.01	NP (NDs)

# Confidence Intervals - All Results

Plant William C Gorgas    Client: Southern Company    Data: Gorgas Ash Pond    Printed 1/17/2020, 2:30 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	%NDs	Transform	Alpha	Method
Cadmium (mg/L)	GS-AP-MW-19	0.001	0.001	0.005	No	13	100	No	0.01	NP (NDs)
Cadmium (mg/L)	GS-AP-MW-21	0.001	0.001	0.005	No	13	100	No	0.01	NP (NDs)
Chromium (mg/L)	GS-AP-MW-2	0.01	0.01	0.1	No	13	100	No	0.01	NP (NDs)
Chromium (mg/L)	GS-AP-MW-6D	0.01	0.01	0.1	No	13	100	No	0.01	NP (NDs)
Chromium (mg/L)	GS-AP-MW-6S	0.01	0.01	0.1	No	13	100	No	0.01	NP (NDs)
Chromium (mg/L)	GS-AP-MW-7	0.01	0.00435	0.1	No	13	84.62	No	0.01	NP (NDs)
Chromium (mg/L)	GS-AP-MW-9	0.01	0.01	0.1	No	12	100	No	0.01	NP (NDs)
Chromium (mg/L)	GS-AP-MW-11	0.01	0.01	0.1	No	12	100	No	0.01	NP (NDs)
Chromium (mg/L)	GS-AP-MW-12	0.01	0.01	0.1	No	13	100	No	0.01	NP (NDs)
Chromium (mg/L)	GS-AP-MW-14	0.01	0.01	0.1	No	12	100	No	0.01	NP (NDs)
Chromium (mg/L)	GS-AP-MW-15	0.01	0.00209	0.1	No	13	92.31	No	0.01	NP (NDs)
Chromium (mg/L)	GS-AP-MW-16D	0.01	0.01	0.1	No	13	100	No	0.01	NP (NDs)
Chromium (mg/L)	GS-AP-MW-17	0.01	0.01	0.1	No	13	100	No	0.01	NP (NDs)
Chromium (mg/L)	GS-AP-MW-18	0.01	0.01	0.1	No	13	100	No	0.01	NP (NDs)
Chromium (mg/L)	GS-AP-MW-19	0.01	0.01	0.1	No	13	100	No	0.01	NP (NDs)
Chromium (mg/L)	GS-AP-MW-21	0.01	0.00219	0.1	No	13	76.92	No	0.01	NP (NDs)
Cobalt (mg/L)	GS-AP-MW-2	0.005	0.005	0.006	No	13	100	No	0.01	NP (NDs)
Cobalt (mg/L)	GS-AP-MW-6D	0.005	0.005	0.006	No	13	100	No	0.01	NP (NDs)
Cobalt (mg/L)	GS-AP-MW-6S	0.005	0.00222	0.006	No	13	69.23	No	0.01	NP (normality)
Cobalt (mg/L)	GS-AP-MW-7	0.005	0.00231	0.006	No	13	92.31	No	0.01	NP (NDs)
Cobalt (mg/L)	GS-AP-MW-9	0.005	0.005	0.006	No	12	100	No	0.01	NP (NDs)
Cobalt (mg/L)	GS-AP-MW-11	0.005	0.005	0.006	No	12	100	No	0.01	NP (NDs)
Cobalt (mg/L)	GS-AP-MW-12	0.005	0.005	0.006	No	13	100	No	0.01	NP (NDs)
Cobalt (mg/L)	GS-AP-MW-14	0.005	0.005	0.006	No	12	100	No	0.01	NP (NDs)
Cobalt (mg/L)	GS-AP-MW-15	0.005	0.005	0.006	No	13	100	No	0.01	NP (NDs)
Cobalt (mg/L)	GS-AP-MW-16D	0.005	0.005	0.006	No	13	100	No	0.01	NP (NDs)
Cobalt (mg/L)	GS-AP-MW-17	0.005	0.005	0.006	No	13	100	No	0.01	NP (NDs)
Cobalt (mg/L)	GS-AP-MW-18	0.005	0.005	0.006	No	13	100	No	0.01	NP (NDs)
Cobalt (mg/L)	GS-AP-MW-19	0.005	0.005	0.006	No	13	100	No	0.01	NP (NDs)
Cobalt (mg/L)	GS-AP-MW-21	0.005	0.005	0.006	No	13	100	No	0.01	NP (NDs)
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-2	0.7741	0.1281	5	No	13	0	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-6D	0.7852	0.2729	5	No	13	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-6S	1.133	0.4649	5	No	13	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-7	0.6367	0.1224	5	No	13	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-9	0.7384	-0.01676	5	No	12	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-11	0.5278	0.1156	5	No	12	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-12	0.7973	0.339	5	No	13	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-14	0.9357	0.2508	5	No	12	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-15	0.7528	0.1262	5	No	13	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-16D	0.4537	0.1288	5	No	13	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-17	0.5863	0.1378	5	No	13	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-18	0.7302	0.2204	5	No	13	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-19	1.131	0.4013	5	No	13	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-21	0.9899	0.317	5	No	13	0	No	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-2	1.474	1.085	4	No	14	0	No	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-6D	0.1406	0.09579	4	No	14	0	x^2	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-6S	0.1194	0.06608	4	No	14	0	No	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-7	0.1098	0.06533	4	No	14	7.143	No	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-9	0.1398	0.08385	4	No	13	0	No	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-11	0.1486	0.09737	4	No	13	0	x^2	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-12	0.5853	0.2998	4	No	14	0	No	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-14	0.176	0.1194	4	No	13	0	x^2	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-15	0.7831	0.5456	4	No	14	0	sqrt(x)	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-16D	0.1283	0.07355	4	No	14	0	No	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-17	0.2839	0.1713	4	No	14	0	No	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-18	0.4822	0.2548	4	No	14	0	No	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-19	0.3618	0.2787	4	No	14	0	No	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-21	0.2684	0.2073	4	No	14	0	x^2	0.01	Param.
Lead (mg/L)	GS-AP-MW-2	0.005	0.005	0.015	No	13	100	No	0.01	NP (NDs)
Lead (mg/L)	GS-AP-MW-6D	0.005	0.005	0.015	No	13	100	No	0.01	NP (NDs)
Lead (mg/L)	GS-AP-MW-6S	0.005	0.005	0.015	No	13	100	No	0.01	NP (NDs)
Lead (mg/L)	GS-AP-MW-7	0.005	0.0024	0.015	No	13	76.92	No	0.01	NP (NDs)
Lead (mg/L)	GS-AP-MW-9	0.005	0.005	0.015	No	12	100	No	0.01	NP (NDs)
Lead (mg/L)	GS-AP-MW-11	0.005	0.005	0.015	No	12	100	No	0.01	NP (NDs)
Lead (mg/L)	GS-AP-MW-12	0.005	0.005	0.015	No	13	100	No	0.01	NP (NDs)
Lead (mg/L)	GS-AP-MW-14	0.005	0.005	0.015	No	12	100	No	0.01	NP (NDs)
Lead (mg/L)	GS-AP-MW-15	0.005	0.005	0.015	No	13	100	No	0.01	NP (NDs)
Lead (mg/L)	GS-AP-MW-16D	0.005	0.005	0.015	No	13	100	No	0.01	NP (NDs)

# Confidence Intervals - All Results

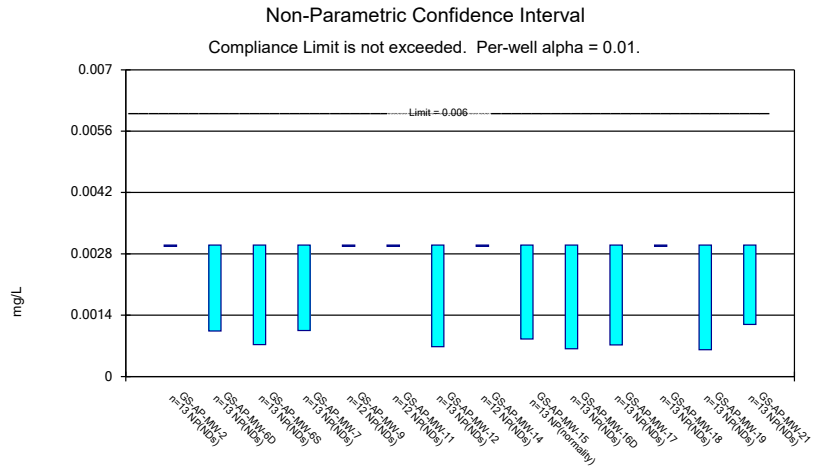
Plant William C Gorgas    Client: Southern Company    Data: Gorgas Ash Pond    Printed 1/17/2020, 2:30 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	%NDs	Transform	Alpha	Method
Lead (mg/L)	GS-AP-MW-17	0.005	0.005	0.015	No	13	100	No	0.01	NP (NDs)
Lead (mg/L)	GS-AP-MW-18	0.005	0.005	0.015	No	13	100	No	0.01	NP (NDs)
Lead (mg/L)	GS-AP-MW-19	0.005	0.005	0.015	No	13	100	No	0.01	NP (NDs)
Lead (mg/L)	GS-AP-MW-21	0.005	0.005	0.015	No	13	100	No	0.01	NP (NDs)
<b>Lithium (mg/L)</b>	<b>GS-AP-MW-2</b>	<b>0.05467</b>	<b>0.04565</b>	<b>0.04</b>	<b>Yes</b>	<b>13</b>	<b>0</b>	<b>No</b>	<b>0.01</b>	<b>Param.</b>
<b>Lithium (mg/L)</b>	<b>GS-AP-MW-6D</b>	<b>0.2548</b>	<b>0.2245</b>	<b>0.04</b>	<b>Yes</b>	<b>13</b>	<b>0</b>	<b>No</b>	<b>0.01</b>	<b>Param.</b>
Lithium (mg/L)	GS-AP-MW-6S	0.0238	0.01	0.04	No	13	69.23	No	0.01	NP (normality)
<b>Lithium (mg/L)</b>	<b>GS-AP-MW-7</b>	<b>0.1609</b>	<b>0.1407</b>	<b>0.04</b>	<b>Yes</b>	<b>13</b>	<b>0</b>	<b>sqrt(x)</b>	<b>0.01</b>	<b>Param.</b>
<b>Lithium (mg/L)</b>	<b>GS-AP-MW-9</b>	<b>0.09621</b>	<b>0.07589</b>	<b>0.04</b>	<b>Yes</b>	<b>12</b>	<b>0</b>	<b>No</b>	<b>0.01</b>	<b>Param.</b>
Lithium (mg/L)	GS-AP-MW-11	0.01414	0.01233	0.04	No	12	0	No	0.01	Param.
Lithium (mg/L)	GS-AP-MW-12	0.0489	0.0225	0.04	No	13	0	No	0.01	NP (normality)
Lithium (mg/L)	GS-AP-MW-14	0.04105	0.03183	0.04	No	12	0	No	0.01	Param.
<b>Lithium (mg/L)</b>	<b>GS-AP-MW-15</b>	<b>0.393</b>	<b>0.136</b>	<b>0.04</b>	<b>Yes</b>	<b>13</b>	<b>0</b>	<b>No</b>	<b>0.01</b>	<b>NP (normality)</b>
Lithium (mg/L)	GS-AP-MW-16D	0.03674	0.03324	0.04	No	13	0	No	0.01	Param.
<b>Lithium (mg/L)</b>	<b>GS-AP-MW-17</b>	<b>0.06064</b>	<b>0.04598</b>	<b>0.04</b>	<b>Yes</b>	<b>13</b>	<b>0</b>	<b>No</b>	<b>0.01</b>	<b>Param.</b>
<b>Lithium (mg/L)</b>	<b>GS-AP-MW-18</b>	<b>0.2988</b>	<b>0.1774</b>	<b>0.04</b>	<b>Yes</b>	<b>13</b>	<b>0</b>	<b>No</b>	<b>0.01</b>	<b>Param.</b>
Lithium (mg/L)	GS-AP-MW-19	0.03995	0.02801	0.04	No	13	0	No	0.01	Param.
<b>Lithium (mg/L)</b>	<b>GS-AP-MW-21</b>	<b>0.2202</b>	<b>0.1449</b>	<b>0.04</b>	<b>Yes</b>	<b>13</b>	<b>0</b>	<b>sqrt(x)</b>	<b>0.01</b>	<b>Param.</b>
Mercury (mg/L)	GS-AP-MW-2	0.0005	0.0005	0.002	No	13	100	No	0.01	NP (NDs)
Mercury (mg/L)	GS-AP-MW-6D	0.0005	0.0005	0.002	No	13	100	No	0.01	NP (NDs)
Mercury (mg/L)	GS-AP-MW-6S	0.0005	0.0005	0.002	No	13	100	No	0.01	NP (NDs)
Mercury (mg/L)	GS-AP-MW-7	0.0005	0.0005	0.002	No	13	100	No	0.01	NP (NDs)
Mercury (mg/L)	GS-AP-MW-9	0.0005	0.0005	0.002	No	12	100	No	0.01	NP (NDs)
Mercury (mg/L)	GS-AP-MW-11	0.0005	0.0005	0.002	No	12	100	No	0.01	NP (NDs)
Mercury (mg/L)	GS-AP-MW-12	0.0005	0.0005	0.002	No	13	100	No	0.01	NP (NDs)
Mercury (mg/L)	GS-AP-MW-14	0.0005	0.0005	0.002	No	12	100	No	0.01	NP (NDs)
Mercury (mg/L)	GS-AP-MW-15	0.0005	0.0005	0.002	No	13	100	No	0.01	NP (NDs)
Mercury (mg/L)	GS-AP-MW-16D	0.0005	0.0005	0.002	No	13	100	No	0.01	NP (NDs)
Mercury (mg/L)	GS-AP-MW-17	0.0005	0.0005	0.002	No	13	100	No	0.01	NP (NDs)
Mercury (mg/L)	GS-AP-MW-18	0.0005	0.0005	0.002	No	13	100	No	0.01	NP (NDs)
Mercury (mg/L)	GS-AP-MW-19	0.0005	0.0005	0.002	No	13	100	No	0.01	NP (NDs)
Mercury (mg/L)	GS-AP-MW-21	0.0005	0.0005	0.002	No	13	100	No	0.01	NP (NDs)
Molybdenum (mg/L)	GS-AP-MW-2	0.01099	0.005125	0.1	No	13	30.77	No	0.01	Param.
Molybdenum (mg/L)	GS-AP-MW-6D	0.006282	0.004683	0.1	No	13	0	No	0.01	Param.
Molybdenum (mg/L)	GS-AP-MW-6S	0.01	0.00214	0.1	No	13	46.15	No	0.01	NP (normality)
<b>Molybdenum (mg/L)</b>	<b>GS-AP-MW-7</b>	<b>0.1708</b>	<b>0.1472</b>	<b>0.1</b>	<b>Yes</b>	<b>13</b>	<b>0</b>	<b>No</b>	<b>0.01</b>	<b>Param.</b>
Molybdenum (mg/L)	GS-AP-MW-9	0.006981	0.004951	0.1	No	12	0	No	0.01	Param.
Molybdenum (mg/L)	GS-AP-MW-11	0.01	0.00217	0.1	No	12	91.67	No	0.01	NP (NDs)
Molybdenum (mg/L)	GS-AP-MW-12	0.0269	0.00411	0.1	No	13	61.54	No	0.01	NP (normality)
Molybdenum (mg/L)	GS-AP-MW-14	0.01	0.00283	0.1	No	12	83.33	No	0.01	NP (NDs)
Molybdenum (mg/L)	GS-AP-MW-15	0.0683	0.0327	0.1	No	13	0	No	0.01	NP (normality)
Molybdenum (mg/L)	GS-AP-MW-16D	0.01	0.01	0.1	No	13	100	No	0.01	NP (NDs)
Molybdenum (mg/L)	GS-AP-MW-17	0.01115	0.005841	0.1	No	13	0	sqrt(x)	0.01	Param.
Molybdenum (mg/L)	GS-AP-MW-18	0.04958	0.03248	0.1	No	13	0	No	0.01	Param.
Molybdenum (mg/L)	GS-AP-MW-19	0.01034	0.005971	0.1	No	13	0	ln(x)	0.01	Param.
Molybdenum (mg/L)	GS-AP-MW-21	0.06975	0.03952	0.1	No	13	0	No	0.01	Param.
Selenium (mg/L)	GS-AP-MW-2	0.01	0.01	0.05	No	13	100	No	0.01	NP (NDs)
Selenium (mg/L)	GS-AP-MW-6D	0.01	0.01	0.05	No	13	100	No	0.01	NP (NDs)
Selenium (mg/L)	GS-AP-MW-6S	0.01	0.01	0.05	No	13	100	No	0.01	NP (NDs)
Selenium (mg/L)	GS-AP-MW-7	0.01	0.01	0.05	No	13	100	No	0.01	NP (NDs)
Selenium (mg/L)	GS-AP-MW-9	0.01	0.01	0.05	No	12	100	No	0.01	NP (NDs)
Selenium (mg/L)	GS-AP-MW-11	0.01	0.01	0.05	No	12	100	No	0.01	NP (NDs)
Selenium (mg/L)	GS-AP-MW-12	0.01	0.01	0.05	No	13	100	No	0.01	NP (NDs)
Selenium (mg/L)	GS-AP-MW-14	0.01	0.01	0.05	No	12	100	No	0.01	NP (NDs)
Selenium (mg/L)	GS-AP-MW-15	0.01	0.01	0.05	No	13	100	No	0.01	NP (NDs)
Selenium (mg/L)	GS-AP-MW-16D	0.01	0.01	0.05	No	13	100	No	0.01	NP (NDs)
Selenium (mg/L)	GS-AP-MW-17	0.01	0.01	0.05	No	13	100	No	0.01	NP (NDs)
Selenium (mg/L)	GS-AP-MW-18	0.01	0.01	0.05	No	13	100	No	0.01	NP (NDs)
Selenium (mg/L)	GS-AP-MW-19	0.01	0.01	0.05	No	13	100	No	0.01	NP (NDs)
Selenium (mg/L)	GS-AP-MW-21	0.01	0.01	0.05	No	13	100	No	0.01	NP (NDs)
Thallium (mg/L)	GS-AP-MW-2	0.001	0.001	0.002	No	13	100	No	0.01	NP (NDs)
Thallium (mg/L)	GS-AP-MW-6D	0.001	0.001	0.002	No	13	100	No	0.01	NP (NDs)
Thallium (mg/L)	GS-AP-MW-6S	0.001	0.001	0.002	No	13	100	No	0.01	NP (NDs)
Thallium (mg/L)	GS-AP-MW-7	0.001	0.001	0.002	No	13	100	No	0.01	NP (NDs)
Thallium (mg/L)	GS-AP-MW-9	0.001	0.001	0.002	No	12	100	No	0.01	NP (NDs)
Thallium (mg/L)	GS-AP-MW-11	0.001	0.001	0.002	No	12	100	No	0.01	NP (NDs)
Thallium (mg/L)	GS-AP-MW-12	0.001	0.001	0.002	No	13	100	No	0.01	NP (NDs)
Thallium (mg/L)	GS-AP-MW-14	0.001	0.001	0.002	No	12	100	No	0.01	NP (NDs)

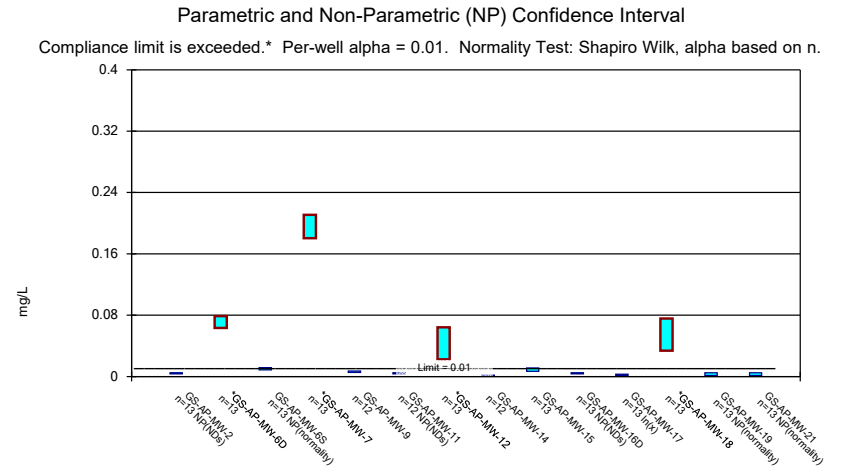
# Confidence Intervals - All Results

Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond Printed 1/17/2020, 2:30 PM

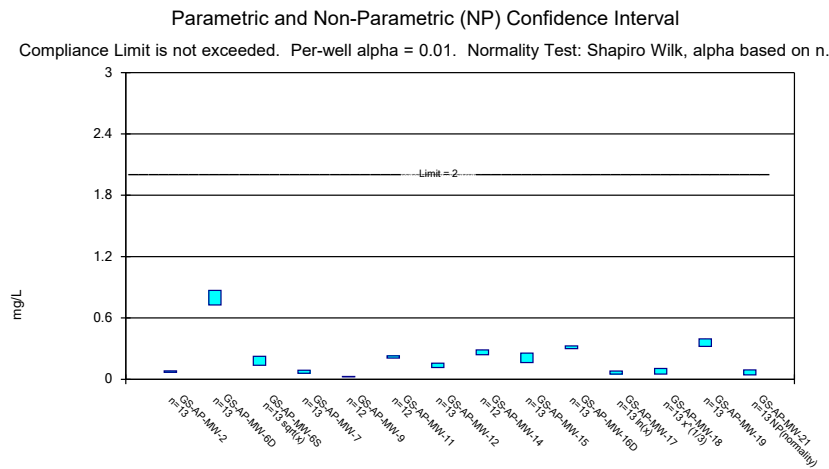
<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Compliance</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Thallium (mg/L)	GS-AP-MW-15	0.001	0.001	0.002	No	13	100	No	0.01	NP (NDs)
Thallium (mg/L)	GS-AP-MW-16D	0.001	0.001	0.002	No	13	100	No	0.01	NP (NDs)
Thallium (mg/L)	GS-AP-MW-17	0.001	0.001	0.002	No	13	100	No	0.01	NP (NDs)
Thallium (mg/L)	GS-AP-MW-18	0.001	0.001	0.002	No	13	100	No	0.01	NP (NDs)
Thallium (mg/L)	GS-AP-MW-19	0.001	0.001	0.002	No	13	100	No	0.01	NP (NDs)
Thallium (mg/L)	GS-AP-MW-21	0.001	0.001	0.002	No	13	100	No	0.01	NP (NDs)



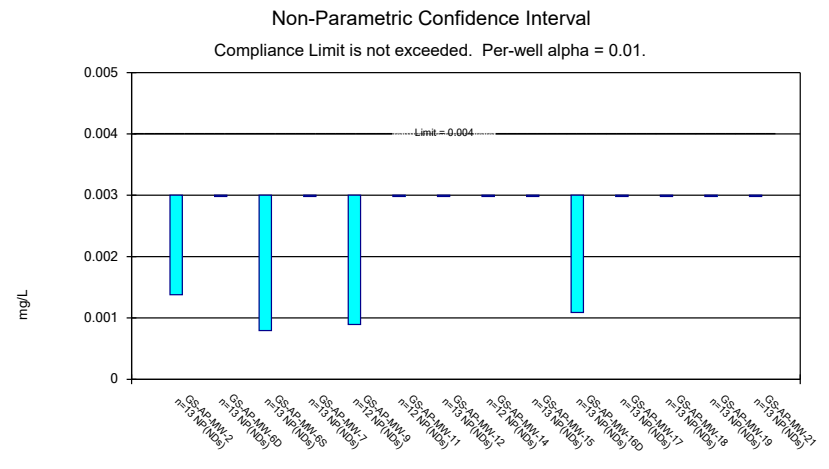
Constituent: Antimony Analysis Run 1/17/2020 2:24 PM View: Confidence Intervals - Appendix IV  
 Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond



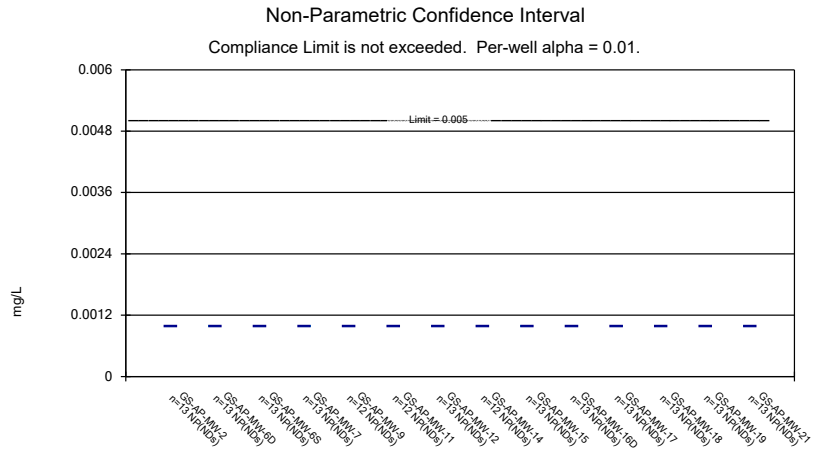
Constituent: Arsenic Analysis Run 1/17/2020 2:24 PM View: Confidence Intervals - Appendix IV  
 Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond



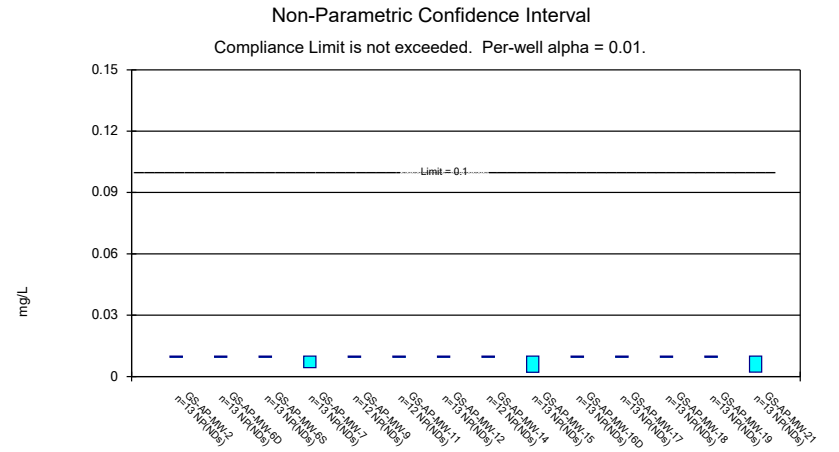
Constituent: Barium Analysis Run 1/17/2020 2:25 PM View: Confidence Intervals - Appendix IV  
 Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond



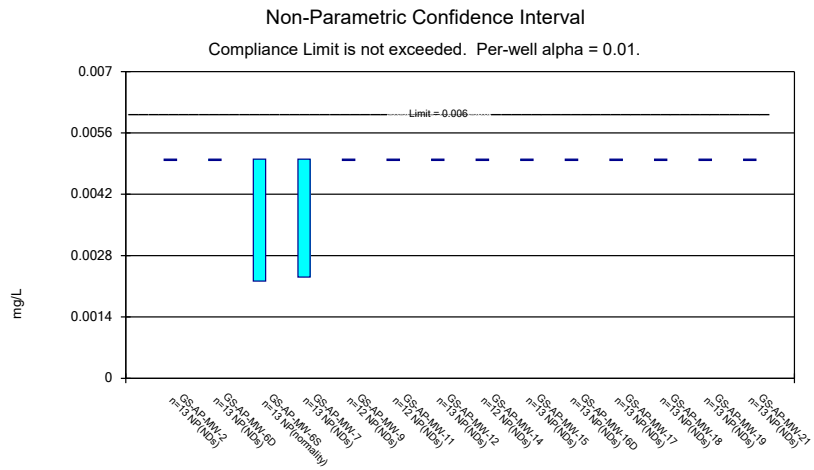
Constituent: Beryllium Analysis Run 1/17/2020 2:25 PM View: Confidence Intervals - Appendix IV  
 Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond



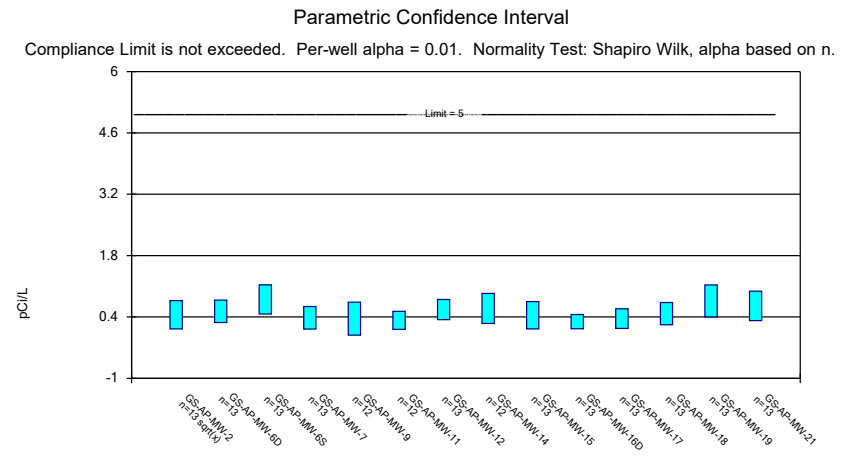
Constituent: Cadmium Analysis Run 1/17/2020 2:25 PM View: Confidence Intervals - Appendix IV  
 Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond



Constituent: Chromium Analysis Run 1/17/2020 2:25 PM View: Confidence Intervals - Appendix IV  
 Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond



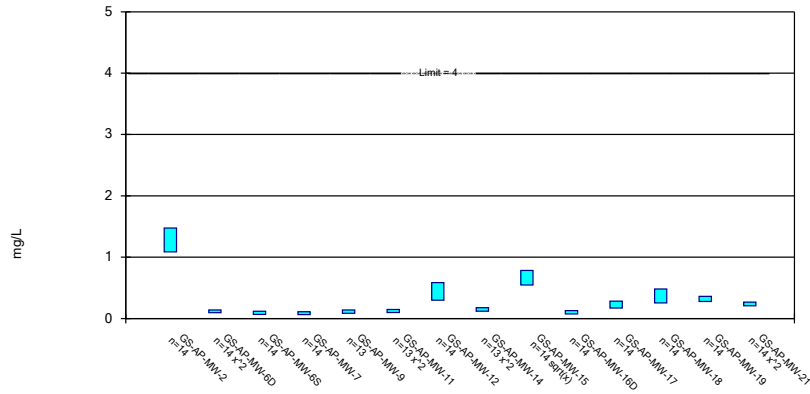
Constituent: Cobalt Analysis Run 1/17/2020 2:25 PM View: Confidence Intervals - Appendix IV  
 Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond



Constituent: Combined Radium 226 + 228 Analysis Run 1/17/2020 2:25 PM View: Confidence Intervals -  
 Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

### Parametric Confidence Interval

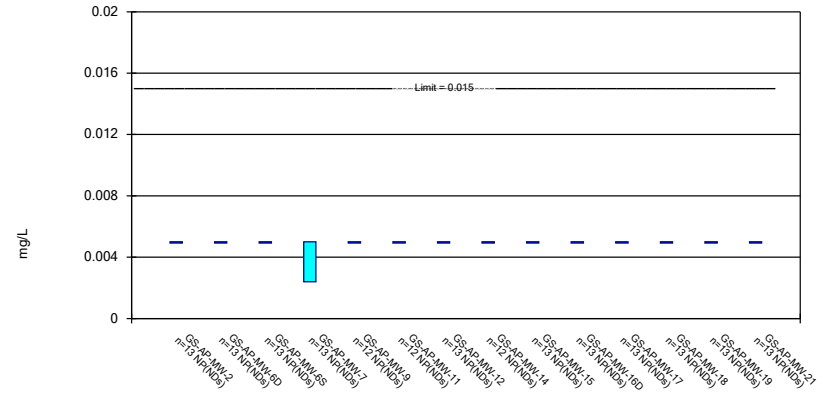
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Fluoride Analysis Run 1/17/2020 2:25 PM View: Confidence Intervals - Appendix IV  
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

### Non-Parametric Confidence Interval

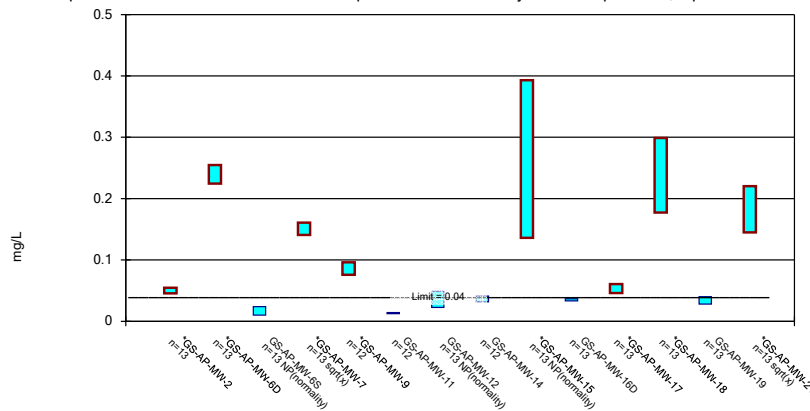
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Lead Analysis Run 1/17/2020 2:25 PM View: Confidence Intervals - Appendix IV  
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

### Parametric and Non-Parametric (NP) Confidence Interval

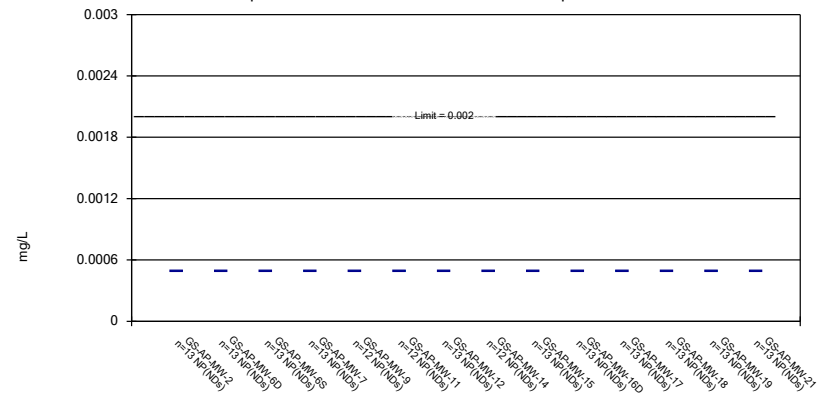
Compliance limit is exceeded.\* Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Lithium Analysis Run 1/17/2020 2:25 PM View: Confidence Intervals - Appendix IV  
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

### Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.

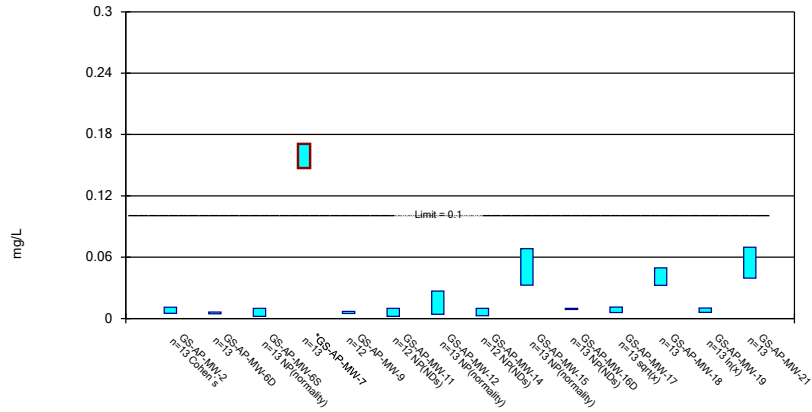


Constituent: Mercury Analysis Run 1/17/2020 2:25 PM View: Confidence Intervals - Appendix IV  
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond



### Parametric and Non-Parametric (NP) Confidence Interval

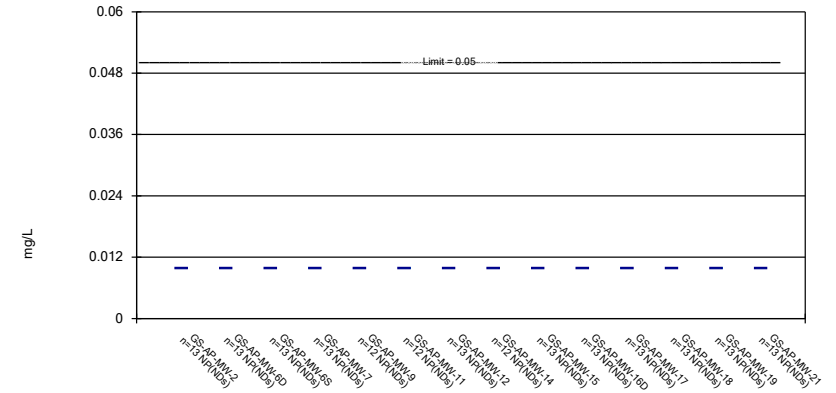
Compliance limit is exceeded.\* Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Molybdenum Analysis Run 1/17/2020 2:25 PM View: Confidence Intervals - Appendix IV  
 Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

### Non-Parametric Confidence Interval

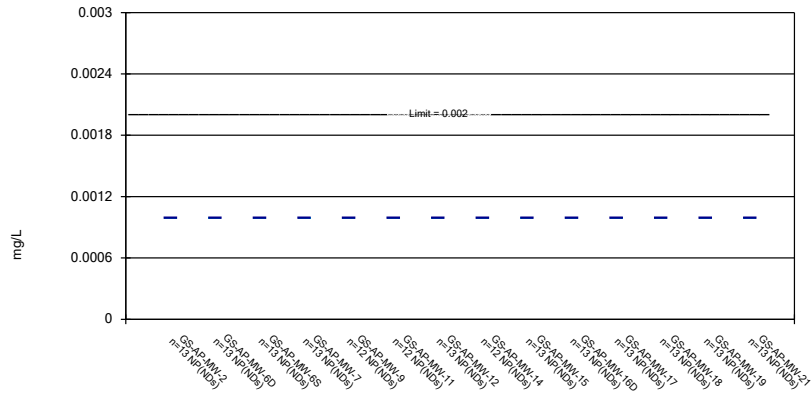
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Selenium Analysis Run 1/17/2020 2:25 PM View: Confidence Intervals - Appendix IV  
 Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

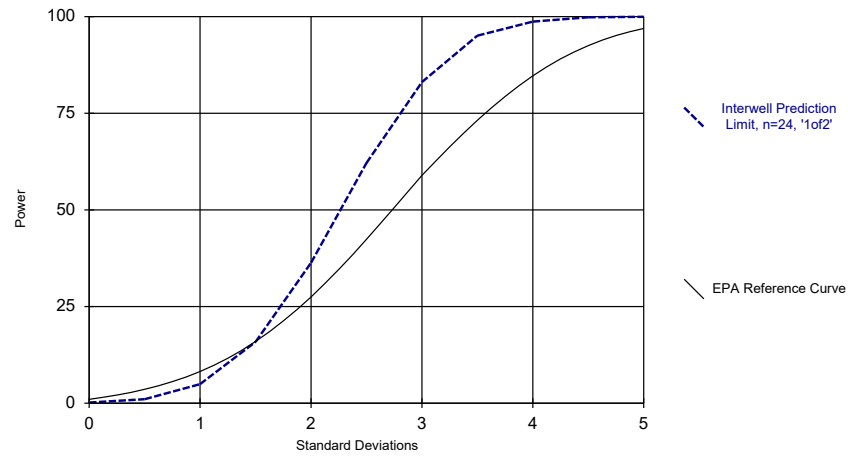
### Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Thallium Analysis Run 1/17/2020 2:25 PM View: Confidence Intervals - Appendix IV  
 Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond

### Power Curve



Kappa = 2.195, based on 10 compliance wells and 7 constituents, evaluated semi-annually (this report reflects annual total).

Analysis Run 1/30/2020 10:32 AM View: Power Curves  
Plant William C Gorgas Client: Southern Company Data: Gorgas Ash Pond